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The Thing Itself

AA Files and the Fates of Architectural Theory

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Thomas Weaver

Volume Two
The Thing Itself
AA Files 71–74

AA files

71

AA files

William Firebrace	3	Paradise on Erft
Andrew Crompton	27	How To Say Nothing With Sincerity
Thomas Weaver	30	In Conversation with Kevin Roche
Piers Gough	48	Deus ex Moline
Hamed Khosravi	50	The Multiple Lives of Gabriel Guevrekian
Nicholas Olsberg	64	Two Continuous Monuments
Andres Kurg	68	Tallinn in Technicolour
Cristóbal Amunátegui	75	Circles, Circuits, Cycles
Adrian Forty	90	The Euston Folly
Eva Branscome	92	Triptych for an Ideal Museum
Charles Rice	104	*Heatwave*, or The Megastructure as Eden
Chris Blencowe & Judith Levine	113	Peripheral Odyssey
Andri Gerber	121	A Life Less Ordinary
Thomas Daniell	129	In Conversation with Hiroshi Hara
Pier Vittorio Aureli	147	Do You Remember Counterrevolution?
Niall Hobhouse & Tina Di Carlo	166	Come for Porchetta
	168	Contributors

71

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A Note on the Display Initials
The display font in this issue is an adaptation of a sans-serif typeface created by the architect Gabriel Guevrekian for the temporary shop-front he produced for the Simultané fashion line of Sonia Delaunay and Jacques Heim, as part of the 1925 Exposition des Arts Décoratifs in Paris. Our own version of this letter face, drawn by Adrien Vasquez from the John Morgan studio and featured in the essay by Hamed Khosravi, is a set of numbers assigned to each one of Guevrekian's 'lives'. The original shop featured only letters – the Simultané brand and the last names of its two designers – but we have used the weight and profile of these letters to extrapolate an appropriate set of numerals. These numbers are printed in the metallic bronze used for this issue's first and last pages – a colour that is itself a reference to the Cor-ten steel pioneered by another contributor to this issue, Kevin Roche, whose John Deere World HQ and Ford Foundation HQ ('complex, ominous and sultanic', according to Vincent Scully) are equally metallic and equally bronze.

Paradise on Erft

William Firebrace



Erwin Heerich, *Turm* pavilion, 1985–88
Museum Insel Hombroich
© Tomas Riehle / Artur Images
















At the Museum Insel Hombroich, beside the river Erft near Düsseldorf, 11 brick structures by the sculptor Erwin Heerich function as a kind of fragmented gallery for one man's collection of art. Together with an adjacent site, a redeveloped former NATO rocket station which houses four other Heerich buildings, the 'museum island' is home to a small collective of artists, musicians and poets.

Müller

The initial idea for both the galleries in the landscape and the resident artistic community stems from the complex, contradictory personality of Karl-Heinrich Müller. Born the son of a factory worker in a suburb of Düsseldorf in 1936, Müller grew up in the flat, marshy Rhineland of the city's southern edge, a foretaste, he would later say, of the similarly amphibious landscape of the banks of the Erft. Soon after the war he set himself up as a property developer in Cologne, where by means of considerable ambition – and largely by being faster and more driven than anyone else – he built his firm up from a one-man business with a communication network that relied on the payphone on the street to one of the largest industrial property concerns in Germany, employing more than 400 at its peak.

Walther König, founder of the eponymous art and architecture bookshop in Cologne and a significant *capo* in the unofficial Cologne–Düsseldorf art world mafia, seemed to be an obvious source for information on Müller. Part of a brief informal interview with the chain-smoking Herr König, sitting at a large table on the first floor of his shop, surrounded by shelves filled with art monographs, went like this:

WF *How well did you know Karl-Heinrich Müller?*

WK He was a friend. I would often be invited to dine at his house. On one occasion we even had a grand lunch together at the Hombroich Insel – a wonderful meal in the cafeteria. All the tourists, who are given only boiled potatoes to eat and water to drink, sat and stared at our delicious food and fine wine. We really enjoyed ourselves. I admired Müller. Other people liked him too, as a man, but at the same time here in Cologne he was also known as the *Heuschrecker*, the locust, because of his tendency to devour everything in his path. He was a businessman, a successful property dealer, used to wheeling and dealing.

WF *Why did Müller become attracted to art?*

WK He was intrigued by artworks, both as commodities and as high-quality objects. He soon got to know the right dealers, and he also knew many of the artists at the Kunstakademie, especially Erwin Heerich and Gotthard Graubner, with whom he was good friends. He saw art as something to collect, but also as a kind of purpose in life. He felt at home with artists.

WF *Müller seemed especially drawn to the work of the pre- and postwar Düsseldorf artists, but why not the big names like Joseph Beuys or the Bechers?*

WK He could be impatient, which meant he often missed out on a deal. At the same time Beuys, in particular, was considered by some people here to be an ideologue, not an artist to collect.

Müller's first forays into art began in the 1970s. Initially he focused on primitive and archaeological objects but, prompted by his meetings with dealers such as Sami Tarica in Paris and Alfred Schmela in Düsseldorf, he soon started to purchase work by artists from the 1930s and 1940s – notably Hans Arp, Francis Picabia, Kurt Schwitters and Jean Fautrier – whose paintings were then relatively affordable. Müller collected art in the same way he built up his property business, by buying in bulk, by selling high and buying low and by making deals at the right moment. For instance, in the early days of his collection he swapped a fine Hockney for a large number of ancient Chinese Ban-Chiang sculptures. He had a feeling for the quality of individual pieces, but he also clearly loved quantity, and never seemed to know quite when to concentrate rather than diversify. Soon his interests expanded to take in antiquities from the Near and Far East, where he made various trips, as well as the undervalued artists of the Düsseldorf school. With this expansion his collection became increasingly eclectic – he bought a number of Tjurungas from Australia, a series of Alexander Calder mobiles, several Cambodian stone heads, some wonderful ceramics from the Near East, a few Pacific Island sculptures and a remarkable ballet costume by Matisse. 'I believe art belongs to nobody', he announced in an interview in 2004, 'art is a self-sufficient living entity', as if the idea of it being a floating commodity was alien to him, and as if art didn't actually belong in increasing quantities to Müller himself.

As his collection outgrew his house Müller cast around for a more suitable place to install it. In 1982 he bought the Hombroich estate, then comprising only a modest house, a number of smaller outbuildings and a rambling garden that had long run wild. Over the following years he added other pieces of adjoining land, the process of acquisition only hampered by his locust reputation – when this wealthy property magnate started buying land, people tended to wonder why, and the value of surrounding properties went up. But with the eventual purchase of the rocket station in 1994, Müller finally aggregated 62 acres into the complete Stiftung Insel Hombroich.

There is a photograph of Müller in the 1990s standing in a Hombroich meadow, a sturdy man dressed in an old jacket and baggy trousers with a halo of fuzzy grey hair, looking quizzically at a sheet of paper as though considering some kind of deal. This is not the archetypal German property shark. By all accounts Müller was a well-loved figure, at least among the art community, a person who would listen and was open-minded and generous – a sort of contemporary version of a Renaissance prince, whose dubious dealings in business could be separated from his public persona as a Maecenas or patron. As König attests, Müller would play out this role partly by hosting lavish feasts and celebrations in the cafeteria at Hombroich, with cakes in the shape of the pavilions and with artists and musicians and other guests invited from all over the world. He was also an enabler, trusting others to do what he could not, notably encouraging Erwin Heerich, who had no architectural training, to design buildings, the artist Gotthard Graubner to show an orthodox mix of artworks, and the poet Thomas Kling to bring in other writers and playwrights. At the same time he offered his patronage to scientists and commissioned composers for island concerts. It was Müller, too, who conceived the idea of the artists' community, providing ateliers on the site for his friends. Yet he wasn't self-aggrandising. He didn't play lord of the manor and build himself an imposing house, but lived in the upper part of the old coach house, above the ground-floor studios of his closest collaborators, Graubner and Heerich.

One might recall those typical late medieval Rhineland paintings of the crucifixion or nativity whose cast of characters includes a peripheral figure kneeling or praying, supporting the piety of the event. Such a character was in reality the artist's patron and his appearance, quietly edging into the scene, was a form of acknowledgement. The photograph of Müller in the meadow operates in a similar way, peripheral yet also clearly fundamental, a slight smile on the lips and an eyebrow raised, as though he was aware of what was going on and was playing a longer game. For Müller was also highly individual, bold and impervious to conventional criticism, treating his art collection in ways others wouldn't dare, not least in his apparent disinterest in conservation. 'For me', he says in a 1992 interview with Peter Sager, 'it is not strange that a painting grows old'.

In rows, from top left: Labyrinth, *Caféteria*, *Zwölf-Räume-Haus*; *Kassenhaus*, *Atelierhaus Graubner*, *Schnecke*; *Graubner*, *Tadeusz* interior, *Graubner* interior; *Labyrinth* interior, *Wohnhaus*, *Orangerie*; *Fontana*, *Kloster*
Museum Insel Hombroich
© Tomas Riehle / Artur Images

Community

There were three initial members of the Hombroich community, an inner circle which in the early stages directed almost everything: Müller, the essential mover for the whole enterprise; the sculptor Heerich, who designed the buildings; and the painter Graubner, who coordinated the choice and display of artworks. But as Hombroich Insel developed and as more land was purchased others were soon added. For example, the sculptor Anatol Herzfeld (usually referred to only by his first name) moved in, living and working in a barn on the island, now surrounded by his artworks – a metal piano, wagons, bits of human figures. The art critic Volker Kahmen still lives in the original property on the estate, the Rosa Haus, which he has also made the base for an archive specialising in German–Jewish literature. There were others who lived at least part of the time at the rocket station, located on higher ground above Hombroich: the poet Kling, assorted artists including Ute Langanky, Katsuhito Nishikawa and Oliver Kruse, composer Christoph Staude, a team of biophysicists and a large cast of miscellaneous characters who flit across the Hombroich story. What brought them together was not dogma, not a party line; Müller's aim was only to find a self-sufficient, loose-knit group of individuals, from a variety of disciplines, and give them free rein to produce their own work.

One can easily imagine the difficulties that could potentially develop among an isolated community of artists – a group of people not usually known for their ability to keep their egos in check – and indeed, as Müller writes in *Stiftung Hombroich Insel*, there were outbreaks of 'biting jealousy, bitter criticism and excessive vanity'. Yet somehow he managed to insist on the 'careful holding together and measured development that create natural growth'. Müller's circle seems to have been a sort of version of the Knights of the Round Table, where each has his place, with 'no hierarchy, no ranking', and the king oversees rather than commands. But in reality did rival artists vie for space or recognition from their benevolent patron? Walking around the island one can see, for instance, how the metal sculptures of Anatol begin to infringe on the space of the Heerich studio, but then how Heerich carefully uses the *Hohe Galerie* (High Gallery) just beyond Anatol's studio for a carefully thought-out display of his own rather more elegant sculptures.

More expansively, how did the community relate to the private lives of the individuals in the outside world? Müller writes of how the island (*die Insel*, feminine in German) 'is a path on which one collects communal experiences and results through different experiments in various areas', adding rather surprisingly that 'the island has no place for masculinity'. Yet the community was largely male. Müller frequently refers to the community as 'a family'. But what did the actual families of Müller, Heerich and Graubner think of their husbands and fathers vanishing off for long periods into their island garden sheds? One never really discovers the answer to these questions. What is apparent, however, is that the community of talented artists living and working in Hombroich, despite its complex dynamic and periodic descents into squabbling, seems to have functioned remarkably well under Müller's generous and open-minded guidance, perhaps because on the island and rocket station there is plenty of space, with each occupant able to find their own privacy.

Hohe Galerie

Approached from across a meadow, the *Hohe Galerie* first appears in the distance as a long brick wall, lined by a row of tall, wispy poplars planted almost too close to the brickwork. Only closer up do you realise it is a three-dimensional volume. You enter through a high wooden door with an oversized round handle. The interior is long and high, church-like, and divided into two, the second half rather higher than the first. The walls are painted white, the floor is white marble, the glass of the roof is milky and there are no windows. The roofs of the two halves also slope in different directions, picking up either north or south light. After a while you become aware that this minimal difference produces two kinds of diffused light, one slightly bluish, the other reddish. The illumination varies according to the weather and the position of the sun, always changing. Arranged inside are several large Heerich sculptures in black stone, like tombs of some departed island inhabitants. A few leaves and twigs from outside drift in and lie across the white floor. In the adjoining half of the building there is a second door, diametrically opposite the first. Leaving the gallery, you initially feel like you've made a mistake, exiting the same way you entered, but this door opens onto a timber bridge which crosses a stream, leading onto the landscape of the island. The building in this sense is the most minimal of labyrinths, the two halves almost identical, but distinguished by slight variations in light, one half relating to the landscape of the marshes, the other to the overgrown English garden of the island as a whole.

Graubner

The painter Gotthard Graubner advised Müller on the purchase of artworks and was also responsible for how these works were displayed, which is unique to Hombroich – and an indication of Müller's mistrust of professional art curators. In all of Heerich's pavilions there is no artificial lighting, no signage, no air conditioning, no security guards, no CCTV. The collection is almost all on display, and what's on show remains in position, there are no temporary installations. The art therefore speaks for itself, and also looks after itself, coping with the fact that the galleries open directly onto the exterior, whatever the weather. It is up to the viewer to reach his own conclusions about the artwork, no signs or captions are going to tell him what it is or what he should think. Because there are various galleries and not just one large building, the in-between also becomes important – the landscape of fields and woods out of which the next building emerges, and a space whose navigation affords time to consider what he has just seen.

In addition to the overall layout Graubner also challenges conventional categories of art display. Sometimes the rooms show just one kind of object. For instance, the *Tadeusz Pavillon* features only paintings by Norbert Tadeusz, just as the *Hohe Galerie* is occupied solely with sculptures by Erwin Heerich. Graubner's own work consists of large canvases saturated with pale colour, indefinite but giving an impression of an uncertain depth, abstract but with the drifting atmosphere of Caspar David Friedrich or J M W Turner. For a period in the early 1970s he produced a series titled *Nebelräume*, fog spaces. Graubner even has a pavilion dedicated to himself, but perhaps appropriately enough for a painter whose work is concerned with the nebulous, it is empty. This building is formed of one large circle intersected by a smaller glass circle. Light enters from the south-facing glazed facade and reflects off the curving plastered wall of the larger interior, as if the building were a kind of model of the human eye, the glass as lens, the plaster as retina. In other pavilions Graubner uses Müller's eclectic tastes and dislike of art experts as an opportunity to gently subvert traditional art categories, deliberately mixing periods, places of origin and styles. It is not that anything can go with anything, but certain objects play off and question others. So pre-Columbian artefacts are shown alongside 1920s paintings, Oceanic sculptures next to Albert Jensen's bright and fizzy electro-diagrams, ceramic and bronze figures of camels, cows and horses from early Asia and Mesopotamia – relics of intense but long-forgotten natural religions – are now confined to glazed cupboards, sharing space with Graubner's own paintings, where abstract atmospheres drift across the canvas. Do the ancient cows communicate with the modern mists, and in what language? 'I placed particular emphasis on the spatial relationships between the groups', Graubner once wrote, 'every picture, every sculpture, every object must speak its own language in order to blossom. Art-historical



Erwin Heerich, *Hohe Galerie*, 1983–84
Museum Insel Hombroich
© Tomas Riehle / Artur Images





Erwin Heerich, wooden models,
Hohe Galerie and *Orangerie*, 1983
Photos Achim Kukulies
© Erwin Heerich Estate / Insel Hombroich Foundation

links should be conveyed through the art and not via tracks of knowledge.' But what kind of conversation takes place when each speaks his own language? The effect could have been a babble, but here the works speak not with words but with colour, form, material, texture, intention. The effect is both deliberately unsettling and revealing. Stepping from room to room you are never sure what to expect next.

Düsseldorf

The mix of objects at Hombroich, all from different times and periods, is simultaneously confronted with the strong identity of the Rhineland, with its combination of industrial and natural landscapes – factories and river ports set within heaths, marshes and flat alluvial plains. In a long interview with the poet Kling in 2004, Müller spoke of the Rhineland's capacity to shape both plants and people. He went on to describe it as a 'wonderful, godly earth', as some kind of chosen land.

Of course, Düsseldorf lies on the Rhine, of which the Erft is a tributary. Much of the cultural mix Müller put in place in his island museum can be seen to have its source in the nearby city, and in particular its Kunstakademie, founded in the eighteenth century and located just north of the old town in a grand building beside the river. Running around the ground floor of the academy is a wide and high corridor punctured by doors lined in reddish marble, which open into large ateliers belonging to the individual professors. The *Meisterklasse*, a studio led by a distinguished artist, was the school's original pedagogical system and it remains largely the same today, mixing considerable respect for personal artistic authority with a certain tolerance for individual creativity. In the 1970s and 1980s the Düsseldorf Kunstakademie was seen as the best in Germany, and the city's art scene was of international importance. Beside Heerich and Graubner, graduates of the school included Joseph Beuys, Binky Palermo, Norbert Tadeusz, Gerhard Richter, Sigmar Polke, Bernd and Hilla Becher, Andreas Gursky and Thomas Demand. And as the Rhineland became the centre for any number of competing art movements – pop, neo-dada, formalist, Fluxus, performance, minimalist – the Kunstakademie became the location for rival art factions.

Heerich and Graubner were part of the same student generation as Beuys and Richter. As students of the sculptor Ewald Mataré, Heerich and Beuys were initially close friends. Mataré was famous for his sculptures based on animal and plant forms, but his work was banned by the Nazis as 'degenerate'. After the war he attracted more public commissions, including the great doors of the south portal of Cologne cathedral, where he was assisted by Heerich and Beuys (Beuys even famously inserted his own shaving mirror into the bishop's coat of arms, still visible today). The young artists then collaborated again with Mataré on the reconstruction of the limestone sculptures of mourning parents by Käthe Kollwitz beside the Cologne church of St Alban – Beuys produced the father, Heerich the mother. Both later became professors at the Kunstakademie.

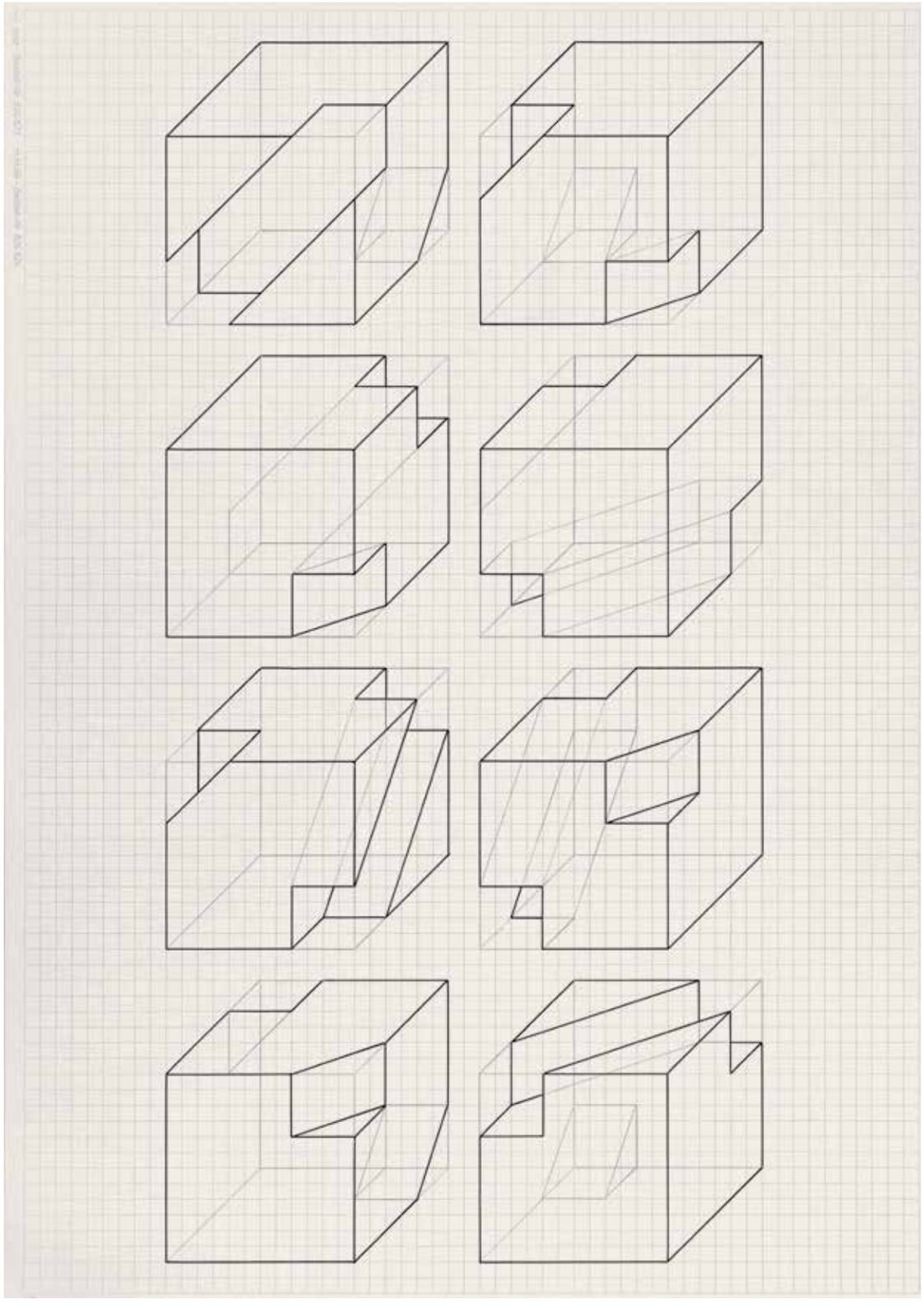
In his own work Beuys took Mataré's concern for nature and spirituality, and for the ideology of Rudolf Steiner, into wilder directions, following his own self-delineated path into an art based on social, political and spiritual principles, mixing in equal parts shamanism and charlatanism, ever self-promoting, part of the much-contested public culture of postwar Germany. In contrast, Heerich remained closer to the Mataré tradition, sculptural, object-based, moving towards abstraction and non-figuration, following a quieter, more considered way, uncontroversial, almost hermetic, where ideas were expressed through the simplest materials with a precise, almost mathematical process rather than sudden inspiration.

The contrast filters through into Hombroich, where there are no examples of Beuys's work even if he remains a ghost in the machine, absent in his own artworks but present elsewhere. For example, various artists seen as preceding him, such as the collagist and poet Kurt Schwitters and the painter and performance artist Yves Klein, hang in a number of the galleries, and his shamanism is there in the form of tribal objects from Mesopotamia and Oceania. Anatol, whose work is scattered around the island, was once a student of Beuys. In an act that has now attained semi-mythical status, in 1973 he paddled his master across the Rhine in a hand-carved canoe, Beuys in the prow in a 'Sea of Galilee pose', to celebrate the restoration of Beuys's professorship at the Kunstakademie (he had been fired the previous year when he continued to accept large numbers of students into his class after they had been denied admission by the school). Anatol on Hombroich occupies the same spirit of the old shaman on the island, but Anatol is slightly second-hand Beuys, without the fiery aggression of the original. Another Beuys student, Norbert Tadeusz, has a Heerich pavilion dedicated to his large-scale paintings. Perhaps Beuys himself was too extreme, too loud to feature directly in the quiet detachment of Hombroich, so has to slide in sideways.

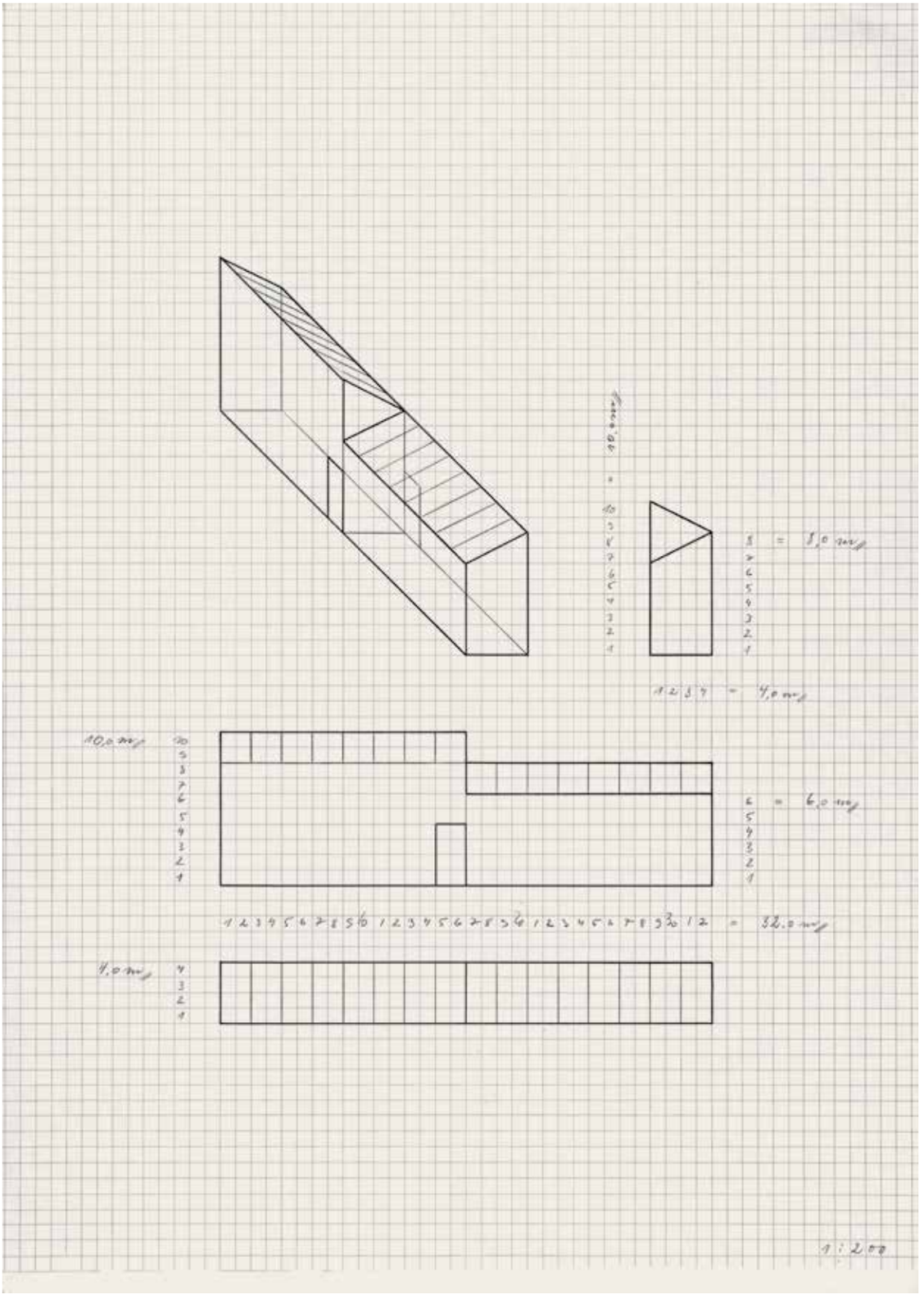
The Kunstakademie influence on Hombroich goes further. Just to the north of the academy lie the remnants of the 1926 Düsseldorf Great Exhibition, dedicated in the fashion of the times to a mix of art and social hygiene, its buildings including a planetarium and a series of large exhibition halls, all built to a formal geometry, lined in clinker brick with white interiors, high doors and stone floors. In contrast, a street just south of the academy was once the location of the Ratinger Hof, a venue notorious from the 1970s on for its mix of Krautrock and punk bands, such as the offshoots of Kraftwerk, Neu and LA Düsseldorf, or Die Toten Hosen. The pub was also a meeting place for students and teachers from the academy, and attracted personalities from both popular and high culture. One well-known regular was Thomas Kling, who in his early series of poems, *Ratinger Hof zb*, celebrated the frenetic activities in the pub, boosted by cocaine and amphetamines made from aircraft fuel. So the Düsseldorf Kunstakademie was flanked by indications of what would become the twin poles of Hombroich – the geometrical brick-faced buildings of Heerich below, and the last traces of the Ratinger Hof with the presence of Kling in the rocket station above.

Labyrinth

Located almost at the centre of the Hombroich island is the largest of the pavilions, *Labyrinth*. The square-shaped building is surrounded by marshy land, very different in quality to the otherwise endemic outgrowths of the shaggy English garden. In the waters of the Erft and the man-made ponds swim rats of surprising size, while up above the tree tops float buzzards and falcons. Approaching the pavilion, you first encounter a dense hedge concealing what appears to be a high garden wall. Between the hedge and the wall is a gravel path. As at the *Hohe Galerie*, you walk along the path and discover that the wall is actually part of a large building, with four identical sides, each perforated by an identical door on its corner, again unusually high. Entering at random through one of the doors, you find yourself in what seems to be a sequence of identical square rooms, distinguishable only by the light coming through the angles of the glass roof. How many rooms are there? Is there a route for navigating through them? Somewhere in what may be the centre is a large space, with atmospheric paintings by Graubner and Asiatic and Mesopotamian sculptures. The sense in these rooms is of light, uplifting spaces, filled with so many fine objects that you hardly have time to properly absorb them. A number of the internal walls are thick enough to contain within their depth ingenious glazed vitrines containing ceramic objects. You begin to find your way through the placement of these art objects. Finally you come to a door, identical to the one through which you entered. You step outside once more, onto the same gravel path between wall and hedge, uncertain as to just where you are or how you might proceed.



Erwin Heerich, isometric sectional studies, 1982
Photo Dejan Saric
© Erwin Heerich Estate / Insel Hombroich Foundation



Erwin Heerich, isometric, elevation and plan,
Hohe Galerie, 1983
Photo Dejan Saric
© Erwin Heerich Estate / Insel Hombroich Foundation

Heerich

Erwin Heerich tended to use the phrase *begehbare Skulptur* (walk-in sculpture) rather than 'pavilions' or even 'chapels' to describe his Hombroich creations, implying that he saw them as volumetric art pieces which visitors could enter rather than simply observe from a distance. But just when does a *begehbare Skulptur* become a building, which implies a function? For the sake of simplicity, and not because the issue is resolved, in this essay they are called pavilions, a term used to define small, independent structures of open use.

Heerich's favoured material for his earlier, smaller sculptural work was cardboard, which he chose as a fragile, neutral, amorphous material that could be folded to create three-dimensional sculptures, a skin rather than a mass. While there is a scalar distinction between the works he produced on paper and those he later constructed in bricks and mortar, all of Heerich's buildings are reducible to his earlier sequences of sculptural objects and drawings. The pavilions were first conceived on graph paper, Heerich drawing out the basic elements in plan, section and axonometric. These rudimentary diagrams were then sent to the office of local architect, Hermann H Müller, who developed them into a typical set of construction drawings.

Heerich's sculptural work – which later absorbed wood, metal and stone, as well as cardboard – is very varied, but essentially consists of a large number of small, three-dimensional objects based on orthogonal geometrical forms, which are either added to or cut away. Sometimes the first moves are very simple, such as a piece of wood cut in a certain way or with an angled section removed. Yet these somewhat elementary actions then build up to produce objects of increasing complexity. One example is the series of metal cubes he produced, sometimes adding together cubes of diminishing size, at other times cutting smaller cubes out of larger ones, to produce elaborate three-dimensional puzzles. Often Heerich would have such pieces photographed as a group, so one piece in the family reflects off another. Many of the individual components are comparatively small, but once aggregated they can form larger figures, like his furniture designs, or larger still the massive stone objects found in the *Hohe Galerie*, or ultimately, of course, the pavilions themselves, freestanding sculptural containers within the landscape. Viewed in its entirety, Heerich's work constitutes a vast array of possible geometrical forms, carried out at all scales. The work appears calm and detached, but this apparent rationality barely conceals a battery of tricks and deceptions that delight in baffling the viewer or occupant.

In the handful of interviews that he gave, Heerich remained evasive about his intentions, but stressed both that his work is organic – one piece grows from the next – and that it lies largely in the realm of thought: 'For me, sculpture is the bringing out of a form, whose coming into being shows a self-referential system of organisation – like that of a fruit or mussel in the organic world.' He also emphasised that his work is not purely material: 'The existence of my work lies in the zone of what is conceived (*gedacht*) rather than made (*gemacht*).' He enjoys the fragility of his materials, and the actual objects are not what is important. The world of Heerich is thus both natural and conceptual. What we are seeing, whether sculpture or building, is the physical manifestation of an idea. It is not clear how we would understand the idea without the existence of the objects, but the idea comes first. This almost spiritual approach to sculpture – the equivalent of the word made flesh – provides the particular and rather undefined qualities of Heerich's work, the feeling that one is experiencing more than just one aspect of the physical world. Part of its ingenuity stems from the way Heerich was able to move between families of objects, between sculptures and models, all based on some unseen idea, and then apply this approach at various scales. Many of his simple objects are already architectural in nature, without needing to be models for buildings. They lack only interiors, almost always being solid figures, intended to be seen from the exterior.

Sculptors producing architecture is hardly something new: Renaissance architects, for instance, moved with ease between the two fields. In more recent times, the question of the nature of the two professions – functional or non-functional, fine or applied art – has generally been more closely defined, but one such hybrid, originating in the US land art movement of the early 1970s, seems to have had an influence on Heerich. Among these artists, Mary Miss and Alice Aycock created large-scale structures, often based on American vernacular forms, typically sited in the landscape. Aycock's *The Beginnings of a Complex*, a temporary construction at Kassel for the 1977 Documenta, offers an interesting parallel to Heerich's own pieces, consisting of a series of medieval-style timber walls, shafts and towers, which the visitor had to experience in person, crawling through tunnels and clambering up ladders. Aycock's work was shown in Germany in a number of large exhibitions in the early 1980s. Some of this interest in mazes, walls, towers and passages is reflected in Heerich's architectural vocabulary, but with the difference being that Aycock is concerned with extreme psychological states, while Heerich, though also playful, is quieter and more meditative. Aycock has also never considered her work as anything but sculpture.

Other artists lie closer still to the aesthetic coolness of Heerich. For instance, the US sculptor Donald Judd, originally a philosophy student, produced sculpture with industrial materials such as plywood, steel and Perspex, and moved between the requirements of pure art and functional design. He coined the term 'specific object' for his geometrical, non-representational work, deliberately avoiding the terms 'sculpture' or 'painting', and rejecting even more explicitly the word 'minimalism', since in his opinion his work was never reductive but always offered considerable complexity. Disliking the way artwork was shown in temporary exhibitions, Judd developed instead particular locations for the display of his work, first in a house in New York, and then, more relevant to Hombroich, in a former US army base in Marfa, Texas. Judd may have crossed over between art and design, but he was careful to distinguish between the two. In his 1993 essay 'It's Hard to Find a Good Lamp', he wrote:

The configuration and the scale of art cannot be transposed into furniture and architecture. The intent of art is different from that of the latter, which must be functional. If a chair or a building is not functional, if it appears to be only art, it is ridiculous. The art of a chair is not its resemblance to art, but is partly its reasonableness, usefulness and scale as a chair. These are proportion, which is visible reasonableness. The art in art is partly the assertion of someone's interest regardless of other considerations. A work of art exists as itself; a chair exists as a chair itself.

Some of Judd's concerns are reflected in Heerich's work – the production of 'specific objects', the insistence on permanent rather than temporary exhibitions, the interest in the links as well as the differences between art and design. However, Heerich was much more open to viewing three-dimensional artworks as potential architecture and was not deterred by notional requirements of function. His sculptural work and drawings already have certain architectural qualities, a concern with clear geometrical form, proportion, material. It was actually Müller, the non-artist, who first proposed to Heerich that his work might be enlarged to an architectural scale. And having taken on this proposition Heerich played with the idea of reasonableness, usefulness and scale with a boldness that might have been frowned on by Judd, and in a way which later becomes more problematic as the demands of function struggle with the perfection of the sculptural object.

Heerich's buildings at Hombroich can be divided into three categories: those which act as pure *begehbare Skulptur*, such as his empty *Turm* (Tower); those which have the function of displaying Müller's collection, such as *Labyrinth*, *Hohe Galerie* or *Zwölf-Räume-Haus*

(Twelve-Room House); and then those with more complex functions, such as *Caféteria*, or his artist's residence and archive in the rocket station. Again, at what point does one of these constructions move from being a piece of art to a piece of architecture? The distinction between the three categories is actually not as neat as it first appears, for at Hombroich form clearly does not follow function. But nor does function follow form, as conventional pragmatic function is also fairly irrelevant. For instance, the *Graubner Pavillon*, which is at present empty, once contained sculptures. The issue is neither to do with scale, for the structures vary in size; nor with habitation, for even *Turm* allows a certain temporary habitation; nor with interior space, for all possess interiors, though these are often at odds with the exterior. Nor is it really to do with function, or Judd's word 'reasonableness', for while the introduction of functions such as toilets or food preparation facilities adds a layer of complexity to the *Caféteria*, this does not really change its form. In this sense, the cafe might just as easily have been the *Zwölf-Räume-Haus*, as 12 interesting top-lit rooms for dining. If the function changes, the building remains relatively untouched. The rocket station archive, for example, was originally used by biophysicists for certain experiments, but now contains shelves of books. These could easily be stripped out and, with its unusual blank ground floor, blind courtyard, two symmetrical stairs and general air of existing to baffle as much as to accommodate any particular activity, the building could either simply be designated a *begehbare Skulptur* or, with the addition of some artworks, serve as a gallery. It is only when Heerich becomes too concerned about function, for instance in the stairs and glazing of the tall, thin *Wohnhaus* (guest house), which are clearly architectural, that his buildings become weak and drift away from being the pure manifestation of an idea.

Yet still, Heerich's buildings never feel like scaled up versions of a sculptural object. They are not like Claes Oldenburg's extruded domestic objects – clothes-pegs, hammers and forks – which are simply larger versions of originals, using different materials but visually the same. With Heerich, in contrast, a material and conceptual transformation takes place alongside the artefact's rescaling. For instance, within the archive of his work on the rocket station site one can see a solid object which will become the *Hohe Galerie*, a box-like form featuring two opposing diagonal slopes, even if this object is not yet a model of the building to come – it has no scale, it can be rotated in various directions, it has no interior; rather, it is a kind of *ur*-form from which various other forms may emerge. When this becomes the *Hohe Galerie* the object is given a horizontal orientation, plaster turns into re-used clinker brick, the diagonal faces become glass and an interior emerges, with white walls and a marble floor. All of this is latent in the *ur*-form, yet still needs to be reimagined and transformed to become a building. If Heerich had simply scaled up the original model he could have made the building in concrete, which would have resembled the original, but he avoids this, and by using bricks gives the exterior a texture, linking its appearance to that of other buildings of the Rhineland. In addition, by giving the object a particular site, between two rows of high trees planted close to the walls, and with a particular north–south orientation, he further transforms the original, which of course had no specific location. Does the *Hohe Galerie* necessarily belong to one side or other of the line proposed by Judd? The question isn't pointless, but Heerich has taken the issue further so that his *Hohe Galerie* belongs to some new category that goes beyond the old divisions.

It would be tempting to draw some parallels between these buildings by Heerich and some of the architecture of the period. He was acquainted with various Rhineland architects, including Oswald Mathias Ungers, proponent of a reduced rationalist architecture, and his built work echoes – for it doesn't clearly precede or follow, but rather shares similarities with – the architecture of other rationalists, such as Aldo Rossi, whose geometrical forms were based on an abstracted version of the vernacular. In Heerich's case this interest in the vernacular is evidenced, if in nothing else, by his use of brown clinker bricks, timber doors, glazed roofs and industrial windows. The exhibition buildings north of the Düsseldorf Kunstakademie have already been mentioned as a prompt for this architectural language, but the use of clinker and simple forms is widespread throughout the Rhineland. The photographs of Bernd and Hilla Becher had brought the industrial architecture of the Ruhr Valley into the art world, and had shown how banal structures, usually disregarded, had their own aesthetic qualities. This earlier precedent in turn finds an overlap in photographs by Tomas Riehle (another Kunstakademie graduate and former Heerich student) of the Hombroich buildings – black-and-white images of unadorned, almost sculptural built forms, shot straight on and in flat light conditions that play to the industrial, yet artful character of their subject.

Heerich's buildings also bear a similarity to work from the same late-1970s period by John Hejduk, such as his project for the Texas House, with its plan of repeating squares, the same love of a sequence of reduced forms. But whereas Hejduk is often whimsical, Heerich remains calm and serious, and whereas Hejduk loves a picturesque narrative of occupancy, Heerich never imagines any exotic inhabitation. His buildings are certainly individualistic, maybe eccentric, but they play the game completely straight-faced. One might imagine that Heerich knew little about contemporary currents in architecture, and was as unconcerned with architectural fashions as he was with whatever line the art world was following at the time. Instead he stuck to his own path, and never needed to look far for inspiration, since this principally came from within, from the extensive explorations of his early work.

Grid

Heerich produced a very large number of drawings, many of which are now in plan-chests in the archive of his work at Hombroich's rocket station. These immaculate drawings were made by hand, mostly with that traditional architectural instrument, the Pelikan Graphos ink pen, and its successor, the Rotring Rapidograph. Despite the uniformity of their paper size and line weights, the drawings are very varied, often using architectural iconography such as plan, perspective and axonometric, or showing what might be imagined as a three-dimensional object, but more often they are abstract or play with being potentially representational, as though uncertain whether to be pure abstract art, slipping off into a graphic reverie, or part of the ordinary world of three-dimensional forms. The lines appear mechanical, but seen close up their slightly shaky, hand-drawn qualities become more apparent, with the spaces between lines often uneven. Many of these drawings are based on the setting-out of a two-dimensional grid, which is then distorted to create illusionary three-dimensional forms. The lines of the grid are pushed in or pulled out, project in or out, play with moving from two to three dimensions, so that the viewer is presented with various ways of reading the drawing. The standard repetitive world of the grid, expanding to infinity in all directions but also limited by the size of the paper, becomes a surface out of which other forms are born. Often this grid is contrasted with areas of flat black, brushed on rather than drawn, not as a background but as a sort of continuous anti-space, set against the complexity of the grid. The clear lines, the areas of black, the use of standard drawing techniques, all seem to imply the creation of a definite and comprehensible world. On closer examination, however, internal contradictions are revealed; the drawings deliberately don't quite add up, the suggested spaces contradict one another so that no unified understanding is possible. This love of physically impossible spaces is later transferred into certain pavilions – the *Turm*, for instance, is spatially baffling, the exterior, at least on first inspection, does not seem to match the interior.

Heerich's gridded drawings have been compared to those of two other artists who used the grid as a basis for their art, Agnes Martin and Sol LeWitt, whose work was widely exhibited in Germany in the 1970s. In 1973 Martin produced, as part of a lifelong concern with the possibilities of the grid, a series of 30 hand-drawn studies titled *On a Clear Day*, each setting out a simple grid within the shape of a square. Martin stated that her grids were not meant to represent or imitate anything, they were pure idea, and linked to emotional states – happiness, innocence. The grids in her work are usually painterly, concerned with colour, tone and texture, whereas for Heerich they are graphic, black and white. But something of this unlikely combination of abstraction and feeling carries over from Martin to Heerich. Through the principles of geometry, which at first appear devoid of emotion, he somehow induces an emotional response in the viewer, or in the case of his *begehbare Skulptur*, the occupant. And within the best Heerich objects and buildings, the purity of the expression does indeed elicit feelings of joy, melancholy, anxiety, maybe even happiness.

In contrast, LeWitt used geometrical drawing techniques to build up sequences of possible forms, which he compared to the evolution of a language through sentences and paragraphs. With a determined rationality, he studied the number of possible permutations emerging from a simple set of drawing rules. LeWitt also sometimes used lined graph paper, similarly favoured by Heerich. No doubt some influence transferred from the US to Düsseldorf, but whereas LeWitt follows his self-imposed rules without deviation, Heerich adapts and changes with a limited set of variations. The result is that there is clearly a Heerich language of forms, but its grammar is capable of unexpected twists and turns.

This mix of plodding consistency and unpredictable, leaping progress is also present in Heerich's buildings, which evolve with continuous ingenuity but are always based on the grid. These are not the pure grids of Martin, considered as an end in themselves, rather they are stepping stones from which a system of proportion for objects and buildings is derived. To an architect these drawings appear alarmingly basic. In an age of increasing sophistication in architectural graphics, due in part to digital technology, is this really how buildings are designed? By counting squares on a piece of graph paper and marking them off with a pen? The *Zwölf-Räume-Haus*, for instance, is just as its title suggests, 12 rectangular rooms, each 1 x 2, placed within an envelope of 4 x 6 squares. That's it: 24 squares measured out on graph paper. The only difference between rooms is the number of doors they feature – one, two or four. The plan resembles the layout for a board game or a geometric puzzle rather than a building – but it works, and because everything is reduced back to the idea, it makes for one of Heerich's more successful buildings. The relationship of grid to building becomes compromised when the perfection of the repetitive, abstract line has to adapt to the awkwardness of actual architectural materials, but this is invisible to a casual visitor. The ideal system gives way to everyday built reality.

The use of grids becomes more sophisticated in other buildings at Hombroich when Heerich cuts out complex shapes from basic box-like forms. For example, the *Archiv* (archive) on the rocket station and the *Turm* on the island are each boxes with square plans from which elements are then removed, at the lower level in the former and higher up in the latter. Likewise, the design of the *Schnecke* (Snail) proceeds by cutting away parts of a square plan, here (unusually for Heerich) using a triangular cut to produce a plan folded in on itself, with a remarkable piece of brickwork tapering to an acute point. These in turn lead to other versions of design by subtraction, such as the *Fontana Pavillon* on the rocket station, whose plan, again set out on that familiar graph paper, is formed by a series of cuts of increasing size – 1, 4, 9 and 16 squares – removed from a larger square. The drawing is absurdly simple, but achieves a remarkable power through the minimal manipulations of the lines of the grid.

Abstract and Unruly Nature

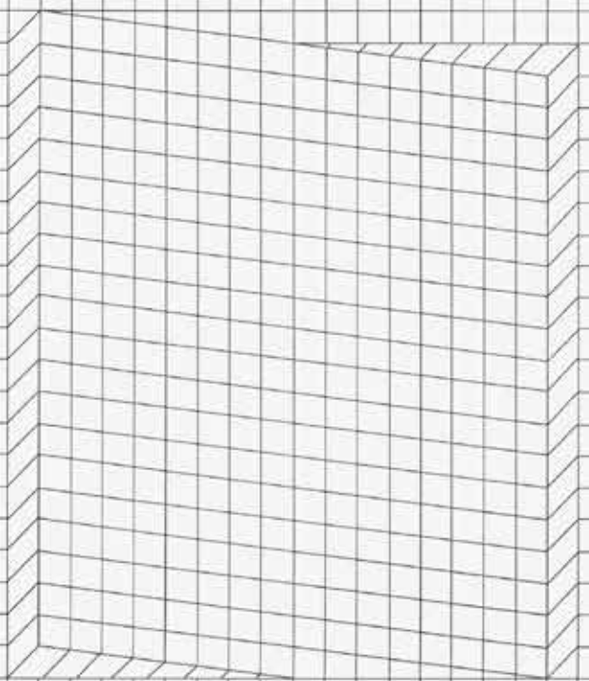
Heerich's original idea for Hombroich was to lay a vast grid over the entire landscape in order to determine the footprint and placement of his pavilions. He must have soon abandoned the idea when he realised that it would be impossible to impose a two-dimensional grid on a three-dimensional landscape already complicated by the presence of trees, plants, streams and ponds. In the absence of the guiding hand of the grid, it is difficult at first to discern just what method does determine the arrangement of the Heerich buildings. They appear to be simply scattered across the site, without any particular relationship to one another. This apparent randomness is in direct contrast to the objects themselves, which are always geometrically composed, and also to the way Heerich organised his sculpture for shows, set out as though conforming to some invisible orthogonal layout. However, on closer examination an order is discernible, although it is not a geometric network but a more ad-hoc system that develops over time, and also responds to Müller's gradual acquisition of more land. In Hombroich this system divides the site into three main landscapes and also three phases in time (a fourth phase in place and time is higher up at the rocket station).

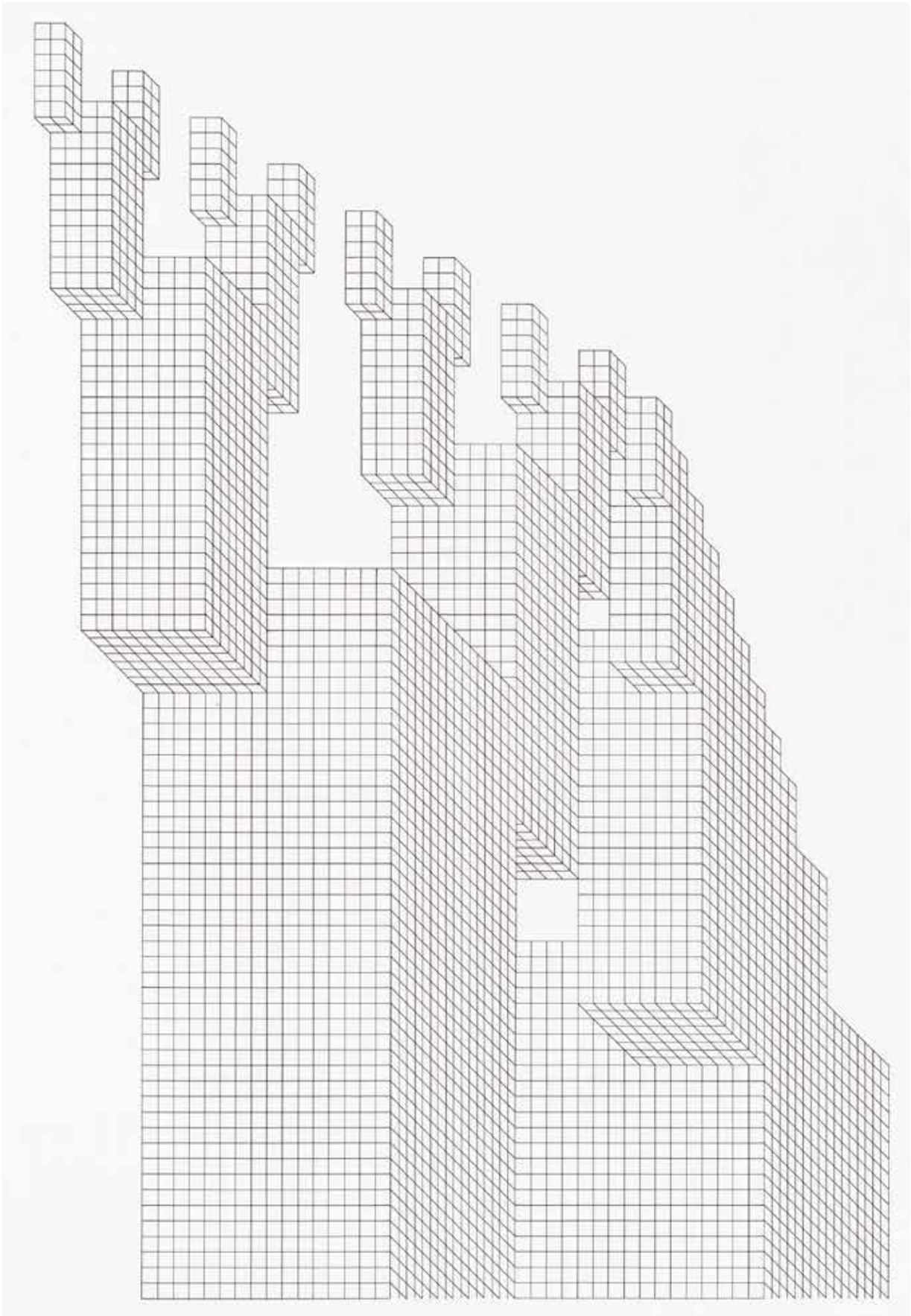
Erwin Heerich, *oT. T/P*, 1963
Overleaf: Erwin Heerich, *Doppelungen*, *c* 1970
Photos Achim Kukulies
© Erwin Heerich / VG BILD-KUNST Bonn, 2015

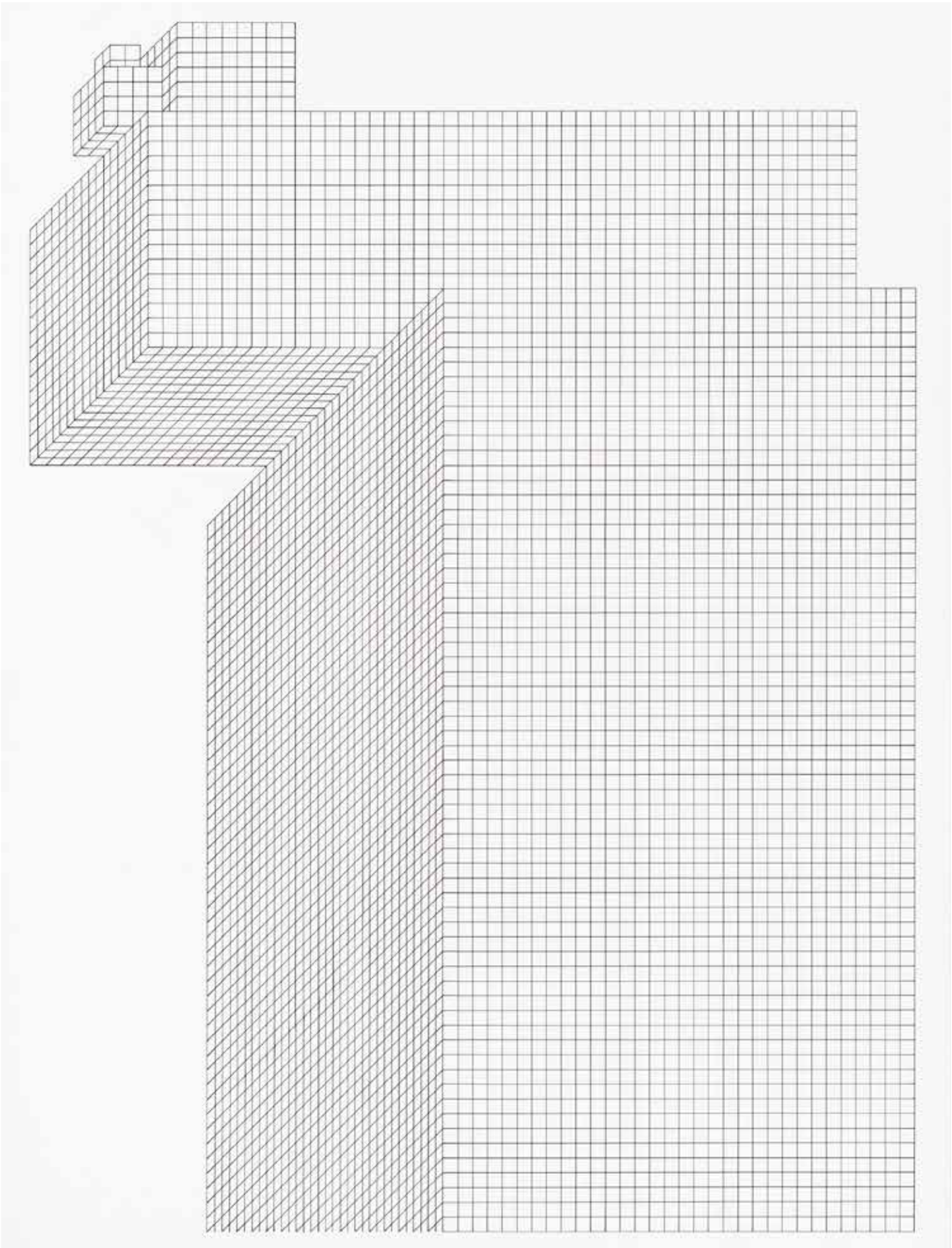
The first three buildings, the *Hohe Galerie*, *Graubner Pavillon* and *Orangerie* (Orangery) (1983–84), were constructed on the sites of existing buildings within the original English garden on the island. But Müller soon realised that these would not be sufficient to house his collection and so commissioned three further buildings – *Labyrinth*, *Turm* and the *Caféteria* (1985–88), which lie as a triangulation of freestanding pavilions amongst the ponds and streams of the flatter landscape to the north. The larger pavilions are located where the land is level, so as to avoid the need for expensive foundations. The next trio, *Tadeusz Pavillon*, *Zwölf-Räume-Haus* and *Schnecke* (1991–93), experiment with various geometrical forms, and are set on the higher agricultural ground, beside fields and woodland. To these should be added the two buildings added later (1992–98), also on the higher ground, the *Kassenhaus* (entrance building) and a workshop for the artist Graubner, which are a little different in nature from the earlier work.

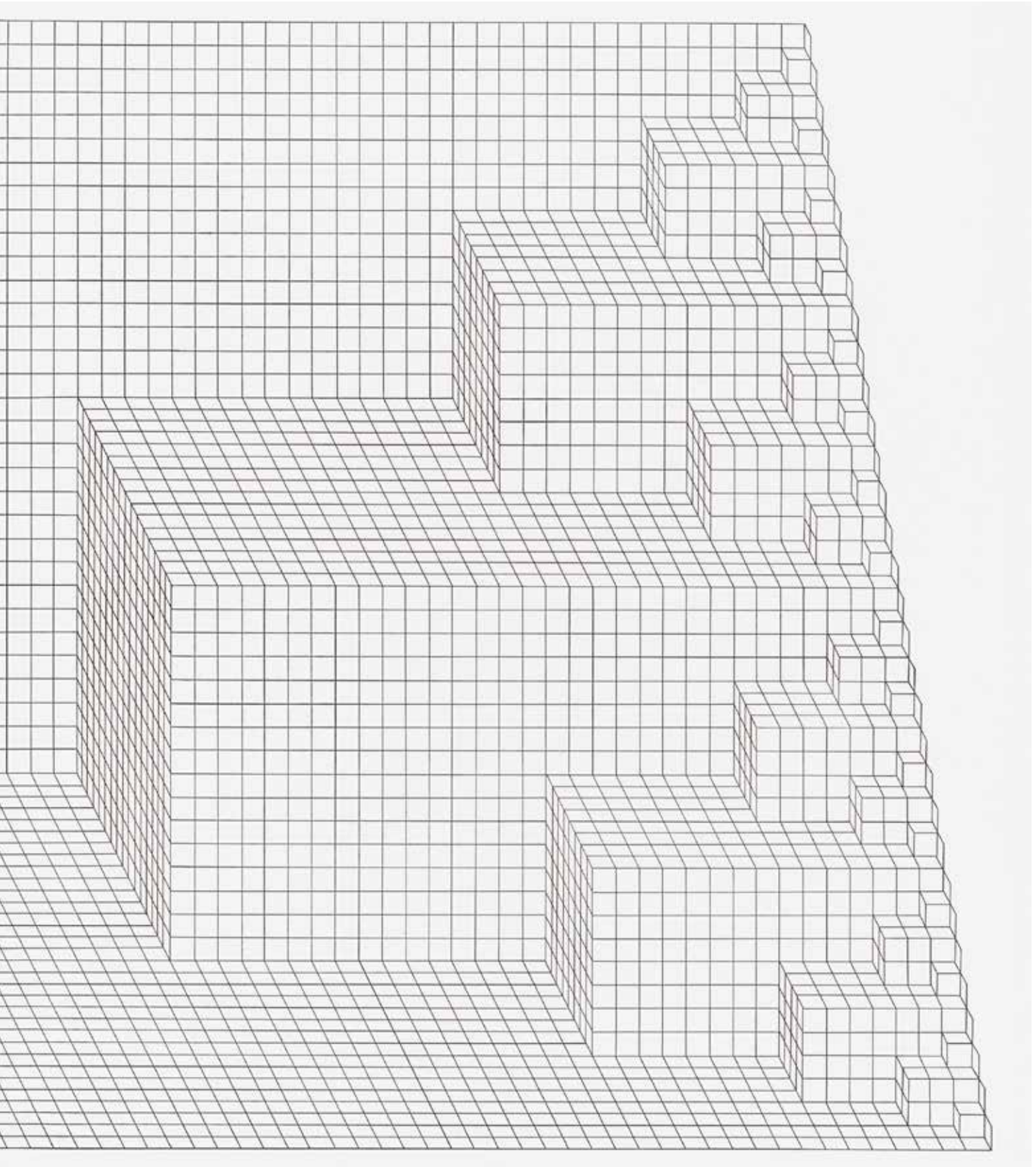
In considering these 11 structures as a group, built in sequence but without a masterplan, one can see how Heerich evolves his technique of placing abstract forms within an unpredictable landscape. In many ways there are parallels to a similar ambiance and scale in the landscape William Kent designed at Stowe, but whereas in an eighteenth-century English picturesque garden one folly leads to another, and prescribed views are clearly set out, at Hombroich the buildings are often concealed, with no obvious route between them. Instead of a sequence of clear visual links, they provide points of transition between one type of landscape and another, or act as gates leading the visitor through the woods, streams, ponds, marshes and fields – and as passive eyes, filtering the light and registering the changes to external luminescence, but rarely allowing any view in or out. This is a more ambiguous vision of buildings in the landscape, reminiscent of *The Household Tales* of the Brothers Grimm, where buildings of slightly dubious identity are to be found in the woods, and where the way forward is not always clear to the visitor.

Questioned by Christina Schroeter in a 1994 interview about the role of nature in his work, Heerich produced an unexpected and revealing answer. He didn't speak about architecture sitting benignly within the natural environment, about adapting to nature, or about any kind of aesthetic sensibility, but rather spoke about nature as a system of design, as an









inspiration for sculptural forms. 'I observe the permanent, the substantial, in nature and try to allow these observations to influence my work. Morphology and metaphysics interest me. Through them archetypical sculptures come into being, which evolve organically.' For Heerich nature is not visual, but prompts ideas about form: morphology, metaphysics, archetypes, organisms. He sees his work as relating to nature, because it follows an organic system, with one form evolving from another. For instance, one can see the evolution of Heerich's pavilions in terms of cells, a word relating both to biology and architecture. The *Orangerie* is one cell, the *Hohe Galerie* two, the *Zwölf-Räume-Haus* naturally 12. These cells seem to multiply as time goes by, like some slow biological animation. Then there are also complex single-cell pavilions, like the *Turm* and the *Schnecke*, where the cell morphs out of a simple form. 'The walls', says Heerich in the same interview, 'are the skins of the organism', as though describing the structure of a biological element rather than a building.

This is nature as a process, a continuous morphology. It is also very different from its depiction in more established German art-historical traditions, such as Caspar David Friedrich's romantic vision of landscape, which conveys nature as a spiritual experience, or the dark ecstatic forests of Anselm Kiefer, which comment, poetically or ironically, on the Nazi version of the sacred German land of *Blut* and *Boden*, or, more immediately, the shamanistic performances of Beuys, with his hares and stags, which usher a mystical understanding of the natural world back into contemporary life. But at the same time Heerich's viewpoint does relate to another very German vision of nature, deriving from the work of late-nineteenth-century scientists such as Ernst Haeckel, who categorised natural forms into continuously evolving families, and then related these systems to some grand idea of a natural religion which lies behind the material world – once again that odd mix of morphology and metaphysics. Haeckel produced wonderful illustrated books showing the families of forms. Through his sculptural systems Heerich is creating his own version of nature, his own evolutionary family tree.

When he places this family of forms in the landscape of Hombroich, whether in the overgrown garden beside the Erft or the open land of the rocket station, he is not merely producing a contemporary version of the picturesque. Hidden amongst trees or out on the plain, their brick walls are unforgiving, their geometry – which Heerich describes as 'the locating of people within space' – makes no attempt to blend in. Rather, the pavilions are a set of organisms, with their own nature, placed within the equally artificial nature provided by the museum island's landscape architecture and the anonymous and deliberately artless NATO rocket engineers.

Lensing

When Müller bought it, the land around Hombroich Insel had long been a kind of lost landscape, a German version of Daphne du Maurier's *Rebecca* or Alain Fournier's *Le Grand Meaulnes*, a forgotten domain, overgrown and virtually deserted. This feel of the lost garden is reinforced in the work of the landscape architect Bernhard Korte, who created the apparently natural environment in which Heerich's abstract forms are located. In studying aerial photographs of the site, Korte discovered long dried up branches of the Erft, which he then excavated to provide streams feeding new ponds and marshlands. Elsewhere he played up the mix of exotic and local planting, making the English garden something like a tropical version of Devon. Korte even indulged in his own form of botanical archaeology, uncovering in the humus of the formerly dead river's arm, seeds from plants from many thousands of years ago. These plants, with their wildly idiosyncratic names – frogspoon, feverpoppy, poisonous henfoot, hedgehog-ear, cuckoo-light-carnations – provide much of the herbaceous infill between Heerich's pavilions.

Korte's mix of old and new garden forms is in this way integrated into the long history of the island. Around its perimeter, the estate's fields were originally farmed with hefty German crops – turnips, potatoes, cabbage – while in the eighteenth century the inner areas were laid out in the fashion of the time as a formal garden, with long, radiating avenues of trees reaching out into the fields. In 1813 the estate was bought by a Wuppertal industrialist, Peter de Weerth, who three years later built the Rosa Haus as its central residence. As a prelude to Korte, in the land immediately beyond his house Weerth introduced exotic plants such as hemlock pines, tulip trees, trombone trees, robinia and deciduous cypresses, some of which have now grown to immense proportions with trunks over 5m in diameter. At the same time he turned the formal garden into an English landscape garden, of winding paths, streams, woods and picturesque figures.

By the early twentieth century the estate had changed hands, and was now owned by the youngest son of a family of industrialists from Cologne, an eccentric named Wilhelm Lensing. He hung chandeliers from the trees, plucked the wood-violets for salads, placed odd sculptures in the shrubbery, devised automated bird feeders, and lived much of his later life alone on the island as an affluent hermit. It was actually Lensing who first started to dig out the dried tributaries of the Erft, getting the water and the energy flowing again, a form of garden acupuncture, but also using the resulting network of streams to demarcate his land from the surrounding fields, and create an increasingly inaccessible home for himself. He recorded much of this landscaping on a box-camera, preserving its transformation on glass-plate negatives, and as a kind of forerunner of Müller, revelled in the privacy of his own private Arcadia along the Erft.

When Lensing died in 1962 he was an almost forgotten figure, but a local woman, Frau Vicky Kreuels, was able to shed some light on his character. Frau Kreuels, who lives in a third-floor apartment in nearby Neuss, is something of an Anglophile, having worked in London in the early 1950s as a maid to a rich aristocrat. Cheery and conversational, she responded very well to an English visitor, and recounted stories of encounters with Lensing in the late 1950s. He was a small, unprepossessing man, she said, a *sehr sensibler mensch* (a sensitive soul), quite lonely and old-fashioned in his ways, but still very sharp – for instance, when he was teased by an assistant in the local bakery he registered her terrible teeth and politely suggested that before laughing at him she ought to see a dentist. When Lensing died his house was cleared. Frau Kreuels' husband Albert, a journalist, salvaged some glass-plate negatives from a pile of possessions waiting to be destroyed, and later used several of them in an article on Lensing for the local paper. The photographs, retrieved from a cardboard box in Frau Kreuels' attic, have the quality of the technology of the period, slightly blurred owing to the long exposure times and rather flat due to the lack of focal depth, which gives them an inevitably melancholic air. Imitating in a painterly way the style of late impressionism, they nonetheless have just a suggestion of the photography to come, of *Neue Sachlichkeit*, even a touch of the celebrated Rhineland photographer August Sander. Their subjects include a large gathering of well-dressed figures on the lawn in front of the Rosa Haus; two youths standing on a bicycle-powered punt while two men look on from the reedbeds; cows grazing on the bank beside the willows; or Lensing himself, round-faced and tubby, accompanying two colleagues on a shoot. Lensing, ever the uncertain dilettante, practised photography for only a few years before he became bored and put his equipment and plates away. Comparing these images to the same scenes today, more than a century later, we find the well-dressed figures have been replaced by tourists, and Heerich's *Hohe Galerie* or *Orangerie* have risen up in the background.

Erwin Heerich, *oT. T/P*, 1963
Photo Achim Kukulies
© Erwin Heerich / VG BILD-KUNST Bonn, 2015









Photographs from Hombroich Insel
featuring Wilhelm Lensing, *c* 1910
© Albert Kreuels, reproduced by
kind permission of the Kreuels Estate

Kahmen

Rosa Haus, the nineteenth-century property at the centre of the estate, is today home to the critic Volker Kahmen, a long-time friend and colleague of Müller, and one of the few insiders remaining who is still able to recall the early days of the Hombroich project. Kahmen, besides being one of the first to write about the Düsseldorf photographers Bernd and Hilla Becher, is also the author of other more general books on photography and on abstract art. The Rosa Haus contains the literary archive that Kahmen set up, with its large collection of literary autographs, such as those of Franz Kafka and Paul Celan. Somewhere upstairs, apparently, is Kahmen's own remarkable collection of art, studded with works by friends like the Belgian painter René Magritte – although it should be said that with Kahmen, as with so many aspects of Hombroich, facts and myths tend to overlap. Kahmen himself is a very private individual and has a reputation for refusing all interviews, but a meeting is arranged through the good offices of the Hombroich archivist. In the small entrance hall of the house are a number of cabinets in which Kahmen has placed an extraordinary geological collection of minerals, fossils and prehistoric tools, interspersed with unexpected miniature artworks, each item's title and date of acquisition recorded in minute script on a paper slip. Kahmen sits at a small table by the window, and speaks expansively, even if there is something lightly ironic or slightly evasive about his responses.

VK Müller was an industrial property developer. He liked things done in mass. It was the same with art. He bought in bulk. I sometimes acted as his artistic advisor, and would also be asked to comment on the quality of a particular piece. His collection is very good, but of course there were also beautiful things he didn't seem to value – most famously, a Hockney.

WF *Do you think Müller had limits, did he know when to stop?*

VK Müller was a businessman, he always wanted more. He would blow things up and up, like a balloon, until … well, you know the Grimm fairytale of the Fisherman and his Wife, where the wife never knows when to stop asking for more, until they lose all sense of scale.

WF *Was it Müller's idea for Heerich to build the pavilions?*

VK Müller and Heerich and Graubner were friends. Heerich made such beautiful objects out of cardboard, and also in steel and stone. He made these with his own hands, and so controlled the work. Müller saw the possibility of turning these objects into buildings. In the early days everything was regulated by the authorities, and it was very difficult to secure planning permission. To get around these problems the first buildings were called 'renovations' or 'sheds' and placed on the sites of existing buildings. Then they were called 'chapels', because chapels are uninhabited, they require no complicated functions and no one can really object to a chapel. There was no artificial lighting or security guards or air-conditioning because there was not enough money. At first this was out of necessity, then later it became standard in all the buildings.

WF *Do you think the transition in scale was always successful?*

VK In his sculptures Heerich did the work himself. He was a very fine craftsman. But with the buildings he was dependent on others – on an architect and on workmen, and so he lost some of the control.

WF *Why did Heerich not receive more international recognition?*

VK Heerich was quiet, modest, with his small-scale cardboard sculptures and fine gridded drawings. He never became an international name. Other artists at the time made more noise.

WF *In your book,* Eroticism in Contemporary Art*, you include Heerich as an artist with erotic aspects …*

VK Ha ha, did I write that? No, there isn't any eroticism in Heerich. In that book I was really writing about *Sinnlichkeit* (meaning), not about erotica – my argument was that there was meaning in abstract art, which at that time was ignored – but the publishers changed the title of the book to something that would sell more copies. With Heerich, there is clearly meaning within his drawings and sculptures.

Tadeusz Pavillon

On higher ground on the western edge of the museum estate, where the landscape has a different feel, almost agricultural, with open grass fields and enveloping woodland, you encounter the *Tadeusz Pavillon*. It is another clinker box, this time with a large square window cut into its facade. By this time you might feel you have seen so many of these boxes that there can't be many tricks left in store. But it still manages to surprise. You enter as usual through an oversized timber door, as though going into a space you have already experienced. Inside you see a series of very large oil paintings by Norbert Tadeusz, which appear to combine a vibrant atmosphere of human anatomies in all possible positions, with the occasional suspended Francis Bacon-like animal corpse, as though a butcher had moved into a circus. Of course, the interior space of the building has none of this carnivorous performance, but remains as ever cool and slightly baffling. The large window that dominates the outside has vanished and is nowhere to be seen, until you realise there is a second interior higher up, cutting through the first one across the centre of the building. Initially there appears to be no way of accessing this other space. But once outside again, behind the building, you find a mound and a stair which allows you to enter this second space – an empty horizontal shaft which reaches across to the window and a view over the fields. It is only back in the *Caféteria*, aided by a second helping of apple puree and mint tea, that you figure out the *Tadeusz Pavillon* is a building with two spaces that do not connect, one a gallery, the other a viewing room.

Rocket Station

In 1994 Müller bought a site made available by the end of the Cold War, a decommissioned NATO rocket station located about 1km away from Hombroich Insel, and separated from it by a road and railway line. The presence of the station had been a running sore for supporters of a neutral Germany without nuclear armaments. Today the site is intriguing, the Belgian troops that manned it have gone, but the bunkers, sheds and control tower remain, surrounded by fields and orchards. In the right season, large hares can be seen leaping through the fields.

The purchase of the rocket station gave Müller the opportunity to extend his interests beyond Hombroich Insel, where space is rather limited, and to develop a community of artists. In this sense the station has a different mandate, no longer displaying his collection but encouraging a wider range of activities. The two sites balance one another, the island gentle and concealed, the rocket station rough and exposed. With his usual enthusiasm – and finance – buildings were renovated, bunkers cleaned out, and specific artists, musicians, even scientists invited in to use the site. As an inveterate property developer, Müller saw a building crane as an indicator of life, and developed an ambitious architectural programme. Heerich was again invited to produce a number of buildings, this time four structures, including the *Archiv*, originally designed for use by visiting scientists; the *Fontana Pavillon*, containing artwork by Lucio Fontana; *Wohnhaus*, a three-storey seminar building; and, with his architect-son, the *Kloster*, a cloistered guesthouse. Each is interesting, but up here on the rocket station the buildings appear exposed, unable to shelter within Korte's carefully planned marshy landscape. Yet still Müller wanted more – and this is where he perhaps began to overextend himself, indulging his old fondness for buying in bulk. A series of celebrated architects were invited to produce additional buildings. Per Kirkby produced three modest and rather delightful vernacular



Erwin Heerich, *Tadeusz* pavilion, 1991–93
Museum Insel Hombroich
© Tomas Riehle / Artur Images



Erwin Heerich, *Archiv*, 1998–99
Museum Insel Hombroich
© Tomas Riehle / Artur Images

buildings on the path down to the island; Raimund Abraham designed a very sculptural house for a musician, oriented directly towards the control tower, with a large circular concrete roof – like some kind of symbolic millstone (the building is still to be completed); and there is a pleasant but rather uncertain gallery by Álvaro Siza. The Langen Foundation, another private arts foundation, separate from the Müller enterprise but sharing the same site, then commissioned Tadao Ando to design a museum, rather banal and corporate in appearance, the antithesis of Heerich's modest but formally inventive structures. Late in life, Müller made considerable efforts to bring in other celebrity architects, such as Peter Zumthor (who reportedly demanded that the site be cleared of all the other buildings) and Daniel Libeskind, but nothing came of this. In 2004 he was still thinking big, inviting numerous artists and architects to produce a vast project for an art colony extending far across the surrounding fields, but his death three years later meant his 'HombroichRaumOrtLabor' never happened.

Seeing Müller's approach to the rocket station one might recall the parable cited by Kahmen, of the tale of the Fisherman and his Wife, always demanding more. At what point is there too much art? At what point are there too many galleries? At what point are there too many languages? Up here something has been lost of the mystery and subtlety of the ideal world below. Perhaps this is necessary; Hombroich Island, with its art separated out from the everyday world, is too perfect, too detached, the creation of the art paradise has its limits. However, the best thing about the rocket station is not the new buildings but the wild location on the plain, the industrial quality of the bunkers and tower, the wind, the fields, the creatures, the unexpected.

Kling

At the centre of the rocket station is a control tower, its raised operation room looking out over the landscape. Müller invited the poet Thomas Kling to live at the station and rather unexpectedly he chose the tower as his home, renaming it the *Dichterturm* (poet tower). Unexpectedly, because one might not expect a poet to occupy the central position in a rocket base, making lyrical expression, rather than highly aggressive missiles, the hub around which it revolved. Born in 1957 in Bingen, further up the middle Rhine, Kling became one of the preeminent German poets of his generation, celebrated both for his verse and his biting putdowns of other more conventional poets. Though connected to Düsseldorf, and formerly part of the city's arts scene, Kling travelled widely, writing about the many places he visited – New York, St Petersburg, Finland, Vienna. But he retained a particular feeling for the Rhineland, its long history, its people, its fauna and flora.

From early on Kling's writing was characterised by its disruption of the comfortable grammatical forms of German, mixing slang, dialect and imports from other languages as much as from geological and zoological phrases, following but reaching beyond the experiments of 1920s Dada poets like Hugo Ball, and the linguistic games of Austrian poets such as Ernst Jandl and Friederike Mayröcker. A Kling poem often lacks any consistent syntax, usually has no clear subject or object, produces unanticipated repetitions and line-breaks, and requires several readings to determine its sense. His work is both an attempt at a kind of alternative German, and also what he described as *Spracharcheologie*, language archaeology, bringing out and resurrecting words that had been lost in dialect or technical backwaters. A slender parallel can be drawn with those litanies of rediscovered plant names dug out of the dead tributaries of the Erft by Bernhard Korte, an ancient botany excavated and reused for contemporary purposes. In his younger days Kling would compound the complexity of his language by reading his poems out aloud in a mix of considered tones and angry shouts – sessions he termed *Sprachinstallationen*. Later he became less theatrical, more measured, but sounds and syntax remain central. His work, often difficult enough in German, is hard, perhaps even impossible to properly translate into English, where invented compound nouns have little sense, and where the particular sound of the German language is lost.

Heerich, who belonged to the island, and Kling, who was at the centre of the rocket station, can in some ways be compared. They are different but not opposed, both attached to the landscape of the Rhine, to its history, but each looking much further afield. Heerich believed in clarity of form, but his work quickly becomes mysterious, baffling, deliberately labyrinthine. Kling starts off looking intimidatingly complex, almost nonsensical, but is often conveying a straightforward idea, with a deep, sometimes dark relationship to people, animals and landscape.

This concern for the landscape and its creatures finds it way into other Rhineland art. Joseph Beuys famously carried a dead hare into one of his performances to allow this corpse perched on his arm to 'explain' his artwork. Kling's 'Eine Hombroich-Elegie', published in his 2002 collection *Sondagen* (Soundings), is a long poem broken down into 21 individual fragments. The poem never mentions the Müller enterprise, the artworks or the buildings, but concentrates instead on the site's animals, birds and insects, especially the wasp,

[1] *the grey bee eyes scan*
here the meadows, the grey meadows.
a proper waxrest-memory
waxrest-dictaphone,
forms meadows, valley, blocks,
the whole landscape thing in
clay
voice over.

[2] *the bees from the grey-unseen meadows,*
homewards-speeding to the beehome,
to pass by the entry-control. to
perform dances, which beelanguage,
honeyalphabetical, should convey something.

[4] *since they no longer knew,*
that it would get very bad, as they meant,
with the
wasps,
they fetched the waspbanner.
he knew the right words and
made the creatures all kinds of signs.

[7] *on its side, still*
a young hare,
flexible, whole, still
fluffy.
on each side
without wounds
sun shines on it pink,
through the ear.
the time is three
golden flies and
a sungold wasp
appear without words
on furry
summer-carcass.

[14] *but they chirrup yes!*
curves and aircurrents.
language of the falcons: they chirrup
with one another, gentle seeing language.
the audible tongues in descent.

[17] *these are the secrettints of the region*
aldersshaking over the names of the moornames
in dryness over the deep groundwater
mirrors quavering writing
single rising bubbles…

[18] *foxbreast, that beats. beating*
heart and foxvoice by weatherchange
out of the soundstudio at night, rustling. there
he barks again, wailing night, and breaks off,
as though deathrattling, just over there,
and the storm begins, as though
a creature must in it believe.

From Thomas Kling,
'Eine Hombroich-Elegie', *Sondagen*, 2002
© DuMont Buchverlag, Cologne, 2002

which became Kling's own symbolic emblem, equivalent to Beuys's hare. As in folktales, the animals prove wiser than the humans, but their wisdom is unfortunately non-transferable. The fragments express a disturbing sensibility: the landscape and its inhabitants are slightly threatening, and death is just a step away, but life continues to buzz and chirrup in a language the poet cannot fully understand. The language of the poem, reduced down from the baroque complexity of his earlier work, displays the typical Kling inventiveness – waxrestmemory, honeyalphabetical, ochredepth – and syntactical disruption. Of course, the elegy as literary form looks back to Virgil, whose *Georgics* dealt with the life of bees and other insects, but also to English poems of the eighteenth century, such as *Elegy in a Churchyard* by Thomas Gray or *Elegy on Death* by John Keats, which turned these pastoral requiems into sweet meditations on landscape and death. Where better in Germany to find possible allusions to this lyricism than in a wild English garden beside the Erft?

Archiv

Navigating the rocket station you walk through the rather confused configuration of bunkers and towers before heading out onto the plain. Amid long grass you approach a square-shaped building, again sheathed in clinker brick, but unusually for Heerich it integrates a strip of utilitarian windows and, doubly different, is arranged over two storeys, the lower floor being cut away so that the upper level canters out in a rather disturbing fashion. You enter into a small shaft, open to the sky, but blank, revealing nothing, leading nowhere. A small door in one of the walls leads you to an interior room, and then up a simple dog-legged stair to the main space running around the upper storey, which contains rows of shelves with books, some of which appear to be organised by the colour of their spines. This was formerly a research space where a team of biophysicists led by Fritz Albert Popp experimented with biophotons and bioluminescence – one of Müller's wilder attempts to add science to Hombroich's arts-oriented programme. Now the building is an archive for the Müller project. Some researchers work quietly at a table, an unexpected outcrop of human beings hard at work in these often empty buildings. From the windows you look out across the plain. You walk around the perimeter of the archive, arriving at a second stair, identical to the first, leading downstairs to another identical exit. Once again this building is a miniature labyrinth, elegant, reduced, giving nothing away, the visitor orienting himself only by the windows which give onto different views.

Future

The Hombroich project, utopian, highly aesthetic, hermetic, seems to have no fixed end. 'Its quality', Müller said in a 1992 interview, 'is that it will never be complete, and remains a living space, where the diversity of art meets the diversity of nature'. But how does such a project remain alive once its founder has gone? In the early 2000s the community of Hombroich began to thin out. Heerich died in 2004; Kling followed him a year later at the early age of 48; Müller died unexpectedly in 2007; Graubner in 2013. Within less than ten years Hombroich Insel had lost all of its principal protagonists. By then Müller had spent most of his fortune, with comparatively little remaining to continue the ambitious scale of his project. Some of the pavilions now require substantial and expensive repair work, a necessary but ironic task, considering that Müller emphasised the transitory nature of his collection, and that Heerich was originally attracted to fragility and an emphasis on the idea rather than its material realisation. Wandering across the island now is a strange, almost hallucinatory experience, as if one had assumed the ghostly identity of a character in Lensing's photographs. In the Heerich atelier, for example, everything remains just as he left it, his books on the shelves, artworks set out on a podium, his bedroom behind with its bed still in position, the coffee percolators lined up on the shelves. There is on the island a certain weight from the past, as though the generation of the 1970s and 1980s were the giants, and all that came after existed on a smaller scale.

A foundation, Stiftung Insel Hombroich, was already set up in 1996, delegating responsibility for the administration of the entire Müller enterprise to the state of Nord-Rhein-Westfalen, the district of Neuss, and Karl-Heinz Müller himself. Transferring Müller's collection to the state solved some of his then considerable tax problems, and gave the island access to national and regional sources of funding.

Other members of the community remain, and various new artists continue to arrive. Like the religious order it rather resembles, the Hombroich community develops and evolves.

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There is one large committee for the direction of the Stiftung, and another one for the direction of the art. Where once Müller and his friends made decisions and simply carried them out, now committee members engage in the usual endless discussions, each claiming to channel the wishes of the departed patron. The locust has achieved a kind of saintly status.

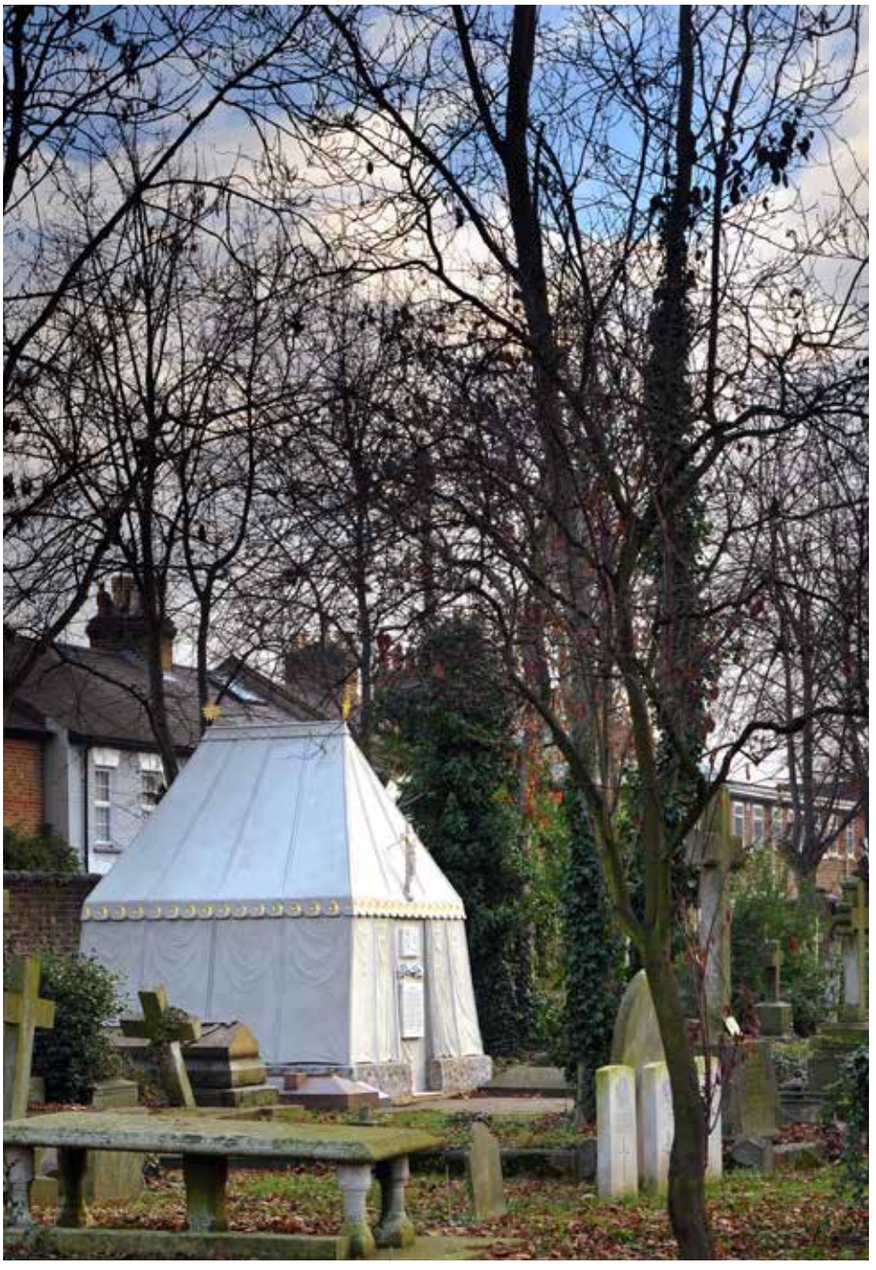
Inevitably tensions arose when the very personal, non-hierarchical system set up by Müller and his colleagues transmuted into the bureaucracy of a centrally administered German arts institution. One business director, Ulrike Rose, came and went. In 2014 the architect Frank Boehm was appointed her successor, with the very complex task of managing the island, renovating the buildings and organising the art shows on the rocket station. True to the Hombroich tradition, Boehm is currently displaying a show of the Düsseldorf sculptor and photographer Thomas Demand, another man who in his own way plays on the differences in scale between cardboard models and buildings.

But how does Hombroich now develop? It could become a kind of monument to its original founders, operating as an art foundation, but frozen, unable to move on. It could reconsider its position, expand, create new buildings and new facilities, possibly attempt to realise the grand vision of the *RaumOrtLabor*. It could retreat into becoming a more conventional sculpture park, like the Louisiana Museum north of Copenhagen, or the Kröller-Müller Museum outside Arnhem. But Hombroich is an intensely personal creation of a small group of people, its essential qualities emerge from a combination of personality, site, scale, individuality. It works when it challenges the conventional art world assumptions because it is isolated, because it makes few concessions to visitors, because it treats its collection as being altered by time rather than being preserved forever, because it is, at least by German standards, a bit unkempt, quirky, slightly dysfunctional. There is a balance at Hombroich between preserving and decaying, destroying and creating. It doesn't need the dubious celebrity of star architects, it doesn't need the dead hand of conventional art foundations, it doesn't need big-scale plans. It just needs to keep to its mix of great ambition and essential modesty, to continue to be individual.

Müller once said 'I believe that art is a self-sufficient living entity'. Self-sufficient? Then perhaps it will look after itself. Müller certainly felt that art should be nourished but not coddled. Hombroich Island isn't really an island, rather a landscape of undefined marshy land, known in German as *Broich*, through which a number of small streams flow. It was by restoring and recreating the flow of these streams that the land was brought back to life. A sodden Arcadia? Paradise enough for now.

How to Say Nothing with Sincerity

Andrew Crompton



Tomb of Richard Burton,
St Mary Magdalen Church, Mortlake, 1891
Recently restored by HOK
Photo Philip Vile

Few people seem to have noticed that we are living through a period of religious building to rival the great years after Waterloo, when 600 Commissioners' churches were built as a national thank-offering for the defeat of Napoleon. Since the millennium alone, more than 2,000 multifaith spaces have been built in the UK. That total includes 13 just at Heathrow, which in terms of density of religious sites has come to rival the pan-Hellenic sanctuary of Delphi.

This is quite an increase from Frederick Gibberd's lone airport chapel of 1969, but one reason why you may not have noticed them is that these are all interior spaces, often sited near the lavatories. If you are curious enough to go round a few corners and open a door you will find yourself in an irregular plasterboard cell with a suspended ceiling and no window. Usually there will be a few books, a Bible, Gita, Koran and so on, side by side on a shelf, along with some simple furniture or perhaps no furniture at all. You are in a new sort of sacred space, one that is timeshared by people of different faiths. Whether you stand, sit or kneel is up to you.

With no pressure group behind it and no legal requirement to provide for it, the spread of multifaith spaces is rather mysterious. None of them is architecturally notable. Even the prayer room at Heathrow Terminal 5 by Richard Rogers – a possible exception to the rule – is a blank plasterboard box like all the rest. Most multifaith spaces in this country are actually vernacular works created in an amateur fashion by managers and administrators, sometimes themselves religious, sometimes not. Architects seem unable to design them properly. This is a strange claim, but one that deserves to be taken seriously; like the eye that cannot see itself, whatever architects attempt is self-thwarting.

It is a hard thing to make a space that is acceptable to many faiths yet never inappropriately meaningful. Some sort of enclosure is needed, but how does one ensure that it does not privilege one culture over another? The answer, as will be seen, is to be the built equivalent of ambient noise, background rather than figure. This leads to an interesting question: what is the very least that architecture can say, semiologically speaking?

Being minimally meaningful is not the same as being minimal. A James Turrell light installation is both minimal and spiritual, but it would not work for a multifaith space because it projects certain ideas of purity and simplicity that are specific to, let us say, the US around 1990. Multifaith needs to be more general than this, but being unspecific does not come easily to architects who pride themselves on their ability to create meaningful concepts and write specifications. Utterly empty rooms seem sinister, yet whatever is added to them causes problems; any table can become an altar, every bowl of pebbles seems pagan. This is the trap in which the designer is caught.

When only two religions are involved some sort of compromise might still be possible. One example at the Christianity–Islam interface is the 1891 tomb of the adventurer Richard Burton. He was the translator of the *Kama Sutra* and a no-holds barred version of *The Arabian Nights*, as well as one of the very first Englishmen to see Mecca – and survive, by passing himself off as an Afghan dervish, his pasty face smeared with walnut juice and his penis newly circumcised. Possibly a difficult man to be married to, he now lies quietly beside his wife at St Mary Magdalen Church, Mortlake. Their tent-shaped mausoleum made from Forest of Dean stone merges her devout Catholicism with his Orientalist leanings. Nothing is hidden. There is a window through which their coffins can be seen side by side, in eternal Christian harmony, while the outside is inscribed with an Islamic frieze.

This is a simple love story, not even a *ménage à trois*. Multifaith is more of a *ménage à vingt* in which Christians and Muslims are joined by Sikhs, Baha'is, Jews, Hindus, Taoists, Buddhists, Rastafarians, followers of Shinto, Zoroastrians, Unitarians, First People, Neo-Pagans, Scientologists, Ahmadis, Jehovah's Witnesses, Humanists, Wiccans, Druids and people just needing a little peace and quiet. The deep problem here is that there is nothing they all share in common. At best there is only a family resemblance between what they believe, so to try to represent some common ground is to commit what the philosopher Gilbert Ryle called a category error, mistaking an abstract concept for something tangible. Ryle gives the example of the 'Average Taxpayer', who would seem a mysterious everywhere-and-nowhere sort of person if you actually went looking for them. The core of multifaith is nebulous in much the same way. All the same, this has not deterred architects from trying to build a home for it. Avid for essences, they assume they can get to the heart of the matter like a monkey cracking a nut. The results are usually self-indulgent or even ridiculous, for when, as with sex and snobbery, there are things of which one cannot speak, comedy will be close at hand.

In early multifaith spaces you can find shelves of artefacts like religious supermarkets with ludicrous juxtapositions such as statuettes of Christ next to witch's cauldrons, prayer rugs next to fire-worship equipment. Crosses, it turns out, are offensive to nearly every one and where they survive they are disguised, often by being bent into airplane shapes. At Brandeis University there is a crucifix from which Jesus appears to be leaning forward and waving, as if saying 'Hi'. Here the image of the bearded figure that has been familiar since Dürer's woodcuts reaches one of its many ends. There is much use of natural objects such as leaves, branches and pebbles. For example, the 'spiritual opportunities' offered to departing passengers at Munich airport include a prayer room with a big fat tree trunk at its centre, 'signifying the variety of benefits'. This is funny and peculiar at the same time. In straining not to be Christian, tree worship appears as an atavism.

When different religions share a room they settle in opposite corners. The remedy for this anti-social behaviour, an idea that many architects have lit on, is an oval room. Unfortunately every such room I have visited has been divided by Muslims screening off one end for themselves. Islam carries its own space around with it, in the form of a mat, and flourishes in multifaith spaces oblivious to whatever else is going on. It makes its presence felt in subtle ways, through bottles of scent or Korans being moved to a high place if a ledge or top shelf is available. At Hilton Park Services on the M6 motorway in Staffordshire the washroom has a high-level dryer for hands and a low-level dryer for feet. At Bolton University the gridded carpet is set out at a very slight angle to the wall. Perhaps this is just bad workmanship? But no, it points to Mecca. By and large, carpets seem Islamic and hard flooring seems Christian. But a floor has to be made of something, so here we are forced to decide: carpet or not. It is around these polarities that rooms can be classified. Saying nothing might actually be impossible.

To complicate matters Jews normally stand to pray, Christians sit and Muslims prostrate themselves. This leads to divisions in section as well as in plan, and because of this chairs, especially chunky wooden chairs, appear Christian. How can something to sit on be de-Christianised? One solution is to turn it into a cube of solid wood. At the 'open' church of St Jakob in Zurich you can sit on such a block in an underground chamber and contemplate a huge crystal. You leave by a concrete staircase that rises into the light, continuing

above ground into the air for seven steps, equally convenient for mounting a horse or beginning a journey to heaven.

Because they are generally located in out of the way interior spaces, multifaith rooms lack the elevations that would allow them to join the society of other buildings. Instead they are isolated, windowless monads. An exception is the prayer room at Liverpool Museum, which has a westward view of the Mersey. Muslims, however, turn away to face east and Mecca and one imagines most other prayerful people would do the same because the stirring view is a distraction. So often in multifaith spaces interesting ideas are irrelevant to their purpose. Having visited many of them I would say that, in general, the larger the budget the worse they turn out, and that the UK, through its amateur and parsimonious approach, is the accidental world leader in this field.

This brings us back to the anti-architectural box, which after many fruitless experiments has become the de facto answer to the multifaith problem. Normally there is a lack of symmetry, with plasterboard walls meeting an existing structure in an unordered way. There will be a 600mm ceiling grid with no suspension points (do not think about hanging yourself here), MDF skirtings, smoke alarms, fitted carpets, anodyne artworks and IKEA furniture. Such rooms would be hard to parody, for which feature could you exaggerate? A Lego multifaith room would be difficult to recognise: the white walls, a door, a shelf, are too generic to be identified and the rackety space-left-over-after-planning quality is perhaps impossible to represent in crisp plastic bricks. In any case, kneeling and prostration are not in the Lego figure's repertoire.

A room that was known to be the work of a famous architect, or was in some other way conspicuous, would be self-defeating, because it would say something unwanted. On the other hand it would be equally wrong for them all to be identical since that would raise the question, why this arrangement rather than some other? The compromise solution is to make multifaith rooms roughly the same while differing in unimportant ways. They might remind you of lobbies, or offices, or storerooms or bereavement counselling suites, but most of all they look like other multifaith rooms. After the first few they begin to feel familiar in the way that a McDonalds does. They are camouflaged like animals in a herd.

The problem of providing universal access to the divine is thus solved by something humble. Can something so nondescript truly be sacred? A standard theory of sacred space depicts it as a model of the cosmos connecting earth and sky. Clearly that does not apply here. A more modern view, however, is that sacred or profane are not substantive categories but rather situational ones. Sacrality is a category of emplacement, and what is being emplaced in multifaith spaces is being carried into the room on bodies and clothes rather than represented architecturally. It was not present until somebody walked in. A better question to ask is this: how can a multifaith room be profaned? The answer is by returning it to secular use, such as for sex, sleeping, eating or charging a phone while pretending to pray. In this case preserving a room's sacred character is simply a question of proper management.

It is surely a striking turn of events that religion in the public realm is today largely restricted to windowless boxes. Yet these places are not to be despised, people do care about them and do use them, indeed they are contested spaces. You can usually tell who used them last by how things are left, requiring them to be reset by someone with an eye for the religious significance of how things are laid out; in short, they need to be ritually cleansed once a day. Proselytising is the unforgivable sin here, breaching an implicit contract: do as you will but tidy up afterwards and do not talk to anyone else. Even so, you can find evidence of trouble if you look for it – petty vandalism such as writing on the carpet, scratches on the table, things left, things stolen, litter dropped. These are spaces with attendant spirits. Furniture shifts as if a poltergeist has been at work and airports have cameras to catch it in the act. This is a very peculiar state of affairs: today the state is spying on people at worship, something unknown in England since the Civil War. I like to think it is polite to bless the policeman watching you as you finish your prayer.

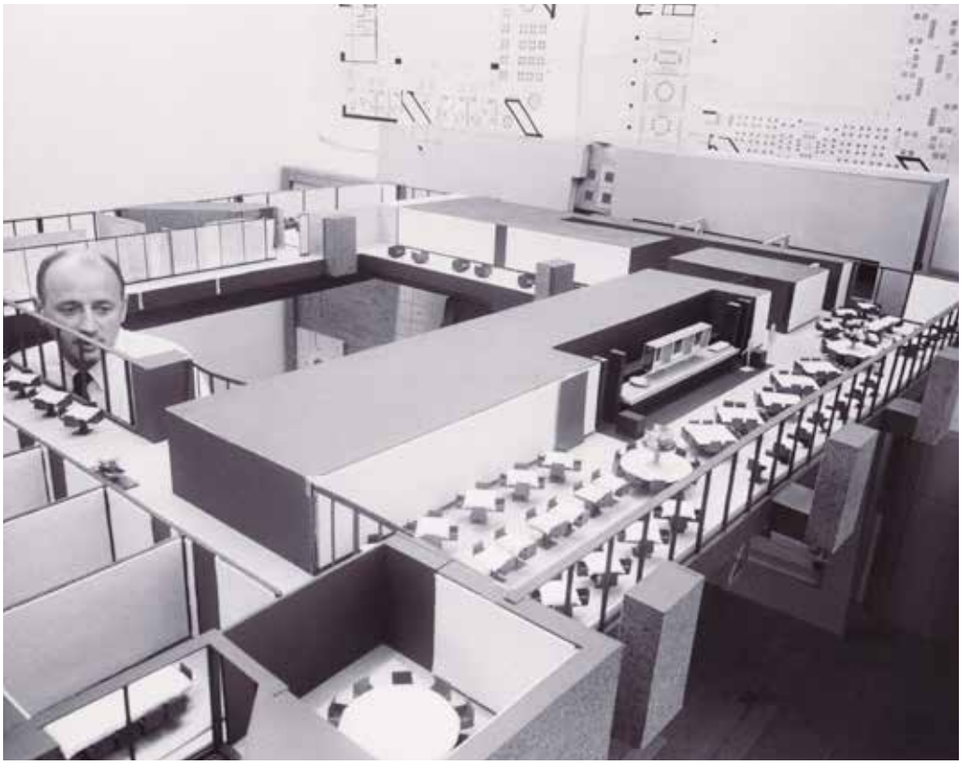
At Malmo hospital a tray of sand is provided in which you can draw your own symbol with a finger. This is surely beautiful, a reminder that what is good in multifaith is often ephemeral and cheap. It is the destruction of the symbol in the sand by the next person to come along that is the clever thing here. How are we to understand this as architects? Perhaps we too much want to create a presence without considering its relation to absence. Once absence is accepted, odd things happen as the play of something and nothing leads to spaces that resemble conceptual art. In multifaith rooms sacred space is being dematerialised like art objects were in the 1960s and 1970s. But even this game can go too far. Severely empty spaces can come to resemble art installations such as Gregor Schneider's constructed rooms where things may or may not have happened. This leads to a new mode of multifaith failure, becoming macabre. In these extreme cases you can feel the chill of the cell or the sensory deprivation chamber where you can scream but nothing happens.

What we see in multifaith spaces is akin to, but not exactly, nothing. It is close to Sartre's memorable phrase, 'things are entirely what they appear to be – and behind them ... there is nothing'. One way to understand this is by analogy. Mathematicians put the empty set $\{\}$ to creative use as the root from which the natural numbers can be defined recursively, starting $0 = \{\}$, $1 = \{0\}$ and so on. Although we can construct 'one' and 'zero' and then all the other integers, and can represent them with familiar glyphs, the closest approach we can make to the empty set is a curly bracket seen from the outside. Think of the plasterboard walls as being like that bracket, containing the un-thing at arm's length. As fleshy creatures like ourselves approach it, we encounter not the void itself but our own unconscious in the form of comedy, fear, boredom, alienation, crime, atavism and a lot of strange people. These boring spaces which entirely lack elevations are ironically very expressive. Quite possibly they are the building type which, above all others, best represents our own time.

The next time you pass through Heathrow, instead of going shopping why not have a close encounter with $\{\}$. Look behind one of several doors marked with icons such as ✞☬✡☼ॐ☪☸◕. Surely if God is to be found anywhere, these are the places to look. Push the aluminium doorplate. What do you think you will find behind the curtain? Luminous aliens with long fingers or wizards pulling levers, perhaps? That's just in films, in reality there is not even a curtain. What you see is a bad copy of another boring room that undermines even its dignity of being unique. You are in a metaphorical dead end. That is the point of it. It is exactly what it seems to be. There is no next step to take. You have passed out of culture and reached measure zero. Whether you stand, sit or kneel is up to you. Now turn around and fly – if only to another airport.

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and to Helen Molton from HOK

Kevin Roche *in conversation with* Thomas Weaver



The architect Kevin Roche is 93 years old and still going strong. When I first emailed to ask if he'd be interested in this conversation he shot back a reply within a few minutes, inviting me over to his office in Hamden, Connecticut, where he still works four days a week. A couple of months later, when I arrived in Hamden, he was there to greet me, and over the next five hours he talked non-stop, recounting stories from his childhood, his education in Dublin and with Mies in Chicago, and even restaging the original slideshows from a number of his most celebrated projects, all delivered in his mellifluous brogue.

With Roche you don't need to dig very deep to uncover an archaeology of modern architecture because it is right there in front of you. His office is the latest successor to the US practice first set up in Bloomfield Hills, Michigan in 1923 by the Finnish architect Eliel Saarinen. When Eliel retired the office was split between his partners; one half went to his daughter Pípsan and her husband Robert Swanson, the other to his son Eero. From 1950 Eero Saarinen & Associates became perhaps the most famous architectural studio in the world, or certainly the most productive, turning out a succession of great buildings, including the General Motors Technical Centre in nearby Warren, Michigan, the TWA Flight Centre in New York and Dulles International Airport in Washington, DC. Eero's assistant on all of these projects was Kevin Roche, and when Saarinen died suddenly in 1961 it seemed only fitting that the work of the firm would be continued from its new home in Connecticut by his deputies, Roche and John Dinkeloo. Between 1961 and 1966 the two men oversaw the construction of all the projects initiated by Saarinen, including the Gateway Arch in St Louis, the CBS Building in New York and the John Deere HQ in Moline, Illinois, only retitling the office under their own names when they were done. The work continued and the practice flourished, quickly establishing its own identity with ground-breaking buildings such as the Oakland Museum, Ford Foundation in New York and Fine Arts Centre at Amherst. Dinkeloo died in 1981 but, loyal to his partner, Roche kept the office name, and under the acronym KRJDA it continues to this day, completing projects the world over.

Kevin Roche inside a model of the Ford Foundation HQ, *c* 1964
© KRJDA

At the centre of this lineage is Roche himself, who over 70 years of practice has pioneered so many of the things architecture now takes for granted, as much as he has reinvented what it actually means to be an architect, devolving the image of the practitioner as artful casuist in favour of the architect as communicator and problem-solver. And amazingly he is still working. Halfway through our conversation, when Roche's assistant asked if I'd like some lunch, I replied that I'd eat whatever Kevin was having, thinking that this perhaps was the elixir of his eternal youthfulness. It turns out that if you want to live a long and distinguished life, still happily working in your nineties and able to talk engagingly about any number of subjects, this is what you eat: a toasted ham and cheese sandwich with mayonnaise, a plate of ruffled crisps, another of chocolate chip cookies and a very large glass of Sprite.—*Thomas Weaver*

TW *Kevin, in preparation for this talk I was reading the big* Shaping the Future *book on Eero Saarinen, published a few years ago, in particular the transcript of an event at Yale in which all the great and the good were offering rather grandiose appraisals of Saarinen's legacy – architects like Stern, Pelli, Venturi, etc. When it came to your turn to speak you prefaced your remarks with an eloquent kind of apologia in which you quoted the famous passage from St Paul's epistle to the Corinthians, saying that in trying to see what we venerate we look 'through a glass, darkly'. You used this sermon to suggest that we have to be careful in looking at the past, mindful of the circumstances of the culture of a specific period. I am keen to employ the same qualification, so that we talk about your past through the context of your time – if only because your time is so long – more than 90 years, 70 of them as a practising architect, extending from the 1920s through to today. And I guess, in beginning, one of the most obvious contextual things to point out is that although you are celebrated as one of the most influential American architects of the second half of the twentieth century, you are in fact Irish.*

KR I am. I was born over a shop owned by my aunt in Lower Camden Street in Dublin on 22 June 1922. At that time my mother was destitute because my father Eamonn was in jail. He had been arrested and imprisoned during the Irish War of Independence because he was a member of the IRA. Along with other Irish prisoners he went on a hunger strike. When he was released in 1920 he became a member of parliament in the Irish Free State, but soon afterwards, during the Irish Civil War, he was captured and imprisoned again for a couple of years, this time in Limerick. When he was eventually released he was offered a position as manager of a small creamery in Mitchelstown, County Cork, the heart of Ireland's dairy region. My father was an absolutely incredible man. He had never been to school but he had a great mind, and could solve arithmetic problems so fast it was unbelievable. This helped him to become very successful. Some short while later he took over a rival creamery, and within a few more years he had built it up into this huge institution – Mitchelstown Co-op Creameries – employing hundreds of people. They would make butter, buttermilk, cream, things like that. He sent these products to my aunt in Dublin who would sell them in her shop, and within a short while she, too, became very successful, operating more than 25 other branches and several restaurants. She bought an enormous estate called Burton Hall outside Dublin where she and her eight children lived, surrounded by a team of gardeners, cooks, an upstairs maid, a downstairs maid, racehorses in nearby stables and a chauffeur called Eddie Keogh. He drove the identical car to King George V – a huge Daimler – and wore leather leggings and gloves and a peaked cap. Whenever my aunt walked towards the car Eddie would jump up and salute her.

TW *Did your father indulge in the same trappings of wealth and upward social mobility?*

KR No, but we did live in a rather grand house called Gardenhurst in Mitchelstown, at the entrance to the old castle, with an acre of beautiful garden surrounded by a 14-foot-high stone wall, but really we lived quite modestly, and my father was much more interested in building up the business than luxuriating in his wealth.

TW *And he didn't keep up his political activities?*

KR God no. After two stints in prison he said to hell with that and abandoned politics altogether. He was much more interested in butter and cream, and then cheese. He used to travel all over Europe, often by airplane on the very first Aer Lingus flights, establishing contacts. On one of these trips he befriended a Swiss man called Dr Winternitz, who lived with us for a while because there were no hotels in Mitchelstown, and who helped my father develop his cheese-making. Every night before bed my brothers and I would say the rosary. But before this we would all play poker with Dr Winternitz – when he lost a hand he used to shout out in his thick Swiss accent that he had been 'Schwindled!' When the cheese also proved a great success my father was again very clever, because he exploited a by-product of its manufacture – whey – which he discovered he could feed to pigs. Before long he had several thousand pigs, and their own manure and by-products were in turn used to enrich vast acres of local farmland to grow wheat. So the whole thing became a big, almost industrial, agricultural setup. After my father died the creamery was eventually bought by Kerrygold.

TW *How did this emerging industry, right on your doorstep, impact on you?*

KR My father was keen for me to involve myself with everything, and so by the time I was 13 or 14, every day after school I would work as an apprentice to a local mason or carpenter based in the big metal-welding workshop and sawmill my father had set up among the farm and creamery buildings. Soon he even gave me a commission of my own, to design a cheese warehouse, and I also helped supervise its construction. I must have been about 17 years old at the time. The following year I designed and built another building on the compound, the piggery. At that stage I was in my final year at boarding school – Rockwell College in Cashel, County Tipperary – although I must admit that I was pretty much the worst student ever, certainly earlier when I was at the Christian Brothers' School in Mitchelstown. Consistently bottom of the class. There was no subject I didn't fail. Mitchelstown at the time had a village idiot called Patsy Murphy who always used to walk around pulling a little toy train behind him. The hierarchy at school was honours students, passed students, failed students, then Patsy, and finally at the bottom of them all, Kevin Roche.

TW *But when did you get cleverer? Or when – and this doesn't necessarily follow – did you develop an interest in architecture?*

KR At Rockwell, after study, we would have an hour or so to ourselves to do our own reading and follow our curiosity. I remember suddenly thinking that I'd like to design a church. Sketching this out I had, what I thought, was a stunning epiphany, imagining a church in the shape of a cross. I was incredibly impressed with myself – I thought it was a brilliant, genius innovation – and showed it to a friend that night in the dormitory. 'You feckin eejit', he said, 'don't you know all churches are in the shape of a cross'. It was the most disappointing moment of my life. Anyway, this is how stupid I was. But it was at Rockwell that I came across Ruskin's *Seven Lamps of Architecture* in the school library. Not that I could understand a word of it, of course. Have you ever tried reading it?

TW *It's not the easiest read.*

KR You're telling me. But nevertheless I was interested in it.

TW *But what did you understand architecture to be? I mean, there can't have been many architects in Mitchelstown in the 1930s.*

KR Well, you know, the English had left a residue of fairly interesting buildings. King's Square, where we lived, was one of them – a rather good quality Georgian square, with Protestants living in the lower half, Catholics in the upper. The whole of the town itself was similarly orderly, located on the Cork to Dublin road, with a market square in the centre; on axis with this to the north was the Catholic church, and on the same axis to the south, the Protestant church. So there had been a bit of planning. But really, I have no idea where my interest in architecture came from. Perhaps more from the warehouse and piggery I designed for my father than anything else.

TW *Didn't he want you to take over the family business?*

KR Oh no, nothing like that. Besides, my eldest brother, who studied law, was working with him, handling all the legal affairs of the business. After Rockwell, in 1940, I remember going to see him and telling him I wanted to be an architect. My father, to his credit, just went along with this. A few weeks later we walked down an administrative corridor in University College Dublin towards a little office, where my father put down a £20 note and announced 'My son here wants to study architecture'. The woman behind the desk said 'Okay'. That was

the extent of the application process. Back then the school was located in a kind of mock cathedral built in the nineteenth century, and I just remember it being full of sand, because they were filling hundreds of sacks in anticipation of German air raids. In the upper portion of the main space were two balconies, one of which was where the drafting tables were arranged. We'd be constantly having to brush the sand off our drawings. The professor at the school was Rudolf Maximilian Butler, an ecclesiastical architect and scholar. Very strongly Beaux-Arts. He wouldn't brook anything that wasn't Greek Revival. On our first day I remember standing in his office with the other ten students that year – interestingly, five of them were girls, which was very enlightened for the time – listening to Butler cryptically declare 'There are no plums in architecture'. 'Well, thanks a lot', we thought, and all trooped back to our desks. That first year we just drew classical columns. Copying mostly. Lots and lots of columns. Then after a year we moved on to arches. It was all very strictly supervised. But in my second or third year Butler died, and the school was taken over by a practising architect, who dropped the whole Beaux-Arts thing. The first project he set for us was the design of a house. Mine had a spiral staircase in the middle – as with the church cruciform plan, I thought I'd invented something totally original. After I presented my drawings my tutor took one look at them and said, 'You'll never get a coffin down those stairs, Roche'.

TW *It's also quite pragmatic. I mean, he's right. At a certain point in any house you do have to get a coffin in and out. This I suppose is also the ultimate Modulor – not the human figure alive and vertical but dead and horizontal.*

KR That's the Irish Modulor. We certainly weren't exposed to the Continental version. We were vaguely aware that there was a guy called Le Corbusier, but it wasn't until my final year that we started seeing any of his buildings. I actually based part of my thesis project – a house for the Taoiseach – on the curved wall at the entrance to the Swiss Pavilion. Of course, I was still an idiot at that stage but I did come top of the class.

TW *What did you do after graduation?*

KR Immediately afterwards I went to work for the architect Michael Scott. He was a really interesting figure. He hadn't had a formal architectural education but had been an actor with the Abbey School of Drama while doing a pupillage with a Dublin firm. He was wonderful. Really charismatic. It was a small office at the time but it attracted some of the brightest young designers around – people like Patrick Scott, who became a well-known painter, Kevin Fox, Wilfred Cantwell and Robin Walker, who was a good friend. Michael gave us all quite a bit of freedom. At one point I was designing an apartment block and I had the idea of prefabricating the apartments and stacking them on top of each other. I built a model of the scheme. I remember one morning a man called Ove Arup came by the office – he was working on his own then, long before his firm was set up, and was the engineer on Michael's Busáras bus station. I showed him the model, but he just looked at it dispassionately and said it would never work. I insisted it would and argued my case, until finally Ove picked up the model and stood on it. 'You see', he said, crushing it, 'the problem is that it has no lateral strength'. That was my masterclass in engineering.

TW *Why didn't you stay longer with Michael Scott?*

KR I was feeling restless and wanted to see more of the world. Because of the war, I was also feeling a complete sense of isolation. I had no idea what was happening in Europe. I mean, I only heard about the D-Day landings as I was going into an engineering exam at UCD. The rest of the world was completely wrapped up in this madness and I was sitting there taking a stupid exam. I felt so out of it. But anyway, Michael understood my impulse to escape and helped me secure a position with Maxwell Fry – the leading architect in London at that time. I moved there the following year, in 1946. There were only five other people there at the time, a young woman and four ex-RAF pilots. Max put me to work designing simple little huts in Accra, West Africa. We all had to do our own engineering, and despite Ove's earlier instruction, I really knew nothing and so just covered my drawings in fake calculations and random numbers because I knew that Max checked every drawing each night – this is just to give you an inroad into my character at the time. Despite my idiocy, the others in the office were all very kind and generous to me. I remember when one of them had a birthday we made a little collection and pooled a couple of pounds between us. Through a mutual friend we contacted Henry Moore and went to visit him in his one-room London apartment. He sold us one of his drawings, which we gave to our colleague as a present. It must be worth about $50,000 now.

TW *Did you like London?*

KR I loved it. But remember in 1946 there was rubble everywhere. It was shattering really. Whole areas were totally destroyed. Food was also in short supply. I was hungry most of the time I was there. For lunch we would walk around the corner from Max's office, and at a small window hatch next to a restaurant we would hand over two and sixpence and in return get a little paper plate with something barely edible. But still it was a great experience. With another friend from Michael Scott's office I travelled around looking at buildings: Oxford and Cambridge, where we were arrested for sleeping on one of the college cricket pitches – to two Irish vagrants, such as we were, it just seemed like the nicest, flattest piece of grass on which to spend the night. We didn't realise it was sacred. We were mostly looking at the churches and cathedrals. English modernism was very dull in comparison. With my father's help we also flew over to Paris to see some of the modern European buildings, and from there went on to Switzerland and northern Italy. Milan was even more devastated than London. But where we really saw the best modern architecture was in the magazines, especially *The Architectural Review*, which the office subscribed to. I remember one issue in particular praising the work of Mies van der Rohe, who I'd never heard of before. Some months earlier I had written to the offices of Le Corbusier, Aalto, Sven Markelius and a few others, without much luck, but after seeing those photographs I thought to myself that I had to get over to the US to study with Mies.

TW *So that's what you did?*

KR In 1947 my friend Fred Hilton and I were accepted into IIT's masters programme and we left the following year. I took two bags with me – in one was my underwear, in the other was my collection of nineteenth-century poetry and all of Joyce's work. I still have the first editions. At one stage I had aspirations to be a poet. Even earlier I wanted to be a dress designer – you can imagine what people in a small town in Ireland thought about that. Anyway, getting to Chicago from Dublin in 1948 wasn't easy. We first had to fly to Shannon airport, and then get on another flight to Gander airport in Newfoundland. From there we changed planes again and went to Boston, and then caught a flight to Idlewild in New York, which in those days was just a handful of shacks. From New York we had to fly to Toledo before finally going on to Chicago. It took days. I remember we arrived at 2am, caught a bus to 33rd Street in south Chicago, which was a very tough neighbourhood.

TW *But I read somewhere that you had also applied to other US architecture schools.*

KR That's true. Together with IIT, I applied to Harvard, where Gropius was teaching, and Yale, and, incredibly, got accepted by all three. But in the end I chose IIT because Mies seemed like the man. The school was very small at that time, and the campus had yet to be completed. Crown Hall wasn't finished until the mid-1950s and so we worked out of the engineering faculty. As a graduate student I was with ten

Clockwise from top left:
Kevin and his sister Lily,
the family home in Mitchelstown,
with his brothers, the local train
service, *c* 1939 and with his mother
Courtesy Kevin Roche





















others, all foreigners, and each from a different country – England, France, Switzerland, even Egypt. Personally, I never really presented myself as Irish – I mean, I never went around wearing green things or celebrating St Patrick's Day or anything like that. I much preferred to think of myself as a citizen of the world. Once we were there the one lesson you learned in the studios was that you had to have a brush to clean your drawings, but in Chicago the detritus wasn't sand but soot. The whole city was so polluted. For our first design project we had to design a house. I remember it was snowing hard and so I thought why the hell would you design a flat roof, and not do what the Scandinavians do, and create a pitched roof. Mies took one look at my drawings and said, 'You could do dat, but I would not do dat, you know'. That was the beginning and end of my education from Mies.

TW *Did Mies run the school as if it was an office?*

KR He had three or four assistants with him who would patrol the place. It was all rather strict. I must say I was really quite disappointed with the school. The undergraduates, for example, just seemed to spend all their time drawing bricks, constantly trying to figure out how many bricks you could get between two evenly spaced steel columns. There was no such thing as trying to understand concepts or designing forms. It was all about making very elemental things fit. And so after one semester I left. I had seen reports of the new buildings being designed for the UN in Manhattan, and these seemed so much more exciting. At the same time I was running out of money. So I got on a bus and went to New York. After two days in the city I went to see Wallace Harrison and begged his office manager to give me a job. He hired me, but only as a file clerk. After two months I then managed to get onto the drafting team, earning $1.50 per hour, $60 per week, which seemed like a fortune at the time.

TW *Where were you living?*

KR I rented a little studio apartment in a fifth-floor walk-up on 67th Street. After work I used to go to a little place I knew where you could get a meal for 20 cents and then I'd just walk all over the city. One evening, letting my inner fashion designer come out, I was looking at dresses in a storefront on Madison Avenue. As I was standing there I saw Joe DiMaggio behind me in the reflection of the glass. He called out to a woman nearby, 'Would you get your ass over here!' Marilyn Monroe then wiggled her way up and the three of us looked at the dresses together. At the time it felt like the most amazing experience of my life. I thought I'd really arrived.

TW *Other than the UN, what was happening architecturally in the city at that time? The Guggenheim and Seagram buildings had yet to be built, but there must have been other things to see.*

KR Bunshaft's Lever House was under construction and of course there was the original MOMA building by Edward Durrell Stone. I virtually lived at MOMA during my days off. It's wonderful when you are by yourself and have no responsibilities, you can just see what you want to see. In this sense I had a great education in New York. There was also a cousin of mine, Kathleen, who would often visit and who I'd go out with in the evenings. She was an actress contracted to MGM and made a few movies, one of them playing opposite James Mason. It was actually Kathleen who helped me find my next job. I had left Harrison's office because they fired me after I'd flown home briefly to visit my parents; they said I hadn't told them about the trip. I tried every office I could think of to get another job. I remember going to see Marcel Breuer, who was very sweet – he said I was interested in all the same architects he was – but he didn't have any work. I finally got a position with Anthony J DePace, who had a small office in the garment district. He did lots of gothic revival churches and a few days after I started he asked me to design an altar for one of his commissions. And so I sat down and started sketching. Two hours later he yelled at me, 'You got them drawings yet, Roche?' I soon realised that DePace was not the office for me. But then through a friend at the UN I heard that Eero Saarinen was coming to town and that he was looking for people. I managed to get an appointment to see him at 8am. He was staying at the Plaza Hotel. I had been up all the previous night, hitting the town, going to the Stork Club and every place you could imagine, and so when I showed up at Eero's room I was dead on my feet. He sat me down on the edge of the bed, and talked to me from his dressing room as he got himself ready. He ... had ... this ... very ... slow ... way ... of ... speaking, and I just fell asleep. Luckily he didn't notice. When I woke up I gave him a real *spiel* about my experiences and interests and he said, 'Okay, why don't you come out to Michigan'.



TW *If only all job interviews were like that.*

KR But initially I wasn't so excited. Michigan seemed like the end of the earth, and I must admit I also didn't have much regard for the work of Eero's father – Eliel. He had done a kind of fake monumental thing at Cranbrook which I really didn't like, and Eero himself, who was only about 40 years old, hadn't done much of his own. But anyway, I borrowed some money and caught the train to Detroit and then a bus to Bloomfield Hills. The office was located at a desolate intersection and was shared with his brother-in-law Robert Swanson, who Eero really disliked and wouldn't talk to. Eero's half of the office was tiny. There was only a handful of staff. I started right there and then. Somebody helped me find a place to live – a rented room in the house of Mrs Looney on Purdy Street – at $7 a week paid promptly on Saturday morning.

TW *Within a relatively short space of time, however, what at first felt like the middle of nowhere turned out to be an incredibly rich and interesting place to be, not least in the world of design.*

Opposite, clockwise, from top left:
Kevin's first motorbike, making a model airplane, as a student at Rockwell College and the piggery he designed and built at his father's creamery
Courtesy Kevin Roche
Above: Eero Saarinen and Kevin Roche, *c* 1953
© Balthazar Korab / Library of Congress Prints and Photographs Division, Washington, DC



KR Detroit in 1950 was an extraordinary city. All of the design world suddenly seemed to be focused there. Part of this, of course, was a result of the automobile industry, with all the major motor manufacturers based there. Industry was right on our doorstep. It was also in this period that the head of design at General Motors – Harley Earl, who was crazy but an absolutely wonderful guy – introduced the idea of changing the style of each model every year. This is how they sold their cars – through their newness as well as their style. Design therefore became fundamental to GM's business strategy. And its importance soon permeated everything. This explains the emergence of people like Charles Eames and George Nelson, or design schools like the nearby Cranbrook Academy of Art. And of course there were architects like Eliel and Eero. All of these people were in Michigan. And so very soon after I'd arrived in Bloomfield Hills I thought of New York as past it. You'd also never want to go to California. Detroit was the cutting edge and the place to be. This was immediately made clear to me when the first job I was assigned at Saarinen's was the General Motors Technical Centre.

TW *How was it that an architect who had built so little and who was then still relatively young got what turned out to be America's richest architectural commission?*

KR Well, his father got the job. After working on the masterplan Eliel – who was very well established – passed it on to his son. I was given the task of working on the research centre. In the lobby I finally got to design a spiral staircase and that somehow put me in Eero's consciousness. A short while later he had to give a presentation for Brandeis and he asked me to do some drawings. I was a terrible renderer and just did some scribbles, which were quickly rolled up and given to him. When Eero unrolled them on the train on the way to the meeting he was so horrified he had to redo them all himself. The next day he said to Joe Lacy, the office manager, 'fire that guy'. He soon recanted, but I was really in the doghouse for a while.

TW *But within the next two or three years you climbed your way back, promoted to principal design associate and Saarinen's main assistant in 1954.*

KR I think he took a shine to me because, like him, I was from a small country and we would often talk about our shared backgrounds. I also had all these theories about architecture – which of course were all nonsense – but Eero seemed to enjoy listening to them. At the same time, Charles Eames had seen the completed lobby at the research centre and was especially taken by an impressed plywood ceiling I had designed.



He told Eero how much he liked it and so my stock rose. He was a good friend and influence on Eero, even if they were sometimes rivals, especially when it came to their furniture designs.

TW *Was that your first encounter with Eames?*

KR Charles would often pass through the office – he had earlier taught at Cranbrook at the invitation of Eliel, and even after he moved to California his friendship with Eero meant that he would frequently consult on various projects. The first time I really collaborated with him was on a film he was preparing. He was especially interested in the Northland shopping centre in Detroit, one of the very first large-scale shopping centres in the US, designed by Victor Gruen, and so with a crew of people from the office we went down there and took about 300 photographs. Charles then collaged these into his presentation, and some of them later appeared in his *Glimpses of the USA* film shown in the first USSR–USA cultural exchange in Moscow in 1959. Again, that helped me work my way up. But really, I wasn't only ambitious to get closer to Eero. I just enjoyed the work.

TW *It also seems to me that you were confident. Despite your self-proclaimed idiocy, right from your childhood you appear confident about the things you were thinking – even if some of these things, like the cruciform plan and spiral stair – unbeknownst to you – had been considered before. Going all the way from Mitchelstown to Chicago to study with Mies and then only staying one semester also seems to suggest a certain self-assurance.*

KR I guess so. But it was only in the mid-1950s, after a few years with Eero, that I felt I knew what I was doing. It was also then that I started travelling with him. When he pitched for a job or met clients or saw the site he always liked to have someone to talk to immediately afterwards about the experience and to think through the first design ideas. I was that person. We flew everywhere. For example, it was during one trip to San Francisco that we first thought of developing some kind of loader that would take passengers straight from the plane to the terminal building – even if the terminal building then was only a shack. All airports at that time just had steps, so you'd walk down from the plane onto the tarmac. We then refined these loaders or platforms and integrated them into the design of the TWA terminal.

Opposite: Eero Saarinen & Associates, General Motors Technical Centre, 1950–56
© Balthazar Korab / Library of Congress Prints and Photographs Division, Washington, DC
Above: Eero Saarinen and Kevin Roche, spiral staircase, General Motors Technical Centre, 1956
© Ezra Stoller / Esto

TW *I didn't realise until speaking with you today that the evolution of the aviation industry is a constant, parallel, thread through your whole life and career – going right back to the way your father endorsed the fledgling Aer Lingus airline for his own trips around Europe. The plane, much more than the car or the train, seems to be your definitive mode of transport.*

KR I think that's right. The first ten years I worked with Eero, from 1950 to 1960, was when the twentieth century was really gathering speed. And the airplane was central to that. For Dulles I went to all the meetings right from the word go. We looked at every possible airport we could see. Eero was not intimated by what other people were doing, and so we spoke with Minoru Yamasaki and visited his own airport at St Louis. There's also all those famous stories of Eero sending out teams of people with stopwatches to record everything – when planes take off and land and the flow of passengers. He was obsessed by research. We felt we had to be as prepared as possible because Dulles was going to be the first airport designed with jet aircraft in mind. During its design the FAA even flew us out to Seattle to visit Boeing and join a test flight of a prototype of the 707, the first commercial jet airliner. I remember as we nervously waited to board, the pilot came out onto the tarmac and kicked the tyres – it was just his way of reassuring us.

TW *It's interesting that you frame all this work as 'research'. This is a massively overused and misused term now, and one that seems forced on any intellectual exercise, no matter how insignificant; but as you describe these processes, research really is the right way of characterising these activities. Your architectural ideas didn't simply emerge out of invention, but involved a huge amount of information gathering.*

KR Research is an essential part of the design process. You can't design anything without first doing your homework. As an architect you have to ask yourself what problems the end product is going to solve. Or indeed, whether there is a solution at all.

TW *And is that what you learned from Saarinen?*

KR Eero was very, very bright, and he always wanted to think through the origins of any problem. You never learned that in architecture school. More pragmatically, you never learned the things most fundamental to him – that a building is only for people, at a specific moment in time, and that it has to evolve and have the capacity to change its culture and be exciting to live in, as well as doing all the usual, functional things like keeping the weather out. Working with Eero was in this sense a tremendous lesson for me. Forget about all the theories of architecture. Designing something that people occupy is the architect's job. There was nothing that Eero said or did that even in some obscure way didn't have something to do with a project we were developing. He also never once stopped working. I remember when he was sketching out designs for the Yale hockey rink late one night we were having a debate about whether to do the roof in steel or concrete and at some point he suddenly looked around the office and exclaimed, 'Where the hell is everybody?' I replied that it was 9pm on a Sunday and it was New Year's Day. 'So what', he said.



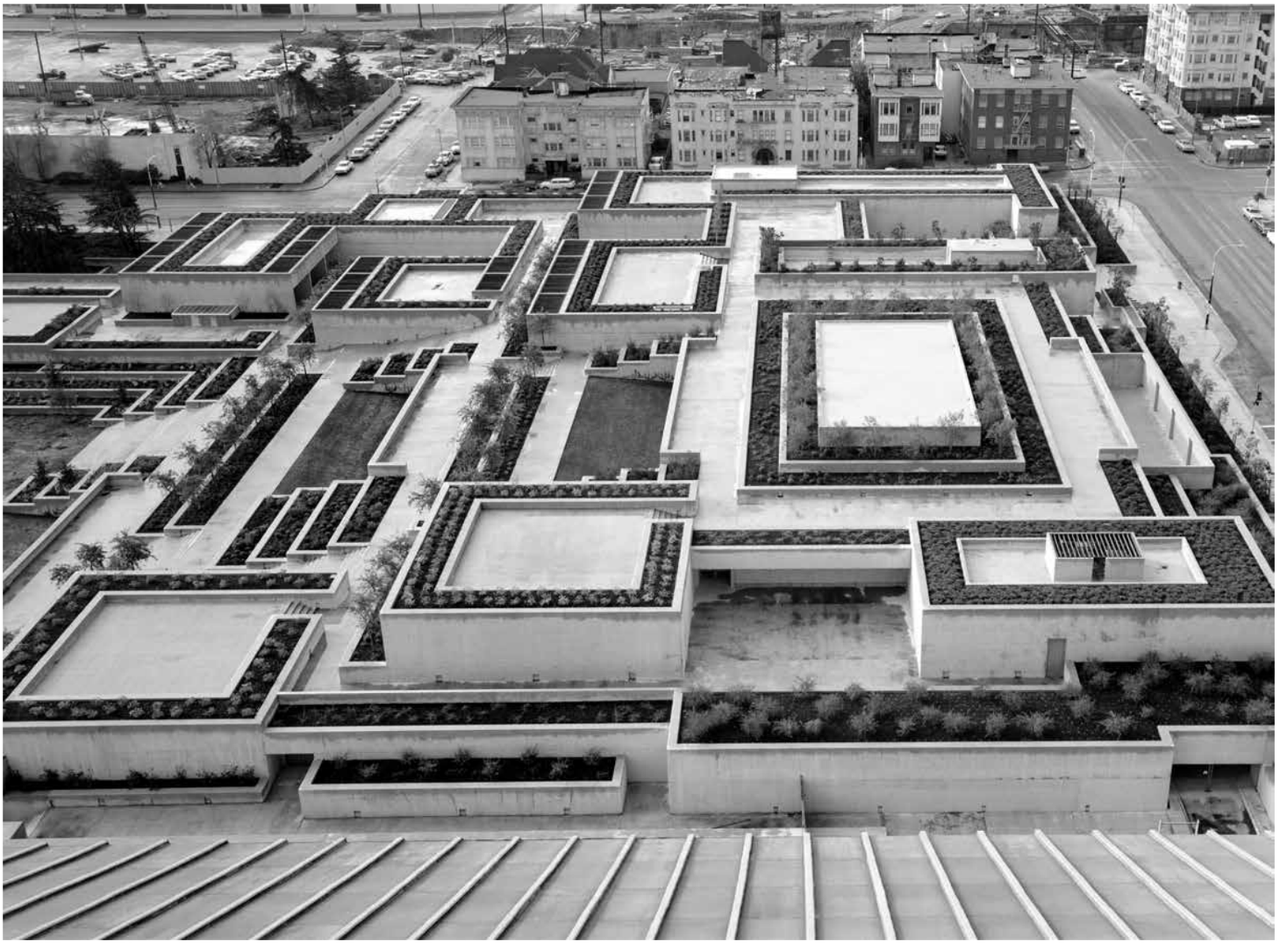
Above: Kevin Roche and John Dinkeloo, images from the original slide presentation, Oakland Museum, 1961
© KRJDA
Opposite: Kevin Roche and John Dinkeloo, Oakland Museum, 1961–68
© Ezra Stoller / Esto

TW *But after just over a decade of working like this, producing one building after another that would all go on to become celebrated, defining monuments of postwar American architecture, Saarinen suddenly dies from a brain tumour in September 1961. He was only 51 years old.*

KR I was going to get married the following Tuesday – I had fallen for Jane the moment I interviewed her for an interior design job in the office a few years earlier. On that Friday I was in New York seeing the CBS people to discuss the design of the elevators for their building on 52nd Street. I was called out of the meeting to take a call and was told that Eero had just died. I did what I thought Eero would do: I finished the meeting. Only after we were done did I tell them the news. All hell then broke loose. Afterwards I went out to Idlewild to check on the construction of the TWA terminal before flying back to Detroit. I remember reaching into my coat pocket on the way back and inside was a note from Eero that just said 'Bon voyage'. I think he knew. He was due to have an operation on his brain, and his wife Aline had asked me to pick up a bottle of champagne in New York to toast what she expected would be his recovery. Of course we never opened it.

TW *Did life suddenly feel very precarious?*

KR Words can't explain how devastating that moment was. But at the same time there seemed like there was just so much to do. This helped me get through it. I've always liked having a set of tasks to complete. Jane and I obviously postponed our wedding, and I bought her a pet monkey called Lucy to cheer her up. John Dinkeloo was also terrific. He was a really strong person. After years working together we had become good friends, and each night we ate in the same restaurant in Birmingham, Michigan – Heckert's. John was a very straight-down-the-line guy. He didn't allow drinking in his home and went to church every Sunday. Nevertheless, we always got along. The first thing we had to resolve was the planned move. In the last years of Eero's life Aline had become quite a force in the office and as a New Yorker she was increasingly keen to move out of Michigan and head back east. At the same time, the office had all these big East Coast commissions – Dulles, TWA, CBS,



Bell Laboratories in New Jersey and IBM in Rochester – and so it seemed only logical to move. We looked everywhere for a new home – Boston, Washington, and other smaller places up and down the coast, but ultimately because Eero was teaching at Yale and liked New Haven he wanted somewhere close by. I was assigned the task of finding the new office, and after a trip out here I came across this house in Hamden, which had been built for a man who manufactured cigars. He had been a Yale graduate and I remember one of the rooms had been converted into his own private Yale bar – he had the counter and stools and beer pumps and all the usual paraphernalia. But anyway, I got Eero over to have a look and he signed the deal on the house right then and there.

TW *How big was the office by the time you moved?*

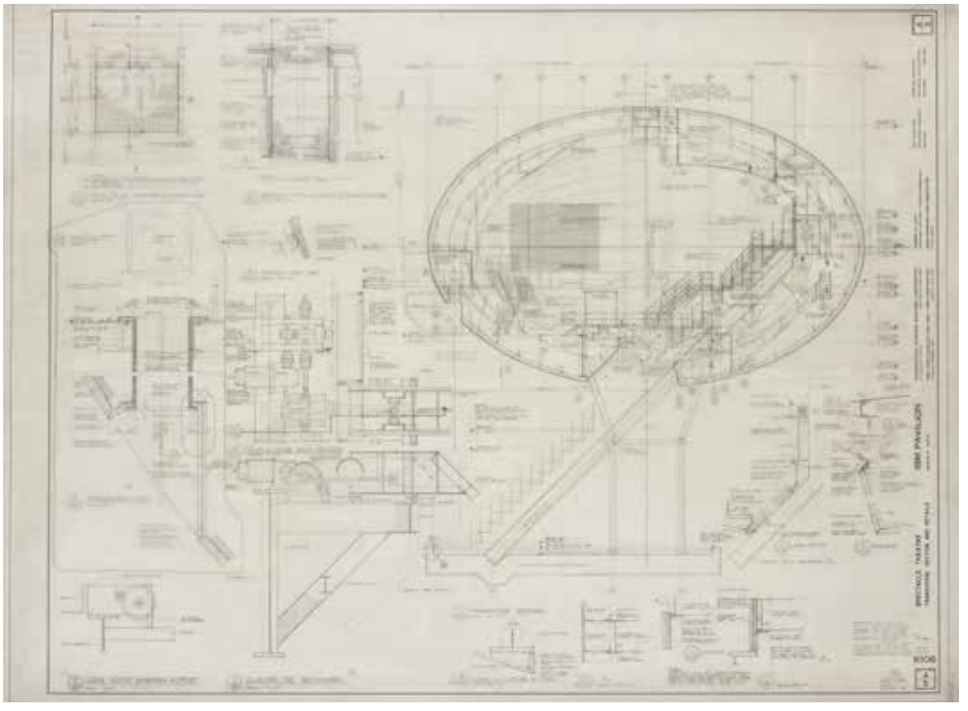
KR We were close to 160 people. It had become a whole community, and we tried to replicate this in Hamden, encouraging our staff to stay with us and maintain the same communal spirit. There was so much work to do that I just lived above the studio, sleeping on a little pull-out cot, while Jane rented an apartment nearby.

TW *And that work was completing all of the Saarinen projects. So over the next five years you kept the office name and saw through the completion of the nine major projects already underway – like all those East Coast commissions you mentioned – and continued with other less developed projects, including the Gateway Arch in St Louis and the John Deere building in Moline. Only when these were complete, in 1966, did you change the office name to Kevin Roche John Dinkeloo & Associates and began again with the first job of your own, the Oakland Museum.*

KR Oakland was actually concurrent with the completion of all those earlier projects. Aline really went to bat for us on that job. Eero was going to be interviewed for it, and after he died she spoke with the Californian architectural critic and writer Allan Temko and encouraged him to convince the jury to let us pitch for it. One of the backers of the project was a local woman called Mrs Fuller, and she took a shine to me, and the mayor of Oakland at the time was a man named Houlihan – it never hurts to have an Irish mayor (the same thing happened later in New Haven when we did the Coliseum project). And in the end, even though we were up against architects like Breuer, Gropius, Johnson, Rudolph and Nervi, we got the job.

TW *You also won despite breaking with the brief, which called for three separate museums, rather than the single big one you provided.*

KR It just seemed logical to consolidate the three museums – culture, natural history and art – into one urban collective. We called our scheme 'anti-architecture' because we argued it was not about the form but the context and the relationships it fostered. The whole structure took up four whole blocks which connected with the existing streets, meaning people could enter the galleries and roof garden from multiple points.



TW *Historians have recently characterised your Oakland scheme as a pioneering piece of 'environmental' architecture precisely because of this context you describe, but having heard you describe your father's creamery in Mitchelstown and its importance in your childhood there also seems to be something peculiarly agricultural about it – I mean, this project and many others by you are, in a sense, all farms – always conceived as compounds of buildings with clearly defined perimeters, each building with its own predetermined function, held together by some connective thread but also defined by its relationship to nature, usually in the form of a garden.*

KR Well, whether we like it or not, we are stuck with nature. And on Oakland, as you can see, the roof garden and all the planters and trees are fundamental to the project, even if the mayor, when he first saw the model, said, 'What's with all this broccoli?' But I've never really thought of it as a compound, or even as a museum for that matter. I tried to suggest instead that the emphasis should be on producing a sense of place. This carried over into the interior. I've always promoted the idea that in a museum or gallery you don't want to see paintings in enormous rooms, you want to see them intimately, close up. But anyway, we pitched all these ideas to the jury – mostly through diagrams rather than drawings that they'd never understand – and they went for it. Even as I was presenting it to them I could feel their attentiveness and sympathy for the proposal.

TW *What's interesting to me is that these diagrams also had their own aesthetic. In the archives of your office or in the publications of your work you rarely seem to find meticulous or artfully produced plans and sections, in the spirit of all those Beaux-Arts architects you were forced to look at as a student, but instead only graphic and very clear diagrams. There are even stories of the way you embedded these into your Oakland presentations – simple, coloured gouache drawings that were then photographed on slide film and presented alongside your oral narration of the project. In some way, one could argue that in addition to your architectural innovations these signature presentations show you as the person who first developed a kind of proto-Powerpoint.*

KR I'm not sure I *am* that guy – what we were doing then was simply a popular way of showing ideas – but I do remember developing our presentations in reaction to what traditionally happened. You used to see talks where an architect, imagining himself as some kind of mystical character, would simply show a scribbled sketch on a piece of tracing paper and expect you to build it. At no stage would you ever know what *it* was. And you'd certainly never be presented with an account of how the ideas or forms in the proposal had emerged. Even after Oakland, through my work with the Fine Arts Commission in Washington, I'd often be brought in to listen to architects pitching proposals. Despite the fact that I am fairly familiar with the world of architecture, I'd have real trouble understanding what the

hell so many of them were talking about. Most of the time they weren't just unable to solve the problem they were being asked to investigate, they couldn't even solve the problem of how to keep their drawings flat – they'd come into the room with these vast rolls of tracing paper which would be constantly curling up. And when they were eventually secured, all you'd see would be highly technical plans. Never any ideas. We tried to change all that. We first defined what we saw as the problem, then showed several options to solve that problem, then the one single option we thought best. We would end by rendering this option first in the most sensible way, then the most interesting way, then finally the most exciting way, building up the energy with each step.

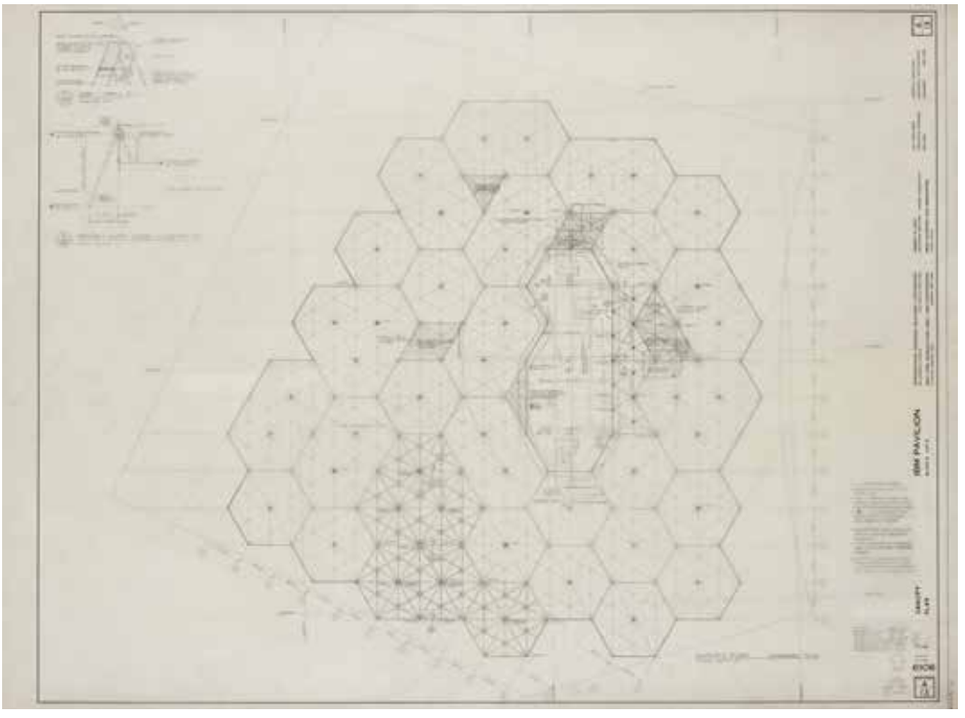
TW *As much as this was an honest account of the design process, I can also see how appealing this method of presenting was to a potential client. Even for me, listening to the way you talk through a scheme with your diagrams, I suddenly feel part of the process. And so this methodology must have been an obvious reason for your success, winning one big commission after another?*

KR I think it didn't hurt.

TW *In these presentations there also seems to be a continuation of your earlier exposure to Charles Eames, in the sense that he was the guy who throughout the 1950s was basing so much of his work around the graphic reinvention of how ideas are presented. And soon after working on Oakland, as another of the concurrent projects you did immediately after Eero died, but before renaming the office, you collaborated directly with Charles and Ray Eames on the IBM Pavilion at the 1964 New York World's Fair.*

KR I still have the script of the text I gave to the IBM employees in 1964, explaining why we designed the pavilion like we did – a one-acre site sheltered by a grove of 30 Cor-ten steel trees with an oval projection theatre at its heart – and a voiceover I delivered in my best Irish brogue. I can read it to you now. The beginning went like this: 'I am going to talk about two parts of the pavilion, the structure and the ovoid. Inevitably, I'm sure you will be asking yourself what on earth these strange structures are. I must admit, we've had quite a battle trying to figure them out for ourselves. I suppose you could say they are trees, and in a way that might be the best description you could give them. And you might say that the form of the forest isn't too far off either, because after all, when you think about it, the shade of a group of trees is perhaps the best place for contemplation, for fun and for games. It is also a place for conversation and social exchange. So the concept of a forest as a place for things to happen is not a bad one at all.'

TW *From this piece of oral history I can immediately understand why you won so many jobs. It's so clear. It's also quite informal, almost colloquial.*



KR We just thought it important to present our ideas in the simplest possible terms. But still, the design involved a hell of a lot of research – in terms of the form of the trees and the configuration of the presentation theatre.

TW *Was its central form – the ovoid decorated in thousands of small IBM logos – also a reference to IBM's Selectric typewriter 'golf ball' innovation, which had been introduced just a couple of years earlier?*

KR No, but it should have been! I wish I'd thought of that. We could have used it in the presentation. We actually worked with Charles again a couple of years later with the National Fisheries Centre and Aquarium in Washington DC. This was a scheme that was basically developed in response to the urban plan of Washington, aligning it with the long axis of the National Mall and the Lincoln Memorial. The design was focused around a 60-foot-high curving greenhouse, which contained all these different microclimates. Charles designed all the exhibits inside. The original design was orthogonal. I remember after we did the curve I sent Charles a kind of Gehry-style sketch, and as soon as it arrived he called me up early one morning and really balled me out, 'What the hell do you think you're doing?' But anyway, he soon came to see the value of the curve and we completed the design and submitted it to Congress, who passed it. In the end, though, for some reason Nixon went out of his way to cancel the project, and it was later relocated to Baltimore and redesigned by someone else.

Above and opposite:
Kevin Roche and John Dinkeloo,
section and roof plan, IBM Pavilion, 1961–64
© Manuscripts and Archives,
Yale University Library

TW *I am sure that this scheme, like the great majority of your work, only emerged after an extended period of research, but still the silhouette of the design is a very powerful, formal one, as it is with nearly all of your projects. If you did a police-style line-up of all the designs you have ever produced you would see a succession of really striking formal geometries. But to call yourself a formal architect today is really to be an architect of gesture – like Frank Gehry, as you said, or Zaha Hadid, sketching an artful, expressionistic shape and then building it. This is something you obviously distance yourself from, as you do from the grander Beaux-Arts tradition, which is also formal, but only on the basis of a more limited toy box of pre-existing shapes. So I'm wondering if form is ever something we can speak about in terms of your architecture?*

KR Well, there's architects and there's architecture. Every architect likes to do things their own way, formal or otherwise, whereas architecture – classical, Beaux-Arts architecture – is really a formal language. In any period, the only thing that differentiated one architect from another was whether they spoke this language well or not. In contrast, modern architecture is not a language, or at least not yet. It's garbled, a blather, a hubbub. This is partly what makes it interesting. And so I don't





think you can talk about modern architecture in the same formal terms. Yet even modern architects sought out some kind of consistency – like Mies, it was part of their nature – because you can only change so much and because despite the wave of changes one hopes to make, there is still a straight line.

TW *And was that your project – to find the straight line in modernism?*

KR I don't think we ever thought about it like that. In architecture a form has to arrive eventually because you have to build something, but our forms were only ever the end product, and were never predetermined. Where and how they developed is another story entirely.

TW *But whether formal or not – and again thinking of your career as a whole – the typical vehicle architects have always used to express themselves, or the usual calling-card for their ambitions, has been the house. It's through their houses that architects have traditionally sold their ideas. And yet in spite of your 70 years of practice you have designed very few houses.*

KR I did do the Miller House with Eero, and another house for the Millers in Florida and one for the head of John Deere in California, but you're right in a way, I haven't done that many. Perhaps it's partly because a couple wanting a new house is the toughest kind of client an architect can have. Inevitably you find yourself having to moderate between a husband and wife who can never agree. You become a kind of marriage-guidance counsellor. Getting approval for houses is also difficult. I recently designed a house for someone on the shoreline in Rhode Island and had to present it to the people in the district who control what the place looks like. After I spoke a woman asked me why my design had no windows. I pointed out that the house had glass walls and so didn't need windows. That was as far as I got – they said that under no circumstances would they have a glass-walled house in Rhode Island and that it would totally destroy 200 miles of shoreline. I guess it was a lesson. You have to know your audience.

TW *But if not houses, the one architectural type that has come to define so much of your work is the corporate headquarters, which developed as a typology very much as you developed – in a way you are a product of each other.*

KR It's true that these things ran parallel in time. In the 1950s, particularly in the East Coast around New York, we saw all these businesses getting bigger and bigger, just as our own firm was expanding, and soon they all wanted their own corporate building. For the architect, the model at the time was to design a series of boxes into which the employees would be allocated, with specific areas also suggesting a specific manner in which they would be expected to behave. Interestingly, the opposite is happening now – today there are no more boxes, only open space in which corporate employees are allowed to ramble around, working, talking, eating and drinking together. But when we first got these commissions, as with all the work we did with Eero, we initially spoke with hundreds and hundreds of employees, trying to learn as much as we could about their working lives and the things that were important to them. We found it always came down to both little things, like more washbasins in the women's toilet, and bigger things, especially more contact with nature. Our designs were then always sold through the communities they provided – people work and behave better when they feel part of a community – and also through their contact with nature, minimising each employee's distance to the curtainwall, so that they would be closer to the outside, or as often developed, bringing nature into the building.



Previous: Kevin Roche and John Dinkeloo, Ford Foundation HQ, 1963–68
© Ezra Stoller / Esto
Above: Kevin Roche and John Dinkeloo, Federal Reserve Bank of New York, 1969
© KRJDA

TW *As you refined this approach did you look at older American corporate models? The typology, as you said, only really emerged with your commissions, yet there were still earlier corporate prototypes – I'm thinking especially of all those wonderful factories Albert Kahn did for Ford in the 1910s and 1920s.*

KR We did look at them, even if they were never really acknowledged as architecture. Today we can see that Kahn was doing Mies before Mies, in that there was a tremendous logic to his approach. All very no-nonsense. Bang, bang, bang. Everything straight down the line. Each component worked out perfectly. Was it architecture? Maybe not, but it was essential. However, Kahn was doing factories, which are very different to office buildings. The office project that we did look at very closely was the corporate headquarters Gordon Bunshaft designed for Union Carbide on Park Avenue. It's a really elegant building. Everything inside is designed on a five-foot module, and so the offices are either 25 × 25, 20 × 20, 20 × 15, 15 × 10 or 10 × 10. I loved Gordon, but later, when we did our own building for Union Carbide in Danbury, I used these modules as an opportunity to tell them how wrong they were with everything. I argued that people were all the same size, regardless of whether they were chairman of the board or a file clerk. And so I thought everyone should have the same-sized office. Incredibly, they went for it. But the company itself had problems after they moved in. If you are an investor, the first thing you should do when a company decides to build its own headquarters is immediately sell all its stock. Out of the 37 or so corporate HQs we have done, most of them have gone out of business soon afterwards.

TW *But one that hasn't, and perhaps your most famous piece of corporate architecture, is the Ford Foundation Headquarters in Manhattan, which you completed in 1968.*

KR The Ford Foundation was really an attack on the traditional office building, with its central core and offices around the perimeter for privileged members of staff, and space nearer the core for the less privileged. If you put several of these buildings in a line you'd get a typical street, and if you put even more together you'd get a typical city. When you looked out of the window of one, you'd see another of exactly the same type. I argued that you can't create a community in that kind of building, and that this was an architecture of uniformity and isolation. The site itself was on the far eastern end of 42nd Street, squeezed between the usual skyscrapers of Midtown and a series of mock-medieval high-rise blocks called Tudor City along the river. They're quite bizarre but actually very nice, with lots of open space, gardens and playgrounds integrated within them. And so we thought our building should relate to this model rather than the more typical blocks the other side. At roughly 200 square feet we could have filled the site with five floors of offices, providing Ford with all the space they required, and then gone home. But this wouldn't have looked especially good. Or we could have halved the footprint, placing the building in the middle of a reduced site, and doubled the number of floors. But still, this wouldn't have changed the view for those inside. I also rejected the Seagram model, which everyone loved at the time, where you move the building to the back of the site and create a plaza at the front. I always disliked the way this set-back destroyed the line of the street. I realise this is quite irreverent for an architect, but I've always hated the Seagram building because of this. An even more extreme option – which we tried for a project for the Federal Reserve Bank in New York – would be to raise the building up 150 feet on four stilts and leave the whole of the ground vacant. But here the solution instead seemed to be to place a garden in the middle of the block, like a courtyard, and then wrap 12 storeys of office space around it. This was our preferred scheme for a while, but then one day as I was driving across the bridge in New Haven, feeling guilty because I had to leave Jane who had just given birth to our son, it suddenly hit me that we should open up the plan so that the view looks towards the East River. And that's what we did, re-orientating the open space so that the garden occupied the whole of the southeast corner of the building. I was very happy with this solution, but I did make the classic mistake of presenting a model of the scheme to a group of elderly Ford executives immediately after they'd had lunch – as I was doing my song and dance half of them fell asleep. But still, they woke up in time to approve it. Some weeks later I walked the site with *The New York Times* critic Ada Louise Huxtable, explaining our solution to her, and she quickly became a supporter of the scheme.



TW *She certainly did. In her* New York Times *review of the completed building she called it 'a shimmering Crystal Palace' and 'probably one of the most romantic environments devised by corporate man'. On my way into your office this morning I thought I saw a chunk of the Ford Foundation building sitting in your car park, and I must admit, it did look a bit romantic.*

KR You saw that? You're right, it's a remnant of a 1:1 model of the stone finish, Cor-ten steel and brick paving we used in the building. We had it installed during the design and brought all of the board out here to take a look. There's actually another piece deeper within the trees at the side of the building. It looks like a kind of picturesque sculpture. We often worked like that – building 1:1 sections of the buildings we were designing. It's only at full size that you can get a proper sense of the materials. On the Ford Foundation we again used Cor-ten because we liked the way it worked with the first buildings we did for the John Deere HQ, which was completed around the same time. But you know, the idea of using Cor-ten originally came from something I said to Robin Walker. He was visiting us in Birmingham some time in the early 1960s, before our move to Hamden, and one night over a drink I said, 'You know Robin, this whole architecture thing is nonsense. What we really should be doing is making sure all our buildings rust and fall apart after 20 years, because then we can start over again and redesign them.' The next day I was telling John Dinkeloo the same thing. John suddenly became very interested in the idea. He thought we really could produce a rusty building and soon afterwards spoke to one of our steel fabricators. It turned out that they were already experimenting with Cor-ten for some light poles they were producing. John quickly got them to make us some samples which we had delivered here. We liked them so much we used Cor-ten on Deere and later Ford – two everlasting ruins!

Kevin Roche and John Dinkeloo, Knights of Columbus HQ, 1965–69, and New Haven Veterans Memorial Coliseum, 1965–72
© Manuscripts and Archives, Yale University Library

TW *When I visited the building for the first time yesterday the thing that really struck me is that every single thing has been designed – not just the rusted patina of the Cor-ten but everything. There don't seem to be any stock components whatsoever. Every brick, every door pull, every window detail, even the lift, which is on its own idiosyncratic module, much taller than any other lift I have ever been in, is its own custom piece of design, and finished – as if to show off its uniqueness and the largesse of your client – in gold. It's the most golden building I have ever seen.*

KR Well, Ford really gave us the opportunity to rethink everything, and we, very gleefully, took it. Henry Heald, president of the Ford Foundation, was a really terrific client.

He had earlier been head of IIT and was rumoured to have been the guy who brought in Mies. When we were pitching for the job I made sure to tell him about my own experiences studying with Mies at IIT – of course I didn't tell him it was only for a semester.

TW *My friend Dietrich Neumann from Brown University was recently telling me about John J McCloy, another key man at the time and chairman of the Ford Foundation board. Before the war he had personal encounters with both Hitler and Mussolini, and after it he became head of the World Bank, then the Chase Manhattan Bank. He was even a member of the Warren Commission into the assassination of John F Kennedy.* Harper's Magazine *once called him 'the most influential private citizen in the history of the US'.*

KR I'd forgotten about all that. McCloy and Heald hired a very competent building manager who was our regular contact, and after the board approved our design we just went ahead and did it. Besides, on any job, but especially the corporate HQs we've done, I always deal with the people down at the bottom. They're the real clients. Losers are much more interesting than winners.

TW *But whoever is at the top now, psychotic or not, has a decision to make, because it appears that Ford want to renovate the building, which means that the whole place is going to close for a couple of years while they carry out all the work.*

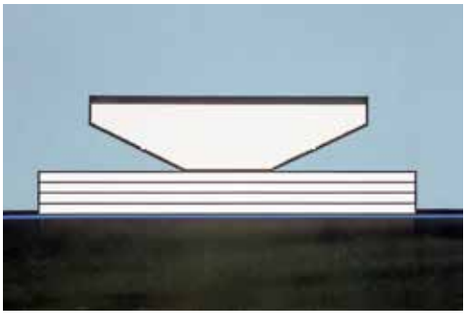
KR They made a few overtures about this to me some time ago, and I said I'd be pleased to do it, even *pro bono*, but then we never heard back from them. They've now hired another firm. It's a bit upsetting. I don't think they realise what they have there.

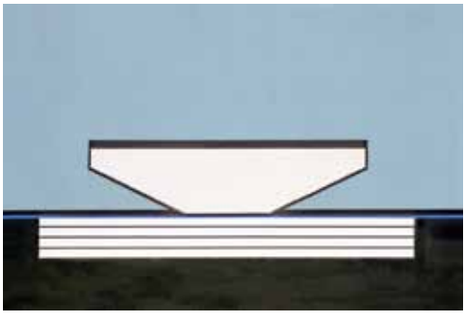
TW *This, in a way, pre-empts another question which concerns style – a concept that architects are traditionally a bit evasive about. Because when I look at the Ford Foundation building now or those sumptuous black-and-white Ezra Stoller and Balthazar Korab photographs of not just Ford but several of the other buildings you produced, especially in that really productive first decade of the office, I see an architecture with a very pronounced sense of style. The standard modernist line on style is that it doesn't exist, that architecture transcends style, and yet so much of the work you do seems compelling and necessary and also functional, but above all stylish.*

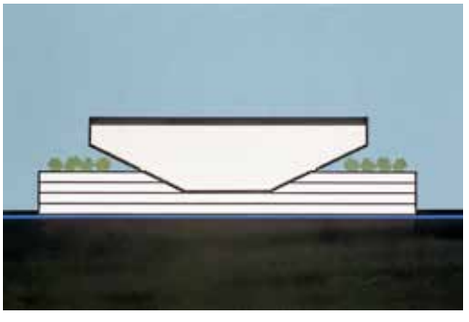
KR I think I inherited a residual sense of style from Mies, even if he never articulated it in those terms. I think I also inherited the idea that it really wasn't something we thought consciously about. As a designer it always seemed as if there were so many options available to us that trying to define a singular office style would have been too restricting. The building we completed a year after Ford, the Knights of Columbus headquarters in New Haven, is a case in point. Where the Ford Foundation dissolved the corner, the Knights of Columbus reinforced it.

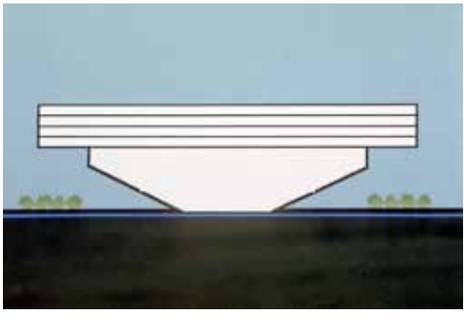
TW *Isn't the Knights of Columbus the one building of yours that Vincent Scully really hated?*

KR Loathed it. He went apoplectic when we first completed it. Holy God did Vince









dislike that building. And for the next 40 years he kept ranting about it. A number of people in the city also had mixed feelings, largely because there had always been this suspicion about the Knights – a fraternal Roman Catholic society set up in a town that is largely Protestant New Englanders. And so when we

Kevin Roche and John Dinkeloo, images from the original slide presentation, New Haven Veterans Memorial Coliseum, 1965

unveiled plans to house these evangelicising Catholics in this dirty great big skyscraper right at the front of the whole city it did cause some problems. But one crucial supporter was the mayor of New Haven, Dick Lee – another Irishman – who'd given me the job after I sat next to him one time on a flight. I must admit I'm fond of it too, even if the original design was ten storeys higher, which would have helped its proportions. The idea behind its design again came from a wish to rethink the conventional office – this time, questioning the standard, large open-plan floor, where you'd get rows and rows of desks and hundreds of people on a single level without ever being able to develop a sense of community. With the Knights we deliberately wanted to have a small floor plate, large enough only for 20 people or so. We also wanted to develop a model that challenged the standard office plan where the services run up the centre, and everyone sits around the edge. Here it's the opposite. All the services, except for the elevators, are in the corners, meaning each floor is open and able to take in the views. Another inspiration was the Tour de la Bourse skyscraper in Montreal, designed by Moretti and Nervi, which I'd seen shortly after its completion. The structural system for the building is not an internal frame but columns placed in each of the four corners. It made such a strong impression. Separately, while driving back home through Connecticut one day, I was passing Waterbury or one of the state's other more industrialised towns and I suddenly noticed these nineteenth-century circular brick chimneystacks which again produced a really powerful silhouette. They were a reminder, too, of the tradition in the Midwest of constructing grain silos out of interlocking 12" × 12" bricks – a type and material I had always loved. So at the Knights of Columbus we brought all these things together, pushing all the building services into four concrete brick-clad chimneys, which in turn supported the floor slabs. It's a simple structural system but an effective one. And it was very fast – the core of the chimneys was built using a non-stop concrete pour – so it appeared at its full height very suddenly (again, this might explain the reactions we got).

TW *The building itself was also not designed to stand alone, but was part of a bigger complex which included your Coliseum sports arena.*

KR We completed the Coliseum three years later in 1972. It, too, was designed as part of a major downtown redevelopment scheme, reimagining the centre of New Haven as an entertainment hub, able to absorb 2,400 cars and 9,000 people, but only half of the scheme – the arena – was ever built. The problem was that Dick Lee retired in 1970 before the complex was completed, and towards the end

of his term of office he was increasingly attacked by rival politicians who presented him as some sort of bullying dictator. Somehow the Coliseum came to be seen as the physical expression of his authority. And so when a new mayor came in, the city chose never to finish the whole complex. Worse still, they refused to set up the right kind of organisation to run and maintain those parts that were built. The result was that after being occupied for ten years or so the building was abandoned. Several years later, in 2002, mayor DeStefano blew it up. He even made this whole theatre out of its destruction, televising it and inviting thousands of people to come and watch. It was heartbreaking. Not long afterwards I did get a nice letter from Zaha Hadid, who wrote to say how impressed she had been by the building. That was kind of her. But I would much rather have the Coliseum still standing. It was so infuriating that the city, in its short-sightedness, had thrown away a perfectly good building.

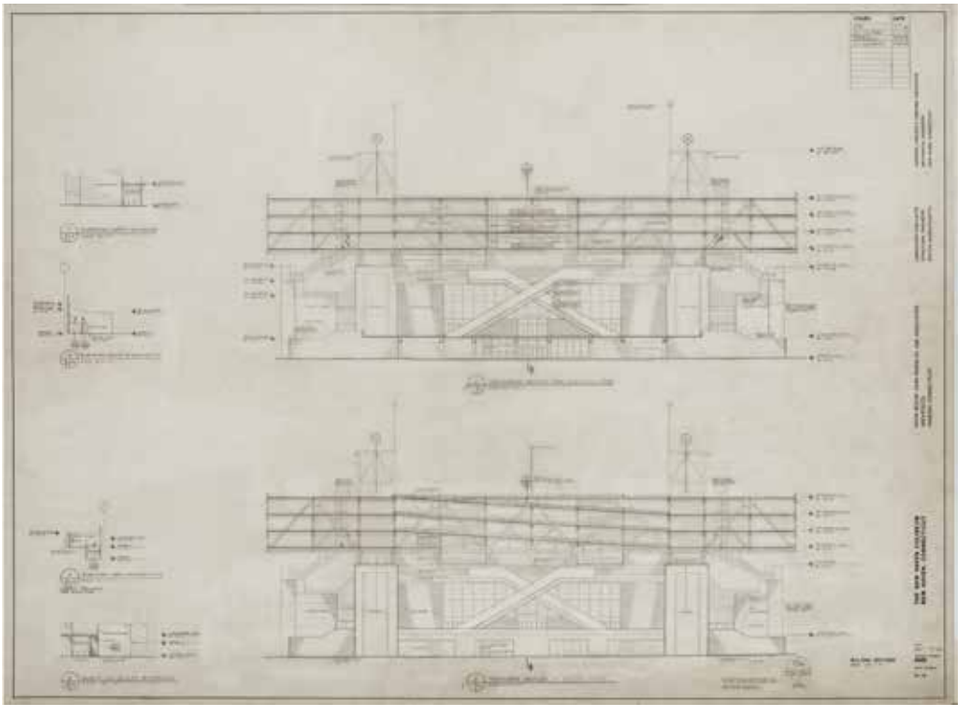
TW *Even if this building was designed as a kind of megastructure, it still seems to me that you are more comfortable with smaller-scale towns and suburbs than within inner cities, where you have built comparatively few projects. I mean, you based your office in Hamden rather than New York, and most of your work appears in similar, small commuter towns all over New England. And so I'm wondering about your relationship, or even allegiance, to the city, country and suburb.*

KR I think it again all comes back to this idea of community. The country is isolated, but a village is really the ideal community. A city, in effect, is multiple villages, but with multiple villages you get multiple problems. And so I prefer to design communities where their scale can be controlled. The perfect village for me has a couple of churches, a central square and a market, shops and houses. At this scale people talk to each other as a community. They feel comfortable like this.

TW *But other architects, especially modern architects, are much more explicit about their fondness for the city. They like its density. They even like how generic it is, its anonymity.*

KR For me, so many aspects of the modern city are a disaster. Look what's happened to Harlem in New York, where you now see all these endless high-rise housing blocks. They're no answer to anything. You see the same thing in every new Chinese city, where people are so isolated in their little apartment on the 25th floor. Before you had all these two- and three-storey blocks, which encouraged people to get out and walk around and interact with their neighbours, and which seemed to work just fine.

TW *You have produced so many buildings that have tried to create this kind of interaction – mostly, it has to be said, low-rise but huge corporate complexes, set up as their own kind of complete environment, but perhaps just to end we could finish with a different type of building altogether – your work on the Metropolitan Museum of Art in New York, which through a succession of different commissions occupied you for over 40 years.*



Kevin Roche and John Dinkeloo, section of the New Haven Veterans Memorial Coliseum, *c* 1966
© Manuscripts and Archives, Yale University Library

KR We did work very closely with the Met for the previous 40 years, developing a masterplan for the site, only parts of which were built. At the core of our proposals was an attempt to make the building work better in terms of its relationship with Central Park, basing our designs around the implementation of large inclined glazed walls and courtyards – starting off with the Temple of Dendur in the Sackler Wing – and making the main entrance more welcoming and communicative to the city by extending the front steps. We just tried to make the whole thing more legible.

TW *After speaking with you for hours now, these seem to be the real, defining characteristics of all of your work – the ideas of legibility and communication. I could try to do a pop psychoanalytic interpretation and see all your buildings as coming out of the childhood diagram of your father's village farm and creamery, with everything working perfectly, each component in its right place, but the pursuit of clarity and legibility appears to be a more convincing common thread to your architecture. This, I suppose, is also another facet of your background – I don't mean your ability to convince through words, or even all those Irish clichés of the talker as charmer, the love of the craic, etc. Rather, the talker as problem-solver, or simply the architect who sees the importance of describing what they will do, or have done, in the clearest possible terms.*

KR Communication is fundamental to the design process. Maybe it even *is* the design process. And as you say, in addition to solving problems – of how many cars you can squeeze in, how many square feet you can find, how many columns you need – there's the problem of communicating all of that. Not just to the client, of course, but to everybody – the contractor who has to build the thing, and the user who has to occupy it. All of this is an essential part of design. In art you don't have to communicate because the canvas speaks for you and you alone create it; but the very collective nature of architecture means you have to communicate. Without it you'd be lost. Of course, architecture has always been a language. It's just that for me it is a literal one, not symbolic. But, you know, at the same time, if I was being dispassionate, I'd also say that most architects can also talk absolute nonsense. Sometimes we just have to face up to this fact. And because of this there also often comes a time when you don't want your architect standing there, making all these big speeches about what they might be doing, or what it all means. You want them to just hurry up and get the roof over your head, because you know what, it's raining and without them you're going to get wet.



Deus ex Moline

Piers Gough

John Deere's distinctive green and yellow tractors have long been synonymous with American farming, an association first established as early as the mid-nineteenth century when the company's eponymous founder invented a steel plough, smoother than iron or wood, to till the heavy, sticky soil of the Midwest. By the twentieth century John Deere had become a classic American corporation, diversifying into everything from lawn mowers to golf buggies and heavy construction equipment. It is now the largest agricultural machine company in the world, with a $5 billion turnover and 20,000 employees worldwide.

In 1937 the company brought in the great Henry Dreyfuss to design their various products, and it was he who would later recommend Eero Saarinen as the architect of their new headquarters building in Moline, Illinois. In the ten short years he ran his own practice – the successor to a difficult partnership with his revered father, Eliel – Saarinen established a strong track record for designing pioneering HQs for such advanced corporations and household names as General Motors, IBM and Bell telephones. This proficiency was a reflection of an innate skill, but also a diligence: assisted by Kevin Roche, Saarinen would habitually erect 1:1-scale mock-ups and sample panels of proposals so as to thoroughly test out their ideas and make sure every aspect of the design worked. The resulting buildings were expansive, cool and suave. Although clearly influenced by Mies, they also offered something new in the form of lightweight construction techniques and a richer palette of colour and natural finishes derived from Saarinen's more Nordic sensibility. Located on the vast, flat plains of the Midwest, they leavened the landscape with the addition of large artificial lakes.

For Deere & Co Saarinen helped choose a wooded site and initially proposed a colossal inverted pyramid to sit on top of a hill. His client–patron baulked at its overly powerful and hermetic quality, pointing out that the future expansion required by the brief would be impossible. And so Saarinen went away, puffed on his pipe, and with Roche completely rethought the project, relocating the complex to the valley and having it span a meandering lake. Opened in 1964, the building has every claim to be the most beautiful corporate headquarters ever built.

Inside, the rugged John Deere machinery is displayed in a large, glass-encased exhibition hall and also on a revolving stage in a 350-seat auditorium where they perform their idiosyncratic routines (updated versions of the *deus ex machina* of classical Greek theatre). A long bridge connects this entrance and exhibition building to the middle floor of a second structure containing all the offices. The lower levels of this block descend down into the lake, so that in the executive dining room the water is at window level. The office interiors are a masterpiece of servicing and furnishing, with filing cabinets doubling as room dividers (Saarinen would be revered as a great furniture designer if he weren't also an even better architect). But the outstanding element of the complex are its elevations, which are ravishing. The upper six floors of the eight-storey, custom-walled office building are protected by horizontal *brises soleil* set away from the glazed facade and hung on bracketed rails. Every element is built from Cor-ten steel – the first time this permanently rusted material had been used on a building rather than railway tracks, for which it was first developed. Heavily rugged in colour and texture, yet delicately refined in its articulation, the John Deere HQ is a totally, fully-formed, uncompromising essay in Cor-ten's possibilities.

When the Deere employees first heard that their chairman was championing a totally rusty building as their emblematic headquarters they were a little perplexed, not least because the workers on the factory floor were spending most of their time making sure their products didn't rust, and their salesmen were equally vigilant in persuading farmers that rust was the ultimate enemy. But they need not have worried. The buildings turned out to possess the exquisite beauty of a Japanese tea-house while also evoking a freshly ploughed field, a particularly felicitous reading in view of the history of the company. The pastoralism of these associations was further reinforced by a sumptuous landscape designed by Hideo Sasaki, blending oriental details with an existing treescape, and establishing the model for many later corporate settings.

Saarinen and Roche famously designed every building differently, tailoring each to its individual purpose and with exemplary research into every new material and typology. Hence the TWA terminal is the airport building most expressive of flight, but also most celebratory of the possibilities of poured concrete. But their technical bravura was always in pursuit of the emotional. As Saarinen once said, 'The whole building should carry emotionally the purpose and meaning of the building', and 'the concept for a building has to be exaggerated and overstated in every part of the exterior and interior so that wherever you are, inside or out, the building sings with the same message'.

Although Saarinen won many awards and medals he suffered for his brilliance. Critics thought he was too capricious, without a singular developing oeuvre, and perhaps worst of all, too willing to please his clients and public. However, even sceptics had to admit that the Deere & Company headquarters was a supreme tour de force and exemplar. Saarinen himself as the *deus ex machina*.

Tragically, Eero didn't live to see the building. He died much too young. Roche therefore completed the design and oversaw its construction, and with his partner John Dinkeloo later designed an atrium-type office extension in the same Cor-ten *brise soleil* style. The typology has been much copied and interpreted ever since, but never really surpassed, not only for its sheer compositional elegance, but for the message that it sings.

Eero Saarinen & Associates,
John Deere World HQ, Moline, Illinois, 1964
© Balthazar Korab /
Library of Congress Prints and
Photographs Division, Washington, DC

The Multiple Lives of Gabriel Guevrekian

Hamed Khosravi



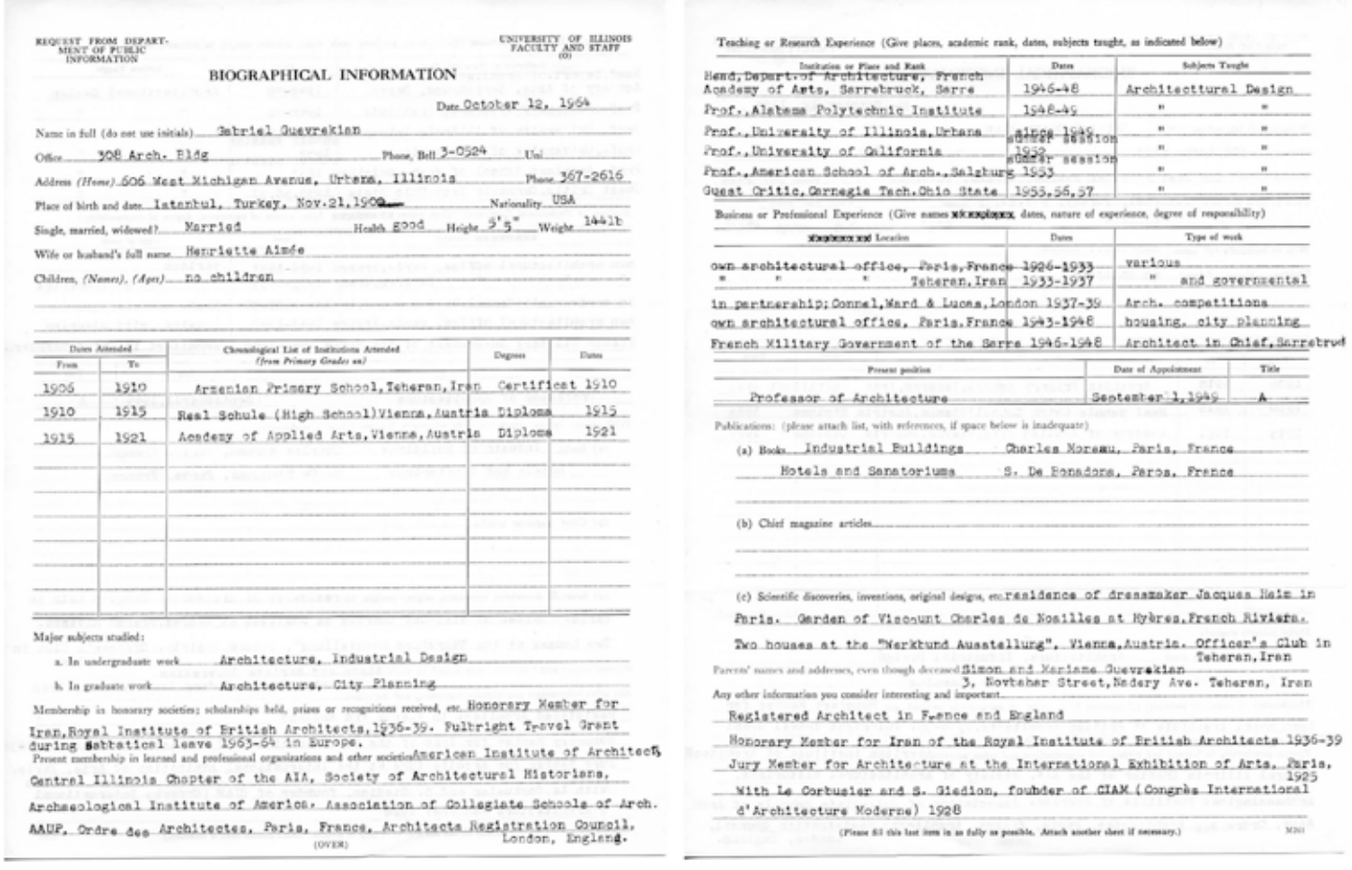
Official group photograph,
CIAM I, La Sarraz, 1928
© gta Archives / ETH Zurich

'I felt very odd', said the 25-year-old Gabriel Guevrekian on being appointed vice-president of the music section at the 1925 Exposition des Arts Décoratifs in Paris, 'I was hardly more than a boy, and the rest of the jury were old men'. Less than three years later, we see the precocious architect again, standing in the front row of a group photograph commemorating the founding of CIAM at La Sarraz in 1928. Immediately recognisable by his bald head, sharp double-breasted suit and confident, upright posture, Guevrekian radiates an obvious assurance – all the more remarkable given that he was standing shoulder to shoulder with many of the leading lights of the modern movement, among them Max Ernst, Mart Stam, Sigfried Giedion, Josef Frank, Gerrit Rietveld and, skulking towards the back of the group, Le Corbusier. Not yet 30, Guevrekian was now recognised as one of the protagonists of the European avant-garde. But other roles awaited him. Before another decade was out, Guevrekian had hopped continents to work on a series of monumental buildings that were designed to present to the outside world the modern face of Reza Shah's Iran. Then, after a career drought coinciding with the Second World War, he again moved thousands of miles to take on his final guise, as a genial professor in a Midwestern university.

Armenian Émigré

The man behind these mobile personae learned early on to move with the flow. Guevrekian was born on 21 November 1900, in what was then Constantinople, but while he was still an infant his Armenian family migrated to Tehran to escape Ottoman persecution. This turned out to be a good move, since the Iranian Constitutional Revolution of 1905–07 had opened the way for sweeping social and political reform. Through Guevrekian's father Simon – who worked in the Qajar court as a surveyor of the crown jewels – the family came into contact with the city's aristocratic, cultural and intellectual elites. At the age of ten, after finishing primary school, Guevrekian then moved with his older sister Lyda to Vienna, where his uncle, Alex Galoustian, was a practising architect. He continued his studies, enrolling first in a private music school and then, at the age of 15, starting his architectural training at the Academy of Applied Arts (*Kunstgewerbeschule*). Aside from the small fact that the First World War had broken out the year before, his timing was perfect, as the school was flourishing under the direction of teachers such as Oskar Strnad (his diploma master), Josef Frank and Josef Hoffmann. It was at the *Kunstgewerbeschule*, too, that he met Hans Vetter, a fellow student who would become his life-long friend. The two young men shared a similar sense of self-assurance. Vetter had grown up in a liberal artists' 'colony' in the suburb of Kaasgraben, in one of six villas designed by Josef Hoffmann. His father was head of the National Theatre, and among the frequent visitors to his family home were Egon Schiele, Oskar Kokoschka and Gustav Klimt. After graduating in 1919, Guevrekian and Vetter worked for Strnad and for Hoffmann, mostly on residential schemes. Guevrekian also collaborated on a few projects with Adolf Loos.

A generation before, when Josef Hoffmann and Koloman Moser had founded the Wiener Werkstätte in radical opposition to the prevailing neoclassicism, *fin-de-siècle* Vienna had been the epicentre of Europe's artistic and intellectual avant-garde. But the war had robbed it of its lustre. By 1922, the cosmopolitan émigré had decided it was time to move on. With a small entourage – his sister Lyda and Hans Vetter, who would soon become Lyda's husband – Guevrekian travelled north to Paris, the glittering postwar capital of the arts, where he would make his name.



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BIOGRAPHICAL INFORMATION

Date October 12, 1964

Name in full (do not use initials) Gabriel Guevrekian

Office 308 Arch. Bldg Phone, Bell 3-0524 Uni

Address (Home) 606 West Michigan Avenue, Urbana, Illinois Phone 367-2616

Place of birth and date Istanbul, Turkey, Nov.21,1900 Nationality USA

Single, married, widowed? Married Health good Height 5'5" Weight 144lb

Wife or husband's full name Henriette Aimée

Children, (Names), (Ages) no children

Dates Attended From	To	Chronological List of Institutions Attended (from Primary Grades on)	Degrees	Dates
1906	1910	Armenian Primary School, Teheran, Iran	Certificat	1910
1910	1915	Real Schule (High School) Vienna, Austria	Diploma	1915
1915	1921	Academy of Applied Arts, Vienna, Austria	Diploma	1921

Major subjects studied:

a. In undergraduate work Architecture, Industrial Design

b. In graduate work Architecture, City Planning

Membership in honorary societies; scholarships held, prizes or recognitions received, etc. Honorary Member for Iran, Royal Institute of British Architects, 1936-39. Fulbright Travel Grant during sabbatical leave 1963-64 in Europe.

Present membership in learned and professional organizations and other societies American Institute of Architects, Central Illinois Chapter of the AIA, Society of Architectural Historians, Archaeological Institute of America, Association of Collegiate Schools of Arch. AAUP, Ordre des Architectes, Paris, France, Architects Registration Council, London, England.

(OVER)

Teaching or Research Experience (Give places, academic rank, dates, subjects taught, as indicated below)

Institution or Place and Rank	Dates	Subjects Taught
Head, Depart. of Architecture, French Academy of Arts, Sarrebruck, Sarre	1946-48	Architectural Design
Prof., Alabama Polytechnic Institute	1948-49	" "
Prof., University of Illinois, Urbana	since 1949 summer session	" "
Prof., University of California	1952 summer session	" "
Prof., American School of Arch., Salzburg	1953	" "
Guest Critic, Carnegie Tech, Ohio State	1955, 56, 57	" "

Business or Professional Experience (Give names ~~xxxxxxx~~, dates, nature of experience, degree of responsibility)

~~xxxxxxx~~ Location	Dates	Type of work
own architectural office, Paris, France	1926-1933	various
" " " Teheran, Iran	1933-1937	" and governmental
in partnership; Connel, Ward & Lucas, London	1937-39	Arch. competitions
own architectural office, Paris, France	1943-1948	housing, city planning
French Military Government of the Sarre	1946-1948	Architect in Chief, Sarrebruck

Present position	Date of Appointment	Title
Professor of Architecture	September 1, 1949	A

Publications: (please attach list, with references, if space below is inadequate)

(a) Books Industrial Buildings Charles Moreau, Paris, France
Hotels and Sanatoriums S. De Ronadore, Paros, France

(b) Chief magazine articles

(c) Scientific discoveries, inventions, original designs, etc. residence of dressmaker Jacques Heim in Paris. Garden of Viscount Charles de Noailles at Hyères, French Riviera. Two houses at the "Werkbund Ausstellung", Vienna, Austria. Officer's Club in Teheran, Iran

Parents' names and addresses, even though deceased Simon and Mariame Guevrekian 3, Novtcheer Street, Nadery Ave. Teheran, Iran

Any other information you consider interesting and important

Registered Architect in France and England

Honorary Member for Iran of the Royal Institute of British Architects 1936-39

Jury Member for Architecture at the International Exhibition of Arts, Paris, 1925

With Le Corbusier and S. Giedion, foubder of CIAM (Congrès International d'Architecture Moderne) 1928

(Please fill this last item in as fully as possible. Attach another sheet if necessary.) M201

Gabriel Guevrekian's faculty profile,
University of Illinois, 1964
Courtesy University of Illinois Archives,
Gabriel Guevrekian Papers, RS 12/2/26

2 Parisian Radical

In 1923 Marcel Temporal was casting around for ideas for the urban section of the 16th Salon d'Automne, an annual showcase for the less conformist artists and architects of Paris and their friends. Doubtless he was hoping, in his second outing as curator, to match the success of the previous year, when Le Corbusier had caused a stir with a spectacular 10om diorama of his City of Three Million Inhabitants and, smaller in scale, but equally indelible, a plaster model of his Maison Citrohan, already containing the five points of a new architecture that he would formulate in writing only seven years later.

The theme that Temporal lit on was the 'hotel', which he asked exhibitors to frame in relation to the various regional identities of France – or, more specifically, as a counter to the right-wing regionalist movement that had spread across Europe in the wake of the First World War. Guevrekian was naturally among these exhibitors. After a brief spell working for Henri Sauvage, he and Vetter had – as a pair – joined the atelier of Robert Mallet-Stevens, who was responsible for coordinating the design of the entrance area of that year's salon – a cubist-style park. Guevrekian's Hotel Touring-Club de France, along with Adolf Loos's Grand Hotel Babylon (designed for Nice), had the distinction of attracting the highest level of opprobrium from conservative critics.

The living embodiment of the international, rather than the parochial, Guevrekian designed a project that rejected every principle of French regionalism. His Hotel Touring-Club was a prototypical model that could be expanded in any direction, horizontal or vertical, and replicated ad infinitum in any region of France. Spaced along the highways at 300–400km intervals, the hotels were designed to form a network of minimum habitation machines, reduced to the barest formal expression, and distinguishable from each other only by their two-part identifying code, made up of the road number and a letter, for example, A20-A, A4-B, or A8-C.

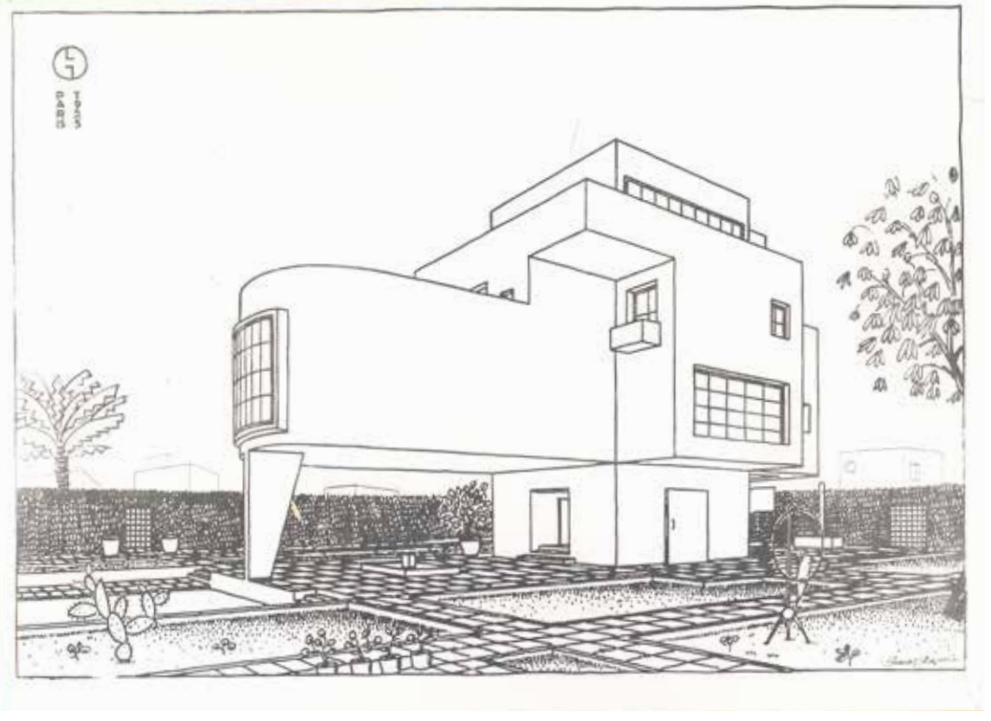
The Hotel Touring-Club was completely self-sufficient, like a small city. In addition to accommodation units it contained restaurants, a cinema, theatre, shops, garages and car repair workshops. On each level there was a common hall that doubled as a library, with walls decorated with regional maps, and bookshelves laden with publications of potential interest to the motorist. Leading off from both sides of the hall were identical series of rooms – smaller ones on the lower floors for the chauffeurs, and suites with bathrooms for their employers on the floors above. Regardless of type, all were fitted out with the minimum of furniture.

The critic Gaston Varenne saw in the work of Guevrekian and Loos – who had described the aesthetics of his Grand Hotel Babylon as 'Algerian' – an expression of contempt for the venerable traditions of France:

Only concerned with volumes and forms, excluding all sentimentalities, these architects ignore tradition, preferring instead original solutions … their buildings are nothing like what we [in France] are accustomed to seeing… [They] do not realise that, under the pretext of modernity, they have returned to very primitive designs. Their buildings seem to refer back to Nineveh or ancient Egypt.

Ironically, Varenne's xenophobic outburst harbours an aesthetic insight: the architecture of Nineveh and Egypt was indeed inherent in the abstract, cubist qualities of both projects. A few years later, in the preface to his book on *Hôtels et Sanatoria* (1931), Guevrekian – the urbane nomad – would locate the origins of the contemporary hotel in the caravanserais and monasteries of the Middle East, pointing out that a certain idea of collective short-stay accommodation had endured despite the revolution in the means of transportation. Expanding on the theme he writes: 'Recent social changes have given rise to a new way of living inspired by the idea of staying in a hotel, where a minimum private habitation unit is served by common spaces of work, fun and relaxation.' This was the kind of collective living embraced by the Hotel Touring-Club de France.

Besides the hotel, Guevrekian also showed two other projects in different sections of the 1923 salon: a realised design for a music shop, Le Sacre du printemps, and a hypothetical project for a Ferroconcrete Villa, represented in plans and a low-angle perspective in the style of Mallet-Stevens' *Une cité moderne* (1921), albeit rendered in a rather purist fashion. Raised on *pilotis*, the villa contained more than a few allusions to contemporary visionary designs for planes and motorcars. One particularly distinctive feature was the external ramp that connected the balcony of the large studio on the third floor with the roof terrace – an idea realised by Le Corbusier only a few months later, in his Cité Frugès in Pessac. In a 1932 article on 'Deutsche Kunst', Sigfried Giedion claimed that the Ferroconcrete Villa also had some bearing on Le Corbusier's 1924 design for the Villa La Roche.



Gabriel Guevrekian,
Ferroconcrete Villa, 1923
Courtesy University of Illinois Archives,
Gabriel Guevrekian Papers, RS 12/2/26

Persian Garden Designer

It was the 1925 Exposition Internationale des Arts Décoratifs et Industriels Modernes in Paris that provided Guevrekian with his *entrée* into the role for which he remains best known – that of landscape architect, and specifically the designer of the chequerboard garden at the Villa Noailles in Hyères.

A six-month extravaganza that took over a large swathe of central Paris, the expo was designed to show the impact of modernity in every sphere. Jean-Claude Nicolas Forestier, curator of the garden section – there were 11 other sections, devoted to themes such as architecture and textiles, photography and cinema – commissioned pairs of artists and architects to design 'instant' gardens to flank the pavilions: instant because they had to bloom immediately and last for the duration of the fair, from April to October. Mallet-Stevens came up with an ingenious (though not universally admired) solution to this difficult problem: together with the sculptors Jan and Joël Martel, he made a garden where the trees were cast in concrete.

Alongside this French modernist take on the garden, Forestier themed other installations according to more conventional geographic divisions – Arabic, Moorish, Spanish, Italian, Japanese, etc. Guevrekian was allocated the Persian garden, which he had to fit into an oddly shaped plot, an elevated corner site that opened onto the main exhibition pathway, just in front of Esplanade des Invalides. Titled *Jardin d'Eau et de Lumière* (Garden of Water and Light), Guevrekian's installation was the precise realisation of a conceptual painting of the scheme he had produced earlier in the year – an abstract illustration of a flattened axonometric view. With its vivid shades of crimson, green, yellow and cobalt blue forming an abstract yet playful composition of triangles, the painting borrowed both from traditional Persian miniature composition and from the style of Guevrekian's cubist friends, in particular the artist Robert Delaunay's *Window or Circular Forms* series.

As built, the garden was simply a stylised triangular walled space, a piece of landscape contained within a boundary made of concrete and coloured glass and designed to be perceived only from the outside. At its centre was a tiered fountain, on top of which Guevrekian installed a revolving sculpture by the French glass artist Louis Barillet ('rather a nightclub trick than a serious attempt at garden decoration', sniped the critic Fletcher Steele). The space between the fountain and the walls was geometrically patterned, with triangular patches of flowers and grass forming solid colours of orange, purple, red and green, and each panel was also slightly tilted to follow the inclined ground plane. The striking effect of these colours and the geometric composition as a whole meant that the garden immediately became one of the most noticed and debated installations in the exhibition, and would ultimately win Guevrekian the jurors' Grand Prix.



Gabriel Guevrekian,
Jardin d'Eau et de Lumière, 1925
© J Marrast, *1925 Jardins*, 1926

Among the many visitors to the fair that year were Charles and Marie-Laure de Noailles, wealthy patrons of the arts and owners of the fabled *hôtel particulier* at 11 Place des États-Unis (site of notorious parties with Jean Cocteau, Luis Buñuel and Man Ray, and an extravagant interior designed by Jean-Michel Frank). At the time the couple were collaborating with Mallet-Stevens on the design of their holiday villa in Hyères on the Côte d'Azur. After seeing Guevrekian's installation, the Vicomte de Noailles (who had earlier commissioned an abstract garden of boxwood and coloured gravel for the grounds of his Paris home) wrote to Mallet-Stevens, saying 'I very much liked this garden at the Decorative Arts and would gladly ask [Guevrekian] to design one for here, if you think this kind of thing would amuse him.'

This idea did indeed amuse Guevrekian and he soon accepted the commission to design a 120m^2 garden on another triangular plot in the southeast corner of the Noailles' Hyères estate. Besides its bounded geometry and the fact that it was designed to be viewed from a terrace, outside its perimeter, the garden had many other elements in common with the earlier expo installation – the plot was framed by crisp concrete walls, the ground plane was tilted, and flower beds filled with brightly coloured tulips were arranged in a mosaic chequerboard pattern, again framed by white concrete dividers. There were some differences, though, notably the two orange trees that were planted symmetrically just in front of its entrance, and the sunken pool of water that marked the central axis. In lieu of Barillet's spinning ball, the Hyères garden featured a bronze sculpture by Jacques Lipchitz, *La joie de vivre* – a dancing figure with a large guitar which rotated every four minutes on its mechanised base. The statue was not part of Guevrekian's original design, and after its installation, the perimeter walls of the garden were subsequently lowered, to make both the statue and the geometry of flowerbeds more visible.

Upon its completion the garden immediately became a celebrated modernist monument, and even found its way onto celluloid, featuring in a number of sequences in Man Ray's 1929 surrealist film of the Villa Noailles, *Les Mystères du Château de Dé*. Sadly, these stills, together with a number of photographs of the garden taken by Man Ray and by Thérèse Bonney, were soon all that remained of the garden. By 1934 the Vicomte's gardeners had filled the entire triangular plot with low-maintenance aloe, having grown tired of the upkeep the garden required. Later in the 1930s, the site fell into total neglect. It was only in the 1990s that the city of Hyères – which now owned the estate – renovated both the villa and its garden, even if the troublesome tulips were replaced with hardier marigolds.

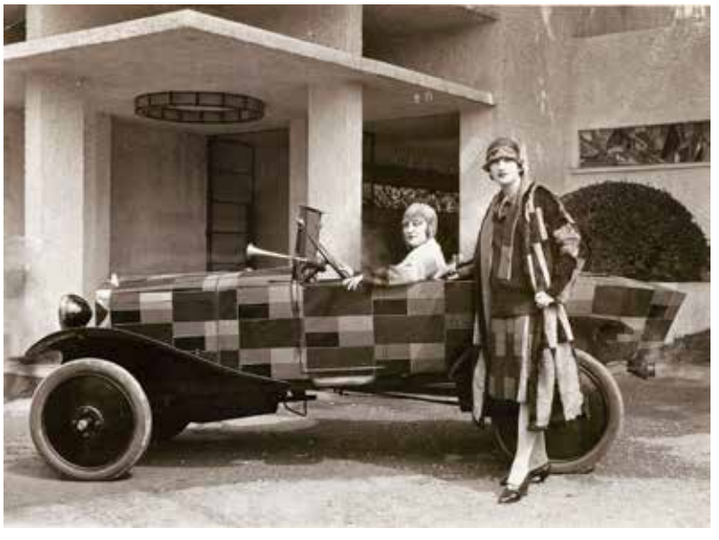
Fashion Lover

That Guevrekian's triangular garden at the Villa Noailles should pop up in the July 1930 issue of French *Vogue* was not a huge surprise. The design was very obviously *à la mode*, and its creator had established strong connections with the fashion world from the very beginning of his stay in Paris. Guevrekian's first jobs at Mallet-Stevens' office were villas for two of the leading couturiers of the day: Jacques Doucet and Paul Poiret (known in the US as the 'King of Fashion' and in France simply as '*Le Magnifique*'). Both had pioneered new approaches to dressmaking, but after the First World War their businesses went into decline, partly as a result of the economic crisis, but also because they were losing ground to a new generation of designers, led by Chanel, Lanvin, Vionnet and Heim, whose style was more casual, chic. The older guard of Poiret and Doucet were perhaps hoping that a new house would bring their older fashion house back into vogue.

In 1924, while working on Doucet's villa, Mallet-Stevens and Guevrekian were also approached by a key member of this younger generation – the artist Sonia Delaunay, who was in process of opening her own fashion studio – a venture largely funded by selling Henri Rousseau's *The Snake Charmer* (commissioned by Robert Delaunay's mother) to none other than Doucet. To generate publicity, Delaunay wanted to have a faux shop-front installed at that year's Salon d'Automne. The 'Simultanée' boutique – the name referring to clothes whose rhythms and forms were determined both by colour and by movement – featured a large window in which an array of textiles seemed to float in mid-air, buoyed by a patented mechanical device. Above them rose a slab of white marble with two more sets of windows joined in the middle by a single emblematic painting by Delaunay. The letters 'SIMULTANE' stretched across the front in an elegant typeface designed by Guevrekian.

The following spring Delaunay exhibited her Simultané collection at the 1925 Exposition des Arts Décoratifs, collaborating with Jacques Heim, a furrier and imminent inventor of the two-piece swimsuit (a ruffled bra with bloomers that he called *Atome*). Guevrekian was commissioned independently to design a second temporary shop-front, which was installed on Pont Alexandre III, not far from a Citroën B12 repainted in Simultané patterns and colours and parked in front of Mallet-Stevens' Tourist Pavilion.





Top: Boutique Simultané at the Exposition des Arts Décoratifs, Paris, 1925 © René Herbst, *Devantures, vitrines, installations de magasins a l'Exposition Internationale des Arts Décoratifs*, Paris, 1925
Bottom: Models and a Citroën B12 all dressed by Sonia Delaunay & Jacques Heim, Exposition des Arts Décoratifs, Paris, 1925 © BnF

A few months later Jacques Heim himself got in touch, inviting Guevrekian – then only 27 years old, and still working as Mallet-Stevens' *chef d'atelier* – to design his family home on the Avenue de Madrid in Neuilly-sur-Seine. Guevrekian responded to the *largesse* of the brief with a piece of total design that extended to the details of the interior, the furniture and the garden. Externally, the house assumed an austere cubic form – the art critic Marcel Zahar described it as a 'safe' – with blank facades that contrasted sharply with the bourgeois villas on either side. A three-storey orthogonal bay window accentuated the spartan front of the house, while the rear was more variegated, overlaid by a number of terraces looking onto the nearby park. The interior plan was strictly modulated, with rooms, structure, openings and paving all abiding by the same grid. The garden mirrored the interior compartmentalisation, its various areas defined by the long lines and rectangles of box-hedges pruned into simple geometric shapes – a geometry reinforced by the division of the ground plane into six platforms, each paved in a different brick pattern. Animated with mechanised water circulation and interjections of coloured tiles, the garden acted as an 'architectonic composition set against the naturalistic background of the eighteenth-century park'.

Though the villa was well received in modernist circles, it was attacked by the general public, who viewed its flat roof and bare facade as a calculated assault on one of the city's more affluent neighbourhoods. The chorus of critics included an uncle of Jacques Heim, which Guevrekian found particularly discouraging: 'it was a tragedy', he later recalled, he 'was a wonderful man, but it was only five years later, after the birth of the Heims' first child, that he finally came to the house'. More reassuring, though, was the appreciation of his fashionista friends, and his work would continue to be promoted and find a backdrop in numerous style magazines of the period. Guevrekian even sealed his love of the fashion world through his marriage, on 20 June 1933, to Henriette-Aimée Creed, a scion of the House of Creed.

With his fee from the Villa Heim, Guevrekian was able to open his own atelier at 4 Rue Marbeuf. The interior was monastic compared to the luxurious offices of Mallet-Stevens (for whom he would continue to work for another two years), and modest next to the spectacular gardens he was dreaming up, yet still very much his own. Alongside the essential pieces of equipment – drafting tools, typewriter, telephone – it contained several pieces of furniture of his own design – a chair, stool, desk, larger table and storage cupboard – a small sampling of the 50-odd pieces he would produce in Paris.

Though Guevrekian's furniture remained almost unknown to the public, among his social circle he was becoming quite famous. His stools, tubular-steel furniture and circular mirrors even seem to have influenced pieces made by a young Francis Bacon, who, after a brief sojourn in Paris in 1927, and not yet settled on his career as an artist, took on work as an interior designer in London: 'I was awfully influenced by the French design of that time', he admitted in a 1966 interview. However, as much as he was central to this particular aesthetic, Guevrekian's furniture designs – more richly textured than those of Le Corbusier, for example, and using a greater variety of forms and materials





– were also quite distinct. In many ways, Guevrekian's interior design in Paris actually brought him closer to his Viennese roots and the work of his former professors and colleagues, Strnad, Hoffmann and Loos. Like Loos, in particular, he seemed to revel in the juxtaposition of a sumptuously upholstered chair placed within an unadorned white interior.

For each of his furniture commissions Guevrekian would produce a singular set of drawings, showing the dimensions of the particular piece alongside a watercolour rendering of its suggested placement in situ. In 1929 the publisher and pioneer of architectural photography Albert Lévy produced two portfolios of Guevrekian's coloured renderings as the fourth and fifth volumes of his *Répertoire du goût moderne*. In one portfolio, Lévy presents Guevrekian's design for a dressing table, stool, vanity mirror and blank-faced wardrobe, the inside of which is divided by a neat array of drawers and adorned by three coloured cloche hats. Each of these furniture elements have their own design idiosyncrasies, while the space enveloping them – an *Existenzminimum* that could be a bijou apartment interior or even the cabin of an ocean liner – remains simple, rational and plain.

Top: Gabriel Guevrekian's office in Paris, 1927
Photo Thérèse Bonney
© RMN, Médiathèque de
l'architecture et du patrimoine
Bottom: Gabriel Guevrekian, *Chambre de Dame*, 1928
© *Répertoire du goût moderne* IV

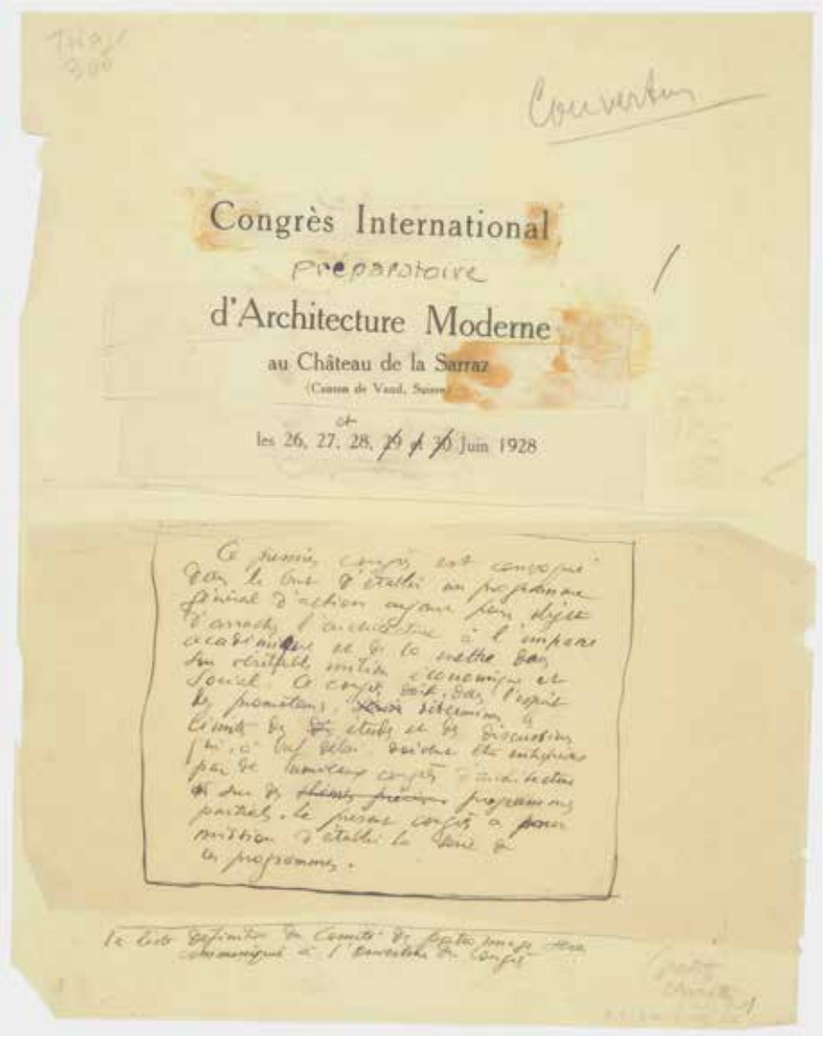
Iranian Socialite

Guevrekian was a night owl. After finishing work – usually around 10pm – he would often meet up with friends for dinner at either Les Deux Magots in St Germain des Prés, or Le Select or the all-night Dingo American Bar in Montparnasse, where the barman was Jimmie Charters, a former lightweight boxer from Liverpool, and the clientele, in the mid-1920s, included Ernest Hemingway, F Scott Fitzgerald and Isadora Duncan. Guevrekian's social circle included the Delaunays, Picasso, Braque, the art historian Daniel-Henry Kahnweiler, the American photographer Thérèse (born Mabel) Bonney and Carl Einstein, the art critic who would become his sister's second husband in 1932 – Lyda's first husband, Hans Vetter, having returned to Vienna in 1926. Thursdays were reserved for active pursuits – gymnastics and a spirited game of basketball with friends including Pierre Jeanneret and Le Corbusier, who 'was quite a sporty person', as Guevrekian recalled in a 1966 interview with David Hanser. 'He looked funny because he always wore a little wire basket over his good eye to protect it. He was blind in one eye, you know, and his vision in the other eye was not very good.' The friends never squabbled over who got to play the strategic roles: 'One time forward, the next time guard. We all played all the positions'.



Sigfried Giedion, Gabriel Guevrekian, Hélène de Mandrot and Le Corbusier, 1928
© FLC, Paris

Secretary General


Congrès International
préparatoire
d'Architecture Moderne
au Château de la Sarraz
les 26, 27, 28, 29 & 30 Juin 1928

'Architecture is stifled by custom', Le Corbusier famously wrote in *Towards a New Architecture*, and 'the "styles" are a lie'. In 1927, the same year these words first appeared in English, he unleashed perhaps his most polemical project, a competition entry for the League of Nations headquarters. The proposal won first prize, but was then disqualified on the grounds that it broke competition rules. No identifying marks were allowed on the drawings and, never one to deny his own hand, Le Corbusier had in fact included two: a caricature of himself, and a little sketch of a crow or *corbeau*. The French and Swiss avant-garde were outraged by this turn of events, accusing the jury of sabotage, and immediately repaired to their ateliers and the homes of their rich patrons to plan a counter-attack.

The form that this response might take became clear one morning in January 1928, when Guevrekian showed up at Le Corbusier's rue de Sèvres studio in the company of modernism's solid patroness, the Swiss art collector and designer Madame Hélène de Mandrot. As the *corbeau* later recounted:

I can see her there now, with Guevrekian, saying, 'I want to gather together at my country house the most go-ahead architects of 20 countries.'

'What for?' I asked.

'To talk.'

'To talk about what?'

'We shall see when the time comes', was her reply. 'I have come to ask for your participation.'

'No thank you', I responded, 'I have too much of a horror of palavering!' A fortnight later she was there again. 'No!' once again. After another fortnight she again reappeared.

'You are coming', she said.

Finally Le Corbusier relented and agreed to participate, subject to some quite precise conditions: the first draft of the programme should be sent to him for editing; the event should be called The Congress of Modern Architecture; the host, Madame de Mandrot, should provide lodging for the guests at her chateau in La Sarraz, Switzerland (where she had already established the Maison des Artistes in 1922); and a committee should be assigned to direct the activities of the congress.

At just 28, Guevrekian was named Secretary General of the congress and charged with assembling the working committee. By April he had compiled the draft programme which (after some minor revisions from Le Corbusier) would define the structure of the first meeting. In just a few short weeks modern architecture had re-asserted its authority. Being an architect – as Guevrekian ably demonstrated – was now no longer simply about designing buildings, but was a matter of cultivating a political persona, proselytising an ideology and keeping a shared spirit alive.

CIAM I, preparatory programme, 1928
© gta Archives / ETH Zurich



1 et 2. Cabine centrale d'aiguillage, gare de Laon, Cie du Nord
Cusson, architecte. Etablissements Schwartz-Hautmont, constructeurs à Paris

In all the centres of European modernism in the 1920s and 1930s, publications played a vital role in both capturing and disseminating the spirit of the new art and architecture. This was as true in Vienna – where Hans Vetter edited the influential *Profil* magazine – as it was in Paris, where the seemingly infinite tally of avant-garde journals included Le Corbusier's *L'Esprit Nouveau,* Mallet-Stevens' *La Gazette des sept arts,* Jean Badovici's *L'Architecture vivante*; art reviews like *Cahiers d'Art*, founded by Christian Zervos, and surrealist art magazines such as *La Révolution* or *Documents*, edited by Georges Bataille and Carl Einstein.

These titles tended to be short-lived, however, lasting only for a handful of years, with the notable exceptions of *Cahiers d'Art*, which continued until 1960, and *L'Architecture d'aujourd'hui*, which survived not only the Great Depression and Second World War, but continues to be published even to this day. The journal was established in 1930 by André Bloc, and one of its founding members was Guevrekian, who regularly contributed editorials and reports. In the same year, Guevrekian branched out on his own, producing *Hôtels & Sanatoria*, the sixth volume in the series *Répertoire de l'architecture moderne*, which he used to articulate a position on new forms of collective living. A year later he oversaw the publication of a series of 19 limited-edition portfolios, *L'Art international d'aujourd'hui*. The last volume, *Bâtiments Industriels,* which he personally edited, is dedicated to the aesthetics of industrial architecture, and pairs his own immaculately composed photographs with a number of somewhat surrealistic portraits of steel armatures, monumental water towers, factories, power stations, grain elevators and silos. Alongside Sigfried Giedion's more celebrated accounts of industrialisation – *Building in France, Building in Iron, Building in Ferroconcrete* and *Mechanisation Takes Command* – Guevrekian's book stands as a significant monument to the modernist absorption of this particular visual language. But what further distinguishes Guevrekian's volume is not only the subtleties of the structures and buildings he chooses to photograph, but the qualities of his photographic technique, which anticipate by almost half a century conceptual art's appropriation of an industrial vernacular in its own measured black-and-white images.

Laon Station, France, *c* 1925
© Gabriel Guevrekian,
Bâtiments Industriels, 1931

Viennese Modernist

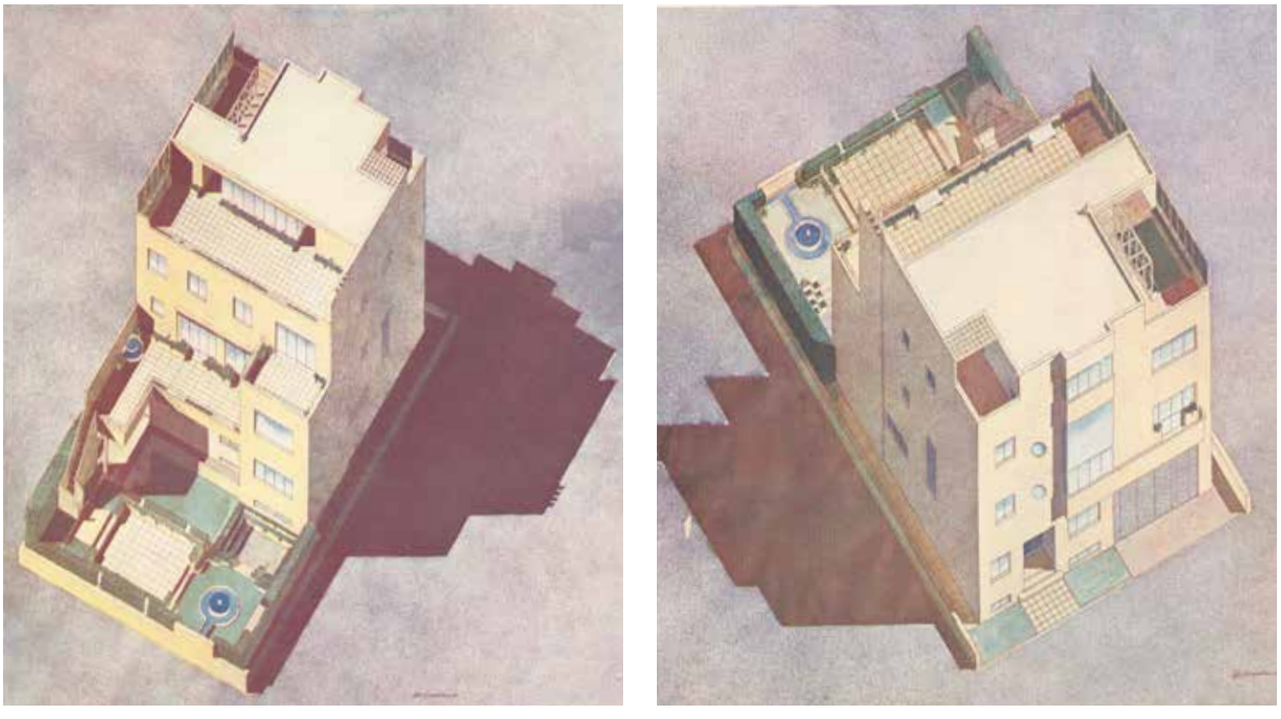
In 1932 European economies were in freefall, yet visitors to that year's Vienna Werkbund exhibition would have witnessed the realisation of a utopian project – a model housing estate presenting prototypes for much-needed low-cost compact living units. Where the *Existenzminimum* typologies formulated at the 1929 CIAM Congress reduced costs by means of mechanisation and standardisation, the Werkbund relied on clever design, in keeping with its core principle of ensuring that 'the less well off, the lower middle and working classes … are offered only products that provide joy through their fitness for use and which foster the culture of domestic living'.

Thirty-three architects were invited by the Werkbund's director Josef Frank to develop designs for the exhibition. Guevrekian was among a handful of foreign names – along with Gerrit Rietveld, Hugo Häring and André Lurçat – on a list of participants that otherwise reads like a *Who's Who* of Austrian modernists, including among others Josef Hoffmann, Adolf Loos, Richard Neutra, Oskar Strnad and Hans Vetter.

Guevrekian had no prior experience of building compact living spaces. Up to then his proposals for collective housing and hotel accommodation had remained solely on paper, while his last completed residential building, the Villa Heim (1927–30), had been a very different kind of project, where money was no object. The commission from Frank, then, was a stimulating challenge, inviting him to develop his ideas for minimum housing units and to apply them in a real-life situation.

First planned as an extension of the housing blocks of Red Vienna, the model estate would eventually be sited in Lainz, a leafy suburb on the outskirts of the city. Josef Frank devised the masterplan, dividing the area into 70 plots of 200m², each geometrically outlined in relation to adjacent streets. Strict regulations governing height (a maximum of three storeys) and site ratios (the building could occupy up to 40 per cent of the plot) ensured the typologically diverse units had a visual coherence.

Assigned two adjacent plots, Guevrekian developed two symmetrical houses – Nos 67 and 68 – which were seamlessly joined, as if to form a single unit. Each had a radically simple form, a perfect cube (in some ways developing further the premise of his earlier design for the Ferroconcrete Villa). Each was also raised on *pilotis*, with a narrow staircase connecting the utility area (laundry, storage, WC) near the entrance with the upper floors. The first floor contained the living room and kitchen, the second floor two bedrooms and a bathroom. The smooth finish of the facades was gently pierced by modulated openings, each one syncing perfectly with the interior composition of the space. Freed from the influence of Mallet-Stevens, Le Corbusier or Loos, units 67 and 68 expressed an architecture that was entirely Guevrekian's own.



Gabriel Guevrekian, Villa Heim, Neuilly-sur-Seine, 1927
Courtesy University of Illinois Archives, Gabriel Guevrekian Papers, RS 12/2/26

10 Tehran City Architect

When the Great Depression told hold in France in 1931 architects began looking for commissions and projects outside Europe. André Lurçat moved to Moscow to work for the Soviet government. Auguste Perret took projects in Egypt and Lebanon. After nearly abandoning architectural projects for more theoretical urban pursuits, Le Corbusier picked up commissions in South America and the Middle East. In 1933 Guevrekian and his wife set off for northeast Asia, stopping first in Tehran to visit family. Immediately Guevrekian was asked to design two urban villas – one for a family member, the other for some friends, Persian aristocrats. Later that year, Reza Shah appointed Guevrekian Chief Architect of Tehran. The city was then in the midst of a large-scale urban reconstruction as part of the shah's effort to refashion Iran in a modern image, clearing away all traces of its Qajar past. Guevrekian's first public project was the design of the National Theatre. He was then asked to prepare the masterplan for Tehran, but when city officials asked for numerous revisions, he refused. Preferring to be his own boss, he redefined his relationship with the government, setting himself up as an independent contractor. With a group of French, Swiss and Iranian architects and engineers, he designed the Ministry of War and an amphitheatre for the military school, and also supervised the construction of the Ministry of Foreign Affairs and the Central Bureau of Records and Archives. Perhaps the most important project to come out of this period, however, was the design and construction of the Officers' Club, a collaboration with the French engineer, Pénalié, and the Iranian-Armenian architect Vartan Hovannesian, a colleague from his brief time at Henri Sauvage's office. Similar to his European projects, Guevrekian designed every last detail of the crisp five-storey building, right down to the bricks, which were custom-made to achieve the correct proportions of walls and openings. Lavishly appointed, the club was decked out with the most advanced building services: elevators, central heating system and sanitary fittings were all imported. To balance construction costs, Guevrekian combined these imports with local skills and materials, developing many innovative construction techniques in the process.

Two years into his Persian sojourn, Guevrekian was invited by the Minister of Finance, Ali-Akbar Davar, to run the technical department of the Société Générale de Construction, which coordinated all public building activities in the city. In this capacity he designed the Palace of Justice with French architect Marcel Dubrulle and produced two schemes for the Ministry of Industry and Mines with the Swiss architect M K Akatos. There are some interesting parallels between these austere yet tasteful compositions and Marcello Piacentini's design for the Città Universitaria in Rome, conceived in the same period. However, the use of elements taken from traditional architecture, such as the *iwan* (portal) or *badgir* (wind-catcher) makes the work essentially Iranian. Parallel to all of this, Guevrekian's private office was involved in the design and construction of 20 houses across Tehran, where he enjoyed considerably more freedom to design in the modern style, working with generous budgets.



Gabriel Guevrekian,
Officers' Club, Tehran, 1943
© Digital Archive of the
National Library of Australia

While Guevrekian was in Tehran, his friend Hans Vetter was in Baghdad, working on King Faisal's palace, as project architect for Clemens Holzmeister. After this he returned to Vienna, but not for long. When the Nazis annexed Austria, he had to leave not only on account of his left-wing politics – which caused him to be summarily dismissed from his teaching post at the Academy of Applied Arts – but also for the sake of his second wife, Jadwiga Orsul, who was Jewish. Around the same time, Guevrekian's sister and her husband Carl Einstein were interred in France, after fighting with a German anarcho-syndicalist brigade in the Spanish Civil War.

Back in Tehran, the death in suspicious circumstances of the Minister of Finance brought the activities of the Société Générale de Construction to an abrupt end in February 1937. Soon after, Henriette-Aimée was diagnosed with malaria. The couple decided it was time to leave. They took refuge with the Creed family in London, but Guevrekian found the British capital far less rewarding than Tehran. He joined the firm of Connell, Ward & Lucas, where he was friends with the partners, and collaborated on several competition entries and a large-scale housing project. None of these were ever realised, and the office closed at the outbreak of the war.

Guevrekian's four short years in Tehran proved to be the most productive period of his professional life. He would later express his deep regret at leaving behind the country where he had defined a new style. As he pointed out in the January 1938 issue of *L'Architecture d'aujourd'hui*, his Iranian houses could not be directly compared to his earlier work. The climate and the limitations of local building techniques and materials made it impossible to simply transpose European architecture onto the urban fabric of Tehran. Instead he initiated a new movement of Iranian modernist architecture, defined not by a top-down imposition of the shah's will but by a desire to respond to sweeping social change. Guevrekian told his French readers of the 'semi-religious' traditions that were now obsolete – the division of the house into male and female quarters, the predominance of an uneven number of openings, the placing of the entrance on the south facade. Freed from these constraints, Guevrekian opened up the enclosed forms of traditional Iranian typologies and exposed them to the city.

French Military Urbanist

Just a few weeks after the Allied victory in Europe, on 12 July 1945, French troops took possession of Saarland. The French had occupied the German coal-producing region before, under Napoleon and in the years following the First World War. Then, as in this case, the primary purpose of the occupation was to exploit economic resources: Saarland was to become an 'industrial colony at the service of the internal reconstruction of France'. But the military governor, Colonel Gilbert Grandval, made it clear there were also old scores to be settled. It was necessary, he said, to 'erase the traces of the Prussian spirit that still persist despite the bombardments, and to use the capacities of urbanism to consecrate forever the ties that unite Sarre and France'. When those ties had been broken in the past (with the 1935 referendum, in which Saarlanders voted to rejoin Germany), it had 'ruined a population' – Grandval wrote in the May 1947 issue of *Urbanisme* – 'whose work ethic and sense of discipline ought to have kept them on the path to social progress'.

Having met Jean Prouvé during his time in the French Resistance, Grandval knew who to call for help in drafting his special operations force of architects and planners. The elite team he assembled included Marcel Roux and André Sive (both returning from Algeria), Roux's former employer Georges-Henri Pingusson, Edouard Menkès (who had survived Auschwitz), Pierre Lefèvre, René Herbst – and Guevrekian (who had stopped practising under the Vichy regime). All had known each other before the war, through CIAM and the Union des Artistes Modernes (UAM). Now mobilised in Saarland, they received military ranks distinguishing the top brass (Roux, Pingusson and Sive, who were 'lieutenant-colonels') from the rest, who were merely 'commandants'. Only Prouvé, Guevrekian and Herbst refused to wear their uniforms.

Guevrekian's main contribution seems to have been towards the reshaping of the curriculum at the Saarbrücken School of Arts and Crafts, to help it train the new kinds of workers required by the postwar reconstruction. The most important aspect of the French mission, however, was the production of a redevelopment plan for the whole region, including its most important towns. The plan for the reconstruction of Saarbrücken bore no small resemblance to Le Corbusier's scheme for Saint-Dié-des-Vosges, only blown up in scale. Presented as the model of a new 'democratic' urbanism, it was a *tabula rasa* project that erased all surviving traces of the historical architectural form. Consistent with the principles of the Athens Charter, the urban territory was divided into different functional zones. The centre of the new city was marked by the crossing of two perpendicular axes on the south bank of the River Saar. Set parallel to the river were long rows of residential slabs, oriented east–west for maximum exposure to light and air – an orientation that did not reflect Saarbrücken's historical development towards the north, but was designed to optimise transport connections with France to the west. The existing inhabitants of Saarbrücken seem hardly to have had a place in this vision of the city. Not surprisingly, then, when they were given a chance to voice their opinion of the scheme, they rejected it roundly. The Saar's transition to the status of protectorate in 1947, combined with the lack of funds to undertake the wholesale transformation of the region, sounded the death knell for the plan. 'No one liked the architecture we were doing', Guevrekian later recalled. 'The Russians thought it was capitalistic, the French thought it was communistic and it was too Latin for the Germans'.



Gabriel Guevrekian with students at the Saarbrücken School of Arts and Crafts, 1947
© Historisches Museum Saar

American Professor



12

'I believe that practising, even so little, is one important part of teaching, in order to be in touch with the realities', Guevrekian confided in a letter to Turpin Bannister, a professor at the University of Illinois Urbana-Champaign. It was June 1949, and Guevrekian was now teaching in the US. A job at Auburn University in Alabama – secured through Hans Vetter, who was now teaching at the Carnegie Institute in Pittsburgh – had given him a ticket out of war-torn Europe. But after less than a year in the Deep South, he had had enough. Cutting short the preamble, he got straight to the point: 'I want very much to change … to be nearer to an intellectual centre which I would naturally prefer'. Bannister took the hint, and by the end of the summer Guevrekian had been installed as professor of architecture at the University of Illinois.

Guevrekian enthused about his new home: 'This is one of the best universities. The campus offers so much – a tremendous music department – the orchestra is better than in many big cities. Opera, drama, literature. A very fine library – and that is important. And the people are so wonderful here! The people in the Midwest are so different. Here on this black soil, this is real America. The East, well, they are something else. European, or Orient. But this is America.' Before the war, Illinois had welcomed other architect émigrés escaping Nazi Germany – most famously, of course, Mies van der Rohe, who for over 30 years based his own studio in downtown Chicago, and combined practice with teaching, as head of the school of architecture at Armour Institute of Technology (which would become IIT). Moholy-Nagy had come to Chicago too, and founded the short-lived New Bauhaus as well as its successor, the Institute of Design (also absorbed into IIT).

Here, in the Midwest, Guevrekian finally had the space and freedom he needed to try out his ideas in architectural education. He developed a new design curriculum, which included master classes, and expanded the activities of the school, connecting it to the cultural life of the city by curating exhibitions and hosting symposiums. He wrote effusively of how Chicago was the 'place to be': 'Things are changing, and Chicago is again becoming a nucleus for art and architecture. It will be more so in the future. It is in the right place. There is now a "middle-west" movement centred in Chicago, but it is not visible because it is so broad, so spread out.' Once again, his instinct for being in the right place at the right time had proved unerring.

Guevrekian became a naturalised American citizen in 1955, and remained at the University of Illinois for a total of 20 years until his retirement in 1969. Well established in the US, he would also spend part of each year in Europe, teaching on the university's first study-abroad programme (another of his innovations), which he strategically based in La Napoule on the French Riviera. He and his wife bought an apartment in Antibes, with views across the rooftops to the Mediterranean. They planned to spend their years of retirement here. Soon after moving back to Europe, however, Henriette-Aimée became unwell. After a protracted illness, she died in Paris on 15 September 1970. Guevrekian died in Antibes six weeks later, on 29 October 1970.

Gabriel Guevrekian with students at the University of Illinois, 1953
Courtesy University of Illinois Archives, Gabriel Guevrekian Papers, RS 12/2/26

13

Postcard Collector

Throughout a life that rather neatly occupied seven complete decades – and which began in the first year of the twentieth century, just a few months after the first ever zeppelin flight, and ended with news of Paul McCartney's decision to leave The Beatles – Gabriel Guevrekian enjoyed multiple, modern identities. But despite all his various pursuits, and the homes and nationalities he held in Asia, Europe and then America, he kept few personal effects that would attest either to the range of his geographies or the extent of his responsibilities. Yet one thing he did consistently collect were postcards, many of which are now held in the archive of the University of Illinois. These vintage postcards are all signed and dated. They include no city view, no work of architecture, and instead feature mostly just paintings, Rembrandt's *The Nightwatch*, Raphael's *The Marriage of the Virgin*, Manet's *Déjeuner sur l'herbe*, among them. Neatly packed together in boxes, their accrual seems to symbolise a certain nomadism, both geographic and professional, in which change was not just a consequence – of crisis, illness or war – but a very deliberate choice.

Of course the other thing that Guevrekian clearly collected, even if he would have never perceived it in these terms, was the various lives that he lived – a serial adoption of personae that was in no sense a form of conceit. Guevrekian was no Zelig who thrived off the reflected glory of others. Quite the opposite, he made every discipline meaningful, every city central, every period epochal simply by his own very tangible engagement with it. And if there is a single postcard-like image that represents all of these multiples, it is one ironically not found in his collection (even if it perhaps should be there). In 1927 the American photographer Thérèse Bonney took a portrait of Gabriel Guevrekian that presents him standing at his drafting table, impeccably dressed as ever, his fingers resting on his parallel motion, while he stares intently ahead from under his characteristically darkened brow. Behind him is his axonometric drawing of the Villa Heim, token of one life already lived, while ahead of him is cast his shadow – its own, more benign, *Dr Caligari*-like outline even more precise that his three-dimensional real self – and seemingly pointing the way ever forward to yet more lives that still need to be led.



Portrait of Gabriel Guevrekian, 1927
Photo Thérèse Bonney
© RMN, Médiathèque de l'architecture et du patrimoine

Two Continuous Monuments

Nicholas Olsberg

Carlos Diniz was born in Phoenix, Arizona in 1928 to an American mother and a Brazilian father who were then en route to California, where his father had just been appointed attaché to the Brazilian consulate in Los Angeles. His skill and exactitude in capturing details of the constructed world were evident from an early age – already at 14, as a student at Beverly Hills High School, he was attracting press attention for his exhibitions of meticulous topographic models of towns and villages and for his precise miniature replicas of historical armoury. After military service he went on to study industrial design at the Art Centre College of Los Angeles from 1948 to 1952, before turning to architecture, which enabled him to combine his passion for history – not least the Venice cityscapes he had seen as a soldier in the US Army in 1946 – with his enthusiasm for a whole range of modernisms, from Le Corbusier to Frank Lloyd Wright (whom he visited in 1948). He then worked for a number of years in the office of Victor Gruen, pioneer of the shopping mall, before leaving in 1957 to establish his own studio in 'the visual communication of design'.

Drawing (and drawing) very consciously and knowledgeably on the evolving tradition of representation, from Piranesi and Canaletto, to Gandy, Catherwood and Ferris and ultimately Cullen, Diniz would become perhaps the last great architectural illustrator to work in the techniques and materials of the hand-drawn perspective. In grounding these representations in the realities of site and context, Diniz used aerial photography, but he also drew with changing promotional media in mind, from the screen-print and lithographic brochure to the colour slide-show, and eventually employed early CAD systems to generate the outline of works and to modify them in response to changing design methodologies. For all this, ink, line and vellum remained his muses, and his drawings are an object lesson in how to reconcile the efficiencies of the new media with the finesse of pen and hand.

In his 40 years in practice Diniz played a central role in the representation of more than 2,000 projects by North American architects for sites throughout the US and abroad. His visualisations captured the huge scale of a series of new typologies – shopping centres, hotels, subdivisions and metropolitan office towers – that first appeared on the US West Coast, Hawaii, the mountain states and the Sunbelt. Charged particularly with selling proposals to investors and potential tenants, his involvement with a project at its earliest stages saw him meticulously translate an architect's original design into the essential anatomy of a building. But beyond the foreground of the architectural object, Diniz was more active still in articulating a particular backdrop, seen either from above in panoramic aerial views or closer up, in intimate ground-level vignettes, which infused his drawings with ideas about the aesthetic character of the city, the resort or the suburb – the nature of its public life, the ways of animating its social space, the new buildings that might be landmarks in the topography. These were visualisations, then, in which Diniz essentially tried to reconcile the machine aesthetic in which he had trained, and for which he never lost sympathy, with a more traditional approach to rural and urban vistas, working to instil an ideal of dynamic public space and a transcendent landscape in even the most monumental schemes.

This attention to scale is significant because Diniz opened his studio just at the moment when architects in Los Angeles were being challenged to construct a vast new infrastructure for an exploding population and workforce. Their response was to establish a shimmering new language tailored to the wider horizons of the American West, surpassing in scope anything seen since the steel-frame skyscraper cities of the 1920s. Indeed, by the end of the 1960s California had so mastered planning and construction formulas for cost-effective, rapidly built megastructures that the state could boast the three largest architectural firms in the world. Diniz worked for all of them, in addition to drawing new office parks for Welton Becket's Century City, new suburbs for William Pereira's city of Irvine, whose footprint was equal to an entire European metropolis, and new shopping centres and hotels of almost limitless proportions for Minoru Yamasaki. These were presented to the wider world with great fanfare – Diniz's renderings for Century City and Irvine even made the covers of *Time* – while Los Angeles itself basked in the reflected glory of what would be in many ways America's last great contribution to modern architecture – the realisation of functional monuments of an almost otherworldly dimension.

Some of the most compelling of Diniz's illustrations are those that portray exactly how these works of great scale might appear in the context of their even greater landscapes. This was achieved largely through an extraordinary precision; he kept a portfolio of his own tree studies beside him, so that foliage and form would be faithful to particular species, and made the sky and clouds his own singular preserve – no assistant was ever allowed to work on them. At the same time, he analysed with ravishing exactitude the structured shadows that reveal a mountain topography and the precise fashion in which the eye caught or the mind imagined the dissolving perspectives of a distant view. Above all, he captured the metaphysical sweep and grandeur that lay behind many of these last great American romances. For example, his 1961 rendering of SOM, Wurster and Belluschi's Bank of America – 'by a very large margin, conceived as the largest building in San Francisco' – anticipated the way its concertina walls would project a pattern of light and shadow from the sunlit street high into the atmosphere. A year later his lithographic prints famously converted the gothic tracery of Yamasaki's World Trade Centre into endless columns of mirrored sky hovering over the opaque masonry of the city below. But nowhere are his drawings more compelling than when they celebrate the sadly short-lived endeavour to move such meditations on continuity and bigness into the greater bigness and continuities of America's perpetual dreamscape – the open land that lay beyond Los Angeles.

The illustrations that follow show Diniz rendering two such designs with a fanatical but requisite rigour, on sheets laid together to the same great size but at radically different scales, from markedly different viewpoints, and with studiedly different approaches to their very different landscapes. Though both represent architects proposing ostensibly the same solution – a single horizontal container – they also represent two different faces coming up in the last throws of the modernist dice.

The first depicts the headquarters of the timber company Weyerhaeuser, designed by Edward Bassett from SOM's San Francisco office, within

Overleaf: Carlos Diniz, Weyerhaeuser HQ, Tacoma, by SOM, 1969
Courtesy Drawing Matter Collections
Photo Craig Stevens
© Family of Carlos Diniz / Carlos Diniz Archive

its forested site outside Tacoma, Washington – a building that drew on Bassett's long association with the Saarinens, on his firm's fascination with concrete and on the play of structure and surface that Ponti and Nervi – with whom SOM's Myron Goldsmith had worked – achieved in the Pirelli tower. Conceived as a skyscraper lying on its side, its structure sustained by timber girders and columns, it suggests, rather buoyantly and romantically, a new way for architecture to sit lightly on the land, dressed in vegetation and so somehow also repairing anything that might once have been ravaged. The second illustrates Craig Ellwood's Art Centre College in Pasadena, a building that in contrast harks back to Mies (Ellwood's response to his increasing disappointment with the contemporary drift of architecture) in proposing a final, slightly melancholy elegy on the beauty of structure and reason, made clear in the black and neutral geometries of its steel and glass.

'The climate in the northwest is so beautiful, with the mists and fogs and the greyed greens', Bassett once said, 'very Whistler-like, very oriental. The site itself had an interesting character which immediately suggested a solution... It had been cut up badly over a long period of time by county roads, abandoned access trails and spotty, semi-rural development. Once we decided how to place the building on the site, we began to work on a plan to reclaim and heal the property under Weyerhaeuser's stewardship.' In terms of the working environment, the acceptance of the open-plan office was central to the success of the programme, but the scheme had larger aspirations than an open workplace. Completed in 1971, Weyerhaeuser was among a wave of new corporate centres that provided not only community facilities for their employees – recreational, dining and day-care – but also a sort of transcendental window on their setting.

Diniz, who worked closely with Bassett over many years, tailored his drawing to the same brief, presenting the new structure from an aerial perspective, lying on the threshold of what the novelist Wallace Stegner called the 'geography of hope' – that vast uncorrupted wilderness whose echoes, in this first wave of Earth Days and Sierra Club activism, were heard as a call to a newly awakening environmental consciousness. 'An important aspect of Weyerhaeuser's ''corporate image'' concerns environmental sensitivity and the protection of natural resources', said Diniz. 'In their words, the architects' guiding idea has been to create a building which would ''literally tend to disappear – becoming one with the landscape. All of the roof surfaces are gently sloped and are, except for the fifth floor, covered with ivy. The windows are hardly apparent as they are deeply recessed behind the roof edges and are, moreover, not interrupted by any vertical dividers which might impair the visual merger between interior and exterior''. Our illustrations picture the building conceived in a manner to further emphasise both the corporate goals and the aims of the architects. The dramatic architectural concept and primarily coniferous flora of the landscape were especially compatible to a crisp execution in ink line.'

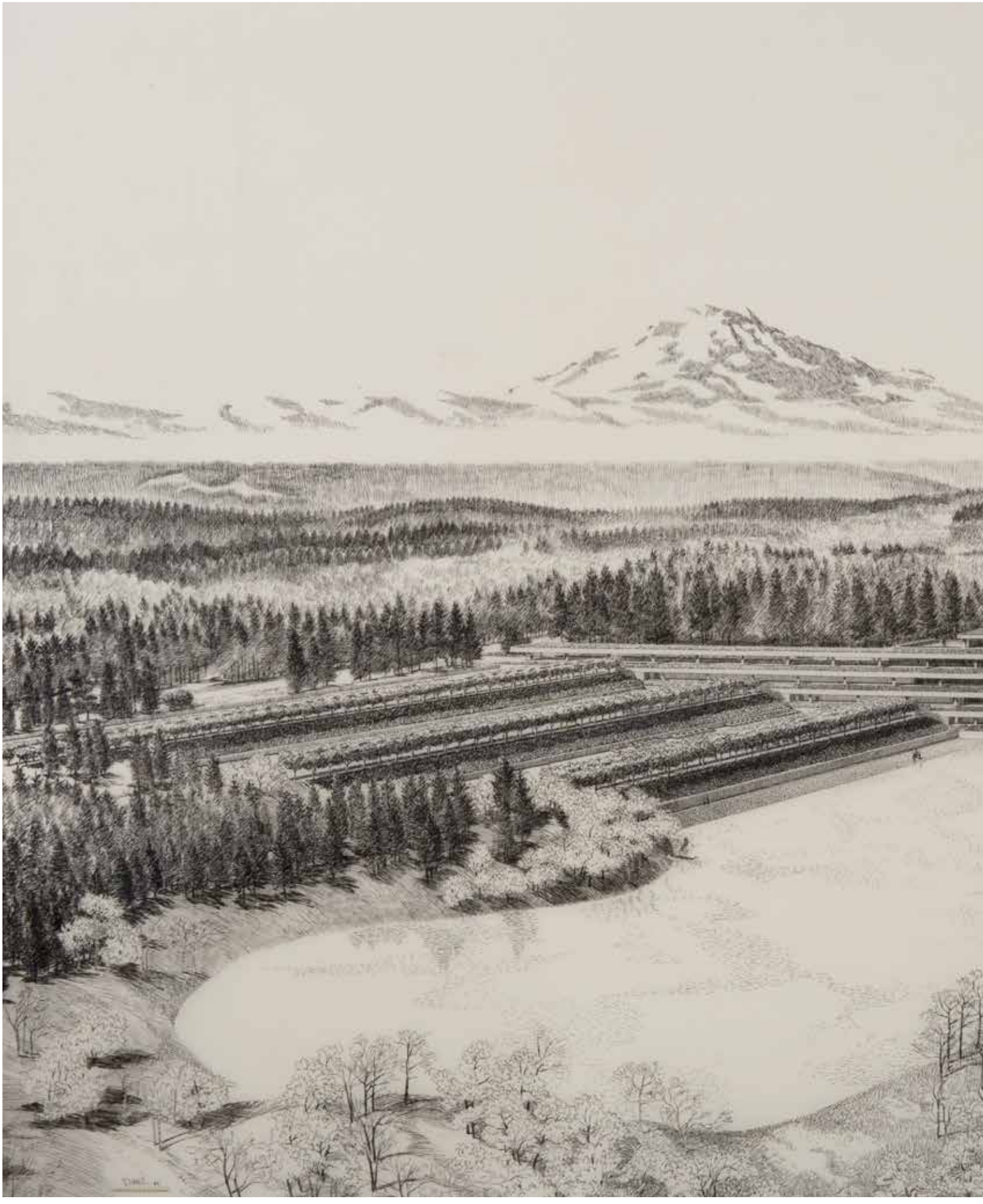
The second building, the Art Centre of Los Angeles, Diniz's alma mater, was established in 1930 to train commercial artists, especially in photography and illustration, answering a growing demand from the film, fashion and advertising industries. With the massive postwar migration of veterans into the region – many with wartime engineering experience behind them – and with the accelerating growth of aircraft manufacture, the college widened its focus to include technical illustration and industrial design, with automotive design rapidly becoming one of its primary fields. These were all practices – commercial photography included – that required extensive studio spaces, and by 1965 the college (accredited to award degrees in design since 1955 and now dispersed among different facilities) had renamed itself the Art Centre College of Design and begun the search for a site for a comprehensive new campus outside the city centre.

By the time Ellwood and James Tyler came to him with their final design, Diniz recalled, 'I had already prepared illustrations of four prior schemes for different sites by different architects for the proposed relocation'. These included a prizewinning proposal by John Rex, designed in 1968, with which Diniz's office was deeply involved, studying patterns of light and use in each of the public spaces, classrooms and studios as the design developed. Diniz's final aerial view shows Rex's scheme as a 'modernist hill town' – a monumental town centre of academic halls sunk into the crest of a ridge, surrounded with a vast horseshoe of discrete modular open-air residences and studios, each partly sheltered under canopies in the shape of irregular pentagrams, all rising and falling between gridded walls.

Nothing could have been more unlike this pattern-plan than the single continuous Miesian bridge, straddling an arroyo in the San Gabriel foothills, that Ellwood proposed for the final site. Indeed, Ellwood's scheme was designed precisely to counter the inefficiencies of dispersal inherent in the earlier plan, where 'the ratio of corridor to work area was', as Ellwood noted, 'unrealistic, expensive, difficult to service and hindered communication'. Ellwood's unitary plan was well advanced by the time Diniz drew his presentations, so that he could render, in addition to this extraordinarily precise evocation of its likely effect in the landscape, a detailed set of analytical isometric plans of all its interior spaces. The initial concept of a long span of structural steel had been arrived at quickly, but its application to the site and programme only made sense with Tyler's recognition that, by resting the superstructure on a barely visible lower storey, studio space could be simply and efficiently sectioned and arranged below ground. A subtle intervention by the great landscape architect Alfred Caldwell – deepening the chasm of the arroyo and obscuring the meeting between structure and ground at the lower level – then reinforced the illusion of a shelf-like structure spanning the slope. The simplicity of materials and logic of construction meant that the entire scheme could be detailed and built in little more than a year from ground-breaking to occupancy, and that the college's extreme constraints of cost – $30 per square foot – could in fact be accommodated with ease.

Diniz was delighted. After six years of false starts, 'finally, we were presented with a marvellous site and a rational, inspired conception'. This was a perfectly simple, flexible system that Diniz's isometrics could lay out with compelling force and logic, with none of the agonising attempts to fit function to form, or to evoke the uncertain drama of entry and approach evident in his sketches for Rex. Indeed, even the glorious theatre of this long view was simply and logically achieved. As Diniz wryly acknowledged, 'Ellwood's ''Miesian'' box was extremely small in scale but its length, incorporating a ''bridge structure'' spanning the entrance road, required a very long drawing – six feet. Despite its size, this was an unusual case where the site and the architectural concept were so compatible and, in their own way, so dramatic, little gymnastics on our part were required – merely the pleasure of drawing.'

Gatefold: Carlos Diniz, Art Centre College of Design, Pasadena, by Craig Ellwood, 1968
Palm Springs Art Museum, Gift of L J Cella
Photo Taylor Sherrill
© Family of Carlos Diniz / Carlos Diniz Archive













Tallinn in Technicolour

Andres Kurg



Ando Keskküla,
illustration for animated film, *Bluff*, 1973
Estonian Museum of Applied Art and Design

Estonia in the 1970s was a curious anomaly, a provincial border zone and a rapidly modernising country at the same time. Part of the USSR, yet on a longer leash than most Soviet Socialist Republics, its citizens could access uncensored information by tuning into Finnish radio or TV stations. They could eat in western-style cafes and restaurants, a number of which maintained both a customer base and an ambiance from the period of inter-war independence, while others were decorated in the modern Scandinavian style and served a broad variety of cakes and tarts, or 'whipped cream and strawberries', as Anne Gorsuch characterised them in *All This is Your World*, her study of post-Stalin Soviet tourism.[1] If Estonians went to the theatre or an art gallery, they could enjoy shows that would rarely have seen the light of day in Moscow or Leningrad. The country's arts culture was never polarised into 'official' and 'unofficial' camps and – the ultimate index of quiet toleration on the part of the authorities – there was even a rock music scene, germinated in the university halls and student clubs of the capital, Tallinn.

This same combination of local flexibility and pan-Soviet conformity characterised the industrial design department at the Estonian State Art Institute, where in 1975 a student named Sirje Runge presented her diploma project, 'Proposal for the Design of Central Areas in Tallinn'. Communicated by means of brightly coloured 1 × 1m boards, 80 slides, working drawings and text, Runge's project set out to inject a certain visual attraction and excitement into what she saw as an otherwise overly utilitarian urban environment. Two panels showed run-down inner-city courtyards that she envisaged repainting in bright red, yellow and blue, with the colour extending from the courtyard walls out into the street. Other boards depicted temporary structures – assemblies of 'aluminium rods, joints, planes, boxes, stairs, lifts' based on a 3 × 3 × 3m module, and rising up to six storeys. In classic 1970s mode, these structures incorporated all the informational and TV screens you could eat, along with news kiosks and 'music automata', telephone booths and 'boxes for conversation', not forgetting the essential cigarette vending machines.[2] An advertisement for a Soviet brand of cigarettes, 'Kazbek', was shown next to colourful screens spelling out 'happiness/sadness', 'love/hate' and the names of Bowie and Zappa, leaving no doubt as to the kind of music that would be programmed into the music automata. Climbing up the stairs or moving across certain surfaces would trigger a cascade of lighting effects or a playful accompaniment of music. Lighting could also be used to change the appearance of the modular constructions according to the weather or the season: 'The structures should become communicative signs representing the character of the city, visual symbols side by side with the overexploited historical monuments', Runge asserted. All this, however, was merely a warm up for the project's culmination, what she called her 'urban fantasies … free from technical and utilitarian demands'. One such fantasy involved converting a disused industrial area into a park centred around cylindrical towers that symbolised factory chimneys: 'These cylinders periodically emit fumes with a certain colour. The fumes are harmless, pleasant-smelling, reducing through their consistency the pollution of the surrounding air… The smoke-producing and air-cleaning chimneys refer to the possibility that by changing the content of industry we might also change its harmful impact on people.'

Runge's ideas about the relationship between design, art and the environment were informed not just by her studies at the art institute but by her social circle, a loose-knit group of artists and architects who included her then-husband, Leonhard Lapin. On long walks with their friends, Runge and Lapin explored the city's fringes and urban wastelands, taking photographs and organising happenings inspired by the sites. In their own words they wanted to get to know the 'ugly' areas: 'We were drawn to slum motifs, discarded objects, the reality of the railway, warehouses and garbage heaps.'[3]

Looking both east and west, the group drew equally on post-1968 youth culture – music, pop art, flower power – and the rediscovery of the early twentieth-century Russian avant-garde. They took the constructivist interest in a rapidly transforming machine environment and its impact on human perception, and married this with the possibilities of the new media. A 1972 article on contemporary theatre architecture, co-authored by Runge and Lapin, called on artists to explore the atmospheric and synaesthetic potential embedded in the new technology of the cybernetic era – to employ 'sensorial, motoric, kinetic, sonic and verbal means as information to embrace all human senses and the central nervous system'.[4] In Lapin's work this impulse found expression in a series of prints, *Machines*, *Woman-Machine* and *Man-Machine*, which presented the machine less as a means of production and more as an instrument for enhancing pleasure and freedom of choice. Runge, however, took this idea further, exploring the potential of the new media to shape the environment of the city by 'engaging its inhabitants in full communication'. The city was to be a synthesis of different arts, a 'multi-medium employing all technical means' – architecture as well as design and audiovisual arts.

'We need to revive the aim of taking art to the streets, by giving it a volume and a content proper to urban design', Runge declared in her diploma project. This was an aim that went back to 1968, and that featured large in a manifesto-style book both she and Lapin referred to – *Livre blanc, objet blanc* (1969), by the French art critic Pierre Restany, published in Finnish in 1970.[5] Restany had called on artists to embrace the new technology in order to probe hitherto unexplored psycho-sensuous dimensions of perception. In this way, he declared, the art of the future would become 'total art' and 'art for all', giving the population the means to adapt to the rapid pace of change: 'Art descends to the street. Museums become centres of information and production. Academies become laboratories. Monuments and fetish-ruins that are meant to be eternal undergo multiple formal changes'[6] – Lapin took up Restany's call and quoted these very words at the end of a talk in December 1975, in which he defined the approach of his circle of artists and designers as 'objective art'.[7]

Parallels could be drawn with contemporary work in the west – not least the early cybernetic studies Cedric Price carried out on his Fun Palace with Gordon Pask, or the Ville Cybernétique by the Hungarian-born French architect Nicolas Schöffer – but this synthetic approach also had roots in the curriculum of the industrial design department at the Estonian State Art Institute.[8] Set up in 1966, the programme sought to provide a 'universal education', partly out of necessity, because of a lack of clear prototypes for the course of study and detailed information on design schools abroad, but partly also because in a country as small as Estonia it was not practical for designers to be too narrowly specialised – or so the argument went.[9] In addition to traditional classes in composition, drawing and sculpture, students were taught information theory, bionics (a requirement imposed by Moscow) and later on sociological research.[10] However, the ideal of an all-round design practice also mirrored a wider shift in how design was theorised in the Soviet Union in the late 1960s, when there was a move away from the design of the individual object towards the development of systems related to the environment. It meshed, too, with the convictions of the founder of the programme, Bruno Tomberg, a furniture designer by training: 'It has become clear that an object does not exist separately in reality and that design is a phenomenon of the synthesis of material culture – that social, ideological, cultural and other influences have always been integrated into art', Tomberg wrote.[11] Such an all-encompassing approach was seen as differentiating Soviet design from capitalist design, which was ruled by the competing and contradictory interests of private corporations. Another vital difference between the two systems was that in a would-be classless society, it was not appropriate for design to function as a mark of status, whereas in the west design was used to confer a certain cachet on consumer goods, thereby stimulating demand and the production of surplus value.[12]


SIRJE LAPIN 1975
2



Sirje Runge (Lapin),
Proposal for the Design of Areas in Central Tallinn: Re-colouring of the Courtyards, 1975
© Sirje Runge / Museum of Estonian Architecture

This new conception of design was concerned less with form-making than with addressing the city in its totality. In *Pioneer*, a popular magazine for adolescents, Tomberg explained that unlike the traditional industrial designer, who merely provides a form for a function, this new kind of designer was a universal problem-solver: 'if the task of the industrial designer is to produce a new model for an iron, then the [environmental] designer sees his task as avoiding the tiresome activity of ironing altogether. A solution to this problem has been the production of non-creasing fabric.'[13] Drawing on the Ulm model and in particular the systems thinking of Tomás Maldonado and Gui Bonsiepe, Tomberg described how the work of the designer began with the problem of how to organise and present the excess of information encountered in an urban environment 'in a rational way relating to each person's needs'.[14]

The changed role of the designer in a contemporary information-dominated environment was addressed in the 1973 diploma project of a colleague of Runge, Ando Keskküla. Like Runge, Keskküla found a way to combine visual art and design through the new media, producing a scenario and design for an animated film, *Bluff*, that offered a polemical commentary on materialism and excess consumption.[15] From the opening scene, where the main character enters an empty room, we see the space progressively fill up with more and more stuff that begins to take on a life of its own (enacting Marx's principle of commodity fetishism) until everything spirals out of control: 'the walls open up behind him, we see a blue colour that first appears as sky but then shows itself as another space with blue walls'.[16] The film's visual language combines drawing with collage technique, incorporating cut outs from newspapers and magazines and fragments of postcards. For Keskküla, this combination of photography and the readymade made the work more 'truthful'. Adopting a vocabulary from cybernetic and media theory, he defined the man-made environment as an ecosystem that displays structures of communication and needs to maintain internal stability and homeostasis in order to survive. To maintain this stability, design had to adapt the rapid advances in culture and technology to the needs of the user, so that they were absorbed into everyday life.

In his theoretical statement, Keskküla also described recent western avant-garde practices that sought to erase the border between design and art, referring to artists who documented or intervened directly in the environment 'painting glossy cars, everyday food, streets with reflecting window-screens with photographic accuracy in big format… Ditches dug into earth are presented as art, artist's behaviour becomes art.'[17] These practices – hyperrealist painting, land-art and happenings and performance art – represented for him a turn towards 'an analysis of the senses'; by setting up new modes of perception, art would become an instrument for moulding consciousness. In this context, any distinction between high and low art was meaningless: whether an object was art, design or mass culture would be determined solely by the user's attitude to it. The designer, then, became the initiator of a 'new kind of popular art' that responded to social and technological change and connected 'functional needs with means such as colour, form, sound, light and material'.[18]



Some of these new ideas about the environment would be translated into material form by Runge and Lapin. In 1975 Lapin was invited by his friend, the architect Toomas Rein, to work on the design of a series of concrete sculptures (*architektons*, as Lapin named them, in a nod to Malevich) for the entrances to a 700m-long housing block on the fringes of Pärnu, a small seaside town in western Estonia. The housing was part of a larger complex for a local collective farm building company (KEK). Being cooperative, rather than state-owned, Estonian collective farms were able to hold onto their profits, which were considerable, thanks to the consolidation of smaller agricultural estates, the ready availability of cheap fuel and raw materials, and access to a pan-Soviet market for their products (dairy, pigs and poultry). The farms channelled a large portion of these profits into new construction, creating not only industrial and administrative buildings but also innovative housing schemes, sports centres and healthcare facilities as well as public structures that contained spaces for concerts or cinemas. Toomas Rein worked for EKE project, a design office specialising in these buildings. By forming a self-contained partnership with the collective farm construction companies, EKE was able to bypass the dominant rule of mass prefabrication and standardised details, finding the space to experiment with structural systems and material finishes.

This latitude is evident in the Pärnu KEK complex, designed by Rein along with Andres Ringo and Ell Väärtnõu from 1970 on. With its strict orthogonal layout, unusual housing typologies and combined living and work areas, the project ran counter to the hierarchical zoning principles of the postwar decades, moving towards an urban micro-environment where different functions were intertwined. The two parts of the complex bordered the Tallinn–Riga highway. Running along one side of the road were the production facilities of the construction company (metal and wood workshops) and office spaces. On the other side was the four-storey housing block, called 'The Golden Home' – the name originally chosen by the architects, 'Commune', was rejected by the inhabitants on account of its official overtones. Ground-floor apartments included atrium-like inner courtyards that brought light into the living and dining rooms; small kitchens were lit with rooflights. A long central corridor ran the length of the block, designed to provide access

to services and a shop in the middle (although this central component was never realised). On the cross-axis was a kindergarten, 'Frolic' (architect Toomas Rein, interior design Helle Gans, 1975–78), a two-storey building with brightly coloured interiors and transformable furniture (for example, beds used for daytime naps could be turned into climbing frames). These themes were extended in the playground that Rein commissioned Runge to design in 1976. In place of the standard figurative play equipment there were abstract constructions for climbing – not unlike the modular structures proposed in her diploma project the year before, with blue steel lattices and yellow timber frames – as well as partially covered rooms for outdoor play in inclement weather and different play zones defined only by their materials: sand, timber decking, grass. In an axonometric drawing showing a fragment of the playground, the timber climbing structures double as flagpoles, carrying primary colours – red, blue, yellow.

Abstract art and graphic design were integrated into other parts of the KEK complex: the white rendered walls of the wood workshop were decorated with elements in macrographics, the main elevation facing the road was decorated with timber details painted in all the colours of the rainbow, while the entrances on the same side were marked by Lapin's painted *architektons*, based on the form of a cube. Embodying the synthetic approach that Lapin and Runge had embraced since the early 1970s, the new micro-environment of the KEK complex brought together different art fields in a single totality. Here, rather than merely decorating pre-existing architectural objects, art functioned as the organiser and producer of a new environment – a means to entice the inhabitants to participate in the public realm, rather than retreat to their homes after a long working day. A review in the pan-Soviet journal *Arhitektura SSSR* somewhat predictably remarked on the socially progressive aspects of this kind of 'industrial–habitational complex'. A community had been formed around a single enterprise: people who worked together during the day also spent their free time together in the same neighbourhood. As the reviewer noted, this allowed for a more effective use of space and greater access to the activities in the sports and leisure clubs. Over the longer term also, it had led to a lower turnover of the workforce, fewer sick days and even a ten per cent rise in rationalisation proposals.[19] While these last claims are typical of overblown Soviet propaganda, The Golden Home was undeniably considered to be a highly desirable place to live.

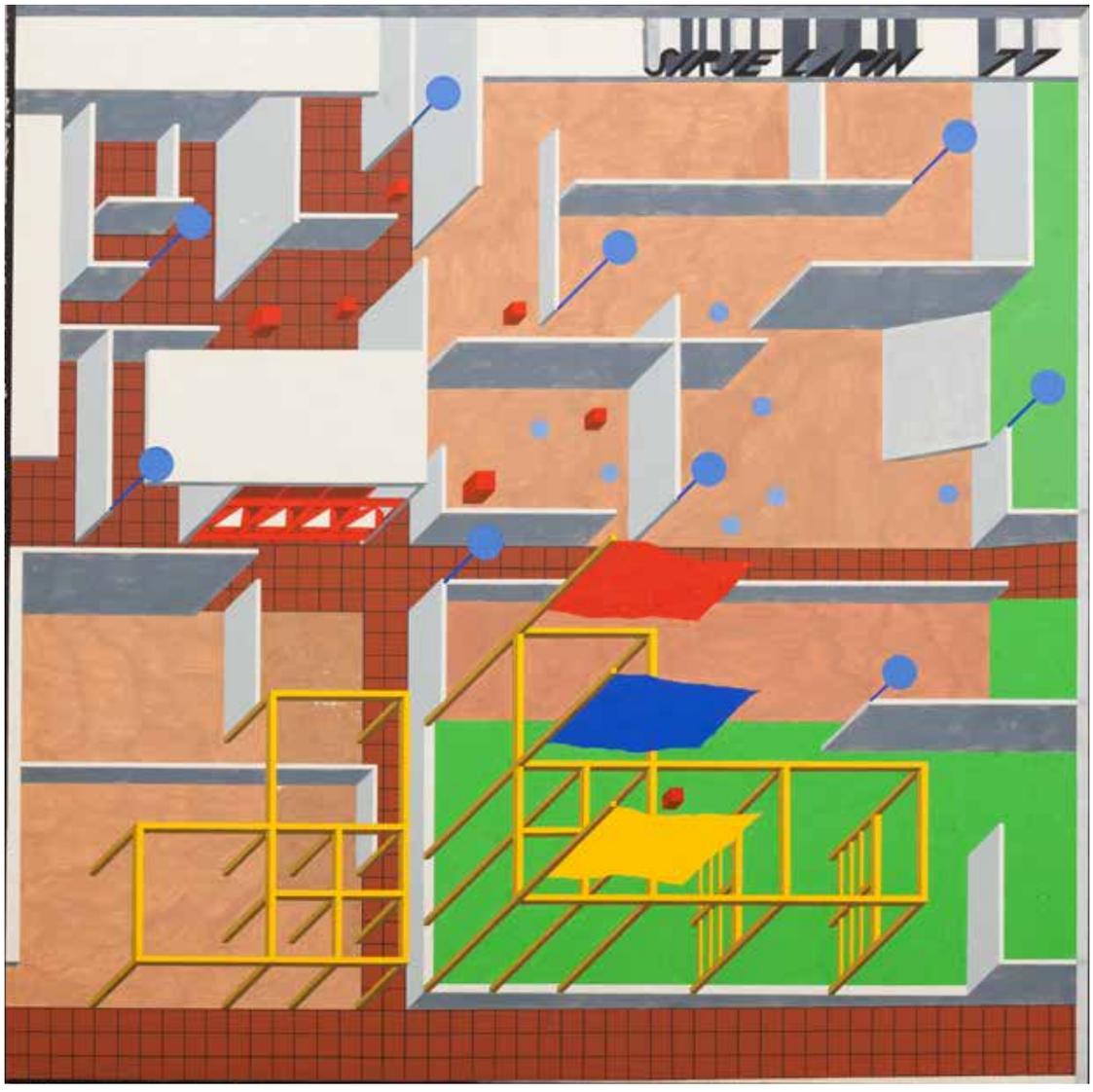
How, then, should we define the relation of this circle of young artists and designers to the Soviet state? Were they critical of the dominant power or, rather the opposite, were their interventions intended to demonstrate the 'human face' of a socialist society? The answer perhaps comes down to how we understand the concept of autonomy. The work drew criticism from conservative intellectuals in Estonia, for whom the slogans of bringing art back to the streets and the influence of Russian avant-garde echoed too closely the official rhetoric. Viewed through this prism, the attempt to help the user adapt to the new technological reality could be seen as a device to support even greater centralisation and state control, perhaps even to forge a new communist subjectivity.



Sirje Runge (Lapin),
Proposal for the Design of Areas in Central Tallinn: Audio-visual Objects – Communication Centres (*left*) *and Urban Fantasies* (*right*), 1975
© Sirje Runge / Museum of Estonian Architecture

For the conservatives, the new conception of art posed a threat to national traditions already endangered by the Soviet regime. Their position, as formulated by the influential writer Jaan Kaplinski, was that the task of planning was to compensate for the loss of autonomy that had accompanied the mass urbanisation and modernisation of the postwar decades.[20] In turn, architecture had to provide a place of retreat from the industrial landscape, a means to filter out unwanted information and the barrage of interpersonal communication that threatened to overwhelm the individual.

However, this view failed to take account of two significant and inescapable developments – the emergence of a young generation with a changed relation to technology, and the first signs, even in the factory fields of the Soviet Union, of a post-industrial environment. Instead of retreating into their shells, as the conservatives proposed, Runge and her circle found an alternative to the official city in the otherness of neglected and marginal locations. There they projected transformable structures that absorbed the different needs and individuality of the users, allowing for free communication and, perhaps, more democratic kinds of practices. Runge's diploma project – adopting a similar approach to contemporary western art – uses kinetic and conceptual objects to demonstrate ways in which outdated industrial technologies could be redeployed to enhance the living environment. In the chimneys of her utopian park, with their trails of aromatic and colourful vapours, the spirit of 1968 intermingled with the dreams of the avant-garde for a new kind of relationship between humanity and its environment. 'To be free means to participate', the students on the streets in Paris had chanted, while for Lapin, quoting Restany, the project always remained a Rubicon for a more active, engaged form of environmentalism: 'If we reject the enormous opportunity that today is within our reach, and if we predict that excessive mechanisation will lead to the destruction of the culture we want to achieve, then we will empty out the freedom of action, creation, thought and seeing, and in doing so we will negate the human being.'

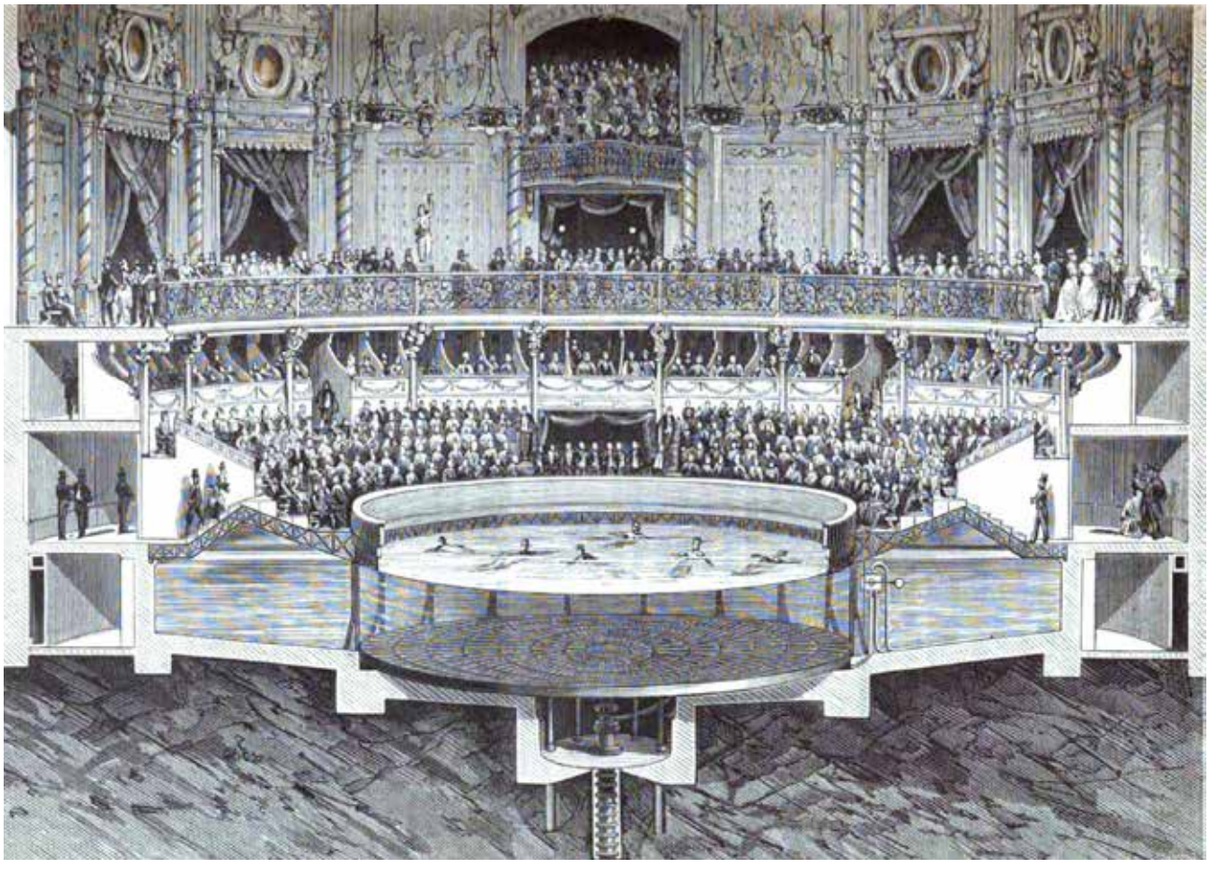


Sirje Runge (Lapin),
View of Pärnu KEK Kindergarten Playgrounds, 1977
© Sirje Runge

1. See Anne Gorsuch, 'Estonia as the Soviet "Abroad"', in *All This is Your World: Soviet Tourism at Home and Abroad after Stalin* (Oxford: Oxford University Press, 2011)
2. Sirje Lapin (Runge), 'Tallinna kesklinna miljöö kujundamise võimalusi', diploma project at the Estonian State Art Institute, department of industrial design, Tallinn, 1975, p 8. Held in the Museum of Estonian Architecture.
3. Leonhard Lapin, *Ando Keskküla, Näituse kataloog* (Tallinn: Estonian Art Museum, 1986).
4. Sirje Lapin and Leonhard Lapin, 'On sügis, lehed langevad', in *Thespis: Meie teatriuuendused* 1972/73 (Tartu: Ilmamaa, 1997), p 289. The work of Runge and Lapin overlapped in other ways too. After graduating from the architecture department of the State Art Institute in 1971, Lapin was employed for three years in the State Directorate for Restoration, where he produced 'An Overview of the Visual Milieu of Tallinn and Its Importance in the Reconstruction of the Central City' (1974), an analysis of the built environment of central Tallinn. Rather than focus on traditional landmarks, the project documented in photographs and text the peripheral areas, industrial zones and working-class suburbs with wooden tenement houses from the late nineteenth and early twentieth centuries – an architecture invested with human qualities that had been lost in the postwar march of industrialised building techniques. Many of the sites that Lapin documented in his work became the basis for Runge's analysis. In several cases, she even used the same photographs as the basis for her own renderings.
5. Pierre Restany, *Livre blanc, objet blanc* (Milan: Apollinaire, 1969). The Finnish translation published as a supplement to the art magazine *Taide*: 'Valkoinen kirja' (Porvoo: WSOY, 1970).
6. Pierre Restany, 'Valkoinen kirja', *ibid*, pp 33–34.
7. The talk was given at a symposium accompanying a non-institutional art exhibition held at the Institute of Experimental Biology in Harku, and was recently reprinted: see Leonhard Lapin, 'Objective Art', *ArtMargins* 2, 2013, pp 172–85. The term 'objective art' neatly combines the 'object' of Restany's title with a reference to the legacy of Kazimir Malevich's *Non-Objective World*, a crucial influence on Lapin.
8. There were generally only four to six students each year in the full-time industrial design programme. Estonian State Archives (ERA), f R-1696, n 1, s 621, l 60.
9. Bruno Tomberg, 'Jooni disaini arengust' (Tallinn, 1979), manuscript in Estonian Museum of Applied Art and Design, Tallinn, p 17.
10. Virve Sarapik, 'Disainikateedri algus: Immitsev utoopia', in Mart Kalm (ed), *Kunsttööstuskoolist Kunstiakadeemiaks: 100 aastat kunstiharidust Tallinnas* (Tallinn: Estonian Academy of Arts, 2014), pp 332–63.
11. Bruno Tomberg, *op cit*, pp 5–6.
12. Leonhard Lapin, 'Objective Art', *op cit*, p. 185.
13. Bruno Tomberg, 'Mis on disain?', *Pioneer* 11 (1973), p 37. Another important influence on Tomberg was Victor Papanek's *Design for the Real World: Human Ecology and Social Change* (New York, NY: Pantheon Books, 1971).
14. *Ibid*, p 37.
15. Ando Keskküla, 'Joonismultifilm. Stsenaarium, lavastus, kujundamine', diploma work at the Estonian State Art Institute, Department of Industrial Design, 1973.
16. *Ibid*.
17. *Ibid*.
18. *Ibid*.
19. G Cherkasov, 'Promõshlenno-selitebnõi kompleks v Pjarnu', *Arhitektura SSSR* 2, 1978, pp 46–53.
20. Jaan Kaplinski, 'Inimene märgivoolus', *Kunst ja Kodu* 1, 1979.

Circles, Circuits, Cycles

Cristóbal Amunátegui



Sectional perspective of the
Arènes Nautiques, Paris, from *La Nature*, 1886
© BnF / Gallica

The extent to which modernity made use of the circle is impressive. The late enlightenment's propensity to classify and control everything from knowledge to bodies to morals would have been implausible without the infinity of circular tropes that were mobilised in the second half of the eighteenth century. The circle became both metaphor and apparatus – it set limits to the world and organised it through a variety of objects and discourses, including literary and theatrical tableaus, revolutionary *cercles*, circular buildings of every denomination and of course the *Encyclopédie*, that 'espèce de mappemonde', as Jean le Rond d'Alembert aptly called it.[1] A century later, neither modernisation nor one of its most spectacular products, Haussmannisation, would have been conceivable without the array of circuits, cycles, pipes, ellipses, cylinders and spheres that in a very concrete way made Paris function. The emergent entertainment industry played an active role in this craze, as leisure was widely reconceptualised as part of the processes of modernisation. Indeed, neither the democratisation of entertainment nor its instant commodification happened without that industry's deployment of circular floor plans, cooling pipes, hydraulic artefacts and rotational mechanisms that sent buildings, audiences and attractions into a spin.

But of course, the kinship established between circularity and entertainment in *fin-de-siècle* Paris is distinct from the use of the same alliance during the Bourbon restoration, let alone in the years before and after the revolution. The garden rotundas of the late enlightenment are not the panoramas that flourished in the 1830s, and these in turn share very little with the circuses, hippodromes, ice-rinks and velodromes one finds everywhere in the later decades of the century. The eighteenth-century promise of a public sphere committed to an egalitarian project might still be discernible in the bourgeoisie of the 1830s, but traces of this are increasingly difficult to find towards the end of the century. Boredom, the theme around which entertainment is constructed in the Paris of Balzac, is not quite the same thing as the ubiquitous trope of *décadence* in the 1880s, and these breaks and transitions are evinced in the spaces these periods produced for their own distraction.

One thing remains at the centre of such endeavours, however, and this is an irrepressible quest for reality. Both the enlightenment and the culture of the nineteenth century faced a similar struggle to 'apprehend the world of events', to use Eric Auerbach's expression.[2] To 'encircle' the world of phenomena and make it fathomable – to limit objects, events and sensations to the boundaries within which knowledge is still tenable: this is modernity's continuous pursuit, in spite of the speed and transitory nature of the events it promotes. As a matter of fact, modern entertainment also strove for forms of integration through a concrete set of buildings, objects and practices. For what we now gather around the notion of spectacle was in 1880 a complex web of spaces, groups and associations, a web that was fundamentally urban, and to many extents the carrier of a set of values where capital had not yet been completely severed from ideals of equality and invention.

1

In 1791 a pornographic-political pamphlet was published anonymously in France under the title *Bordel patriotique*. A theatre piece in ten acts, the play represented the *ancien régime* in the form of an exuberant orgy performed by the deputies of the Assemblée nationale, a number of political celebrities and the queen herself.[3] But while the



Orgy scene from
Bordel patriotique, 1791
© BnF / Gallica

pamphlet concentrated on Marie-Antoinette, her friends and the regime's functionaries, access to the brothel was not restricted to them alone. Or so the play went, for almost anyone could purchase morning or evening tickets at the *bureau de fouterie et d'encoulage*, the price of admission varying according to the status of the clientele – princes and cardinals, lieutenants and colonels, but also lawyers, students, *hommes de qualité* and common-or-garden swindlers were all welcome. Probably drawing from scenes typical of the eighteenth-century rotundas devoted to entertainment – think of those at Vauxhall and Ranelagh, for example, located on either side of the Thames and exported to every big city in Europe – the authors of *Bordel patriotique* offer another instance of the enlightenment's use of the circle as a device for the integration of a variety of phenomena. Rather than in the salons of the court, it was in the now open gardens of the Palais Royal, under the precursory iron and glass roof of the short-lived Circus, that business, politics, class and spectacle intersected.

Renovated and made public by Philippe-Égalité, in these years the Palais Royal, with its arcades, gambling houses, cafes and countless other shops, became the place of rendezvous both high and low for Parisian society. Among those drawn to the Circus was the *Cercle social*, also known as *Les amis de la Vérité*, a melange of a political and revolutionary club, masonic lodge and literary salon founded by Nicolas de Bonneville and the abbé Claude Fauchet. A typical child of the revolution, but also the perfect product of the eighteenth-century public sphere – the *Cercle* used the printing presses in the surrounding arcades to propagate important revolutionary pieces ranging from political pamphlets to journals, plays and poetry. In yet another circular turn, two of the forerunners of panoramic literature, Louis-Sébastien Mercier and Rétif de la Bretonne, were among the authors promoted by the group.

Prior to the revolution the circle already reigned in a variety of aesthetic, moral and scientific discourses. If Copernicus had taught that it was the circle, with its spheres, rings and orbits, that made the heavens cohere, then the eighteenth century took the geometry and made it the tool of choice to create earthly 'cosmologies' of its own.[4] Circular tropes manifested in figures of speech as much as in the materiality of objects. With customary urban disaffection, Rousseau spoke with longing of his time as an exile on the island of Saint-Pierre, a place he recommended to anyone wishing to 'circumscribe himself' in isolation, removed from the burdens of human association.[5] The second half of the eighteenth century saw the emergence of an entire architecture of reform that *encircled* subjects in order to improve productivity, isolate diseases and correct morality. These French circles might not have been the bourgeois associations of the following century – the fundamentally provincial *cercles*, devised as they were to protect social status, morals and property – but their cohesion was secured by a similar interplay of inclusion and exclusion.[6] Of course, not all references to circularity were to do with normative behaviour. Diderot and d'Alembert tried to inventory the world using the circle to name their 28-volume enterprise, the *Encyclopédie*, and a similar gesture defines the panoramic mania that started to spread in the years around the revolution.[7] In the realm of objects, gamblers welcomed the instantly popular roulette wheel, an artefact that, in combining fantasy and rationality in similar measures, could almost be seen as heralding the incredible proliferation of circular stock

exchanges that took place only a few decades later. Circularity also manifested in a variety of utterly useless inventions, fashioned by countless *faiseurs de projets*, 'builders of castles in the air, tinkerers of things physical and moral', as Cesare Birignani has recently described that entire category of unsystematic scientists, proto-technicians and pseudo-innovators that flourished in mid-eighteenth-century Paris.[8] One such invention, proudly unveiled by M Guillauté in his 1749 *Mémoire sur la Réformation de la Police*, was a series of enormous hidden 'wheels' that allowed the king's functionaries to police subjects through the administration of massive amounts of data. Devices like this were first gathered by the Royal Academy of Arts and Sciences between 1761 and 1788 in the *Descriptions des Arts et Métiers*, a compendium of machines whose rotational mechanisms were essential in the development of the 'mechanical arts'.

In short, during the second half of the eighteenth century numerous circular artefacts attempted to articulate and give cohesion to the domains of culture and nature, technology and morals, artifice and reason. Calendars, watches, chronometers, hot-air balloons, diving bells – these objects not only described the world in new ways, but quite literally made it anew. They turned artifice into a new nature, as it were, paving the way for the changes in subjectivity that unfolded in the following century, when traditional models of spatio-temporal perception – linear time and perspective, to name but two – were overturned by ambulatory subjects whose perception of the world was 'kaleidoscopic', to use one of the keywords of the period. The sheer quantity of inventions testifies to the enlightenment's urge to move away from theological accounts of the world to narratives woven by a set of commensurate objects and practices defined by humans alone. In the age of reason, objects could be judged by results – they were given an agency, they were conceived to organise phenomena and produce events, to *do* things as well as describe and represent them.

2

Fostering an elaborate field of perceptual relations, the Rotunda at Ranelagh Gardens in Chelsea was an early example of the enlightenment's fascination with cohesion and performance, and the forerunner of many forms of entertainment developed in the following century. Built in 1742 by William Jones, an architect in the East India Company, the Rotunda suspended social and spatial hierarchies to allow the proliferation of sound, sight and movement through some of the period's favourite pastimes – mutual scrutiny and emulation. Here, the supper boxes contained in the upper rings served as perfect observation posts, whereas the circular promenade gave strollers the chance to study each other closely, attentively, in search of differences and likenesses. The interior was strikingly theatrical, in that it provided an entire script for visitors to perform. Together with the salon expositions in the Palais du Louvre, which opened in 1737, the Rotunda was among the first instances of a semi-public space that brought together people of different gender, class and age. Unlike the Louvre, however, the Ranelagh building was conceived for the exclusive purpose of entertainment, as though it were a machine for commercialised diversion. 'Everybody that loves eating, drinking, staring or crowding is admitted [in the Rotunda] for 12 pence',[9] Horace Walpole wrote at the time, and continued with the endorsement that 'the company is universal: there is from his Grace of Grafton down to children out of the Foundling Hospital'.[10] The illusion of a world brought down to an interior, human types mingled in an interplay of stasis and motion, of space and bodies organised in a series of discrete relations – this is what made Jeremy Bentham cite Ranelagh as a direct inspiration for his 'museum of human nature', as Michel Foucault famously described the panopticon.



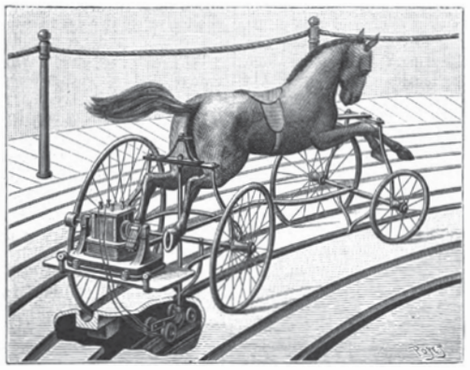
Canaletto, *Interior of the Rotunda at Ranelagh*, 1754
© Compton Verney, Warwickshire

From its inception, Ranelagh combined the enlightenment's pressure for equality with early forms of commoditised leisure, but in the process also seemed to anticipate some of the principles set forth in the 1780s by French architectural theoreticians who embraced Rousseau's vision of a return to nature. Presented as an 'escape from urban pressures', Ranelagh established itself as a pastoral, if utterly manufactured landscape modulated and qualified by the architecture of the Rotunda.[11] From Ledoux to Le Camus de Mézières, rural settlements were similarly favoured as an alternative to the 'infectious' congestion of cities. In fact, as architectural historians have widely shown, Ledoux's attention shifted dramatically to the building as a device for social improvement, following Laugier's and Soufflot's doctrine of *dégagement* – a significant step towards the modern understanding of the building as a performative, autonomous artefact[12] – and Pierre Patte's vocabulary of city diseases and contagions to be remedied by urban 'surgeries'. Here, the building was *disengaged* not only from the urban block but from the city as a whole. And in the midst of this Arcadian dream, the circular factory was privileged over the town square as a vehicle for intensifying social activity.[13]

Clearly, neither the Rotunda at Ranelagh nor the Circus in the gardens of the Palais Royal were products of an ideology of reform, in contrast to Ledoux's projects for the Royal Saltworks or the ideal Town of Chaux. Yet both were exemplary enlightenment spaces: *universal* in the use of seamless, undivided interiors, suggestive of no particular hierarchies; *ideal* in their uncompromising relationship with the fabric of the city; *scientific*, in that they made bodies and objects stand as discrete and knowable entities amidst the rigour of geometry and technique.

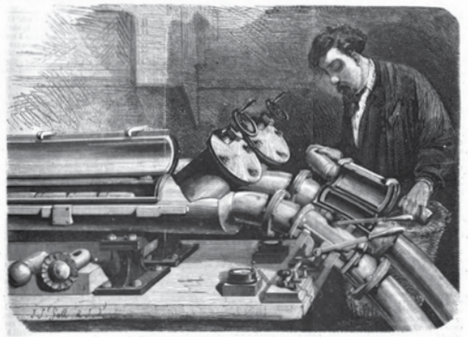
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Yet if these interiors carried enlightenment ideology they also contained the seeds of modes of social intercourse developed in the following century in the context of modernisation. Just as Ranelagh and its famous rival, Vauxhall,



established a model that proliferated everywhere, from London to Paris to Brussels through to St Petersburg, so the short-lived Circus was the forerunner of the burgeoning glass arcades of the Paris of Louis-Philippe. Both the garden halls and the arcades were spaces of commercialised leisure, semi-public interiors where sociability was traded alongside music, food or goods. Anthony Vidler has presented the popular panoramas and dioramas that began to appear in the 1820s as the natural progression of these spaces. 'This love of visual display, within an artificial environment that allowed its continuance day and night, unimpeded by the weather', he writes, 'was further reflected in the new entertainments that sprang up adjoining the arcades, the Panoramas and Dioramas; institutions that enclosed within their own circular space all the attributes of gallery while adding the dimension of travel, mystery and romance'.[14]

Of course, panoramas were circular, semi-public interiors, and in this sense not



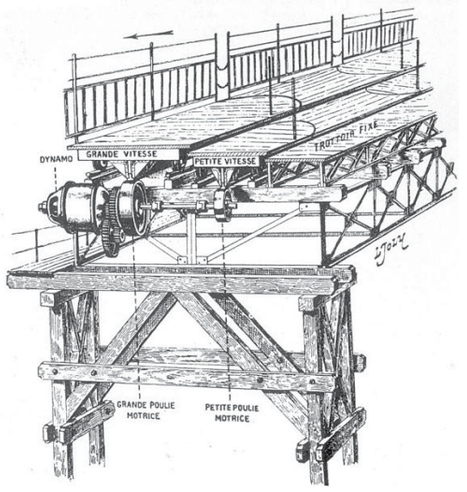
so unlike the garden rotundas of the previous century, to which they were also bound by a shared 'love of visual display'. But for all this, the activities that unfolded in either place differed significantly. While Ranelagh was referred to by a contemporary as a 'marriage market',[15] none or very little of its social intercourse was at play in the pre-cinematic interiors of the first half of the nineteenth century. As Jonathan Crary has noted, the attractions on offer in such spaces immersed the visitors in regimes of attention where visuality was emphasised above all other modes of perception, fostering a kind of docile behaviour – in sharp contrast to the intense life of the Circus at the Palais Royal. Furthermore, kinetoscopes, dioramas, panoramas, kaiser-panoramas, cinéoramas – these were all 'examples of the image as an autonomous luminous screen of attraction, whose apparitional appeal is an effect of both its uncertain spatial location and its detachment from a broader visual field'.[16] In spite of the profusion of visual artifices, however, in these sites, reality was not so much manufactured as merely reproduced. Darkened towards the centre to enliven the image – whose source of light was hidden between the ceiling and the canvas – in panoramas space was reduced to mere facility, with spectators spinning around the centre as they quietly contemplated unbounded landscapes, cityscapes, sieges or battleships.

4

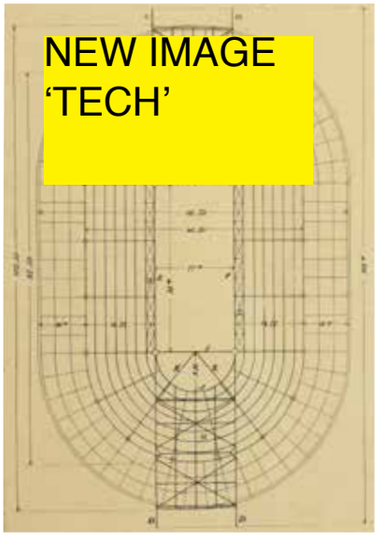
From the 1850s on, discourses concerned with circularity grew well beyond the field of optics and its embodiment in panoramic vision. Flaubert's *Madame Bovary* and J-K Huysmans' *Marthe* were each hailed as the perfect reconstruction of the endless circularity of their respective milieus – French provincial life and the Paris demi-monde.[17] The model of the cyclical also served to describe *fin-de-siècle* discourses on decadence – moral, physical, historical – as much as it delineated the mechanical gesture of the assembly-line worker whose life was inextricably tied to the endless cycle of modern labour. Inversely, circular tropes were more broadly articulated by aesthetic modernity to integrate aspects of the world in coherent 'wholes'. Examples of this range from Wagner's *Ring* cycle, to Nadar's aerial panoramas, to impressionist painting, commonly described as circular in its attempt to build well-rounded, if at times idealised representations of reality.[18] Jules Verne's adventure novels took the reader on an endless circumnavigating voyage, and a whole array of writers resorted to the panoramic in an attempt to give integrated accounts of everything from food to cities to nations to physiognomies, human and animal.

Furthermore, to the conceptual and material formations that originated in the late enlightenment were then joined the countless cylinders, pinions, pulleys, belts and gears that set the whole machinery of industry in motion. As Helmut Müller-Sievers has recently written, from the moment both rotational and translational motion were introduced in mechanical design through the cylinder, machines acquired an unprecedented autonomy, spreading to

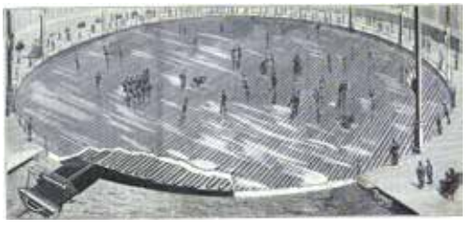
Télégraphe atmosphérique (*bottom left*), *L'Illustration*, 1873; the ice-rink at rue Pergolèse, *La Science illustrée*, 1890 (*bottom right*), and other details from assorted circular structures associated with entertainment in *fin-de-siècle* Paris
© BnF / Gallica

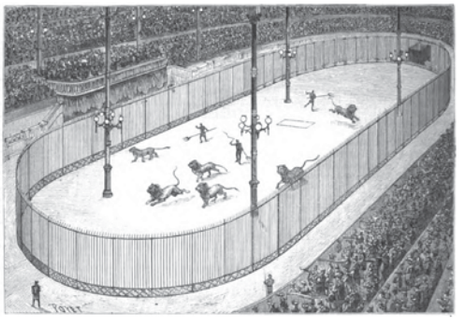


almost every sphere of material production. Simply put, with the emergence of forced, rotational motion, machines were no longer made to reproduce human movement – they ceased to be considered mere enhancements of physical power.[19] The cultural impact of this discovery was vast, and it seems hard to dispute Müller-Sievers' assertion that this comes partly down to fact that the force we are talking about here is utterly artificial: nothing on earth rotates naturally, and yet it is this energy that propels



everything, from locomotives and rotary printing presses to steam rollers. The 'epochal achievement of nineteenth-century machines and their cylindrical components was to have made rotation universally available, and at the same time to have brought to light the limits of technics: it begins where the body ends'.[20] It was this very distinction which evinced the power of



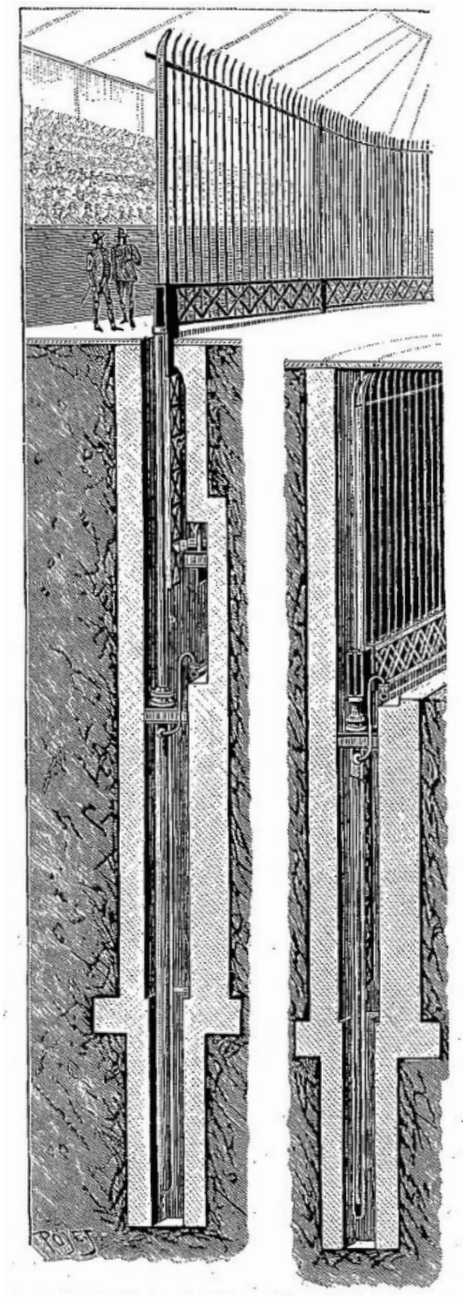


man as creator. Machines reinforced faith in calculation, renewing trust in the realms of the empirical, the visible, but perhaps above all in the objects of man's own making.

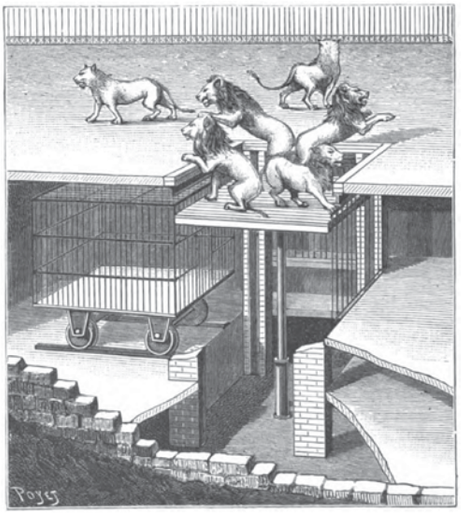
Cities, of course, were also part of this fever. What in the eighteenth century still operated at the level of theoretical propositions – Pierre Patte's notion of the city as organism, for one – manifested in nineteenth-century Paris through the well-known repertoire of interventions associated with Haussmannisation. Inasmuch as Paris was a city, it was also meant to foster the idea of a unified entity, an urban 'cosmos' defined by the circulation of goods, money, communication, people, health, morals and, not least of all, leisure. There was the *télégraphe atmosphérique*, whose pipes described ample circuits below ground, just like the tubes and pipes that sanitised the city; but there were also those rotational mechanisms which enabled Parisians to ascend Eiffel's tower in a matter of minutes, or to tour around the great exhibitions transported by formidable *plateformes mobiles*.

Yet this cosmos contained within itself further rings. Paris, the engine of circuits, was also an apparatus of both inclusion and segregation, traditional accounts insisted, and still do. As a contemporary commentator put it, 'By forcibly driving the working population from the centre out towards the city's edges, this transformation has turned the capital into two cities: one rich, one poor. The latter encircling the former. The class of the needy is like an immense cordon hemming in the class of the well-to-do.'[21] Comments like this were saying it was one thing to open avenues, connect monuments and stations, and make air and water circulate, and quite another to turn the city into the very expression of capital, in the process dissolving many of the social bonds long harboured through the life of the street – all the workshops and markets, shops and communal rooms, bars and arcades where work and social life were not as distinct as they would later be.[22]

The Second Empire's 'policy of joy and glamour', as Siegfried Kracauer once called the fairground of universal expositions and urban transformations fostered by Louis Napoléon and Haussmann, was obviously achieved with a fair amount of horror and stupefaction. Not for nothing did Simmel, Weber, Durkheim and others insist that modernisation had to be understood in relation to the processes by which formerly stable social ties were dissolved – psychological disorientation, anomie, a deepened privatisation of the self: clearly, these were among modernisation's very tangible effects. But this is not *all* modernisation did. To use T J Clark's formula, 'The men and women in the Galerie des Machines in 1889 were not ''influenced'' by the mechanics of modernity. They were dwarfed by it, maybe; crushed by it; but also elated and magnified. The machines were their creations. Adorno is doubtless right that objectified labour is menacing, and in a sense demonic; but in modernity it is also wonderful, heavenly.'[23] Indeed, it is from this



Elliptical lion cage and hydraulic mechanisms from the Hippodrome de l'Alma, Paris, 1891
© BnF / Gallica



stock that the myth of modern Paris, as represented in art and literature, was created: 'the world of supreme grandeurs and unforgivable crimes … the world in which everything, everywhere, is possible at all times', as Roger Caillois put it in his famous essay on Paris; 'this world was no longer remote, inaccessible and autonomous. It was the world in which people lived.'[24]

Caillois argued that one of the results of the radical transformation of the conditions of existence derived from modernisation was 'the poeticisation of urban civilisation and a truly deep emotional attachment to the modern city'.[25] In his mind, such poetics came from a 'distinctly mythical [and therefore collective] idea of the city', now regarded as a site of heroism. Neither desolated battlefields nor distant journeys, then, but the sheer limits of the city – this is where the modern epic is constructed, as shown by the transition from Racine's Greek or Hugo's Spanish heroes to Balzac's Rastignac or Baudelaire's dandy.[26] In this new context, Caillois went on to say, 'what truly matters is to imagine the possibility of orienting aesthetics toward dramaturgy, that is, toward exerting an effect on people through representations engendered by the very morphology of the society in which they live'.[27] This is what drove Chesterton to write in 1901 of the omnibus as a moving interior that assumed 'the antediluvian aspect of an enchanted ship'; this, one could add, is also what made Huysmans pair the fabulous Hippodrome de l'Alma (1877) with 'certaines machines à vapeur énormes'.[28] 'The Palace of the Hippodrome, which has materialised as if by magic, is today one of the greatest curiosities in Paris', a journalist wrote in 1878.[29] A reporter on *La Science illustrée* spoke in similar terms of the new ice-rink at the rue Pergolèse (1890), describing a place where 'the skates acquired the status of an emblem, and the ice turned into myth'.[30] Midway between a bridge and a flying edifice, the unbuilt velodrome L'Aérien (1897) would surely have belonged to this lineage, with its four legs

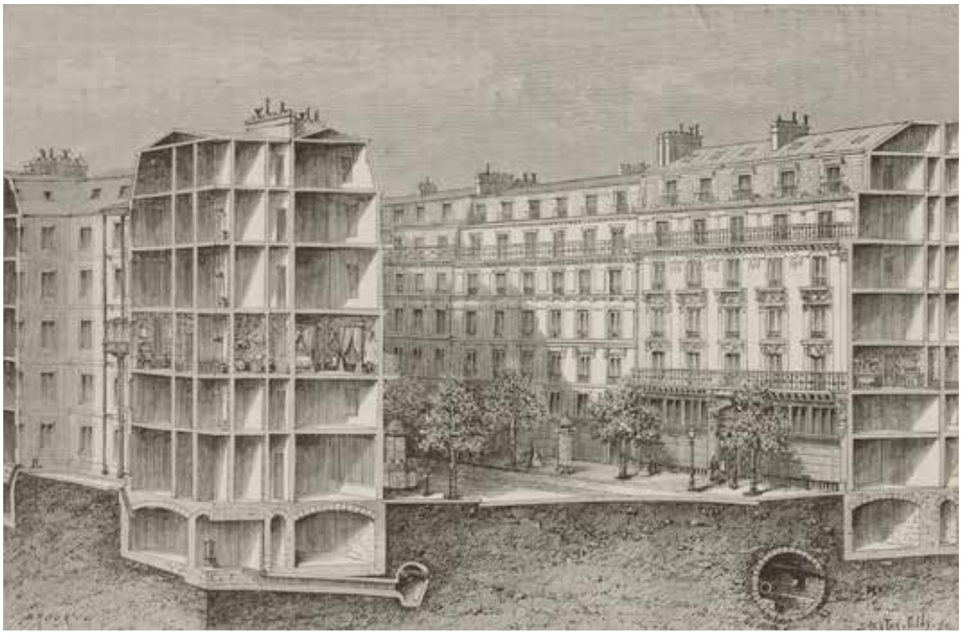
straddling both banks of the Seine, right in front of the Jardin des Tuileries. To quote Caillois once more, 'everywhere reality was contaminated by myth'.[31] What qualified the myth and made it commensurable was the *intérieur* – the site where the technical, the natural and the social orders coincided to make the world of phenomena cohere, even if only for an afternoon.

5

There was an awareness, heightened by the whole techno-scientific literature of contemporary journals, that the bourgeois interior depended on the domain of machines to function, that even behind the homogeneous facades of the boulevards, the bourgeois apartment was connected to the web of elements and circuits that made Paris 'modern'. The urban dwelling, the drawings suggest, was an artefact whose bonds with the city were not just established through a window – Gustave Caillebotte's 1876 *Jeune homme à sa fenêtre* or Walter Benjamin's 'box in the theatre of the world'[32] – but more concretely by way of a complex series of pipes, ducts and, after 1880, wires through which gas, water, wastes, air and electricity could flow. Equally interesting were the building sections published in journals that showed domestic interiors cohabiting with industrial and office spaces, as if suggesting that anything could happen backstage, behind the Haussmannian facade – anything, of course, from which profit could be made, so long as the boulevard remained open to the gaze of the police, the tourists and the mass of the population.

Some of the semi-public interiors of entertainment emerging in the wake of the Second Empire did not depart from this logic. In fact, through facades perfectly aligned with *fin-de-siècle* Beaux-Arts formulas, they seemed to make every effort to conceal from the boulevard the world of commercialised fantasy they unfolded on the inside. Inwardly, however, these interiors made mechanisation their theme, proudly exposing the doings of mechanical apparatuses to anyone willing to pay for a ticket. But these were not so much sites of recollection – not the bourgeois apartment, whose interior the individual needed to 'sustain him in his illusions', as Benjamin famously put it – as places where subjects went in search of utterly constructed realities.[33]

The Hippodrome de l'Alma is a good example, epitomising Sigfried Giedion's dictum that 'Wherever the nineteenth century feels itself to be unobserved, it grows bold.'[34] Behind its unremarkable neoclassical elevations, lay a grand elliptical floor plan, mechanised arena and roof, and routines that preceded by decades those 'mass ornaments' Kracauer described in the 1930s as the *summum* of rationality and reality combined.[35] Erected in the shadow of contemporary Beaux-Arts debates between eclectics and rationalists, the Hippodrome appears to have succeeded in its attempt to construct a well-defined set of relations between the social and technical orders, joining traditional architectural elements with the latest railway technologies to build an impressive iron and glass roof that enabled the transition from an open-air afternoon of familial pantomimes to an indoor evening of erotically charged spectacles, like the one James Tissot painted in 1885.[36] Ignored by architectural critics, relegated to the pages of scientific and technical journals, the Hippodrome caught the attention of many of the 'writers of modern life', with Huysmans drawing a parallel between the building's 'new and original form, achievable only with the metal elements produced by our factories', and the aesthetic advancements of impressionist painting and literature – works the writer thought were making important steps towards an aesthetic of artifice, removed from neoclassical formulas still rooted in mimetic procedures.[37]



Section through a typical Haussmann block, complete with sewer, water and gas lines, Paris, 1878
© Mémoire de l'Assainissement / SIAAP

But the Hippodrome was not a one-off. In 1885 one of its founders opened another venue in the rue Saint-Honoré, only steps away from the Place Vendôme. He called it the Arènes Nautiques, and turned to a longstanding architectural collaborator, Gustave Gridaine, to renovate the structure of the former Panorama Français (the work of an already famed Charles Garnier). Just as the Hippodrome's neoclassical facade allowed the city to absorb the less conventional architectural features of the hall, so the facade of the Arènes 'fused' the building with the elevations facing the street. Behind the facade, however, there was a lavish little two-storey building – the foyer and a cafe, 'le plus en vogue de l'époque' – which connected the street with the circus and its sensational pool, half lost in the depth of the dense blocks of the rue Saint-Honoré. The Arènes' pool functioned during the summer months in lieu of the more traditional winter arena, but even in the winter it took no more than ten minutes to bring down the platform and launch impressive routines like the *Trio de Plongeurs*, which encapsulated a number of card players with light and oxygen below the water, constructing an artificial microcosm in the circular pool.

In contrast to their forebears at Ranelagh and Vauxhall, however, these spaces were fundamentally urban. Indeed, they added a new layer – albeit often a transient one – to the set of features that made Haussmannisation thrive. But in doing so, they contradicted one of the prefect's essential axioms: where Haussmann believed the public life of the city had to be opened to itself and to the world through an array of strategically conceived boulevards, squares and *dégagé* monuments, these buildings made a case for radical introversion, as though they were counteracting the pressures of the city with interiors that produced realities of their own. To the long perspectival space of the boulevard – about whose 'implacable straight lines' Edmond de Goncourt complained bitterly[38] – these buildings opposed interiors whose appeal to circularity abolished linear perspective altogether, promoting endless kinaesthetic relations between building elements, audiences and performers. No wonder de Goncourt wrote an entire novel around the circus, which he regarded as the 'new theatre',[39] possessing an originality that the mere 'imitations' of theatrical acting

could not hope to match.[40] To be in the centre of the city, and yet to partake of an entirely alternate reality, seems to have been the purpose of most of these interiors. In this they were also not dissimilar to other contemporary aesthetic practices. Think of the then common theme of the artist's studio, a site of individual introversion and mutual comfort for artists; or more precisely of Courbet's celebrated *L'Atelier du peintre*, where the artist's social world is reorganised through a deliberate magnification of the limits of the studio – in these spaces aspects of the everyday were cited, isolated, combined, transformed or improved in search of new forms of aesthetic cohesion.

Clearly, these were not just rooms within a building – not the bourgeois apartments, offices and workshops that populated the floors of the *immeubles* of the Faubourg Saint-Antoine, as depicted in *L'Illustration*. Rather, they were entire halls hosting audiences that could be counted in the thousands. Circuses, concert halls, ice-rinks, hippodromes – their interiors were loud and smoky; they mixed classes, ages and sexes in an amalgam where trade and sociability became one and the same thing, prostitutes rubbing shoulders with families who travelled from the *banlieue* and the provinces to marvel at routines defined as vulgar by those of more refined pedigree. The upper classes attended these places to satisfy their curiosity and, in passing, reassure themselves of their place in the increasingly unstable map of social hierarchies. The rest went there looking for just the opposite. No social, aesthetic or cultural aspects of the period seem to have been left outside these interiors, which is what led Huysmans to say of the popular Folies-Bergère that it had 'a real air of the boulevards', a combination of 'the rush of the Rue Montesquieu and an Algerian or Turkish bazaar … Alhambra-Poret, Duval-Moorish with, in addition, a vague odour of old suburban outdoor saloons'.[41]



6
A brief micro-history of the Hippodrome de l'Alma might show how the dialogue between entertainment, architecture, finance and industry shaped what was arguably the largest space of entertainment in Paris at the onset of the Third Republic. Records show, in fact, that on 16 December 1876 permits were granted for the construction of a hippodrome located at 3, avenue de l'Alma – today George V – to the owners of the plot, Senta and Berdutti. The document also mentions a man who went by the name of Gridaine, most likely the same Gustave Gridaine involved in the design of the Arènes Nautiques and the Cirque Fernando (1875), an assumption reinforced by the fact that one of Gridaine's associates was Catalan-born entertainment entrepreneur Joseph Oller, owner of the Arènes. Known in the business as the 'Napoléon des attractions', Oller was associated from the outset with the formation of the Hippodrome, though his exact role was never specified. His ubiquitous presence in the entertainment industry of the time, however, leaves no reason to doubt his participation.[42] In addition, newspaper articles mention the early involvement of another distinguished man of spectacle, Charles Zidler – *père* Zidler – the charismatic entertainer who was to become the first artistic director of the establishment, as well as Oller's future associate in two of the most successful venues of *fin-de-siècle* Paris, the Jardin de Paris and the Moulin Rouge.

The list of figures involved in the creation of the Hippodrome continues with Beaux-Arts architect Jean-Alfred Leroux, whose role is somewhat ambiguous. Whereas some accounts mention him as the sole architect of the building, others relegate him to mere *décorateur*, and perhaps not without good reason. Leroux's obituary reveals some of his institutional affiliations: member of the Société des Artistes français, sub-inspector at the École Polytechnique, inspector and then architect of the Ville de Paris – not a figure one could easily associate with the design of a roof more akin to railway mechanics than anything else. It is likely instead that Leroux was the architect of the Hippodrome's two neoclassical facades, the one facing the avenue de l'Alma, the other the avenue Marceau.[43]

Perhaps, then, as an example of an architectural division of labour, the owners of the Hippodrome commissioned Leroux to concentrate on the two elevations in order to comply with city regulations and to bestow on the building a certain institutional respectability lacking in most sites of popular entertainment. This would have allowed Gridaine to apply himself to what he did best, namely iron construction, from roof to stands, his involvement extending, at least in part, to the design of the mechanisms that produced the Hippodrome's various 'attractions' – moving fences, hydraulic lifts, retractable roof and so forth. Due to his previous experience in circus architecture, it is reasonable to think Gridaine was also in charge of the Hippodrome's overall floor layout.

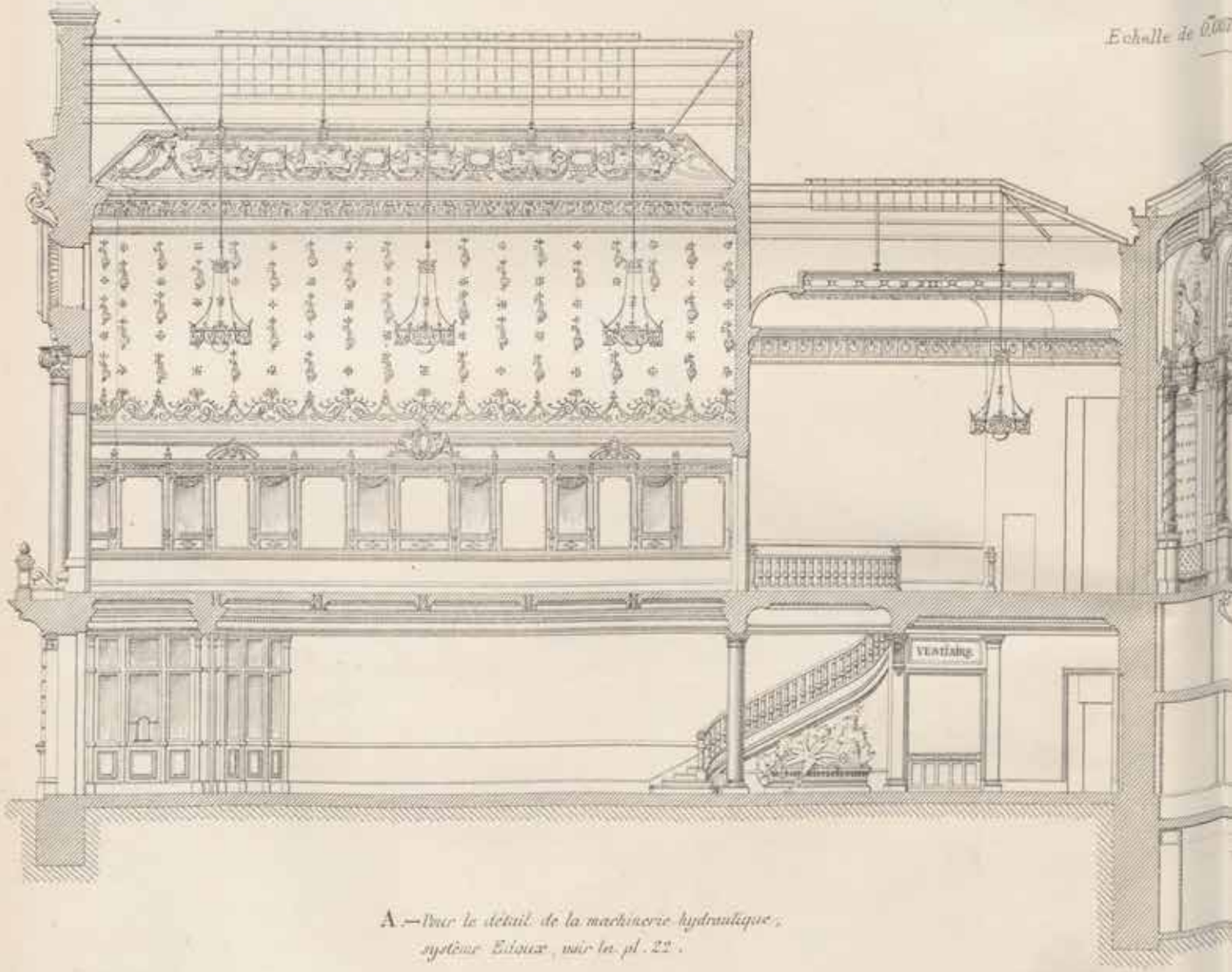
If permits were granted late in 1876, little is known of the Hippodrome during 1877, except for the fact that already in July the building – or more precisely its facades, and a wooden structure built to temporarily host the public during the summer months – was offering spectacles that attracted increasingly large audiences.[44] On 12 January 1878, a new permit was issued, this time to the Société anonyme de l'Hippodrome de Paris, in connection with the 'couverture de l'arène avec une toiture métallique'. The public limited company was very likely the creation of Senta, Berdutti and Oller, formed to raise capital to complete the construction of the new iron-and-glass sliding roof, the main architectural attraction of the building. From the same documents we know the roof design was given to both Gridaine and the engineers behind the thriving Compagnie de Fives-Lille – Félix Moreaux and Eugène

Arènes Nautiques, Paris, 1885
Photo Frères Séeberger, 1925
© Ministère de la Culture / Médiathèque du Patrimoine, dist RMN-Grand Palais
Overleaf: Arènes Nautiques, Paris, 1885
Le Génie civil, 24 April 1886
© BnF / Gallica

LES PISCINE
ARÊNES NAUTIQUES.

Coupe tra

Echelle de 0,00



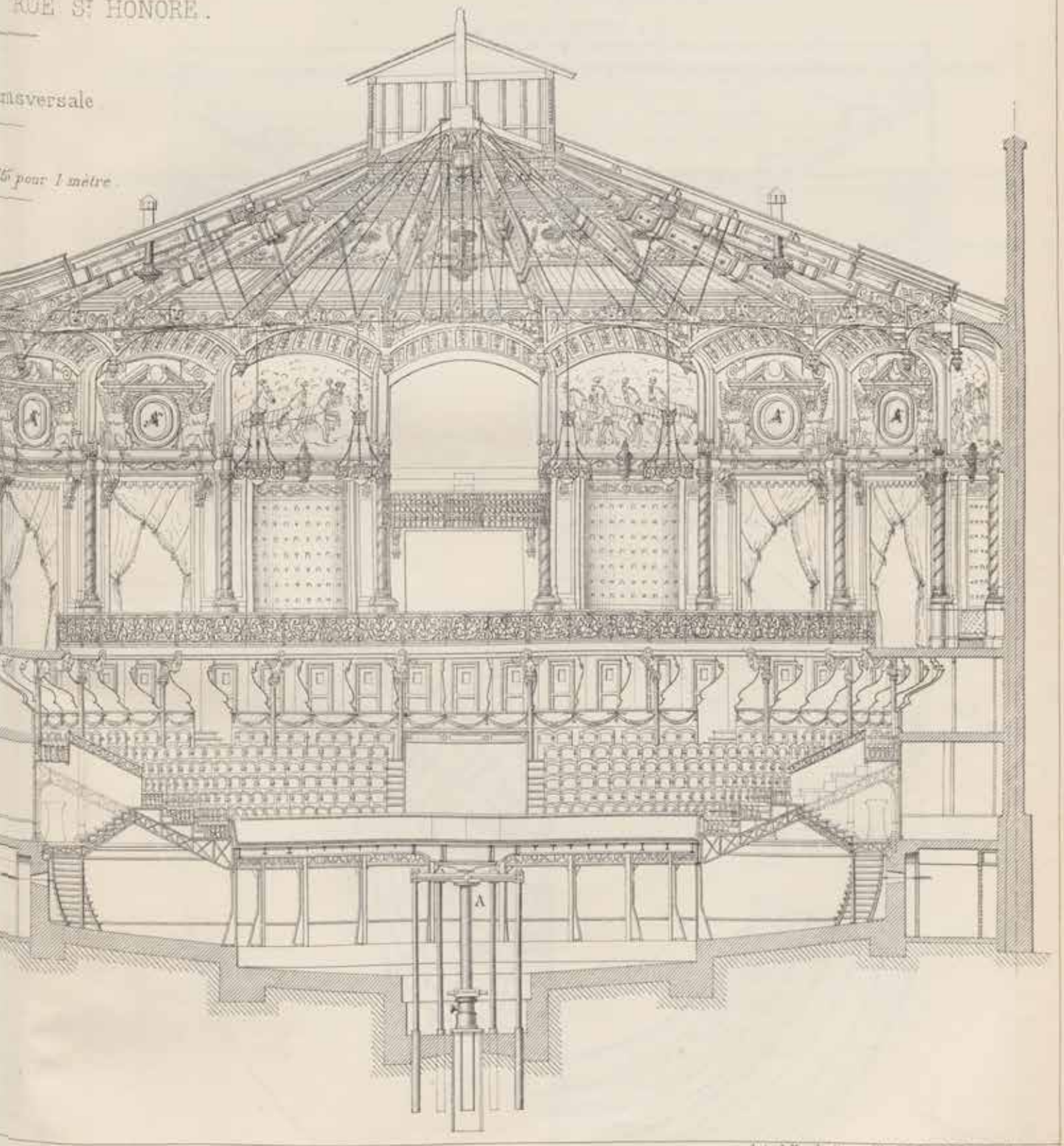
A — *Pour le détail de la machinerie hydraulique, système Edoux, voir la pl. 22.*

S DE PARIS.

RUE S^T HONORÉ.

nsversale

6 pour 1 mètre.



Auct. J. Marchadier et C^ie, 150, Rue Lafayette, Paris.

Lantrac. The construction of the 2,000m² roof took at most three months – work got underway on 2 February and on 7 May, two days after the inauguration of the 1878 Universal Exposition, the Hippodrome opened its doors to a crowd of 8,000 people.

A few conclusions can be derived from these facts. Surprisingly, no two newspapers agreed on the names responsible for what was at the time the largest interior ever dedicated to popular entertainment in Paris. One explanation could be found in the relatively transient life of nineteenth-century spectacle buildings. Once removed from the tradition of the theatre or the opera, the history of entertainment in the nineteenth century is also the history of a succession of spectacle forms that rose as swiftly as they disappeared. In search of a public in perpetual transformation, buildings rarely outlasted the attractions they hosted without being subjected to significant alterations, which is why they were often paired with a rather lowly architectural culture, one associated with three-franc ticket entertainments rather than with the monumental architecture of operas. Take, for instance, the site on the rue Saint-Honoré where the Arènes Nautiques was built in 1885. Prior to the Arènes' arrival, five other spectacle entrepreneurs had paraded through the century, each leaving behind a building of their own. Simply put, more often than not buildings dedicated to popular spectacles were cheap, stylistic 'bastardisations' bound inevitably to be transformed within a decade, which might explain why little attention was given to the men behind their construction. The second reason, which might deserve more notice, has to do with the corporate nature of the model under which the Société anonyme de l'Hippodrome brought the building to completion.

It is reasonable to say that at the Hippodrome de l'Alma the alliance between architecture and spectacle acquired unprecedented corporate connotations. Of course, associations of some sort had undertaken profitable endeavours mixing architecture and entertainment in the past, but what made the case of the Hippodrome different was that it opened up new ways of dealing with the matter. Before this, all through the nineteenth century, there were panorama entrepreneurs, for example, who attracted investors by evenly distributing capital so as to secure a central location and the participation of a reputed panorama painter. The success of this model depended on keeping the architectural investment within reasonable limits, something that was easy to achieve given the relatively inexpensive nature of the hollow circular plan. On the other hand, the owners of the sites where panoramas were displayed were also for the most part entertainers. This category included Robert Baxter and his inaugural Leicester Panorama as well as James Thayer's two famous rotundas facing the boulevard Montmartre, though perhaps the consumate example is the Société Française des Grands Panoramas, whose shares boomed on the stock exchange after a number of successful ventures, allowing them to build several new ones – the Panorama Français and the Panorama Marigny among them.



Hippodrome de l'Alma, Paris, 1878
Drawing by Arthur Vierendeel, *La construction architecturale en fonte, fer et acier*, 1896
© BHVP

At the Hippodrome de l'Alma this model was to change in several ways. Whereas with panoramas it was the canvas – ie, painting – that remained the main object of attention, here the building *was* itself the canvas. In other words, inasmuch as it was a panoramic interior, the Hippodrome was less the prop for an attraction than a spectacle in and of itself, the very commodity on display. And one so profitable that investors spared no expense in its construction, even though they knew no long-term gains were to be made from a 9,100m² building that would be demolished as soon as the freeholder decided to terminate the lease. Which is what happened in 1893, when the hippodrome site was sold to industrialist and politician Gustave Lebaudy who subdivided it into smaller plots suitable for lucrative apartments for rent – the typically Haussmannian *maisons de rapport*.[45] Nonetheless, the company behind the Hippodrome de l'Alma had understood that buildings could be offered as commodities all on their own, provided they performed for a public eager to pay for the attraction.

7

Patterns, rhythm and motion, the ingredients of popular late nineteenth-century spectacles, hardly ever told stories. Bad at representation, they were barely historical, regardless of how many historical motifs they brought onto the stage. In these spaces the public cared little for the grand narratives of the opera or the theatre; for them, the acrobats performing at the Hippodrome de l'Alma or the Arènes Nautiques were above all else entertaining. And the way the *fin de siècle* found to entertain audiences had more to do with the synchronicity of bodies in space than with the staging of tragedy or drama.[46] This is what the Goncourts made evident when they declared the supremacy of the circus over the theatre, whose traditional representations simply 'bored' and 'irritated' them. In this, despite their customary snobbishness, they were no different from the masses who attended these relatively cheap attractions.[47] Inaction, immobility, lack of sensory stimuli, were all rapid routes to losing

the attention of audiences accustomed to modes of perception increasingly associated with movement.

In addition to the trains and trams that set thousands of city dwellers in circulation, by 1890 there were 375,000 cyclists in France, a number that grew to three-and-a-half-million in 1914. The urban pools moored on the banks of the Seine, the dozens of ice- rinks and velodromes that proliferated from the 1880s onwards, the *trottoirs roulants* on which expo visitors circumnavigated vast portions of the city, these are just a few examples of everyday instances in which subjects found themselves experiencing space through mechanical and bodily motion. 'At opera and concert the rounded forms of ancient melody are coldly listened to', Max Nordau lamented in characteristic anti-modern mood. 'The translucent thematic treatment of classic masters, their conscientious observance of the laws of counterpoint, are reckoned flat and tedious. A coda graceful in cadence, serene in its "dying fall", a pedal-base with correct harmonisation, provoke yawns.'[48]

This was an opinion apparently supported by medical literature of the time. Commentators made a consistent case that movement – not repetitive but varied – captured the subject's attention like no other element, immersing them in states of utmost concentration. And attention, it was believed, anchored the subject's psyche to the world of phenomena. In his 1889 study, the psychologist Théodule Ribot went so far as to say that voluntary attention was an achievement of civilisation, an unnatural state which distinguished civilised men from savages, vagabonds, thieves and prostitutes.[49] For Ribot, voluntary attention was an instance of cognition, an intellectual disposition towards the unity of consciousness, one that appealed to moral integrity rather than dissolution, say, or the human propensity to sloth. As a matter of fact, for voluntary attention to occur, Ribot observed, there would need to be an object – a set of elements which by virtue of their artificial nature could trigger in subjects the desire for full sensorial engagement: 'The process through which voluntary attention is formed, may be reduced to the following single formula: to render attractive, by artifice, what is not so by nature; to give an artificial interest to things that have not a natural interest. I use the word 'interest' in the ordinary sense, as equivalent to the periphrase: anything that keeps the mind on the alert.'[50]

Ribot's words can be taken as a commentary on the active role attributed to perception by late nineteenth-century psychology, particularly in those years when the self-styled *fin de siècle* manifested an overwhelming concern with moral and cultural decay. Paradoxically, and as proof of the countless definitions to which *décadence* was subjected at the time, the so-called decadent writer Huysmans would no doubt have agreed with a passage like this. In the pages of *À rebours* (1884), especially, we find his antihero Des Esseintes praising the virtues of artifice within the rooms where he aspired to build an idealised version of the world in isolation. To make sense of phenomena, to integrate events by means of artifice, to keep the mind alert – the tasks attributed to perception by *fin-de-siècle* critics were very much in tune with the routines presented in the entertainment interiors of the period.

In recent years, and still validating the model of an autonomous subject that reorganises the world of phenomena according to active sensorial perception, the linguist Paul Bouissac has theorised the role of circus attractions in relation to 'crucial concepts and mental operations involved in the [subject's] progressive construction of reality'. Understanding circus acts, he says, requires 'not only that the spatial and temporal fields as well as the elaboration of groups of displacements be acquired, but also that the concept of causality be fully developed and a logical universe be constructed'.[51] Seen in this light, one could argue that the attractions presented at the Hippodrome and several other establishments were not just a matter of *loisir*, not just a result of commoditised leisure, but also a place where the *fin-de-siècle* subject went to measure, sense and compare phenomena produced by humans alone, becoming an example of what Foucault came to call 'the great eschatological dream of the nineteenth century' – the will to liberate man 'from all the determinations of which he was not the master', to make 'man an object of knowledge so that man could become subject of his own liberty and his own existence'.[52] The self previously formulated by sensationalist philosophy – a passive receptor of external stimuli, and only then the organiser of such sensations – gave way to a subject who used his internal faculties to engage more actively with the material world. As Lorraine Daston and Peter Gallison have put it, 'Overcoming this natural passivity was understood by enlightenment thinkers as both a moral and an intellectual imperative, a gauntlet thrown down to reason to reassert its control over insubordinate faculties – memory, imagination, the will and the appetites – in order to act upon the world rather than be acted upon.'[53]



Acrobats at the Hippodrome de l'Alma, Paris, 1878
Photo Albert Londe, 1887
© BnF / Gallica
Overleaf: Hippodrome de l'Alma, Paris, 1878
Le Génie civil, 30 October 1886
© BnF / Gallica

Debates arose in these years, however, as critics increasingly worried that these attractions were overshadowing traditional forms of theatrical representation. The typically *fin-de-siècle* theatre and cafe-concert Eldorado, for example, was charged with conspiring to bring France to a state of sheer 'intellectual decadence',[54] wasting the talents of serious actors who might otherwise have flourished in *théâtre dramatique* or *théâtre lyrique*. The Eldorado was hardly the epitome of modern technique and architecture combined, yet its interior partook in the period's general reorganisation of entertainment, and did so by resorting to spatial formulas similar to those used in the Hippodrome and other establishments. Among these was the circular plan, which acted as a veritable intensifier of social intercourse, sometimes even at the expense of the attractions on offer.

Whether unleashing the rage of bourgeois critics, or simply expressing the opinions of less doctrinaire commentators, harsh criticism tended to underscore the fact that these new modalities of spectacle were on the whole taken seriously. Some critics were troubled by the mix of popular entertainment and aesthetic practice, which seemed to them to indicate that art was on the threshold of a vast transformation, one that encompassed the revision of its technical procedures as much as its symbolic content. But there were others who celebrated these instances, seeing in them a territory worthy of exploration. Already in 1806 the *Literary*

HIPPODROME DE PARIS_INSTAL

Salle de Spectacle (Echelle de 0.002 p^r 1^m)

Fig. 1. Elévation.

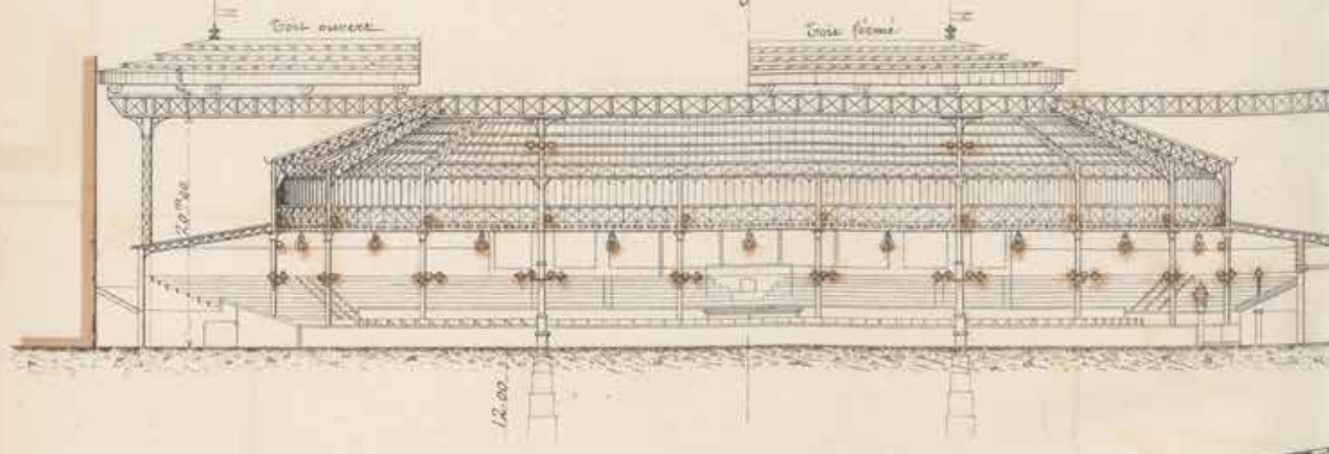
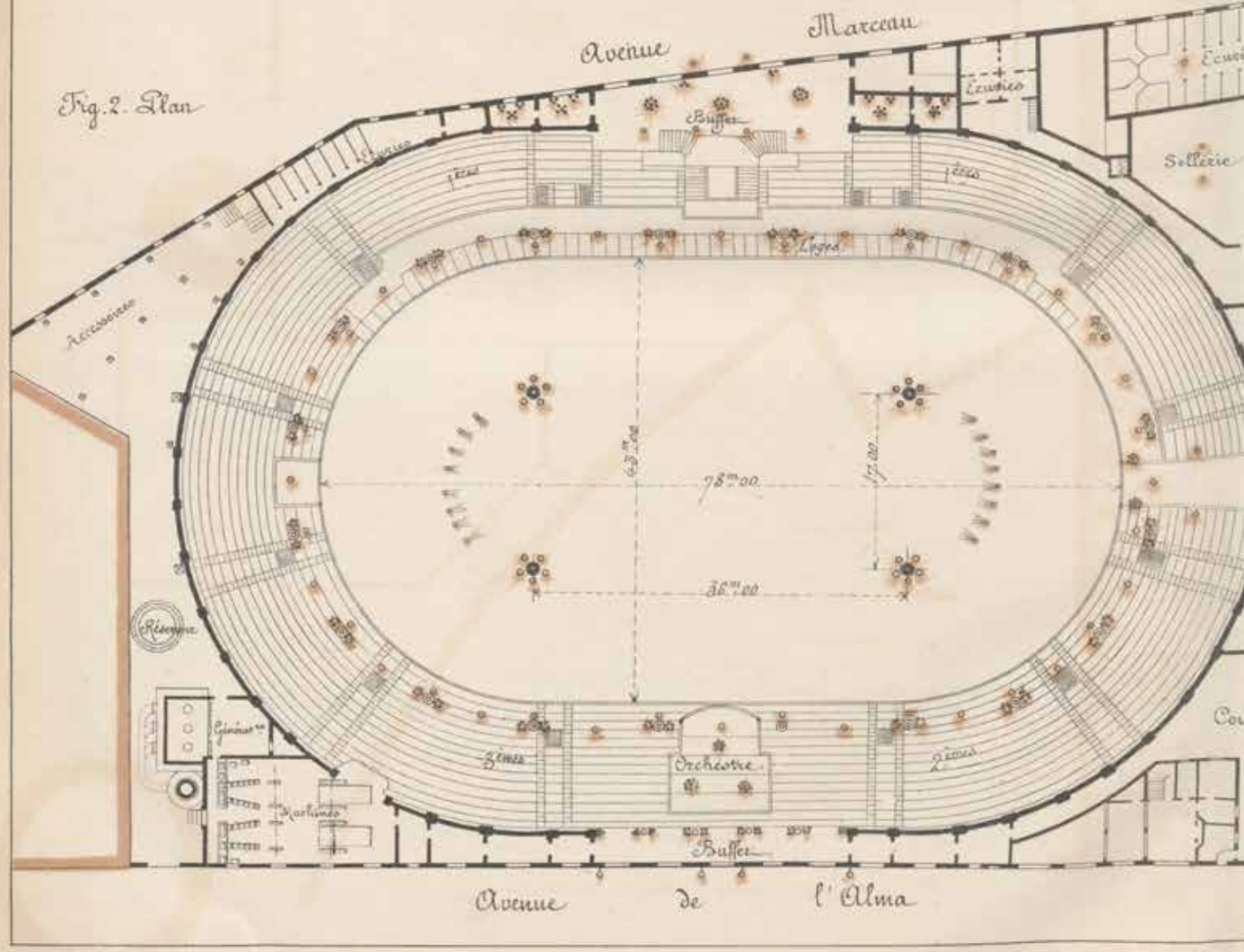


Fig. 2. Plan



Cette planche a été exécutée d'après les nouveaux procédés autophotographiques de MM. Clost et Gentil, les calques ont été fournis par le Génie Civil (Voir page 217).

LLATION D'ÉCLAIRAGE ÉLECTRIQUE

Salle des Machines (*Echelle de 0.008 p^r 1 m^r*

Fig. 3. Coupe ABC.

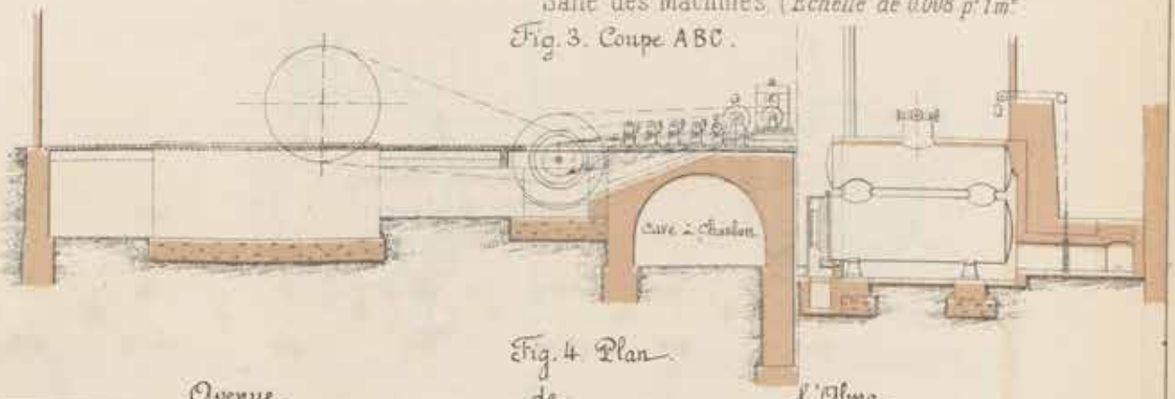
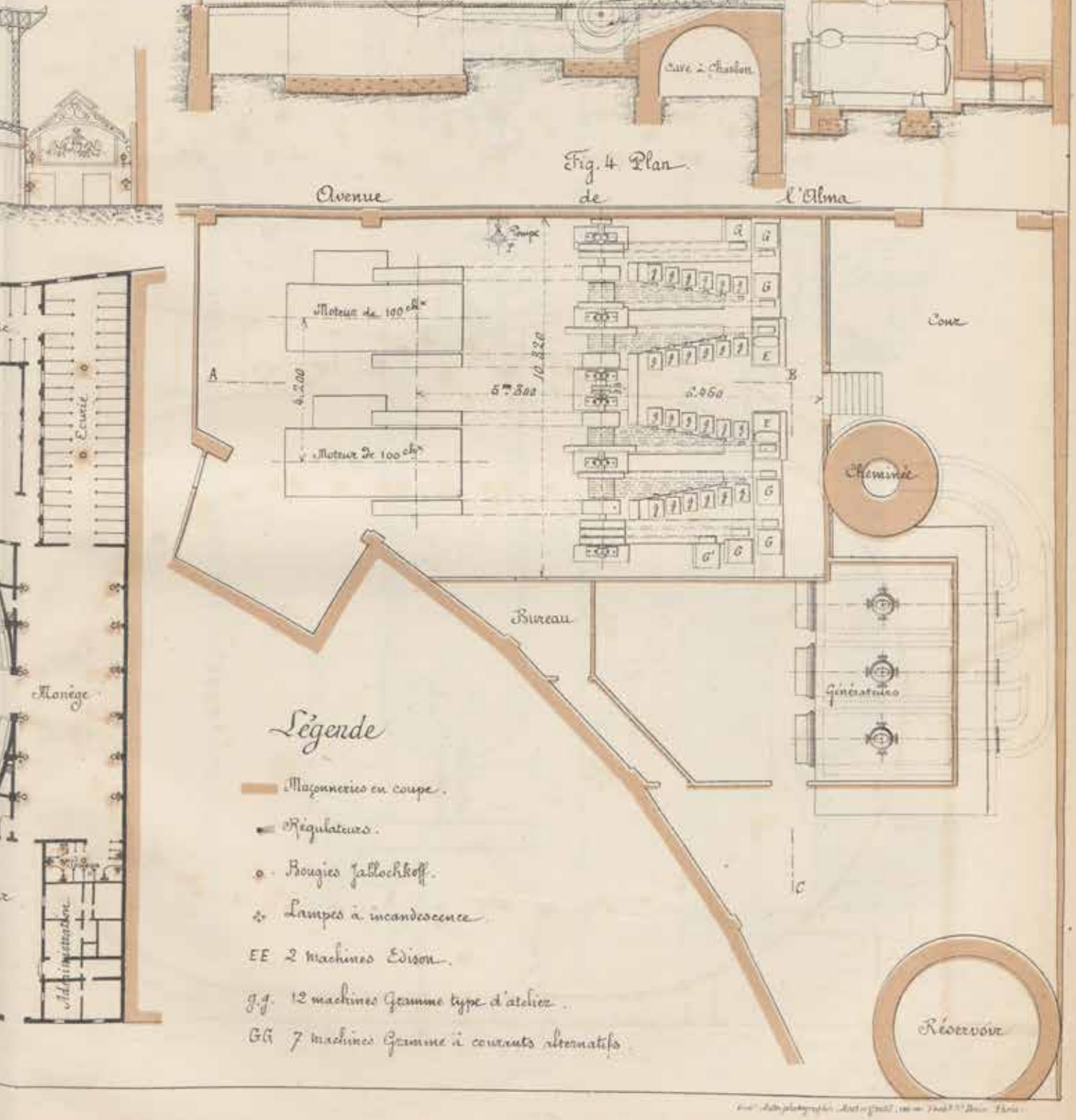


Fig. 4 Plan.



Panorama pronounced the burgeoning painting panoramas of the decade 'an ingenious device in the art of painting', 'a happy effort of modern art' whose popularity throughout Europe 'sufficiently proves its merit and attraction'.[55] Baudelaire, in turn, famously constructed his 1859 salon piece, *Le Peintre de la vie moderne*, around Constantin Guys, a minor caricaturist who to his mind was doing more to decipher modernity than most salon painters. In turning his attention to minor art forms, Baudelaire was only insisting on something he had already done with his essays on laughter and caricature. Similarly, this is what Théodore de Banville had to say in 1878 about the Hippodrome de l'Alma and the forms of entertainment displayed in its interior: 'It is quite evident that the old theatre, that of the poets, has ceased to exist, and we soon will see the birth of a new kind of theatre in which material illusions obtained by scientific means will play a large part.'[56] Though increasingly subject to the strictures of commerce, the new modalities of entertainment were still seen by some as a site of aesthetic experimentation and social practice.

8

The historian John Tresch has recently explored the significance of the dialogues between romanticism and the sciences in Paris between the Bourbon restoration and the end of Louis-Philippe's reign. According to Tresch, it was this exchange that allowed the technical, the natural and the social orders to intersect in what he calls 'romantic machines' – objects which in his view articulated inner subjectivity with the outer world of events in 'concrete cosmologies', combining the domains of emotion and reason, aesthetics and technology, fantasy and calculability.[57] He cites J J Grandville's *Un autre monde* as a good example of this desire to define a new unifying order, since it 'revealed the close ties between romanticism's organic mutations, aesthetic ecstasies, voyages into infinity and passionate dramas; technologies of production and knowledge; the media of steam, light electricity and human labour; and the instruments these powers brought to life'.[58]

Similar dialogues, one might suggest, survive in a number of *fin-de-siècle* buildings produced for entertainment. Just as more is asked from painting in this period than the mere portrayal of historical motifs, so in the field of spectacle it is no longer possible to organise the world of phenomena by representing reality through the canvas of a panorama – much less through the operettas, *féeries*, melodramas and horror plays that abound in the Second Empire, but begin to wane towards the end of the century. In the 1880s, after the trauma of the Franco–Prussian war and the Commune, and with the effects of modernisation clear for everyone to see, entertainment has to do more than distract the July Monarchy *boulevardier* from boredom. In this decade, the romantic cult of the fragment, understood as indicative of the possibility of reconstructing a unified view of the world, still in some way overlaps with the machinistic fascination with invention and novelty – that mix of anomie and euphoria constitutive of what Foucault called the 'nineteenth-century imagination'.[59] Indeed, Baudelaire's analogy of the work of art as a machine whose logics are commensurate and verifiable is pervasively present in the advanced aesthetic practices of the period.[60] 'There is no chance in art as there is no chance in mechanics', Baudelaire wrote; 'a painting is a machine whose systems are all intelligible for an experienced eye'.[61]

Rather than being conducive to the dissolution of perception, then, the forms of spectacle that emerged out of *fin-de-siècle* culture could still be considered attempts to bring together the different spheres of life in search of cohesive accounts of the world. Indeed, in those decades when artistic practices found it increasingly difficult to justify or even legitimise their forms, it might not be mere coincidence that painters turned to sites where the struggle for cohesion was still at issue. In these spaces, Manet seems to say in a picture like *Skating* (1877), identity can still be constructed, defined, emphasised. Relegated to the background, the ice-rink is in this painting the site where 'woman' can be singularised and made apparent as the subject.

If the world coheres in these interiors devoted to entertainment, then it is through narratives that are unavoidably filled with ambiguity – the myths of antiquity are staged and mingled with those of technology, the historical with the unhistorical, sheer lawlessness with social equalisation. These are flawed spaces, yet ones where the logics inherent to modernity are blatantly exposed. It is as if they are saying: this spectacle, this architecture, these constructed realities, are no more than artifices; they are assembled and disassembled carefully, periodically, continuously, until the novelty wears off, until a new artifice is built. In the process, however, they too are imbuing matter with the forms modernity made available to itself to produce meaning, to make reality cohere once the old absolutes of religion, authority and style have been exhausted.

I would like to thank Thomas Weaver for excellent editorial suggestions and vibrant exchange of ideas during the preparation of this essay.

1. Jean le Rond d'Alembert, *Discours Préliminaire de l'Encyclopédie* (Paris: 1751), p 60.
2. This is the expression used by Eric Auerbach in his analysis of Stendhal's treatment of reality in novels, such as *The Red and the Black*. Stendhal is a good figure to illustrate the period's understanding of reality as something that can be fashioned – the transition from descriptive to productive imagination M H Abrams theorised in *The Mirror and the Lamp: Romantic Theory and the Critical Tradition* (Oxford: Oxford University Press, 1971).
3. An exceptional mingling of drama, pornography and satire, as Marie Delouze has recently noted, the pamphlet also came about as the result of the 1789 freedom of the press law, which triggered an unprecedented diffusion of images and texts among the lower classes. Marie Delouze, '*Sodom* (1676) et le *Bordel patriotique* (1791): Mises en scène d'une pornographie politique', *Loxias* 18, http://revel.unice.fr/loxias/index.html?id=1781.
4. In Book I, chapters 1–11 of *De revolutionibus orbium coelestium* (*On the Revolutions of the Heavenly Spheres*) Copernicus lays the basis for his heliocentric theory, describing the axial and rotational movement of the earth around the sun, and the properties of other celestial bodies.
5. Jean-Jacques Rousseau, *Les rêveries du promeneur solitaire* (Paris: Libraire des Bibliophiles, 1882), p 81; written in 1776–78, this text was published posthumously in 1782.
6. For a comprehensive account of the nineteenth-century French *cercles* and the problem of emulation see Carol E Harrison, *The Bourgeois Citizen in Nineteenth-Century France: Gender, Sociability and the Uses of Emulation* (Oxford: Oxford University Press, 1999), p 2.
7. From Ancient Greek κύκλος (*kúklos*, 'circle') and παιδεία (*paideía*, 'education') – to 'encircle knowledge'.
8. Cesare Birignani, 'The Utopia of the Police', unpublished manuscript.
9. Austin Dobson, *Eighteenth-Century Vignettes* (London: Chatto & Windus, 1907), p 270.
10. *Ibid*, p 272.
11. In this sense, Ranelagh can be taken as London's equivalent to William Kent's garden at Stowe.
12. Perhaps best exemplified in Charles de Wailly's contemporary project for the Comédie-Française.
13. On the pastoral motifs articulated at Ranelagh and Vauxhall, see Berta Joncus, *op cit*, pp 34–66. Anthony Vidler has shown how in this model private interest and common good were no longer to be negotiated in the street, but through a social philosophy of equality that had in the English landscape garden an idyllic pastoral environment, and in buildings, shelters where the forms of collectivity suggested by the city could be translated to nature through specific architectural devices – the portico, notably in the case of Ledoux, as evidenced in the projects for the Royal Saltworks, the ideal Town of Chaux and the *Propylées* in Paris. Anthony Vidler, *The Scenes of the Street & Other Essays* (New York, NY: Monacelli Press, 2010).
14. *Ibid*, p 82.
15. Austin Dobson, *op cit*, p 269.
16. Jonathan Crary, 'Géricault, the Panorama and Sites of Reality in the Early Nineteenth Century', *Grey Room* 9 (Autumn 2002), p 19.
17. For an account on the ways literature used circularity as an expression of bourgeois life, concentrating particularly on the work of J-K Huysmans, see Elisabeth M Donato, *Beyond the Paradox of the Nostalgic Modernist: Temporality in the Works of J-K Huysmans* (New York, NY: Peter Lang, 2004), chapter 1.
18. As Thomas Crow has written, not unlike other impressionists who attempted a more integrated version of reality in their paintings, 'Monet used the artifice of painting to make [some of his scenes] better, more congruent and formally satisfying, than it could ever be in life'. Thomas Crow, *Modern Art in the Common Culture* (New Haven, CT: Yale University Press, 1996), p 24.
19. Or as Karl Marx wrote, 'As soon as tools had been converted from being manual

implements of man into the parts of a mechanical apparatus, of a machine, the motive mechanism also acquired an independent form, entirely emancipated from the restraints of human strength.' Karl Marx, *Capital*, vol 1 (New York, NY: Vintage, 1977), p 499.

20. Helmut Müller-Sievers, *The Cylinder: Kinematics of the Nineteenth Century* (Los Angeles, CA: University of California Press, 2012), p 4.
21. C Corbon, *Le Secret du peuple de Paris* (Paris: 1863), p 200, quoted by T J Clark in *The Painting of Modern Life* (Princeton, NJ: Princeton University Press, 1982), n 55, p 276.
22. Accounts like this were written in the heat of Haussmannisation, and there were good reasons to believe them, especially if one was old enough to have gone through the 1848 Revolution and the Commune of 1871 – the two events that signalled more clearly the political irrelevance of workers in the overall scheme of things. Yet for all the indictments against Haussmann's interventions, it appears that by 1870 there were more small businesses in central Paris than ever before. There should be no doubt that the working population was dragged to the periphery by the thousands, but just as many seemed to have stayed to preserve both roots and clientele, even if rents skyrocketed. Rather than two clearly defined cities – 'one rich, one poor', as the commentator had it – there was a system of relatively autonomous *quartiers* where social strata overlapped to greater or lesser degrees. To be sure, the west grew more and more bourgeois, while the east remained traditionally working class, but even then exchanges were not infrequent, with artisans operating on either side of the city.
23. T J Clark, 'Modernism, Postmodernism and Steam', *October*, 'Obsolescence' (Spring 2002), p 158.
24. Roger Caillois, 'Paris, A Modern Myth', *The Edge of Surrealism: A Roger Caillois Reader*, edited by Claudine Frank (Durham, NC: Duke University Press, 2003), p 178.
25. *Ibid*, p 181.
26. Along similar lines, Mikhail Bakhtin, too, reflected on the shift undergone by the modern novel, one where encounters no longer occur randomly 'on the road' or 'in an alien world'. With Stendhal and Balzac, he writes, the space of social friction is indeed narrowed down to the limits of the interior. What he associates with the parlour and the salon, we may extrapolate to the interiors of entertainment – only a wider version of the latter, comprised by even more samples of Third Republic society.
27. Roger Caillois, *op cit*, p 188.
28. J-K Huysmans, *L'art moderne/Certains* (Paris: Union générale d'éditions, 1975), p 199.
29. Auguste Lannoy, 'Le palais de l'Hippodrome', newspaper article printed around 1878. Source: BnF, Arts du Spectacle.
30. G Bonnet, 'Le skating de la rue Pergolèse', *La Science illustrée*, vol 5, 1890, p 168.
31. Roger Caillois, *op cit*, p 181.
32. Walter Benjamin, 'Paris: Capital of the Nineteenth Century', in *The Arcades Project*, translated by Howard Eiland and Kevin McLaughlin, edited by Rolf Tiedemann (Cambridge, MA: Harvard University Press, 1999), pp 8–9.
33. *Ibid*.
34. Sigfried Giedion, *Building in France, Building in Ferro-Concrete* (Los Angeles, CA: Getty Centre, 1995), p 33.
35. Siegfried Kracauer, 'The Mass Ornament', *New German Critique* 5 (Spring 1975), p 75.
36. For a complete account of the debates held between eclectics and rationalists around the problem of iron see Bertrand Lemoine, *L'Architecture du fer* (Paris: Editions Champ Vallon, 1993).
37. In the same way Degas or the Goncourts had to 'forger un incisif et puissant outil, créer une palette neuve des tons, un vocabulaire original, une nouvelle langue', so in Huysmans' view the men behind the Hippodrome were able to produce 'une forme originale neuve, inaccessible à la pierre, possible seulement avec les éléments métallurgiques de nos usines'. J-K Huysmans, *op cit*, pp 119–20, 200.
38. Jules and Edmond de Goncourt, *Journals: 1851–1870* (Paris: 1887), p 93.
39. See Edmond de Goncourt, *Les frères Zemganno* (Paris: 1879). The reference to the circus as the new theatre is in *Journals*, *ibid*, p 491.
40. *Ibid*.
41. J-K Huysmans, *Parisian Sketches*, translated by Richard Griffiths (New York, NY: Fortune Press, 1960), p 8.
42. Oller was without doubt the most successful spectacle entrepreneur of *fin-de-siècle* Paris, responsible for the Piscine de Rochechouart, the Nouveau Cirque – known for years as the abovementioned Arènes Nautiques – the Jardin de Paris, the Olympia and the widely successful Moulin Rouge.
43. *La construction moderne*, 2 December 1899.
44. From a newspaper cutting printed in July 1877: 'Le succès continue à s'affirmer de plus en plus à l'Hippodrome. Cet établissement n'a, du reste, rien négligé, et son excellente troupe recueille chaque jour les bravos d'un public très nombreux'. Source: BnF, Arts du Spectacle. An article written in *La semaine des constructeurs* a year later accounts for what the Hippodrome must have looked like during its first season: 'On se rappelle … que dans l'Hippodrome tel qu'il existait l'année precedente, la partie correspondante aux gradins seule était couverte et que l'arène était en plein air. Les nombreux et lourds poteaux en bois, qui supportaient la toiture d'alors construite en forme d'abri, coupaient la vue de l'arène dans toutes les directions et détruisaient l'harmonie générale. Aujourd'hui, cet edifice a subi une transformation complète.' Léon Mangin, 'La charpente de l'Hippodrome', *La semaine des constructeurs*, 3 January 1879, pp 318–19.
45. 'L'Hippodrome arrivé à fin de bail sur des terrains qui ne lui appartenaient pas, a dû céder la place à un groupe de maisons de rapport qui vont, paraît-il, être construites sur cet emplacement tout vibrant encore du roulement des courses de char', Max de Nansouty, 'La démolition des bâtiments de l'Hippodrome', *Le génie civil*, 11 March 1893, p 298.
46. Even pantomimes had run out of steam in the 1880s, although they were resuscitated through an appeal to technical inventions and the extraordinary, incorporating narratives derived from Jules Verne's novels.
47. The Hippodrome offered attractions for prices ranging from two to five francs, rather than the 20 or 26 francs ticket that an exclusive theatre could charge in the 1880s. A box at the Opera was rented for 25,000 francs a year, whereas a seat was a comparatively affordable 16 or 20 francs. See Eugen Weber, *France, Fin de Siècle* (Cambridge, MA: Belknap Press of Harvard University Press, 1988), p 167.
48. Max Nordau, *Degeneration* (New York, NY: Appleton and Company, 1895), p 12.
49. Théodule Ribot, *The Psychology of Attention* (Chicago, IL: Open Court Publishing Company, 1890), p 44.
50. *Ibid*, p 36.
51. Paul Bouissac, *Semiotics at the Circus* (New York, NY: De Gruyter Mouton, 2010), p 26.
52. Michel Foucault, 'Foucault Responds to Sartre', in *Foucault Live*, translated by John Johnson (New York, NY: Semiotexte, 1989), p 36.
53. Lorraine Daston and Peter Gallison, *Objectivity* (New York, NY: Zone Books, 2007), pp 209–10.
54. *L'Eldorado et la question des cafés-concerts* (Paris: Hugonis, 1875), p 5.
55. Cited in Erkki Huhtamo, *Illusions in Motion: Media Archaeology of the Moving Panorama and Related Spectacles* (Cambridge, MA: MIT Press, 2013), p 74.
56. 'Il est très évident que le théâtre ancien, celui des poètes, a cessé de vivre, et nous verrons l'éclosion d'un théâtre nouveau, où les illusions matérielles, obtenues par des moyens scientifiques, tiendront une large place', Théodore de Banville, Feuilleton du *National* (Paris: 24 June 1878).
57. John Tresch, *The Romantic Machine: Utopian Science and Technology after Napoleon* (Chicago, IL: University of Chicago Press, 2012), p 6.
58. *Ibid*, p 177.
59. Michel Foucault, 'L'imagination du XIXe siècle: sur Wagner repris par Boulez, Chéreau et Peduzzi', *Semiotext(e)*, vol 4, no 2, 1982, pp 182–90.
60. Fuelled by research carried out by contemporary scientists, Georges Seurat's interest in optical effects, colour and perception is well known, as is Edgar Degas' interest in physiognomy, variously influenced by the contemporary investigations of Cesare Lombroso or Alphonse Bertillon. Andreas Huyssen, in turn, has given an account of the way the historical avant-gardes were informed decades later by 'the invasion of the very fabric of the art object by technology and what one may loosely call the technological imagination'. Andreas Huyssen, 'The Hidden Dialectic: Avant-Garde–Technology–Mass Culture', in *After the Great Divide: Modernism, Mass Culture, Postmodernism* (Bloomington, IN: Indiana University Press, 1986), p 9.
61. Charles Baudelaire, *Oeuvres complètes* (Paris: Robert Laffont, 1975), p 890.



Edouard Manet, *Skating*, 1877
Harvard Art Museums / Fogg Museum,
Bequest from the Collection of Maurice Wertheim
© President and Fellows of Harvard College

The Euston Folly

Adrian Forty

Next to the Euston Station Signal Box, and behind the Bartlett School of Architecture's temporary accommodation, is a free-standing concrete megalith. 26m long, 3.9m high reducing to 2.2m where the ground rises, and between 0.15m and 0.4m thick, its most striking feature is the chevron pattern in the board-marked surface. It serves no obvious purpose, and will shortly disappear as it stands in the path of the new HS2 track.

The wall, which dates from late 1964 or 1965, is the only relic of the abortive Taylor Woodrow project for the redevelopment of Euston Station. The design of the scheme was led by Theo Crosby, and it was he who brought together to work on it all the members of the Archigram group, as well as various people who later became famous for other things – among them Alex Pike and Robin Middleton. The project is generally acknowledged as an Archigram scheme and is listed as no 33 on their website. The concrete wall, whose survival can only be the result of some oversight, was put up as a test for the concrete work of the new station, and the unusual shuttering pattern was the work of the artist Joe Tilson, also an associate of the informal academy of avant-garde talent that operated out of a Portakabin behind the parcels office in nearby Eversholt Street. (Another regular visitor was Eduardo Paolozzi, and from Peter Cook's description it is clear that the occupants' time was far from exclusively spent on Taylor Woodrow's project: both *Archigram* magazine and Theo Crosby's own magazine *Uppercase* came out of the hut, while, for purposes of his own, Warren Chalk was occupied in reading the entire back run of *Casabella*). Tilson got involved because he had collaborated with Crosby on the British pavilion at the 1964 Milan Triennale, producing the dome and a geometric wooden wall relief for the interior of the pavilion, for which Crosby was the lead designer. It was Crosby's suggestion that he work up a design for the board-marked facing for the in-situ concrete of the new station, and this is what we see today. Tilson's relationship with the design team and with Taylor Woodrow, whose tradesmen must have fabricated the shuttering and poured the concrete, was, like everything else about the Euston Station project, characteristically casual: there was no contract, no agreement and, Tilson says, 'I never got any money'.



Photo Sue Barr


HIGHWAY ACT 1980 SECTION 31(3)
PRIVATE ROAD
Freeholder Does Not
Accept any Loss or Damage
Suffered by Trespassers

Triptych for an Ideal Museum

Hollein, Beuys and Cladders

Eva Branscome

One day in 1967 there was a knock at my door. I opened it and in front of me was a man wearing a hat. I knew a little bit about Beuys, but not much – he wasn't so familiar to me at the time, and became famous only later through the Mönchengladbach exhibition. He stood there and said rather directly, 'I'm here because I want you to become the new professor of architecture in Düsseldorf'.[1]

The rather unusual circumstances of this unexpected encounter between the German artist Joseph Beuys and the Viennese architect Hans Hollein were still fresh in the architect's memory almost four decades later. It was a meeting that would indeed result in Hollein taking up a professorship at the Kunstakademie Düsseldorf, and later would prompt the commission of what is probably his most important building, the Museum Abteiberg in Mönchengladbach, which won Hollein the Reynolds Memorial Award in 1984 and largely influenced his Pritzker Architecture Prize in 1985. The story of this new museum is a complex one, and hinges on a synergy between three men: Hollein, Beuys and Johannes Cladders.

Today, alongside Andy Warhol, Beuys is seen as arguably the most significant artist of the second half of the twentieth century. Yet in 1967, when he so forthrightly rapped his knuckles on the door of Hollein's apartment in Vienna, only insiders in the Düsseldorf art scene really knew about him. In Austria he was more shadowy still. A selection of his work had been shown at the avant-garde Galerie nächst St Stephan in Vienna in November 1966 – a little-noticed and small exhibition of rather fragile sketches that received mixed reviews, largely because Austrian critics were expecting something more visceral from the 'Düsseldorfer Happening-Professor'.[2] But when Beuys returned to the same gallery four months later, on 1 March 1967, he did not disappoint. Accompanied by the music of Henning Christiansen, his performance, *Eurasienstab 82 min Fluxorum Organum*, captivated its audience, among them three of the best-known Vienna Aktionists – Hermann Nitsch, Günther Brus and Otto Muehl – as well as Hollein's friend and sometime collaborator Walter Pichler. A repeat showing would take place during an international symposium at the gallery in July later that same year.

These performances were instigated by Oswald Oberhuber, who had recently taken over the running of the Galerie nächst St Stephan on behalf of the gallery's founder, the charismatic Catholic priest Monsignor Otto Mauer. While Mauer had stepped back from the day-to-day aspects of his avant-garde venue, he was nonetheless still interested in the new directions that art practices were taking, and would often act as an interpreter for speakers at its various openings. Among these new practices, Beuys's work especially appealed because of its Catholic iconography. As Mauer succinctly explained, 'it is thus the spiritual element and not the material that makes art'.[3]

It was also through the Galerie nächst St Stephan that Beuys first came across Hollein, who was a frequent visitor, organiser and exhibitor. Mauer, in his more conventional priestly guise, had even officiated at Hollein's wedding to Helene Jenewein in 1966, and Oberhuber was godfather to their first child, Max, born in 1969. It appears that the German artist explicitly sought out Hollein to support his own increasingly tenuous situation at the Düsseldorf Kunstakademie. Problems had started there in 1965 when the faculty nominated him for the academy's directorship. A large majority of tutors voted in support, but Paul Mikat, culture minister for North Rhine-Westphalia, vetoed the appointment. He had not forgotten Beuys's anarchic performance at the Technical University in Aachen during the Festival der Neuen Kunst on 20 July 1964 – coincidentally the twentieth anniversary of the attempted assassination of Adolf Hitler – which had caused public outrage. One indignant young member of the audience had even come onto the stage and punched Beuys full in the face. The now iconic photograph by Heinrich Riebesehl shows the artist, blood running from his nose to form a small ersatz moustache, with a crucifix held aloft in his left hand, like a sacred chalice, and his right arm outstretched. In a written statement to Hans Schwippert, then still the director of the Kunstakademie, Beuys wrote that the gesture alluded to his work on 'death and resurrection', but to Schwippert and everybody else it simply looked like the *Fuhrer* making a Nazi salute.[4]

Bruised but also buoyed by the uproar surrounding not only his Aachen performance but his failed bid to become director of the Kunstakademie, by 1967 Beuys had become increasingly interested in politics. On 21 June that year he formed the *Deutsche Studentenpartei* (German Student Party) calling for the abolition of Germany's state-run institutions and even of the state at large, in the process branding his collective not so much a party as an *Antipartei*. These political ideals of freedom and self-government were intimately connected to his mission as a teacher, and he considered his political and didactic self inseparable from his activities as an artist. Hosting his more professorial duties, the academy, he argued, should be freely accessible to all as a place of study, and students should have a voice and indeed voting rights in questions relating to admissions and the appointment of professors.

A former student, Johannes Stüttgen, remembers Beuys holding forth on a completely new status for art. 'For him', Stüttgen wrote, 'art seemed to include literally everything: himself, directly, as a person, his conduct, every situation of consequence, every object with which he came into contact and especially the work of his students'. He went on to suggest that for Beuys, 'art was not only a subject to teach or the name given to a defined area of activity, but was a right. And nothing was exempt from its reach.'[5] Clearly Beuys's manner of teaching was messianic and deeply seductive, instilling an exhilarating sense of the possibilities for autonomy. Yet it was also evident that his ideas were essentially concerned with destabilising the same academic environment in which he was working, and so in this sense were bound to induce some kind of instant, local response.

Anthem to these ideas was Beuys's famous slogan, 'everyone is an artist', which found an immediate echo in Hollein's declaration, 'everything is architecture', and which signalled to Beuys that he had found a kindred spirit, ally and lifelong friend.[6] Hollein's own journey to this point had followed a similar path. He too had launched his public persona with a performance of his own manifesto, *Zurück*

Marcel Duchamp,
Boîte-en-Valise, 1940–41
© University of Iowa Museum of Art




BEUYS
STÄDTISCHES
MUSEUM
MÖNCHENGLADBACH
BEUYS
AUSSTELLUNG
VOM 15. SEPTEMBER

zur Architektur, in a packed room in Monsignor Mauer's gallery on 1 February 1962. Though a number of progressive artists connected with the gallery were less than convinced of architecture's ability to crossover with art, Mauer was captivated by what he saw. Hollein was immediately given the opportunity to follow up with a three-day exhibition, for which he enrolled the help of his friend Pichler. Titled 'Hans Hollein, Walter Pichler, Architektur: Work in Progress', the show opened in May 1963. As Hollein recalled, people stormed the space, provoking an explosive response, both for and against – 'there were even people who stamped on our models and we were physically attacked'.[7]

More than his models, however, it was Hollein's drawings, collages and written manifestos that seemed to rethink the scope of architecture, expanding its definition to include rocket science, transport infrastructure, ancient structures, religious rituals, politics, the human body, suffering and sex. Vienna's architectural establishment, then still largely in the grip of a rather dour form of international style functionalism, interpreted these provocations as a threat, and effectively blacklisted Hollein; even professors at the city's three main architecture schools forbade their students from attending any events associated with this maverick artist–architect.

Hollein's response was to escape to the US, working as a visiting professor at Washington University in St Louis in 1963–64 and again in 1966, in addition to more intermittent appointments at Yale, before returning to Europe in 1967 to take up his Düsseldorf professorship.[8] In America he found people far more appreciative of his work and ideas, and was quickly able to navigate through the upper echelons of the art and architectural establishment without the need for any public provocations. Along the way, he befriended Philip Johnson and Claes Oldenburg, and shortly afterwards (thanks no doubt to his new associates) the Museum of Modern Art in New York started acquiring his drawings and models – among them the celebrated *Aircraft Carrier City in Landscape* collage. At the same time his frequent forays back to Vienna saw him complete his first substantive architectural project, the Retti candle shop, on a city plot just 4m wide. He also began co-editing the newly relaunched *Bau* magazine, alongside Oswald Oberhuber, Günther Feuerstein and several others. And it was an issue of *Bau* in 1968 that provided the main forum for his celebrated manifesto, *Alles ist Architektur* (Everything is Architecture), in which the ideas he had been developing since the early 1960s were suddenly made overt through a combination of striking pop images and subversive written content.

Meanwhile, following the success of the 'Work in Progress' exhibition, the Galerie nächst St Stephan started to shift its curatorial programme and become both more daring and more inclusive, largely due to the influence of Oberhuber. Recognising that Vienna's art and architecture world was tight-knit, incestuous and infested with intrigue and strife, the gallery deliberately moved away from the *Art Informel* it had consistently fostered. Significantly, in addition to Beuys and Hollein, among the artists Oberhuber exhibited were the Viennese Aktionists, ending their long exclusion from the art scene. Perhaps the only surprise and slight disappointment at their opening event was that they managed to keep their clothes on, a case of extreme self control for a group renowned for their frequent violation of decency laws.

By 1967, then, the Viennese arts scene had taken on a whole new character, but in Düsseldorf, too, the situation was changing. At the Kunstakademie Hollein quickly proved to be a faithful and supportive ally of Beuys, and the two were very much committed to the cross-fertilisation of their respective practices. Interestingly, even if he was nominally professor of architecture, Hollein's promotion to this role was secured by votes that came disproportionately from the artists in the school, rather than the architects. As Agatha Buslei-Wuppermann has noted, the architectural faculty were in fact extremely sceptical about the appointment, with very few of them even aware of Hollein's work and ideas. 'A member of the appointment committee, who had clearly never heard the name before, is said to have leafed through Hollein's application and asked whether he had ever built anything as high as two storeys.'[9]

Yet this lack of recognition was not unique to Hollein. Even Beuys's own students were not especially familiar with his work, despite the fact that he had been teaching at the academy since 1961 – but things were about to change.[10] In 1967 Beuys was given his first retrospective exhibition, an event that would immediately make him the anointed champion of the avant-garde, not only in Germany but internationally. This took place in the local museum in Mönchengladbach, an industrial town close to Düsseldorf that was known for its football team but certainly not for its art. The museum had existed since the turn of the century, but a new director had recently taken over – an ambitious middle-aged curator called Johannes Cladders.

The museum building Cladders inherited had been constructed at the end of the nineteenth century as the private residence of Oskar Kühlen, a successful printer who specialised in Catholic devotional cards. Following Kühlen's death, it had been donated to the town in 1924 for the purpose of housing its local museum until a more appropriate purpose-built structure could be provided. But somehow no such building ever materialised and the museum remained in Kühlen's former home. Cladders described it like this:

Neo-gothic, creaking floorboards, a smell of sauerkraut *that seeped down from the caretaker's room in the attic, and a collection reminiscent of a kind of* Wunderkammer. *There was a sampling of local history, an excellent collection of ancient Coptic textiles as well as stocks of liturgical vestments and a few old sculptures from the Lower Rhine, alongside more recent works by local artists and a small but fine selection of German expressionist drawings and paintings that had been acquired with modest means by Dattenberg after the war, and enhanced by a more recent Kaesbach donation with works by Heinrich Nauen.*[11] *Dattenberg had also already begun to collect contemporary art. So overall a mixed bag, although decidedly less extensive and significant than the collection at Krefeld, which I not only knew but even loved.*[12]

While Cladders openly embraced the eclectic assemblage of objects, he was not nearly so delighted at the prospect of having to organise exhibitions in a two-storey, four-bedroom bourgeois townhouse. He had even complained about this at his job interview, pointedly asking about the likelihood of a new building. In this, though, he was pushing at what was already an open door, since the Kühlen residence had always been considered merely a temporary venue, and clearly needed to be expanded and improved. But as some compensation for these architectural constraints, Cladders enjoyed a large degree of independence, being answerable only to the mayor and town clerk. He also quickly developed a solution to the limited space, typically using one floor of the house for the display of the museum's permanent collection, and the other as a gallery for contemporary shows. Sometimes he even packed up and stored all of the mismatched items in the permanent collection so that he

Joseph Beuys,
exhibition box catalogue, 1967
Photo Uwe Riedel
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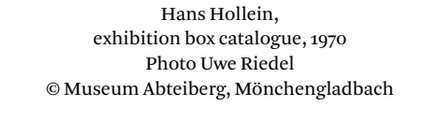
could use the whole of the space, dedicating the museum's relatively compact 250m² interior to his new line-up of avant-garde exhibitions.

Cladders had first become familiar with the art scene in this particular region of industrial Germany as an assistant to Paul Wember at the Kaiser-Wilhelm-Museum in Krefeld, where he had worked from 1957 to 1967. Indeed, his appointment as the new museum director in Mönchengladbach coincided with the temporary closure of the Krefeld venue, which had been the first German museum after the war to consistently promote contemporary art. So in this sense Cladders was fortunate that there was now a cultural void which he could fill. But to a certain extent he was also simply continuing along the same path he had followed at Krefeld, picking up things as he went along and learning on the job. For Cladders had not trained as an art historian and had only by coincidence become a curator. He had started out as a journalist in Krefeld, where his duties included reviewing contemporary art shows for the local paper. Wember was sufficiently impressed by these pieces to hire him, when he was given a budget to employ an assistant.[13]

And so in 1967, for what would be his inaugural exhibition in Mönchengladbach, Cladders was keen to step into Wember's shoes, taking over the staging of international shows (at Krefeld, Cladders had been responsible only for the distinctly less glamorous permanent collection and a handful of local artists). Already in his early 40s, he realised that this was perhaps the only chance he would get to make a name for himself. He therefore came up with an ambitious proposal to stage an Andy Warhol retrospective – the first exhibition in Germany of the artist's work – but he was immediately bowled over by the projected costs, in particular the huge expense of transporting from the US not only the artworks but the artist. At the same time, he made the unwelcome discovery that his predecessor had already spent half of his meagre annual budget of 10,000 Deutschmarks, which also had to cover the cost of publishing any catalogue. So Warhol was definitely out. Reluctantly he realised that his only remaining option was to revert to his knowledge of the local art scene. And it was within this context that Beuys immediately stood out. Cladders had been aware of the artist as an *enfant terrible* within the Fluxus group and had seen a few small exhibitions, not least a selection of drawings shown at Documenta 3 in Kassel in 1964. There were also Beuys's outrageous performances, of course, but there had never been a real retrospective. Surely, Cladders thought, there'd be an audience for just such a show? With this in mind he began planning the exhibition.

I'd actually long had in mind the idea of doing a Beuys exhibition. One of the more memorable shows I'd seen had been the exhibition at Schmela, where Beuys had explained his paintings to a dead hare. That had greatly intrigued me. Of course, I'd also got to know him even earlier, through the van der Grintens and the exhibitions they organised in their farm stables. So I said to myself, 'Well then, why not start with Beuys.' So in July that year I approached him and we came to an agreement very quickly.[14]

The two men then met in Mönchengladbach to walk through the available rooms. During these initial discussions it was decided that the museum, constrained by very limited finances, would not publish a conventional catalogue but would instead produce a run of cardboard boxes into which all the various texts, images and other associated objects would be placed. In the end a total of 330 of these boxes were assembled free of charge by one of the museum's trustees, who happened to own a nearby printing works. To Cladders' further relief Beuys also agreed to cover the transportation costs of all his artworks. It seems that the artist was very attached to his particular firm, not least because they wore immaculate white livery gloves while handling the objects.[15] Eventually 142 works were chosen, for which Beuys calculated an exorbitant insurance value of 310,000 Deutschmarks.[16] Cladders went specially to Vienna to retrieve from Monsignor Mauer a copper rod that Beuys had bent into a kind of shepherd's crook or bishop's staff, and that had been left behind after one of his performances at the Galerie nächst St Stephan. With all the artworks delivered, the installation was then carried out largely by Beuys himself, working tirelessly day and night. He even brought his own sleeping bag so that he could stay over at the museum, with the aim, he said, of fully familiarising himself with the spaces and their intimate characteristics.[17]



Hans Hollein,
exhibition box catalogue, 1970
Photo Uwe Riedel
© Museum Abteiberg, Mönchengladbach

At the time Beuys was explicit in framing his own work through the 'anti-art' tradition that was pioneered by Marcel Duchamp in 1914 and later absorbed by the Aktionists of the 1950s and 1960s. As an approach it disconnected everyday items from their typical use and meaning, thereby questioning what really constituted the idea of normality. The basic principles of this approach were explained in the exhibition with a text written by the critic Hans Strelow, which was printed on a *leporello* and inserted into the cardboard boxes. Strelow suggested that Beuys's relationship with objects represented a new form of parallel knowledge, in which everything was experienced for the first time.[18] Warming to this theme, Cladders' own text continued in the same vein:

Beuys likes to talk about 'opposite space' and 'opposite time'; he confronts mathematics with 'anti-mathematics', chemistry with 'anti-chemistry', physics with 'anti-physics' and – to establish a common denominator – nature with 'anti-nature'. What is ultimately meant by this 'opposite' is man himself. Man is the 'anti', the one who opposes.[19]

In more material terms, Beuys practised his art mainly through the collection of items that he thought might find some future use in his performances and actions. All these props filled his apartment in Oberkassel on the outskirts of Düsseldorf, just across the Rhine from the Kunstakademie, as well as his designated studio space in *Raum 3* of the school. There, Stüttgen tells us, 'a magnificent jumble' of 'chaotic trinkets, bottles, tubes, screwdrivers, spindles, tins, bones, small bits and bobs' was housed within a huge wooden cabinet that Beuys treated like a *Wunderkammer*, a literal cabinet of curiosities, but one now elevated to the status of art, not least through the fact that he had given it a title, *Szene aus der Hirschjagd* (Scene from a Deer Hunt).[20]

Beuys then continued the same strategy with other objects, assigning them value simply by arranging them strategically within the Mönchengladbach galleries – hung on a wall or placed behind glass, basically any kind of museological placement that removed them from human touch or any suggestion of usefulness. Beuys argued that it was through this model of display, this reassigning of meaning, that an object became culturally relevant. As Stelow continued in his own exhibition text:

Beuys wants to expand not only the concept of art, but consciousness in general. If he wants to show a loaf of bread, he does not convert it aesthetically into another medium, he just puts it in a display case. The way he places it is 'natural', but it still has more sculptural presence than the loaves we see in the still-lifes of the Dutch masters of the sixteenth and seventeenth centuries. Beuys is a magician who can


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make us experience these things as part of life, just as he sees his own life as a work of art. This is an idea that runs through the art of this century, from Marcel Duchamp to Yves Klein, yet no one else has made it as concrete as Beuys.[21]

Empowered by these ideas, Beuys stuffed the museum still further. Blobs of grease were offered up as artefacts, as were hair balls, toenail clippings, a dead rat, a pack of rancid butter, a chocolate Easter bunny, plastic toys (including an Etch-a-Sketch) and an old withered sausage. In many ways, by celebrating this detritus as art, he was critiquing both the institution of the museum in general and the Mönchengladbach museum in particular, highlighting its perplexing mix of important pieces from modern art alongside the cultural relics of a local history. At the same time, he treated the museum like any other object, accepting it as a found thing, not changing it in any obvious sense, and so exposing all of its inadequacies to a viewing public. Busso Diekamp, a local councillor responsible for culture, witnessed the whole installation, and immediately began to worry that the whole thing was going to blow up in their faces.[22]

Meanwhile, Cladders was desperate for his first big show to be well received, and so to attract a wider audience he ingeniously scheduled the opening to coincide with the Cologne Art Fair. He must have therefore been pleased to get pre-orders for the box catalogues even before the show was up and running. But he could not have anticipated what would happen next. On the first evening, before the doors opened, Cladders took Beuys, Monsignor Mauer, the art collector Karl Stöher and a few others out to a local restaurant. As they walked back to the museum they found 600 people already queuing to get in. Busso Diekamp need not have worried. Art lovers, collectors, critics and gallerists seemed to have flocked to Mönchengladbach from all over Germany, immediately straining the capacity of the modest house-sized museum. Those waiting outside were soon only permitted entry in small groups, and then only after others had first exited.[23] All 330 of the box catalogues, which included bijou felt rectangles with a painted brown cross hand-produced by Beuys, sold out. The following day several of them were being offered for resale at the Cologne Art Fair at a huge mark-up. Mass dissemination was instant.[24]

Cladders' anxiety about attracting a suitable audience – a fear immediately assuaged by the vast crowds – was matched by pre-show nerves about the possibility that the strongly Catholic iconography adopted by Beuys would give offence to the town's good *bürgers* and municipal bureaucrats. And so to defuse any possible outrage he invited Monsignor Mauer to come all the way from Vienna to give the opening speech. While most of the visitors on that first night were younger people from the Cologne and Düsseldorf art scene – among them the now notable artists Gerhard Richter and Sigmar Polke, who would exhibit their own work in Mönchengladbach in 1974 and 1983 respectively – photographs of the evening show a more staid group of older onlookers, leaning back in their chairs or standing in the aisles, their arms crossed defensively across their chests and their brows furrowed. Perhaps their stiffness was merely an expression of their incomprehension, because in his speech Mauer celebrated Beuys's work through a kind of homily that combined an engaged reading of artistic truth with aspects of eucharistic theology:

There is a deep inner sufficiency that emanates from the artwork, a spiritual sufficiency, a spiritual reality that stirs us and touches us deep down; there is a correspondence here. And it is from this correspondence, ladies and gentlemen, that we live. From the correspondence between the dawning of being and human gnosis, human knowledge. From the correspondence between the ultimate goodness of being and the striving to fulfil our desire for perfection, for self-perfection, which holds out the promise that we may yet become human, though we are all fragments, all half-human. And so it is in the aesthetic realm. This splendour, this lustre of the aesthetic, gives us a deep certainty regarding an ultimate meaning. So when I see these things that Beuys offers us, that he annoys and torments us with, then I would like to say: Ecce homo*, here is a true human being. And because he still suffers under these things and under the condition of being human, then we permit him to annoy us and attack us; for his exhibition is an act of aggression.*[25]

At the opening, this simultaneously disarming and insightful speech was broadcast through a tannoy system to a crowd of people who weren't able to find a seat inside. The response was so eager and receptive that the speech became a kind of installation in its own right, recorded and then played back twice a day for the duration of the exhibition. There was even a demand for a printed transcript – satisfied a year later when it appeared in a publication that celebrated the museum's activities since Cladders had taken over.[26]

By the time the Beuys show closed, on schedule, precisely 37 days after its opening, it had been visited by 2,679 people.[27] The town of Mönchengladbach breathed a huge sigh of relief (an anonymous note delivered to the museum announced that 'Gladbach is looking forward to the 29 October 1967 when this exhibition will be closed'),[28] but for most it was an unqualified triumph, not least for its 46-year old artist, who was immediately propelled into international stardom, and for Cladders, now hailed as an exciting new museum director. In the *Frankfurter Rundschau* a piece by Peter Iden noted:

That Johannes Cladders, who has just taken over the museum in Mönchengladbach, started his tenure with this exhibition, speaks volumes for his decisiveness; as do the first pieces of a collection (by Yves Klein, Fontana, Tinguely, Arman – all of good quality), that he wants to build up gradually. One would hope that he gets the support – not least from the town – that he needs and deserves. In Mönchengladbach contemporary art could find a new showcase.[29]

And indeed, as director of this new showcase, Cladders would go on to mine an incredibly rich seam of then little-known artists. A list of exhibitors gives some idea of the sheer density: Erwin Heerich in 1967; Bernd and Hilla Becher, Carl Andre in 1968; Hanne Darboven, George Brecht, Robert Filliou, Panamarenko, Piero Manzoni in 1969; Hans Hollein, Richard Long, Stanley Brouwn in 1970; Daniel Buren, Jasper Johns, Marcel Broodthaers in 1971; Reiner Ruthenbeck, Jan J Schoonhoven in 1972; Palermo, Ulrich Rückriem, Lawrence Weiner in 1973; Gerhard Richter in 1974; Braco Dimitrievic, Joel Fisher, Daniel Buren in 1975; Jonas Hafner in 1976; Giulio Paolini, James Lee Byars, Gorgona, Georg Ettl in 1977; John Cage, Jannis Kounellis in 1978.

As Iden indicates, in addition to hosting these exhibitions, Cladders rode the success of the Beuys retrospective by building up the museum's permanent collection, focusing in particular on Dadaism and Constructivism. One especially important piece was Duchamp's *Boîte-en-Valise*, a second edition, from 1940–41, of the celebrated 'box in a suitcase' first produced by the artist as a miniature version of his portfolio during his 1938 visit to the US. Cladders explained its acquisition by suggesting that no other work was able to capture the trends and intentions of his collection in quite the same way.[30]

As much as it was a model for his collection, and perhaps also an inspiration for the cardboard box catalogues (their own form of

'multiple'),[31] Duchamp's *boîte* was more fundamentally an image of a kind of portable museum that conceptually rendered all existing institutions defunct[32] – something of an echo of Marinetti's provocative call to destroy all museums, along with academies and libraries, and a prelude to Andy Warhol's more whimsical but prescient quip that 'someday all department stores will become museums, and all museums will become department stores'. These notions were especially appealing to Cladders because he was still struggling with the limitations of the townhouse he had inherited. The museum was far too small, and it exuded a domestic rather than a civic presence. No firm decision had yet been made on its replacement, though the municipal authorities were unanimous on the need for such a building. And so while Cladders waited for his new museum to materialise, the box catalogues he produced not just for Beuys but for other later exhibitors served as its stand-in – it was as if he had already started packing the museum and its shows into their respective moving boxes, conceptually, if not in actuality, ready to switch to his new ideal museum when it was eventually built.

Hollein was among the many visitors to the Beuys show, and his trip to Mönchengladbach also gave him the chance to familiarise himself with the museum and its director's broader ambitions. Soon he and Cladders were in frequent contact, and within a year he was invited to put on an exhibition of his own work – his first ever show in Germany – which eventually opened two years later, in 1970. Titled 'Hans Hollein: Alles ist Architektur. Eine Ausstellung zum Thema Tod' (An Exhibition on the Theme of Death), this was not a retrospective like the Beuys exhibition but rather an interactive environment in which the museum was transformed into a kind of archaeological site. The entire surface of the ground floor was covered in mounds of white building sand, out of which rose the 'ruins' of brick walls and staircases, while the sides of the room were concealed behind long floor-to-ceiling curtains. Visitors were encouraged to pick up a spade and find out for themselves what lay buried beneath the sand – which was not so much ancient fragments as everyday artefacts from the period, bits and bobs made of plastic. But as an incentive to dig, a few coins issued by the Deutsche Bundesbank were also buried, the reliable standby of avarice being used to stimulate public participation. The excavated items – a salt cellar, bottle opener, cake tin and such like – were then put on display in cabinets on the upper floor, objects now worthy of museum curation, their cultural significance identified and secured for posterity.[33]

The installation also featured an artificial grave covered with a thick slab of plate glass, through which visitors could see other uncovered remnants of a contemporary culture: a hardhat from a building site, golf club, mountaineering crampons, a coin and some glass shards from a smashed Coca-Cola bottle. This particular piece was titled *Grave of a Warrior*? Or was it really that of a struggling architect? Cladders described the exhibition as an allegory of affluent western society and the competing demands of work, consumption and leisure. It also seemed to borrow from Beuys, questioning the values we ascribe to things and elevating everyday items to the status of art. A feature on the exhibition on Radio Bremen declared it of 'enormous socio-political impact'.[34]

Yet the items were also designed to expose a certain cultural confusion, including relics that had been wrongly identified by Hollein's fictional archaeologist. As he described this conceit:

The objects in the display cases on the upper exhibition floor are deliberately misinterpreted. The captions do not describe what they are really about. So for example, a dunce cap is assigned to a king, a spiked helmet to a medicine man, a top hat is declared a protective helmet. The misattributions of archaeologists are consciously magnified and transported into our time. Misinterpretations, with their often sarcastic explanations – a metal tube with a showerhead then becomes a 'Cleaning Device for Maintaining Racial Purity', exploiting the association of this harmless bathroom fitting with the gas nozzles of Auschwitz.[35]

This calculated misidentification also mirrored Beuys's performances, in which he would pretend to experience everyday objects for the first time – a tactic that allowed him to assign them new meanings while questioning concepts of reality and culture. Another kind of misdirection was integrated into the last part of Hollein's show, where the subtitle of the exhibition – the theme of death – really came to the fore. In a darkened room, veiled in inky fabric, stood a black coffin, topped with a tremendous bouquet of flowers. As each day passed the flowers slowly wilted, their perfumed scent gradually transforming into the pungent smell of decay. The head of the coffin was left open, inviting curious visitors to peer inside. But when they did so, a mirror showed them only their own reflection, and therefore also their mortality. Many instantly recoiled in shock. In the adjoining stairwell, death shrouds hung like lifeless banners, black, white and yellow. There was also a hospital bed, borrowed from a local ward, ominously surrounded by a medical screen.[36] What Hollein appeared to be saying was that in modern society death had become anonymous, western culture no longer having any adequate means to express it.

The box catalogue for this exhibition, issued in an edition of 550 copies, was black with a cut-out square that exposed a lower section of the cardboard on which Hollein's name was embossed – no longer a miniature portfolio but a miniaturised sarcophagus. Three printed leaflets were inside. The first was a text written by Cladders explaining the exhibition, while a second mostly featured photographs of the opening event showing Hollein alongside Beuys, both digging energetically. Accompnaying the photographs was a set of architectural drawings accompanied by fragmentary notes.[37] These plans adopted different styles of *poché* to distinguish the original 1890 house from the 1970 installation, while dashed lines – explained in the key only with a question mark – denoted some kind of hypothetical future building. The third leaflet was a pamphlet showing Hollein's earlier work, including his manifesto *Alles ist Architektur*. These printed documents were then finished off with a handful of pressed flowers taken from the actual installation; fragile remnants of ephemeral beauty and life.

Contemporary reports describe visitors coming away from the exhibition in a state of turmoil, quivering, feeling stirred both by their newfound powers of self-reflection and a certain degree of angst.[38] This was clearly not an easy art installation for viewers to take in, pushing at the limits of what was considered tolerable.[39] Yet it was also enthusiastically reviewed by the media. A TV crew from Westdeutsches Fernsehen turned up during the last week of the show and shot a short profile,[40] while among many favourable articles in newsprint Georg Jappe's piece for the *Frankfurter Allgemeine Zeitung* was especially trenchant:

'Everything is Architecture' is Hollein's motto, and so in a sense he is the Beuys of architecture ('Everyone is an Artist'). Death and the future are excavated as the archaic sine qua non *of our existence. Hollein understands architecture as an extension of our senses, although it would have been preferable if he not only exhibited psychological spaces but also realised them as a new concept of architecture. We have*

a progressive architect in the museum, instead of a progressive museum architect – this is the absurdity of timid town planning, which increasingly shies away from the ideas of art. Is it not finally time to allow an artist to build a psychological space for art?[41]

As an article for a national newspaper this story itself became news, prompting follow-up pieces in the local *Westdeutsche Zeitung* that called directly on Mönchengladbach's town council to take the hint and recognise that Hollein was the right architect for their long-promised new museum.[42] Is this, then, what the exhibition was really about? A kind of calling card for a subsequent commission? Writing a decade or so later Hollein actually admitted to an ulterior motive, acknowledging that the show was a precursor to the design of the new museum, a commission he got in 1972, just two years after the exhibition, without having to participate in any competition.[43]

For an architect to use a provocative, highly conceptual avant-garde art installation as a means to secure a major building contract would be remarkable today, but in Mönchengladbach this really seems to have been what happened. And indeed, with the benefit of hindsight, we can detect traces of Hollein-the-architect as opposed to Hollein-the-artist in a short narrative buried in one of the 1970 box leaflets, which now reads like the opening of a pitch for a job:

Originally I had a completely different exhibition in mind – one that looked at the new media of environmental design, communication, the use of technology, holographs and other laser architectures – all those things which fit so perfectly into our life-affirming world. But already after my first visit to Mönchengladbach different thoughts began to surface. This landscape seemed cloaked in immense sadness. And as for this town, it was a Sunday and it was deathly quiet, seemingly expired. Every now and then a couple of locals would appear in their Sunday best. Or a flashy car would drive around a corner too fast. A few adolescents hung around, looking bored. I had trouble finding the museum, but I actually liked that somehow. This old townhouse had something of the atmosphere of my old primary school. The dark wooden staircase, the gloomy air. And then there were its centuries-old scraps of fabric, all meticulously maintained. All those abandoned treasures. And yet this was also the place that staged exhibitions by the best, most lively people. An animated museum, and an animated director. The whole environment affected me. I could not just move in and act. I also had to respond.[44]

Hollein's ultimate response, in this sense, was not an exhibition on the theme of death but a project that envisaged the end of the local – imagining killing off a somewhat crusty provincial museum in its nineteenth-century bourgeois house, located appropriately enough on Bismarckstraße; an antiquated and now out-of-date version of Germany. In the manner of Beuys, he did this by provoking a discussion about what the old museum was about, using fake ruins and coffins as his props, and above all suggesting that if not the whole institution, then for sure this particular outpost, was obsolete and in need of immediate replacement. The task naturally required an architect who not only understood the limitations of the existing house, but also appreciated the avant-garde artistic practices that would animate its future home. Hollein's desire to kill off the old museum was therefore simply the starting point for his design of Cladders' ideal new museum.

Of course, this attack on the museum must also be understood within the context of the cultural upheavals that had started in 1968. Along with the academy, the museum was under siege throughout Europe, as an institution through which society was seen to enforce its context, produce its history and reproduce its culture. The Palais des Beaux-Arts in Brussels was occupied that summer, as were the Milan Triennale and the Venice Art Biennale, complicit events that fed into the system. Cladders caught the mood of the time. At the end of May 1968, he commemorated his first year as director with an essay titled 'Das Antimuseum', published as an insert within a box catalogue. Later, in September, he used a speech at the opening of Marcel Broodthaers' 'Musée d'Art Moderne, Département des Aigles' – a fictional museum, located in the artist's own Brussels apartment – to criticise the museum's power to transform an artist's work through a kind of official process of cultural validation. And yet, as a museum director he continued to exercise a certain provocative power of his own, as could be seen in October 1969, with the exhibition 'Zeit ohne Zeit' (Time without Time), a further display of his signature curatorial interest in confrontation, in which a mixture of items from the permanent collection were arranged as temporal and contextual collisions, entirely rejecting chronology and all forms of categorisation. The exhibition following Hollein, in September 1970, by the Dutch Fluxus artist Stanley Brouwn, perhaps took these provocations too far, with the galleries bare, displaying absolutely nothing at all. The empty museum generated the expected disapproval, but this time the reviewers were distinctly underwhelmed, comparing the exhibition, perhaps justifiably, to the story of the emperor's new clothes.

At the Düsseldorf Kunstakademie the tension had also been escalating, but it was Beuys, as much as the academy, who was under attack. On 12 November 1968 ten of the 22 professors published an open letter declaring a loss of confidence in their celebrated colleague. In particular, they were aggravated by the admissions policy he had adopted for his studio, which let in just about anyone who wanted to study at the academy for a trial period of two semesters.[45] Ignoring his colleagues' fears, Beuys continued the unregulated admission. By 1971 his class numbered more than 200 students, many of them spilling out of his three teaching rooms into the hallways. While the official capacity of the entire school was 400 students, actual enrolment was now closer to 700. When, later that summer, figures for the new intake were processed, it was revealed that Beuys had accepted every single student who applied, disregarding the fact that the great majority of them had already been officially turned down by the school. Had all of them taken up his offer, his own class would have doubled in size to 400, filling the whole building.[46] By now, with Beuys having lost the support of nearly all the faculty (although Hollein stood by him), the Kunstakademie's director Eduard Trier saw no other option but to apply to the ministry to initiate disciplinary proceedings.

1972 proved to be a big year for Beuys, Hollein and Cladders. In June Beuys exhibited at Documenta 5 in Kassel with an installation that took the form of an office. For 100 days he sat behind a desk from which he launched a forum for direct democracy and political debate. In one photograph Hollein is shown next to him. The two men sit at a table covered with neat stacks of paper, a single rose in a clear glass vase and an ashtray. Further chairs are available for anyone else wanting to join in. Behind the two men is a second desk with more stacks of paper and a telephone, with a blackboard next to it. When the show closed and Beuys returned to Düsseldorf he was dismissed from his teaching post with immediate effect.

Photographs from the installation and opening of the Joseph Beuys exhibition, 1967
Photos Ruth Kaiser
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Bottom right: Beuys opening, 1967
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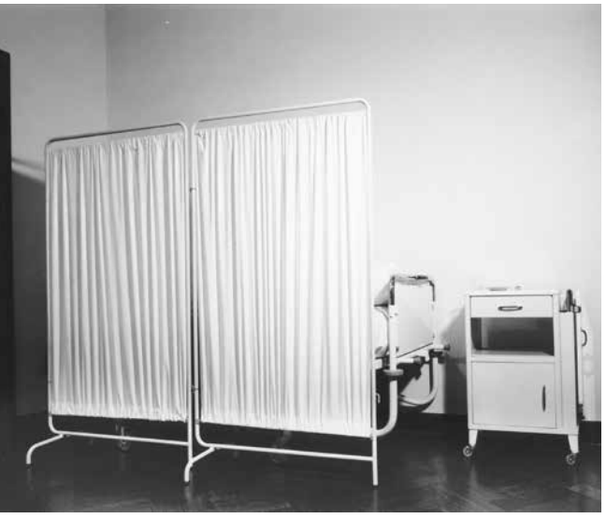




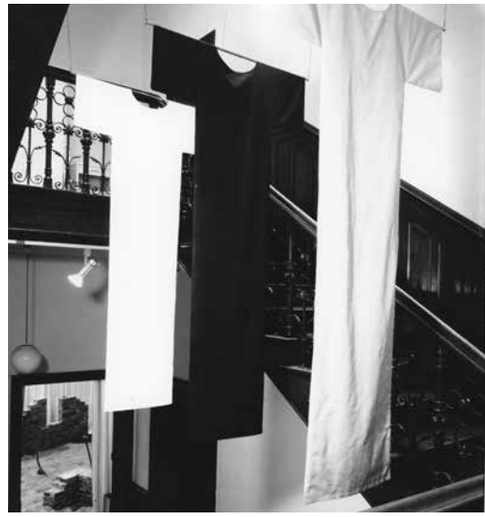




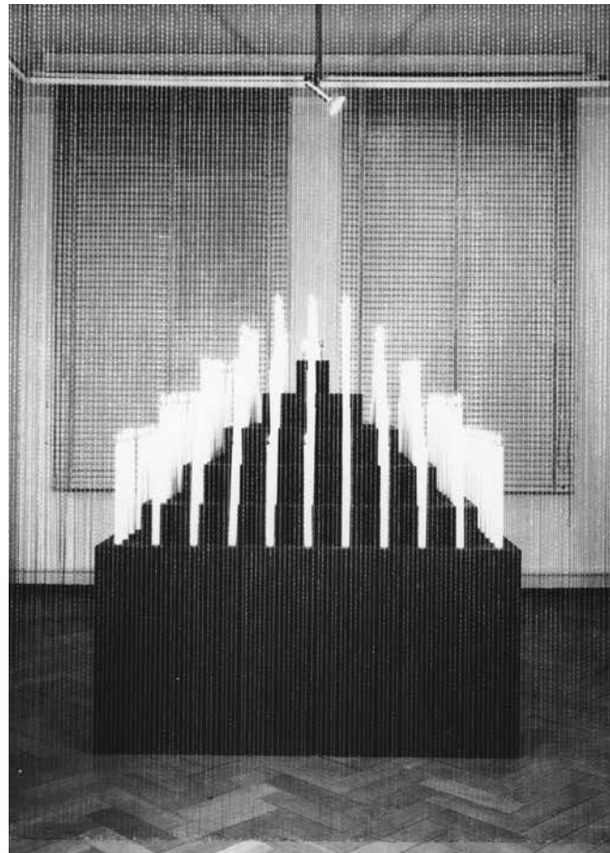












That same year Cladders officially appointed Hollein to design his Museum Abteiberg in Mönchengladbach. Photographs of the ground-breaking ceremony in 1977 bear an uncanny similarity to Hollein's original archaeological exhibition – the spades and shifting sands being a feature of both.[47] When the building finally opened in 1982 – its ten-year gestation only fuelling a sense of public expectation – Beuys was there to celebrate with Hollein. In fact, Beuys was doubly present, as the museum opening was accompanied by the unveiling of Cladders' latest purchase, Beuys's *Revolutionsklavier*, first created at an earlier performance at the old museum, when he had 'decorated' and filled an old upright piano with red roses and carnations, thereby rendering it mute. Now encased in its own display cabinet, the 1982 version was adorned by Beuys for a second time – the artist pointedly removing the old wilted flowers during the opening press conference and replacing them with 200 fresh long-stemmed red Baccara roses and 100 red carnations as a symbol of the renewal of the Mönchengladbach museum. Today the piano still occupies a prime location inside the museum, but the flowers – just like the rose in his box catalogue – are now dry and crumbling.

In the years leading up to this moment Cladders had added other key pieces to the collection, and even if the old museum had long engendered feelings of resentment, part of him had also to feel grateful. For it was within the walls of this dusty old house that he had helped push the careers of Beuys and Hollein to whole new levels, and the piecemeal unmaking of the house – through wilfully destructive exhibition after exhibition – not only defined new forms of site-specific art practice but also miraculously allowed art to challenge the sanctity of the museum while remaining under its shelter. By the time the replacement building opened, these avant-garde practices were no longer peripheral but occupied the centre of the discourse, and its celebrated artists and curators had all entered the canon. Everything had become connected to architecture and everyone was indeed an artist. Everything had also become fixed, because when Cladders launched his first show in the new galleries it was notable that he no longer produced a box catalogue but a traditonal bound booklet. The era of transience and portability had ended. Mönchengladbach had finally got its dedicated museum and like the Coca-Cola bottle in its permanent collection, this was the real thing.

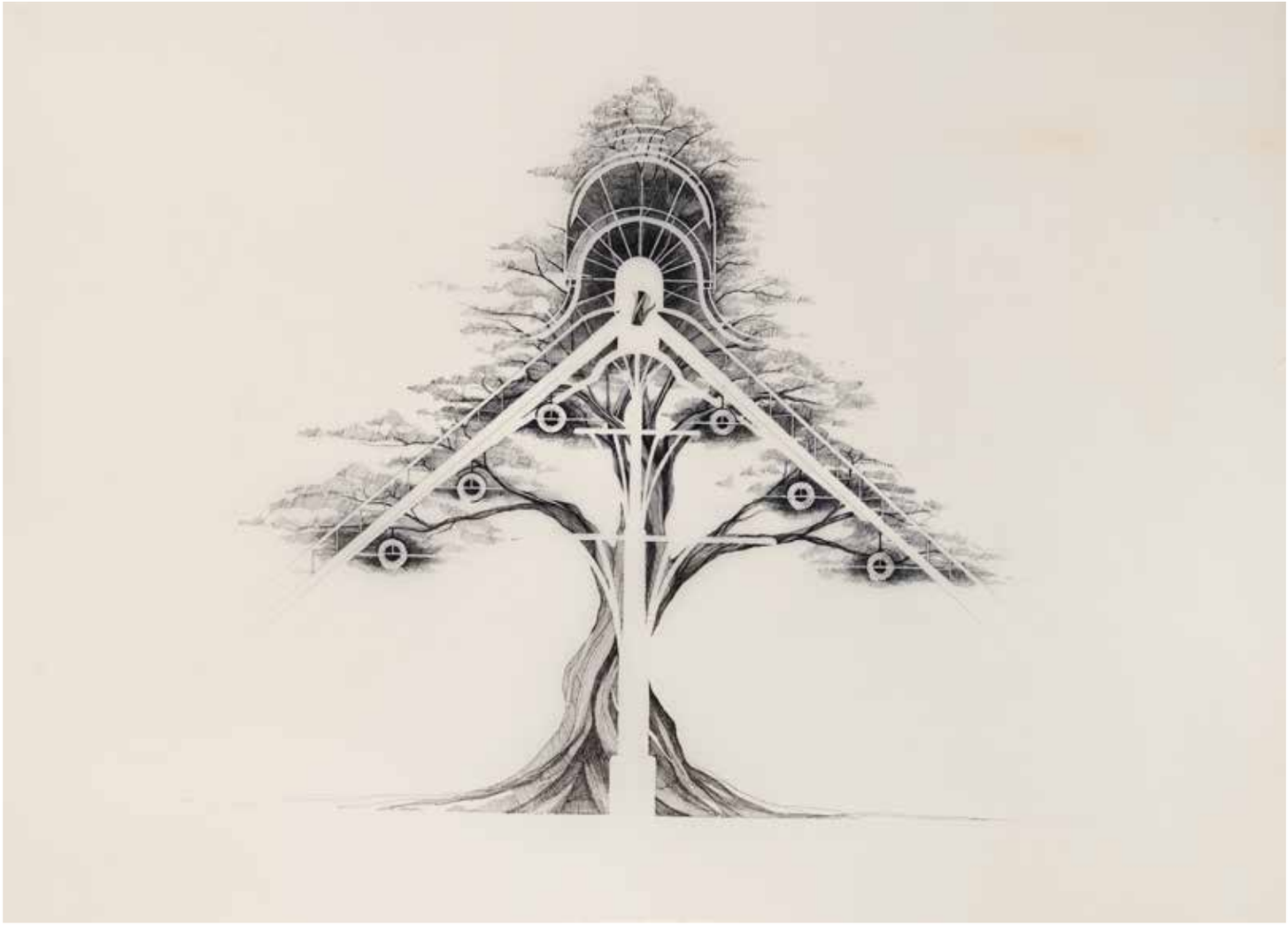
Research for this essay has been made possible through a grant by the Gerda Henkel Stiftung as a collaboration between the author and the Museum Abteiberg, in particular its director Susanne Titz.

1. Interview with Hans Hollein by Susanne Titz and Chantal Jacobi, Mönchengladbach, 31 August 2005, from Michael Stevenson (ed), 'Meeting Johannes Cladders and Hans Hollein', *Art of the Eighties and Seventies* (Frankfurt: Revolver – Archiv für aktuelle Kunst, 2006).
2. From Kristian Sotriffer, *Die Presse*, 9 November 1966, reprinted in Robert Fleck, *Avantgarde in Wien: Die Geschichte der Galerie nächst St Stephan, 1954–1982 Kunst und Kunstbetrieb in Österreich* (Vienna: Löcker-Verlag, 1982), pp 590–91, footnote 84.
3. Monsignor Mauer's theological interest in Joseph Beuys is also explained by Johanna Schwanenberg, art historian and director of the Dommuseum in Vienna, http://oe1.orf.at/programm/350578.
4. In the end the directorship of the Kunstakademie went to the art historian Eduard Trier. The official reason was that Beuys – unlike Trier – was not a civil servant, which at that time was a requirement for such a post. Subsequent efforts in 1966 to overturn the decision, including a letter of support by Monsignor Mauer, were unsuccessful. See Hans Peter Riegel, *Beuys: Die Biographie* (Berlin: Aufbau Verlag, 2013), pp 201, 242–44. It was actually the Aachen event that had first brought Beuys to Hollein's attention, and it was from the famous bloodied photograph that Hollein was able to recognise the artist when he stood at his front door.
5. Johannes Stüttgen, 'Anmerkungen zu Joseph Beuys als Lehrer der Kunstakademie Düsseldorf und die Beuys-Klasse 1961–1972', *Die Geschichte der Kunstakademie Düsseldorf seit 1945* (Berlin: Deutscher Kunstverlag, 2014), p 109. Translation by the author. Before going to Düsseldorf to work with Beuys, Stüttgen had studied theology in Münster under Joseph Ratzinger, the future Pope Benedict XVI.
6. Hollein attested to his own long friendship with Beuys in an interview with the author, Vienna, 4 June 2010.
7. Hans Hollein, interview with the author, *op cit*.
8. See Peter M Bode, 'Ein Star der daheim lange nichts galt: Porträt des Architekten, Plastikers und Designers Hans Hollein', *Art: Das Kunstmagazin* 2 (1986), pp 109–10.
9. Agatha Buslei-Wuppermann, 'Die Baukunst an der Kunstakadmie Düsseldorf seit 1945', *Die Geschichte der Kunstakademie Düsseldorf seit 1945* (Berlin: Deutscher Kunstverlag, 2014), p 385. Translation by the author.
10. Johannes Stüttgen, *op cit*.
11. Heinrich Dattenberg had been the museum's director from 1945–67, immediately preceding Johannes Cladders.
12. Walter Grasskamp, *Johannes Cladders* (Cologne: DuMont, 2004), pp 32–33. Translation by the author.
13. *Ibid*, p 22.
14. *Ibid*, p 36. Translation by the author.
15. *Ibid*, p 36.
16. Hans Peter Riegel, *op cit*, p 270.
17. Walter Grasskamp, *op cit*, pp 38–39, 44.
18. Hans Strelow, 'Joseph Beuys als Zeichner', box-catalogue for Joseph Beuys retrospective, *op cit*.
19. Johannes Cladders, *ibid*. Translation by the author.
20. Johannes Stüttgen, cited in Hans Peter Riegel, *op cit*, p 271. Translation by the author.
21. Hans Strelow, 'Das Bewusstsein wird erweitert: Ausstellung Joseph Beuys in Mönchengladbach', *Rheinische Post*, 22 September 1967. Translation by the author.
22. Walter Grasskamp, *op cit*, pp 38–39.
23. *Rheinische Post*, *op cit*.
24. *Amtliche Mönchengladbacher Mitteilungen*, no 27, 20 September 1967.
25. Monsignor Otto Mauer, 'Einführungsrede zur Ausstellung Beuys', box-catalogue for 'Beleg 1 – Neuerwerbungen 1967–1968' at the Städtisches Museum Mönchengladbach, 29 May – 11 August 1968. Translation by the author.
26. *Rheinische Post*, 20 September 1967.
27. *Ibid*, 30 October 1967.
28. Anonymous posting to museum, archive of Museum Abteiberg Mönchengladbach.
29. Peter Iden, 'Moralist in Grau: Zu den Arbeiten von Joseph Beuys im Städtischen Museum Mönchengladbach', *Frankfurter Rundschau*, 6 October 1967. Translation by the author.
30. Johannes Cladders, 'Die Revolution der "Welt-Anschauung": Dada und der Konstruktivismus', Städtisches Museum Abteiberg Mönchengladbach (Braunschweig: Westermann, 1982), pp 40–45.
31. Horst-Johs Tümmers, 'Kunstbücher – Rehcübtsnuk: von den Nöten eines Kunstbibliothekars', *Museen in Köln* 12, 1967.
32. Susanne Wischermann, *Johannes Cladders: Museumsmann und Künstler* (Frankfurt: Peter Lang, Europäischer Verlag der Wissenschften, 1997), pp 24–25.
33. Werner Krüger, 'Mönchengladbach: Hans Hollein macht den Tod ausstellungsreif: Die Besucher graben nach Flaschen und Ziegeln', *Kölner Stadtanzeiger*, 2 July 1970.
34. Radio Bremen, 30 June 1970.
35. Johannes Cladders, opening speech, *op cit*. Translation by the author.
36. 'Die Welt von 1970 auf dem Totenbett: Der Architekt Hans Hollein stellt in Mönchengladbach aus', *Rheinische Post*, 29 May 1970.
37. The museum's collection contains Kazimir Malevich's drawing, *Bleistiftskizze für ein suprematistisches Gemälde*, which resembles Hollein's architectural drawing for the installation. Johannes Cladders, 'Die Revolution der "Welt-Anschauung"', *op cit*, p 44. The parallels between the drawings of Malevich and those of Hollein have also been pointed out in John Anthony Thwaites's review, 'Tod und Architektur', *Saarbrückener Zeitung*, 26 June 1970.
38. Werner Krüger, 'Mönchengladbach: Hans Hollein macht den Tod ausstellungsreif. Die Besucher graben nach Flaschen und Ziegeln', *Kölner Stadtanzeiger*, 2 July 1970.
39. 'Die Welt von 1970 auf dem Totenbett: Der Architekt Hans Hollein stellt in Mönchengladbach aus', *Rheinische Post*, 29 May 1970.
40. *Westdeutsche Zeitung*, 3 July 1970 and 7 July 1970.
41. Georg Jappe, 'Architektur – psychisch: Hans Hollein in Moenchengladbach', *Frankfurter Allgemeine Zeitung*, 3 July 1970. Translation by the author.
42. *Westdeutsche Zeitung*, 14 July 1970.
43. Hans Hollein, 'Zu Johannes Cladders', *Hommage à Cladders: 14 September 1984* (Redaktion Rolf Hoffmann und Klaus Flemming, Museumsverein Mönchengladbach, 1984), pp 19–20.
44. Hans Hollein, cited in the opening speech, *op cit*. Translation by the author.
45. Johannes Stüttgen, *op cit*, pp 110–11.
46. Hans Peter Riegel, *op cit*, pp 351–54.
47. Compare photographs of digging for 'archaeological treasures' during the exhibition with those taken of the symbolic digging activity at the 'Erster Spätenstich' and then the 'Grundsteinlegung'. Museum Abteiberg Mönchengladbach archive.

Photographs from the installation
and opening of the Hans Hollein exhibition, 1970,
and the ground-breaking ceremony for the new museum, 1977
Photos Ruth Kaiser and Albert Weber
© Museum Abteiberg, Mönchengladbach

Heatwave, or The Megastructure as Eden

Charles Rice



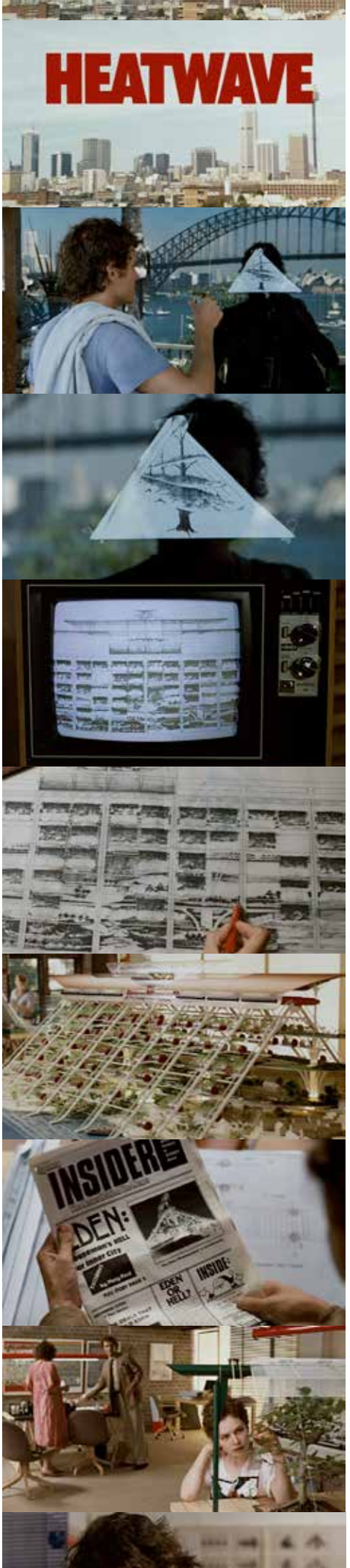
Drawings by Paul Pholeros,
Eden, 1982
Courtesy Paul Pholeros

In Philip Noyce's *Heatwave* everybody sweats, all the time. Released in 1982, the film is a fictionalised account of historical events that played out in Sydney in the mid-1970s, a tangled tale of property development, union and grassroots activism, crime and, true to its title, oppressive heat. At the centre of this scenario is an architectural idea – the megastructure – already considered to be obsolete at the time, but presented here as a sublime Babylon, along with its dastardly 'other', a sub-Sant'Elia barracks. Both share the same name, Eden. The film is the story of the movement from one scheme to the other, of architecture's expulsion from its 'natural' state through its exposure to the murky world of commerce and vice. As these events unfold, everybody waits for the weather to break.

Within its sometimes overplayed drama, the film presents a meditation on when (and under what conditions) an architectural project can be said to make its mark. In 1976 Reyner Banham had consigned the megastructure to history, as a 'dinosaur' of late-modern imaginings of the future, setting out to do what was patently impossible: in his words, to 'make sense of an architecturally incomprehensible condition in the world's cities, to resolve the conflicts between design and spontaneity, the large and the small, the permanent and the transient'. A concept based on adaptability and growth, the megastructure became terribly solid and immovable once built. As a result, Banham tells us, it was 'deserted by the avant-garde', and 'left to the despised Establishment as a conventional method for maximising the returns on urban development'.[1]

Except the megastructure that belatedly materialised in Sydney does not conform to this simple narrative of overreach and obsolescence. Looking at the way it is taken up in *Heatwave* – bound up with the film's formal mechanisms – we can see it in a new light. Rather than being defined in terms of a degraded instrumental value, the megastructure acquires the power to illuminate the machinations of urban development.

Heatwave begins with an image of the violence of urban renewal. In the opening sequence the camera pans across a park bordered by imposing nineteenth-century terrace houses, following a line of cars that pull up to the kerb in front of waiting policemen. The cars disgorge thugs, sledgehammers at the ready. The exterior pan then becomes an interior one, the consistent morphology of terrace facades yielding to the idiosyncrasy of a domestic interior. An elderly resident serves tea – a nostalgic ritual, especially given the heat – to the 'community' gathered around her. Her photographs, lace curtains and patterned wallpaper signify accumulated experience, the kind which constructs placed-ness and belonging in the midst of the fundamentally

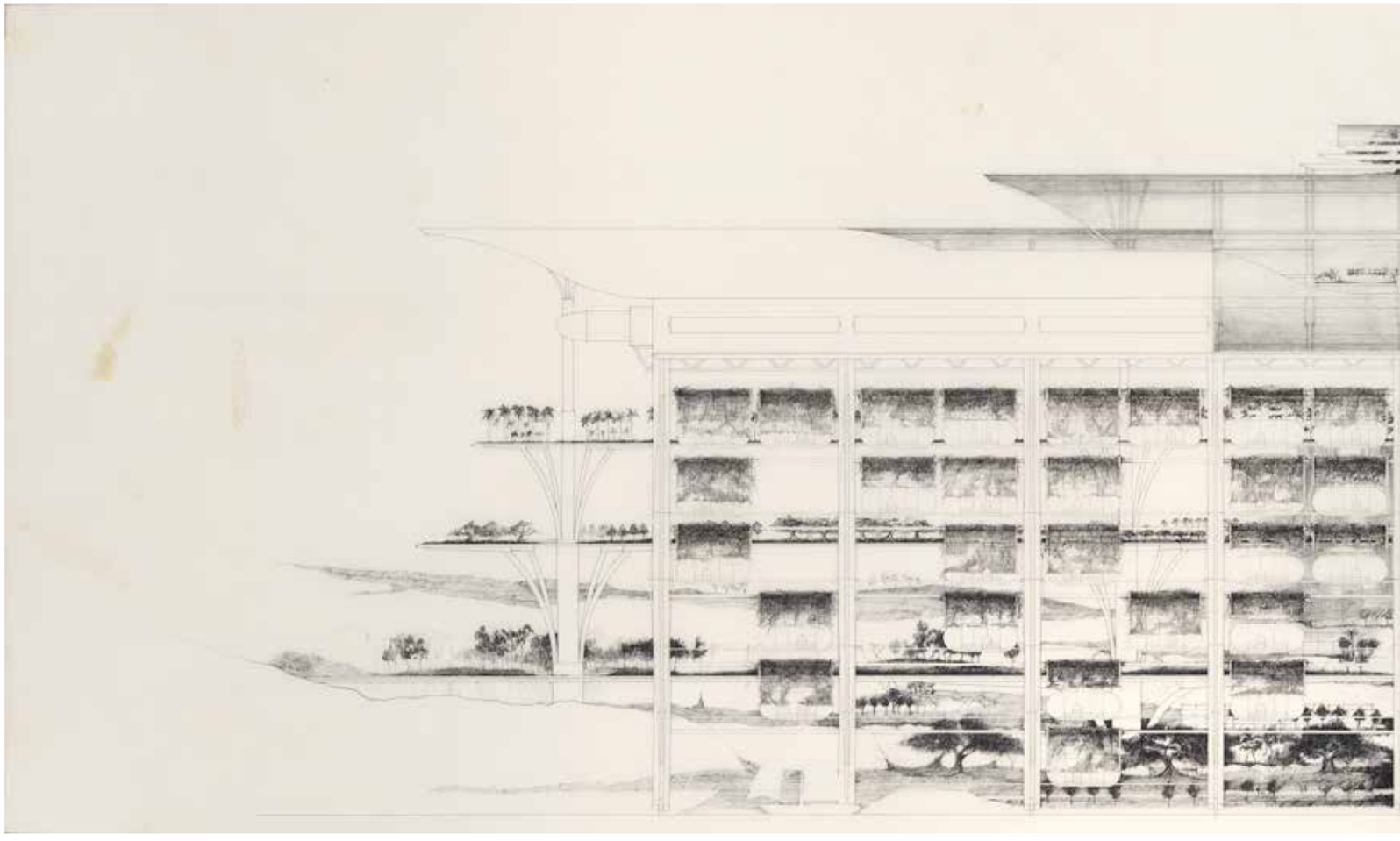


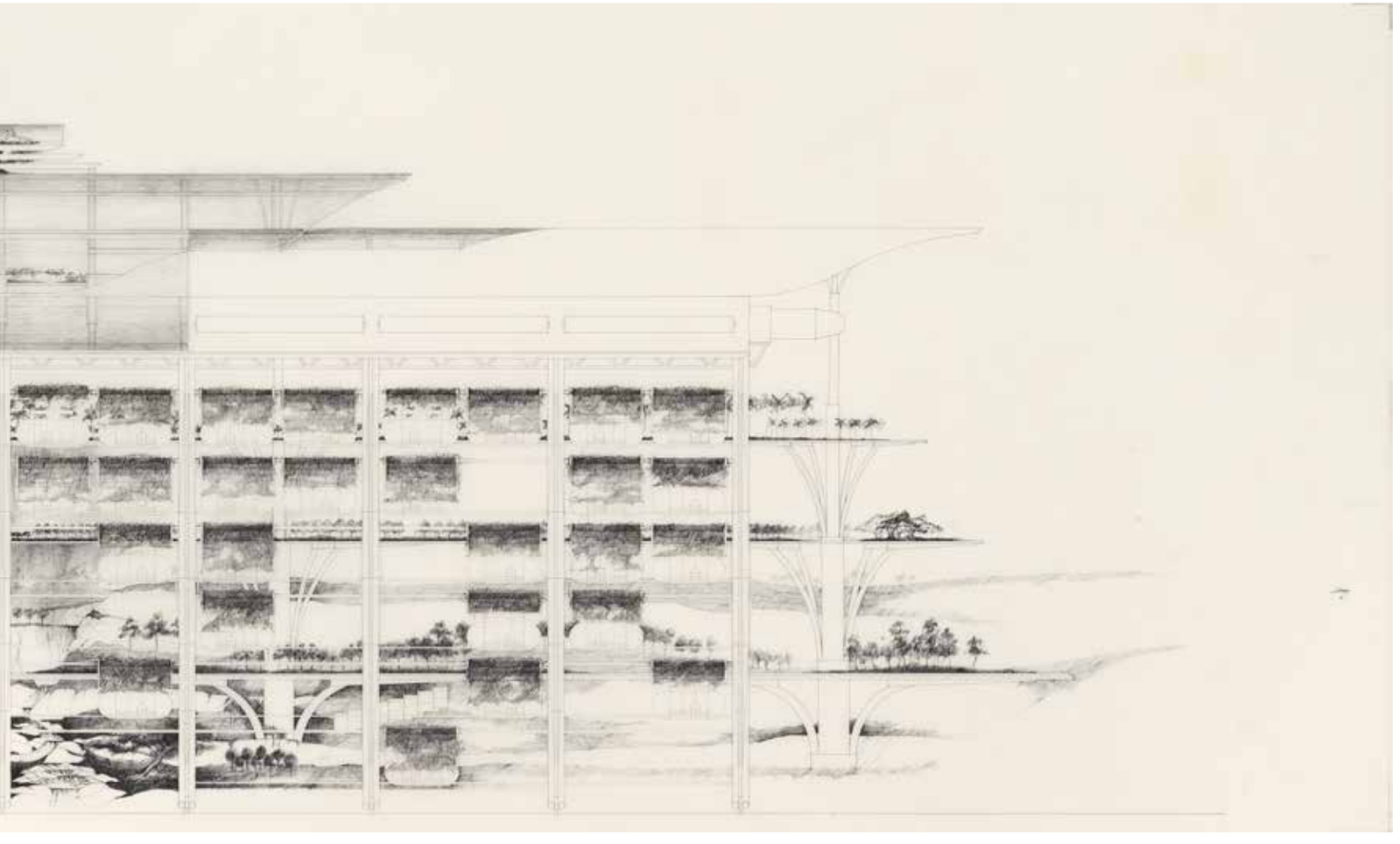
modern domestic apparatus of the terrace house. Threatening shouts from the thugs outside offer a kind of meta-commentary on this fabricated mode of existence: 'You're running out of time, this is your last chance'. And then the interior is broken open, first by projectiles lobbed through the windows, then by an axe through the door. The thugs burst in, and the film's narrative jolts into action.

The next cut is to a very different scene. Two men – the architect Stephen West (played by Richard Moir), accompanied by his solicitor-colleague – jog through a park along the harbour's edge to West's waterfront house. When they get there, his wife reports that the developer has just called with some good news: the site for his visionary project has been cleared, the last of the 'squatters' having been removed. On a deck with a breathtaking view of Sydney harbour they pour champagne and raise a toast to Eden, a sketch of which is conveniently stuck to the window. West turns away from the intimate celebration to contemplate his creation. Reflected in the window is the iconic backdrop of Sydney: the graceful curve of the Harbour Bridge and, framed beneath it, the shell-like forms of the Opera House. Tacked to the window pane, Eden joins this scene. Here it is shown as a germ of an idea, hardly even architectural at this point: a formation of massive trees rises up to support densely vegetated platforms, the barest trace of a triangular canopy encompassing and structuring the 'natural' formation. The project references both the infrastructural elegance of the Harbour Bridge and the iconic impact of the Opera House, while at the same time appearing to be the outcome of structured organic growth, something like a giant three-dimensional espalier.

The magnificence of the idea is literally undercut as we are immediately thrust back into the violence of the assault at the terrace. A young activist, Kate Dean (played by Judy Davis), manages to break free from the melee and escapes across the rooftops, a thug in hot pursuit. West first catches sight of her on the TV news, where the cameras show her dancing precariously along a parapet. The report then cuts to an elevation drawing of Eden, proclaiming it the 'Eighth Wonder of the World'. However, it is clear the attempt to take possession of the site is not going entirely to plan. One terrace owner is still holding out: he tells the reporter that he disapproves of the antics of the squatters, but stands firm in his decision not to sell to the developer. Turning away from the television, West goes back to the vast elevation taped to his drawing board, and begins to mark it up.

The mediated encounter between architect and activist is soon followed by a meeting in real life. When West next goes into his office he finds it occupied by Kate Dean and fellow campaigner Mary Ford, publisher of a local newspaper vociferously opposed to the development. Here,





for the first time, we see Eden as a full-blown scheme, the camera tracking past the massive form of an intricate scale model that stands at the centre of the office. Yet its reality is always presented in terms of its ideal state: Dean plays with a conceptual model of the scheme, a bonsai tree held within a delicate framing structure of metal and wire placed across from West's desk. The encounter is tense, though cordial. Ford informs West that she has asked the Construction Workers' Union to boycott work on the project, and invites him to a community meeting to hear the residents' concerns. Idealistic, West goes along, and is dismayed to hear the union agree to down tools. His response to Dean after the meeting can be seen as a kind of mapping of Banham's narrative of the megastructure's decline. Perhaps once a member of the avant-garde himself, he predicts that the developer will go bankrupt, and that the next one in line will 'squeeze every last cent' out of the project by constructing the concrete boxes Dean abhors.[2]

By the time of the film's release, the events it fictionalised had basically reached this conclusion. In March 1982 the major phase of a controversial development was underway, following a decade of struggle for the life and soul of a 400m stretch of Sydney's Victoria Street, which links two urban extremes – Kings Cross, a district of seedy pubs and strip clubs, and Potts Point, a residential 'village' boasting some of the city's most expensive real estate.[3] The street runs for 1.6km along the top of a sandstone ridge. Going north towards Potts Point, spectacular views of Sydney harbour and the city's central business district open up, while the end of the street delivers the classic picture postcard view – a skyline of skyscrapers ending at the Harbour Bridge, the Opera House nestling in the middle ground at the edge of the Botanic Gardens. The film shows a similar view reflected against the Eden sketch stuck to the architect's window. In reality, too, this was the view that formed the backdrop to the built megastructural project.

The street's topography provided the perfect platform for developer Frank Theeman's Victoria Point housing.[4] In the 1971 scheme by Stephenson & Turner, a podium ran most of the length of Victoria Street's northernmost section, descending at an angle down the ridgeline, with three 45-storey circular towers rising from this base (to take full advantage of the 10:1 plot ratios allowed by the New South Wales State Planning Authority's plan). After this audacious start, the scheme would soon run into trouble, as it collided with an unprecedented upsurge of industrial and grassroots activism concerned – in different, sometimes conflicting ways – with the development of the built and natural environment. This activism was crystallised, most notably, by the 'green bans' put into place by the New South Wales (NSW) branch of the Builders Labourers



Federation (BLF), fictionalised in *Heatwave* as the Construction Workers' Union. One contemporary analysis succinctly defined a green ban as 'the refusal of workers to build socially or environmentally destructive projects'.[5] Unionised workers (which effectively meant all workers) would down tools on banned projects, bringing construction to a standstill. This mode of industrial action began when the leaders of the union's NSW branch sided with a Residents Action Group, and banned its members from working on a controversial scheme to replace common bushland with a residential development in Hunter's Hill in the northwest of Sydney. The idea quickly caught on. By 1974, around 40 green bans were in effect in Sydney, blocking construction projects worth approximately AU$4 billion.[6] The term 'green ban' deftly avoided the connotations of self-interest and political motivation attached to the 'black ban' – a mass refusal to supply services – and positioned the communist-led union at the centre of engaged environmentalism, signalling a strategic 'attempt by the worker to control the environmental impact of his work product'.[7]

The politics of the green ban were not quite as straightforward as this, however. In the first green ban, the red union had answered the call of the Hunter's Hill Residents Action Group – all 'Upper-Middle-Class Morning Tea Matrons', to use union leader Jack Mundey's unreconstructed 1970s phraseology.[8] Political and class divisions were put aside for the sake of a common cause. While what was being protected was natural bushland, an amenity accessible to the privileged residents of Hunter's Hill, the union was concerned to maintain the principle of public access and to ensure those affected had a say in the development. At this time in New South Wales there was no legislative review process for planned developments, which were regulated by state-level laws and authorities. Only landowners directly affected by new developments could raise objections, which were heard by the planning authority. In the absence of an official vehicle for public consultation, the green ban became an extra-legal action which pried open the planning process.[9]

Nonetheless, the green ban was not so much an idealist's rallying cry, as a course of action based on assessing the degree of local opposition to the proposed development. The BLF and affiliated unions would vote on a ban only after being invited to hear residents' concerns – in *Heatwave*, this is the kind of meeting that Mary Ford organised, and West attended. If a development was opposed by a majority of residents and was thought to present adverse social or environmental effects, then the union would agree to impose a ban.

In 1973 Frank Theeman found his Victoria Point project subject to a green ban. He had already entered into protracted negotiations

with the NSW State Planning Authority, which had rejected his initial scheme, baulking at the way their approved plot ratios had been literally concretised. Theeman's second scheme, prepared by well-known Sydney architect Ken Woolley, removed the towers and developed what Banham called the *Terrassenhaus* section, which followed the downward plunge of the Victoria Street ridge more closely. Architect and developer negotiated versions of the scheme with the National Trust, which in the interim had listed the whole of Victoria Street, citing the significance of its streetscape of historic terraces. Woolley's megastructure was adapted to incorporate the existing terraces and the scheme won the approval of the Sydney City Council and the State Planning Authority. Yet the BLF's green ban stayed in place, the union concerned not so much with the concessions to streetscape as with the social implications of displacing the terraces' occupants. While Theeman had found alternative accommodation for many of the residents, a squatter community had moved in to oppose the development. Things took a violent turn late in 1973 when a court order was obtained for their eviction. With police cooperation, Theeman's operatives forcibly removed the squatters, destroying fittings and fixtures, and rendering the dwellings uninhabitable in the process. This is the event that *Heatwave* opens with.

The representation of these events in the film – which is otherwise quite conventional – is given a particular cast by the Eden project itself. In terms of its design ambition, the filmic Eden reaches far beyond Theeman's schemes, which at each juncture were trying to maximise a diminishing set of returns on the land he owned. Despite its massive scale, Eden is almost wilfully lacking in the kind of density that would offer a reasonable profit for the investor. Yet Eden needs to be understood not as a development proposition, however outlandish, but as a filmic object. This is the way Paul Pholeros, the architect hired to design Eden and to arrange the *mise-en-scène* of West's architectural office, conceived of the project.[10] Pholeros and his scheme were chosen by director Philip Noyce from a shortlist. Somewhat bizarrely, Ken Woolley, one of the architects Theeman hired, was also in contention. According to Pholeros, Woolley appears to have thought that the filmic brief would best be fulfilled by constructionally plausible images. Or perhaps he was trying to achieve fictionally the success that had eluded him in reality.

The developer character in *Heatwave*, Peter Houseman, refers to Eden as the 'apple tree', the tempting and corrupting object, but the tree Eden most resembles is the Moreton Bay Fig (the native *ficus macrophylla*), its structure emerging through the twists and buttresses of its trunk and root system. This tree has an unusual way of germinating. A seed lodged within an existing tree sends roots down to the ground. These take hold, bind around the host tree and, serpent-like, eventually strangle it, the emergent fig's own structure and form taking shape from this action.



And here we have the beautifully insidious nature of West's – or, rather Pholeros' – Eden. Shown in a section in West's office, a kind of *ur*-tree sits atop the structure, preserved as if from extinction under a transparent, curving canopy. Compared with the conceptual drawing we first see reflected against Sydney harbour's icons, the tree-like structure in this section has become more definitively architectural. Columns rise and spread into branches that support habitable platforms; living pods, each arranged around its own mature tree, hang from the structure like fruit, shaded by wing-like fins overgrown with ivy. Emblematic trees then suffuse all the densely planted levels of the structure. In straddling the level change of an escarpment, the scheme doesn't so much clear or replace its site as envelop it, multiplying its habitable levels across the series of densely-planted platforms. Existing buildings nestle underneath the vast structure, seemingly undisturbed, the slenderness of the limbs lending the whole design an elegant openness.

The massive structure would easily sit within a metabolist's diorama of regionally scaled urban infrastructure, and its triangular profile nods to any number of projects exhibiting the *Terrassenhaus* section, including Theeman's Victoria Point schemes. The pods appear as slices of the snaking escalators of the Centre Pompidou, hanging below an arcade-like roof structure finished in an elaborate, postmodern, layered capping particularly reminiscent of the detailing of steel structures in Australia in the early 1980s. Yet Pholeros' meticulous pencil and ink drawings are not simply referential. Their particular quality comes from the way in which they imagine a world, much in the way film does, as a totality that connects the smallest detail to the entirety of the structure.

The construction of the model of Eden was a major undertaking, requiring half a dozen modelmakers to work round the clock for two months. Measuring 2.5m × 1.2m – Noyce had doubled its size on the first day of its construction – the completed model turned out to be too big to fit through the doorway in the building in which it was made (the classic moment of scale misapprehension) and had to be craned out through a window. On set, it formed the centrepiece of the architectural office, and was the fulcrum around which the whole film turned, its importance reflected in the fact it was insured for half a million dollars.

One of Pholeros' intentions was to have the camera travel inside and through the model. Although this was not technically possible, the openness of the structure, both literal and

conceptual, was communicated through the way in which it became part of the *mise-en-scène*. In all the scenes set in the architectural office, different developmental sketches can be glimpsed in the mid- and background, while large-scale photographs of the model, taken by the celebrated Australian photographer Max Dupain, adorn the walls of the developer's suite. Pholeros made many different sketches and drawings of the project to allow Noyce to choose which ones he wanted in particular scenes. In this way the scheme was not scaled to an architectural reality, but to a *mise-en-scène* signifying architectural production.

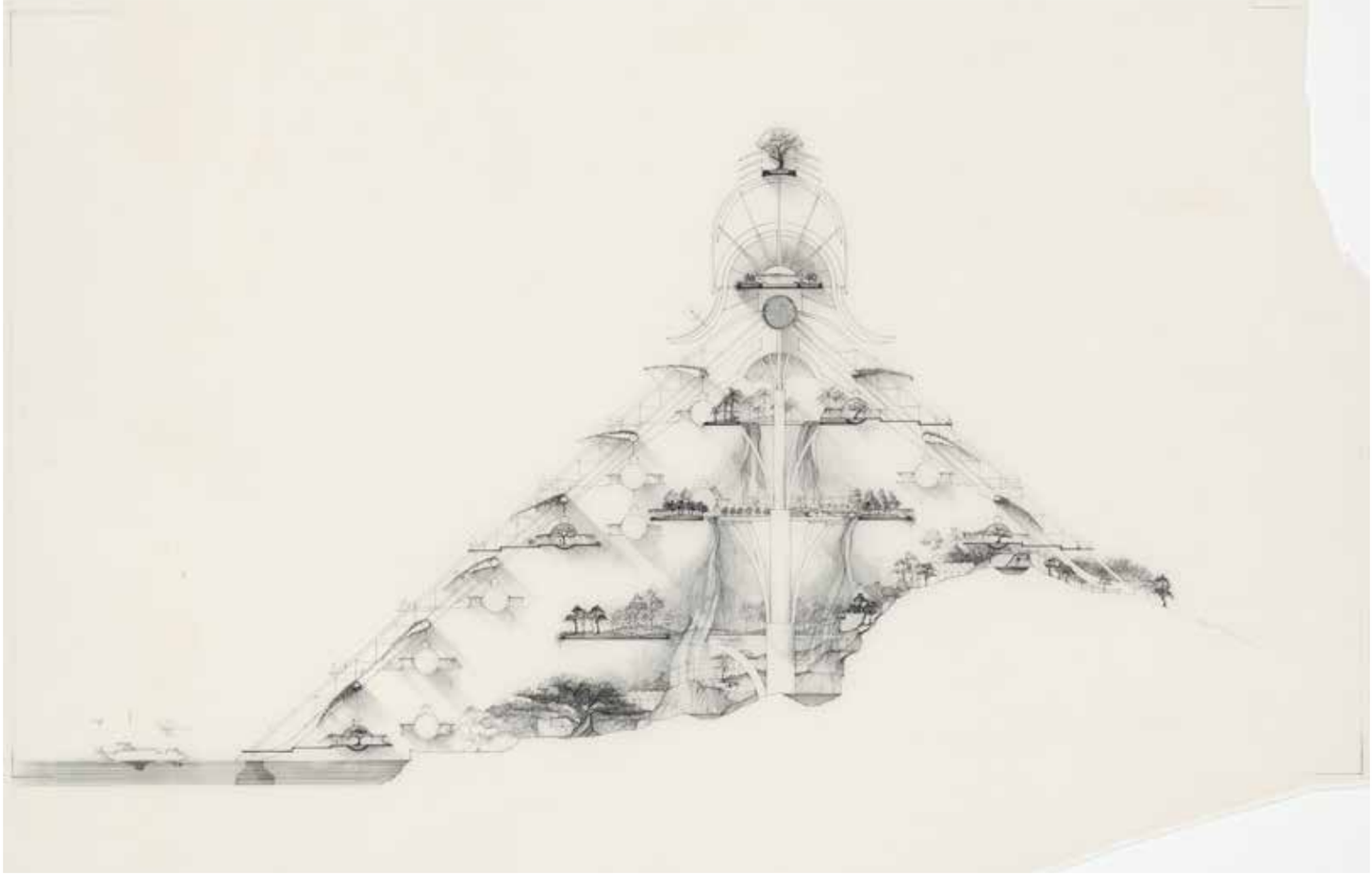
In being shown in – and as – this scene of its production, the scheme is also undone. West first contemplates revisions when he sees the squatters being evicted, and as more pressure is placed on the scheme by the union ban and the efforts to save the terraces, it becomes compromised even further. West continually goes back to the drawing board and as the narrative wades deeper into the mire – the project's tenuous financing, the disappearance of the newspaper publisher Mary Ford, and an arson attack on the last terraces – Eden's 'other' emerges in a new project designed to increase the density on the site. This scheme represents the 'ideas' of Houseman's solicitor, who, it turns out, has been manoeuvring to transfer ownership of the site to Dick Molnar, a rival developer linked with the shady underworld of Kings Cross. As West gets to know Kate Dean rather intimately, he begins to delve into these dealings himself, but does not get involved, his obsession with his Eden project robbing him of a sense of agency. He has a showdown with his wife – who has learned of his affair with Dean, and seems to have her own thing going on with the solicitor. Returning to his office that evening, he positions his drafting table opposite the Eden model, and starts the project all over again. The montage shows him arraying the initial conceptual sketches, and we see the scheme brought back to its foundational idea in the structure of a tree. This then forms the basis for a reimagining of the scheme – as if by sheer architectural will he could overcome all the impediments thrown in the way of his dream. For it is a dream, as the montage of this sequence captures, cross-fading between various moments of feverish activity – sketches are pinned up and laid over the model, parts of which are then removed and remodelled according to new structural ideas. Increasingly frustrated and exhausted, West reworks the scheme until the clichéd moment when he upends his drafting table. At the point of its narrative impossibility we see the project worked through in full, emerging as if for the first time.

In late 1974, a year after the Victoria Street evictions, and with the gutted terraces remaining cordoned off, Theeman would go to a third architect, Neville Gruzman, who was part of an



advisory group put together by the BLF. Gruzman's scheme, a stepping megastructure, much the same as Woolley's, was presented to what was now a myriad of authorities and advisory groups, but two larger political shifts served to bury this scheme as well. The BLF was going through its own internal turmoil: the antics of the NSW branch had irked the union's federal council to the extent that the branch was dissolved in 1975. The federal secretary, Norm Gallagher, was keen to get construction projects moving in the state and agreed to lift the green ban on Theeman's project. But by this time the planning landscape had changed again, thanks to federal intervention in the adjacent district of Woolloomooloo, where large-scale redevelopment – private, state and federal government projects – had, like Theeman's project, been halted by green bans. The new Labor government, under Gough Whitlam, sought to establish the concept of a National Estate, 'to keep the beauty we have been given and keep out the ugliness we can only make for ourselves'.[11] To do this it expanded its powers over the conservation of the built and natural heritage, which until that time had been state-level concerns.[12] Embracing the Woolloomooloo plan as something of a *cause célèbre*, the federal government was able to force a compromise between all parties by providing subsidies to the state government to develop low and moderate income housing in the area. Gruzman's scheme for Theeman did not fit into this new scenario, as defined by an interim development order. Theeman went to yet another firm, Rommel Moorcroft, who produced a compliant scheme retaining the original terrace houses, with a plot ratio of 4.1, to be phased in five stages of construction. This is the scheme which exists today, yet Theeman, like Houseman in the film, would not personally see it through to completion. It has none of the architectural interest of the Gruzman or Woolley schemes, and represents the banal, developer-led end of the megastructure, meriting the name only by virtue of its sheer size.

The narrative of *Heatwave* concludes on New Year's Eve with the arrival of a 'southerly buster'. Revellers in Kings Cross are drenched by a thunderstorm, as cooling winds blow through various interiors scattered with the detritus of Eden. The camera makes a final pass through the architect's office, along the Eden model, then goes in search of its more compliant other, rendered as a celebratory cake for a party at a Kings Cross nightclub. Slumped into the cake is the usurper developer, Molnar, shot by his lover – a stripper in one of his clubs, and the daughter of the terraces' last owner, who died in the arson attack. West visits the building site the next morning in the torrential rain, only to see the construction hoarding advertising the other Eden. From the depths of the site emerges another riddle, as a drain overflows and a body



– one we believe to be Mary Ford – is pushed up against the grating.

The film's somewhat melodramatic conclusion substitutes the drama of shady dealings for the less photogenic complexity of the redevelopment process. In particular, it plays on the events surrounding the disappearance of the local newspaper publisher and campaigner Juanita Nielsen. The characters of Kate Dean and Mary Ford represent different aspects of Nielsen, whose disappearance and presumed death remains one of Sydney's most notorious crimes, still unsolved. Nielsen had entered a Kings Cross strip club in July 1975, ostensibly to discuss advertising in her newspaper, and was never seen again. The subsequent investigation and reporting revealed (and revelled in) the many layers of the Kings Cross underworld, and suggested links to Theeman and his efforts to develop the Victoria Point scheme.[13]

In its generic denouement *Heatwave* is aligned with a cluster of conspiracy thrillers from the 1970s and 1980s – a genre that is given its definitive reading in Fredric Jameson's *The Geopolitical Aesthetic* (1992). Drawing on the work of the urban theorist Kevin Lynch, Jameson deploys the concept of cognitive mapping to analyse the filmic desire to make the narrative of specific events express something like 'the very secret of the world system itself'.[14] This desire is, of course, set against the impossibility of its realisation, the filmic codes of narrative, montage and *mise-en-scène* disclosing nothing except their scaffolding around the revelation that will never come. Jameson points to the way these films attempt to make visible the apparatus of 'the world system itself' in technologies of communication: telephones in *All the President's Men* (Alan J Pakula, 1976), surveillance devices in *The Conversation* (Francis Ford Coppola, 1974) and video technology in *Videodrome* (David Cronenberg, 1983).

And yet in *Heatwave*, it is a building that stands in for the communication network scaffolded around a totality glimpsed in the urban ground of the city – economic development, labour relations and political manoeuvring all present as the shadowy outline of the 'world system itself'. The 'operator' of that building, the architect Stephen West, is revealed to be no more in control of his art than, say, the professional eavesdropper Harry Caul in *The Conversation*.[15] In that film the bugger gets bugged, whereas in *Heatwave* West's scheme is replaced by one proffered by none other than a solicitor, the agent capable of transferring land, and therefore investment potential, between developers. Both of these schemes are Eden, and in each, 'architecture' falls away as 'nature' becomes the focus of both well-meaning preservation, where nature is recreated as in a garden, and the maximisation of profit, where nature is simply exploited as the amenity of a view.

But to signify in this way, the megastructure, this 'already dead' architectural genre, had to stand in for 'architecture' in the early 1980s, performing for the camera as an outmoded mechanism, a technology unable to grasp its constitutive role, which was – to reprise Banham – to 'make sense of an architecturally incomprehensible condition in the world's cities, to resolve the conflicts between design and spontaneity, the large and the small, the permanent and the transient'. It fulfils its fateful architectural mission as filmic object, communicating the message of its own impossibility in the only appropriate genre: the conspiracy.

Eden had a final role to play for an architectural community that has never quite grasped how architecture functions as communication device. To coincide with *Heatwave's* cinematic release, *Architecture Australia* published a double-page feature simply titled 'Eden'. It was ostensibly an interview with the architect Stephen West, illustrated with an image of the Eden model and a photograph showing West at his desk, surrounded by drawings (actually a still from the sequence showing his creative breakdown). The interview begins by suggesting that the project, now under construction, has perhaps gone unnoticed by Sydneysiders because of the distracting heat or the end of year 'hustle and bustle'. West then introduces his design with a typically architectural mix of naïve enthusiasm and artistic seriousness. He emphasises its conceptual form – a tree – and the way this underpins the form of each dwelling and the structure as a whole, and describes how the landscape is integrated into the structure, so as to preserve existing dwellings on the site. West is upbeat even about the setbacks, which consist of 'finding enough plant material, ways of fabricating 12m-diameter columns, and union problems; plus a few thousand minor ones'.[16] Perhaps our filmic architect's positive attitude was inspired by the possibility of reviving the project through making it public in the Australian Institute of Architect's journal of record. His enthusiasm was certainly infectious. The phone rang off the hook at the publisher's offices, contractors and manufacturers desperate to know how they could get a piece of the action.[17]

1. Reyner Banham, *Megastructure: Urban Futures of the Recent Past* (London: Thames and Hudson, 1976), p 10. In Sydney around this time Australian architectural writer Philip Drew's book *Third Generation: The Changing Meaning of Architecture* (London: Pall Mall Press, 1972) would have been a more widely-known source for an understanding of recent architecture. Chiming with Banham's account of the megastructure, Drew writes: 'The task of the third generation was to include the realities of the situation with all their contradictions and confusions within the programme', p 28.
2. Noyce based Stephen West on charismatic Sydney architect Richard Leplastrier, who as a recent graduate worked for Jørn Utzon on the Sydney Opera House, and for Kenzo Tange in Japan, before becoming well known as a sole practitioner designing hand-crafted 'place-sensitive' houses in natural, secluded settings.
3. Roseanne Robertson, 'Controversial Victoria St Site Goes Ahead Again', *Sydney Morning Herald*, 23 March 1982, p 12.
4. On the events surrounding the development of the Victoria Point project I am following Vincent Smith, 'The Battle of Victoria St', *Architecture Australia* 65, 4 (1976), pp 36–45.
5. Richard Roddewig, *Green Bans: The Birth of Australian Environmental Politics* (Sydney: Hale & Iremonger, 1978), p IX. Roddewig's book, written as a visiting American legal scholar around the time of the bans, remains the most convincing and interesting account, mainly because it situates the green bans in a comparative discussion of American and UK legal frameworks and practices. See also Meredith Burgmann and Verity Burgmann, *Green Bans, Red Union: Environmental Activism and the New South Wales Builders Labourers' Federation* (Sydney: UNSW Press, 1998); Marion Hardman and Peter Manning, *Green Bans: The Story of an Australian Phenomenon* (Melbourne: Australian Conservation Foundation, 1975).
6. Richard Roddewig, *Green Bans*, *op cit*, p 30. The term 'green ban' was coined by BLF union leader Jack Mundey.
7. *Ibid*, p 66.
8. *Ibid*, p 11.
9. *Ibid*, p 68. An independent judicial body, the NSW Land and Environment Court, was established in 1980. Its first chief justice, Jim McClelland, commented that its purpose 'was to draw the line somewhere between those who wanted high-rise buildings in the Botanic Gardens and those who wanted to turn Pitt Street into a rainforest'. Quoted in 'Attorney General's Opening Speech for the Australasian Conference of Planning and Environment Courts and Tribunals (ACPECT) Conference 2010', online at http://www.lec.justice.nsw.gov.au/Documents/ags_opening_speech_acpect.pdf.
10. Details about the design of the Eden project and its role in the film were discussed in an interview with Paul Pholeros, Sydney, 3 June 2015.
11. Jenny Hocking, *Gough Whitlam: His Time* (Carlton: Miegunyah Press, 2012), p 55.
12. Richard Roddewig, *Green Bans*, *op cit*, p 72ff.
13. See the sensationalist account in Peter Rees, *Killing Juanita: A True Story of Murder and Corruption* (Sydney: Allen & Unwin, 2004).
14. Fredric Jameson, *The Geopolitical Aesthetic: Cinema and Space in the World System* (London: BFI, 1992), p 22. Cognitive mapping has been given a refreshed reading in Alberto Toscano and Jeff Kinkle, *Cartographies of the Absolute* (London: Zero Books, 2015). See especially chapter 3, 'Werewolf Hunger (New York City, 1970s)', pp 105–36. For a critique of the cognitive map as a way of attempting to understand the city and its development as a totality, see Rosalyn Deutsche, *Evictions: Art and Spatial Politics* (Cambridge, MA: MIT Press, 1996), pp 198–99.
15. See Charles Rice, 'Urban Interiority: Listening in to Coppola's *The Conversation*', in Bridget Elliot (ed), *Breaking and Entering: The Contemporary House Cut, Spliced and Haunted* (Montreal: McGill Queens University Press, 2015), pp 33–45.
16. Paul Pholeros and Steve Lesiuk, 'Eden', *Architecture Australia* 71, 3 (1982), pp 42–43.
17. Interview with Paul Pholeros, *op cit*.

Movie stills from *Heatwave*, directed by Philip Noyce, 1982
© New Line Cinema

Peripheral Odyssey

Chris Blencowe
& Judith Levine



László Moholy-Nagy filming on Aegina
Photo Carl Hubacher
© gta Archives / ETH Zurich, Carl Hubacher

On 25 July I'm driving to Marseille, a seat is reserved for you. You'll be making a film about the congress and about Greece. The film will be paid for by us by way of raw material. It is most likely that any travel expenses you incur during the trip will be covered, just that at the moment I can't commit on this conclusively. Léger and Arp will also travel with us. Anyway I've added your name to the list. So make up your mind. Please let me know![1]

There's a certain exigent Swissness to Sigfried Giedion's invitation to László Moholy-Nagy to join the fourth meeting of CIAM, issued just two weeks before the event. But then some urgent improvisation had been called for, after plans to hold the congress in Moscow had been scuppered at the eleventh hour. It was Marcel Breuer, in an emergency meeting in Le Corbusier's rue de Sèvres studio in April, who had suggested holding the congress on a ship.[2] The idea had immediate appeal, not simply for the prospect of a Mediterranean voyage, but for the distance it afforded from the turbulent politics of mainland Europe. Le Corbusier put in a call to Christian Zervos, the Greek expatriate editor of *Cahiers d'Art*, who in turn conjured up Heracles Ioannides, shipping agent and organiser of Mediterranean cruises for the well-to-do on *Patris II.* The dates of the voyage – 29 July to 13 August 1933 – were confirmed the next day.

Last-minute addition or not, Moholy was happy to go along. '*Mitfahre mit freude*' he wired from Berlin on 12 July 1933, the day after receiving Giedion's letter. Opportunities for creative work were otherwise thin on the ground. After resigning, alongside Gropius, from the Bauhaus in 1928 in protest at Hannes Meyer's appointment as director, he had shifted his focus from painting to photography and film, but the tenor of his work was out of kilter with the times. Moholy's first short, *Berlin Still-Life* (1926), was a *cinéma-vérité* portrait of the city. His second, from 1929, was a ten-and-a-half minute portrait of *Marseilles, Old Port*, featuring shots of the towering *Pont Transbordeur* juxtaposed with evidently relished scenes of low street-life: piles of garbage, a child defecating, cats and dogs foraging, a Roma caravan with performing bear and dilapidated buildings elaborately shored up against collapse. The Roma had been a romantic element in Moholy's Hungarian childhood,





Giedion, Steiger, Roth and van Eesteren, and Le Corbusier (*below*) on board *Afros*
Photos László Moholy-Nagy
© gta Archives / ETH Zurich, Moholy-Nagy

and they appear again in the last film he made before the congress, *Gross-Stadt Zigeuner* (1932), an attempt to record the vanishing – soon to be obliterated – way of life of urban gypsies on the outskirts of Berlin. The attraction was not entirely mutual. One of the Roma, objecting to the presence of an alien in their midst, took a potshot at Moholy from the roof of his wagon. To make matters worse, as his wife Sibyl recalled, 'The film never passed the censor. The first objection was that it had been made by a foreigner who did not belong to the German Film Chamber … it was rejected as showing German social conditions in an unfavourable light… Moholy buried his last hope for creative work in Germany. His world became very abstract.'[3]

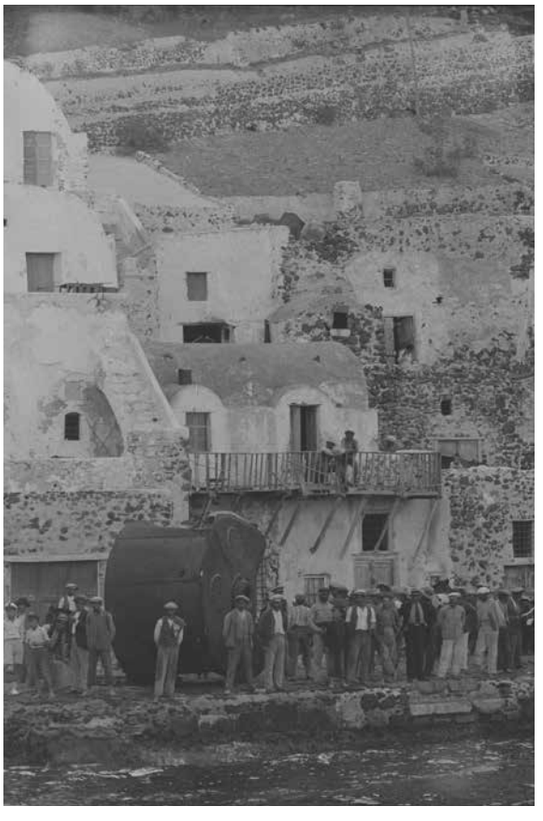
Moholy's 29-minute, 16mm silent film of the 1933 voyage opens with a motif familiar from his earlier work – the transporter bridge in Marseilles, viewed as *Patris II* pulls out of the harbour. The subject matter, however, is immediately sunnier. Filmed entirely on a Zeiss Kinamo (the company's first ever hand-held movie camera), *Architects' Congress* flickers before the viewer's gaze, offering impressions of a convivial group of young men and women on board the ship and at large in the Greek landscape. As the architect and historian Jos Bosman puts it in a publication marking the centenary of Le Corbusier's birth, the film gives us 'portraits of the congressists as slightly clumsy actors in an atmosphere of imperturbable sun… Good humour was the order of the day – laughter, alcohol, games.'[4]

With only a handful of prints in existence, Moholy's film acquired near legendary status, being held up as the record of an event that prompted a change of sensibility in Le Corbusier and a change of direction in CIAM. Yorgos Simeoforidis and Yorgos Tzirtzilakis – contributors to the same publication as Bosman – insist that it was the proximity of certain members of the Greek avant-garde that enabled Le Corbusier to arrive at a vital 'rapport between modern and archaic spirit, human scale and landscape'.[5] A casual viewing of the film does not immediately substantiate this claim, for the figure we see here seems less concerned with spiritual matters and more like a politician on the campaign trail, earnestly addressing assemblies on board *Patris II*, button-holing small groups to

pre-empt committee deliberations, chatting to his cronies or simply extracting one last desperate drag from the minuscule cigarette butt that seems permanently clamped between his teeth.[6]



But in one fragment of the film we find perhaps a different perspective on the event. Some 21 minutes into the action, a murky night-shot of a ghostly Parthenon floodlit for the congress gives way to the intertitle 'Cruise to the Greek Islands' and the screen suddenly fills with light. The bleached screen signals a change of mode. Moholy focuses on the vessel's wake streaming away from us: one of the longer shots in what turns out to be a film-within-a-film – four minutes and 28 seconds devoted to a four-day island cruise. On board that vessel were Le Corbusier and Giedion and the leading lights of CIAM.[7] The voyage they were embarking on may have been peripheral to the main business of the congress, but it provided an opportunity to concentrate minds.



Any romantic notion of a Greek yacht gliding serenely through the azure waters of the Aegean should immediately be discarded, for the vessel that departed Piraeus on the afternoon of Saturday 5 August 1933 has an unusually tall smokestack and does not so much glide as chug. In a letter to the seven-months pregnant Sibyl Moholy-Nagy, back in Berlin minding the studio, Moholy called it 'a small nut shell'.[8] Giedion referred to it rather contemptuously as an 'ex-English coal barge'. Giedion was only half-right. The boat had started life around 1911 as a Norwegian whaler, operating in both the Arctic and Antarctic oceans. During the First World War it was then converted into a French gunboat, based off the coast of Brittany. Sold again in peacetime, it became a bunkering tender, delivering steam coal to the port of Piraeus. Finally, in 1928, it was purchased by Andreas Embirikos – shipowner's son, surrealist poet, photographer and later Greece's first psychoanalyst – who converted it into a yacht, albeit a clumsy-looking one, with the residues of its working past still very much in evidence. And for sure, the vessel was too small to accommodate the 30 or so men and women on board in any degree of comfort. Moholy tells Sibyl that 'six people can sleep in the cabin, all of the others must sleep on deck, or in the salon (three people)'. He adds that it is 'manned by a captain, helmsman and several sailors, and 25 chosen guests of the congress, mostly French, who like to keep to themselves, and several Swiss, Dutch and Greeks, plus me'. If Moholy was not entirely sure what the members of this motley group had in common, he seems to have sensed that he was 'the outsider'.

Docking at Seriphos, and Santorini seen from *Afros* (*below*)
Photos Carl Hubacher
© gta Archives / ETH Zurich, Carl Hubacher

Cornelis van Eesteren, CIAM cofounder and chief planner for Amsterdam, was naturally on board. Among the French, 'who liked to keep to themselves', were the painters Fernand Léger and Amédée Ozenfant, the art critic Maurice Raynal and two young poets, Gaston Bonheur and Pierre Guéguen (much later, Bonheur would become editor of *Paris Match*, while Guéguen would introduce Le Corbusier to the wild rocky landscape of his native Brittany). Another guest with a particular connection to Le Corbusier was his advisor on all matters of urbanism, Pierre Winter, a fellow-member of Georges Valois' short-lived Faisceau party (1925–28), whose agenda was based on hygiene, physical fitness and racial purity.[9] Winter was perhaps an uncomfortable addition – Giedion would refer to him only as 'a well-known French physician'. Also present was Le Corbusier's older brother, the composer Albert Jeanneret, who had written the score for *Le Voyage aux Cyclades*, shot two years previously, when the cinematographer Eli Lotar, poet Roger Vitrac and director Jacques Brunius joined Christian Zervos on a cruise of the islands.[10] Portraying a surreal world on the periphery of Europe, the film was screened only a few times in Paris (despite Le Corbusier's best promotional efforts) and has since disappeared without trace.

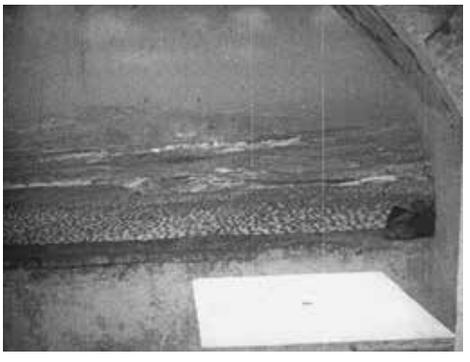
Completing the Greek expatriate contingent, also with connections to Christian Zervos, were Le Corbusier's close friend, the painter Nikos Hadjikyriakos-Ghikas (Ghika), patron–publisher Tériade (Stratis Eleftheriades), the shipping agent Heracles Ioannides, the US-based architect Stamo Papadakis, who had played a major part in organising the events in Athens, and the sculptor Michael Tombros, a friend of Marinetti, whose 'scandalous' monument to Rupert Brooke on the island of Skyros had also featured in the Lotar-Vitrac-Brunius film.

As co-founder of CIAM, with Le Corbusier, and the organisation's permanent secretary, Giedion had also ensured that the 'chosen guests' included the most promising members of the younger generation of Swiss artists and architects, among

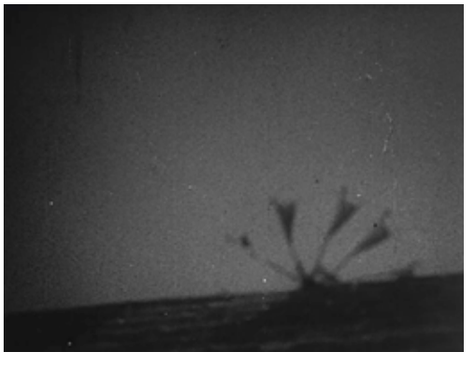










Stills from *Architects' Congress*,
filmed by László Moholy-Nagy, 1933
© 2007 The Moholy-Nagy Foundation, Inc

them the surrealist painter Kurt Seligmann, the architects Alfred Roth, Werner Moser, and Rudolf Steiger, who with his partner, the engineer–architect Carlo Hubacher, had been responsible for the revolutionary Zett-Haus in the centre of Zurich, a multi-functional building notable for its rooftop Roxy cinema, the roof of which slid open on fine evenings. And it is Hubacher who gives us yet another perspective on the voyage of August 1933 through the bequest of his images, now catalogued in the gta archives in Zurich. While Giedion took relatively few photographs with a medium-format folding camera,[11] Hubacher came equipped with a 35mm Leica, preferred eye-level tool of the photo-journalist, and took over 100 pictures, among which we find shots of Moholy both behind his viewfinder and, uncharacteristically, sound asleep on deck (an image that Hubacher orientated vertically).



László Moholy-Nagy asleep on board *Afros*
Photo Carl Hubacher
© gta Archives / ETH Zurich, Carl Hubacher

Eluding Moholy's sketchy categories were the Romanian architect and editor of *L'Architecture Vivante*, Jean Badovici, the young Catalan architect and co-founder of the GATEPAC group, Josep Lluís Sert, and the Austrian philosopher of science, sociologist and political economist Otto Neurath. A member of the anti-metaphysical Vienna Circle, Neurath was also the inventor of the universal *Isotype* graphic language that CIAM adopted to standardise its presentation of urban analyses, responding to Giedion's call for a common visual language, 'One of the great defects of our contemporary civilisation is that we have forfeited that "common language" which bound the leading spirits of all branches of art and science so closely together in previous ages. Then each knew what the others were talking about, whereas today the outstanding personalities in these fields no longer understand one another.'[12] A big man in every sense, Neurath signed his letters with a symbol of an elephant and was also renowned for his boundless 'resources of energy and capacity for enjoying life'.[13]

Finally, a number of wives and partners of congress participants also came along, many of whom – notably Carola Welcker-Giedion, Yvonne Zervos and Antigone Kotzia (Ghika's wife) – were writers and artists in their own right. Also present was Embirikos' companion, the Belgian-born Marguerite Antoinette Jeanne Marie Ghislaine Cleenewerck de Crayencour, who would become a successful novelist under her anagrammatic *nom de plume*, Marguerite Yourcenar. Of course, if there had been a category of those on board who would achieve success after inventing their own names, this would have also included Le Corbusier and Moholy.

The first leg of the voyage was the short 17-mile hop from Piraeus to the island of Aegina, part of the Saronic archipelago. If Aegina was Zervos' choice of destination then it was an inspired one, for its olive and pistachio groves, pine forests, rugged mountain slopes and protected valleys seemed to offer a microcosm of the ancient Attic landscape and the perfect introduction to the poetic reality of Greece (as distinct from its political reality, for the country was by then already launched on a cycle of military coups and dictatorships). But there was also something more, because on a hilltop site occupied since Mycenaean times there stood the Temple of Aphaia, in mythology 'the vanishing one'. Although built at the dawn of the classical era, the temple, seen in a certain light, appears uncannily modern – a correspondence that Zervos seems to have been keen to emphasise (a year later, in the introduction to *L'Art en Grèce*, he would develop the topic more fully, drawing parallels between the archaic and the modern sensibility, with the temple playing a vital didactic role).

While Moholy filmed, Giedion and Hubacher photographed the temple's Doric columns. Le Corbusier, in contrast, preferred to sketch, having at this stage taken a principled stand against photography: 'I bought myself a little Kodak camera, which Kodak sold for six francs in order to sell film to those idiots who use it, and I was one of them, and I noticed that by entrusting my emotions to a lens I was forgetting to have them pass by me – which was serious. So I abandoned the Kodak and picked up my pencil, and ever since then I have always drawn everything, wherever I am.'[14]

Perhaps the lone figure we see in Moholy's film is merely contemplating how best to render these austere but slender columns that have none of the bulging muscularity of the Parthenon. Doric temples are notoriously difficult to capture in this way: the columns – their proportion and spacing – defy the pencil. He is facing the north elevation, but it is the east elevation that is shown in the two sketches that survive in his *Carnet B5*, which have a hurried quality – perhaps a consequence of the fading light and the fact that the cruise party had to get back on board the ship and continue their journey south, reaching their next destination in time for dinner. As Moholy's letter to Sibyl describes this leg of the tour:

From Aegina we went to Poros, where we experienced the wonderful, simple, white architecture of the island by brilliant moonlight. The people there whitewash their villages once a week; if emigrants from America or Canada, etc, return on a Wednesday, the playful young women who are open to marriage do not shy away from wielding the brush in the middle of the week. Everything blazes with cleanliness. Even the treads of the stairs are white, and on every step there are only two specific places to step, hence permitted to become grey. The steps and large terraces don't have railings, the houses are cubic, clear, with sharp edges; the numerous orthodox churches, like small baking ovens, according to old Byzantine heritage. The white, stark island architecture visible in wonderful clarity on the hills … was the greatest experience for me.



There is no photographic or filmic record of this brief stop in Poros, and by midnight, as Giedion writes in 'CIAM at Sea', his 1949 account of the trip, 'we sailed again, but found little sleep under the electric brilliance of a full southern moon'.[15] While the crew plotted the overnight course for Seriphos in the western Cyclades, Giedion may have met with Moholy, Badovici, Steiger and Neurath on that sleepless night, for all of them formed part of the same committee set up 'to deal with the findings of this congress'. As the vessel approaches the coastline in the morning light, Moholy's Zeiss Kinamo is whirring again, briefly showing a close-up of a bare foot before pulling focus and shooting the archetypal white Cycladic *chóra* gleaming high on the naked Seriphos hillside. After going ashore, Moholy would go on to find 'glorious architecture and wonderful smiling faces', even if the more austere Ghika would later view matters from a different angle: 'We put into port at the beautiful and calm Seriphos, however despite gallant efforts on the part of Ioannides it was not possible to find anything to eat but one hen'[16] – an assertion contradicted by Moholy's lens, which zooms in on two barefoot boys dangling several roosters by their legs, with a laden donkey trotting behind them.



The following leg of the cruise again failed to survive the editing process, but the next port of call, the island of Santorini, proved to be one of the film's most photogenic backdrops, enthralling the congress participants with an architectonic spectacle of white geometric houses. 'Dawn revealed the summit of Santorini', Giedion writes, 'its white-washed houses trailing like a drift of last year's snow along the edge of its precipitous cliff, and later in the morning we lay-to before that island. When we climbed up to those houses Moholy pointed out they merged so plastically into one another that the children were playing on their neighbours' flat roofs and how, being built up a steep slope in graduated steps, every house enjoyed a free and uninterrupted view over the sea.'[17] Moholy's own euphoria is communicated only through his camera, which wilfully abandons any mandate to film the CIAM personae and instead cuts exuberantly between the stepped array of white cubed houses and the violent black volcanic rock formations.

Geographical details such as these also interested Le Corbusier, even if at this stage of the tour he has disappeared from the film-within-a-film, as has his brother Albert, along with Léger, Zervos and Ghika – the same group who had gone off for an early morning *volta* along the Piraeus dockside on the first day of the congress. It seems reasonable to assume that the five of them had again split off from the main group. Shimmering in the distance from Firá where the boat docked is the archetypal white-vaulted village of Oia, linked in those pre-vehicular days only by boat or the narrow cliff-top *monopati*. Not far north of the neighbouring village of Imerovigli is the all-white walled cemetery, densely packed with elaborate marble memorials and a vaulted church with a strikingly plastic east wall, simultaneously curved, angled and dipping earthwards – Ronchamp *avant la lettre* – and surmounted by an impressive spout-like gargoyle.

Writing in his signature cryptic, stream-of-consciousness, style, Le Corbusier makes a series of scribbled notes in the *Carnet*, perhaps intended as mnemonics to this visit: 'pumice stone materials of / Santorini / + earth of Santorini, which makes / hydraulic mortar / Papatsatos / trees / marine pines / trellis / grapes / turned into vinegar / plane ('platane') not lacking water / no cypresses / marble veneer / + red ceramic products / + (ceramic) of Kuttahia'. His scrawl, as much as his syntax, is notoriously difficult to decipher. Even his publishers had difficulty. In the 1981 Thames and

Le Corbusier, sketches of the Temple of Aphaia, *Carnet B5*
© FLC, Paris / DACS, London 2015

Hudson edition of his sketchbooks, for example, one note from this trip is transcribed as 'stature 1 ombros', which is meaningless, until reconfigured as 'statue Tombros' – Rupert Brooke, no doubt. Another problem lies with Le Corbusier's reference to the 'yacht', whose name is transcribed in the name edition of his sketchbooks as *Agros* – a curious choice for a sea-going vessel, as this is the Greek word for field, but it is one that has subsequently been absorbed and quoted down the years. However, on closer inspection, the scribbled 'g' in *Carnet B5* could also be an 'f', and indeed Ioannides' brochure does advertise a yacht named *Afros* – an onomatopoeic name meaning 'sea-foam from the burst of waves'. The confusion multiplies when we discover that Ghika – whose memory was 'very reliable', according to the archivist at the palatial Ghika Foundation – recorded the name as *Eros* – primordial god of love.



Moholy's film camera continued to be drawn to the geometries of an architecture of found objects, shooting a repeating grid of crops in a striated treeless landscape through a round stone arch. To the right of this opening a square white marble slab then catches his eye, and the camera dwells on this iridescent shape for a second or two. Its precise shape seems to have a powerful resonance for Moholy, whose eye picks it out as a symbol of 'the end of painting', as explored by his friend, the suprematist Kazimir Malevich, and which he had included in his 1925 book *Malerei, Fotografie, Film* (Painting, Photography, Film). Here Moholy had mused on the philosophical relationship between the three media, arguing that the new technologies of film and photography could 'make us see the whole world with different eyes', while painting is characterised simply as 'pure colour composition'.[18] When we consider that soon after the cruise Le Corbusier took up photography again, using the 'stop-frame' function of a movie camera to create stills in a mode not unlike Moholy's, it is interesting to speculate whether this was a consequence of discussions he had in Greece with Moholy.[19]



If a discussion with Le Corbusier did take place perhaps it was in the Firá taverna, which appears as the next setting in the film. Moholy shoots from a dark interior through a square-mesh fly-screen out onto an intensely lit street – a small boy presses his face to the screen, while a stout woman carries several chairs, presumably extra seating for the party. He then cuts abruptly again, returning to the rooftops, from where he frames the abstraction of both bright and dark wall planes, and even inadvertently shoots himself, one of three shadowy heads peeking above a parapet. It would no doubt have amused Moholy, pioneer of the photogram, that his sole appearance in *Architects' Congress* is as a shadow.

In the following frames of Moholy's film the late afternoon light and a scurrying figure of Cornelis van Eesteren suggest that it's time again for the ship to depart. The passengers would have wended their way down the 558 steps, deep in mule dung, of the switchback *skala* to the ship anchored in the *caldera*. Next on the itinerary were Delos and Mykonos, islands on which, as Anastasios Orlandos had suggested in his opening address to the congress, the visitors would find further enlightenment and confirmation of a pre-existing 'modernism'. But it soon became clear that this goal was unrealistic as the old ship ran into a gale and cresting seas. The captain, who knew a thing or two about the tempestuousness of the Aegean and the limitations of his vessel, decided to make a dash for shelter. Thus the party fetched up on the seldom-visited island of Ios, famous as Homer's resting place and, less nobly, as an island of exile for political detainees. Again Moholy reached for his camera and shot a number of sequences, panning over the white cubist Greek *chóra* and a row of ten or more squat cylindrical windmills, each with conical thatched roof, their sails spinning in the wind (evoking his kinetic *Light–Space Modulator*). It is at this point that the screen goes dark, concluding the film-within-a-film.

A lull in the storm then persuaded the captain to press on with their return, but as Giedion later recalled:

The weather changed abruptly, and grew from storm to tempest. We made ourselves fast, but the waves crashed over the deck, drenching us to the skin and soaking our mattresses. The little ship could no longer answer the helm or reach the port we were making for. To avoid capsizing, we had to let it follow the wind. Through the howling gale I heard Fernand Léger, who was at the other end of the ship, bellowing like a lion at each fresh spasm of seasickness. My mattress was just above Le Corbusier's and throughout the night he kept repeating the same words, 'Ne me crachez pas dessus!'[20]

Moholy seems to have kept his good-humour throughout, ironically boasting in his letter to Sibyl of 'my heroic deed... In short, at Santorini a rather strong storm blew up that made our little boat dance around so

Rooftops of Santorini, with László Moholy-Nagy filming (*below, extreme left*); see bottom left film still, p. 116
Photos Sigfried Giedion
© gta Archives / ETH Zurich, Sigfried Giedion

much that the entire group became ill. I – thanks to your despised Vasano – survived two bad days and was one of the few that didn't get seasick.' On the morning of Wednesday 9 August 1933, *Afros* finally limped into shore, depositing the bedraggled passengers directly onto the beach, appropriately enough just below the Temple of Poseidon at Cape Sounion. No doubt with a nod to the sea-god, Giedion later reflected, 'had the ship foundered during the night a good slice of art history might never have been written'.[21]



Le Corbusier, too, was clearly left wondering about that stormy night, even if when his swagger did return, in the form of an account of the trip in Zervos' luxurious publication, *L'Art en Grèce*, he reversed any lingering anxieties over what might have been lost by recasting the voyage, and not least his own survival, as a Homeric adventure in which he 'rediscovered the Greece which possessed heroes and created gods'.[22] In this, if nothing else, he seems to have taken Zervos' instruction to find modern meaning in Greece's antiquity too far, suggesting that the most contemporary incarnation of the Attic lay not in its temples and columns but in his own singular mythology.

Moholy's readjustment to life back on land and his own reminiscences of the voyage were less hyperbolic, partly, of course, because he didn't have time to mythologise. Berlin, the city that had made him, had become hostile, and exile, for the second time in his life, seemed inevitable. But the question, then, was where to go? The late autumn of 1933 found him prospecting in London at the invitation of P Morton Shand and Herbert Read. On 22 November he writes from the Regent Palace Hotel to Sibyl, now the mother of six-week-old Hattula, to let her know that he 'spent all day editing the CIAM film'. Intended as a documentary record of the fourth congress, footage had been processed in Athens, and rushes shown to the assembled congressists during the return voyage on *Patris II*. Moholy had also shot 130m of film on the island cruise, and this footage was still unprocessed when he arrived in London. It wouldn't stretch the imagination too far to picture him in a rented editing suite, reliving the Aegean adventure while cutting this footage into its final four minutes and 28 seconds. This task, to say nothing of the tumultuousness of war and of finding a new life and home, clearly overshadowed any residual traces of those stormy nights on board. And whereas after 1933, Le Corbusier's work and writings continued to abound with both nautical and classical references, Moholy's consciousness remained entirely contemporary and fully landlocked. However, just two years before his untimely death in Chicago, in his credo *Abstract of an Artist* (1944), Moholy offered up an allusion that could serve as a fitting epitaph not only to his four momentous days at sea in July 1933, but to his now legendary film, *Architects' Congress*: 'As a young painter I often had the feeling, when pasting my collages and painting my ''abstract'' pictures, that I was throwing a message, sealed in a bottle, into the sea. It might take decades for someone to find and read it.'[23]

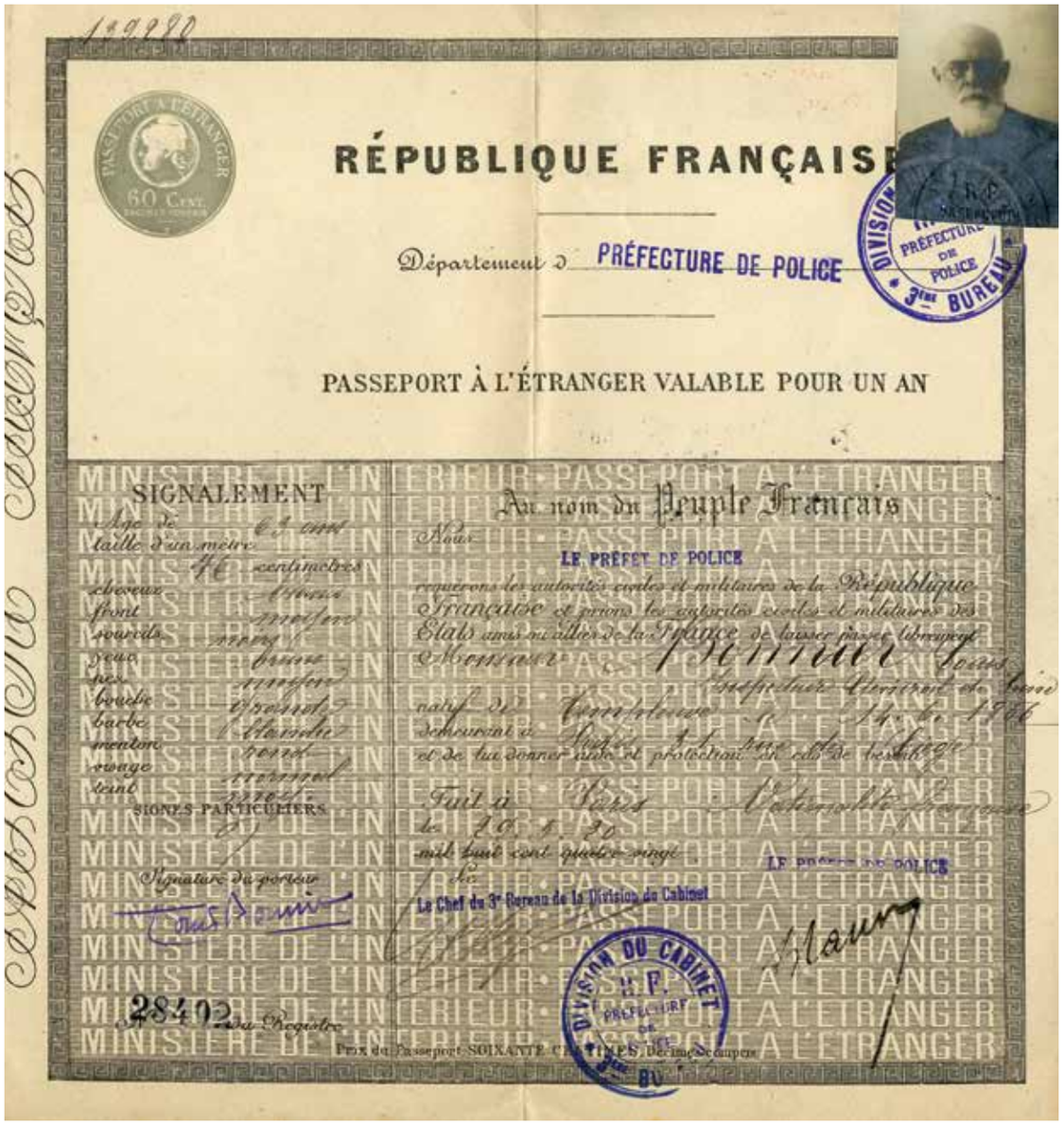
Bonheur, Le Corbusier and Léger (*back to camera*) on board *Afros*, the morning after the storm
Photo Ghika
© Ghika / Benaki Museum

This essay is an abbreviated version of a longer study that discusses the broader context and ramifications of the 1933 congress. Special thanks to Hattula Moholy-Nagy for making available and translating her father's correspondence, and for patiently answering our questions; Nikos P Paissios, biographer of Nikos Hadjikyriakos-Ghikas, for generously setting aside time to discuss the background to CIAM IV, and for providing access to his archive of 1930s publications; Agni Pikioni, for making available her father's text, *About a Congress*, and Kathryn Koutelieris for translating Pikionis' formal *katharevousa* into English; Ioanna Moraiti, archive manager at the Ghika Gallery of the Benaki Museum in Athens; Filine Wagner of the gta archives, Zurich, and Evelien van Es, Rotterdam, for retrieving previously unpublished material relevant to the 1933 cruise; and to Christy Constantakopoulou of Birkbeck College, London, for insights into the life of political exiles on the Greek islands.

1. Sigfried Giedion, letter to László Moholy-Nagy, 11 July 1933, gta archives, ETH Zurich.
2. Sigfried Giedion, 'CIAM at Sea', in *Architects' Yearbook 1949,* translated by P Morton Shand.
3. Sibyl Moholy-Nagy, *Experiment in Totality* (Cambridge, MA: MIT Press, 1961), p 78.
4. See Jos Bosman, 'Sur le *Patris II* de Marseille à Athènes', in *Le Corbusier et la Méditerranée* (Marseille: Editions Parenthèses, 1987). Translation by the authors.
5. Georgios Simeoforidis and Georgios Tzirtzilakis, 'Le Dernier Voyage en Grèce', *ibid.*
6. Kees Somer, *The Functional City: The CIAM and Cornelis van Eesteren, 1928–1960* (Rotterdam: NAI Publishers, 2007), p 165.
7. The other congressists visited Osios Loucas, Delphi and the islands of the Argo-Saronic; scarcely comparable, according to Simeoforidis and Tzirtzilakis, to the more plastic qualities of the Aegean islands.
8. László Moholy-Nagy, letter dated 13 August 1933; translation by Hattula Moholy-Nagy.
9. Simone Brott, 'In the Shadow of the Enlightenment: Le Corbusier, Le Faisceau and Georges Valois', in Alexandra Brown and Andrew Leach (eds), *Proceedings of the Society of Architectural Historians, Australia and New Zealand: 30, Open* (Gold Coast: SAHANZ, 2013), pp 777–89.
10. Damarice Amao, '*Le Voyage aux Cyclades*', in Christian Derouet (ed), *Zervos et Cahiers d'Art* (Paris: Centre Pompidou, 2011). Translation by the authors.
11. The question of attribution is difficult to establish. According to Oliver Lugon (Filine Wagner, email to the authors, 16 April 2014) and also to Werner Oechslin and Gregor Harbusch (eds), *Sigfried Giedion und die Fotografie* (Zurich: gta Verlag, 2010), Moholy and Giedion shared a still camera. Moholy's own folding camera, or rather the one he had borrowed from his first wife Lucia, had been stolen along with his suitcase before the departure from Marseilles.
12. László Moholy-Nagy, letter dated 13 August 1933, *op cit*.
13. Rebecca Goldstein, *Incompleteness: The Proof and Paradox of Kurt Gödel* (New York: Norton, 2006), p 81.
14. Tim Benton, *Le Corbusier Secret Photographer* (Zurich: Lars Müller, 2013), p 23.
15. Sigfried Giedion, 'CIAM at Sea', *op cit.*
16. Nikos Xatzikiriakos-Ghikas, 'Memoirs of Le Corbusier', *Zigos*, vol 8, 1965, pp 15–21. Translation by Kathryn Koutelieris. Written in 1965, this memoir also references Pikionis' prophetic August 1933 text, 'About a Congress'.
17. Sigfried Giedion, 'CIAM at Sea', *op cit.*
18. Krisztina Passuth, *Moholy-Nagy* (London: Thames and Hudson, 1985), p 48.
19. Tim Benton, *op cit*, p 16.
20. Sigfried Giedion, 'CIAM at Sea', *op cit*.
21. *Ibid*.
22. Le Corbusier, 'Explications', in *L'Art en Grèce* (Paris: Cahiers d'Art, 1934).
23. László Moholy-Nagy, in Krisztina Passuth, *op cit*, p 364.

A Life Less Ordinary

Andri Gerber



Temporary passport for Louis Bonnier's travel to London, 29 March 1920
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Not perverts but bureaucrats will set things off, and we won't even know if their intentions were good or bad.
Jacques Lacan,
'The Function of the Beautiful',
1959

Possibly the nineteenth century's most bureaucratically boring architect, Louis Bonnier was also one of that era's most creative and influential practitioners. His ability to simultaneously occupy both the lower and higher planes of a profession – to juggle mundane city and state administration with exuberant historicist design – was not achieved through some sleight of hand or assumed double life, but in many ways mirrored the day-to-day reality of European architects at the turn of the century, especially in France. Architectural historiography has tended to obliterate this generation of architects – have you ever heard of Louis Bonnier? – and if mentioned at all, it is only for the supposedly more creative side of their lives, and never for their administrative prowess. One life is remembered, the other forgotten. But it is impossible to give a full account of this period without presenting both the ordinary and the extraordinary. In Bonnier's particular case, this means we need to go beyond the cliché of the architect–genius, free of any constraint, able to shape the world at will, and instead recount the history of a nineteenth-century architect–bureaucrat who spent a large portion of his career grappling with monotonous paperwork, endless meetings and incompetent associates. Amid all this tedium, what we might just discover is that even the most boring of bureaucrats can engineer profoundly influential effects.

Born in 1856 in Templeuve, a small town in northern France, Bonnier initially studied painting and architecture at the École Académique in nearby Lille under Jules-Louis Batigny, *architecte-en-chef* of the city's National School of Arts and Crafts. His tutor encouraged him to continue his artistic studies at the École de Beaux-Arts in Paris, but the death of his father prompted Bonnier to turn his attention towards the seemingly more practical path of architecture, even if the professional designation, 'architect', barely registered in France at the time. Accordingly, when he did enrol in the famous Paris school in 1877 he joined the atelier of Constant Moyaux in the architecture department. The eldest of four brothers, he also taught evening classes in geometric design to help make ends meet.

Bonnier's best friend at the École was a fellow student named Ferdinand Deconchy whose father was a civic architect of some standing and whose sister, Isabelle, Bonnier would later marry. It was through his absorption into the Deconchy family as much as his eight years of toil through the Beaux-Arts – an institution steeped in its own rituals and tradition – that Bonnier began to develop not only a proficiency in the language of architecture but also, and more significantly, a fluency in the administrative lexicon necessary to succeed as an *architecte-voyer* or municipal architect. In England during the same period an architectural novice would have regarded a government job and its implied anonymity as an inglorious step away from everything he had trained for. In the Third Republic, in contrast, titles within the administration were badges of pride, conferring the highest form of social prestige. Almost every government job had its own particular distinction, special charges, decorations and medals. Even architects who had earned the highest honour at the Beaux-Arts, the Prix de Rome, often forsook the celebrity this bestowed and instead chose a career in administration.[1] Bonnier's own finest hour came in 1910, when he presided over the Services d'architecture de Paris during one of the city's worst ever floods, covering for the department's permanent head, Joseph-Antoine Bouvard, who was away on holiday. For this short stint he received the *Médaille en vermeil des epidémies* (Vermeil Medal of Epidemics) – one of a collection of 33 medals and honours listed in the biography of Bonnier published by the Institut français d'architecture, and quite an honour, considering the award was typically given only to those who had accumulated 20 years of service in the Service de santé des armées.[2]

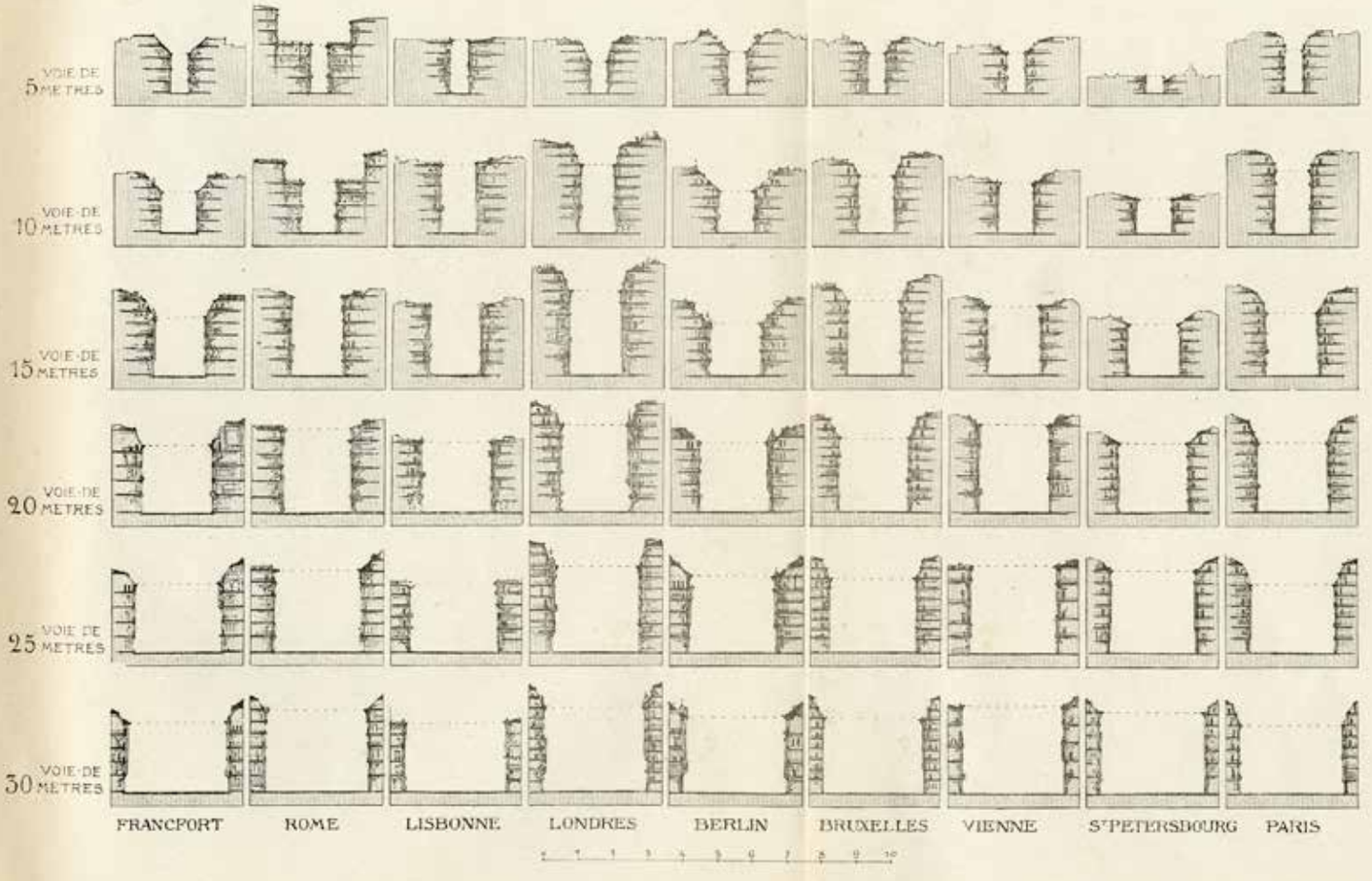
Yet despite, or perhaps because of these accolades Bonnier could not be further removed from the modern ideal of the architect – that Apollonian hero *à la* Ayn Rand, who designs the world as he imagines it from his office eyrie, master of all he surveys. Bonnier, in contrast, always needed permission to work. He had to battle with people and paperwork, often to no avail, as he recalls in his unpublished autobiography. And although today it is impossible to imagine a star architect as a bureaucrat, in actuality Bonnier *was* making the world, or at least the city of Paris, a better place, working within the confines of an administratively tight ship in which the image of the hero was replaced by that of the *fonctionnaire* (public servant), ranked progressively as *modeste* (modest), *respectueux* (respectful) or, by the time of his retirement in 1926, simply *vieux* (old).[3]

Bonnier was still a student when he made his first foray into this administrative life, taking up the minor post of *expéditionnaire* (lowest-level paper-pusher) in the 10th arrondissement of Paris. In 1885, four years later, and still a year away from obtaining his diploma, he entered the city administration more formally through an open competition for the position of *architecte-voyer-adjoint-auxiliaire-stagiare* (municipal architect trainee or intern) for the 19th arrondissement. So began a 40-year bureaucratic architectural career, a convoluted journey that not only navigated individual districts – prefects with their own organising systems and bodies – but also answered to the larger, even more convoluted system of the state. (The prefect, as the representative of the state, usually had the last word when it came to approving projects, which caused friction with the city administration. Bonnier, a cog in both mechanisms, often found himself caught between the two.) Rising through the ranks of an entrenched municipal hierarchy was equally complicated and based less on merit than on tenacity. Here, patience was not just a virtue but a prerequisite for a successful career, since a promotion only materialised when one's superior had himself advanced, retired or, more likely, died. The one other possibility was to change districts and quickly adapt to a whole new set of organisational idiosyncrasies. Either way, there were many hurdles to overcome – for example, in the highways office (*Voirie*) there were 13 positions between the lowest level, *architecte-voyer sectionnaire*, and the highest, *architecte-voyer-en-chef*, while the office of public transportation had 25 hierarchically delineated posts.

In 1887, alongside his public work in the 19th arrondissement, Bonnier joined the office of Paul Sédille – *architecte-en-chef* of the 1889 World Exposition – as *premier inspecteur*. A move to the 8th arrondissement two years

Opposite: Louis Bonnier, study of street widths and set-backs in various European cities, 1898
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Cité de l'architecture et du patrimoine /
Archives d'architecture du XXe siècle

HAUTEURS DES MAISONS
RELATIVEMENT A LA LARGEUR DES VOIES
DANS LES PRINCIPALES VILLES DE L'EUROPE



later saw him rise to *architecte-voyer-adjoint*. Five years after that he migrated to the Service des Bâtiments civils et Palais Nationaux, before taking up the post of *inspecteur* for the Gallery of Palaeontology and Anatomy at the Jardins des Plantes, through the office of Ferdinand Dutert, architect of the Palais des Machines at the 1889 expo. In 1895 he went back to work at the Bâtiments civils et Palais nationaux as *architecte-en-chef*, before being promoted two years later to *architecte-voyer* in the 10th arrondissement. Fourth place in the competition for the World Exposition of 1900 secured him the post of *architecte-en-chef des installations générales* for the same expo, overseeing an office of 41 employees. Bonnier's ascent continued: in 1898 he returned to the 8th arrondissement, which allowed him to become, in 1901, *architecte-en-chef du Palais de l'Élysée*. By 1903 he was *architecte-voyer-en-chef-adjoint à l'Hotel de Ville* and in 1906 *architecte-en-chef de la Ville de Paris*. In 1911, when the director of the Services d'architecture de Paris retired, Bonnier took his place and became director of the Services d'architecture de Paris et des promenades et plantations, a title he retained until his own retirement from the post (although the scope of his role underwent change, for example in 1914, when the architecture department was divided into an administrative and a technical section). Bonnier then became *inspecteur général* of the Services techniques d'architecture et d'esthétique et de l'extension de Paris and later *directeur* of the Services d'architecture et des jardins, formally the highest rank an architect could achieve within the administration of the city, and one celebrated by the architects' associations with a banquet in his honour.



Louis Bonnier, Globe Terrestre, Paris, 1897–98
© Fonds Louis Bonnier, SIAF / Cité de l'architecture et du patrimoine / Archives d'architecture du xxe siècle

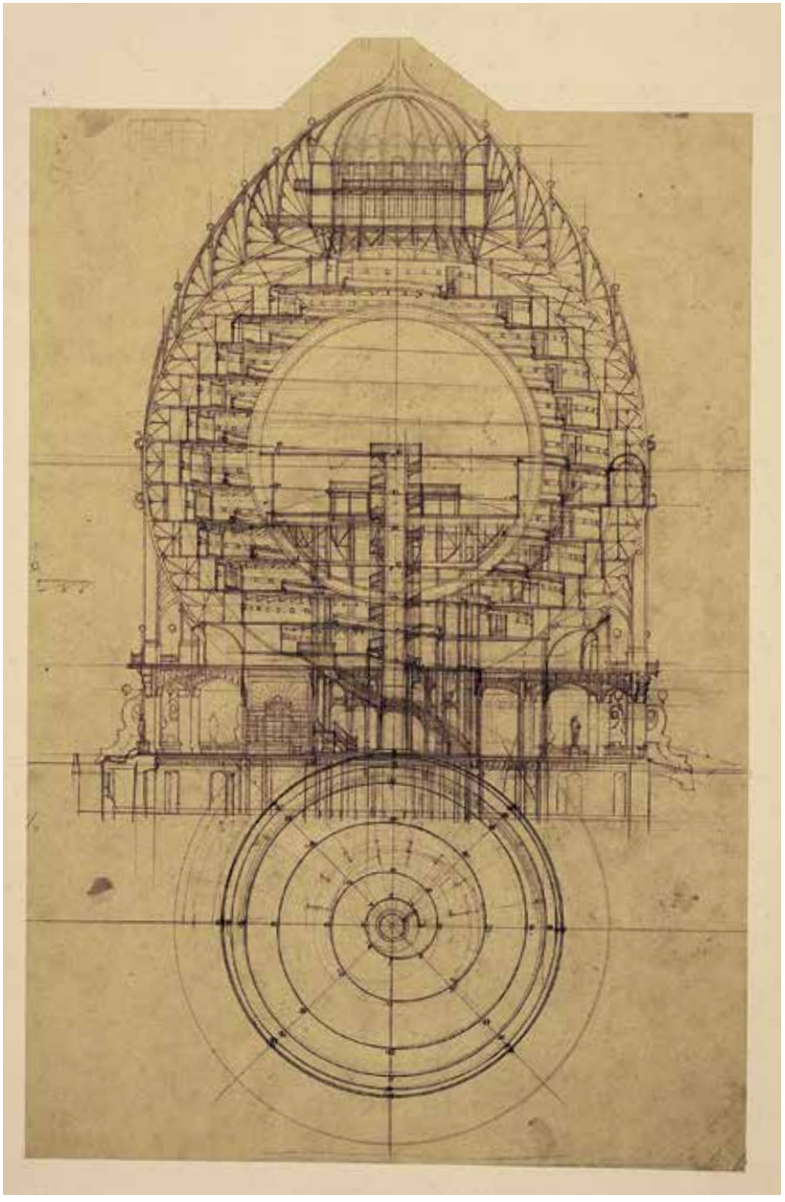
Amazingly, Bonnier also found time to work as an independent architect, taking part in competitions and receiving direct commissions from his family and friends. In 1922, at the age of 66, he became *architecte-conseil* to the private train company PLM (Compagnie des chemins de fer de Paris à Lyon et à la Méditerranée), with a salary of 15,000 francs and a personal railway pass. He also squeezed in some extra projects for the city, developing a peculiar style based on the use of local materials and complex sequences of spaces and forms initially tinged with art nouveau – it is not by chance that in 1895 he was commissioned to design a gallery for Siegfried Bing, who was instrumental in introducing the style into France. As if all this wasn't enough, Bonnier was involved in a vast number of committees, associations and delegations, including two separate societies of architects – those with diplomas (Société des architectes diplomés par le gouvernement) and those without (Société centrale des architectes). As president of the former and a member of the latter he was always trying to mediate between the two. In his autobiography he often writes about feeling tired, which is hardly surprising, considering how many things he was involved with at the same time.

This independent activity notwithstanding, the majority of Bonnier's working life was taken up less with drawing and design (certainly not with painting) than with paperwork – with completing standard forms, reports and enquiries for which there was always a corresponding form with its own corresponding header issued by whatever administration he was working for at the time. The French architect Adolphe Dervaux (1871–1945) paints a cruel portrait of the typical *fonctionnaire*, describing a robotic individual with neither the aesthetic sensibility nor the technical know-how to do justice to 'delicate tasks' such as planning highways.[4] Lacking an imaginative solution, Dervaux argued, the *fonctionnaire*'s plan of choice was always more or less geometric, designed to promote utilitarian construction and – on occasion – the interests of powerful citizens. Contemporary dispatches from the bureaucratic frontline tended to reinforce this impression of misery. Work for the administration of a smaller city 'is neither amusing nor artistic. It is nothing but boring, exhausting and is more similar to the work of an economist … than an artist who pays his annual dues (*patente*) for the privilege of providing his country with masterful artworks', reported a contributor (anonymous, of course) to *Le Moniteur des architectes* in 1880.[5] To add to the general sense of despair, from 1804, when Napoleon became emperor, every architect employed by the city was considered to be a singular corporate entity, meaning they were responsible not only for designing projects (as *maître d'oeuvre*) but also for supervising their construction (as *maître d'ouvrage*). Within this set-up the municipal government was both employer and client. Whenever Bonnier or his fellow *architectes-voyers* received a commission from the city they would be paid based on their estimate of costs. Any miscalculation, any cost overruns, were not subtracted from the city's budget but came directly out of the architect's own pocket. The architect, then, was not just responsible for his own vision – the design – but was also liable for the builder's failures. In his autobiography Bonnier proudly underscores the fact that all of his buildings were delivered for less than their original estimates.

But beneath all of this bureaucracy lurked a more artful, even flamboyant Bonnier, as revealed by the two projects he designed as *architecte-en-chef des installations générales* for

the 1900 World Exposition. The first of these, the Pavillon Schneider, produced for the eponymous arms manufacturer, was a metal dome 42m in diameter, and 27.5m high, painted red and crowned with a cupola encircled by a ring of cannons that pointed towards the city in an evidently threatening manner. Inside, displays featured train engines and even more cannons as well as access to the roof. In a distorted way the whole pavilion resembled a battleship. Bonnier's original design included further military-style accoutrements, such as oversized chimneys erupting with smoke and illuminated by floodlights. Probably for cost reasons these were never added. The general effect was an apotheosis of a militarised architecture, surprising for somebody as seemingly mild-mannered as Bonnier.

More outrageous still was his second project, the unrealised Globe Terrestre designed for the renowned geographer and anarchist Élisée Reclus, who dreamed of building a didactic structure that would survive the exposition. This 'terrestrial globe' consisted of an internal scale model of the earth encased by a second enormous steel sphere. A continuous ramp winding around the slowly rotating inner globe allowed visitors to walk next to the earth's surface, mapped in relief, while the underside of the exterior sphere offered views of the galaxy, similar in effect to Étienne-Louis Boullée's Cenotaph for Isaac Newton. As one of the pioneers of social geography and the author of the monumental *Nouvelle Géographie universelle*, Reclus had dedicated himself to studying the nature of cities and their relationship to human society. The idea behind the globe, which he first presented at the Sixth International Geographical Congress in London in 1895, was to demonstrate the harmony binding together 'the earth, its natural phenomena, its plants and its inhabitants'.[6] Reclus thought big. In his original scheme, the outer globe was a 1:100,000 model of the earth, 200m high and 160m in diameter (for reference, Boullée's Newton sphere would have had a diameter of 150m), designed to sit opposite the set piece of the 1899 expo, the Eiffel Tower, from the Palais de Chaillot. The projected construction cost was 20 million francs, whereas the Eiffel Tower was built for 8 million.



Louis Bonnier, Pavillon Schneider, Paris, 1900
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From the outset, there was a competing proposal to build a big globe at the expo – the *Cosmorama*, designed by the architect Albert Galleron. The organisers of the expo attempted to get the two men to work together, but Reclus was neither ready to compromise – he refused to design a model of the world simply as a pleasure ground attraction – nor to be outdone. Probably through a network of family and friends, among them Patrick Geddes, who had taken an interest in the project, he approached Bonnier to develop a new design. Now scaled at a mere 1:500,000, the inner globe was 26m in diameter. The outer sphere totalled 46m in diameter and reached a height of 60m. Sadly, this project also proved financially unviable. Reclus gave up on his dream in April 1898, leaving the way clear for Galleron's *Cosmorama*.[7]

Bold and extravagant, Bonnier's pavilion projects reveal how the 'respectful' public servant was not only capable of incredible flights of fancy, but willing to act on them. However, separating Bonnier's daily life as a functionary from these intermittent outbursts of exuberance becomes more difficult when examining what would become his main focus: town planning. While his own version of this discipline probably seemed banal compared to the work of younger, more celebrated planners of the time, such as Léon Jaussely (1875–1932), who worked on a city plan for the expansion of Barcelona, or Henri Prost (1874–1959), who redeveloped a number of Morocco's cities, Bonnier was actually much more effective. This was because he was less concerned with the design of grand schemes that would never be realised (bar the exceptional situation of the French colonies in Africa) and instead focused his attention on analysing the factors that influence the development of the city, such as building codes and regulations. In his autobiography Bonnier cites 1915 as the 'beginning of town planning action', but his involvement in that nascent field actually dates back much further.[8] For instance, in 1894 he was part of a subcommittee led by Paul Sédille charged with updating building regulations in Paris. As *rapporteur* to the group, Bonnier analysed the equivalent codes of a handful of other European cities and in 1898

published these findings in a memorandum titled *Enquête sur la réglementation de voirie dans les grandes villes de l'Europe*. The document compared the building regulations of Paris with those of Frankfurt, Rome, Lisbon, London, Berlin, Brussels, Vienna and St Petersburg, describing the relationships between the width of the street and the height and format of the building facades. When the subcommittee's report was released in 1899 it was accompanied by Bonnier's own visualisations of the proposed changes. These included a series of street views drawn in perspective, 'befores' and 'afters' that highlighted the impact of the new regulations on the size and form of the buildings in relation to the streetscape, making clear the advantages they would undoubtedly usher in. He also produced a number of thumbnail-sized diagrams (less animated than his street scenes), contrasting existing approaches with proposed models. The new planning laws stipulated more modulated setback regulations, meaning that taller buildings would seem lower at pedestrian level, while their rise up and away from the street would allow more space for air and light.



Fig. 11. — Rue de 6 mètres de largeur.
Conforme au décret de 1884.

It was in no small part thanks to these drawings that on 13 August 1902 – eight years after the subcommittee was first set up – that the city accepted Bonnier's proposal. But even after he had made it through all the bureaucratic hoops, Bonnier still faced criticism from his fellow-architects, who were suspicious of any regulations placed on their work. Perhaps in an attempt to overcome this resistance, Bonnier decided to give a talk at the École des Beaux-Arts a month later. While he prefaced his explanations with an apology about how 'dry' it might all seem, he need not have worried, for in actuality his set of methodical, very rational guidelines, which he had toiled over day-in day-out for nearly a decade, breathed fresh life into the city.[9] And in fact it was their very boring-ness that fuelled their appeal, allowing for a more varied streetscape and avoiding the relentless monotony of Haussmann's interventions while still respecting their urban value.[10] At the same time, while Bonnier was pioneering a new way of planning the city he was also championing its preservation, as his talk at the Beaux-Arts prompted him to establish, in 1916, the Casier archéologique et artistique de la Ville de Paris, a municipal institution charged with the task of recording notable buildings across Paris. By 1923 the Casier had made 236 site visits, created 1,675 dossiers and taken 4,800 photographs.

But Bonnier was equally if not more interested in opening up this emerging field to those outside the immediate network of city administration. Though he claimed that architects were predisposed to assume the role by virtue of their education, Bonnier realised that good architects were not automatically good town planners. Instead, he believed, that anyone from any discipline could learn to be good at the job. He would put this idea to the test when, in 1912, he and the urban historian Parcel Poëte began work on a study for the possible extension of Paris. The pair collaborated again in 1919, overseeing an ideas competition for the same extension, following the adoption of the *loi Cornudet*, which obliged all towns with more than 10,000 inhabitants to develop a Plan d'aménagement, d'extension et d'embellissement (PAEE). Preferring to organise rather than enter it himself, Bonnier reserved one category of the competition for members of the city administration, further drawing a line between the older generation of *architectes-voyers* and the emerging crop of *architectes*. The competition in turn led the city to establish a Commission supérieure d'aménagement, d'embellissement et d'extension de Paris, charged with planning its future extension. Bonnier was a member of both this commission and another set up to judge the entries – some 40-odd projects subjected to a detailed critique over the relatively short (by bureaucratic standards) timeframe of three years.

The increasing professionalisation of town planning in France was signalled by the founding, in 1917, of the first school dedicated to the subject, the École supérieure d'art public. Bonnier had helped set up the school and would go on to oversee its 1919 transformation into the École des hautes études urbaines (EHEU), as well as its (not entirely trouble-free) integration five years later into the Sorbonne as the Institut d'urbanisme. This new institution was widely viewed with suspicion, as a rival to existing architecture schools such as the École Spéciale, but a friend of Bonnier's, the politician Henri Sellier, *Conseil général de la Seine*, played a vital role in championing it. From the start the teaching was deliberately interdisciplinary: there were 25 professors, only 13 of whom were architects. While the students often came from all over the world, the teachers were drawn solely from the ranks of government employees. At one time or another, most of the renowned French town planners – including Léon Jaussely, Jacques Gréber, Alfred Donat Agache and Marcel Auburtin – would take up a position there.

Yet in the midst of all this activity Bonnier, like many of his contemporaries, was struggling to pin down what exactly he was doing. Was town planning *art public*, *urbanisme*, *art de l'urbanisateur* or *art de la ville*? All of these terms seemed to designate the same general activity, yet each one carried its own particular associations. The abundance of available descriptors also raised the larger question of whether town planning was a science or an art. In Bonnier's writing we find him trying out all positions. Mainly, though, he sought out the expertise of geographers and sociologists, which enabled him to base his practice of town planning around the twin poles of the survey (isochronous maps) and scientific method (a mantra for his generation of architects). Ultimately, however, what defines Bonnier's approach is an awareness that town planning is a collective endeavour, calling for specialists from many disciplines – among them, geographers, historians, politicians, economists, doctors, artists, philosophers and scientists. Within this framework, the role of the architect is not only to design grand schemes (which in Bonnier's experience are doomed to fail), but also to develop building codes and regulations. Bonnier himself never stopped working on this task. From 1934 to 1938 he was even part of a commission set up to revise his own 1902 building regulations. Once again he produced the accompanying visual material, this time without success.



Fig. 12. — Rue de 6 mètres de largeur.
Transformée conformément au décret de 1902.

While the caesura of the First World War marked the end of 'official architecture' and the beginning of modernism's own coming-of-age, there were few direct encounters between the different generations represented by Bonnier's bureaucrats and Le Corbusier's modernisers. However, these two protagonists were indirectly pitted against each other in one highly symbolic location, the Exposition des Arts Décoratifs in Paris, an expo first discussed in 1911 but not realised until 1925. Playing a pivotal role was Le Corbusier's Pavillon de L'Esprit Nouveau, a paean to the new architecture, which he described as 'a signal triumph over difficulties'. Le Corbusier's troubles began with the small budget he had at his disposal and the discovery that his pavilion was to be placed outside the Grand Palais, on the fringes of the expo site. Things deteriorated further when he learned that it would also be hidden behind a green 7m palisade installed by the expo's organisers to shield the ongoing construction – which he interpreted as an attempt to sabotage his revolutionary architecture. The final straw was when Auguste Perret, Le Corbusier's former employer and vice-president of the jury, refused to bestow an award on his work – or as Perret succinctly put it, 'This is idiotic and will not stand. It lacks a line of thought. There is no architecture here.'[11]

For Le Corbusier the exhibition was the very embodiment of the struggle between old and new: 'The building committee of the exhibition made use of its powers to evince the most marked hostility to the execution of my scheme', he complained.[12] Bonnier was one of the three members of this committee. In his autobiography, he also recalled a series of difficulties related to the organisation of the exhibits, the choice of the site and disagreements with the architects and the national exhibitors. Regarding the battles with Le Corbusier and the Pavillon de l'Esprit Nouveau there is just one laconic note in the archive: '1925, Jeanneret submits a belated project for a pavilion which is badly developed and which I refused, asking for a new study.'[13]

Le Corbusier also mentions Bonnier just once – in a chapter of his *Almanach d'architecture moderne* (1926), which refers to a review of the exposition by Gabriel Veissière that challenged two of his urban schemes – the City for Three Million Inhabitants and Plan Voisin.[14] In his response Le Corbusier wrote that:

This appraisal of Urbanisme *appeared in* L'Architecte*, the mouthpiece of (amongst others) Messrs Plumet, Bonnier and Dervaux.* L'Architecte *is to be found on all architects' desks. The article in question is elsewhere very agreeable and even flattering. The part I have extracted here is in some sense the 'But, nevertheless', of a whole generation. You would think we were on the barricades; struck by a bullet in the heart, the hero, before collapsing, declares his principles with an eloquence which becomes more animated at every turn.'*[15]

Le Corbusier the revolutionary, overthrowing the old order, clearly had no interest in what Bonnier and his generation had achieved. For him, urbanism *was* architecture – and the architect a demiurge who set simple elements on a rational grid within an abstract landscape – while bureaucracy was merely an unnecessary hindrance.[16] In contrast, Bonnier saw a more complex picture, recognising that urbanism was a field full of compromise, where the bold ideas put forward by architects were somehow made possible by the slow-turning cogs in the administrative machine.

Some two years later, while Bonnier was teaching at the Sorbonne, he penned his own

Louis Bonnier, typical 6m-wide Paris street, built according to the 1884 regulation, and (*above*) an alternative 6m-wide street built according to the new 1902 regulation
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critique of modernist urbanism – a rebuttal to Le Corbusier, without explicitly mentioning him.

One cannot overemphasise the inconveniences and even the dangers attached to an excessive application of these methods of standardisation, which would have human beings live in towns where everything is the same – rooms, apartments, houses, monuments, streets, trees, rivers, hills, even the clouds. As a result of this love of regularity, the unfortunate inhabitants, themselves standardised, would surely die of boredom within a day.[17]

Representative of his generation, Bonnier never strove towards an absolute position, but sought instead a balance between history and progress, between concrete and masonry, between architecture and all the other disciplines involved in planning cities. His allegiance to a life of administration was the logical consequence of these multiples faiths, and for him the true agency of architecture. As an emblem of these ideas, there is an undated self-portrait which shows Bonnier riding a pair of horses – each of their saddles inscribed with the acronym SE, *sport équestre* – with his harlequin riding silks similarly split between a red and a green self. Bonnier was without doubt a realist. He knew how easy it was to fall off one of the horses, or even both of them – that is, he was conscious of the limits of his profession, of the endless paperwork and often stagnant nature of bureaucracy, just as he was wary of aligning himself too closely with one particular movement or style. Yet these limits never stopped him from realising important buildings or from participating in the political processes that made a real impact on the built environment. This was a reality he willingly embraced as the *sine qua non* of architecture. While subsequent generations would only ever ride (or imagine they were riding) one especially magnificent stallion after another, in straddling two Bonnier was revealing his double life – a desire to be both independent and part of something greater.



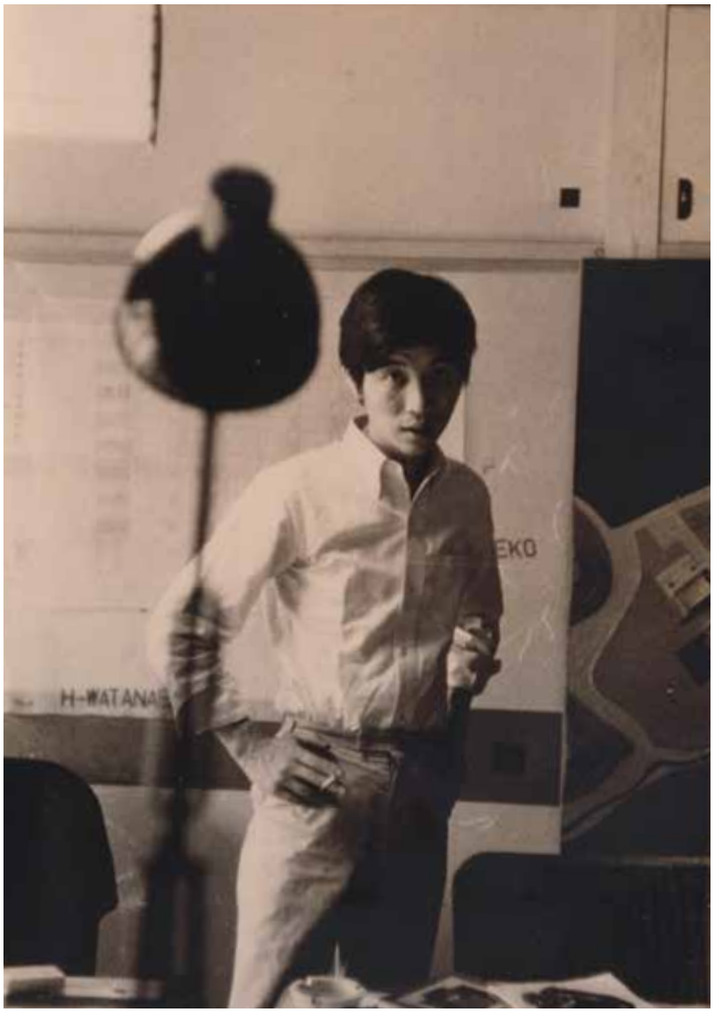
Louis Bonnier,
self-portrait, undated
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Archives d'architecture du XXe siècle

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2. http://archiwebture.citechaillot.fr/pdf/asso/FRAPN02_BONLO_BIO.pdf
3. The first two of these terms appear in Louis Bonnier, 'Observations sur le projet de loi relatif à la reconstruction des régions dévastées', *Conférence à l'union centrale des Arts Décoratifs, 1916* (035 Ifa/300/5/D3); the latter is from Louis Bonnier, *Conférence à la Société des Ingénieurs de Travaux Publics de Paris en avril 1926* (IFA 301 E24), p 1.
4. Adolphe Dervaux, *L'édifice et le milieu* (Paris: Éditions Ernest Leroux, 1919), p 156.
5. 'Chronique', *Le Moniteur des architectes* (Paris, 1880), p 170. The *patente* was the business tax architects had to pay yearly in order to exert their profession.
6. Élisée Reclus, 'Projet de globe terrestre au 320,000e', Bibliothèque Nationale de France, manuscript collections (NAF 22 916 f 2).
7. Jean-Christophe Fromantin, the mayor of Neuilly, has recently resuscitated the Reclus project for Paris' candidature for the Expo 2025. For a more detailed account of the original project see Bernard Marrey, *Louis Bonnier 1856–1946* (Paris: Collection Architectes, 1988), and the review of Marrey's book by Roderick Gradidge in *AA Files* 20 (1990), pp 102–04.
8. Louis Bonnier, *Notes biographiques de Louis Bonnier*, (035 Ifa 301/4), p 13. Translation by the author.
9. 'Commencements de l'action urbaniste', Louis Bonnier, *Conférences faites dans l'hémicycle de l'École Nationale des Beaux-Arts les 22 et 29 octobre 1902 sur les règlements de voirie, I. – Les décrets antérieurs ; les réglementations étrangères II – le décret du 13 août 1902* (Paris: Charles Schmidt Éditeur, 1903), p 1.
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11. Le Corbusier, *Almanach D'architecture moderne* (Paris: Les Éditions G Crès et Cie, 1926), p 151. Translation by the author.
12. Ibid, p 198.
13. Louis Bonnier, *Notes biographiques de Louis Bonnier* (035 Ifa 301/4), p 37. Translation by the author.
14. Gabriel Veissière, 'L'Architecture française à l'exposition des Arts décoratifs modernes de 1925', *L'Architecture*, 25 July 1925, p 189.
15. Le Corbusier, *Almanach d'architecture moderne* (Paris: Les Éditions G Crès et Cie, 1926), p 182. Translation by Charlotte Benton and Tim Benton, https://modernistarchitecture.wordpress.com/2010/10/20/le-corbusier's-"words"-1925/.
16. Le Corbusier, *L'art décoratif d'aujourd'hui*, 1925 (Paris: Éditions Vincent Fréal, 1959), pp VIII–IX.
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Hiroshi Hara *in Conversation with* Thomas Daniell

In Japan those born in and around the 1930s, and therefore now in their 70s and 80s, are known as the *yake-ato* generation. It's a word that literally means 'remains of a fire' – more poetically, 'charred ruins' or simply 'ashes' – and refers to the apocalyptic scenes that followed the incendiary bombing of Japan's cities in the final months of the Second World War. This generation experienced the destruction of their homes as children and became adults during the terrible deprivations of the immediate postwar period, simultaneously undergoing a dose of cognitive dissonance as nationalist emperor worship was replaced by democratic principles imposed by an occupying alien power. Over time, these multiple traumas were sublimated into a recognised sensibility, manifest across all artistic genres and sometimes leading to the creation of new ones – from a perverse nihilism among novelists to the disturbing and cathartic activities of performance artists. All this work is characterised by a curious coldness or lack of simplistic sentimentality toward wartime tragedies. Perhaps the example best known outside Japan is Studio Ghibli's 1988 animated film *Grave of the Fireflies*, based on a semi-autobiographical short story by Akiyuki Nosaka about his failure to prevent his infant sister from dying of malnutrition as the war came to an end.



Hiroshi Hara, Tokyo, 1966
Courtesy Hiroshi Hara

Architecture is the field with the most conflicted relationship to *yake-ato*, given its mandate to rebuild those charred ruins and prevent their recurrence – the postwar preference for reinforced concrete rather than traditional wood structures is arguably part of the *yake-ato* mentality. Indeed, the Metabolists originally intended to call themselves the Yake-ato-ha (Ashes Group) before settling on their more optimistic name. As Arata Isozaki, avowed non-member but fellow-traveller of Metabolism, has always insisted, creation and destruction are not opposites but necessary and complementary aspects of sustaining life.

Born in 1936 Hiroshi Hara is clearly an architect whose work and worldview have been shaped by his childhood experiences as a member of the *yake-ato* generation. Like Isozaki and the Metabolists he was briefly a student of Kenzō Tange, but he has never felt the need to join groups or promote himself through the mass media. Commercially disinterested, artistically uncompromising, deeply intellectual, familiar with literary and philosophical traditions from every era and culture, Hara has remained somewhat isolated and inscrutable (if that word has not yet lost all credibility in relation to Japan), careful about his choice of colleagues and deeply loyal to those he does choose. From the beginning of his career, he taught while maintaining an architectural practice that even today functions as a research laboratory for an idiosyncratic exploration of architecture as a cultural and artistic practice. Refusing to ever knowingly quote from the modern or classical canon, he has pursued originality in every aspect of his own architecture while simultaneously searching for inspiration in 'minor' building traditions, through a lifelong study of traditional villages in what for him were distinctly exotic locales. This search for a more 'innocent' approach to human settlement patterns and sociality has influenced the thinking, if not the style, of many of his former students – the so-called 'Hara School', which includes Kengo Kuma, Riken Yamamoto, Kazuhiro Kojima and Kiyoshi Sey Takeyama, among others.

I spoke with Hara in early September 2015 at his office, Atelier Phi, a concrete building of his own design set on a corner lot in a quiet Tokyo neighbourhood. Diminutive and dynamic, Hara chain-smoked and drank orange juice throughout our long conversation, jumping between topics and moments in his life with bewildering speed. The transcription here, a somewhat more orderly version of what was actually said, demonstrates the extraordinary range of Hara's experiences, obsessions and ambitions.—*Thomas Daniell*













TD *In a 1983 essay titled 'Kūkan to Bungaku' (Space and Literature) you wrote that architecture and literature are essentially the same, referencing writers such as Gabriel García Márquez and Kenzaburō Ōe. What did you mean by that?*

HH I really believe they are the same. Literature – that is to say, a narrative – unfolds in a chronological sequence. In a similar way, a work of architecture changes constantly over time – for example, sometimes it will be inhabited, while at other times it will be empty. But due to such changes it somehow develops the quality of a narrative. Architecture is designed and built as an object, but when people start to use it events occur and stories develop. There is a relationship between words and buildings. In this sense, I think architecture is extremely similar to literature.

TD *Do you have a particular type of literature in mind?*

HH I am mainly referring to novels – that is, long stories or epic poems. But it can't be just any kind of novel. Overly lyrical or expressive prose is no good. When emotions enter, it's difficult to make a correlation with architecture. Rather, the most appropriate novels are those that are based on some kind of contrived structural device. For example, I think Kafka's writing is very architectural. *The Castle* has a clear spatial structure, with a strong distinction between the village and the castle up above, which the main character is somehow unable to reach. It was when I started my own research into traditional villages that I realised spatial structures such as that in *The Castle* actually existed. Another example would be Senji Kuroi's novel *Life in the Cul-de-Sac*, which resembles some of Peter Eisenman's designs in the way the lives of the characters form intersecting layers that accumulate over time. This is expressed very directly by a scene in which a family visits the construction site of their new home, and they see the new layout of rooms superimposed on the foundations of the old house. Kuroi is a friend, and I speak with him often, but one of my closest friends is Kenzaburō Ōe. His novels also use these kinds of devices. Ōe grew up in a forested valley in rural Shikoku, and he has written a series of books set in a similar landscape – the valley setting is like an experimental laboratory that provides the fixed conditions within which different events take place. Among the various characters he sends into this fictional valley are Ōe himself, his son Hikari, his wife, his daughter and sometimes even me, under the pseudonym 'Ara'. The setting is always the same, but the events are always different. Of course, I also like more classical literary references – in my recent exhibition 'Wallpapers' I included an extract from James Joyce's *Ulysses*, where the 20 years of wandering of this mythic Greek figure are compressed into a single day in a real contemporary city. I think this is a very architectural device. Maybe this rule doesn't work all the time, but the more intricate the structural devices used in implementing a fictional setting, or the more experimental and logical the novel, the more closely it resembles architecture.

TD *Have you ever written fiction yourself?*

HH When I was young, at secondary school, I published a few stories in the local newspaper, although I don't think anything has survived. But I have been reading widely since I was a child, at least since immediately after the war, when I was eight or nine.

TD *I know that you were born in 1936 in Kawasaki, and then were evacuated to a rural area in Nagano during the final months of the war. What was your experience of the war and its aftermath?*

HH Well, Kawasaki was, and still is, an industrial city located between Tokyo and Yokohama. Our house was in the centre of the city. I wasn't really aware of the war when I was young. I had two older sisters, and when I was five or six they would take me to the Tama River every afternoon to collect shellfish and wild vegetables. These beautiful memories of being amid nature are still so vivid for me. Another great place to play as a child was on the only lift in the city – inside the main department store. I loved urban life and the natural world equally. My father was a tailor of western-style clothing and our house was also his place of business, with a sign hanging above the front door. He would lay big pieces of fabric on the living-room floor and cut them with templates. My mother helped, as did my sisters and I, and my father would often take me along with him to the homes of his wealthy clients for fittings. I remember learning the word 'London' because it was printed in the Roman alphabet on the edge of some of the more expensive fabrics.

TD *You lived in a traditional wooden house?*

HH Yes, almost all the houses in Kawasaki back then were wooden. Life was peaceful until about 1943, when the city started demolishing a number of these houses in order to stop the spread of fire after an air raid. We used these new void spaces to create little vegetable gardens, because food was becoming scarce. There was no rice and no soybeans either, because soybean oil was being used to manufacture airplane fuel. But as children we were oblivious to these wartime problems. We just found it exciting. Kids can be so lacking in empathy. We were running wild, and my mother was often angry with me. When the nightly air raids started getting closer to our home, my parents finally decide to send my sisters and me to live with relatives in Iida, a small town in Nagano where my parents were born. I remember catching the train but having to climb aboard through the windows because there was no room to squeeze through the doors. The journey was frightening and chaotic, because the train kept stopping whenever an air raid happened nearby. Two days after we left, our home was bombed but my parents survived. Unbelievably they walked all the way to Iida to join us. It took them a very long time.

TD *Where were you when the war ended?*

HH I was swimming in a river with some other kids and I remember my sister came to tell us the news. Of course, I was still just a child and so I thought a Japanese defeat was impossible – I had been studying at a military primary school and the emperor was the symbol that we bowed to every day. And so at that moment I suddenly understood it was all lies. I was also very nervous about what would happen next, but I can honestly say that I felt it was for the best.

TD *Did you continue living in Iida after the war?*

HH Yes, and I remember the first three years as being really miserable, even if memories of the war differ from generation to generation. People slightly older than me were traumatised by the deaths of their friends and family, whereas those only five years or so younger don't seem to recall the pain of it at all. I just remember a terrible, endless hunger. There were so many people living in the Nagano region – evacuees and people repatriated from the colonies – that there was never enough to eat. We had to find food ourselves, and so every day we went foraging, even during school hours. Frogs became a very important food source. I ate them all the time because

Clockwise, from top left: with his sisters, *c* 1952; with his wife Wakana, 1965; working with Wakana, 1970; with his newborn son, 1974; reading with Wakana; swimming in Hachijō-jima, *c* 1966
Courtesy Hiroshi Hara

even a little kid like me could catch them. We also found wild vegetables in the mountains and along the small rivers. We ate acorns and locusts. We cut up bamboo shoots and cooked them. Almost all the children in my school were categorised as malnourished. But by the fourth year supplies from the Americans finally reached Iida – pineapple juice, tomato ketchup, powdered milk. It was delivered to our homes and put into our school lunches. By our fifth year we got bread and milk, which literally saved our lives.

TD *Do you think these experiences had an effect on your architectural sensibility?*

HH Iida is a small medieval town in the Japan Alps, located in a huge valley between the Chūō and Minami mountain ranges, with the Tenryū river flowing through the middle. From the second floor of my aunt's house I would look at the mountains to the west in the morning and the mountains to the east at sunset. These views of reflected sunlight and the sense of directionality in the valley had a strong influence on my architecture. Much later I designed a series of buildings I called the Reflection Houses – including my own home, the Awazu House and the Niramu House – in reference to the topography of the Iida area. The traditional culture of Japan arose in the valleys. A valley has a symmetrical spatial structure. In other words, the fundamental mode of a valley is face to face, or call and response. Similarly, the Reflection Houses are symmetrical around an interior corridor along the main axis, with skylights above. The relationship of inside and outside is inverted. Later still I designed Kyoto Station using the same valley typology. Architecture should always be an extension of a natural topography.

TD *Where did you find books to read in Iida?*

HH There was a small public library with just a few books, which meant that they were very precious. It was there that I first discovered philosophy, western and Japanese, in the books of writers such as Karl Marx and Kitarō Nishida. But after the war books were censored. Every passage relating to nationalism was redacted with black ink. Of course, I also read literature, such as *The Arabian Nights*, but that was censored too, not for political reasons but because of its supposedly erotic content. At the same time we would listen to classical music on vinyl that had survived the air raids. Even with the distortions of an old record player I was amazed by the lushness of orchestral works by Beethoven and others. Because our lives were so difficult, the beauty of the world of art was very important to me.

TD *How long did you stay in Iida?*

HH Until I was 18, when I left to study at the University of Tokyo. I received a scholarship, but I also had to work part-time to make ends meet. I chose Tokyo partly because you could study the liberal arts for a year and a half before deciding on your subject, whereas at Kyoto University, the other main choice, you had to make up your mind at the outset. I entered a department that focused on natural science and mathematics, then later went on to study architecture. In hindsight I have some regrets about not choosing a more conventionally scientific subject, but I was deeply attracted to western classical music, literature and philosophy. I was always talking about the fine arts and music, so friends recommended that I entered the architecture department. I knew architecture existed as a profession, because Kenzō Tange was becoming quite famous at the time, but I hadn't realised that it was available as an academic discipline. But even after having successfully entered the department of architecture, I found it uninspiring until my fourth year, when I joined Tange's lab. We studied modern architecture so intensively with him. He was a very inspirational figure. I remember he would come into the studio wearing a pure white suit and a bowtie.

TD *You were in Tange's lab just one year?*

HH That's right, only the final year of my undergraduate degree, but I had the privilege of getting to know him very well, because at the time he was completing his PhD, which comprised an analysis of the relationship between urban form and the movement of people commuting to and from work, and was full of mathematical data. He asked me to assist him with the calculations. Every day I would go to Tange's home – a very beautiful house he'd designed himself – and we worked together. It was very valuable experience for me – it's important for students of architecture to spend time in the company of great architects, even for a short period. After graduating I did my masters and PhD under Yoshichika Uchida, because Tange had then established a separate new department for urban engineering and urban planning, but I wanted to continue with architecture.

TD *Did you meet the Metabolists?*

HH Not until I entered the Tange lab in my fourth year. There were interesting people among Tange's staff and students, such as Arata Isozaki and Kishō Kurokawa, but I wasn't really part of that group because I was in Uchida's lab. But it was an exposure to these various circles that taught me the power and fascination of architecture. Isozaki became a kind of older brother to me. I've respected him ever since we first met. At that time he was also working in Tange's office, and didn't yet have any of his own projects, unlike Kurokawa and Kiyonori Kikutake, who were already making a name for themselves as members of the Metabolist group. Isozaki was slightly removed, but was all set to pursue a new direction in architecture. His erudition meant that he became a central figure for our generation of young architects. He taught me how to become an architect.

TD *What was your PhD topic?*

HH Its title was something like 'The Fundamental Theory of Building Elements'. Uchida's basic methodology was what you might call elementalism. I followed his lead, but quickly discovered that even if I could define and itemise various two-dimensional architectural elements – walls, floors, ceilings, etc – I was still left with the problem of how to put them all together. In the end, I don't think it was an especially good thesis. I was actually very dissatisfied with it. But before I die I'd still like to write a comprehensive grammar of architecture using mathematics and geometry.

TD *Were you also doing design projects?*

HH I gathered together a few classmates, including Mayumi Miyawaki and Koichi Sone, to work on competition entries. We called ourselves Group 59. We never received anything better than an honourable mention, but it did make us more serious about architecture, even if Group 59 only lasted one or two years.

TD *Your earliest published projects are sometimes credited to* RAS Kenchiku Kenkyūjo (RAS *Architecture Research Institute). Was that a continuation of Group 59?*

Clockwise, from top left: with his daughter at Tama Zoo, Tokyo; study trip to the Sahara, 1978; office members in the Hara House, 1980; Bali tour organised by Iwanami Shoten, with leading Japanese intellectuals, including Kenzaburō Ōe; with friends, including Arata Isozaki (*far left*) in Iki, *c* 1970
Courtesy Hiroshi Hara

















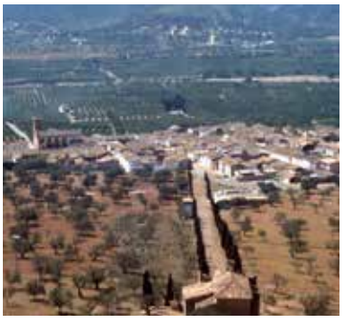








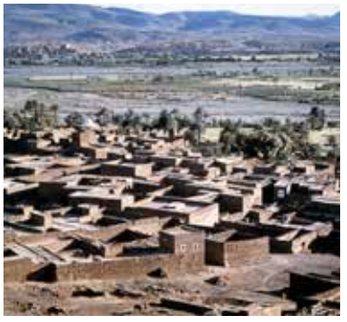






























Selection of photographs from
the Hara Lab village research, 1972–79
© Atelier Phi

HH No, that was with a different set of people who were all doing the PhD course at the same time as me. We received the opportunity to design and build a high school in Sasebo, so we decided to establish an office that could do real projects. I was the main designer.

TD *What does RAS stand for?*

HH Research, Architecture… I've forgotten the S. Maybe Science?

TD *It's interesting that many of your own students have done something similar, forming group practices such as Amorphe and Coelacanth while they were still studying. Were they inspired by RAS?*

HH Maybe, but those groups were begun mainly as an excuse just to have some fun, and a way for students to get their careers started before establishing their own offices. RAS was a somewhat strange collection of people, and for that reason we attracted a certain amount of attention from the architectural press. In the end the group lasted for about ten years, including the period I was teaching at Toyo University.

TD *Were you also a member of Gokikai (Fifth Generation Group), the design collective of about 40 young architects centred around Tange's lab?*

HH No, Gokikai was part of a slightly older generation. Isozaki was the youngest member. Others were from Tange's lab, like Sachio Ōtani, but many of its leaders were talented young architects employed at Kunio Maekawa's office, such as Masato Ōtaka and Azusa Kitō. I knew them because I also worked there part-time.

TD *Maekawa was an important figure in the introduction of modernist architecture to Japan, having worked for Le Corbusier in Paris during the 1920s before setting up his own office, where he employed Tange, among others. How long did you work for Maekawa?*

HH Not very long. I think it was only during my fourth year. I mostly did simple tasks like tracing plans. I remember the office then was in Yotsuya, and I used to go there by bicycle, while Maekawa would drive a gorgeous Jaguar. It was an amazing car.

TD *In 1960 there were widespread student protests against the signing of the Treaty of Mutual Cooperation and Security between the United States and Japan. Were you involved?*

HH Yes, but not very enthusiastically. I took part in the 1960 protests only because I was living in a student dormitory and the other students insisted that I come along. There were demonstrations every day, mostly in Yoyogi Park. I never joined Zengakuren (All-Japan Federation of Student Self-governing Organisations) in 1960, or Zenkyōtō (All-Campus Joint Struggle Committee) in the late 1960s, when the student uprisings restarted in response to the renewal of the treaty and the onset of the Vietnam War. I became increasingly non-political over time, and from the beginning I was dubious about the motives of the Japanese Communist Party and all the left-wing student groups that were starting to appear. I couldn't get along with the leaders of these organisations. But even though I wasn't very active, no one was allowed to be entirely passive. We were all called to the meetings. When we got there all we wanted to do was have discussions, but we'd be attacked by riot police wearing helmets. It was a really difficult situation. A few of my more political colleagues tried to talk me into quitting architecture and joining the movement, but I always refused. That caused some conflicts, but I'm glad I kept insisting on becoming an architect. Among my generation some architecture students did quit.

TD *The resurgence of protests in the late 1960s was partly directed at the planning of Expo 70, which was regarded by many on the left as nationalist propaganda intended to distract the population from more important issues. What was your stance?*

HH I, too, was dubious about the expo. To me it was meaningless. But I was an outsider, not invited to contribute. Kurokawa was probably the youngest participant, while Isozaki and Tange were central to the whole enterprise. Back then we all needed to make our standpoints clear, so in 1969 I became part of a group called Kenchiku Sensen, or Architectural Front, in order to voice our opposition through symposiums and publications, not rioting in the streets. Architectural Front didn't have many members, just a few architects and critics such as Yoshihisa Miyauchi and Keiichi Taira. The left-wingers set up barricades on campus, and they called me to meetings with them. I found that people in these kinds of organisations and political groups had totally different ideas from me. I agreed with them in principle, but in the specifics they were quite wrong. We just couldn't communicate. They wanted to solve contradictions through dialectics. I wanted to embrace the contradictions and go beyond simple dialectics.

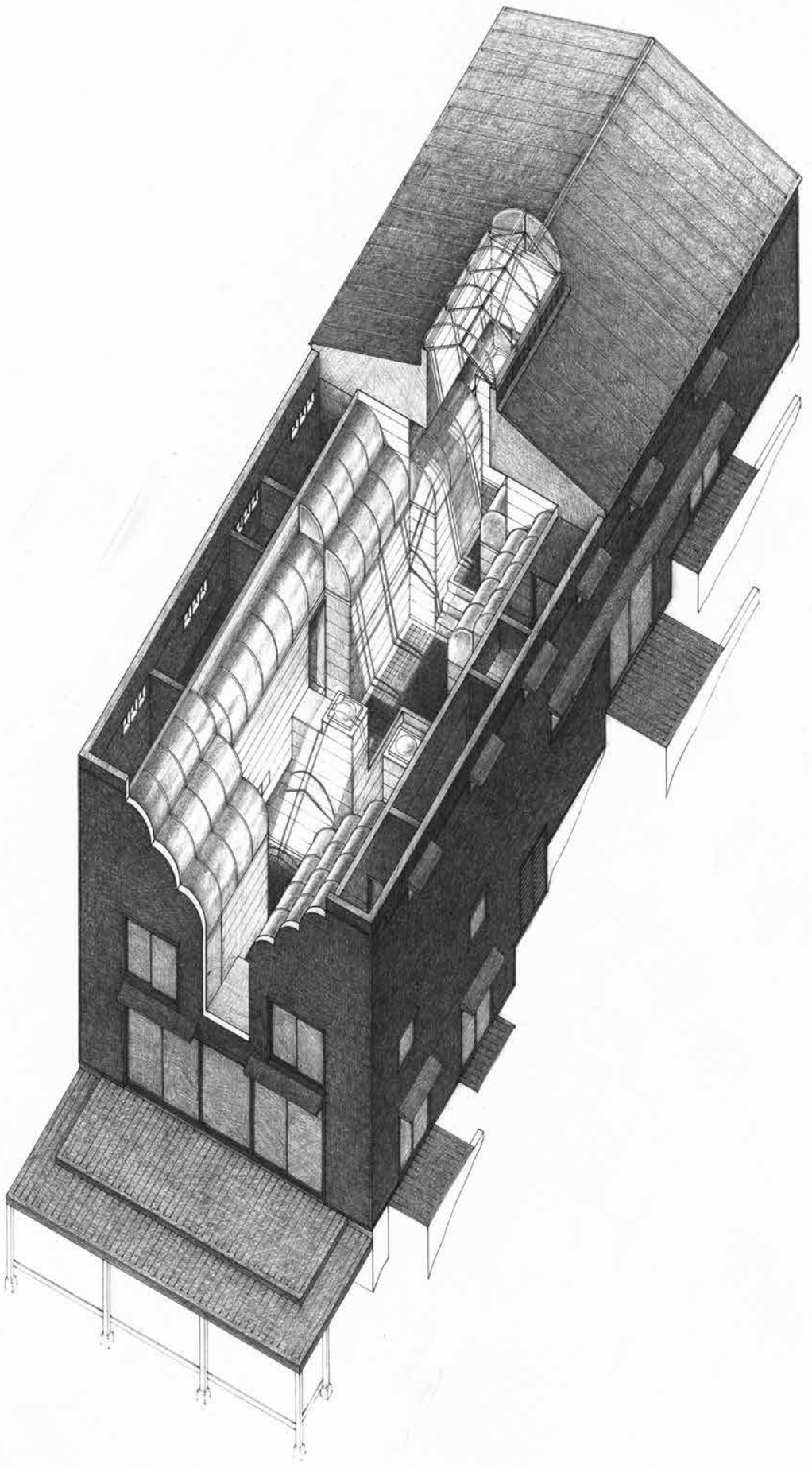
TD *Many of the contributors to Expo 70 had also been participants in the 1966 exhibition 'From Space to Environment', held at the gallery in the Matsuya department store in Ginza. It contained some important early experiments in media art and technological art by a large group of artists, with you and Isozaki the only architects. Many of the ideas first tested there were expanded later in the expo.*

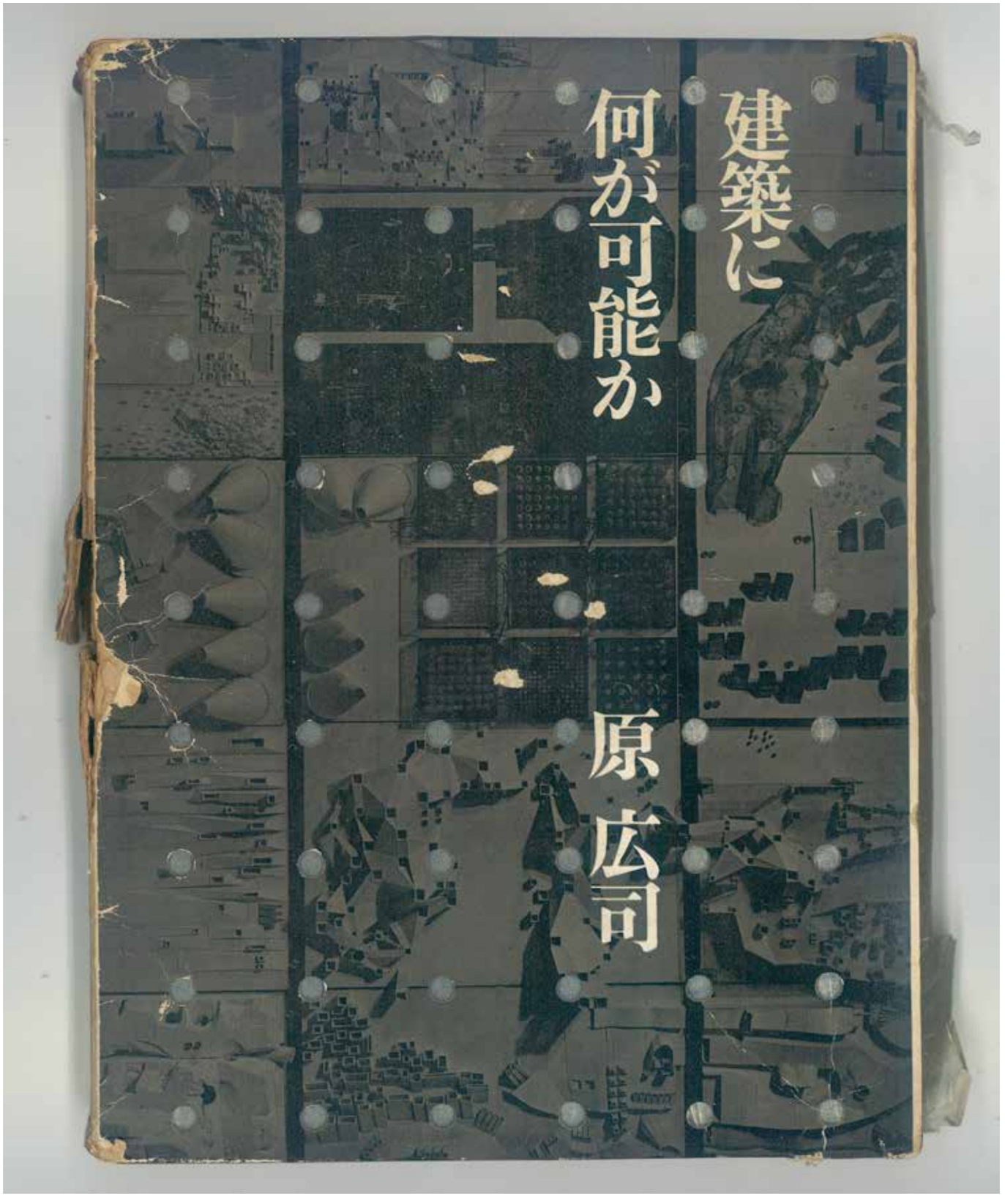
HH That's true, but I never got involved in developing these ideas for the expo. It was Isozaki who invited me to be part of that exhibition. The concept of 'environment' had just started to become popular, and we became interested in the shift from object-based to environment-based art – today, there are lots of theories about the reasons for this change, but I think it originates in music, from John Cage via Toshi Ichiyanagi, although you can still find traces of it today in the music of Brian Eno. As part of the preparations for the exhibition we even formed another group called the Environment Society, which included artists, writers, critics, graphic designers and so on. The meetings were held at Isozaki's atelier. I encountered so many interesting people there, including Ichiyanagi and the graphic designer Kiyoshi Awazu. At one of the parties I even met Jasper Johns. I was always very grateful to Isozaki for inviting me to these events. It was characteristic of the period that people from different generations and disciplines would get together around a particular cultural activity. When we did the show, we were all friends and worked together very harmoniously. After 1968 there was a sudden change in the political and social atmosphere, and I think this kind of group activity became impossible.

TD *What did you exhibit in 'From Space to Environment'?*

HH I showed the *Yukotai Model*, which was a set of architectural forms containing many different types of hole or aperture. At the time I was developing my *yukotai* theory, about porous volumes, or rather bodies with holes. I felt then, as I still do now, that holes have a great significance in contemporary geometry. In many ways, the form of an object can be classified according to how many holes it has. This idea has been the basis for many of my subsequent projects, as a way of designing from the part to the whole, rather than using top-down ordering principles. We were all proposing new concepts in the exhibition. For example, Kiyoshi Awazu made a shallow stainless-steel pan filled with water in which ripples formed

Atelier Phi, Hara House, Machida, Tokyo, 1973–74
© Atelier Phi




建築に
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due to the vibrations caused by the movement of people. It was an early example of interactive art. Awazu was one of the leaders of the exhibition, and went on to organise other events with progressive artists. He was particularly inspired by Andy Warhol and the 'happenings' in Greenwich Village.

TD *He was also a founding member of the Metabolist group.*

HH That's right. I later designed his home as the first of my Reflection House series. He in turn designed the cover of my first book, *Kenchiku ni nani ga kanō ka?* (What is Possible in Architecture?), with a grid of small holes punched into it, representing the *yukotai* theory. The original edition is now very rare. I only have one copy myself.

TD *Its title is a succinct statement of the approach you have always pursued – rather than trying to define what architecture is, you try to define what it can do. When was the book published?*

HH I finished it when I was 30 years old, so that would have been 1966, the same year as the exhibition. I handed the manuscript to the publisher, and then began a round-the-world trip, starting in the US, then travelling through Europe and finishing in Istanbul before coming back home. I visited all the important cities, and I saw works by the modern masters, Frank Lloyd Wright, Mies van der Rohe, Le Corbusier, and by the architects that came soon after – like Buckminster Fuller, whose dome for the US pavilion at the Montreal Expo made an impression – as well as those that preceded them, such as Adolf Loos and Otto Wagner. They all fascinated me. I thought, 'Wow! Finally here are all the buildings I studied at university.' But above all, I was impressed by the classical European and Islamic architecture.

TD *I think your second trip outside Japan was two years later, when you were invited to attend the 1968 Summer International Seminar at Harvard University.*

HH That was unexpected. I didn't realise it at the time, but the seminar was part of an American cultural strategy funded by the CIA. Henry Kissinger ran the programme, first as a graduate student at Harvard's department of education and then later with the US state department, working with the FBI in spying on all the participants. I only discovered this later, and I realised all politicians are like this. They can't be trusted. For example, when I was travelling around the US I remember Kissinger canvassing on behalf of Hubert Humphrey, the Democrat candidate in the election that year, and making a lot of anti-Nixon comments. But then, of course, Nixon won the election for the Republicans and suddenly Kissinger switched sides and became his vice-president. That really shocked me. Anyway, people from all over the world had been invited to the US for the seminar, where we discussed various cultural topics. It all seemed very open and free. I remember the state department asked me who I wanted to meet, and I suggested Walter Gropius and Mies van der Rohe. I had letters of introduction from Tange and Fumihiko Maki. These meetings never took place, but they did arrange for me to see Philip Johnson. I remember he picked my wife and me up from the train station in his sports car. He also called Paul Rudolph on my behalf, and set up a meeting. As I said, later I realised that this was all part of some sinister CIA and FBI strategy. Kenzaburō Ōe had been invited to the Summer International Seminar a few years before me, but we've never once talked about it with each other. It's like an unmentionable guilty secret.

Hiroshi Hara's first book, *What is Possible in Architecture?*, 1966, with a cover showing his Yukotai model
Cover design by Kiyoshi Awazu
© Atelier Phi

TD *Back in Japan in 1970, the same year as the expo, you established your current office, Atelier Phi. Why did you disband RAS?*

HH That was after I left my teaching position at Toyo University to take up a position as assistant professor at the University of Tokyo, where I set up my own postgraduate design lab. At the time the internal situation at RAS wasn't good – a number of its members were leftists, and differences of opinion were affecting the balance of power. After my involvement with Architectural Front, I even thought that I should quit architecture altogether – I remember Maekawa was furious with me when he heard that I was considering this. There were just so many personal and political problems in that period – the expo and the student movement that tried to destroy it, as well as the increasingly serious issues of pollution and environmental damage. So much conflict. And so I disbanded RAS and felt like starting something new, doing only real projects. By 1971 I had settled, resolved or ended relationships with many of the people around me.

TD *Was there much overlap between your practice at Atelier Phi and your teaching at the Hara Lab?*

HH I led them both at the same time. When I planned and designed, I worked at Atelier Phi, and when I studied and did research, I worked at Hara Lab. The lab itself was part of the Institute of Industrial Science at the University of Tokyo, so I had two main obligations: education and research. I believe that for young people, especially students of architecture, the most important thing is not the acquisition of knowledge but what I'd call intellectual training exercises. My lectures tended to last about four hours, and in preparation I expected my students to read assigned texts on science, philosophy and aesthetics. Architecture is a type of cultural activity, not simply the task of accommodating people and their activities. For me, the main goal is originality, but we cannot teach originality, or at least artistic originality, because it arises from what we don't yet know. And so I developed a system of training exercises that might instil an artistic comprehension. Only a student that comprehends art will be able to become a complete architect. My training was rigorous, like any sport, and it revolved around research exercises, because research requires original thought. In my lab there were three types of research: field research on villages, mathematical research, and architectural or urban design research.

TD *I know that one of your former colleagues in Group 59, Mayumi Miyawaki, had already done fieldwork on villages in Japan, but throughout the 1970s you made a series of trips with your graduate students to document and analyse villages all across the world. What prompted you to do this?*

HH As I mentioned, at that point I had just begun teaching at the University of Tokyo, but all the protest movements and political infighting between left-wing splinter groups had left the universities in a state of terrible confusion. Life was becoming harder every day. Eventually things calmed down and the 1970s became something of a lull, a period of respite after the cultural upheavals of the 1960s – the simultaneous rise of the artistic and the political avant-gardes, the appearance of the Beatles and the Rolling Stones, Andy Warhol and so on. Nonetheless, after all the conflicts, I decided that I had to get away from the local situation and rethink modern architecture, so I came up with the idea of leaving Japan to research vernacular villages elsewhere in the world.

TD *How did you fund the trips?*

HH In the beginning the students paid for their own travel costs, but later we secured a number of grants. Subaru also donated some vehicles. When we first started I didn't know if the university would allow us to make an international research trip, so I took it as holiday leave. This was 1972. We started in Paris and drove south, following the Rhône down to the Mediterranean. We then headed across the Pyrenees and through Spain, before crossing over to North Africa from Gibraltar. From Morocco we then traversed the Atlas Mountains to reach the Sahara desert. We finished our trip in the M'zab Valley region of Algeria. At every point we would document settlement patterns by means of photographs and measured drawings of the house plans and their layout relative to each other, from which we would later try to extract organisational diagrams. I remember being deeply moved by the city of Ghardaïa, where we found much of the native vocabulary that Le Corbusier had absorbed into his 1933 Plan Obus. I discovered that villages possessed a beauty equal to that of any classical architecture, and I began to wonder if there were other village types that Le Corbusier had not discovered. So I wanted to continue, or rather, I felt compelled to continue – something made easier by the fact that I didn't have any commissions at the time, other than the Awazu House. The village research began almost as a joke, but I ended up spending pretty much all of the 1970s doing it. I wanted to shut myself away from the everyday world – something I still tend to do now.

TD *Where did you go next?*

HH The second trip was in 1974 and we went through Latin America, from Mexico to Peru. The third was in 1975, to Eastern Europe and the Middle East. The fourth was in 1977, to Iraq, India and Nepal. The final one, in 1979, was to West Africa. We visited about 40 countries in total. We went by car from continent to continent, region to region, crossing national borders and visiting various villages without any kind of advance appointment. In retrospect it's unbelievable that we were able to do it.

TD *Were you influenced by Bernard Rudofsky's famous book and exhibition on the vernacular,* Architecture Without Architects*?*

HH Naturally, of course. His photographs are splendid. But I was also aware of the work of various other village researchers.

TD *Rudofsky taught in Tokyo in the 1950s.*

HH Really? I didn't know that.

TD *He was at Waseda University. You never met him?*

HH No, but then I'm not a historian, and my research doesn't have anything to do with history. In fact, unlike my other university training exercises, I try to avoid calling these trips 'research', because I didn't think we were doing it for academic reasons. I've always tended to avoid treading too far into academic territory, with all its requirements for correct procedure. Instead we referred to our work as 'travels' or 'adventures'. Yet it was still very much part of what I saw as essential architectural training, just like reading books on aesthetics or philosophy. The concept of the traveller is of course part of western culture – just think of Homer, or of Aristotle's writing about travellers, which I read closely. But there is also a Japanese version of the traveller, which is somewhat different, more poetic. There are many famous domestic travellers, such as Bashō, a poet of the Edo era, who wrote a series of haiku poems while travelling around Japan. His book, *The Narrow Road to the Deep North*, is a really wonderful account of his travels.

TD *What about Christopher Alexander and his attempt to develop a 'pattern language' for architectural and urban design from studies of traditional settlements?*

HH I also know Alexander, but I'm less convinced by his model of discussing architecture through these kinds of 'patterns'. Rather, I think we should employ a more general and methodologically open way of thinking, based on semiotic fields and signs. A pattern language makes architecture stagnant. Of course, I don't claim to have single-handedly cultivated the genre of village research, but for me it is about interpretation – we visit sites in different cultures and from different eras and make our own judgements based simply on what we see, not on predefined exposition, but through our own sensibilities.

TD *You mentioned your need to escape the difficult conditions in Japan at the beginning of the 1970s, but was all this travelling to unusual places also partly an attempt to find alternatives to international style modernism?*

HH My thoughts about modern architecture are very simple. Basically, the dominant concept of our era is 'homogeneous space', which originates with Descartes and is embedded into the deepest layers of western architectural culture, from the Renaissance all the way through to Mies. I always believed in this concept, and still do. It's inescapable. So I cannot presume there is any alternative to homogeneous space, just as there doesn't seem to be an economic system that could supersede contemporary capitalism. But through my village research I felt that I could address things that the modern movement had repressed or denied, or at least look at things outside the classical canon. At the same time, I didn't want to be misunderstood as a revivalist. For example, I never advocated the use of traditional symbols or forms. Instead, I always saw the villages we studied as offering principles that we could then build on using a contemporary vocabulary. But ultimately, our trips and adventures were just interesting and joyful – qualities that I think are crucial in any education, but especially an architectural one.

TD *Yet though you say you were trying to find alternatives to the canon, your first trip was around the Mediterranean, the birthplace of classical architecture.*

HH That's true. But modern architecture began with a rejection of the village, even if Le Corbusier also visited some of these villages, and found inspiration in what he saw in Italian hilltop communities as much as the settlements in Algeria. I never felt I could offer a complete antithesis of modernism, and so instead I just hoped to find architectural objects or possibilities that the great masters, and even Le Corbusier, had overlooked.

TD *Your village studies led to a series of special issues of the Japanese architectural magazine* SD: Space Design*, and the methodology has been developed further by some of those students who participated in the trips, such as Riken Yamamoto and his own work on diagramming threshold patterns. Did your own village trips continue after the 1970s?*

HH I have continued exploring villages in various places. It usually takes two years – a year to prepare and a year for the trip itself. But I've been denied permission to visit some of the places I'm interested in, such as China, Russia and the Ukraine. Brazil has also refused, because the more remote areas of the Amazon are very dangerous and difficult to enter. So there are large areas of the world that I have yet to explore. Maybe someone will investigate them someday – perhaps Akira Fujii, a student of mine who joined the early village trips and is now a professor at the University

of Tokyo. He continued to do village research after I retired, and has been accumulating reports and data, but they have yet to be edited and published.

TD *Your interest in non-modern, non-western sources has something in common with the attitude of Kazuo Shinohara, who alongside you and Isozaki is a key figure in postwar Japanese architecture. Was there ever a dialogue between the two of you?*

HH I often met Shinohara at the Tokyo Institute of Technology where he taught. We talked about all kinds of things. There is a generational gap between the two of us – he was about 12 years older than me, a difference that in Japan we call one cycle (of the Chinese zodiac) – so he was not a friend, but certainly an architect I respected. I always considered Shinohara to be a true artist in the history of Japanese architecture, with the ability to convey a timeless beauty through his buildings. In contrast, for me, an ideal architecture should always undergo modification or transformation, depending on changes in the activities it contains and the natural conditions around it. In this sense, I don't believe architecture can or should ever attain absolute beauty.

TD *So whereas Shinohara was intuitive, you were systematic. I think there is a simple distinction between the three key figures here, in terms of their attitude toward houses versus cities: Isozaki is interested in the city, but rejects the house; Shinohara is interested in the house, but rejects the city; Hara accepts both, but tries to embed the city within the house.*

HH I think that's right. Certainly the importance of the city was one of the defining topics of that era. Tange constantly emphasised urban design. For him, the city was always the most important thing. But in reality, urban design is not part of an architect's mandate. It's the responsibility of national and local governments. Yet even if we cannot participate in real urban design, I always felt we had to somehow address it. My solution was to metaphorically embed the city inside the house – or to place a city inside architecture. I tried to do this in the Reflection Houses, but probably the best example of this is Kyoto Station, which I designed as a kind of city.

TD *It also seems that Isozaki's architecture is based upon quotation and collage of historical sources, whereas you are always trying to create new things.*

HH At first I learned a great deal from Isozaki. We even had a series of conversations about modern architecture that were convened and published by the magazine *Toshi Jūtaku* (Urban Dwelling). However, after the late-60s protest movements each of us had to increasingly defend our respective standpoints and interests. Isozaki chose to find inspiration in classical architecture, while I chose vernacular villages. I think that's the major difference between us. He is interested in artifice, but I am interested in creating a new naturalism in architecture. This is due to my upbringing in the Iida valley and my experience of food shortages, which made me believe that it is impossible or unwise to try and live outside the natural world. Isozaki and I were both influenced by early twentieth-century aesthetic developments prior to the appearance of international style architecture, notably Russian formalism and French surrealism. But villages reveal a different world. That is why I have such a rapport with Kenzaburō Ōe. We were both raised in villages located in valleys, which are very important to Japanese culture, as I said. I lived in a huge valley and his hometown is in a small valley, but nonetheless, this aspect of our upbringing makes us part of a particular group in Japan with a shared sensibility.

TD *When did you first meet Ōe?*

HH We both studied at the University of Tokyo during the 1950s, but it wasn't until the late 1970s that we first met. At that time the publishing house Iwanami Shoten set up a kind of cultural studies group, through which they would organise discussions and events. Ōe and Isozaki were part of it, along with the composers Tōru Takemitsu and Toshi Ichiyanagi, the novelist Hisashi Inoue, poetry scholar Makoto Ōoka, new-wave film director Kijū Yoshida, theatre director Tadashi Suzuki, cultural anthropologist Masao Yamaguchi, philosopher Yūjirō Nakamura… I also had the privilege of being invited to participate. The idea was that these meetings would result in a series of books, published under the general title *Bunka no Gendai* (Contemporary Culture).

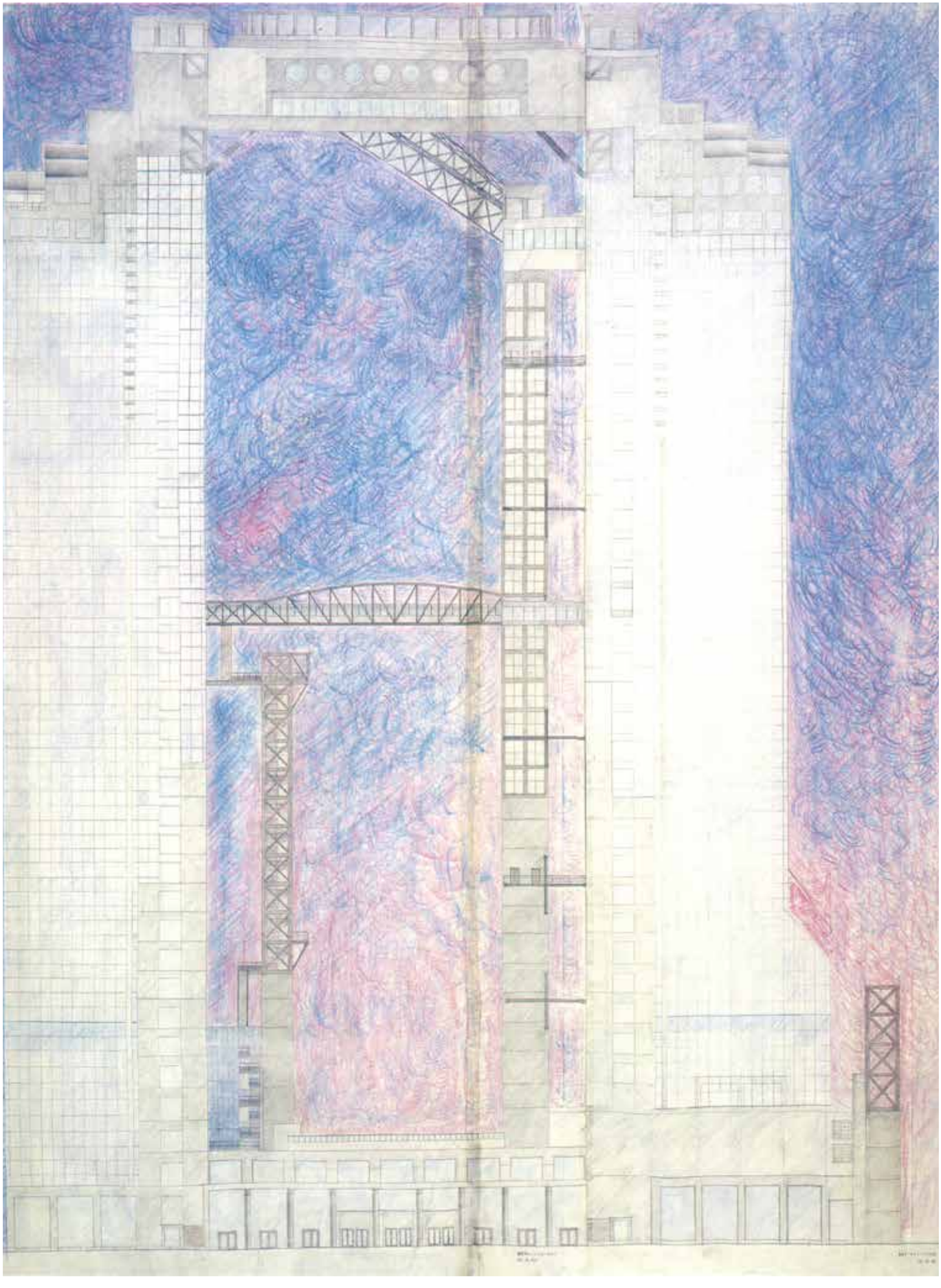
TD *Iwanami has always been known for promoting progressive intellectuals, despite occasional censorship and even the arrests of authors and editors. They began publishing the left-wing magazine* Sekai *(The World) just after the war, during the period of the American Occupation, and today it's still probably the most important forum for radical intellectual and cultural voices in Japan. Was there a connection between* Sekai *and the* Bunka no Gendai *series?*

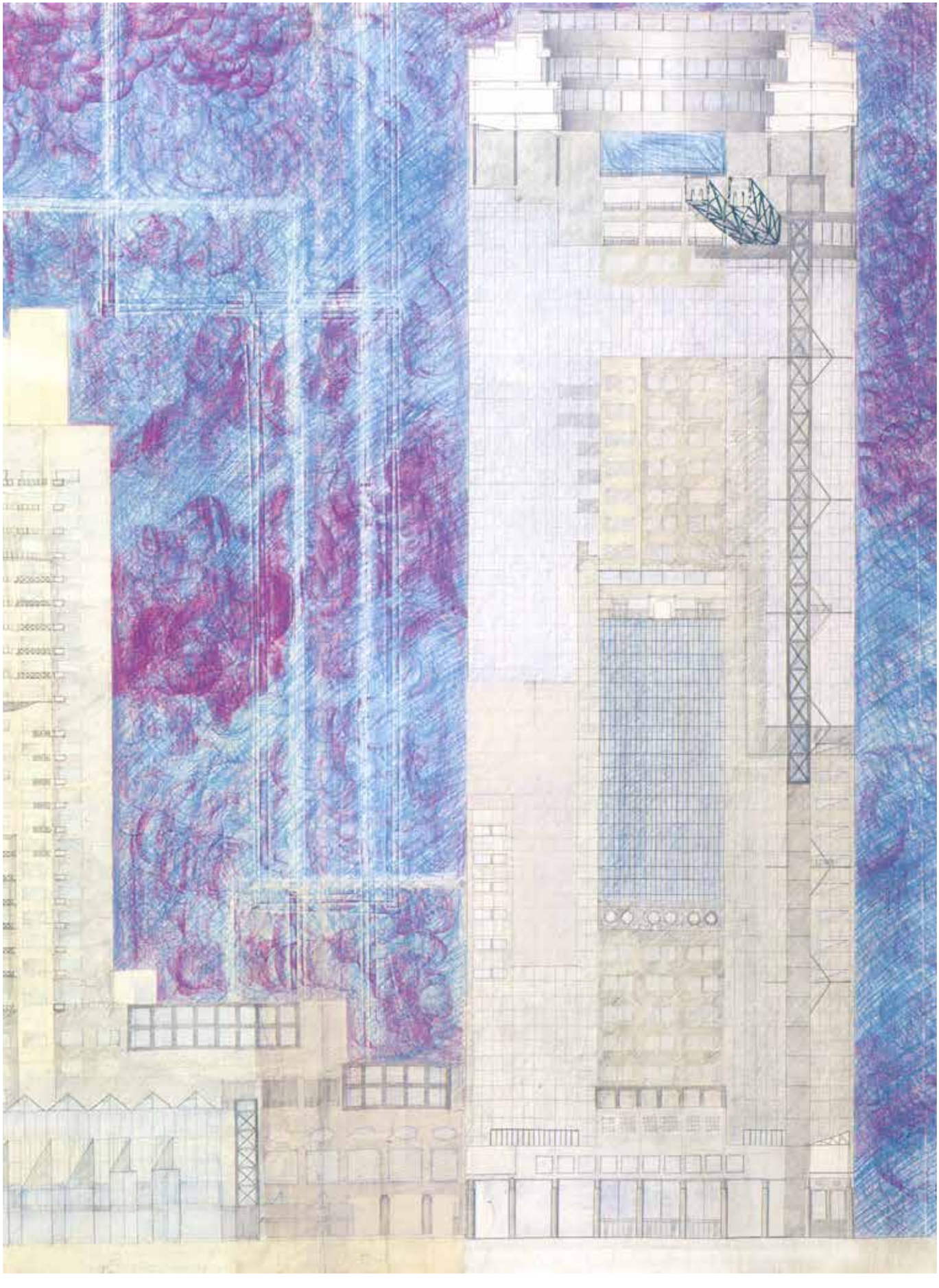
HH There wasn't a direct relationship, but it was somehow an outgrowth of *Sekai*. The magazine editors were with us in the meetings and they did publish some of our musings. Iwanami employs many excellent editors. It's an amazing organisation. For example, when they published my book *Kūkan: Kinō kara Yōsō e* (Space: From Function to Modality) they checked and improved every single sentence. Excerpts from my texts were even chosen for university entrance exams because the prose was considered so reliable. During the 1970s, the heyday of cultural criticism, people in Japan were attacking European logo-centrism and so on, and Iwanami was also targeted. But their insistence on quality and precision has gained Iwanami the total trust of its readers, and it's their editors that generate this trust.

TD *Was it due to meeting Kenzaburō Ōe through the Iwanami group that you were commissioned to design a school in his hometown?*

HH Ōe is of course a huge celebrity in his hometown, so when they wanted to rebuild Ose Middle School, which he attended as a child, they asked his advice and he recommended me. Ose is the original 'forested valley in Shikoku' that forms the setting for so many of his novels. And so before beginning the design I analysed three of his valley novels very closely, identifying a set of about 30 symbolic places, which later led to my notion of 'semiotic field'. In his novels, these places act as 'attractors' for movement in the valley. My design for the school is also composed as a set of symbolic places, including some particular references to his stories – for example, a 'pond for collecting rain' and a long retaining wall that corresponds to his image of a 100m-long path and dam. Ōe liked it a lot. After it was completed the new school building appeared as a backdrop in some of his books, and he started including me as a character in the stories – his writing is a mixture of 'real' and 'not real'. You know, Ōe is really funny. I sometimes can't believe he writes such tedious novels. He has a sense of beauty, but as he writes he distorts and deforms everything. He purposefully makes it difficult. His essays are very easy to understand, but his novels are so strange that most people don't want to read them. In meetings, everyone wants to

Overleaf: Atelier Phi, north elevation and section, Umeda Sky Building, Osaka, 1993
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speak their mind, but he just concentrates on making people laugh. And while telling a joke, he's already thinking about the next one. It's amazing that he has also remained an important democratic figure in Japanese society, guiding public opinion, and he has done this while continuing to write and engage in public events and look after his handicapped son, Hikari. Ōe has already won the Nobel Prize for Literature, but if there is ever a Nobel Prize for Humanism he should get it – he is such a bright and fantastic guy.

TD *If Ōe was Japan's unofficial democratic leader after the war, then perhaps the unofficial fascist leader would be his counterpart, Yukio Mishima. Mishima publicly committed ritual suicide in 1970, the year of the expo, after failing in his attempt to trigger a military insurrection to restore the emperor to full power. Did you ever meet him?*

HH No, I never met Mishima, but of course I know his writing very well. In his novels he has a certain way of capturing space, but I've never really studied him in depth, so I don't know if the whole world of his novels can be described spatially. The previous generation of writers and filmmakers displayed a kind of Japan-ness in their work, such as novelists Junichirō Tanizaki and Yasunari Kawabata – a person who in many ways is like Japan itself – or the directors Yasujirō Ozu and Akira Kurosawa. The aesthetics of the generation of Mishima and Ōe attempted to exceed this world of Japan-ness. I too have an inherently Japanese sensibility but I am also influenced by other aesthetic systems.

TD *In 1978 you went to New York for the 'New Wave of Japanese Architecture' exhibition at Peter Eisenman's Institute for Architecture and Urban Studies. Did you have any memorable encounters?*

HH I travelled around the US with Arata Isozaki and Takefumi Aida and some other people, giving lectures prior to the 'New Wave' exhibition. It was no big deal, but I did meet some interesting people, such as Laurinda Spear and Steven Holl.

TD *Steven Holl shares many of your interests in the phenomenological experience of material, light, sound and so on. In 1987 you published the book* Kūkan: Kinō kara Yōsō e *(Space: From Function to Modality), which expands your field of interests from the analysis of villages to the construction of a philosophy or phenomenology of space that combines an incredible range of sources from just about every culture and era.*

HH If I remember correctly I wrote that book while I was working on the design of Yamato International and the Iida City Museum. The basic idea was to take a stance against homogeneous space through the idea of the 'mode' – a notion of continuous change found throughout the history of thought, in Buddhism, and in Spinoza, Locke, Kant, even Barthes.

TD *The larger projects of the late 1980s and 1990s have allowed you to deal with the theme of modal transformation in a more overt way. Your early projects were mainly small private houses. Was it a deliberate choice to shift to increasingly large and public projects?*

HH No, just luck. Maybe it's also related to the structure of Japanese society. In Japan you only attain a degree of social status and power when you reach your 50s. As I got older, my projects got bigger. As much as I was interested in villages, I never had the desire to work only at the scale of the house, like Shinohara. I spent almost 20 years on three huge projects – the Umeda Sky Building, Kyoto Station and Sapporo Dome – which entailed developing new structural devices to give them clarity and feasibility. For example, the Umeda Sky Building uses the notion of connected high-rises, and the Sapporo Dome permits spectacular changes of mode for different events. I couldn't have done any of them without structural engineers of the calibre of Toshihiko Kimura, who studied in the same lab as me, or Mutsurō Sasaki, who did the Sapporo Dome, or Yoshiharu Kanebako, who worked with me on Kyoto Station.

TD *Wasn't Christo going to wrap the Umeda Sky Building?*

HH Yes, but he gave up. It was too complex and too expensive. I first met him in Japan, around the time he was working on the umbrella project. He gave me a couple of his smaller works as gifts – a wrapped telephone which I have here in the office, and which I like very much, and also a drawing of his Miami project which I have at home. I've collaborated with many different artists on my projects since the Umeda Sky Building. At Kyoto Station, for example, I had the idea of making all the advertising billboards as artworks, so when it first opened it was full of installations by a really fantastic group that included Robert Longo, Miyuki Ueda, Joseph Kosuth, José de Guimarães, Tadanori Yokoo and Roy Lichtenstein, who was the one artist I wanted more than anyone else. The Lichtenstein piece was commissioned by the Kyocera company, but they threw it away when they changed the billboard. Unbelievable! All of the other artworks have also since been removed.

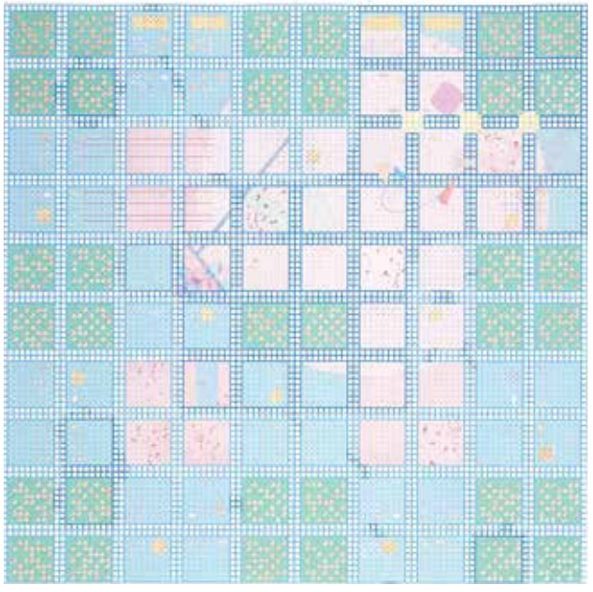
TD *Do you select the artists?*

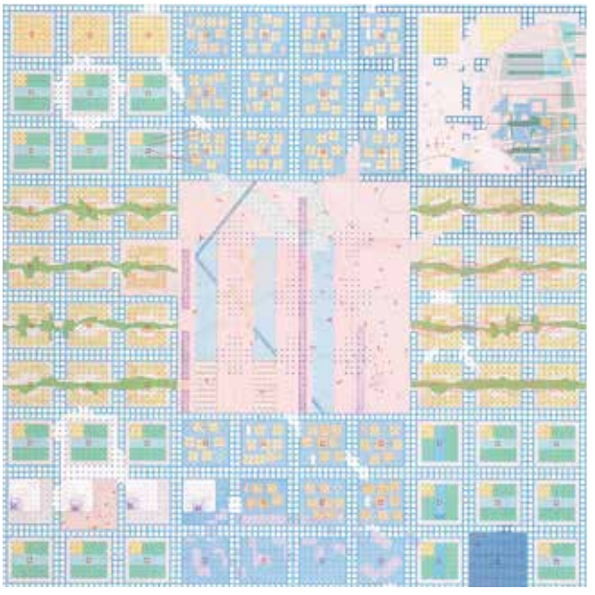
HH Usually. My brother-in-law is Fram Kitagawa, director of Art Front Gallery, and he has contacts with every major artist in the world so he can make introductions for me. For example, Joseph Kosuth and Felice Varini made pieces for the Sapporo Dome and Jean-François Brun did a lighting installation that is very beautiful, especially in the snow. Other artworks by Japanese artists such as Tadashi Kawamata and Shintarō Tanaka form an 'Artgrove' that spreads all across the site. In 2003 I built the Tokomachi Stage as the central facility for the Echigo Tsumari Art Triennale, an event also coordinated by Fram, and various artists have installed works in the courtyard, most recently Christian Boltanski and Cai Guo-Qiang. When I collaborate with artists, I never interfere. I already know their work and its importance, so I just provide drawings of the architecture and then leave them to it – a distance that I believe ensures a successful collaboration.

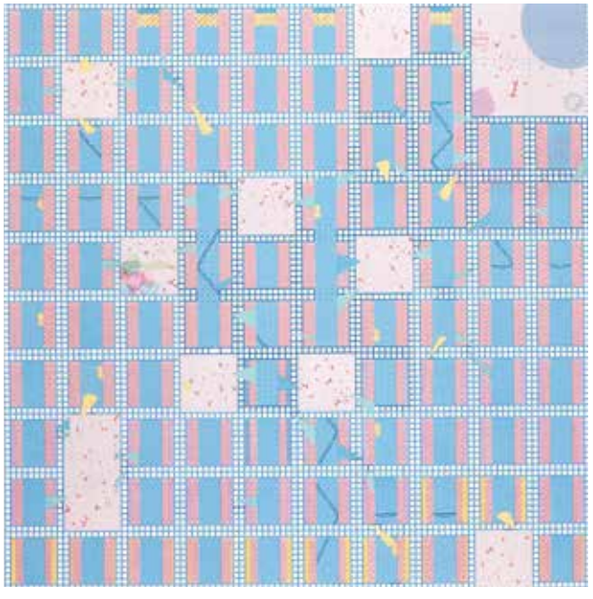
TD *Throughout your life you have maintained the ability to find or create beauty in extremely adverse conditions. How have the 3/11 Tohoku earthquake, tsunami and nuclear power plant disaster affected your architecture?*

HH I don't think there has been any real change. Such things have happened throughout Japan's history. For example, the famous thirteenth-century text *Hōjōki* (An Account of my Hut), by the Buddhist monk Kamo no Chōmei, describes events in which thousands of people died due to famines, fires, earthquakes and so on. Because I experienced the Second World War and its aftermath I am relatively unmoved by these kinds of terrible disasters. Of course, I can understand how tough it must be for the victims, but I don't think it's good to wade in and start instructing people what to do. And so I think we should leave it to the people of Tohoku to resolve things. During wartime, people didn't give us orders or assistance. When I was at school I didn't have any food, and no one helped me, but don't I assign blame, because we were all having a hard time. The students were divided between those who could bring lunch boxes from home and those who could not. I belonged to the group who could not. At lunchtime, our teacher would simply ask those without food to play outside, while the other students ate

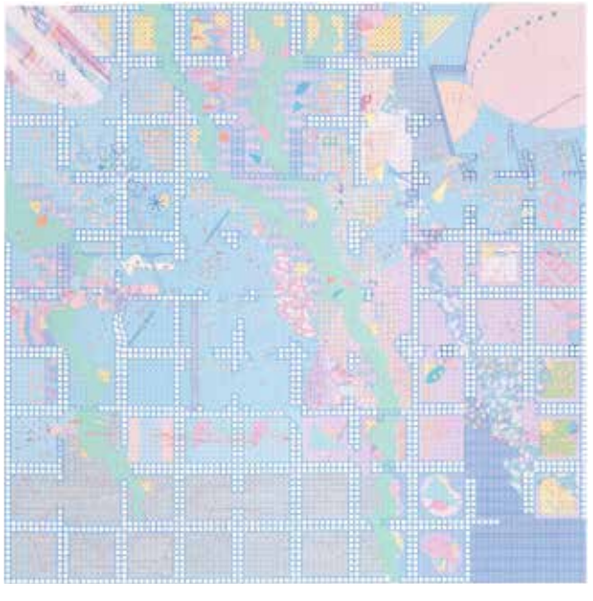
Atelier Phi,
500m × 500m × 500m Cube, 1992
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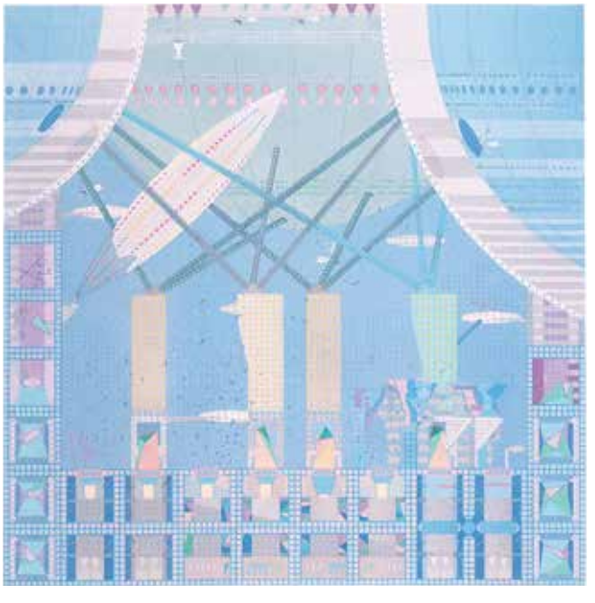












inside. Our teacher never asked them to share. I often think about that. There's no solution to that kind of problem.

TD *Do you see any cause for optimism?*

HH Tendencies in the scientific world suggest that human culture will become increasingly homogeneous in the future, yet cultural differences remain in our industrialised world. There are different understandings of the world itself – for example, every idea about the cosmos was different before and after Copernicus. During the Renaissance, Aristotle's picture of the universe was proven wrong, but this didn't stop Bernhard Riemann resurrecting and revitalising it in the nineteenth century. Of course, nobody can reject the rising and setting of the sun, but now we have various forms of culture, in the geometrical sense, and I think this variety is a good thing.

TD *How should architects respond?*

HH The urge to foresee the future has always been a strong motivating force in art and architecture. I can give examples from my own work. The concept of the cloud has become increasingly popular in the IT industry. A diagram of the internet looks like a cloud, or a crowd. Those two words sound the same to a Japanese person like me, and I think their resonance produces a beautiful image. From the Reflection Houses of the 1970s right through to projects such as Yamato International, Iida City Museum, and the Umeda Sky Building, I have always said that my architecture is symbolised by a cloud. Recently, we started to look into the mathematical description of cloud formations, and found ridges that indicate the centrelines of closed-curve surfaces, a phenomenon known as a 'fork'. It is similar to the way a tree has branches, and the branches have smaller branches, which have even smaller branches, and so on. This branching ultimately becomes a cloud. I suggest that my notion of embedding the city in architecture is equivalent to this cloud. Of course, many people are now trying to represent clouds in architecture. Another example from my work is the use of illusion. To explain illusion in architecture requires the concept of transportation. Many things are transported to a city from elsewhere – food, construction materials, machines, people. This is literal transportation, but there is also metaphorical transportation to a city in, for example, a park – the trees, hills, rivers, maybe animals, all seem to come from other places. Etymologically, the word 'metaphor' means to 'carry' or 'transfer'. So to implement a metaphorical city within a small work of architecture we must make a transport system. I do this with glass walls set at various angles, such as at the museums in Tasaki and Iida, thereby creating multiple overlapping reflections that mix real images and false images – or 'unreal', to use one of T S Eliot's favourite words. His book *The Wasteland* is one of my most treasured texts. It is so relevant to architecture. At a much larger scale, my 500 × 500 × 500m Cube is a proposal for an 'unreal city' – a three-dimensional lattice floating in the air that could house 100,000 people, along with factories and farms. It's a homogenous space permeated with transportation systems that would allow it to evolve over time in new and unanticipated ways. We always have to ask what 'real' is. Usually people think architecture is real, because it is an object. But if people come to think of architecture as an event, or a kind of phenomenon, it may be understood as unreal. In Judeo-Christian culture people believe in 'real being', because God made the universe as a thing. Whereas in Asian culture people believe in 'real being' and 'not real being' at the same time, because the creation of the universe is never explained in the ancient texts. And so we don't believe that God or Buddha created the universe, we believe that God or Buddha 'might have' created it and 'might not have' created it. In western logic this is a fundamental contradiction, but to eastern thinking it makes sense. The term for it is *arazu arazu*, or 'not-not'. This is evoked in a famous line by the twelfth-century poet Fujiwara no Teika: 'As far as the eye can see / neither blossom nor autumn leaves.' It is not simply a description of desolation. The mention of the absence of blossoms simultaneously implies their presence. This is *arazu arazu*. In today's digitised world, we are increasingly seeing that real things and unreal things can exist at the same time. Technology has dissolved the differences between western and eastern logic. And in the simultaneity of western dialectics and eastern *arazu arazu* I think there are grounds for optimism.

TD *Your theoretical writings seem to be largely based on logic, and include many mathematical equations and formulas. Do you use these equations to produce your designs, or as a way to explain the designs after they have been realised?*

HH When I was at university I listened to music, studied philosophy and read novels. Now I regret that I didn't also engage with mathematics, or at least geometry, because I feel that if I had studied mathematics more seriously then, things would be easier now. I believe that architecture is not an object but an event. If you lack the tools to notate such events, you have to create your own notational system. Such a system should be comprehensible to a wider audience, not just architects. This is where mathematics could provide the basis for a kind of textbook or general description of architecture that could notate its large structural devices. Of course, it is also important to describe the small details, but the originality of a work of architecture exists in the conception of large devices. The fine arts of the past displayed beauty in their unique details and nuances, but such things have begun to disappear in contemporary culture. In traditional villages, the details are sometimes very beautiful, but sometimes they are half broken or built randomly or of mediocre quality. But even under such conditions, beauty may appear.

TD *Mathematics is logical, whereas art is intuitive. Which is more important?*

HH Ultimately logic is more important. I think it is better to kill feelings completely, in the same way that contemporary composers – like Tōru Takemitsu, John Cage or György Ligeti, all of whom produce very beautiful music – eliminate from their work the ornamentation, melismas and other emotional effects of traditional music.

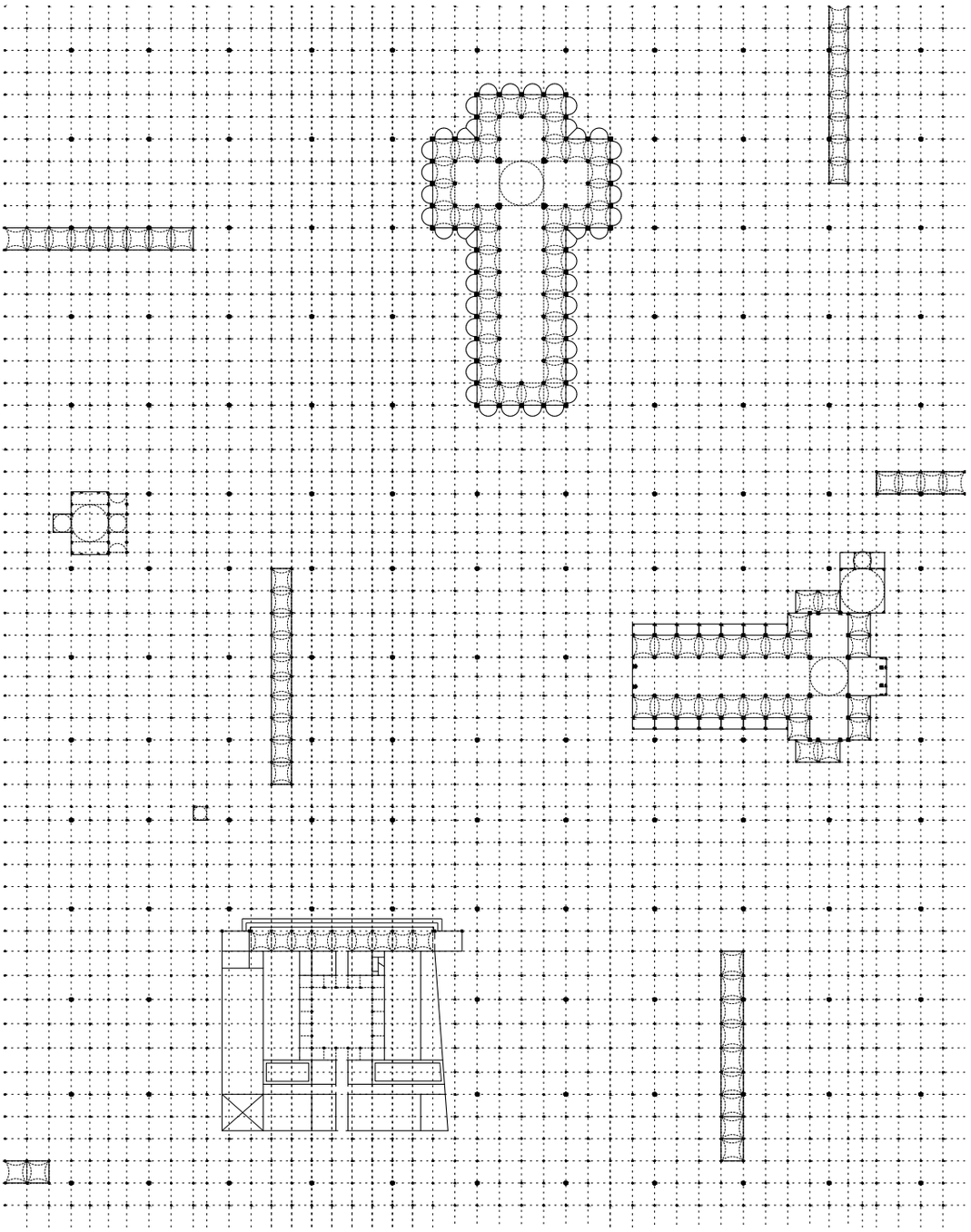
I don't mean to suggest that one should be completely shut off from emotion, but whenever I enter the activities of the real world, I begin to move away from the truly significant aspects of intellectual culture. Sometimes I think maybe it's better not to see other architects very often, because most architects are obsessed with architecture but are unaware of the ways in which geniuses from other fields have created the culture of today. Mathematicians such as Carl Gauss and Bernhard Riemann achieved truly incredible things. Even though such achievements have no direct connection with architecture, I think they are highly significant. I feel the same about other figures in philosophy and music, even if they are detached from the activities of the world. And so even though we must design fearlessly, we should also be modest. Because one thing is sure: if architects are unaware of all the magnificent cultural achievements of other fields, they will remain confined within their own field and have an illusory sense of their own greatness.

Translated from Japanese
by Thomas Daniell

Do You Remember Counterrevolution?

The Politics of Filippo Brunelleschi's Syntactic Architecture

Pier Vittorio Aureli



with drawings by Fabrizio Ballabio

I

To articulate what is past does not mean to recognise 'how it really was'. It means to take control of a memory, as it flashes in a moment of danger.
Walter Benjamin,
On The Concept of History, 1940

Since its invention in the nineteenth century the now epic history of the Renaissance has symbolised a golden age for western art, with scholars from multiple fields more or less unanimous in considering it the starting point of both the enduring intellectual tradition we call humanism and the ongoing historical era we call modernity.[1] Despite several challenges over the last decades both to the idea of the Renaissance as a moment distinct from medieval civilisation and to an overly idealistic understanding of humanist culture, in popular imagination at least the myth of the Renaissance remains intact.[2]

The strength of this myth derives largely from its reducibility: that the early Renaissance was focused on one particular city – Florence – and expressed through the work of only a handful of revolutionary artists – the architect Filippo Brunelleschi, the sculptor Lorenzo Ghiberti, the painter Masaccio and the sculptor Donatello, a fab four whose technical ingenuity, knowledge of ancient sources, pictorial verisimilitude and realistic rendering of the human body was enshrined in their pivotal works: Brunelleschi's design for the Foundling Hospital, Ghiberti's Baptistery doors, Masaccio's frescos at the Brancacci Chapel and Donatello's statue of St Mark in the Orsanmichele.

The still reverberating power of these works appears to sustain all depictions of the early *quattrocento* as a period populated by geniuses, even if there have also been occasional, less adulatory histories, reading the 'controversies' of Renaissance art as the locus of theological and cultural politics.[3] In contrast, and but for a few notable exceptions, what has been absent from this historiography is a critique of fifteenth-century art and architecture as a specific ideology rooted in specific political and economic conditions.[4] Of course, in the past questions have been raised about the elitist nature of Renaissance art and its complete subservience to its rich and autocratic patrons,[5] but this critique is so obvious as to be harmless, since it misses the crucial point that any form of power, no matter how authoritarian, has the potential to be overthrown. The point, therefore, is to understand Renaissance art and architecture less as an expression of privilege and more as a site of conflict in which aesthetic principles were rooted in the struggles – the 'blood and fire' – that gave form to our modern civilisation.

More particularly, the greatness of Renaissance art and architecture can be better appreciated (and perhaps understood) if we read this epochal period not as revolution but as counterrevolution. As the philosopher Paolo Virno has explained, a counterrevolution is a 'revolution in reverse', enjoying the same cultural, social and economic presuppositions that a revolution would typically engage, yet one that looks at the establishment not of an emancipatory power, but the consolidation of a conservative authority. The counterrevolution is thus a revolution that forges new mentalities, cultural habits, tastes, customs and modes of production.[6] In this specific case, the repressed revolution was the political process through which the guilds of fourteenth-century Florence countered and successfully limited the access of wealthy families to the governance of the city.[7] This process would be accelerated and go even beyond guild politics in 1378, with the famous *Tumulto dei Ciompi*, a revolt by proletarian textile workers not represented by the guilds, who took power and established a short-lived revolutionary government.[8] Although this administration was immediately suppressed, its successor – pressured by a groundswell of popular opinion – promoted important political and economic reforms by imposing a more equal taxation system. In the long term, however, the traumatic memory of the 1378 revolution and the fear of political instability led to a realignment of civic beliefs, persuading the *popolo* (and especially its artisans and merchants) to support an economic elite in the transformation of Florence from a guild-led republic to a *de facto* oligarchy. Of course, we know how the story goes – that the Medici family would eventually assume command of this oligarchy, but not until the 1430s, after an opposing faction led by Rinaldo degli Albizzi had been discredited and exiled. The early decades of the fifteenth century are thus an ambivalent period in which the middle class increasingly aligned itself with a wealthy elite, while the elite, in an attempt to win the support of the masses, embraced the republicanism of the *popolo*.

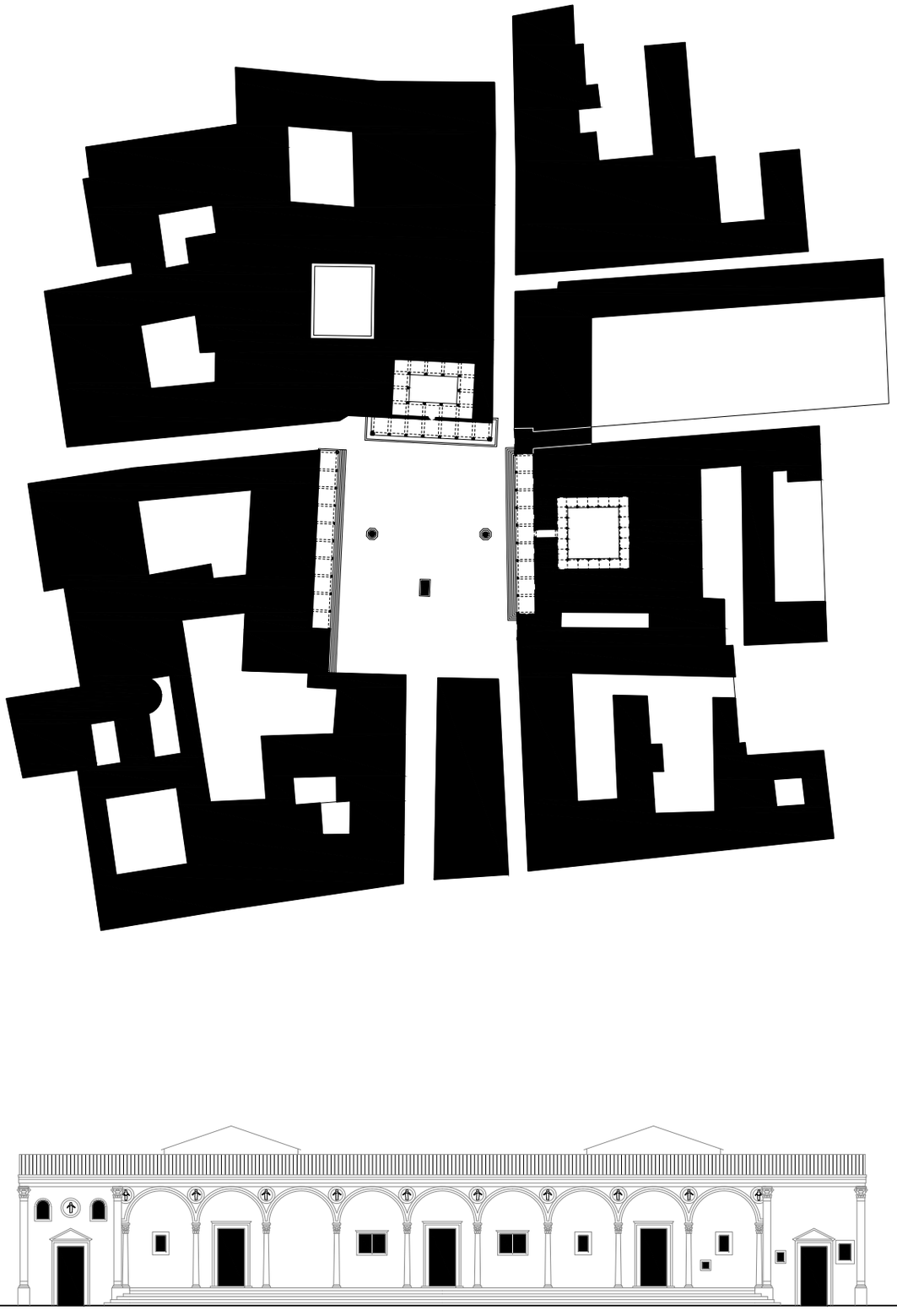
Physically at the heart of this city, and central also to its subsequent depiction, the work of Filippo Brunelleschi was born out of this ambivalence, to the extent that it is inscribed not so much with the material and representational tropes of a characteristically modern intelligence, as with the spatial and figurative embodiment of the counterrevolution of the early 1400s. Brunelleschi's work is therefore interesting because its radicalism, its invention of a new spatial and formal language, upsets the terms by which we usually distinguish something 'revolutionary' from something 'conservative'. Indeed, it is possible to argue that Brunelleschi's architecture radicalised the spatial impetus that was already *in nuce* in fourteenth-century Florence, forcibly emerging out of the social unrest that threatened the city's civic order. [9]

We know from history that architecture is not just shelter but the representation of an idea of order and the systems that institutions impose so as to avoid disruption to this order. The more these institutions are haunted by a fear of disorder, the stronger their desire for stability. The *arché* or first principle of architecture is in this sense both an anthem to the necessity for order, and an implicit acknowledgement of its opposite condition: instability and chaos. And again, applying this to the context of Florence, we see that the political milieu to which Brunelleschi, Ghiberti, Masaccio and Donatello belonged was induced by an acute fear of civic disorder and the concomitant search for new forms of stability. In the *quattrocento* these new forms were attempted with several means, from ideological solutions (for example, the invocation of ancient Rome as some kind of noble precedent) to technical strategies (such as the reorganisation of civic space and the promotion of public works).

Following the historian Arnaldo Bruschi, we could define the compound nature of these solutions as 'syntactic architecture' – an architecture where every element is a *syntagma*, a constituent segment of a coherently ordered whole.[10] What distinguishes Brunelleschi, in particular, is that his work clearly displays the wider political connotations of this whole. And so rather than cataloguing his influence merely through his formal innovations, or as the vague

Map of Florence (based on an 1847 plan by Giuseppe Molini) showing Brunelleschi's Foundling Hospital (1), Rotonda deli Angeli (2), dome of Santa Maria del Fiore (3), basilica and Old Sacristy of San Lorenzo (4), Palazzo di Parte Guelfa (5), church of Santo Spirito (6) and Pazzi Chapel (7)
© Fabrizio Ballabio


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Plan of the Piazza della Santissima Annunziata
and elevation of the Foundling Hospital, 1419-45
(based on Eugenio Battisti's
analysis of the building as it was in 1427)
© Fabrizio Ballabio

evocation of humanistic principles, it is possible instead to read his work as representative of an urban elite's spatial response to a counterrevolutionary conflict that saw Florence – the epicentre of one of the most advanced capitalist economies – struggle with a seemingly permanent condition of political instability. The result was an architecture that was both radical and conservative, highly abstract, almost on the verge of iconoclasm, while still evoking the reassuring myths of antiquity. And it is precisely this contradiction between spatial radicalism and conservative politics that constitutes the ideological core of the early *quattrocento* counterrevolution from which was born not only Brunelleschi's work but the entire tradition of what today we still call architecture.

Fuelling this atavism, of course, is the fact that Brunelleschi was arguably the very first architect, in the sense of being a clearly recognisable professional figure whose agency was independent from that of the builder. As his fifteenth-century biographer Antonio di Tuccio Manetti tells us, Brunelleschi was born in 1377 and initially trained as a goldsmith before turning towards sculpture. It was only later, after a series of trips to Rome between 1402 and 1404, when he had the opportunity to see and measure ancient monuments, that he shifted focus again and became increasingly engaged with architecture. The immediate successes he achieved in this new role, designing a succession of public works in Florence, can to some extent be explained by his family ties. The son of a notary, Brunelleschi was politically close to the Florentine faction led by Albizzi, and thus it would be no exaggeration to say that his career as a designer was part of a political project directly or indirectly supported by this ruling party. After he succeeded in 'solving' the construction of the dome of Florence cathedral, one of architecture's earliest self-mythologising narratives, his reputation received a further boost (so he was not only the first architect, but the first celebrity architect). Indeed, the more his fame grew the more his authority as the singular author of works became irresistible, overruling the formerly collective ethos of Florence's guild-led construction processes. The fact that Manetti chose to document this life (the first ever architectural biography, another first) further demonstrates Brunelleschi's contribution to defining the architect's prominent role within the liberal arts (at the expense, say, of the builder, stone-cutter or carpenter, whose own roles would be diminished in terms of their cultural and thus political importance).[11] To reopen a discussion about Brunelleschi, then, is to reintroduce an examination of how the mandate of the architect came into being, and the cultural and political circumstances that defined the purpose of architecture as we know it from its inception as a profession.



Filippo Brunelleschi, loggia of the Foundling Hospital, Florence, 1419–45
© Alinari Archives, Florence

II

Between 1418 and 1423 Brunelleschi started three major works – the *Ospedale degli Innocenti* (Foundling Hospital), the rebuilding of the basilica of San Lorenzo and the dome of Santa Maria del Fiore. Even though their construction would take many more years, and would not be complete before Brunelleschi's death in 1446, these structures, aggressively inserted into the city fabric, would radically change not only the image of Florence but also the way in which architecture itself was made.

Of these buildings the dome of the cathedral had perhaps the biggest impact, due to its scale and unprecedented means of construction. Yet the Foundling Hospital, even if less ambitious in terms of its dimensions, is arguably a more exemplary project. Commissioned by the *Arte della Seta*, or silk merchant's guild, one of the most powerful in the city, the construction of the hospital was a direct response to an urgent problem: depopulation. Between 1300 and 1400 the number of people living in Florence fell from 90,000 to 40,000, a major cause for concern for an industrial city, since it dramatically raised labour costs. It therefore followed that the fastest way to reduce these costs was to increase an urban workforce, which the Florentine authorities attempted to bolster by also providing a home to those children abandoned by their parents. At the time, orphanages were considered institutions of shame, and generally located away from the city centre, in secluded spaces such as monasteries. It is symptomatic of the political urgency of the Foundling Hospital that it was conceived as a secular institution and housed within a monumental building facing what would become in the course of the fifteenth century one of the most important squares of Florence, the Piazza dell'Annunziata.

The open relationship between hospital and square is revealed in the building's famous loggia, which for the first time captures Brunelleschi's syntactical architecture in the form of a public interface. Made up of nine bays framed by columns supporting arches and spherical vaults, the loggia features a large entablature that runs along the top of the arches, the effect of which is to make them appear not as individual entities but as part of a rhythmic sequence. This unity is further reinforced by four fluted columns that work

as a kind of gigantic order bracketing the entire composition. Of course, as a typology, the loggia had been a common feature of public buildings since the Middle Ages, but what is unprecedented about Brunelleschi's design is its materiality and, especially, its proportions – the interval between columns is equal to their height, which means the arch is half the width of the bay, and the height of the columns is equal to the distance between the top of columns and the top of the entablature. In this way all the proportions of the loggia are reducible to the width of one bay, which, as a square canopy supported on four columns and vaulted with a spherical dome, becomes the unit that rules the whole system.

While working on the hospital, Brunelleschi had tested this canopy model on a small chapel for the Barbadori family in the Church of Santa Felicita – again a perfect syntactical element presented within the absoluteness of a single unit and as a clearly defined *disegno.* This word, literally 'made of sign' (*di-segno*), which would become a fundamental keyword in Renaissance art theory, addresses a physical and metaphysical reduction of form to the control of the contour line. *Disegno* in this sense implies abstraction, since it reduces form to not just a silhouette but a concept. And for this reason the word alludes to both a technique and an ideal of the arts in which the most important aspect of creation lies not in the moment of execution but in its *conception*.[12] As such, *disegno* becomes the prerogative of the artist and the architect, as distinct from the artisan, whose craft is only embedded in the act of making. In the Foundling Hospital the idea of *disegno* also emerges through the clear separation between structural elements and walls: the first are made of grey stone (*pietra serena*) while the second are whitewashed. From a tectonic point of view this differentiation is as clear as it is ambiguous, for the columns are in some cases decorative, not structural (as in the case of the fluted columns), and what often appears as infill is in fact a loadbearing wall.

Yet what is immutable is that columns and arches are made clearly visible as *lines*, again highlighting the nature of the work as a composite of interconnected elements. Here, Brunelleschi's choice of material is also revealing. Traditionally columns were always crafted in the most precious marble, whereas he only used soft grey stone (*pietra serena*). This had the immediate benefit of easing their manufacture, since stone was more malleable and cheaper, but the uniformity of this kind of stone (whose grey tone is as mute as a Gerhard Richter 'grey' painting) also made architecture more abstract and thus more susceptible to being experienced as an optical rather than a tactile element. The same abstraction appears in the 'infill' walls, whitened as if he wanted them to dematerialise, and thus seem to expand in any direction. And indeed the success of this abstraction is revealed by the perfect correspondence between the loggia and the rest of the building: the module exposed in the plan of the loggia becomes the measure that governs the entire complex.[13]

From Manetti we know that Brunelleschi developed this module, and the hospital as a whole, not by working with models but with the drawing of a plan annotated with exact measurements, which his builders were then expected to faithfully follow. Fundamental to this process, the architectural plan became both a physical tool and an abstract emblem that not only distinguished the builder from the architect but helped enshrine the subordination of one to the other. As the canopy module shows, for Brunelleschi the plan was also a datum expressed in the architectural form itself. A strict modularity and synthetic relationship between elements allowed the architect to control the construction process by reducing the builder's creativity to mere execution. Everything, in this way, was tied together as an interconnected composition, meaning no part could be altered without seriously damaging the integrity of the whole – a point made clear in Manetti's warning at the end of his detailed biographic section on the hospital: 'It has been learned from experience that in the long run nothing can be altered without lessening its beauty, increasing its cost and in large part weakening the buildings and making them less functional.'

This binding relationship of part to whole – a radical new model of what is really engaging in a piece of architecture – also extends to the building's ornamentation, where every element was standardised according to Brunelleschi's design. Today we only understand the idea of standardisation within the context of industrial manufacture, but the logic of producing elements in series had already merged before Brunelleschi, notably in those processes of manual labour which were strictly controlled by a preliminary scheme. Standardisation here implies that variances produced by different hands are subsumed into a singular and correct model introduced at the beginning of the process as an archetype to be copied.[14] In the case of the Foundling Hospital this is especially evident in the column capitals, which look all the same, something unprecedented at the time (even if the replacement of most of the originals in the nineteenth century means we cannot judge their uniformity now).

In pre-modern buildings ornamentation was the real site of a builder's pride. If you look at a Romanesque or Gothic church, for example, you will notice a rich diversity of ornamental patterns, the deliberate index of different workmen, each with his own sensibility. In *quattrocento* Florence, such evident variation was extruded into the collective ethos of the guild – an individual's contribution to any endeavour lay in his ability to control not the idea but the execution. If there is something profoundly (counter) revolutionary in Brunelleschi's architecture, it is that he deeply challenged this logic, bringing ornamentation under the control of the architect, and thus making it the formal register of his idea. No longer left to the stonecutter's initiative, the ornaments in Brunelleschi's architecture took their form from his reinterpretation of the classical architectural orders, not on the grounds of antiquarianism, but because they established a very precise grammar by which elements could be ordered in a highly controlled manner.[15]

Perhaps predictably, such a radical restructuring of the construction process was not greeted with any great enthusiasm. In fact, as recounted by Manetti, during Brunelleschi's periodic absences from the construction site the builders would quickly deviate from the original scheme and introduce their own solutions to various problems – something that enraged the architect on his return.[16] What played itself out through battles like these was not just a disagreement about the execution of certain predefined details, but a more fundamental conflict between the architect's mastery – underwritten by the city oligarchs – and the guilds' more established rule over the building site. Brunelleschi's new model of architectural authority therefore challenged both the way a builder worked and more generally the way labour in the city was organised. And it is worth reiterating that he did this through the abstraction of design (supported by measure and by standardisation), which in the process disempowered the collective nature of building by reducing it to a singular set of ideas: the principles established by the architect.

The conflict between an architect and his builders became even more dramatic in the later building of the dome of Florence's new cathedral. Of course, much has been written about this incredible structure, a 41m-diameter dome larger than the Pantheon or any other dome since antiquity.[17] History books will tell you that Brunelleschi solved the problem of constructing the dome of Santa Maria del Fiore through rigorous geometry and technical genius, not only developing a revolutionary method of centring the dome, but devising a scaffolding system supported on the pre-existing structure that would rise as the dome itself grew and even designing, and patenting, the machines needed to lift all of the material required for its construction. More fundamentally, though, his success could be attributed to his reorganisation of the building site, effected with the same precision with which he conceived the dome itself. Besides timetabling shifts so as to minimise the number of times workers would have to climb up and down the scaffolding, he implemented rigorous safety checks. He even oversaw meal-breaks, making sure the workers' lunchtime wine was suitably diluted, and the food was hoisted up the scaffolding rather than laid out on tables lower down. To reinforce this regime Brunelleschi would on occasion not show up on site as scheduled, sowing confusion as his contractors would not know how to proceed, and thereby further asserting his position of absolute superiority.[18]



Filippo Brunelleschi, dome of the Cathedral of Santa Maria del Fiore, Florence, 1419–36
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This perfect coordination of building elements, where just one misplaced brick would compromise the whole, and perfectly organised labour force is reflected in the form itself – a regulating rhythm of structural supports and appropriately perfect symmetry. Even the materiality of the dome's outer profile reflects the abstraction of its construction process, with white marble crests indicating the main tectonic lines of the dome against the terracotta tiles of the cloves. And indeed, from far away the dome does not look like a volume at all, but like an immaculate silhouette. The centrepiece of Santa Maria del Fiore is thus an image of unity and geometric perfection cast across an entire city, and beyond, as a model of civic strength. It is not hard to imagine the impact of the emergence of such an abstract, pure form from the chaos of the early fifteenth-century Florentine city – a whole new ideology made physical in brick and stone.

Despite this immaculate systematisation, and of course also largely because of it, work on the dome was interrupted by a number of conflicts, and two rather dramatic disputes in particular. The first saw all workers down tools in protest against the punishing construction schedule, but it might be assumed that such an act was also political, challenging Brunelleschi's supremacy over the construction site. Rather than coming to some kind of compromise, Brunelleschi's response was to hire an alternative team of workers from Lombardy at a lower wage.[19] And so the Florentine workers were forced to end their strike and accept his conditions; when they were rehired it was as individuals, one by one, rather than as collective members of a guild, and at a wage now determined by the architect.

The second event, again instigated by Brunelleschi's *nemesi*, the guilds, became yet another opportunity for the Florentine architect to reinforce his leadership. In 1434, with the dome almost complete, Brunelleschi was arrested following a complaint that he had failed to pay his annual subscription to the stonemason's and carpenter's guild, the body traditionally in control of all building construction. Brunelleschi's defence, however, seemed watertight – he refused to pay because he was not a member; as we know, Brunelleschi trained first as a goldsmith, and so was registered early on in the *Arte della Seta*, the silk merchants' guild, which also included goldsmiths and bronze-workers. In practice, however, Brunelleschi remained independent of any legitimising body, and so became *de facto* the first freelance architect in modern history, beyond the corporate power of the guild. In the end, because he was clearly essential to the completion of the dome, the authorities had no other choice than to side with Brunelleschi and release him after just a few days, establishing in the process a legal precedent in favour of the independence of the architect as an 'autonomous' creator.[20]

In hindsight one can see Brunelleschi's conflicted relationship with the guild system not as an isolated event but as the most immediate symptom of a crucial passage in which manual labour was increasingly subordinated to intellectual labour.[21] As the political power of the guild was downgraded, more prestige accrued to the individual artist, emancipated from the collective organisation of the guild. It is no coincidence, then, that the phenomenon of celebrity enters the discourse, with Renaissance theorists predicating their theories on the prominence of their subjects – advertised most explicitly in the title of Giorgio Vasari's famous 1550 book – *The Lives of the Most Excellent Painters, Sculptors and Architects*, which alongside Manetti's biography is one of the definitive sources of the Brunelleschi myth. And it was within this context that artistic and artisanal practices became clearly distinguished: the first were guided

by reason and ideas, while the second were seen merely as toil, as labour without quality.

As Brunelleschi's hospital and dome both demonstrate, this condition of the artist–architect as an autonomous being was also not just a professional assignation, but was directly reflected in the form of the artwork itself. For painters and sculptors, professional autonomy thus coincided with the invention of a recognisable style, further advertising their singular authorship, regardless of the obvious fact that distinguished painters of the period were supported by a multitude of often unpaid assistants. For architects, professional autonomy was not so much an issue of style as one of technical expertise, a quality that ensured their apparent superiority over artisans, consistent with an age that celebrated reason as the foundation of *dignitas homini.*

At the core of this rationalism for Brunelleschi and his many followers was an increasing allegiance to the classical orders, which not only introduced a form of standardisation but also – and especially – demanded that a high level of literacy be integrated into a building culture. From this point onwards Renaissance architecture is defined by the struggles of its practitioners to absorb a classical architectural lexicon. The main literary source of this language was of course Vitruvius's *De Architectura Libri Decem*, which featured precise, if somewhat convoluted, descriptions of each of the orders, although architects also dug physically into their immediate environments, uncovering as much archaeological evidence as they could get their hands on, even if the subsequent reduction of these fragments to a systematised grammar was harder to rationalise.[22] More generally, an emphasis on the orders develops into an obsession for Renaissance architecture precisely because the new division of labour forces it to become a discipline whose mastery is not limited to construction but extends to a cultural legacy expressed in the philologically correct use of antiquarian references. The problem of architecture is thus no longer simply technical but syntactical, dictating that building can only make sense if framed by the formal reason of the system of orders.

This was not an easy problem to solve. In ancient structures the orders were primarily used for temples, a typology completely different to those classical structures built in the *quattrocento*, such as palaces and churches. The Renaissance architect had therefore to endure a painstaking process of adaptation so as to fit a presumed modular order into new buildings often lacking the proportional form these orders required. One of the consequences of this adaptation, though, was that classical elements, such as entablatures, were no longer considered just loadbearing but ornamental, serving to confer dignity to an otherwise bare construction. As we have seen, Brunelleschi was especially adept at this reversal, just as he was at working in the more traditional manner, where a column structurally supports an arch. Yet the complexities of his architecture only really come to the fore when the orders are used as formal signs while the actual structure is in the form of a wall, and which framed by the orders therefore merely looks like a 'passive' element. It is here that Brunelleschi's architecture runs the risk of revealing its limits, thus undermining the visual power of a system in which each element informs the other. This is especially apparent in the basilica of San Lorenzo and the adjacent sacristy, now known as the Old Sacristy.



Interior of the Old Sacristy,
basilica of San Lorenzo, Florence, 1421–40
© Alinari Archives, Florence

III

Brunelleschi's Old Sacristy is a strange, hybrid building: apart from being the sacristy – a room in which a priest keeps his vestments – annexed to the basilica, it was a chapel for the Medici family and their own private mausoleum. Unlike the hospital and cathedral dome, it is also a building experienced almost wholly through its interior, the only one executed entirely under Brunelleschi's control. Once inside, it is clear to the visitor that the goal of the architect was to construct a space in which every element is held together by an overriding spatial system – a system made immediately visible in the fabric of the architecture. The chapel consists of a simple cubic volume topped by a dome. This volume is in turn divided into two parts: the lower part is defined by a continuous entablature running around the entire inner perimeter of the volume, with fluted pilasters marking all the corners, while the upper part is composed of four arches that support the dome. Because of its form, the arches clearly reveal how the upper and lower parts are the same height. Moreover, the spherical shape of the umbrella-like dome also shows that it is more or less the same height as the arches – thus half the cube, and so a mirror to the lower and upper parts. If we further abstract this design, the space of the sacristy can be represented as the stacking of three equal parts, all treated in different ways and yet all related to each other by a strict symmetrical composition of parts – a system made obvious, as it is at the hospital, by the use of grey stone to materialise the principal lines of the volume, while the rest is rendered in white plaster.[23]

It is important to note that the whiteness of these walls was not conceived simply as a backdrop for a subsequent series of coloured frescos or some other form of ornament. In Brunelleschi's

architecture walls always remain neutral, abstract surfaces whose shape is subordinated to the edges marked by tectonic lines of grey stone. Yet in spite of the force with which these lines appear – notably in the post-and-lintel system that defines the lower part of the sacristy – they are not loadbearing but ornamental. Paradoxically, what is loadbearing are precisely those elements coded as passive surfaces – the walls. This role reversal becomes fully visible in one of the more puzzling parts of the sacristy: the lower third of the space, marked by large walls framed by the Corinthian order, where the entablature has to cover a great distance with no visual support except three small shelves. It seems clear that Brunelleschi installed these shelves to remedy the rather strange effect of having an imposing entablature float on top of passive white walls. And yet it is precisely here that the wall – seemingly non-structural, but in actuality the concrete reality of the architecture – takes its tectonic revenge on the abstraction of the column and the entablature; that is, on the *disegno*. Here we therefore see Brunelleschi trying to subordinate architecture to the logic of his diagrammatic system, but ultimately failing to completely reduce the mass of architecture to such a system.

This was also more than just a compositional problem. Rather, in seeing this detail as the tension between the architectural orders as the *representation* of tectonic legibility, and the realities of a loadbearing structure (which in fact often contradicts this representation), there lies a more fundamental challenge to the credibility of the orders as a language capable of speaking for a so-called true architecture. What made this challenge especially threatening was that it questioned not only the architect but a whole political class whose prestige was advertised by the particularly tectonic 'look' of the orders. For within Renaissance culture the semantic associations of the orders were meant not only to imitate nature, and thus the perfection of God, but also to invoke the authority of the ancients as a way to legitimise modern political institutions. The sacristy, as we know, was both a public building and a private mausoleum, something akin to the Pantheon, which Brunelleschi directly references in the use of the dome and in the solution of the continuous entablature. And yet it is precisely the entablature, the single most important element, whose function is to coordinate all the various parts of the composition, that appears so fragile, afloat on top of the very same bare walls it is supposed to visually dominate.

Similar contradictions are evident on an even larger scale in the adjacent interior of the basilica of San Lorenzo. In 1419, when Giovanni de' Medici invited Brunelleschi to work on this commission, the idea was simply to enlarge the transept of the existing building. By lobbying other wealthy figures, however, Medici raised the finances to build a brand new church, thus making San Lorenzo – the city's second most important religious structure after the cathedral – the family's palatine chapel.

Medici's initiative to first appropriate the sacristy as the family mausoleum and then ask Brunelleschi to work on the basilica makes clear how he used this second commission to legitimise his prestige, inscribing one of the most important public buildings in the city with his family name. The audacity of this appropriation should also be understood in terms of the location of the new church within a very particular part of the city. Over the preceding centuries the district of San Lorenzo had been one of the more embattled areas of Florence, site of a prolonged conflict between church authorities and local inhabitants over the issue of land ownership, which extended to those properties immediately adjacent to the convent of San Lorenzo.[24] The dispute became so bitter that even the pope became embroiled, excommunicating anyone who appeared to be challenging the convent's property rights.[25]

Given this context, it is possible to argue that the rebuilding of the basilica was not only an issue of prestige but also a pretext to put in order a rather discordant part of the city, and one fast becoming known as the Medici district. Integral to such a transformation was the topographic role that churches and public buildings played in the medieval city, where communal space and spatial order had to be literally carved out of the organic mass of private buildings. Large churches and cathedrals were a significant point of reference in the construction of this *res publica* because of their scale and the regularity of their architecture. One can well imagine the fifteenth-century visitor's experience of stepping from the chaotic, constricted city streets into such an open building, encountering a clear directionality of space, a regular rhythm of columns or pilasters framing the main nave, and an imposing interior height, all of which created a sort of vast indoor piazza that would have seemed overwhelming in relation to its outdoor equivalents. And herein lies the political significance of Brunelleschi's intervention at San Lorenzo: in the tangled urban fabric of a conflicted city, the rebuilding of a major church according to a measurable plan devised by a singular, great architect was a clear opportunity to establish spatial order by fusing vested interests with the creation of a new public domain. More fundamentally, it is also here that we see the full emergence of the modern sin of using public space as a vessel for private interests, whereby the rhetoric of 'common good' becomes instrumental in crystallising these private interests into a civic artefact. It is only by exposing the often convoluted processes that these private bodies had to follow to achieve this, that we can see how these public monuments all bear the scars of their making.

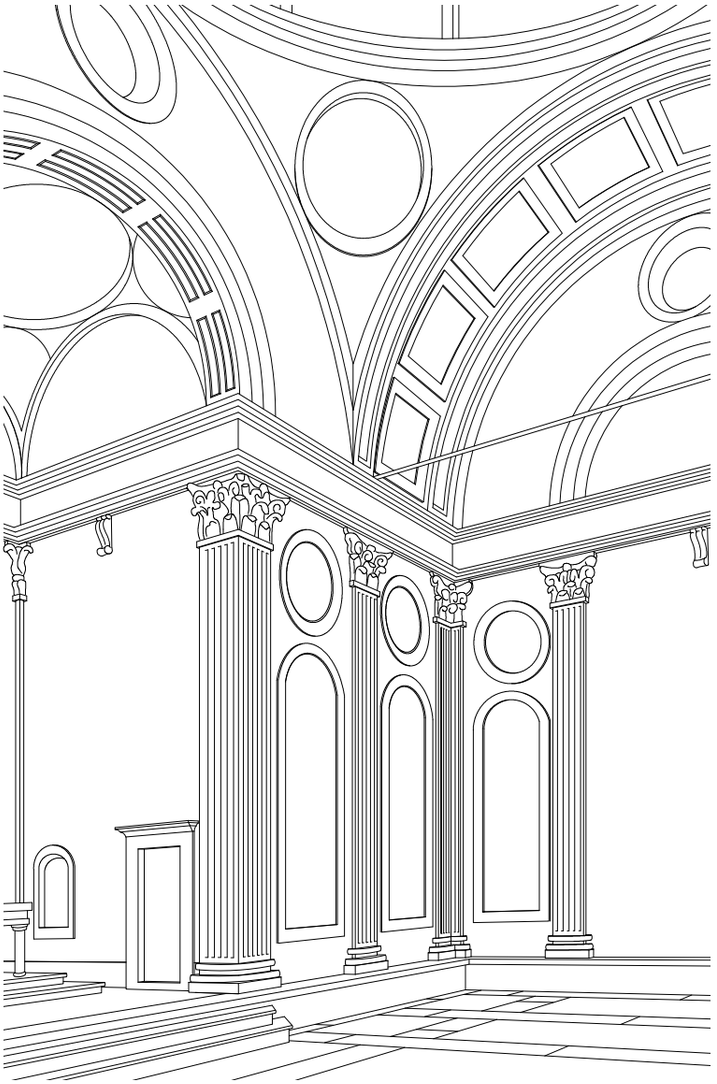
The starting point for Brunelleschi's specific intervention at San Lorenzo was the transept's foundations and two chapels – including the sacristy – that Medici had already started to build.[26] The presence of private chapels in public churches had long been established as a way for eminent families to advertise their status; more immediately, it was how ecclesiastical communities would subsidise the costs of its expensive buildings. Chapels were typically quite distinct not only from the enveloping church but from other chapels inside the same structure – the more powerful the family, the closer the chapel to the apse and the more elaborate its decoration. Of course, the most powerful families of all had the means to construct a small autonomous church annexed to the larger church, as in the case of the Medici's sacristy. But at San Lorenzo Brunelleschi broke with all of these traditions. Here he was somehow able to impose on all parties the same standardised model of chapel, including a repeating decorative treatment. Even the painting above the altar was of the same square format and dimensions in each of the chapels.[27] This sameness reflected a political consensus among the various parties, in spite of the fact that the rebuilding of the transept was promoted by one very prominent family. San Lorenzo thus reflects the way in which a Florentine elite was gaining control over the city, not only by imposing their authority, but by giving form to a collective civic consciousness, of which important religious and public monuments such as this basilica were the physical embodiment.

Producing an architecture that mirrored this consensus, however, was no easy task, not least because Brunelleschi had to impose a syntactical system on a space that was already conditioned by what had previously been built. According to Manetti, Brunelleschi's response for the main body of the church was to continue the transept solution: a single nave surrounded by chapels. But the problem then was that he was forced to add aisles, which immediately complicated the junction between nave and transept. Furthermore, because the chapels along the transept were the same width as the aisles, these parallel, circulatory spaces began to look awkward: when seen from the transept, the aisles appeared like deep chapels with no infill walls.[28] There was also the problem of the transept elevation, with windows on the upper part misaligning with the orders that define the lower part, and which in turn create an uncontrolled clash between niches and arches on the corner.

The result is a composite architectural language that fails miserably. Manetti's loyal biography tried to circumvent these failures by pointing out that many features in the transept were not executed under Brunelleschi's control. This, however, seems to be an a posteriori justification for a rather embarrassing situation that revealed the architect's uncertainty in applying an a priori rational system to a compromised set of existing conditions. At the heart of the problem was therefore the passage from the abstraction of a conceptual scheme to its materialisation as a physical entity, where the inexorable thickness of walls dilutes the purity of a geometric solution.

Of course, these innate difficulties were compounded further by the sheer amount of time it would take a building of this scale and status to be constructed – typically a generation or more, progress faltering in the face of wars, various economic crises and battles between private patrons and civic authorities. Even in its failures, then, Brunelleschi's syntactic architecture holds a kind of understandable attraction because of the way it attempts to outmanoeuvre such temporal conditions with a model that is abstract and timeless, and where everything is defined at once and no discord is ever possible.[29]

But also, where it does succeed, the power of its effect is overwhelming. In San Lorenzo these contrasts are especially magnified because while the transept is awkward and compromised, the interconnecting nave realises a perfectly controlled conception of space. Here, as in the best of Brunelleschi's architecture, every element is strictly defined by the system that governs the whole volume. Although clearly inspired by ancient basilicas, the interior seems in this sense to be the obvious successor to the hospital's loggia, and again we see the interlocking of arches, columns and entablatures (all in Brunelleschi's signature grey stone) within a self-informing whole. This urge for a correspondence between all the parts seems to have led Brunelleschi to adopt the one feature that distinguishes this nave, marking a departure from the earlier loggia – the *pulvino*, an unusual solution borrowed from Byzantine architecture where a stone block (which in Brunelleschi's interpretation becomes a fragment of an entablature) is positioned between the top of the capital and the base of the arch. When seen in sequence all the *pulvini* work as a virtual entablature, keeping the eye away from the distraction of the arches and thus reinforcing the fugue of the columns towards the altar. It is precisely here, therefore, that we see at work the ultimate spatial paradigm that Brunelleschi's syntactic language seems to address: perspectival space.



Interior perspective
of the Pazzi Chapel, Florence, 1441–60
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IV

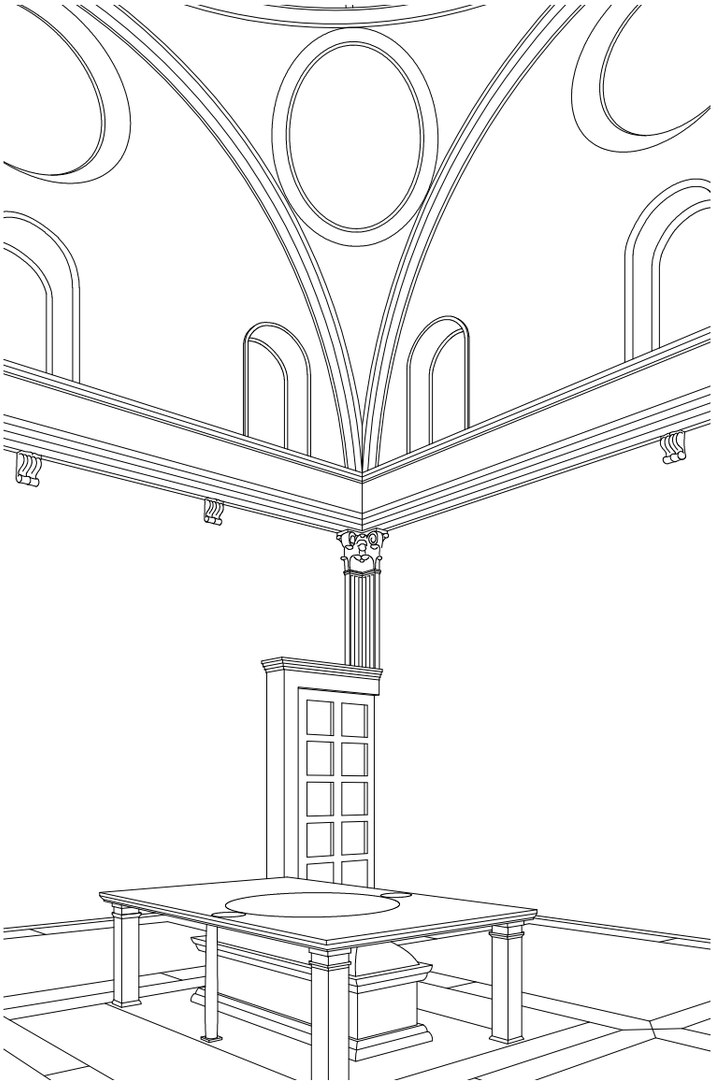
Of course, in art and architectural history Brunelleschi is synonymous with perspective. As the historian Eugenio Battisti pointed out in his 1976 biographical study, just as Brunelleschi's architecture could be said to have initiated 'a way of building', his use of perspective initiated 'a way of seeing'.[30] Already in the late-thirteenth century painters were familiar with the rudiments of perspective which they applied to their compositions, but what Brunelleschi did pioneer was a mathematically constructed, or linear, perspective distinct from earlier painterly models, in that the distance between objects is calculable rather than arbitrary. This means that with a linear perspectival drawing in hand, we can then reconstruct a plan of the same space, and vice versa. Accordingly, perspective here is not simply subjective, nor even a representational device, but an objective method through which space can be measured.

For architects, the introduction of linear perspective was important both for the way they would practise and the way their discipline would be conceived. In particular, linear perspective implied the importance of orthogonal projections, and above all the plan, as the basis for correct perspectival representation – the two-dimensional plan, in this sense, is a more powerful register of perspective than

the three-dimensional rendering. And it is not by chance that Brunelleschi was the first-ever architect to give special importance to the plan. In many of his projects he even went so far as to *only* provide plans, or rather horizontal orthogonal sections of his buildings. Extruded into its physical context, the modular grid that defined Brunelleschi's architecture would then be projected in elevation by columns, arches and vaults, in much the same way that chequerboard tiles and colonnades give measure to the urban landscapes that appear in many early *quattrocento* paintings. The logic of the plan in turn ensured an architect's authority over the building process by reducing this process to the repetition of a predefined module. Plans also helped those administering the construction of major public buildings to oversee costs and impose on the city the immutability of a verifiable set of dimensions. The imposition of a common, rational system of measurement was no small detail in Florence, a city historically so politically unstable that just about every column, every brick, every lintel of its urban fabric bore the traces of deeply engrained conflicts between eminent families, factions, public and private parties.

Yet the history of Florence also offered a significant precedent that would hugely assist the evolution of perspective: the city survey. As the historian Marvin Trachtenberg has argued, this kind of surveying was not a sudden revolution but the continuation of a practice that had developed during the fourteenth century, and found its most visible urban register in the piazza, a distinctly Florentine form of public space where the city experimented with precise dimensions.[31] In the *trecento* the city's rulers had become increasingly concerned that Florence's public monuments – which directly embodied the power of their governance – were getting lost within the tangle of the urban fabric. What was required, they argued, was a visual frame against which one would not only see but better comprehend these monuments. The civic piazza became that optical frame within which the city's churches, fountains and statues would be intensified through the medium of space. Accordingly, existing squares were cleared of unnecessary clutter while the construction of new piazzas was regularised so as to give space a measurable form. This form – abstract, since it responded to the immutability of quantifiable data – generated a similarly timeless set of architectural dictates that encompassed the alignment of facades, the parallelism of facing sides, corners meeting at right angles and a uniformity of roof heights.

In Florence the two sites where this approach to space was applied most consistently were the two most important squares in the city: the Piazza del Duomo and the Piazza della Signoria. It is no accident that Brunelleschi made these the subject of a public demonstration of his perspectival techniques. As recounted by his biographer Manetti, Brunelleschi's experiment consisted of paintings depicting, with striking perspectival effect, the city's two key public buildings, the baptistery in front of the cathedral, and the Palazzo Pubblico, now known as the Palazzo Vecchio, located in the Piazza della Signoria.[32] These paintings were never meant to hang on a wall, but were designed to be seen in the same place from which the buildings had been painted. To further exaggerate this synthesis, Brunelleschi made a hole in the paintings in the exact position of their vanishing point, thus allowing a viewer standing behind the painting to see it reflected in a mirror held in front. Once the mirror was removed, the viewer was then able to appreciate the perfect correspondence between the painted version of the building and the building itself. What was crucial in this demonstration was not how a painted image could be made similar to an object in reality, but how this resemblance could be mathematically deduced. In other words, the convincing effect of the picture was obtained by precisely measuring the baptistery and surrounding buildings and then using these exact dimensions as the basis for the perspective itself.



Interior perspective of the Old Sacristy, basilica of San Lorenzo, Florence, 1421–40
© Fabrizio Ballabio

But beyond the apparatus of the mirror, the painting and its vanishing point, Brunelleschi's successes with this experiment are also largely attributable to the spaces in which he staged his demonstration – the two civic piazzas, which as we know had already been regulated the previous century. What drew Brunelleschi to these spaces was not the clarity with which their town hall and baptistery stood out, but rather the repeating order of their enveloping backdrop – a regularity that Brunelleschi saw as crucial in making human sight more reliable. In doing so, he was touching on one of the most crucial theological and philosophical problems of medieval culture: whether human sight could be trusted as the basis for knowledge.

According to the German historian Hans Belting, perspective originally emerged, not in visual representation, but in the science of

optics, with the tenth-century Arab polymath Ibn al-Haytham (more usually Latinised as Alhazen) being among its most important protagonists.[33] Alhazen was the first to suggest that vision was the refraction of light rays in the human eye. Anticipating Leon Battista Alberti's famous representation of perspectival vision, he went on to postulate that these rays formed a pyramid whose apex is the centre of vision.[34] Such a configuration produced two mutually dependent types of vision: the *aspectus* – vision generated by all the rays – and the *intuitio*, the central ray of the pyramid. While the *aspectus* generated images that fed a sort of vague sense of vision, the *intuitio* was considered more focused and precise. Thus for Alhazen *intuitio* was a form of vision capable of being both sensible and rational, since its workings could be reduced to mathematical verification.

In the Middle Ages this theory had a wide influence on western culture, in particular inspiring a multitude of *philosophi perspectivi* – scientists whose research was at the intersection of theology, optics and mathematics. Among them was Domenico da Chivasso, who in his important treatise, *Quaestiones super perspectivam*, elaborated on Alhazen's thinking, arguing that the imaginary line projected by the eye's gaze – what Alhazen defined as the *linea visualis* – was the object of perspective as scientific knowledge. Alhazen had affirmed that such a line was 'made of nothing', since it was just an imaginary projection and not a tangible object – an assertion that appeared to undermine the rational status of perspective, for, following Aristotle, scientific knowledge could only be based on the concrete properties of real things. Chivasso resolved this problem by comparing the abstraction of the line of sight to the role played in mathematical science by points and lines – elements that were clearly not real objects, but could still be used by mathematicians to reach objective – ie, rationally verifiable – results.[35]

What this thesis implied was that the abstraction of pure geometry was no longer considered antithetical to the way the world was physically experienced. Borrowing a famous concept advanced by Marx, we could therefore say that in the Middle Ages perspective was theorised as a form of 'real abstraction'; that is, as a methodology it offered something abstract, but its determinants were real, affecting our perception of the material world by making it geometrically verifiable.[36] Erwin Panofsky's famous 1927 text, *Perspective as Symbolic Form*, argued that the goal of a perspectival view is essentially to approximate the natural appearance of objects and spaces.[37] At the same time Panofsky acknowledged that perspective is a highly constructed way of seeing and has very little to do with eyesight. Perspective is thus a system within which perception is no longer understood as the realm of fleeting impressions but is, rather, the possibility of a fixed and shareable knowledge of things. And it is through this extended history of ideas that we can view perspective not simply as a technique but as an epistemological framework in which the act of seeing the world is reinvented on a scientific basis.

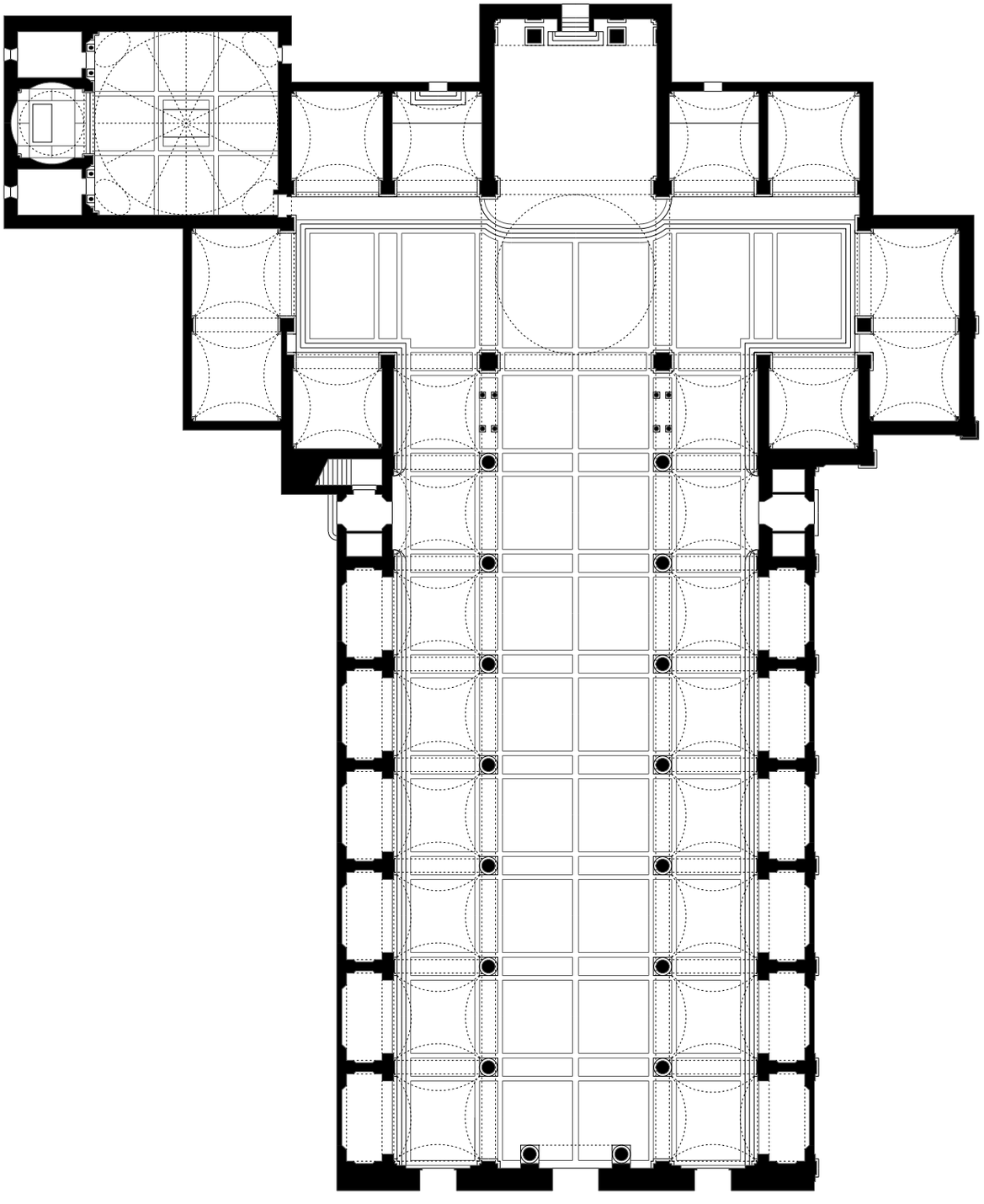
And yet for such a system to work it needs to reduce the experience of space to the abstraction of mathematical space. This is the ultimate paradox of perspective: on the one hand, it is the representation of space as perceived by the human eye; on the other, it is a construction that excludes on principle the accidents of seeing and reduces the gaze to the certitude of a repeatable formula. Perspective, in this sense, is not so much an innovation in terms of representation, as a revolution in the conception of space.

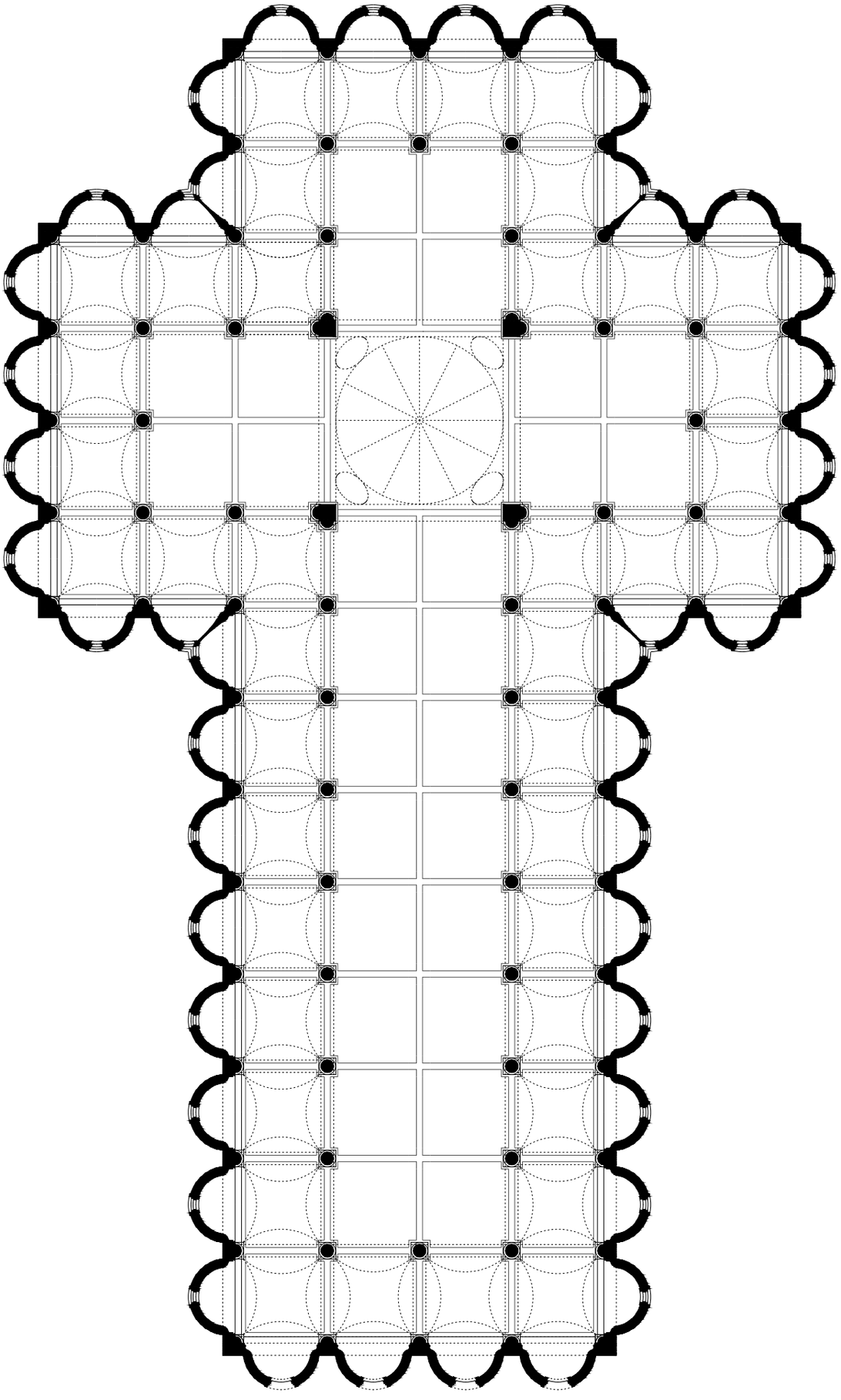


Interior of the basilica of San Lorenzo, Florence, 1419–80
© Alinari Archives, Florence
Opposite: Plan of the basilica of San Lorenzo
© Fabrizio Ballabio

Fourteenth-century Florence was the epicentre of this revolution thanks to the fertile reception accorded to perspective both as a science and as the basis for a measurable conception of space. One of the most influential theories of such an understanding of space was advanced by the mathematician, philosopher and astrologer Biagio Pelacani, who had a profound influence on Brunelleschi, not least for his assertion of the notion that what mattered most in the definition of real objects in space was the possibility of quantifying the distance between them.[38] Before Pelacani, and before the Renaissance, empty space was considered a vacuum, a lacuna which, precisely because of its intangibility, could not be grasped. But after Pelacani, empty space is no longer an incommensurable reality, external to the world of physical objects, but an assessable space that measures the objects it contains. Such empty space is both real, because it allows viewers to locate their position within it, but also abstract, because it is constructed according to mathematical relationships.

At the same time it is important to recognise that in medieval Florence mathematical knowledge was not limited to theoretical discourse but was part of a more general civic intelligence, thanks to the importance of calculus within the highly developed mercantile culture of the city. Six separate *abbaco*, or arithmetic schools, taught their apparently numerous students that mathematical reasoning was not a diffuse skill but a daily tool.[39] As Michael Baxandall has pointed out in his seminal book, *Painting and Experience in Fifteenth-Century Italy*, the typical Florentine





merchant was in addition highly adept at 'gauging' – calculating the mass of any given object so as to quickly determine its economic value. Gauging was also taught, and several textbooks from this time abstracted these common objects into more diagrammatic shapes and volumes.[40] For a populace brought up to revere mathematical theorems, to study geometry, calculus and arithmetic, and to regularly employ skills that determined the dimensions of any given object, the abstract geometry of Brunelleschi's architecture must therefore have been perfectly comprehensible and quite familiar. Rather than being revolutionary, his ideas, in this sense, were distinctly everyday.

But if we make rhetorical use of the lines of a perspectival image and radiate not outwards into a city and culture, but inwards, towards the architect who inscribed them, we can find a far more radical set of assumptions. Principal among these is that Brunelleschi's mastery of science gave him the conceptual and practical tools to claim the art of building as a *project* – that is, something defined in advance of its execution. What the architect therefore offers in practising his architecture is a plan and eventually an elevation, the means to provide perfect models to be copied and quantifiable data to help calculate time and costs. When architecture was object, it was executed by builders directly on the material itself. But after its invention as project, the physicality of architecture is suddenly reduced to the abstraction of lines, points and surfaces, whose immateriality nevertheless becomes real because it finds a direct mirror in the construction process.



As we have seen, Brunelleschi's grey stone structure and terracotta or white-walled infill perfectly conveyed the simultaneously abstract yet material qualities of this architecture – again, think of the view of the Duomo from the surrounding hills, a rational shape rising out of an irrational city. But in many ways the power of this architecture is made even more manifest if we perceive its objects not as unbounded urban landscapes but as constrained urban interiors. And indeed if we pursue this incongruity and privilege the similarity between San Lorenzo's main nave and the hospital loggia, we can see that Brunelleschi's application of perspectival space implied the internalisation of the city, because – as in a designed interior – he forces all of its elements to fit into a coherent and thus controllable space.

Today our familiarity with cities like Paris or Barcelona or even New York means that we take for granted the way the facades in these cities frame their adjacent boulevards and avenues, forming one continuous perspectival space as if they were the side of a large room or corridor through a sequence of rooms. In the eighteenth and nineteenth centuries, as the whole city was progressively conquered by state bureaucracy, it increasingly took on the appearance of an endless interior in which elevations appeared more as a visual frame for public space than as the face of individual buildings.

Brunelleschi's syntactic architecture, where every line seems to emphasise its perspectival image, is an anticipation of this city-as-interior effect. For example, take the loggia he produced for the Foundling Hospital. In the 1440s, 15 years or so after its completion, the same motif was applied to the front of an adjacent church, and later still, from 1516, the entire hospital loggia was again mirrored, this time on the opposite side of the piazza, so the whole square was framed by the unchanging rhythm of Brunelleschi's columns and arches, regardless of the different functions of the buildings they fronted. We have no idea whether Brunelleschi ever anticipated such a development, but we do know that in proposing the loggia in the first place he was explicitly invoking the example of the self-informing Roman square *par excellence*, the forum, where – as Vitruvius explained – all of the sides are defined by the repetition of colonnades and galleries. In this way Brunelleschi's loggia can be understood as an urban model in which abstraction is made spatial beyond the singularity of the individual building, and as a consequence the entire city is invested with uniformity.

Consistent with the paradoxes that enshroud Brunelleschi's work and ideas, the objectivity of this uniformity also seems to harbour a subjective experience of perspectival space as a psychological condition. Indeed, as Lorens Holm has noted in his study on perspective, when reduced to a diagram, Brunelleschi's perspective demonstration bears a striking similarity to the one that explains Jacques Lacan's theory of the mirror-stage condition.[41] Lacan famously used the case of an infant looking at himself in a mirror (and thus acquiring selfhood) to show how human ego is dependent upon external forces – what Lacan defined as 'the other'. The mirror, he suggested, projects an image of the infant as an ideal I, towards which he perpetually strives throughout his life. Fuelling this projection is a visual field that is not just what we see individually, but the perception of a world (and of ourselves) that we share with others, who in turn communicate their experience to the viewer. As Holm convincingly argues, it is the control of this visual field that seems to be the goal of Brunelleschi's use of perspective, making not just a realistic representation of space, but the act of viewing that space stable – looking with one eye in one direction all at once.

Opposite: Plan of the church of Santo Spirito, Florence, 1441–81
© Fabrizio Ballabio
Above: Filippo Brunelleschi, nave of the church of Santo Spirito
© Raffaello Bencini / Alinari Archives, Florence

And yet what is extraordinary about perspective is how its realism, so convincing, is also profoundly unreal. As Holm reminds us, stability is a cultural construct (in which architecture plays a fundamental role), since human life is anything but stable – indeed, the battles we have with love, loss and change are among the things that define us as human.[42] But it is also here, in this instability, that we can finally understand the historical and above all political drive behind Brunelleschi's so-called invention of linear perspective. For in a city where social order was challenged constantly, almost daily, by the sudden eruption of one conflict after another, stability was always the supreme goal, most especially for the oligarchs in the first decades of the fifteenth century. Moreover, the sense of stability established by Brunelleschi's perspective seems to chime perfectly with the ideological consensus invoked by influential contemporary humanists like Leonardo Bruni and Poggio Bracciolini, who often referenced the ancient Roman republic as a model of civic virtue. Not by chance, then, did Bracciolini 'rediscover' and promote Vitruvius's *De Architectura Libri Decem*, written at the end of a century-long civil war, just as Augustus was imposing a new unifying order on all the political, social and cultural apparatuses of Rome.[43] The emphasis that Vitruvius gave to the orders as a coherent architectural grammar therefore formed one crucial component of this unanimity. Exactly the same ideological drive plays itself out in the *quattrocento*, in the aftermath of civil struggles, when a ruling Florentine elite was both repressing the proletarian classes while celebrating its own civic responsibility. Emerging in this context, Brunelleschi would then perform precisely the same role as Vitruvius, insisting on the systemic value of the classical orders and on a consensus physically made real.



Giotto di Bondone, Scrovegni Chapel, Padua, 1305
© Cameraphoto Arte Venezia / Bridgeman Images

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The interconnections of this architecture and this perspective are therefore both abstract and narrative frameworks at the same time: they organise space according to the abstraction of an infinite mathematical space, and yet they also make the world stable and thus legible as a representation. In this representation every position is defined by what is near and what is far, by what is at the centre and what is at the edge, by what comes first and what comes after. Although Brunelleschi is depicted as having pioneered everything himself, Arnaldo Bruschi has highlighted one particular precedent for this syntacticism and perspectivalism in the Scrovegni Chapel in Padua, which was entirely frescoed by Giotto in the first years of the fourteenth century with a complex narrative intertwining the stories of Christ and the Virgin.[44] A painted series of vertical and horizontal lines enmesh the chapters of their lives within the architecture of the chapel – the grid not only making the chapel a coherent, almost totalising space, but also ensuring the legibility of the story. The overall organisation of the chapel is further echoed in the compositional logic of each episode, in which painted architecture – in the form of buildings, domestic interiors and urban landscapes – figures prominently, framing the narrative.

During the fourteenth century, under Giotto's influence, there was a significant growth in the importance of architecture in painting. As noted by Bruschi, Taddeo Gaddi's *Presentation of the Virgin to the Temple* (1328–38), painted at the Baroncelli Chapel in Santa Croce, presents a composite background of innovative architectures that seems to anticipate Brunelleschi's syntactic language.[45] Made for public audiences, these frescos show how, starting in the fourteenth century, architecture became an essential means for conveying visual order and stability, although what is more striking from a contemporary perspective is how so many of them were sponsored by families involved in banking (then a relatively diffuse activity among Florence's non-aristocratic elite). During periods of political upheaval, the city's wealthy families therefore appear to have sublimated their need for legitimacy and security in the image of architecture as a stable background, the orderly composition of columns, arches and entablatures signalling their desire for an overtly respectable civic space.[46]

Brunelleschi was the first architect to give physical form to this desire. Yet in the abstract qualities of his architecture, he somehow both supported and undermined the rhetoric of civic space by opening it up to the vertigo of infinite space – a tension that reached its climax in what is arguably his masterpiece: the church of Santo Spirito. In contrast to the rebuilding of San Lorenzo, initiated and largely funded by the Medicis, Santo Spirito is essentially a public work, supported by a consortium of families, but under the aegis of the city council. The consensus demanded of these separate factions is reflected in the organisation of the architecture – a space strictly based on one module and surrounded by equal chapels. Moreover, not only are the chapels all the same – at least in the original project – but their motif runs uninterrupted along the entire perimeter of the church, with Brunelleschi proposing chapels at both apse and entrance, something unprecedented in the entire history of church building.

Another remarkable aspect is the fact that in Santo Spirito there are no flat walls; rather everything is curved and seemingly soft, as if

someone had inflated the whole edifice with a pump. Particularly striking is the formal resonance between the concave form of the chapels, the rounded vaults of the aisles, the curved arches and the annular column shafts. Everything seems reducible to the perfection of the circle, with this figure obsessively repeated in all of its possible variations. Thus Santo Spirito appears almost quasi-baroque, which makes it appropriate that it was greatly admired by Gian Lorenzo Bernini, the great baroque artist–architect of seventeenth-century Rome.[47]

Yet it would be a mistake to reduce the formal daring of Santo Spirito to artful intuition, for each of its elements are governed by a rigorous systemic logic – in this instance (and paradoxically for a circle-dominated architecture) by that quintessential Brunelleschi motif, the square canopy, whose module gives form to the entire space. So in plan the width of the main nave is two modules, while the depth of the repeating chapels is half a module. Such a simple and precise pattern is especially legible in elevation, thanks to the carefully controlled sequence of columns and arches, which again are all the same. The only exception are four gigantic piers that support the dome and the entablature that runs above the arches. Despite their size, the piers' visual strength is dwarfed by the run of columns which gives the impression that the whole interior is made up of the endless repetition of a single element.



Taddeo Gaddi, detail, *Presentation of the Virgin to the Temple*, Baroncelli Chapel, Santa Croce, Florence, 1328–38
© Alinari / Bridgeman Images

In the original Brunelleschi plan the aisles were all the same, running along the main nave, with choir and transept then effacing a difference – fundamental in a church interior – between entrance and altar, or main nave and transept. This meant that in looking across the interior from the main nave one would have the impression that the run of columns was never-ending. This perception was in turn augmented by one of the most iconoclastic features of Brunelleschi's architecture: the column in axis, which not only countered the viewpoint towards the altar with a free-standing element (instead of offering a more traditional termination point in the form of a perimeter chapel), but also denied the possibility of a main entrance in the middle. And because nave and transept are treated in the same way, the church looks like a seamless hypostyle interior – a kind of hyper-perspectival space exalted by the repetition of self-same elements, but also undermined by the optical vertigo induced by this forest of columns.

Manetti writes that Brunelleschi was particularly pleased with his design for Santo Spirito, even if he did not live to see its completion. Only here was he able to employ the full grammar of his architecture without compromise, unhindered by existing structures or by builders reluctant to execute his precise instructions.[48] Here, too, he was finally acknowledged as commander-in-chief of the building site, which was especially gratifying as this was a public work, supported not by a single, wealthy backer but by the civic government.

As with the earlier Foundling Hospital scheme, at Santo Spirito Brunelleschi initially provided only a plan of the building. Just like a perspective drawing, where everything is first set out on grid, the plan showed that the architecture of the church was determined by a modular system clearly manifested in its grid of columns. But it also revealed how the convex internal form of the chapels would be exposed on the building's exterior – part of a long architectural tradition of making inner workings visible on outer surfaces. In this respect, Brunelleschi may have been influenced by earlier precedents, such as the cathedrals of Orvieto or Prato, where the repetition of a motif both inside and out was designed to symbolise the power of the church, expanding its internal, liturgical remit over the space of the whole city. In Santo Spirito Brunelleschi deploys the same tactic, even if his evangelicalism was visual and geometric rather than theological – what he was radiating out across an entire city was the symbolic power, not of Christianity, but of perspective. Indeed, Brunelleschi's initial intention for the project was to orient the church entrance towards the Arno, and thus make his new monument visible directly from the riverbank. In this way, Santo Spirito would have become the stepping-stone for the urban reorganisation of the whole of the city's Oltrarno district, following the geometrical order of the church itself.[49]

Brunelleschi had proposed something similar with the basilica of San Lorenzo, advising Cosimo de' Medici – then at the peak of his power – to build his family palazzo immediately in front of the church, their entrances on axis with each other.[50] The advice was rejected, for even a megalomaniac like Medici could see that such a scheme would pose too great a challenge to the authority of the church. Yet the proposal still reveals the extent to which Brunelleschi imagined his new syntactic architecture as extending beyond the individual building to become a potentially ubiquitous order that would circumscribe the city in its entirety. The significance of Santo Spirito lies in its partial realisation of such a vision, which allows us a glimpse of the all-encompassing abstract space to which Brunelleschi seemed to aspire. In this respect, the church remains unique. Never again would the architecture of a public monument go so far towards constructing the same

kind of totalising, absorbent space. Perhaps Paxton's Crystal Palace came the closest, but in the end the stuffing of the building with an overabundance of objects diminished the power of its own systemised enclosure. Santo Spirito, in contrast, remained empty, and as a result the strength of its architecture was undiminished, even if it also induced a spatial vertigo that threatened to collapse the very authority it set out to radiate.

More expansively still, at Santo Spirito the spirit of counterrevolution also reached its apotheosis. For it was here – even more than at the sacristy, basilica of San Lorenzo or cathedral dome – that the abstract perfection of its architecture erased an image of the city mired in conflict. And yet it is precisely the intensity of this abstraction that reveals, *per via negativa*, an instability that the certainties of this mathematical space sought to tame. A parallel might be drawn with the way Marx conceived of the machine as a technical and social apparatus that 'runs wherever strikes occur' – to use Antonio Negri's phrase.[51] In other words, the development of capital, with its simultaneously abstract and concrete ways of working, cannot be separated from the conflict it consistently attempts to defuse. Abstraction, therefore, should not be understood as some kind of will imposed from above, but as a social force determined by cooperation and the sharing of skills, as a living labour. And machines are never invented *in vacuo.* They are not the product of solitary geniuses, as the rhetoric of the Renaissance would have us believe. Rather, they are always born out of social situations that instruct their power to dominate not by force but by reason. As the Italian Operaist philosopher Mario Tronti would put it, 'first struggle and then development'.[52]

In this sense, Brunelleschi's syntactic architecture could be seen as simply another kind of machine – a reading that is not entirely symbolic but also supported by biography, for we should remember that Brunelleschi's background was as a goldsmith and more particularly a clockmaker, not to mention the fact that he designed and manufactured machines in order to facilitate the construction of the dome. As Bruschi suggests, the architecture he pioneered could therefore be imagined as made of cogs and gears, coordinated within a larger machine and designed so as to transmit forces and avoid any form of slippage. The singularity of this image is further reinforced by the fact – confirmed by his biographers Manetti and Vasari – that distinct from the plans Brunelleschi made available to his builders, he would construct rudimentary models that conveyed the most salient features of a project. Here architecture was reduced to bare volumes, edges to pure lines, a perfect kind of portable token or timepiece for a set of ideas he imagined as timeless.

Ironically, however, it was precisely the force with which Brunelleschi pushed the all-encompassing logic of this architecture that prevented its further development. Historical accounts of the Renaissance tell us that Brunelleschi's influence waned because he was too close to the Albizzi faction, and when the rival Medicis assumed the leadership of the *Firenze Signoria* his support structure diminished. A more intriguing reading would suggest that ultimately Brunelleschi's project was defeated by its own disruptive radicalism – that in the end he disoriented rather than reinforced a new order by overreaching the boundaries of what could be considered abstract space.

One can see this already in the building many consider to be Brunelleschi's masterpiece, the Pazzi Chapel (even if its attribution to Brunelleschi has been contested[53]). Here, the decision to add two half modules to the crossing results in a rather awkward intersection between the arches and the dome, where, as Marvin Trachtenberg has argued, it is difficult to understand where one plane begins and the other ends. Moreover, instead of augmenting the geometric character of the chapel, the overly rich decoration seems to make the surface more important than the space. This would become a defining characteristic of later Renaissance architecture, with very few architects (including Bramante, the most Brunelleschian of all Renaissance architects) able to counteract the trend. And indeed, already with Alberti – Brunelleschi's obvious successor – there is much more of an emphasis on surfaces, now able to accept transgressions and contaminations from other architectural languages, while the orders, even though rigorous, become reduced to a secondary ornamental element.

Despite all that he did and all that he represented, the buildings that Brunelleschi produced are thus merely a glimpse of a moment: the manifestation of a first counterrevolutionary wave in which architecture was born as a clearly recognisable profession and as a form of real abstraction. That this glimpse ultimately became just as threatening as the very thing it was attempting to counter should not undermine its significance, for as the modern project initiated by Brunelleschi continued, the power of his architecture would be diluted by endless formal games played by a celebrated cast of practitioners who have since given an explicitly aesthetic form to that long and latent counterrevolutionary movement that is the history of capital.

1. The cornerstone of the Renaissance myth was laid by Jakob Burckhardt's extremely influential *The Civilisation of Renaissance in Italy*, in which the Swiss patrician developed further Leon Battista Alberti's and Giorgio Vasari's idea of *rinascita* as the rebirth of the arts after the 'dark age' of medieval civilisation. Burckhardt linked this idea with the bourgeois ideology of man as the centre of the universe. As he wrote, 'To the discovery of the outward world the Renaissance added a still greater achievement: by first discovering and bringing to light the full whole nature of man.' See Jakob Burckhardt, *The Civilisation of Renaissance in Italy* (Penguin: London, 1950), p 84. A 'humanistic' interpretation of Renaissance architecture was put forward by Rudolf Wittkower's seminal study of Leon Battista Alberti, Francesco di Giorgio and Andrea Palladio. See Rudolf Wittkower, *Architectural Principles in the Age of Humanism* (London: Warburg Institute, 1949); and Henry Millon, 'Rudolf Wittkower's *Architectural Principles in the Age of Humanism*: Its Influence in the Development and Interpretation of Modern Architecture', *Journal of the Society of Architectural Historians*, September 1972, pp 83–91.
2. For one of the more radical critiques of the idealisation of humanistic culture see Manfredo Tafuri, *Interpreting the Renaissance: Princes, Cities, Architects* (New Haven, CT: Yale University Press, 2006).
3. A very interesting and fresh approach to the Renaissance has been taken by Alexander Nagel in *Controversies in Renaissance Art* (New Haven, CT: Yale University Press, 2011). Yet this book focuses only on the sixteenth century. What is missing is work of the same calibre on the early *quattrocento*.
4. Here I mean to suggest not a specific critique to a specific episode, but more of a general critique similar to that offered by Manfredo Tafuri's early historiographic work. See in particular Manfredo Tafuri, *Architecture and Utopia: Design and Capitalist Development* (Cambridge, MA: MIT Press, 1976).
5. A well-known example of just such a critique was put forward by John Ruskin, a contemporary of Burckhardt. See Richard Titlebaum, 'John Ruskin and the Italian Renaissance', *English Studies in Africa*, vol 19, no 21, 1976, pp 1–7.
6. Paolo Virno, 'Do You Remember Counterrevolution?' in Paolo Virno and Michael Hardt (eds), *Radical Thought in Italy: A Potential Politics* (Minneapolis, MN: University of Minnesota Press, 1996), pp 241–60. In this essay, which responded to a group of former Autonomia Operaia militants' text, 'Do You Remember Revolution', Virno explained the historical victory of the Right in Italy in the elections of March 1994 as the culmination of a 'counterrevolutionary' movement that started after the long 'revolution' that took place in Italy in the 1960s and 1970s. Against the traditional assumption that counterrevolution is simply the restoration of an *ancien régime*, Virno argued that what happened in Italy in the 1980s was a period of great innovation but in a politically

conservative direction. What Virno presents in this reading is one of the most useful conceptions of political conflict in which processes of social and cultural innovation, on the one hand, and counterrevolutionary politics, on the other, are not mutually exclusive. Even the history of art and architecture from the last 50 years can be read from the same vantage point, with its leaning towards contemporary politics. Such a theory also helps us avoid the two traditional responses, of either celebration and acceptance, or dismissive criticism. There is no doubt that in simple terms of architectural production the last half century has been a radically innovative period that has deeply challenged the architectural profession. Yet this radicalism has been put at the service of a politically very conservative order. The current crisis of architecture lies exactly in the contradiction between the radical erosion of architecture as a traditional practice, and the way the 'tradition' of architecture is often used to cover up a completely fragmented situation. And it is also precisely at this point – a crisis in a certain idea of 'progressive' architecture – that a reconsideration of Renaissance architecture as a site of conflict may be useful.

7. The class conflicts that shaped politics in fourteenth-century Florence have been set out in John M Najemy, *A History of Florence, 1200–1575* (London: Wiley, 2008). Yet we have to be careful not to idealise the political role of the Florentine guilds as agents of progressive politics. As noted by Najemy, the guilds, especially those considered Arti maggiori (those that included the most important professions), were reluctant if not openly hostile in recognising the rights of salaried workers and emerging professionals. This condition led to a contradictory political process in which guilds were simultaneously progressive, in defending the republic from the interests of wealthy families, and conservative, in repressing attempts by the proletarian population to be politically represented.
8. See Ernesto Screpanti, *L'angelo della liberazione nel Tumulto dei Ciompi* (Florence: Protagon Editori, 2008).
9. I am very much indebted to Amir Djalali's reading of Renaissance architecture in relationship to political conflicts which he put forward in his PhD dissertation defended at TU Delft and titled 'Common Space: Politics and the Production of Architectural Knowledge'. A chapter of the thesis has been published as 'Prehistories of Common Space: Conflict and Abstraction in Renaissance Architecture', in Pier Vittorio Aureli (ed), *The City as a Project* (Berlin: Ruby Press, 2014).
10. The possibility of a syntactical architecture is rooted in the long tradition of Romanesque and Gothic architecture. Arnaldo Bruschi has shown how the interior of Romanesque churches such as the Florentine Basilica of San Miniato al Monte (which Brunelleschi must have known very well) was organised by non-structural motifs such as a continuous flat entablature running along the upper part of the nave interior, visually linking all the elements that defined this space. My reading of Brunelleschi is deeply indebted to Arnaldo Bruschi's interpretation of the Florentine architect's work. See Arnaldo Bruschi, *Filippo Brunelleschi* (Milan: Electa, 2006), pp 53–176.
11. See Antonio di Tuccio Manetti, *The Life of Brunelleschi*, translated by Catherine Engass (Philadelphia, PA: Pennsylvania State University Press, 1970).
12. See Sergio Rossi, *Dalle Boteghe alle accademie: Realtà sociale e teorie artistiche a Firenze dal XIV al XVI secolo* (Milan: Feltrinelli, 1980).
13. There has been a lot of discussion among historians comparing Brunelleschi's original scheme to what was built. We know that at the time of his death, the building, with the exception of the loggia, had been constructed only as far as its foundations. Rather than resembling a monastery, with a clear emphasis on the adjacent church, the hospital is rationally organised around its courtyard. While the loggia defines the public square, the courtyard defines the hospital's internal organisation. On two sides of the courtyard are two large halls, one for the church, the other serving as a dormitory for the *innocenti*. In plan there is no difference between these two halls and from the outside the church is not visible from the piazza since the entire complex is fronted by the even rhythm of the loggia. The internal courtyard allows immediate access to the administrative offices. The plan is arranged by Brunelleschi with unprecedented rationality. The hospital is not an ad-hoc aggregation of different spaces around a courtyard, as would have been customary in such buildings, but a machine whose main goal is to guarantee efficient circulation. Here we see how modularity and a syntactic relationship between all the architectural elements is a matter not simply of beauty but of spatial efficiency, and thus governance of space. For a precise survey of Brunelleschi's original project for the hospital see Eugenio Battisti, *Filippo Brunelleschi* (Milan: Electa, 2002), pp 46–48, and Arnaldo Bruschi, *op cit*, pp 69–76.
14. See Mario Carpo, *The Alphabet and the Algorhythm* (Cambridge, MA: MIT Press, 2011).
15. See Arnaldo Bruschi, *op cit*, p 67.
16. See Antonio di Tuccio Manetti, *op cit*, p 25.
17. There is an impressive amount of literature on the building of Santa Maria del Fiore's dome. Apart from the detailed reconstruction by Eugenio Battisti in his book on Brunelleschi, an accessible but fairly accurate report of the entire story of Brunelleschi's work on the dome can be found in Ross King, *Brunelleschi's Dome: How Renaissance Genius Reinvented Architecture* (London: Bloomsbury, 2013).
18. See Maria Paola Zanoboni, *Scioperi e rivolte nel medioevo. Le città italiane ed europee nei secoli XIII–XV* (Milan: Jouvence, 2015).
19. Antonio di Tuccio Manetti, *op cit*.
20. *Ibid*.
21. This phenomenon has been examined by Alfred Sohn-Rethel in his influential book, *Intellectual and Manual Labour* (London: Macmillan Press, 1978).
22. On the tortuous history of architectural orders see Erik Forssman, *Doricsch, Jonisch, Korinthisch: Studien über den Gebrauch der Säulennordnungen in der Architektur des 16–18 Jahrhunderts* (Stockholm: Almqvist & Wiksel, 1961).
23. Brunelleschi seems to want the visitor to be sure that every surface is under control and thus reducible to the principle of symmetry; this is especially visible in the pendentives which link the arches to the dome. As in the arches of the hospital, here Brunelleschi inserted four circles whose diameter touches both the arches and the dome. In this way the triangular–spherical form of the pendentives is reduced to the certainty of the circle whose diameter chains together the main features of the sacristy's upper part: the arches and the dome. Moreover, the circle echoes not only the square plan of the space, but also a number of elements that define the architecture of the sacristy: the dome and all the openings oriented towards the outside, which are either *oculi* or rounded windows. It is not by chance that Brunelleschi used the circle to seal his syntactic systems. The circle is the most tangible sign of perfection, completeness and control. For this reason Brunelleschi was annoyed when Donatello was given the commission to insert bas-reliefs into the pendentive circles, turning the latter into frames of pictures and thus introducing a figurative element whose visual impact had nothing to do with the geometric rigour of the interior.
24. On the conflict surrounding the old church of San Lorenzo see William M Bowsky, *La chiesa di San Lorenzo a Firenze nel Medioevo: Scorci archivistici* (Florence: Edizioni della Meridiana, 1999).
25. *Ibid*, p 24.
26. For a detailed historical survey of the rebuilding of San Lorenzo see Eugenio Battisti, *op cit*, pp 174–95.
27. *Ibid*, p 186.
28. If the chapel opened towards the transept the lateral wall would have to interrupt the rhythm of chapels on the nave (as indeed happens in the realised version), and if it opened towards the nave it would have done the same towards the transept. In the final solution with the aisles, the crossing – the most important part of any church, especially because the altar was supposed to be located here – looks rather messy. The situation was further complicated by the chapels on the short sides of the transept, whose position was already determined by the sacristy and the chapel already built for Medici.
29. See Marvin Trachtenberg, *Building in Time: From Giotto to Alberti to Modern Oblivion* (New Haven, CT: Yale University Press, 2010).
30. Eugenio Battisti, *op cit*, p 102.
31. Marvin Trachtenberg, *Dominion of the Eye: Urbanism, Art and Power in Early Modern Florence* (Cambridge: Cambridge University Press, 1997).
32. Antonio di Tuccio Manetti, *op cit*, p 19.
33. On the contribution of Alhazen to the development of perspective as science see Hans Belting, *Florence and Baghdad: Renaissance Art and Arab Science* (Cambridge, MA: Harvard University Press, 2011).
34. Mark Smith (ed), *Theory of Visual Perception (First Three Books of Alhacen's De Aspectibus), Volume One: Introduction and Latin Text* (New York, NY: American Philosophical Society, 2001), p 67.
35. Filippo Camerota, *La prospettiva del rinascimento: Arte, architettura e scienza* (Milan: Electa, 2006), pp 20–21.
36. Karl Marx discussed the issue of abstraction most notably in his introduction to the *Grundrisse*. See Karl Marx, *Grundrisse: Foundations of the Critique of Political Economy* (London: Penguin Classics, 1993), pp 81–114.
37. Erwin Panofsky, *Perspective as Symbolic Form*, translated by Christopher S Wood (New York, NY: Zone Books, 1997), p 31.
38. See Graziella Federici Vescovini, 'Le questioni di 'perspectiva' di Biagio Pelacani da Parma', *Rinascimento*, XII, 1961, pp 163–243.
39. For a detailed overview of mathematical education in Florence between the thirteenth and sixteenth centuries see Robert Black, *Education and Society in Florentine Tuscany, 1250–1500* (Leiden: Brill, 2007), pp 226–40.
40. Michael Baxandall, *Painting and Experience in Fifteenth Century Italy* (Oxford: Oxford Paperback, 1988), pp 29–39.
41. Lorens Holm, *Brunelleschi, Lacan, Le Corbusier* (London: Routledge, 2010), pp X–XIV.
42. *Ibid*, p XIII.
43. See Vitruvius, *Ten Books on Architecture*, edited by Ingrid D Rowland and Thomas Noble Howe (Cambridge: Cambridge University Press, 1999); see also the fundamental interpretation of Vitruvius' theory proposed by Indra Kagis McEwen in her book *Vitruvius: Writing The Body of Architecture* (Cambridge, MA: MIT Press, 2003).
44. Arnaldo Bruschi, *op cit*, pp 59–61; see also Francesco Benelli, *The Architecture in Giotto's Paintings* (Cambridge: Cambridge University Press, 2011).
45. *Ibid*, pp 62–63.
46. For an interesting reading of the relationship between Giotto's frescoes and money-lender patronage see Julian Gardner, *Giotto and his Publics: Three Paradigms of Patronage* (Cambridge, MA: Harvard University Press, 2011), pp 49–79.
47. As quoted in Eugenio Battisti, *op cit*, p 196.
48. Antonio di Tuccio Manetti, *op cit*, p 50.
49. Eugenio Battisti, *op cit*, p 197.
50. Antonio di Tuccio Manetti, *op cit*, p 31.
51. Antonio Negri, 'Notes on the Abstract Strike', *E-Flux Journal 56th Venice Biennale*, http://supercommunity.e-flux.com/texts/notes-on-the-abstract-strike.
52. This is the main conception of capitalist development proposed by Operaist thought. See Mario Tronti, *Operai e Capitale* (Turin: Einaudi, 1966).
53. See Marvin Trachtenberg, 'Why the Pazzi Chapel is not by Brunelleschi', *Casabella*, June 1996, pp 58–77.

Come for Porchetta

Niall Hobhouse & Tina Di Carlo

The Milanese architect Giò Ponti typically arrived at his office very early in the morning and would use the quiet interlude before his colleagues appeared to write a succession of letters – to friends and associates, to clients and contractors, to his associate editors at *Domus* or *Stile*, to his fellow architects Le Corbusier, Frank Lloyd Wright and Josep Antoni Coderch, and to any number of other important people, not least the Italian president, the Pope, even the Queen of England. An Italian archive of his correspondence, both sent and received, contains more than 99,000 letters exchanged with over 6,400 recipients.

'My happiness, my love, my life, my sunny rainbow, my sweetheart, my kitty' – these are the words with which Vladimir Nabakov would begin and end letters to his wife Véra. Ponti's own prose was no less effusive, but what distinguished his seemingly more heartfelt offerings was that he expressed emotion not so much in words as in pictures. Nowhere is this more apparent than in several letters he sent to Daria Guarnati, publisher of perhaps his oddest book, *Espressione di Giò Ponti*, the eighth volume of her *Aria d'Italia* series, published in 1954.

The exuberance of the drawings in these letters seems to suggest they formed the backdrop to a consuming affair, for among them we see words springing out of a fine female profile, or extruded from an especially elegant hand, or – presumably as the passion escalated – springing from the fuses of a number of sticks of dynamite, and then, even more forcefully, as the eruptive magma of a turbulent volcano.

In reality, however, the words themselves and the prompt for their writing were often quite mundane. 'Can we print it in black ink?' 'Would you publish small editions?' Or 'Come for Porchetta', as an invitation to talk further over dinner. In other missives we find him debating the titling of a chapter in his book or discussing the arrangements for a trip out of town – everyday details that in some way are also reflected in the associative character of his less explosive visual tropes (words hung beneath sheets on a washing line, for example, or perhaps most sweetly – in its ordinariness – in the three-word letter he formed out of a boiled egg in its cup).

As much as these charm us, there is also an undeniable aesthetic in these letters – a joy that comes not from the words but from the beauty of the sinuous, looping line. For this line follows, traces, creates or transforms, giving the rhythm of a poem to every word it spells out, lending it new meaning and making it even more beautiful. With the line, Ponti turned the most banal of letters into an elegy.

Yet is there also perhaps something more shaded and uncertain here, as though Ponti's real voice could only find itself through equivocation? Something in those impeccably wrought lines that then tail off into banal words; in the forms of delicious intimacies that then never move beyond their promise? It is as if Ponti – that playful chameleon of Italian design – had danced long enough between textiles and concrete, between elegiac history and modernist rupture, between the editorial authority of *Domus* and the mystical opacity of *In Praise of Architecture*; even between form and word. Could it be that the very ambiguity of Ponti's lapidary form encapsulates an uncertainty about which of all the different selves, and all the possible Italys, he should really be addressing?

Opposite and insert: selected letters from
Giò Ponti to Daria Guarnati, *c* 1953
Courtesy Drawing Matter Collections


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auguri

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AA files

72

AA files

Davide Spina	3	The Good, the Bad and the Malaparte
Thomas Daniell	20	In Conversation with Itsuko Hasegawa
Mario Tedeschini-Lalli	40	Descent from Paradise
Laurent Stalder & Moritz Gleich	57	Stirling's Arrows
Colin Rowe	68	Excursus on Contessa Priuli, with a postscript by Daniel Naegele
Irénée Scalbert	73	The Nature of Gothic
Peter St John	96	Cathedral
Silvia Micheli & Léa-Catherine Szacka	98	Paolo's Triangolo
Paulo Berdini	107	Introduction to *La matematica della villa ideale*, with a postscript by Daniel Sherer
Hubert Damisch	115	Noah's Ark
Nicolas Kemper	127	The Hideous Duty of Isaiah Berlin
Thomas Weaver	134	In Conversation with Alexander Brodsky
Emma Letizia Jones	152	The Wanderer
Henrik Schoenefeldt	161	The Lost (First) Chamber of the House of Commons
Max Moya	174	Bawa's Rolls
	176	Contributors

72

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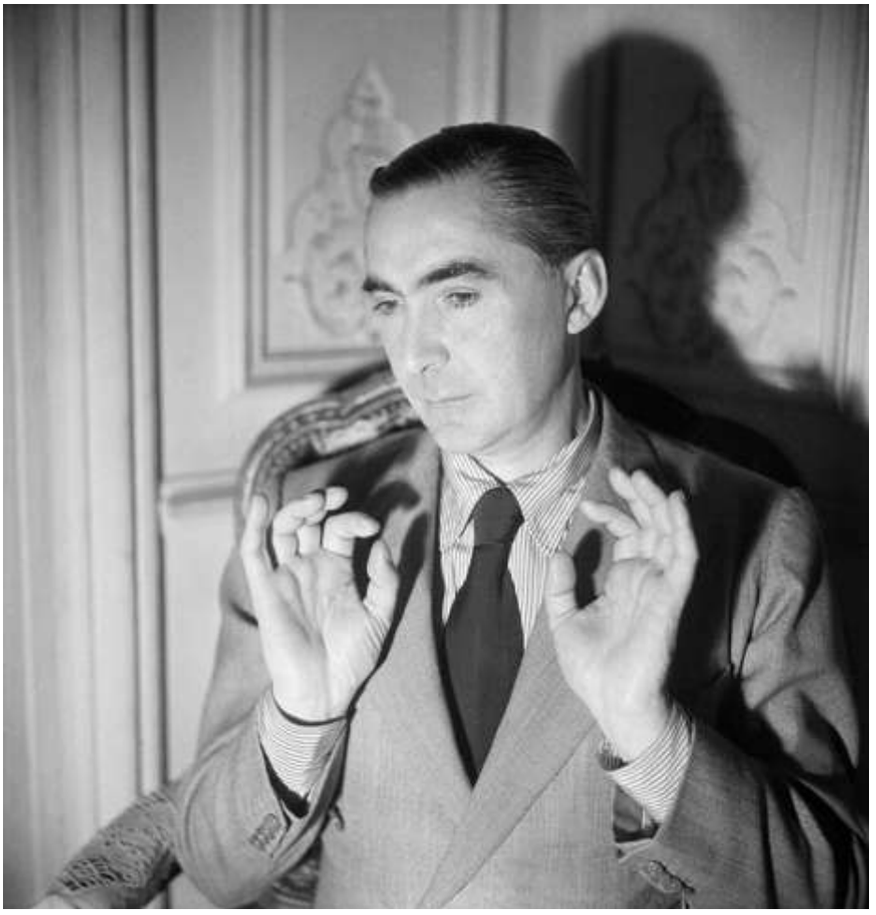
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A Note on the Display Initials
Drawn by Adrien Vasquez of the John Morgan studio, and featured in the twin texts on or by Colin Rowe, the display initials in this issue are an adaptation of a slab-serif typeface developed in the first half of the nineteenth century by the English punch-cutters Bower & Bacon and by the Fann Street Foundry, bought in 1820 by William Thorowgood with a large sum of money he had just won in the lottery. Thorowgood was the first to use the term 'grotesque' to describe a sans-serif typeface. Similar letterfaces were used in the 1940s in the pages of *The Architectural Review* – the journal that first published Rowe's 'The Mathematics of the Ideal Villa' in March 1947 – whose characteristically English vernacular typography also seems fitting given Rowe's idiosyncratic, spoken and resolutely English prose. These letterfaces are printed in the antique madder lake of this issue's inside cover – which, alongside the cover colour, reference the signature pinks and apple greens of Hieronymus Bosch, whose works have recently been on display at the Noordbrabants Museum in Den Bosch, Netherlands.

The Good, the Bad and the Malaparte

Davide Spina



Curzio Malaparte,
Paris, 1948
© Roger-Viollet / Topfoto

Projecting into the void from a rocky cliff on the southeastern edge of Capri is a peripherally located building that occupies a central place in architectural culture. Casa Malaparte is so isolated that you cannot simply stumble upon it during a casual visit to the island, you have to really want to see it. One of those hard-won destinations of architectural pilgrimage, like Eileen Gray's E1027 or Kazuo Shinohara's Tanikawa House, the casa requires you to journey by plane, train, taxi, ferry and funicular before slogging the last part of the way on foot through Capri's tangled underbrush. Yet even those with the greatest sense of purpose are often thwarted. Casa Malaparte is private property, and an invitation to visit is accorded only to a privileged few. Most people, then, approach the building along the cliffside path, only to find the most mundane of devices, an inconspicuous gate, blocking their way. Bypassing this obstacle and instead tackling the house from the sea – as some do by climbing the steps connecting it to the water – is feasible, but illegal. So when you reach the gate you can only retrace your steps, stop at a given spot along the path where the view of the building is unimpeded by the shrubbery – the same standpoint that has long given us the iconic shot of the building – and stare at it from the prescribed distance, savouring a brief moment of unmediated visual contact with the coveted object.



Mario Vellani Marchi,
Caricature of Curzio Malaparte, 1928
© De Agostini Picture Library /
Bridgeman Images

Mystical inaccessibility aside, the peculiar design of the building, 'one of the strangest habitations of the western world',[1] has remained an enduring source of fascination. Casa Malaparte does not quite fit into any style. To this day there is no consensus on whether it is surrealist, rationalist, vernacular, modern, postmodern or something else entirely. The figure of its original owner, the writer Kurt Erich Suckert, more familiar by his *nom de plume*, Curzio Malaparte, has proved equally hard to pin down, and not just in terms of literary genre, but personality-wise too.[2] Negotiating writers' houses always implies a tension between what you see – the biographical details supplied by the domestic environment – and what you know about the owner and his work. This undertaking becomes even more difficult when the writer plants decoys in the physical space of his house and hides behind a smokescreen in his books, as Malaparte does. That said, the story of its original owner, and his uncommon life, is a useful place to start if we want to unlock the Casa Malaparte and access its wider political and social habitat.

Born in 1898 in Prato, the 'Manchester of Italy', Kurt Erich Suckert had a Milanese mother and a German father, a master textile dyer. The third of seven sons, he was placed shortly after his birth with the family of his wet-nurse, Eugenia Baldi, and her metal-worker husband, Milziade, who raised him until he was seven. After a few years spent with his itinerant natural family, in textile towns in Piedmont and Lombardy, young Kurt was sent back to Prato in 1911 to attend the prestigious Liceo Cicognini, the same school that had famously fostered the talent of Gabriele D'Annunzio, writer, poet, journalist, playwright, all-round Casanova and ultra-nationalist, who would go on to be a major influence on Italian culture under Mussolini and beyond. As a promising high-school student, Kurt lodged with Guido Perini, a republican lawyer known for his broadsides against the church and Italy's dysfunctional monarchy. And it was through his teachers at the Cicognini that Kurt met the writer and poet Bino Binazzi, who became his mentor, introducing him to the classics and to nineteenth-century French literature, and who would take him on Sundays to literary gatherings at the Florentine cafés Paszkowski and Giubbe Rosse ('Red Coats'), where the talented Kurtino, aged only 14, would first encounter the irrational and anti-democratic avant-gardism of a number of writers affiliated with *Lacerba* magazine, namely Ardengo Soffici, Aldo Palazzeschi and Giovanni Papini. These café visits not only nurtured his gift for words but sowed the seeds for his lifelong affair with politics, a topic discussed with peculiar virulence in these Florence hotspots – witness the famous 1912 brawl at the Giubbe Rosse between the local contingent and a squad of Milanese futurists led by Tommaso Marinetti. This was Italy on the eve of the First World War, a country inflamed by class tensions, colonial delusions and nationalism, all related in varying degrees to a widespread frustration with the failings of the *Risorgimento* (the process of national unification) and resulting disillusion with parliamentary democracy.

Intoxicated by this turmoil, the restless Kurt explored the far reaches of the political spectrum. So while head of the Prato branch of the Young Republicans, he also flirted with Garibaldi nostalgics, went on strikes with anarchists and stormed the streets of Prato alongside right-wing syndicalists inspired by the French political theorist Georges Sorel, a group whose ranks would later supply the 'muscle' of fascism. Perhaps the natural outcome of this thirst for confrontation was to embrace war. At the age of 16, against his family's wishes, Kurt went to Avignon to train with an Italian branch of the French Foreign Legion led by Giuseppe Garibaldi's nephew Peppino. This was in February 1915, three months before Italy's entry into the war. After this, the Legion was disbanded and its members absorbed into the 51st Infantry Regiment of the Italian army.

For the next three years Suckert fought in the Eastern Alps on Italy's border with Austro-Hungary – experiencing all the butchery of trench warfare, at high altitudes and with punishing winters. When the Austro-Hungarian empire collapsed in the summer of 1918 he was sent to the trenches in the Marne, to support French and British efforts to contain the final German offensive on the western front, where he distinguished himself as commander

of the 94th Section of Flamethrowers. For Suckert, the Legion was 'the harbinger of fascism', and the Great War his 'first life experience'.[3] He returned from it a prodigiously young lieutenant – just 20 years old – proudly displaying French and Italian medals on a chest bursting with patriotism, yet with a lung damaged by German mustard gas. He went on to excel both as a press officer during the Treaty of Versailles and as an executive in the Warsaw embassy during the Polish-Soviet war (1919–21). At this point he could easily have embarked on a diplomatic career, but he chose instead to pursue literary glory in Rome, armed only with his charm.

His first years in the capital were not easy. In 1921–22 you might have seen him approaching the likes of Giorgio De Chirico or Luigi Pirandello at the Caffé Aragno in via del Corso, or editing articles for local newspapers *Il Tempo* and *Il Mondo* in his boarding house in via Lucina. However, he initially struggled to gain the recognition he hoped for. His political invectives and poems, expressing the ethos of a movement of his own invention called 'Oceanism' – naturalism meets the Nietzschean übermensch – elicited no more than a few raised eyebrows among the Roman intelligentsia. 'One must be anti-bourgeois … usefulness is not necessary in life', Suckert declared.[4] Both left and right saw him as ideologically inconsistent, but possessed of a dangerous gift for rhetoric. His *Viva Caporetto* (1921), a pamphlet denouncing the 'bourgeois' and 'cowardly' Italian military apparatus during the war, was banned only two weeks after publication. 'Those men who push people to war and, when war is declared, go into hiding in a safe corner … they are fodder for the rioting plebs' – Suckert's words were now as incendiary as his flamethrower had been.[5] While such a talent for agitating passions in the populace might have been regarded with suspicion in the literary world – no less a person than the communist ideologue Antonio Gramsci branded Suckert 'a wild arriviste with a streak of chameleonic snobbery' – it did not go unnoticed in more turbulent circles.[6] Impressed by his persuasive hyperbole, Mussolini's blackshirts approached Suckert, keen to harness his talents in recruiting new young members. Won over by the success of their charismatic leader and his revolutionary agenda, Suckert joined the party in September 1922 as a trade union manager in Florence. 'It is the first time a man of letters takes control of a union', he pointed out immodestly upon his appointment.[7]

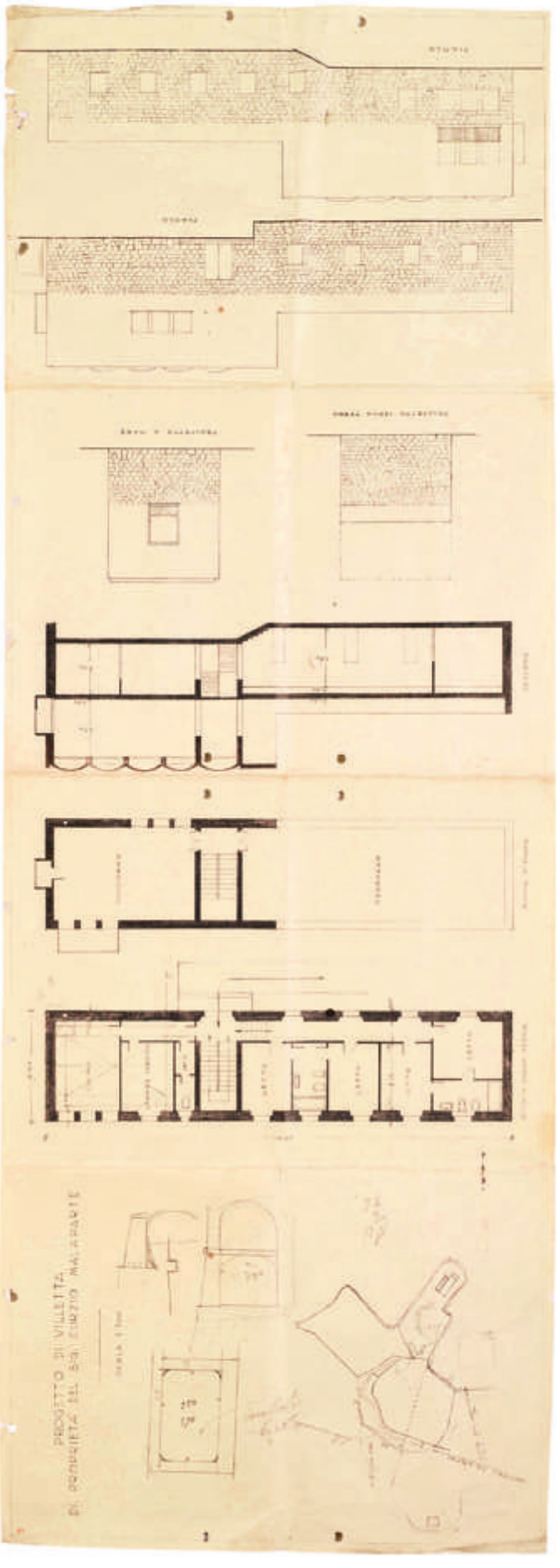
During his first years in the party Suckert demonstrated a strong commitment to the fascist cause, and was one of the signatories of the 1925 'Manifesto of the Fascist Intellectuals', alongside D'Annunzio, Marinetti and Luigi Pirandello. 'Fascism is like an empty tube, you can put whatever you want in it', Pirandello would later say, and indeed the party operated *per via negativa*, attracting a motley crowd who were bound together more by being *against* something – against modernity, against democracy, against rationalism, etc – than *for* anything in particular. In the absence of such a common purpose, there was ample scope for marking out individual positions.[8] 'I am a maverick fascist', Suckert said, unsurprisingly.[9] But there were also structural reasons for his endorsement of the movement. Mussolini's call for national renewal by turning against communism and against capitalism resonated both with his advocacy of *Risorgimento* ideals and his sense of discontent – victory in the First World War had come at the cost of crippling public debt, swingeing wage cuts and escalating class hatred. In fascism, Suckert saw an authentically Italian alternative to the moral bankruptcy of northern European civilisation, made manifest in its ruinous war: 'the fascist revolution will restore authority, faith, dogma and heroism against the sceptical, critical, rationalist and Enlightenment spirit'.[10] Not long after penning these words in *Europa Vivente* ('Living Europe', 1923),[11] Kurt Erich Suckert turned into Curzio Malaparte.

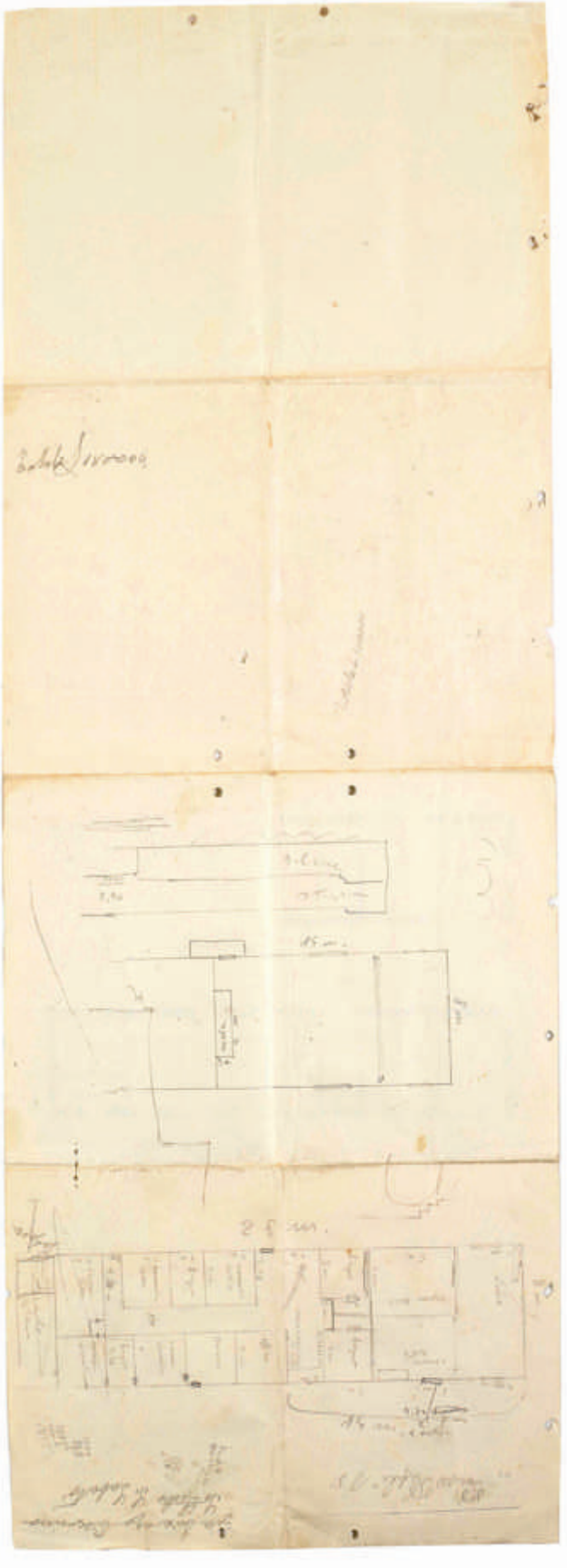


Curzio Malaparte, 1940
© Ullstein Bild / Getty Images

'A fascist writer must have an Italian name', Mussolini commanded in 1926.[12] Suckert embraced the order, insisting that he longed to be 'Italian not only in spirit, but also in name'.[13] His quest for the perfect literary handle was happily resolved when he chanced upon an obscure 1869 booklet about the alleged Italian origins of one of the *Duce*'s role models, Napoleon Bonaparte, and discovered that his family name was formerly 'Malaparte', a surname with overtones of an aristocratic lineage, akin to Malaspina or Malatesta, the latter perhaps best known to an architectural audience for being the clients for Leon Battista Alberti's first building, the Malatesta Temple in Rimini. Soon Suckert was writing to a friend, 'Malaparte is my banner!'[14] The choice was not accidental: *Mala*-parte – the *bad*-side, as distinct from Bonaparte's *bon* or good – had multifarious connotations that reverberated with the writer's mixed Italo-German background and his mission of stirring up the masses by offending bourgeois sensibilities at every possible opportunity. A master in the art of branding, Suckert slowly introduced the public to his manufactured persona, only making Curzio Malaparte his legal name in 1937.[15]

By then Malaparte had elbowed his way up to the highest echelons of public life. 'To achieve success he was capable of any amount of mischief', noted the disproving Antonio Gramsci a few years later.[16] He became the mouthpiece of 'fundamentalist' fascism (*fascismo integrale*), not only as editor, from 1924 to 1928, of *The Conquest of the State* – a magazine defiantly named after a 1919 article by Gramsci himself – but also as leader of the literary movement *Strapaese* (from 1926) and author of tomes such as *Barbarian Italy* (1925), *Don Camaleo* (1926) and *The Arch Italian* (1928). Expressing his


PROGETTO DI VILLETTA
DI PROPRIETA' DEL SIG. CINZIO MALFRANTE



antagonism at will, not least against Mussolini's regime in Rome – which he criticised for making 'compromises with the bourgeoisie … inappropriate to the revolutionary spirit'[17] – Malaparte gained a following among provincial hotheads the length and breadth of the peninsula.

In late 1929 this ability to probe and shape the *vox populi* secured him, at the startling age of 30, the post of editor of the Naples daily *Il Mattino*. Just three months later, he took over the helm of an even more prestigious publication, Turin's *La Stampa* – Fiat's newspaper. At that time the car manufacturer was in conflict with its left-leaning workforce, and company boss Giovanni Agnelli saw in Malaparte the right man to reverse the situation: he was to turn *La Stampa*, a 'serious' newspaper with declining sales, into a popular daily with sensationalist local news and sports sections, all the better to distract workers from politics, and dampen their fervour.

Whilst at *La Stampa* Malaparte seems to have been especially prolific. Aside from the daily editorials, he found time to skewer topics as diverse as *The Intelligence of Lenin* (1930) – a political analysis of Soviet Russia – and *Technique du Coup d'État* (1931) – a treatise on the Machiavellian skills of a number of professional revolutionaries including Napoleon, Trotsky and Mussolini. Yet Malaparte was perhaps too self-confident an editor: he ran the newspaper in an autocratic manner, often ignoring Agnelli's directions, rubbed shoulders with the factory workers (like the union manager he once was) and used his new platform to criticise the regime in Rome and the odd attention-seeking blow on the *Duce* himself.[18]

As a result, Malaparte quickly exhausted the patience of his employer, who in January 1931 asked the *Duce* for permission to fire him – a request that must have been granted without too much brooding. A disgruntled Malaparte then cashed in a generous severance cheque and relocated to Paris to lick his wounds. From the French capital he supervised the publication of his *Technique du Coup d'État*, which enjoyed considerable success, despite Trotsky's scathing criticism: 'in the book of the Italian writer Malaparte, who is something of a fascist theoretician, Lenin and Trotsky have many conversations, and they display as much intelligence as nature made available to Malaparte'.[19] That text was Malaparte's last real attempt to establish himself as a leading political thinker and launch a new career in the Ministry of Foreign Affairs – an ambition which was not entirely ungrounded. Rumours from Rome suggested that the *Duce* approved of the book – possibly because he emerged from it as an inflexible leader – and was considering making its author an ambassador-at-large.[20] Thus Malaparte spent several months in Paris waiting for a call from Rome.

But it was a call that never came. Crushed by the silence of the 'boss' – 'there is no place for me in Italy'[21] – he filled letters to friends back home with a stream of vitriol aimed at Rome's establishment, heedless of the consequences. In two of these letters, intercepted by the Italian secret service, he lambasted the withered fascistness of Air Marshall Italo Balbo, heir apparent to Mussolini and a fiery man famous for his jet-black goatee and obsession with Charles Lindberg-style transatlantic flights: 'Balbo has gotten fat',[22] Malaparte sneered, 'he seems a minister of Louis Philippe I',[23] 'if he is given free rein bad things will happen to fascism'.[24] This time the *enfant terrible* of the regime had gone too far. Balbo immediately reported the insult back to Mussolini – '*My Duce*! Before assuming command of the second Atlantic crossing, I have the honour to proceed against Malaparte'.[25] The seasoned statesman resolved that the writer should 'have a dose of his own medicine'.[26] Consequently, when Malaparte returned to Italy in late 1933, he was arrested, charged with anti-fascist activity and defamation, and sentenced to a five-year exile in Lipari, a tiny arid island off the northern coast of Sicily.

Banished to this rocky Mediterranean outcrop, Malaparte soon found himself lost for things to do – 'there is too much sea, too much sky, for such a small island and so restless a spirit'.[27] Suddenly aware of his own powerlessness against the political machine of the fascists, Malaparte found solace in re-reading the classics, and in particular Homer, in the original language.[28] But his stay in Lipari was short-lived. After only seven months, claiming lung problems, he managed to be transferred first to the more salubrious island of Ischia, in the gulf of Naples, before moving again in 1934 to Forte dei Marmi, a seaside haunt of the wealthy and cultured in his native Tuscany. The transfer came as a great relief – 'finally people of quality after a year among fishermen and shepherds'.[29]

In Forte dei Marmi, Malaparte's existence was hardly that of the outcast: he sojourned in the opulent mock-Renaissance Villa Hildebrand (completed in 1901 and a former residence of D'Annunzio), rode around in a state-owned Alfa-Romeo, and was a habitué of the Negroni-fuelled parties hosted by Forte's cosmopolitan elite. He also returned to his journalistic work, writing satire under the 'innocent' Voltairian pseudonym of 'Candido'. In 1935 his old friend and the *Duce*'s newest heir apparent Galeazzo Ciano then granted him early release from this gilded confinement.[30] Malaparte proceeded to buy the Villa Hildebrand, complete with its Arnold Böcklin-frescoed rooms, and prepared his comeback.

Though he was now *persona non grata* in Rome, Malaparte soldiered on. In early 1937 he sought to boost his career with the launch of *Prospettive*, a magazine he described as 'printed on American art paper'[31] and 'in the style of *Fortune* and *Minotaure*, yet completely Italian and fascist in spirit and content'.[32] *Prospettive* was additionally Janus-faced: political in its first years (1937–39), vocally supporting the government agenda in order to secure public funds granted to pro-regime publications, it was more self-consciously 'literary' in its second incarnation (1939–43), when it was on financially and politically firmer ground, and could therefore afford to have a liberal mandate, publishing pieces by André Breton, Federico García Lorca and James Joyce, as well as essays on surrealism and existentialism – then taboo topics in Italy.

It was at this point in his career, after a visit to Capri in December 1937, that Malaparte decided to build his own house on the island. By the late 1930s Capri, already a choice destination for high society, had become particularly attractive to the fascist elite. The discovery of Roman villas on the island (Villa Jovis in 1931 and Palazzo a Mare in 1935) had sparked a great deal of excitement among Mussolini and his men, who were always seeking to legitimise their rule through a suggested kinship with Imperial Rome. A 1937 exhibition in the capital, highlighting a bond between ancient Rome, Capri and fascism, was followed a year later by a series of events on the island.

Left: Adalberto Libera, 'Progetto di Villetta' preliminary design, with sketches by Malaparte and Amitrano, March 1938
Right: Curzio Malaparte, sketched alternations, reverse side, March 1938
© MART / Archivio del 900, Fondo Casa Malaparte

Yet if almost overnight Capri had acquired Roman affiliations for adherents of the regime, it had also long fascinated intellectuals and artists as *Mediterranean*. The myth of the Mediterranean runs deep in European culture, going all the way back to the birth of the Grand Tour,

and Capri was – perhaps still is – a key location for its production and consumption. Especially in Malaparte's turbulent times, the word 'Capri' conjured up images of a pristine realm untarnished by the evils of the machine age. But long before the Tuscan writer made his appearance on the local scene, the island was home to a number of eccentric personalities seeking moral, spiritual or sexual liberation. A few of these characters even proclaimed their love for the place architecturally: former American Confederate officer John Clay McKowen built the Red House (1899), French dandy Jacques d'Adelswärd-Fersen the Villa Lysis (1905), Swedish physician and socialite Axel Munthe the Villa San Michele (1907), which Malaparte dismissed as 'a fake prison'.[33] To varying degrees, Capri's bohemians were fascinated by the classical heritage of the island, and especially the figure of the Roman emperor Tiberius, who galvanised their own delusions of grandeur.

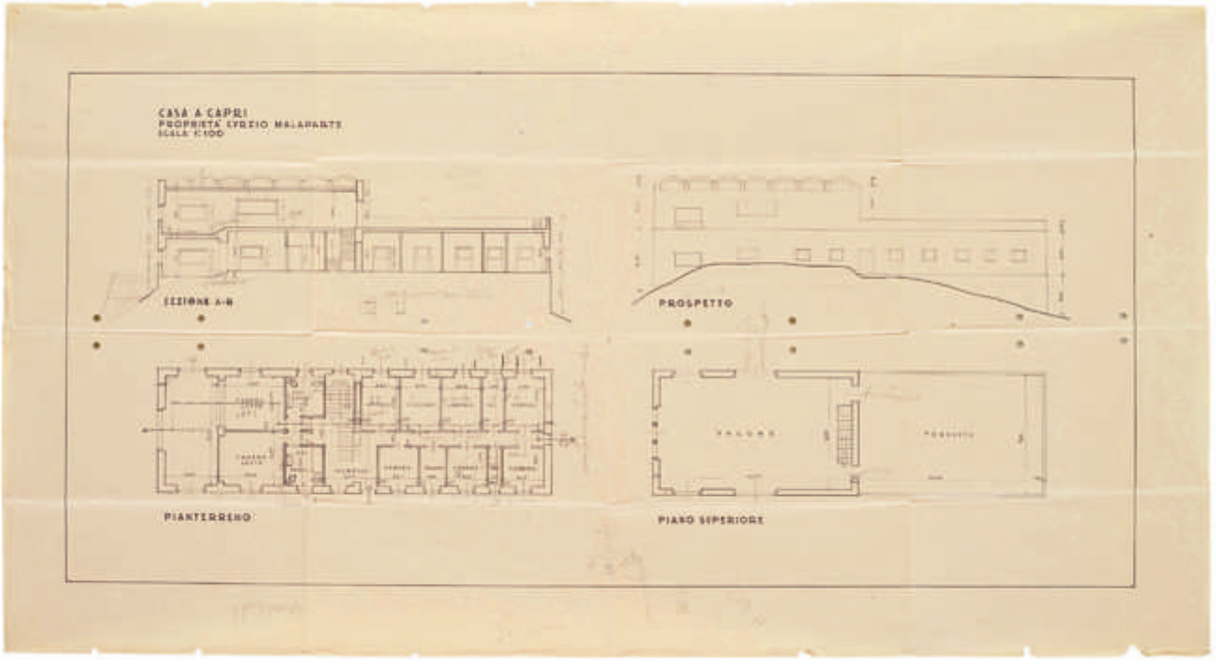
However, Capri was of interest not only to lay architects in love with the classical world, but also to a number of forward-looking professionals who were more concerned with its 'mundane' past. The island's pre-modern buildings inspired the modern fantasies of the highly influential Gruppo 7, whose members were seeking a 'spiritual' and 'Italian' variant of modernism. Another fan was architectural globetrotter and Capri resident from 1932 to 1934 Bernard Rudofsky, who co-designed the Villa d'Oro in Naples alongside local engineer Luigi Cosenza in 1937. Later in life Rudofsky would conceptualise his interest in vernacular buildings in his acclaimed *Architecture Without Architects* (1964).[34] And even futurist leader Tommaso Marinetti had a soft spot for the island, where he set *The Island of Kisses*, an erotic novel co-authored in 1918 with Bruno Corra, and where he later honeymooned with the painter Benedetta Cappa. In the 1930s, then, sweet Capri was a magnet for powerful people – classic megalomaniacs as well as the avant-garde – and as such, it provided the ideal location for a dramatic statement from a man fallen into (relative) disgrace.

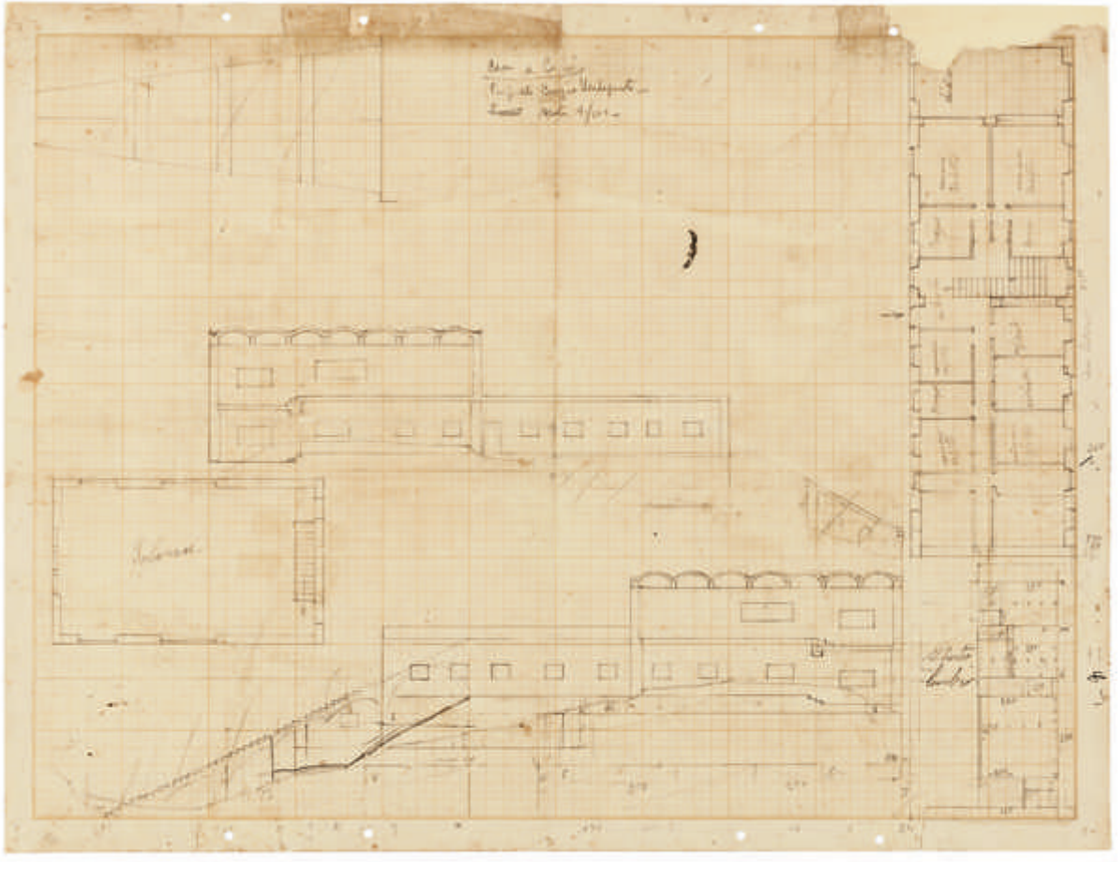
The site Malaparte cherry-picked for his house was Cape Massullo, a remote promontory in the southeast of the island. Up till then the land had been used for rough grazing, as it was a non-building zone. How local regulations were bypassed is unclear, but a comment by the writer in 1939 alluded to 'the distinguished interest of the Ministry of Foreign Affairs' – ie, his old friend Ciano, whom he had met in Rome when they were both young and dreaming of breaking into theatre writing.[35] Where Malaparte got the money for the house is also something of a mystery. Detractors pointed to the severance package from *La Stampa*; Malaparte himself, in a 1944 memoir, claimed to have used revenues from his book sales and hefty bank loans – a version of events partially supported by documents in the MART archive in Rovereto. What is sure is that the sum was enough to buy the entire cliff, and to think of building on it.

In early 1938 Malaparte entrusted the design of the building to Adalberto Libera, an architect affiliated with Gruppo 7 and Italian rationalism. By then, Libera was an established name in Italy, a strong brand whose icy marble-clad buildings seemed to make manifest fascism's pretence of a spiritual revolution. The extent of Libera's involvement in the project is still disputed – Malaparte insisted that he used him 'only for legal matters',[36] but Marida Talamona's 1997 study provides a more convincing account.[37] In March 1938 Libera handed in a preliminary design, the famous Progetto di Villetta. This was essentially a two-storey elongated block, 28m × 6.6m, rusticated at the bottom, rendered on top. On the ground floor, a corridor running along the southern edge of the building connects bedrooms, bathrooms and kitchen. On the first floor the architect positioned a dining room looking towards the sea, and a large terrace set back into the cliff-face. A simple staircase connects the two levels. The design was submitted for approval to Capri's planning committee, but Malaparte was already thinking of changes, because he pencilled a new plan on the back of a copy of the submitted drawing. Talamona has interpreted this sketch as an attempt by Malaparte to explain to the contractor, Adolfo Amitrano, a design that Libera had discussed with him but had not yet completed. A letter from Malaparte to the architect ten days later seems to support this hypothesis – 'Amitrano is begging me for a copy of the plan, without which he cannot do anything … please send it to him as soon as possible, okay?'[38]

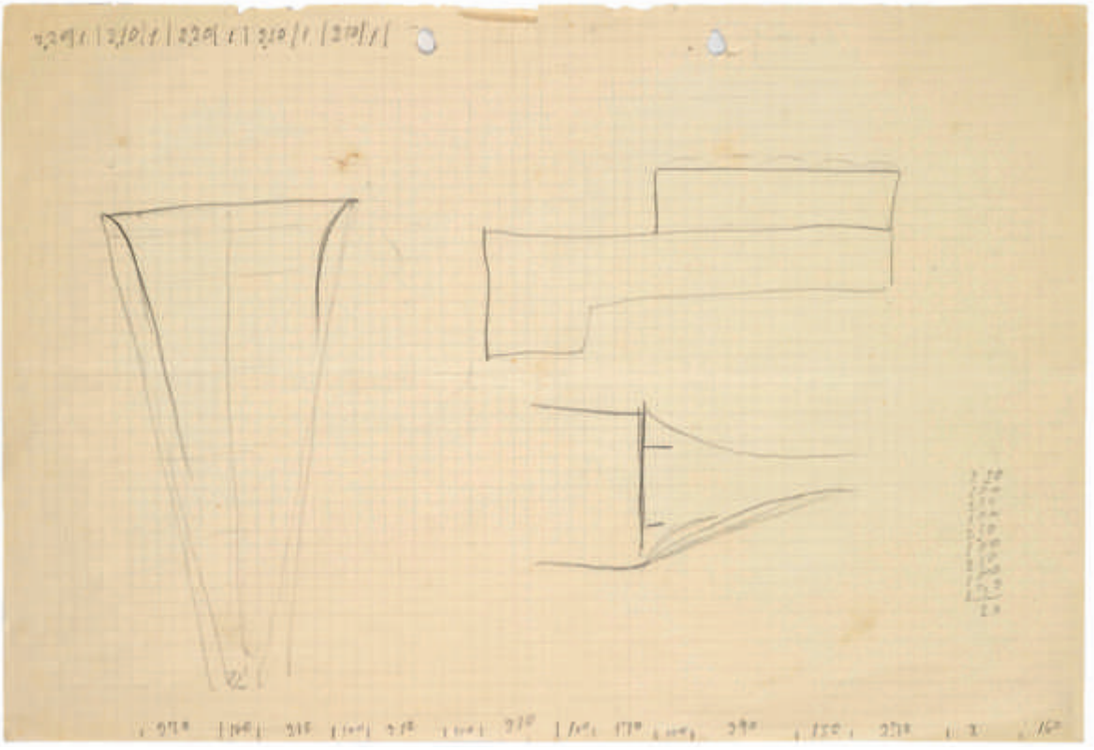
In the absence of definitive evidence, however, this point remains unresolved. What is clear is that Malaparte is in a hurry: 'We must be quick, quick, it's crucial to be quick',[39] concerned as he was about the amount of red tape he had to fight through. Libera soon complies: the new scheme is a slightly larger and longer block (29m × 9m), but the volumetric qualities are unchanged. The rusticated cladding covering the lower half of the elevations has disappeared, and the ground floor features a new layout. The entrance has moved to the north, while the corridor is in an axial position with rooms either side. And to the front is the blueprint of the *appartamento padronale* as we see it today: two identical doors, two symmetrical bedrooms and bathrooms, the studio spanning the whole width of the building. The appearance of this drawing was followed by a flurry of activity. In mid-May Malaparte discussed with Amitrano the idea of an external staircase; in early June the two were in Capri concocting the first design featuring the famous wedge-shaped element; in mid-June the writer sent the contractor a new rough draft of plans and elevations. At this point Libera mysteriously disappeared off the radar: 'I have tried to call him many times, but no one answered'.[40] The Tyrolean architect and the Tuscan writer were distinctly different personalities – Manfredo Tafuri described them respectively as 'rigorous' and 'amoral'[41] – but there is no indication that this alone caused their rift. The end result, in any case, was that Malaparte, left to his own devices, made so many changes to Libera's design that the architect never claimed authorship of the final building.[42]

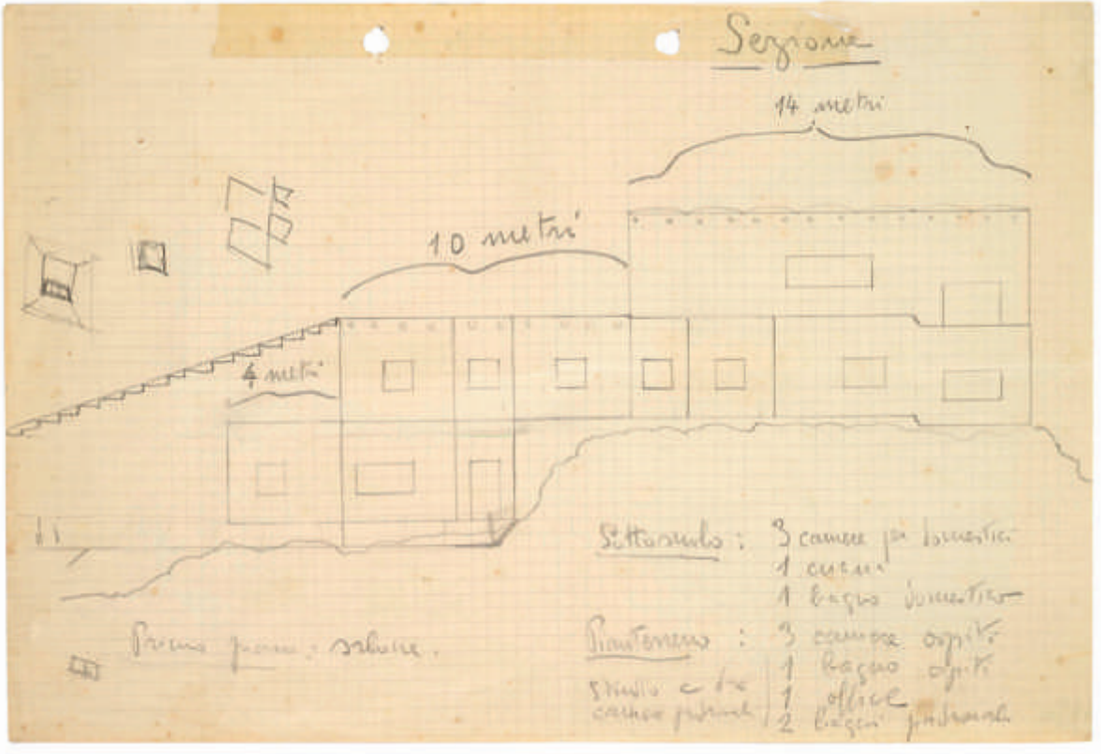
Instead, the odd couple – the sophisticated writer and the pragmatic contractor – spent the next year refining the details of the design and preparing the site for construction. Their collaboration was not always smooth, Amitrano being too slow for the impatient Malaparte: 'That's not how things are done'[43]… you're wasting my time[44]… I have no reason to be satisfied with you.'[45] The project got the green light from the planning office in September 1938, and construction began in early 1939. Yet it advanced by fits and starts, since from late 1939 to mid-1943 Malaparte served as war correspondent in Ethiopia, France, Greece, the Balkans, Romania, Ukraine and Finland, and returned to Capri only when on leave. Throughout the construction process Amitrano built and demolished portions of the building, first giving Malaparte's architectural fantasies material consistency, and then patiently tearing them down if the result was not to the untrained designer's liking. The prime example of this is the entrance of the house, first carved on the southern elevation, then pierced through the staircase in axial position, and finally restored to its original position. This





Above: Adalberto Libera, revised design,
Casa Malaparte, April 1938
Below: Curzio Malaparte and Adolfo Amitrano, revised
design, with introduction of wedge-shape, June 1938
© MART / Archivio del 900, Fondo Casa Malaparte





Curzio Malaparte, revised designs,
Casa Malaparte, June 1938
© MART / Archivio del 900, Fondo Casa Malaparte

was a piecemeal, trial-and-error approach to building: costly and decidedly unmodern.

What *was* modern was 'the design from within' logic of Malaparte's method. The predominance of plans and cross sections among the writer's drawings suggests that his primary concern was to sort out the layout of the interior. The exterior then followed, its design responding to the arrangement of the rooms inside: windows randomly punctuate the facades, as well as practical needs; the staircase is moved to the outside to give the building more mass, and with it, more rooms. Little by little Malaparte remoulded Libera's block and for a short period in 1939, following the latter's departure, ideas were communicated to the contractor using technical drawings drafted by Uberto Bonetti – a young futurist painter and acquaintance from Forte dei Marmi, following the writer's 'aesthetic and architectural directions'.[46]

As an amateur architect Malaparte needed help to get things done, and continuously sought advice from his entourage: Roman architect Luigi Moretti – 'Tonight at nine Moretti came for dinner';[47] *Prospettive* art director Orfeo Tamburi – 'It was I who gave him the design of the curl on the rooftop';[48] Naples architect Carlo Talamona – 'a more harmonious distribution of the openings could bring the design of the house back to the concept of a modern house';[49] and even his housemaid – 'Maria told me that the house looked better before, but hers is the taste of the common people, and I do not trust it'.[50] Yet the final decision always rested with Malaparte, who developed some architectural skills in the process and personally fetched the material for the fit-out on numerous trips through the peninsula: marble slabs from Carrara, stone slabs from Castellammare di Stabia, windows from Pisa, alabaster from Volterra, woodwork from Rome, 'super-expensive'[51] horsehair mattresses and sofas from Milan. Construction often stalled, not just because of Malaparte's periodic absences, but because of the difficulty in procuring building materials, especially steel, during wartime, and then transporting them to the site by boat and on the backs of mules. In summer 1943, however, the house was ready for the writer to move in on his return from Russia, his final stint as a war correspondent.

Malaparte christened the house by completing *Kaputt* in its studio in the autumn of that same year, but did not take up permanent residence in his 'portrait in stone'. After serving as liaison officer for the American army between 1944 and 1945, he shuttled to and from Rome over the next two years before relocating to Paris in 1947, where he resided until 1950.[52] Letters to and from the house custodian Ciro Amitrano reveal the reasons behind his absence: 'I cannot leave Paris before finishing this book', Malaparte wrote, 'If I come to Capri, I will do nothing'[53] ... 'Capri is cut off from the world'.[54] 'You are right', Amitrano replies, 'after a while Capri obfuscates the mind'[55] ... 'it makes you stupid and the brain stops working'.[56] Malaparte seemed to fear that a long stay on Cape Massullo would diminish his most cherished asset, creativity. This concern is also reflected in the design and use of the house. Female guests with whom Malaparte ostensibly entertained intimate relations were allocated a room of their own – 'the room of the favourite' – a space close to, yet separate from, those spaces in which 'masculine' creative powers were exercised and restored, that is to say, Malaparte's studio and private bedroom. Kurt Forster has commented on the 'misogynistic obsession with creativity' of writers and filmmakers orbiting around Casa Malaparte.[57] This obsession is much in evidence in Malaparte's notes: 'every woman is an enemy of the work of man',[58] 'bitches, not good women, make you want to excel'.[59] For Malaparte, women are a catalyst for creative production, and are to be managed with care – 'he gave to himself, and reluctantly, no more than one a week',[60] hence the sharp demarcation in the plan of the house.

This preoccupation with creativity, as much as compartmentalisation, is also found in the most famous cinematic representation of the house, Jean-Luc Godard's *Le Mépris* (1963), which, among other things, is a story about a film that struggles to take shape. On Cape Massullo, Malaparte not only preserved and exercised his creativity, but also put it on show. In one of his books he relates how Erwin Rommel had paid a visit to the house prior to the Allied landing on mainland Italy. The Wehrmacht general was so impressed by the building that he asked the writer whether he had bought it readymade or designed it himself. The answer was a typical Malapartian pun, 'the house was already here, *I designed the scenery*',[61] accompanied by 'a sweeping gesture' towards the four large windows in the living room, whose edges are surrounded by a moulded wood frame of the kind traditionally used for paintings. Though this anecdote is most likely apocryphal, it is nonetheless significant because it exemplifies how Malaparte designed and used his Capri house as a platform to promote his creative persona.



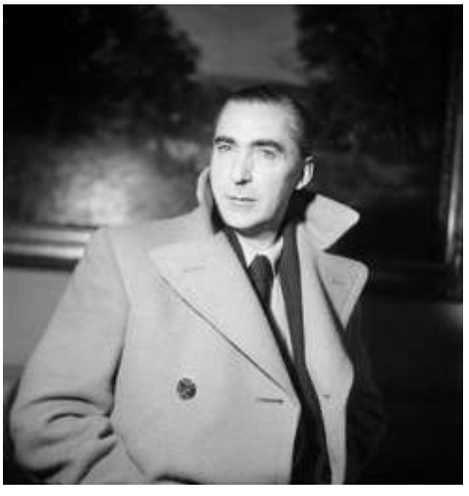
Living room, Casa Malaparte, Capri
© Gabriele Basilico / MART, Archivio del 900, Fondo Adalberto Libera

In the late 1940s Malaparte was in the limelight again thanks to the success of *Kaputt* (1944) and *The Skin* (1949), hallucinatory war accounts that assaulted the reader with a catalogue of obscenities, human misery and general *marciume* ('rottenness'). Many were curious to see his Capri house. When Malaparte was on the island, artists, media people, politicians and military officers were regular visitors: 'we would spend two or three days sitting on the rocks, fishing or drinking in the hall by the fireplace, or stretched out on the terrace looking at the blue sky'.[62] When he was absent, the custodian was instructed to allow those who asked to visit to admire his work '*una casa come me*'.[63] And of those visitors, he wanted to know 'their name ... that is the only thing that interests me'.[64] In this way,

'the house, like me' amplified the resonance of Malaparte's written work, reviving a social capital much diminished by his years of exile.

And perhaps fundamental to the house's profile was its flat roof, whose size and conspicuousness make it the actual main facade in the eyes of the visitor, and a sort of Corbusian solarium. Malaparte naturally had an agenda of well-being and hygiene, but he seemed to value this space even more as a stage for his public appearances. In a similar way, the interior design aims to keep the spotlight on its owner. The generous provision of bedrooms on both floors – four bedrooms on ground level, one on the *piano nobile* – suggests the presence of guests in the everyday life of the house, yet visitors would usually only see Malaparte around lunchtime (he preferred to work at night and slept all morning in his quarters), when he made his grand entrance into the living room through a small, yet conspicuously placed, wooden door.[65] This living room, a hall the size of a ballroom, was, and indeed still is – as the layout and furniture have been admirably restored by the Suckert family inheritors to their original state – punctuated with pieces of furniture so distant from each other as to make communication difficult, unless during an unusually busy event. And the rough-hewn stone used for the *opus incertum* flooring was meant, as Malaparte offhandedly revealed, to 'thwart anyone from dancing',[66] so as not to divert attention from the celebrated host. If Casa Malaparte is an 'architecture of hedonism', then, as Martino Stierli suggested at the 2014 Venice biennale, it is not everyone's idea of hedonism, but Malaparte's own particular brand, which seeks the subtle pleasure of imposing on others his own idiosyncratic desires. Nor is it entirely correct to say that the house is the abode of a 'Dionysus', as Tafuri wrote in 1981. For what Dionysus suggests is an abandoned pursuit of pleasure, whereas in this space thoughts and actions are instead disciplined by the owner, who uses the building's iconographic and choreographic potential to overwhelm his guests, even 'starving them' on one occasion[67] – behaviour more appropriate to Narcissus than Dionysus. Also in some sense appropriate to Narcissus is the articulation of the design of the house around two large voids – the living room and the rooftop terrace – which in turn corresponds to a Freudian reading of narcissism which highlights in its aetiology the idea that something is lacking, and a state literally rendered in this architecture through the absence of matter. It seems especially telling, then, that these voids are the most celebrated spaces of the building.





Narcissism, like its cousin dandyism, implies a certain contrarian style, which in Casa Malaparte is present in spades. Malaparte and his guests may have belonged to the Italian middle class, but instead of bourgeois comfort we find a Spartan austerity peppered by flashes of luxury reflecting the martial temperament of the owner, a decorated war veteran and man of action, aloof and self-disciplined but with a penchant for teasing and ambivalent leanings towards delicacy and roughness. The living room, for instance, is too large for informal meetings, too draughty in winter and too dark at night, having no chandelier and few outlets for electric lighting. This is not a space to share and mingle, but rather to contemplate – the objects on display, the view outside, Malaparte himself striking a pose like a statue: 'it seemed as if he were always wearing a mask'.[68] In contrast, while the living room has an aloof feel, the dining room – small, dominated by a large Tyrolean stove and clad entirely in dark wood – exudes a kind of Alpine domesticity. This is a place where people can actually get to know each other, with a suggestion that such relations are possible only outside the normal bounds of bourgeois sociability. The guest accommodation on the ground floor is also far removed from anything you would find in a standard middle-class interior. In its dark corridor and four stripped-down bedrooms you breathe an atmosphere of privation more suited to a prison than a house – 'the house must have a hard character, like a jail or a fortress'[69] – a fetishisation of Malaparte's experience as an exile and convict. Outside, archive photographs show that until February 1944 a railing ran around the sides of the rooftop, evidently to prevent people from falling down the cliff. But Malaparte clearly grew impatient with such commonplace concerns, because the railing was soon gone. Removing it made the rooftop a relatively unsafe space to walk – echoing Malaparte's feelings about his professional condition: 'it is dangerous to be a writer in Italy'[70] – but it also enhanced the view of the beautiful surroundings and provided a more appropriate stage for his superman public persona – gods do not need railings. Fashion brand Ermenegildo Zegna channelled this quality in a recent TV ad for one of its men's fragrances, which shows an impeccable young professional speed to Cape Massullo in his 1965 Alfa Romeo Giulietta, climb the staircase at a solemn pace, and finally experience a moment of pure ecstasy with a heavenly female partner on top of the building.

All of these features confirm that Casa Malaparte was devised to put on show a 'blissful state of mind', yet it would be simplistic to dismiss it as just a piece of PR. The Capri building is the autobiographical house of a controversial man who navigated first fascist and then republican politics with remarkable vigour and cunning. But apart from his *trasformismo,* Malaparte is interesting because his life and work provide a commentary on Italy's difficult relation with the apparatus of modernity, to which his personal brand of fascism promised an alternative. And so whereas Giovanni Gentile, the official theorist of the party, attempted to legitimise fascism by promoting it as a fully-fledged modern doctrine spawned from the German idealist tradition,[71] Malaparte saw it as a non-modern *way of being*, as having to do with *spirit*, not intellect. As his friend, the novelist Alberto Moravia implied, Malaparte was perhaps 'not an intellectual' because 'he did not believe in ideas' –

a comment echoing scholarly observations of fascism as *praxis*, not ideology.[72] Therefore if the house is interesting, it is also because Malaparte managed to translate this spirit into built form. From this standpoint, the Casa is not just the daring feat of a controversial writer, but a precious piece of historical evidence. For what we see in this isolated corner of Capri speaks of issues that transcend the geography of the house and the history of its designer – issues having to do with the past of an entire national culture.



Let us start with the distinctively Greek look of the house. Besides the setting (from the windows one can easily picture Odysseus' ship sweeping by the nearby sea stacks), there are other evocations of ancient Greece in the dramatic isolation of the building, poised even more precariously on the cliff edge than the Temple of Poseidon in Cape Sounion; in the theatre-like staircase leading to the altar-like rooftop terrace; in the living room, with its rough-hewn stone floor, chopped Minoan columns and Pericle Fazzini's wooden relief; and in Alberto Savinio's lyre-themed floor tiles in the studio in the front. Here, Malaparte reveals a fascination with the ancient world akin to Munthe and company, but with a polemical twist. As the writer noted in the early 1950s, central to his work is the analysis of decline – 'the gist of my activity as a writer is to see why and how societies become rotten to the core'.[73] This condition preoccupied a contemporary of Malaparte, the German philosopher Oswald Spengler, who saw it affecting modern western civilisation as a whole.[74] For the Tuscan writer, however, decline was concentrated in one modern nation: Italy. In his view, the country had 'lost its spiritual sovereignty over the world after the Lutheran reform' and ever since had been condemned to a vicarious existence, compelled to 'copy, badly, the European democratic and liberal system', in the process losing 'its historical originality'.[75] As a 'Latin nation', Italy was – in Malaparte's opinion, at least – 'unfit for modernity'.[76] 'Counter-reformation', or the establishment of a fascist anti-modernity, seemed to him the only way out of this stalemate.



This was Malaparte in the mid-1920s, but these convictions are also to be found in his mature production, which bears the same undertone of anti-modernism and nostalgia for an authentic past, located in ancient Greece and its myths. However, this love for Greece and the Greek idiom of the Capri house ran counter to the prevailing mood in the capital, where the regime's iconography revolved around ancient Rome. Malaparte considered Mussolini's regime – which had just discarded him – as not representative of *true* fascism, which was instead 'a phenomenon with a rural origin',[77] whose 'capital never was Rome',[78] and whose true roots lay in the Strapaese, the galaxy of Italian villages and provincial cities, like his own Prato. 'Rural fascists were key to Mussolini's seizure of power … he must carry out their will'.[79] Malaparte's fascism therefore took aim not only at modern systems of belief – capitalism and communism – but at Mussolini's imperial Roman fascism as well. In this respect, the uncorrupted Greek look of Casa Malaparte is a condemnation, equally, of modernity and of the critique of modernity via ancient Rome proffered by official fascism.[80]

Curzio Malaparte, Paris, 1948
© Roger-Viollet / Topfoto

Aside from these ideological implications, the building speaks of another problem, the condition of Italian intellectuals after national unification. Given the chronic underfunding of the culture industry, this is a sector that has traditionally been underemployed.[81] A common solution has been freelance work in journalism and politics, fields that are always keen to enlist fresh new talent in the perpetual struggle for hegemony in the writing of the history of the nation. Unsheltered by institutions, Italian intellectuals have therefore consistently been valued for their ability to persuade a wide public (as opposed to engaging in critical thought with their peers). And with persuasion to be achieved by any means necessary, the result has often been media saturation as they take on the role of *outré* preachers, rather than thinkers, in order to reach 'the most illiterate population' and 'the most ignorant bourgeoisie in Europe', as the character played by Orson Welles curtly states about Italian society in Pierpaolo Pasolini's short film *La Ricotta* (1963).

As an overexposed and underemployed writer (the former by choice, the latter because he burned bridges with publishers and patrons all too easily), Malaparte exemplifies this category. Writing inflammatory texts was for him first of all a source of income – 'I have to make ends meet, and therefore write articles … you don't make a living from literature or politics, but from freelance journalism'.[82] And it is no accident that the floor in the front studio of Casa Malaparte contains a great number of lyre-themed tiles, an obsessive reminder of the double nature of his job, the lyre being at once the symbol of the art he loved and practised – poetry – and the currency he was paid in, the Italian *Lira* – 'Do you know what they say when I walk in this room? They say that Malaparte walks on *Lire*!'[83] Selling his virtuosity to the strongest leader must therefore have seemed to him a minor concession in return for the recognition and financial security he coveted. In a moment of painful honesty Malaparte admitted that 'For many years I, too, have been a whore, like all the others.'[84] In doing so he offhandedly accorded himself a title that only consummate professionals with a big drive but little qualms can aspire to – for example, note the same self-appraisal Philip Johnson made in terms of his architecture ('I do not believe in principles … I am a whore'). Malaparte also seems to have shared with the designer of the Glass House the conviction that he could not be on top of his game unless he was constantly in the public eye. And this impulse permeates the house on Capri just as it does the one in New Canaan, a house whose

main feature is precisely a narcissistic disregard of the border between public and private spheres, enacted through the transparency of its glass.

In Italy there are around 60 writers' houses that are now used as museums.[85] One of the few to have reached a level of interest comparable to Casa Malaparte is, not coincidentally, the 'Vittoriale degli Italiani' belonging to another, albeit more conventional, dandy, Gabriele D'Annunzio. Both Casa Malaparte and the Vittoriale – the citadel built by D'Annunzio ('The Prophet') on Lake Garda from 1921 to 1938[86] – are born out of similar motivations. Both were constructed by unruly writers upon their forced removal from fascist public life. Both are autobiographical works, giving physical form to their literary production.[87] Yet they could not look more different. From the outside the Vittoriale follows the additive logic of the (pre-modern) city: as D'Annunzio grew older, more and more extensions and outbuildings mushroomed across the plot. By contrast, Casa Malaparte follows the modern, or Palladian, logic of the pavilion: it is a self-contained, autonomous object – at a glance you know where it begins and where it ends. While it is difficult to capture the Vittoriale in its entirety, Casa Malaparte is immediately comprehended in its finiteness, and this makes it a more felicitous architectural motto – the irony here being that D'Annunzio enjoyed a more successful side career as a copywriter, but his Garda property lacks the immediacy of his slogans. The interiors also embody antithetical visual regimes. In the inward-looking Vittoriale the eye is always constrained in cramped, dark interiors cluttered with an insane amount of weird objects (more than 10,000 scattered across the property). While in the outward-looking Casa Malaparte the gaze flits between isolated geometries, large blank surfaces and the bright world outside. If D'Annunzio's domestic surplus numbs the senses, Malaparte's asceticism starves them.



These differences are entirely justified by the fact that the buildings at Lake Garda and Capri represent two dissimilar, yet complementary sets of core values. With its delirious eclecticism, the Vittoriale displays many of the maladies affecting Italy before the First World War – a morbid love for the body of the nation, excitement with military and colonial strength, a fascination with the machine – all amplifications and distortions of European cultural themes of the same period. For its part, Casa Malaparte is about the interwar withdrawal from modern Europe into pre-modernity, a specific trope in fascist cosmology. A thin line then connects the two estates: at Lake Garda you see the toxic cultural premises of fascism, at Capri a reaction to the regime's 20-year long binge on phantasmagorias of imperial Rome. But if the Vittoriale is essentially an affirmative gesture, an alternative community with D'Annunzio at its helm, Casa Malaparte arises out of rejection, as a retreat for Malaparte to shine in his loneliness.

Malaparte furthermore stands out among his colleagues by virtue of the fact that he built his estate from scratch – writers rarely experiment that far with architecture. In the exchange between disciplines, architects are generally the more daring, as their fortunes often depend on the translation into built form of ideas previously expressed with words. By writing *and then* building, one could say that Malaparte followed a classic trope in modern architecture. However, as a wordsmith and not by education a designer, Malaparte took care to give phenomenal expression not only to the general content of his written work – his life and his anti-modernism – but also to the form of his writing.

If it is true that you know what one thing *is* by looking at what it *is not*, then a comparison of *The Skin* (1949), Malaparte's account of wartime Naples, with *Naples 1944* (1978), a deadpan report of the same events by British writer Norman Lewis, makes clear the Italian writer's compulsion to bend reality to his will. This vocation for the *unnatural*, already noticeable in Malaparte's juvenile production, became predominant during the fascist regime, whose rhetoric ratified and even encouraged non-objectivity.[88] For many Italian journalists active during the *ventennio*, the idea that you should stick to the facts epitomised everything that was wrong with (Northern European) positivism and the 'standard man' it promoted. As an Italian studies scholar put it, the common feeling was that 'by making the writer a mere reporter of events, the doctrine of impersonality [had] deprived the literary work of an individual imprint and stripped the writer of an active role in shaping new values'[89] – the subtext being that you could transfigure reality but not interpret it (knowledge being impossible in fascism). Fuelled by his peculiar distrust of rationalism, Malaparte took this 'transfiguration' to an extreme, and consistently distorted or manufactured facts with the aim of stupefying his readership. Eventually he would embrace surrealism because it legitimised irrationality and artifice and thus served his pursuit of *the sensational*.[90]

But how is all of this expressed on Capri? Take the living room, the most representative space of the house. Here we have a fireplace that looks like a glob of crude matter extended from the ceiling and then stretched horizontally; a glass panel at the rear creating a dazzling juxtaposition of the flames with the blue of the sea outside; windows with moulding frames which literally make paintings out of the world outside; long and curvaceous wooden tops to be used as benches standing on Doric column-shaped water closets; a small dark door at one end of the room leading to a corridor terminated by the ominous presence of two identical doors. Taken together, these individual objects present a Daliesque quality, and the ensemble plays with unconscious associations in the typical surrealist fashion.[91] In addition, we find figures of speech that are rife in Malaparte's writing: the oxymoron (the fire-and-water fireplace) and the twofold interpretation (the pair of doors) – both of which address the theme of doubleness so dear to the Tuscan writer. Indeed, Malaparte went to great lengths to achieve consistency between his literary and his architectural production, because

he considered each one of his works a means to publicise his public persona. But since most of his work was autobiographical and semi-fictional – 'a writer is always depicting himself'[92] – throughout his life he basically used his idealised self-image to promote his public self,[93] or even – akin to Oscar Wilde's *Picture of Dorian Gray* – using his architectural double to age and transform instead of his physical self: 'the braid around the windows will look great, especially when the colour has turned old, stained, faded or, as they say in Naples, "rotten".'[94]

We see this in Capri, where Malaparte praised the honesty of his 'portrait in stone': the house features 'none of those hybrid marriages between Moorish, romanesque, gothic and secessionist styles that some Germans brought to Capri 30 or 40 years ago, thus contaminating the purity and simplicity of the Capri house'.[95] But his is *not* a 'simple' Capri house. One can hardly imagine any sensible islander building on the remote and exposed Cape Massullo, and with a house whose layout was so at odds with Capri's building culture. Also, Malaparte claimed to have used 'no bricks, no concrete, but stone of the local kind, from which the cliff is made',[96] when in actual fact the building is made of many non-local materials – cement, wood, steel, stone, tiles and textiles from every corner of Italy. Even the seemingly natural distribution of the greenery shrouding the front and sides of the house is contrived – 'I want the pine trees planted in picturesque disorder as if it were a wood born spontaneously... I want a forest, not a garden, around me, is that clear?'[97] Casa Malaparte therefore seems less about naturalness, more about *artifice*.



Interior views, Casa Malaparte, Capri
© Andrea Jemolo

A consideration of Malaparte's intellectual background provides further support for this hypothesis: even if he consistently denied it – claiming, for instance, in *The Skin*, to be 'nauseated' by a group of learned young men he labels 'inverts' and 'Des Esseintes'[98] – decadent sophistication was his true passion. 'Malaparte's writing was a mix of D'Annunzio and Papini', was how Alberto Moravia put it in a 1989 interview.[99] And taking a step back, we can see how the Capri building addresses a number of themes of decadent fiction: the punitive introspection, the self-imposed exile in the prison-like house, the critique of modernisation, the nostalgia for a bygone past, the incompatibility with prevailing social norms, the figure of the hero as a marginalised other.[100] These obsessions certainly played a part in the estrangement of writer and architect. Adalberto Libera's memoir, *My Experience as an Architect* (1960), gets back at his client by branding both him and Gabriele D'Annunzio as 'romantic' writers unwilling to 'accept reality'.[101] Artifice and transmogrification, *these* were the cherished themes in Malaparte's value system, as the writer himself confirmed in the 1937 cinema issue of his *Prospettive* magazine: 'Cinema turned reality into artifice ... this is an act of culture and civilisation'.[102] Malaparte appears to have really meant these words, since his chameleonic biography is a treatise on a specific artificiality, that of identity in the modern age, and on the struggle that comes with constructing one – 'I continuously try to be (not to seem) an Italian like all the others, and I cannot do it.'[103]

Born in Catholic Italy to a Protestant German father, and by turns a republican, war veteran, fascist, writer, journalist, editor, amateur architect, film director and even revue host, Malaparte spent his entire life constructing and reconstructing himself to not only survive but profit from events that pushed millions of Europeans to their limits – and beyond. The positioning of the house, defiantly placed immediately above sea level to challenge the fury of the waves, is a good allegory for this heroic quest to survive the 'tempest' of modernity, a reading also suggested by the closing scene of *Le Mépris*, in which Ulysses, the archetypal mythological hero, looks onto the pacified sea from the roof terrace, arms raised in a gesture of victory.

Yet while Malaparte thrived in the turmoil of European high modernity, he found himself increasingly out of step with American-influenced and consensus-driven late modernity. As journalist Luigi Barzini Jr put it, in the postwar years his writing was 'too good to succeed with the masses, and too insincere to succeed with critical and thoughtful readers',[104] who could not forgive him for his blatant fascist past (even though many had themselves been supporters of fascism) and sneered at his attempts to join the communist party. This hostility cornered Malaparte into an even more contradictory, elusive and quarrelsome stance. He publicly accounted for his flagging popularity as a shared predicament in the new era – 'literary language is no longer enough to express the moral and social needs of the modern world',[105] and, desperate to remain in the limelight, experimented with other media – with mixed results. In 1951 Malaparte directed *Strange Deception*, a drama about a Russian POW camp survivor heavily larded with Catholic rhetoric to appease the Christian Democrats and the Vatican, which had just placed *The Skin* on its index of prohibited books. The film was critically well received, but flopped at the box office because the public could not make sense of its 'high and noble poetry'[106]. His 1954 theatre show, *The Women Lost the War Too*, got tepid reviews, whereas the improbably named *Sexophone* of 1955 – a revue that he not only produced and directed but also acted in – was an all-out critical and financial disaster.

That same summer Malaparte even announced a US coast-to-coast bicycle ride sponsored by Coca Cola – there are publicity shots of him posing on a bike on the rooftop terrace of his Capri house, but the ride was cancelled for undisclosed reasons.[107] His last adventure was a 1956 reporting trip behind the closed doors of Mao's China. This was when modernity, which he thought he had vanquished, presented him its final reckoning. He fell sick while in China, and on his return to Italy a few months later died of a lung cancer caused by a modern atmospheric weapon, the mustard gas he had been exposed to in France during the First World War.[108]



After his death, both Malaparte as a person and his 'portrait in stone' quickly sunk into oblivion. In his last will, incorrigible contrarian to the end, the writer had bequeathed his house on Capri to the government of the People's Republic of China. Until his heirs successfully contested the document, the house was left in limbo, abandoned to the full force of the elements and occasionally vandalised despite the efforts of the loyal custodian Ciro Amitrano. Over the following years the Suckerts kept the building hidden from view, except for the odd appearance on the cinema screen, and without doubt this absence fuelled the myth surrounding it.[109] In a 1979 poll organised by Andrea Branzi in *Modo* magazine, Casa Malaparte was voted the best work of Italian architecture of the century – ironic for a building not authored by an architect, though this fact was not widely known at the time.[110]

Casa Malaparte had been attributed to Adalberto Libera up to the late 1980s, when Marida Talamona's research proved otherwise.[111] 'This is good architecture, therefore it is Libera's' was the logic that spawned a number of studies that glorified the modernist architect,[112] of which the prime example is the formalist review that Franco Purini wrote of the book in which Talamona presented her findings.[113] According to the former member of *La Tendenza*, 'an architecture forming such an accomplished single entity and born out of a single creative stroke' could only have been built with 'a plan, now lost' – a plan that 'must have been drafted' by Libera, but that Malaparte deliberately kept hidden. And to prove the argument, he superimposed a grid on the plan and cross-section of the house, pointing out 'traces of proportions, proof of a skilful control of space … superior to both Amitrano's and Malaparte's ability to organise three-dimensional shapes'. Purini concluded by denoucning Talamona's 'dangerous' evidence-based study, which in his view 'denies the necessity of the project … and the autonomy of the language of architecture'. The tirade – based solely on assumptions and inferences derived from sketches – reveals how the attribution of the celebrated building to a neophyte was seen as a threat to the already precarious status of the profession in Italy. Purini's knee-jerk reaction encapsulates a discourse that was averse to acknowledging contributions by individuals outside its realm – especially if the individual in question was anathema to the public, as Malaparte still was in the early 1990s.

Yet, after decades of critical neglect, Malaparte's controversial work and figure have begun to attract more interest in recent years. While new editions of his books signal his rehabilitation as a writer, his agency in the design of the house on Capri has also been brought to the fore,[114] partly through the efforts of the Suckerts, who run a law firm specialising in copyright law, and look after both the image and the physical fabric of the building. Given its location, the Capri house requires constant upkeep, and Amitrano knew this well – 'remember the house must be inhabited, if abandoned it becomes dried fruit'.[115] The Suckerts not only keep the house in good shape, but true to their forebear's go-it-alone spirit, refuse all assistance from the Italian state, seeing this as interference in private affairs. Reliant solely on their own resources to cover the huge maintenance costs, they occasionally rent the house out as a location for high-profile art events or fashion shoots – a fate that would probably not have displeased its original owner, a man who was very selective in his enjoyment of luxury.[116]

The manager of Casa Malaparte, Alessia Rositani-Suckert, says that 'it cannot be understood without seeing it in person',[117] a Banhamesque comment that gets straight to the heart of the matter. Only first-hand experience gives an idea of the extent to which the building sustains the cult of Malaparte – a cult the man himself started the moment he penned his first work. Vigilantly guarded all year round and accessible only by invitation, Casa Malaparte still functions today as a sanctuary of its first owner, whose presence permeates the property so strongly that you expect him to walk in at any moment (the house is not only a portrait, as Malaparte proffered, but also a frame, and as such needs the figure of its owner to fill its voids). This care in preservation, however, has not stopped the building from developing a life of its own. Casa Malaparte remains widely defined by its fictionalisation – as 'the house featured in *Le Mépris*' – and is popular for its hard-to-pin-down design, which has elicited a large number of interpretations based on similes or metaphors. These are mainly divided into two groups. The first group (among them John Hejduk, Peter Eisenman and Manfredo Tafuri) associates the building with *objects*: a coffin, a submarine, a shipwreck, a fossil of a prehistoric monster, a strange geode, a brick fallen on the rocks.[118] The second (which includes Wiel Arets and Bruce Chatwin) defines it in terms of *building types*: as a mix of palace, temple and prison; a museum; a mausoleum; an altar; a tomb.[119] This allegorical profusion is revealing of the building's capacity to play with categories and spark the imagination. It also shows how architecture means more to people when they see in it something other than mere building.

In more general terms, architecture's enduring liaison with the allegorical is most obvious in the practice of giving nicknames to buildings, although this is conditioned, of course, by *who* is doing the naming. When the owner christens the building, as with Casa Malaparte, it is usually to brand it and steer the critical discourse in a particular direction. When the public comes up with a moniker, it is usually to mark an extraordinary or tasteless building – Gherkin, Walkie-Talkie, Cheesgrater, etc. In the case of the Casa Malaparte, the building's popularity among a much narrower segment of the population, namely architects, may have attributed not only to its volumetric and iconographic qualities, but also to the way it lends itself to the eye. As you walk along the cliffside path, all of a sudden the vegetation clears and you get a view of the house. From that angle – the most common angle for photographs – the building looks like an axonometric drawing. And as Bruno Reichlin has pointed out, the axonometric holds a special place in modernism, as *the* instrument of representation that 'constitutes in the two dimensions of the drawing paper the *mental* viewpoint of the architect-demiurge'.[120] Therefore Casa Malaparte, already a forceful presence by virtue of its location and design, also conveys a feeling of power through the way it is visually understood – something that has not gone unnoticed among architects. Just browse a 1999 book celebrating the building and you will see that half of the celebrities featured in the publication (Michael Graves, Mario Botta, Steven Holl and Arata Isozaki) sent the editor a freehand drawing made from that very spot.[121]

In the end, Casa Malaparte did not provide an appropriate framework for the production of literature – though perhaps Malaparte never really expected it to, as he enjoyed writing about things from the thick of the action. The house did, however, prove to be an excellent device for extending the reach of his creative production, for perpetuating his legacy and creating a myth around his persona. Most significantly, perhaps it elicits that abandonment of rational thinking that Malaparte advocated in his political writings.

Curzio Malaparte, Paris, 1949
© Robert Doisneau / Rapho

In helping to realise Malaparte's desire for adoration, the building made him the 'object of a secret-type cult, but also an anti-cult', to borrow Reyner Banham's famous description of another guru, Colin Rowe of Ithaca.[122] Today Malaparte's combative spirit still lives on in his finest piece of artifice, constantly battling against the forces of nature and its inevitable petrification. Viewing the house from the cliff, isolated against the deep blue of the sea, one would hardly think that it holds a multitude of other meanings, beyond those attributable to the figure of its owner. But as a three-dimensional essay against modernity, a physical platform for the self-promotional efforts of a literary celebrity discredited by his affiliation with fascism, the object of contested authorship and a battleground for debates around the autonomy of architecture, Casa Malaparte is a sore reminder of truths few Italians are willing to hear.

For in large part Italy remains resolutely hostile to the modern paradigm, fascist in its moral code, provincial in its outlook and afflicted with an undiminished sense of its own national self-importance in spite of its now blatantly marginal position in global affairs. All of these conditions are manifestly in evidence on this remote Mediterranean promontory, and so Casa Malaparte is perhaps not so much a dot on the edge of a fresco depicting the Italian peninsula, as the vanishing point at its centre, a beacon irradiating multiple lines of thought, many of which are at the root of the various ills affecting the country. Ultimately, then, when we look at the house from the nearest public viewing point, what we are really seeing is the body of a country laid out for dissection – the clifftop path doubling as the gallery of a kind of anatomical theatre. It is disconcerting to discover that such a beautiful building conceals a tainted core, but in its own way this is also a measure of its success, at least in terms of that marriage of goodness and badness which the 'arch Italian' Curzio Malaparte steadfastly pursued in his life and his work, and which find their fullest expression in his house at Capri.

1. Bruce Chatwin, 'Self-Love Among the Ruins', *Vanity Fair*, April 1984, pp 46–55.
2. For more on the difficulty in placing Malaparte in only one literary genre see Robert G Walker, 'Malaparte and Literary Strangeness: A Critical Preface to *Kaputt*', *Sewanee Review*, vol 118, no 2, 2010, pp 270–82.
3. Curzio Malaparte, *Autobiografia* (a 1944 typewritten memorial posthumously published in August 1957 in *Rinascita*, a magazine run by the Italian Communist Party).
4. Kurt Erich Suckert, 'Cos' é l'Oceanismo', *Oceanica*, 15 January 1921, self-published magazine. Excerpt in Matteo Noja, '"Curtino" Torna dove si Fece Uomo ed Esteta', *Mensile della Biblioteca di Via Senato,* no 9, October 2010, p 28.
5. Curzio Malaparte, *Viva Caporetto! La Rivolta dei Santi Maledetti* (Florence: Vallecchi, 1995) [1921], pp 106–07.
6. Antonio Gramsci, *Letteratura e Vita Nazionale* (Turin: Einaudi, 1950) [1934], p 170.
7. Curzio Malaparte, letter to Piero Gobetti, 1923, in Piero Gobetti, *Scritti Politici* (Turin: Einaudi, 1960), p 566.
8. For more on this see Norberto Bobbio, *Ideological Profile of Twentieth-Century Italy* (Princeton, NJ: Princeton University Press, 1995), pp 122–32.
9. Curzio Malaparte, letter to Giuseppe Prezzolini, in Marcello Staglieno, 'Le Cento e una Maschere del Santo Maledetto', *Il Settimanale*, 24 June 1980. Malaparte's unpublished letters to Prezzolini are stored in the town library of Lugano, Switzerland.
10. Curzio Malaparte, *Europa Vivente* (Florence: La Voce, 1923), p 342.
11. Published in France under the thundering title *L'Italie Contre l'Europe* ('Italy Against Europe') (Paris: Felix Alcan, 1927).
12. Curzio Malaparte reporting Mussolini's instructions, letter to the Minister of Popular Culture, 14 September 1938, in Archivio Centrale dello Stato, Min Cul Pop, Reports 1922–1944, b 7, n 65, *Malaparte-Curzio – Prospettive 1935–1943*; and Maurizio Serra, *Malaparte: Vite e Leggende* (Venice: Marsilio, 2012), p 109.
13. Curzio Malaparte, letter to Leo Longanesi, 4 January 1926, in *Malaparte I*, p 776; Maurizio Serra, *ibid*, p 110.
14. *Ibid.*
15. Maurizio Serra, *op cit*, p 108.
16. Antonio Gramsci, *op cit*, p 170.
17. Curzio Malaparte, 'La Maschera della Rivoluzione' (The Mask of the Revolution), *Impero*, 6 April 1923.
18. The most famous one is 'Spunta il sole e canta il gallo / O Mussolini monta a cavallo' ('The sun rises and the cock crows / Oh! Mussolini mount your horse'), an ironic jeer at Mussolini's 'bourgeois' habit of riding his horse before going to work. Curzio Malaparte, 'La Cantata dell' Arcimussolini' (1928), in Enrico Falqui (ed), *L'Arcitaliano* (Florence: Vallecchi, 1963), pp 13–15.
19. Lev Trotsky, speech on occasion of the fifteenth anniversary of the October revolution. Copenhagen, 7 November 1932. Author's translation from French. Excerpt in Maurizio Serra, *op cit*, pp 182–83. Full text on www.marxiste.org.
20. Curzio Malaparte, 19 November 1931, in Edda Ronchi-Suckert, *Malaparte II*, pp 844–45; Maurizio Serra, *op cit*, p 188.
21. Curzio Malaparte, letter to Aldo Borelli, 12 May 1933, *ibid*, p 193.
22. Curzio Malaparte, letter to Nello Quilici, 3 October 1932, in Edda Ronchi-Suckert, *Malaparte III,* p 76 and Maurizio Serra, *ibid,* p 198.
23. *Ibid*.
24. Curzio Malaparte, letter to Nello Quilici, 3 October 1932, in Giordano Bruno Guerri, *op cit*, p 143.
25. Italo Balbo, letter to Mussolini, 7 June 1933, in Archivio Centrale dello Stato, *Segreteria Particolare del Duce, Carteggio Riservato,* folder 'Italo Balbo'. Full text in Giordano Bruno Guerri, *L' Arcitaliano* (Milan: Bompiani, 2008) [1980], p 150.
26. Benito Mussolini, *Prefazione Borelli*, in Edda Ronchi-Suckert, *Malaparte III*, p 153; and Maurizio Serra, *op cit*, p 207.
27. Curzio Malaparte, letter to Armando Meoni, in Manfredo Tafuri, 'L'Ascesi e il Gioco', *Gran Bazar*, no 15, 1981, p 96.
28. For an analysis of the relations between Malaparte's exile and his Capri house see Alexandra Brown-Hejazi, *The Awful Beauty of Exile: A Renaissance Reading of Casa Malaparte* (doc file on academia.edu).
29. Curzio Malaparte, *Malaparte: Arcitaliano nel Mondo* (Milan: Biblioteca di Via Senato Edizioni, 2010), p 38.
30. Curzio Malaparte, letter to his French publisher Daniel Halevy, 23 May 1936, in Edda Ronchi-Suckert, *Malaparte III*, p 705; Maurizio Serra, *op cit*, p 231.
31. Curzio Malaparte, excerpt from the press release for the launch of the magazine, 5 July 1937, in Luigi Martellini, *Le Prospettive di Malaparte* (Naples: Edizioni Scientifiche Italiane, 2014), p 13.
32. Curzio Malaparte, letter to Aldo Borelli, 6 February 1937, in Edda Ronchi-Suckert, *Malaparte IV*, p 1992; Luigi Martellini, *ibid*, p 12.
33. Curzio Malaparte, *Kaputt* (Milan: Adelphi, 2009) [1944], p 22.
34. Members of Gruppo 7 included Ubaldo Castagnoli, Luigi Figini, Guido Frette, Sebastiano Larco, Adalberto Libera, Giuseppe Pagano, Gino Pollini, Carlo Enrico Rava and Giuseppe Terragni. For a discussion on the influence of vernacular architecture on modernist architecture see Michelangelo Sabatino, *Pride and Modesty: Modernist Architecture and the Vernacular Tradition in Italy* (Toronto: University of Toronto Press, 2010); Jean-François Lejeune and Michelangelo Sabatino (eds), *Modern Architecture and the Mediterranean* (London: Routledge, 2010).
35. Officer Conte, 'Relazione Conte', in *Malaparte IV*, p 489; Maurizio Serra, *op cit,* p 516.
36. Curzio Malaparte, 'Portrait in Stone' (1940), text in Marida Talamona, *Casa Malaparte* (New York, NY: Princeton Architectural Press, 1996), pp 84–85, first published in Italian as 'Una Casa tra Greco e Scirocco' in *Il Mattino del Sabato,* 20 June 1987.
37. Marida Talamona, 'Nuovi Documenti', *Casabella,* September 1997, pp 22–27.
38. Curzio Malaparte, letter to Libera, 24 Apr 1938, MART Archive, Fondo Casa Malaparte.
39. Curzio Malaparte, letter to Adolfo Amitrano, 9 April 1938, *ibid*.
40. Curzio Malaparte, undated letter to Adolfo Amitrano (Talamona believes it was sent 12 June 1938).
41. Manfredo Tafuri, 'L'Ascesi e il Gioco', *Gran Bazar,* 15, 1981, pp 92–99.
42. Daniele Rulli, son of Guglielmo Rulli, Malaparte's neighbour on Capo Massullo, speaks of 'so many changes to Libera's design that the finished building can be considered almost a different project', interview with Maurizio Serra, in Maurizio Serra, *op cit*, p 517.
43. Curzio Malaparte, letter to Adolfo Amitrano 10 October 1938, MART Archive, Fondo Casa Malaparte.
44. Curzio Malaparte, letter to Adolfo Amitrano, 11 January 1939, *ibid*.
45. Curzio Malaparte, letter to Adolfo Amitrano, 10 May 1939, *ibid*.
46. Uberto Bonetti, letter to Curzio Malaparte, 3 June 1939, Rositani-Suckert Archive, Florence.
47. Orfeo Tamburi, *Calepini* (Bari: Adriatica, 1968), p 34.
48. Orfeo Tamburi, interview with Marida Talamona, Paris, 10 July 1987, in Marida Talamona, *op cit*, p 50.
49. Carlo Talamona, letter to Curzio Malaparte, 5 May 1943, *ibid*, p 112.
50. Curzio Malaparte, letter to 'Anne', 4 September 1945, *ibid*, p 115.
51. Curzio Malaparte, letter to Adolfo Amitrano, 19 December 1940, MART Archive, Fondo Casa Malaparte.
52. In addition, from August 1950 to February 1955, Malaparte never set foot on Capri due to arguments with a number of the locals – arguments that even escalated into a trial, that Malaparte lost. See Maurizio Serra, *op cit*, p 457, and 'Rentrée di Malaparte a Capri', *La Voce di Napoli*, 12 February 1955, in Edda Ronchi-Suckert, *Malaparte XI*, pp 184–85.
53. Curzio Malaparte, letter to Ciro Amitrano, 9 January 1948, *ibid*.
54. Curzio Malaparte, letter to Ciro Amitrano, 3 September 1947, *ibid*.
55. Ciro Amitrano, letter to Curzio Malaparte, 8 September 1947, *ibid*.
56. Ciro Amitrano, letter to Curzio Malaparte, 2 August 1949, *ibid*.
57. Kurt Forster, 'The Autobiographical House: Around a Haunted Hearth', in Emmanuel Petit (ed), *Philip Johnson: The Constancy of Change* (New Haven, CT: Yale University Press, 2009), p 57. In this passage Forster discusses a piece by O Karl Werckmeister on Malaparte, Alberto Moravia, Jean-Luc Godard and

Fritz Lang: 'Casa Malaparte: Eine Topographie maennlicher Kreativitaet', *Merkur*, 598, January 1999, pp 28–39.
58. Curzio Malaparte, letter to an unknown woman, 1946, in Giordano Bruno Guerri, *op cit*, p 100.
59. Curzio Malaparte, letter to young writer Nantas Salvalaggio, 1952, *ibid*, p 101.
60. Lamberti Sorrentino and Arturo Tofanelli, interview with Giordano Bruno Guerri, *ibid*, p 100.
61. Curzio Malaparte, *The Skin* (Evanston, IL: Northwestern University Press, 1997) [1949], p 204.
62. *Ibid*, p 75.
63. Curzio Malaparte, letter to Ciro Amitrano, 23 July 1948, MART Archive, Fondo Casa Malaparte.
64. Curzio Malaparte, letter to Ciro Amitrano, 3 September 1947, *ibid*.
65. Michael McDonough, *Malaparte: A House Like Me* (New York, NY: Clarkson Potter, 1999), p 68.
66. Michael Z Wise, 'Part Palace, Part Temple, Part Prison: On the Casa Malaparte', *LA Review of Books*, 17 January 2013.
67. René Novella, *Du Rocher aux Sept Collines* (Monaco: Editions Gérard Comman, 1992), p 145. Also 'he can only offer us the vegetables of the garden, and the *totani*, caught by the gardener in the early morning' (*ibid*, p 144). English text in Michael McDonough, *ibid,* p 69.
68. Claude Nabokoff Joxe, in conversation with Maurizio Serra, in Maurizio Serra, *op cit*, p 414.
69. Curzio Malaparte, letter to Carlo Talamona, 2 May 1943, in Marida Talamona, *op cit*, p 110.
70. Curzio Malaparte, *Kaputt*, *op cit*, p 15.
71. Fascism is an 'intellectual revolution', said Gentilian thinker and fascist hierarch Giuseppe Bottai, see Giuseppe Bottai, *Pagine di Critica Fascista 1919–1926* (Florence: Le Monnier, 1941), p 332. Philosopher Benedetto Croce objected that 'intellectuals cling to the counter-reformation thesis to hide an ideological emptiness' in 'Controriforma', *La Critica*, vol 20, 1924, p 333. Excerpt in Giuseppe Pardini, *Malaparte. Biografia Politica* (Milan: Luni, 1998), p 120.
72. Alberto Moravia, interviewed by Marc Lambron for French weekly *Le Point*, April 1989. An excerpt of the interview is in Maurizio Serra, *op cit*, p 275.
73. Curzio Malaparte, *Du Coté de Chez Proust* (Rome-Milan: Aria d'Italia, 1951), pp 91–92, in Maurizio Serra, *op cit*, p 427.
74. Oswald Spengler, *The Decline of the West* (Oxford: Oxford University Press, 1991) [1918].
75. Curzio Malaparte, 'Anche gli Italiani Proclamano e Difendono il Nostro Integralismo', *Conquista dello Stato*, 8 February 1925.
76. Curzio Malaparte, *Europa Vivente e altri Saggi Politici, 1921–1931* (Florence: Vallecchi, 1961), p 365.
77. Curzio Malaparte, 'Le Origini Rurali del Fascismo', *Conquista dello Stato*, 10 August 1924.
78. Curzio Malaparte, 'Mussolini Accetta la Tesi del Fascismo Integrale', *Conquista dello Stato*, 4 January 1925.
79. Curzio Malaparte, 'Il Fascismo contro Mussolini?', *Conquista dello Stato,* 21 December 1924.
80. The preface of the first issue of *L'Italiano* (The Italian), a magazine edited by Malaparte's friend Gherardo Casini, states: 'what still is Italian in this country is found outside these cities breeding concrete buildings and standard men and women, out there in the countryside, where the road-roller of international civilisation has not arrived yet'. Gherardo Casini, 'Preface', *L'Italiano*, 14 January 1926. Text in Giuseppe Pardini, *Malaparte*, *op cit*, p 178.
81. For a compelling study on this topic see Pierpaolo Antonello, 'Politics of (Dis)Engagement: Italian and British Intellectuals', in Eugenio Bolongaro, Mark Epstein and Rita Gagliano (eds), *Creative Interventions: The Role of Intellectuals in Contemporary Italy* (Cambridge: Cambridge Scholars Press, 2009), pp 338–62.
82. Curzio Malaparte, letter to Piero Gobetti, 18 August 1925, in Edda Ronchi-Suckert, *Malaparte 1*, p 593. Full text in Giuseppe Pardini, *op cit*, p 170.



83. Etta Comito, 'Cocktail in Casa come Lui', *Corriere di Napoli,* 2 June 1947.
84. Curzio Malaparte, *Kaputt*, *op cit*, p 352.
85. For a discussion on writers' houses see Harald Hendrix, 'Writers' Houses as Media of Expression and Remembrance', in Harald Hendrix (ed), *Writers' Houses and the Making of Memory* (London: Routledge, 2008), pp 1–15.
86. For an analysis of Il Vittoriale see Lucia Re, 'Gabriele D'Annunzio's Theatre of Memory: Il Vittoriale degli Italiani', *The Journal of Decorative and Propaganda Arts*, vol 3, Italian Theme Issue (Winter 1987), pp 6–51.
87. 'Everything here was created and transmogrified by me. Everything bears the imprint of my style and the meaning I intend to give to my style' – Gabriele D'Annunzio, excerpt of the donation act of Il Vittoriale to the Italian state (1923).
88. For more on the role of artifice in Italian fascist culture see Ruth Ben-Ghiat, 'Italian Fascism and the Aesthetics of the Third Way', *Journal of Contemporary History*, vol 31, no 2, Special Issue: The Aesthetics of Fascism (April 1996), pp 293–316.
89. *Ibid*, p 301.
90. Malaparte gives his take on surrealism in Curzio Malaparte, 'Il Surrealismo e L'Italia', *Prospettive,* monographic issue on surrealism, no 1 (IV), 15 January 1940, pp 3–7.
91. For a study of Casa Malaparte's surrealist quality see Jacqueline Gargus, 'The Tangency of the World to Itself: The Casa Malaparte and the Metaphysical Tradition', in Thomas Mical (ed), *Surrealism and Architecture* (London: Routledge, 2005).
92. Curzio Malaparte, *Portrait in Stone* (1940), text in Marida Talamona, *op cit*, pp 84–85, first published in Italian as 'Una Casa tra Greco e Scirocco' in *Il Mattino del Sabato,* 20 June 1987.
93. For a study of Malaparte's use of literature as a means for constructing self-identity see William Hope, *Curzio Malaparte: The Narrative Contract Strained* (Leicester: Troubadour, 2001).
94. Curzio Malaparte, letter to Carlo Talamona, 2 May 1943, in Marida Talamona, *op cit*, p 110.
95. Curzio Malaparte, *Portrait in Stone*, *op cit*, p 85.
96. *Ibid*, p 84.
97. Curzio Malaparte, letter to Adolfo Amitrano, 19 December 1938, MART Archive, Fondo Casa Malaparte.
98. Curzio Malaparte, *The Skin*, *op cit*, p 130.
99. Alberto Moravia, *ibid*.
100. For a study on the social function of decadent fiction see Moira Di Mauro-Jackson, 'Decadence as a Social Critique in Huysmans, D'Annunzio and Wilde', PhD Thesis, The University of Texas at Austin, 2008.
101. Adalberto Libera, *La Mia Esperienza di Architetto* (Lavis: La Finestra, 2008), p 82.
102. Curzio Malaparte, 'La Verità sul Cinema', *Prospettive,* no 2 (August 1937), p 8.
103. Curzio Malaparte, letter to Giancarlo Vigorelli, *Il Tesoretto: Almanacco dello Specchio* (Milan: Mondadori, 1941), p 66, and Giordano Bruno Guerri, *op cit*, p 115.
104. Luigi Barzini Jr, *From Caesar to the Mafia: Persons, Places and Problems in Italian Life* (Piscataway, NJ: Transactions, 2001) [1971], p 54.
105. Curzio Malaparte, interview in Italian newspaper *Il Giornale*, 2 August 1950.
106. Curzio Malaparte, letter to Ciro Amitrano, 6 December 1950, MART Archive, Fondo Malaparte.
107. Malaparte invested the bicycle with a mythical aura: 'As a boy, I fantasised about the feats of Gerbi, Petit-Breton and Ganna. Early cycle racing was my Iliad', Curzio Malaparte, 'L'Agonia della Bicicletta' (The Agony of the Bicycle), *Battibecco* 1953–1957 (Florence: Vallecchi, 1967), p 186.
108. In a general comment, Alberto Moravia said that 'Malaparte was caught by surprise by the modern world', *op cit*.
109. Casa Malaparte appears in *Le Mépris* (Jean-Luc Godard, 1963) and *The Skin* (Liliana Cavani, 1981).
110. Andrea Branzi, 'Referendum popolare: Cento progetti da ricordare', *Modo*, no 20 (June 1979), pp 47–54.
111. Marida Talamona, 'Adalberto Libera and Villa Malaparte', *AA Files* 18, 1989, pp 4–8.
112. Vieri Quilici, 'Adalberto Libera', *Lotus International* 16, 1977, pp 55–87; Bruno Zevi, 'La Scomparsa di Adalberto Libera', *Cronache d'Architettura,* vol IX, no 464, 1971; Enrico Mantero, *Il Razionalismo Italiano* (Bologna: Zanichelli, 1984), p 34.
113. Marida Talamona, *Casa Malaparte* (Milan: Clup, 1990); Franco Purini, 'Architettura senza Architetto?', *Casabella*, no 582, 1991, pp 40–42.
114. Crucial to this was the English-language publication of Marida Talamona's book in 1992.
115. Ciro Amitrano, letter to Curzio Malaparte, 2 August 1949, MART Archive, Fondo Casa Malaparte.
116. The fascination that Casa Malaparte has been capable of exerting over global brands like Gagosian, Louis Vuitton, Hugo Boss, Persol, Zegna and Fendi is yet more proof of the interest that the fashion industry has recently shown towards Italian architecture of the 1930s. Fendi's creative director, Karl Lagerfeld, even published a book of his Polaroids of the building: Karl Lagerfeld, *Casa Malaparte* (Göttingen: Steidl, 1998). This trend was analysed by Owen Hatherley in 'Fendi Vidi Vici: When Fashion Flirts with Fascism', *The Architectural Review*, 3 March 2015.
117. Alessia Rositani-Suckert, interview with the author, Florence, November 2014.
118. Respectively by Malaparte's French translator René Novella, John Hejduk, Manfredo Tafuri, Francesco Venezia, Peter Eisenman and Malaparte's biographer Giordano Bruno Guerri.
119. Respectively by journalist Michael Z Wise, Wiel Arets, Giorgio Ciucci, Bruce Chatwin and John Hejduk.
120. Bruno Reichlin, 'The Axonometric as a Project', *Lotus International*, no 22, 1979, p 87.
121. Michael McDonough, *Malaparte*, pp 40, 75, 91, 123. Tellingly, Mario Botta's drawing is called *From the Gate.*
122. Reyner Banham, *New Society*, 17 March 1966.

Casa Malaparte, Capri
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Itsuko Hasegawa *in conversation with* Thomas Daniell



Itsuko Hasegawa in the lab of
Kazuo Shinohara, 1969
Courtesy Itsuko Hasegawa

In December 1986 – the beginning of Japan's brief-but-incandescent economic bubble – *Toshi Jūtaku* (Urban Housing) magazine published a special issue on the theme 'Ephemerality', guest-edited by Kazuhiko Namba, Akira Kuryu and Kiyoshi Sey Takeyama. The latter contributed an essay titled '86-nen wa shōrai kioku sarubeki toshi to naru darō' (1986, A Year that Should be Long Remembered), in which he discussed Japan's accelerating economic growth and the effect this was having on Japanese architectural design. Takeyama identified the emergence of a new tendency that he called 'light' architecture, a distinction he explained using premiated and commended entries from the recent competition for the Shonandai Culture Centre: 'heavy' architecture was exemplified by the proposals from Shin Takamatsu and Hajime Yatsuka, 'light' architecture by those from Toyo Ito, Kazunari Sakamoto and Itsuko Hasegawa, the winner of the competition. Hasegawa was thereby anointed as the vanguard figure in a significant new tendency, one that still dominates the Japanese architectural world. Astoundingly, the Shonandai Culture Centre was the first architectural competition she had ever entered. A few years later it was her first completed public building, and the first in a long series of public buildings she would win through competition. Hasegawa quickly became recognised for her innovative aesthetic sense – built volumes broken down into interdependent 'islands' and wrapped in perforated, translucent screens – and her ground-breaking emphasis on broad public participation in the design process as well as in the finished buildings.

Prior to Shonandai, Hasegawa had been known only as a designer of small, experimental houses. She spent the 1970s as the sole full-time employee of Kazuo Shinohara, a hugely influential architect and theorist. The nascent 'light' architects – Hasegawa, Ito and Sakamoto – were then being described, somewhat controversially, as the 'Shinohara School', purportedly disciples who were applying and extending their mentor's vision of architecture. In 1979, the year she founded her own office, *SD: Space Design* magazine published a feature on the Shinohara School that included a one-page essay about Hasegawa titled 'Onna de aru koto', which roughly translates as 'On Being Female'. In an ideal world, her gender would not be an issue, but in the real world it greatly compounds the importance of her achievements. Throughout her career, Hasegawa has been a pioneer in many ways, one of the few female architects to attain a substantial position in the international avant-garde, and the first from Japan.

I spoke with Hasegawa in January 2016, at her new rented office space in Tokyo. She was still in the process of unpacking, having recently vacated B Y House, the office building she built for herself in 1985. Now partly a museum for a permanent display of her work, B Y House will also function as a temporary gallery for other architects and artists, and an event space for lectures and workshops – another example of her generosity to the profession, and her advocacy of architecture as a stage for public activity and interaction. Hasegawa is in the process of retrospectively evaluating and summarising her career, having just published a hefty three-volume box-set of her work – primarily photographs, but interspersed with explanatory essays by her and critical essays by others – and a large-format, limited edition folio of her sketches. In conversation she alternates between humility and pride, insecurity and confidence, sometimes within the same sentence. She spoke freely about the setbacks and conflicts that have punctuated her career. Too freely, perhaps – after seeing a raw transcript of our conversation, Hasegawa quickly asked for several of the more inflammatory or defamatory episodes to be cut. Clearly, many of her achievements came at a personal price, but what she has thereby enabled for younger generations of architects – male as well as female, international as well as Japanese – is priceless.
—Thomas Daniell








Clockwise from top left: first day of middle school, 1953; high-school student, 1958; with her university art teacher, *c* 1960; university student, *c* 1960; first day at the office of Kiyonori Kikutake, 1964 (photograph Shozo Uchii); high-school student, 1958
Courtesy Itsuko Hasegawa










Clockwise from top left: on the roof terrace of the Aono Building, *c* 1982 (photograph Mitsumasa Fujitsuka); with the competition-winning model of the Shonandai Culture Centre, 1986; with Toyo Ito, *c* 1974; researching *minka* with Teruaki Ohashi, *c* 1968; on the Shonandai site, *c* 1988; at the N C House, 1990; in Cardiff, 1994; with Kiyonori Kikutake at the Sky House, *c* 1999
Courtesy Itsuko Hasegawa

TD *After graduating from Kanto Gakuin University you worked for Kiyonori Kikutake from 1964 until 1969, during his Metabolist period. Why did you choose him?*

IH Actually, I didn't. He chose me. At the end of my third year of study, Kikutake called the university, requesting that I come to his office and make the model for his entry to the Kyoto International Convention Centre competition. He didn't know who I was, but he'd seen a balsa-wood model of a house that I'd designed in an exhibition of student work organised by Kisho Kurokawa and Arata Isozaki. My professor had submitted it without asking me, and it received first prize. Balsa-wood models were unusual then, but I'd learned how to make them through designing and building my own yacht. Since childhood I'd always spent a lot of time outside, playing tennis and sailing. My grandfather was involved in boatbuilding, so I often saw the design drawings. I wasn't a good student at university, spending most of my time sailing in Yokohama Harbour – friends of mine would answer my name when the teacher took attendance. It was only after my third year that I decided to give up sailing and take architecture more seriously, partly because of the invitation from Kikutake, but also because I decided I was exerting myself too much physically and not enough mentally. After I helped with that first competition model, Kikutake asked me back to help with the design of the Asakawa Terrace House (1964) during my summer vacation. It was a simple, long apartment building. I drew all the plans, elevations and sections in pencil on A1 sheets of paper. Recently there was a retrospective exhibition about Kikutake, and I was amazed to see that he had kept those poor drawings of mine and put them in beautiful wooden frames.

TD *Why did you choose to study architecture in the first place?*

IH When I was at high school, a friend told me that her father had studied architecture at Waseda University and ran his own practice, designing houses with her mother helping. She said it looked like fun. But both my father and my uncle – who was my high-school mathematics teacher – told me that I would have to study at the University of Tokyo or Kyoto University if I wanted to become an architect. Their architecture departments are in their engineering faculties, and they only had male students at that time.

TD *Was it a rule that there were no female students?*

IH No, but very few women applied. Reiko Tomita, one of the founders of Team Zoo, was then in her first year of study at the University of Tokyo, so she hadn't yet entered the architecture programme. When I was told that I couldn't go and study architecture, I got really angry and stopped going to class for the final two or three months of high school. I had never been a truant before that. The teachers at my all-girls school told me I should go to Japan Women's University. When I was younger, I had wanted to become a botanist, because I liked walking in the countryside and collecting plants. My mother was an artist who did Japanese-style paintings, and she said I should study fine arts and become a nature painter. Supplied with these suggestions, I decided not to go to university at all, but spend my time doing oil paintings at home instead. Then my sister, who was studying in Tokyo, told me that Kanto Gakuin University was going to start a yacht club for female students; as an added bonus, it had an architecture department too. So I suddenly changed my mind and applied to study there. But it was really the experience of working for Kikutake while I was a student that made me decide to become an architect. Kikutake was very famous, and would generally only accept students from the top universities who were also top of their graduating class – I didn't really qualify. When I joined the office, Kikutake said he only wanted one new staff member at a time, in order to train them properly. But things changed. Four months after me, Mitsuru Senda – who was from Kiyoshi Seike's lab at Tokyo Institute of Technology – started working there, then a year later five new people entered at the same time, including Toyo Ito.

TD *Kikutake divided his staff into three teams based on his design theory of* ka, kata, katachi, *which might be translated as 'force, gesture, shape', but which he explicitly equated with conceptual planning, schematic design, construction documentation. Which group were you in?*

IH I was in the *kata* group, which did the main design work.

TD *Having been assigned to one team, was it possible to move to a different one?*

IH It never happened while I was there. I sat right next to Kikutake, so I was often involved with developing the initial image sketches, and was permitted to design quite freely. Unfortunately, Shozo Uchii, the leader of the *kata* team, and Shokan Endo, leader of the *katachi* team, were often annoyed by my contributions. It started with the first project I worked on, the Miyakonojo Civic Hall (1966). I went with Kikutake to meet the structural engineer, Gengo Matsui, who asked us to make a form that would allow the structure and services to be concentrated at a single point. So I sketched a shape resembling the canopy of a giant pram, which Kikutake liked so much that he used it for the final design. Shozo Uchii hated my proposal – *he* had wanted to make a sober concrete box. When Miyakonojo was published, Uchii wrote the text, but refused to use the word 'pram', instead explaining it as a tympanum structure. For the Hagi Civic Centre (1968), Shokan Endo had taken a very careful, precise design to quite an advanced stage – the detailed design was complete, and the cost estimation was underway – when Kikutake suddenly decided that he didn't like the reinforced concrete structure. We were in a car together, and he asked me what kind of architecture I wanted to make. I said that I wanted to construct buildings like boats, telling him about my sailing days and the boat design drawings I had seen as a child. He asked me how boats were made, and I explained the way steel plates are welded onto very beautiful steel frames. He went home that evening and drew some small sketches, then gave them to me the next morning and told me to draft new plans and sections. I worked through the night revising the design. I was nervous that everybody would be angry with me for making changes at such a late stage, so when I gave the completed drawings to Endo I told him, 'This is what Kikutake wants', and then rushed home. When I returned the next day the office was still in uproar.

Uchii was always entirely logical in his approach, and he felt that what I did wasn't logical. But Kikutake had an amazing feel for shapes. When I intuitively said 'pram' or 'boat frame', he understood. Aside from his abstract *ka kata katachi* theory, he had a concrete methodology for making architecture. As a designer he was less logical, more pragmatic. The truth is, he just wanted to make everyday life a bit more beautiful. It was a great experience to be developing images together with him, but the hostility it provoked in other people was unpleasant, so in my final year in the office I moved my desk away from Kikutake and mostly worked alone on interiors and furniture design. Kikutake was a gentleman who always treated women very well, though I was usually the only one in the office. When I was very busy I asked him to employ another interior designer to assist me. Two different women came, but each quit after a couple of months, saying 'it's impossible to work like this', and so I usually worked alone.

TD *Did you go to the construction sites of the projects you worked on?*

IH Generally only the people in the *katachi* group went to the construction sites. I would sometimes go when I was working closely together with Kikutake on an interior design, but he would always accompany me: a building site was too dangerous a place for a lone woman, he thought. Toyo Ito was in the *ka* group, meaning he didn't do any actual design but worked instead on concepts, or urban planning, looking at how architecture is placed in the city. During his fourth year in the office, Ito saw me and Kikutake working together on interiors, and asked if he could do some design work too. So Kikutake gave him the job of designing the Itabashi Kindergarten, and

I helped him with the design of the children's furniture. As Ito had quite an unusual sensibility, the design ended up being a bit different from other work produced by Kikutake's office. Ito was also Kikutake's representative on the Expo '70 team, in charge of the Expo Tower. He was often sent to meetings at Kenzo Tange's office, and was good at communicating Kikutake's intentions. I also met Tange once, for some issues related to the tower interiors.

TD *Did you often talk about architecture with Toyo Ito while you worked together?*

IH We were so busy that we could only talk during our lunch breaks. But the next person to join the office was Yuzuru Tominaga. He liked to drink, so we all got together after work quite often.

TD *You and Ito both quit at the same time, in 1969. Was that by chance?*

IH I think Ito left one year after me. I was there for five years, then I went to study in the lab of Kazuo Shinohara at the Tokyo Institute of Technology. Around the time I was preparing for the entrance examination, Ito suggested, half-jokingly, that we both join Arata Isozaki's atelier. Everyone had heard about that strange episode where people were dancing naked on Isozaki's roof. Rather than going to study at such a serious place, Ito said, it would be more fun to work in Isozaki's office. Though I liked Isozaki's architecture, I think Ito didn't really understand Shinohara very well, so I confidently proclaimed, 'I will go to the boring place'. I wanted to design houses, but until then I had been working on large-scale projects. I would do everything from exterior perspectives through to interior design details – I was considered good at drawing, so I'd drawn a huge number of measured plan drawings and perspective images. At the time, public architecture was very symbolic and authoritative. There was a lack of communication between architects and citizens that led to many problems with public buildings, so I wanted to do smaller things. I'd seen Kazuo Shinohara's House in White (1966) in a magazine, and I thought there was a connection to Kiyonori Kikutake's own home, the famous Sky House (1958). The Sky House is basically one large room, which is a traditional Japanese approach, based on the *minka* (vernacular private house). The living room of House in White may also be seen as a one-room *minka*. While I was still a student, Kikutake and his wife guided me around the Sky House, which left a great impression on my thinking. That was when I first decided that I wanted to design houses. I had no desire to work for Isozaki, and I liked Kazuo Shinohara's approach, so I went to study in his lab.

TD *Why didn't you join the office of Masako Hayashi, for example? She was from the same generation as Shinohara, and designing mainly houses, not to mention that she would have been the most famous woman architect in Japan at that time.*

IH After I saw the House in White, I had no interest in going anywhere other than Shinohara's lab. Anyway, Masako Hayashi refused to take on female staff, because she thought they would inevitably quit after a while, to get married. She did her undergraduate degree at Japan Women's University, but then studied in the lab of Kiyoshi Seike at the Tokyo Institute of Technology, where she overlapped with Kazuo Shinohara. So she and her husband Shoji Hayashi – also a well-known architect – occasionally visited Shinohara lab during the years I was there. Whenever we all had dinner together, she would tell me that architecture was no profession for a woman, and that I should hurry up and quit and get married. I told her, jokingly, that if I established my own office, I would hire only female staff. She acted shocked, saying, 'Don't do that!'

TD *Were there other female students in Shinohara's lab when you joined?*

IH No. Some arrived later. But after I had applied to enter the lab, I was invited to a seminar there on the theme of whether or not a woman could be an architect. They were actually debating whether or not female students should be allowed to join them. It was tough to enter the room – there were no other women. To begin with, my dress sense turned out to be unacceptable. I had recently been to London, so I was dressed in foreign fashion, a miniskirt with long boots and a white jacket. Everybody else was wearing subdued clothes. I had been permitted to wear almost anything I wanted in Kikutake's office, though he was quite particular about fashion. He told the other staff to wear black sweaters during winter, and there was a rule that you should wear a black jacket for meetings with clients. But in Shinohara's lab at the Tokyo Institute of Technology, everybody was sloppily dressed, wearing work clothes, jeans and filthy jumpers. Some of these people took exception to my appearance and debated whether I needed to change my wardrobe. I realised then that they considered architecture to be based upon masculine criteria. At the seminar they discussed issues that up to then I had only vaguely understood, making it clear that architecture is an intellectual construct, based on rigorous theoretical and philosophical reasoning; that buildings are engineering structures which must be reconciled with social behaviours, and that there are severe obstacles in the way of women who decide to practise architecture. At the conclusion of the seminar, Shinohara said to me, 'To become an architect, you must have the ability to first become masculine, and then once again become feminine.'

TD *And were you able to de-feminise yourself as he asked?*

IH No, I didn't try to change anything about myself. But Shinohara could be malicious. Early on, he bought everyone in the lab souvenirs from France, his first trip to a foreign country. He gave an extremely beautiful, very feminine graduate student called Mariko Goto a wonderful pink scarf, but he bought me a black jumper with a label that said 'unisex'. I was shocked and confused, and immediately hid it away in my bag, then took it home and put it in my wardrobe. It's still hanging there. I never wore it. My gift was probably more expensive than hers, but everyone was besotted with Mariko, and it was well known throughout the university that Shinohara had given her that pink scarf. I found out later that everyone thought he hadn't given me anything at all.

TD *At the Tokyo Institute of Technology, you were initially a research student and only later Shinohara's assistant. Did you write a dissertation?*

IH I was a student for the first two years, but I didn't write a dissertation or go to classes. Instead, I travelled throughout Japan looking at famous examples of *minka*, just driving with some other students from Tohoku to Okinawa. Shinohara's doctoral dissertation was titled 'Nihon kenchiku no kūkan kōsei no kenkyū' (Research on the spatial composition of Japanese architecture), so I wanted to understand the origins of his ideas before I studied with him.

TD *And why did you change from a student to an employee?*

IH Shinohara asked me to stay and help me with his architectural projects, so I became a staff member of the university. I worked as his assistant for about ten years, but not just on architectural projects. When Shinohara was on holiday, I also taught and graded his classes for him.

TD *On architecture?*

IH No, for his classes teaching descriptive geometry to undergraduate students. His first degree was in mathematics, from Tohoku University, after which he became a mathematics instructor at Tokyo Medical and Dental University. After a year of that, he enrolled in the architecture programme at the Tokyo Institute of Technology, studying in the lab of Kiyoshi Seike.

TD *I assume there was a relationship between his teaching of geometry and his architecture?*

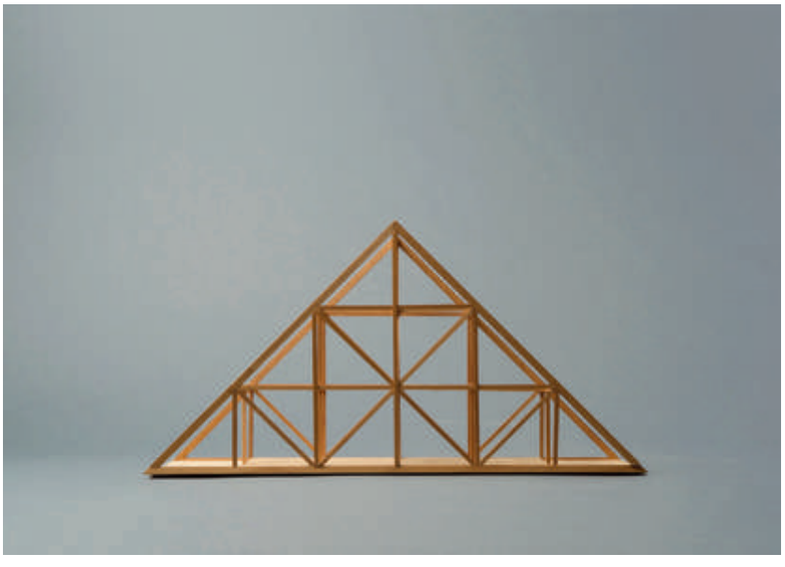
IH Not really. That's just how Shinohara got his salary. But he also had a few postgraduate students for classes in architectural design. They also helped with his projects.

TD *Did Shinohara have a first-class architect licence?*

IH No, but I did. I gained the qualification while I was working at Kikutake's office,







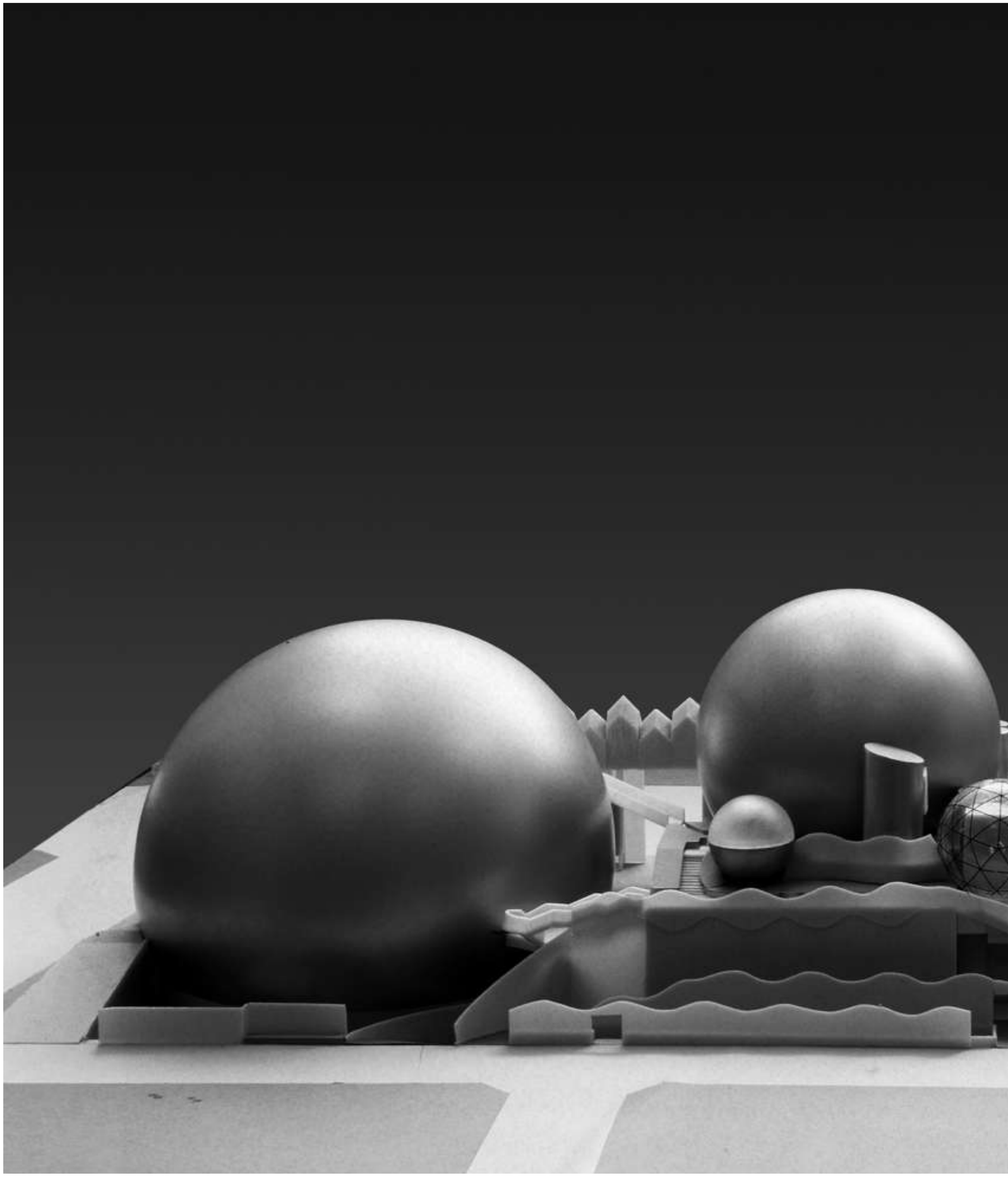
House 1 at Yaizu, 1972,
and House 2 at Yaizu, 1977
Photographs Kayoko Yoshida
Courtesy Itsuko Hasegawa

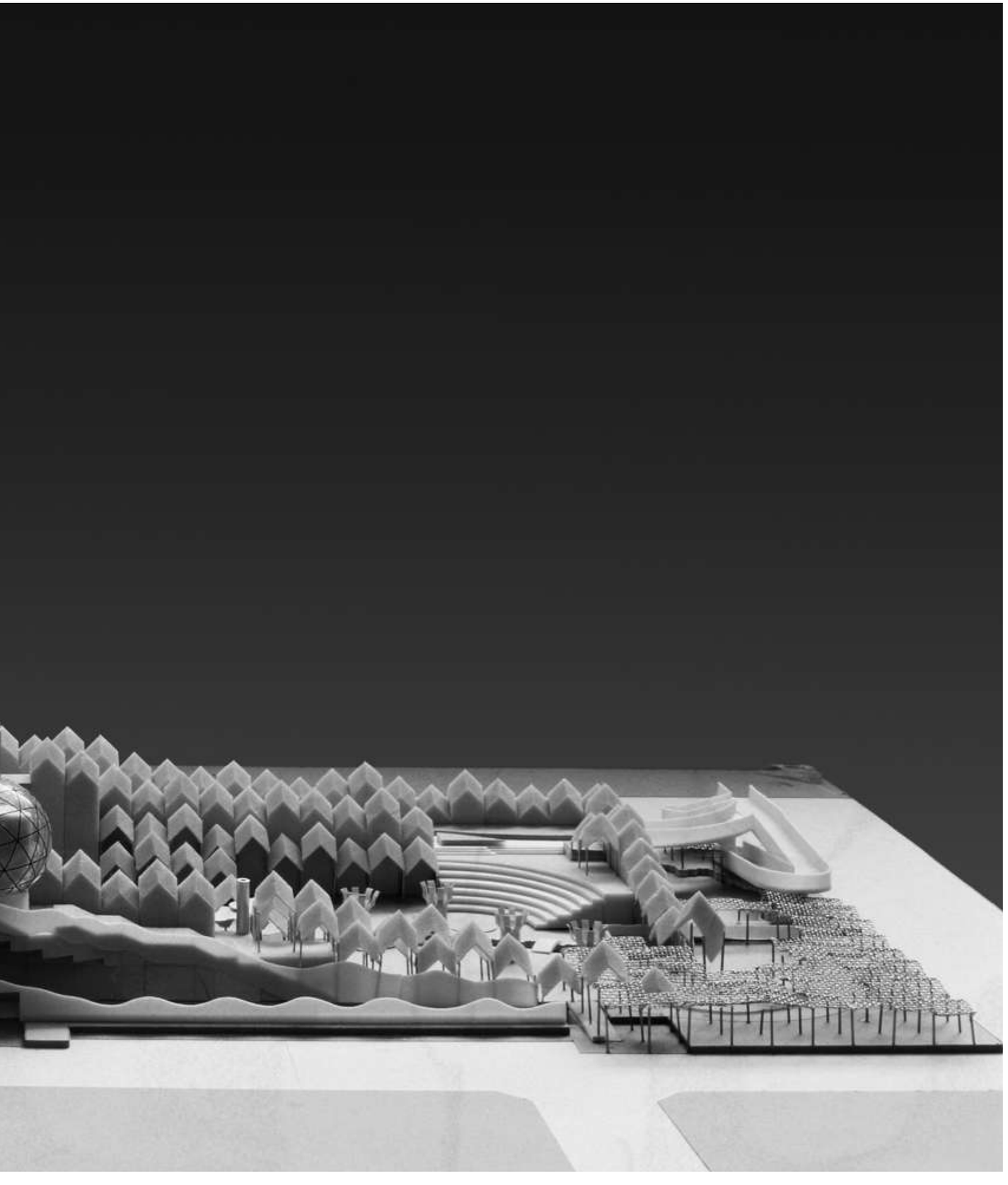






House at Midorigaoka, 1975
and Stationery Shop at Yaizu, 1978
Photographs Kayoko Yoshida
Courtesy Itsuko Hasegawa





so Shinohara always used my name and licence for building permit applications.

TD *So Kazuo Shinohara's buildings in the 1970s were actually Itsuko Hasegawa buildings. Amazing. But how did he manage before you joined him?*

IH In the 1950s and 1960s all his houses were wooden structures, so a first-class architect licence wasn't necessary. Most contractors will have at least a second-class architect licence, so they could apply for the building permits on his behalf. Many of the early houses were built by a contractor called Bau Kensetsu, which used its licence for the building permits.

TD *During the 1960s the pressures of postwar reconstruction inspired many architects to make proposals for efficient, minimum dwellings, and to develop techniques for industrialised construction, but Shinohara was known for a more poetic, irrational approach.*

IH Yes, his houses were like artworks. When I first met him in his lab, he was carving a block of clay with a knife, like a sculptor, to make a model of a house. I'd read his 1967 book *Jutakuron* (Housing Theory), in which he wrote that he was basing his work on tradition, whereas most other Japanese architects were focusing on technology, especially in the build-up to the world expo in Osaka in 1970. In a way, Shinohara was a very conservative person. But when I said to him, 'I came to study under you because I like your House in White', he replied that he had already moved on from the House in White, and was now going to make concrete boxes. Whenever I mentioned traditional houses, he would get angry with me. I quoted his statement that *minka* are like mushrooms, growing naturally in their soil – an image that I really liked – and said I also wanted to make houses like that. He said, 'Forget about all that, I've already moved on'. He was, in a sense, a great architect, but many problems arose because of his attitude towards the more mundane aspects of practice. He would nonchalantly say things like, 'It isn't necessary to see the site, it isn't necessary to listen to the client'. He started to ignore all the normal requirements of the design process in order to turn the architecture into an artwork. He might design a building for the sake of a single photograph. I decided I didn't want to make architecture like that. Buildings are for people to live in. I think architecture should come from regional characteristics, and provide amenity for modern life. He started doing the opposite of '*minka* as mushroom'. His designs became less like architecture and more like art objects. In a way, I learned from Shinohara by negative example…

TD *You began working with Shinohara at the exact moment of his shift from what he called his 'first style', based on tradition and using wooden structures, to his 'second style', based on abstract geometry and using reinforced concrete structures. Perhaps this wasn't a coincidence, but came down to the fact that he was now able to build in concrete because you had a licence.*

IH I don't think so. When I entered Shinohara's lab, he had already done the design for the Uncompleted House (1970), which was reinforced concrete. Actually, soon after I entered the lab, Kikutake tried to get me to come back to his office. Kikutake didn't really know who Shinohara was, so when I left to study at Tokyo Institute of Technology, he'd assumed I was in Kiyoshi Seike's lab. Apparently he called Seike and said, 'I'm having a tough time without Hasegawa here and I want her to come back'. Seike rushed over to the lab to tell me. When Shinohara realised that Kikutake had called Seike instead of him, he was less than pleased. He jumped up and said, 'Hasegawa, call him right now, in front of me, and refuse him!' So right there and then I had to phone Kikutake and tell him that it would be too difficult to work in his office while studying. But I was surprised to discover how important I was to Kikutake. Soon after that, Shinohara and Kikutake were both invited to give lectures at the Architectural Institute of Japan (AIJ) on the same day, one in the morning and one in the afternoon. Since they had never met in person, Shinohara decided to invite Kikutake for a drink in the bar of a nearby hotel. Shinohara liked to drink. Kikutake had a low tolerance for alcohol, but accepted the invitation because he wanted to meet. The evening spiralled into a huge argument. After a couple of drinks, Shinohara said in an off-hand way that he was contemptuous of Metabolism. Kikutake was completely taken aback, and started to argue. Shinohara explained that he was moving beyond the traditional composition of the House in White towards something more modern, searching for a new type of functionalism. Kikutake didn't understand. He believed that function was something that arose after a space was made – I realise now that I inherited the notion of *garandō* (open void) from Kikutake. They just couldn't communicate. They were using the same words, but in very different ways. I had to sit between them and translate. Shinohara said that even while designing small houses, he was exploring ideas about society. Kikutake said that even while designing individual buildings, he thought about issues of land ownership beyond the frame of architecture, by doing his huge Marine City designs and so on. Both of them were delving into issues around society and the city, but for the first time I saw how their different standpoints could lead to miscommunication. This was partly due to their background. When Kikutake was young, he'd lived in a house where there were no books, but Shinohara had always read all kinds of books, including philosophy and mathematics. Afterwards, Shinohara said that he hadn't understood anything that Kikutake had said, and told me to write a report on the differences in the way they used words. There is a big difference between the vocabulary of a house designer who thinks like an artist, and that of a major architect doing large projects. I looked at the context – that is, when they used a word like 'functionalism' I looked at the surrounding words. I spent one full year doing that. This was before word processors. I wrote it all out by hand, and presented it to everyone in the lab. Shinohara found it interesting, so we started to analyse the vocabulary of architects with a mainframe computer at the university. This was the 1970s, so computers were very difficult to use. That research became Mariko Goto's master's thesis.

Previous: Shonandai Culture Centre / competition model, 1986
Photograph Katsuaki Furudate
Courtesy Itsuko Hasegawa

TD *I think that you are probably the only person who fully understands the ideas of those two architects. Shinohara wrote that his second style began with the Uncompleted House, but he only ever showed very abstract interior photographs in his publications, so no one quite knew what it looked like.*

IH I was there when those photographs were taken. Shinohara sent me to the Uncompleted House with Koji Taki, an art critic with a background in aesthetics and philosophy. He was also a photographer, and had just founded an experimental magazine called *Provoke* together with some other photographers, such as Daido Moriyama. That was the first time I met him. Just the two of us were at the house. I watched him spend a whole day taking photographs. He concentrated so intensely, moving all the furniture and decorations around. I was baffled by why he took so much time and trouble over photos of a simple concrete volume. Shinohara had said that the House in White embodied a new nature, yet now he seemed to be pursuing an abstracted nature, trying to create something dynamic in a static concrete space. I found this contradiction bewildering. A few years before Shinohara died, Sou Fujimoto, Ryue Nishizawa, Kengo Kuma and I had a public conversation with him as part of the 'Architecture of Tomorrow' exhibition and symposium at Gallery MA. The other three asked me why I had chosen to join Shinohara's lab. I said it was because I had seen House in White, and Shinohara, who was sitting next to me as always, pulled a sour face. But after that he wrote another essay in which he discussed the House in White, and before he died I think he again came to feel that it was his masterpiece. So rather than the later concrete houses, I prefer the more traditional houses,

such as the Umbrella House (1961) and the first house he designed for the poet Shuntaro Tanikawa (House in Kugayama no 2, 1958). Those designs are what drew me to him, but he had already moved on to other things, so he always had trouble with my design approach. 'Stop doing that!', he would yell.

TD *His shift to concrete also happened during the build-up to Expo '70, which was dominated by Metabolist-style architecture. Was the raw, massive quality of those houses perhaps implicitly intended as a criticism of the modular precision and industrialisation that attracted the Metabolists and their followers?*

IH He always wanted to go against the prevailing trends. Concrete was easy to use, but it was also a statement against the steel and glass of the architecture at Expo '70, and the related social and political circumstances. I went to see the expo with Shinohara, but he showed absolutely no interest. He walked around grumbling the whole time – 'there is zero architecture here', he said – and refused to go inside any of the pavilions. It just made him angry. On the second day he wouldn't even go back, so I went with two other students from Shinohara's lab.

TD *Why did he go to the expo in the first place?*

IH Shinohara always wanted to know about new movements in architecture. But after we got back to Tokyo, he had a big argument with Koji Taki about it, while I arbitrated. Even though he appeared cool, Shinohara would often quarrel with other people, particularly with Taki. But they were close friends. Shinohara really liked Taki's photographs of the Uncompleted House, and asked him to shoot some other projects. But Taki was having doubts about architectural photography. He'd decided he wasn't going to do it any more – architecture magazines didn't like his photographs, because they were so abstract. So he and Shinohara started to argue more frequently. Their relationship gradually worsened as their ideas and values diverged.

TD *In Shinohara's 'third style' he sometimes used wooden structures and traditional ideas, notably in the second house he designed for Shuntaro Tanikawa (Tanikawa House, 1974), the holiday villa in the forest in Karuizawa, with its sloping earthen floor.*

IH That house was the cause of the worst fight I ever had with Shinohara. He'd been ill with tuberculosis, recuperating in a sanatorium, and had done hardly any drawings, so I'd developed a design over the course of many meetings with the client – well, mostly with his wife and son. The design was largely complete by the time Shinohara recovered and came back to the lab. He handed me some floor plans he had drawn showing concrete walls of various thicknesses. It looked like an array of gravestones. 'What's this?', I asked, 'A sculpture? It isn't architecture. You can't make spaces with only walls. Doesn't architecture need a roof?' He immediately became furious and yelled, 'Hasegawa, you can quit tomorrow! Pack up your things and get out!' Then he stormed off. Over the years I was there, he fired me many times, but this time I actually did clear out my desk. Then he came back in the morning and told me not to leave. But we had a huge argument that day about what architecture is. It looked like we might come to blows, it was so terrible. Shinohara said he wanted to bring the atmosphere of Karuizawa inside the house, the sounds and the smell of fallen leaves, and thereby make a 'new nature'. That is when he decided to incorporate the sloping ground of the site within the house. Then he asked Tanikawa and his wife to come to see the new design. They looked at the model, and saw the sloping dirt floor. His wife hated it. She got angry at Shinohara, saying, 'How can we live here if there is dirt inside? This can't be a living room, even if we put chairs there. You obviously don't understand the damp climate of Karuizawa'. She wanted to use my original design, but Tanikawa said, 'Even though the plan designed by Hasegawa is very good, I want Professor Shinohara to design my house, so I will endure this unusual proposal'. Houses designed by Shinohara tended to have a big influence on family relationships. I often visited the site of the Tanikawa House while it was under construction. When it was complete, I saw the sloping earthen floor in the main room, and finally understood Shinohara's 'new nature'.

TD *How many other staff members did Shinohara have?*

IH There were no real staff members. Aside from me, he had one assistant for the classes in descriptive geometry, and there were always two or three postgraduate students who would help on the architectural projects, unpaid. So I was made to do most of the work. To be honest, I was like his secretary, office manager and project director all rolled into one. I would persuade clients to accept his design proposals. I would devise the details necessary to implement his abstract spaces. When he was sick I would do his drawings for him, when he was in a foul mood I would attend meetings in his place. I would collect the design fees. I would revise and edit his texts. Shinohara hated construction sites and rarely visited, so I would supervise the sites, but he often complained that the results didn't exactly follow his drawings. It was difficult but always interesting, seeing what he would do next.

TD *Though you were obviously very busy, you also found time to do your own projects. You designed six houses and one commercial building under your own name while working for Shinohara. Did he know and approve?*

IH Yes. My first real project was for a young male relative of mine (House 1 at Yaizu, 1972). I asked Shinohara if he had any objections, and he told me it was fine to work on my own projects, but only in my own time. On weekdays I had to be at school, so I did my designs at home during the vacations and on weekends. They were all wooden structures, except House in Midorigaoka (1975), which was reinforced concrete. I also supervised the construction sites myself. When other people in the lab asked if they could do the same, they were refused.

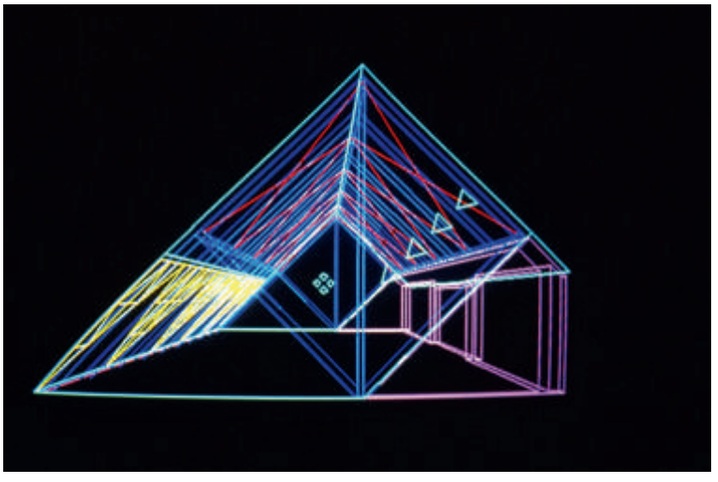
TD *What did Shinohara say about your designs?*

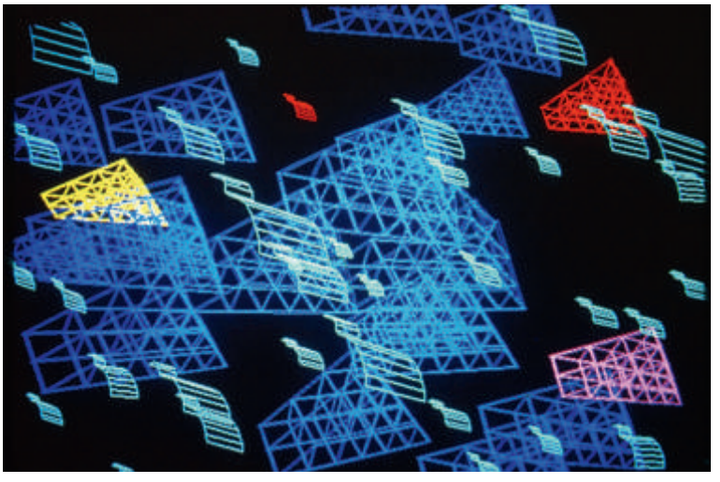
IH He made no criticism, but also gave no praise. He saw them when they were published in magazines, but never went to see them in reality.

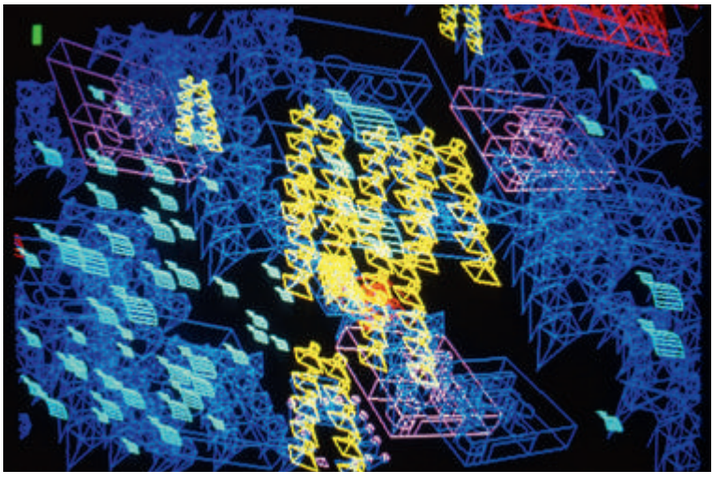
TD *Did Koji Taki look at your projects?*

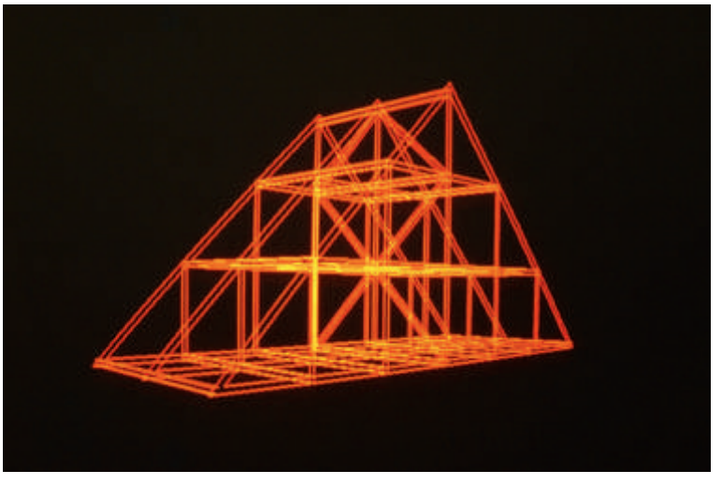
IH Yes, he often visited the lab. We had a friendly relationship. After I built House 2 at Yaizu (1977), he published an essay on my body of work up to then, with the title 'Tayōsa to Tanjunsa' (Diversity and Simplicity). He wrote that I omitted certain conventional things from my designs in order to achieve visual simplicity, but these omissions implied a multiplicity or diversity. It was the most stimulating critique I had received until then, and it guided my subsequent design approach. From the Tokumaru Children's Clinic onwards, I would try to introduce overt diversity and multi-dimensionality into the architecture. Isozaki would also visit the lab often, and from the two of them I learned a great deal about international architecture, and other systems of aesthetics and philosophy. I was always deeply influenced by Taki. Some people say I have been too influenced by him. Taki was a great supporter of our generation.

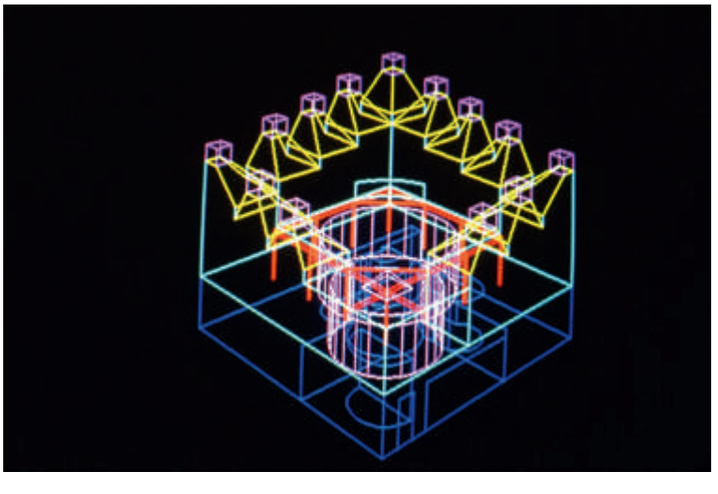
After I took Professor Takamasa Yoshizaka from Waseda University to visit my House in Midorigaoka, he asked me to show him more houses designed by architects from my generation. So I introduced him to Toyo Ito, who had just completed the House in Nakano Honmachi (White U, 1976) for his widowed sister. Yoshizaka asked Ito to give a lecture at the house for some of his students. Many other people came along that evening, such as Osamu Ishiyama. But rather than talking about the spatial theory behind the house, Ito explained it using the dated language of classical planning theory, as he had been doing at Kikutake's office. He talked as if it was the grave of his late brother-in-law, showing photos of the interior containing some geometric models that he had bought – cylinders and cones and cubes lit by spotlights. It was really weird. Everybody became bored and irritated, and started to walk out while he was still talking. Ito was so upset. To cheer him up, I said, 'Let's have Koji Taki look at this house and write a critique of its spatial ideas'. Taki agreed to visit the house, but said, 'I will send a message to Ito by taking

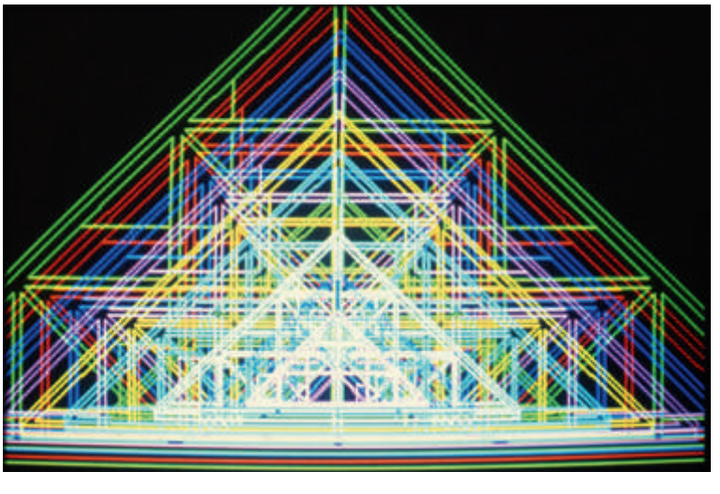


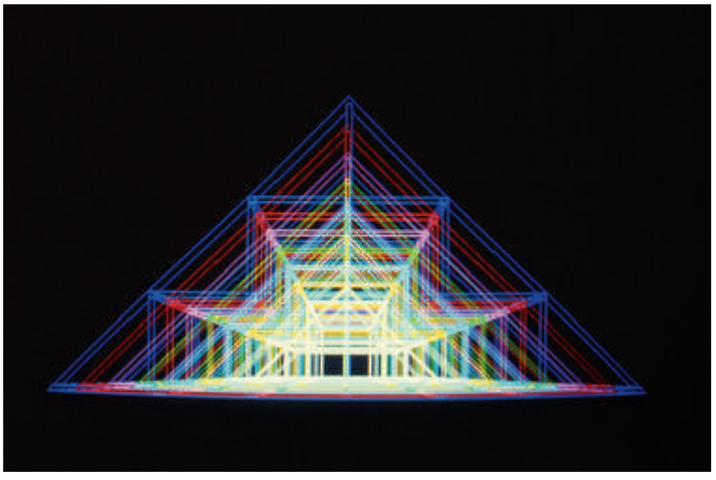
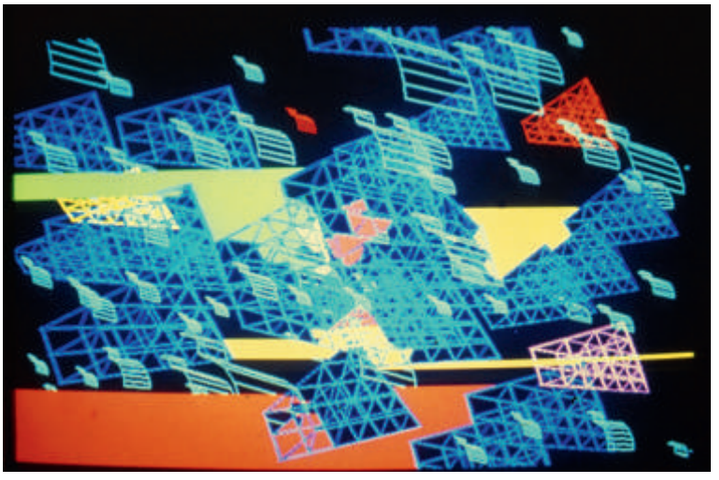
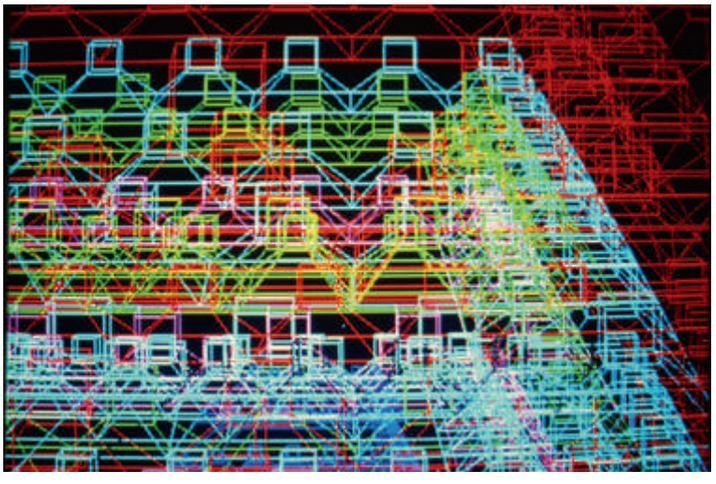
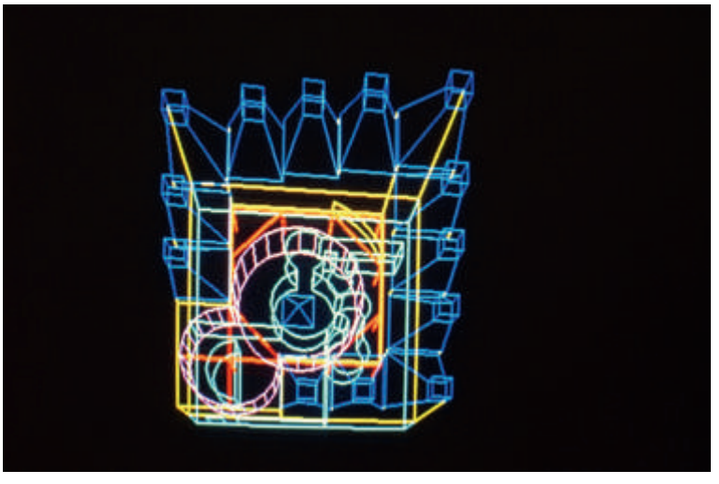
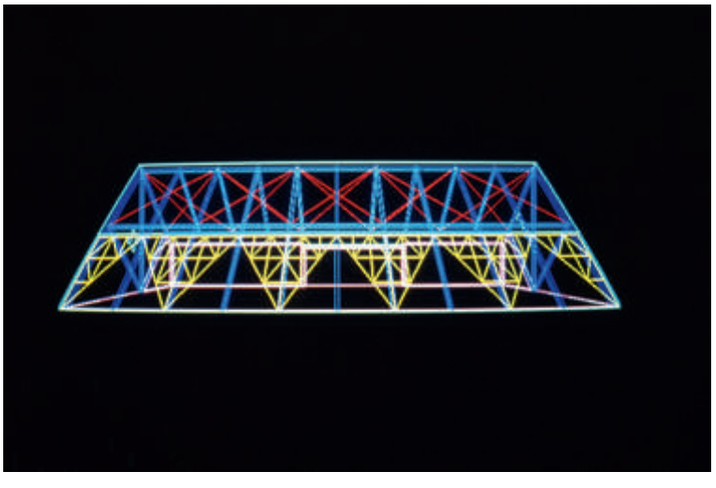
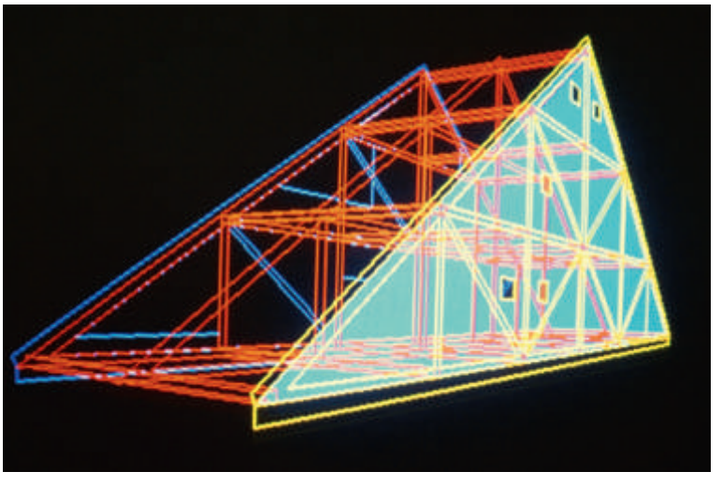










Wire-frame CAD drawings, *c* 1985
(House at Oyama, Work M, House 2 at Yaizu,
Bizan Hall, House at Oyama)
Courtesy Itsuko Hasegawa

photographs'. And so he lay down on the floor and took those famous photographs in which children are leaping about inside the house. Taki's photographs allowed Ito to see his own architecture in a new light.

TD *You started your own office in 1979, but in January that year* SD: Space Design *magazine published a special issue on Kazuo Shinohara, which included a section about a so-called 'Shinohara School' that categorised you, Toyo Ito and Kazunari Sakamoto as somehow being disciples of Shinohara. How did you feel about being placed in the Shinohara School?*

IH I think that the term Shinohara School was probably invented by Koji Taki, and was then used by some critics to describe architects who designed small houses using clear geometric forms. We weren't really a group, in the sense of describing ourselves as such, or meeting regularly and debating ideas and so on. Kazunari Sakamoto and I didn't overlap at the Tokyo Institute of Technology, because he moved to Musashino Art University after he finished his master's degree. He didn't get on well with Shinohara, and was often critical of him. After Shinohara retired, the Tokyo Institute of Technology was looking for a successor, so they hired Kazunari Sakamoto, then he invited me to help. Soon after Koji Taki had taken those photos of the House in Nakano Honmachi, Ito told me that he wanted to meet Shinohara. He knew very little about Shinohara then. So I set up an invitation for him to visit the lab. Ito brought Osamu Ishiyama with him. But rather than using the front gate of the Tokyo Institute of Technology, the two of them climbed over a concrete wall, then went into a culvert, got lost, and finally didn't ever make it to the lab. Shinohara was angry: 'What happened to our guests?!' So I invited Ito to the completion party of Shinohara's House in Uehara (1976), though I don't know if they actually met in person for the first time then, or later on.

TD *What was the trigger for starting your own office?*

IH When I received the commission for the Tokumaru Children's Clinic (1979), I thought that it was too large to be done part-time. The client was a famous pediatrician, and his accountant had told him that my fee couldn't be paid unless I had a registered office. I told Shinohara that I would stay with him for one more year, but I spent that year working on the Tokumaru project. So I stopped working for Shinohara in 1979, but officially left the university in 1980. Shinohara asked me not to leave, but accepted that I had to do so.

TD *Did you remain on good terms?*

IH At first, but our relationship gradually deteriorated as I became more successful. He supported me for a while, treating my office like an annexe to the Shinohara lab – he would be constantly calling me on the phone, asking how I did particular construction details. In 1986, I received the Architectural Institute of Japan Prize for Bizan Hall (1984), due to Shinohara being on the jury. But soon after, I received first prize in the competition for the Shonandai Culture Centre (1990), and Shinohara called Fumihiko Maki – who had been on the jury – and said, 'She can't receive two prizes at once, so you must withdraw the Shonandai prize.' Maki himself told me that – he said, 'Your old teacher seems to be a bit crazy.' The Shonandai announcement had already appeared in newspapers and on television, so the prize couldn't be withdrawn, but from that time on I began to sense a growing jealousy on Shinohara's part. He began to avoid me. I was winning competitions and building public architecture, and it made him angry. He somehow thought it was insolent of his former assistant to surpass him.

TD *Just after you completed Bizan Hall,* SD: Space Design *magazine published its first special issue on your work. It contains a long interview with you titled 'Kenchiku no Feminism', which could be literally translated as 'The Feminism of Architecture' – though I think the English word 'feminism' has been adopted into Japanese to mean something more like 'chivalry', in the sense of showing special consideration towards women. The interviewer is anonymous, and the interview is only in Japanese, but it also has an English title with quite a different nuance: 'The Feminine Touch in Architecture'.*

IH That interview was done by Koji Taki. He invented the title, both the Japanese and English versions, and it angered many people, even though the content of the interview was really nothing to do with feminism. Many other architects complained in public, and even to me directly: 'What is the meaning of that title? Women making architecture?! Most women should quit architecture!' Osamu Ishiyama was particularly furious about it.

TD *Ishiyama is a famously eccentric individual, but were there others who had equally strong feelings?*

IH Ishiyama was the leader of a group of young architects from my generation who called themselves the Basara. It's a word from the medieval period that refers to dandies and libertines, or young radicals who reject tradition and authority in order to create shocking new types of art. Basara was somehow opposed to the Shinohara School. They were frightening. Unlike the Shinohara School, which was very genteel, they were very aggressive. They insisted that architecture could never be feminine, that it was always masculine. Taki was astonished by their reaction. 'What kind of people are these?', he asked me.

TD *Perhaps they didn't mean that a woman couldn't be an architect, but rather that you shouldn't be promoted using the rubric of feminism. Who was in the group?*

IH Aside from Ishiyama, it included people like Kiko (Monta) Mozuna, Kijo Rokkaku, Toyokazu Watanabe and Kazuhiro Ishii. Strangely, Toyo Ito was part of Basara as well as the Shinohara School.

TD *I guess that's why the* SD: Space Design *feature on the Shinohara School described Ito as a 'failed student'.*

IH Soon after that, the Japan Institute of Architects – not the Architectural Institute of Japan – inaugurated a Rookie of the Year award. Kenzo Tange, who was then the director of the JIA, said that he wanted more women to participate. I was contacted by Nobuo Hozumi, a professor at Waseda University, to tell me that he was recommending my House in Kuwabara Matsuyama (1980) for the award. At that time, I just happened to be together with Toyo Ito and Osamu Ishiyama, and they made a big fuss, trying to get me to decline. Ishiyama said, 'I would never accept anything from the JIA establishment, endorsed by Tange. Isozaki wouldn't accept either. Any architect from our generation would decline, so you just can't accept that prize.' So finally I declined the award. But the following year, Ito joined the JIA and received the Rookie of the Year award for his House in Kasama (1981), despite having been so opposed to me doing so! The competiveness and jealousy of male Japanese architects is incredibly powerful. It prevented me from doing many things.

TD *Do you think that there is a difference between female architects and male architects?*

IH There are certainly masculine and feminine types of architect. Masako Hayashi was very masculine, in my opinion.

TD *Having established your own office, were you able to employ women, as you had promised – or threatened – Hayashi?*

IH Eventually. At first it was difficult to employ anybody at all. I could put all my energy into the work, since I was no longer working just on weekends and holidays, but having left the lab I'd lost my university salary. And it's hard to make a living doing houses. I'd already been published quite widely, so many people came to visit, hoping to work for me, but I couldn't afford to pay them. My first staff member was male, Masaki Shitaka, a University of Tokyo graduate introduced to me by Shinohara. Shitaka came straight from school, with no work experience. He couldn't draw or make models, and he knew nothing about building sites. I don't know why Shinohara recommended him, but he later became very valuable to me. Many others arrived over the years. Kazuyo Sejima wanted to join my office after she graduated from Japan Women's University. Her professor wrote a very formal recommendation letter on her behalf. But I had recently hired

another graduate of the same university, and other staff members were complaining that she was completely incompetent. I decided not to hire anyone else from that university, and I didn't even give Sejima an interview. So she joined Ito's office. We are good friends now – she still has the rejection letter I wrote, which is so full of feigned politeness that we laugh about it.

TD *From the House at Kuwabara Matsuyama onwards, perforated metal panels became your signature motif. They allow the perception of light, air and human movement through the walls. You wrote at the time that you wanted to create spaces filled with 'grains of light'. What inspired this?*

IH I was raised near Suruga Harbour, and the sea was always sparkling with what looked like grains of light. We would often go to the seaside for picnics. Even if the air was cold, the sand would be warm, and we could swim in the sea, which was calm and glittering. I wanted to make similarly beautiful grains of light in my architecture, but I didn't know how. It couldn't be a facade pattern. It had to be real light. A traditional Japanese house brings in natural light through lattices and *shoji* screens. So rather than dealing with concrete, I wanted to create a more traditional atmosphere by bringing in light and air with new, porous materials. The only perforated metal panels I had ever seen in Japan were screens behind bus drivers, which had a floral pattern of holes. The client for the House at Kuwabara Matsuyama happened to own a company that made metal components. I asked if they could make aluminium panels perforated with circular holes. He said of course, they would make anything I wanted. But aluminium was not much used in architecture, and had never been used for exterior walls. So I got them to make all kinds of samples. I asked for about 35 different types. I wasn't just testing the size and shape and density of the holes, but also their layout – for example, some were arrayed at 45 degrees, some at 60 degrees. I laid them all out on an exterior stair at my office, and watched the effects of light and shadow across the day. As the sun moved, grains of light from the 60-degree layout became increasingly oval-shaped, while the 45-degree ones stayed circular and just got smaller. So I thought that I could achieve the effect I wanted only with a 60-degree layout. The House at Kuwabara Matsuyama is covered with aluminium panels that reflect the changing colours of the sky. One wall is made of sliding panels of perforated aluminium, but when they are all closed, they appear to be a single, seamless panel. Shitaka calculated the precise locations of the holes to achieve that effect. He loves doing calculations. I hate it. After I completed the B Y House (1985), many other architects, such as Kisho Kurokawa, sent their staff to study the details of the sloping facade of perforated panels, using tracing paper to copy the pattern directly. Back then, perforated metal wasn't mass-produced. Now you can just choose from a catalogue. Architecture should not have solid surfaces. I wanted to use high technology to create something that seemed natural. With computers I am now able to achieve a kind of fluctuation, like a living thing.

TD *Several other architects, notably Toyo Ito, started using perforated metal panels around the same time as you. Did you influence each other?*

IH Yes, I think so. We were all experimenting with materials. I also started using ASLOC extruded cement panels, which had been invented by a friend of my brother. The panels are very strong, but also contain an air cavity, so they act as insulation. They were mainly being used to build shelters for pigs. I was asked to design a building using them for a site in Yaizu, near the train station, but that was when I was still with Shinohara, so I didn't do it. When Ito saw the panels he told me that he wanted to use them, so I introduced him to the inventor.

TD *Your big break was the Shonandai Culture Centre, which made you an international star. The competition was held at the historical moment that the Japanese asset price bubble began, but it also ushered in a whole new approach to public architecture in Japan. Until then, such competitions had invariably been won by large, established offices with relatively conservative design proposals. All the finalists for Shonandai were very radical, possibly due to the presence of Arata Isozaki and Fumihiko Maki on the jury. Many of the entries also attempted to bury the architecture, to diminish the usual grandeur of a public building.*

IH I was surprised by the similarities in thinking between my entry and people like Toyo Ito and Kazunari Sakamoto. We all tried to make the architecture into a landscape. When I'd visited the area, I'd met an elderly woman who told me that when she was a child the site was a hill where she gathered mugwort. My first sketch was of a hill with the architecture buried inside. My staff told me that it would never win, because public architecture needs a grand facade. So during the design process, I gradually raised the building above the ground. The final proposal had about 70 per cent of the volume buried. That was the first time I had entered a competition, and I was sure I had no chance of being selected. I was about to leave for a lecture in Los Angeles when I got a call from Kiyoshi Seike, head of the jury, asking me to come in for a second-stage interview. I was sure it would be a waste of time – I was bound to lose, and thought I would rather go to Los Angeles. Nonetheless, everybody insisted that I went to the interview, so I cancelled the lecture and lost the price of the air ticket. But I won the competition.

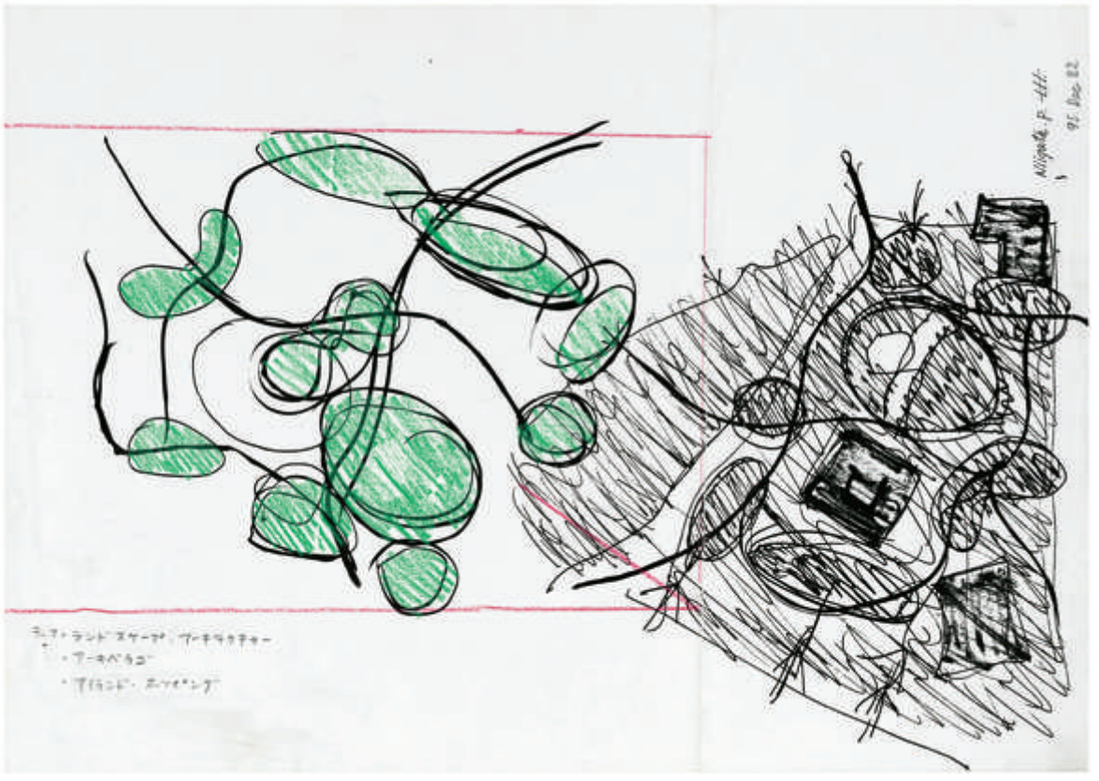
Shonandai is often called a bubble-era building, but that's not right. It was built with money that the local metropolitan government city had already saved. The first stage of construction was completed before the bubble. During the second stage of construction, the bubble began, construction costs soared, and the budget became very difficult. In Japan, bubble architecture is constantly treated as if it were equivalent to the postmodern movement. However, postmodernism possessed a critical awareness of many issues, such as European historicism, regionalism and citizen participation. The differing context of consumer-oriented commercial architecture of the bubble must not be overlooked.

TD *Your success with Shonandai made it possible for younger, experimental practices to feel they had a chance at major competitions. And indeed they started to win, to the extent that during the bubble years every new public building in Japan seemed to be attempting to outdo its predecessors in terms of sheer architectural innovation. What was the reaction to Shonandai at the time?*

IH People who expected a symbolic and magnificent work of architecture were outraged. Public architecture was supposed to be a political symbol, and I was accused of breaking that model. I was criticised for enabling public participation, as if I was pandering to the lowest level. The emphasis on participation is now normal, but then it was unprecedented. Once it was finished, the mayor described it as a facility that mingled architecture, people and nature. Kiyoshi Seike also complimented it, but others who had been on the jury were negative. Ito was annoyed at me because he had been certain he would win. One famous critic said that it was indeed a *harappa*: an empty field, with streams and artificial trees, full of people, but no architecture.

TD *You often describe your architecture with the terms* harappa *(empty field) and* garandō *(open void). I assume you mean spaces without defined function, for people to use freely. Does this relate to Shinohara's idiosyncratic notions of 'functional space' and 'wasted space'?*

IH I partly inherited his ideas about traditional architecture. But I am trying to make spaces that are more casual and lively. Whereas Shinohara wanted to make a symbolic space, something like a church, I want to make something more like a bazaar. I use *garandō* to describe private houses and *harappa* to describe public buildings. We need free spaces for human interactions at every scale. I don't want to feel restricted by functionalism, to have to divide up a building into many small spaces, each with a specific purpose. It is the large empty spaces that allow a building to remain useful in the future. Of course, I also design in response to the opinions and desires of the end users. But I don't simply follow their opinions, I also think about the region and its future. My approach has been heavily criticised in Japan,





Niigata Performing Arts Centre,
competition and initial sketches, 1992
Courtesy Shokokusha



Yamanashi Fruit Museum,
IFA exhibition model, 1997
Photograph Tomio Ohashi
Courtesy Itsuko Hasegawa

but regarded highly in France, America and especially England. Peter Cook and Rem Koolhaas were very supportive.

TD *When did you first start to meet members of the international avant-garde?*

IH I first met Peter Cook in the mid-1980s, during his first visit to Japan, at a party held by Isozaki. Peter did a kabuki-style greeting at the party, and everybody roared with laughter. Later he invited me to the Bartlett, and I taught there for about one month. While I was in London I was also asked to give a lecture at the Architectural Association. That afternoon, I met Alvin Boyarsky, and he called Peter Cook to join us, and then the three of us drank far too much. By the time I gave the lecture, I could barely read my English notes. Afterwards Boyarsky invited many of his friends and acquaintances to a party. I was surprised to see so many famous people. A lot of great people were at the Architectural Association then, such as Rem Koolhaas and Bernard Tschumi. Possibly that was the very first time I met Rem. Tschumi quickly became a close friend. All the members of Archigram were there. Nigel Coates called me, wanting to get in, but he was turned away at the door. The next day, Peter Cook took me on a tour of London. We walked along the Thames, toured Kew Gardens, and visited some unique English pubs. I'll never forget how much fun we had. When the first stage of construction of Shonandai was over, I received many invitations to lecture in Europe. In 1987 I spent about a month giving lectures in Europe, beginning in London at the Architectural Association, then on to Oslo, Helsinki, Copenhagen and Frankfurt. Also I was invited to enter many competitions in foreign countries. I won first prize in the Cardiff Opera House competition, before the project was awarded to Zaha Hadid – and, of course, it was taken away from her as well. I think I first met Zaha in 1992, when I was invited to judge an RIBA International Student Competition. That same year I was invited to the Harvard GSD as a visiting professor. My class was next door to Rem's class. In 2001 I received an honorary degree from University College London for which my entire office was invited to the ceremony and party – it was held in the front courtyard of the Chadwick Building, I think. I remember that Zaha Hadid and Norman Foster were there. But I was surprised when I learned the reason for the honour – it was related more to my method than to the resulting architecture. Under the old European class system, architects were seen as part of the aristocracy, so a design methodology that included listening to the end-users was very unusual. It later became common in Japan, but only after many struggles. It was very surprising, but after winning Shonandai, I consistently won first prize in every competition I entered for many years. Other architects often got angry about it, though after Shonandai the competition system in Japan changed. From then on, most public buildings were won through open competitions, and everybody says that was caused by me.

TD *At least from Shonandai onwards, you have often used the term 'second nature' with regard to your work. Where did the idea come from?*

IH I was using the concept much earlier, but it really became important for Shonandai. I didn't mention it in the competition proposal, but I started using it in discussions with the local citizens during the design development phase. Kikutake had used the term 'second nature' in his 1969 book *Taishiya Kenchikuron: Ka Kata Katachi* (Metabolist Architecture Theory: Force, Gesture, Shape), and Shinohara talked about 'new nature', but my approach is different. By 'second nature', I mean that the involvement of people over time can enhance natural beauty and produce a pleasant environment, like *satoyama* – the environment around traditional Japanese villages that is created by generations of subtle human intervention. People are a part of nature, but it is now impossible to include untouched nature in architecture and cities, so I am always thinking about how to manipulate new materials and technologies to create sensations resembling nature.

TD *Technology has always been prominent in your work. You must have been one of the first architecture offices in Japan to use computers – the 1985 issue of* SD: Space Design *devoted to you has nothing but coloured wire-frame computer drawings on its cover. That was unprecedented, I think. Before then,* SD *covers invariably featured photographs of buildings, with the occasional hand drawing or silkscreen print. Almost no one was using computers in architecture, and certainly not for presenting their work. Were you also using computers as part of the design process?*

IH I think we were the first architecture office in Japan to start using computers, but those early wire-frame computer drawings weren't for any particular purpose. A friend from the Tokyo Institute of Technology taught me how to draw them. I found it interesting and enjoyable, so I started doing them all the time. Back then, personal computers were mainly being used as game consoles. By the early 1990s most Japanese architecture offices had shifted to a mixture of hand drawings and computer drawings, but only my office was equipped with one computer per person. In 1992 or 1993 I remember giving a lecture in the Netherlands – Rem and others were in the audience – and when I showed some 3D computer images everybody got really upset, saying computers should not be used for designing architecture. Some of the larger projects use geometrical forms that only became possible because of computers, such as the distorted ovoid volumes of the Yamanashi Fruit Museum (1995). Soon after winning the competition, I was invited to give lectures in Harvard and London, where I showed some images of the design. I was approached by Cecil Balmond of Arup, who offered to do the structural analysis. We had meetings in Boston, London and Japan. I told them I wanted to make the real building just like the competition model – woven steel members without any joint elements. I suggested that we use welded joints, like in shipbuilding, but they said it was impossible. So we consulted Mitsui Engineering and Shipbuilding in Yokohama, who told us it was possible. Arup was amazed that such huge curvilinear volumes could be built with welded joints. We also used computers to optimise costs and energy usage, and those techniques were further developed for the Niigata Performing Arts Centre (1998). All the entries for that competition used ink drawings, except mine, which used computer printouts containing a mixture of analogue and digital.

TD *Did your 'archipelago' planning concept emerge from the Niigata design?*

IH I first used the term 'archipelago' for Niigata, but looking back I think the idea of breaking a building into several elements, rather than one big mass, began with Shonandai. Architecture comprising a collection of small islands coexisting with the abundant air between them; that is what I call the archipelago system. At Shonandai most of the volume was underground, with various elements – the globe, the village of triangles – placed upon the *harappa* above. The Oshima-Machi Picture Book Museum (1994) used connecting ramps and bridges in various places. At the Sumida Culture Factory (1994) the architecture was divided into three parts according to the three main functions, then each part connected with bridges, and finally the whole volume wrapped with perforated metal panels. At Yamanashi Fruit Museum, the independent glass domes are linked by gardens, bridges, outdoor pathways and underground galleries. Bridges are visualisations of human movement, and my hope is they give rise to various encounters and collaborations.

For the Niigata Performing Arts Centre, I wanted to design the overall landscape, breaking the building down into independent islands connected by bridges. The whole site was turned into a performance garden. The project took seven years from start to finish, and as it developed I held many workshops with local people and specialists. I turned the three main functions – concert hall, theatre, Noh stage – into oval volumes 'packaged' in double-skin glass facades. The main lobby was treated as a glazed courtyard. Niigata is a cold region, so some mechanical equipment was necessary

there, but overall we were able to cut energy usage by about 30 per cent. I wanted to control light and heat using perforated metal panels. There are two layers of perforated aluminium within the double-skin glass facades, and they can move up and down independently, thereby adjusting the aperture ratio and controlling the amount of sunlight that enters. We installed German-made sensors to register the outside temperatures and light incidence angles, and these are connected to computers that calibrate the height of the panels and the aperture ratio. I insisted that these move very slowly, like yacht sails being raised or lowered by hand. It is actually quite low-tech, but the computers allowed us to calculate the running costs. It saved a lot of money that could then be used elsewhere in the project.

TD *I think Niigata is one of your most significant projects, but the design was publicly criticised by Hajime Yatsuka. He accused you of copying the oval shapes from OMA's Congrexpo in Lille (1994).*

IH The roof forms I used at Niigata may have resembled that OMA project, but the arrangement of the programme was quite different. Rem later said that he was completely unconcerned. Anyway, I have always liked ovals. They appear naturally when I draw because I am always making islands. At the time of the Niigata competition, there was a boom in the use of ovals among many Japanese architects. Isozaki and Sejima were also using a lot of ovals and circles back then. They were nothing out of the ordinary. So, on the contrary, it may have been Rem imitating Japanese architects.

TD *Perhaps you were attacked because you were winning so many competitions.*

IH Hajime Yatsuka was one of the finalists in the Shonandai competition, but I won first prize. The same thing happened with Niigata, so possibly that made him mad. Yatsuka is an old friend, and we have since reconciled, but losing a competition is a painful experience. That is why Isozaki and Shinohara fell out. Isozaki often visited Shinohara lab. He would bring bottles of wine to drink with Shinohara while they chatted. That all stopped after the Yokohama Port Terminal competition in 1995. Isozaki was on the jury, and he published some negative comments about Shinohara's entry, saying that he rejected it because it had the symbolic form of a Japanese sword. So Shinohara lost to the young team of Alejandro Zaera-Polo and Farshid Moussavi, who had just left OMA. At that time Shinohara had been devoting all his energy to the Euralille hotel project, commissioned by Rem, and was very disappointed when it was cancelled. Shinohara furiously accused Isozaki of distorting the Yokohama competition results. They had an intense debate in the pages of *Nikkei Architecture* magazine, but they never spoke again. Soon after the competition, there was a launch party for that huge monograph on Shinohara published by TOTO. Isozaki attended, but he found it unbearable and slipped away before it finished. Isozaki also started to avoid me, because I was seen as part of the Shinohara School. Isozaki always played an active part as a 'producer' in the Japanese architectural world, selecting and bringing together other architects for projects such as Kumamoto Artpolis and Nexus World Housing (1992), which included several foreign architects – Rem, Christian de Portzamparc, Steven Holl. He also produced Gifu Kitagata Housing (1998), for which only women architects were invited – Kazuyo Sejima, Christine Hawley, Liz Diller and so on – but in fact, Kitagata Housing was originally my project, commissioned by Gifu Prefectural Governor Taku Kajiwara. I spent about ten years organising conferences and competitions for women architects, and during that time I assembled that team. But one day Isozaki called me and said, 'I think it will be difficult for a woman to coordinate a collaborative project for women architects, so let's do the project together.' I don't really understand what happened, but before I or the governor knew it, Isozaki had taken charge of Kitagata Housing and I was dropped from the project. Governor Kajiwara was very angry about it. I think that Isozaki began to give me a wide berth after that. He had close relationships with European architects as well as Japanese architects, and also played a great role in promoting Japanese architects abroad. So because he was in charge of selecting the Japanese participants for the Venice Biennale, I didn't go as a representative of Japan, but as an international exhibitor invited directly by Hans Hollein.

TD *With the increasing number of female architects in Japan, can we possibly identify a 'Hasegawa School'?*

IH Some of my former staff members have become quite successful. Tomoko Taguchi is doing good work, and also very involved with the JIA. Takehiko Higa and Yasuko Kawaharada formed a practice called kw+hg architects, and they have won many public competitions, such as Musashino Place library (2011), which received an AIJ award this year. Taiji Fujimori did a lot of furniture design while he worked for me, and now has an award-winning product design office. Naoko Tarao did a clever renovation of a high school in Nagoya, as well as some good houses and renovations of pre-war buildings. She is now one of the directors of the Tokyo Society of Architects and Building Engineers. Souhei Imamura is very active teaching and writing. Ever since I founded my office, I have had an unbroken series of teaching positions at various universities in Japan. The female students are really excellent. There are some social pressures that prevent women from becoming architects, but I feel that things are improving.

TD *Do you regard yourself as a woman architect, or simply an architect?*

IH Either is fine. I have no strong opinion on that topic. When I first started to think seriously about architecture, during my last two years of study at university, I was suddenly overwhelmed by doubt. I felt like a failure because I was insufficiently rigorous and logical in my approach. I used to think that I would always feel that way, as long as I practised architecture, but I began to realise that my sense of failure was due to my misgivings about architecture based on a 'male principle' and my inability to adapt myself accordingly. The more I was criticised for not being sufficiently engineering-minded, the more I began to consider what a feminine architecture, or a feminine architectural discourse, might be like. In retrospect, I was searching for an alternative 'female principle'. In the architectural world objective, public architecture occupies the centre, but my interests lay in the subjective, private architecture on the periphery. I recently completed a large project in Shanghai (Caohejing Block 3, 2014), which I won in a competition. We started by creating a complex pattern in sheets of perforated aluminium. I visited a textile art museum that displayed all kinds of Chinese lace, used in coats for women, which inspired the design of the perforations. When I made a presentation to the client representative he was delighted and said, 'At last we can do a womanly building. It is normal for both men and women to work here in China, and this is exactly the kind of building that we need.' So as society changes, perhaps such distinctions will disappear.

Translated from Japanese
by Thomas Daniell


NEW YORK
BUZĂU
EAST HAMPTON
PARIS
MILANO
LONDON
TORTORETO (TERAMO)
ROMA
BUCUREȘTI
CHICAGO
VENEZIA
MANTOVA
TOKYO
CALCUTTA
ODESSA
AMAGANSETT
SPRINGS
Tashkent
Santo Domingo
MANAOS
RECIFE
SIENA
SALT LAKE CITY
Chungking
KUNMING
KWEILIN
Hengyang
NAKYO
COMO
BERGAMO
CANAVERAL
Los ANGELES
SAO PAULO
BELEN
MADRID
PALENCIA
MONZA
MIAMI
BRUXELLES
GIBRALTAR
ALGIERS
CINCINNATI
TECUCI
RIVERHEAD
VIGGIU
OMAHA
ASMARA
NAGASAKI
CAMPULUNG
CASERTA
BARI
GAETA
SAG HARBOR
TIBILISI
BUTTE
CICERO
MALAGA
Bangkok
Cagliari
CAPE FEAR
SASSARI
BOMBAY
HOUSTON
LAS VEGAS
AMARILLO
Cameron
NEWARK
MILLBROOK
AMENIA
BILOXI
FLAGSTAFF
ATLANTA
WELLINGTON
PEPTH
ARARA
RIO
LUNE
CAPRI
PONPOSA
KANSAS CITY
KYOTO
WASHINGTON D.C.
WORCESTER
EDINBURGH
ZURICH
BATON ROUGE
JUAREZ
TOLEDO
TIANMA
BASEL
DUBLIN
TERRE HAUTE
PADOVA
EL PASO
BOSTON
GETTYSBURG
SEATTLE
LEHIGH
BALTIMORE
LISBON
JUNEAU
CADIZ
OTTUMWA
NAIROBI
CACHAN
NICE
COLOMBO
TEL AVIV
MINEOLA
PRINCETON
Copenhagen
PALAS
CHABUA
WATERMILL
AVIGNON
VOLCANO ISLAND
SAGATOHAK
TUPPER LEDYARD
WASHINGTON D.C.
HAZRAS
LENINGRAD
SAN FRANCISCO
MALAGA
MIDL
VOLTERRA
LAREDO
STOCKHOLM
BUZIAS
VICKSBURG
SELMA
HONDO
SAVANNAH
HATTERAS
RÂMNICUL SĂRAT
CARAMIE
RODI
GONDAR
ROXBURY
BUFFALO
STONINGTON
TUCSON
OTICA
WAIKIKI
BASEL
FOCSANI
ADEN
SAMARKAND
ANCHORAGE
S. FRANCISCO
NIAGARA
NOME
MOAB
KETCHIKAN
WILMINGTON
WELLFLEET
ROCHESTER
KEY WEST
CHEYENNE
LEADVILLE
GALLUP
TAHA
KARENTA
OZAMA
Puerto Plata
ONOMEA
CAPRI
Amarillo
Sarata Monteoru
MENDOTA
EAST JAMAICA
BRATTLEBORO
APPLETON
ODDEN
ALMERIA
Pomona Tapului
STEINBECK

Descent from Paradise

Saul Steinberg's Italian Years (1933–41)

Mario Tedeschini-Lalli

I didn't want to accept the reality, the betrayal – the way dearest Italy turned into Romania, hellish homeland.
Saul Steinberg, letter to Aldo Buzzi, 26 June 1995[1]

Life as Art

For most of his adult life Saul Steinberg (1914–1999) drew maps – maps of real or imaginary locations, maps of words and of concepts. Often the maps are of actual places refracted through the artist's mental constructs, as in *View of the World from 9th Avenue*, his famous *New Yorker* cover from 29 March 1976, which, reprinted as a poster, copied and appropriated for many other cities of the world, became his personal nightmare; even today, it remains the image that most easily identifies him. There is, however, another splendid map, completed ten years earlier; although intended for *The New Yorker*, it was never fully published in Steinberg's lifetime.[2] Titled *Autogeography*, it is a bird's-eye view of a green territory dotted with the names of many locales, large and small, from every corner of the world. A very blue, winding river flows through the territory, and on the bottom right it skirts a small lake with an island. On the island is the word 'Milano', while on the shore northeast of the island we find a locality named 'Tortoreto (Teramo)'.

Young Steinberg lived for more than seven years in Milan (1933–41), arriving from his native Bucharest to enrol in architecture school. In Milan he studied, loved, began to draw and publish and formed enduring friendships. By mid-1938, however, the institution of the fascist racial laws made his Italian sojourn perilous, and he began to seek safe haven elsewhere. In late April 1941 he was arrested as a Romanian Jew and sent to an internment camp in the small Abruzzi town of Tortoreto in the province of Teramo. The experience would continue to haunt him and to punctuate his correspondence. But never – at least not during his lifetime – did it translate into a coherent and conscious narrative. Steinberg feared 'autobiography – the last refuge of the scoundrel'.[3]

Nevertheless, in the mid-1970s, Steinberg's friend Aldo Buzzi convinced him to tape-record memories of his life, which Buzzi planned to edit for publication. However fascinated Steinberg was by this exercise, as well as admiring of Buzzi's editing skills, he never allowed the book to be published. As late as 1995, four years before his death, Steinberg thanked the Italian publishing house Adelphi for its willingness to print the book, but rejected the idea of seeing 'a tragic part of my life treated with *allegria*!'[4] He was especially hostile to a public airing of his Italian period, including the cartoons he published in the later 1930s in the satirical newspapers *Bertoldo* and *Settebello*. These works represented a moment in his past too much involved with 'jokes'. But he could also be more vehement on the subject of publishing these cartoons. To one proposal he responded angrily, 'what a bad idea! Blackmail!'; he feared that 'dark horrors' might be exposed.[5]

Even in calmer moments Steinberg remained averse to biographical enquiries, so that while he was still alive, only fragments of his story have surfaced. Some things he told to interviewers, others emerged in the chronology he dictated for the catalogue of his 1978 retrospective at the Whitney Museum of American Art, New York.[6] Such autobiographical comments, however, were often designed to be more provocative and concealing than informative. Other hints about Steinberg's life can be uncovered in his art (as in *Autogeography*), but these are incomprehensible without the biographical facts.[7] Only after Steinberg's death did his friend Buzzi publish a short book, *Reflections and Shadows*, an edited version of the taped narrative of the 1970s, followed by a selection of the letters Steinberg wrote to him over a 50-year period.[8] Since then a number of authors (notably Joel Smith) have greatly expanded our store of biographical data, yet the Italian period of Steinberg's life remains the least known.[9]

What happened to Steinberg during his seven-year Italian sojourn is both a personal history – Steinberg's happy embrace of western culture and the beginning of his career as a draftsman – and, with the imposition of racial laws in 1938, part of a collective history of fascist anti-Semitism. His was one case among thousands in the most widespread and dramatic historical event that befell foreign Jews living in Italy at the beginning of the Second World War. Steinberg's arrest and internment, his struggle to obtain the necessary papers, and his final escape are recorded in the journal he kept from late 1940. Enlivening the entries are the constant shifts between the pleasures or irritations of daily life and the dread of being entrapped in Mussolini's racial policies.

A Romanian Jew in Italy

Saul was the son of Moritz Steinberg, a printer–bookbinder who had a small business manufacturing boxes and cardboard wrapping materials. His birth certificate says he was born on 15 June 1914 in Râmnicu Särat, Romania (100 miles north of Bucharest; on the great river of life in *Autogeography*, the town is located near the river's narrow source on the left).[10] But he was to grow up in the Romanian capital, attending primary and secondary school and spending one year as a philosophy student at the university before seeking admission to the school of architecture at the University of Bucharest. Decades later, speaking to his former schoolmate Eugen Campus, he explained his decision to study architecture and his failed attempt at the admission exam:

If I had declared that I wanted to dedicate myself to art, my parents would have not supported me in school. So I declared that I wanted to study architecture. My parents agreed to this serious and prestigious profession, almost on the same level with medicine. Matchmakers started to show up at our house, offering rich partners for the future architect, even agreeing to sponsor my studies for a prolonged duration. Fortunately, I did not pass the admission examination, and so I left for Milan.[11]

He left in November 1933. Steinberg's Jewishness may have had something to do with his failure to pass the entrance examination. Since the early 1920s, anti-Semitic groups in Romania had been clamouring for the institution of *numerus clausus* in universities: a limit on 'foreign' (ie, mostly Jewish) students as a way to further the 'Romanisation' of professions. *Numerus clausus* was not introduced

Saul Steinberg, *Autogeography*, 1966
The Saul Steinberg Foundation, New York

until 1938, but in 1933 – the very year Steinberg's application was rejected – 'special entrance examinations were introduced and Jewish candidates were deliberately failed'.[12] The few Jewish students who did manage to gain admission (four out of 160 at the school of medicine in 1935) were subjected to physical attacks by fellow students and militants and were hardly able to attend classes. That was Steinberg's own experience: 'I was a college student for a year', he would recall later, 'but I hardly went to school because there was an atmosphere of brutality'.[13] More and more young Romanian Jews thus emigrated to France or Italy for their studies.

This increasingly anti-Semitic climate was something Steinberg would remember all his life. Any occasional expression of nostalgia for a childhood home tended to be coupled with a more vehement rejection of the society, culture and language of his native land.

'My childhood, my adolescence in Romania were a little like being a black in the state of Mississippi. It will be difficult … to understand – especially for a child – life in an anti-Semitic country such as Romania… The country is a cesspool.' 'In [the Romanian] language I have been humiliated, beaten, cursed and worse – for being Jewish, the only satisfaction those savages had…' 'I have what they call phantom pain, that is, strong and specific pain in the big toe of a leg amputated years before. It's the pain of the Romanian patriot I was until the age of eight or ten, when the anti-Semitism of the place made me renounce that fucking nation forever, remaining faithful only to the landscape, the smell, the house on Strada Palas.' 'I was embarrassed to be part of a primitive civilisation, and pledged that I would save myself from it – [by 1933], in fact, I was in Italy, and in America by 1942.'[14]



Saul Steinberg,
Milano–My Room–Bar del Grillo, 1937
Beinecke Rare Book and Manuscript Library,
Yale University

So the 19-year-old Saul abandoned Bucharest for Milan; in his valise were 'a pink, green and blue box of sugary treats, and some drawings'.[15] On 16 December 1933 he enrolled in the Regio Politecnico as an architecture student.[16] Steinberg was later to speak of the Milan period as his middle years, in which he carried out his transformation from 'easterner' to 'westerner'.[17] He lived in a series of rented rooms, then in a student residence and finally in a room on the top floor of the Bar del Grillo, a little place once at 64 Via Pascoli, a short distance from the politecnico.

In some of Steinberg's recollections these first years in Milan have a nostalgic, bohemian tone: 'I don't recall if I even had plates or flatware. During my first year, at the *pensione*, I ate gigantic portions of *rigatoni al sugo* with sage twigs and all the bread you could eat, followed by goulash or stew drowned in red sauce, which you mopped up with the endless bread'.[18] But in more candid reflections, he remembered 1934 and 1935 as unhappy years of loneliness and poverty. He had to wait until 1936 to have a good year, indeed an 'excellent' one, a 'paradise' year.[19]

July 1936 saw the first issue of *Bertoldo*, a satirical newspaper published by Rizzoli that brought together some of the best young writers and artists of the time. One of those writers, Carlo Manzoni, recalls that one day there appeared at the office

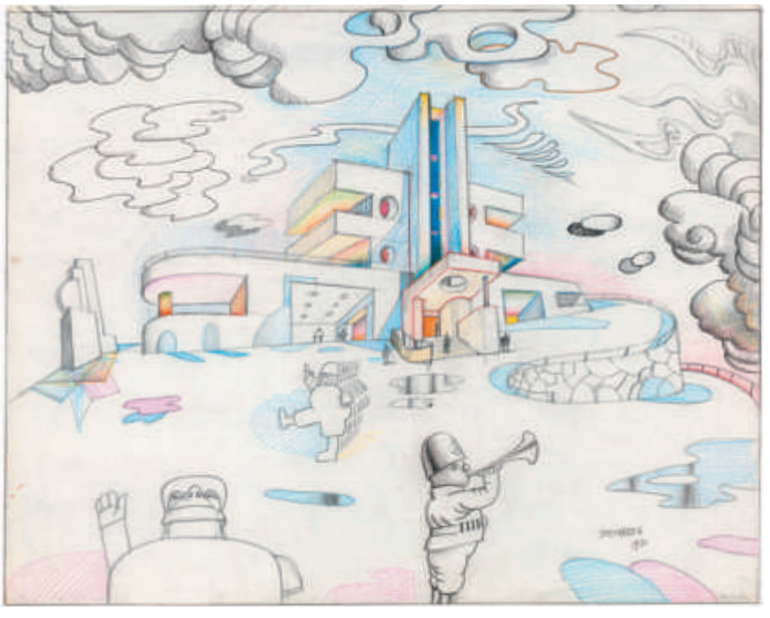
a young man with a blond moustache and glasses. He has a large portfolio under one arm. He puts the portfolio on the table and pulls out a paper with a drawing of a little man, a cartoon cloud exiting from his mouth: 'I would like to illustrate a short story by [Giovanni] Mosca', says the cloud. He pulls out more drawings and [Giovannino] Guareschi looks at them and places them aside. 'Okay', he says, 'when Mosca arrives I will show them to him. Give me your address.' The young blond man says that he's studying architecture, that he lives in the student residence, and that his name is Saul Steinberg.[20]

Steinberg, continues Manzoni, 'is immediately taken in by the group of friends'. His first drawing appeared in the newspaper on 27 October 1936 (signed with the pseudonym 'Xavier').[21] From that moment to the end of his official collaboration on 19 March 1938 Steinberg was to publish at least 204 cartoons in both *Bertoldo* and its supplement *Arcibertoldo*.[22] The number he actually created, however, may have been higher if the figure of '250 or more a year' later cited by the artist is correct.[23] The lonesome, cash-strapped student was no more: 'For those years and for my conditions', he said 22 years later, 'we were always very well paid. I could make a living, I could eat and sleep, buy neckties'.[24] These were years of intense activity – twice-weekly newspaper deadlines, summer visits to Romania and participation in a rich and lively intellectual ambiance.[25] By the spring of 1938 Steinberg was a star in his field: he quit *Bertoldo* for its competitor, *Settebello*, published by Mondadori, where he was officially part of the editorial committee, working not only as an artist but as the intermediary in managerial matters between the newspaper's two editors, Achille Campanile in Rome and Cesare Zavattini in Milan. He drew the ad for the revamped newspaper, and his first cartoon appeared on 23 April.

These years of 'paradise' for Steinberg were also the years of a groundswell of support for the fascist regime, a popular consensus that peaked with the invasion and conquest of Ethiopia (October 1935 – May 1936) and Italy's consequent diplomatic isolation. The first issue of *Bertoldo*, 14 July 1936, carried on its front page a large cartoon against the League of Nations, and the second issue mocked the ousted emperor of Ethiopia, Haile Selassie. Likewise, the 27 October 1936 issue that contained Steinberg's first cartoon had on its front page a huge reproduction of a telegram to Benito Mussolini: '44 Million Italians Express Their Gratitude' (for the anniversary of the founding of the fascist party). One should remember that all newspapers in Italy had to be authorised by

the government and remained under the strict control of the propaganda authorities, which periodically sent out very detailed guidelines on how to toe the official party line. Most often, the largest illustration on the front page of *Bertoldo* was devoted to a political cartoon. Cartoons exploiting traditional anti-Semitic stereotypes also appeared, even before the enactment of the 1938 racial laws. Afterwards, however, such cartoons acquired a particular nastiness. Still, the newspaper and its authors managed to walk the thin line between compliance and satire, sometimes mocking, albeit with a high degree of circumspection, the pomp and pretentiousness of some features of the fascist regime. Over and over, for example, *Bertoldo* artists would poke fun at monuments, drawing horses riding humans or triumphal arches too small for the passage of a military procession. Writers also mocked the rhetoric of some patriotic literature for boys and girls as well as the fascist directive to Italianise all foreign words; this latter policy the *Bertoldo* editors pushed to the extreme, with hilarious results.

The only record of how Steinberg felt at the time about working in such a political environment is not publicly recorded, except in a discussion he had with Eugen Campus in Bucharest during the summer of 1937. As Campus later recalled, Steinberg said that artists living under a dictator such as Mussolini were free from the need for 'demagoguery'. It was, Campus thought, as if Steinberg were advocating a sort of 'truce' in the fight against fascism, albeit as a 'paradox'.[26] Steinberg would privately admit that he was then living in a 'political vacuum', while 'there were other people who saw better than I did – who participated, who understood' what was happening.[27]



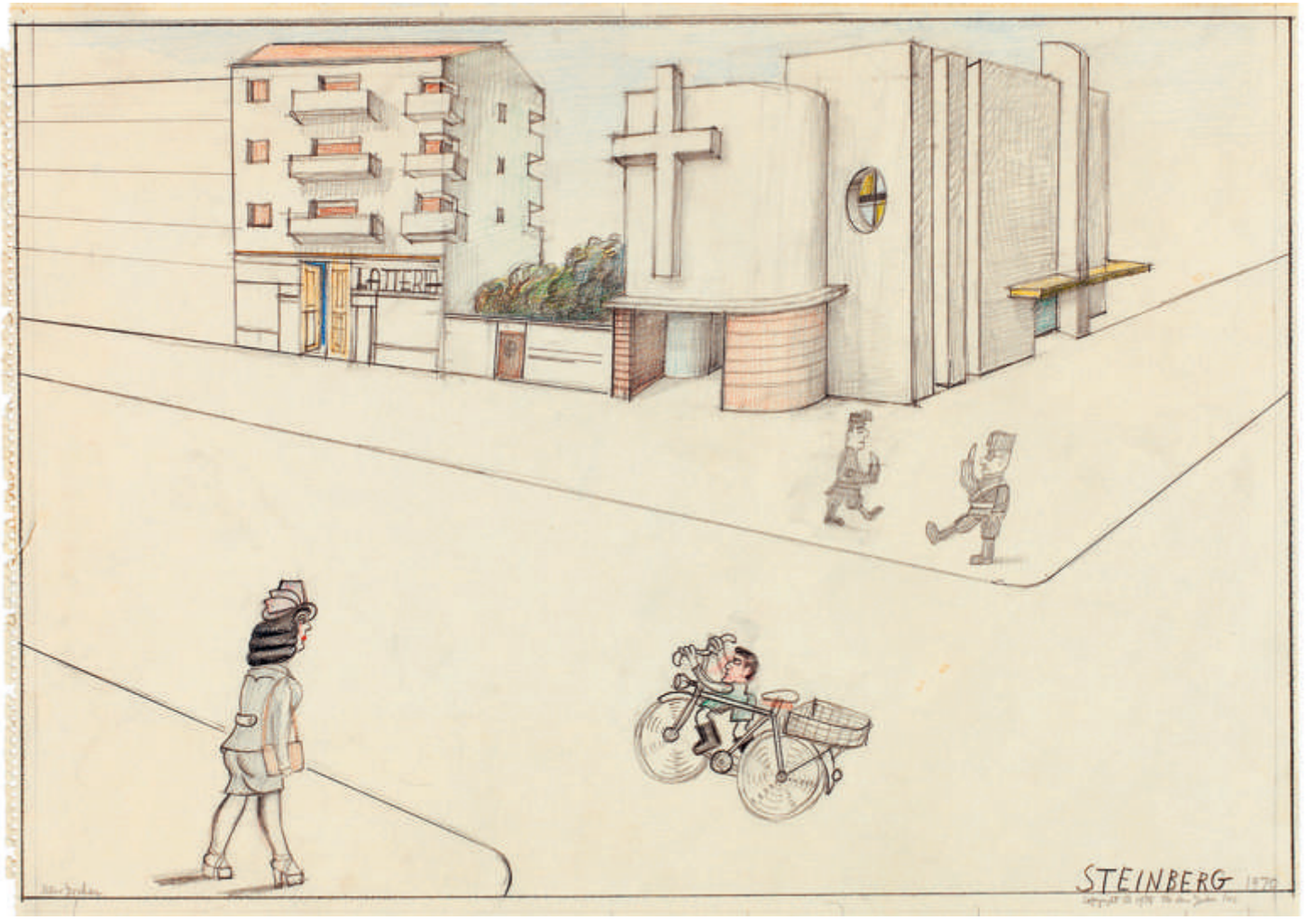
Saul Steinberg, *Milano Bauhaus*, 1971
First published in *The New Yorker*, 7 October 1974
The Saul Steinberg Foundation, New York

A few years later, however, newly arrived in America, Steinberg had to explain to government officials how a young Jewish artist had lived happily and worked so successfully for newspapers in fascist Italy – newspapers which, in 1941, even used some of his drawings (unsigned) in the propaganda war. While his later refusal to make public his *Bertoldo* and *Settebello* cartoons had, he claimed, a cultural basis (their concern with 'jokes' being implicitly too lowbrow), the aversion may be also rooted in the fraught and nuanced politics of the 1930s – a complex situation unlikely to be understood by wartime American authorities or even by later generations. In 1942, impatiently awaiting a visa to enter the United States, Steinberg asked his cousin Henrietta Danson, who was in New York working on his behalf, not to mention 'any my work [*sic*] in wartime Italy' to the authorities.[28] By 1944 a politically correct spin – not to mention a promotion – had been put on his Italian newspaper activities. An officer in US Naval Intelligence and the Office of Strategic Services (OSS) for almost a year, he was introduced to new superiors as someone who had been 'editor and publisher of a well-known paper violently opposed to fascism'.[29]

As late as 1978, in the chronology of the Whitney Museum retrospective catalogue, he still felt it necessary to explain his employment in the 1930s: 'In fascist Italy, where the controlled press was predictable and extremely boring, the humour magazines were a way of knowing other aspects of life, which, by the nature of humour itself, seemed subversive'.[30] Just two years later, recalling the pressure he put on Sandro Angelini to keep Angelini's son Piervaleriano from publishing a thesis on the *Bertoldo* and *Settebello* work, he would privately use strong language that may have been provoked by more than mere aesthetics – 'Who knows what dark horrors will surface?' 'The horrible work ... which uncovered my past ... Blackmail!'[31]

Steinberg's only other public response to his experience in fascist Italy came three decades after his flight, in a series of memory drawings of Milan. Some of them have a pretence of objectivity, with the streets and the buildings of the city rendered in postcard-like fashion, urban perspectives that seem to capture the architectural style of the times. But in other Steinberg drawings that very style became a retrospective political statement. He consolidated the different modes of architectural modernism practised in Italy between the wars into what he would mockingly call 'Milanese Bauhaus': perspectives are exaggerated, churches and apartment buildings are transformed into monstrous caricatures, all portholes, balconies, cantilevers, curved corners and jutting verticals. 'Milanese Bauhaus', often seasoned by Steinberg with art deco elements, symbolises the whole of modernist architecture prevalent during his Italian years – Bauhaus, rationalism, *Novecento*, monumentalism.[32] Such symbolic reductionism – a typical Steinbergian device – omitted the often complex and opposing realities of the Italian architectural scene of those years, not to mention the different artistic as well as political choices of some of the participants. Many architects coming of age in the 1920s did adhere to fascism, hoping that its claim to revolution would help modernise Italian architecture and transform an ossified cultural environment. But as the regime evolved, academic design morphed into a rhetorical monumentalism that invaded Italian cities. Rationalist architecture managed to express some interesting – indeed, beautiful – examples, but was definitely on the losing side. By the end of the fascist period, with Nazi Germany ruling half of the war-ravaged country, abetted by Mussolini's republic in the north, some of these people would choose to fight against fascism – and would die in the struggle.[33] In the 1970s, however, Steinberg consolidated the stylistic realities of prewar Italian architecture (not to mention aesthetic links with similar movements in other countries) to create an architecture that stood for fascism.

To stress his rejection of an architecture that he linked to a pompous and repressive



Saul Steinberg, *Via Ampere*, 1936
First published in *The New Yorker*, 7 October 1974
The Saul Steinberg Foundation, New York

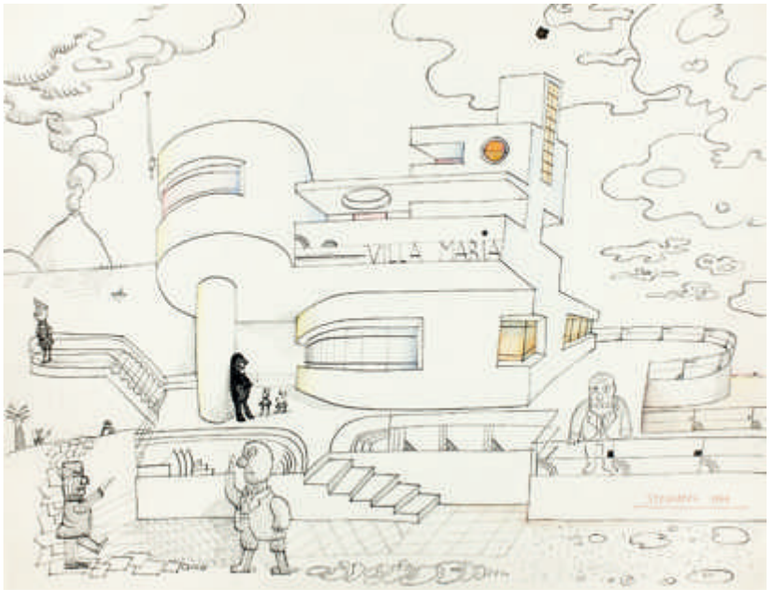


Saul Steinberg, *Via Pascoli a Milano*, 1971
First published in *The New Yorker*, 7 October 1974
The Saul Steinberg Foundation, New York

political regime – which may not have been evident to his public in the 1970s – Steinberg populates the drawings with telling figures: powerful soldiers marching, sombre men of mystery (usually rubber-stamped), moustachioed figures in black shirts and fez who leap to exchange Roman salutes and, in one drawing, goose-step in front of a building resembling the Palace of Justice in Milan, and in another from a building labelled the 'Villa Maria'.[34]

Paradise Lost

Steinberg's prospective and retrospective response to fascism was either coolly theoretical, as he averred in 1937, or politically activist, as his wartime statements and later images implied, but in real time, his was most probably just the good life of a young student who finally had money to spend and the opportunity to mingle with interesting intellectuals in a large European city that was not yet as overtly or as aggressively anti-Semitic as the intra-war Bucharest he had escaped from. His future seemed Italian, and he even began using an Italian name: Paolo, instead of Saul.[35] Whether this was also a conscious effort to underplay his Jewish roots or just a way to feel and sound 'like everyone else' is impossible to know. In either case, this good life would not last. With the imposition of racial laws in the middle of 1938, the world of 'Steinberg Saul of Moritz – Romanian Jew' (as he was referred to in his police file) changed radically, and the 'paradise' he found in Italy began to topple. 'It was horrible', he recalled two decades later, 'you had the stupid society turning against you'.[36]



Saul Steinberg, *Villa Maria No 1*, 1969
The Art Institute of Chicago,
gift of The Saul Steinberg Foundation, New York

In the autumn of 1938 foreign Jews were told to leave the country within six months. But finding refuge elsewhere was increasingly difficult, and Steinberg observed with growing panic the deteriorating situation of even Italian Jews (who numbered 37,000, according to the 1938 official census).[37] After their legal emancipation in the mid-nineteenth century, the Italian Jewish community had become arguably one of the most assimilated in Europe. It was all the more shocking, then, when the Mussolini regime began its racial discrimination and persecution campaign, which culminated in the Italian role in the Shoah. At the time there were Jews in the army, the judiciary, the state administration and in the fascist party itself. Even though discriminatory measures against Jews had begun much earlier, and a racist campaign was waged in the press months before it became official policy, many Jews were caught by surprise when they found themselves demoted to second-class citizens, or worse. The *Manifesto fascista della razza* was published on 14 July 1938 in *Il Giornale d'Italia* (issue dated 15 July) and then reprinted in other major newspapers. It claimed a pseudo-scientific justification for the Aryan purity of Italians; Jews were not Italians because they had non-European racial elements.

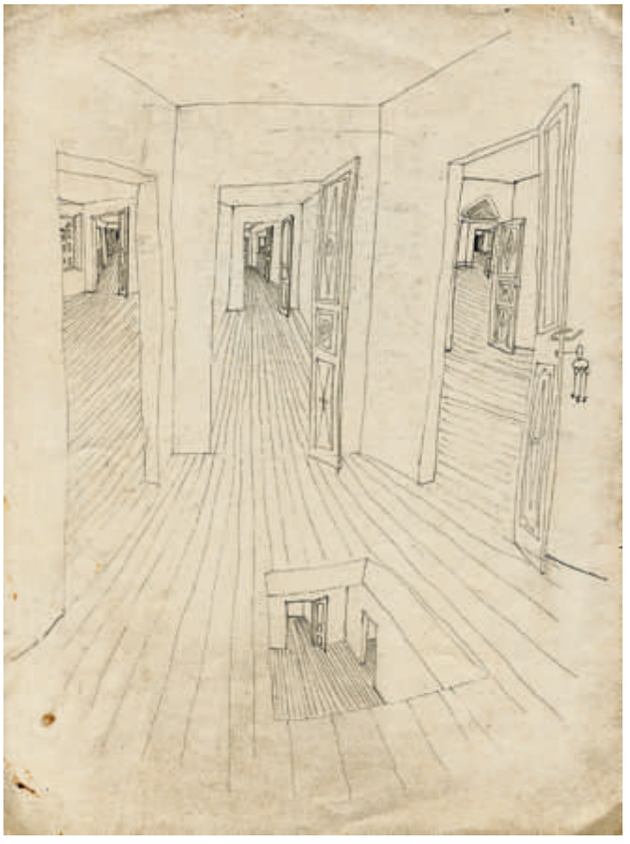
Restrictive laws against Italian Jews started to come thick and fast. By June 1939 Jews in all professions were banned from working for non-Jewish clients. Of course, Steinberg, as a foreign Jew, could not work at all, since foreign Jews were under an expulsion order. But in fact he was already out of business. His last signed drawings had been published in the 10 September 1938 issue of *Settebello*, just a few days after a meeting of the Council of Ministers that resulted in the first anti-Semitic law.[38]

That summer it seemed that Steinberg might not even be allowed to complete his studies. On 6 August, a month before foreign Jews were ordered out, Giuseppe Bottai, the Minister of National Education, had closed university courses to all foreign Jewish students, 'even those who had enrolled in previous years', starting with the academic year 1938–39. This draconian rule, however, had diplomatic repercussions since it affected foreign citizens studying in Italy, and the Italian government feared similar restrictions on Italian students abroad. Thus, a month later, the Ministry of Foreign Affairs intervened, announcing that foreign Jewish students who had already begun their university studies and had been properly enrolled for the 1937–38 academic year could 'carry on with their studies until they finished their degree'. It took until 16 January 1939 for the Ministry of National Education to issue an official clarification, but Steinberg had clearly got a reprieve: he could remain in Italy until he completed his degree, so long as he met one condition of the ministry: that those behind in their coursework had to catch up within the academic year 1938–39.[39]

At this point Steinberg was in the final year of a five-year course for a degree in architecture – and he had a lot of catching up to do. From the day his first drawing appeared on the pages of *Bertoldo* in October 1936, he had essentially stopped studying: between that moment and mid-January 1939 he had taken precisely one of his 17 scheduled exams, even though his student ID card shows stamps for six academic years, 1933–34 to 1938–39. 1938–39 was, therefore, his first year beyond the official five-year programme, and the last year in which the new rules allowed him to enrol at the politecnico and thereby maintain his legal residence in Italy. From the issuing of the 16 January ruling, Steinberg was therefore in a race against time – to complete his degree and, at the same time, to find some part of the world willing to welcome him.

Steinberg's forced departure from the pages of *Settebello* after September 1938 left him seriously short of funds. Documentary confirmation of his impecunious state begins in early 1939 in letters sent to his parents in Romania, asking them to send him money – over the previous couple of years he had supported himself with cartoon work.[40] Friends now occasionally lent him money, while others secured him work, most of it closely tied to his studies in architecture.

He was, he reported to his parents, 'picking up some architecture or interior design jobs together with a colleague of mine', although he didn't like it much (in a later interview he went so far as to say that 'I even practised architecture for a while – but I gave it up right away, I didn't like it. It's a horrible thing to be an architect … it has to do with a lack of privacy, lack of independence').[41] In a resumé compiled for the US Navy in 1945 he describes himself also as a 'designer' and adds: 'Occasionally I made designs for interior decorations'.[42] Little was known about such activities until a few years ago, when Francesca Pellicciari found an original sketch by Steinberg in the archives of the celebrated graphic design and advertising agency Studio Boggeri.[43] Pellicciari, who published the sketch for the first time, makes the plausible suggestion that it must have been Erberto Carboni, a famous member of the agency, who brought Steinberg in. Steinberg later remembered him with gratitude: 'A true aristocratic man, even in his appearance. During a rough time he gave me work'.[44] It was later discovered that Carboni helped him secure an assignment for a series of ads for Shell in the daily *La Stampa*, while architect friends like Vito Latis commissioned some interior design work from him.



Saul Steinberg, drawing for unknown Studio Boggeri project, *c* 1938–40
Archivio Boggeri, Milan

Help also came from another professional source, Cesare Civita, who had been the co-director of the Mondadori periodicals (which published, among other things, the Walt Disney cartoons in Italian), as well as a friend and collaborator of Alberto Mondadori. A Jew, he had fled Italy in 1938; a year later he was in New York, where he established himself as an illustrator's agent.[45] From across the Atlantic, he worked hard to get Steinberg published in the pages of American journals. And he succeeded: thanks to Civita's advocacy, Steinberg's work appeared in *Harper's Bazaar* (15 March 1940), *Life* (27 September 1940), and *Town & Country* (October 1940), as well as in a number of South American magazines.[46]

There was one other source of income from publications. Steinberg's friends at *Bertoldo* and *Settebello* were able to resume publishing his cartoons in November 1940 by concealing his authorship, as Erberto Carboni had done with the ads in *La Stampa* – in this case, by printing them without signature (though readers of the newspapers no doubt recognised Steinberg's hand). The journal speaks of such cartoons, which he was making right up to the day before his arrest in April 1941. The entry for 18 December 1940, for example, notes: 'five of my gags in an issue of *Bertoldo*' – in the same entry he announces, 'I'm broke'.

No Exit

Forced by the decree of the Ministry of Education to bring his coursework up to date during 1938–39, Steinberg crammed 16 exams into one year and managed to graduate with the presentation of a theatre project. The project has not turned up in the archives, but Vittorio Metz, *Bertoldo*'s co-editor, remembered that next to the building's entry Steinberg drew a stick figure with a lance in its hand, straddling a cow – 'to indicate the proportions', he claimed.[47] It was 4 March 1940, probably the last possible thesis examination date for the academic year 1938–39, conforming to university rules established by the racial laws.

Graduation, however, meant that Steinberg's legal residence in Italy was officially over, and he became more anxious than ever to get out. His diploma was inscribed to Saul Steinberg, 'of the Hebrew race', and printed, he commented later, 'in excellent taste, handsomely set in Bodoni, which rendered it even more sinister'.[48] These words transformed the traditional language of such degrees – 'for all legal purposes' – into a condemnation and a bureaucratic oxymoron: in the Italy of racial discrimination, the effect was to negate the diploma's validity. It became a diploma for working in a profession that was not open to Steinberg. Forty years later he would wax ironic about that piece of paper. Since he never worked as an architect, and since 'Vittorio Emanuele III, King of Italy and Albania, Emperor of Ethiopia', under whose power the degree was granted, no longer ruled these lands, nothing of the diploma remained valid except for the reference to the 'Hebrew race'. So it was, in sum, a 'diploma of Jewishness'.[49]

Accounts of Steinberg's efforts to leave Italy have occasionally been hampered by fiction. The Italian journalist Indro Montanelli reports an encounter in this period with Steinberg and Ugo Stille, the late editor of *Corriere della Sera.* The place was the newsroom of *Omnibus*, the first modern illustrated magazine in Italy, edited by Leo Longanesi. With brilliant but mean-spirited phrasing, Montanelli recounts:

With [Stille], another Jewish boy began to poke his head into the newsroom occasionally, a refugee from Bucovina, and one destined to be talked about as the greatest caricaturist and cartoonist of the century: Steinberg. Together they had so much affection for Italy that they didn't want to leave, not even when Italy joined the war as a German ally. 'But what sort of Jews are these two?' yelled Longanesi, 'Jews are, by definition, wanderers, and these don't want to wander, not even if you kick their asses!' Finally we succeeded in persuading them to seek American visas just in time to escape the Gestapo's raids.[50]

Well told, like all of Montanelli's stories, but untrue – at least with regard to Steinberg.[51] We know, in fact, that in late 1939, Steinberg had begun contacting relatives and friends in an attempt to leave Italy. Harry Steinberg, a paternal uncle who had emigrated to America

in the 1890s, received a phone call from an Italian claiming he had news of his nephew, whom he had last seen as a 12-year-old boy. The man was Civita, who soon visited the Steinberg family in the Bronx to ask for their help in bringing Saul to America. Young Steinberg would find great success as an illustrator and cartoonist, he assured them. Civita's visit mobilised Steinberg's cousin Henrietta, her husband, Harold Danson, as well as other relatives in Colorado, all of whom worked, along with Civita, to obtain a visa for Saul and pay for his passage. From the moment Civita first contacted the Steinberg-Danson family, however, it would be almost two years before Saul managed to leave Italy, and another year after that before he arrived in the United States.

In those two years Steinberg was one of thousands who found themselves stranded in Italy. In the autumn of 1938 about 3,100 foreign Jews were permitted to remain in the country, while about 8,800 were ordered to leave; some 5,000–6,000 still managed to enter Italy from Germany or German-dominated countries on a 'transit' or a temporary 'tourist' visa. Many of these Jews, along with Italian Jews deprived of citizenship by the racial laws, wanted to leave, but lacked the money or the papers to do so. And the outbreak of war in September 1939 made things all the more difficult, even if Italy had not yet joined the battle. Only those few who made the immigration quota for their country of birth were able to gain entry to the United States, while a handful of visas were obtained for some Latin American countries. In the meantime, international transportation – especially across the Atlantic – became more complicated. When Italy entered the war, on 10 June 1940, transatlantic passenger ships ceased departing from Italy, so instead of sailing from Genoa, it became necessary to pass through Portugal to reach a ship bound for America. But this indirect route required transit visas – visas that were sometimes dependent on other visas, which often expired before the whole journey was completed. Furthermore, the available boat passages were few and expensive.

Many Jews were aided by DELASEM, the Delegation for the Assistance of Jewish Emigrants (Delegazione per l'assistenza agli emigranti ebrei), founded in December 1939, with headquarters in Genoa and offices throughout Italy. It was an official organisation created with government authorisation, under the auspices of the Union of Italian Jewish Communities (then 'Unione delle comunità israelitiche italiane', now 'Unione delle comunità ebraiche italiane'). DELASEM's aim was to give foreign Jews in Italy financial and administrative assistance with the emigration process.[52] In the first seven months of its existence, DELASEM aided approximately 9,000 Jews – residents or those in transit – and about 2,000 managed to leave with its help, the majority of them on Italian ships. However, when Italy declared war in June 1940 there were still about 3,800 foreign Jews in Italy, Steinberg among them.

Steinberg apparently managed without financial aid from DELASEM. But the organisation lent crucial assistance at the very end of his internment in June 1941, which suggests that he had been in touch with them earlier about his paperwork. The practical matters of dealing with consulates and the Italian authorities could be frustrating and complex, all the more so after Steinberg's graduation from the politecnico, which marked the end of his legal residence. Now the young Romanian Jew anticipated being stopped and expelled from one moment to the next: 'In the spring of 1940, shortly before Italy entered the war, I expected to be arrested'.[53] And surely the prospect of being forced back to that 'fucking nation', where anti-Semitic measures were doubling daily, and which was soon to be marshalling its troops with Nazi Germany, added fear to bureaucratic tangles. So much so that Steinberg began to regret having stayed in Italy through graduation, instead of leaving before the war 'when everything was simple. Now', he added, 'it's too late, it's impossible to leave and I don't know if the degree of architecture will be useful to me in the present or future situation'.[54] An attempt in April 1940 to get a visa for the United States failed. So did an attempt to get to Portugal in May, when the authorities denied him a tourist visa because he was a Romanian Jew. Thus, in the weeks preceding and following Italy's declaration of war, Steinberg's American supporters came up with the idea of having him emigrate to Santo Domingo, bringing him one step closer to the United States. He tried unsuccessfully to obtain a visa himself from the Dominican consulate in Genoa. On 7 June the Dominican Republic Settlement Association, writing to one of those supporters about the required documents for a visa, observed that the matter could wind up being 'purely academic, as it is questionable whether there will be any boats out of Italy from now on'.[55] Even Civita feared

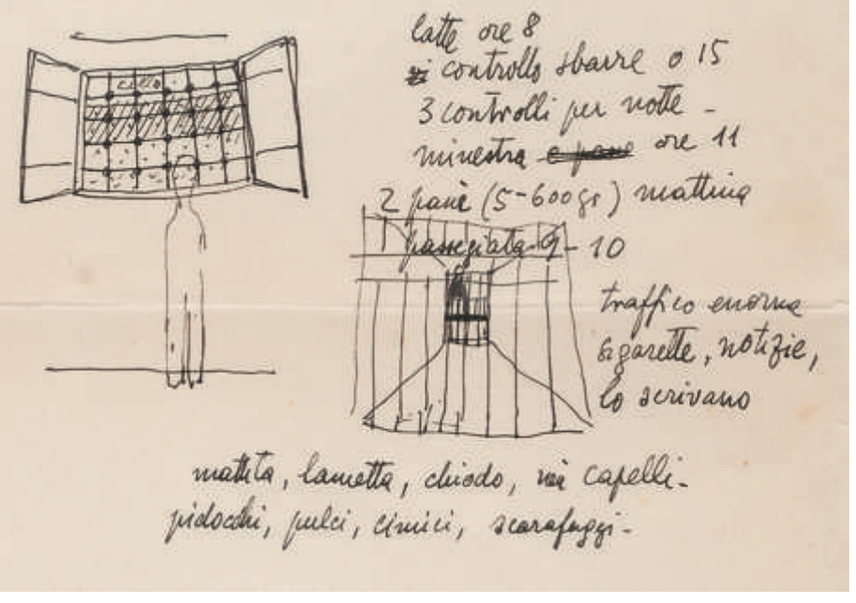


that it was 'too late now to get Saul out of Italy', but persisted in his efforts to get him a visa: 'perhaps he might find some way we cannot foresee to reach Santo Domingo or Ecuador'.[56] The paperwork went ahead, and on 8 July the association telegrammed Henrietta Danson that the visa for Saul was ready at the Dominican Legation in Milan.[57]

Steinberg's Dominican visa is dated 26 July 1940, seven weeks after Italy entered the war against France and England. It must have been a precious document to him because it promised deliverance from an alarming consequence of the declaration of war, the internment of civilians deemed dangerous to the Italian regime: subjects of enemy countries capable of carrying arms, those suspected of espionage, or with questionable political affiliations. People were arrested, brought to a police station or a jail, and then transferred to the so-called 'places of free internment' or to the *campi di concentramento* (internment camps) organised and run by the Ministry of the Interior. 'Free internment' meant that the detainee was deported to a small village and forced to live within its boundaries, subject to constraints such as curfews and roll calls. The internment camps were collective places of confinement, with the internees allowed

only limited contact with the population. Most of the camps were situated in southern Italy or in isolated central Italian regions, distant from possible war fronts and prying eyes. The physical facilities differed widely – villas, apartment houses, convents, even theatres had been taken over and adapted for the purpose; in other cases, as at the camp of Ferramonti di Tarsia in Calabria, fenced-in barracks were built.

Italian Jews as a whole were not considered candidates for internment, but they came to represent over 11 per cent of all Italian internees, about ten times the proportion of Italian Jews to the general population: much harsher criteria were clearly used to assess their supposed risk. Foreign Jews like Steinberg presented a complicated problem, since they had been directed to leave the country but lacked exit papers. Although the policy of the Ministry of the Interior was to facilitate the departure of foreign Jews, the breakdown in international communications after Italy's entry into the war radically changed the situation. A DELASEM report to the ministry dated 22 July 1940 announced that there were 150 Jews with visas for the United States, 50 with visas for Santo Domingo (within four



days, Steinberg's would arrive), and a few others with visas for Palestine or Shanghai – but no one knew how to get them out of Italy. War had no sooner been declared than the government decided to ease the worsening logjam by subjecting foreign Jews to internment as well, justifying the practice with a dose of racism. On 15 June the chief of police ordered the arrest of Jews 'from countries with racial policies' and of stateless persons between the ages of 18 and 60: 'These so-called undesirable elements', he wrote in a telegram to the prefects and the police commissioner in Rome, 'filled with hate towards totalitarian regimes, capable of any deleterious action, must be immediately removed from circulation to defend the state and public order'. 'Hungarian and Romanian Jews', he specified further on, 'must be' – in the euphemistic language of the ministry – 'removed from the Kingdom'.[58]

The beginning of the round-ups shattered both Jews and their organisations. 'In the last few days the arrests spread like wildfire', wrote Gastone Polacco, a DELASEM official in Milan to the Genoa headquarters on 20 June 1940. On 22 July he described a recent roundup in Milan:

Saul Steinberg, San Vittore Prison, Milan
Journal entry, 28 April 1940
Beinecke Rare Book and
Manuscript Library, Yale University

There were about 100 arrests made, more than half of these [people who] voluntarily presented themselves [to the police] on the basis of lists given to us [by the authorities]. We have managed to have jail time reduced to the minimum possible, so that now those arrested are sent to their destinations usually on the second night following the arrest. We were unable to do anything about the manner in which the prisoners are accompanied: however, it appears to us that as soon as they board the trains, they are freed of their chains and it seems that the chains are not put back on.

By 12 August Polacco reported that 'our situation is to be considered absolutely terrifying and could give way to the most tragic and unthinkable consequences, as we must provide, practically forever, for the upkeep of nearly 900 persons, without any arrangements of any kind'.[59]

Steinberg certainly witnessed the fate befalling fellow foreign Jews in his own city, and it shattered the illusion that he had found a real home in Italy. 'I didn't want to accept the reality, the betrayal – the way dearest Italy turned into Romania, hellish homeland'.[60] But this was written more than half a century later, and in a private letter. His public descriptions of life in post-1938 Italy were recast as amusing anecdotes. In the 1970s, he breezily recounted how he managed to escape the classic arrest hour, between 6am and 7am, by waking up a little before 6am, riding around Milan on a bicycle borrowed from Giovanni Guareschi, and then returning to bed at 7am. But one morning, just as he was about to go out, the youngest of the four sisters who ran the Bar del Grillo, where he was staying, warned him that the police had arrived. He managed to flee by means of a secondary exit; returning at 8am, he was 'welcomed like a hero'. 'They told me that one of the policemen, a real Sherlock Holmes, had felt the bed and said, ''It's still warm''. The policemen were poor devils, southerners who did this job without taking any interest in it. But their laziness, the fact that the organisation did not function well, resulted in an inefficiency that would then be converted into a lack of injustice.'[61] The stereotypical observation about the good-humoured inefficiency of Italian bureaucracy sidesteps the repressive force that the Ministry of the Interior managed to exert with studied *souplesse*, as it tried, and to a certain extent succeeded, in forcing its victims to collaborate in the arrest process.

An Aborted Escape

With his Dominican visa in hand Steinberg now had to find a way to get to Lisbon, where he had passage booked on a boat to New York. A ticket awaited him. DELASEM had proposed to the ministry that refugees heading for America board their vessels in Lisbon, and that they get to the Portuguese capital on ships bound for Spain, or fly via Barcelona 'using the services of the Ala Littoria'.[62] The proposal was accepted, but Spanish ships no longer provided real passenger service, and Ala Littoria flew to Barcelona only once a week; furthermore, the flights were expensive, and the few available seats were often reserved for diplomats and official delegations. Between 10 June and 30 November 1940 only 202 people managed to leave Italy by these means. But Steinberg was one of those who made it out, if only briefly.

On 26 August Civita sent him a telegram: 'Intervention by state department at the American consulate should authorise it to grant transit visa for the United States; even if you do not have it by Tuesday, depart nevertheless for Lisbon. Civita'[63] – which

Steinberg did, since there is no US visa in his passport, only a Portuguese transit visa stamped on 29 August and a Spanish one dated 3 September. On Friday 6 September he managed to leave on an airplane for Lisbon, via Barcelona-Madrid. But at Lisbon airport something dramatic happened. Portuguese authorities denied him entrance and sent him back to Italy the next day on the very same plane. This was to remain a catastrophic event in Steinberg's life. A diary entry for 6 December begins with the statement: 'three months since my return from Lisbon', and a little later Christmas is described as 'a day as sad as the 6 and 7 of September'. Decades after, he still spoke of 7 September as a 'most dramatic disaster – my black Friday'.[64] Yet in the autobiographical notes prepared for his 1978 retrospective at the Whitney Museum, there is not the slightest mention of this disaster. Nor can it be found in Steinberg's narration in *Reflections and Shadows*, where he merely notes that in the quest for visas to leave the country, 'the only one missing was the Italian one, which they wouldn't issue without my physical presence, proof of having obeyed the law'.[65] The missing Italian 'visa', however, probably refers to his second flight from Italy several months later. In the summer of 1940 it would have been unthinkable for a foreign Jew to board an airplane from Rome without an official exit permit.

The real reason for the September disaster in Lisbon has only recently come to light in the form of Portuguese documents, which tell a story Steinberg probably never knew. When he had applied for a tourist visa in May, the Portuguese foreign ministry denied it, on the principle that it brought the country one step closer to becoming a dumping ground for 'undesirable' Romanian Jews. As a result of the ministry's letter to the secret police (PVDE, a powerful body during the autocratic regime of António de Oliveira Salazar), Steinberg was put on an unwanted list. It was therefore to the 'great surprise' of the border police at the Sintra airport near Lisbon that the artist showed up on 6 September, carrying a valid passport and a valid visa signed by the Portuguese honorary consul in Milan, Giuseppe Agenore Magno, three months after the first refusal. The police went by the book and denied him entry, while the consul – one of a number of Portuguese diplomats who helped Jews finding safe havens – was disciplined for his action.[66] The fact that Steinberg was supposed to board a ship bound for New York but did not have an American transit visa may have reinforced the decision of the police, who would have been unwilling to let in another refugee lacking the papers to leave. This is probably what Steinberg himself thought had happened, since two years later, just before his actual arrival in the United States, Civita's secretary had to reassure him: 'As to your documents, please believe that they are now in perfect order, and that there is not the slightest danger that the events of Lisbon will again take place'.[67]

On the Paperwork Trail

September 1940: Saul Steinberg was back in Milan, without a job, without permission to stay in Italy and, most important, aware that he could be arrested and interned at any moment or forcibly sent back to the 'primitive' and detested Romania, where a change of regime – for the worst – had just taken place. In Bucharest on 6 and 7 September, the very days when Steinberg was at Lisbon airport, General Ion Antonescu and the extreme right-wing group known as the Iron Guard staged a coup that ousted King Carol II and set up the so-called 'National Legionnaire State' along fascist-Nazi lines, and the Italian press was awash with coverage. To make things even clearer to the young Romanian Jew in Italy, the *Conducator* Antonescu explained in an interview to an Italian newspaper that rabid anti-Semitism was now official policy:

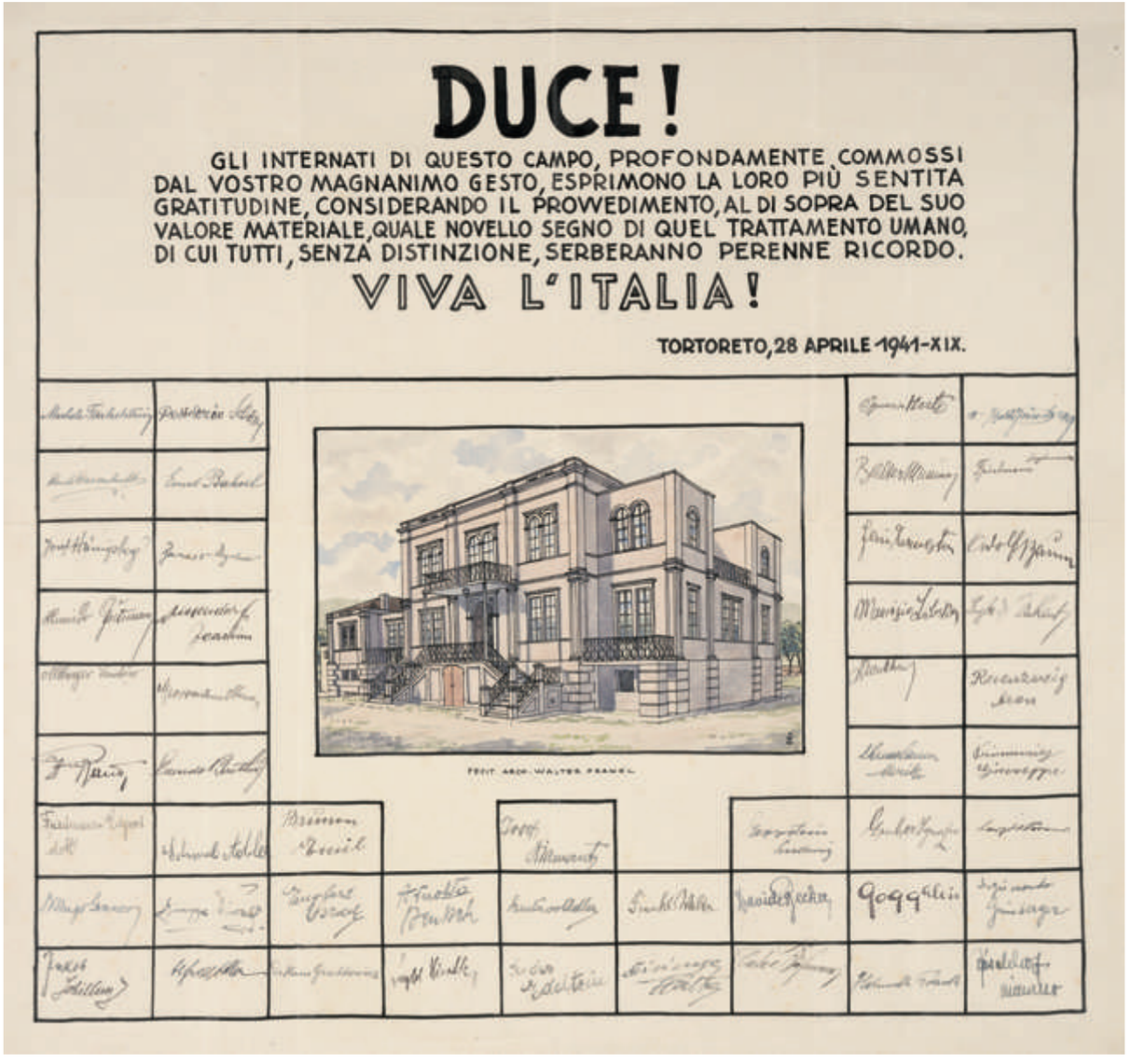
I will solve the Jewish problem ... by gradually substituting Jews with legionnaires who will ready themselves in the meanwhile. Most Jewish property will be expropriated and compensated. Jews who arrived in the country after 1913 ... will be sent away as soon as possible, even if they have become Romanian citizens, while the others – I repeat – will be gradually replaced.[68]

Steinberg spent this period living at home in the apartment above the Bar del Grillo and in the houses of friends, in particular the studio of his colleagues Aldo Buzzi and Luciano Pozzo on Via dell'Annunciata.[69] As we have seen, he combined a little under-the-radar work for newspapers with a few advertising assignments and commissions for architect colleagues, and seems to have received financial help from his friends and acquaintances. His romantic life was filled with the woman whose name punctuates the journal, Ada or, in the affectionate diminutive, Adina. Ada Cassola probably met Steinberg in 1937. Six years older than him, she was married (and later went by her husband's name, Ongari) and a Catholic.[70] Their relationship was intense, and a mixture, as the frequent journal entries show, of longing and occasional annoyance.[71]

The main task for Steinberg in the autumn of 1940 was to renew now-expired visas so that he could leave once more for Lisbon. He seems to have been aiming for a late December departure, since his journal for 8 December records that the USS *Siboney*, which sailed between Lisbon and New York, was scheduled to leave in 12 days. On 17 November he got a 'Transit Certificate' stamp from the US Consul in Milan; on 27 November, having somehow cleared his position with the authorities in Lisbon, he managed to receive another Portuguese transit visa, this time from the consul in Genoa. But his Romanian passport, reissued the previous year, was to expire two days later, on 29 November 1940, and the Romanian Legation in Rome would not renew it, 'without giving any reason', according to Steinberg. What he may not have known was that the Legionnaire regime, as part of its anti-Semitic policy, was now targeting even those Romanian Jews who were abroad: 'passport renewals were denied for a wide range of reasons (not having paid military taxes, for instance), and return to Romania became more difficult'.[72] Discovering that Steinberg's passport was no longer valid, the Spanish consulate cancelled the transit visa it had just granted. As he explains in the 6 December 1940 journal entry, he had to start all over again: 'I had a Romanian passport, it was no good at all, it was like an indictment'.[73]

In the meantime, however, the situation in Portugal had become even more chaotic. At the end of October a famous American journalist arriving in Lisbon found the city to be 'an international whirlpool into which were swept from every direction, people of all nationalities, races, colours and tongues, none wishing to stay, but all forced to remain long days, weeks and sometimes months awaiting transportation'.[74] There were refugees who lacked valid visas for their countries of destination as well as visa-holders who could not find a berth on a ship. So many people were flocking to Portugal that until February 1941 the authorities denied entry even to those with legitimate transit visas.

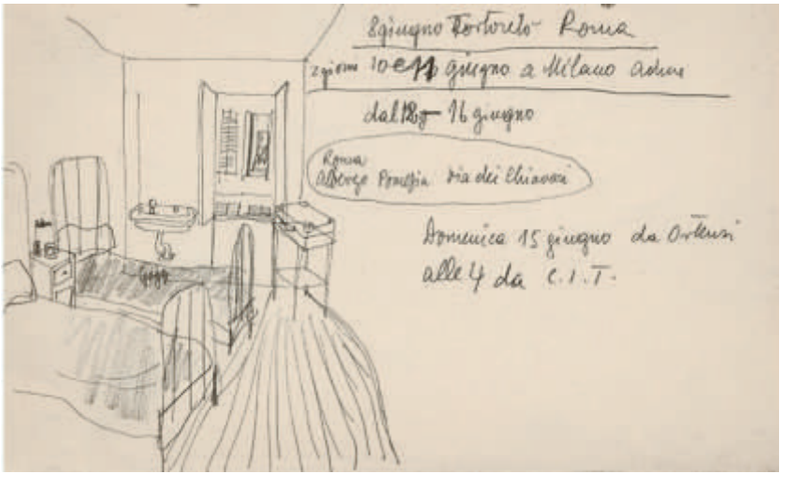
Steinberg's journal for these later months of 1940 tells of his comings and goings between Milan, Rome and Genoa to renew



Walter Frankl, thank-you note to Mussolini
with a drawing of the Villa Tonelli
28 April 1941
Imperial War Museum, London

visas and permits, and of an uneasy relationship with the American consulate. In the 30 December journal entry the vice consul had been 'tight-lipped' when Steinberg applied for a transit visa earlier in the month, but on 16 January the US consulate issued an 'Affidavit of Travel', with a photograph and biographical details that somehow could be used to corroborate his now-expired passport. But the journal entries also speak of films he has seen (*Stagecoach, Piccolo mondo antico, Jamaica Inn*), of visits to galleries, of air raids, of the bombs on the Porta Ticinese neighbourhood and of his hopes to work again for *Settebello*; he writes of his disappointments as well, and of his clearly complex relationship with Adina. We also learn from the journal and elsewhere of his friends' efforts to persuade the police authorities to go easy on him. For example, in an unpublished passage of the dictated memoirs that became *Reflections and Shadows*, Steinberg describes a 'pact with the police headquarters' set up 'through Mondadori and Mondadori's acquaintances', ensuring he would be treated well at the moment of his arrest. 'I believe', he adds, 'a certain Captain Vernetti was helpful to me'.[75] Vernetti also appears in the journal entry for 8 January 1941 as the bearer of 'extensions' and of both good and bad news; then, on 24 and 27 April as the police officer who arrested him and brought him to prison.

In fact, between hiding out and moments of accord with the local police, Steinberg managed to escape the attentions of the central authorities until February 1941. What happened to him then can be reconstructed from documents in the 'Steinberg Saul di Moritz' folder still in Central State Archives in Rome. On 21 February a telegram from the prefect of Milan informs the ministry about this young Jew who, 'having been warned to leave the Kingdom', now declares that he cannot do so since his passport has expired; and even though he has a travel affidavit for the United States, he has not yet obtained new transit visas for Spain and Portugal. This conundrum seems to create some kind of bureaucratic embarrassment, and the prefect asks Rome for 'directives'; in reply, the ministry asks the prefect to 'formulate concrete proposals'.[76] Two weeks later the prefect proposes that, as 'the foreigner in question is unable to leave the Kingdom', he should be 'assigned to an internment camp'.[77] This last memo from the prefect is covered with annotations in various hands. Scrawled across the top is 'nulla a debito' – there was 'nothing against the subject'. Another, dated 25 March: 'Transfer to Tortoreto internment camp'. The actual order is found in a memo dated 31 March, though it was not immediately enforced. In the meantime, Steinberg spent from late February until 16 April 'awaiting Rome's decision'; he may, sometime in April, have been taken by the police for a short time and then released ('16 April already out', he notes).[78] Another ten days passed before Steinberg, who was busy trying to complete work projects, showed up at the police station. He turned himself in on 27 April, was taken to San Vittore, Milan's central prison, and from there to the camp of Tortoreto in the province of Teramo.



Saul Steinberg, bedroom at the Hotel Pomezia, Rome
Journal entry, 12–16 June 1940
Beinecke Rare Book and Manuscript Library, Yale University

Internment

'As a child, I dreamed of being the Count of Monte Cristo, of writing my diary with my own blood. When I found myself in prison I understood I had become an interesting subject for a novelist', even amidst the 'sadness that was permanent'.[79] In sum, San Vittore prison was a romantic 'grand adventure', which Steinberg described in his journal entry of 28 April (in ordinary fountain-pen ink) with punctilious curiosity: the chamber-pot and the arrival of the *scopino,* the prisoner assigned to clean it; playing cards with a deck made from tobacco papers, the red ink drawn in blood; the schedule for prisoner checks and the 'enormous trafficking' of cigarettes and news. And all this illustrated with drawings. The sketches of the three-man cell 111, second wing, along with views down corridors and through barred windows, are brief and informative, the first in a series of graphic notations Steinberg would make in the following months about his new places of residence. But Steinberg's verbal and graphic inventory of prison life dodges the real horrors of the San Vittore jail, where he spent four days, though some prisoners waited for several weeks before being transferred. They were treated like the common criminals alongside them, an experience described as 'the most harsh and humiliating of the entire adventure'.[80]

On 2 July 1940 the ministry sent a memo to police headquarters, urging officials to transfer the detainees to internment camps as soon as possible. Prisoners incarcerated in San Vittore were not informed of their final destination. Steinberg's biggest fear, noted in his journal on 30 April, was that he would be sent to 'Ferramonte', that is, Ferramonti di Tarsia, the large camp in the province of Cosenza (Calabria), about 150 miles south of Naples. The only purpose-built camp, eventually housing 2,000 prisoners, it was located in a marginal and depressed area where malaria was a constant menace, as the Milanese Jewish community had just learned from a first-hand observer.

Steinberg was not shipped to Ferramonti; on 1 May, accompanied by two policemen, he was taken on a train headed for Tortoreto, a small Adriatic town in the Abruzzi. In *Reflections and Shadows* he recounts his journey in tones that personalise geography: 'During that wonderful trip I saw perilous mountains for the first time, with the train going ever so slowly along the edge of the abyss, which was precisely my situation'.[81] In the journal entry for 1 May, however, there are no adventurous voyages described, only a simple itinerary, Milan–Bologna–Rimini–Ancona, along a route that is actually very flat. He spent the night at Ancona station, where he managed to send his parents a postcard, written in an upbeat tone, which says nothing about his internment: 'I'm constantly on the road in my attempt to leave.

I hope I'll succeed soon. I'm well and hope to give you good news. In any case, even if I don't succeed right away, I'll console myself with the idea that sooner or later I'll succeed.'[82] He arrived in Tortoreto, his journal tells us, at 10.30 in the morning on 2 May: 'I see the sea, beautiful'.

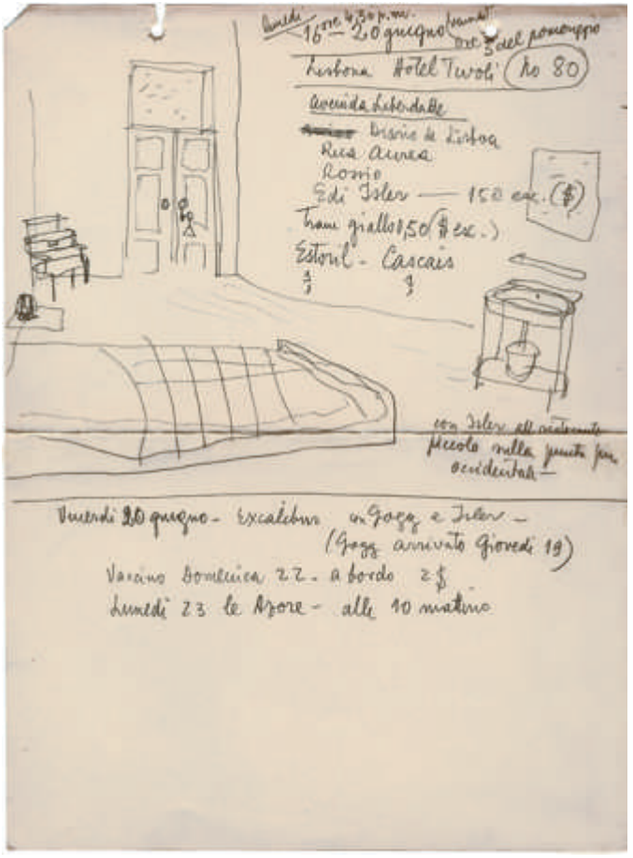
In the township of Tortoreto there were two different camps: one in the centre of Tortoreto Alto, a village up in the hills, the other, to which Steinberg was headed, in Tortoreto Stazione, the area around the railway station, known after the war as Alba Adriatica. The camp, he tells us in *Reflections and Shadows*,

was a villa from which you could see the sea, but you weren't allowed to go to it. The camp was small, with perhaps 50 internees: a few Jews, White Russians, gypsies, stateless persons, refugees, being held there in a fairly makeshift and human fashion as compared with the other camps. I was lucky.[83]

The 'villa' was the Villa Tonelli, a two-storey building with a large garden in front, a living room, kitchen, ten large rooms on both the ground floor and the floor above, along with nine other habitable rooms; the police authorities deemed it suitable for interning 75 people. It was not fenced in, and the prisoners were allowed, under escort, to walk about for an hour a day.[84] Officially, contact between prisoners and local residents was prohibited, but Elena Zanoni, then living in the villa next door, tells of how she and her friends, out strolling one day, became aware of a new arrival, a 'romantic young man who fascinated all the girls on account of his good looks'. Some quick detective work revealed that he answered to the name of Saul Steinberg. He stood out so much that after just a few weeks in Tortoreto 'the town girls' were calling him by his first name, in the Italianised version of 'Paolo'.[85]

Life went on in the form of daily roll calls, attempts to fill the empty hours and the search for food. Prisoners with no money were given a daily stipend of 6.5 lire, which was raised to 8 lire a little before Steinberg's arrival – a raise for which the prisoners sent a thank-you note to Mussolini, illustrated by the architect Walter Frankl, a fellow inmate.[86] These funds went to the common mess, where, Steinberg recalled, 'there was quite a traffic in bread: fresh bread, dry bread, all kinds of bread. Grass and herbs, a bit of onion, were added to make bread soup, bread pies'.[87] Playing music was permitted, even if it had to be somewhat muted.

At night we had curfew, and these 30 people gathered together in the dining room with the lights off, and there was one man there who was a good violinist, he had a fiddle with him, and he played the fiddle … very quietly so that the guard wouldn't wake up, and in the dark played … some Beethoven, some classical music. It was beautiful… I still get goosebumps about that music.[88]



Saul Steinberg, bedroom at the Hotel Tivoli, Lisbon
Journal entry, 16–20 June 1940
Beinecke Rare Book and Manuscript Library, Yale University

The fiddler was most likely the violinist Alois Gogg, an Austrian who would eventually be freed along with Steinberg and, like him, sail from Lisbon to New York.[89]

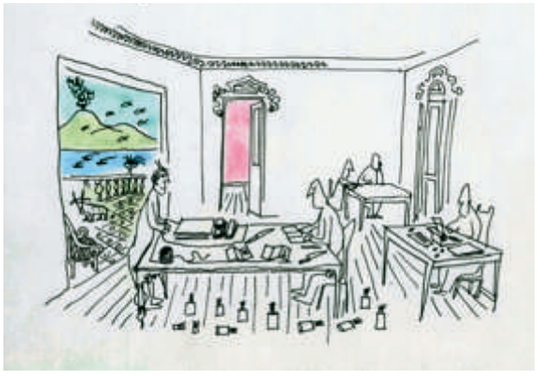
Steinberg spent his time drawing, painting, writing, receiving letters and handling the paperwork necessary to secure his missing visas. At the time of his internment he had a new reservation on a ship scheduled to embark from Lisbon on 20 June. He therefore asked for authorisation to leave Tortoreto to complete his paperwork. Such requests were not unusual, given that government policy was to help foreign Jews leave Italy. In Steinberg's case, the prefect of Genoa advised against allowing him to travel to the city, while a few days later the ministry agreed to let him travel to Milan. All these efforts, however, became unnecessary, thanks to the intervention of DELASEM. On 4 June their office in Rome wrote to the ministry requesting an immediate release for Steinberg so that he could catch a plane in Rome on 12 June in order to make his scheduled departure from Lisbon. Permission was granted on 6 June, and two days later Steinberg boarded a train for Rome with Gogg. Writing to his friend a few months later from Santo Domingo, Steinberg would remember the train journey from Tortoreto, the excitement, the tension, even the people on board chanting prayers for family members who were fighting at the front: 'It was an ugly period', he said, 'which, remembering it now, becomes beautiful, especially for me, since I was going to Milan to see my girlfriend'.[90] More than 50 years later he reminisced to Aldo Buzzi:

How lucky I was to be saved… I took a night train from Rome, seated, with all the perils, police, documents. Arrived safely in Milan, spent the day with Ada, while Natalina scolded me: 'what poor things you have in your suitcase, ingegnere!*' She had seen my worn-out socks etc in the wardrobe. At night I returned to Rome, a crowded train, nameless hotel, on via dei Chiavari, I think, in the Ghetto. Saved from minute to minute by a miracle. The only thing remaining in my mind is the beautiful maid in the hotel, going up and down the narrow staircase.*[91]

Between Milan and Rome Steinberg collected the last of his missing documents. He stayed in Rome at the Hotel Pomezia in via dei Chiavari from 12 until 16 June when he once more got on an Ala Littoria flight for Barcelona–Madrid–Lisbon. This time the Portuguese authorities granted him entry. Arriving in Lisbon he stayed at the Hotel Tivoli, and on 20 June he finally boarded the SS *Excalibur*, a ship of the American Export Lines. Ten days later the boat arrived in New York harbour, but Steinberg could not get permission to disembark and was forced to remain on Ellis Island.[92] On 5 July he was once again at sea, now bound for Ciudad Trujillo, as Santo Domingo was then known.

There he spent one more year, working and hoping for an American visa, until the summer of 1942, when he finally flew to Miami and boarded a bus to New York. After two years of frustration and fear, he had done it. And he was one of the lucky ones: between 1 December 1940 and 15 October 1941 only 210 other foreign Jews managed to leave Italy.

In the United States Steinberg began to work for the American government, and in February 1943 he was given both US citizenship and a commission in the Naval Reserve. Assigned to Naval Intelligence and later to the Morale Operations (MO) division of the OSS, the unit set up to sap the enemy's morale with 'black propaganda', fake messages and communications, he was sent to China, India, Algeria and finally, in mid-1944, to Italy; in less than three years he had literally gone around the world. Back in the OSS headquarters in Washington DC, he was asked – like all other returning agents – to write a report. Except that Steinberg, being Steinberg, did not write a report, he *drew* one. You can find it in the US National Archives among the declassified papers of the CIA. A thick folder with a manila cover, it has two intimidating 'SECRET' stamps inked over its bureaucratic, acronym-heavy label: 'Collection of Cartoons Produced by MO Artist, Lt Saul Steinberg – Target Germany for OWI, PWB and MO/US, MTO & ETO'. Below it Steinberg glued some coloured labels of his own, more familiar and cartoonish arrows and shapes, including a black hand with a white MO.[93]



Saul Steinberg, OSS Report, 1945 (detail)
US National Archives and
Records Administration

Inside the folder, together with specimens of anti-Nazi cartoons, Steinberg inserted three pages describing the locations of his fieldwork: Algiers, Naples and Rome. There are also reduced photographic reproductions of collages of postcards and other memorabilia of the places he visited, plus an original drawing. The section dedicated to Naples explicitly shows the Villa Maria, taken over by the OSS when the Allies occupied the city in October 1943. The villa was an ostensibly 'modern' or 'rationalist' building that he would draw again in the late 1960s and early 1970s, parodying its architecture with the addition of goose-stepping passers-by. But in Steinberg's OSS folder what we see is an interior, a delightful little sketch that presents MO staff writing, cutting and pasting propaganda material, while the Gulf of Naples, criss-crossed by ships and barrage balloons, can be seen through the open window with the smoking Vesuvius in the background. The interior, with doors and ceilings complemented by decorative moulding, all in a bland neoclassical style, is further removed from the unadorned architecture Steinberg came to associate with fascism. The Villa Maria was actually built at the beginning of the twentieth century by Italian diplomat Giulio Cesare Montagna, in Posillipo, then on the outskirts of the city. It is still standing today, used as a venue for weddings and other ceremonies, and its ornate interiors are by and large intact. The beautiful view is also still there. The only thing missing is the drumbeat of war.

An earlier, more detailed, version of this essay was published online in *Quest: Issues in Contemporary Jewish History* (published by the Fondazione CDEC), issue 2, October 2011, www.quest-cdec-journal.it/focus.php?id=221. Its point of departure was my earlier 'Fuga d'artista: L'internamento di Saul Steinberg in Italia attraverso il suo diario e i suoi disegni', *Mondo Contemporaneo* no 2 (2008), pp 91–127. The present text has been edited for its publication in *AA Files*, the added material on Villa Maria at the end is excerpted from 'The Nightmare of Villa Maria. Saul Steinberg: Architecture, Fascism and the OSS', 13 May 2015, published by the author at medium.com/@tedeschini/the-nightmare-of-villa-maria-97d3fde2f3e#.2fbo039ou. Complete references and supplementary material can be found in the *Quest* essay.

I am grateful for assistance received from many quarters. First, to The Saul Steinberg Foundation, New York, and its executive director, Sheila Schwartz, who was constantly available to explain nuances of Steinberg's life and art, shared artistic and archival material, and authorised the publication of the drawings. Aldo Buzzi, Steinberg's friend and confidant for 60 years, generously welcomed me to his home on many occasions to speak about his friend; Buzzi died on 9 October 2009. Cristiana Facchini and Michele Sarfatti helped me finetune the *Quest* edition by offering additional information and asking probing questions. Thanks also to Mario Toscano for bibliographical and archival suggestions. For graciously providing information and assistance, I am indebted to Piervaleriano Angelini, Emanuele Ascarelli, Bruno Coen Sacerdotti, Carlo Di Cave, Luca Dello Iacovo, Domenico Frassineti, Susanna Gadd, Italia Iacoponi, Verena Kustatscher, Margareta Latis, Bruno Monguzzi, Pasquale Rasicci, Francesca Pellicciari and Paula Weber. Andi Casson ably translated the original essay into English. The original English version could not have been realised without the enthusiasm and substantive editorial input of Sheila Schwartz. I am also indebted to Iain Topliss and Deirdre Bair for their suggestions and corrections.

1. Saul Steinberg to Aldo Buzzi, 26 June 1995, in Saul Steinberg, *Lettere a Aldo Buzzi 1945–1999*, edited by Aldo Buzzi (Milan: Adelphi, 2002), p 278. The English translations of letters cited from this volume are by John Shepley (through 1978) and James Marcus (1979–99). The originals of Steinberg's complete correspondence with Aldo Buzzi, in Italian, are in the archives of The Saul Steinberg Foundation. Those that were not included in the book are here referred to as '*Lettere*, unpublished'.
2. Reproduced and discussed in Joel Smith, *Steinberg at The New Yorker* (New York, NY: Harry N Abrams, 2005), pp 220–21.
3. An obvious reference to Samuel Johnson's aphorism, 'Patriotism is the last refuge of the scoundrel'; Steinberg to Buzzi, 24 November 1978, *Lettere*, unpublished.
4. Steinberg to Roberto Calasso, 15 May 1995, copy to Buzzi, *ibid*.
5. Steinberg's comment about 'jokes' (*barzellette* in Italian) is from my interviews with Aldo Buzzi, 24 May 2007 and 18 January 2008.
6. Harold Rosenberg, *Saul Steinberg* (New York, NY: Whitney Museum of American Art, 1978), pp 234–45. In 1960, Steinberg agreed to be interviewed by Raimond Rosenthal and Moishe Ducovny for the American Jewish Committee's Oral History Library; the long interview was never published. The original transcript, now at The New York Public Library. The transcript is undated, but can be dated by internal evidence to the summer of 1960, with a possible follow up in October of that year. Henceforth cited as 'Steinberg, AJC-OHL'.
7. Francesca Pellicciari, 'Critic Without Words: Saul Steinberg e l'architettura, thesis' (Istituto universitario di Architettura di Venezia: 2004–05), p 25, notes that in another famous map, *Looking East*, 1986, a view of the world from his worktable, Steinberg includes a fragment of Milanese topography from the area around his neighbourhood of Piazza Carlo Erba. But if you look lower in the sketch of Italy, Tortoreto is noted as well, the only area on the map south of Modena.
8. Saul Steinberg, with Aldo Buzzi, *Reflections and Shadows*, translated by John Shepley (New York, NY: Random House, 2002). Originally published as *Riflessi e ombre* (Milan: Adelphi, 2001).
9. Joel Smith, *Steinberg at The New Yorker* and *Saul Steinberg: Illuminations.* Both books introduce scholarly analysis to the study of Steinberg's life and work, including *Bertoldo* and his art from the war years.
10. The birth certificate is reproduced in Steinberg, *Lettere a Aldo Buzzi*, p 175. An official copy is in his personal student file at the Politecnico di Milano, Archivio generale d'Ateneo, Fondo Fascicoli studenti e Registri carriera scolastica, folder 'Steinberg, Saul' (AGA, copy at SSF).
11. Quoted in Iosef Eugen Campus, 'Afinitati elective (Convorbire cu Saul Steinberg)', *Deschizând noi orizonturi: Însemnări critice, Israel, 1960–2001*, vol II (Libra: Bucharest, 2002), pp 368–69;

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unpublished English translation by Emil Niculescu, at SSF.

12. Theodor Lavi, 'Romania', in entry 'Numerus Clausus', Michael Berenbaum and Fred Skolnik (eds), *Encyclopaedia Judaica*, vol 15 (Detroit, MI: Macmillan Reference, 2007), pp 341–42.
13. Steinberg, AJC-OHL, T1 7 (tape 1, p 7).
14. Sources for the five quoted passages: Steinberg, *Reflections and Shadows*, p 3; Steinberg to Buzzi, 31 May 1982, *Lettere*, unpublished; *ibid*, 24 May 1996 (the words are an emotional reaction to an invitation just received from the Romanian academy, described elsewhere in the letter. The academy had proposed awarding a medal to Steinberg and erecting a statue in his honour); Steinberg to Buzzi, 4 January 1990, in Steinberg, *Lettere a Aldo Buzzi*, p 188 (the Steinberg family lived on Strada Palas); *ibid*, 20 November 1987, p 165.
15. See Aldo Buzzi, 'L'Architetto Steinberg', *Domus*, no 214 (October 1946), p 20.
16. Steinberg's student identification card, ID number 33-34/81, is among the Saul Steinberg Papers, Yale Collection of American Literature, Beinecke Rare Book and Manuscript Library, Yale University, Uncat Mss 126 (YCAL), box 73, folder 'SS Biography'. The papers remain uncatalogued.
17. See Steinberg to Buzzi, 8 January 1959, in Steinberg, *Lettere a Aldo Buzzi*, p 50, referring to the later transformation of his sister and family, who had recently emigrated to France from Romania: ' In Paris I saw sister & children. The poor things are making the transformation from easterners to westerners… It's an experience that I know'.
18. Steinberg, 26 November 1992, *Lettere a Aldo Buzzi*, p 219.
19. Steinberg to Buzzi, 15 February 1986, *Lettere*, unpublished.
20. Carlo Manzoni, *Gli anni verdi del Bertoldo* (Milan: Rizzoli, 1964), p 28. On *Bertoldo*, see also Cinzia Mangini and Paola Pallottino, *Bertoldo e i suoi illustratori* (Nuoro: Glisso Edizioni, 1994), and Carlotta and Alberto Guareschi, *Milano 1936–1943: Guareschi e il Bertoldo* (Milan: Rizzoli, 1994).
21. Reproduced in Mangini and Pallottino, *Bertoldo e i suoi illustratori*, fig 138. Of this drawing, Steinberg later recalled: 'I only discovered my talent when my first drawing was published in Milan. It took me ten minutes to do, but when it appeared in the paper, I looked at it for hours and was mesmerised'; quoted in Pierre Baudson, introduction to *Steinberg*, *'The Americans', Panneaux de l'Exposition universelle de Bruxelles, 1958* (Brussels: Musées Royaux des Beaux-Arts de Belgique, 1967), pp 1–2.
22. Piervaleriano Angelini, 'L'attività italiana di Saul Steinberg', thesis (Università degli Studi di Pavia, 1981), p 58 (copy at SSF), *Bertoldo* was published from July 1936 through the beginning of September 1943. See Carlotta and Alberto Guareschi, *Milano 1936–1943*, *op cit*, p 10.
23. 'The good American press has the advantage of having the material possibility (money) to choose quality over quantity, and thus I make about 35 drawings a year for *The New Yorker* instead of the 250 or more that I did in one year for *Bertoldo*'; Steinberg to Buzzi, 23 July 1947, *Lettere*, unpublished.
24. Steinberg, AJC-OHL, T2 36.
25. Besides the men at *Bertoldo*, Steinberg mingled with, among others, Leo Longanesi (journalist and maverick publisher) and Indro Montanelli, who would become Italy's best known and most widely read journalist after the war. Teachers, of course, among them Piero Portaluppi, Tommaso Buzzi, Gio Ponti, formed part of his milieu, as did his classmates such as Aldo Buzzi, Luigi Comencini and Alberto Lattuada; the latter two would become famous film directors. Before long he was introduced to Cesare Zavattini, who became a leading figure in postwar Italian literature and cinema, humourist Achille Campanile and designer Bruno Munari (Zavattini and Campanile co-edited *Settebello*, to which Munari contributed).
26. Campus recalls that the conversation took place during a long walk in Bucharest, after Steinberg had begun publishing his drawings in *Bertoldo*.
27. Steinberg, AJC-OHL, T3 75-76.
28. Cited in Lawrence Danson, 'An Heroic Decision', *Ontario Review*, no 53 (Fall–Winter 2000–01), p 66.
29. Typewritten copy of a letter from Commander R Davis Halliwell to Morton Bodfish, 27 January 1944, National Archives, Washington (NARA), RG 226, OSS Personnel Files 1941–45, Box 742, Entry 224, folder 'Saul Steinberg'.
30. Steinberg, 'Chronology', in Harold Rosenberg, *Saul Steinberg*, *op cit,* p 235. Joel Smith, *Saul Steinberg: Illuminations*, *op cit*, p 27, suggests that 'Zia Elena', the powerful matron with the square jaw who in the pages of *Bertoldo* ordered around little lost men, could also be seen as a 'veiled caricature of Mussolini'. In the collection of original Steinberg drawings for *Bertoldo* and *Settebello* (some unpublished) owned by Bruno Coen Sacerdotti, there is a Roman emperor strutting forward with a militaristic air. His face bears so many Mussolini-like traits that, in the Sacerdotti family tradition, the figure was always considered a sendup of *Il Duce*; emails from Bruno Coen Sacerdotti to the author, 12, 30 March 2008.
31. 'L'attività italiana di Saul Steinberg' was a dissertation for a history of art degree that consisted of two volumes: one gave some biographical detail of Steinberg's life in Italy and catalogued his work at *Bertoldo* and *Settebello*; the other was a photocopied collection of all Steinberg's cartoons published by the two papers until September 1938. The unsigned works published in 1940–41 were not known at the time. Steinberg's effort to prevent publication of the thesis is recounted in two unpublished letters to Buzzi dated 11 July 1980 and 28 March 1983.
32. Mocking modern architecture as nonsensical was a common pastime with the *Bertoldo* and *Settebello* staff, who did not distinguish among the different styles or schools. 'Case Novecento' (houses built in the twentieth-century style) became a stereotype in itself, and many cartoons used the expression as a common slur.
33. For a general artistic and political assessment of Italian architecture in the interwar period, see Carlo Melograni, *Architettura italiana sotto il fascismo. L'orgoglio e la modestia contro la retorica monumentale 1925–1945* (Turin: Bollati Boringhieri, 2008).
34. For examples of such goose-stepping, saluting figures, see Steinberg's portfolio 'Italy – 1938', *The New Yorker,* 7 October 1974.
35. Steinberg never used his first name in signing his works, either in *Bertoldo* or later in life. Paolo (Paul) has an obvious assonance with Saul, but it is of course also the name by which Saul of Tarsus became known after his conversion. The Italianisation of Steinberg's name was not known until recently. He mentioned it in a private letter to Cesare Zavattini, datable to 1949 on internal evidence: 'The name Saul had such a solemn sound in Italy that for my friends I changed it to Paolo. But biblical or historical names are common here [in New York] and my name is pronounced Sol, I am therefore not disturbed by its sound'; copy of letter at SSF.
36. Steinberg, AJC-OHL, T3 74-75; 'Steinberg Saul of Moritz – Romanian Jew' is the heading on Steinberg's file in the papers of the Italian police in the Italian State Archives, the Archivio Centrale dello Stato (ACS). Copies of the entire Steinberg ACS file are at SSF.
37. Michele Sarfatti, *Gli ebrei nell'Italia fascista: Vicende, identità, persecuzione*, 2nd ed (Turin, 2007), pp 33–34. English edition: *The Jews in Mussolini's Italy: From Equality to Persecution*, translated by John and Anne C Tedeschi, (Madison, Wisconsin: University of Wisconsin Press, 2006)
38. For Steinberg's four 10 September 1938 drawings in *Settebello*, see Joel Smith, *Saul Steinberg: Illuminations*, *op cit*, p 236, note 30.
39. Sources for the documents cited in this paragraph: *Circolare* (written instructions to subsidiary offices) no 19153, 6 August 1938, by Giuseppe Bottai in ACS, MI, PS – AG, cat A16, Ebrei stranieri, b 3, f B/1 'Ebrei stranieri – Disposizioni in genere'. *Ibid*, for the *circolare* no 8 from the Ministry of Foreign Affairs, signed by Minister Galeazzo Ciano (Mussolini's son-in-law), 9 September 1938, sent to all Italian embassies, with copies to the Ministry of the Interior and to other central administrative offices. (German–Jewish students, however, were excluded from this concession and could not continue their studies.) *Ibid*, for *circolare* 6408, signed by Bottai, 6 October 1938, confirming that foreign Jewish students could enrol for the new academic year. *Ibid*, for *circolare* no 532 of 16 January 1939, signed by Bottai.
40. Three of the few surviving letters Steinberg wrote to his parents in Bucharest during this period concern their financial support. 29 January 1939: 'I still haven't received anything from you. But there was a message from the bank so that in 4–5 days I will receive the money.' 6 January 1940: 'I hope to get some money on time from you through the National Bank. Send me more than usual.' 9 February 1940: 'Today I finally received the notice from the bank and in five days I can get the money. It arrived in time because if they had been late a few more days, I would have lived pretty badly. Please make sure to send me the rest as soon as possible.' Both letters at YCAL, box 12, folder 'Letters from Milano and Santo Domingo'. Translations and copies of the originals at SSF. Henceforth cited as 'Romanian letters'.
41. Romanian Letters, 12 August 1940. Statement on architecture, Steinberg, AJC-OHL, T2 34.
42. Officer Qualifications Questionnaire, YCAL, box 20, folder 'Navy 2 of 2'.
43. Francesca Pellicciari, *Critic Without Words*, *op cit*, pp 123–25. Pellicciari points out the close relationship between this drawing and the one published, anonymously, in *Bertoldo*, 28 March 1941, and has now found eight other Steinberg sketches in the Boggeri archive, all in a similar style.
44. Steinberg to Buzzi, 31 October 1997, in Steinberg, *Lettere a Aldo Buzzi*, pp 304–05.
45. See 'Cesare Civita, '1905–2005', *Fondazione Franco Fossati-Museo del Fumetto e della comunicazione* (www.lfb.it/fff/fumetto/edit/c/civita.htm); the entry on Civita at imdb.com; and the email from his daughter, Barbara Civita to SSF, 6 February 2007.
46. See the feature on Steinberg's drawings in the first issue of the Brazilian journal *Sombra*, December 1940 – January 1941, for which Civita was the American correspondent.
47. Metz's account appears in Domenico Frassineti, 'Steinberg', thesis (Facoltà di Lettere e Filosofia, Università di Roma, 1966–67), p 7, note 34; copies at SSF and YCAL, box 37, folder '"Steinberg" a dissertation by Domenico Frassineti.' Steinberg's thesis project is not preserved in the politecnico archives, but his personal file notes the topic he was supposed to address in his *esame di laurea:* 'Architectural and urbanistic organisation of an urban centre. Development of a representative building.' The building may have been the theatre Metz referred to.
48. Letter to Buzzi, 12 August 1985, in Steinberg, *Lettere a Aldo Buzzi*, p 141.
49. See Steinberg's recollections quoted by Robert Hughes, 'The World of Steinberg', *Time*, 17 April 1978.
50. Indro Montanelli, 'Un russo in USA: Cremlinologo alla Casa Bianca', *Il Corriere della Sera,* 3 June 1995, (archiviostorico.corriere.it/1995/giugno/03/russo_Usa_cremlino_logo_alla_co_0_95060310610.shtml).
51. Every reference to Steinberg in Montanelli's article seems – to say the least – poorly remembered: from the little things like his supposed birth in Bucovina or the visa for the United States, to the tale of his (and Longanesi's) encounter with both Stille and Steinberg in Milan after the war: 'One day shortly after Liberation', goes Montanelli's account, 'I was walking with Longanesi in the Galleria Vittorio Emanuele, which was filled with more or less self-declared partisans, agit prop and Anglo-American military, when two of the latter appear in front of us, blocking our way: they were Stille and Steinberg, wrapped in the most shabby and crumpled uniforms imaginable. 'What a great country, America!' shouted Longanesi, 'if it won

the war with soldiers like you'!'; Montanelli, 'Un russo in USA'. In fact, Steinberg had left the Italian theatre in September 1944, long before Milan was liberated on 25 April 1945; he did not return to Italy until 1946, and certainly not in uniform.

52. The organisation had contacts with the Italian authorities and with international humanitarian groups, such as the American Joint Distribution Committee, which provided funds to assist Jews within Italy, and the Hias Ica Emigration Association (HICEM), which funded the voyage out of Italy. For a more detailed history of DELASEM, see Sandro Antonini, *DelAsEm: Storia della più grande organizzazione ebraica italiana di soccorso durante la seconda guerra mondiale* (Genoa: De Ferrari, 2000).
53. Steinberg, *Reflections and Shadows*, *op cit*, p 26. In a letter to his family announcing that he would soon graduate, Steinberg is aware that he might have to return to Romania: 'In a month I'm completely done with school… I may come home after February'; Saul Steinberg to Moritz and Roza Steinberg, 6 January 1940, 'Romanian Letters'.
54. *Ibid*, 12 August 1940.
55. Rebecca Hourwich Reyher to Cornelius Vanderbilt Jr, 7 June 1940, copy at SSF.
56. Civita to Henrietta Danson, nd, but certainly from mid-June 1940, copy at SSF.
57. Telegram from Rebecca Hourwich Reyher to Mrs H Danson c/o Cornelius Vanderbilt, Jr, 8 July (the year is missing), copy at SSF. Steinberg's visa is in his passport, YCAL, box 89, folder 'SS Romanian Passport 1939'.
58. 'Allontanati dal Regno', in Italian. Reproduced in Akademie der Künste, *Deutsche Kunstler und Wissenschaftler in Italien. Artisti e intellettuali tedeschi in Italia, 1933–1945* (Milan: Mazzotta, 1995), p 41.
59. Letter of 20 June 1940, Gastone Polacco in Milan to Dante Almansi in Rome, AUCEI, sf 'Genova'. 22 July 1940, Polacco to the Genoa office of DELASEM, in AUCEI, sf 'Milano'. 12 August 1940, *ibid*, for the copy sent to Rome. The statement concerning collaboration with the authorities appears in the 22 July letter.
60. Steinberg to Buzzi, 26 June 1995, in Steinberg, *Lettere a Aldo Buzzi*, *op cit*, pp 277–78.
61. Steinberg, *Reflections and Shadows, op cit*, pp 27, 32, for the quoted passage and the preceding details.
62. DELASEM to the Ministry of the Interior, 22 July 1940, AUCEI.
63. YCAL, box 1, folder '1942 Correspondence'.
64. Saul Steinberg to the art historian Leo Steinberg (no relation), 7 September 1984, original at SSF. Actually, 7 September 1940 was a Saturday, but in his journal there are references to 'Fridays' as days on which to expect bad luck.
65. Steinberg, *Reflections and Shadows*, *op cit*, p 32.
66. These documents are published in Alberto Dines, 'Black Friday', *Serrote* no 1 (2009), 69–72; Dines gives the archival locations as: 'Ministry of Foreign Affairs, Lisbon, A/43, M/17'. The problems for Magno began with the Steinberg affair, according to Avraham Milgram, 'Portugal, the Consuls and the Jewish Refugees, 1938–1941', *Yad Vashem Studies* vol 27 (1999), pp 26–29. Magno was relieved of his duties in January 1941 and replaced by a vice-consul who never took up the post. As a matter of fact, though, he kept the consulate open until after the war and he kept issuing visas, since the last Portuguese visa on Steinberg's passport carries his signature and was stamped on 7 June 1941. On Magno, see also Rui Alfonso, 'Count Giuseppe Agenore Magno', *Portuguese Studies Review* 5/1 (1996).
67. Gertrude Einstein to Steinberg, 25 May 1942, YCAL, box 1, folder '1942 Correspondence', cited in Smith, *Saul Steinberg: Illuminations*, *op cit*, p 237, note 35. Steinberg's American family, meanwhile, hypothesised that he had been sent back from Portugal because he had been mistaken for another Steinberg, a communist; see Lawrence Danson, 'An Heroic Decision', *op cit*, p 61.
68. *La Stampa*, 28 September 1940.
69. 'Some of my friends showed great courage and they … kept me, they hid me… My friends, that's something else. You can't call them Italians. Anybody who's a friend is not an Italian, is not English, it's nothing, it's a friend, it's a mensch, it's something'; Steinberg, AJC-OHP, TP3 87.
70. Ada Cassola was born in 1908 in Vigentino, a small town near Milan later incorporated in the larger city. She was married to Giovanni Ongari, two years her senior. She died in Erba, in the province of Como on 16 January 1997. See Iain Topliss, 'Saul Steinberg: un art de vivre', in *Saul Steinberg: L'Écriture visuelle* (Strasbourg: Musée Tomi Ungerer, 2009), p 19.
71. In Steinberg's correspondence with Buzzi there are frequent references to Ada, up until a letter of 3 May 1990, *Lettere*, unpublished. He stays in touch with her and even contributes to the cost of her nursing home; see, for example, the unpublished parts of the 1 February 1990 letter.
72. Radu Ioanid, *The Holocaust in Romania: The Destruction of Jews and Gypsies Under the Antonescu Regime, 1940–1944* (Chicago, IL: Ivan R Dee, 1999), p 259. On 5 December the Romanian regime formally abolished military service for Jews, and at the same time ordered them to forced labour under military authority. Those 'physically incapable were required to pay a military tax'; *ibid*, p 27. Steinberg's statement that the Romanians gave no reason for not renewing his passport appears in the travel affidavit he signed on 16 January 1941 at the American Consulate, Milan; the original is in his passport.
73. Steinberg, AJC-OHP, T4 154-155.
74. Harry W Flannery, *Assignment to Berlin* (New York, NY: Alfred A Knopf, 1942), p 3. Flannery was on his way to Berlin to run the CBS bureau there. He arrived in Lisbon on a PanAm Clipper and apparently left for Madrid on the Ala Littoria weekly flight.
75. 'San Vittore e Tortoreto', typescript, p 2, YCAL, box 78, folder 'Tortoreto, translated by Adrienne Foulke'.
76. Prefect of Milan to the Ministry of the Interior, 21 February 1941, in ACS, MI, PS, AG, Cat A16 Ebrei stranieri, b 270, f, 'Steinberg Saul di Moritz'; *ibid*, initialled draft, Ministry of the Interior to the Prefect of Milan, 27 February 1941.
77. *Ibid*, 12 March 1941.
78. Whatever happened on 16 April, it must have been very important since the date is also noted (without explanation) in a very short handwritten list of addresses where he lived in Milan. The year 1940–41 only includes dates, beginning with 6 September and ending with his arrival at and departure from Tortoreto; YCAL, box 2, folder 'Santo Domingo 1942'.
79. 'San Vittore e Tortoreto', typescript, p 4. Also: 'I found consolation in that sort of Huckleberry Finn or Tom Sawyer impersonation of the Count of Monte Cristo right away… [I] kept a diary, of course. As soon as you go to jail you keep a diary. It's classic. Tried to behave like a mixture of Devil's Island, Foreign Legion, what have you, an adventure'; Steinberg, AJC-OHP, T3 74-75.
80. Carlo Spartaco Capogreco, *I campi del duce: l'internamento civile nell'Italia fascista, 1940–1943* (Turin: Einaudi, 2004), p 64. See also Mario Avagliano and Marco Palmieri, *Gli ebrei sotto la persecuzione in Italia: Diari e lettere 1938–1945* (Turin: Einaudi, 2011).
81. Steinberg, *Reflections and Shadows*, *op cit*, p 35. Like a good travel writer, he goes on to describe the embarkation of a procession of penitents and their ecstatic songs; they were probably pilgrims to the holy shrine at Loreto, not far from the train route.
82. The postcard, written to his parents, is dated 3 May, even though Steinberg was in Ancona on 1–2 May; Romanian Letters. The postal stamp is incomplete, but it seems to suggest 2 May; this may be among the earliest instances where Steinberg, who cared little for chronological precision, inadvertently misdated a document or artwork.
83. Steinberg, *Reflections and Shadows*, *op cit*, p 35. 'There were no fences, nothing. Anybody could have escaped, nobody was fool to escape, we were kept there'; Steinberg, AJC-OHP, T3 93–94.
84. Elena Zanoni, *Alba Adriatica e la sua gente: Un secolo di eventi e di ricordi* (Rome: Pioda Imaging, 2006), pp 151–52. Steinberg later quipped to friends and relatives that 'the Italians didn't know how to run a concentration camp'; Danson, *op cit*, p 61.
85. Zanoni, *Alba Adriatica e la sua gente,* p 154. For Steinberg's own account of the sensual women of Tortoreto, see Steinberg, *Reflections and Shadows, op cit*, pp 38–39.
86. The note, on a large sheet of paper, is dated 28 April 1941. At the centre, an ink and watercolour drawing by the architect Walter Frankl depicts the Villa Tonelli at Tortoreto Stazione, surrounded by the signatures of the internees. '*Duce*!' one reads above the drawing, 'the prisoners of this camp, profoundly moved by your magnanimous gesture, express their most heartfelt thanks, and consider this measure, beyond its material value, a new sign of that human treatment, which everyone, without exception, will remember forever.' Another similar though smaller note, dated 1 May 1941, was sent by the inmates of the Torterto Alto camp. Both documents are reproduced in Pasquale Rasicci, *Alba Adriatica: I primi 50 anni, Ieri-Oggi 1956–2006*, (Colonnella: Grafiche Martintype, 2005), pp 71, 75. The originals are among the papers and memorabilia in the Gianfranco Moscati collection, now at the Imperial War Museum, London.
87. Steinberg, *Reflections and Shadows*, *op cit*, p 38. Three decades later, Steinberg recalled the stipend as smaller, adding to the above passage, 'The pope gave us six *lire* a day as an allowance, and for his own peace of mind.'
88. Steinberg, AJC-OHP, T3 83.
89. Steinberg speaks of Gogg as a 'mysterious man, because he remained in good spirits and always had faith; he never had a moment of silence or lack of courage'; 'San Vittore e Tortoreto', typescript, p 6, found at YCAL, box 78, folder 'Tortoreto, translated by Adrienne Foulke'.
90. Steinberg to Gogg, 30 September 1941, in Italian. Copy kindly provided to the author by Paula Weber; copy also at SSF. In Rome, Gogg shared a room with Steinberg at the Albergo Pomezia; in Steinberg's drawing of that room, Gogg's name is written on one of the two beds, while a photograph on the night table is identified as 'Adina'.
91. Steinberg to Buzzi, 26 June 1995, in Steinberg, *Lettere a Aldo Buzzi*, *op cit*, p 278. Natalina is Natalina Cavazza, the second of four sisters who ran the Bar del Grillo, cited also in the journal entry for Sunday, 29 December 1940, and in Steinberg to Buzzi, 6 April 1987, *ibid*, p 159.
92. On 2 July 1941 he wrote to his parents in Bucharest that he had been met by '[Harold] Danson, Harry's son-in-law, and Civita. Now I'm waiting on Ellis Island, I can't enter New York because I'm in transit; still, Harry and Sadie and their girls with their husbands and Civita with his family visit me daily. They've bought me everything, I'm well equipped, they are all very nice and polite and very attentive. Saturday I embark [on] the ship for Santo Domingo, it's not far, I hope to get there well and to start working right away because I have a lot of hope and potential to succeed – have hope, have confidence in me, I will do everything for you'; 'Romanian Letters'.
93. Steinberg's 'report' of 1945, US National Archives (NARA), RGG 226, entry 99, box 40, folder 6.



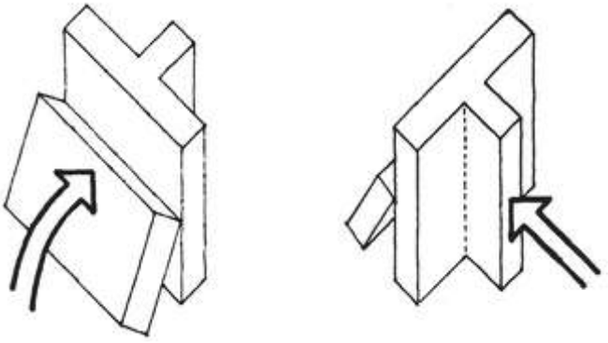
Stirling's Arrows

Laurent Stalder & Moritz Gleich

The ins and outs of James Stirling's career – and private life – are well known: his studies at the school of architecture in Liverpool; his initial immersion into the London architectural scene through an AA exhibition in the early 1950s;[1] his first jobs in London, with the London County Council and then Lyons, Israel & Ellis; his participation in the ground-breaking exhibition 'This Is Tomorrow' in 1956; his membership of CIAM; and, not least, his work as an independent architect, which spanned almost 40 years, from 1956 until his death in 1992.[2] His oeuvre, from student projects to those completed posthumously, has been collected, discussed, examined and exhibited down to the very last detail.[3]

From the very start – and not without Stirling's own active encouragement – the architectural press kept track of his projects, buildings and competition entries, from the first houses in London to his international breakthrough with the large university complexes designed in the 1960s, and, later, the pioneering projects of the 1970s. In addition to the seemingly continuous coverage his work enjoyed in specialist journals and the daily press, many of his buildings were discussed even more thoroughly in dedicated monographs. Stirling himself would pursue this obsession for the modernity of documentation and the postmodernity of celebrity by publishing his own work in his famous 'Black Book' and later 'White Book', heavily illustrated tomes directly referencing the format, design and rhetoric of Le Corbusier's *Oeuvre Complète*. Stirling, one might say, personifies the success of the attention-seeking economy so characteristic of postwar architecture, which engendered the mediatisation not only of architecture and its image, but also of the discipline's leading exponents.[4] It is no coincidence that he was the third ever Pritzker Prize winner in 1981, coming hot on the heels of Philip Johnson and Luis Barragán.

Stirling's architectural works are generally discussed in terms of their distinct phases, and therefore read like a kind of chronological guide to postwar form or style. The first phase – his student projects in particular, except for the handful he designed after a sojourn to the US, which attest more strongly to the influence of Frank Lloyd Wright – is usually defined as Corbusian. The second phase – comprising most of his work in the 1950s – could consequently be considered as updated-Corbusian or even brutalist, the former because, as in Ham Common, certain motifs are oriented towards the postwar architecture of Le Corbusier, the latter because the sheer plasticity and highly visible structure of these projects, as well as their use of 'as found' materials, epitomised a similar strain in the brutalist British avant-garde, above all, in the work of Alison and Peter Smithson. For their part, the large buildings which followed at the universities of Leicester, Cambridge and Oxford – the red trilogy – tend to be attributed to a more constructivist bent, while subsequent projects, such as the residential district of New Town in Runcorn or the Olivetti Training Centre in Haslemere, could be seen to derive from an English pop tradition, albeit one with certain Italian undertones (an Anglo-Latin connection that seems even more convincing when one remembers that these designs were initiated only a few months after the launch by Olivetti of the Valentine – Ettore Sottsass and Perry King's celebrated red, white or green plastic typewriter). From the late 1960s onwards the Stirling office then went through an even more mannered classicist phase. Depending on the on-looking critic, this period began either with his design for Siemens in Munich in 1969, for Derby city centre in 1970 or for the arts centre at the University of St Andrews in 1971. Yet one thing these critics do agree on is that all of these projects are too early for postmodernism, which instead characterises the next, and final, phase of Stirling's work: the major museums in Germany, for example, or the Clore Gallery extension to the Tate in London.[5] It is hardly surprising, therefore, that these readings overlap and contradict each other – that some consider Stirling an early postmodernist, while for others he is an eternal modernist.[6]

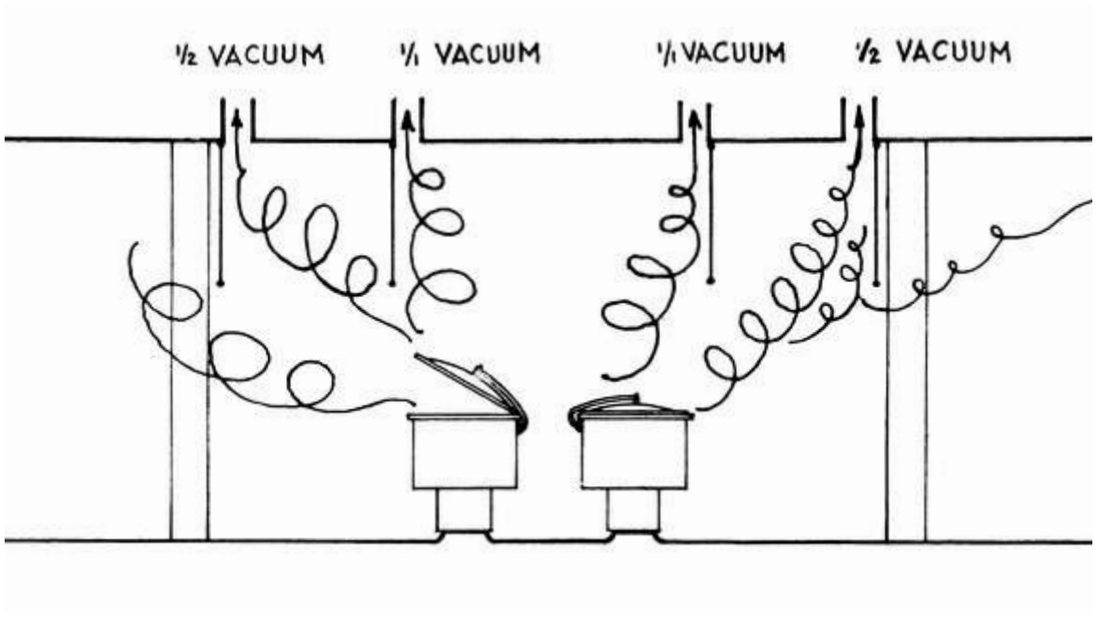


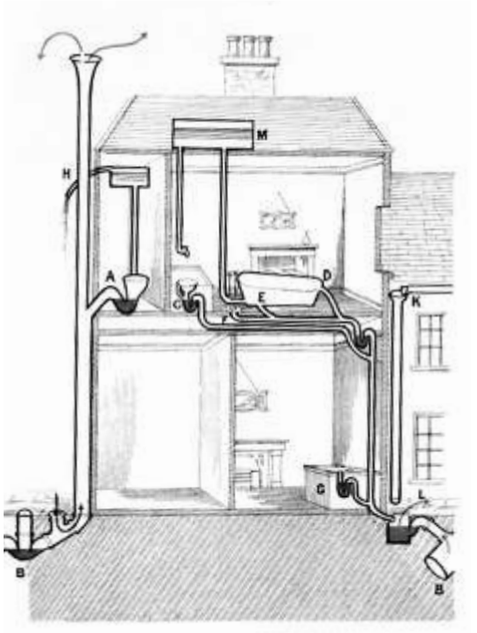
James Stirling & Partner, detail of structural concept for Dorman-Long HQ, 1965

Another approach has been to assess the different phases of Stirling's *oeuvre* not so much in stylistic but biographical terms, by tracing them back through his various professional collaborations.[7] The defining and perhaps most regarded of these was the 'fractious relationship' he enjoyed with James Gowan, his former colleague at Lyons, Israel & Ellis, which characterises the first phase, and whose best exemplar was the Faculty of Engineering building at Leicester University, a 'gothicist' *parti pris*, in the words of Gowan, in contradistinction to Stirling's own 'classicism'.[8] A second phase would then be the collaboration with Léon Krier,[9] who helped make manifest a certain classical sensibility until then more latent.[10] A third one, lastly, would then be the 'good partnership'[11] he enjoyed with Michael Wilford, characterised by the museum, institutional and corporate projects they completed in the 1980s and 1990s, mostly in Germany and the United States.

Finally, still others – the majority, in fact – have explained Stirling's work through reference to a broad range of role models. For example, through Colin Rowe, the friend and historian whose knowing asides accompanied Stirling his whole life, and which in turn prompted subsequent references, from Palladio to Aalto, from Melnikov to Le Corbusier, from peculiar rock formations on the Yorkshire moors to the glasshouse at Kew, from local Liverpudlian influences to global ones. Rowe was complemented by many others, who echoed his reading of Stirling's architecture as a collage of referential horizons that of course shifted with the advent of each new phase of his work. Likewise, Stirling himself played the same game, explicitly offering up a panoply of ever-changing allusions as keys to the interpretation of his architecture: on machines, ruins, churches, courtyards, and so forth.[12]

Yet all these different approaches are in some sense as flawed as they are fruitful. True, the stylistic perspectives bring a certain order to the vast catalogue of works; the historical references illustrate what a great visual archive the architect held in his mind's eye; and the different partnerships make it easier to identify the shifting office structure in which Stirling, as Wilford once put it, acted as 'editor', simultaneously taking charge of content, metaphorically proofreading and publishing.[13] But at the same time, all of them also further consolidate the tendency to a periodisation, and thus to a fragmentation of his work and ideas, meaning we keep aggregating multiple and different Stirlings rather than ever seeming to comprehend a more singular Stirling.





Top row: Alvar Aalto, Paimio Sanatorium, 1932; Thomas Pridgin Teale, Dangers to Health, 1880; Drysdale & Hayward, *Health and Comfort in House Building*, 1872

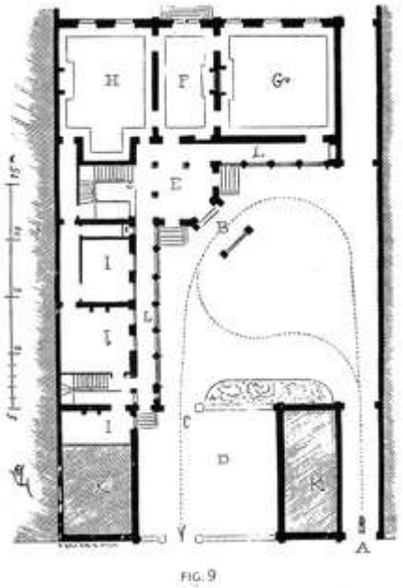
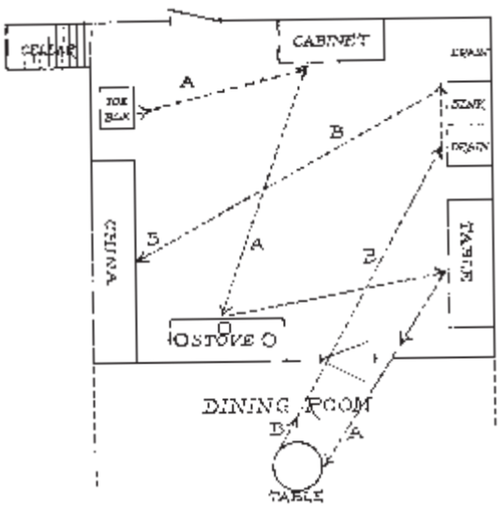
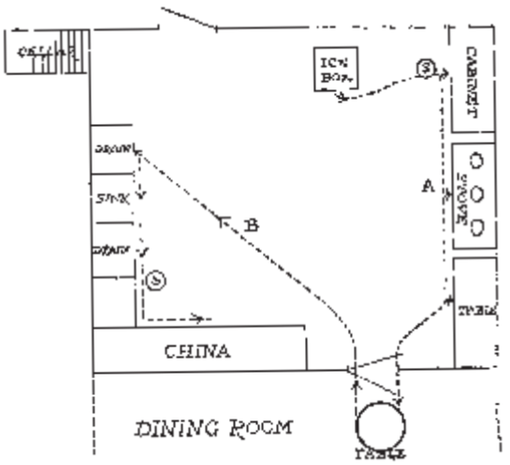
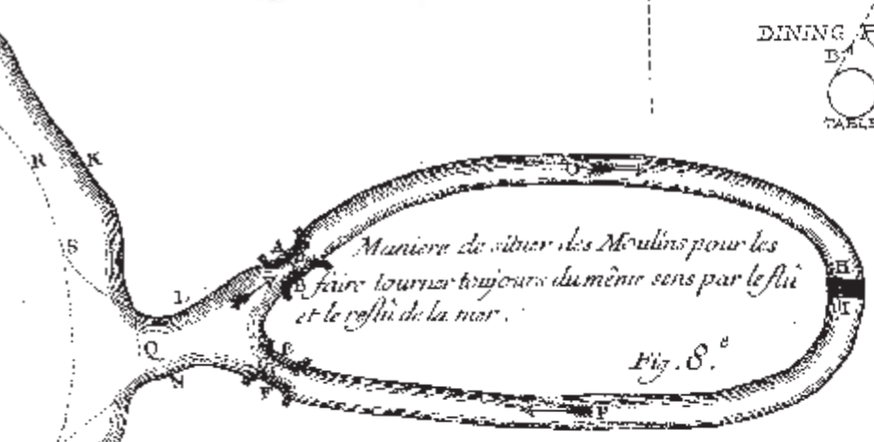
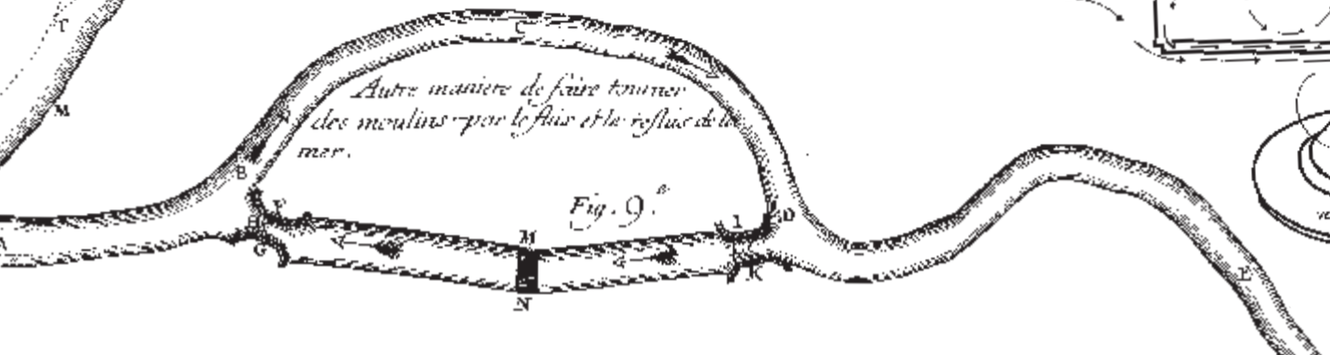


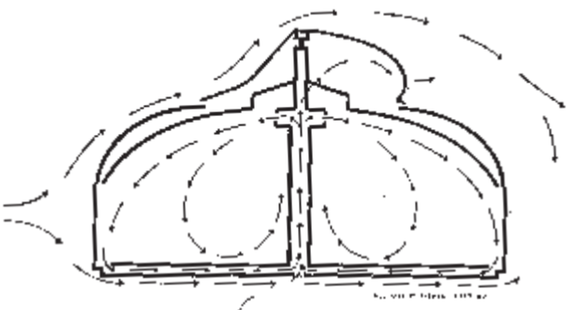
FIG. 9

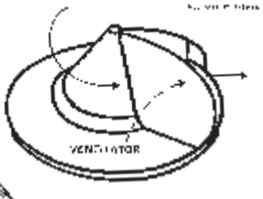


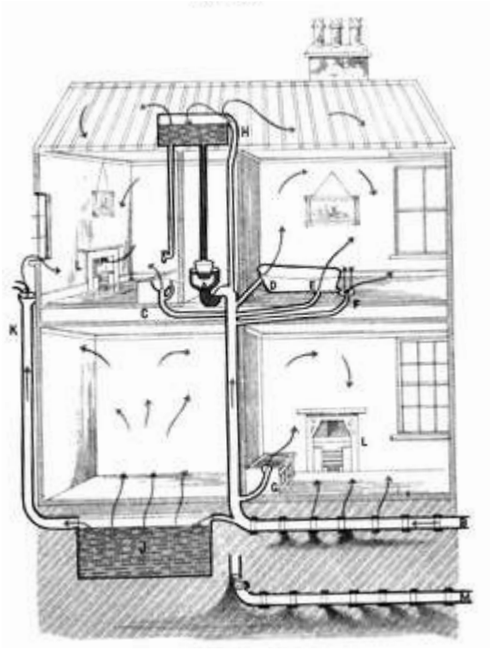


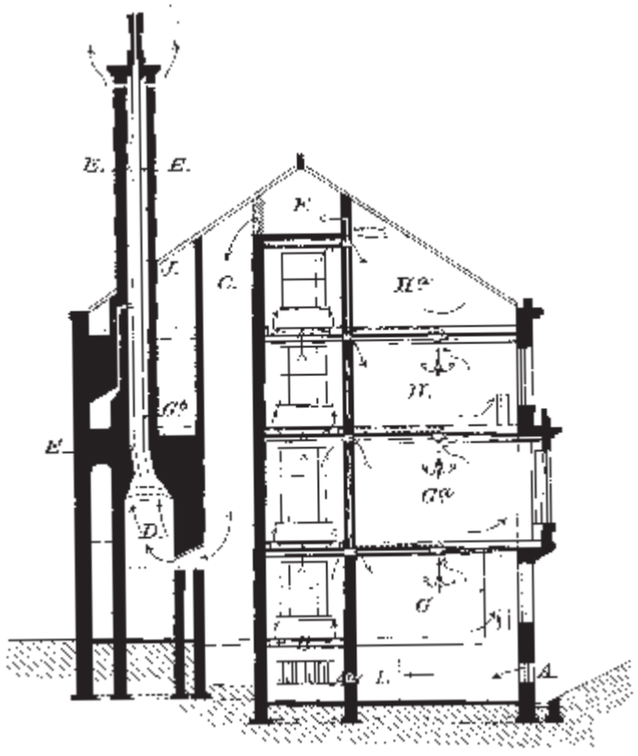




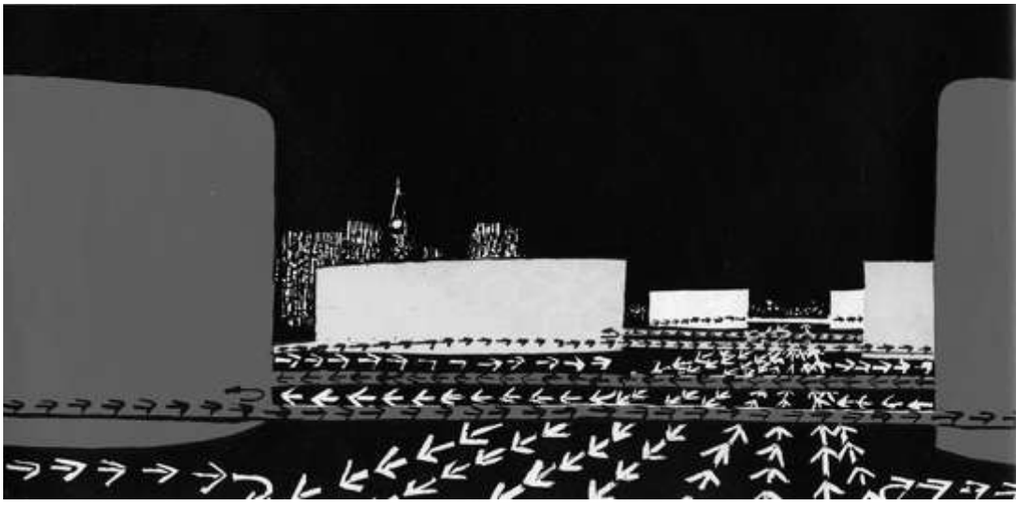


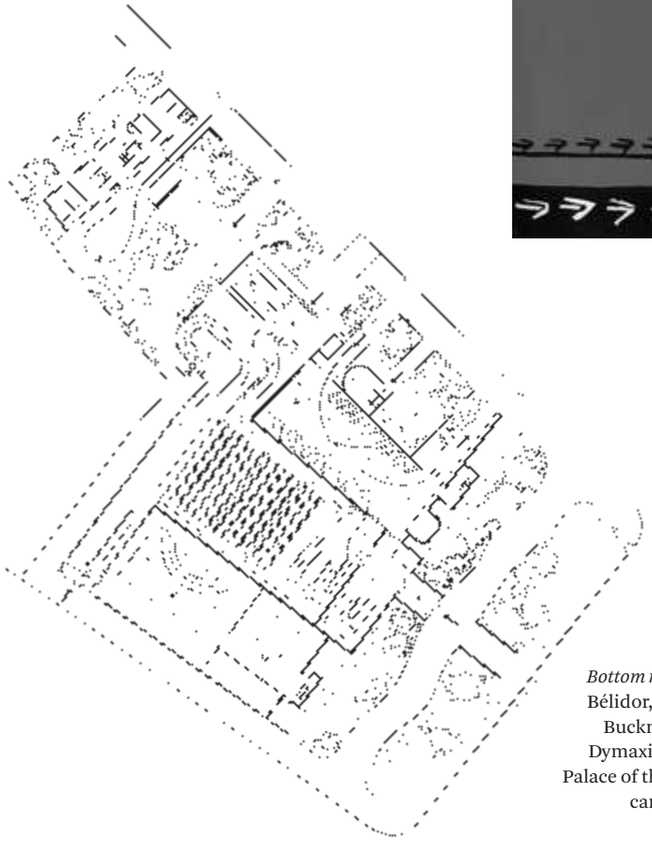




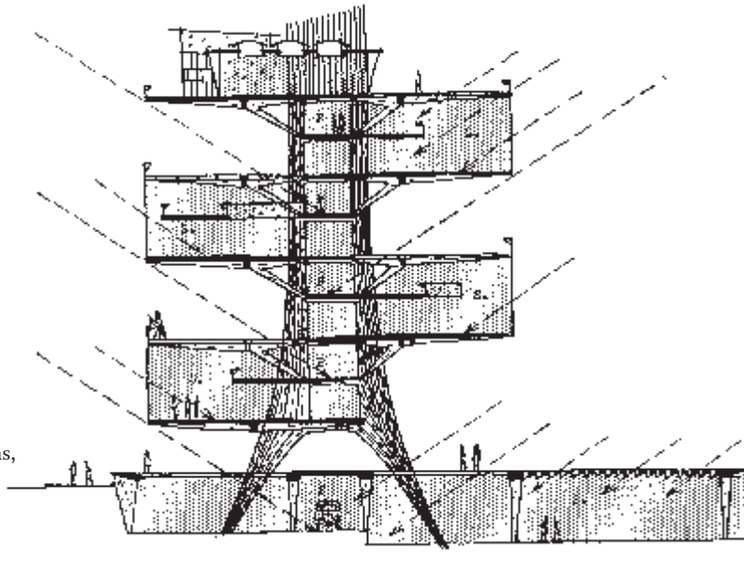


Middle row: Eugène Viollet-le-Duc, townhouse, 1872; Christine Frederick, studies in home management, 1913; Louis Kahn, Toward a Plan for Midtown Philadelphia, 1953





Bottom row: River flow, from Forest de Bélidor, *Architecture hydraulique*, 1737; Buckminster Fuller, airflow in the Dymaxion House, 1946; Le Corbusier, Palace of the Soviets, 1931; Rodney Thomas, cantilevered structure, 1953



However, one seemingly nondescript motif counters this fragmentation, and allows us to target more precisely Stirling's work and better grasp its trajectory. This motif is the arrow. In contrast to the changes offered by building type or clients, or the shifts one sees in a formal language, collaborators or art and architectural conventions, the arrow is ever-present in Stirling's work. For example, a close inspection of his plans and presentation drawings reveals north arrows, of course, in site plans, as well as arrows marking an entrance or the direction of a staircase. But keep looking, and you will notice many more: arrows that trace a mechanical operation, such as the opening or closing of a window, arrows that represent the various stages of a construction process, from the laying of foundations to the tiling of a roof, and arrows that trace pedestrian or motorised routes, both straight and circuitous. Arrows indicating the minimum water level in a tank can also be found, along with arrows in a ground plan or in section showing the sun's rays and their angle of incidence. Then there are the arrows that highlight intersecting – both critical and contemplative – perspectives, that illustrate a structural concept – pressure and resistance, for example – and, finally, those arrows that mark paths a leisurely visitor may pursue, or the direction of travel of passing ships or trucks.

As unremarkable, even expected, such arrows may seem to us now, it is worth noting the contrasting infrequency with which they appear among the published drawings of the pre-Stirling generation of architects. Few can be found in the widely read monographs of the period: in the published work of Alvar Aalto, for instance, they make only a rare appearance, in the carpark of the Aalborg Museum and once again in a drawing of the ventilation system in the kitchen of the tuberculosis clinic in Paaimio.[14] Le Corbusier, whose work was one of the major references around 1950 and who devoted much attention to questions of light, ventilation and circulation, mostly got by without any arrows at all, with the exception of a handful in his plans of the Mundaneum, and one or two more in drawings for his Palace of the Soviets project.[15] Alone among this generation, only Louis Kahn appears to have implemented the liberal use of arrows, notably in his acclaimed studies of Philadelphia in the early 1950s, even if these were restricted to rough sketches and large urban-scale drawings, and never presentation images.[16]

Allied to its scarcity among the modern masters, precedents to the arrow are similarly patchy, and its history in architectural drawings therefore comparatively brief. Ever since the emergence of architecture as its own professional discipline, architectural and technical drawings have mainly been of an illustrative or figurative nature – their primary purpose has been to depict the structure of an object, not how it worked – and this purpose remained predominant until well into the second half of the nineteenth century.[17] There are consequently very few arrows in this period. An exception in terms of literature broadly concerned with the built environment is the first use of the arrow in the mid-eighteenth century, largely in relation to treatises that touch upon hydraulics (which in turn parallel their use in the cartography of the time, especially mappings of rivers and streams). By the turn of the nineteenth century, instances of the arrow become more common, particularly in regard to illustrations concerning the natural sciences, with arrows typically helping to convey the idea of direction and momentum in an otherwise static drawing.[18] The arrows themselves were usually depicted not as an abstract shape but as an archer's arrow, complete with head, shaft and fletching, before being simplified into a more graphic register of direction – no longer a projectile but a symbol.[19] Feathered or not, these arrows have since served to reveal a movement in time and space that could not be otherwise represented – initially the flow of fluids such as water, then air, steam or gas, later of people, goods or vehicles and, more recently, abstract entities such as energy or information.

It is therefore no coincidence that the arrow found its way into architectural drawing courtesy of experts such as doctors, social reformers and engineers, who were the first to attempt to map in their designs the ephemeral flow of fluids into, within and out of an architectural object. Exemplary in this regard are two houses built in Liverpool in around 1860 by the medical doctors, Dr Drysdale and Dr Hayward, and described in detail more than a century later by the architecture critic Reyner Banham. Writing in 'A Dark Satanic Century' in *The Architectural Review* in 1968, a prelude to his subsequent book, *The Architecture of the Well-Tempered Environment*, Banham shows how the plan, section and construction of these houses was designed to ensure good ventilation, from the intake of air beneath each structure, and its technologically driven circulation through the individual rooms, to the thermal pull of the kitchen chimney, leading to its final disposal via the 'foul air shaft'.[20] Air circulation, not only in the pipes and chimneys, but also within the various rooms, was meticulously noted with an abundance of arrows.

One of the first trained architects to use this representation technique was Charles James Richardson, a sometime collaborator of John Soane. After receiving first-hand experience of the introduction of several central-heating systems in Soane's office at Lincoln's Inn Fields, Richardson authored a pamphlet, *Popular Treatise on the Warming and Ventilating of Buildings* in 1837, designed to summarise recent developments in this field in layman's terms, and which indicated the different flows of warm air or hot water with meticulous little arrows in all of his illustrative plates.[21]

Around the same time the arrow also began to be used in ground plans to map non-fluid entities. Thus in drawings for Pentonville Model Prison, published in 1844, feathered arrows plot routes prescribed for inmates through the prison chapel and network of corridors.[22] This innovative practice of marking human movement in the architectural plan was to be eagerly adopted for other, non-penitentiary typologies, such as the townhouses of Eugène Emmanuel Viollet-le-Duc, as well as in the early ergonomic studies of the 1910s, in particular those by Christine Frederick.[23] For both fluids and people, therefore, the arrow first served to map movements that were too volatile, ephemeral or fragile to be otherwise visible or legible. And it did this not just in terms of movement as an abstract condition, but in direct relation to the buildings that contained this movement. Moreover, besides being an effective tool for visualisation, the arrow registered the possibility of investigating the potential operation of whatever was being represented on the drawing board.[24] In this way, the arrow pointed the way for greater insights into flow and movement within buildings for the purpose of systematic planning, notably those demands at the end of the nineteenth century for better hygiene, security and comfort. Nowhere is this more apparent than in the multiple editions of the successful 'pictorial guide' *Dangers to Health*, published by the British surgeon Thomas Pridgin Teale in around 1880, and which highlighted the most common sanitary defects in building (and their remedy) in over 50 plates and a plethora of coloured arrows, thus giving the arrow the leading role in the definition of better domestic design.[25]

Whether Stirling was aware of such pioneering prototypes is debatable. But the essay about Drysdale's and Hayward's two houses – which were still standing in Liverpool, Stirling's birthplace and university – was written by his friend Banham in the same year *The Architectural Review* would also publish his detailed appraisal of Stirling's library in Cambridge.[26] While Banham was investigating, on paper, historical instances of attempts to control the architectural climate, Stirling was therefore busy attempting to control the same thing in bricks and mortar, steel and glass, with the underfloor and ceiling heating, insulated double-glazing and ventilation systems (both mechanical and natural) of his History Faculty inducing the same well-tempered environment Banham was championing. But as the various arrows in the plans and sections of Cambridge reveal, 'environment' in Stirling's building implied not merely technologically controlled climatic parameters, but the more ambitious,

and architectonic, control of circulation through various ramps, corridors and staircases, which structure the plan and which decrease in density the further up the building. Furthermore, with its annular, slightly recessed complex of reading room, stacks and central lending desk – a feature evidently crucial to Stirling's success in the competition[27] – the History Faculty library implements a visual arrangement that enables the entire space to be monitored at a single glance – as in a prison, as one Cambridge don sniped.[28] Indeed, just like a panopticon, the assortment of shelves in the library are separated from each other by a corridor and are back-lit, allowing them to be viewed from a central desk, which again, true to Bentham's ideal prison, lies in the darkest area, its occupant seeing everything without ever being seen by the reader.[29]

But if the library can be read as a device or apparatus which is determined by its concentrated disposition of figures, volumes, gazes and light around a quarter-circle, it also differs in a significant way from the disciplinary dimension of the prison. For the central lending desk is not only the preserve of the librarian, but also houses the technical controls for the building's lighting, ventilation and heating (as in the Staatsbibliothek, built in Berlin by Hans Scharoun that same year). In Cambridge, then, what is at stake is less the distribution of bodies in space, but the control of a multi-layered visual, climatic and spatial environment, whose boarders are blurred by a combination of the white light of the ceiling, the atmospheric conditions of the reading room and in the open plan of the floor.

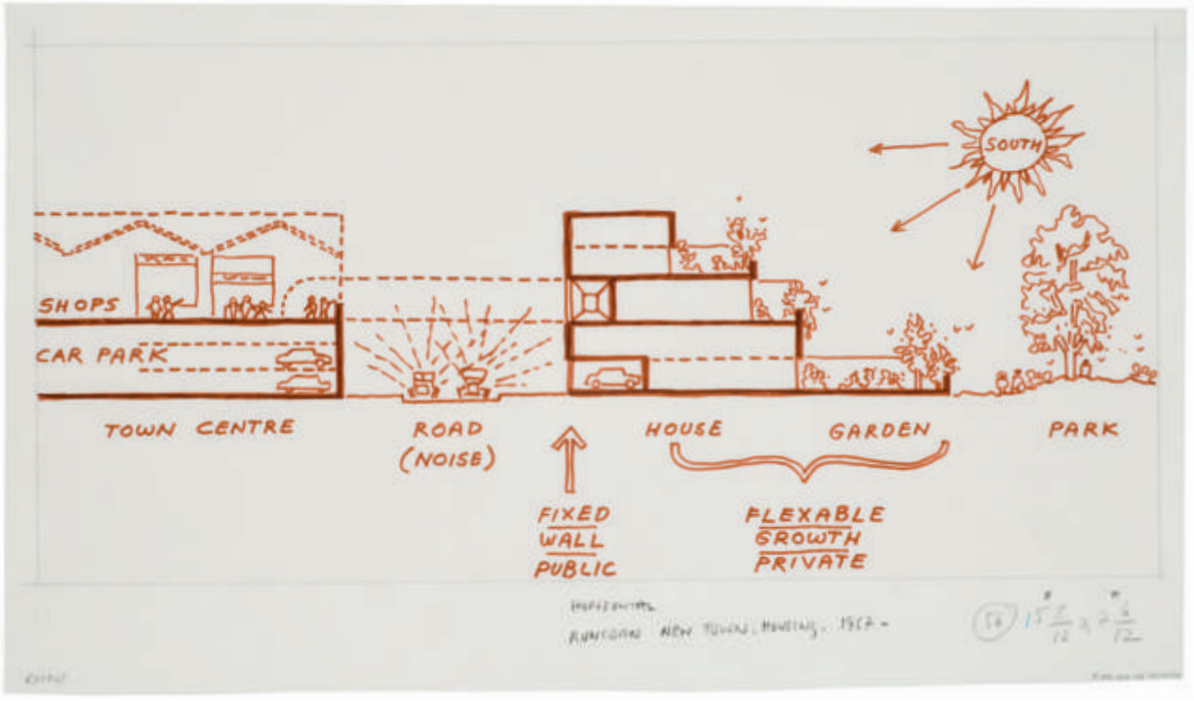
In referencing the sum of a set of environmental features, the arrows therefore mark architecture's various potentials to perform. And their scope, at least in Stirling's early work, ranges from visual dispositions in St Andrews (where the rows of the student rooms open to the wider landscape), to structural information (as in the Dorman-Long Headquarters in Middlesbrough, where the arrow uncovers structural forces otherwise not visible), and then later to infrastructural provisions in Leicester (a building that could also be read as a circulation diagram) and, finally, to a notational device indicating strolling visitors (as in the galleries at Stuttgart). The arrows in such drawings not only denote virtual movements in space and time that would otherwise not be legible, but also make it possible to plan and organise them. Accordingly, they are as much a design tool as they are a medium of representation.[30]

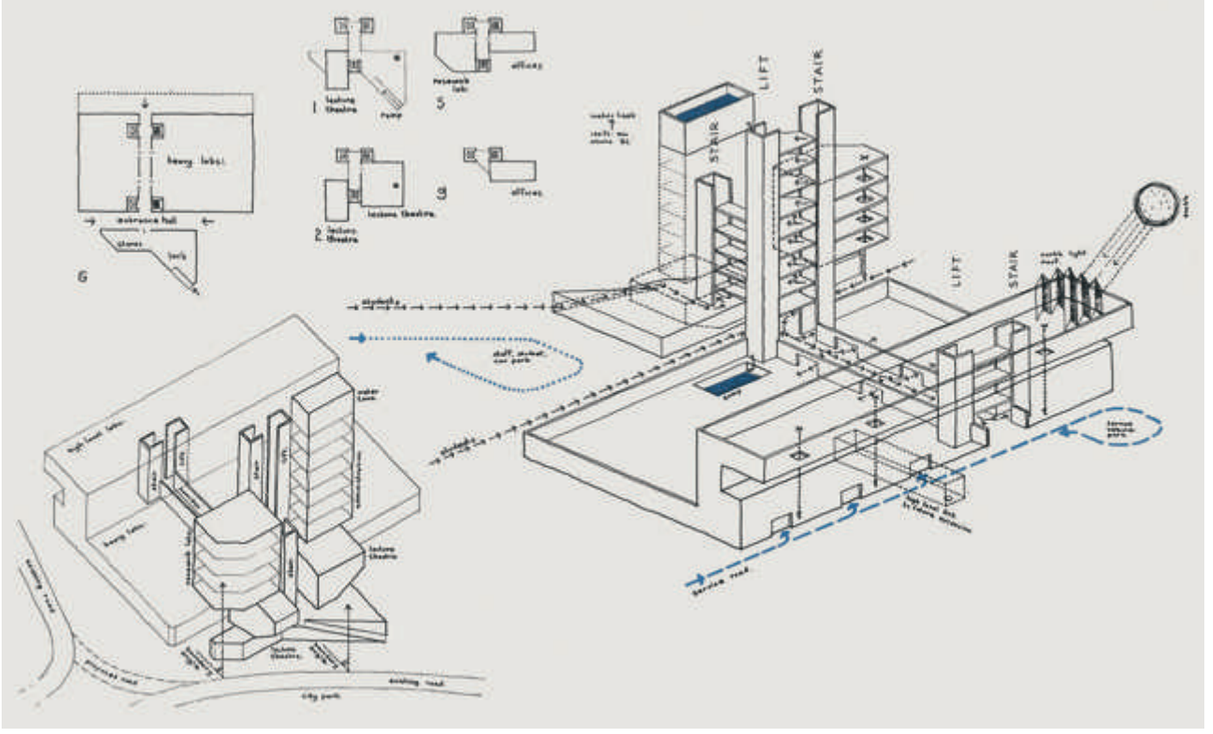
In this dual role, the arrow therefore enables a building to be conceived, not only in terms of its static volume, but also as the outcome of its spatial relationships. Stirling pursued this topic implicitly from the mid-1950s on, most evidently in the sculpture he helped produce for the 1956 exhibition 'This Is Tomorrow' whose form was derived from soap bubbles.[31] Its structure can hardly be described through its geometry, but only topologically – ie, in terms of the position of its various points to each other. What distinguishes the soap bubble is the fact that its surface constantly changes owing to the action of external forces. This characteristic is evident in his later designs, for example in the successive steps made towards the plan of the Florey Building, a student residence in Oxford. The building's geometry changes constantly on the drawing board yet its topological disposition remains the same: the previously regular block shifts shape, becoming an asymmetric yard so as to open up a view towards the river, park and city of Oxford beyond. In turn, the section also opens up over the course of the design process, taking a staggered upwards direction in order to better accommodate the sun's angle of incidence.[32] Similarly, the fan-shaped arrangement of the reading room in Cambridge describes the librarian's panoptic outlook while the steep angle of the glass roof simultaneously guarantees good interior day-lighting, the flow of natural air along its sloping surfaces and facilitates a view of the hall from the upper galleries. In the same vein, one might say that the gradually narrowing staircase at Leicester is a response to the decreasing number of users from floor to floor. This approach also explains the fundamental significance attributed in Stirling's built work and publications to infrastructure and other circulation facilities, be they chimneys, ventilation pipes or stair cores – either closed or transparent, single or double flight – in Leicester, Cambridge, Oxford and Camberwell, through to the rhetoric of the long ramps and stair arrangements in his late work; all of which is illustrated through arrows.

However, the arrow not only represents aspects of performance in architecture, but is also an expression of new spatial concepts. The theoretical implications of this were addressed in numerous articles throughout the 1950s under the catchword 'transparency'.[33] In its most literal sense, transparency denotes see-through materials and structures, such as patent glass or the curtain wall, which – as in drawings of the glass roof at Cambridge, the facade at Leicester or even the large glass-vaulted passage of the Derby project – are pierced by arrows denoting diurnal and nocturnal sightlines and rays of light. But for Stirling transparency can also be understood in its 'phenomenal' dimension (to pursue Rowe's line of thought), ie, in terms of the overlap, overlay or interpenetration of individual spatial sequences or structures whose arrangement becomes palpable and legible only by striding down those routes marked in the plan by circulation arrows. For example, the stairs in the Florey Building, which lie in front of as well as within the facade, and therefore explain the cantilevering structure of the complex; the circulation tower at Leicester, whose form can be grasped only by climbing to the very top of it; the spatial sequences at Cambridge, whose gradations can be detected only by traversing the whole building; or, lastly, the paths plotted in Düsseldorf and later Stuttgart, which can be fully appreciated only by penetrating the entire breadth and depth of each building.

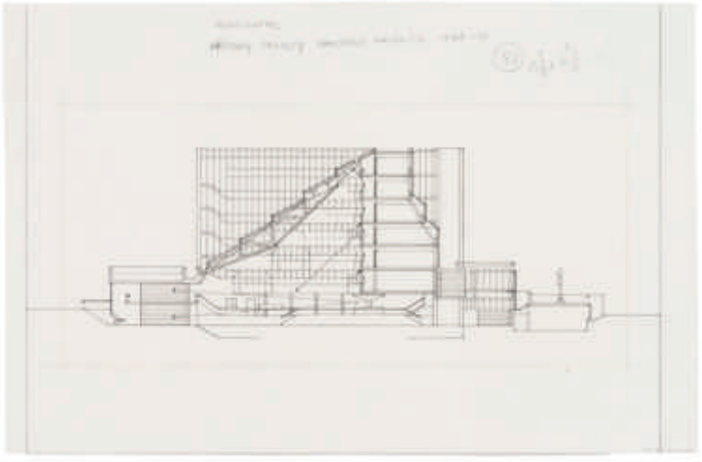
Arrows, then, are all over drawings of Stirling's early projects, but disappear almost completely from his presentation-drawings by the late 1960s. Yet to see in this a break in Stirling's architecture would do little to further understanding of his work. It would imply opting either for a formal or a functional reading of it, for a reading of his early buildings as mere stylistic baubles or technical objects, not as devices, which is to say, as structures that synthesise the knowledge of an era and participate in the conditions of their own production and are therefore never arbitrary. Besides, there is ample evidence of continuity in Stirling's work. On the one hand, arrows remain in the sketches a privileged symbol for all kinds of movement. A prime example is their use in the late 1970s in the sketch of a section through the entrance area of the Clore Gallery, where they indicate both the interrelationship of sightlines and sunlight incidence in relation to circulation, not unlike in the drawings for Cambridge; another is their use in the Stuttgart and Düsseldorf museum projects, where they plot in detail the prescribed public routes through the exhibition galleries and outdoor areas. On the other hand, Stirling also relied on other forms of representation to pursue his exploration of movement in time and space, first and foremost through the worm's-eye-view axonometrics that were to become so characteristic of his later work.[34] According to Krier, Stirling discovered this representation technique in the work of Auguste Choisy, and first adopted it in 1969 – which is to say, just as the major projects of his 'second phase' were drawing to a close – and thereafter used it systematically, even if the projections published in volume one of the *Collected Works* were actually produced retrospectively (as were a number of the plans featuring arrows).[35]

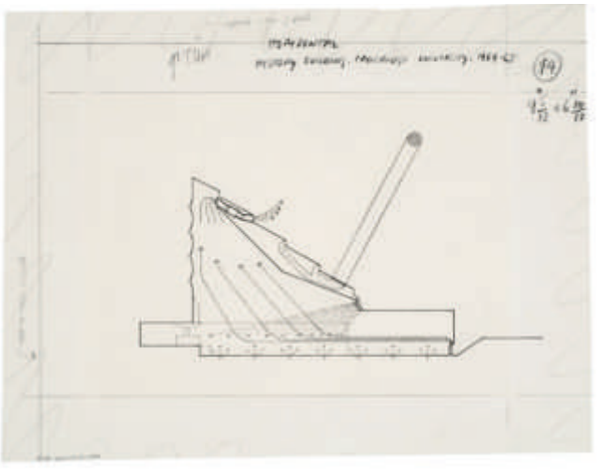
Yet axonometric projections were nothing new by this point in Stirling's career. He had used them often enough in some of his earliest projects – in his CIAM study of an expanding village, for instance, or his design for Ham Common, both from 1955 – essentially for the purpose of showing a building in its general layout. Axonometric projections were likewise his tool of choice for his studies of private residences in 1956, which he presented as a montage of varied geometric volumes; and,

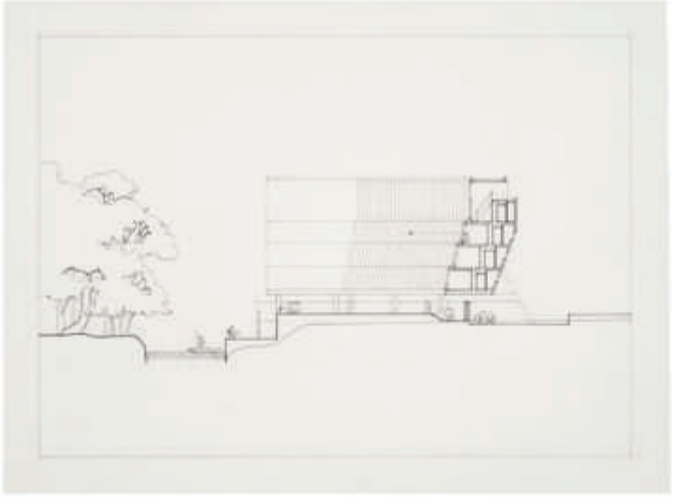


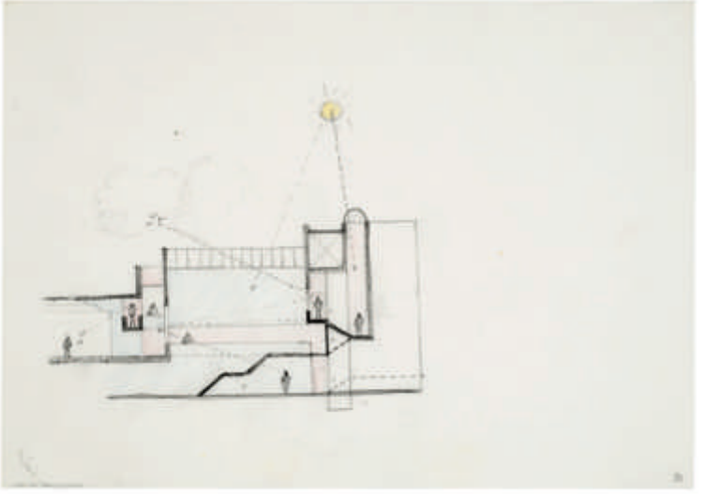


Above: James Stirling & Partner,
Southgate Housing, 1967–76
© Canadian Centre for Architecture, Montreal
Below: James Stirling & Partner,
Leicester University Engineering Building, 1959–63
© *Architectural Design*, February 1964



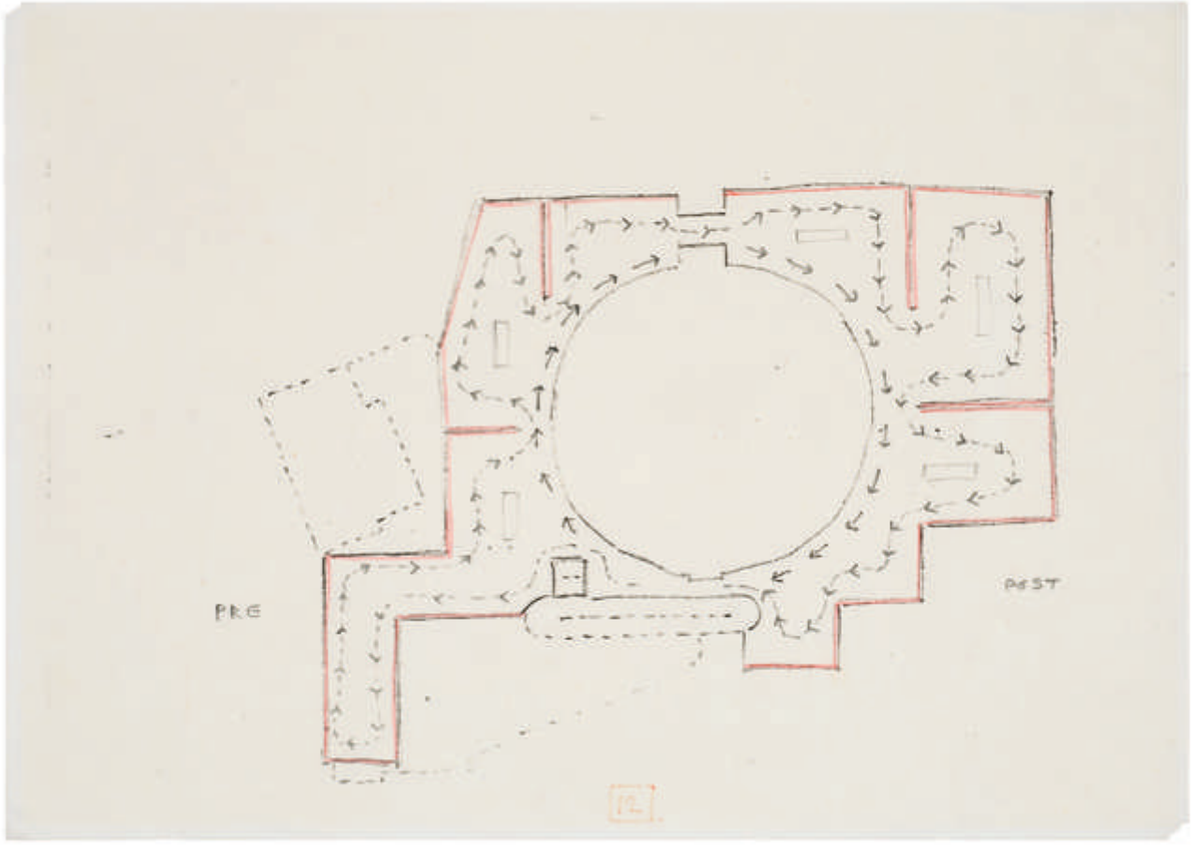




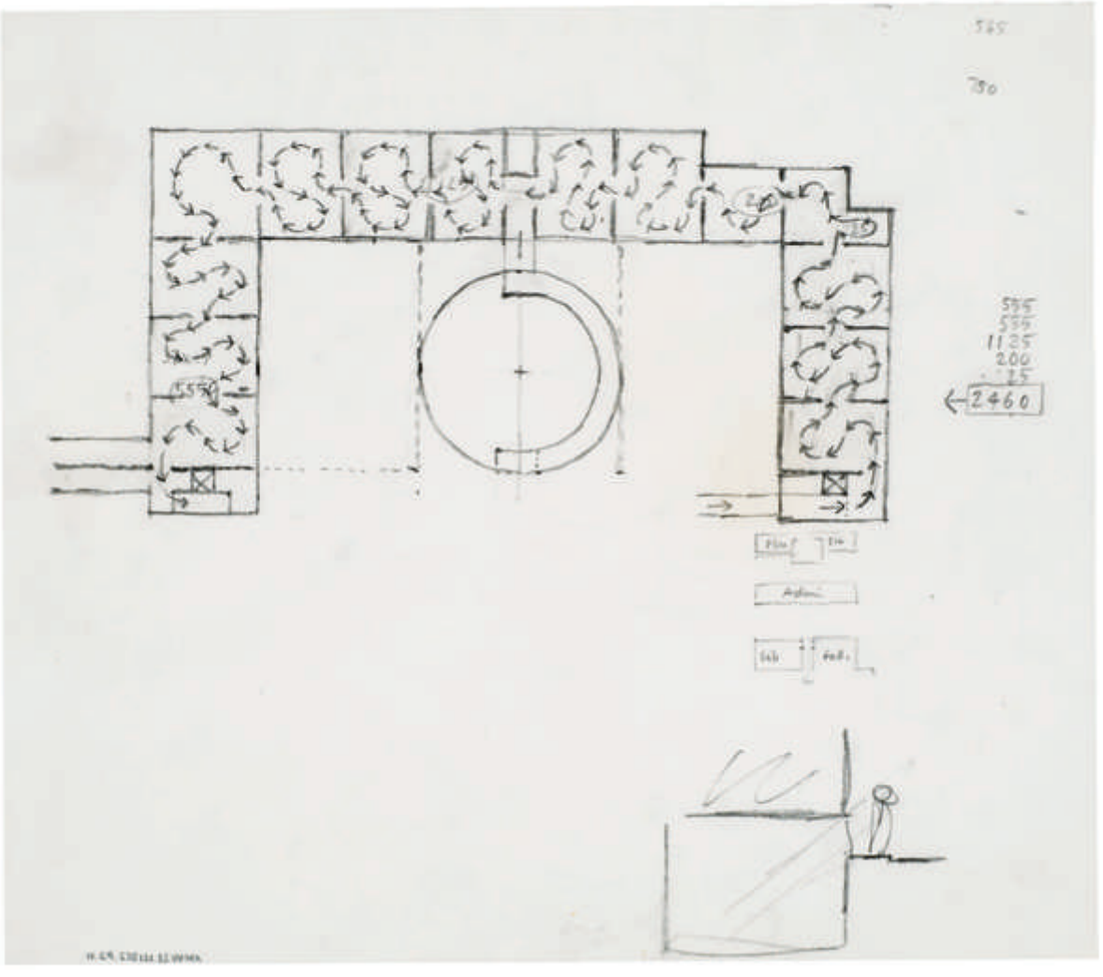


Above: James Stirling,
Cambridge University History
Faculty Building, 1964–68
Below left: James Stirling,
Queen's College, Oxford, 1966–71
Below right: James Stirling & Michael Wilford,
Clore Gallery, Tate, 1978–86

© Canadian Centre for Architecture, Montreal



James Stirling & Partner,
Nordheim-Westfalen Museum, Düsseldorf, 1975
© Canadian Centre for Architecture, Montreal

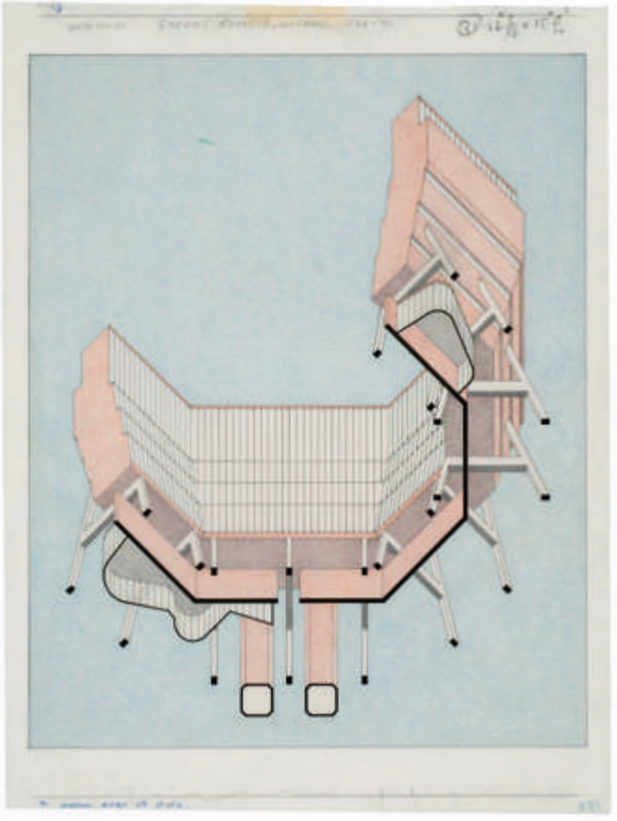


James Stirling & Michael Wilford,
Staatsgalerie, Stuttgart, 1977–84
© Canadian Centre for Architecture, Montreal

in similar manner but on a larger scale, for his Churchill College competition entry. An axonometric presentation drawing of the entire complex at Leicester was made too, along with studies of individual structural details. Precedents for the use of this means of representation were common enough. Le Corbusier and Gunnar Asplund had used axonometric projections, and so too had Alberto Sartoris,[36] from whom Stirling could also have adopted the hatching technique as a means to prevent a drawing flipping over into its negative form. And, as Reyner Banham remarked, most architects would have been familiar with axonometric projections at the latest by the 1940s, since these were commonly used in military manuals.[37]

Two instances in the history of axonometric projections serve to better understand their properties. Firstly, there are the reasons the military chose this means of representation when planning fortifications, namely to simplify calculation, to standardise foreshortening and to avoid blind spots.[38] Stirling was similarly motivated to use it in early drawings, such as the house studies, to simultaneously illustrate the bird's-eye and the lateral view. Secondly, its use was highly recommended as of the early nineteenth century for representations of machinery. As Yve-Alain Bois has noted, the 'sameness of scale for all three dimensions of a space' was much acclaimed,[39] for it was this particularity which made it possible to represent transition mechanisms between individual links in a functional chain, true to scale. The drawings for Leicester attest this same benefit, since they illustrate the complex interrelation of parapet and wall, and the complex construction of the patent glass roofing in the stairwell; and so too those of the construction process at St Andrews, which show the various steps to completion of the student residence.

However, what distinguishes the axonometric projections with their characteristic worm's-eye perspective from more traditional forms of representation is the fact that they enable the building hitherto divided into abstract plan, elevation and section to be read as a single whole. Like the arrow, yet on a decidedly different vein, this makes them a most apt technique for illustrating virtual movement in a building. They allow a building to be represented not only in terms of the sequential steps that go into its making, but also – and this is decisive in this context and represents a further step in Stirling's interest for movements in buildings – in terms of the temporality of any perception of it. For what essentially distinguishes axonometric projections from perspective drawings is that they replace the viewer's single fixed viewpoint with a range of potential viewpoints, namely, as Yve-Alain Bois notes in an essay on Sergei Eisenstein,[40] by uniting all the important elements of a building in order to represent it quasi in a single frame. Likewise in the work of Stirling, axonometric projections actively foster kinetic perception of a building. This is evident in the axonometric projections for the museum in Düsseldorf, in which the two prescribed routes into and within the building are illustrated in their entirety: the sequence running from the entrance pavilion, with its portico, through a revolving door – an architectonic device par excellence – and along a wall as far as the ramp that leads to the upper floor on the one side; and, on the other, from the pavilion, along the wall and through the entrance into the cylindrical inner courtyard, and from there beneath the exhibition space and on into the city. Axonometric projections facilitate the 'single-frame' representation of all the perspectives that may possibly be gained from an experience of a building. The numerous photo series featured in Stirling's later publications are retrospective proof of this: photos of the ascent of the stairs in Leicester, for example, or of the prescribed route through the inner courtyard in Stuttgart.



James Stirling, worm's-eye view, Queen's College, Oxford, 1966–71
© CCA, Montreal

The historiographers' aforementioned insistence on historic role models in Stirling's work must accordingly be considered in a different light. Certainly, various referential horizons can be identified in his forty-year career, from the machine aesthetic of the 1960s to the classic formal repertoire of the 1970s and 1980s. But if we are to foreground the technique of 'collage' in reference to Stirling's work – whereby 'montage' would perhaps be the more appropriate term, given that he presents reality as a series of sequences, not as fragments – then not so much in the sense of a recollection of historical motifs but, rather, as a continuous interrogation of the potential of these motifs.[41] Thus the glass roof in Cambridge references the glasshouse in Kew only insofar as it highlights the potential of transparency; the cylinder of the museum in Stuttgart references the central hall of Schinkel's Altes Museum in Berlin – biographically perhaps more accurate would be John Foster's Liverpool Custom House[42] – only insofar as it highlights the spatial potential of picturesque circulation routes. Indeed, the historical motifs in Stirling's work provide potential figures, not just forms. This performative demand to architecture runs like a thread through all of Stirling's oeuvre. If axonometric projections gain such currency in the later work, then only because they illustrate the buildings' performative potential in spatial terms whereas arrows in the early work primarily revealed the functional and topological properties of a design. What changes, however – and this is visible in the axonometric projections for the later work, for the music school and theatre academy in Stuttgart, or the Poultry in London for example, which always portray the building through its surfaces – is that the focus shifts from a, in the broadest sense, technological understanding of environment to a perceptual reading of it, from the building's use (and its typified user), to the building's individual perception (visually but also bodily) – from a linear trajectory of the arrow in the early drawings to the winding one in the later ones.

It would be tempting at this point to draw connections between Stirling's arrows and the emergence of other arrows in the 1940s and 50s, from the innumerable arrows which appeared on the asphalt of the streets and on the signage along the streets, to the arrows in the Situationists' psychogeographic maps, to the arrows in scientific and especially communication studies, which would find their way for instance in Richard Hamilton's, John Voelcker's and John McHale's catalogue entry to the 'This Is Tomorrow' exhibition in 1956,[43] where the

different organs of perception of the environment – eye, nose, mouth – are similarly illustrated with arrows. Although the temporal concurrence of these different types of arrows is striking, the polar instances of form and content, original and reference, signifier and signified involved in these examples bear the risk of getting entangled in the too intricate problems of signification and representation. Instead, it seems more rewarding to relate the arrows in the work of Stirling – as well as in that of a series of his contemporaries in Great Britain, like Alison and Peter Smithson in their famous London Road Study of 1959, or in America, like Buckminster Fuller in his mapping of the aerodynamic behaviour of the roof of his Dymaxion house in the early postwar years – to what Félix Guattari has called 'a-signifying semiotics.' These semiotics make up the realm of diagrams, schemes and plans, that is, the realm of signs, that do not only produce signification but cross the boarders of different types of signs and productively bring together signs with other material. A typical example would be the building plan, that puts physical and mathematical descriptions into a specific relationship to the construction materials. In Guattari's thought such diagrammatic schemes stand in a particular relationship to his broader machinic concepts, as they effectuate, very much like real machines, the transformation of realities into a different state.[44]

If therefore Stirling's designs can be seen not only as buildings but in the broadest possible sense also as apparatus or devices that define different environmental conditions – if the library in Cambridge can be seen as a monitoring device, the student dormitory at the University of St Andrews as a device for viewing the landscape, the engineering building at Leicester as a circulation device, and the museum in Stuttgart as a device for the consumption of contemporary art – then it is the symbol of the arrow that forms the link between the semiotic machine of signs and the material machine of architecture. Stirling's arrows do not only represent movement in architecture, like the archer's arrows they were first modelled on, they create it.

1. 'John Miller in Conversation with Mark Swenarton and Thomas Weaver', *AA Files* 70 (2015), p 127. It was Sam Stevens, an AA student then responsible for the AA gallery, who presented the work of recent graduates from Liverpool University to question the then somewhat professional orientation of the AA. Stirling's own student designs were the standout work in this exhibition.
2. See Mark Girouard's more than simply entertaining portrait of James Stirling, *Big Jim: The Life and Work of James Stirling* (London: Chatto & Windus, 1998).
3. In the last five years alone the following monographs have all been published: Anthony Vidler, *James Frazer Stirling: Notes from the Archive* (New Haven, CT: Yale Centre for British Art, 2010); Alan Berman (ed), *Jim Stirling and the Red Trilogy: Three Radical Buildings* (London: Frances Lincoln, 2010); Geoffrey H Baker, *The Architecture of James Stirling and his Partners James Gowan and Michael Wilford: A Study of Architectural Creativity in the Twentieth Century* (Farnham: Ashgate, 2011); Mark Crinson, *Stirling and Gowan: Architecture from Austerity to Affluence* (New Haven, CT: Yale University Press, 2012); Amanda Reeser Lawrence, *James Stirling: Revisionary Modernist* (New Haven, CT: Yale University Press, 2013). See also *Oase* 79 (2009), special issue, 'The Architecture of James Stirling 1964–1992: A Non-Dogmatic Accumulation of Formal Knowledge'.
4. See Georg Franck, *Mentaler Kapitalismus: Eine politische Ökonomie des Geistes* (Munich/Vienna: Carl Hanser Verlag, 2005).
5. See for instance Charles Jencks, *The New Paradigm in Architecture: The Language of Post-Modernism* (New Haven, CT: Yale University Press, 2002), p 110. In the first edition of *The Language of Post-Modern Architecture* (London: Academy Edition, 1977), Jencks still considers Stirling 'modern'. A few years later, Heinrich Klotz identifies Stirling's break with modernism already in his Leicester building. See Heinrich Klotz, *Moderne und Postmoderne: Architektur der Gegenwart, 1960–1980* (Wiesbaden: Vieweg, 1984), pp 330–36.
6. See, most recently, Amanda Reeser Lawrence, *op cit*, pp 1–2.
7. See Geoffrey H Baker, *op cit*, p 364; and on Stirling's collaborators in general, pp 362–66.
8. On James Gowan's account of the design of Leicester's engineering department, see bdonline.co.uk/james-gowan-on-designing-leicester's-engineering-department/3114086. article, an extract of an interview with Ellis Woodman.
9. See Anthony Vidler, *op cit*, p 241.
10. See 'Léon Krier in Conversation with Christopher Pierce & Thomas Weaver', *AA Files* 60 (2010), pp 68–77.
11. See Mark Crinson, *op cit*, p 135.
12. See Geoffrey H Baker, *op cit*.
13. See Geoffrey H Baker, 'Interview with Michael Wilford, October 1998', *ibid*, pp 379–96.
14. Alvar Aalto, *Alvar Aalto: vol 1, 1922–1962* (Zurich: Les éditions de l'architecture Artemis, 1963), p 40.
15. Willy Boesiger and Oscar Stonorov (eds), *Le Corbusier und Pierre Jeanneret, Oeuvre complète, vol 1, 1910–1929* (Zurich: Girsberger, 1937), p 208.
16. Louis Kahn, 'Toward a Plan for Midtown Philadelphia', *Perspecta* 2 (1953), pp 10–27.
17. See Ernst Gombrich, 'Pictorial Instructions', in Horace Barlow, Colin Blakemore and Miranda Weston-Smith (eds), *Images and Understanding: Thoughts About Images, Ideas About Understanding* (Cambridge: Cambridge University Press, 1990), pp 26–45.
18. André Lavarde, 'La flèche, le signe qui anime les schémas', *Communication et Langages* 109 (1996), p 51.
19. Rebekka Ladewig, 'Über die Geschicke des Pfeils', in Jörn Ahrens and Stephan Braese (eds), *Im Zauber der Zeichen: Beiträge zur Kulturgeschichte des Mediums* (Berlin: Vorwerk, 2007), pp 17–30.
20. Reyner Banham, 'A Dark Satanic Century', *The Architectural Review*, vol 144, no 860 (1968), pp 257–60. See also Neville S Billington, 'A Historical Review of the Art of Heating and Ventilating', *Architectural Science Review* 2 (1959), pp 118–30.
21. Charles James Richardson, *Popular Treatise on the Warming and Ventilating of Buildings* (London: John Weale, 1837). On John Soane's successive trials see Todd Willmert, 'Heating Methods and Their Impact on Soane's Work: Lincoln's Inn Fields and Dulwich Picture Gallery', *The Journal of the Society of Architectural Historians* 52/1 (1993), pp 26–58.
22. See Joshua Jebb, *Modern Prisons: Their Construction and Ventilation* (London: John Weale, 1844), plate 3.
23. Eugène Viollet-le-Duc, *Entretiens sur l'architecture*, vol II (Paris: Morel, 1872), p 823.
24. See Sybille Krämer, 'The Mind's Eye: Visualising the Non-Visual and the Epistemology of the Line', in Richard Heinrich et al (eds), *Image and Imaging in Philosophy, Science and the Arts, volume II* (Frankfurt: De Gruyter, 2011), pp 275–87.
25. T Pridgin Teale, *Dangers to Health: A Pictorial Guide to Domestic Sanitary Defects* (London: J & J Churchill, 1878). Further editions appeared in 1879, 1881 and 1883.
26. Reyner Banham, *op cit*; Reyner Banham, 'History Faculty, Cambridge', *The Architectural Review*, vol 144, no 861 (1968), pp 328–32.
27. F E Heppenstall, 'Some Notes on the Services', *The Architectural Review*, vol 144, no 861 (1968), p 338.
28. See Hugh Brogan, 'Cambridge Diary', *Cambridge Review* (October 1968), p 15.
29. See Michel Foucault, *Discipline and Punish: The Birth of the Prison* (New York: Vintage Books, 1995), pp 195–228.
30. See Sybille Krämer, 'The Mind's Eye: Visualising the Non-Visual and the Epistemology of the Line', in Richard Heinrich et al (eds), *Image and Imaging in Philosophy, Science and the Arts, volume II* (Frankfurt: De Gruyter, 2011), pp 275–87. On the multiple roles of the arrow – notably in the artistic work of Gordon Matta-Clark – see also Briony Fer, 'The Beginning of Trees and the End', in *The Beginning of Trees and the End: Drawings and Notebooks of Gordon Matta-Clark* (New York, NY: David Zwirner, 2016), pp 10–18.
31. Regarding this sculpture, see Michael Pine and Richard Matthew, *This is Tomorrow* (London: Whitechapel Gallery, 1956), as well as David Robbins (ed), *The Independent Group: Postwar Britain and the Aesthetics of Plenty* (Cambridge, MA: MIT Press, 1990), pp 242–43.
32. See Mark Girouard, 'Florey Building, Oxford', *The Architectural Review*, vol 152, no 909 (1972), pp 260–77.
33. See Colin Rowe and Robert Slutzky, 'Transparency: Literal and Phenomenal', *Perspecta* 8 (1963), pp 45–54; and 'Transparency: Literal and Phenomenal, part II', *Perspecta* 13/14 (1971), pp 287–301.
34. Anthony Vidler, *op cit*, p 240.
35. Geoffrey H Baker, *op cit*, p 181. Indeed, Krier was to play a fundamental role in the shaping of the reception of Stirling's work. He would not only introduce implicit classical references in the works and drawings of Stirling, but his return to the office in the early 1970s to oversee the publication of the 'Black Book', actively helped shaped Stirling's public image. See 'Léon Krier in Conversation with Christopher Pierce & Thomas Weaver', *op cit*, p 72.
36. Amanda Reeser Lawrence, *op cit*, p 4.
37. Reyner Banham, 'Introduction' to the Heinz Gallery exhibition catalogue *James Stirling*, 24 April – 21 June 1974 (London: RIBA Publications, 1974), pp 5–14.
38. See Yve-Alain Bois, 'Metamorphosen der Axonometrie', *Daidalos* 1 (1981), pp 40–58.
39. *Ibid*, p 55.
40. Yve-Alain Bois, 'Montage and Architecture', *Assemblage* 10 (December 1989), pp 111–15.
41. Peter Bürger, *Theorie der Avantgarde* (Frankfurt: Suhrkamp, 1974), pp 98–111.
42. See Brian Hatton, 'Situating Stirling', *The Architectural Review*, vol 229, no 1370 (2011), pp 76–79. Biographical accuracy should not avoid the necessity of questioning the larger relevance of historical quotations.
43. Michael Pine and Richard Matthew, *op cit*.
44. Félix Guattari developed the idea of a-signifying semiotics in several texts, most comprehensively in *Molecular Revolution: Psychiatry and Politics* (London: Penguin, 1984). See Henning Schmidgen, *Das Unbewußte der Maschinen: Konzeptionen des Psychischen bei Guattari, Deleuze und Lacan* (Munich: Fink, 1997), pp 141–53.

Translated from the German
by Jill Denton, Berlin

Excursus on Contessa Priuli-Bon

Colin Rowe

I have dedicated this collection of essays to the memory of Contessa Lilian Priuli-Bon because I begin to understand that, unless I myself make notice of her, hers was a life and a sensibility – a remarkable historical intelligence – which likely will remain without record.

The first thing to say about Contessa Priuli is that she wasn't Italian and she wasn't rich. In terms of theological speculation, in Italy, she had moved in circles of intellectual brilliance. In terms of art history, she had written a monograph on Sodoma (I have not read it). In terms of the history of ideas, she had acquired by marriage the celebrated Venetian name of Priuli and by historical empathy, by osmosis, had absorbed the politics of the Venetian Republic; by means of visual observation, reading and recollection, she had then, by the time that I met her, placed herself *centre-stage* in a prominent theatre of sixteenth-century dispute.

Lilian Priuli-Bon was half-Swedish and half-Welsh – an unlikely combination. Her father was Dean of Uppsala – I have always supposed of the cathedral rather than of any university department. And, when she was 18 or so, it became the ambition of her parents to marry her off to a Prussian landowner, Kurt von Beckerath – 'but, Colin, I could *never* have married von Beckerath, he was so cru*el* to his horses'. To me, this is like something out of Turgenev or Gogol. I picture long extents of land, not much gradient, not quite steppes, all interspersed with lakes and forests, farms and country houses, now totally vanished, but always – horses, horses, horses.

Anyway, whatever the accuracy of this image, I think this is what the young Lilian saw, and she acted accordingly – she never *did* like horses. If not entirely dazzling, the destiny which her parents had planned for her was – within the realms of imagination – clearly to be associated with a modest opulence; but *that* society, *that* Baltic light, above all *those* horses – if not a fate worse than death, evidently, to her, this had presented itself as a near-equivalent.

But fortunately help was at hand. She had an aunt; the aunt was sympathetic; she understood – I think – the resolute type of St Birgitta or Queen Christina, the type which used to abound as Swedish landladies of Swedish *pensione* in Siena, Palermo, Rome; the Swedish type which abandons Sweden *never* to return. The aunt was planning a journey through Italy; I suspect there was a conspiracy – but the idea was promoted that Lilian should travel with her. Did the parents, with unjustifiable *naïveté*, imagine *she would* return to *Kurt von Beckerath*? If so, they didn't understand the *style* of their offspring. For, apparently, it was one of those arrivals in Italy which is love at first sight; and, very shortly, Lilian married her little *conte* – who was also *an architect.*

I don't know very much about Lorenzo Priuli's practice, except that he was a restorer of Byzantine churches; and for this reason I like to place the pair of them, freshly married, in all sorts of Byzantine and then Romanesque locations. I have quite sentimental notions of them at Ravenna, Ferrara, Modena, the Abbey of Pomposa and all the rest. The Romanesque excitement, I get the impression, came a little later. But Romanesque excitement there had been; and mostly down in Puglia. For talk about Trani, Troia, Barletta, Bitonto, Bitetto, Castel del Monte was abundant proof of all that.

And then, as Contessa Priuli, Lilian had acquired a genealogy. In the course of the sixteenth and early seventeenth centuries there were no less than three Doges of Venice who carried the name Priuli: Lorenzo (1556–1559), Girolamo (1559–1567) and Antonio (1618–1623). In Lilian's terms, the Doge Antonio eclipsed all others. It was *he*, accompanied by Galileo, who had climbed the campanile to take a look at Padua through Galileo's newly invented optical instrument, that famous telescope suitably lined in red velvet.

Thus there was a big emotional investment, both in the history of science and the history of Venice. Obviously, she felt almost a proprietor of Galileo and identified with him in his condemnation by the Vatican. And then she moved, by extensions, *from* science *to* Venetian politics of religion, *from* an extreme preoccupation with Galileo *to* an extreme fixation with Fra Paolo Sarpi (something I've found quite easy to do myself since she told me all this stuff). It was Sarpi who defended the Venetian state after it was put under an Interdict by Pope Paul V (formerly Camillo Borghese) in 1606. And still more. As part of his polemic against the Vatican, Sarpi wrote the first history of the Council of Trent, dedicated to James I (James VI of Scotland). A worshipper of the Venetian state, *esto perpetua*, Sarpi was more Venetian than Catholic, with the Venetian disdain for Rome. After all, Venice could, and did, make a persistent claim for a superior legitimacy – it was Venice, affiliated both to Byzantium and antiquity, which was the true heir of Roman *virtu*. And it was with this – the tradition of Venetian *campanilismo* – that Lilian remained associated.

And for these reasons she never was converted – she *couldn't* be Protestant and she *wouldn't* be Catholic. She found another specimen of this *via media* predicament with another Priuli, who in the 1540s was attached to the English Cardinal Reginald Pole, then papal legate at Viterbo. And Reginald Pole? Educated at the University of Padua, he was a cousin of Henry VIII and had, perhaps, a rather better claim to the throne of England than his Tudor relative, who had Pole's entire family exterminated, apart from him. At the papal conclave of 1550–51 he was a highly regarded candidate for election and, in competition with the future Julius III, is said to have failed by only one vote. Subsequently, as a person whose doctrinal correctness *might* be suspect, Pole suffered persecution from Gian Pietro Carafa, later Pope Paul IV, before leaving for England to assume the dignity of Archbishop of Canterbury – this much to the satisfaction of his cousin, Queen Mary I, Mary Tudor, the Bloody Mary of legend, and the highly unsuccessful wife of Philip II of Spain. Among Pole's friends, along with Priuli, are said to have been Michelangelo and Vittoria Colonna – more *via media* people? – to whom Michelangelo wrote a sequence of sonnets.

So here we are, absolutely in the *thick* of sixteenth-century religious and political ambiguities. And give or take a few years around 1900, what exactly did this all mean for a Swedish-Welsh, adoptive Venetian, intelligent and of quiet ferocity, with religious and historical interests, a good eye and an anti-Vatican inclination?

Of course, except for Lilian's pro-Venice predispositions, this wasn't really such a very arcane position. Within the Church, there were others, more than a few, who felt less than happy about doctrine as officially or 'infallibly' promulgated. Among them was the Anglo-Bavarian Lord Acton, born in Naples, with a cardinal for an uncle and William Ewart Gladstone as a friend in his maturity, who in 1870 had registered extreme distaste for the Dogma of Infallibility as it was pronounced at the Vatican Council of that year. And Lilian *had* known Lord Acton, though I can scarcely think that she knew him very well. For in the 1890s Acton must have been in Bavaria (where he owned a property on the Tegernsee) or in England (where he became Regius Professor of Modern History at Cambridge) or failing these on the French Riviera (for reasons of health). In any case, Lilian's friends belonged to a somewhat later generation.

I first met Lilian in 1946. This was at 43 Paultons Square, Chelsea, at a crowded party in the upstairs drawing room. She was sitting, decorated with some Italian order, in a large wing chair – one of the kind with a curved rather than a flat back, covered with a yellow slip cover – placed between the fireplace and the nearest of the two windows. The chair was enviably big and she becoming diminutive and, I suppose, at least 75 years old [actually, she would have been 86 or 87 by then —*ed*]. Over the fireplace was a large and bland Ben Nicholson, and on the mantelshelf a pair of small Staffordshire dogs (English folk art?) and a good French early nineteenth-century carriage clock, and there were also a lot of night lights in small Chinese bowls – these more for looks than light.

I now think that it was a prepared meeting. I was led up and introduced. Adjacent there was a padded (Berlin wool work) x-frame, late-Regency stool. I was motioned to sit on it and, though the fire was going to be rather too warm on my back, down I sat and, though other people were brought up, for the rest of the evening I never moved. At that time I was hyper-excited about Palladian villas; she seemed to know them as individual buildings; for the rest of the evening, we simply talked – about these villas and about herself, considered to be related topics. Retrospectively it was an auspicious beginning.

But now to say something about 43 Paultons Square itself, where I had an apartment in the basement, and about my landlady, Enid Furlonger, whose party it was. 43 Paultons Square is one of those smaller Chelsea houses of the 1830s or 1840s which are too narrow and too inconveniently tall – in this case about 17ft wide and, including the basement, five floors high. Nor was it all that very deep from front to back – the London townhouse of this period never has the more accommodating depth of the American townhouse of a slightly later date – an average depth must have been about 30ft, with staircase cramped and back room too narrow. But excellently constructed shutters – of the type found both in London and New York/Boston, but not in continental Europe – were a characteristic of these particular properties.

These houses were not convenient for the occupancy of the large Victorian families that arrived so soon after they were built. You might pack the bedrooms, you might put a couple of virtual slaves – or a husband and a wife – along with the kitchen in the basement, but the dining room would scarcely have been big enough, and the other three living rooms more than a bit restrictive. They were built, I think this is evident, for a practice which flourished in London throughout the nineteenth century. A widow – it had to be a widow – would acquire one of these houses and rent out rooms and the subdivision of the place would follow something like this: she would occupy the ground floor herself – supervision and dislike of stairs; the servants would be in the basement – kitchen adequate and bedroom tight; then the rest was disposed of floor by floor, each with two rooms, sometimes *en suite*. Meals served floor by floor, a lot of fetching and carrying for the servants? There can't have been an alternative. Though the basements are not really oppressive, it does seem to have been, for them, the sort of life which *should* have incited revolution.

And the tenants, who were they? Inevitably, one supposes widows again; widows and retired military men, half-pay officers, a succession of political refugees – conspiratorial French Bonapartists, Italian liberals, French anti-Bonapartists, people like Karl Marx and later Russians, anarchists and nihilists – all these with a miscellany of aspiring journalists and literary men, ambitious and on the make. You got your rooms, you got your food, you got your laundry, and you got your boots blacked: this very important in a period when, because of all those horses in the streets, black boots and *not* brown shoes were standard wear. Though in a different part of town, it was to this kind of house that George Bernard Shaw was introduced when he came to London from Dublin in 1876; and, though he didn't like it, as a struggling music critic and impressario of a theoretical politics, he was able to endure it – for several years.

I may have misinterpreted the origins of the Paultons Square houses for this landlady trade – they are rather far down the King's Road, almost at the World's End. But about some houses adjacent to the Royal Hospital – Cheltenham Terrace, Walpole Street – there can be no doubt: stock them up with impecunious relics and specimens of the elderly, apoplectic military, and I think you have the picture. For the most part Chelsea's bigger, and more particular, houses came later – in the 1870s; and then it was later still – after 1918 – that the earlier Georgian builder's houses came to be considered 'desirable property'. It must have therefore been about 1938 that number 43, as a house which had come to possess *cachet,* had been bought for Miss Enid Furlonger.

Enid had come to London from Canada. I think she had been engaged to somebody who lived in England, but the engagement fell through, hence the house which was too big for her. I was recommended as a possible tenant by a Chinese friend of mine; he was Enid's tenant and was about to return to China. He had told her I was called 'Co Lin Lo'; and it was thus that I moved into her basement. I think that she was terribly disappointed that I was not Chinese!

Enid was intelligent, scatter-brained and stylish; and she had lots of stories about the house. Bram Stoker had lived there and had written *Dracula* in the basement – she was sure it had been there! And, then, in her own kitchen: '*Somebody, you know, once committed suicide in this kitchen and sometimes as I look around it – don't you know – I'm not surprised!'* She also had a succession of Italian lovers. At this time it was Ricardo Priuli – son of Lilian – who provided the essential services.

Ricardo, along with his mother and his sister, Francesca, had left Italy because of Mussolini. After the Abyssinian affair and the Racial Laws they had begun to receive premonitions of *the worst*; and, in this way, they were examples of an Italian refugee culture – many of them, though not all, Jewish – which was a curious replica of an earlier, and highly educated, Italian community, the political refugees of 1820 to 1860–70.

As a lover Ricardo was not highly animated; in order to be stimulated he generally needed two Haydn quartets – and I was *obliged* to know this because I lived underneath and worked late. As a rather boisterous aesthete his tastes in painting, I should say, oscillated between Piet Mondrian/Ben Nicholson and Max Ernst/René Magritte. He didn't, seriously, know anything about Le Corbusier – though he really felt he ought to; but since mannerism had become a mildly fashionable taste – Nikolaus Pevsner's article, 'The Architecture of Mannerism', dates from 1946 – and since he found me crazed about mannerism and his mother equally crazed about The Council of Trent, putting the two of us together must have seemed to Ricardo to be a project fraught with, maybe, amusing possibilities.

At this stage, when I have taken so long to get *not* so very far, I feel I should now say why. It seems that my memory is principally spatial. Or that, to set recollection in motion, I need to reconstruct a house or, preferably, a room, to make a catalogue of its episodes or furniture – and the more detail the better – and then, by doing so, I can begin to recall *events* – things, people and conversations. And this must be my excuse for a protracted examination of a typical London house and a specific Chelsea drawing room.

I believe this to be a fairly normal *mnemonic* process. For Mario Praz I suppose that all that Empire furniture of his *was* the instigation of chains of memory; for Jim Stirling I know that comparable furniture acted as comparable stimulus; and I rather suspect that this must also have been the case with Edgar Allan Poe. And for myself? And *that* yellow chair? Not, altogether, a case of Proust's *les vrais paradis sont les paradis perdus* – but, again like Proust and, this time, his *madeleine* – I never see a chair approximately like that chair or a yellow approximately like that yellow without the almost inevitable flood of recollection.

[I recall talking about the fourth] son of Henri II and Catherine de Medici; in spite of her uncle being Pope Leo X, the house of France would never have tolerated a marriage with the Medici – bankers and parvenus – if Henri had not been a younger son with little hope of succession. Henri's younger son was elected king of Poland, but on the death of his elder brother he returned to France – as the future Henri III – by way of Venice; at Venice he enjoyed a state reception on the Lido; the ceremonial background – a colonnade and a triumphal arch – designed by Palladio, later served as a model for Decimus Burton's arrangements at Hyde Park Corner in London; Henri's homoerotic propensities caused him to surround himself with far too many boyfriends, his *mignons*, all of them prone to dress in the Spanish style, in black; on the whole, the population of Paris was less than pleased by all this – I suppose this is what I intimated, but it didn't interest her. After all, she knew it and she knew that I knew it; evidently, I had inhibited a line of conversation which she would have preferred and her look, which I distinctly remember, seemed to imply: 'But, dear boy, you are being terribly obvious, in a Protestant way, and I didn't think you could be so banal – like a nineteenth-century liberal.'

It was apparent that she would have preferred to talk about the *mignons* and their more esoteric tendencies. After a lapse of some 50 years, since I am sometimes rather slow, I now begin to understand. She had been hoping that I would refer to Giordano Bruno, Neapolitan, ex-Dominican, born 1552, who had travelled around teaching the *art of memory*, a traditional speciality of the Dominican order of which St Thomas Aquinas had been a prime exponent. And to make *this* even better – though I just didn't know about it then – I should have been able to add a question: 'But was it not at the court of Henri III that Bruno had instructed the king and his *mignons* and proposed for them a sort of ''theatre of memory''?' And, to have made things even better, to have conversation flow, I should have added: 'And might there not be some connection between this metaphorical theatre in Paris and the Teatro Olimpico, erected in Vicenza by Palladio at almost the same date?'

Undoubtedly, this is what I should have said; but, as it was, I had been brash and, by her standards, obtuse in a great breathtaking way. In fact, as I see it now, she had wanted to introduce me to an arcane intellectual tradition, Pythagorean, Cabalistic, incipiently Rosicrucian, and claiming a pedigree drawn from the 'Egyptian mysteries'. So I had failed her. Though she partly believed in this tradition, she had wanted to suggest to me – surprising from a woman of her generation – not only that Henri III and the *mignons* had been adepts in this tradition, but also that Andrea Palladio and his patron, editor of Vitruvius, Daniele Barbaro, had been among its representatives.

Strange! Because, had I but known it, I could have acquired this story at the Warburg Institute almost any day – though scarcely from Rudolf Wittkower. The full story might have been rather too exotic for him, but there was Frances Yates, who shared virtually all the Priuli interests – Henri III, Giordano Bruno, Paolo Sarpi *and* Galileo – and was somewhat intrigued by my spending so much time with the contessa.

At that time at the Warburg Institute, all the Fellows (I was called a Junior Research Fellow) were very discreetly assimilated Jewish. We two were the only very visible *goyim* (a word that was never used, of course), the only gentiles – it's amusing that this should relate both to the *gentle* and the *genteel.* Fritz Saxl and Rudolf Wittkower were the most important people for me there. Saxl: mercurial, indefatigable, helpful and incredibly kind, truly Austro-Hungarian, Viennese in his attitudes, Aby Warburg's essential aide, who in 1933 had quickly brought the institute from Hamburg to London; sometimes, with a shoulder shrug, he would say to me that his only ambition in life was to be operating a small delicatessen in the vicinity of Prague. Wittkower was my own particular teacher, serious, scarcely vivacious, overtly laborious, infinitely concerned; he had come to the institute shortly after its arrival in London, after spending some ten years at the Hertziana in Rome. And, then, there were two women of whose presence I was extremely aware, both in their different ways mementos of the Hamburg days: Gertrud Bing and Annemarie Meier. Bing, long-time assistant to Warburg and now companion to Saxl, was I believe some sort of niece of the Hamburg collector who had established himself as an art nouveau dealer in

Paris in the 1890s; and Annemarie, indispensable secretary, who privately lamented the institute's presence in London and would have preferred – as maybe would the New York Warburgs – that it had relocated to Princeton. Saxl, she said, would have been perfectly happy with Panofsky in Princeton, the funding would have been better, and it was really only that old Vienna anglophilia – a characteristic also of Adolf Loos and Sigmund Freud – which had steered Saxl to London. As the best of all *probable* strategies, though *possible* problems might be imagined, I am sure that she was right.

So the only two *goyim* were Frances Yates and myself. I shared a little space in the library next to her rather bigger one; with hindsight, I see that my failure to comprehend her intrinsic interests – they were much the same as Priuli's – was an inexcusable failure of interpretation. But I found her a little stiff, a little slow and maybe – though I didn't really know it – a little too High Church Anglican. So there were no electric sparks which flashed between us. Lilian may have been a grandmother figure, but I preferred her more accomplished allure. It was a case of scholarship *versus* experience. Yates' intuitions had been acquired, but I felt that Priuli's were, in some way, inherent. With Priuli, one could almost feel that one was *touching* history, with Yates I always felt – some several degrees – removed. And *this* was an error, as I now confess.

Frances Yates, I am sure, would have been highly amused by my present exercise of the *art of memory*; and I would have liked to have been able to tell her that, in this exercise, I haven't used any of Bruno's recommendations.

But it was rather a strange life, this Warburg episode: sixteenth-century architectural ambiguities and walks, backwards and forwards, to South Kensington or Earl's Court, two or three afternoons a week with Rudolf Wittkower – and sixteenth-century religious conflict, one or two evenings with Lilian Priuli. And – in between whiles – various nocturnal thumpings transmitted from the floor above.

Contessa Priuli knew Frances Yates, I think not intimately but with her usual perception. The story of Galileo, Antonio Priuli, the campanile and the velvet-lined telescope is intrinsically Lilian; Frances Yates tells this story and, with her, I wonder about its provenance – it seems to be equipped with less personal vibrations. Contessa Priuli did not know Rudolf Wittkower and I begin to wonder what might have happened had I somehow arranged a meeting. Another case of scholarship *versus* experience? They both of them felt that they knew Venetian villas – Priuli with the know-how and the prejudice of the insider, but where she would be anecdotal, Wittkower would be analytical. *Architectural Principles* had not yet appeared as a book, though it had existed for some time as a sequence of articles in the *Warburg Journal*. Lilian was familiar enough with these to applaud the analysis of harmonic proportion and musical ratio, but her instincts differed from Wittkower's deductions in the appraisal of (to her) more familiar particulars, as, for instance, in the judgement of the character of Giangiorgio Trissino, Palladio's first preceptor and patron, 'the glory of our age'. For Wittkower, immersed in an art historical culture, Trissino was a humanist paragon; but from Priuli, immersed in Venetian politics and the history of religion, I received the impression that Trissino had not been an entirely admirable character – if possible, something distinctly worse than Kurt von Beckerath. If not 'cru*el* to his horses', he was more than cru*el* to his son, whom he had denounced to the Inquisition as a Lutheran heretic, with painful results.

She was also – though I don't think that she was in any position to judge – doubtful about Wittkower's closing discussion, 'The Break-Away from the Laws of Harmonic Proportion'. She felt that everything could not be so circumscribed, that there must be eruptions from outside; and thus she was disturbed by the negative interpretation of English and Scottish aestheticians considered responsible for this 'break-away': William Hogarth, David Hume, Edmund Burke, Lord Kames, Richard Payne Knight, Archibald Alison. She found that this was an inadequate presentation, felt without compassion and understanding, an example of what she used to call 'rather textbook'.

Repeat: her taste for the arcane tradition of Giordano Bruno had caused her to be highly responsive to the concepts of musical ratio, mathematical law and harmonic proportion; but, as I now see it, she also knew the exigencies of a dissenting attitude, the insistencies of what today we would call the romantic revolution. And it was in this context of positive–negative, yes–no, figure–ground reaction that, I believe, being inspired by her, I wrote that ambiguous article which has received a too extensive/obsessive attention, 'The Mathematics of the Ideal Villa'.

Wittkower didn't like the article; Priuli did. Rudy saw it as lacking in scholarship and frivolous; Lilian saw it from her more experiential point of view, and she saw it as deadly serious. She *delighted* in the sixteenth-century clash between religious ideologies – in apprehending it; but she *approved* the Venetian policy – in the interests of 'trade' and 'communication' – of working to minimise the violence of ideological collision. Might one coin the word *Veneto-philia*? As 'think intensely but live and let live', it sufficiently defines her attitude, and she knew it to have been the attitude/policy preferred and pursued, to some extent by Holland in the seventeenth century, and by England in the eighteenth century – but she didn't know the American Revolution and the United States. An attitude without *extreme* commitment, a policy without passion, a concern for self-interest leniently understood – deviations from this historical 'Venetian' mind-set were to her aberrations; and it was thus that she condemned the policy pursued, at the beginning of the twentieth century, in condemning her theologically modernist friends. Private fervour: public tolerance; and Lilian did have her little Picasso – I see her clutching it under the piano when the house fell on top of her – and, for her, in this scarcely minor catastrophe – this little picture must have been an item of faith.

I have had two principal teachers: Rudolf Wittkower and Henry-Russell Hitchcock. In Texas, as I have recorded, I had the good – and the bad – luck to have been instructed by Jean Murray Bangs (Mrs Harwell Hamilton Harris), who tried – without success – to convert me to the 'doctrine' of Frank Lloyd Wright; but who did succeed – with persuasion rather than belligerence – in instilling some preliminary conviction related to the United States.

However, my principal teacher must have been Lilian Priuli-Bon, whose lesson was less *singular* than those of the three others, and who, in delivering it, expended *no* effort. It is strange, perhaps, that the men eschewed any political culture while the women embraced it.

Postscript

In early 1992, after three decades at Cornell, Colin Rowe left Ithaca to undertake a brief teaching assignment in Rome before retiring in early July to a flat that his brother David had prepared for him in Gloucester Avenue, London. He stayed only two months. Rowe returned to Ithaca for a year, and then went back to London for another year, before moving once again – this time to Washington, DC – in the autumn of 1994. And there he remained for the last five years of his life – with his wondrous library, renowned Italian engravings and a stunning collection of furniture – renting an apartment in the Kennedy-Warren, an enormous block that he once described as a 'sort of proto-unité' and a building 'not without provenance', since Harry Truman, Lyndon Johnson and 'no less than Otto von Habsburg' had all once lived there.

On his death in November 1999 Rowe's entire library and most of his papers went to the Charles Moore Foundation in Austin, Texas. A few things remained in Washington, though, in complete disarray, including some of Rowe's writings. At the request of his brother these were kept by one of Rowe's close friends, a former student at Cornell.

In the summer of 2012 I was collecting a number of Rowe's letters for publication. David referred me to this Washington collection, and there I found nine letters. I also discovered three, undated, typewritten essays on someone called Contessa Priuli-Bon. I didn't know who she was, but I remembered a 'Lilian Priuli-Bon' from a letter Rowe had written to his friend Alex Caragonne (editor of his three-volume anthology, *As I Was Saying*). On 24 March 1996 Rowe wrote to Caragonne, telling him of his plan to publish a final collection of ten essays, to be called *Footprints and Footnotes*, he said, and dedicated to 'Phyllis Lambert and to the memory of Lilian Priuli'. The book would include an 'Excursus on Contessa Priuli' among its contents. The essay published here, the longest of the three metal-cabinet essays, is that excursus.

Rowe first met Priuli-Bon in 1946 while he was a student at the Warburg Institute and renting a basement flat in Paultons Square, Chelsea. She lived nearby, had published a book on the Italian high Renaissance painter Giovanni Antonio Bazzi (better known by the pseudonym Sodoma), and had spent much of her life in Italy married to a Venetian architect, a descendent of the important sixteenth-century Priuli family. At that time Rowe was preparing his MA thesis on Inigo Jones under the supervision of Rudolf Wittkower. He was also writing his first essay for *The Architectural Review*, 'The Mathematics of the Ideal Villa'. Concerned with ratios, architectural principles and sixteenth-century Palladian villas – and thought by many to this day to be his defining work – the essay set out ideas important to both Wittkower and Priuli-Bon. 'Wittkower didn't like the article: Priuli did', Rowe tells us. 'Rudy saw it as lacking in scholarship and frivolous: Lilian saw it from her more experiential point of view, and she saw it as deadly serious.' Wittkower, he continues, was 'analytical', 'serious, scarcely vivacious, overtly laborious, infinitely concerned'. He was 'immersed in an art historical culture'. Priuli-Bon, on the other hand, was 'anecdotal', 'immersed in Venetian politics and the history of religion', and had a 'remarkable historical intelligence'. She also offered her history effortlessly and without insistence; and clearly Rowe favours her position over Wittkower's, in many ways using her to represent sixteenth-century Venice, the city that served as metaphor in 50 years of his writing.

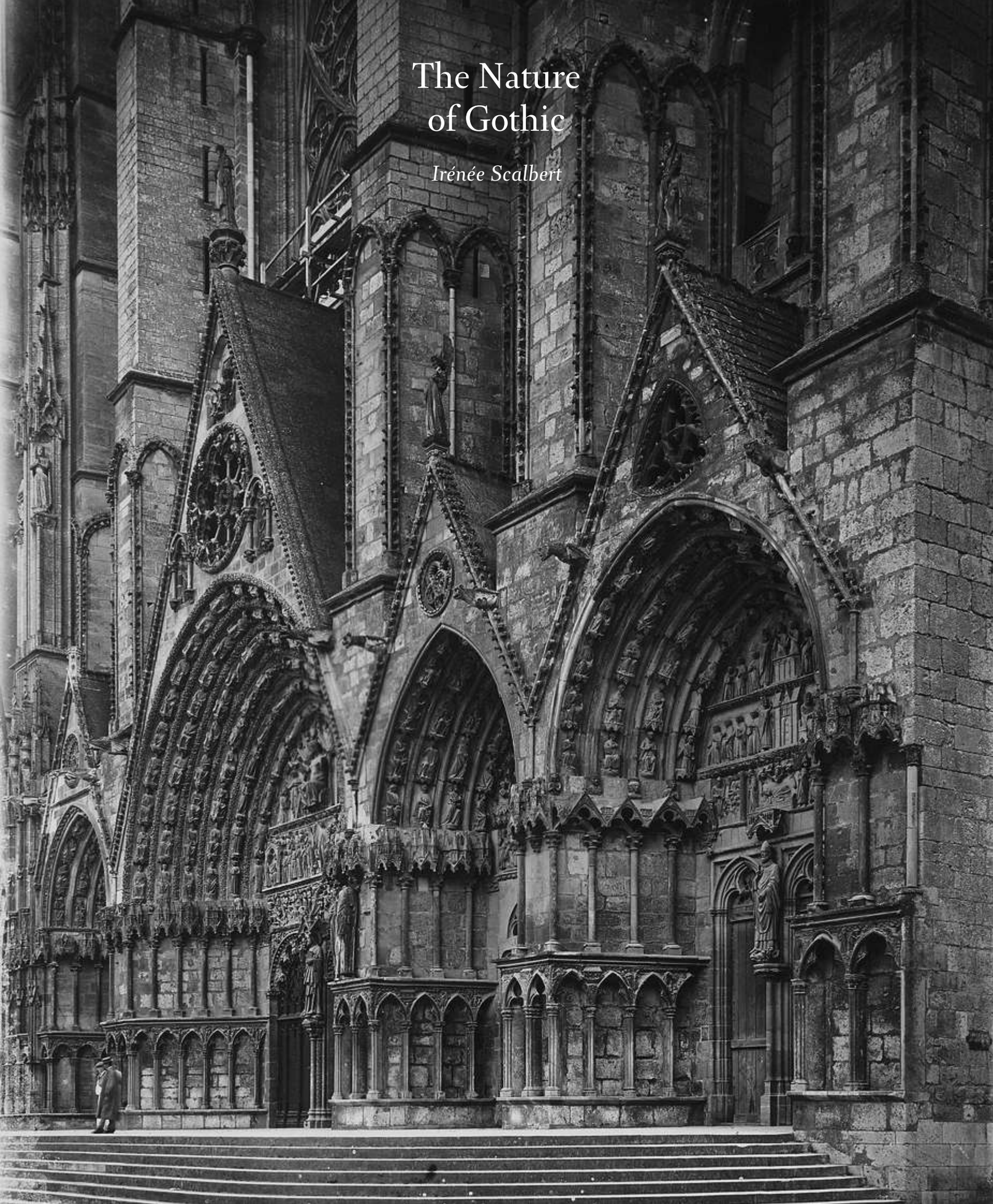


Il Sodoma (Giovanni Antonio Bazzi), self-portrait with badgers, Abbey of Monte Olivetto, 1502

It seems that Rowe wrote the excursus in 1997 or 1998. A few years earlier he had published other essays about other influences in his life – in 1994 'Henry-Russell Hitchcock', 'Texas and Mrs Harris', 'Cambridge 1958–1962' and 'Two Italian Encounters' (about a chance meeting in Arezzo with San Francisco architect Arthur Brown); and in 1984 'James Stirling: A Highly Personal and Very Disjointed Memoir'. But he had published nothing about Priuli-Bon and, as importantly, nothing of substance about Wittkower, the historian assumed by many to be the major influence on his writing.

The excursus seems to correct this view, for in telling us about Priuli-Bon, Rowe is also telling us about Wittkower. She becomes a kind of *aide-mémoire* through which he remembers life in London in the mid-1940s, his teachers, schools, friends, influences and life in a basement flat in a Chelsea terrace. He recalls sounds, colours, furnishings and conversations, and mentions his Warburg colleague, Frances Yates, noting that his own memory is 'principally spatial' and that 'to set recollection in motion' he needs to 'reconstruct a house or, preferably, a room, to make a catalogue of its episodes or furniture'.

Recollection, recall, reconstruction, remembrance. Like *Collage City*, like the best of postmodern architecture, 'Excursus on Contessa Priuli' presents us with the past as a palpable entity. And its prose style encourages this association. It's a story and it rambles, getting even more rambling as his appreciation for Priuli-Bon grows. Its sentences are seldom simple declaratives. They eschew conventional structure and punctuation, assuming phrasing (as ever with Rowe) that suggests the spoken, not the written, word. The essay in this sense is both a written 'talk' and an exquisitely construed memoir. 'You see I believe in the reading of memoirs, diaries, autobiographies, biographies and the like', Rowe wrote to his former student Mark Hinchman in a letter in January 1996. 'That is because, like Disraeli, I conceive these to be the stuff out of which history is made. Then, also, it's because I do like a bit o' gossip'.—*Daniel Naegele*



The Nature of Gothic

Irénée Scalbert



You don't have to understand, you just have to believe.
Jean Cocteau, *Orpheus*, 1950

Within a radius of 150km from Paris can be found the cathedrals of Amiens, Beauvais, Rouen, Chartres, Troyes, Reims and Laon. Paris itself hosts Notre Dame and the abbey of Saint Denis. To these great churches can be added the less familiar names of Evreux, Le Mans, Sens, Senlis, Soissons, Noyon and Saint Quentin. With the exception of Normandy, the concentration of gothic fizzles out beyond this radius. Still, imagine having within the same distance of Athens the temples of Aegina, Sounion, Bassae, Ephesus, Cyrene, Agrigento, Selinunte, Segesta and Paestum. The range of gothic reaches from Gloucester in the west to Gdansk in the east, from Linköping in the north to Seville and Lisbon in the south, but only the region of Île-de-France is blessed with not one or two but a dozen gothic Parthenons. Nowhere else in Europe, and perhaps nowhere else in the world, is there a comparable density of great architecture.

And yet in spite of this concentration, twentieth-century architects have paid little attention to it, beyond the odd allusion to its structural prowess. Mies van der Rohe praised not Erwin von Steinbach, the architect of Strasbourg Cathedral, but the neo-classicist Karl Friedrich Schinkel. Le Corbusier was moved less by cathedrals (in spite of his revulsion at the shelling of Reims during the First World War) than he was by the Parthenon. Bar one or two eccentrics like Gaudí, gothic has had little or no impact on the architecture of the last century.

What did impress modernists was its size. Indeed, size is almost the only characteristic which makes a cathedral seem familiar and allows comparison with a dam, a bridge or an ocean liner. Almost everything else about the gothic seemed contrary: the verticality, the superabundance of ornament, the imperfection, the frequent decay, the piousness, the unreason. There is in the gothic cathedral something venerable and old which is fundamentally alien to the modern craving for newness, cleanliness and simplicity. Whereas the medieval mind eagerly submitted to the Church Fathers, the modern mind called forth the *Homme Nouveau*. The admiration of John Ruskin, William Morris and Eugène Viollet-le-Duc for gothic has been presented as evidence of a medieval lineage in modernism, but these claims attach not to gothic but to Ruskin, Morris and Viollet-le-Duc. Gothic was the greatest architectural rediscovery of the nineteenth century. But the incompatibility between gothic and modernism was insuperable.

In the nineteenth century an account of gothic architecture invited descriptions accompanied by a profusion of details. In the twentieth it seldom entailed more than the facade of Notre Dame and a typical section showing the structural principle of the flying buttress – the moderns saw gothic no better than they understood it. To this day, as one comes close to a gothic building, one feels its strangeness.

Consider, for instance, the Sainte Chapelle of Saint-Germer-de-Fly, in many ways a cathedral in miniature. The chapel appears as the quintessence of French gothic, as one of the most accomplished examples of the *style rayonnant*. Situated to the west of Beauvais in a little-visited part of France, it was built to receive the relics of Saint Germer and forms a disproportionately large appendage to an earlier abbey church. A vestibule connects the two like a train coupler connects two carriages, but it is a building in its own right, commissioned by an abbot who planned to be buried in it rather than in the chapel dedicated to the Virgin Mary.

The detailing of the vestibule is exceptionally fine. Inside, piers are faced with clusters of no less than nine colonnettes, each not much wider than a hand, with a further two set back and belonging to the tracery windows on either side. The effect is so delicate, so taut, that there seems to be a certain perversity in having realised the piers in stone rather than in timber. Inside the chapel proper the vault is broad and the inflection point in the arch is barely marked, contributing a subtle and graceful quality to the space. The light is bright and even. With the exception of the apse, the twelfth-century stained-glass has been lost, confounding expectations raised by visits to Paris's Sainte Chapelle.

The structure reprises that of the vestibule as if in a major key. Again, the bays are divided by piers faced with nine colonnettes, but now scaled up to match the larger space. Springing at different heights depending on whether they belong to the vault or frame the windows, the capitals provide barely a break in the cluster of lines that make the pier, and it is clear that their role is not to provide support. Deprived of their architectonic role, they seem to grow at random, like mildew, in the crevices between the ribs. Gothic may be full of details – in the stone carvings of capitals and bosses, in the stained-glass of clerestories, in the timber carvings of stalls – but these are too numerous, too distant and too small relative to the whole to hold our attention for long. Instead, the eye is presented with an orderly succession of vertical lines.

These lines are literally innumerable but, contrary to assumptions, the effect produced by columns and ribs is not dynamic. As one stands in a gothic nave, the eye feels no urge to follow their lines from pier to vault and down again. (Only the historian would make an effort to observe whether the bays are barlong or sexpartite, whether there is in addition to the triforium a tribune, whether the clerestories are divided in three, four, five or six lancets.) Instead, the eye stays still and looks straight ahead. It is this stillness that expands the sense of time. Anyone who has attended a service in a gothic building will be familiar with the ennui. Like minimal music, the impact of the architecture is soothing and relentless and presents few moments of heightened interest. One sometimes hears gothic structures being described as a cage. But it is not the structure that is confining; rather the eye, having no specific place to rest, dilates, fills the space and becomes one with it.

The strangeness of gothic becomes fully apparent when one looks at the arcade wall which runs along the lower section of the chapel. Here, the sole ornament is the highly stylised foliage attached to the capitals. Above it the mouldings of the arcade spring in a manner that is almost repulsive to a modern sensibility. They do not express anything: not the stonework from which they are made, not the structure (which they do not contribute to), not the assembly of ribs which intersect and overlap without any articulation. Viollet-le-Duc referred to such ribs as *boudin*, a word which in French also means black pudding and belongs to the world of the butcher. Their section is circular, like the steel tubes so cherished by high-tech architects, but their lines suggest no vigour or effort. The ribs on the arcade wall of Paris's Sainte Chapelle are almost identical, only slightly more elaborate in form and painted in gold. These *boudins* are the

Previous: Bourges Cathedral, west front
© The Courtauld Institute of Art, London
Opposite: Vestibule, Sainte Chapelle of Saint-Germer-de-Fly, Oise, Picardy
© Bildarchiv Foto Marburg

essence of gothic design: lines coursing with blood, capillaries in an elaborate network.

Turning around to face the entrance, a large rose magically comes into view; a window in a clear line of filiation with the best French examples – in the south transept of Notre Dame, or the north transept, known as the *Portail des Librairies*, of the cathedral of Rouen. In itself the motif of the rose, so common in cathedrals, should be enough to confound interpretations of gothic as structure. The arches at the end of its petals are as often upright as they are upside-down and, at Saint-Germer-de-Fly, further mullions in the outer ring of the rose spring from the structurally weak midpoint of ogives. Clearly the structural model for the rose was not that of the vault in which it is inscribed but, strangely, that of the wheel. Saint Catherine, the patron of masons, was commonly represented by the wheel, the instrument of her martyrdom. But this detail alone hardly exhausts the compelling motif.

Moreover, the perimeter of the rose is not fitted within the arch of the vault. It is not even tangential with its curvature; rather, it seems roughly inserted behind it, like an old-fashioned film slide in the guides of a projector. The same approximate placement can be found in other chapels, for instance in the Chapelle Royale at Saint-Germain-en-Laye. The motif of the rose, like the detail of the arcade, demonstrates that the distinction between structure and ornament does not apply to gothic: nothing that is structural is not also ornamental, while much that is ornamental is also structural. Yet this distinction, which was reinforced by modernism, continues to inform accounts of gothic.

The strangeness of gothic is even plainer on the exterior. For a start, the arches of the windows meet the buttresses on either side without acknowledgement. They collide with them, penetrate and disappear, in the process refuting the idea that there exists in gothic a sense of order in which all parts are clearly individuated and articulated. In fact, this lack of articulation, this relative disinterest in decorative incidents, is one of gothic's latent tendencies.

More striking still is the manner in which the fine vestibule meets the church and the chapel on either side. Again, the end bay to the east vanishes behind a buttress of the chapel like a concertina in a train carriage. Even as one leans forward into the gap, though the detail of the window seems in every way complete, the actual meeting between vestibule and chapel is a non-event. To the west, the collision of the vestibule with the apse of the church is barely alleviated by the superposition of an entrance porch, a half-size reduction of the window behind it. The manner is abrupt, expedient and ultimately satisfying, like the medley of flying buttresses which somehow cohere in the corner between transept and choir in most cathedrals.

The strangeness of gothic – its sometimes fastidious, sometimes lax sense of consistency, its combination of prolix care and unstudied expediency – evokes a freedom which seems unattainable today. The means by which architectural design is commonly circumscribed and fixed in time, the recourse to drawing which obsessed the nineteenth century and was confirmed in the twentieth, the programmes, the plans, the elevations which freeze architecture in a slice of time and seem to us so necessary, were seldom if at all used in gothic. Its compliance with religious faith and ritual notwithstanding, gothic impresses with a fluidity, with a plasticity which embraced design adjustments in real time, in a pre-modern anticipation of digital procedures.

Plan

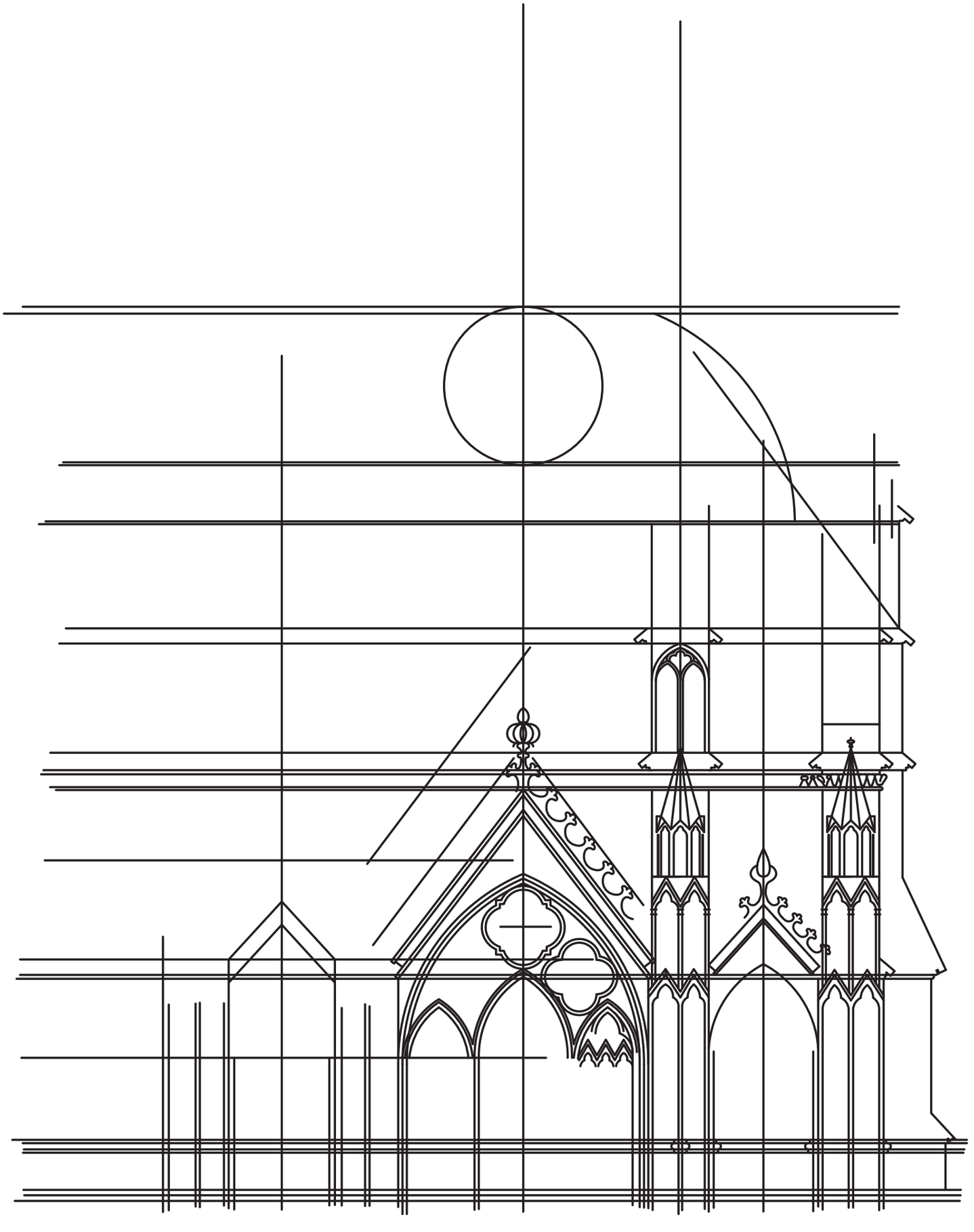
It has become customary in modern times to display a plan near the entrance of cathedrals. Thus at Troyes the plan of the cathedral shows a layout which to the uninitiated and to most architects must seem absolutely standard: a regular succession of piers, disrupted halfway by the transepts, ending at the top of the sheet with a flourish of chapels. In addition, it indicates in different colours the succession of building campaigns, and by implication the succession of styles. It also gives a few dates: construction started in 1208, consecration took place 200 years later, in 1430, and completion required a further 200 years, ending in 1638. I doubt whether anyone gives it much attention.

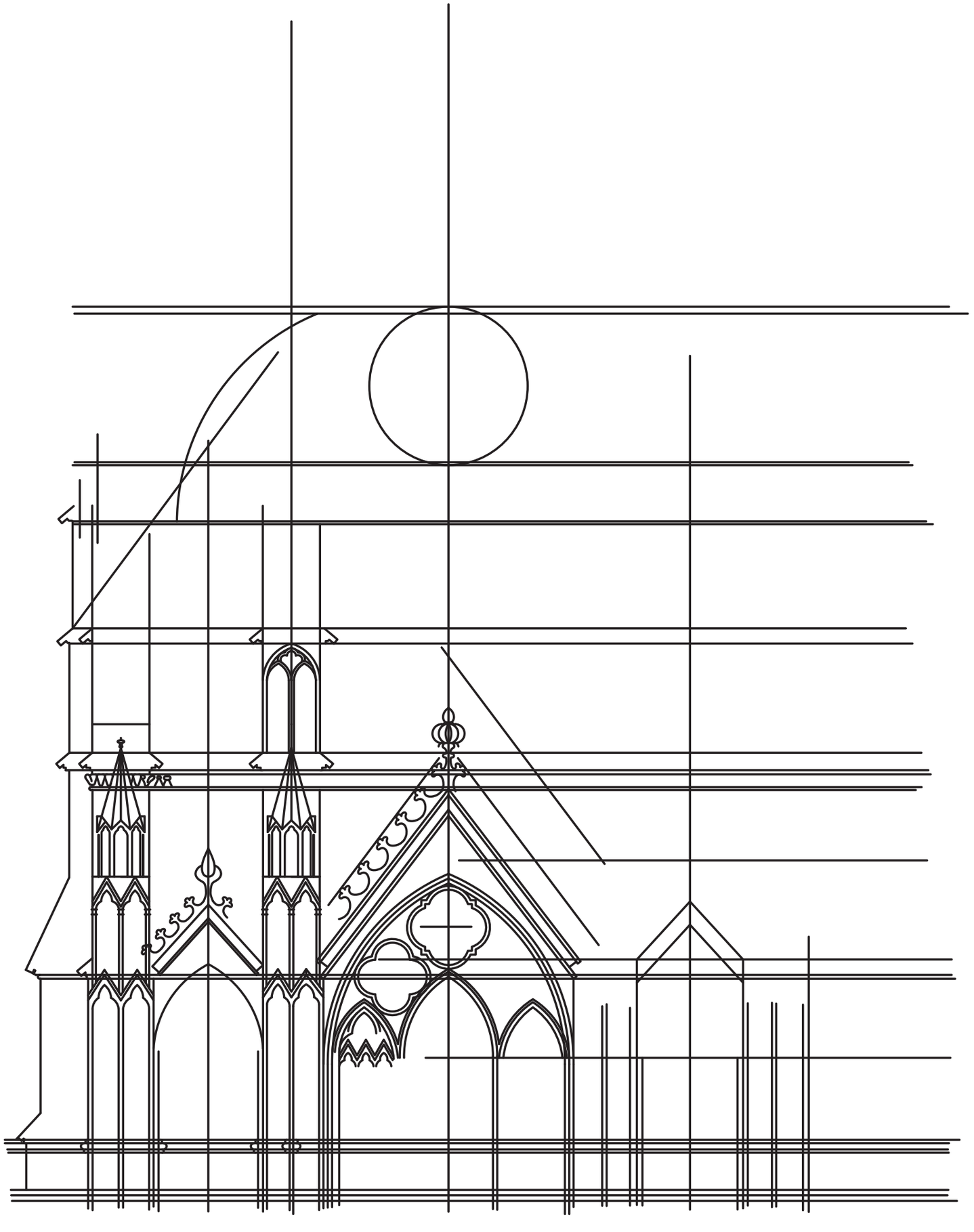
Twentieth-century plans of cathedrals are exceptionally uninformative. They do not indicate entrances, let alone doorways. They ignore screens, stalls, altars, monuments, seats, relics, pulpits, organs, not to mention ticket offices, bookshops and washrooms. They rarely show paving or the profile of piers. They merely indicate in thin black lines reaching from pier to pier the position of ribs on the vaults above. In this, they confirm the continuing dominance of structure in the interpretation of gothic and the legacy of Viollet-le-Duc's theory according to which gothic architecture was conceived from the vault downwards. '*C'est la chose portée qui commande à la chose qui porte.*'[1] ('It is the thing that is carried which dictates the form of the thing which carries.')

One cathedral plan appears much the same as any other. Collectively, they assert the existence of a single model, the cathedral type. Few writers have resisted the temptation to hypothesise an ideal cathedral form. For Ruskin, it was perhaps Amiens, the subject of his text 'The Bible of Amiens'. For Victor Hugo, it was Notre Dame. For Viollet-le-Duc, Chartres was the quintessential cathedral, even though the illustration to the entry 'Cathédrale' in his *Dictionnaire* shows a combination of the nave of Reims, the porches of Amiens and the towers of Chartres. For Jules Michelet, Cologne best represented the spirit of gothic, its passion as well as its evenness of temper. Yet these are not really types at all, but sums of singularities assembled from several cathedrals or, when taken from a single building, a sum of singularities accumulated over time. The notion of a gothic type is an illusion.

In a remarkable article on the cathedral of Milan, James Ackerman describes how, nine years after the start of construction, when the piers had already reached a height of some 2m, its college of clerics was still consulting with experts from France, Germany and Italy, deliberating how best to proceed. From this Ackerman deduced that there was no connection between plan and elevation, and made the extraordinary assertion that it was 'standard procedure at Milan to permit the cathedral to grow haphazardly, without ultimate aim'.[2] Clearly Milan Cathedral did not have a plan in the modern sense of the word. There is no evidence of an actual drawing or model. Generally in medieval times there was no setting-out drawing to which all subsequent design decisions would conform.[3] At most a drawing of a part of the building, for instance a sketch of the choir to indicate the relationship between piers and vaulting, might have been made on parchment. Or full-scale tracings might have been chiselled directly into a stone floor, for instance on the roof of the tribune in the cathedral of Clermont-Ferrand. Most decisions were made on site. Thus it is possible to imagine masons in Milan using stakes and cords to set out the position of the piers on the ground itself.

Palimpsest of Reims, mid thirteenth century
Blind-embossed drawing
© Timothy O'Hare





In the absence of plans it has been claimed that designs must have been conceived in the mind: *opus in mente conceptum*.[4] But what exists in the mind is merely an intuition: a design acquires a form only when it is externalised. The example of Milan powerfully suggests a design elaborated on site and in real time, in a continuous confrontation between mind and matter.

Gothic cathedrals, among the largest and most adventurous constructions ever conceived, were born from a formidable clash between a plan (in the sense of a project) which is consistent and abstract, and time, the effects of which are inconsistent and concrete – between the idea of God's will, of the Church as an eternal institution on the one hand, and the wanderings of human destinies on the other. Cathedrals are eloquent manifestations of this unresolved contradiction between plan and time, but they are seldom understood in this way.

Usually a cathedral is conceived as the fulfilment of a plan, its whole expression – including inconsistencies in its fabric – being seen as rooted in Christian dogma. Of this divine plan, the architectural plan itself, shaped in the form of a cross, is a kind of prefiguration, absorbing the irregularities of a cathedral in the way eternity absorbs the span of human life. Understood in this light, the physiognomy of the cathedral is indivisible; straining towards the perfection of a type, towards the advent of a New Jerusalem, it is received as a revelation. This corresponds in the main to the view held in the nineteenth century, a view that was underpinned by Christian faith and overlaid by classical aesthetics (nothing was to be added or taken away).

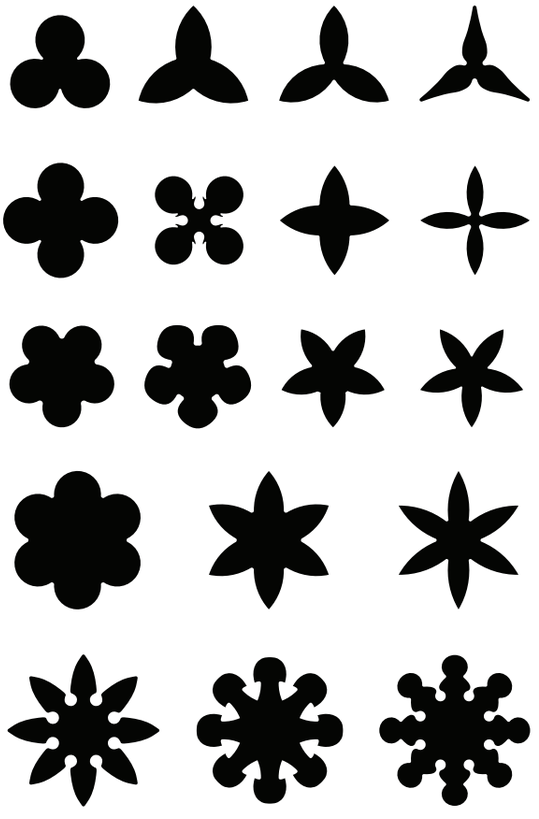


Illustration from John Ruskin, *The Nature of Gothic*, 1853
© Timothy O'Hare

Less often a cathedral is conceived as an effect of time. Notably scholars seek a chronological explanation according to which discontinuities in the fabric can be traced to specific events and decisions during the long period of construction. The plan (in the sense of a project) is like a parenthesis in the dense fabric of time. It is merely a convenient abstraction, a makeshift device that facilitates the comprehension of the whole. Bar a few notable exceptions like the cathedral of Cologne or the Sagrada Familia, the plan is always defeated by duration. The physiognomy of a cathedral makes manifest the frailty of human ambitions and is by its very nature imperfect. It results from a huge work of *bricolage*, a monumental but capricious accretion of coincidences.

In this sense the development of gothic architecture was a fluke of history. According to Jean Bony, it was born by accident from an extraordinary combination of circumstances. Like the invention of human flight by the Wright brothers, it was a gamble limited at first to a small group of men who sought, most unreasonably, to combine thin walls with total vaulting. The process of invention – one of self-imposed challenge, followed by sharp response – gave gothic its initial orientation. Its originality was concealed by the adoption of earlier Romanesque elements from different sources in ways that seem, only in retrospect, strictly logical and necessary.[5]

The plan of a gothic cathedral is therefore a kind of MacGuffin: a prompt or a trigger after the fact, in itself it has no architectural significance. Contrary to Viollet-le-Duc's assertion, it is also quite clearly *not* the expression on the ground of a logical order imposed by the rib vaults above. The plotting of the piers in Milan describes not a plan but in effect a horizontal section cut *a posteriori* through the building at a particular moment in time. Moreover, the chronology of cathedrals is full of interruptions caused by fire, collapse, storm, penury, war, plague and other disasters, often leading to radical changes in the design. This makes the existence of a plan still more problematic. Yet there must necessarily have been, if not a plan, then a motivating idea, an Ariadne's thread which guaranteed the completion of these constructions without common measure.

This motivating idea was faith and the feelings it inspired. In 1833 Jules Michelet wrote a brilliant essay that deserves to be better known, 'The Passion as Artistic Principle in the Middle Ages', in which he describes how medieval thought was wholly contained within Christianity – and specifically within the Passion of Christ.[6] From this moment of darkness sprang an inexhaustible welling of tears which crystallised in cathedrals. Michelet writes poetically about gothic architecture as 'a passionate vegetation of the mind' growing according to the rules of geometry and art. Gothic architecture, he claims, was superhuman, born in the belief in the miraculous, in the absurd – he quotes Tertullian's phrase (which he misattributes to Saint Augustine): *Credo quia absurdum* ('I believe because it is absurd.')

The belief which gave rise to gothic recalls the 'abstract machine' of Deleuze and Guattari's *A Thousand Plateaus*, 'a pure Matter-Function', a diagram which has neither form nor substance, neither expression nor content.[7] This abstract machine is not a plan or a drawing, in that it does not seek to represent; rather, it constructs a new type of reality. Whereas expression and content presume distinct forms, function merely manifests itself in '*traits*' and '*pointes*', in tracings and pricks which connect expression and content. 'There is a diagram', Deleuze and Guattari write, 'whenever a singular abstract machine functions directly in a matter'.[8]

In gothic architecture, faith functions like an abstract machine. Without drawing or formal representation, it 'functions directly in a matter' to construct a reality that is yet to come, a New Jerusalem, a new type of reality in the form of a cathedral. Deleuze and Guattari describe a double movement. The abstract machine functions between strata – in gothic between the succession of plans or, better, successive building campaigns. At the same time it prolongs the 'lines of flight' across these strata, to 'connect the dots' and define a 'plane of consistency'. For his part Ackerman refers in the context of

Milan to a 'theory of consistent relationships'. He claims further that the specific problems of form and structure (or in the terms of *A Thousand Plateaus*, form and substance) do not come into play. 'The overall character of the gothic cathedral', he writes, 'is determined on the basis of geometrical grids of lines and dots', namely the basic diagrammatic sections made by the experts called in to advise the clerics at Milan.[9] Deleuze and Guattari's pragmatics resonate with the pragmatism of the medieval builder.

Drawing

Given the immense complexity of building cathedrals, it is surprising that so little is known about the processes of their design. Today, endeavours of a comparable scope necessitate plant on a vast scale, materials and products from multiple countries, experts in architecture, engineering, management, finance and law. Yet the medieval architect had as his sole equipment a straight edge, a square, a compass, a divider and a plumb line, and he deliberated on site about a building that was laid out with pegs and cord. As Ackerman demonstrated in the case of Milan, there was between the plan and the elevation (both of them understood as an act rather than an orthogonal projection or a drawing) no necessary connection.

A few treatises have survived but they are not theoretical in a modern sense. Rather than offering geometric principles for the building of cathedrals, they are of a practical nature, giving instructions in the form of procedures – algorithms – to be followed in the design of specific parts of a building: tower, spire, vault rib, window mullion, etc. For instance, Mathes Roriczer's treatise of 1487, which bears the evocative title 'The Little Book on the Rectitude of Pinnacles', outlines 234 steps supported by 17 figures describing how the elevation of a pinnacle can be obtained from its plan. This knowledge was not mathematical. It was empirical, founded on the tradition of the mason's craft.

Like gothic architecture itself, these modest treatises were far from systematic. They offered no comprehensive view by which a part, for instance a vault, could be related to the edifice as a whole. In this they were fundamentally different from Viollet-le-Duc's *Dictionnaire* and from most nineteenth-century writing on gothic – difference that helps to explain the stiltedness of much of the restoration and gothic revival design of the period. The knowledge of the medieval architect was a sum of inherited, piecemeal know-how. It consisted in design precepts that had lost their ancient connection with theoretical geometry, the laws of which masons were only dimly aware.

One such precept was progressive squaring, a method by which squares used in juxtaposition (one next to the other) as well as rotation (one within the other) generated the projection method typical of gothic design. With these simple procedures the design of most parts of a building, for instance the section of a compound pier or tracery mullions, could be obtained without taking measurements. Though often mentioned in modern times in the context of cathedrals, the golden section and the geometrical sequence associated with it were unknown to medieval architects and played no role in building practice.

Today, problems in design are solved with drawings. The greater the complexity of a design, the larger their number. In medieval times, drawings became common practice only in the latter part of the thirteenth century after several cathedrals (Laon, Chartres, Paris, Amiens) had already been completed. Even then, their use was limited. They included hypothetical plans, working drawings, sketches and, occasionally, presentation drawings (Cologne). All represented parts, large and small, but never the totality of a building. The practice of making drawings as a basis for building, in itself a novelty, was in all probability a development of the use of full-scale templates to assist with the construction of parts.

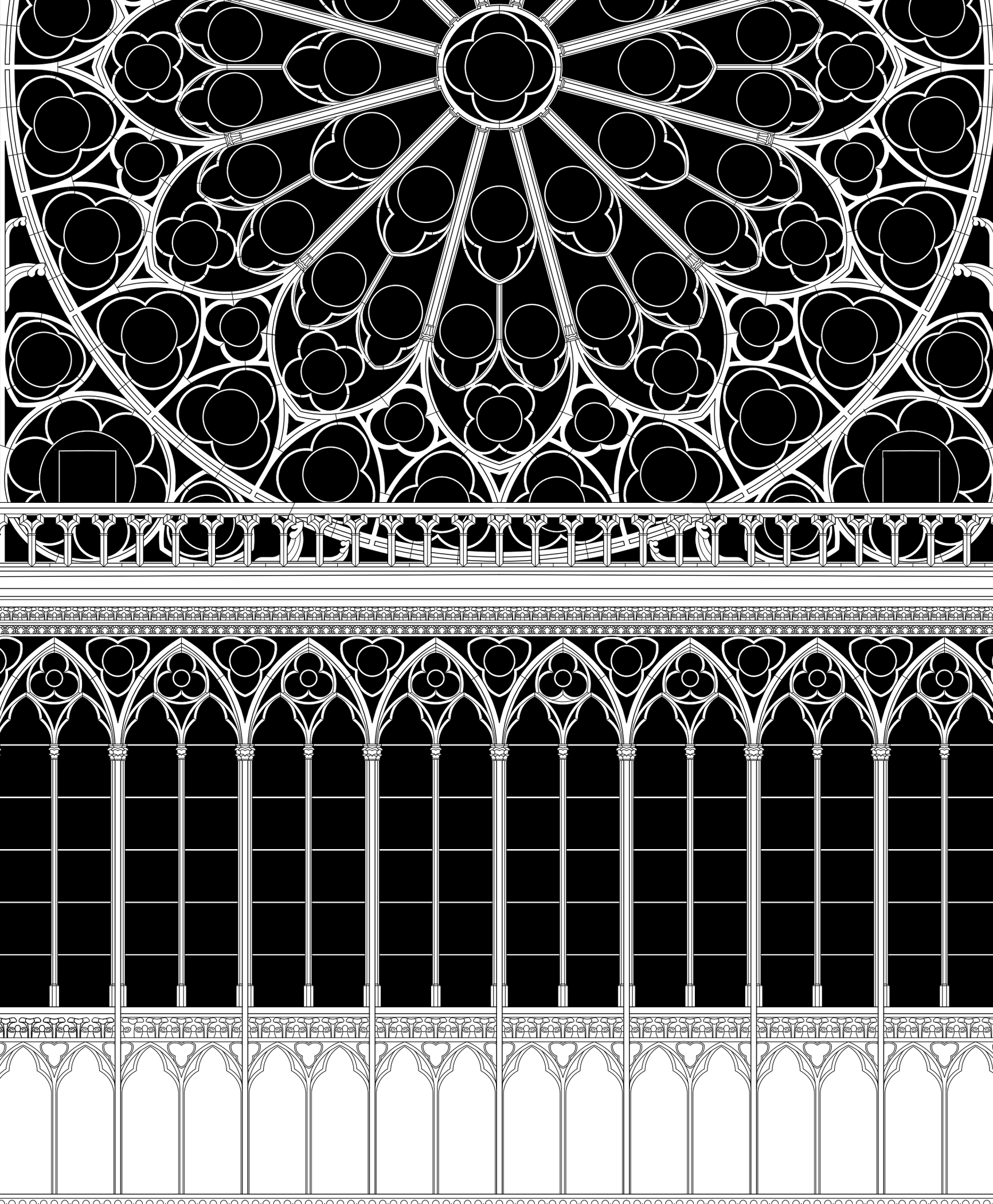
One of the earliest examples is the Palimpsest of Reims. Sheets of parchment being expensive, they were washed and reused several times. Beneath a study of martyrs and an obituary of the members of the Reims Chapter, faint drawings associated with the cathedral were discovered, representing notably a part of a facade, the elevation of a clerestory and the delineation of an unidentified structure. Some sheets have been drawn on more than once, suggesting that they were put to regular use in the architect's workshop. Each drawing was painstakingly constructed, following a procedure reminiscent of setting out.[10] The position of each line was established with pin pricks, like pegs on a building site. The drawing progressed slowly, one line at a time, using in addition to dry points and a pen – the same tools that were used by the mason – a straight edge and a compass.

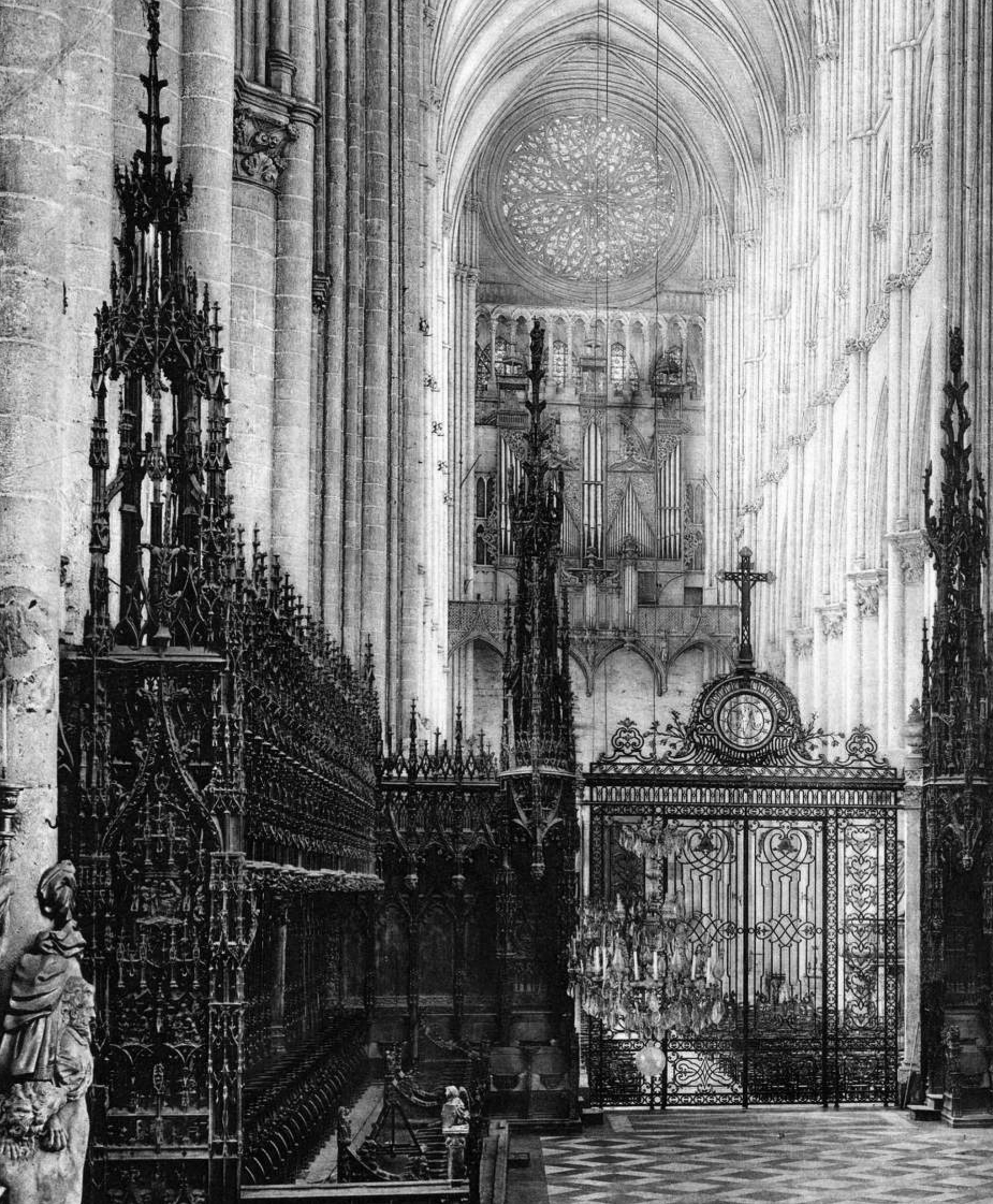
Not until the fifteenth century did architecture drawings reach a level of sophistication reflecting that of the buildings themselves. Even then, assisted by the same basic tools, the rules of progressive squaring continued to apply. Lines and points defined basic polygonal frameworks in which mathematics played no part. Instead, design involved, in the words of a historian, 'physical manipulations of geometric forms'.[11] Again one is struck by the closeness between the methods of design and construction. Both used the same tools and the same geometry, and used them 'physically'. Moreover, both conceived the building in terms of parts. The idea of the whole evolved as the building progressed, becoming definitive only as the building neared completion. The gothic cathedral recalls the seamless continuity between drawing and fabrication to which CAD-CAM and 3D printing aspire and, the difference in speed notwithstanding, it prefigures the ultimate digital panacea: a vision of design being realised in real time.

No element in gothic is autonomous; every element is intimately related to every other proximate element. Whether what Ackerman called 'a theory of consistent relationships' is a theory, and how consistent it is, is a matter of judgement, however, gothic did strain towards a consistent order. In his treatise Roriczer advocated the 'right measure', meaning the measure that resulted from a series of consistent geometric operations.[12] Such measure should not be confused with ancient proportional systems. Unlike, say, the column of a Greek temple, no rule existed to coordinate the respective height of base, column and capital in a gothic pier.

In the piers of the crossing at Chartres, the bundle of colonnettes rises to the vault without a break from a base that is not even waist-high. Each colonnette is carried on a polygonal block, chamfered at mid-height to meet the narrow shafts above. Between base and shafts, the masons introduced a transition in the form of a torus or cushion, the shape of which resembles an upside-down Doric capital. The toruses are contiguous and form, together with the crystal-like assembly of polygonal blocks below, a wonderful sculptural composition. Above this base, the colonnettes rise in compact formation,

Rose window, south transept, Notre Dame, Paris
© Timothy O'Hare
Overleaf: Amiens Cathedral, choir looking west
From Georges Durand, *Monographie de l'église Notre-Dame, cathédrale d'Amiens*, 1903
Courtesy Société des Antiquaires de Picardie









suggesting not fluting as in Doric but piping. They seem not so much carved as blown. 'Cathedrals', Viollet-le-Duc observed, 'are like glassmaking, plastic in their conception and immensely fragile in reality'.[13]

The arrangement adopted in the vestibule of Saint-Germer-de-Fly is almost identical: polygonal base, toruses and colonnettes closely packed in a bundle. But unlike the giant pipes of Chartres, these elements now appear to be as small as stone carving would allow. More striking still, the polygonal blocks of the base have been elongated to an extent that makes them appear as slender and brittle at Saint-Germer-de-Fly as they are squat and robust at Chartres. No necessary relationship exists in gothic between the measurements of the plan and those of the elevation, which could be stretched at will. The measure may have been 'right' but it clearly had considerable elasticity.

The historian Jean Bony described gothic as a linear architecture in which space is enclosed less by bounding surfaces than by networks.[14] This prompted him to refer to 'styles of linearity' which became progressively thinner and sharper, more delicate and more firm. In time gothic developed into an 'art of tracing', increasingly dominated by a sense of pattern and fantasy.[15] Given this tendency, it is all the more surprising that drawing, the art of tracing par excellence, never played more than a subsidiary role.

Elevation

The history of gothic architecture extends over more than 400 years. Some cathedrals, for instance Cologne, were even completed long after the gothic moment had been spent. Unlike classical architecture, gothic was never codified during its long history. It offers no canonical works, equivalent, say, to the Parthenon or Vitruvius's *Ten Books on Architecture*, by which lesser works can be recognised and evaluated. This hasn't stopped writers from attempting to sum up gothic in a few major traits. Ruskin identified six characters, among them savageness, changefulness and naturalism. Erwin Panofsky ascribed to it three principles – totality, organisation and the distinction of parts – and Paul Frankl, four – division, diagonality, texture and partiality. Jean Bony singled out its main features as the rib vault, the pointed arch, height and openness.

Among the many ideas associated with gothic, one has been endorsed by all writers, though under a variety of names. Ruskin gives as his 'final definition' of gothic the character of foliation, without which, he says, gothic would remain imperfect.[16] Applicable equally to a simple arch and to tracery, foliation describes the process by which forms can be divided in patterns of three or more leaves, which can in turn be put together at will. Where foliation was for Ruskin both aesthetic and moral, being ultimately a homage to nature, Viollet-le-Duc justified the same process, which he referred to as crystallisation, on practical grounds.[17] The multiplication of mullions in tracery, he argued, made it possible to minimise the iron framework holding the panels of stained glass in place.

Panofsky chose to proceed by analogy. Seeking to understand the essential tendencies of the medieval mind, he likened gothic architecture to the *Summa Theologica* of Thomas Aquinas. Both were said to participate in an 'orgy of logical thought', the scholastic *Summa Theologica*, in which the elements of Christian doctrine were enumerated, organised in parts and subparts, and interrelated, seeming to offer a perfect correspondence with the order of gothic, with its emphasis on hierarchy of parts and repetition. For his part Bony referred to a 'new system of progressive subdivision into subordinated series'. System, progression, subdivision, subordination, series: the terms used by these authors (the most learned and insightful writers, and arguably the four fathers of gothic scholarship) suggest an attempt to analyse and eventually to crack a gothic code, as if to expose the mechanism at the root of its architecture.

It is in Amiens, allegedly, that the process of foliation or crystallisation became common practice. In Reims Cathedral still, the high windows followed the motif invented at Chartres of two lancets surmounted with a rose. In Amiens, the same motif was replicated at a smaller scale within each of the lancet windows. Subsequently this process – which today might be called self-similar or fractal – was repeated further east in the cathedral. Thus the clerestory windows of the transept have four, six and eight lancets, while in the choir they have four lancets instead of the two found at Reims.

This proliferation of scaling motifs is said to have begun with the design of roses. At Chartres the west rose consists of many smaller roses punched into the masonry of the facade. In the centre, the rim of a larger rose forms the base upon which 12 columns radiate outwards to form as many petals. Compare this with the considerably larger rose (13m wide) in the south transept of Notre Dame. Areas of masonry have entirely disappeared. As in Chartres, 12 petals radiate from the centre, but now they are filled from the centre outwards by one, then two lancets, crowned with a quatrefoil. The entire rose is carried on the gallery below. Made of columns alternating in section between 36cm × 20cm and 20cm × 10cm, the construction of the gallery appears even thinner than that of the rose. Viollet-le-Duc mentions that when its columns are struck (and undoubtedly he had a go) they resonate like metal.

The audacity of this design continues to astonish. The structure of the rose is fundamentally alien to the rationale of modern engineering. Indeed, at first no member was either vertical or horizontal, the rose being offset by 15 degrees – a fact that must have been intentional. The structure having fallen in a state of disrepair, Viollet-le-Duc rebuilt it and corrected what must have appeared to him as an anomaly. Thus the clock was reset, as it were, precisely on the hour.

The foliation which gradually invaded most aspects of gothic design was accompanied by another tendency. Elements including piers, colonnettes and mullions had been carefully graded in a hierarchy of sizes; they now became increasingly uniform. Already the members of the huge rose in Paris included no more than three sectional sizes. In the basilica of Saint Urbain at Troyes (another milestone in the design of tracery) members became thinner and more uniform. Slim and brittle like straw, they hardly suggest the channelling of forces to the ground. Gone is the tension between the ambitions of design and the necessities of building. The art of tracing and the art of tracery – Deleuze and Guattari's 'lines of flight' coursing through the material – have become aligned and increasingly indistinguishable.

Having lost its already ambiguous corporeality, gothic increasingly registered upon the eye as a network of lines. This fact has been noted by many authors. Auguste Choisy wrote about 'a mode of construction in which matter becomes so to speak obliterated, in which everything is combination'.[18] In his view this evolution constituted a decadence, as it brought the architect face to face with the impossible. Wilhelm Worringer argued that, unlike Greek architecture,

Rouen Cathedral, west front
Photograph F R P Sumner
© The Courtauld Institute of Art, London

gothic architecture was made 'in spite of the stone'.[19] Whereas the Greeks had aspired to sensuousness, it presented an abstract system of construction.

By the close of the thirteenth century the translation of motifs across all scales and all materials had become commonplace. The resulting architectural fantasies proliferated over available surfaces from choir screens to stalls and reliquaries. Tracery became increasingly graphic. The articulations which had been associated with construction progressively disappeared. Capitals became ornamented collars. For a time they lingered as support for foliage, for instance at Saint-Germer-de-Fly. When it became understood that they served no practical purpose, they were left out altogether. On rare occasions, most strikingly on the northwesternmost pier of Troyes Cathedral, foliage survived in the form of little clumps of vegetation sprouting between mouldings like unwanted growth. Structurally, formally, even decoratively, such leftovers seem absurd, but this is to overlook the long and fertile association between foliation and foliage.[20]

When ribs did not vault across the space uninterrupted, the lines of mouldings required a conclusion, like the stem of plants. For a time, they found it in wonderful buds about to burst beneath the abacus of capitals. Below these 'crockets', leaves stood proud of the surface of capitals, making them visible from a great distance on the ground below. Nowhere is this flora more beautiful and abundant than on the capitals of the choir at Reims and at Auxerre. The leaves of common species can still be recognised, among them plantain, arum, ranunculus, fern, clover, fern, parsley, strawberries, ivy and oak. But this is no ordinary flora, giving the lie to Ruskin's assertion that naturalism was a key to gothic. It has its own laws as well as an infinite number of specimens, like natural flora itself. Indeed its leaves often recall a gothic vault in miniature, with a double curvature highlighted by a strongly marked rib.

Vegetation aspires to the status of architecture while architecture, conversely, longs for the freedom of vegetation. In the stalls of Amiens, which Ruskin admired almost as much as he did the west portals, 'there is', he wrote, 'nothing else so beautiful cut out of the goodly trees of the world... Under the carver's hand it seems to cut like clay, to fold like silk, to grow like living branches, to leap like living flame. Canopy crowning canopy, pinnacle piercing pinnacle – it shoots and wreathes itself into an enchanted glade, inextricable, imperishable, fuller of leafage than any forest, and fuller of story than any book.'[21] In this phenomenal gothic undergrowth of Amiens' choir, in the brushwood that shoots, pierces and wreathes, only the figures retained their autonomy (and some 4,700 of those have been counted).

Latent in gothic from the outset, foliation became a universal principle. In defining ornament and structure alike, and combining them in a single form, it made both confused, visually as well as intellectually. The west front of Rouen Cathedral offers a compelling example. Hardly any part of this marvellous facade has not been foliated, then foliated again, and in the upper parts progressively squared, then squared again into finials and pinnacles. Following the construction on the north side of the Tour Saint Romain (which seems all the more massive for its stonework being partly undressed) two squat portals were added in 1200 on either side of the main entrance. Almost 200 years later, a new screen of tracery and statuary was erected above these portals. During the next 50 years, the screen was extended outwards to fill the remaining space between the cathedral's two towers and became still more intricate. Foliation was to gothic what pixellation is to the modern age, and it is perhaps not a mere coincidence that Monet chose the same facade at Rouen to repeatedly demonstrate the effect of light upon the eye.

By then, in the evocative terminology coined in the nineteenth century, the *style rayonnant* of the earlier tracery had morphed into the more up-to-date *style flamboyant*. Lancet forms were deformed at will to fit in the frame of an arch or a gable. Once always vertical (except in roses) they were now bent to point sideways or even downwards. Single curves were bent into double ones, lancets were twisted into *mouchettes* and *soufflets*, and oculi were pressed into lozenges.

The effect has been compared to lace and the comparison is appropriate. There appears to have been no limit to how small elements and patterns could be made. Moreover, like lace, the convergence between virtuoso technique and decorative form seems entirely willed, even relished. Like lace, tracery is a two-dimensional art (though one that requires three-dimensional skills). For this reason it was not able to embrace the depth of the wall and to develop a consistency between inside and outside. Instead, it evolved into a series of loosely connected overlapping screens, for which the multiple planes of Rouen's facade offer a good example.

Then came the completion of the upper storeys of the Tour Saint Romain, the building of the new Tour de Beurre on the south side, and the addition of pinnacle turrets which give such a distinctive silhouette to the tracery screen. The central porch was rebuilt and crowned with a gable. The new rose window (partly occluded by the gable) was topped with a gallery and, above it, a crowding of tracery, finials and gables so dense and extravagant as to seem primeval.

Foliation enmeshes every aspect of the facade. Evolving from the simple early portals to the extreme elaborateness of the central gable, it migrated forwards, proud of the main facade, sideways from the rose to the towers, upwards to the tower's upper tiers, and down over the central porch. In its form, chronological sequence and spatial organisation, it is so dense as to defy analysis. The eye struggles to identify forms within the all-over texture of the facade.

This facade was not built according to a conventional plan, to which reality must then comply. Instead, situation and invention were engaged in a process of mutual adaptation in real time over several centuries. In a different context, I have called this process 'unitary functionalism': a process, assisted today by digital technology, by which every action, whether related to programme, structure or ornament, is coordinated with every aspect of a particular situation.[22]

Loose Ends

Historians of medieval architecture have learnt to distinguish one cathedral interior from another. But the general public (including most architects) have not. They will remember the extreme darkness of Chartres before the recent restoration, the plain brightness of Laon and the eddying crowds at Notre Dame. They might also remember a sensation of great height at Beauvais and the splendour of the stained-glass windows in the choir of Bourges, or the black-and-white paving at Amiens (a close approximation of its medieval state). For most, however, memories will

Rouen Cathedral, west front, tour de Beurre
Photograph Noël Le Boyer
© Médiathèque du Patrimoine / RMN-Grand Palais





be blurred. Sketching at Saint-Germer-de-Fly, an architect friend told me: 'I can't draw: there are too many lines.' By and large gothic interiors present *nothing but* lines. As no single object is strong enough to hold one's attention, details recede and become faint in the vastness of space.

Gothic interiors resemble one another in real life even more than in photographs. In photographs the vault is invariably prominent and comparisons can be made between the articulation of the parts: between column and capital, pier and colonnettes, tribune and triforium, nave and transept. In real life, however, interiors present themselves as a crowding of vertical lines, briefly held apart by the rose of a transept or the fanning of clerestories and chapels in the curve of a choir. They recall the stripe paintings of Bridget Riley and the colour grids of Gerhard Richter (who designed the stained glass in the window of the south transept in Cologne), though without the stridency, softened by the filtered light which brings out the roundness of piers, colonnettes and mullions.

Given the insistent, even obsessive linearity of the interior, it is surprising that the arrangement was not continued on the outside. Occasionally it was carried through on late gothic facades, most memorably on the west front of the cathedrals of Rouen and Strasbourg, where it takes precedence over figurative sculpture. An earlier attempt was made on the facade of the south transept at Chartres, in the form of a screen of exceptionally elongated colonnettes superimposed over the massive structure of towers that were never completed. But the result is monotonous and, unlike for instance at Wells Cathedral, it lacks depth and complexity.

The mismatch between interior and exterior is characteristic of gothic architecture. Jean Bony claimed that it was first successfully resolved at Reims, and described the whole building as presenting an image of perfect clarity and harmony.[23] While it is true that there is a concordance between the levels of the various storeys, the huge pinnacle on top of the buttresses appear to belong to a different world of forms from the linear scheme inside. The disjuncture between exterior and interior can be seen at its simplest, however, in a pier at Saint-Germer-de-Fly, forming on the outside the blunt mass of a buttress and on the inside the highly articulated sheaf of colonnettes.

Far from being a manifestation of structural rationality, exteriors are full of idiosyncrasies. Even Viollet-le-Duc, who wished to recognise in gothic the unfolding of a logical process, saw in flying buttresses an 'accusation' against the general system adopted in the construction of cathedrals.[24] Why should these props be at all necessary? Thus builders did their best to conceal them with pinnacles, as at Reims, or reduced them to the simplest possible expression, as at Saint-Germer-de-Fly. For Choisy, too, the flying buttress came under the category of the guileful expedients made necessary, he believed, by limited material resources (a municipality was not a Roman Empire). Even Bony recognised a fundamental contradiction in the desire to combine thin walls with rib vaulting, prompting, notably, the contrivance of the flying buttress.

The makeshift nature of the interior was mirrored in the design detail of the exterior. In the upper part of the choir at Amiens, buttresses describe 'a sort of forest in which general directions are difficult to discern'.[25] The buttresses are topped by a multitude of pinnacles which are as diminutive here as they are monumental at Reims. 'Everything seems to be in the process of breaking up and multiplying', giving the choir 'a bushy, spiky aspect'. Compare this with Notre Dame, where the strong horizontal cornice line emphasises the bold geometric volume of the choir and the decisive arc of the buttresses reaches the perimeter of the church in a single flight.

At Le Mans by contrast, flying buttresses are multiplied to such an extent that they appear from a distance to be integral to the volume of the choir. Most ingenuously, they divide above the outer perimeter of the choir into split ends, resulting in an appearance which is as tousled as Notre Dame is orderly. Perhaps the most eloquent arrangement (if not the most elegant structurally) is found at Beauvais, where the extreme height of the choir is matched by the extreme height of the buttresses. Here the upright volume of the choir is held delicately, as if it were a precious stone, high above the ambulatory and deep inside the battery of closely spaced abutments.

Clearly gothic exteriors show little consistency from one period to the next or from one region to another. They point to no evolutionary path which in turn could inform the maturation of a style. No-one expressed the curious mismatch between the interior and the exterior more succinctly than Ruskin. 'The outside of French cathedrals, except for its sculpture, is always to be thought of as the wrong side of the stuff, in which you find how the threads go that produce the inside or right-side pattern', he wrote in *The Bible of Amiens*.[26] The outside – the 'wrong', unintended side – exhibits the ends of the threads that are integral to the pattern inside: they hold the pattern upright and make it visible. Michelet used a related simile, describing how buttresses help to keep the church upright as if it were Christ on the cross. Whereas the outside of a cathedral seems to be all matter, the interior is immaterial and ethereal.

Between the accidental character outside and the aspiration to an immaculate order inside – between the exterior, which is by necessity about material and work, and the interior, which is above all a construction of the mind – there is an irreconcilable contradiction, reflecting the mystery that separates the ephemerality of human life and the timelessness of religion. Unlike later observers in the twentieth century, Ruskin acknowledged the contradiction and welcomed imperfection. Like the labourers who built the churches, gothic was savage, rude, disturbed, obstinate, redundant – an admission of the fallen nature of Man. Yet from fragments that were full of imperfections, masons succeeded in raising what Ruskin called an 'unaccusable whole'.[27]

The expression recalls Robert Venturi's later acknowledgement of contradiction and of a sense of 'obligation towards the difficult whole'. Venturi's emphasis is more formal than it is moral. Nevertheless his eye, like Ruskin's, embraces imperfection. 'The difficult whole', he writes, 'includes multiplicity and diversity of elements in relationships that are inconsistent'.[28] Instead of the orgy of logical thought laid bare by Panofsky, he praises 'an orgy of contrasting dualities of form', of inflections and discontinuities, of clashes and contrasts resulting from the accommodation of conflicting functions. Surprisingly, in *Complexity and Contradiction in Architecture* Venturi had little to say about gothic, beyond a few lines on the truncated choir of Beauvais Cathedral, the porch of Saint Urbain at Troyes and the bizarre sets of responds in the aisles of Rouen cathedral pushing away from the wall like candelabras in a Cocteau film. At its most extreme, Venturi's sensibility was more surrealist than mannerist, and more mannerist than gothic.

Amiens Cathedral, nave looking east
Photograph Henri Deneux
© Médiathèque du Patrimoine / RMN-Grand Palais

Gothic proposes a different kind of aesthetic. It calls for an idea of the whole that is not only 'difficult' but above all inexhaustible. A gothic cathedral embraces the conflicting notions of plan and event, of anticipation and adventure. It combines order and randomness, coherence and incongruity. 'Whenever it finds occasion for change in its form or purpose', Ruskin writes, 'it submits to it without the slightest sense of loss either to its unity or majesty'.[29] In every other architecture discontinuities are shocking and are rarely welcome. But in gothic they are not only tolerated but are integral to its conception. No-one complains about the very different age and design of Chartres' towers, the one as solid as the other is all finery and fretwork, or about the mismatch between the end walls of transepts in most cathedrals. No cathedral has been completed in full compliance with an original plan.

It is therefore not surprising that the role of individuals is rarely acknowledged. Not even the familiar names of Robert de Luzarches (nave at Amiens), Hughes Libergier (Saint-Nicaise at Reims) and Pierre de Montreuil (nave of Saint-Denis and south transept of Notre Dame) call forth a particular personality. Nor do their works demonstrate the development of a personal style.[30] Instead, they are part of a long and eventful sequence in which individual contributions fade in the *longue durée*. In this sense gothic could hardly be more at odds with the identification between author and project in today's architecture, and from the sometimes grotesque characterisations this gives rise to. Think, for instance, of the Unité d'Habitation in Marseille, dubbed *la maison du fada* ('nutter's house'), or the project for a médiathèque at Pau in France nicknamed *le caleçon de Zaha* ('Zaha's panties').

The chronology of cathedrals reads like a litany of major disruptions. At Reims, the construction of the main facade was delayed by existing houses on the site. At Amiens, the depth of the towers was reduced for lack of space. Most bizarrely, at Lausanne the nave had to accommodate a public road cutting across it. But this is like nothing compared to the west fronts of cathedrals. Viollet-le-Duc (who is temperamentally inclined to overlook idiosyncrasies) describes them as '*des amas de constructions sans ensemble, élevées successivement sans projet arrêté*' ('constructions without unity, one thing piled onto the next without a fixed project').[31]

The west fronts of cathedrals bear witness to a gradual disintegration of a comprehensive sense of order. Chronology aside, a story could be told starting with the cliff-like facade of Chartres, a design that seems barely architecture, too flush and scarcely drawn, with openings that are rare and small, as if crushed and partly sunk into the ground by the immense weight of masonry. At Notre Dame, on the other hand, symmetry and regularity prevail. The facade seems to have been subjected to an academic composition, each large-scale motif or series of motifs fitting neatly within its own compartment or division. This west front was much loved by Le Corbusier, who used it to demonstrate the application of *tracés régulateurs*.

At Reims horizontal storeys remain strongly marked, but the process of disintegration is well under way. No gothic facade is more colossal (as anyone who has stood besides one of its statues in the adjacent Musée du Tau can testify), but it is now full of crevices and lineaments, beaten on the outside and eaten away from the inside. For architecture it is the ultimate *écorché*, a model of immense power and pain. This, together with the extraordinary liberties taken by its sculptors over the central portal, remind one of Michelangelo, even if the *terribilità* here is on a scale that would be inconceivable with the work of an individual artist.

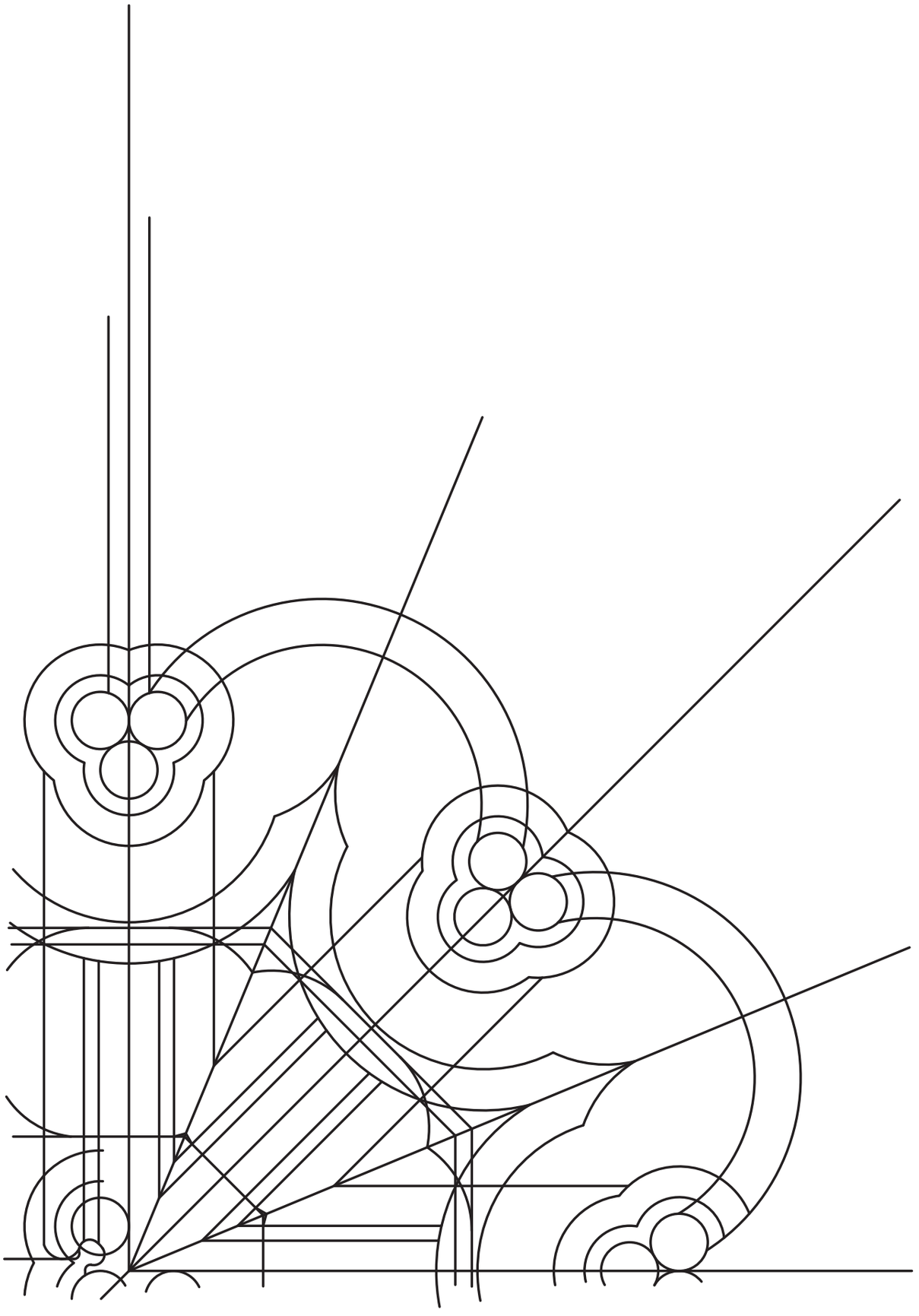
Henceforth the sense of compositional balance becomes uncertain. Though I lived for much of my youth in the shadow of Amiens Cathedral (my ophthalmologist's consulting room stood opposite its main facade), still today I struggle to appreciate its order. It is as if the neat compartments of Notre Dame's facade had been slid around on a pocket puzzle game. The original order seems lost: the rose has moved up, while the kings' gallery has moved down to a position immediately above the arcade. Above the two lateral porticos, just enough height has been reserved for a lunette. Only the upper storey of the two towers breaks the symmetry, differing in height and in detail.

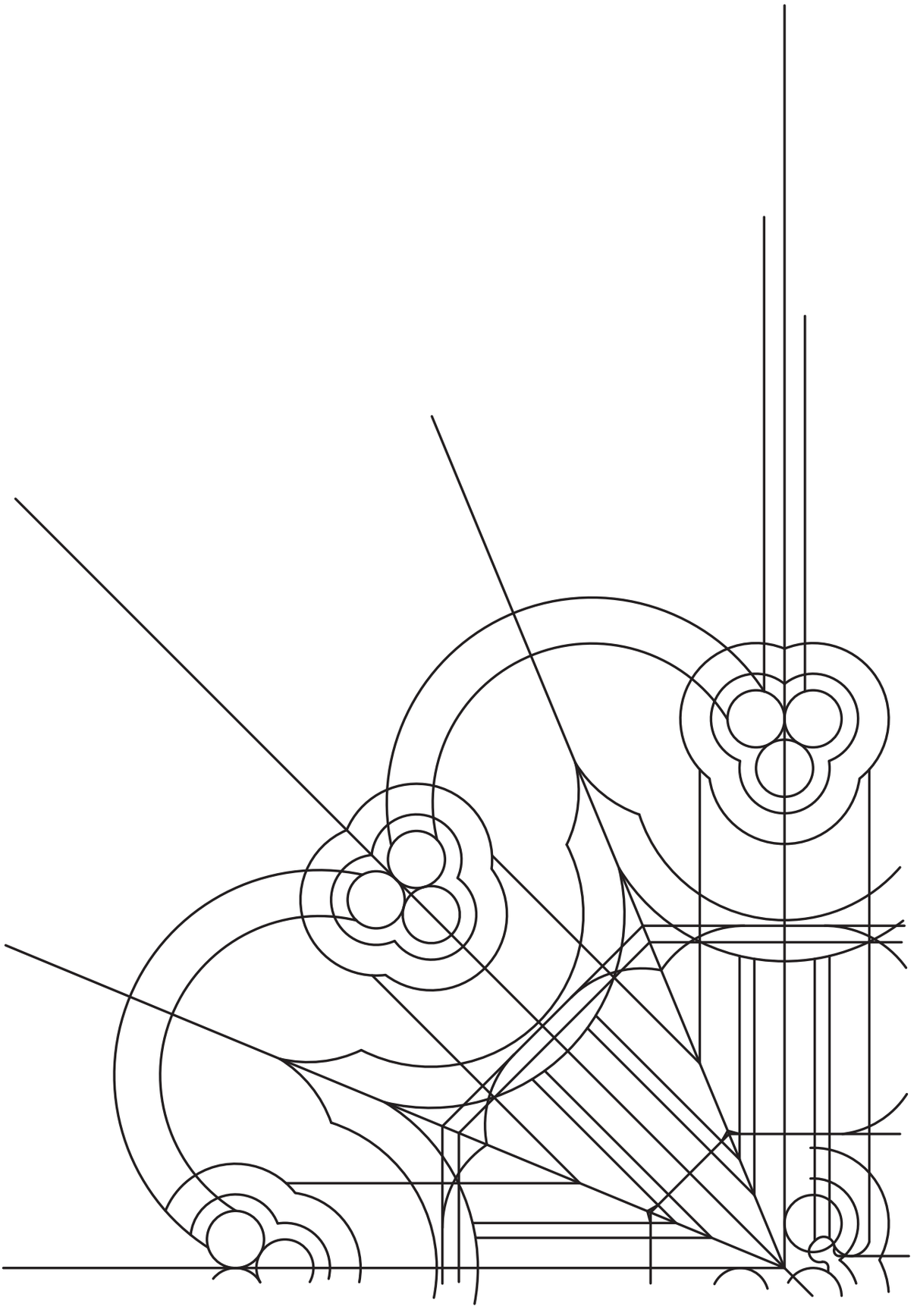
The sense of awkwardness in the arrangement persists, even though the complicated circumstances of construction are now well understood.[32] However, the greatness of Amiens' facade lies in the porches, which more than compensate for any such reservations. Few forms in the history of architecture have achieved a greater sensuousness or a keener sense of drama. Their canopies are shaped like gigantic shells from whose depth incomparable statues speak to us in a voice that comes from times immemorial and seems almost audible. Still today, I cannot approach them without trepidation.

At Bourges the lining of porticos (of which there are five) also stands proud of the main facade. But above them everything seems to be in a state of disarray, something that is all the more surprising given that the bays of the great nave behind proceed with faultless regularity from end to end. To refer to the west front as a facade is almost a euphemism. Six massive buttresses rise like monumental candles with no setback whatsoever. Between them, with the exception of the unusually fine tracery in the central bay, the wall is almost entirely windowless. The space is filled instead with deep arcades, some arched and others with an ogive. Above this gallimaufry rise two towers, rather squat, unequal and ungainly. Although the arrangement is not beautiful in any conventional sense, the west front of Bourges exudes strength, breadth and character. Its awkwardness may contrast with the grace of the nave but no-one has argued that it is detrimental to the value of the building as a whole. The cathedral remains, to use Ruskin's phrase, an unaccusable whole.

Such inconsistencies are integral to gothic architecture. At Amiens site restrictions resulted in shallow towers that resemble rectangular cut-outs and appear, in the west front, like a 'constructional *trompe l'oeil*'.[33] The facade was flattened against the nave, which pre-existed it. Echoing the situation in Milan, no feature above the level of the triforium – neither the kings' gallery, nor the rose, nor the towers – had been designed at the outset. As construction proceeded, a succession of formal accidents were concealed by improvised solutions.

At Rouen no less than six architects were employed on the west front over a period of 350 years. At Strasbourg the design of the tower continuously evolved over a period of 80 years in the hands of one master after another, no matter what Goethe said about its 'countless details melt[ing] together into a complete whole'.[34] In gothic architecture the dimension of time cannot be separated from its aesthetic. In a real sense cathedrals are works without beginning and without end. Records might provide dates for the start of a building campaign. But the laying of the first stone seldom





marks an unequivocal start. Records might provide dates for the consecration of churches. But here again completion is regularly prevented by fire, collapse, extension, shelling and, in our own time, creative restoration.

The notion of a unified gothic style reaching maturity in the *style rayonnant*, and ending with the fireworks of the *style flamboyant*, is a fantasy – a legacy from the nineteenth century, when gothic was defined in opposition to, and in parallel with, classicism. Strictly speaking, each cathedral elaborates its own aesthetic in the process of its making; each is a kind of precipitate arising from the admixture of intentions and events. Unlike classical buildings, gothic cannot be understood in the light of particular models and theories. Unlike classicism, it does not submit to the authority of a language, a grammar or a vocabulary.

The expectation of uniformity and consistency in the design of buildings did not exist in medieval times. It is common sense that at least some notion of the whole edifice must have been entertained: even the most casual *bricoleur* starts with a notion of the project he is undertaking. But there is little evidence that this original idea was considered sacrosanct. As the facade of Rouen demonstrates, architects were anxious to keep up with changing fashions, even at the cost of a loss in symmetry. Moreover, the possibility that a design might survive without modification during extended periods of construction simply did not correlate with medieval experience. 'The concept', Peter Draper has argued, 'insofar as one can suggest an articulated notion – was, rather, one of coherence than conformity to an original design'.[35]

But cathedrals trump even notions of stylistic coherence. Defined by a capacity to respond to or resist circumstances (as the case may be), they embrace inconsistency and they are tolerant of mistakes. A cathedral's character, like the character of a person, is the sum of its distinguishing qualities. And like the character of a person, its essence is moral. Ruskin understood this when he attributed to gothic qualities such as rudeness, obstinacy and generosity. Character is the expression in one object of its passing through time. It is the resultant of a multitude of events, random and planned, contingent and rational, natural and human. It defines the forms of a cathedral as much as it does the process and the values by which these forms were created. The shaping of character, like the construction of a cathedral, needs time.

Programme

Modernism struggled with gothic. Its conception of architecture as the fulfilment of human *needs* found no resonance in religion, and there was no middle ground between the 'house as a machine for living in' and the house of God. The search for minimum standards and for economy was hardly compatible with the desire to build cathedrals. Yet in a fundamental, existential way gothic was functionalism reduced to its purest form, based not on physical or social needs but on belief. The thirteenth-century theologian William Durandus wrote that 'in the Temple of God, the foundation is Faith, which is conversant with unseen things'.[36] In the building of cathedrals, faith was the programme.

Treatises played a minor role but gothic architecture had a theory in the form of the Bible. More particularly, it was founded on the authority of the Gospels and on the exemplary life of Christ. A gothic cathedral is in effect a re-enactment of a biography, endlessly repeating the details of His life in every craft and at every scale. Above all it is a reenactment of the final moments of His life: the Passion. The death of God is at the core of all medieval art and life. 'Life', said one dismal doctor of the Church, 'is but the shadow thrown by the cross of Christ, outside that shadow is death'.[37]

Nowhere was this devotion more fully represented than in the treasure of Sainte Chapelle in Paris.

In addition to the Crown of Thorns and the timber of the cross, its relics included the Holy Lance which pierced the heart of Christ in the shape of a cross, a phial containing the water mixed with blood which seeped from this wound; the Holy Sponge with which the lips of Christ were wetted with gall and vinegar, a fragment of the Holy Shroud within which he was entombed, the purple tunic which Herod's guards put over him in derision, a fragment of the Holy Reed which they put in his hands in lieu of a sceptre, the linen with which he washed the feet of apostles during the Last Supper, a stone from the Holy Sepulchre and the 'titulus' of the cross... To this were added a flask of milk of the Virgin, her coat, swaddling clothes of the infant Jesus, the rod with which Moses caused the Red Sea to open and then to close, the victory-bearing cross of the Byzantine emperors, which replicated the *labarum* of Constantine and constituted one of the insigni of their authority as well as many relics of saints: Saint John the Baptist's occiput, the foot of one of the Holy Innocents, the skulls of Saint Clement, Saint Blaise and Saint Simeon, a rib of Saint Nicaise, a knee of Saint Aignan, a tooth of Charlemagne, etc.[38]

Given the exceptional relics of the Sainte Chapelle, it is not surprising that the building itself should have been conceived as a reliquary. Much of the masonry and statues were gilded, suggesting the gold and enamel work of goldsmiths.

No aspect of a church was too insignificant to commemorate the Passion – Durandus, for instance, prescribed that a cross be engraved on the first stone to be laid. And none was too large – the floor plan of cathedrals, in the form of a cross, reminds the faithful that they should 'tread on the steps of The Crucified'.[39] Above all, the Passion was celebrated in the Mass and in the rite of the Eucharist. In this rite the life of Christ is adapted into a play combining drama and reality. His actions during the Last Supper – the blessing and the sharing of bread and wine with his disciples – are recalled and endlessly repeated. As is the familiar exhortation: 'All take and eat of this. For this is My Body... All take and drink of this. For this is the chalice of My Blood, of the new and eternal covenant. Mystery of Faith: which shall be shed for you and for many unto the remission of sins.'

In medieval times the urge to see the priest raising the Host and blessing it was such that a dark curtain was sometimes placed behind the altar to make it more clearly visible. This prompted visions of its shining like the sun and of the priest holding in his hands, not the Host, but the infant Christ. In cities people are said to have run from church to church to prolong the experience of sighting it.[40] The rehearsal on the altar of a bloody sacrifice – the crucifixion of Christ – draws from what is most primitive in religion ('host' comes from the latin *hostia*, or 'sacrificial victim'). And the fascinated belief in transubstantiation, in the actual presence of God in the Host before which the assembly kneels in adoration, suggests affinities with the world of magic.

During the consecration, the priest exceptionally turns away from the congregation to

Palimpsest of Reims, mid thirteenth century
Blind-embossed drawing
© Timothy O'Hare

face the altar. He then adopts the ancient attitude of the *orantes*, the palms of his hands facing upwards, to 'seek the things which are above', as counselled by Saint Paul. The action continues in complete silence. The upward movement of the Host, the stillness, the sense of mystery contribute to an expansive atmosphere that seems intent on filling the space of the cathedral and illuminating its meaning. It would be hard to overstate the sense of drama that accompanies the presentation of an object as small as the Host – a two-inch wafer holding out, like some radioactive nugget, the promise of eternal life – in a space as vast as a cathedral.

In late medieval times the appetite for dismal details of the Passion became insatiable. 'Jesus no longer teaches, he suffers', Emile Mâle writes, 'whereas the death of Jesus Christ had been a dogma addressed to the intelligence, now it is a stirring image which speaks to the heart'.[41] The extent of one's absorption in this dolefulness became a measure of religious piety. In sculptures of the Pietà and of the Entombment, and in the *Christ Seated Waiting for Death* in the church of Saint-Nizier at Troyes (a sculpture Mâle singled out for praise) pain appears to be absolute, in a manner consistent with the prelude to the death of God.

The emotional charge of late gothic sculpture found an equivalent in the increasingly complex foliation of late gothic architecture. Virtuosity must have been fascinating in its own right but the sensibility was new. Architectural forms now conveyed a keener susceptibility to emotion. This is visible, for instance, in the upper storeys of the Tour de Beurre at Rouen Cathedral, where the foliation is so intricate and brittle as to suggest that the surface of the masonry has itself become sensitive. It is visible, too, in the increasingly fine modelling of columns and tracery, which together form the pattern on the 'right side of the cloth'. Whereas faith had been dominant in the early phase of gothic, the emotion which faith aroused now became increasingly active. Emotion became the programme.

At root an architectural programme is an allegory, a parable. It is founded on a recollection of experience. Norman Foster's terminal at Stansted Airport (today sadly compromised) sought to recapture the clarity of early air travel when 'on one side there was a road and on the other a field'.[42] A church, in turn, is founded upon the remembrance of the Last Supper. Even when a designer closely follows the prescriptions of Ernst Neufert's *Architects' Data* (the book includes a measured drawing of a priest celebrating the Eucharist) there remains in every programme something irreducible. It is this enigma alone which causes the vaults of a cathedral or the 'trees' at Stansted to be of a particular height and form. This enigma, this creative rehearsal of experience informing every aspect of a building, is the core which the architecture critic strains to understand.

The relation between the rite of the Eucharist and the form of the cathedral is like the relation between a tungsten filament and a light bulb, necessary, mutually defining. Without the Eucharist there would be no cathedrals. The Passion celebrated in the Eucharist was the blueprint. Its stages – the Last Supper, the sermon on the mount, the arrest, the judgement, the crucifixion – were obsessively featured in the fabric of cathedrals. In stone and in glass, in metal and in wood, artists reproduced spontaneously what they knew by heart.

Outside the church, episodes from the Passion gave a rhythm to everyday life. Durandus describes the unfolding of the day in this way: 'At *Matins* bound: at *Prime* revil'd: condemned to Death at *Tierce*: Nailed to the Cross at *Sexts*: at *Nones* His Blessed Side they Pierce: They take Him down at *Vesper*-tide: in grave at *Compline* lay who thence forth bids His Church to keep Her sevenfold Hours always.'[43] Events in the life of Christ, especially the Nativity and Easter – the birth and the death which mark the mysterious thresholds of His Incarnation – lent their meaning to the passing of the seasons.

Though seen to come from God, time was associated with humanity and with being mortal. Human life was a short interval, a hiatus within eternity. Likewise God's incarnation in the person of Christ was a hiatus within the reign of God. In his great essay on art in the Middle Ages, Michelet stressed the central role of the Passion. 'The Middle Ages as a whole', he wrote, 'are contained within Christianity, and Christianity as a whole within the Passion. Literature, art, the manifold developments of the human mind from the third to the fifteenth century, all hangs on this mystery.'[44] He further emphasised a specific moment when Christ, having celebrated the Last Supper with his disciples, withdrew to the Mount of Olives to pray in solitude. There he implored his Father to spare him what he knew was to come: 'Please take this cup of suffering away from me.'[45] Once crucified he called out in his agony: '*Eloi, Eloi, lema sabachthani?*' ('My God, my God, why have you abandoned me?')[46] For Michelet, the anxiety of doubt, the fear of abandonment by God, was the essence of medieval thought.

This doubt of Christ is like a breach in the Gospels, the singular moment when Christ, now alone with his conscience, doubts his own faith and gets a taste of what it is like to be human. Made incarnate by his Father to redeem mankind, then abandoned by him in his last hour, he fears becoming human himself. The moment is not without suspense. Nor is it without irony – having taken a human form to give humanity a chance to redeem itself from sin, Christ contemplates the loss of his own godliness.

In dwelling on the Passion, the aim is not to praise Christianity but to stress that gothic architecture cannot be understood apart from the religion which gave rise to it – no more than, say, Islamic architecture can be isolated from Islam, or Renaissance architecture from humanist culture. Writers in the twentieth century privileged a secular conception of gothic, focused mainly on its form and structure. Yet Christianity – its rites, its beliefs and its values – constitutes the anthropological basis of gothic. Gothic architecture is human not in spite of religion, but because of it. The doubt, the anxiety, the suffering in the Passion – what Michelet called 'the night of the soul' – are human feelings. As such, they are universally understood and are a means by which gothic forms are made meaningful to all.

These feelings, this 'passionate vegetation of the mind', underpinned gothic and the foliation of its lines. From them rose a manmade order parallel to that of nature, its flora and its rocks. Improbably, it combined passion and mind, emotion and intellect, instinct and logic. If, in early gothic, ribs were believed to carry the vaults, in the more extravagant examples of late gothic, ribs became detached from the surface of the vaults and carried nothing but themselves. In the chapels of the Cathedral of Our Lady at Ingolstadt, ribs imitate branches and fork into cusps that are sharp like brambles, and bosses bear thistle-like spikes, causing the apex of the vault to take the aspect of a crown of thorns. The passion displayed in this fantastical outgrowth seems itself a prolongation of the Passion of Christ.

Gothic is not conventional in a classical sense. To this day there is no easy answer concerning the nature of the order by which it

can be recognised. The acts of devotion by which a church came into existence took precedence over the formal unity of the building. These took many different forms – the gift of a new chapel, the rebuilding of a tower, the offering of a window – and they were not soon exhausted. Thus a cathedral includes many projects and it is in its nature to accommodate differences. Moreover, as its construction often lasted for as long as gothic itself (and sometimes beyond), it was open not only to new additions but also to random events which could either curtail or prompt new projects.



In this respect, there is much that resonates with current interests in architecture. Gothic is open-source like the software whose code is freely available and modifiable. It is contingent, in that, more than other architectures, it is open and responsive to the vagaries of time. Faced with unprecedented tasks, it is often improvised like some giant work of bricolage. It is collaborative in that design decisions are seldom if ever concentrated in the hands of a singular author. Lastly, in spite of its scale, it is and remains almost entirely the work of dedicated craftsmen. Open-source, contingency, bricolage, collaboration, craft – these topics are frequently discussed today and they all share related motives: finding a meaningful engagement between the profession and users, between invention and situation, between the plan and the effects of time.[47]

In time gothic found an ally. Its pace was not a 'dynamic from hell', but rather the composure of heaven.[48] It showed no anxiety about originality and remained imperturbable in the face of events big and small. Much of its fabric has been repaired, removed and replaced over the course of centuries. For instance, only half to two-thirds of the original stained-glass survives in the great windows of the Sainte Chapelle, mingling the coloured specks of its glass with those of subsequent restorations. Not merely great in their design, gothic cathedrals have been admirable in the devotion shown in their maintenance. Unlike so many familiar monuments, they have not merely weathered the passing of time but have brought it to their side and embraced it. Hence their immense and immensely fragile shells have endured to remain among the few great works of art and architecture which are still freely accessible to all.

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Christ Seated Waiting for Death,
Church of Saint-Nizier, Troyes, sixteenth century
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38. Sophie de Sède, *La Sainte Chapelle et la Politique de la Fin des Temps* (Paris: Julliard, 1972), p 18.
39. William Durandus, *op cit*, p 26.
40. Rev Joseph A Jungmann, *The Mass of the Roman Rite: Its Origins and Development* (London: Burns & Oates, 1959), pp 424, 426; see also Roland Recht, *Seeing and Believing: The Art of Gothic Cathedrals* (Chicago, IL: University of Chicago Press, 2010).
41. Emile Mâle, *op cit*, p 86.
42. David Jenkins (ed), *Norman Foster Works*, vol 3 (London: Prestel, 2007), p 29.
43. William Durandus, *op cit*, p 91.
44. Jules Michelet, *op cit*, p 592.
45. *The New Testament*, Mark 14:32–36.
46. *Ibid*, Mark 15:34.
47. See for instance, and respectively, Mario Carpo, *The Alphabet and the Algorithm* (Cambridge, MA: MIT Press, 2011); Jeremy Till, *Architecture Depends* (Cambridge, MA: MIT Press, 2009); Irénée Scalbert and 6a Architects, *Never Modern* (Zurich: Park Books, 2013); *San Rocco*, Collaborations issue, no 6, 2013; Richard Sennett, *The Craftsman* (London: Penguin, 2008).
48. The expression was adopted by Rem Koolhaas from Jean-Paul Baïetto, the president of Euralille, to describe the momentum needed to bring the development to completion.

with drawings by Timothy O'Hare

Cathedral

Peter St John

For the architect there are few more enjoyable moments in the long process of realising a building than visiting the site mid-construction, before the building is fully formed. In the quiet at the end of the day you can walk upwards through the floors, examine things closely and maybe climb the ladders up the scaffolding to the roof, looking down from vantage points that will soon be inaccessible. In the disruptive landscape of the site, elements of building have not yet found the proportions for which they will be perceived from the ground, and there is a wonder at their scale and physicality. For a brief period, before its spaces become clarified and purposeful, the building is held in a provisional state between the positive and the negative – nothing to do with a plan organisation, a facade or an interior, but a hollow construction of the mind.

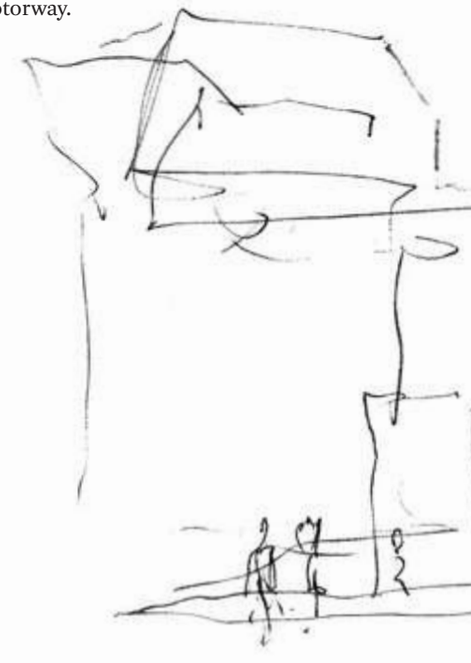
If an architectural imagination is to have some seed of ambition, then the nave of a high gothic cathedral is a good place to start. Its pure subject of space and light at the grand scale is in a delicate counterpoint to the technical marvels by which this is achieved. The rib in the gothic cathedral, rising to the vault of the roof, makes the massive stone piers and wall surfaces look delicate. The extremely vertical space and the high light coming through the thin upper shell of the wall, held up in the air invisibly by the fingertips of flying buttresses on the outside, is ethereal, sublime and perhaps the closest architecture comes to a force of nature.

But the sublime is more poignant for being experienced together with something else, like failure or rudeness, and this is what makes the early gothic cathedrals in northern France most special, peculiar and beautiful. Amiens, Chartres and Beauvais were all built within a relatively short period of time (for cathedrals), but they are wonderful for their asymmetries and their incompleteness, where bursts of religious fervour suddenly stopped, or over-stepped, causing collapse. Massive buttresses rise to blunt platforms for spires never carried out. Twin towers start off symmetrically but develop upwards in different styles and heights. There are areas of extreme virtuosity next to major missing parts. It is clear that the final picture was not worked out at the start, and that responsibilities changed hands.

I had read about these buildings in Fiona MacCarthy's biography of William Morris, and knew that Morris had visited them in a formative summer trip with his friend, the architect Phillip Webb. They had made sketches and climbed out onto the roof of Amiens. And so, partly because of my fascination with Morris, and partly because it seemed a nice thing to do, I went with Irénée to see them. Morris and Webb had walked on their holiday, to avoid the new trains that Morris saw as a disastrous invention. On a later trip he had travelled by boat on the river. We drove there in a red van.

Morris loved these buildings because of their sophistication, but also because they are evidently the work of many individuals all working at the peak of their skill. On the west front of Amiens everyone is represented, from the saints to workers in the fields. The massive front rises cliff-like in tiers of varying depth, stretching upwards unevenly to the bristly top. Halfway up, a low tier of kings and queens stand in a close-fitting arcade. On our way up to the roof we walked behind them, along a narrow gallery under the rose window. They were giants, and we looked out at the city between their ankles. High up in the nave it was extremely bright. We walked along the narrow gallery of the triforium, looking at the brush-strokes of painting on the stained glass, and into unreachable high cavities in the vault, where you could see the faded pigment of the wall paintings that would once have covered the interior.

The huge loft space above the stone vault was black and unknowable. In the centre, massive trunks rose in a tangled pyramid to support the spire on the ridge. People watching over the building slept up here, as did some of Irénée's more adventurous school friends, apparently. On the roof there was a light breeze. At the bottom of the steeply pitched roof we walked along the gutters, past the pinnacles of flying buttresses so delicate they looked like a net held up from points in the sky. In the spire the huge building sloped away steeply below us. We could see fields around the city, and on the horizon, a motorway.



Amiens Cathedral, 2013
© Peter St John



Paolo's Triangolo

Silvia Micheli
& Léa-Catherine Szacka



Frontispiece of *Paolo Portoghesi by Francesco Borromini*, *c* 1946
© Paolo Portoghesi Archive

The triangle, no!
I hadn't thought of it
But sure, I'll give it a go
Geometry's not a crime.

These lines come from the 1978 pop hit 'Triangolo'. Go to YouTube and you can see the androgynous Renato Zero, dressed alluringly in a flared yellow spandex bodysuit and an emerald geometric tiara, lip-sync the words while dancing with a pair of glittery green triangles.[1] As much as the song attests to Zero's easy-going willingness to experiment with a *ménage à trois*, the track, like others from the same period, also represents an attempt to escape the social and political turmoil of Italy in the late 1970s and muse instead upon a dreamy, sensual, hedonistic future.

At the time geometry wasn't much of a crime in architecture either. From Aldo Rossi's Monument to the Resistance in Segrate (1965), usually remembered for its triangular-section fountain, to the plan of Paolo Portoghesi's Casa Andreis (1964–69), also based on a triangular matrix, or Franco Purini & Laura Thermes' House of the Pharmacist (1981) in Gibellina, Sicily, with its own recurring triangular motifs, the history of Italian postmodernism abounds with examples of buildings seemingly defined by their allegiance to the three-sided polygon. Even product and furniture design developed the same affection, as evidenced by Alessandro Mendini's Kandissi sofa, the textile designs of Daniela Puppa, or much of output of the Milan-based collectives Alchimia and Memphis. In each case, the triangle became a kind of unconscious emblem for a sudden obsession with geometry, and an irreducible and symbolic counter to the social engagement that had informed both the ideologies and forms of postwar Italian architecture and design up to that moment.



'Michelangiolo Architetto' exhibition, Palazzo delle Esposizioni, Rome 1964
© Paolo Portoghesi Archive

But as much as the triangle offers a significant visual trope, it can also be adopted as a rhetorical matrix for giving order to the somewhat patchy history of 1970s Italian architecture, with the three vertices of the triangle corresponding to the three major dimensions of postmodernism: political, relating to the shift towards the ideology of the Italian Socialist Party (Partito Socialista Italiano, PSI); cultural, with mass media being embraced as the *de facto* vehicle for the construction and dissemination of architectural ideas; and methodological, specifically, the movement's renewed appreciation of architectural history. Working together, these elements generated a sort of love triangle that in many ways can be considered representative of the postmodern attitude towards design as a whole.

And if one had to choose a single figure around which to frame such a diagram, then the Renato Zero of this architectural moment would undoubtedly be the architect–historian and great mediator Paolo Portoghesi, '*the* architect of the Italian postmodern' as Mendini later dubbed him.[2] Born in Rome on 2 November 1931, and remaining quintessentially Roman all his life, Portoghesi nevertheless built up a network from bases in Venice and Milan that strategically connected different aspects of postwar architectural discourse. The success of this network soon attracted advocates beyond Italy, and at its peak corresponding figures in the UK (such as Charles Jencks), the US (Robert A M Stern) and Germany (Heinrich Klotz) added further strands to an international web devoted to the propagation of postmodern ideas through publications, buildings, teaching and exhibitions.

Portoghesi had first begun to formulate these ideas at the end of the 1950s as a young academic, instructing students in the study and restoration of ancient monuments – he had found a teaching position in his home university, Sapienza, in Rome, soon after graduating. Around the same time, in 1959, he began working on his first building – the wilfully neo-baroque Casa Baldi on Via Flaminia, Rome, a distinctive advert for his historicist ambitions.[3] Portoghesi would continue to juggle design commissions with his academic work, developing research on Francesco Borromini that he had first pursued as an undergraduate, publishing a book on the eighteenth-century architect Bernando Antonio Vittone in 1966, and the following year extending his teaching responsibilities with a course on criticism at Sapienza; thus triangulating his field of operations into the three separate but interconnected realms of architectural history, criticism and practice.[4]

The burgeoning of Portoghesi's career was further bolstered in 1963 when Bruno Zevi, a historian 13 years his senior, returned to Rome after a stint teaching at the Istituto Universitario di Architettura di Venezia (IUAV). The two men quickly became close, and when Zevi was asked the following year to organise an exhibition on Michelangelo at Rome's Palazzo delle Esposizioni, he chose to collaborate with Portoghesi. The installation, celebrating the 400th anniversary of the artist's birth, displayed Michelangelo's work in a strikingly innovative way, most notably making a connection between his designs for fortifications and the more exuberant plastic forms of late-period modernism. Recalling this period now, Portoghesi talks of a moment of 'boundless love' in which he and Zevi indulged their mutual passion for architectural history, excited not just by what it offered as its own separate discipline, but by the convergences and possibilities it opened up for contemporary design.

It says something for the strength of architectural history in Italy in this period, and the historian's increasing sway over the course of design practice, that it wasn't long before the Zevi–Portoghesi duo became a trio, with the arrival of Manfredo Tafuri. Portoghesi had first encountered Tafuri in 1959 during Vicenzo Fasolo's history of architecture class at Sapienza – Tafuri was a final year student, and Portoghesi Fasolo's teaching assistant. Tafuri's term paper for the class – on scenography – had hugely impressed his instructors (and many

years later Portoghesi would recall this earlier affection for the subject in an attempt to dilute Tafuri's savage attack on what he saw as the scenographic aspects of postmodern architecture at the 1980 Venice biennale). Like Portoghesi, Tafuri embarked on his own academic career immediately after graduating, initially working as a teaching assistant to Ludovico Quaroni, even if at that stage he was thinking about becoming an urban planner. Portoghesi quickly dissuaded him from such a path, and furthered his nascent academicism by helping him to collect several excellent essays on mannerism – a number of which had been written for Ernesto Nathan Rogers' *Casabella-Continuità* – into a single volume, *L'architettura del Manierismo nel Cinquecento europeo*, which was published by Rome-based Officina in 1966.

The same year their academic paths would again intertwine when they were both nominated as part of a national search for new professors of architectural history. To everyone's surprise, one obvious candidate for the post, Leonardo Benevolo, author, among others, of *Storia dell'architettura moderna* (1960), was eliminated, while both Portoghesi and Tafuri were ultimately offered the title – Portoghesi taking the role at the Politecnico di Milano, and Tafuri, after a brief stint in Milan, at the IUAV in Venice.[5] Following on from their appointments, the two young professors were invited by Zevi to collaborate on a history of architecture. For Zevi it was a move that would orient the future of the discipline, he hoped, as well as a framework that could potentially connect Italy's three principal architectural centres, with Zevi operating from the Sapienza in Rome, Portoghesi from Milan and Tafuri from Venice.



Giovanna Massobrio, Anna Craxi, Paolo Portoghesi and Bettino Craxi, Como, 1984
© Paolo Portoghesi Archive

And yet things did not work out the way Zevi had planned. While Portoghesi welcomed the proposal, Tafuri refused. Perhaps he was already anticipating a time when the bond between the three historians would be less harmonious, and if so, he was right. Because after the sweetness and *bonhomie* of the first half of the 1960s, their ideological and political positions quickly diverged, meaning that after 1966 there was indeed a triangular diagram of architectural historicism, but it was one characterised not by respect and mutual admiration but by virulent confrontation, giving rise to some of the most notorious love–hate tussles of architecture's recent past.

Somewhat surprisingly, the first axis to break did not involve Tafuri (the more naturally combustible of the three), but Zevi and Portoghesi. The occasion was an international conference held at the Accademia Nazionale di San Luca in Rome in 1967 to celebrate the third centenary of Borromini's death. Portoghesi was invited to moderate a roundtable titled 'The Legacy of Borromini in Italy', and took this as an occasion to present a lecture on the contemporary relevance of the architect's work. Zevi, sitting in the audience, was appalled, and immediately attacked the presentation, insisting instead on Borromini's subversive historical character. Portoghesi countered with a defence of a more contextual and philological approach.[6] With the argument unresolved, Zevi continued to lambast Portoghesi in the pages of the architectural journal *L'Architettura Cronache e Storia*, expanding the dispute to take in matters of design. A particular case of disgruntlement was the competition for the Carlo Felice Theatre in Genoa, won by Aldo Rossi and Ignazio Gardella. Portoghesi had sat on the jury and hence was clearly to blame for this unwelcome development, which Zevi took as evidence that the spectre of postmodern architecture was stalking the whole country. In response he rented out a cinema in Genoa and hosted a conference to debate the patently obvious scandal of the competition. Thus Rossi joined Borromini in the list of triggers for an outpouring of Zevian vitriol.

Two years later Portoghesi was attacked again, this time not by Zevi but Tafuri. The spark for what would become a famous *querelle* was the publication of Tafuri's article, 'Per una critica dell'ideologia architettonica' (later translated as 'Towards a Critique of Architectural Ideology'), which appeared in the political journal *Contropiano: Materiali marxisti*.[7] Adopting a strident, somewhat apocalyptic tone throughout, the article offered a gloomy reflection on the state of architecture and its apparent subjugation to a new power. 'There is no "salvation" to be found within it', Tafuri concluded, 'neither by wandering restlessly through ''labyrinths'' of images so polyvalent that they remain mute, nor by shutting oneself up in the sullen silence of geometries content with their perfection. This is why there can be no proposals of architecture ''anti-spaces'': any search for an alternative within the structures determining the mystification of planning is an obvious contradiction in terms.'[8]

Portoghesi immediately understood that these 'polyvalent' images and 'geometries content with their perfection' was a direct attack on both his eclecticism and his beloved triangles. His response was not simply to blast back, but to establish a whole new platform that revelled precisely in those 'anti-spaces' Tafuri had derided. And so in 1969, together with Ezio Bonfanti, he founded the architectural journal *Controspazio* (Counter-space), mischievously appropriating Tafuri's put-down as the very banner under which they would operate. In his first editorial Portoghesi wrote: 'Rather than undergoing a conversion on the basis of some contrived syllogism – and putting aside a debate that Marxist culture has been rehashing for some 40 years now – we must prevail over a nihilistic attitude that threatens to become another ''cultural fashion'' and reclaim our right to an active and justifiable role within revolutionary design.'[9] But it wasn't until the sixth issue that same year that he responded directly to Tafuri's thesis, countering his rival's pessimism with the barbed comment that Tafuri's 'text does not define the degree of autonomy and the scientific value

of the architectural discipline, nor does it specify whether it is to be understood as an art in the traditional sense, or as a particular moment of human labour'[10] – a summing up that Portoghesi now sees as 'vital', not so much in resolving the debate (which he acknowledged was impossible to do), but in retroactively defining his own position.[11]

Nor was this growing antagonism confined merely to academic issues. Zevi, Portoghesi and Tafuri, together with their multiplying entourage of acolytes, also adopted increasingly inimical political affiliations, even though they were all nominally on the Italian left. In Rome Zevi identified with the Partito Radicale (Radical Party), a group with markedly libertarian social and economic policies.[12] In contrast, Tafuri was a member of the Communist Party and turned the school in Venice into a kind of Marxist fortress whose crosshairs were permanently fixed on Italy's devolving bourgeoisie,[13] while in Milan, Portoghesi remained loyal to the socialist PSI (a party previously supported by both Zevi and Tafuri), and in particular to Bettino Craxi, leader of the party from 1976, who broke the traditional duality in Italian politics between the dominant Christian Democrats and the communist opposition. Playing off the deep divisions within Italian society, Craxi's party continued to gain popular support, so much so that by 1983 he became Italy's Prime Minister with a campaign that consistently promoted a new sense of exuberance and optimistic faith in the future.



Filippo Panseca, pyramid design for the 45th congress of the PSI, Milan, 1989
© Lorenzo Capellini
Overleaf: Paolo Portoghesi at his politecnico desk in front of the book *Dieci Posters Del Partito Socialista Italiano* (*Ten Posters of the Italian Socialist Party*), 1971
© Adriano Alecchi / Mondadori Portfolio / Getty Images

Portoghesi's involvement in these debates was in many ways an echo of his childhood in Rome. He had been initiated early into politics, as his family home had doubled as the headquarters of the *Comunità del Porcellino* (Community of the Piglet), a group of Catholic intellectuals who were elected to the Constituent Assembly in 1946. Two of the group's most important members were Giuseppe Dossetti, an Italian jurist, politico and later priest, and Giorgio La Pira, who would go on to become mayor of Florence, and who educated the young Portoghesi in the interconnected dynamics of politics and religion.

Portoghesi's familiarity with politicians perhaps explains why, soon after joining the PSI in 1961, his first meeting with Craxi quickly developed into a friendship – a personal and political affiliation largely facilitated by the fact that they both lived in Milan, which was then enjoying an intense moment of creativity and economic growth.[14] And just as Craxi's political motto was 'liberation' – extracting Italian politics from the pincer movement of the Christian Democrats and communists – so Portoghesi felt inspired to foment the reinvention of the architectural discipline. And yet opposed, by political instinct, to any kind of binding orthodoxy, he consistently defended the cause of postmodernism not so much for any absolute values it might propagate, but for its capacity to reflect the heterogeneous qualities of the city at large, in which the triple forces of politics, ideology and architecture harmoniously converged.

Significantly, it was also during Craxi's leadership of the PSI that an explicit marriage of politics and architecture was consummated. Already by the end of the 1970s, prompted by a growing interest in mass media and a desire to celebrate his party's collective rituals, Craxi had given the Sicilian artist–architect Filippo Panseca a brief to reinvent the PSI's communication strategies. Panseca's solution was to design a succession of themed backdrops for every annual party congress, from the late 1970s through to the early 1990s. In essence, the immutability and permanence of the traditional monument (an older architectural–political model), was rejected in favour of forms and associations that were at once sensational and ephemeral. Among the more memorable of these political stages were a disco-pulpit (1984), a Greek temple (1987), a 'Berlin Wall' (1990) and a triumphal arch (1991), each installed in different Italian cities. However, the arrangement with by far the greatest impact was Panseca's design for the 45th congress, held in the former Ansaldo factory in Milan in 1989. On this occasion Panseca produced a spectacular stage dominated by an 8m-high 'light pyramid', whose size and perfect form conveyed a clear model of the party's hierarchy. Ever since, the image of Craxi's face, hugely enlarged and inscribed into the centre of an equilateral triangle, has become a kind of emblem of the successes – and excesses – of Italian postwar politics.

Portoghesi's own proximity to Craxi was less architectural, more ideological. Despite this, there does appear in hindsight to be a close affinity between the provisional character of his famous *Strada Novissima*, with its 20 fake facades, at the first Venice architecture biennale in 1980, and Panseca's subsequent stage designs for the PSI.[15] However, Portoghesi's active involvement in Italy's shifting political landscape predates both the biennale and Craxi's postmodern theatrics, going back to October 1968, when he was promoted to the role of dean of the faculty of architecture at the Politecnico di Milano. The school was dominated at the time by the leading figures of the Milanese architectural establishment, notably Ernesto Nathan Rogers and Ludovico Belgioioso, partners in the firm BBPR, either of whom might reasonably have expected to take on the role. Why Portoghesi, then only 37 years old, should have got the job instead is only partly explained by his academic credentials – his growing reputation as an architectural historian. His status as an outsider, coming from Rome, and therefore able to offer a fresh perspective on the city of Milan and the dynamics of the school, also seems to have worked in his favour. But what ultimately secured the deanship was his well-documented affiliations with the PSI, meaning he was aligned with the Italian left, but not

DIECI POSTERS
DEL PARTITO SOCIALISTA
ITALIANO
1905 - 1925

PARTITO SOCIALISTA ITALIANO
TESSERA D'ISCRIZIONE
PER L'ANNO 1905

FIORE MICHELE
FABBRO IN GENERE



on the extreme wing, in contrast to other members of the faculty who belonged to the communist PCI or any one of the fringe groups to which the politecnico was especially susceptible. In this sense, the outsider Portoghesi was perceived as the perfect head, mediating between the radicalised students and staff of the university and the more conservative forces of Milan's local government and police force.

Such a responsibility to reconcile various differences was desperately needed because there had already been an explosion of protest at the politecnico as part of the European-wide student revolts of 1968. The previous dean, Carlo De Carli, had even capitulated in the face of these protests and agreed to the complete reorganisation of the school, since when a sort of weekly liturgy saw over 1,000 students hold mass meetings, all competing to articulate their various demands. It was into this fray that Portoghesi entered. His first task was to balance a sympathy for student protest with the mandate to restart the assortment of classes and courses. And yet still, the undercurrents of rebellion remained. On 6 June 1971 these came to a head once again when one of the school's more extreme groups, *Lotta Continua* (Continuous Struggle) invited a large number of Milan's homeless into the building. It says something for Portoghesi's own radicalism that this act of benevolent dissent was sanctioned by Portoghesi himself, who, along with fellow teachers Aldo Rossi and Guido Canella, shared the group's outrage over the city's violent evictions of squatters from empty buildings. Along with these new guests came a manic scheduling of 24-hour-a-day lectures. As Portoghesi remembers it now, 'we were under the illusion that the police could not enter if there was ongoing activity, in other words, one could say that the police were preventing a public official from performing their role'. After only a few days, however, the police raided the building. 'I was giving a lecture on neo-realist architecture at the time', Portoghesi says.[16] Eight professors, including the dean, were arrested and promptly suspended from teaching duties. The case rumbled on for more than two years, before Portoghesi and his colleagues were all eventually acquitted. In June 1974 he was reappointed dean of the faculty.



Paolo Portoghesi, with Guido Canella, Fredi Drugman, Federico Oliva and Pierluigi Nicolin Politecnico di Milano, 1971
© Paolo Portoghesi Archive

In a notorious photograph of the occupation of the politecnico's faculty of architecture from June 1971, Portoghesi appears in his signature checked jacket holding a megaphone and standing shoulder to shoulder with his colleagues Canella and Fredy Drugman and a mass of students. In front of them stands the perimeter fence of the school and a squad of policemen in full riot gear. Portoghesi recalls his defence strategy. At the time, the politecnico had just one computer, assigned its own dedicated space in the engineering department. 'It was massive, took up a whole room and needed Niagara Falls to cool it down'.[17] The computer was one of the glories of the university and the engineers considered themselves the custodians of this particular treasure. But the architects also understood that the computer symbolised both their education and their struggle – Portoghesi even gave a lecture on the importance of the computer and its relevance to the socialist world.[18] And so when the police threatened to enter, they were warned of the dire consequences of upsetting the delicate environmental sensibilities of the computer. When this tactic failed, Portoghesi resorted to other underhand architectural means, at one point insisting that the mass of police on a concrete ramp far exceeded its structural capabilities, and would surely result in its imminent collapse. The police dutifully retreated.

At the politecnico, then, we can see the flowering of Portoghesi's talent for communicating – an ability that he has used throughout his career, constantly exploiting the power of his own voice not just through the university lectern or megaphone but through the more mediated apparatuses of print, exhibitions and film. This media savviness was partly prompted by Zevi, who developed his own persona as a kind of public intellectual largely through the regular column he wrote for *L'Espresso*, at the time Italy's foremost weekly news magazine, and the only one with a section dedicated to architecture.[19] But equally, Portoghesi's ability to disseminate his voice through publications can be detected in his rather precocious childhood. For example, while still a high-school student, the young Portoghesi would pass Borromini's Sant'Ivo alla Sapienza and Oratorio dei Filippini on his weekly visit to his grandparents who lived on the nearby Via della Chiesa. Each encounter with these buildings seemed to beguile him even more, and so he decided to capture their influence on his teenage self in his first published work – the aptly titled *Paolo Portoghesi di Francesco Borromini* (Paolo Portoghesi by Francesco Borromini), which was a handmade book produced in a limited edition of five copies and sold to his classmates and friends. One copy still exists, kept in the private library of its author. Flicking through its neatly typewritten pages one can read its clear, if somewhat lyrical, prose – a writing style that Portoghesi now admits was inspired by the homilies of the Italian hermetic poets, who flourished in the 1920s and 1930s under fascism, and who included Giuseppe Ungaretti, Leonardo Sinisgalli, Salvatore Quasimodo and Mario Luzi. Integrated into this text, Portoghesi then carefully pasted in a series of images – photographs cut from pages of the 1942 exhibition catalogue *EUR Civilità*, or more precisely from five copies of the catalogue, bought to match the extent of his print run.

Later, while studying in Rome, the Piedmontese architect Guarino Guarini briefly became the object of Portoghesi's infatuation, allowing him to reconnect with his maternal

origins. It was not long, though, before he returned to Borromini: more official studies were published in 1964, with perhaps his most famous book, *Borromini, Architettura come linguaggio* (translated as *The Rome of Borromini: Architecture as Language*) following in 1967. After that came many other books, together with two magazines: first, *Controspazio*, in 1969, then in 1983, *Eupalino*, a more explicitly postmodern journal with a generous format, exuberant colours and a distinct bias in the choice of projects, including works by the American architects Robert Venturi, Robert A M Stern, Charles Moore and I M Pei.

From the outset, too, Portoghesi used the printed page to promote the work of Aldo Rossi. The two architects had met in the 1950s through his future colleague at the politecnico, Canella: 'I had asked Guido if he would introduce me to the editorial staff of *Casabella-Continuità*, and he said that the best way to meet them was to go to the Samantha, a discotheque in the centre of Milan, where they all used to hang out.' On cue, the two men encountered each other later that evening, first exchanging pleasantries over the dance floor before retiring to a quieter corner table to talk more. 'Aldo had just written a great article in *Società*, so we started discussing it, but of course I also knew him through his writing on Adolf Loos, a very inspiring architect. We belonged to the same generation, born in the same year and we shared many common passions.' It was through Portoghesi's journal *Controspazio* that Rossi was later introduced to Italy's architectural public, laying the groundwork for his increasing celebrity in the 1970s and 1980s. Even before Rossi's first triumph with the Modena cemetery competition in 1971, Portoghesi had dedicated an entire issue to his work, seeing in Rossi, before anyone else, 'an architect who could disseminate new ideas, because he was the first to propose a really alternative architecture'.[20]

At the end of the 1970s, Portoghesi's editorial successes opened the door to another form of architectural media, when he was appointed director of the first Venice architecture biennale.[21] At that time many Italian cultural institutions were under the patronage of left-leaning political parties, and new appointments typically emanated from the capital. This was certainly the case here, as his directorship came from the president of the biennale, Carlo Ripa di Meana, a Roman politician who was also a member of the PSI and, like Portoghesi, very close to its leader Craxi.



Paolo Portoghesi kneeling in front of Palladio's Rotonda, Vicenza, 1986
© Lorenzo Capellini

Portoghesi immediately understood the huge potential of such an international architectural showcase, and quickly oriented the biennale around a message that advertised the end of modernist prohibition and celebrated instead architecture's plurality through a series of exhibits that were as spectacular as they were popular – or as Portoghesi characterises the biennale now, 'a hotbed of projects, with the aim, not only to represent reality, but to grasp the phenomenon in a nascent state'.[22] Central to this, of course, was his 1980 *Strada Novissima*, the idea for which originally came from a visit to a street market in Berlin's Alexanderplatz with fellow architects Rossi and Carlo Aymonino, and the excitement this engendered, not just for its scenography, but for its echoing of similar stalls in Rome's Piazza Navona. Yet more spectacular still was his commissioning a year earlier of the *Teatro del Mondo*, perhaps Rossi's most enchanting building, which accompanied an exhibition titled 'Venezia e lo spazio scenico'. The sequel to this event is well known: Rossi's floating theatre journeyed across the Adriatic, all the way to Dubrovnik, before coming back to Venice to be exhibited once more during the 1980 biennale. That year Rossi had refused an invitation to be part of the *Strada Novissima*, preferring instead to design an entrance gateway to the Arsenale, but in the end, his theatre proved to be the most memorable facade of all.

The construction of Portoghesi's celebrated *papier-mâché* street had famously been carried out by unemployed set technicians from the Rome film studios of Cinecittà, establishing a direct link between architecture and cinema that in many ways acted as a prelude to Portoghesi's deepening engagement with the medium. Of course, in Italy, as everywhere else, cinema had long been considered by architects as an important source of inspiration for their work, but Portoghesi was the first to fully realise film's potential as a means to promote it.

His first, albeit indirect, encounter with film had actually occurred nearly 15 years before, in 1967, when his Casa Andreis, built in Scandriglia, Rieti, was used as a location for Marco Ferrara's movie *L'harem* (The Harem), in which an amorous older woman invites her friends to holiday with her at her elegant villa. Two years later, it was the turn of Portoghesi himself to appear on film, when he featured in *Utopia, Utopia*, directed by his long-time friend Maurizio (Anzio) Cascavilla. The film narrates the story of Renato (played by Renato Nicolini), a 28-year-old Roman architect in the grip of

an obsession with geometry and urban questions. At one point in the drama Renato visits 'an important professor' – played by Portoghesi, naturally – who lectures him on the difference between geometry and architecture: 'The city is made of fragments of elementary geometrical forms, which combined together create complexity'. A year after that, another house designed by Portoghesi – this time, the Casa Papanice – assumed a starring role, appearing in *Il dramma della gelosia* (later translated for the dubbed English version as *Jealousy Italian Style*, but more colloquially referred to as *The Pizza Triangle*), a 1970 Italian tragi-comedy directed by Ettore Scola. In the movie Adelaide (Monica Vitti) is seeing Oreste (Marcello Mastroianni), a married construction worker, but is soon led astray by Nello (Giancarlo Giannini), setting up a dangerous *ménage à trois*. Adelaide eventually leaves both men and runs off with Amleto (Hércules Cortés), a butcher who lives in the Casa Papanice and whose well-rehearsed seduction involves a sensual explanation of the importance of geometry in the design of his house.

Years later, Portoghesi used the power of cinema to promote his 1980 Venice biennale, commissioning two documentaries: *La presenza del passato* (The Presence of the Past), again directed by his friend Cascavilla, and *Viaggio nella Biennale: Architettura* (Journey to the Architecture Biennale), by Marcello Ugolini.[23] The films promoted the biennale while expounding upon the meaning of the 'new' postmodern architecture. They also reintroduce Portoghesi himself to the screen. At one point in *La presenza del passato* we see him in the middle of a Rome street, preaching a return to the authenticity of public space, even if sequences later in the film revel in the fakery and ephemerality of his Venetian *Strada*.

Elsewhere in Europe or the US, the three defining lines of the postmodern triangle – the centrality of history for the discipline; an affiliation with what would become characteristically neo-liberal politics; and the wilful mediatisation of architecture – appear and reappear in isolation, and in shifting orders of importance. Only in Italy were they all in evidence, all of the time, because only in Italy was there Paolo Portoghesi, virtuoso historian, politician and communicator. And yet, as we have seen, Portoghesi's synthetic identification with all three of these forces also speaks of his urbanity, and in particular his undying allegiance to Rome, because ultimately only Rome could operate at once as Italy's political centre, as its cradle of history and as Hollywood on the Tiber.



Paolo Portoghesi with Aldo Rossi, visiting the Teatro del Mondo, 1979
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This essay is based largely on an interview with Paolo Portoghesi by the authors, Piazza della Piscinula, Rome, 25 February 2015.

1. 'Il triangolo, no! / Non lo avevo considerate / D'accordo, ci proverò / La geometria, non è un reato', 'Triangolo', from the album *Zerolandia* by Renato Zero, 1978. For a video of Zero's performance, see www.youtube.com/watch?v=zwpjBxDzqro.
2. Silvia Micheli, interview with Alessandro Mendini, Atelier Mendini, Milan, 12 January 2016.
3. Although the Casa Baldi is his first building in private practice, Portoghesi first collaborated on a design for the Town Hall of Civitacastellana as early as 1954, while still a student.
4. Portoghesi's academic career continued with a professorship in the history of architecture at the Politecnico di Milano from 1966 to 1979, and where he served as dean between 1968 and 1976. From 1976 to 1980 he taught design at the same school, before returning to architectural history through a professorship at the University of Rome. He went back once more to design in 1995, as a professor of architectural design at the faculty of architecture 'Valle Giulia' at Sapienza in Rome.
5. *Storia dell'architettura moderna* (Bari: Laterza, 1960) has now been published in seven languages. Leonardo Benevolo's other books at that time included *Una introduzione all'architettura* (Bari: Laterza, 1962) and *Le origini dell'urbanistica moderna* (Bari: Laterza, 1963).
6. See the discussion between Zevi and Portoghesi in *Studi sul Borromini*, vol 1 (Rome: De Luca, 1967), pp 507–42. See also Giovanna Massobrio, Maria Ercadi and Stefania Tuzi, *Paolo Portoghesi architetto* (Milan: Skira, 2001), pp 37–39.
7. Manfredo Tafuri, 'Per una critica dell'ideologia architettonica', *Contropiano* 1, 1969, pp 31–79, translated as 'Toward a Critique of Architectural Ideology', in K Michael Hays (ed), *Architecture Theory Since 1968* (Cambridge, MA: MIT Press, 1998), pp 6–35. Tafuri's original article later formed the basis of his book *Progetto e Utopia* (Bari: Laterza, 1973), which itself was translated as *Architecture and Utopia: Design and Capitalist Development* (Cambridge, MA: MIT Press, 1976).
8. *Ibid*, pp 32–33.
9. Paolo Portoghesi, 'Editoriale', in *Controspazio* 1, 1969, p 7. Translation by the authors.
10. Paolo Portoghesi, 'Autopsia o vivisezione dell'architettura?', *Controspazio* 6, 1969, pp 5–7. Translation by the authors.
11. See Paolo Portoghesi in Marco Biraghi, Gabriella Lo Ricco, Silvia Micheli and Mario Viganò (eds), *Italia 60/70: Una stagione dell'architettura* (Padua: Il Poligrafo, 2010), p 267.
12. See Bruno Zevi, *Zevi su Zevi: Architettura come profezia* (Venice: Marsilio, 1993), pp 176–79; see also Roberto Dulio, *Introduzione a Bruno Zevi* (Rome: Laterza 2008), pp 127–28.
13. See Andrew Leach, *Manfredo Tafuri: Choosing History* (Ghent: A&S/Books, 2007), pp 33–39.
14. Portoghesi was a member of the party for only six years, and although he didn't renew his membership after 1967, he always considered himself a socialist until the collapse of the party in the early 1990s. Paolo Portoghesi, interview with the authors, *op cit*.
15. On the active relationship between artists and designers and the Italian Left, see Lella Golfo, *Ad alta quota. Storia di una donna libera* (Venice: Marsilio, 2013).
16. Paolo Portoghesi, interview with the authors, *op cit*.
17. *Ibid*.
18. Paolo Portoghesi, *Italia 60/70*, *op cit*, p 263.
19. Zevi started writing on architecture first in the magazine *Chronicles* (more precisely, from 18 May 1954 to 27 September 1957), which in turn drew him to the attention of the editors of *L'Espresso*, for whom he wrote from 1955, the year the magazine was founded, and continued through to his death in 2000. There was only one break in his contributions to the magazine: from 18 June to 19 November 1967, when, according to Zevi, *L'Espresso* assumed an anti-Israeli stance. See Bruno Zevi, *Zevi su Zevi: Architettura come profezia* (Venice: Marsilio, 1993), p 75.
20. Paolo Portoghesi, interview with the authors, *op cit*. The dedicated Rossi issue is *Controspazio* 10, 1970. By that time, after Portoghesi's move to Milan, the tone of the magazine also changed, and concentrated more on theoretical issues. Within a couple of years it then became identified as the journal of La Tendenza, taking a critical line that later turned out to be crucial to the Italian architectural culture of the period.
21. 1980 was technically the first year of the architecture section at the Venice biennale, even if there had been a prototype art/architectural exhibition, directed by Vittorio Gregotti, at the 1976 biennale, referred to as Year Zero. Portoghesi would ultimately direct two architecture biennales, in 1980 and again in 1982, in addition to his exhibition featuring the first appearance of Aldo Rossi's *Teatro del Mondo* in 1979.
22. *Ibid*.
23. *La presenza del passato*, directed by Maurizio Cascavilla, 32 minutes (RAI, 1980) and *Viaggio nella Biennale: Architettura*, directed by Marcello Ugolini, 52 minutes (RAI, 1980).

Introduction to *La matematica della villa ideale*

Paolo Berdini

Colin Rowe was first and foremost a connoisseur, inasmuch as his reflections presuppose a prolonged intimacy with his primary object of study, modern architecture. He always speaks in the presence of the work, with the work before his eyes, so to speak; and when interpreting the work's meaning, the personality of the artist is always of greater interest than the *Zeitgeist* or the given historical moment it is thought to express, though historical understanding and its methods of interpretation remain an important aspect of his approach. All of these diverse intellectual strands are united with the acute perception of the naturalist and the analytical acumen of the psychologist. Like others who belong to the category of the connoisseur, the author concentrates on and valorises the play of differences, focusing on distinguishing traits, and in fact on everything about the work that is unique and specific, in contrast to that which is generally known. Rowe pursues this path in order to return to the radical originality that stands at the basis of his credo: namely, the formal strategy that a work reveals in relation to what came before and after: which is to say, in relation to the tradition to which it belongs.

In this as in other respects Rowe's preferred cognitive instrument is the eye, which has to be nourished daily, incessantly, by a wide variety of forms – a variety he is only able to keep in check through the rigour of an approach based on carefully chosen comparisons and analogies. However, the exercise of memory, which he extends both to himself and to his reader, assumes a singular character in the presence of a modern work and, more specifically, in the presence of a work of modern architecture. Far from spontaneously subordinating itself to disciplinary imperatives, the specific modernity of the work appears to be able to challenge those imperatives from within, and hence limit their exercise of power, according to the well-known principle that new ideas often enter into conflict with human memory. And as we shall see, in this complex process of resisting the seductions of the new, the thought of the author does not come up against an obstacle, but on the contrary discovers the tension necessary for the emergence of a critical reflection to give form to his own arguments. Rowe's interest in modern architecture, and in Le Corbusier in particular, might initially seem to be extraneous to the culture of the connoisseur. To this one might counter that, in hindsight, it was his deeply felt, even passionate connection with the oeuvre of the Swiss-French master – an emotional bond capable of transmitting admiration, pleasure and surprise – that formed the essential precondition for understanding its value.

To locate all of this in a specific historical context we should begin with an account of how modern architecture was perceived during the mid-twentieth century by two distinct, if related audiences. There were those who sought in the modern an 'ideal beauty', as opposed to the mutable, rather frivolous and intellectualised style espoused by some of their contemporaries, which could never meet with their approval precisely because of the memory of that 'ideal beauty'. Conversely, there were others who thought it possible to attain modernity by studying specific symptoms that could reveal the history, myths, conventions and attitudes of the emerging modernist code. The latter were animated by the belief that in following this path they would be able to disclose sufficient historical precedents and roots to grant a certain level of orthodoxy, and in the process endow modernism with a coherence comparable to other, more established languages. Rowe was familiar with both of these theses or preoccupations, and the reader who is alert to them will find echoes of their respective positions in his texts. Nevertheless, the questions Rowe raised were of a wholly different order and of a quite specific nature, and one feels compelled to say, in retrospect, that he was correct to frame them in this way. What he did, in fact, was to pose the question of the theoretical originality of modern architecture while investigating how and why it came into being, and while attempting to explain the forms that it assumed in the places and times that were favourable to it and allowed it to flourish.

In 1947 *The Architectural Review* published a singular article which bore the title 'The Mathematics of the Ideal Villa'. Drawing a comparison between Le Corbusier and Palladio (and in particular, between the Villa Malcontenta and the Villa Stein at Garches) this text annulled the principles that up to then had formed the basis for the criticism of modern architecture. Given the fact that the two works were distant in time, their comparison subverted the historicist premise whereby the originality of the modern lay in its negation of tradition. Pursuing an opposed thesis, Rowe reached conclusions of great importance for the interpretation of modern architecture. The title, which at first glance seems insidious, was in fact well suited to the ambitions of the essay. 'Mathematics', one might note, is a term that frequently recurs in the pages of *Vers une architecture* and *Le Purisme*, while a critic as perceptive as Howard Robinson had already grasped the ideal character of the Villa Stein in 1929, when he presented this house, alongside a profusion of images, in the pages of *Architect & Building News*.

As far as Palladio is concerned, it should be noted that at the time Rowe wrote the essay he had just completed his MA on the architectural theory of Inigo Jones. His supervisor at the Warburg Institute was Rudolf Wittkower, the chief promoter during the war years of studies of the ideal character of the architecture of Italian Renaissance humanism and the influence that it exerted on seventeenth- and eighteenth-century English classicism, above all through the architecture of Palladio. The chief result of this line of enquiry was a series of articles that appeared from 1940 onwards in the *Journal of the Warburg & Courtauld Institutes*, subsequently collected under the title *Architectural Principles in the Age of Humanism*. Equally influential was the 1948 photographic exhibition 'British Art and the Mediterranean', organised by Wittkower and Fritz Saxl, which in keeping with Warburg tradition deployed an extensive

apparatus of images to suggest comparisons and affinities, thereby stimulating investigation of the migration of motifs and symbols both within and between cultures. Although the outsider status of the German exiles diminished the impact of their work during the war years, Wittkower's studies of humanist architecture nonetheless found a greater resonance. Here one may single out for attention his interest in proportional and harmonic systems and the related theme of the universality of the architectural principles of the early Renaissance. In Wittkower's study, the opposition between ideal and purely stylistic values, the latter being the chief emphasis in English historiography – here the only reference one need recall is Geoffrey Scott – marked a new departure in the study of humanist architecture. Interest in Wittkower's theses was not restricted to art historians, however, but caught the attention of practising architects. His investigation of proportion turned out to be just as inspiring for the new culture of contemporary architecture as it was for new paths of enquiry into the Renaissance and the interpretation of English classicism. The fact that Wittkower's analysis underscored the links between Renaissance architects and humanist circles, but at the same time emphasised the ideal, and hence metahistorical, character of those systems and relations of proportion opened up further unexpected avenues.

One may conclude from this that a tendency to symmetry, equilibrium and proportional relationships is inherent in the human mind. If in its Renaissance, and above all Palladian version, this predisposition could act as a model for English architects of the seventeenth and eighteenth centuries, then it exhibited a similar power to inspire contemporary modern architecture. Indeed, there was a whole other set of reasons why an interest in ideal proportion was very much alive in Europe in the period from 1945 to 1950. For with the end of the war a phase of modern architecture – its heroic one, according to many – had come to a definitive conclusion. Its new incarnation, especially in Britain after 1945, was institutional, as the Labour government adopted modern architecture for the programmes of the Welfare State. In this context many architects were induced to attempt exemplary solutions that would combine the most accessible aspects of modernism with a diffuse need for rationality – motives that were both economic–constructive (one thinks in this case of modular construction) and logical–compositional. Add to this the continuing interest in Palladian compositional structure, particularly in the US, or the impact, during the same period, of theories of proportion on the studies of Le Corbusier (subsequently formalised in the Modulor, these studies elicited the praise of Wittkower himself). In the Milan Triennale of 1951 the theme of proportion surfaced once more, this time in connection with the presumed necessity for a refoundation of contemporary architecture. However, a three-day conference dedicated to 'The Divine Proportion' reached a set of conclusions of such modesty and restricted scope that it was decided that they did not merit publication, and the conversation ended there.

But if understanding the theory of proportions was an objective shared by Wittkower's studies, postwar English architects and Le Corbusier alike, it was not this contiguity which stimulated Rowe to compare Palladio and Le Corbusier. On the contrary: when the necessity of drawing this comparison arose in the author's mind it was accompanied by a pronounced feeling of tension, only subsequently publicly acknowledged, between an enthusiasm for Le Corbusier's architecture and an awareness of the rationality inherent in classicism, to which Wittkower's researches had given a new theoretical impetus. Or as Rowe wrote, 'I suppose I have always suffered from having been at one stage an enthusiast for the architecture of Le Corbusier and also at the same time a student of Rudolf Wittkower's. There is a kind of tension involved in that scene, which I have never been able to solve.'

It seems that the initial motivation, then, was an impulse to explore this tension. This was accompanied by an enthusiasm which did not blind the imagination, thereby running the risk of devouring its object, but which, on the contrary, restored a level of admiration for the works of great masters, laying the ground for a deeper comprehension of history. In any case, if truth has its requirements, enthusiasm is clearly one of them. And it is equally clear that behind the appearance of intellectual discomfort there was a presumed incompatibility of interests. One can read this incompatibility as a cause of that dissatisfaction which has often been expressed regarding the formal results and interpretive practices of modern architecture, even if under the right circumstances it might also contribute to a grasp of the limits of this practice.

Here we confront a tension which also applies to the history of art. To resolve it, we must now consider the only system that enables a fertile juxtaposition of two works – the system elaborated by Wölfflin. This system formulates concepts and registers differences by means of comparative analysis. At the same time, it seeks to comprehend forms and formal combinations as well the modes by which they can be altered or manipulated to generate meaning and expression. If this was the original meaning of 'formal analysis', then its declared objective was to understand how forms change over time, to give systematic order to this understanding through the use of accessible concepts, and ultimately to present this process as an organic artistic development. Wölfflin's system was undeniably more interested in results than in motivations, but what mattered most, according to its theses, was that perception and interpretation could finally enter into a relationship that was complementary rather than antagonistic. Here it is necessary to recall that within the German school of art history the competence of the philological method was extended to include the results of an experimental psychology of perception and its relation to the concept of artistic expression. Within this system – and this was also the case with any form of comparative philology – language was assigned the function of formulating concepts capable of establishing generalisations as well as defining differences, with the aim of giving an account of details and motifs that would facilitate the interpretation of artistic phenomena.

For art history, the primary objective was to grasp the recurrence of expressive motifs in relation to preoccupations that, although regarded as being organic with their social matrices, could also be read in terms of their independence from them. This meant that they could be read as initiatives 'internal' to the same dynamic which informed artistic forms. Consequently, according to Wölfflin, the term 'style' depended on the acceptance of this double purpose: on the one hand, to increase the interpretive capacity of perception, by assigning to it linguistic functions of generalisation and differentiation; on the other hand, to regard these same concepts as being responsible for artistic development as a whole, in its historical sense. This system – even if compromised by a certain internal inconsistency, insofar as it ascribed to perception the capacity to read forms in themselves, while at the same time disclosing the connections with their cultural context that drove their transformation – had the merit (and also the limitation) of excluding non-visual conditions from consideration. This was the case even if those conditions had played a role in the genesis of forms, or if they ended up legitimising comparisons undertaken for purely cognitive reasons. Comparative analysis was at any rate considered to be the most scientific means of understanding cultural phenomena as it was derived from the study of language, whereby language was conceived primarily as a medium of communication, able to ensure the comprehension and interpretation of the conditions, causes and powers of all phenomena. Obviously this thesis had its own conspicuous genealogy that traversed the entire western philosophical tradition, entering into artistic theory in its own right with Leon Battista Alberti, only to find a new application in John Soane's *Lectures* of 1798.

It may be useful to recall that Wölfflin came into contact with it when, as a student of Dilthey in Berlin, he was investigating the theory of knowledge, and that an English philological text, *The Principles of Comparative Philology* by A H Sayce, was recommended reading within that course of studies. And it was this methodological and interpretive aspect – perfected by Wölfflin's technique of juxtaposing paired slides – that one may consider to have been useful for the critical explorations of Colin Rowe: and it is significant in this regard that he did not feel obliged to endorse Wölfflin's attempt to transform descriptive concepts into general principles of art history in order to account for their cycles of historical development.

Indeed, as in a slide lecture, Rowe's 1947 essay proceeds on the basis of an equilibrium between two opposed viewpoints: those of Palladio and Le Corbusier. Rowe begins by quoting an epigram from the *Parentalia* of Christopher Wren: 'there are two kinds of beauty – natural and customary'. While inspired by seventeenth-century French architectural theory, and by Perrault in particular, this theorised dichotomy between nature and custom does not seem to belong to the consciousness of the architect; nor is it presented as being part of his ideological or epistemological make-up; in fact, it is not even presented as the great historical *caesura* dividing the world of Palladio, anchored in the metaphysical certainties of the treatises, from that of Le Corbusier, caught in the coils of a dialectic between the certainty ensured by the norm and the uncertainty inherent in form. It does belong, however, to the consciousness of the critic, for which it serves to epitomise a basic condition: as such, if it were to be 'recomposed', it would lose its utility. Readers are thus invited to bear in mind the proposition by Perrault/Wren as they follow the course of the analysis, rather than seek to grasp its final sense in the resolution of the tension between humanist and modernist discourse in the work of Le Corbusier.

The first pair of images, exactly as in an art-historical slide lecture, juxtapose the sites of the two villas. In their respective writings the two architects, Palladio and Le Corbusier, offer descriptions that would seem to be inspired by the same Platonic ideal, a bucolic–literary vision equally capable of seducing a Renaissance humanist and a twentieth-century intellectual. In this way the Rotonda of Palladio and the Villa Savoye of Le Corbusier find themselves side by side, almost as if they were two chapters of a book with a fragile binding that had allowed the intervening chapters to fall out. The comparison is justified not only by the sites and the descriptions offered by the architects, but by the buildings themselves, insofar as they are individual isolated volumes that work to reinforce the comparative analysis.

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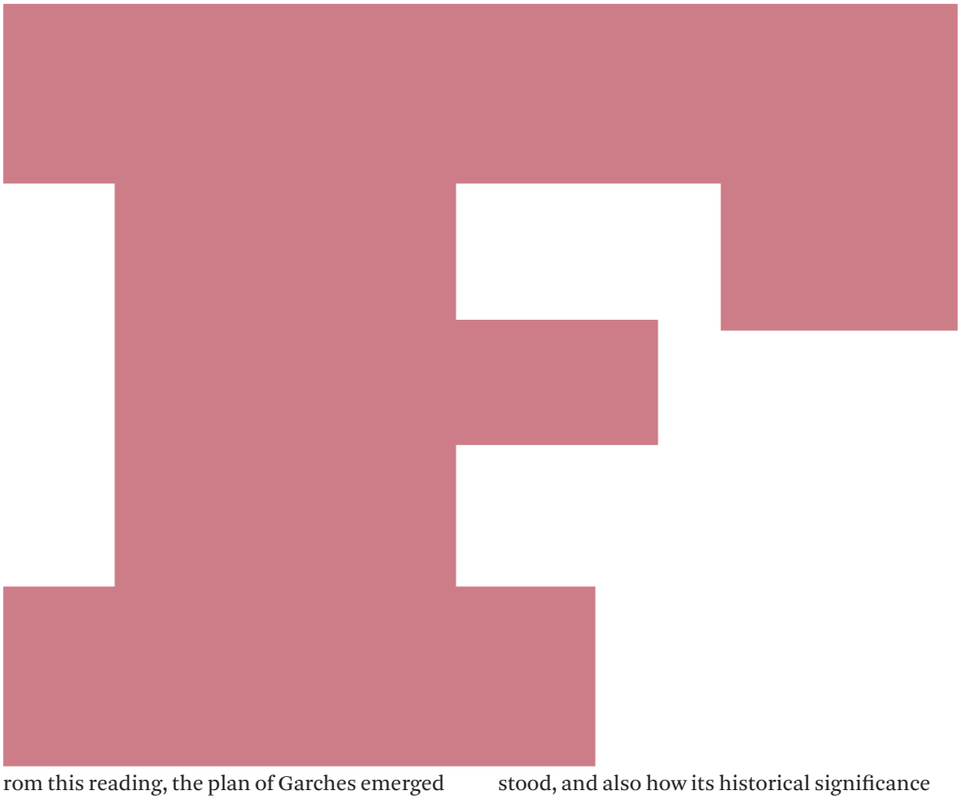
ut now, unexpectedly, two other images are shown: the Villa Stein at Garches and the Villa Foscari, the Malcontenta. The place that these works occupy in the oeuvres of their architects seems slightly eccentric compared to the previous two examples; indeed at first glance these two models have a discouraging effect – something that, to be sure, far from inhibiting the analysis, might on the contrary advance it. What ultimately emerges from all of this is a profound analogy between compositional and structural systems or, better yet, the relationship between the two, which may legitimately be considered the basis for any theory of architecture. Moreover, this analogy of the structural bay system is defined along the lines of a roughly similar proportional system, encouraging a reading of the respective plans as documents, or if you will, as texts which rise to a purely conceptual comprehension of alternative formal strategies. The plan of the Villa Malcontenta, which follows the logic of the structural system, could be accurately defined as centripetal, affirming centrality, while the plan of Garches, which is structural and point-based, is centrifugal and works towards the valorisation of peripheral episodes. The internal coherence of the former falls under the apt, unavoidable designation of *plan paralisé*; the unstable equilibrium of the latter justifies the use of the term 'free plan'. Further analogous differences are registered in the facades of the respective buildings. In the villa by Palladio, the tripartite organisation of the plan is expressed in elevation, and the inclusion of special motifs such as the portico and the thermal window seems to respond to the centralising tendencies dictated by the cruciform double-height main hall. In the villa by Le Corbusier, on the other hand, the planimetric tendency towards spatial dispersion exploits the reduced bay system enabled by the cantilevered slab, so as to simultaneously affirm and deny the centralising impulse. A reading which proceeds from outside to inside will show, therefore, that in the first case a congruent classicism gives rise to an overall sense of clarity through the masterful orchestration of motifs derived from ancient Greek and Roman architecture; whereas what is at play in the second case is in fact a sequence made up of real and virtual vertical planes on which fantasies of past and contemporary memories alternate in mutually exclusive fashion, exactly as in a cubist composition.

After a comparison of the plans and the elevations, the analysis then proceeds from a conceptual level (advanced by the intellect) to a perceptual one (invoked by the eye). Here we are dealing with an unstable equilibrium that is difficult to achieve and even more difficult to maintain. If an overemphasis on the conceptual runs the risk of an ideological construction of architecture, then the predominance of the perceptual might imply a reduction to a simplistic psychology of vision. But the requisite equilibrium is preserved thanks to the dual nature of the method, which forces the argument to proceed along the lines of a binary and inevitable symmetry. At first sight, the essay would thus seem to be devoid of any conclusions which are not validated by a historical consciousness that presupposes a natural contrast with the past, as opposed to a naive mode of reception and reflection that insists upon the

need to sharply separate past and present, so as to access the meaning of modernity – an approach which moreover implies an awareness of having constructed a model that, in terms of standpoint, method and language, reveals in a particularly incisive manner the vulnerability of certain key ideological and historiographical assumptions of modern architecture.

In effect, the very possibility of a comparative stylistic analysis of Garches and Malcontenta has an important consequence: despite the numerous and authoritative voices that have argued against this thesis, modern architecture can be seen as a style – one that is legitimately original and distinct and yet, like any other style, subject to an internal discipline which ultimately derives from a set of compositional principles that has brought it into being at a particular historical moment. And like any other architectural style, modern architecture is based on a concept of space that emerges only through the analysis of the respective roles assigned to the walls, the support system and the roof, and the way in which these elements give life to a coherent orchestration.

Different orchestrations may be subsumed under the general designation 'modern architecture', and a necessary and final qualification of Rowe's position in this regard emerges in his subsequent essay, 'Neo-Classicism and Modern Architecture'. It is here that the author declares his almost exclusive predilection for a spatial order characteristic of European architecture of the 1920s, the International Style, which postulates that it is necessary to clearly express the basic distinction between the supporting function, exercised by the independent wall comprised of a skeletal frame, and the space-defining function, exercised by the non-loadbearing, hence free members. Between space and structure, then, a conceptual distinction of roles must always be maintained, though this distinction is dialogical rather than dialectical, as it aims not at a synthesis of distinct forces, but rather at an exploration of the formal possibilities offered by multiple conditions in the evolution of the dialogue. Consequently, all other attempts at resolving the tension between space and structure, which went so far as to propose they were one and the same – as in the case of Frank Lloyd Wright's 'organic' architecture – had to be excluded from consideration. Yet even within the International Style, adhering to these principles meant excluding central experiences such as Gropius's Bauhaus or Russian constructivism in order to single out the works of Le Corbusier and Mies van der Rohe as the sole progenitors of a conception of space based on the autonomy of the structure, whether that structure was in concrete or in steel. This already circumscribed selection would then have to restrict itself even further, to the work of Le Corbusier, and inevitably, to his most paradigmatic work in this respect: Garches. This is a conclusion which the author reaches in 'Transparency Literal and Phenomenal' (written in collaboration with Robert Slutzky) and in the second part of 'Mannerism and Modern Architecture', utilising a second fundamental concept towards which the protagonists and critics of modern architecture have often shown a hostility that is as fierce as it is confused. Here I am referring to the idea of composition; and here one observes, yet again, that the argument proceeds from an initial comparison of Garches and the Malcontenta.



From this reading, the plan of Garches emerged as a composition which finds its equilibrium in the relation between the proportional order of the structural frame and the disposition of fortuitous episodes. This is made possible by defining the space allocated to the free positioning of the non-loadbearing dividing walls, which are shifted away from the structural elements. The resulting planimetric ingenuity could rightly be described as belonging to the tradition of the French *hôtel particulier*, where the dextrous accommodation of *distribution* and *commodité* had elevated the plan to the role of generator, long before Le Corbusier affirmed it as such.

Nonetheless, Garches discloses the active presence of formal preoccupations in its orchestration of the plan, which at first sight might seem to be extraneous to architectural tradition, and which Rowe, like Giedion, related to De Stijl and, to a lesser extent, to constructivism. In particular, the concept of *peripheric* composition, where the focus is decentralised in favour of the edges of the canvas, seems to be essential to understanding the tendency to organise the building, not according to an idea of gravitation towards the centre, but on the contrary, towards levitation at the margins. Fundamental works of modern architecture such as Garches, the Gropius Bauhaus or the Brick Country Houses of Mies van der Rohe seem to be difficult to interpret without some reference to this concept, and the fact that Theo van Doesburg and Gropius spoke of a new conception of form which abolished symmetry in favour of diverse modes of asymmetrical balance shows how this discovery was understood, and also how its historical significance was clear to these protagonists of modern architecture. This conception, moreover, can help us grasp important differences between the architectural works. In this respect, if the Brick Country Houses exhibit a clear tendency to centrifugal levitation at the periphery, it should also be noted that this tendency was arrested and the plan was dispersed, if not potentially dissolved. Garches, on the other hand, shows how the presence of clear boundaries, imposed both by the volume and by the structural grid, tended not only to contain the peripheric dispersion but even more importantly – and one should recall the comparison with the Malcontenta here – to qualify it. But even the Bauhaus building by Gropius justified its own compositional originality through the asymmetrical balance of its elements, prompting Giedion to evoke the concept of space–time in an attempt to more effectively characterise its revolutionary importance for the new architecture. Not so Rowe, who detected the emergence

in this building of preoccupations that were not visual but ideological in origin, and hence extraneous, if not antithetical, to the kind of spatial orchestration for which Garches provides the paradigm.

More particularly, as an aggregation of different volumes, Gropius's Bauhaus not only negates any concept of centrality, but effectively denies the actual presence of a physical centre, which in fact disappears between the area of the bridging element on the second floor and the road that runs orthogonally below it. Under such circumstances, the perception of the building naturally becomes more fraught. The absence of a privileged vantage-point, the consequent mutability of the body of the building and the multiplicity of foreshortened views elicited by the scalar discrepancy between the volumes – effects reinforced by the vertical surfaces, where a succession of diverse materials is juxtaposed at diverse angles – all act to unsettle an eye that is not predisposed to reconstruct coherence through non-visual aids. The author speaks of disorder in the plan, of a labyrinthine and obscure conception, of an incoherent sequence of disconnected episodes that are in themselves unappealing: the observer, in short, seems to be invited to experience only frustration instead of the pleasant complexity of cubist compositions. Contrast this with Giedion's classic interpretation, where the Bauhaus is presented as the product of a space–time dynamic that allows multiple readings, just like a cubist composition, with its extended glazed surfaces that animate a transparency of superimposed planes.

In Herbert Bayer's layout of *Space, Time and Architecture*, two full-page reproductions of Picasso's *Arlésienne* and the glazed volumes of the Bauhaus are placed side by side to sustain the seductive interpretation advanced by Giedion. A student of Wölfflin, Giedion assimilated the comparative analytic method of the master, deploying it as an effective way of furthering his theoretical construction of architecture. The comparison of the Picasso painting and the Bauhaus building occurred at a crucial juncture. The idea of combining the Bauhaus's figurative proposals, inspired by cubist painting, and its non-figurative, social aspirations, of which Gropius was the most articulate spokesman, appeared as an inevitable attempt at synthesis – a closing of the circle around a work and a master, the Bauhaus and Gropius, who in Giedion's eyes admirably conferred the values of modern architecture on history. Rowe and Slutzky's text dismantles this construction, removing what might have seemed to be its strong point: the concept of transparency.

The text itself begins with a two-part definition of transparency, establishing the system of coordinates in which Wölfflin's method is asked to operate. The first part of the definition hinges on the physical properties of the material, the second on the quality of the formal organisation. The first meaning of transparency, the one found in the *Oxford English Dictionary*, is deemed 'literal'; the second, lucidly explicated by György Kepes in *Languages of Vision*, qualifies as 'phenomenal'. Before it filtered into architecture, this fundamental distinction was applied in a series of pictorial comparisons, most notably in the juxtaposition of *La Sarraz* by László Moholy-Nagy (1930) and *Three Faces* by Fernand Léger (1926). In the authors' analysis, the work by Moholy-Nagy 'seems to have opened a window on some private version of exterior space' since the presence of abstract forms such as the translucent trapezoidal planes, the horizontal and vertical stripes, the luminous spots, the circles and points both dark and light, cannot be seen as negating the presence and the logic of the spatial depth in which they reside. Instead, despite the emancipation of the forms from any reference to nature, and putting aside the grille, the composition maintains the traditional distinction between frontal plane, intermediate plane and back or deep planarity. On the other hand, in Léger's picture, the relation between figure and space is not nearly as definitive, and the eye is invited to experience a 'deliberate oscillation of appearances', a 'calculated multiplicity of readings', 'a constant mixture of identities', a fluctuation of diverse configurations: in short, all the phenomena that are characteristic of cubist painting. To explicate Moholy-Nagy, then, one speaks of literal transparency; for Léger, one has to refer to phenomenal transparency.

Extending this perceptual/conceptual distinction to architecture, and bearing in mind the comparison put forward by Giedion – who for his part spoke of a perception of a 'simultaneity', of 'relations of planes' and of 'superimposition' or 'transparency of superimposed planes' in the glazed volume of the Bauhaus, as well as in the *Arlésienne* of Picasso – one feels compelled to agree with the authors that in reality, in contrast with Picasso's painting, Gropius's building discloses literal transparency. This is due to the fact that the use of glass as a material gives the building that sense of a copenetration of images linked to the phenomenon of reflection and seeing-through that Giedion underlined. Fundamentally, it was the physical and metaphorical attributes of glass that interested Gropius, as was the case with Moholy-Nagy in painting. By contrast, if we want to find in architecture an experience analogous to cubist painting, it is to Garches that we must again turn. In that work, architecture opens itself up to a reading that starts from the exterior and penetrates to the interior, through the registration of the coplanarity and recession of vertical planes, with resulting effects of depth of surface, as in a cubist painting. The cantilevered half-bay, which makes the plan and the section simultaneously 'free', pushes the facade forward and in so doing indicates the presence of parallel planes revealing the vertical stratification of the interior space. With these fragmentary, parallel and incomplete planes, Le Corbusier succeeded in depriving architecture of its three-dimensionality, just as Léger had succeeded in freeing the two-dimensionality of the canvas from the representation of three-dimensional objects.

Rowe and Slutzsky's analysis therefore persuasively detached one of the paradigmatic works of Le Corbusier from Giedion's ideological construction – that is, from the reading of a historian who often seems more interested in justifying himself than in offering a convincing interpretation. Our understanding is enriched by this analysis, even if the rejection of Giedion's position casts into doubt the readings of Moholy-Nagy's and Gropius's artistic intentions, perhaps making them tendentious.

Although we can see the effect of literal transparency in Moholy-Nagy's painting, it is also the case that we cannot deduce the presence of naturalistic space from that fact. Constructivist abstraction may legitimately be read as the negation of spatial depth and hence also as a definitive affirmation of the flatness of the two-dimensional canvas, even if the transparency which the process of abstraction animates is literal. Similarly, the Bauhaus presents in both plan and elevation an explicit reference to the idea of rotational motion – and hence of levitation – and transforms this into a set of formal relationships, but it yields no trace of phenomenal transparency, a goal which in any case is not part of its objectives.

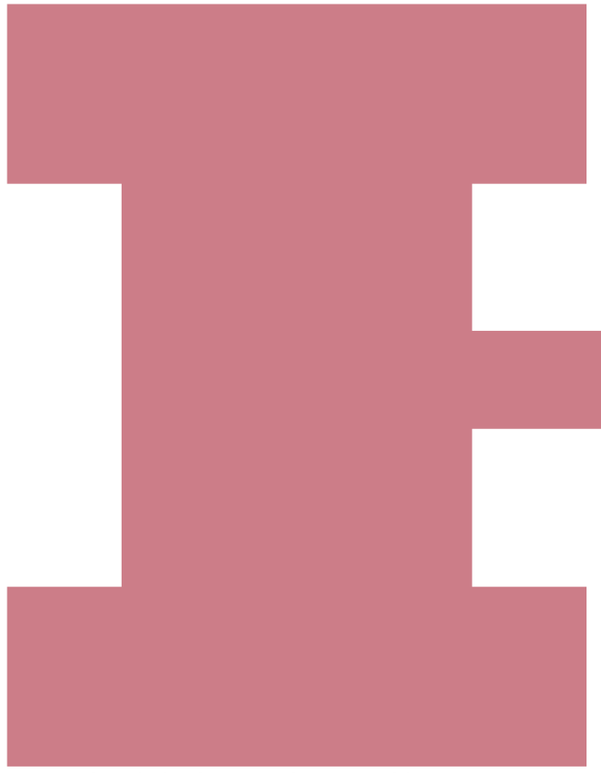
The concept of transparency therefore cannot reasonably be seen to constitute a useful category for evaluating the achievements of modern architecture. The authors did not want to imply it could, but on the contrary sought to clarify the intentions behind an artistic movement – cubism – and modern architecture. And yet, if the excursion into cubism ended up reaffirming the validity of a stylistic reading of modern architecture, it is equally important to clarify how the concept of architectonic composition, as it evolved from the nineteenth to the early twentieth century, crossed paths with cubism.

The term 'composition' – and its repudiation within the historiography of modern architecture – inspired the next essay, 'Character and Composition'. In the years in which Rowe was writing in the libraries of American universities (1953–54), pedagogical and manual-based literature on the notion of composition was still quite a conspicuous

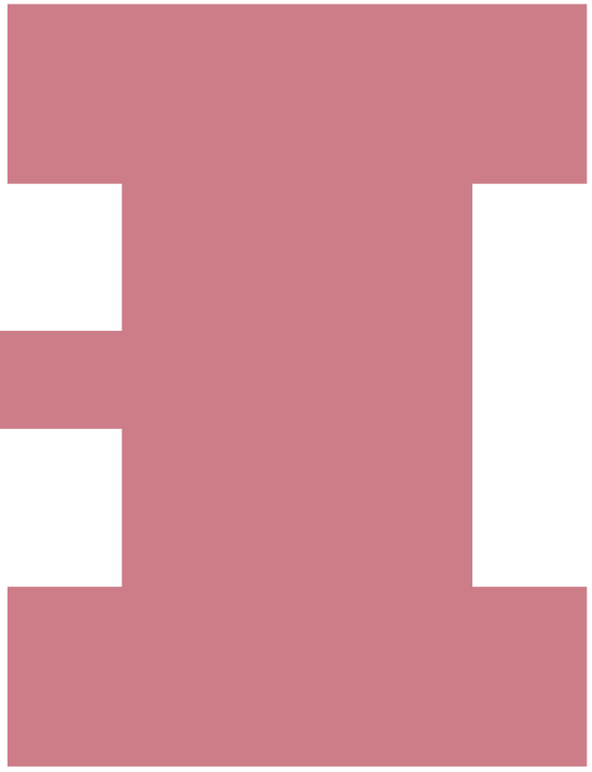
presence on the architectural scene. This literature was rigidly applied to safeguard and reaffirm composition in its traditional meaning: that of an ensemble of principles that lends prominence to the idea of a common formal denominator extracted from famous precedents from the past. This idea was identified with a 'quality', subsumed under the idea of *correct composition*, which could subsequently be infused with a symbolic content described by the term 'character'. Despite its manifest qualities of moderation and pragmatism, this type of literature stirred up the protagonists of modern architecture. Accused of subjectivism, formalism, conservatism, it was rapidly discredited by the manifestoes, declarations of principle and doctrinaire aphorisms of the masters of modernism.

The idea that a building was worthy of approval only if it was designed in accordance with the principles of architectural composition, and endowed with a symbolic value described in terms of character, was a significant acquisition of the late eighteenth century, signalling an important transition from an interest in the work as such to the effect that it has on the observer. If the former insisted on a rational procedure governed by general, fundamentally geometric, laws of proportion, then the latter, invoking the value of the effects upon the spectator, among them the emotions they aroused, appropriated the precepts of the picturesque and endorsed the multiple, the particular and the singular. The difficult coexistence of the two terms in nineteenth-century architectural theory reflected an alternation of mutable ideals in the output of that period. In this context *composition* and *character* indicate opposed tendencies that aspire towards the ideal and the individual, represented architecturally on the one hand by the discipline of the plan and the consequent ordering of the elevation, and on the other by the attempt to base the organisation of a building on a composite expression of its functional, pragmatically defined requirements, and the mutable associations suggested by sentiment. The cult of character in the first half of the nineteenth century implied a revolt against established academic traditions in the name of a return to the reality and authenticity of the architectural object, which had been compromised by the search for the effect of the picturesque, which was at once pleasant, seductive and arbitrary.

By the middle of the century, therefore, the term character had acquired a new connotation: no longer referring to that which was irrationally or capriciously individual, it signalled a return to history, whereby 'character' was formed out of the exchange between the aspirations of the individual and the material conditions of a determinate cultural milieu. We are not dealing here with a reproposition of universal principles, a worthy equivalent of the 'natural' man of the Enlightenment, but rather with a demand for truth on the part of the 'historical' individual, the gentleman, in the face of a greater consciousness of the past. Out of this came the twin commitment to the honesty of the structure and the coherence (almost archaeological in nature) of the form. The treatise of Julien Guadet, Éléments *et histoire de l'architecture*, first published in 1902, marks the culmination of this tradition, in which a work of architecture was an effective composition sustained by an appropriate character. Once these requirements had been satisfied, certain stylistic choices guided by personal taste were permissible – which meant, in effect, that the logic of historical development was negated by eclecticism. Although it was later discredited, this theoretical approach survived the first decades of the twentieth century – the same years that saw such violent opposition to the protagonists of modern architecture. Rather than marking the end of that tendency, however, this reaction could equally well be interpreted as a critical moment within it. At any rate, the attitudes, prerogatives and intentions of the modernist revolt were not entirely original, but instead echoed aims and ideals that the nineteenth century had regarded as opposed. In its aspiration to abstraction, anonymity, the normative and the typical, modern architecture – like the neoclassical tendencies of the nineteenth century – seemed to repudiate the basic attributes of character, with its emphasis on the particular, the contingent and the personal. Yet, at the same time, modern architecture was able to appropriate the late-picturesque ideal of resolving the conflicts between the integrity of the structure and the purely visual qualities linked to the nature of materials. Thus we find in modern architecture all the problems posed by the relation between *composition* and *character* that had been left unanswered by the nineteenth century. The names given to these problems were different – as were the motivations for investigating them – but all the same, and precisely because they remained unresolved, these issues made themselves felt in the discipline throughout the historical zenith of modernism in the 1920s. This in turn brings us back to Garches and the concept of peripheric composition, as with Le Corbusier the conflict between the prerogatives of the structural grid and the demands of character was transmuted into an equilibrium between the order of the structural grid and the fragmentary nature of the peripheral episodes, without these being poetically dispersed in a volume. This followed a logic that remained loyal to the cubist tension between space and figure (almost as if it were an architectonic version of this tension).



However, the relation between the new architecture and the historical debates of the preceding century may well be more complex, and irreducible to formal problems. Or to put it more precisely: the formal consequences of the modern are assumed to be inseparable from the ideals and aspirations that gave them life. And if we accept the assertion that modern architecture is a style, and that style is a historical concept – inasmuch as it represents a concerted animation of principles at a given moment – then we need also to consider how and why certain ideas become susceptible to 'crystallisation'. If we do so, it becomes clear that the idea of style, as formulated above, does not adequately explain this phenomenon. We may suppose that readers have enough good sense to make this discovery on their own; they may well also be astute enough to know that the problem merits more than this kind of expedient response. Looking at the presentations of modern architecture, it is striking how often we encounter projects that are manifestly different on the formal plane, yet united by an expression of 'content' that, although difficult to clarify, is still capable of being circumscribed by a single ideology. What the most significant buildings of the twentieth century tended to 'crystallise' was the vision their architects had of the times in which they operated – a consciousness invested with a sense of urgency, expressed through their choice of architectural instruments and amplified by the contributions of critics, historians and teachers, who gave modern architects ample opportunities to divulge, systematise and reinvigorate their message – a constant revision of the modes



of interpretation and analysis being deemed necessary in view of the radical nature of the phenomena they were witnessing. It has often been assumed that a single, unitary vision inspired all of modern architecture – not only its forms and means of observing and describing its varied phenomena, but also the ethical and political approaches to dealing with it. Ultimately, then, we can say that this congruence of a vision of the world and a vision of architecture – the central objective of any theory of the modern – served to provide an adequate response to the incessant demand for a reconciliation between the artist and society.

Rationally determinable and historically inevitable, the new architecture identified itself with the necessity of the new, when this was socially useful, yet aesthetically autonomous; it was objective and progressive, intended to evoke – indeed to be the only legitimate expression of – the spirit of the age. Over the course of the 1920s and 1930s, the regenerative character of modern architecture was also consistently affirmed in a succession of texts, manifestoes and proclamations addressed to audiences at the most disparate scales, from governments and political or cultural associations to patrons or even individuals. So assiduous was the modern movement in promoting its ideals, in expressing its belief in its capacity to define and solve the problems of society, that it became the repository of a utopian message, and in the process was fatally exposed to modes of thought that displayed authoritarian impulses in their quest to transcend reality and create a better world.

Distracted by the historical development of the artistic avant-gardes, modern architecture remained, in the judgement of Colin Rowe, at once a nightmare and a declaration of good intentions. Developing this point of view more fully in *The Architecture of Good Intentions*, Rowe points out a convergence between the ideals of modern architecture and those aspects of historicism that were so mercilessly attacked by Karl Popper. Popper's argument was of a logical nature, and so is Rowe's. In the idea of utopia, inseparable from the idea of the city – and hence, of architecture – Rowe discerns an alliance between an artistic doctrine that is classical in origin and a social and political project that is static, closed in on itself and impervious to change, and thus potentially intolerant and authoritarian. In pursuing anonymity as the expression of an authentic reforming zeal, in proclaiming the end of the past and presenting an image of the future (in which the useless burden of differences and therefore also of conflict will finally be swept aside), modern architecture presents the monstrous myth of the end of history as historically inevitable, its final incarnation being the inhomogeneous jumble of fragments that make up the contemporary city's abortive utopia. For Rowe, the idea of modern architecture was indissolubly linked to the spectre of an impersonal, coercive *zeitgeist*. Thus the rejection of modernism's formal achievements – even those that are substantial and highly significant, such as the free plan – cannot be met with complete disappointment if it is accompanied by the dismissal of the ideals that inspired it.

In 'Neo-Classicism and Modern Architecture' the classicising, impure, provincial and discontinuous tendencies of the 1950s are greeted with some sympathy, on account of their reassuring distance from the notion of *zeitgeist*. Le Corbusier left the Villa Schwob out of his *Oeuvre complète* for probably the exact opposite reason, though Rowe's astute formal analysis in 'Mannerism and Modern Architecture' uncovered a relation between this work and a number of sixteenth-century models that were seen to express a certain cultural 'disquiet'. But even with his longed-for divorce between the ideology of modern architecture and its formal achievements, the author is unable to look favourably on the process of 'modernisation' that had replaced a 'modernity' shorn of its Enlightenment prerogatives and was advancing remorselessly through the spheres of culture and society. The choice is certainly not between a 'modernity' that is complete and whole and a modernising praxis that has already 'crystallised', assimilated both the premisses and the possibilities of modernity. Given Rowe's firm anti-historicist convictions, we cannot expect him to show any interest in or sympathy for the exponents of post-history, or for the unchecked proliferation of the stylistic adventures of the past decade. On the contrary, his essays recognise from the outset the fundamental difficulty of finding the expression that matches what one wants to express. Moreover, they acknowledge the evident discrepancy between the reading of a 'text' and the prevailing ideology of the historical period in which it was produced. That initial tension between an enthusiasm for the architecture of Le Corbusier and for the ideal rules of Renaissance classicism – the very tension that gave rise to 'The Mathematics of the Ideal Villa' – nonetheless had to take such a discrepancy for granted, and even regard it as beneficial. The merits of Rowe's idea of critical discipline are thus quite evident: by refusing to identify the visible reality of modern architecture with its ideological precepts he advanced a comprehensive reading of its theoretical originality, and was thus able to liberate its salient aspects from the systems which, rather than conceptualising their presumed merits, as intended, instead ended up obstructing their interpretation.

Many might feel that the negation of this constitutive identity leaves a bitter aftertaste – one composed equally of a sense of decay and a sense of loss – and that, in the final analysis, it gives us little pleasure to observe the lack of any tolerance or sympathy for the fortunes of the architectural avant-garde. And yet it is prejudice (rather than critical judgement, filtered by disenchantment) that intervenes here, preventing any sort of intellectual seduction, almost as if the legitimacy itself of modernism was under discussion. Yet we need to recall that in this instance we are not dealing with the anti-Enlightenment prejudice of someone who is unable to make full use of his own powers of reason, and therefore has to hide behind the claims of an obscure authority; on the contrary, this is the positive idea of prejudice articulated by Gadamer, where the relationship to tradition is based more on knowledge than on obedience. It is a prejudice, a form of thought, which finds it impossible to support the 'modernist' conception that our relationship to the past is one of striving to liberate ourselves from that past, but which instead recognises tradition as the constitutive moment of the historiographic mind – as an indispensable interpretive faculty. And this 'prejudicial' standpoint not only sets in motion an important cognitive function within the allied contexts of criticism and research, but retains a validity independent from any presumed need for rational motivation, simply because the acceptance of tradition is no less an act of liberation than its refusal.

Translated by Daniel Sherer
This is an edited version of Paolo Berdini's original, heavily annotated, introduction to Colin Rowe, *La matematica della villa ideale* (Bologna: Zanichelli, 1990)

Postscript

Paolo Berdini was an art historian, architect and translator who played a major role in the *fortuna critica* of Colin Rowe. One of the English critic's few Italian students (perhaps even his *only* Italian student), Berdini arrived at Cornell in the early 1980s after studying at the University of Rome. A decade later, in 1990, he became the first to translate Rowe's most important collection of essays, *The Mathematics of the Ideal Villa*, capturing all the nuances of his seriousness and levity, to say nothing of his stylistic peculiarities, in a lucid, easily accessible Italian. Berdini would go on to write extensively about Rowe's ideas and legacy, becoming a key figure in his reception in Europe.

Before Berdini, Rowe was known in Italy, but only episodically. Neither Aldo Rossi's *L'Architettura della Citt*à (1966) nor Manfredo Tafuri's *Teorie e Storia* (1968) makes any mention of him. Rowe seems only to have appeared on the radar after Tafuri's sojourns in the US in the 1970s, when he established links to the Institute of Architecture and Urban Studies (and its director, Peter Eisenman, a former student of Rowe's at Cambridge): the first direct citation is to be found in Tafuri's *La Sfera e il Labirinto* (1980), in the chapter covering the emergence of the New York Five (Eisenman, Graves, Gwathmey, Hejduk, Meier), when the Italian historian notes that the English critic was perhaps right to dismiss the entire phenomenon of the Five as merely a 'series of simulacrums'.

But it was really Berdini himself who ushered Rowe into Italian architectural discourse, not simply through his work as a translator, but through his own scholarship, and more particularly his introduction to *La matematica della villa ideale* – a text published here in English for the first time. A close confidant of Rowe, Berdini gives us an intellectual portrait that is deeply rooted in its subject's cultural, architectural and aesthetic interests and their dialogue with his critical and methodological precursors. He is particularly effective when tracing the circulation of ideas that helped to shape Rowe's comparative method: connoisseurship, philology, the Warburg tradition, Rudolf Wittkower's reading of ideal proportion and the discourse on modern architecture in England in the interwar period – all are woven into the texture of his argument as so many constitutive threads.

In this regard Berdini's introduction and translation work together to generate a novel and persuasive synthesis that reopens, and in the process reanimates, the field of problems explored by Rowe. It does this, moreover, in ways that recall Walter Benjamin's idea of the task of the translator: to give new life to an old text – and a life that is subsumed under, yet also redeemed by, its afterlife (*Nachleben*). Thus Benjamin's assertion that 'in translation, the life of the original attains its latest, continually renewed and most complete unfolding' may be seen to refer not only to the relation between Rowe's English text and Berdini's Italian version but also, in a more extended sense, to Rowe's corpus and its afterlife, as actualised and exemplified by the reading put forward in Berdini's essay. In turn, my intention in translating Berdini's essay is to identify and evaluate some of the key arguments he used to support the hypothesis that Rowe's approach constituted a radically new point of departure for the study of modern architecture (and of Le Corbusier in particular), by stressing its affinities with humanist architecture (as epitomised by Palladio).

Berdini's reading of Rowe's project is linked not only to their actual intellectual dialogue, which arguably led Berdini to a deeper level of understanding than can be achieved by even the most assiduous readers of Rowe's body of work, but also to the theme of 'dialogism' in more than one sense. When contrasting Palladio and Le Corbusier, Rowe invites both to participate in a conversation that spans centuries, yet is all the more revealing for the distance that separates the practices and theories. Quoting Hans-Georg Gadamer's 'positive' conception of prejudice (*Vorurteil*), Berdini concludes at the end of his essay that the acceptance of tradition is as much an act of liberation as its refusal – no doubt voicing a conviction he shared with Rowe. Thus the renewal of a given code or language – here, the grammar of architecture – depends not just on practices that tend towards its subversion, but on formal strategies that consolidate continuity with the past; for it is only by bringing about a dialectic of formal continuity and rupture that a given language will 'speak with itself', and also 'for itself', in an essential act of invention.

Ultimately, then, with his comparison of Palladio and Le Corbusier, Rowe formulates a question which Berdini answers in a radically new way: what is the discipline of architecture, or better, in what does it actually consist? Berdini's response – no less compelling for being largely implicit – suggests that this discipline is an open-ended yet coherent set of practices regulated by theoretical knowledge but pointing beyond that knowledge towards ever new horizons of practice, and therefore also of history and theory. Thus, even if there are many competing ideas of architecture, and indeed even if the very concept of architecture is sedimented in history, the discipline still moves forward – not always in a straight line, though, but rather in a kind of spiralling movement, conversing with its architectural pasts as well as with its most historically significant critics. Until now, these are two of the most effective means architecture has developed to avoid oblivion and attain (as Rowe said of the Rotonda) a condition that 'impose[s] itself upon the imagination'. 'Mathematical, abstract, four square, without apparent function and totally memorable': these are the adjectives linking purity of form – a quality associated equally with Palladio and Le Corbusier – with the ability of architecture to lodge itself in historical memory, for the benefit of both.—*Daniel Sherer*

Noah's Ark

Hubert Damisch



Edward Hicks, *Noah's Ark*, 1846
Philadelphia Museum of Art
© Bridgeman Images

I

It took Jacques-François Blondel only one and a half pages of the *Encyclopédie* to dispatch the article 'Architecture' that had been commissioned by Denis Diderot and Jean Le Rond d'Alembert. In just three compact and carefully phrased columns, this celebrated architect, noted for his teaching and publications, began by distinguishing between the different varieties of the art of building before briefly treating its origins, the invention of the classical orders by the Greeks, and the long, drawn-out decline of a practice that, having attained its absolute peak of perfection in Rome under the reign of Augustus, sank into oblivion after the fall of the Empire. Its slow recovery began at the end of an era described by the author as 'gothic', when Charlemagne undertook to re-establish ancient architecture – though neither he nor the first Capetians, whom Blondel credits with 'a great liking for that science', were wholly successful. Whether they had intended to react against the taste for heaviness imported from the north by the Vandals and the Goths, or whether the genre declared by Blondel to be 'southern' had been introduced into France by the Arabs, the fact remains that 'the architects of those times created the beauty of their architectures by means of a delicacy and a profusion of ornament till then unknown … in such a way that architecture, as it gradually changed its appearance, indulged in the opposite excess and became too light'.[1] According to Blondel, this was less an interlude than a long period in the wilderness of oblivion; it was, he concluded, 'only in the last two centuries [the sixteenth and seventeenth] that the architects of France and Italy had exerted themselves to retrieve the original simplicity, beauty and proportion of ancient architecture; and it is only since then that our edifices have been executed in imitation of, and following the precepts of, the architecture of antiquity.'[2]

Antique, *ancient* (whatever the varieties, variants or variations may be), but also *gothic*, and even *modern* (a term Blondel avoids defining, but that was nonetheless already current in his day in architectural discourse): these categories did not only correspond to historical periods that succeeded each other following the thread of a strictly linear and irreversible evolution. For language itself – and not only the French – was not content to pit *modern* against *ancient* unilaterally, as we might be led to believe if we take only a cursory glance at the first edition of the *Dictionnaire de l'Académie françoise dédié au roy*, published in 1694. Indeed, what do we read in the *Encyclopédie* itself in the entry for 'modern'? We find that *modern* is used in matters of taste, not in absolute opposition to what is ancient, but to what was in bad taste: thus *modern architecture* has been used in opposition to *gothic architecture*, even though *modern* architecture is only beautiful insofar as it approaches the taste of antiquity.[3] For Blondel's part, as he characterises it, the architecture of the first Capetians could well have been held to be 'modern', on several counts, from the moment it opposed the architecture he describes as *gothic*, a term that contemporaries of the *Encyclopédie* held to be synonymous with 'bad taste'. But if the only good taste was 'antique', then there was no choice but to conclude that a modern architect could only lay claim to beauty on the express condition of renouncing all novelty that did not overtly revive, in form and even more so in principle, the works of a time 'when the arts were brought to their perfection by the fine geniuses of Greece and Rome.[4] Thus, if, chronologically speaking, *antique* were opposed to *modern* in the same way as the *old* to the *new*, then the same reductive division could not be applied in the encyclopedic terms of 'good taste'. This reveals an initial contradiction in Blondel's definition of architecture; a second lies in his characterisation of architecture as a 'science'.

If science indeed had a place in Blondel's scheme of architectural history, any 'progress' achieved was according to a doubly inverted figure: as a decline for which the only remedy was itself regressive (its sole recourse, in the etymological sense, being a return to the antique) or, better, as the resurgence of the antique in the present, *and in the present tense*, following the turn of the Italian and French Renaissance, which would have a much greater impact in the Enlightenment, exceeding the limits of the history of taste, whether good or bad – and this on the eve of a revolution that, though representing a catastrophe in the symbolic order, can hardly be said to have shaken up the reign of the so-called neoclassical aesthetic in official building. With the Restoration assured, the newspapers had ample time to assert that taste in France awaited its own Fourteenth of July; the day would come when, in response to those who agreed with Madame de Staël that the revolution in politics could not fail to have repercussions in the literary realm, Victor Hugo would write that romanticism was the French Revolution made literature. But the great upheaval that came to a provisional end with the fall of Napoleon I in 1814 was not only a matter of taste nor always of the best taste. No one put it better than Karl Marx when he said that the revolution had to adopt first the costumes of the Roman Republic and then of the Roman Empire for its actors to appear on the new stage of history in a disguise and speaking a language that was certainly borrowed and better suited than the romantic wardrobe to the task and roles awaiting them.[5] Architecture was no exception to the rule; 150 years later, Bertolt Brecht would still repeat that the proletariat has a right to columns.

Blondel found proof of the perfection the Greeks attained in architecture in 'the three orders, Doric, Ionic, Corinthian that we inherit from them'.[6] The Romans would only produce two others, and although these were merely imperfect imitations of the Greek, in Blondel's view they still had their 'usefulness'. Each of the five orders in fact corresponded to a specific genre of architecture: the rustic, the solid, the intermediate, the delicate and the composite genres, which express, respectively, the Tuscan, Doric, Ionic, Corinthian and Composite orders 'that together comprise what is most exquisite in architecture'.[7] The notion that architecture, like all the arts, has its limits, that it is not open to indefinite progress, and that there would always necessarily be a return to the example of the Greeks and Romans, is demonstrated by history, 'for we have not been able in France, despite the celebrated opportunities to build over the last century, to compose orders that could come close to the Greeks and Romans; I say *come close*, for many talented architects have tried, such as Bruant, Le Brun, Le Clerc and so on, without being applauded or imitated by either their contemporaries or their successors.'[8] But the orders would not have the importance Blondel gave them if they had been reduced to an accepted convention among the specialists of the art. Born of the necessity that first taught men how to build huts, tents and cabins, architecture would have doubtless developed when these same men, forced as they were 'to buy and sell', and living under common laws, gathered together and managed to make their dwellings 'more regular – the laws of proportion following the conformity to rules and vice versa. If exchange is at the root of societies, then law is at the root of architecture and the regularity that defines it. The ancient authors credited the Egyptians with being the first to raise buildings that were 'symmetrical and proportional'.[9] As for us, declares Blondel, 'we look upon Greece as the cradle of good architecture, either because the rules of the Egyptians have not come down to us, or because what remains of their buildings manifests only a solid and colossal architecture (such as the famous pyramids that have triumphed over time for so many centuries) and that does not affect us in the same way as the monuments we have from ancient Greece.'[10]

When Solomon undertook to build the Temple of Jerusalem, it is said that he called on Egyptian artists but that it was God himself who taught him the precepts of good architecture. The fact that Blondel raises this discussion without entering into it is significant. Architecture is a matter of rules – but also of affects. The architecture of pharaonic Egypt

does not *affect* us in the same way as that of ancient Greece; it is in the way it affects us that confirms that, like the laws men have given themselves, the rules to which the art of building should conform have their *raison d'être*. But just as general agreement is not a necessary condition for the existence of natural rights,[11] so too the diversity of historical forms of architecture, their value, their singular charm – perhaps 'eternal' charm, as Marx would not hesitate to say of Greek art – and their internal richness to which we gain access through 'empathy' is not an argument against the existence of universal norms, which all good architecture ought to respect. The very transgressions of such norms (symmetry, for example) merely bear this out. That one can and should refer to antique architecture as the model of all architecture worthy of the name shows that this art is not controlled by any given society any more completely than by the period in which it is practised and that architecture is in search of a standard that would allow its productions to be judged on the scale and in the suprahistorical dimension of allegedly 'natural' rights. That this model is borrowed from history and corresponds to a precisely dated and localised architecture (that of ancient Greece) changes nothing. This apparent contradiction is merely a consequence of the constraints imposed on an art that (as Viollet-le-Duc would again assert a century after Blondel) obeys eternal principles, independent of the forms that express or betray them.[12]

In Blondel's view, the entire merit of architecture consists of 'the justness of the proportions and the correctness of the drawing'.[13] For the proportions to be considered 'correct' or 'false' in the same capacity as symmetry, however, we must call on criteria other than those suggested by history – first and foremost starting with mathematical criteria. This would seem to justify applying the label *science* to architecture, as well as the various attempts (to which Blondel himself refers) to treat the art of architecture as a purely demonstrative form, *more geometrico*. The article 'Proportion' in the *Encyclopédie* does not go quite so far. In relation to architecture, it keeps to Vitruvius's definition of symmetry, understood as 'the relationship [*rapport*], the suitability [*convenance*] of the whole and of the parts among themselves in works of taste'.[14] Proportion consists in 'the correctness [*justesse*] of the members of each part of a building, and the relationship of the parts to the whole; as, for example, the measurements of a column in relation to the *ordonnance* of the building'.[15] But it is also 'the different sizes of the architectural members and forms according to how they are meant to appear from their viewing point'.[16] We are thus referred back to the division of optics known as 'perspective' and, by the same token, to geometry. This is an old problem, which had already held the attention of the Greeks and the neo-platonists: can the art of architecture, as the closest of them all to the idea and that which, more than any other art, presents *le cose alla virtù* (to adopt the expression used by Daniele Barbaro in his edition of Vitruvius prefaced by Palladio),[17] be allowed to deceive itself by all manner of refinements, corrections, and 'temperaments' designed to redress errors in meaning by means that are themselves illusionist? Even Plato seems to have taken sides, so quick was he to condemn the artifices of art, starting with *trompe l'oeil*, which he sees as not far from a kind of 'witchcraft'.[18] Plato, though, would not have dreamed of accusing architects of not seeking uniformity and harmony for their own sake; he condemns them only in relation to vision, as though the mind could only benefit from the struggle of appearance against illusions and of illusion against appearances.[19]

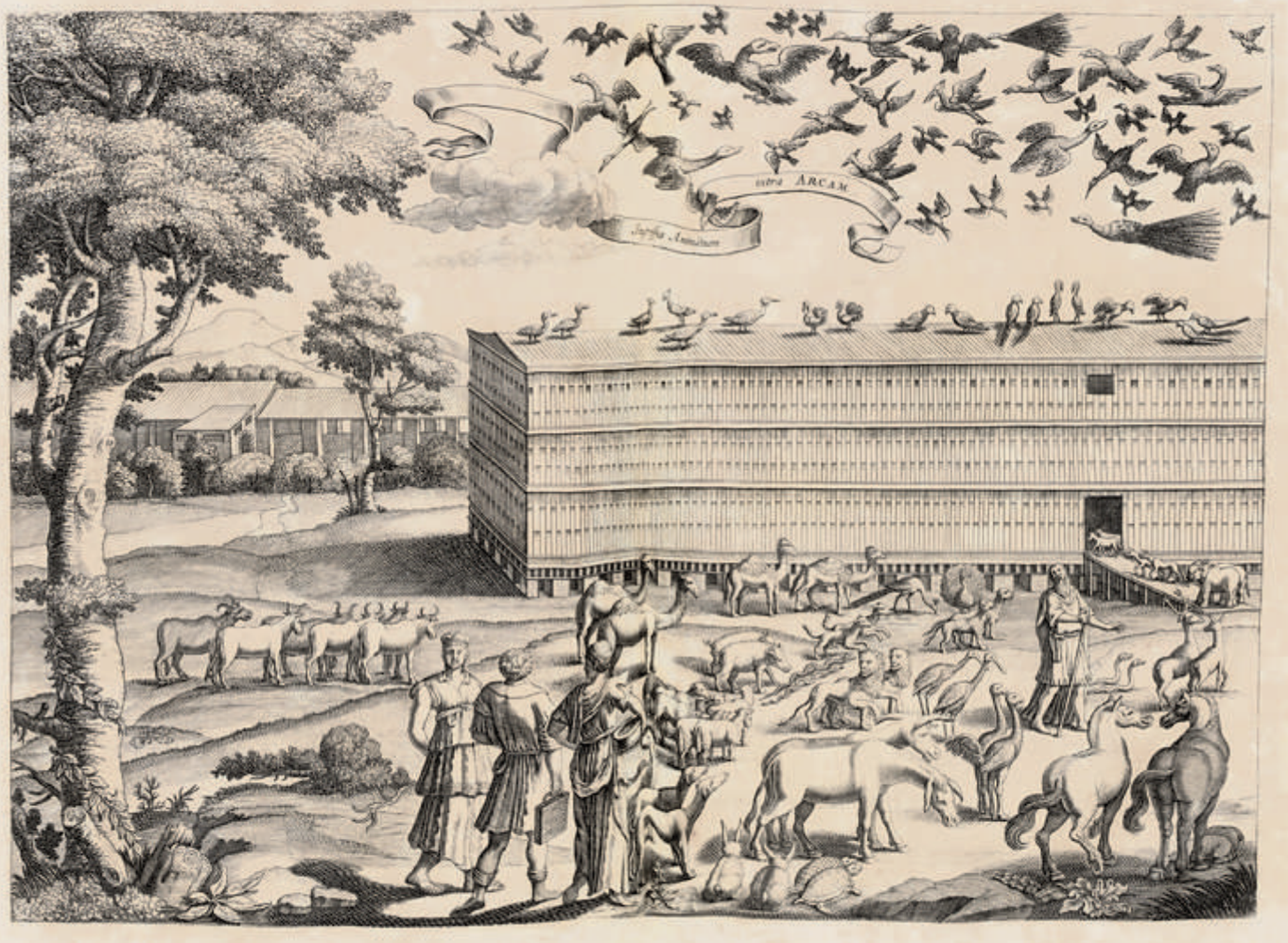
It may have been an old question, but it was still relevant in the age of reason (just as it would become relevant again at the beginning of the twentieth century and through to Erwin Panofsky's work on perspective and its 'temperaments').[20] This is attested by the fact that, in a text as brief as the article 'Architecture', Blondel insists on defining what he calls *architecture in perspective*: 'We call architecture in perspective that architecture whose parts are of diverse proportions and diminished by distance so as to make the general disposition [*ordonnance*] seem bigger and taller than it is in reality, as we see in the famous Vatican staircase, built under the Pontificate of Alexander VII from drawings by the Cavalier Bernini.' Proportions are a matter of measurement, but also every bit as much a matter of perspective – and thus doubly a matter of science.

Another term should also be taken into consideration in addition to proportion: that of composition. Of the three kinds of the art of building that Blondel distinguishes – civil architecture, military architecture and naval architecture – the first, which he defines as 'the art of composing and constructing buildings, for the convenience [*commodité*] and different purposes of life, such as sacred buildings, royal palaces and private houses, as well as bridges, public squares, theatres, triumphal arches, etc', is the exclusive subject of the article 'Architecture'.[21] Composition here is what distinguishes architecture from the simple art of building – in other words, from *construction* as it is practised in military or naval architecture – though it is no less an integral part of civil architecture. Yet the article 'Composition' in the *Encyclopédie*, which is concerned with composition in painting as well as composition in the rhetorical sense of the term understood as 'the order and connection that an orator should apply in the parts of a speech',[22] says not a word about composition in architecture.

The art of building is scarcely better served when it comes to construction, which is somewhat surprising in a work that presents itself as a dictionary of the sciences, arts and crafts. Grammatical construction is the subject of an article of over 20 pages, but that is because it relates to the arrangement of words within discourse, and discourse is based on grammatical construction, as is the *Encyclopédie* itself. Construction in geometry is not overlooked, since it corresponds to 'operations that must be performed to execute the solution to a problem', as well as to lines drawn 'either to arrive at the solution to a problem, or to demonstrate some proposition'.[23] When it comes to architecture, by contrast, the article says nothing about the various attempts (which Blondel mentions only in passing) to confer upon architecture an appearance of scientificity: that of an art, if not demonstrated *more geometrico*, at the very least 'reasoned', as much as the *Encyclopédie* could be and as Viollet-le-Duc's *Dictionnaire de l'architecture française* would be. Blondel's article is limited to defining construction as 'the art of building in relation to matter',[24] without amplification, save for references to the articles 'Carpentry', 'Masonry', 'Joinery' and so on.

However well ordered, the article 'Architecture' responded poorly to what might have been expected from the *Encyclopédie* on the subject, considering the space given to that art (or science?) in the historic project of the Enlightenment. The editors seem to have been aware of this: the Supplément, published in 1777, contains two articles that expand the articles 'Architecture' with material taken explicitly from Johann Georg Sulzer's *General Theory of the Fine Arts*. Both articles are equally flat but, significantly, insist on the social connotations of the art of building and on its potential effects in the cultural realm.

Perhaps we should look for the causes of Blondel's brevity in the constraints imposed on the contributors by alphabetical order. The article 'Architecture' appears even before the article 'Art', which was written by Diderot and intended to serve as a prospectus for booksellers. The fact that the entries in which it would have been possible to take a fresh look at the question of architecture – starting with the article 'Composition' – were not used to remedy the problem seems to indicate that neither the author nor the editors felt the need to do so. This, however, should not stop us from taking a closer look, given the surprising fact that nothing is said about civil or military construction in the article 'Construction', whereas more than six pages are devoted to the third kind of the art of building: *naval architecture*.


intra ARCAM

II

The relative brevity of the article 'Architecture' is all the more surprising if we compare it with the length of another *Encyclopédie* entry that precedes it: the article 'Ark' (*Arche*), produced by the abbé Edme-François Mallet, one of Diderot and d'Alembert's principal collaborators. As the *Discours préliminaire*, or preface, notes, the abbé Mallet was the author of all the articles on ancient and modern history, as well as the articles 'Eloquence', 'Literature', 'Poetry' and (as is only right) 'Theology'. When it appeared in the *Supplément*, the article 'Ark' required just a few typographical corrections and the addition of a certain number of titles to an already copious bibliography. Even in the body of the *Encyclopédie*, it takes up four full pages, or eight columns – close to three times the space reserved for the article 'Architecture'. It is clearly not unrelated to architecture, whether in terms of the meaning of arched, which is naturally joined to the idea of an 'ark', or to Blondel's taxonomy. The ark of Genesis – that 'kind of boat' or 'vast floating building' constructed by Noah to protect the various species of animals that God ordered him take in from the Flood – in effect falls under the heading of the third branch of the art of building that Blondel describes as 'naval', the purpose of which is 'the construction of vessels, galleys and all floating buildings in general, as well as bridges, breakwaters, jetties, rope makers, warehouses, etc, erected along the seashore or at its edges'.[25] The space given to this same naval architecture in the article 'Construction' corroborates the hypothesis whereby 'Ark' and 'Architecture' cannot be considered separately in the general economy of the *Encyclopédie*. If we find the classical definition of the art in 'Architecture', along with a list of its merits, the rules it obeys and a brief summary of its history, then the article 'Ark' that immediately precedes it in the first volume of the work introduces considerations of another order, which take a singularly 'modern' turn. Once articulated, the goal of the construction of the ark – nothing less than assuring the survival of the main species of animals, besides the aquatic animals not imperilled by the rising waters – as well as the design, development and maintenance, if not management, of such a 'floating building' would not have failed to pose a number of problems, both technical and logistical, and their discussion takes up almost the whole article. Although we cannot ignore either the background or the patristics of the article, the fact remains that the abbé Mallet seems to have been less concerned with proving the tale's authenticity than with exploring what we might call the functional implications of the story of Noah and his ark – an initial foray into what would later be called functionalist thought in architecture.

The abbé Mallet begins by reviewing the information supplied by the text of Genesis and the various hypotheses issued by the church fathers and modern critics regarding the time of construction of the ark, the materials used and its dimensions. This is, first and foremost, a matter of *scale*. If we accept, as tradition has it, that the first men were much taller and stronger than those of today, we can allow that Noah and his three sons, to believe Mallet, would have been up to the job of building a vessel that required the felling of a great number of trees, whether cedars, cypresses or any other species denoted by the Hebrew word *gopher*. But the same cannot be said for the dimensions of the ark indicated in Genesis (6:15): 300 cubits for the length, 50 for the breadth, 30 for the height. This seems disproportionate to the quantity of creatures and provisions that were to find a place on-board, and it has raised, as the abbé Mallet concedes, many doubts about the veracity of the biblical text. On this point, the scalar argument suggesting that the cubit, which is a human measure, has varied over the course of the centuries in proportion to the height of human beings is weak. It matters little, asserts Mallet, whether the building's dimensions increase or decrease, so long as they do so relative to the measurements of the people and the animals the ark was supposed to house. Church Fathers Origen and St Augustine, among others, claimed that the cubit referred to was the geometrical cubit used by the Egyptians, which would make the ark 520m long – longer than the biggest ocean liners of the twentieth century – dimensions a contemporary of the *Encyclopédie* could not have accepted. Hence the efforts of a number of scholars, from Father Athanasius Kircher to Isaac Newton, to show that if a cubit were around 50cm, the ark would have been big enough to accommodate not only Noah's family and the animals in their charge, but also a sufficient quantity of provisions and fresh water.

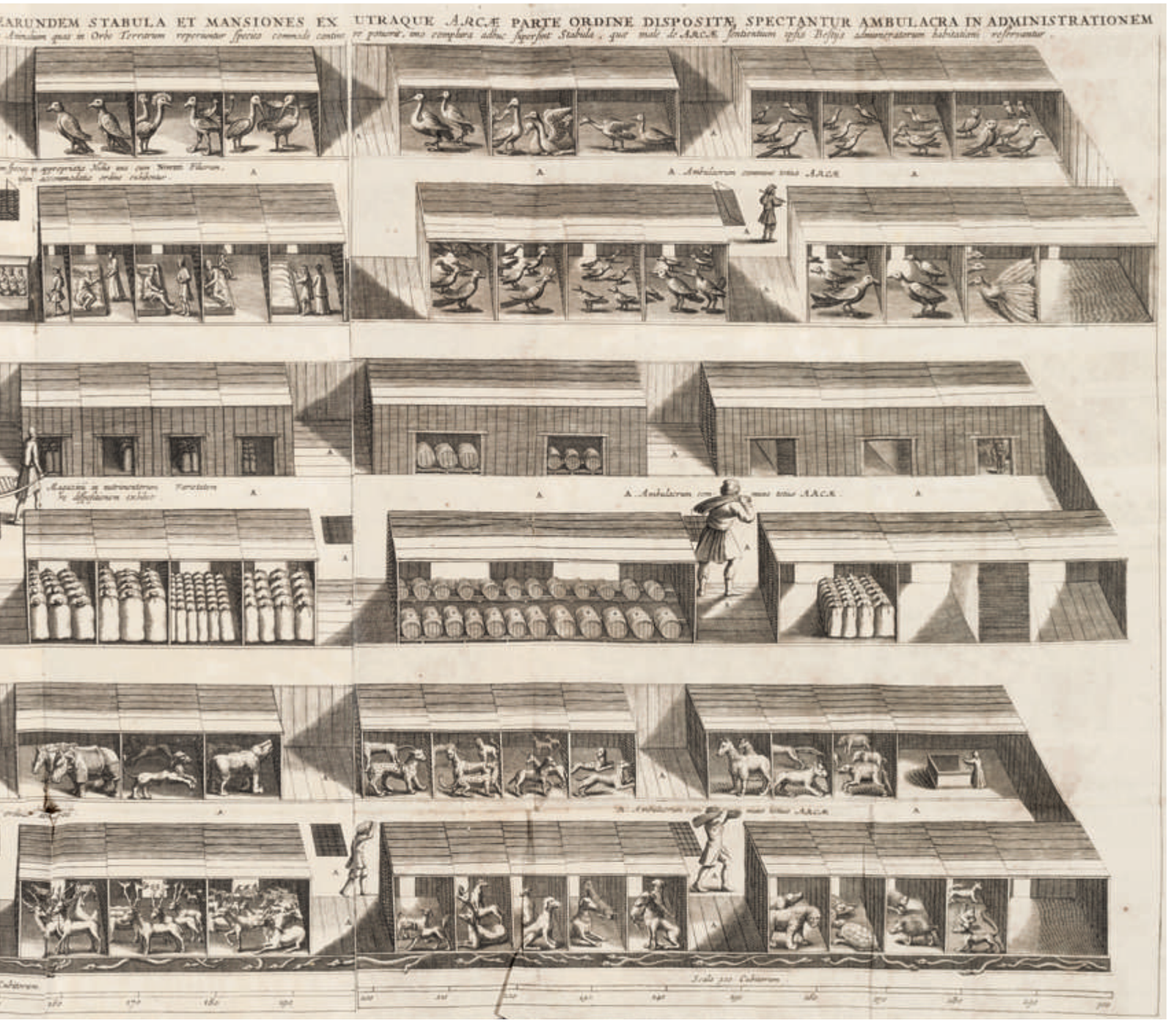
The functions assigned to the ark are clearly set out in Genesis: beyond the eight members of Noah's family, the vessel was to contain one pair of each of the species reputed to be impure, and seven of the species reputed to be pure, as well as provisions for a year, 'which at first glance would seem impossible, but if we work out the calculation, we find that the number of animals was not as great as we had first imagined'.[26] Mallet in fact claims to know of only just over a hundred (from 100 to 130) species of quadrupeds, and as many birds, on top of which must be added, if we hold to the letter of the Scriptures, every creeping thing of the earth – but not the 40 aquatic species that were apparently not targeted by the divine malediction and announcement of 'the end of all flesh'. John Wilkins, the bishop of Chester, felt that only 72 species of quadrupeds needed to be preserved. By Mallet's own admission, evaluating the ark's capacity is an extremely difficult thing to do, considering how incomplete were the lists of animals then in existence, especially for the still unexplored regions of the world, and thus how impossible it was to determine the dimensions of the vessel 'relative to its use' anymore accurately than is done in the Scriptures.

When it comes to the provisions necessary for such an enterprise, the calculation seems a bit easier, even though the parameters are relatively complex. In the case of carnivores, each one would consume a certain quantity of meat that could be measured in numbers of livestock required, but the sheep needed to feed the carnivores would in turn consume a quantity of hay that would decrease as the livestock dwindled. Bishop Wilkins supposed that all the carnivores together could be calculated as equivalent to 27 wolves, plus the space required for their food (which he calculated to be 1,825 sheep). The herbivores, which he estimated as equivalent to 208 oxen, would seem to need 109,500 cubits of hay. Butteo's estimate went higher, with the carnivores as the equivalent of 80 wolves, which needed to be fed ten sheep a day, a total of 3,650 sheep in the course of a year. With the number of animals destined to serve as feed diminishing every day, we should be able to count on a fixed number of 1,820 beasts in order to calculate the amount of hay needed to maintain them, which would support 1,900 sheep and 120 oxen. If seven sheep eat as much fodder as one ox, for a year's supply there would have to be 146,000 cubits of fodder.

These estimations might cause some amusement, as might the discussions about the ark's form, its internal layout and the administration and management of the whole, which today would be called maintenance. If we are to believe the text of Genesis, it was to God himself that Noah was indebted for the vessel's specifications: the ark was to be made of wood and reeds (though the Hebrew word *qanim*, as we will see, is open to debate) and coated with pitch inside and out; it was to be 300 cubits long, 50 wide and 30 high, to be covered with a roof and to comprise three floors. Even the position of the door was subject to divine instruction, which provided that it be placed at the side. In the eighteenth century, several critics fretted anxiously over this. If we understand the ark to have been a rectangular parallelepiped, then the door would have been

Athanasius Kircher, building the ark
Overleaf: Athanasius Kircher, section through the ark
From Athanasius Kircher, *Arca Noë*, 1675
© Division of Rare and Manuscript Collections, Carl A Kroch Library, Cornell University


OPTICA PROJECTIO TRIUM ARCÆ NOE M.ICÆ CONTIGNATIONUM, QUA CUNCTARUM ANIMANTIUM SPE CIES PROPRIIS FIGURIS EXPRESSÆ NEC NON
Animalium figurantur literæ A. adjungitur ipsis Scala Geometrica cujus ope, quisque voluerit partium singularum proportiones elicere queat. Ut ex hujus ARCÆ dispositione,
A. Ambulacrum commune totius ARCÆ.
A. Ambulacrum com- mune totius ARCÆ.
A. Ambulacrum commune totius ARCÆ.
Contignatio I. Quadrupedum ut Bubulis Equ
Scala pro Cubitorum.


EARUNDEM STABULA ET MANSIONES EX UTRAQUE ARCÆ PARTE ORDINE DISPOSITÆ SPECTANTUR AMBULACRA IN ADMINISTRATIONEM
Scala 200 Cubitorum

better off placed on one of the smaller sides than on one of the longer sides, where it would have risked compromising the balance of the whole and spoiling the symmetry (not to mention that the ark would then have had something like a facade, which hardly seems right for what was ultimately just a great big barge). But if this were the case, then the vessel would have been heavier at one end and would have risked not listing to starboard but sinking at the front or back (if indeed these could be distinguished from one another).

As for the different levels provided in the divine programme, commentators generally agree to reserve the top floor of the ark for the patriarch's family, who would have found themselves with a lot of room, even though they had to share it with the birds and find a place for the household utensils, digging tools, fabrics, grains and seeds (not to mention a kitchen and space for taking a walk). The middle floor would have served to store the provisions, while the bottom floor housed the quadrupeds and reptiles (or the other way round). To these floors mentioned in the Bible, some have been tempted to add a fourth: a kind of bilge for storing the ballast and the excrement, which could not be thrown overboard (thus implying that the ark had no opening other than the above-mentioned door, which would have been hermetically sealed for the duration of the ordeal). This same space could have also served as a hull to hold potable water – the water of the Flood, as abundant as it was, not being enough to desalinate the seawater.

But this does not solve the problem of the vessel's internal layout – a problem great enough to hold Blondel's attention, as indicated by the fact that he went to some trouble over the article 'Distribution'. 'Make yourself an ark out of resinous wood', states the Jerusalem Bible. 'Make it with reeds, and line it with pitch inside and out.' The Hebrew word *qanim*, 'reeds', is merely conjecture here. The word could also be *qinnim*, 'nests', to be understood in the sense of 'cabins'. This would imply that God himself stipulated the division of the living quarter decks into cells (or, as Mallet prefers, 'stalls'), the number and size of which remained to be determined; thus, each pair or species of animal is imagined to have had its own stall – yet it would seem that eight people would have had difficulty in the cleaning and provisioning of such a large number of stalls. To this, the abbé Mallet replied that it would have been far more difficult to take care of 380 animals (not counting those much more numerous needed as fodder) if they were all mixed together.

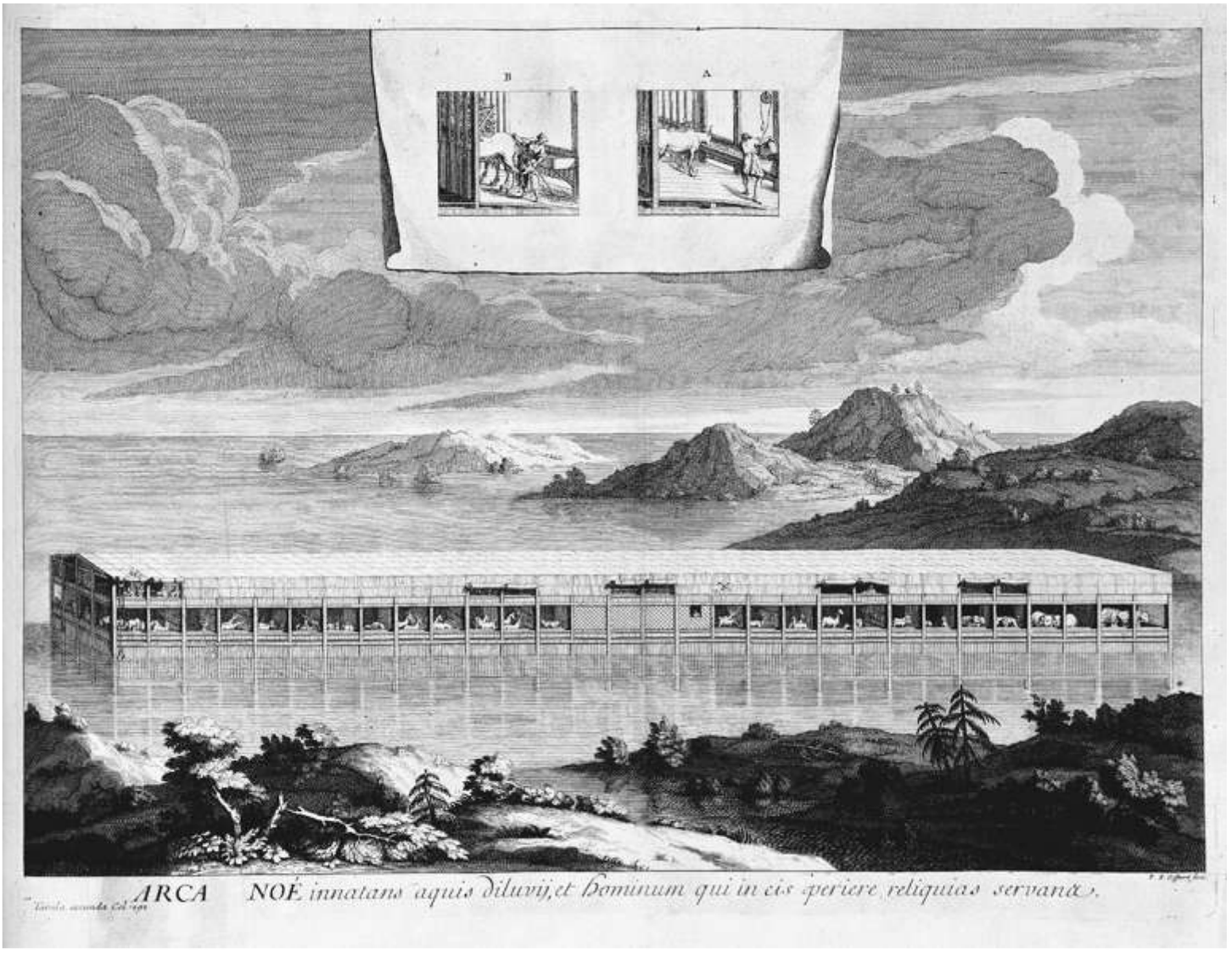
Such a fable is only a fable if we see it as nothing more than a fairytale defying all plausibility, freighted as it may be (as we read further in the Jerusalem Bible) with an eternal lesson about justice and divine mercy, the malice of man and the salvation granted to the just. If, on the other hand, we take the programme assigned to Noah seriously, along with the many problems commentators have raised in its regard, we cannot help but be struck by the fact that the article 'Ark' actually offers a rough sketch (or caricature, perhaps not devoid of humour) of an authentically functionalist approach, one that even goes into detail. Whether concerning the building of the ark, its internal layout or matters of logistics and accommodation (to say nothing of the problems, never alluded to, of security), there is no problem raised by the critics that is not echoed today in the technical specifications or rules imposed on those in the profession of architecture. We might restrict ourselves to two examples of this. The question of the method of loading the ark, its access, is not unconnected, though within a biblical time frame, to concerns that these days preoccupy those in charge of public access whenever a very tall apartment block is slated for a high-density area or one poorly serviced by public transport. Here, we only have to look at the apocalyptic provisions occasioned in their day by the Pan American Building in New York or the John Hancock Centre in Chicago. As for the ark's internal layout, and in particular the layout of the floor reserved for the menagerie, the question is exactly the same as for the plan: whether it should be free or otherwise depends on whether we favour having a number of stalls corresponding to the number of different species or prefer instead to regroup the animals by genus or families. If we take into account the fact that extra space would have become available as time went by and the vegetable and animal provisions were consumed, the best solution would have been to provide removable bulkheads to allow the occupants of the ark to gradually make themselves more comfortable as the cargo dwindled.

Humanity, Marx said, only asks questions it can solve. Following this, Engels held that the housing question could only be solved by a revolution – which deferred not only the solution to the problem, but also the right way of formulating it, thus leaving room for a critique of reformist utopias in anticipation of the revolution to come. The problems posed by the building of the ark and its maintenance were no more than what humanity was able to solve by relying only on its own strengths, as developed at the time, nor any more than what we would be able to solve today. Thus Bishop Wilkins, and the abbé Mallet with him, concluded:

Bernard Lamy, *Noah's Ark*
From Bernard Lamy, *De tabernaculo foederis, de sancta civitate Jerusalem, et de templo ejus, libri septem*, 1720

The ark, which has been used as an objection to the truth of the Holy Scriptures, here becomes a proof of that truth since we may safely assume that in the early ages of the world men versed in the sciences and the arts must have been infinitely more subject to error than we are today. Nonetheless, if today we had to match the capacity of a vessel to the mass of animals and their food, we would fare no better … for the human mind tends in such a case to wildly exaggerate objects. What would indubitably have happened with the dimensions of Noah's ark is what happens with the estimation of the number of stars visible to the naked eye; just as we judge that number to be infinite, we would have carried the dimensions of the ark to vast magnitudes and would accordingly have engendered a building infinitely greater than was necessary, sinning more through its excess capacity calculated by the historian than by what those who attack the story claim is its sin of parsimony.[27]

This development is somewhat surprising, not only for the way it revisits the discussions to find within the doubts raised by the biblical tale proof of that tale's veracity, but also for the argument that springs from this demonstration. No one but God could have conceived the measurements of the ark, for this was a matter of proportion, both in the singular sense (as Blondel used it) and in the pragmatic, functional sense that Le Corbusier later intended with the example of the ocean liner *France*, built in the 1920s by the Saint-Nazaire shipyards.[28] But if the human mind were not adequate to the task, the reason for this was not to be sought in the mind's inability to manage complexity: the plans and sectional views of the kinds of Noah's arks represented by the heavy vessels of the East India Company, which one can see in the National Maritime Museum at Port-Louis, France, are proof that the ship owners of the day and their engineers already had a pretty good idea – at a scale, once again, of that time. The problem lies above all in the opposite: in the propensity of modern societies to deal with the difficulties they must face *by excess* rather than *by lack*, and to imagine solutions, to devise projects, to impose tasks on themselves and to fuel dreams of an exaggerated scope, beyond all proportion, that are ultimately totalitarian. Whereas man, left to his sorry fate, would have designed a gigantic ark that he could not possibly have floated – such as the craft Robinson Crusoe built in the middle of the forest without first working out how he would transport it to shore – God alone was able to take the proper measure of things. Indeed, he himself had ordered and, so to speak, programmed a universal and devastating catastrophe, though one that contained a safety clause, for it was to be a prelude to the regeneration of the human race. As such, it would find an echo in the project of the Enlightenment.



ARCA NOÉ innatans aquis diluvij, et hominum qui in eis periere reliquias servans.



III

The time is long since past when – after the two worldwide catastrophes of the First World War and the Russian Revolution – Le Corbusier could cry:

Everything remains to be done! An immense task! And it is so pressing, so urgent, that the whole world is absorbed into this imperious necessity. Machines will lead to a new order of labour and rest. Whole cities must be built or rebuilt in view of a minimum of comfort, the prolonged lack of which might unsettle the social equilibrium. Society is unstable, cracking under a state of things upended by 50 years of advances that have changed the face of the world more than the six preceding centuries.[29]

A gigantic task it was indeed, one worthy of 'modernity', one that could not avoid taking on a cosmic dimension. To 'an indolent respect for tradition' (well represented by the idea of the Flood); to 'the pettiness of middling conceptions', he would substitute 'the majesty of solutions following on from a problem well posed and required by this century of great endeavours, which has just taken a giant step forward. The land-dweller's house is the expression of an out-dated world of small dimensions.'[30]

As far as the instability of the times, it was as if the place made for Noah's Ark in the *Encyclopédie* was dictated by a premonition of a flood of another kind, which the French Revolution came to represent for the European consciousness. The revolution began with the destruction of the Bastille, that monument of (military) architecture and symbol of the *ancien régime*, whose end it marked at the same time that it heralded, as Jules Michelet would write, the triumph of 'what is outside time, outside the future and outside the past, immutable Right'. This takes us back to the *Encyclopédie* and the analogy Blondel's text suggests between the rules obeyed by architecture and the principles of natural Right. *Architecture or revolution* – the modernist watchword, posed in the form of an alternative or a dilemma – was to translate as clearly as possible the ambiguity of the relations that the art of building, if not architecture itself, has never ceased to maintain with the prospect of a generalised catastrophe: either architecture looks to stave off such a catastrophe by rendering it useless, or it merely aspires to furnish humanity with the means to survive such a catastrophe without too much damage. In the history of the world, the Flood has not only corresponded to a moment of crisis. The rupture of the seawalls put up by God between what Genesis calls 'the waters from under heaven' and 'the waters from the great deep' signifies a return, at least momentarily, to original chaos: the time to wipe out all flesh, or at the very least all flesh 'wherein is the breath of life' and that found itself on terra firma (Genesis 6:17), to the exclusion not only of the animals that move in the water but also of those that move in the air and managed to find refuge either on the water (in the case of sea birds) or on the ark. The evangelists, followed by the church fathers, would not fail to exploit this typology: the Flood prefigured the Last Days just as the salvation granted to Noah and his family prefigured salvation through the waters of baptism.[31] Water in this context takes on functions that seem paradoxical, or at least contradictory, for it is both through water that the catastrophe occurred and through water that the inhabitants of the ark escaped that catastrophe. The fact that the covenant between God and Noah had recourse to naval architecture takes on symbolic value here. In the Latin translation the same word, *arca* ('chest'), is applied both to the ark of the covenant in which Moses enclosed the tablets of the law and to Noah's Ark, but Hebrew uses two different terms: the word *tebah*, which applies to Noah's great vessel, is found again in the Bible only in relation to the basket made of bulrushes in which the infant Moses is laid when his mother entrusts him to the life-saving waters of the Nile.[32]

On Imminent Disaster & Means of Mitigating It

Le Corbusier's discourse echoes those of professional revolutionaries, even as it occasionally takes on biblical overtones: 'My own duty, my quest, is to try and place the man of today beyond harm, beyond disaster.'[33] We are a long way, apparently, from the project that could be said to be a part – but only one part – of the avant-garde: the programme of a kind of art that, in the words of André Masson, would 'explode reality'.[34] But if modernity was associated with awareness of a rupture, of a radical break in the continuity of history, as well as with an idea – the programme of a fresh start – then the sometimes all-too-real fantasy of the tabula rasa corresponded to another kind of disaster, in the commonplace sense of the term. To start afresh, it would seem there is no choice but to begin by making a clean sweep, by pulling everything down. The difference between a France devastated by the First World War and the Plan Voisin was merely one of modality; there were many architects who deplored the twice-missed opportunity that reconstruction represented for the profession immediately after the two world wars and their processions of ruins. The turn that reconstruction took in Berlin after the fall of the wall says enough about the ambiguity that attaches to the notion of 'reconstruction' when it is not mitigated (in the absence of any project in good and due form, like Auguste Perret's programme for Le Havre) by thinking that is actively 'deconstructive' in the most radical sense of the word: that is, tearing down all presuppositions underpinning the connection architecture tends to maintain with construction in the sense understood by Blondel – namely, the art of building, viewed in its relationship to matter and not just to *disegno*. Bramante's ambitious aedilic endeavours, such as pulling down Old St Peter's Basilica, and his great aborted projects (at the time of his death, the 'new' St Peter's rose only a few centimetres above the ground) earned him the nickname *maestro ruinante*. The time had not yet come when, a good distance from Ground Zero in Lower Manhattan, metropolises would spring up in a matter of a few years from the deserts of the Middle East, much as they did just after the Flood, based on something like a throw of the dice, which is meant to abolish terror, or outsmart it, yet which leaves open the question of the relationship that the art of building might today maintain with some form of thought.

From the invention of the ruins of Pompeii to the erection of a house in the shape of Noah's Ark[35] based on the plans of Margit Kropholler (an architect of the Amsterdam School), the spectre of the final catastrophe has never ceased to haunt the imagination of modernity, just as the spectre of decline haunted the classical age. The film industry did not wait for the terrorist attacks of 11 September 2001 to impose the icon of 'the disaster movie' (*filme catastrophe*): the towering inferno, of which the image of the *Titanic* standing hull in the air before it sank like a stone is but one variant – the myth of the ocean liner having prevailed for a time over the myth of the ark. But the term catastrophe does not only have apocalyptic connotations. It can also be understood in a more extended sense, as in the theory of the same name. This remains as valid in matters of architecture as in others, the mathematical theory precisely described as 'catastrophe theory' finding in the art of building a privileged domain of application; a building, a built structure, a 'construction', however provisional, must first stand up, the way a boat must first float and a plane must fly. ('If we built a plane the way we build a house, it wouldn't fly', Jean Prouvé liked to say.) A matter of arithmetic, you might say, as long as we give ourselves the means to allow for discontinuity and all forms of rupture, fracture, general instability and disequilibrium.[36] Take a 'modern' example, though one that is not without precedent in gothic or Renaissance architecture (think of the solution Brunelleschi brought to bear on the problem presented by the dome of Florence Cathedral, which took the form of a double brick hull): it turns out that as a tall building goes up it encounters a certain number of

Simon de Myle,
Noah's Ark on Mount Ararat, 1570
Private Collection

'catastrophe points', which can now be precisely pinpointed, each one corresponding to a threshold beyond which a different structural solution is required. Above 50 storeys, the traditional system of concrete construction is no longer open to improvement and must give way to tubular structures that are themselves contained within precise limits. We might agree with René Thom that the set of these catastrophe points, or breakpoints, combined with the set of 'regular points' that correspond to a continuous, non-catastrophic development, defines the substrate space of the morphology concerned, on the basis of which objects are produced – in this case, buildings. The fact that morphologies, if not morphogenesis (as Thom calls the theory that aims to account not only for the appearance of forms, but also for their emergence and disappearance), are back on the agenda of mathematical science today is an indicator of a major epistemological shift. But it is no less significant that architecture itself seeks to make a return as a theoretical object (and as a domain of objects) at a time when the threat of widespread catastrophe has become so commonplace that we cannot continue pretending to wait for the means to vanquish it through the art of building. How could it be risked, when modern architecture's own relationship to catastrophe too often takes the form that Le Corbusier meant when, upon discovering New York, he wrote 'a catastrophe, but a beautiful and worthy catastrophe'[37] – though now without an aesthetic effect to redeem the social or ecological mess?

The form of tabula rasa, if not a hole, to which the place known as Ground Zero now corresponds in Lower Manhattan does not invalidate the thesis underlying the organisation of articles devoted to architecture in the *Encyclopédie*. The al-Qaida operatives hit hard and on target (at least technically speaking), so much so that some people have felt the attackers had some knowledge of the catastrophe points affecting very high buildings. But even if the World Trade Centre might seem to take after the Tower of Babel more than after Noah's Ark, its destruction was not by natural or divine forces but solely by human malice in its most detestable form. Yet architecture will gain no supplement to its soul, or to its existence, by attempting to anticipate the worst, in whatever form that might take – even the threat of a latent apocalypse.

In their own way, the Tower of Babel and Noah's Ark form a matching pair, even if two distinct and opposed operations are involved. The myth of Babel aims at a kind of advertisement with fundamentally political overtones: any human endeavour attributable to a united community is subject to a limit; past a certain threshold, catastrophe threatens, linked as it is to a change of scale, and that is where the story ends.[38] When it comes to the Flood, by contrast, catastrophe takes its place at the beginning of the tale, which is all that is needed to relativise it; whatever the extent of the disaster, the world order was not fundamentally altered by it, not even the classification of species, each one being reduced to a stock that was meant to find a place in the ark, wherein reigned a peace unknown since the Fall. And if Yahweh did not, in this case, find any remedy for his anger toward humanity other than its extermination, then what some take as his good will leaves open the possibility of regeneration based on the branch whose survival the ark ensured for as long as the Flood lasted. After 40 days, the retreat of the waters marked the start of a new human colony, where the survivors, after seeing to its unloading, abandoned the masterpiece of naval architecture to which they were indebted for having saved them from the disaster and once more got their bearings on dry land, each reinventing, on their own and all together, a new, if still tribal, way of living in this world. The alphabetical order of the *Encyclopédie* that called for the entry 'Ark' to come just a bit before the entry 'Architecture' was, in the end, neither fortuitous nor arbitrary. Architecture could only find its place *after* the Flood – or rather, in its stead.

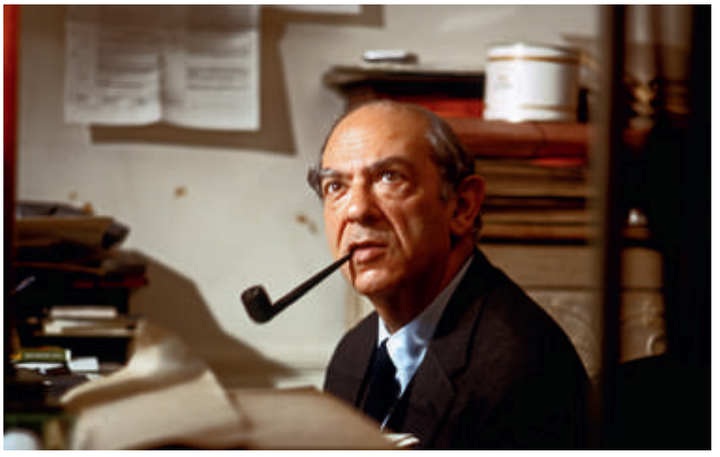
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6. Jacques-François Blondel, 'Architecture', *op cit*.
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13. Jacques-François Blondel, 'Architecture', *op cit*.
14. 'Proportion', *ibid*, vol III, p 468.
15. *Ibid*.
16. *Ibid*.
17. Daniel Barbaro, in Vitruvius, *I dieci libri dell'architettura* (Venice, 1556), quoted in Rudolf Wittkower, *Architectural Principles in the Age of Humanism* (London: A Tiranti, 1952), p 64.
18. Plato, *Republic*, 10.602d.
19. See Pierre-Maxime Schuhl, *Platon et l'art de son temps (arts plastiques)* (Paris: F Alcan, 1952).
20. See Erwin Panofsky, *Perspective as Symbolic Form*, translated by Christopher S Wood (New York, NY: Zone Books, 1991).
21. Jacques-François Blondel, 'Architecture', *op cit*.
22. 'Composition', *ibid*, vol III, p 769.
23. 'Construction', *ibid*, vol IV, p 92.
24. *Ibid*, p 94.
25. *Ibid*, p 617. *Architectus* is from the Greek *arkitekton*, with the sense of architect, builder and (more particularly) engineer, specialising in naval building. See Aristotle, *Metaphysics*, 1.1.ii.
26. Abbé Edme-François Mallet, 'Arche', in *Encyclopédie*, vol I, *op cit*, p 607.
27. *Ibid*.
28. Le Corbusier, *Toward an Architecture*, translated by John Goodman (Los Angeles, CA: Getty Research Institute, 2007), p 153. Originally published as *Vers une architecture* (Paris: Éditions G Crès, 1923), p 75.
29. *Ibid*, pp 156–57.
30. *Ibid*, p 158.
31. See Roland de Vaux and Bernard Couroyer, *La Genèse* (Paris: Éditions du cerf, 1952), p 57, note b.
32. *Ibid*, p 58, note c.
33. Le Corbusier, preface to *Précisions sur un État présent de l'architecture et de l'urbanisme* (Paris: G Crès, 1929), p v. Translated by Edith Schreiber Aujame as *Precisions on the Present State of Architecture and City Planning* (Cambridge, MA: MIT press, 1991).
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36. See Carmine Benincasa, *Architettura come dis-identita: Teoria delle catastrofi e architettura* (Sari: Dedalo libri, 1978).
37. Le Corbusier, *When Cathedrals Were White: A Journey to the Country of Timid People*, translated by Francis E Hyslop Jr (New York, NY: Reynal & Hitchcock, 1947). Originally published as *Quand les cathédrales étaient blanches* (Paris: Éditions Pion, 1937), p 3.
38. See Peter Sloterdijk, *Im selben Boot: Versuch über die Hyperpolitik* (Frankfurt: Suhrkamp. 1993).

The Hideous Duty of Isaiah Berlin

Nicolas Kemper









Isaiah Berlin, *clockwise from top left*, on the beach at Paraggi, Italy, *c* 1972 (© Isaiah Berlin Literary Trust); in his study at Headington House, 1971 (© Noel Chanan); in the garden of his house in Paraggi, Italy, 1969 (© Isaiah Berlin Literary Trust); in Oxford, 1977 (© Bernard Lee ('Bern') Schwartz / National Portrait Gallery, London)

'My head is swimming in architects. I am slowly being driven mad by this fearful problem, particularly when I observe architects exchanging glances in my presence as if to say: "Who is to have a cut of this large and foolish figure, who does not know his own mind"?'[1] This 'large and foolish figure' was one of the most significant political thinkers of the twentieth century, Isaiah Berlin. At the time he wrote these words – in a letter to a friend in December 1966 – he was feted on both sides of the Atlantic. Instrumental in the development of 'Oxford philosophy', and renowned for his conversational brilliance, Berlin claimed he had to talk to think. And how he could talk, seeming to 'bubble and rattle like a samovar on the boil' as his words attained a velocity 'courting the speed of light'.[2] Born in 1909 in the Baltic seaport of Riga, Berlin grew up knowing Russian, Hebrew and German. To this he soon added English, when his affluent family fled the Russian Revolution and washed up in Surbiton in 1921, and then Latin and Greek, when he attended a London public school, St Paul's.

'I am an intellectual taxi; people flag me down and give me destinations and off I go', Berlin once said.[3] John F Kennedy, for example, had hailed him on the eve of the Cuban missile crisis, seeking his advice. And his range extended far beyond the political: Pablo Picasso, John Maynard Keynes, Albert Einstein and Boris Pasternak were among the multitude who found themselves 'lifted up into the vertiginous climb of a Berlin conversation' – a mass swollen by his popular radio broadcasts on BBC's Third Programme and by his Mellon lectures in the US.[4] Yet, in the mid-1960s, this formidable intellect was badly bruised by an encounter with the mother of all arts. 'The thing about architects is confusing, bewildering and frightening', he confided to the legal scholar Ronald Dworkin.[5] A letter written to another friend, the historian Jack Hexter, spells out the particular source of this bewilderment: 'But if there is anybody interested in architecture in your vicinity do ask them, for upon me lies the hideous duty of building a college and the choice of architect is agonising beyond all belief. Nobody agrees. It is a world more filled with stabs in the back, double crossings and general skulduggery than even those of archaeology or art history, and believe me, that is saying something.'[6]

It hadn't seemed such a skulduggerous prospect the year before, when Berlin had taken on the responsibility for building a new college at Oxford. Student numbers at the university had leapt by around 40 per cent since the end of the war, in line with the general principle – backed by increased government funding for higher education across the UK – that university places 'should be available to all who were qualified for them by ability and attainment'.[7] While some 3,000 extra undergraduates had been effectively squeezed into tacked-on extensions or subdivisions of existing quarters, it became clear that Oxford's fast-multiplying population of graduate students and scientists would need new homes of their own.[8] In 1965 Oxford's Congregation therefore founded two new colleges, Iffley and St Cross, to accommodate dons who were not attached to existing colleges as there was insufficient demand for undergraduate teaching in their subjects. The first of these, Iffley, was a community with few resources, in contrast to most Oxford colleges. It had been allocated some funds to help with running costs in the early years, but no money at all for the construction of a new building. It needed a capable leader. Being mainly scientists, the fellows turned first to Charles Coulson, an accomplished mathematician and theoretical chemist, but he was unwilling to take on the challenge. Rebuffed, they approached Berlin, perhaps not the most obvious choice, as he was neither a scientist nor, evidently, a keen administrator – in 1953 he had turned down the opportunity to become the warden of another new Oxford college, Nuffield.

Confounding expectations, Berlin told Oxford vice-chancellor Kenneth Wheare he would consider accepting the post.[9] In his eyes Oxford needed to reform if it was to avoid the 'Salamanca syndrome' – so-called after one of the great universities of the medieval world, which had declined into irrelevance when it failed to adapt and keep pace with its peers. He had even attempted to persuade his own college, All Souls, a rich and exclusive institution, to use its ample resources to bring in graduate students; later, he also proposed a merger with St Antony's to create a Princeton-like Institute of Advanced Study at Oxford.[10] But these efforts had come to naught. In the prospect of overseeing a new college, however, he saw an opportunity to create an institution in his own mould – international, democratic, egalitarian. And so after bonding with a delegation of fellows from the new college led by Frank Jessup, Berlin officially agreed in November 1965 to become Iffley's founding president, provided that he managed to raise the funds for constructing the new building within six months.[11]

Tapping a friendship that dated back to his teaching days at Harvard, Berlin approached McGeorge ('Mac') Bundy, Lyndon B Johnson's former national security advisor and the recently appointed president of the Ford Foundation, then the largest charitable foundation in the world. Within a month Bundy had promised the new college $4.5 million (*c* £1.6 million), on the condition that matching funds be secured from a British donor. Berlin, the 'most respected Jewish figure in British intellectual life',[12] saw a likely candidate in the retailer and philanthropist Isaac Wolfson and his son Leonard, but encountered some stiff resistance from the board of the Wolfson Foundation, and specifically from Solly Zuckerman, the government's chief scientific advisor, who saw Oxford as the 'graveyard of British science' and thought the money would be better spent on one of Britain's 20 new universities, such as, for example, the University of East Anglia, where he himself happened to teach.[13] In the end, the Zuckerman problem was neutralised by Bundy, who clearly did 'not mind walking over corpses', as Berlin once noted (adding that was fine with him, so long as the corpse wasn't his own).[14] At a dramatic meeting of the Wolfson board in June 1966 Bundy declared Ford's unambiguous support for the project and got Leonard Wolfson to confirm the donation of £1.5 million he had discussed with Berlin, at which point everyone around the table had the pleasure of seeing Zuckerman gather up his papers and storm out like the 'moustachioed villain of a melodrama'.[15]

Isaiah Berlin now had all the money he needed to build his new institution, which was renamed Wolfson College in recognition of its British benefactors. Thus someone who had previously demonstrated no great interest in architecture – music, art, ideas, politics and gossip were much more his thing – suddenly found he'd become an architectural honeypot in possession of a purse of £3 million and a prestigious programme. Architects came swarming.

Leading the charge was Philip Johnson: 'I read by the public prints as well as hearing from Jayne Wrightsman that Wolfson College is going to become a reality', he wrote on 13 July 1966. 'I am wondering if you still have in mind talking the project over with me. I still would consider it the greatest honour of my career to be able to work with you, and I can come to England to see you any time.'[16]

The two had met in 1944, during Berlin's time with the British diplomatic service in Washington DC. Though they were firm friends, Berlin still had some reservations (perhaps understandable, given Johnson's dalliances with Nazism in the 1930s). 'He is a great man of a kind, of course', he confided to another friend, 'but I feel slightly nervous about him'.[17] All the same, he wrote back to schedule a meeting for 17 September 1966, taking the opportunity to warn Johnson against 'fearful difficulties about building licences, opposition to "foreign" architects; colleges are democracies in deed as well as word, and my colleagues are most jealous of their rights'.[18] Unperturbed, Johnson replied within the week, 'I am not a bit worried about the local architect question. Of course it would be a joint venture with a distinguished British firm, such as Basil Spence, Hugh Casson or James Cubitt. That will be a political question we can settle when we meet.'[19]

Berlin was not so optimistic. In a letter of 18 August to Lionel Robbins he wrote: 'Here I sit with my mountain of gold, brooding about an architect. I wish English architects were better. If a foreign one is invited to build Wolfson College, what fearful obloquy will be heaped again upon my poor old head. And yet, I suppose, one must think about absolute values, posterity, etc.'[20] Quietly, he pursued his own enquiries – later that month he was going to Paraggi, where he hoped, through introductions made by the historian Bruno Zevi, to meet some Italian architects. He also sent a note to Kenzo Tange in Tokyo.

Both of his benefactors, the Wolfsons as well as Mac Bundy, also sent him suggestions for architects. While the former's were 'not v interesting', Bundy forwarded him a note from Kevin Roche – with whom he'd worked on the new Ford Foundation headquarters in Manhattan – assessing the English scene. The assessment was somewhat gloomy. Other than two established practices, Alison and Peter Smithson and James Stirling ('unquestionably the most talented designer working in England today'), and two younger architects, Colin St John Wilson and Patrick Hodgkinson, 'I do not know of any other English architects that I would care to recommend to you', Roche wrote.[21]

The master of Trinity College Oxford also chipped in with a suggestion: Robert Maguire and Keith Murray, the architects of a recent addition to his own college. But Berlin was not so easily swayed. Another new Oxford college, the starkly contemporary St Catherine's (St Catz), designed by the Danish architect Arne Jacobsen, had won a great deal of praise, but Berlin remained unconvinced. Writing to Yakov Talmon on 7 September 1966, he asked:

Tell me, have you seen a single modern building built in England in the last 20 or 30 years or even longer which caught your imagination and made you think that it was not merely not ugly, or not unsatisfactory, but positively beautiful, noble, thoroughly worthy? St Catherine's is the only building that is even a candidate for such a status in Oxford, and that I feel [is] a positive, full, powerful answer to a question, but the wrong one … for it is certainly a building with a strong and definite personality, and not simply a feeble compromise between styles, or a piece of half-hearted imitation of the modern. Nevertheless, I think it ugly, and even repellent, as one often does with powerful, positive personalities which one cannot stomach.[22]

To Mac Bundy that same week he went on to complain that 'my colleagues write me cautious letters about someone interested in domestic architecture, and not merely great monuments: I feel they are simply humouring the old man – I am obviously some empyrean with thoughts of Philip Johnson and Mr Tange, whereas they are thinking more practical and more homebound thoughts which in the end will prevail. I rather hope not.'[23] And to one such colleague, H B Parry, he wrote:

I feel that with this large sum of money at our disposal, and so marvellous a site – it would be as well not to make too much haste: we have the opportunity of putting up a better building than any other educational institution has yet done; it would be a source of pride and prestige to us as no other; would it not be an excellent thing if we could rise above the merely inoffensive, decent, competent, and ultimately conventional, into something as original as St Catherine's, but more beautiful and more pleasing to us all – or as many of us as take a genuine interest in these matters.[24]

Though beset at this point by solicitous architects, Berlin continued his independent investigations. With his meeting with Philip Johnson now imminent he reached out to a friend at Harvard, the magisterial Elliott Perkins:

What would you recommend in the way of an architect for Wolfson College? Patriotic considerations apart … have you a view about Philip Johnson? Or anyone who has built at Harvard? I have a feeling that our views as to what might be desirable, neither pure pastiche, nor brutal modern just for the sake of it, might well coincide. Our architects seem to me to be conscientious imitators, who have no originality of vision, or anything else whatever. I wonder if this hideously unpatriotic sentiment is merely the product of a certain lack of visual aesthetic, which I acknowledge myself to have. Or alternatively is the truth.[25]

Three days after sharing his doubts with Perkins, Berlin would send a letter that prompted a decisive turn in his search. 'May I presume on a very slight acquaintance to ask you for a very considerable favour?', he wrote to Nikolaus Pevsner, then at the height of his reputation as Britain's foremost architectural historian.[26] Though their acquaintance might have been 'slight', Pevsner and Berlin had a surprising amount in common: both were academically accomplished from an early age, both were exiles who would infiltrate the heart of the British academic establishment. While Berlin defined and defended the ideas upon which the country's liberal tradition rested, Pevsner, through his Buildings of England series, defined and documented its architecture. But there were marked differences in their personal circumstances. Berlin was an indulged only surviving child; Pevsner spent his youth in the shadow of his more charismatic older brother. Berlin did not marry until he was past 30, and then married into wealth. Pevsner married his wife, Lola, before entering college, and supported two children through his studies. Berlin arrived in England as a child, won a scholarship to Oxford and in 1932 became the first Jewish fellow of All Souls. Pevsner came to England in 1933 as a last resort, after his budding career was cut short by Nazi anti-Semitic laws. While Berlin spent weekends with the Rothschilds, researched Marx and debated analytical philosophy in his rooms overlooking the Radcliffe Camera at All Souls, Pevsner lived as a refugee, eating packed lunches in Regent's Park and walking 10km a day to save on bus fares – he had other priorities, needing to raise the money to bring his family over from Germany. Yet it did not take long for Pevsner to establish his reputation in Britain with his 1936 survey history *The Pioneers of Modern Design*, a relatively brief account that presented modernism as the culmination of a progression as inevitable as that from the carriage to the car – a new paradigm that would endure 'as long as this is the world and these are its ambitions and problems'.[27]

When Berlin wrote to Pevsner for advice he expressed his dread of the kind of RIBA competition that had 'led to Churchill College, which does not seem to me (I only hope you agree!) a very fortunate example of contemporary British taste'.[28] He confessed that he was 'thrilled' by Kenzo Tange and mentioned that Philip Johnson was coming to meet him. While Oxford's postwar buildings 'varied in quality', he said, none of them seemed to him of 'overwhelming excellence'. 'A young genius would be very nice – not perhaps easily found.'[29]

Pevsner took a while to formulate his reply. In the meantime Elliott Perkins wrote back to relay rumblings of discontent from the other side of the Atlantic. Reporting on the efforts of Harvard president Nathan N Pusey, he quoted H M Jones's verdict: '"He found Cambridge harmonious, and left it *moderne*". The tasteless bastard.'[30] He warned Berlin to avoid towers: Harvard's 'Leverett Towers were built "high rise" as a matter of principle, and they have proved to be inimical to the growth of a sense of community'.[31] He had to admit, however, that Saarinen had done a good job at Yale.

On Berlin's next trip to New York at the end of September 1966 he and his wife Aline had dinner at the Blackstone Hotel with Mac Bundy. He also had lunch with Kidder Smith at the Century Club, who told him 'Pevsner's a very great friend ... but a man of very poor judgement. They all say this about each other, without fail. It is a strange world', Berlin reported to his vice president and bursar, Michael Brock.[32] Kidder Smith even suggested he host an architectural competition, but Berlin was reluctant to relinquish control of the process. If it came to that, he told Brock, 'I would have to see' that not just Pevsner but J M Richards and even the endorsement of the RIBA 'could be easily outvoted'.[33]

On 18 October 1966, more than a month after Berlin's initial approach, Pevsner finally wrote back. He made it quite clear that he was not impressed with Berlin's candidates:

You say 'worthy', and I agree. You say 'Philip Johnson', and I do not agree. You say 'Kenzo Tange', and I emphatically do not agree. Philip could be guided. He has a protean character, intent on surprising his public by ever-unexpected turns of style, but he is ready to accept a client's character and wishes, if they are unequivocally expressed. Kenzo Tange is much too strong to be guided and his style would, to my way of thinking, be a disaster in Oxford.[34]

Pevsner naturally had some less wilful characters in mind: the English architects Powell & Moya, as well as the Dane, Arne Jacobsen, and the American, Gordon Bunshaft. 'You will see from this that what I am trying to dissuade you from is a style which I consider too personal for collegiate buildings. For a college, Pevsner said, 'nothing sensational should be permitted'.[35] Noting his displeasure with Ronchamp and Chandigarh, he also advised against what he saw as England's Corbusian imitators, Denys Lasdun and Leslie Martin. As his one wildcard 'genius', he threw in Charles Eames: 'He has never built a big building, and he might be helpless at the practical tasks, but he would, I am sure, love to design for Oxford, and would have a lot of feeling for an Oxford college.'[36]

At the beginning of November 1966 Berlin dutifully drew up his first list of possible English architects, complete with their ages. While there was no Powell & Moya or Leslie Martin on the list, it did include Alison and Peter Smithson (42 years of age), James Stirling (43), Brian Henderson (40), William Howell (40) and Alan Fletcher & Colin Forbes (45). Pevsner's disapproval notwithstanding, he scheduled a meeting with Tange in New York on 20 November. On the same trip, with Jack Hexter, he arranged tours of Harvard and Yale, as well as meetings with I M Pei and Paul Rudolph. It was Tange, however, who inspired the most admiration. In a letter after their meeting Berlin wrote:

This is only to say how much I enjoyed our luncheon – that I shall do nothing until you come to England toward the end of January or the beginning of February, no matter what forces I have to hold off, and if there is anything in England that I can possibly do for you I shall be glad to do it.

An architectural masterpiece is something that England has not been favoured with for at least half a century, and although masterpieces do not come about by being deliberately aimed at as such – poets must not set out to be poets only to write poetry – architects cannot set out to be geniuses only to build buildings – yet you will know without my saying it how wonderful it would be if this came about.'[37]

On this trip to the US Berlin also discovered that 'all the architecture experts, architects, etc are violently anti-Pevsner, & regard him as an erudite pedant, with no knowledge of, or feeling for, contemporary art of any kind. So where are we?', he wrote to Michael Brock on 11 November. Turning to Noel Annan, at the time provost of University College London, Berlin expanded on his complaints, 'I have now had a letter from Pevsner denouncing more or less all modern architects except Jacobsen, whose building in Oxford I think pretty hideous.'[38]

But in replying to Pevsner himself that same day, 11 November, he chose a more diplomatic tack, 'I see that you have strong views on this matter, and am duly influenced by them... I see that perhaps an obstinate, uncompromising piece of Japanese-Kahn-influenced design might be appallingly dissonant in Oxford'.[39] At the same time he admitted to a new interest in Gordon Bunshaft and said that he planned to see his Hartford Life Insurance building. ('Am I to avert my eye from the Beinecke Library at Yale? I suppose so.')[40] However, he refused to take any further Pevsner's suggestion of Charles Eames, insisting he no longer built anything,[41] and most of all took issue with Pevsner's perception that he was inspired by brutalist architecture, 'the bleak and the brutal, eg, the new Whitney Museum in New York, in which Breuer glowers very menacingly over the public'.[42] Still, he had to admit, he was drawn to drama: 'So the difference between us is not great; it is only that I still feel a certain Drang towards those, to me, very thrilling photographs of Tange's cathedral in Japan, irrelevant as this may turn out to be.' [43]

Anyway, that is what Berlin told Pevsner. What he told the economist Lord Kahn was that the moment he mentioned an architect he got 'a letter from some central authority like ... Pevsner saying, "I have heard that you are thinking of a Japanese architect – no greater tragedy could befall England – I should regard this a disaster of the first magnitude and shall spare no effort in etc, etc".'[44]

Berlin continued his tour of America. He had dinner with the head of the National Gallery and his wife, who, just back from Japan, raved about Tange.[45] He went to Yale, where he found Rudolph very 'brutal',[46] was impressed by his meeting with Roche, but 'contrary to all advice I liked the Beinecke Library much more than anything by Rudolph (or even Johnson)'.[47] He visited the new Metropolitan Opera House, designed by Wallace Harrison, a 'disappointment both to those who believe in the most bleak modern architecture (which is meant to attack the observer and force him into the

consciousness of the ferocious forces abroad to break through his philistine crust – this is a conception behind the architecture of Mr Rudolph and Breuer) and those who really like Corinthian pillars and sweetness and elegance. It is neither one thing nor the other, and much regretted by many persons.'[48] And he went to Cambridge, MA 'to inspect the labours of Aalto, Sert, Pei, etc'.[49] He went to see I M Pei, who sent him a postcard to say that he'd enjoyed their meeting and that if he did hold a competition, he should be sure to include Stirling and van Eyck.[50]

The pace of correspondence with Pevsner was also hotting up, for the 'central authority' had decided the time was ripe to push the case for Arne Jacobsen. 'To enter St Catherine's', Pevsner wrote to Berlin on 15 November 1966, is to find yourself in heavenly peace, and this is the mood I think a college should convey'.[51] For Berlin this seems to have been the final straw, even if to Pevsner he maintained but a small protest: 'I love the master of St Catherine's; and I like its fellows particularly; about the building itself I do not think I agree, but this need not divide us about the notion of the function of a college – heavenly peace is quite right'.[52] To his colleagues he let rip: 'I have now had a letter from Pevsner saying that he regards St Catherine's as by far the best building in Oxford, and "a haven of heavenly peace" or something to that effect, complaining that he has not had an answer to his letter to me – which I have now in fact answered – it took a month to reach me somehow – and wondering whether I do not agree with him that St Catherine's is a marvellous masterpiece … if St Catherine's is his ideal college, and he more or less says so, he is not the man for us. About that I am now quite clear.'[53] From now on, Berlin concluded, he would continue to correspond cordially with Pevsner, but would ignore his opinions: 'no matter how great an authority on the history of architecture he is, his own taste is deplorable'.[54]

More sure now of his own architectural tastes and predilections, by 22 November 1966 Berlin had a draft shortlist for his invited competition: 'Bunshaft, Roche, Tange, Pei, Johnson and any three English architects you like. My God, we should have to pack the jury', he told Michael Brock.[55] He continued to resist the advances of the British architectural establishment, demurring when pressed by Wolfson to meet Lord Esher, president of the RIBA: 'I wish to avoid this for obvious reasons'.[56] He also failed to rendezvous with Philip Johnson, who nevertheless helpfully sent him at the end of December a plot plan of Wolfson College and suggested 'if you are looking for a "far out" architect', then visit Jim Stirling's buildings at Leicester and Cambridge.[57]

Barely two weeks after Berlin had decried Pevsner's 'deplorable taste', he seems to have had a sudden change of heart. 'This will give you a clearer indication of my views', Pevsner had said when he sent Berlin the text of a talk, the 'Anti-Pioneers', that he had just broadcast on the BBC.[58] In his lecture, Pevsner had denounced a new trend of 'expressionism,' calling for a return to orthodoxy: 'to let forms detract from function is a sin, today as 30 years ago, however thrilling the forms – a sin against the users, committed for the sake of self-display of the architect'.[59] And he provided a roll-call of 'sinners', among them Saarinen and Bunshaft in America, Utzon in Sydney ('I want my emotions to be created … in the opera house by the power of music – not by the architect's mood'[60]) and Tange in Japan.

Berlin responded to 'Anti-Pioneers' with enthusiasm:

I read it with absolute fascination and think that it is a most brilliant piece with which (for what that is worth, and it is worth almost nothing) I agree entirely in the sense that my whole natural penchant is towards the permanent symmetries of the Natural Law – and not towards expressionism, wild individual vagaries however exciting and overwhelming in the short run – deviations which in the end become not only superseded, but seem mere meretricious self-indulgence of a trivial kind to the stern critics of the future.[61]

Where Berlin had sent Pevsner kind words before, only to complain bitterly behind his back, this time the conversion seemed genuine. No more disparaging comments about Pevsner emerged. This may have been a matter of collegiate etiquette, too, for when Berlin returned to Oxford in February 1967 he learned that Pevsner would be one of his peers, as Slade Professor for 1968–69.

At the outset of his search Berlin had been determined not to 'be got down by difficulties – passions for compromise'.[62] He had dreamed of commissioning Tange to build something that would be 'a source of pride and prestige to us as no other'.[63] But more and more he had to face up to the logistical difficulties this would entail: 'is it possible to have an architect who lives in Tokyo, who will never come here, so that the work will be in the hands of some remote British agent?… It all is very worrying.'[64] At the end of February 1967 he wrote to Pevsner: 'This, if ever, is the time when I ought to write Tange, inviting him to come. I have not written, and shall, I suspect, not write. Verb. Sap.'[65] Tange was off the list.

That same month he made plans, reluctantly, to go and see the new British universities for himself:

For am I not bound to look at all modern academic buildings in England, praised extravagantly by our architects, commended in the press, awarded prizes for their beauty, originality, appropriateness, conduciveness to study and contemplation, and, as a rule, of an aggressive bleakness and hideousness which few other modern buildings – in America, France, Finland, Brazil, wherever modern buildings are – can match? Why is it that we have not one architect of first class distinction – only men of second-rate order, of various degrees? Do you admire Coventry Cathedral? The Royal College of Physicians in Regents Park? The new Times Building (& do you know Mr Rees-Mogg? I shd be deeply interested in your view of him. What is thought in Oxford I know) the universities of Sussex, Essex, East Anglia, Warwick, York, etc, etc?[66]

Wryly, he then imagined their progress as some kind of Pickwickian farce:

To all of which my colleagues and I, in some comical vehicle, will be bound during the next ten days or so, like the journeys of the Pickwick Club: up & down the land we go, entertained by vice-chancellors and bursars, wearily trudging from building to building, with mechanical praise on our lips for the brutal looking curves of concrete stained by rain in great ugly streaks, for the tiny bedsitting rooms designed to punish their inhabitants by the University Grants Committee: admiring the freedom with which sexes, colours, ages mix in some: & admiring equally the rigid walls between these same groups imposed in others. I must stop. This is like a piece of pseudo-Nicolson prose written to be published. I am sorry. But that is where I shall be on the 8th March & for weeks & weeks & weeks.[67]

Yet the tour was not the complete rout Berlin had anticipated. In Cambridge he found the new Peterhouse College underwhelming, but was taken with Powell & Moya's Cripps Building at St John's: 'It seems to me that they are the best British architects now working', he wrote to the historian Hugh Brogan, then a fellow at St John's. 'If you know how much your building cost per square foot – that is how I think now – I should be very grateful indeed.'[68]

In March 1967 John Summerson wrote to recommend both Peter Smithson, 'the only man of genius in architecture today', and Denys Lasdun.[69] Berlin wrote back to say a source he would not name had complained about the Smithsons' 'interior arrangements most severely... Dare I put up a beautiful shell – a work of art – or at least be responsible for it and leave later generations to curse and reform? Perhaps I dare.'[70] And he found Lasdun's University of East Anglia, in which he had spent a night, too 'strong' – 'It is a magnificent building, menacing, powerful, with great battlements and deep dark staircases leading to dungeons; huge gunwales directed on to invaders from the valleys all round.'[71]

On 4 April 1967 Berlin was travelling again, this time with Stephen Staples, who took him on a tour of the Montreal Expo before it opened to the public. Berlin offered a potted review of the experience in a letter to George Ignatieff, the noted Russian-Canadian diplomat (and father of his future biographer, Michael Ignatieff). He was not keen on Moshe Safdie's Habitat: 'The dwelling places by that Israeli architect seemed to some bold, hideous and a token of what is to come – the whole world will probably go like this in about 20 years' time so we must learn to live with it, though you and I, I daresay, never will learn.'[72] He did like Frei Otto's pavilion – but Otto was disqualified on account of his nationality: 'I fear we cannot employ a German. We would run into too many snags.'[73] Buckminster Fuller's geodesic US pavilion was deemed quite appealing – 'a sphere composed of other smaller bubble-like spheres, very gay and arresting' – though it was 'not frightfully useful from our point of view.'[74] But both the British and the French pavilions proved hugely disappointing: 'a huge Union Jack on top staring at a very showy French building opposite – the competition for the soul of Canada is obvious.'[75]

Berlin's next site visits took him to Finland, on the advice of Irwin Miller, 'who thinks that Aalto is preferable to any American architect',[76] and contrary to the advice of J M Richards, who thought Aalto 'a great man', but too old. Richards suggested younger Finnish firms – Kaija & Heikki Siren and Aarno Ruusuvuori – but also put Powell & Moya at the top of his list of recommendations.[77]

On 4 May 1967, a day after his return from Helsinki, Berlin then produced his final wish list: Alvar Aalto, Heikki Siren, Philip Johnson, Gordon Bunshaft, Kevin Roche, Powell & Moya and Ahrends, Burton & Koralek. On 11 May, Berlin told *The Times* art critic John Russell 'the hour for choosing an architect draws near'[78] – though he still had time to fit in one last quick architectural day-trip to Newcastle on 15 May.

By 26 May 1967 everything was about to come to the boil. But to say that Berlin was overbrimming with excitement would be an exaggeration. Writing to the Harvard history professor Myron P Gilmore, he explained:

I expect the result will be anti-climactic, in some way. At present we are vacillating between one American, two British and a Finn; none of them are great masters. The great master Aalto would be ready to build for us, but he is 70, and in Finland, which we visited, it is constantly whispered that he is not any longer in the top of his form, that he is not always sober (so we are told, but do not repeat this – it is plainly libellous) and he is obviously highly dictatorial, unapproachable, and we would not get in a word edgewise, and so while we might get a distinguished building, the comforts of the inhabitants within would surely be sacrificed (as if they are in the graduate buildings at MIT).[79]

At this point Berlin seems to have entirely given up his aspirations of working with an architect of genius:

As for me, I shall get there in July, I suppose, if I can get away from the chosen architect and the beginnings of a lifelong association with someone whom initially I am sure I shall not be too enthusiastic about; it is a sad situation; why cannot one find a man in whom one can wholly believe, if only at the beginning, even if only to be disappointed at the end, which almost invariably happens? Apart from men over 70, what architects are there? Whose academic buildings one could possibly anticipate with excitement? Certainly not Mr Pei, nor Philip Johnson, nor Rudolph, nor Breuer. I like Mr Bunshaft's Beinecke Library in Yale, and yet when one looks at his banks and his galleries, they are so chilling, impersonal, machine-made, even though marvellously efficient, elegant and peaceful. It is all very terrible.[80]

Terrible or not, the final decision – for Powell & Moya – was made on 1 June 1967. Of those involved in the search, only Frank Jessup seemed reluctant to agree. Recognising his resistance – 'After all the thought of P&M was probably, at times, literally unbearable to you'[81] – Berlin nevertheless asked him to serve on the building committee. Jessup agreed: 'Who knows, P&M may produce a good building – there must be a first time – although I did like their 1951 Skylon!'[82]

Berlin's correspondence with Leonard Wolfson makes it clear that the architects' nationality was a key factor here: 'this is only to tell you that after much gestation, to-ing and fro-ing, journeys to Finland and elsewhere, we, ie, the college, have settled on a British architect – we knew this would give you much satisfaction, and this was not an inconsiderable factor, believe me, in determining the choice'.[83]

Berlin then made peace with Pevsner, Bunshaft and Johnson, offering each one of them in turn a different account of how the selection was made. With Pevsner he characterised the outcome as a predictable failure of democracy: 'Large bodies, democratically governed by plebiscite, always tend to seek safety so we decided precisely as you predicted we would'.[84] His Bunshaft story expanded on this theme: 'We are, in the end, for better and for worse, a democracy ... not the best organisation for the encouragement of original works of genius – as they are found in Florence, Venice and elsewhere'.[85] And he offered a personal note of apology: 'I feel like someone who was expecting champagne, and found a pleasant glass of cider awaiting him; but I do beg you not to reveal the contents of this letter to anyone, for why should the architects in fact selected be subjected to these perhaps altogether unjust pleasantries. They are gifted people, and will doubtless do an excellent job. Still, I wish it had been you – so do the committee: most of them were won over by your buildings and your personality.'

Writing to Philip Johnson, he struck a similarly despondent tone: 'You were perfectly right – only too right – I say with gloomy exultation in human mediocrity – rather like De Maistre. In the end, as you correctly predicted, the English won, slowly, persistently, and by attrition. There were some objective factors which could be regarded as not irrelevant – the fact that we are less rich than we thought we should be; that the buildings have to go up quickly, and with as little expense as is compatible with not having low-priced University Grants Commission pre-fabs – that grim, ever-growing chain of barracks that our modern universities are slowly becoming.'[86] For Johnson, Berlin marshalled a whole list of culprits: the budget and the British, the RIBA, the Wolfsons, architectural journalists: 'If we had unlimited resources, or at least as much money as even St Catherine's had, five or six years ago, if the Ford Foundation

were not so frightened of being dragged into this as a form of American pressure – which one can understand – if taste, imagination, courage, could be made to prevail over the great craving for mediocrity and philistinism by which this country is consumed, things might have been otherwise. But things are what they are, and the consequences will be what they will be, as Bishop Butler once said, so why should we seek to be deceived?'[87]

An 'excessive anxiety to please' was how Isaiah Berlin judged his own greatest weakness.[88] And in choosing the architect for his new college, Berlin's concern with pleasing others seems to have come at the expense of pleasing himself. 'I see myself choosing some very safe and unenterprising figure and being rightly condemned for it', he wrote to Stephen Spender on the eve of making the decision, 'but all the unsafe enterprising figures seem to be no good for one reason or another. It is rather like preferring Graham Greene or Angus Wilson to say Ginsberg or *The Naked Lunch*.'[89] And yet at the same time, Berlin's disappointment with his first and last architectural commission could be attributed not only to his own inherent desire to please, but ultimately to an inherent weakness of postwar architectural practice, even of the entire species of architects. Berlin's summary of the current scene serves as an *apologia* for the building of the new Wolfson College: 'we are in a curious universe filled with hatred and fanaticism. In the old days there were two schools: the Bauhaus, all of whose admirers loved one another, and the Corinthian Pillar school, all of whom in their turn loved one another and that was that, and you could choose. Now everybody hates everyone and there are no accepted values. Except that Tange is acclaimed by everyone other than Pevsner.' [90]

1. Isaiah Berlin to Francine Gray, 16 December 1966. The Berlin correspondence referred to in this essay is held in the Catalogue of the Papers of Sir Isaiah Berlin, 1897–1998, with some family papers, 1903–72, Bodleian Library, University of Oxford.
2. Michael Ignatieff, *Isaiah Berlin: A Life* (New York, NY: Metropolitan Books, 1998), p 3. The 'speed of light' comparison was made by the poet Joseph Brodsky.
3. *Ibid*, p 7.
4. *Ibid*, p 268.
5. Isaiah Berlin to Ronald Dworkin, 23 December 1966.
6. Isaiah Berlin to Jack Hexter, 14 November 1966.
7. This was the 'Robbins principle', as formulated in *Higher Education: Report of the Committee appointed by the Prime Minister under the Chairmanship of Lord Robbins 1961–63 (London: HMSO, 1963).*
8. In 1946 Oxford had 6,680 undergraduates, whereas in the academic year beginning 1965 it had 9,800, an increase of 42 per cent, from 'Notes on the Post-War Growth of British Universities', author unknown, 1966. Post-graduate numbers increased by about the same percentage between 1961 and 1965 alone.
9. Michael Ignatieff, *op cit*, p 260.
10. *Ibid*, p 261.
11. *Ibid*, p 260.
12. *Ibid*, p 263.
13. Noel Annan, *The Dons: Mentors, Eccentrics and Geniuses* (Chicago, IL: University of Chicago Press, 1999), p 227.
14. Michael Ignatieff, *op cit*, p 263.
15. *Ibid*, p 265. Berlin's words again.
16. Philip Johnson to Isaiah Berlin, 13 July 1966.
17. Isaiah Berlin to Lionel Robbins, 3 August 1966.
18. Isaiah Berlin to Philip Johnson, 4 August 1966.
19. Philip Johnson to Isaiah Berlin, 11 August 1966.
20. Isaiah Berlin to Lionel Robbins, 18 August 1966.
21. Mac Bundy to Isaiah Berlin, 19 August 1966. The Bundy correspondence referred to in this text is held in the McGeorge Bundy Personal Papers, John F Kennedy Presidential Library, Boston.
22. Isaiah Berlin to Yakov Talmon, 7 September 1966.
23. Isaiah Berlin to Mac Bundy, 2 September 1966.
24. Isaiah Berlin to H B ('James') Parry, 5 September 1966.
25. Isaiah Berlin to Elliott Perkins, 6 September 1966.
26. Isaiah Berlin to Nikolaus Pevsner, 9 September 1966.
27. Nikolaus Pevsner, *The Pioneers of Modern Design* (London: Faber and Faber, 1936), p 163.
28. Isaiah Berlin to Nikolaus Pevsner, 9 September 1966.
29. Isaiah Berlin to Nikolaus Pevsner, 20 September 1966.
30. Elliott Perkins to Isaiah Berlin, 16 September 1966.
31. *Ibid*.
32. Isaiah Berlin to Michael Brock, 5 October 1966.
33. *Ibid*.
34. Nikolaus Pevsner to Isaiah Berlin, 18 October 1966. The papers of Nikolaus Pevsner are held in the Getty Research Institute, Los Angeles, California.
35. *Ibid*.
36. *Ibid*.
37. Isaiah Berlin to Kenzo Tange, 11 August 1966.
38. Isaiah Berlin to Noel Annan, 11 November 1966.
39. Isaiah Berlin to Nikolaus Pevsner, 11 November 1966.
40. *Ibid*.
41. He would be more disparaging in a letter to Michael Brock on 18 November 1966, asserting that Eames' furniture was 'of a conventionality difficult to exaggerate' and, as for buildings, 'what he has built proved terrible (except for his own little house)'.
42. Isaiah Berlin to Nikolaus Pevsner, 11 November 1966.
43. *Ibid*.
44. Isaiah Berlin to Lord Kahn, 16 November 1966. Kahn was bursar at King's College, Cambridge.
45. Isaiah Berlin to Michael Brock, 18 November 1966.
46. Isaiah Berlin to Frank Jessup, 29 November 1966.
47. Isaiah Berlin to Jack Hexter, 22 November 1966.
48. Isaiah Berlin to Garrett Drogheda, 2 December 1966.
49. Isaiah Berlin to Michael Brock, 29 November 1966.
50. IM Pei to Isaiah Berlin, 18 November 1966.
51. Nikolaus Pevsner to Isaiah Berlin, 15 November 1966.
52. Isaiah Berlin to Nikolaus Pevsner, 23 November 1966.
53. Isaiah Berlin to Michael Brock, 22 November 1966.
54. *Ibid*.
55. *Ibid*.
56. Isaiah Berlin to Michael Brock, 28 December 1966
57. Philip Johnson to Isaiah Berlin, 28 December 1966.
58. Nikolaus Pevsner to Isaiah Berlin, 5 December 1966.
59. Nikolaus Pevsner, 'The Anti-Pioneers' in *Pevsner on Art and Architecture*, p 303. The talk was first published in *The Listener.*
60. *Ibid*, 304.
61. Isaiah Berlin to Nikolaus Pevsner, 9 December 1966.
62. Isaiah Berlin to Michael Brock, 27 August 1966.
63. Isaiah Berlin to HB Parry, 5 September 1966.
64. Isaiah Berlin to his private secretary Pat Utechin, 22 February 1967.
65. Isaiah Berlin to Nikolaus Pevsner, 20 February 1967.
66. Isaiah Berlin to Ava Waverly, 24 February 1967.
67. *Ibid*.
68. Isaiah Berlin to Hugh Brogan, 28 February 1967.
69. John Summerson to Isaiah Berlin, 21 March 1967.
70. Isaiah Berlin to John Summerson, 30 March 1967.
71. *Ibid*.
72. Isaiah Berlin to George Ignatieff, 4 April 1967.
73. Isaiah Berlin to F Jessup, 4 April 1967.
74. *Ibid*.
75. *Ibid*.
76. Isaiah Berlin to Mac Bundy, 9 March 1967.
77. JM Richards to Isaiah Berlin, 13 March 1967.
78. Isaiah Berlin to John Russell, 11 May 1967.
79. Isaiah Berlin to Myron P Gilmore, 26 May 1967.
80. *Ibid*.
81. Isaiah Berlin to Frank Jessup, 1 June 1967.
82. Frank Jessup to Isaiah Berlin, 7 June 1967.
83. Isaiah Berlin to Leonard Wolfson, 5 June 1967.
84. Isaiah Berlin to Nikolaus Pevsner, 7 June 1967.
85. Isaiah Berlin to Gordon Bunshaft, 7 June 1967.
86. Isaiah Berlin to Philip Johnson, 7 June 1967.
87. *Ibid*.
88. Nicholas Shakespeare, 'Two Books on Isaiah Berlin: Review', *Daily Telegraph*, 17 July 2009.
89. Isaiah Berlin to Stephen Spender, 30 May 1967.
90. Isaiah Berlin to Michael Brock, 22 November 1966.



Alexander Brodsky *in conversation with* Thomas Weaver

The Russian artist and architect Alexander Brodsky lives in exactly the kind of space you would hope he would occupy – an apartment that used to be his father's studio in the attic of a pre-war tenement building close to the centre of Moscow. You enter by climbing the stairs that spiral around a central lift, and when you think you have reached the top you climb higher still, through a diminutive door that once only accessed a service hatch for the lift mechanism. This entrance opens out into a labyrinthine apartment packed full of bookcases, paintings, drawings and a large, seemingly immovable, etching press. Here Brodsky – known as Sasha to his friends – lives with his wife, Masha, and their daughter, also called Masha. His son, now studying art in New York, is another Sasha. Somehow appropriately, as you peer out over Moscow through windows just under the eaves of the building, you feel a bit like Noah in his ark, overseeing these pairs of Sashas and Mashas, while creaking and slightly swaying as if on the top of Mount Ararat.

Brodsky first made his name in the 1980s with a striking set of architectural etchings, produced in collaboration with his great friend Ilya Utkin. Over the last 30 years it is difficult to think of a more influential, more compelling set of architectural drawings, for Brodsky and Utkin not only reinvested Soviet design with all of the intelligence, history and humour it had lost over the previous half century, but they did so with images that were as original as they were engaging. These drawings would be exhibited all over the world, and their success led to a period when Brodsky lived and worked in the US. Back in his beloved Moscow since 2000, he has continued to work across the boundaries of art and architecture, completing a number of pavilions, interiors and galleries, while also exhibiting drawings and large relief models in his now signature unfired clay.

In person, there is something slightly elfin about Brodsky. He is small and smiling, and speaks softly and carefully in fluent English with a lilting Russian accent. He also has an incredible kind of magnetism – you feel yourself drawn to him, just as others in his studio so clearly are – fuelled by a strange combination of both ordinariness and otherworldliness. Brodsky must feel this too, for when we drove across Moscow to his apartment he noted that 'I always find it incredible that I can make this machine move'. In a wonderful portrait of his father, the younger Sasha Brodsky also captures the same qualities. Here Brodsky is depicted at his dining table, which he shares with his loyal dog, staring intently ahead, and in front of them is placed a simple wooden chopping board. In the ceiling above shines a light, illuminating the table, but also producing a kind of halo around his father's long face. Saint Brodsky at home with his dog.—*Thomas Weaver*

Sasha Brodsky, portrait of
Alexander Brodsky and his dog, 2014
Photograph Yuri Palmin
© Sasha Brodsky / courtesy Alexander Brodsky

TW *Alexander, I wanted to begin by asking you first about your father, Savva Brodsky, partly because in reading about your work and that of your contemporaries, it appears as if so many of you as artists and architects are the offspring of fathers and mothers, and sometimes even grandfathers and grandmothers, who were also artists and architects. But I also wanted to ask you about your dad because he seems so interesting. I've looked at some of the book illustrations he did for Russian editions of Victor Hugo's* Les Misérables*, Flaubert's* Madame Bovary*, a number of Shakespeare's plays and especially Cervantes'* Don Quixote*, which you have reproductions of here on the walls in your home – and they are fantastic. There also seem to be obvious visual parallels between your own work and his.*

AB My father was born in 1923 in a small, largely Jewish town called Gomel, now in Belarus. His father – my grandfather – was a dentist and his mother was a housewife, so in terms of our family the artistic influence only goes back one generation. When my father was still just a baby the family moved to Leningrad, which became a very special place for him. From a young age he was always drawing. He was a kind of virtuoso. He could draw anything. He was also ambitious. He once told me that when he was 12 or 13 he read a book on Michelangelo and decided then that he also wanted to be a sculptor. And so somehow he found a large piece of marble, which he put on a sledge and pulled home. Of course, he quickly discovered that sculpting marble was not so easy, and so the rough piece of stone just stayed in the family apartment as the base for a table.

TW *Did he enrol in art school?*

AB He was accepted into the Academy of Fine Arts in Leningrad, but things obviously changed with the start of the Second World War. His older brother was conscripted almost immediately and died on a battleship during the first days of the war. At 16 my father was old enough to enlist, but instead he was taken to a military factory where he worked all day and most of the nights on a metal lathe turning parts for the Russian *katyusha* rockets. He also found time to draw caricatures of his fellow workers – the old guys or young boys he was working alongside – and some of these were published in an in-house newspaper. The director of the factory noticed these cartoons and took my father under his wing, commissioning him to do some portraits of his wife. He also encouraged him to move to Moscow after the war and told him about the Moscow Architectural Institute. But of course, this period in the Soviet Union was extremely dangerous for a Jew. I'm sure you know about Stalin's purges. Both my father's parents were arrested in this period and sent to Lefortovo prison in Moscow. My father evaded arrest. He told me that in 1944 the application form for the Moscow Architectural Institute required him to state if any of his relatives had ever been arrested. For sure, if he had said yes, he too would have been imprisoned. So he lied, and got in.

TW *And did he ever practise?*

AB Immediately after graduating in 1949 he joined an office and completed a number of buildings. In particular, he built three theatres in Petrozavodsk, Karelia, close to the Finnish border, and they've all survived. The first one is a special favourite of mine. It was completed in 1955, the year of my birth, and was designed in neoclassical style – a style I very much like – and featured a number of large interior wall paintings, which he did himself, and on the facade he also produced a large relief.



TW *This must have been one of the last Soviet architectural projects to adopt neoclassicism, because when Khrushchev became Soviet premier in 1953 he famously outlawed it as a style and instead insisted only on utilitarian, prefabricated architecture.*

AB Well, yes, because of these changes my father eventually stopped being an architect, although there was a period when his two careers overlapped, not least when he designed a small museum for the writer Aleksandr Grin, in addition to taking on a commission to produce drawings for all of his books. Of course, he had been accepting illustration jobs ever since high school, but from the 1960s onwards working as a book illustrator was his only career.

TW *What was your home life like, growing up in Moscow in the 1950s and 1960s?*

AB The whole of my childhood was a very happy time. Russia was incredibly interesting in the mid-1950s, and by my calculation this was more or less the very midpoint of Soviet power. So I think of this period as one in which we looked both backwards and forwards.

TW *Did you have any siblings?*

AB No, I was an only child. I remember my mother once asked me if I wanted a brother or a sister. I just said I wanted a dog.

TW *And did your father work from home?*

AB He had his own space. Even before he met my mother he always had a talent for finding spaces of his own – he lived for a while in a 12m² room within a communal block, whereas my mother never had anything of her own, no space, not even a table. When I was very young we lived together in a small apartment, but when I was seven we moved into a larger two-bedroom flat inside a grand U-shaped building where each floor was arranged around a kind of endless corridor.

TW *Were you independent as a kid – exploring the block and the streets outside?*

AB All my friends and I played in the yard and we'd also venture out into the wider neighbourhood of Kitay-gorod, which is still my favourite part of Moscow, full of old monasteries and churches and with steeply sloping streets. But the block itself was also so interesting, with its long corridors and with each apartment packed full of different family members.

TW *So you experienced life in section – navigating in and out of your neighbours' apartments?*

AB In a way, yes. I remember there was a single kitchen at the end of the corridor. The toilets and bathroom were also placed along the corridor, and so everyone was endlessly moving in and out of their apartments. As kids we used to ride our bikes down these passages, squeezing against the sides of the walls when someone walked past carting buckets of water or a big pot of potatoes from the kitchen into their dining rooms. It was an amazing time. So many stories.

TW *At the same time you also discovered a talent for drawing.*

AB I was constantly drawing. My father actually made a portrait of me when I was three years old, sitting in a window painting. When I was 13 or 14, together with a friend, I entered a kind of specialist, artistic high school. In this period, the late 1960s, we were not really encouraged to look at the impressionists – you could see them in the Pushkin Museum, but imitating them in school was frowned upon. Instead, we were meant to follow nineteenth-century Russian painters like Ivan Shishkin, Ilya Repin or Vasily Surikov. Although these painters are very good artists, for us at the time it was all very boring. Besides, at school, you never want to do what you are told. And so naturally we

became passionate about the impressionists. My best friend at the time – and someone still very close to me – started following Cézanne, whereas I became obsessed with van Gogh. It wasn't long before our teachers pulled us aside and said, 'Careful Brodsky and Aleksandrov, you need to drop this, or else'. But of course, we didn't. And so they kicked my friend out. I got off with a warning – I think they were hoping my father would help them do some architectural work renovating the school buildings – but in the end I also decided to leave at the same time.

TW *Was that when you started to shift your allegiances from art to architecture?*

AB Leaving that school prompted lots of discussions with my father. He encouraged me to apply to the Moscow Architecture Institute, or MArkHI, where he had studied in the 1940s. I actually spent the next two years at a special preparatory school in Moscow – it was called Number 50 or just 'Architecture School' – where they primed you for entry into MArkHI, even if it wasn't especially good (we did some drawings and had classes in German). I then began my architectural studies aged 17, in 1972 – the single best year of the twentieth century.

TW *How so?*

AB It was the year I discovered girls, beer, the Beatles, flared jeans, long hair, breaking the rules. Architecture was secondary to all of these things.

TW *But did you want to be an architect?*

AB When I first entered I really didn't know. I liked the subject but I didn't ever want to work in a big bureaucratic office. I basically enrolled at MArkHI out of respect for my father – he had told me so many nice stories about his own architectural education. And I've always loved the late-eighteenth-century building the school occupied. It has a beautiful decorated facade, huge walls, grand staircases and a fountain in the middle which we would all sit around and smoke.

TW *What about the education you received there? I read somewhere about a number of your teachers at the time and they all seemed very interesting.*

AB I had fantastic teachers. When I was a student in the early 1970s there was still a large number of guys from the 1920s teaching there – people like Mikhail Turkus and Mikhail Barsch – basically all former constructivists. They were different people then, very old, but still incredibly strong. To think that I was communicating with the Russian avant-garde is amazing to me now, even if, of course, I didn't realise it at the time. Turkus, in particular, was wonderful. When I first started he was in his late 80s and still teaching – not just at MArkHI but also at Moscow's state technical school, VKhUTEMAS, where he himself had studied. The man was made of iron.

TW *The historian Catherine Cooke once wrote a piece about MArkHI in which she describes how in the 1950s Ivan Leonidov was working there as a workshop assistant – the great constructivist hero reduced to being a kind of lowly technician, almost unnoticed. And even if they were disregarded at the time, she argued that through the continued presence of people like Leonidov, and I guess Turkus and Barsch too, there was a sort of memory trace of the 1920s avant-garde still embedded in Russian schools in the 1950s, 60s and 70s.*

AB That's true. But it's funny thinking about this now, given the importance of constructivism today, because back then it was not fashionable at all. No one was interested in the avant-garde. Of course, we all knew about buildings like the Melnikov House, but no one would ever think of visiting it. It occupied some other planet entirely.



Savva Brodsky, illustrations from the Russian edition of Miguel Cervantes, *Don Quixote*, 1976

TW *But if you knew what the model was in terms of rock 'n' roll – the Beatles or the Rolling Stones – and if you knew what the model was in terms of how you should dress – your flares and your long hair – and generally the way you should behave with your friends and peers, what was the model you were encouraged to adopt architecturally?*

AB Officially it was some strange style that I can't really describe – a kind of architecture that was traditional yet somehow modernised by our professors, and with each brief reduced to a typology – for a club or a school or a theatre. In our first year, though, with Turkus, we only looked at classical Greek and Roman architecture – this famous old constructivist and avant-gardist teaching us how to draw Doric and Corinthian capitals, with precise little details, and then to wash over our lines with thousands of layers of almost transparent Chinese ink to get the required atmosphere and depth. We had to prepare this ink by scraping away at a dried block, and then thin it with different concentrations of water, producing lots of little pots of ink all in different gradations of black and grey. Only later were we allowed to use colour, and gouaches and more contemporary materials.

TW *What interests me about all of this is that in the west this Beaux-Arts model – because that's basically what it seems to be – was thrown out after the student protests in 1968. Of course, in the Soviet Union there was no 1968 moment. Khrushchev had actually killed off the Russian academy in the 1950s as part of his abandoning of what he saw as a decorative style, but to hear you now it seems that, actually, many aspects of the older neoclassical, Beaux-Arts educational system were still intact – not least that you learn first through technique; that you learn things incrementally as you develop the necessary skills; and that you study antiquity. And so to me it appears as if your education was actually really very good, and also, despite your fondness for misbehaving, you were a rather good and loyal student.*

AB I think that's right. And as you say, even if officially we were not encouraged to produce work with any form of ornament or classical detailing, like pediments, capitals and cornices, the school still based our education around the making of very careful studies of all of these things. We would go into the library and take out these priceless folios of eighteenth- and nineteenth-century French drawings and reproduce their techniques – hundreds and hundreds of wonderful drawings of Roman temples and *thermae*. We spent almost two years just copying these things. And only after mastering elevations and plans were we allowed to move onto perspective drawings. I remember doing one in particular, a very precise perspective of the Temple of Poseidon at Paestum. Through that drawing I learned to love the building. Many years later I went to visit the actual temple, just to see if it looked like my drawing. And of course, when I was standing there taking in its wonderful architecture I was thinking back to Turkus.

TW *But when did you switch from copying antiquity to more contemporary things?*

AB At the end of our second year. We did these kinds of Bauhaus exercises which were called Space Compositions, exploring different shapes and geometries. This was taught by another charismatic old teacher called Mikhail Barsch, who was part of the OSA constructivist group in the 1920s and who had designed the Moscow planetarium. He had actually taught

my father in the 1940s and the two of them remained close. But sadly he died a year later and so I moved into another group taught by Boris Barkhin, yet another amazing person, although from a younger generation. He was part of a famous family of architects – his father, Grigori Barkhin, was a noted constructivist who built the Izvestia newspaper building in 1927, and his brother was also an architect. Boris himself hadn't built much – his only noteworthy building is the Museum of Cosmonautics in Kaluga, the museum with all the *Sputniks* and samples of moon dust – but he was a great man and a really good teacher. Coincidentally, just yesterday I got a call from one of his former teaching assistants, who was a young guy then but is now an eminent professor at MArkHI. He had been going through his papers and had found a drawing I had done with Ilya Utkin and another friend – a kind of caricature of our professors – which was made into a card and given to Barkhin on his 70th birthday.

TW *So you were doing exactly the same kind of cartoons and satirical drawings as your father when he worked in the munitions factory?*

AB Yes. They were often just for parties or celebrations, or for posters advertising a particular event. Sometimes we pushed things too far, got too subversive, and they were censored, but lots of our drawings were used.

TW *And as you say, you did this with Ilya Utkin, who of course would become your great friend and collaborator. When did you two first meet?*

AB We met in 1970 when we were both just 15. Our parents had sent us to the same evening class, where we got extra tuition to prepare for the MArkHI entrance exam. The class was really popular because so many of its students were accepted into MArkHI. It was run by a very nice young architect, who must have been in his mid-30s at the time, very energetic, very intelligent, who taught us drawing, basic architectural composition and geometry. As the day of the exam drew closer he also taught us mathematics, physics, even literature. He was a kind of Renaissance Man. Ilya was in the same group as me and we immediately became friends. We liked the same things, and were just very comfortable in each other's company. Ilya's father was an architect too, and so was his maternal grandfather, who was the famous constructivist architect Georgy Wegman.

TW *After you got into MArkHI did you always work alongside Utkin?*

AB In the beginning we were assigned to different professors, but in the last two years, after I moved into Barkhin's group, we were in the same studio. Of course we had been working on drawings together ever since we first met, but in the lost two years we would often collaborate on projects. The first of them was for a large theatre competition, but we also managed to convince the school to allow us to submit a joint diploma project – it was for a kind of huge, crazy cultural centre located in the centre of Moscow.

TW *You graduated in 1978, but in order to work as an architect you then had to serve a three-year apprenticeship in an office, working on more pragmatic, technical details.*

AB The usual policy was that your school would decide which firm you had to apprentice with. But my father had a school friend from MArkHI who was running a big office, and it was agreed that Ilya and I would go there. It was a huge, 25-floor office, terribly boring, but our boss was very nice to us.

TW *What kind of jobs did you work on?*

AB We were part of a group called the Experimental Design Institute, although I never knew exactly what was so experimental about it. We specialised in working drawings for buildings where you watch something – so, theatres, cinemas, operas and large sports halls and stadiums. Other parts of the office produced a lot of sanatoriums and more civic buildings.

TW *As two young radicals did you advertise your radicalism or the disinterest you felt for the work you were doing?*

AB From the very beginning everyone in the office understood that we were only there because we were required to be. They also knew we wouldn't stay a day longer than we had to. Many of the older architects in the studio were actually very good designers, but they were also just workhorses, having lunch every day in one of the two cafeterias in the building and only ever talking about the moment when they could finally retire. It was depressing. As soon as the working day ended, Ilya and I would go out, drinking hard into the evenings. The next day we would often be dozing, working off our hangovers at our desks. Whenever anyone came up and asked something, the older guys next to us would say, 'Shhhh, the boys are sleeping.' And so in a sense it was also a bit of a family. They really liked us and we really liked them. Whenever someone was celebrating their 40th, 50th or 60th birthday, or when they retired, we would be asked to make cards for them, just as we had done for our professors at MArkHI.

TW *And then, just as you had promised, the moment you completed your three-year training and qualified as an architect, you quit the office. This would have been the early years of the 1980s – a moment, we are now told, when ten or so architectural groups in Moscow, featuring over 50 different young architects and designers, began to operate under the collective heading 'paper architecture', a name borrowed from a pejorative term used to describe certain, more obviously graphic, architectural projects in the 1920s, but which was now used to link a number of young architects all producing visually rich, highly speculative, even lyrical, architectural projects. Of course, among them was your own grouping, BR:UT (Brodsky–Utkin). I'm curious about whether paper architecture was actually a kind of fallacy, invented after the fact to give you all a singular identity, or whether you and your contemporaries in that period really were working within some bigger movement?*

AB There was really no movement at all – until after the fact when it was already finished. In reality, the whole thing happened quite spontaneously. As young architects, still studying or completing our training, we all wanted to make something fresh – not collective or institutional, and definitely not Soviet, but something personal. And then we suddenly discovered that there were a number of competitions set up by international architectural magazines that seemed to be asking for precisely this kind of material.

TW *But how did you hear about these competitions in the first place?*

AB The key man was Evgenii Ass, an architect and a kind of teacher who was a little older than us but really very important. Actually, throughout my life, in addition to the formal professors assigned to me, I have had a number of really influential informal teachers. Evgenii was certainly one of these, and was someone who taught me all about contemporary architecture, and why I should like certain architects, but so too was a man called Yuri Borzov, who was just two years older than me, and who philosophically became a very important influence on me. Yuri taught me how to understand dogs – which, for me, is something really crucial – but also primal things, like the relationships in nature between village and forest. I had met Yuri at MArkHI, and Evgenii too. When I was still a student, Evgenii got permission to host a weekly event in the school – I think it was a Thursday evening – when he would prepare a little lecture about contemporary western architecture and give us a kind of summary of what was happening in the architectural magazines. In the beginning only a handful of us would attend, but before long there would be 30 or so people in the room. Somehow Evgenii managed to smuggle into the Soviet Union copies of *Domus*, *Casabella*, *Architectural Design* and the Japanese magazines *JA* and *Shinkenchiku*, from which he made his own slides. I remember being especially crazy about those first big housing projects designed by Ricardo Bofill, and which I first saw through Evgenii's really bad slides. At the same time he also showed historical images – Piranesi, in particular – and so there was always this nice, slightly eclectic combination of things. But anyway, in his review of the magazines he would highlight the open competitions they were running – usually small format, only one or two pieces of paper required, all with nice topics.

TW *And so you entered these as early as the 1970s, while still a student?*

AB We desperately wanted to, but initially there were always obstacles to taking part. Either the school would refuse us permission or, if we went ahead anyway and produced our competition drawings, we couldn't get past the controls at the post office – at the time, if you wanted to mail anything abroad you had to go to the international post office, which meant that our entries would be opened and vetted. Typically we would then be told that we had to get 'special permission' to send our material, but later, even with the backing of the school, the mail would often be deliberately held back for a period, which of course meant we missed the competition deadlines. This went on for years. It was torture.

TW *But eventually the authorities must have relented because your entries began to get through. And in many ways, they were another kind of Beaux-Arts residue – drawings that included a plan, section, elevation, axonometric and a short text all on one piece of paper. They're a kind of hyper-efficient piece of nineteenth-century everything-ness.*

AB That was simply because of the competition rules – nearly all of them only asked for a single piece of paper – 60cm × 80cm – and no more than 100 words of explanation.

TW *Your own entries with Utkin also have wonderful titles:* Wandering Turtle*,* Villa Nautilus*,* Island of Stability*,* Dwelling House of Winnie-the-Pooh*,* Columbarium Habitable*, and my all-time favourite,* Ship of Fools, or a Wooden Skyscraper for the Jolly Company.

AB The title was always important, and we'd spend quite a bit of time trying to come up with one that we both liked. We also laboured over the text, and would often use an epigraph – usually a line from Pushkin or once a quote by Joseph Brodsky, whose writings were banned at the time. But the problem was that even when the Soviet authorities started to allow us to enter these competitions in the early 1980s our entries still had to get past some kind of stupid inspection by the Union of Architects. So we'd all bring our entries into the big lobby of the union building and spread them out across the floor. We tried to turn it into a nice celebration, because of course this was the first time we got to see what everyone else had come up with. A few inspectors would then review the drawings; some would be held back, others would get the go-ahead: 'Okay, you can now take them to the post office.' We'd then have a frantic session packing everything up, squeezing as many drawings into as few tubes as we could get away with, rolling them up as tightly as they would go. Someone would then be assigned to take them to the international post office – on the other side of the city – while the rest of us went out drinking, speculating on how we might do. It became a really nice tradition. After two and a half hours, the guy who went to the post office would return, always complaining about how long it took to cross the city and the length of the queue when he arrived. We would all toast his arrival and then drink some more.

TW *So you're entering all these competitions, but did you feel competitive?*

AB We desperately wanted to win. And we became even more desperate when in 1981 one of us actually did win – my good friend Mikhail Belov, who got first prize in a *Shinkenchiku* competition for a museum of the twentieth century. With the help of some friends he had somehow managed to smuggle his drawings out of the Soviet Union, uncensored and unapproved. His project was really nice, and for me it was an inspiration – not just that you could produce an interesting proposal and even manage to send it, but that you could actually win. The following year I was having a drink with Belov and he mentioned that *JA* magazine had just launched their own competition, for a crystal palace, and he encouraged me and Ilya to enter. That was the beginning.

TW *And you did enter, and you did win. The same year you also won a prize in a competition for a doll's house run by the English magazine* AD*, but it was the Japanese magazines, and particularly those competitions sponsored by the Japanese Central Glass Company, that seemed an especially good fit for the work you and Utkin were producing. But I'm wondering why the Japanese liked this stuff so much. I mean, now it seems like a slightly strange moment: a five-year period when a couple of Japanese magazines, otherwise quite corporate and pragmatic and tied to a profession, suddenly run some ideas competitions that attract loads of crazy Russians. There are tubes constantly arriving stuffed full of wonderful drawings that are all a bit lyrical, a bit historical and a bit narrative, and eventually the Japanese seem to be keeping these competitions going because they realise they need to keep you going too?*

AB It is a very odd moment, I agree. But I'm not surprised the Japanese liked this work so much. They are a very poetic people. We even played to this with our entry for the crystal palace competition, quoting a haiku from the poet Basho: 'Seaweed swarms with / Transparent [minnows] Catch them – / They shall thaw without a trace.' The sense of compression, almost miniaturisation, in our drawings also seemed to appeal to them. As with a haiku, we were putting absolutely everything into something quite compact.

TW *Can you talk a little bit about the celebrated drawing technique you developed for these competition entries – the etchings? I'm interested in this process technically and historically, and also because it generates one of the obvious ironies about the label attached to your work – that this is not so much paper architecture as metal architecture, because at the heart of the drawing is the copper plate onto which you etch your image.*

AB The funny thing is that Ilya and I were dreaming about etching right from the very beginning, largely because of our shared love of Piranesi. When we first met, aged 15, he invited me to his home, which was on the far, northern-most edge of Moscow. His father was an architect and a kind of bitter, very ironical guy, who would growl 'Here come the *Mousquetaires*' whenever we entered the apartment, because we had such long hair at the time. Ilya said he wanted to show me something and in his room he pulled out this big book on Piranesi. The quality of the print was not especially good, but we would stare at the pages for hours. We really loved those drawings.

TW *What was so lovable about them?*

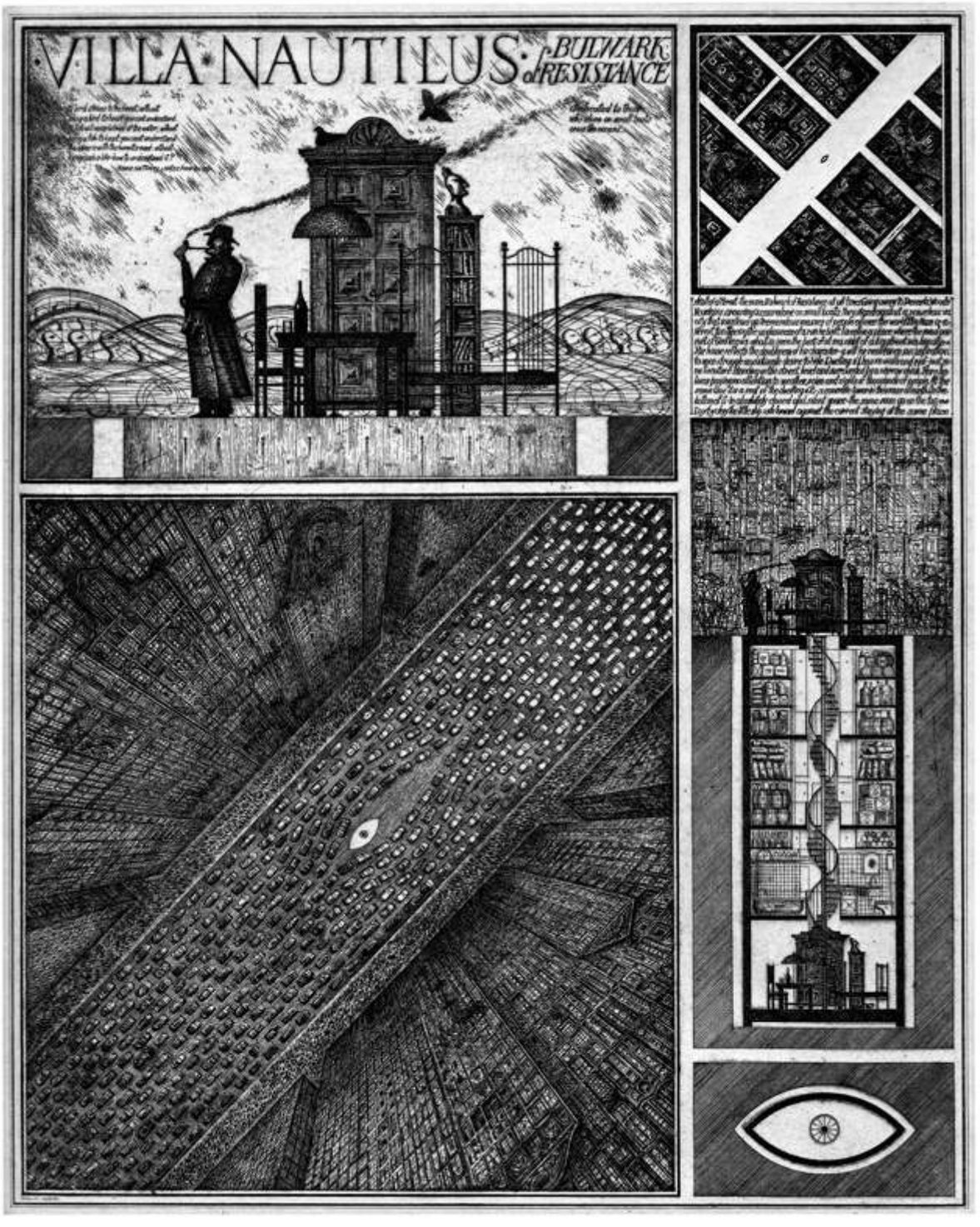
AB I can't quite explain. It was the feeling of depth, and the decay of all the ruins, and of course the technique and skill with which he made them. It all went straight to our hearts.

TW *And was it immediately afterwards that you taught yourself to etch?*

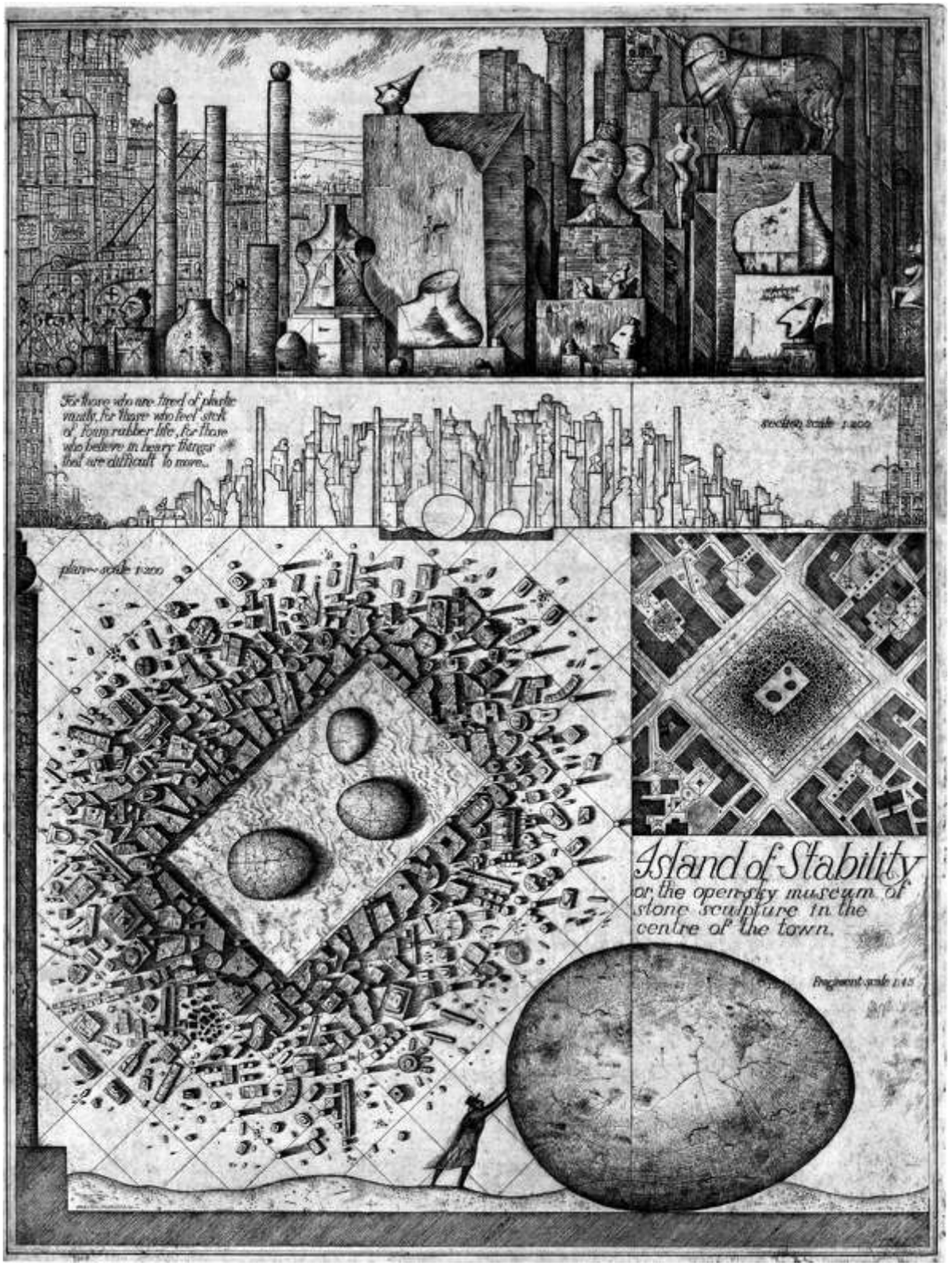
AB No, that was much later. The only experience I had at that time was when my father came home one day and gave me a prepared plate – 'Here', he said, 'just scratch something onto that'. He had a friend who was an etcher and he had set it up for me, and he also helped me print it. When I first saw the drawing we made from the plate it seemed like a kind of miracle. But we never had a press and so making more and learning the technique was difficult. Yet still, I kept thinking about the process. Years later, when Ilya and I first started entering the magazine competitions, the images we first made were actually imitation etchings – hatching the lines with a Rotring and mimicking the style of an etching. Only later, again with the help of my father, were we able to locate and buy a press – it's the same one that you can see now in my studio. It came from a factory in Podolsk, an industrial town south of Moscow, which was the only place in Russia that manufactured etching presses. Not only were they quite expensive, but you had to first get permission from the Union of Artists before you could buy one. But my father was a member of the union and I implored him to help me – 'we really need it'. And so somehow we got the money together and we bought it, storing it in the studio of a friend – actually, the same friend, Aleksandrov, with whom I was kicked out of art school. By that time he was studying at the Polygraphic Institute, Moscow's main school for printmaking and publishing, and he was the one who taught Ilya and me how to etch.

TW *What about the metal and the chemicals and the paper? Were they difficult to obtain?*

AB No, these things were all cheap and easy to get hold of. But in the beginning we didn't



Brodsky & Utkin,
Villa Nautilus, 1990



Brodsky & Utkin,
Island of Stability, 1989–90

Photographs D James Dee
Courtesy Ronald Feldman Fine Arts, New York

work with acid because the studio didn't have any proper ventilation, so we used copper instead of zinc, and vinegar rather than chemicals.

TW *But how did you actually do it? Would you first draw a design on paper and then transfer it onto the plate?*

AB We would make thousands of small sketches before deciding on the composition of our finished drawing. We then measured the sheet of metal and made a full-size, very precise drawing on tracing paper. Next, in pencil, we copied over the lines of the drawing on its reverse side and applied it to the metal. We then took out our etching needles and filled in over all the lines.

TW *Did you and Ilya have different skills? For example, did one of you do the hatching and the other do the figures, or was one of you good at text and the other good at setting out the grid?*

AB It changed with each drawing. If you look closely you can see a difference, but sometimes I would do the architectural part – the plans and sections – while Ilya would do other elements, or sometimes I would work on one corner and he would do the other, or on a few occasions we made two versions of the same idea and then chose which one we liked best.

TW *In the book of the collected works of BR:UT there are 30 or so etchings in total, the majority of which follow the same portrait format, with the drawing then subdivided to allow plans, sections, elevations, text, etc, but in a few instances there are also some landscape-oriented drawings that seem a bit different – a rather picturesque, Constable-esque drawing of a town arranged as a bridge, and another one for the Bastille competition.*

AB I was against putting the *Town Bridge* into the book – not just because it was the only one that Ilya did by himself, but also because it is a different kind of image, as you say – but the publisher liked it and so it stayed. The landscape drawing for the *Opéra de la Bastille* was something of an anomaly because it was not for an ideas competition run by a magazine, but for an actual building – one of President Mitterrand's *grands projets*. We did this later, in 1990. In theory, if you entered an international building competition, the Soviet Union of Architects would pay your fee; but of course they never paid for people like us. But in this instance it didn't matter, as we'd earned a bit of foreign currency with our prize money from *JA* and *Shinkenchiku*, and could therefore cover the entry fee ourselves. Nevertheless, to send our drawings we still needed to have them signed by a member of the union, and neither Ilya or I were members. The only option was to get Ilya's father, who was a registered architect, to sign them for us. He was always incredibly critical about the things we were doing – 'Go and get a proper job in an office', he would tell us, and 'When are you going to stop drawing these shitty pictures?' – even if deep down we knew he secretly liked our stuff. In the end it was really funny because our scheme was the only one of the Russian entries to be published, even though it didn't get a prize. And because Ilya's father had signed our drawings, the scheme was listed under his name. That made him even madder.

TW *In all of the etchings, though, regardless of who signed the drawings or their different formats, certain recurring visual tropes, or rather typologies, appear – so, for example, there are lots of bridges, boats, islands, theatres and museums – and the works themselves also seem full of references. In an essay on your drawings, Lois Nesbitt defines them as part Saul Steinberg, part Paul Klee, part Piranesi and with a sprinkling of Charles Dickens. But there is also a kind of meteorite shower of other references – classical references like Boullée and Lequeu; utopian references like Bentham, Ferriss or Le Corbusier; mythological references like Homer; and literary references, including Gogol and Dostoyevsky.*

AB It's interesting to read about all these different references, even if the only one we were really explicit about was Piranesi – we had been seduced by his labyrinthine and underground spaces and looked at his etchings and wanted to make our own. The other significant one, though, is the American artist Edward Gorey, who is perhaps even closer to the work we were doing. But he was a reference that was subconscious – I actually only discovered him a few years later, when someone gave me a book on his work, and flicking through it I thought, 'Oh, this is very familiar.'

TW *What about Dostoyevsky's own underground allusions – he even wrote his famous* Notes from Underground*?*

AB Of course, we knew and loved Dostoyevsky, but personally I've never really thought of his writing as particularly architectural. If we're talking about literary or poetic influences then Joseph Brodsky is much more important. He is a writer I really admire. And his work, in contrast to Dostoyevsky, is full of architecture. For me, his most influential text is his play *Marbles*, which is based around two inmates in a prison cell, and features a very architectural description of the prison tower, almost as if it was a project in itself. With Joseph Brodsky you always get the impression that he is seeing what he is describing. You really feel that he has a spatial mind.

TW *But that cerebral, almost intellectualised aspect of architecture was also something that your work was reintroducing. Catherine Cooke talks about this in the essay she produced for the 1988 AA catalogue of visionary Soviet architecture,* Nostalgia of Culture *– she argues that through the paper architects there was a rediscovery of what she calls* ideinost*, or idea content: the notion that architecture should be full of ideas, and also that it has a cultural, even mythological responsibility. So the successes that you and Ilya and many of your friends and colleagues enjoyed brought something fundamental back into the discipline – a cultural and intellectual aspect that had been devolved out of Soviet architecture in the 1950s and 1960s.*

AB That was nice of her to say that, and yes, I think she's right. Catherine was so interesting and intelligent. We saw her in Moscow a few times, mostly just to say hello. After the AA exhibition, though, she made a few more critical comments about us – that we were only ever interested in making money – which I never quite understood.

TW *It's funny you say that, because she is a bit stinting in her praise, and at one point she only refers to your 'laconic talents'. But despite Catherine's reservations, everyone else at the time was going crazy for your work. By then there had been exhibitions in the Soviet Union – which even got you the belated approval of the Union of Architects – and in London, Paris and Milan. Today, of course, things have gone to a whole other level – Princeton Architectural Press have just re-released a very handsome clothbound edition of your etchings, and the V&A and the Tate have added your work to their permanent collections. There was even a dedicated Brodsky–Utkin room at Tate Modern. All of which makes me think about Gogol's short, satirical novella,* The Nose*, which as I'm sure you'll know, tells the story of a St Petersburg official whose nose leaves his face and takes on a life of its own, eventually even gaining a higher social rank and status than the man it left behind. It seems to me that the etchings are your nose. They are now more established, more noble, even more dignified than you are.*

AB I know. It's weird, isn't it? I'll tell you a funny story about this. About ten years ago I was working in my studio in Moscow when someone came in to say that there was a young American guy from New York downstairs who really wanted to meet me. I said, 'sure', and went down into the courtyard. 'Hi, I'm Mark Lamster', he says, 'I really like your architectural work, and just wanted to say hello.' He then asked how common my name was in Russian, because some years earlier he had worked as an editorial assistant for Princeton Architectural Press on a book of antique etchings by another Alexander Brodsky. 'But I *am* that Alexander Brodsky', I said. He went a bit pale and apologised, saying he'd always thought the etchings were by some eighteenth-century Russians and not by contemporary architects. Later it was Mark who encouraged Princeton to reprint the book into the nice edition you mentioned. And so yes, they have taken on a kind of life and status of their own, sometimes quite distinct from mine.

TW *Each gallery or institution that exhibited the etchings in the 1980s and early 1990s also*

seems to have used them to promote a bigger idea or movement. And so at the AA it was about conceptualism in Soviet design, whereas at the Deutsches Architektur Museum in Frankfurt Heinrich Klotz presented them as part of a global wave of postmodernism.

AB It was always like that. I remember sometimes feeling that we were disappointing our hosts, not talking about our work in the same terms they did. When we did a show in Paris we were taken out for a big dinner organised by Manuel Nuñez Yanowsky, who had worked for Ricardo Bofill, and later did some huge neoclassical housing estates in France. He had this beautiful apartment and a marble table that was the loveliest thing I'd ever seen. Over dinner he kept asking us about our manifesto and what we were hoping to achieve. We replied that we didn't have a manifesto. 'But you must have', he said, 'you're Russians. If you don't have something to tell everybody, then why did you come?' 'Because we were invited', was all we could say.

TW *Was that French trip the first time you ever went abroad?*

AB It was actually the second time. The first was a trip to Germany a few years earlier.

Some friends and I had won an international student design competition for a theatre of the future while we were still at MArkHI. The prize was a three-week tour around Germany looking at lots of different kinds of theatres, from Hamburg to Munich. Initially the school wouldn't let us go and so it wasn't until 1979, after we had graduated and when I was working for the big architectural office, that we went. We still had to clear everything with the Union of Architects, who insisted that a responsible figure escort us, and luckily our professor Barkhin agreed to take us. The itinerary was crazy – more than 15 different cities, I think – and only concentrated on visits to the backstage and technical aspects of various theatres. After only a few days we were pleading with Barkhin, 'Please, not another theatre!' But still, we had a great time, even if the final stop on the tour – to West Berlin – was dropped by the union because they thought it was just too politically sensitive.

TW *These first trips, though, were always as part of a group or some other collective. After the Paris and London shows you were then invited to New York, this time for a solo show dedicated to the etchings you had made with Utkin.*

AB But the idea for that actually came from another group show in Lower Manhattan. This was in 1988 and we had been invited to take part in an exhibition called 'Present Tensions: 25 Years of Irreverence in Architecture' at the Clocktower Gallery. Ant Farm were also invited, and so was Haus-Rucker, David Greene and a few other famous designers. The union allowed us to take part on the condition that we sent our drawings in a single tube. The gallery wanted 15 of our large etchings, and so we had to wrap them up incredibly tightly. I remember we wound the whole lot around a ski pole. The gallery phoned a few weeks later to say they had arrived safely. We asked if they'd had any trouble getting them out of the tube. 'Hmmm, it wasn't easy', they replied, 'but we managed in the end'. A friend of mine who is a book illustrator lived in New York at the time and he went to the show along with a friend called Ron Feldman, who ran his own gallery. Ron loved the work and then came to the Paris show especially to meet us and propose our own exhibition.

TW *Did you suddenly feel like an artist?*

AB I'm not sure that I thought of myself as an artist, but I do remember the excitement we both felt. A famous gallerist from New York wanted to represent us and give us our own show. We spent the next months planning the exhibition, and decided that in addition to our etchings we should have an installation. We came up with the idea of making a huge egg – as big as this room – and took the idea from the figure of an egg at the centre of our etching, *Island of Stability*. The problem was the expense of sending something this big from Moscow to New York. But this is where Ron was really clever. He called some friends and found out that there was a large Russian festival in San Diego the following year, in 1989. Among the exhibits were some Fabergé eggs made for Tsar Alexander III, and Ron convinced them that our egg would be a nice complement – we even titled it *Nightmare of Karl Fabergé*. So that's what happened – the egg was shipped to California and paid for by the people in California, and then when that exhibition ended Ron arranged for a truck to drive it to New York for the opening of our show in 1990.

TW *How did you manage to make an egg as big as your apartment?*

AB It was produced by a factory here in Moscow – the kind of place that used to make monuments and statues of soldiers, peasants, tanks, rockets and all those Lenins. It was made out of plaster but had a metal structure inside. The whole thing was incredibly heavy, but it was actually sent by cargo plane. I remember on the side of the crate we wrote 'Building Parts for a Pavilion' because the authorities would never have understood that a plaster egg was art.

TW *What happened to it afterwards?*

AB It's a strange story. At the time the director of the art museum at Duke University in North Carolina was a very nice guy called Michael Mezzatesta, an Italian–American. And he was absolutely crazy about contemporary Russian art. He had his favourite artists, but really he loved everything. He went to the show at the Feldman Gallery and afterwards said, 'I want to buy the egg'. Of course, we were all delighted and it was packed up and sent to North Carolina. After a few years, because of the growing size of the collection, Michael spent all his time fundraising to build a new, dedicated museum. Eventually he got all the money and commissioned Rafael Viñoly to design it. But then suddenly the university fired him – I think there were all kinds of jealousies – and so he left for another museum in Miami. The new building was completed but the new director really hated the Russian part of the collection and so they auctioned off nearly all of it.

TW *And so someone, somewhere has a really big egg at the bottom of their garden?*

AB Maybe. Either that or it's lurking in a warehouse, waiting to be discovered.

TW *In 1990, when your show at the Feldman Gallery opened, what did you think of New York?*

AB I loved it from the very first moment. It was foggy when we arrived, and with the low cloud you couldn't see the tops of the buildings. But it was much better like that. Really strong, really evocative, just like a movie. Just like a dream.

TW *When New York becomes Gotham.*

AB Yes, exactly. Those wonderful dark, gloomy days, when the lights from the skyscraper windows twinkle through the mist.

TW *You then spent much of the next five years or so shuttling back and forth between Moscow and this alluring Manhattan, as well as numerous other US cities.*

AB There were lots of exhibitions with Ilya. We showed our etchings all over the place – in Seattle, Pittsburgh, Omaha, Arizona, Portland. My wife and I were travelling the whole time. It was different for Ilya. He had had his first daughter very young – the first of my friends to have a baby, even if I was another kind of baby for them to look after, always at his home, eating and sleeping there. By the early 1990s he and his wife had had three more kids, and he was also launching his own architectural office in Moscow. This is why in 1993 we decided to stop working together. It was a very amicable split, and we are still very close, even now, but at the time he wanted to be an architect and I was more interested in all of these art shows. Ron also kept encouraging my wife and me to move to New York. In Moscow there were no opportunities for art, or for the kind of architecture I was interested in. Basically, there were no commissions at all. It was a really tough situation. And so in 1996, with our new baby Sasha, we moved to the US.

TW *Where did you live?*

AB We rented a loft in a former tobacco factory in Jersey City. From that side of the river you would look over to Manhattan. In Moscow there was no work, but life was tough in the US too. The loft was cheap because we weren't supposed to live there – it was only meant to be a working studio. We had very few possessions

and hardly any money, so we picked up all our furniture on the street – a bed, chairs, sofa, TV, even a video recorder. In fact the only thing we brought with us were the copper plates of the etchings. They weighed a ton. I remember it was difficult getting them through customs – like the egg, we couldn't call them art.

TW *What about your friends at the time? Were you mostly socialising with an émigré Russian population?*

AB Yes, mostly Russians, but we made some very good American friends too. Most of them were artists.

TW *And did Ron Feldman teach you how to behave as an artist – in terms of making editions of your work and signing things?*

AB In a way, yes. There were actually only a few of the etchings made because Ron wanted them to be a really limited edition. We also produced a handful of complete sets and packaged them in a beautiful big folio. After these were printed he wanted us to destroy the plates so that no more could be printed. I couldn't bring myself to do that, and so the compromise we came up with was to make a diagonal scratch across each one and to etch the word 'cancelled' across their surface. So I was working as an artist, even if I would still say that I was an artist–architect when people asked me what I did. It was just that as an architect I was not working. I was waiting. Actually, I'm still waiting now. Towards the end of our stay in New York, though, I did get a commission to do an architectural installation for Canal Street subway station. I turned it into a kind of Venetian waterway, complete with gondolas – because it was a canal after all, and there had been a real canal there in the eighteenth century. Even Chinatown's relationship to the station had a connection to canals, because there had been canals in many Chinese cities too.

TW *The success of that project, alongside your other shows, suggests that you must have been close to being fully absorbed into that late-1990s New York moment when the artist was really ascendant, and the art market was gaining in economic importance?*

AB I've never been into anything like that, which was perhaps a mistake, financially. I've always preferred to be an outsider. Besides, I wanted to come back to Moscow. By the end of the 1990s I was desperately missing the city. For me, America was never about emigration. It was a one-month-long work trip that lasted four years. And so at the very end of 1999 we did return home. We flew on New Year's Eve, on a practically empty airplane – there were only about seven passengers and 15 or so crew, who all seemed to be drunk on champagne. We landed back at a totally empty Moscow airport on the first day of the new millennium.

TW *How did it feel being home again?*

AB It felt so comfortable and relaxed. But it's always been like this for me. After every trip I have ever made I always love the feeling of returning home. On that 1 January it was rainy and grey and everything seemed to be dirty, and I was just so happy – 'Ah, Moscow'.

TW *What is it that you like so much about Moscow?*

AB Moscow is huge, but somehow I've always felt it to be incredibly cosy. The city is a kind of vast village, each part with its own character and sense of style. The more mysterious eighteenth- and early nineteenth-century parts – before the fire in 1812 – have always been my favourite areas. Unlike New York it also has a topography, a relief, with streets that undulate up and down. I love Manhattan, but not the flatness of the city. Also unlike New York or St Petersburg, Moscow was never made by just one hand – it's not a cold, ideal and beautiful thing, with all these straight lines – but a sort of mixed salad of lots of different ingredients. Even if different periods or regimes have tried to destroy the city, rationalising or unifying it, somehow it's always been robust enough to resist. It's a city of fragments. In this sense, it's very Piranesian.

TW *Back in this comforting city of fragments, did opportunities for work then follow?*

AB Almost immediately I was offered two architectural commissions – the 95 Degrees summer restaurant and an apartment for the gallerist Marat Guelman. But at the time I was so full of doubt – I was all alone, not working with Ilya anymore, and I wasn't sure whether I was too old or ill-equipped to work as an architect. I mean, the only architectural qualification I had was my diploma. Apart from this I knew practically nothing about working with builders or making technical drawings or running an office. I felt like I'd be an imposter if I started doing these things. In a state of desperation I went to see my old friend Evgenii Ass, who has always been good at giving me advice. He listened as I described all my anxieties and then simply said that I'd be stupid not to try, as I had a good chance to succeed. And so I immediately accepted both commissions.

TW *Wasn't the restaurant one of several smaller projects that were all built in a slightly low-tech,* bricolage *style?*

AB Yes, there were a number of separate projects – we did the restaurant first, and then a vodka pavilion, a bar on the frozen lake and even a *banya*. All of them were cheap, wooden structures. They were located at an old reservoir site in Klyazma, east of Moscow. It used to be a holiday resort for workers – thousands of people would go there to swim in the lake in summer or ski in the mountains in winter. The whole area was vast, and at its centre there was a complex of modernist buildings – not bad at all, actually. I had lots of friends who would go there in the 1960s and 1970s. After the fall of the Soviet Union this client of mine bought the whole place and put a kind of *shlagbaum* barrier at its entrance gate and tried to make it exclusive.

TW *Didn't that trouble you?*

AB I was very ambivalent about it. I tried to stay as independent as I could – and I was actually refusing other, far more commercial jobs – but at the same time I had to make a living.

TW *At that time Moscow must have been full of all those new oligarchs, desperately wanting to invest in all kinds of different enterprises, some less legitimate than others.*

AB It was a strange moment. Though we had built very few buildings we were meeting these people all the time – lots of discussions about theoretical projects that never came to anything. I remember after we'd exhibited some work at the vodka pavilion a huge man knocked on my door – he had a shaved head and was wearing a purple tracksuit. He said he wanted me to build a shopping centre in one of Moscow's new commercial districts. 'Are you sure I'm your guy?', I asked. 'My boss just told me to come and see you', he replied.

TW *So he was the henchman?*

AB Yes! We communicated for a few weeks; I visited the site, even made a model. And then one day he said that his boss wanted to meet me. So I went to this huge jewellery shop in the centre of Moscow, with loads of black Mercedes parked outside, owned by the big boss. It was some kind of mafia place, really scary. The guy said that he hadn't seen anything I had done but he wanted me to do some sketches for his new shopping mall. 'Make it look like a Swiss chalet' was the only thing he advised. I said, 'Okay, I'll think about it, thank you very much', and then I got out of there so fast. Meetings like this happened several times.

TW *You must also have been thinking about what kind of architect you wanted to be?*

AB It didn't take me long to realise that we shouldn't be working with rich people. The promise of a big budget failed us every time, and none of the wealthy commissions led to anything. In contrast, whenever we collaborated with normal people with not much money they actually built and lived in the spaces we had designed. This was so much more satisfying.

TW *Where was your office at the time?*

AB For a few years we rented a really ugly, depressing place in the centre of Moscow, but then I met David Sarkisyan, director of the Shchusev Museum, and out of the blue he offered me a studio space there. Sarkisyan was a wonderful person. His background was in cinema not architecture, but he knew lots of architects and artists. In many ways it seemed as if he knew the whole world. And the whole world seemed to know him back. He would tell

funny stories about staying in the palazzos of aristocratic ladies in Venice, or talking with distinguished curators in Vienna and eccentric collectors in New York. Before him the Shchusev was an important institution but also a bit isolated; a place only for official architectural documents and archives. With him it was transformed into a fantastic museum and an active exhibition space; much more of a cultural venue. Sarkisyan breathed new life into the Shchusev. The first time I met him he spoke about his fondness for my work, and then he asked if I needed a space. 'We have a small room at the top of the museum, full of garbage at the moment, but if you renovate it you can stay for free. You'd be a guest of the museum, a sort of architect-in-residence.' We moved in immediately. The museum called the space the *riena*, or ruin, because that's what it was. It was almost derelict and had no heating. In the winter you could see your own breath. It was actually colder inside than outside, because somehow the mass of the walls of the nineteenth-century building stored the cold. So we installed electrical heating, fixed the plumbing, painted the whole place white. It became a beautiful, wonderful place. A couple of years later, as the office grew, we were even so terrible as to ask Sarkisyan if we could also take over the space above it, under the eaves. Of course, it was absolutely prohibited to do things like this, but he said it would be fine, and so we installed a lovely metal staircase and opened the roof up a bit.

TW *So you became a kind of living artefact – a new addition to the Shchusev collection?*

AB It's funny you say that because the only condition Sarkisyan made was that he would be free to knock on our studio door any time he liked and bring in whoever he wanted. Of course, we were very happy about this. Over the next ten years there were many different visitors. We'd be working away and suddenly there'd be a *tok*, *tok*, *tok* at the door and Sarkisyan would be standing there with Arata Isozaki. Sarkisyan would say, 'And these are our architects. Please show Mr Isozaki something.' Another time it would be Daniel Libeskind or Steven Holl.

TW *Were you aware of your own celebrity? Because all these guests were not just coming to see the museum, they were coming to see you. The famous Alexander Brodsky.*

AB No, these people had no idea who I was. It was Sarkisyan who they were really meeting, and they were there, basically, because they were planning an exhibition. I remember when Christian Boltanski was working on his installation – which was perhaps the best of the shows Sarkisyan organised – I would invite him in to warm himself up and have some tea. The rest of the museum was like a refrigerator, whereas our studio was so snug.

TW *Why didn't you stay at the Shchusev?*

AB After Sarkisyan died in 2010 a new director came in. She was a contemporary from MArkHI and an old friend. Sarkisyan was so good at keeping all the infighting and rivalries in the museum at bay, but when my friend took over I could see that it was not so easy for her. Questions were increasingly asked about why we were staying there, and so eventually she came to us and said, 'Guys, I'm sorry, but you'll have to leave.' It took us some time to find a new place. I didn't want somewhere inside a shitty office block, with a security guard and someone who polishes the floors at night. I wanted somewhere like the Shchusev – somewhere both cold and warm, somewhere wild and rough and a bit strange, and somewhere made of brick. In the end I went to the Union of Artists and asked them if they knew of anywhere. They said there was nothing, except perhaps an abandoned old building in a courtyard near Mayakovsky Square. The place had been a kind of barracks for workers in the nearby cognac and tobacco factories – absolutely the cheapest kind of accommodation available – and was later used as a gallery and a studio. The union had lost the key for the building but we went and looked anyway. When we arrived I saw this long, thin single-storey building, with the roof partly falling in and the window frames all rotten. It was practically a ruin. We tried peering in through the glass but it was so black and dirty we couldn't see anything. 'I'll take it', I said.

TW *This move seems to have marked something of a watershed. Before then you were occupying the Shchusev Museum, a nice, heavy piece of good Russian neoclassicism, and in many ways the work you had done until then was also neoclassical – not least, the etchings, with all of their Piranesian and Roman undertones, and your love of grand but crumbly and ruinous things, which appears to be in keeping with a nineteenth-century neoclassical sensibility. But after you start to occupy an old industrial building, somehow your work also shifts. You design and build the Winzavod Centre for Contemporary Art, situated in an old brewery, and your artwork – the relief clay models of industrial facades, and especially your drawings of factories – seems to celebrate this industry; an architecture composed of lots of neat, repetitive windows, and with chimneys puffing out benign plumes of smoke.*

AB I've loved factories all my life, for at least as long as I've also loved pantheons and churches. Remember, I lived for four years in an old factory in Jersey City. It was a beautiful building and took up a whole block. Inside it was a kind of endless labyrinth, filled with hundreds of different types of artist. There were painters and sculptors, ceramicists, jewellers, metalworkers, carpenters, video artists, performance artists. We lived there like ants, with all the other ants. When I came back to Moscow I immediately started making clay factories, partly as a way of remembering this wonderful Jersey City building.

TW *Where did the idea of using clay come from?*

AB It started when Ilya and I were working on the egg sculpture in the factory that produced Soviet monuments. They didn't use normal grey clay but this beautiful greenish clay from Leningrad. This was sculpted into the figure of the statue and was then covered in plaster before finally being cast in bronze. Watching the sculptor work was fascinating – the way they had to keep the clay wet the whole time so that they could model it, and how they kept recycling the clay. When it dried out they put it in a huge machine which crushed it all up into dust, ready to be hydrated and turned back into clay. This sense that what you are making could at any moment become dust is something I've always found really exciting. The clay just goes on and on. It has multiple lives. When we did the egg I took a piece of the green clay away with me. After I worked with it myself I thought of all the other things it had once been – the nose of Lenin or Stalin's moustache, Khrushchev's ear or maybe even Mayakovsky's boot.

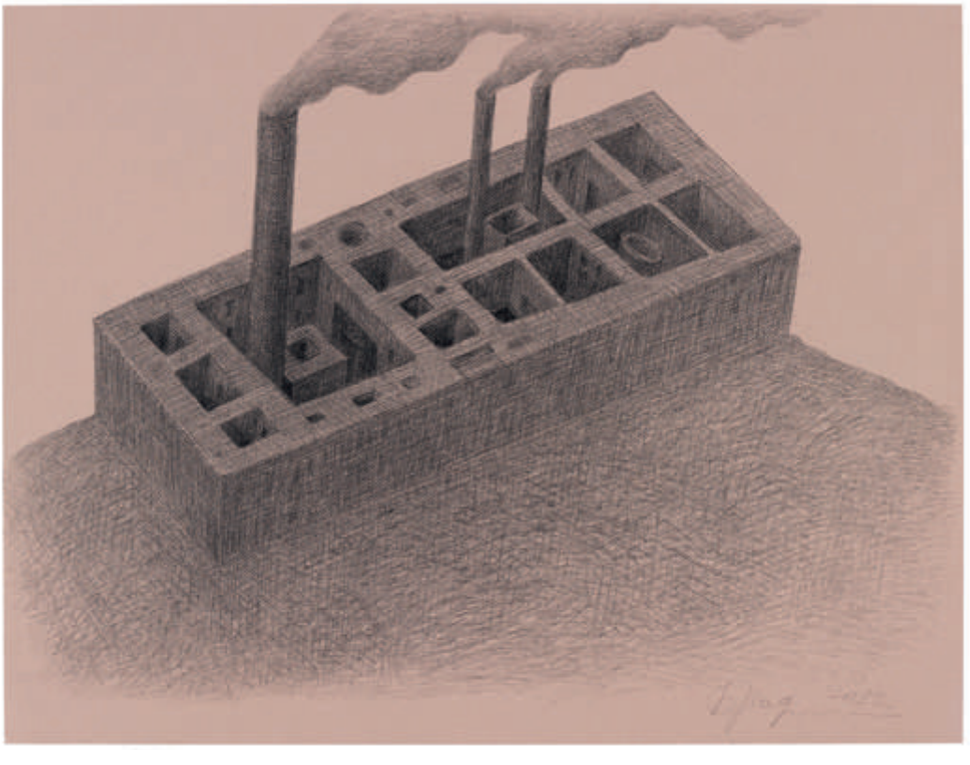
TW *In this sense, clay seems to be the most perfect Brodsky material – perhaps even more so than the copper of the etching plate – because of its ability to hold within it all of these memories.*

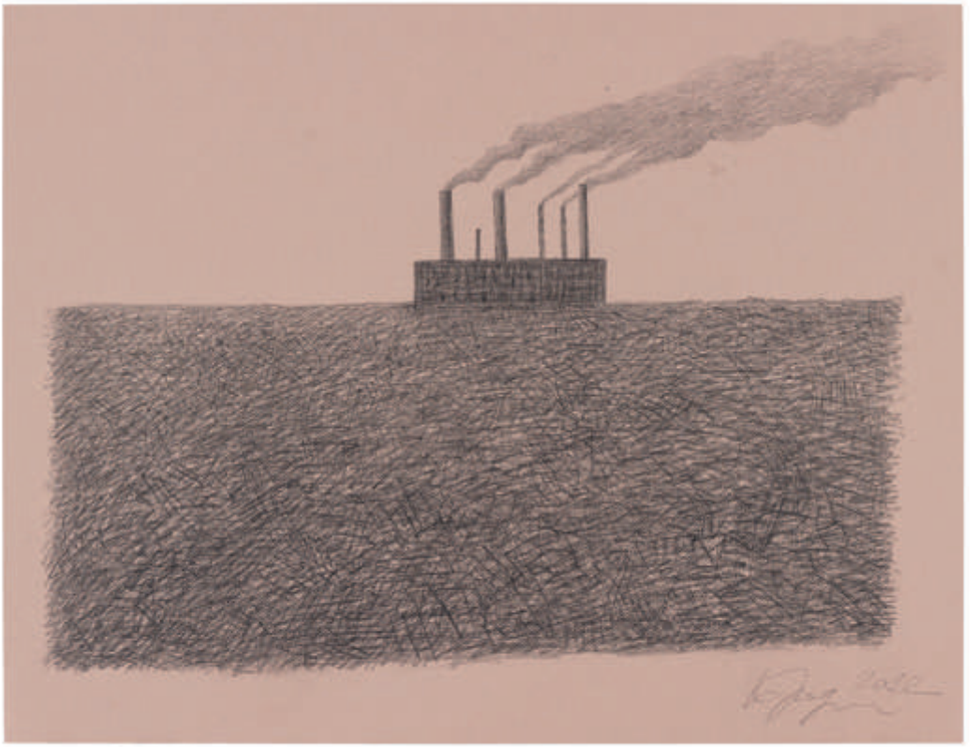
AB The memory aspect is definitely a big part of its appeal. This is why I never wanted to fire the clay pieces I made, because when you put it in a kiln you kill it, you remove the ability to rehydrate it and make it into something new – the next Lenin, the next Putin.

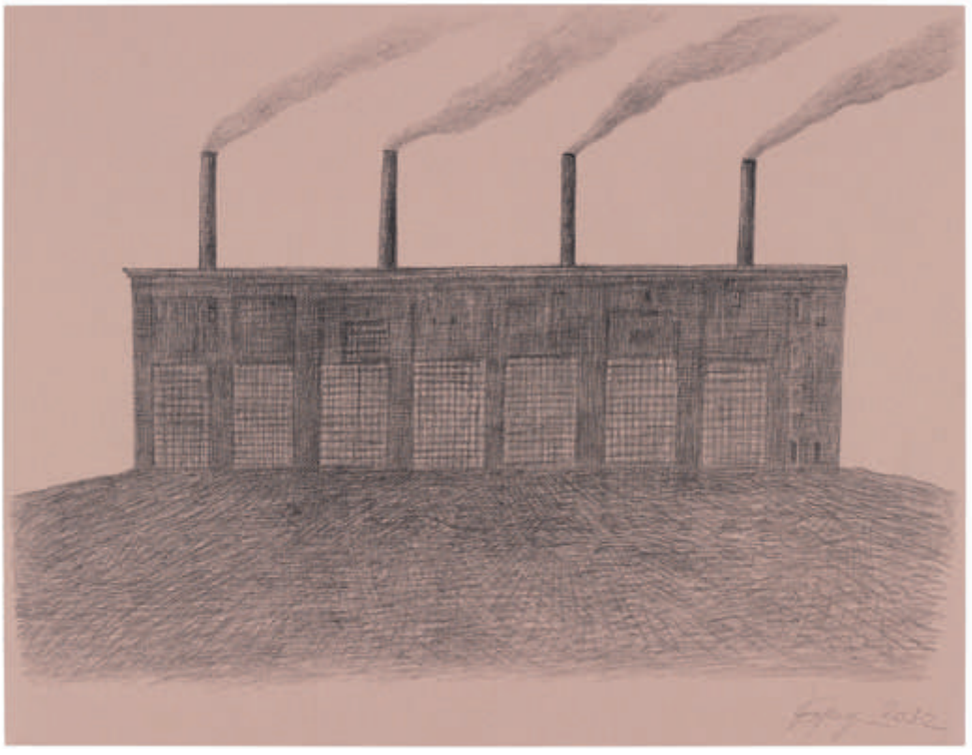
TW *When did you first exhibit unfired clay pieces?*

AB It was for a huge installation I did at the Feldman Gallery in 1999, just before we left the US. The show was called 'Grey Matter' and filled a 20m-long table with several hundred unfired pieces – fragile little sculptures of all kinds of everyday objects including scissors, bottles, glasses, vases, boots, buttons, cigarettes, sticks and shoes. The exhibition was a success, but what happened next turned into a real saga. Afterwards everything was carefully packed away in 100 or so crates. Ron told me to take these away, but we were just about to get on a plane back to Moscow and there was no way we could take them with us. So I called a Russian friend who had a house on Long Island and he said I could store everything in his basement for a few months. My wife and I and our young son Sasha then flew home, and in the excitement of being back in Moscow I totally forgot about the crates. About a year later I remembered and immediately called my friend. He told me not to worry, and that everything was OK. It went on like this for another year or so, but then he called me one

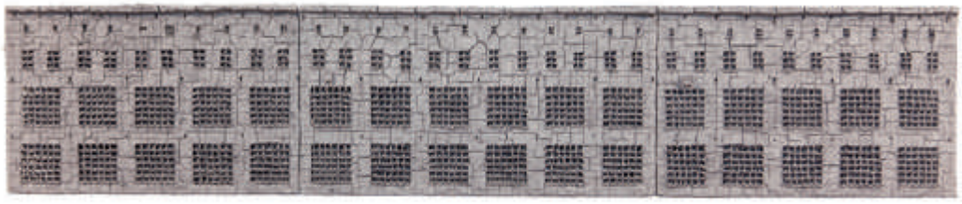


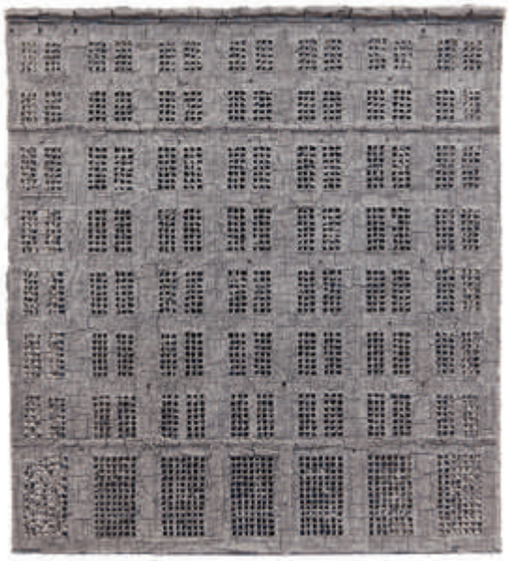


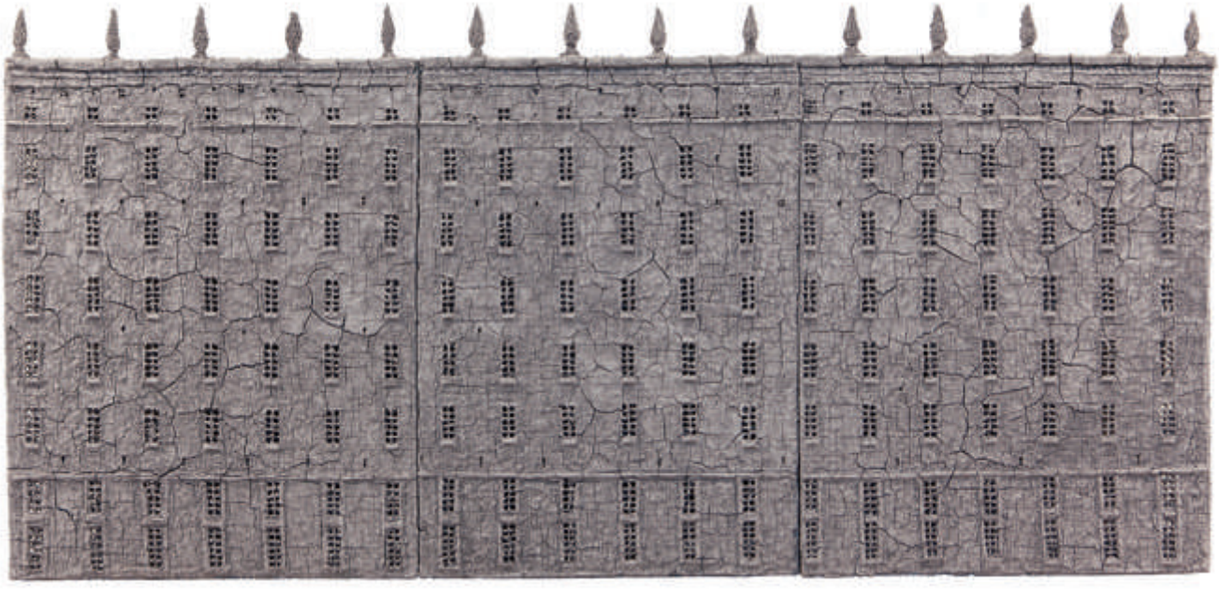


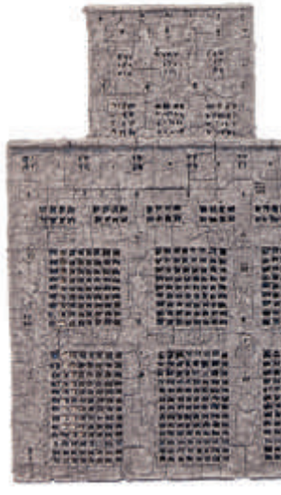


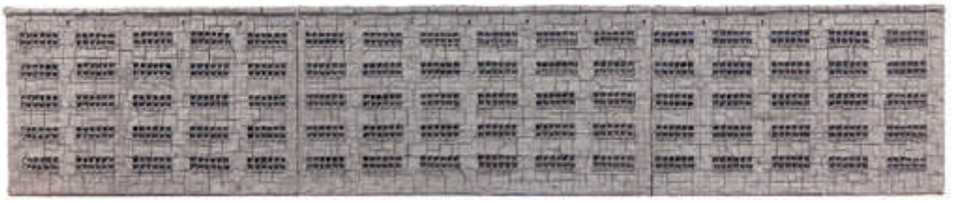
Alexander Brodsky, *Sketches*, 2012
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From the exhibition, 'Alexander Brodsky: Works',
14 March – 5 June 2015, Tchoban Foundation,
Museum for Architectural Drawing, Berlin

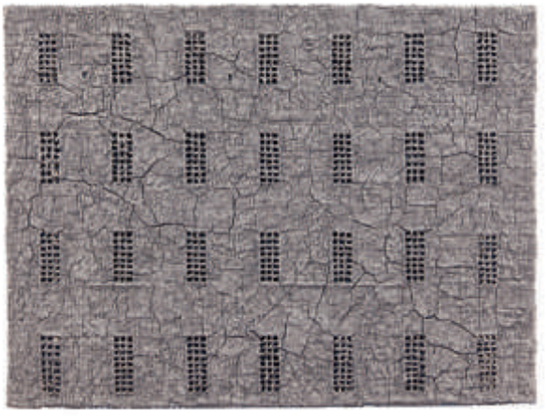


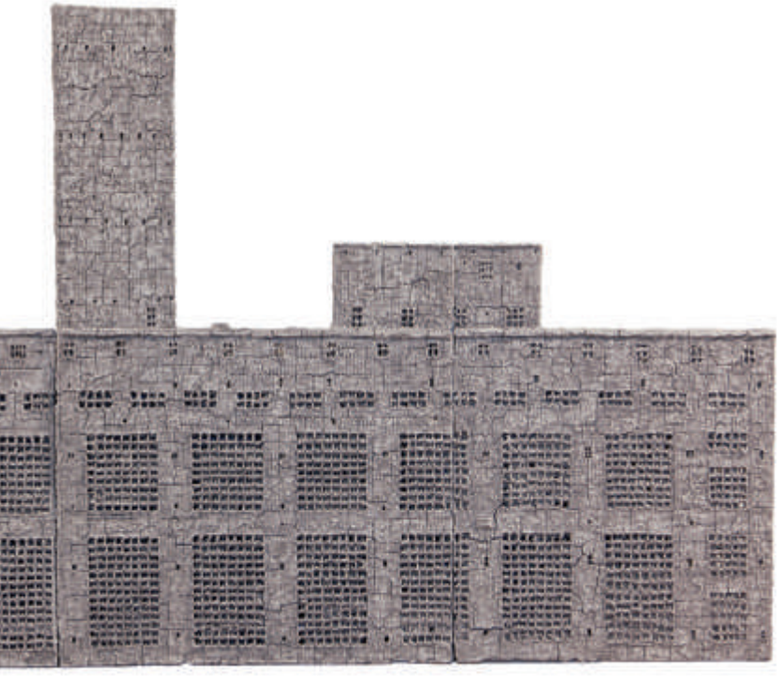


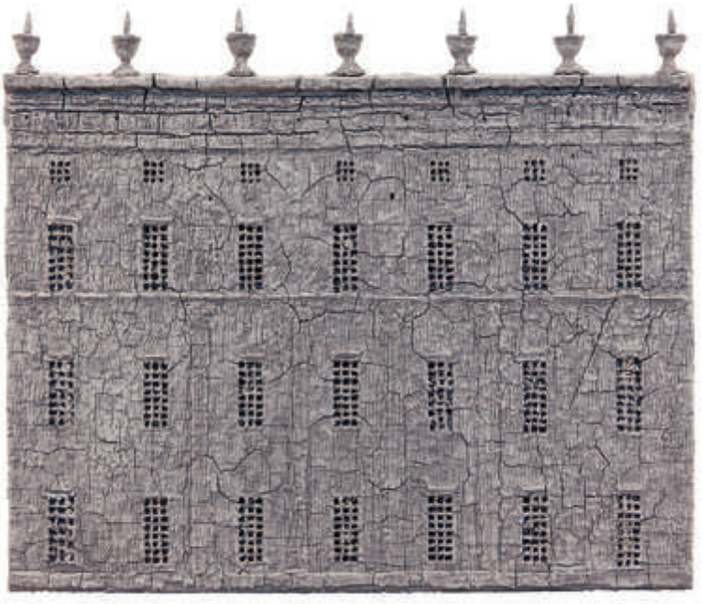












Alexander Brodsky, *Untitled*, 2014
© Alexander Brodsky / courtesy Tchoban Foundation
From the exhibition, 'Alexander Brodsky: Works',
14 March – 5 June 2015, Tchoban Foundation,
Museum for Architectural Drawing, Berlin

day and said that they'd had a burst water pipe and his basement had been under water for a week before they fixed everything. I told him that this was not so good, but what could we do? Another couple of years went by when he called again, this time saying that things had become tough and money was tight and he was having to sell the house. He asked what I wanted to do with all the crates. I said there was no other option than to throw them away. But he felt that he couldn't do that. Instead he said he had a friend – another Russian – who had his own trucking company and who owned a small warehouse in New Jersey. He kindly agreed to take the crates just for a few weeks. I didn't think about them for another year, but then this poor guy in Jersey started calling me every couple of months or so. 'Hi, how are you?', he'd ask, 'Do you have any exhibitions coming up that might need this stuff?' Of course, there was nothing. And so after a few more calls like this I spoke to one of my clients in Moscow, who I was designing a restaurant for. He looked into the costs of shipping all the crates and sculptures back to Russia. It was quite expensive. But he said he'd do it on two conditions – that he'd own everything himself, and that he'd exhibit and sell them at a market space he rented on the outskirts of Moscow. I went to visit this market. It was a terrible space right next to a ring-road where they sold all kinds of stuff – food, clothes, construction materials, tools, everything. It was the very worst place on earth to exhibit hundreds of little unfired clay pieces. And so I had to refuse. He felt a bit insulted and got angry, but there was no way I could see them being exhibited there. So everything stayed in the US. Another year went by and the guy in New Jersey started calling again, saying he had just sold the warehouse and everything had to be moved out. He asked for a bit of money but, really, I had none to give him. 'Just give me a couple more weeks and I will think of a solution', I told him. Then a month later I called him – actually, that's not right, I never called him, he always called me – and I said, 'Look, the only solution is to get rid of it all.' 'Are you sure about that?', he asked, 'It would be a pity because it's really a lot of stuff.' He was a simple guy, a delivery driver, and not someone who knew anything about art, but he tried to help. He said he had another garage space that was empty after he'd recently sold one of his trucks. He said he could move the crates there, but it really would just be short term – a month or two at the most. Another year passed and then one day I got a phone call – a woman's voice. She said, 'I'm the wife.' I understood immediately what this meant. I apologised to her and said I could pay her some money, and that I'd been trying to think of another solution, but that I couldn't come up with anything, and that if she really needed the garage space she should throw all the crates away. We left it like that and I didn't hear from her or her husband. At the time, I remember telling friends this story, and I would end it with all the unfired clay pieces being dumped in some American junkyard. But then, perhaps six months later, I got a call from one of the senior curators at the Russian State Museum in St Petersburg. He said 'Look, Alexander, I'm calling on urgent business. As you know the Guggenheim in New York has been exhibiting the 'Russia!' show. When it closes next month it will move to Gehry's building in Bilbao for an opening four months later.' He continued, 'The New York show was criticised for not featuring enough contemporary Russian art, and so for Bilbao the board and trustees of the Russian State Museum have agreed that you should exhibit a number of sculptural pieces.' 'No way', I said, 'there isn't enough time. Besides, I have no money, no materials, no space.' 'I don't care', he said, 'just do it.' A couple of days later I remembered the 'Grey Matter' show and all those pieces and quickly called him back. I described this first exhibition and said that there was one chance in a million that the crates were still available. A few hours later Ron Feldman phoned me. 'Sasha, where the hell are those crates? We just got a call from some scary guy at the Russian State Museum who wants all the clay pieces.' I said I was pretty sure they'd all been thrown away. 'Shit!', screamed Ron. I then managed to pull out the phone number of the wife and gave it to Ron. Three days later he calls again. 'Unbelievable! We found them!' Every crate was still in the same garage, and inside, despite the leak years earlier, all the pieces were in perfect condition. I told him to pay the guy whatever he asked. I think in the end it was something like $1,500. Ron was so happy. The curator at the Russian State Museum was so happy. The guy and his wife were absolutely thrilled.

TW *And they really were exhibited in Bilbao?*

AB Yes. My wife, Masha, and I, flew there for a week to install them all. After we laid all the pieces out on a huge table I called the guy in New Jersey to thank him again. He said, 'No problem, I knew that it would all work out in the end.' After that show I donated the pieces to the Russian State Museum. They're still there now in the permanent collection in the Mikhailovsky Palace, sitting within a steel and glass vitrine that I designed for them.

TW *And despite this epic saga you've continued to work with unfired clay.*

AB It's just such a wonderful material, the most fragile thing you could imagine, yet so interesting. I made some more pieces last year – really big relief models of facades – that I showed in Berlin, London and Moscow. In Berlin we exhibited them without any vitrine or glass so as to make them seem as if they were long elevation drawings.

TW *But the industrial aspect continues with the still more recent drawings you have done, drawn on roofing bitumen.*

AB Ah yes, what a material that is! I really love bitumen. It's also incredibly cheap – 100 roubles a roll – but it holds brushed ink very nicely. If you look at it from a certain angle the whole thing glistens like a kind of treasure. The only problem is that images of these drawings are really difficult to reproduce. It loses all of its qualities. But I'm still working with it – I've recently done a 2.5m-long drawing for a gallery here in Moscow.

TW *I think it's interesting that so many of the architectural artworks you do today are so long – the relief models and those big bitumen roll drawings. Everything seems to be horizontal. Which reminds me of a passage in an interview Mark Lamster did with you in 2005. He was imagining what might happen next in your career and quoted an old friend of yours, the designer Constantin Boym, who was speculating on what you would produce when you got your first commission for a skyscraper. They imagined that your future was upwards and vertical.*

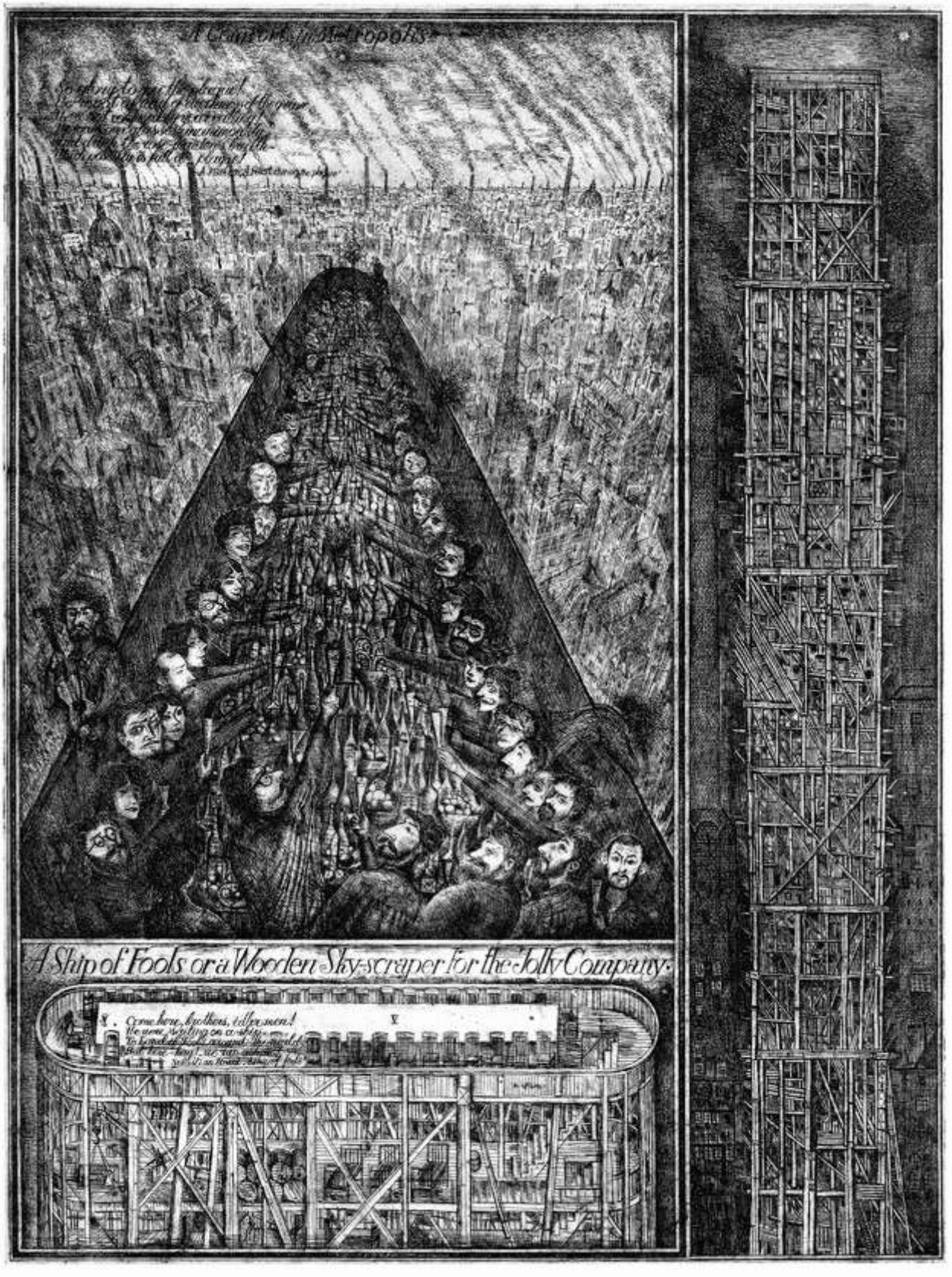
AB When instead everything just got closer and closer to the ground.

TW *And made of the ground, or at least clay.*

AB I'm not necessarily against designing a skyscraper, but it would have to be on my own terms – maybe more like the wooden skyscraper I drew with Ilya, the *Ship of Fools*.

TW *It's funny you mention that etching. It's always been my favourite of the drawings you did with Utkin. I was thinking about it yesterday evening as soon as I walked into your studio – the long, single-storey building that was once a ruin but is now a really inviting space. The lighting was subdued and everyone was sitting around a fireplace you had built at one end, grilling sausages over the flames. All the people who work with you or who share the studio were very convivial, chatting and talking as they ate. Everyone seemed to like each other. And so I suddenly thought that in your studio the* Ship of Fools, or a Wooden Skyscraper for the Jolly Good Company *had come to life – a long table in the middle of a city at which everyone is eating and toasting each other. The table had become the best form of skyscraper and the best form of architecture.*

AB I'd never thought of my studio like that, but when I look at the etching again it is immediately so obvious, but also so very strange, so nice, even so amazing. It really is the return of the ship! In the drawing you can see me and Ilya at the head of the table, and other good friends and family all around us. We were so young then. Ilya and I have led separate lives for such a long time, but we've never forgotten this moment. It's the thing that holds us together. This is why it feels so reassuring for me to see it come alive again. The ship of fools has run ashore, and the jolly good company is together again.



Brodsky & Utkin, *Ship of Fools, or a Wooden Skyscraper for the Jolly Company*, 1988–90
Photograph D James Dee
Courtesy Ronald Feldman Fine Arts, New York

The Wanderer

Emma Letizia Jones



Karl Friedrich Schinkel, view of Capri,
design for wall painting, Schloss Glienicke, 1824
Berlin State Museums
© bpk / Kupferstichkabinett, SMB

In 1834 the Prussian painter Eduard Gaertner climbed with his 'drafting machine' (most likely a kind of camera obscura) to one of the highest rooftops in Berlin, hoping to capture a view of the city in 360 degrees. The rooftop he chose belonged to Karl Friedrich Schinkel's newly completed Friedrichswerder church, whose two slender gothic revival brick towers rose from the west bank of the Kupfergraben canal, across the water from the Royal Palace and just south of the city's main processional route, Unter den Linden. The view from the church would become the basis for his six-panel *Panorama von Berlin*.[1] At the time Gaertner made this painting he was already well known for his *vedute* (urban scenes) in which he captured Biedermeier Berlin life in his signature clean, meticulous style. The completed *Panorama von Berlin*, widely acknowledged to be his greatest work, also shows his mastery over a genre that he had been drawn to from the days of his apprenticeship, when, alongside many of the city's struggling young artists, he trained as a set painter in the Klosterstrasse workshop of Carl Gropius (theatre inspector to the Royal Court).

In jedem Winkel steht ein Schinkel, the Berlin saying goes (its sing-song assonance is lost in translation: 'in every corner stands a Schinkel'). The same applies to Gaertner's panoramic scene, where we see, from left to right, in the first three panels looking towards the south: Schinkel's Neue Wache (Royal Guardhouse, 1818), Packhof complex (1832, slightly hidden behind the Zeughaus), Schlossbrücke (1823, also partly concealed) and Dom am Lustgarten, renovated with an Ionic portico (1822); and, from left to right in the second three panels looking north: the Bauakademie (1836), Kreuzberg War Memorial (1820) and Schauspielhaus (1823). Occupying the crowning position in the third panel is Schinkel's Altes Museum (opened 1830), which is shown just above the one incomplete turret of the church (left unbuilt in the painting, so as not to block the spectator's line of sight). When viewed together, these projects form an entire constellation of institutional monuments stretching across an urban landscape that in many ways represents Schinkel's great contribution to the image of the city: an image through which Berliners recognised – and continue to recognise – themselves.

Quite apart from its technical prowess, however, Gaertner's panorama is also a striking visual record of the development of Berlin during the decades immediately following the Napoleonic wars. More particularly, it is a showcase for all of Schinkel's central Berlin projects. Consistent with the characteristic containment of a panorama, Gaertner imagines the celebrated architect's urban monuments collected, surveyed and displayed as if they were objects arranged in a room. Schinkel's own interiors – executed mainly for members of the royal family and their relatives over a 20-year period between 1809 and 1829 – were likewise masterful repositories of illusion, a parallel constellation to the typically restrained classicism of his facades. From the remnants that survive – drawings, paintings, odd pieces of furniture – it is clear that Schinkel developed the architectural interior as a privileged site of spatial and perceptual experimentation, a space of difference, separation and exception.

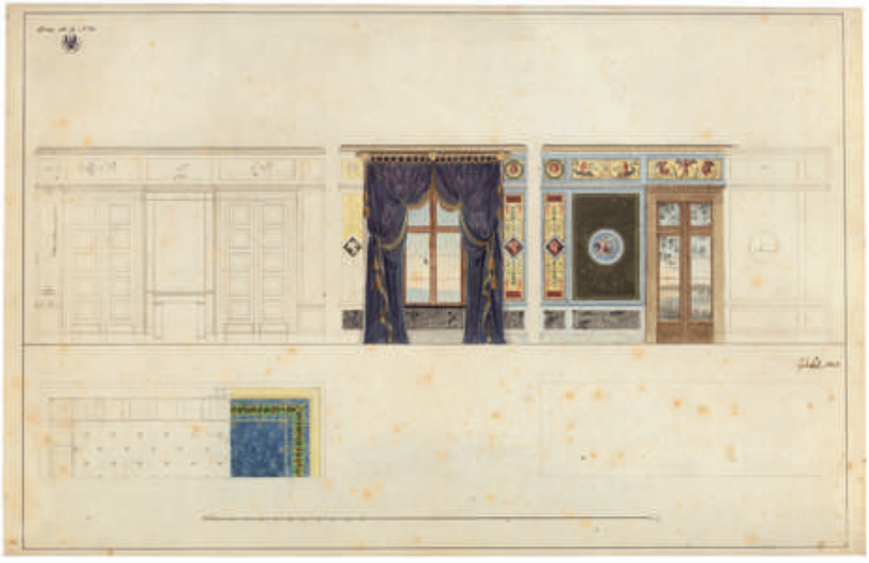
Schinkel's love of sophistry and the deceptive possibilities of an internalised architecture was clearly evident on his first visit to Britain in 1826, when he was as seduced by the lavish trickery of the interiors he saw as he was offended by the decadence and deception of their facades. In his travel diary he recorded his horror at the gaucheness of John Nash's Regent's Park terraces, and complained in a letter to his wife that the rows of new townhouses were overly ornamented and 'made to look attractive by all sorts of peculiar forms'.[2] But the inside of Nash's own 'princely' house was another matter entirely. Here, he was impressed by the copies of paintings and classical statues, the 'beautiful imitation green porphyry' and 'excellent imitation wood in the doors'.[3] Later he described in detail the contents of all the rooms at Nash's Brighton Pavilion[4] and made careful notes on the objects in Robert Adam's Lansdowne House; which he would put to good use on his return, designing furniture for Prince Carl that mimicked the details of Adam's 'Etruscan chair'.[5] From London, Schinkel also sourced carpets and fireplaces for use in the refurbishment of Prince Carl's Berlin Palace on Wilhelmplatz (on which he was working at the time, alongside the renovation of Schloss Glienicke).[6] And though he found 'much that is useless'[7] in the external appearance of John Soane's Bank of England, he was utterly captivated by the interior spectacle of Soane's own house, even if he was given the guided tour by the housekeeper rather than the architect himself. (It had been a similar story the week before, when 'Mrs Nash received us and other gentlemen and ladies … [but] Mr Nash was not there.')[8] Schinkel declared Soane's manipulation and expansion of the perceived dimensions of the small space 'ingenious', exclaiming delightedly: 'everywhere, little deceptions'.[9]

These deceptions were famously engineered largely through Soane's careful placement of mirrors, both convex and flat, throughout the interior of his home. Reflecting the spaces back on themselves, the mirrors disoriented visitors whilst simultaneously opening up new sightlines along their path – as depicted in a watercolour by Joseph Gandy which records the view of the upstairs south drawing room, the final stop on a tour of the house. At the time of Schinkel's visit, guests accessed this room through the double doors connecting it to the room behind.[10] These doors faced the window wall, with its view out to Lincoln's Inn Fields, but Soane was careful to offset the doors from the windows. So, on entering the room, instead of looking straight out towards the square, Schinkel would have been confronted with a view of himself reflected in a mirror placed between the openings. Furthermore, reflected in the glass, as if framed through a rear window, he would have caught a glimpse of the small inner courtyard at the rear of the adjacent room, with its architectural *pasticcio*: 'a precarious tower of ancient and modern fragments' that Schinkel likened to a cemetery.[11] On entering the room, then, what Soane's guests saw was not the grand view through the windows ahead, but rather the relics of architecture reflected in the mirror behind them. It was no great stretch for the romantic mind to conceive of this as a metaphor: examples from the history of architecture were piled high at the architect's back, either weighing him down or urging him on, while his future projects, represented by the world outside, still lay ahead, just out of sight and out of reach.

Schinkel's positive response to the 'little deceptions' of the English interiors was in line with his repeated manipulation of a contrast between sober exterior and theatrical interior. For him, if the public face of a building was suitably restrained, then the interior could be the space of exception and the realm of effects – a duality that allowed him to operate both as fantasist and pragmatist, reconciling what Nikolaus Pevsner once termed the 'two sides' to his character.[12] Yet even before his British tour, Schinkel, like Soane, had frequently installed mirrors in his interiors in order to

manipulate the dimensions of interior space as perceived by the moving eye. For example, between 1824 and 1826, when he refurbished the Crown Prince's quarters at the Royal Palace on Spree Island, he placed mirrors against the windows of the tea-room, angled so as to reflect the urban scene obliquely (a setting that also included his own Altes Museum, opposite). Similarly, in the Berlin palace of Prince Albrecht, Schinkel designed a circular salon with curved mirrors facing the windows that threw fractured views from outside back into the room, while in the ballroom he made use of the *mise-en-abyme* – the effect of placing two mirrors opposite each other to reflect infinite views of a scene – to manipulate scale and depth. The same device was also deployed in the Berlin palace of Prince August. In both spaces, the use of mirrors not only fractured the static architectural and landscape views in and out, but also manipulated the reflection of the moving bodies of the revellers inside.

Further afield in Potsdam, a favourite summer retreat of the Prussian princes, Schinkel also had a mirror installed into a small casino or pleasure pavilion that he was renovating at the edge of the grounds of Schloss Glienicke.[13] Here the mirror sits above a fireplace on the rear wall of the central of three rooms arranged in a staggered row, opposite a set of doors that lead onto a raised terrace overlooking the River Havel. However, it is not this view that is privileged by the architecture, but rather its representation. The visitor, after roving about the gardens, enters the pavilion obliquely from one of the multiple entry points that perforate the otherwise rigid block. Turning to encounter the strategically located mirror, they see themselves and the landscape behind them suspended in the glass, in perfect alignment with the central axis of the building. But as in Soane's upstairs drawing room, the scene dissolves the moment they move.



Schinkel used a grey wash to habitually represent the location of mirrors in his wall elevations, but in his coloured elevation of the mantelpiece mirror at Glienicke he actually painted in the view, clearly wishing to make explicit what would be seen in the glass. This reflection, however, is not rendered accurately, as the depth and detail of the room is not shown (and neither is the person looking into it). Because of this omission, the mirror framing the blue sky and distant riverbank seems at first to be a window; and in fact, before Schinkel introduced this reflected scene, there was originally an opening here. We can actually trace how it came to disappear through a series of rough sketches preserved by Ludwig Persius, the project architect charged with the execution of the construction.[14] For example, an early drawing shows two cross-sections of the building, already modified to Schinkel's design. The top section, taken directly through the central cubic volume of the plan, illustrates a set of doors on both the garden and the river-facing sides. This was a relic of the old structure, which had featured a main entrance in the centre of the composition on the garden facade. Schinkel seems to have intended, at first, to preserve this entrance, and it is not clear exactly when he changed his mind.[15] Yet an unsigned and undated sheet in the Persius archive clearly shows a ground-floor plan in which this opening has been filled in, hastily scribbled in pencil. Some time between the drawing of the sections and the start of construction, the decision was made to wall up the axial garden entrance and to give the space over instead to a centrally located fireplace, with a mirror above.[16]

In the original building, then, the visitor would have entered centrally from the garden and immediately been presented with views of the Havel ahead. But in the new plan the architecture obstructs this privileged outlook. The visitor, now approaching from one of the new entrances in the side wings, is forced to choose which way to turn on reaching the central room: towards the lake, or towards the mirrored reflection of the lake – the choice is no longer clear. By framing a picture of the site and bringing it into the interior, the mirror wall confuses the representational hierarchy by which the framed picture is subordinate to the 'real thing'.

On the other side of the mirror, facing the garden, a Pompeiian-style fresco was introduced. Painted over this now blind wall, the fresco becomes a frustrating tease. For rather than being able to walk directly through the building and see the actual view, as was the case prior to the pavilion's renovation, the visitor is confronted with an imaginary view from antiquity. Placed directly in front of this framed recollection was a new stone 'lookout' bench, facing back toward the villa. Both bench and fresco behave as blocking devices. Rather than being able to contemplate a river landscape, visitors are forced to turn their backs on the Havel and sit amongst the collection of fragments and souvenirs from Prince Carl's Italian travels strewn about the garden: in the mind's eye a landscape of Italian antiquity conflates with that of nineteenth-century Prussia, by way of picturesque England. This highly associative landscape is the Janus face to the reflected landscape on the other side of the wall. The blocking of the garden facade not only disperses the visitor's line of approach to the pavilion, but also redirects their gaze to what lies behind them on both sides of the wall. In this sense, the casino is an unexpected viewing machine, designed to present us with two landscapes, back-to-back.

Alongside mirrors augmenting spatial distortions, Schinkel's Biedermeier interiors

Above: Karl Friedrich Schinkel, design for wall painting, south room, Schloss Glienicke, 1825
Right: Karl Friedrich Schinkel, design for wall painting, middle salon, Schloss Glienicke, 1825
Berlin State Museums
© bpk / Kupferstichkabinett, SMB

display novel manipulations of scale, as landscapes both civic and pastoral were painstakingly reproduced in miniature in paintings, wallpapers and on pottery and furniture. In the case of the Glienicke estate, this merging of real topographies with imagined landscapes of travel and antiquity is aptly illustrated by the lineage of a painting commissioned from the artist Julius Schoppe just after the completion of the casino. Prince Carl wanted Schoppe's painting, modelled on a sketch produced by Schinkel during his 1824 Italian journey, to be made into a wallpaper panorama in the upper hallway of the west wing of the soon-to-be renovated Schloss Glienicke.[17] Though it was perhaps wishful thinking to compare views of the Gulf of Naples with the vista of the damp, swampy Havel, Schinkel's and Schoppe's design for the wallpaper demonstrates how the real and the imagined scene were fused into reproductions to be kept as souvenirs, aids for recollection interred in the private interior.

A number of examples are still to be found in Schloss Glienicke. In the upstairs rooms are two side tables with inlaid porcelain painted landscapes attributed to Schinkel. One features all of his best-known Berlin monuments, including the Altes Museum, Kreuzberg monument, Friedrichswerder church, Schauspielhaus and Neue Wache. The other depicts a view of the Glienicke estate – not just any view, however, but the reverse of the prospect from the casino terrace, looking back at the pavilion from the opposite bank of the river.



Foldout: Eduard Gaertner, *Panorama of Berlin*, 1834
Photo Jörg P Anders
© Property of the House of Hohenzollern, HRH Georg Friedrich Prince of Prussia / SPSG

Such ideal, clean images – of both the pastoral Potsdam and its counterpoint, urban Berlin – were replicated in numerous household objects during this era, their popularity fuelled not just by their obvious theatrical delights but also by the social transformations that made their mass-production possible. For the bourgeoisie, displaying these reproductions inside their homes allowed them to imagine themselves as masters of the new, enlightened *urbs* they represented. 'The private individual ... expects the interior to keep him in his illusions' was how Walter Benjamin would later sum up that period of development, when ideal images served to pacify and distract from the grim realities of Berlin's rapid industrialisation (between 1810 and 1840 the city's population more than doubled; and between 1830 and 1847 four major workers' uprisings would occur).[18]

In Gaertner's orderly *Panorama von Berlin* the only hint of this unchecked development is a glimpse of the iron foundry smokestacks for the expanding locomotive industry in the north of the city, which are just visible on the horizon. But an image produced just one generation later, in 1868, shows a city radically transformed. Here, Gaertner's camera obscura was replaced by the camera of the architect and surveyor Albrecht Meydenbauer, who shot the first 360-degree photographic panorama of Berlin from the tower of the Rotes Rathaus. Meydenbauer was a pioneer in the use of early photographic technology to survey buildings and map terrains. He also used the photographic image to document important buildings for posterity, enabling them to be reconstructed if ever they were destroyed.[19] To achieve this he developed a photogrammetric camera that combined the features of a commercial camera with a wide-angle lens suitable for capturing urban scenes. It had built-in tools such as a mechanical frame for defining the picture plane, while spirit levels and a tripod were used to adjust the camera's vertical and horizontal position. From his photographs alone, Meydenbauer could plot the extent of a building in plan and obtain its height without the need for direct surveying, relying instead on two known systems of spatial interpolation. The first worked backwards from the perspectival image in the photograph, using the rules of projective geometry to plot the vanishing points and a series of vertical points projected onto a ground plane, which were then intersected with compass lines to determine the object's orthographic shape. The second system, often used in surveying, posited that the location of any point on the represented object could be plotted using the intersection of lines drawn from markers representing two (or more) different camera positions relative to it. In this way, the location of a fixed point could be determined from two or more concurrent photographs.

Methods such as these illustrate the potential of the still image to be not just a representational device but a generator of a new order in the city. This order was defined by the impersonal techniques of mathematical surveying, of course, but it was also influenced by the individual surveying the scene, by their particular point of view – the position of Meydenbauer's camera or, in the case of Gaertner, the focus of the painter's eye.[20] And indeed, despite the minute accuracy of its detail, Gaertner's panorama was highly selective: it constructed its view to take in some monuments rather than others, privileging Schinkel's projects in particular. A more true-to-life scene might have shown the market vendors and rubbish cluttering the unpaved streets or the posters clinging haphazardly to the facades of buildings.[21] But Gaertner's view glossed over 'undesirable' neighbourhoods, and presented a civic vision of classical monuments connected both visually and symbolically across a network of orderly, untrammelled streets and squares. Limitations in early photographic technology meant that the careful acts of omission practised by Gaertner were not so easy to engineer in Meydenbauer's photographic Berlin panorama, which revealed a city radically transformed in the intervening 30 years – a city now ringed by industry on a colossal scale. In Meydenbauer's photographs there is no



Ludwig August Most,
View of Berlin from the Roof of the Museum, 1830
National Museum, Poznań
© akg-images







Karl Friedrich Schinkel,
Allegory of Beuth, Riding Pegasus over an Industrial Landscape, 1837
Berlin State Museums
© bpk / Kupferstichkabinett, SMB









hierarchy to the jumble of rooftops – the reach of Berlin already seems indeterminable.

In light of the speed of these developments, the moment of Schinkel's emergence is curiously timely, coinciding with a moment of calm between the upheavals of the Napoleonic wars and the 'rich and muddy torrent' of Germany's mass industrialisation.[22] Berlin's population, particularly its middle classes, seemed to revel in this moment of suspension, enjoying newfound individual freedoms and prosperity while remaining collectively bound to a vision of the Prussian state. Emblematic of these dualities is a Schinkel painting of 1837, which he dedicated to his friend Peter Beuth, director of the Prussian department of trade and manufacturing. Part private joke, part tribute, the painting – titled *Allegorie auf Beuth, den Pegasus über einer Industriestadt reitend* (*Allegory of Beuth*, *Riding Pegasus over an Industrial Town*) – shows a naked androgynous figure astride the white winged horse of Greek mythology, riding over the town's belching chimney-stacks, heading towards a distant mythic Mediterranean landscape. Through the smoke, front and centre, we are allowed a furtive keyhole glimpse into a corner of Beuth's office, presumably the very interior from which the directives shaping this new city were to emanate. This scene is certainly not the placid and ordered *urbs* depicted by Gaertner, but an agglomeration that could be read equally as majestic or terrifying, seemingly a vision of an urban landscape yet to come, and one that reconciles the two great themes of modernist theology: utopian idealism coupled with the redemptive forces of technology. Accordingly, Beuth's city incorporates both poetry and pragmatism, antique mythology and future vision. And the figure on the horse, riding above it all, is the master of this mechanical creation.

The privileged vista of the bourgeois Berliner, torn between the impulse to maintain a separation from the city and the desire to play a guiding role in its transformation, is famously captured in another of Schinkel's drawings, which frames the view of Berlin as seen through the double-height colonnade in front of his Altes Museum. The extreme oblique perspective of the composition – angled towards the twin towers of Schinkel's own Friedrichswerder church in the distance – details the exact opposing view to the one in Gaertner's panorama, which was painted from the roof of the church looking back at the museum. And as with his church, Schinkel was concerned that the roof of his museum should be accessible to visitors – a privilege which was itself captured in another painting from the same period by Ludwig Most, an artist from Western Pomerania who had studied, like Gaertner, at the Berlin Academy of Arts. Though he did not specialise in *vedute*, Most's urban and rural landscapes possess a similar quality of elaborate, almost exaggerated reality. In transmitting a kind of objective, analytical distance from its subjects, this style also proved to be particularly useful in reconstructions and, like Meydenbauer's photographs, Most's paintings were used after the Second World War to aid in the rebuilding of certain structures, not least the Ducal Castle in Most's birthplace, Szczecin. In his *Blick auf Berlin vom Dach des Museum*, 1830, Most offers an elevated view of Berlin, foregrounded by the rooftop of the Altes Museum and by various promenading Berliners. Like Meydenbauer, and like a similar set of figures in Gaertner's panorama (which also includes the artist himself, his wife and children, Schinkel, Beuth and even Alexander von Humboldt), this viewing public are all surveyors, taking the image of the city and reconstructing it within a newly ordered system, just as the visitor to the Glienicke pavilion does with the pastoral landscape. All of these surveyors, with their backs to us, are acutely aware (as are we) of their place within the panorama of the city. Yet in their removal from the scene, as they contemplate the environment from Schinkel's raised viewing platforms, they are also given to understand their separation from it. Schinkel's interventions therefore insert themselves into the city; at the same time, they behave as an apparatus to construct new images of that city.

And so even if the urban interior did not feature in Gaertner's chosen genre, the *veduta*, his panorama already presents Berlin as one vast interior in which all the objects of the city are collected and redisplayed: an interior in which images, impressions and conflations of history, imagination and desire all come together to form a new landscape whose intrinsic value derives from the very effect of its presentation. That Schinkel presented his own landscapes with a similar theatrical flair was not so surprising, given his work prior to becoming an architect. For in 1807, aged 26, after returning from his travels in Italy, Schinkel had been unable to find any architectural commissions – Berlin was under sanction and occupied by Napoleon's troops – and so he began instead to collaborate with a well-known theatrical impresario, Wilhelm Gropius. Father of Schinkel's friend Carl Gropius (Gaertner's future instructor in the painting of stage sets), the elder Gropius owned a mask factory and mechanical puppet theatre. Soon Schinkel was involved with the design of numerous backdrops, in addition to assisting with the creation of festive window displays for shops, a Gropius speciality.



Albrecht Meyenbauer,
photographic panorama of Berlin, 1868
© Brandenburg State Office
for the Preservation of Historical Monuments
and Archaeological Museum

During this time Schinkel unveiled his own ongoing experiments with 'deceptive illusory images'[23] in an upstairs room at 22 Breitestrasse, where he lodged with two of Gropius's sons, and then later in a larger space at 16 Spittelmarkt, and even, as his ambitions grew, at the nearby royal stables. One such show presented a number of architectural monuments from all over the world compressed onto a single, illuminated picture plane, while others re-enacted recent dramatic events from the Napoleonic campaign, such as *The Fire of Moscow*, which Schinkel staged in 1812. Here, audiences experienced a kind of simulated terror, as the features of the image appeared to move under illumination, exposing the lick of a flame over the city or crowds of people apparently surging over a bridge in the foreground. These effects were achieved by painting onto a transparent material using distemper, which was then lit in differing intensities from behind to create the necessary illusion. One spectator described the feeling of being 'pulled in' to the centre of the image, as if the picture plane had suddenly developed a volumetric depth.[24]

These works, along with Schinkel's association with a 'commercial' family of entrepreneurs such as the Gropiuses, were dismissed by some of his colleagues and critics, who found it hard to reconcile the image of the educated architect with that of a purveyor of popular illusion.[25] Schinkel himself had no such qualms – the shows he staged supported him financially for ten years, helped him further his graphic and painterly skills, and eventually even brought him his first royal commission in 1810: an interior for Queen Luise's bedchamber, no less, granted after the queen herself had attended one of his optical performances. It was also through his light shows and, later, his set designs for the royal opera, that Schinkel became an expert in manufacturing *Stimmung*, which has no one-to-one English translation but is usually defined as 'mood', 'atmosphere' or 'ambiance'. For Schinkel, an image transmitting *Stimmung* could provoke a sense of spatial or temporal dislocation,[26] which in turn created in the viewer an emotive – if heavily manipulated – response. And so just as the highly associative landscape at Schloss Glienicke, experienced through its mirrored interior, becomes an important agent in recollecting landscapes past, present and imagined, the picture emitting *Stimmung* conflates history, imagination and desire. The manner of its presentation, too, engenders a sense of displacement that might evoke a simulated reality, but at the same time also makes apparent all the mechanisms of the illusion the viewers are observing (they imagine the atmosphere occurs spontaneously, even as they are aware that it is deliberately manipulated). For this effect to work, they must internalise certain impressions, then project their own associations back onto the image, 'completing' the work through their own response. Or as Schinkel himself would write, 'All art must be viewed with a certain disposition.'[27]

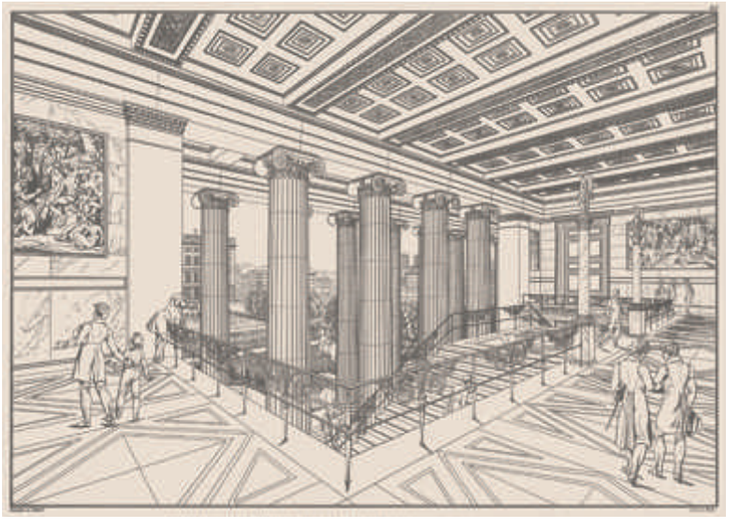
From two-dimensional pictures and backdrops, Schinkel would eventually turn his attention to ways of manufacturing *Stimmung* through the three-dimensional display of architecture. In many respects the consummate result of these experiments – the repository of a number of his more unusual optical manipulations – is the rotunda at the very centre of his Altes Museum, a space physically connected to the galleries that surround it, and at the centre of the museum's plan, yet also independent, disconnected from the main circulation route. The journey to this heart of *Stimmung* is even depicted in the three famous engraved perspectives of the Altes Museum published in Schinkel's *Sammlung* – a set of drawings that reveals an almost ceremonial procession that begins on Unter den Linden, where the entire museum is presented obliquely from the far side of the Schlossbrücke; and then moves inside the raised vestibule, from where the viewer looks back at the framed view of the city; and finally ends in the circular display hall of the rotunda itself.

In both the drawing of the rotunda and in the actual rotunda it is the floor pattern – rather than the commonly photographed dome – that is revealed to be the strongest aspect of the composition.[28] In particular, its concentric rings of dark inlaid stone appear to grow exponentially out towards the edge of the space along with the radial lines intersecting them, creating the perception of an extremely exaggerated room depth. At first this seems merely a consequence of its perspective, with the vanishing point of the drawing dictating that this is how the lines must appear. But a glance at Schinkel's floor plan of the same space reveals that the offset distance of the inlaid rings does indeed increase incrementally (mirroring the reflected ceiling plan showing the division of the coffers in the cupola above), as if they had been thrown outwards by a centrifugal force operating at the centre of the floor. When one is physically present in the space something even more disconcerting happens. Viewed from the edge of the room, the rotunda seems a pleasant, even quite ordinary circular hall, but if the visitor chooses to cross the floor and stand in the very middle

of the space, the offset rings of the floor suddenly appear to 'correct' themselves and to converge into a square grid of equidistant proportions, which in turn has the effect of making the floor seem to tilt up into a flattened canvas. At the same time, and again only from the central standpoint, the walls appear to be pulling upwards and inwards, conspiring to reduce everything to a single pictorial plane, the force of which is to induce an instant feeling of vertigo as the visitor feels themselves plunging through the floor. The only remedy is to step away from the centre, which immediately has the effect of pulling the body out of a distorted drawing and back into a more reassuringly conventional piece of architecture.



Schinkel, of course, was no stranger to the complexities of the kind of corrective perspective he used in the decoration of the rotunda floor, and interestingly the object with which he displayed his confidence with these techniques was again a panorama, painted for the Berlin Opera House over a period of four months when he was 27 years old. The *Panorama von Palermo*, which opened to rave reviews on 30 August 1808, was housed in a temporary wooden rotunda constructed on the city's Opernplatz, just in front of St Hedwig's church. At 4.5m high and 27m in circumference the panorama was modest compared to similar attractions in London and Paris, yet large enough to achieve a sufficiently all-encompassing effect. Schinkel paid for the structure out of his own pocket, then sold the entire work to Wilhelm Gropius, who toured it throughout Germany (its final whereabouts went undocumented, but it was rumoured to have been bought by a wealthy Italian for the interior of his villa in Naples).[29] Because the panorama was exhibited in a circular space, its design had to account for the distortions that occur when sketches made on a flat plane are applied to a cylindrical surface. As can be seen in Schinkel's setup drawing, which may have been used for the attraction's advertising pamphlet, the outlines of the buildings have to be shown curved when depicted on a flat surface so that they will be 'corrected' and appear orthogonal when seen in the round. The black circle at the centre of the diagram represents the raised viewing platform, accessed from below, upon which visitors would stand to view the immersive show.



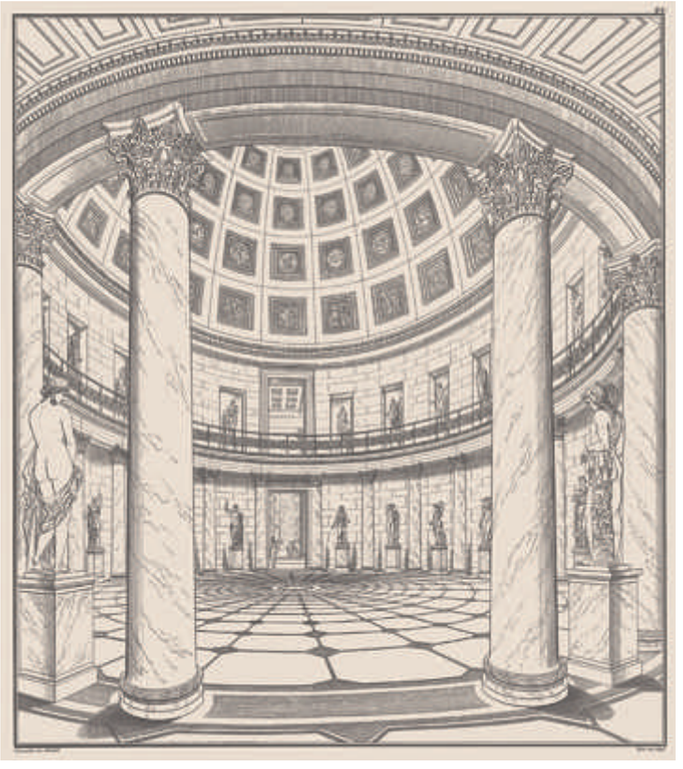
Standing in the middle of the Altes Museum rotunda, the viewer is offered an experience seemingly akin to that of being placed in the centre of one of these urban panoramas, even if there are two important differences: firstly, what is being displayed in the rotunda is not a painting of a landscape but the building itself, along with its array of sculptures, and secondly, unlike the panorama, this sense of spatial displacement caused by the effect of *Stimmung* is predicated not on the body's immersion within a simulated scene, but rather on its emersion or expulsion from it. The visitor, in this sense, is first enveloped and then pushed away from the space as the floor recedes then rises up like a tide – which induces the light-headedness. What is therefore most striking about the rotunda is this overlap between the sensory, spatial experience of the building and its two-dimensional surface treatment. Of course, all of this is quite deliberate, and in order to stimulate what Schinkel referred to as the essential aspect of 'tension' (*spannung*) in a work of art, he orchestrates a transition from being *within* architecture to the experience of being *without*.[30] One moment you feel yourself to be actively engaged in the construction of your surroundings – not least by your movement through the building – the next, you are thrown back into the role of mere spectator, perceiving the building's flattened surfaces from a position seemingly beyond them.

It is somehow impossible to describe these effects without recourse to the experiences of the user, so that a second-person narrative ('at one moment you feel this', 'at another moment you feel that') becomes essential to the articulation of the architecture. These oscillations are also paralleled by the seemingly irreconcilable conflict between pictorial representation (the image of architecture) and three-dimensional space (architecture experienced empirically) – a paradox that Schinkel was all too aware of, and continued to grapple with throughout his career. That is, to construct one's surroundings as an image precludes the possibility of true participation, yet being fully immersed in the architecture also denies a comprehension of the broader view. In this respect, the rotunda is a stage on which this conundrum plays itself out as an allegory for the uncertain relationship of the Biedermeier citizen to the encroaching metropolis, the museum's public interior allowing the enacting, as a kind of ritual, of the conflicting desires of immersion within, and removal from, the tumult of the modern city.[31]

Schinkel was very obviously aware of the importance of the rotunda, not just within his own body of work, but for architecture as a whole, and would often refer to it rather immodestly as a kind of 'pantheon', even if the aim of this Altes Museum gallery was not to transport the visitor towards some higher, celestial realm, but to insist on the corporeal, and more grounded, qualities of the architecture itself – something advertised by the fact that it is not a roof

or symbolic oculus that sells the space but a decorated floor.[32] And if the Pantheon in Rome enabled humans to grasp, for the first time, the concept of interior architectural space, then Schinkel's version allowed them to become complicit and implicit in its very construction.[33] For it is only the visitor, as the agent operating within certain predetermined parameters, who can animate the spatial game inside the rotunda. Without this required human act of communion, the architectural object remains latent, inanimate, and the architect's work remains incomplete.[34]

This is not to say, of course, that the interior was for Schinkel a space defined solely by an emotive and incalculable 'personal experience' – or, alternatively, by the affects of its unquantifiable and destabilising illusions. His architecture remained firmly embedded in the nineteenth century, to the extent that it was always designed to assert the importance of the fixed monumental edifice as an autonomous entity within the city. To a large extent, then, the idea of the interior persists here in the classical sense of a clearly defined space understood through its removal from, and negation of, the outside world. And yet, within this removal there is nonetheless the beginnings of a subtle and steady shift in a reading of space that goes beyond the familiar dualisms of object and subject, inside and outside, contained and unbound, and instead, by means of framing and display, looks to draw what is external into a new logic of its own making. In seeking to integrate and restructure the world beyond, the interior ceases to foster a retreat from the city, and instead begins, in a kind of reversal, to expand across it, with the goal of eventually encompassing everything within its limits.



This, too, is the ultimate ambition that the panorama sought to fulfil – an image that aspired to contain and display absolutely everything, and which turned landscape (whether urban or rural) into a room. It was this novel shifting of scales that made the attraction so popular. But at the same time there was more to its appeal, for it was through the panorama that the urban citizen was first able to imagine and even experience new and ideal cities. As one such citizen, Schinkel remained fascinated by panoramas his whole life. In 1840, while strolling in the Tiergarten just two days before he suffered the stroke that would eventually end his life, he even expressed a desire to his friend Carl Gropius to have the original *Panorama von Palermo* reconstructed at a larger scale, with a few alterations made to its view. Though Schinkel would not live to make these changes, Gropius began to make arrangements for the work to be executed to Schinkel's original sketch. It was finally displayed in 1844, measuring over 20m in diameter.[35] The prospect of an even more ambitious work – this time, a 30m-diameter panorama, presenting all of the world's greatest monuments, shown in their respective contexts, but combined within a single tableau – was also raised by Schinkel in the last months of his life, but this project was to remain unrealised.[36]

There is an often repeated anecdote about the origins of Schinkel's trajectory into architecture, in which it is said that after having encountered Caspar David Friedrich's 1818 painting, *Der Wanderer über dem Nebelmeer* (*The Wanderer above the Sea of Fog*), he immediately resolved to give up painting for building, realising that his own efforts on the canvas could never possibly match the mastery of Friedrich. The story is almost certainly apocryphal, but its retelling is perhaps simply an indicator of the continuing efforts to try and explain precisely what drove Schinkel, a man whose private character is still notoriously hard to pin down, despite the vast repository of literature dealing with his life's work. Friedrich's painting famously shows a man standing on the edge of a precipice, gazing out over a craggy and misty mountain landscape. Because he stands with his back to us, we cannot tell for sure whether this man is emboldened by the elevated scene in front of him or diminished by it, but from his confident stance it seems that he is asserting his own jurisdiction over the surveyed landscape, holding it captive, as it were, so that it might be remoulded according to his own ideal. Schinkel's fabled affinity with Friedrich's painting tempts us to cast him, the emblematic architect of the nineteenth century, as the Wanderer, the emblematic artistic subject of the nineteenth century. And as the Wanderer gazes, surveys and imagines, we could easily imagine him moved to proclaim, with astonishing hubris, the very same words we find in Schinkel's diary entry for 24 May 1804, recounting his climb to the top of Mount Etna: 'I believed the whole world below me could be grasped with a single look, the distances seemed so small, the breadth of the sea to the shores of Africa, the expanse of southern Calabria, the island itself; everything lay so clearly below me that I thought myself, in comparison, almost *larger*.'[37]

Karl Friedrich Schinkel,
engraved perspectives of the Altes Museum
approach, vestibule and rotunda
From Karl Friedrich Schinkel,
Collection of Architectural Designs, 1989

1. For a history of this painting see Birgit Verwiebe, 'Erdenstaub und Himmelsdunst: Eduard Gaertner's Panoramen', in *Eduard Gaertner 1801–1877* (Berlin: Stiftung Stadtsmuseum Berlin, 2001), pp 97–111.
2. Karl Friedrich Schinkel, *Reise nach England, Schottland und Paris im Jahre 1826*, published in English as *'The English Journey': Journal of a Visit to France and Britain in 1826*, translated and edited by David Bindman and Gottfried Riemann (New Haven, CT: Yale University Press, 1993), p 112.
3. *Ibid*, p 91.
4. *Ibid*, pp 108–10.
5. *Karl Friedrich Schinkel: Geschichte und Poesie*, exhibition catalogue, Kupferstichkabinett – Staatliche Museen zu Berlin and the Kunsthalle der Hypo-Kulturstiftung Munich (Munich: Hirmer Verlag, 2012), pp 252–53.
6. Karl Friedrich Schinkel, *The English Journey*, *op cit*, p 116; editor's footnote 363.
7. *Ibid*, p 79.
8. In addition to unceremonious tours in the houses of Nash and Soane, Schinkel's diary records a visit on 31 May 1826 to Charles Cockerell 'who was not at home'. By contrast, in France Schinkel was received with great ceremony. *Ibid*, pp 76, 89, 114.
9. *Ibid*, p 114.
10. As chronicled in John Summerson, *A New Description of Sir John Soane's Museum* (London: John Soane's Museum, London, 1966), p 50. Gandy's watercolour records the view from the standpoint from which today's visitors enter the room.
11. *Ibid*, p 12. The *pasticcio* was removed in 1896.
12. Nikolaus Pevsner, 'Schinkel', *RIBA Journal*, January 1952, p 89.
13. After the severe bombing damage to the pavilion during the Second World War, the entire casino, including the mirror in its original location, was reconstructed from the remaining building shell using Schinkel's original drawings and surviving photographs.
14. Historian Johannes Sievers reasonably contends that the main part of the design development process would have been completed in the two months between when Prince Carl purchased the estate at the beginning of May, and when Schinkel left for Italy at the end of June 1824; though Schinkel may have begun working on the design before Carl's purchase was finalised, as there is evidence he visited the site in early April. See Johannes Sievers, *Bauten für den Prinzen Karl von Preussen* (Berlin: Deutscher Kunstverlag, 1942), pp 21, 86.
15. *Ibid*, p 88. Sievers ascertained that the written notes on the drawing were in Schinkel's hand. It seems likely that any changes – especially a change as major as this – would have been agreed with Persius before Schinkel left for Italy in late June, as after this time he would not have had another opportunity to oversee the design before the majority of the work had been completed.
16. *Ibid*, p 89. Sievers gives the client requirement for the fireplace as the primary reason for the walling up of the garden entrance; however a fireplace could have been installed elsewhere in the room, so we cannot assume this was the only reason for such a transformative act.
17. See Helmut Börsch-Supan, *Bild-Erfindungen* (Munich: Deutscher Kunstverlag, 2007), p 465.
18. Walter Benjamin, *Das Passagen-Werk*, edited by R Tiedemann (Frankfurt am Main: Suhrkamp, 1983), p 52. See also Walter Benjamin, *The Arcades Project*, translated by Howard Eiland and Kevin McLaughlin (Cambridge, MA: Belknap Press, 1999), pp 8–9. This suitably direct translation is taken from Jan Pieper, 'The Machine in the Interior: Ludwig Persius' Steam Engine House in Babelsberg Park', *Daidalos* 53 (1994), p 104. On the growth of Berlin and the workers' uprisings, see Marsha Morton, 'Johann Erdmann Hummel: A Painter of Biedermeier Berlin', PhD dissertation, New York University, 1989, pp 427–28.
19. The Meydenbauer archive containing *c* 20,000 photographs of Berlin and its environs, for which the architect campaigned tirelessly, was finally established in 1885, and is currently in the hands of the Brandenburgisches Landesamt für Denkmalpflege in Waldstadt. One example of this photographic preservation is the French Cathedral in Berlin, reconstructed in 1977 largely on the basis of Meydenbauer's 1882 photographs.
20. As early as the fifteenth century Leon Battista Alberti used a similar method to chart the location of various monuments of Rome from a single position in the city. With a tool of his own invention called the 'Horizon', Alberti mapped the azimuthal position of the monuments using degrees and minutes. His technique is explained in Leon Battista Alberti, *Descriptio Urbis Romae*, *c* 1444, published in English (alongside French and Italian) as 'Delineation of the City of Rome' in Leo S Olschki (ed), *Albertiana vol VI*, (Paris: Éditions de la Maison des sciences de l'homme, 2003).
21. For a collection of eyewitness accounts of the street conditions at this time see Marsha Morton, *op cit*, pp 427–28, and Irmgard Wirth, *Berliner Biedermeier* (Berlin: Rembrandt Verlag, 1972), p 27.
22. Nikolaus Pevsner, *op cit*, p 95.
23. As described by Ludwig Catel in 'Darstellungen von merkwürdigen Gegenden und berühmten Bauwerken in der Art der Panoramen', *Berlinische Nachrichten von Staats- und gelehrten Sachen*, 29 December 1808. Translation by Birgit Verwiebe in 'Schinkel's Perspective Optical Views: Art Between Painting and Theatre', in *Karl Friedrich Schinkel: The Drama of Architecture* (Tübingen: Wasmuth, 1994), p 46.
24. *Berlinische Nachrichten* (also known as *Spenersche Zeitung*), 29 December 1808. English translation by Helmut Börsch-Supan, *Karl Friedrich Schinkel: Bühnenentwürfe, Stage Designs,* vol 1 (Berlin: Ernst & Sohn, 1990), p 29.
25. In 1814 the Berlin poet Achim von Arnim wrote to the writer Clemens Brentano about their mutual friend Schinkel, expressing concern that 'he works hard, but unfortunately still too much for Gropius and that sort of filth'. See Hartwig Schultz (ed), *Achim von Arnim und Clemens Brentano: Freundschaftsbriefe*, two vols (Frankfurt: Eichborn, 1998), p 702.
26. In a letter of 1813 to August Wilhelm Iffland, then director of the Berlin Royal Theatre, Schinkel described how his set designs aspired to the 'most perfect physical illusion of spatial displacement (*Ortsversetzung*) by the means of art'. Reproduced in Paul Ortwin Rave, *Karl Friedrich Schinkel: Lebenswerk, Berlin 1* (Berlin: Deutscher Kunstverlag, 1941 [1981]), p 84.
27. Friedmar Apel (ed), *Romantische Kunstlehre: Bibliothek der Kunstliteratur* 4 (Frankfurt: Frölich and Kaufmann, 1992), p 195. In German: 'Alles beim Kunstwerk liegt darin, dass die Natur mit einer bestimmten Gesinnung gesehen wurde.'
28. On the connections between the drawing of the rotunda and the space itself see Mark Pimlott, who writes of the engraving that 'The perspective of the interior is, like its realisation, very delicate, with fine detail distributed over the entire surface.' Pimlott saw the painted delineation of the surfaces in the rotunda as developing its method directly from that of the drawings Schinkel made to describe them, so that 'the picture is fused with its actualisation', suggesting an obvious overlap between the technique of the drawing and the technique of adornment of the space itself. The net effect of Schinkel's interior – and in this case Pimlott makes particular note of the floor – was thus one of acute artificiality, for, 'as the actual space seems to emulate the drawing, it appears as a *picture of itself*.' Mark Pimlott, *Without and Within: Essays on Territory and the Interior* (Rotterdam: Episode Books, 2007), p 20.
29. See Alfred von Wolzogen, *Aus Schinkels Nachlass, vol II* (Berlin: König, 1864), p 344.
30. See Goerd Peschken (ed), *Karl Friedrich Schinkel: Das Architektonische Lehrbuch* (Munich: Deutscher Kunstverlag, 1979 [2001]), p 115.
31. This is one of the essential arguments of Tony Bennett in *The Birth of the Museum: History, Theory, Politics* (London: Routledge, 1995), though his analysis is focused more on the organisation of social relations and the role of the individual in society through the museum than on the organisation of the physical interior of the museum itself as a model for the city.
32. In a report detailing the museum's display strategy to Frederick William III in 1825, Schinkel referred to the rotunda as having 'das wahre Ansehn von einem alten Pantheon'. See Alfred von Wolzogen, *op cit*, *vol III*, p 258. He also referred to the rotunda as a pantheon twice in his initial report on the project for the king in January 1823; see Paul Ortwin Rave, *Karl Friedrich Schinkel: Lebenswerk, Berlin I* (Berlin: Deutscher Kunstverlag, 1981), p 31.
33. See Alois Riegl, *Historical Grammar of the Visual Arts* (New York, NY: Zone Books, 2004 [1908]), p 429.
34. This idea comes from Schinkel himself, when he states: 'The work of architecture should not stand as a completed object, for the true act of imagination, once it has entered into the spirit of the articulated idea, must forever continue to shape our work – leading it on toward the infinite.' Author's translation, from Hans Mackowsky (ed), *Karl Friedrich Schinkel: Briefe, Tagebuecher, Gedanken* (Berlin: Propyläen, 1922), p 104.
35. As recounted by Schinkel's contemporary, the sculptor Johann Gottfried Schadow, in *Kunstwerke und Kunstansichten* (Berlin: Verlag der Deckerschen, 1849), p 136.
36. As recounted by Schinkel's friend, Gustav Friedrich Waagen, in his biography of the architect, *Karl Friedrich Schinkel als Mensch und als Künstler* (Düsseldorf: Werner, 1980 [1844]), p 420.
37. Georg Friedrich Koch (ed), *Karl Friedrich Schinkel, Lebenswerk, vol 19: Die Reisen nach Italien 1803–1805 und 1824* (Berlin: Deutscher Kunstverlag, 2006), p 116. Author's translation.



Karl Friedrich Schinkel, *Panorama of Palermo*, 1808
Berlin State Museums
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The Lost (First) Chamber of the House of Commons

Henrik Schoenefeldt



Aerial view of the Palace of Westminster,
showing the Central Tower
and square ventilation shaft, *c* 1905
© Parliamentary Archives / FAR/4/24

On 28 October 1943, two years after a Heinkel bomber from the Luftwaffe destroyed the House of Commons, parliament held a debate on its debating chamber. The issue was whether the new House of Commons should adhere to the Victorian model or base itself on an entirely new plan. Prime Minister Winston Churchill spoke passionately about retaining the 'traditional character' of the original chamber, but at the same time pushed his fellow MPs to agree on updates to its ventilation system. George Duckworth, MP for Shrewsbury, backed the argument, stating that 'although we may greatly regret the old chamber, with all its associations, it is my view that its destruction has presented us with a great opportunity. Now that it no longer exists, we may as well face the fact that it had many serious defects... It suffered from a system of ventilation which was antiquated and calculated to give everyone cold feet and a hot head.'[1] No doubt in agreement, Churchill promptly appointed an exploratory select committee, which would release a report the following year recommending a 'thoroughly up-to-date system of heating, ventilation and lighting', with mechanical ventilation and air-conditioning approaches proposed by the engineer Oscar Faber as the 'best which modern science can devise'.[2]

Conceptually, if not technically, Faber's idea for an air-conditioned space was not unlike the first environmental system installed inside the original Victorian chamber by the Scottish physician David Boswell Reid (1805–1863). Brought into being by a similar catastrophic act of destruction (in this instance, the Great Fire of 1834), a special committee had invited Reid to testify on possible arrangements for a new chamber. Reid, who had been testing various heating and ventilation approaches in his purpose-built laboratory in Edinburgh, proposed a sealed debating chamber, with controlled lighting, climatic and atmospheric conditions and an early non-mechanical approach to air-conditioning.[3] This was initially tested inside a model debating chamber, erected in Edinburgh in 1836. He was then invited to further test and refine his principles under real-life conditions, first in the Temporary House of Commons and then the Temporary House of Lords.[4]

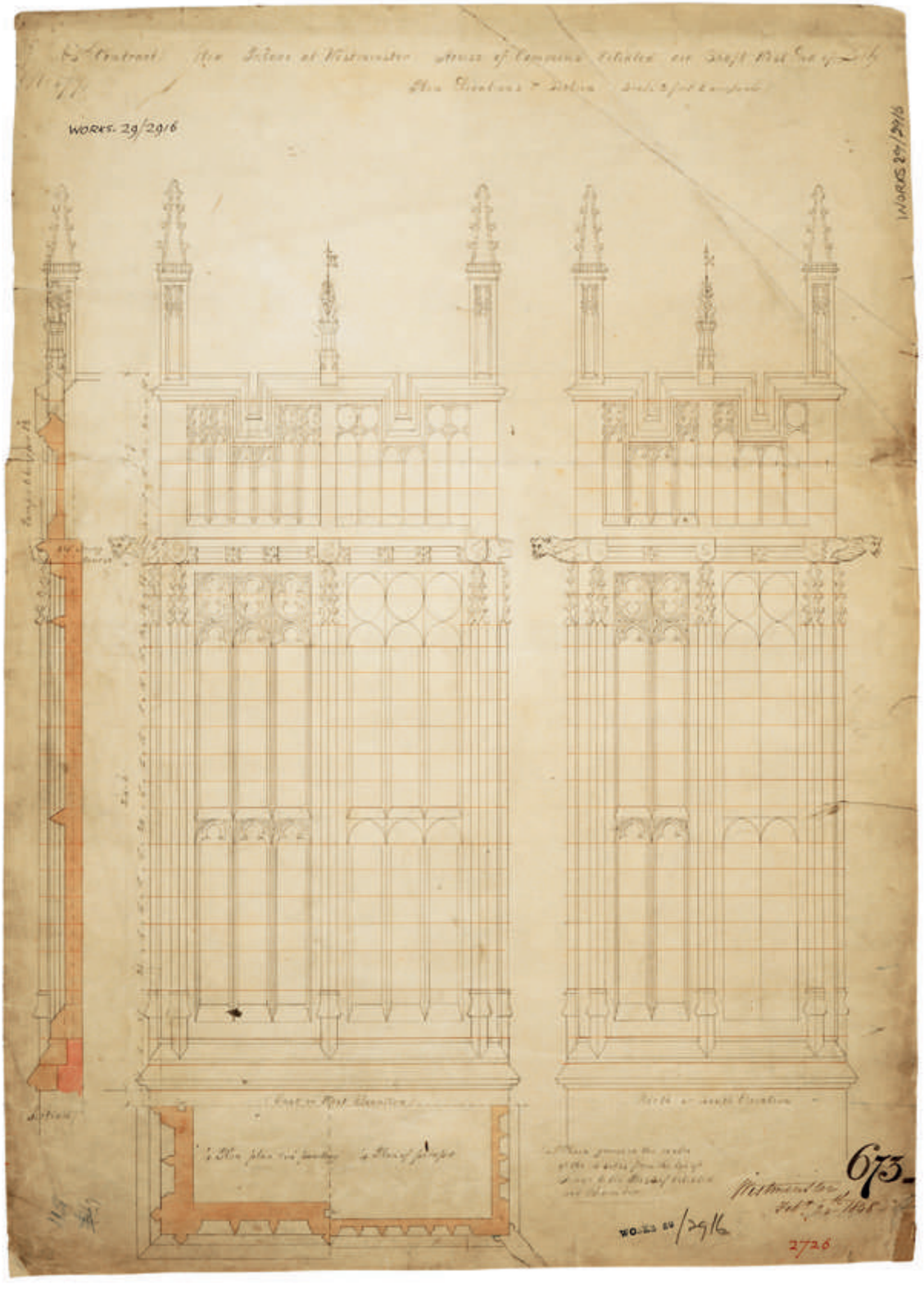
In 1839, following the success of these tests, Reid was appointed ventilation engineer of the new Houses of Parliament – one of the very first instances of the appointment of an expert consultant to advise on the design and construction of a building (pre-empting the modern tripartite division of labours between the architect, engineer and hired consultant). It was in this capacity (as 'ventilator', as he was referred)[5] that Reid was invited to collaborate with Charles Barry, architect of the Palace of Westminster, who by then had already completed his design of the building, which he had worked on since winning the competition three years earlier. It was not long, however, before tensions began to emerge between architect and ventilator. Reid, whose training was in medicine not architecture, insisted that Barry and his team adapt their architectural plans to accommodate his system – an assertion he defended through the immutability of his research, citing several textbooks he had written which illustrated the science behind the natural movement of air induced by atmospheric pressure, gravity or thermal buoyancy, or what modern science now calls fluid dynamics.[6]

Various scholars have used these differing skill sets – between architecture and science – to explain the souring of Reid's relationship with Barry. [7] This critique, however, detracts from the discernible influence that Reid's medical background had on his working method – not just in terms of the ventilation system he was advocating, but more fundamentally through the empirical methods he employed in its development. For example, letters and drawings exchanged between the two offices show how Reid drew on research methods pioneered in the fields of chemistry and medicine to evaluate the performance of environmental technologies from the perspective of human physiology and perception. In this sense, Reid was responsible for the conceptual design of a system – providing drawings and descriptions to Barry that were schematic and largely scientific, and which therefore required Barry's engineers to implement them at a required technical level.

This process of translation in turn prompted Barry, ten years Reid's senior, to question his new colleague, suggesting that Reid did not 'profess to be thoroughly acquainted with the practical details of building and machinery'.[8] Nevertheless, the design of the Palace of Westminster had become a cross-disciplinary endeavour, and between 1840 and 1846 'miles of pipe and thousands of valves and stopcocks were installed', with new heating and cooling shafts designed to fit inside the existing Clock and Victoria Towers.[9] At the same time, Reid's lack of design expertise did not stop him from proposing a new central tower to contain huge volumes of hot smoke and exhaust gases – a £50,000 expense to which parliament eventually agreed, with even Barry conceding that a third tower actually improved the original design.[10]

By 1846, however, the already strained working relations between architect and ventilator had become recalcitrant – Reid's involvement, Barry argued, was slowing down construction and pushing the project significantly over budget.[11] He went on to complain that all of the new shafts were compromising not just the building's fireproofing but its very solidity.[12] In an effort to regain design control, Barry therefore enlisted the help of the chemist Michael Faraday to develop an alternative system using a steam jet. As a result the original ventilation project was discarded in the autumn of 1846 following a full parliamentary enquiry into difficulties arising from the collaboration between Reid and Barry's office. To further minimise Reid's involvement, all ventilation projects, including the scheme for the House of Lords, were transferred to Barry and his engineers, Faraday, William Jeakes and Alfred Meeson, with Reid's area of responsibility now restricted to the boundary of the House of Commons. With this change in personnel, the concept of a single up-cast shaft was abandoned and replaced by a centralised system, composed of an array of local shafts for different sections of parliament, including a stone shaft for the House of Commons. A scaled-down version of Reid's central tower was eventually built, but the structure never fulfilled its intended purpose, functioning merely as a local outlet for air from the central lobby.[13]

And yet this reassignment of control did little to prevent the slowing of any decision making. Because parliament's ventilation was now based on Barry's system, Reid had to adapt his own system (by this stage, at least six years in the making) to function independently and with no access to the central air supply and exhaust outlined in his original plans. Accordingly, in April 1847 Reid submitted a new set of drawings to Barry's office outlining his adapted scheme, even if the detailed design of a number of its important features, including the fresh air supply, was not agreed upon until after several months of often intense negotiation.[14] In some way attesting to its dual authorship, the resulting arrangement featured two air inlets. The main vent constituted manually adjustable cast-iron louvres,[15] built inside the roof facing the river, which could be closed



Elevation of the House of Commons
square ventilation shaft, 1848
© National Archives

when the air pollution or stench of sewage became too severe.[16] A second inlet functioned as a backup and was placed on the opposite end of the site, inside one of the corner turrets of St Stephen's porch – an architectural feature previously introduced by Barry but lacking any obvious practical function. This reserve supply comprised part of the ceiling system, which was equipped with its own up-cast shaft, steam-powered fan, heating and humidification.[17]

Drawings show that fresh air was conveyed into the House of Commons through passages under the roof. On the north side of the central tower air passed through a fan and was then warmed inside a passage lined with steam pipes, terminating in the fresh air chamber above the central row of ceiling panels. Next, the air filtered into the debating chamber through gaps between panels and openings inside hollow ornamental beams that were manually regulated by sliding valves.[18] The vitiated air chamber situated above the side panels was connected to the new up-cast shaft on the west side of the Commons Lobby. Air came up through the base of the shaft and was exhausted through cast-iron valves at the top, which could be adjusted with the aid of pulleys. The current produced by the buoyancy of the hot air, boosted with the aid of coke fires, drove the vitiated air out of the debating chamber. But because the shaft was not strong enough to ventilate all spaces simultaneously, valves were used to switch between individual spaces, such as the Commons Lobby, the Ladies' Gallery and the Strangers' Gallery.[19] During votes, for instance, when the debating chamber was busier and therefore in need of more ventilation, the pull could be redirected from the house to the division corridors.[20]

The reasons for building two simultaneous air supplies, and parliament's approval of such a project, belie a purely functionalist analysis. Instead, the arrangements of the inlets can be seen as the outward expression of a political process that resulted in a physical, political artefact, and one that Reid considered a serious compromise to his original plans: inside the Central Tower was a diagonal wall, which not only served to isolate the fresh reserve of air for the House of Commons from the vitiated air entering the tower from the House of Lords, but also physically represented a contested border between Reid's and Barry's spheres of influence. This border was mirrored by another wall introduced by the architect inside the central air chamber at basement level, which physically isolated the air supply passages within the two territories.

Reid would actually challenge Barry's intervention, arguing that it compromised the effectiveness of his air supply. In fact, the House of Commons already had two pairs of inlets. Apart from the pair that served the downward supply through the ceiling, another set was provided for the upward supply through the floor of the debating chamber. The Central Chamber, which was connected to four courtyards, was intended as a spare inlet for the floor-level supply and could be deployed whenever the atmosphere around the main inlet at the top of the Clock Tower was polluted. Barry's partition, however, cut off the two courts on the south side of the Central Chamber and prevented Reid from using it as an effective backup supply.[21]

Yet Reid's concerns about air pollution entering into the chamber were not entirely unjustified. His earlier observational studies had given him an understanding of how wind conditions affected the movement of atmospheric pollutants around the site. The use of switchable inlets was therefore part of Reid's plan to enable the building to better respond to the level of external atmospheric pollution.[22] The use of windows was not viable due to the severity of local atmospheric pollution; inside the Temporary House of Commons the supply air had to be filtered in through canvas screens and water sprays.[23] Reid's earlier experiments had led him to determine that air was purer when pulled in from a higher elevation. His plans developed between 1840 and 1846 show air being taken in via inlets built high up in the Clock and Victoria Towers, whose positioning on opposite ends of the site allowed the fresh supply to be switched when pollution levels on one side were too severe.[24] In a letter dated 7 July 1840, Reid wrote that these high-level inlets gave access to 'an atmosphere at least equal to that of Hyde Park, and often one as pure as it is possible to obtain within some miles of London for the dull, lifeless, languid and heavy air which I have so often experienced around the present house particularly on the side towards the penitentiary'.[25] In the mid-nineteenth century, however, Hyde Park was on the edge of London, and so its atmosphere was considerably less polluted that Westminster, in the centre of the city – a geographical detail that enabled Joseph Paxton to utilise direct natural ventilation in his glasshouse for the Great Exhibition in 1851.[26] In contrast, parliamentary staff logbooks kept during this period mention several instances when attendants were unable to protect the interior from smoke pollution, even with access to multiple inlets in different locations. On 6 March 1854, for instance, staff reported the atmosphere as 'very foggy and charged with smoke' and that air was 'taken from central hall as that from the Clock Tower very smoky'. One week later it was reported that switching the supply from the Clock Tower to the Central Chamber made the air 'better but not good'. On 18 March, a 'foggy atmosphere loaded with smoke of the neighbourhood penetrated the building', and in early April, attendants wrote 'the supply from the tower feeling close and unwholesome'.[27]

Such unwholesome feelings were largely due to the detrimental effect coal-fired technologies were having on the atmosphere immediately outside the Houses of Parliament, which the system relied on as a source of fresh air. At the same time, the same system was also greatly influenced by the impact of internal sources of heat and air pollution, such as the radiant heat generated by the interior gas lighting, or even the body heat of all the MPs in the chamber and the public in the galleries above (a figure that reached as high as 800 for particularly popular debates). Anticipating these problems, Reid envisaged a fully integrated system capable of filtering in clean air from outside while alleviating the various pollutants within the chamber – a concept he had first demonstrated with his model debating chamber. This was a completely sealed space, without natural light, in which air was supplied and extracted entirely through the perforated surfaces of the floor and ceiling. Temperature, humidity and velocity of the supply air were tightly regulated. Diagrammatic cross-sections published in *Ventilation in American Dwellings* and *Brief Outlines Illustrative of the Alternations in the House of Commons* show the level of detail involved, with gaslights concealed behind sloping glass panels that ran along the edges of the ceiling, so as to isolate the bulbs from the atmosphere of the chamber.[28] The use of coal gaslights in a sealed chamber was a particular challenge – only 0.04 per cent of the energy they produced was visible light. The solution was to contain this unwanted heat and noxious fumes inside cavities above the ceiling, behind walls and under the raised floor before extracting it through the central ventilation shaft of the laboratory.

Overleaf: Sketch plan and section of the House of Commons ceiling system air supply, 1848
© National Archives

For the Permanent House, Reid proposed a different lighting system compatible with the downward air supply provided through the ceiling. A set of drawings submitted to Barry on 1 March 1848 shows the insertion of conical light reflectors covering the whole of the ceiling panels, which were also designed to function as hoods for the extraction of gas fumes. Each cone terminated in a flue connected to the up-cast shaft. Fresh air was supplied downwards, through gaps around the edges of the ceiling panels, and fumes were instantly expelled before they could contaminate or overheat the incoming air. Although it followed the same extraction principles Reid had used inside his private laboratory for extracting fumes released during chemistry experiments, Barry rejected the proposal on aesthetic grounds. And so while the architect, assisted by Faraday, was embracing current gas-lighting technology, fittings in the House of Commons and Lords were designed as medieval chandeliers to harmonise with the gothic character of the interior.

Reid, on the other hand, had proposed a radically different approach, which bore a closer resemblance to the lighting of twentieth-century office buildings – such as Eero Saarinen's 1950 General Motors Technical Centre in Warren, Michigan – than a candlelit hall. Just as the fluorescent ceiling fixtures of the Technical Centre cast a perfectly even light over GM's drawing studios, Reid's intention was to create a more 'equal' and 'homogeneous light'. He therefore proposed covering the entire ceiling of the chamber with 336 small 'burners' in order to cast a soft and uniform light throughout the space, 'imitating the equal and diffuse light of day', and protecting the eye from the intense glare of strong lamps.[29] Direct light was then diffused by placing these gas burners inside white cone-shaped reflectors, thus illuminating the chamber using only the 'mild luminous surface' of the ceiling. External fixtures were also proposed to make stained glass windows visible after sunset, creating a daylight effect.

Despite its modernity, Reid's proposed lighting scheme was rejected on aesthetic grounds because it interfered with Barry's own more ostensibly gothic plans. Yet in implementing his own lighting model, without any involvement from Reid, Barry in turn sabotaged Reid's ventilation system – in particular, the ceiling air supply that Reid had built into the system, which was rarely used at night because it pushed hot air around Barry's beloved chandeliers and into the depths of the house. In order to achieve better acoustics, the architect also lowered and remodelled his own ceiling design (an original scheme that had formed the basis for Reid's design). These obstacles meant that Reid's system could not address the myriad of environmental problems of the house (temperature, circulation, visibility, humidity, pollution, acoustics) in an integrated way, and prompted Reid to exclaim, in his 1852 interview with the select committee, that 'it is utterly impossible … to carry out a perfect system of ventilation whilst [Barry] was liable to have it deranged by violent cold currents'. He went on to argue that the 'existing evils in the ventilation' could not be remedied without inspecting the architectural drawings, and which Barry consistently refused to supply.

Certainly the souring of his relationship with Barry was one of the reasons Reid found himself constantly trying to solve the 'evils' of the house. Another was that, compared to the straightforward ventilation system developed for the Temporary House, the Permanent House was far more complex. Here, ventilation followed a mixed model, combining a stack-driven 'vacuum' model for the extraction of hot air with fan-powered 'plenum' ventilation for the air supply. From the basement air rose through adjustable shutter valves inside the vaults and up into the heating chamber on the ground floor. It then passed over the pipes of a hot-water apparatus before continuing its ascent through another set of valves and into an equalising chamber. The heating chamber was also surrounded by a cool-air compartment, through which unheated air could be conveyed directly from the basement using a set of circular valves, meaning that the chamber could respond quickly to fast fluctuations in temperature (essential for a space that would quickly alternate between heavy and light occupancy, as one debate ended and another began). Fresh air was monitored using a hygrometer and 20 separate thermometers before it was admitted into the same chamber.[30] Once inside, temperature and humidity could be adjusted using a non-mechanical form of air-conditioning that involved running cold water through the heating pipes (ice, which was used for brief trials in the Temporary House, was not deployed). In addition to his attempts to lower the actual temperature, Reid also sought to lower the perceived temperature by exploiting the cooling sensation of air currents as they passed over human skin. At the same time humidity was raised with the aid of steam or by evaporating water and lowered by unspecified 'absorbents of moisture'.

In order to facilitate the workings of this system the floor in the Temporary House of Commons had been completely perforated, allowing conditioned air to be uniformly supplied across the entire space, but in the Permanent House Reid introduced a more elaborate arrangement, which permitted a greater degree of local control over the climate and air supply. This was because in cases where there was a uniform supply of air, attendants reported difficulty getting MPs, who all sat in different areas, to agree on a set temperature. There was 'scarcely a meeting of the house at which there are not some members who would like the temperature to be at 55°F, and others at 70°F or 72°F', Reid reported.[31] The new concept of personal control was first trialled in the Temporary House of Lords from 1838 to 1847 in order to investigate whether user satisfaction could be increased by providing microclimates in different parts of the chamber and by responding to differences in the number of people per zone. But data collected during this time revealed that the new approach did not increase the level of satisfaction.[32] However, the problem was not the system, Reid argued, but that the lords did not provide attendants with enough personal feedback. These difficulties notwithstanding, Reid continued to develop the concept for the Permanent House, dividing the chamber into different climatic zones and increasing the level of control by allowing climate and air supplies around each bench to be individually adjusted.

Reid had first outlined his concepts for the permanent chamber during interviews with the select committee between 1844 and 1846. His aim, he said, was to 'give all who are tied down to official seats a ventilation in unison with their own feelings to a certain extent, while the general ventilation is arranged for the house'.[33] Such a system was an attempt to reconcile the tension between central control strategies, in which environmental systems are managed anonymously following a set range of climactic conditions, and personal control strategies, where users are able to adjust the environment to suit their needs. As if anticipating the modern concept of cybernetics, Reid then designed a system that responded not only to internal and external environmental conditions, but also to personal preference.

Original working drawings show that the attendants inside the equalising chamber used over 60 sliding valves to individually

New Palace at Westminster. Ho: Com: Ventilation Proposition for Supply of

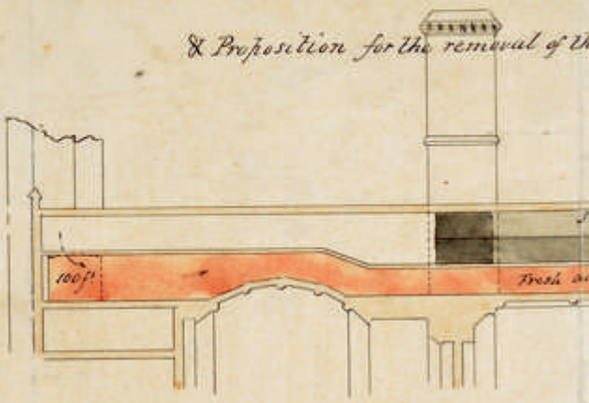
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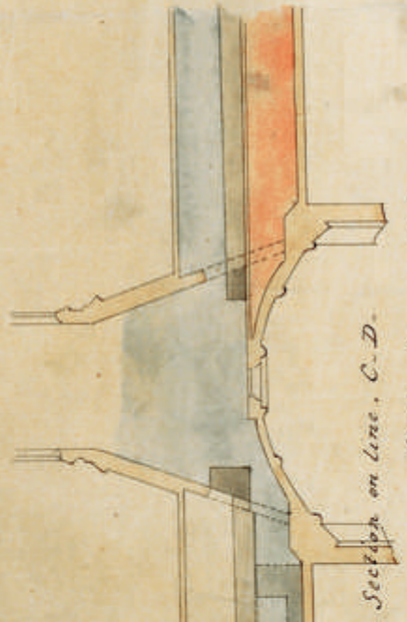
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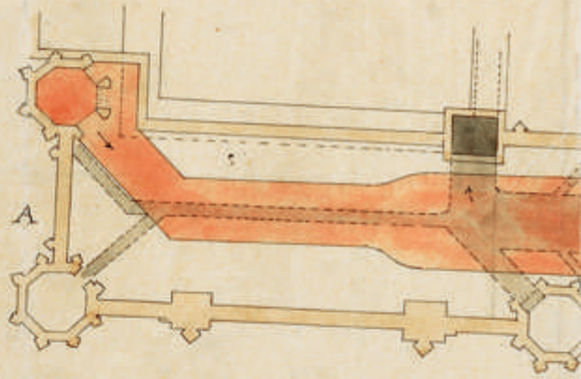
Section on line E. F.
looking Eastward.



Longitudinal



Section on Line. C. D.

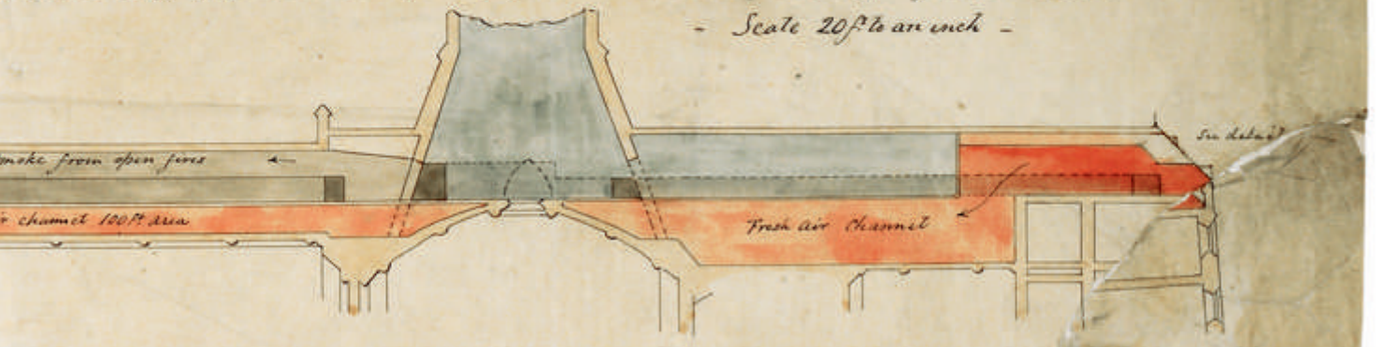


The pink Tint indicates supply of Fresh air
The blue Tint indicates discht: of Vitiated
The black Tint indicates the Smoke Chann

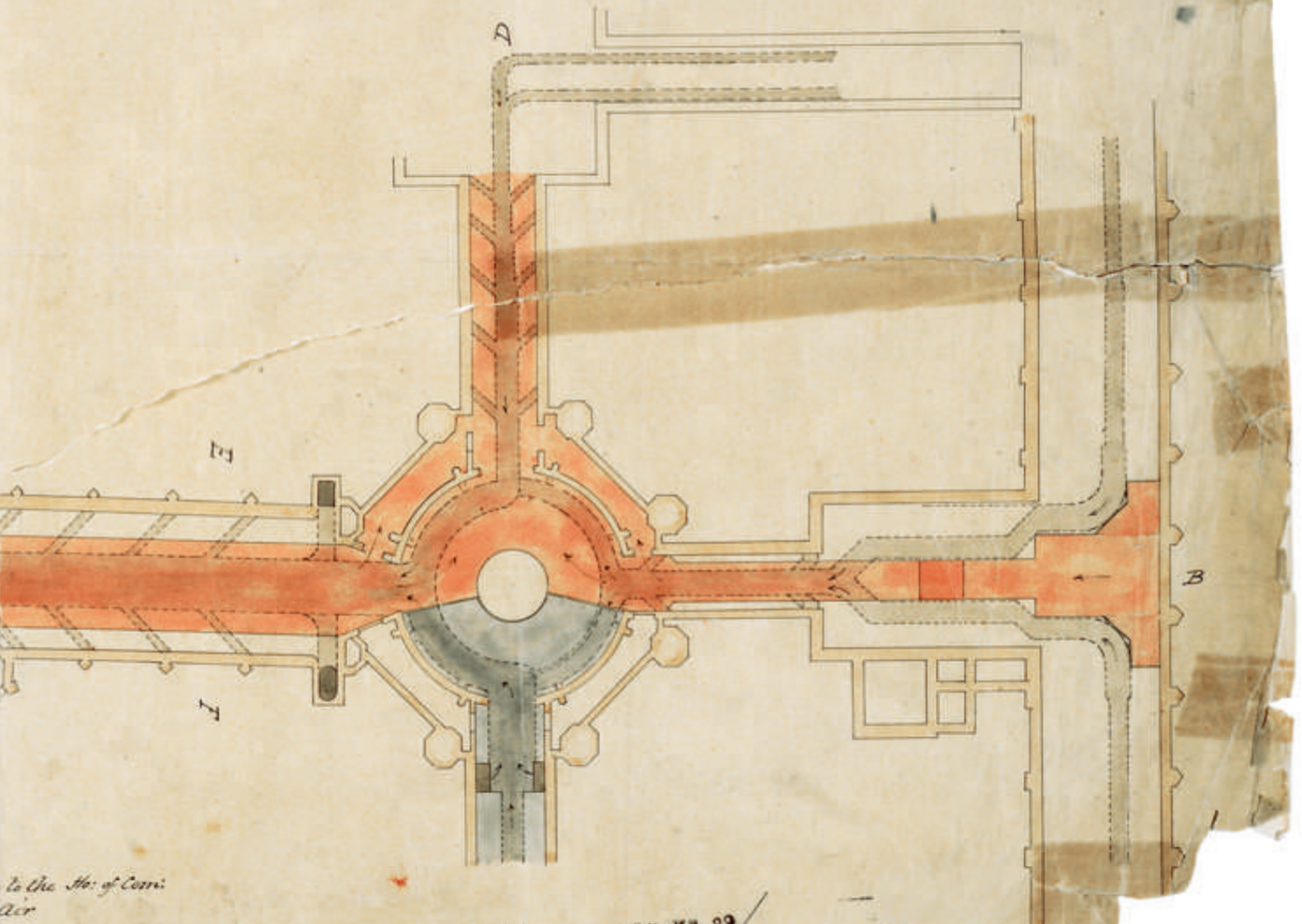
Fresh air to Ho: Com: from the N.W. Turret of St Stephens Porch and also f. the East face of the Roof over the Centre portion of River Front.

e Smoke Shaft from the E. end of St Stephens Hall to the S.E. angle of Westm^r Hall.

- Scale 20 f^t to an inch -



Section on line A-B- see plan



to the Ho: of Com:
air
els.

WORKS 29/2910 £1000

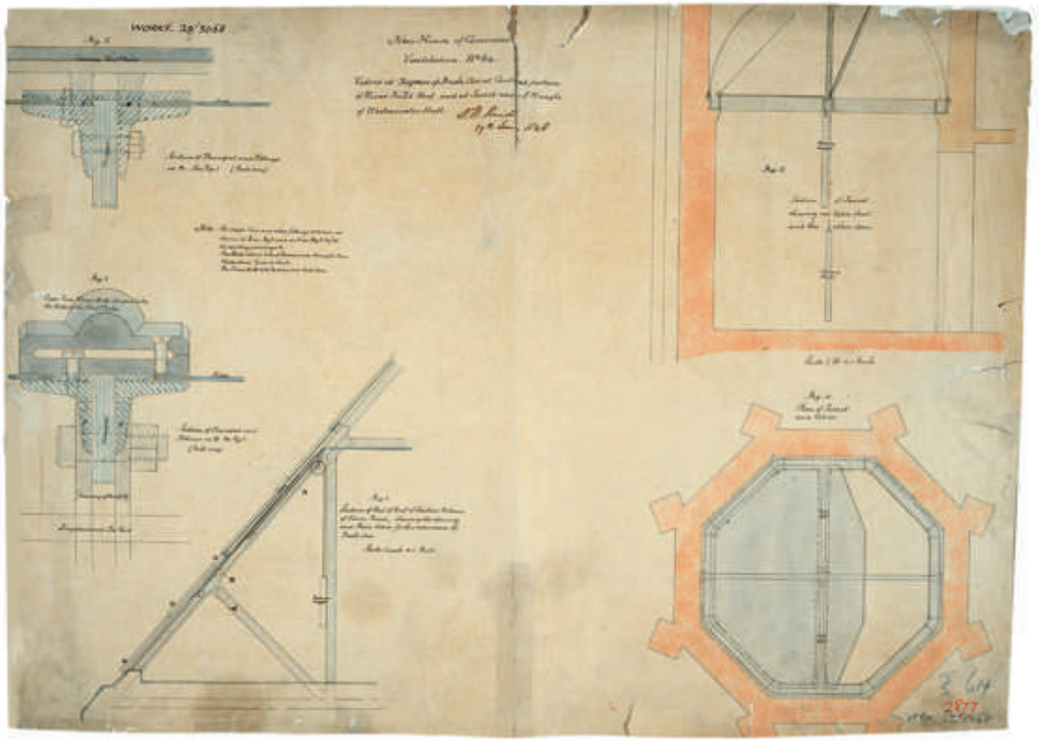
Signed by me in duplicate with a letter to be addressed thereto

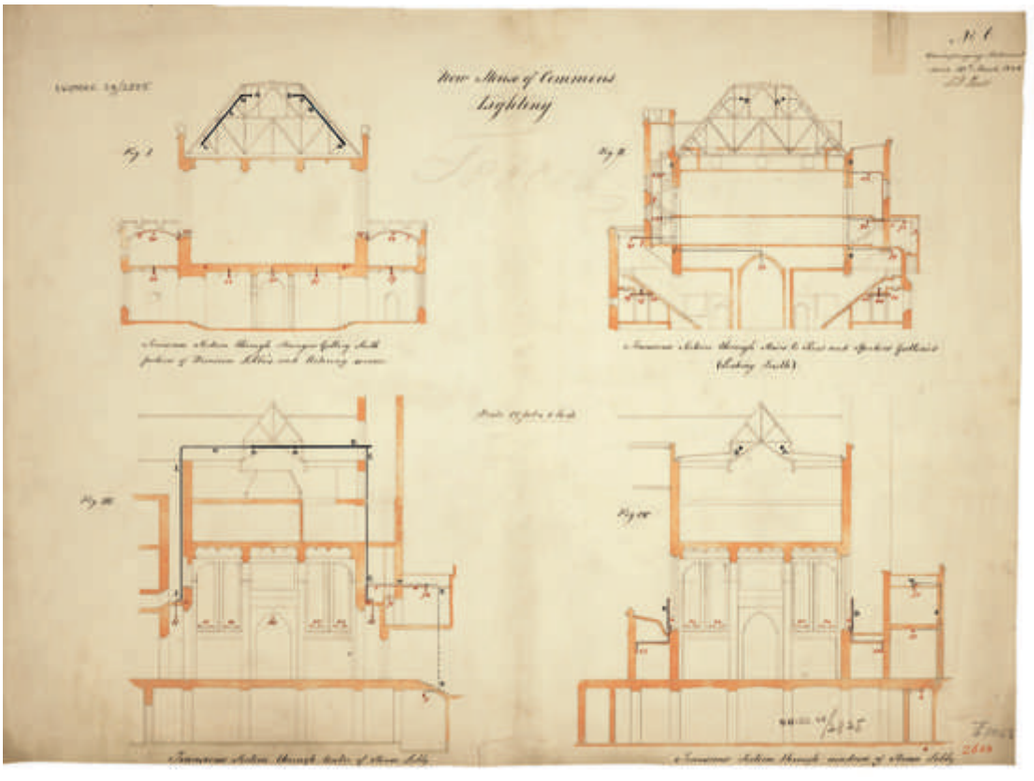
Signed Charles Barry

22 June

Approved
22
Jn

Chas Fowler
Thos Greene





Detail of House of Commons
roof-level inlets, 1848 (*above*), and
Reid's proposed lighting system, 1848 (*below*)
© National Archives

adjust the air supplied to each bench. The conditioned air passed through the valves into a horizontal duct under the bench and entered the house through the perforated floor.[34] Separate supplies were provided for the speaker and sergeant-at-arms, the floor area between the table and bar, and the risers of the steps between the benches.[35] Air was extracted through the ceiling and downwards through different sections of the floor, including the area immediately in front of the benches,[36] before being drawn into a vitiated air chamber below the floor and exhausted through the boiler chimney, which terminated in the octagonal turrets in the northwest corner of the Central Tower.[37]

Such an elaborate ventilation scheme required a monitoring system of equal calibre. From February 1852 to April 1854 climatic conditions inside the chamber were routinely checked and recorded in logbooks that in many ways resembled proto-Excel spreadsheets. Each log sheet contained columns for readings from four thermometers on the main floor. These were located near the speaker's chair, at the bar end and on the government and opposition sides of the central floor. A fifth thermometer, for which there was no separate column, was placed on the table. Additional columns showed readings from four other thermometers located inside the galleries. Humidity was measured inside the equalising chamber before the fresh air was admitted into the house, but not in the debating chamber itself.

Yet the continuous recording of temperature in logbooks was neither new nor unique to Westminster, as it was a practice then widely used in horticultural and public buildings. For example, temperatures were systematically recorded inside Smithfield meat market, several galleries in the Victoria & Albert Museum and the Royal Albert Hall, and twice-hourly readings were taken inside the Crystal Palace over the entire duration of the 1851 Great Exhibition.[38] But according to reports by doctors Neil Arnott, John Leslie and Goldsworthy Gurney, these measurements could not account for the full range of environmental factors – such as radiant heat, air currents, humidity, etc – known to affect perceived thermal comfort.[39] Therefore in the Houses of Parliament, along with aggregating column after column of quantitative data, the messenger of the sergeant-at-arms, Lord Charles Russell, gathered personal feedback from MPs, which Russell reviewed before passing it on to the office of the ventilator. Russell saw himself as the 'usual medium of communication, as respects the ventilation, between Dr Reid and the members'. He was, however, not passively transmitting data but actively moderating the subjective feedback process and engaging with conflicting views – what he called 'the war of lowering or raising the temperature'.

Though all of this predated computerised building systems by more than a century, and incorporated some of the biggest technological advances of its time (steam-powered fans, warm-air central heating, etc), the day-to-day management of the ventilation in the House of Commons was more akin to the honing of a craft than the operating of a well-oiled machine. Reflecting in 1846 on the system Reid trialled in the Temporary House, the engineer Morrill Wyman wrote:

The changes in the various circumstances in and out of the house are so frequent and so extensive, that the attendants must be constantly upon the watch to detect them; indeed, it is said that the same attention is required to give a good atmosphere, as is required of 'the sailor in steering a ship'.[40]

Unlike today's systems, characterised by their automated, anonymous processes and limited human involvement, the environmental control of the House of Commons was a question of human organisation. Its success relied on tight coordination, and the 'steering' of large quantities of environmental data was extremely labour- and time-intensive. In addition to various monitoring procedures, attendants were responsible for adjusting clocks to regulate the temperature of the hot water and steam pipes and managing the 60 individual air valves that regulated the air supply in different sections of the chamber.

The monitoring of personal comfort was another matter, since this was impossible to define using only quantitative climatic parameters. Comfort is a fluid, ever-changing state of being. Because of this, the direct involvement of people and the documentation of self-reported experience had been integral to the methodology Reid used in his early laboratory experiments, which used sealed rooms with controlled environmental conditions to investigate how climate and air purity affected everything from levels of concentration and a physical sense of well-being to appetite.[41] And in demonstrating a methodology by which the perceived reality could be continually 'metered' alongside the measurement of physical stimuli, this monitoring system can be seen to represent an early example of psychophysical principles when applied to architecture. Indeed, Reid's approach closely resembled what the German physicist Gustav Fechner later described as *äussere psychophysik* (outer psychophysics), a scientific field concerned with the correlation between physical stimuli (*äusserer reiz*) in the environment and the sensations (*innere empfindung*) they produce.[42] While his approach was more informal and less systematic than Fechner's method, Reid saw this type of feedback loop – between scientist and occupant – as a central part of his design of the House of Commons.

Like Russell, Reid was aware of the war over the thermostat and saw MPs functioning as the 'instruments' needed to qualitatively measure perception, allowing him to gather 'information as to the ever-changing feelings of members, of which no one can possibly judge but themselves'.[43]At the same time he knew that satisfying every individual in the chamber was impossible. He did, however, set basic parameters for temperature and humidity, if only so as to minimise disgruntlement. 'As far as I have been able to observe', he stated, 'a temperature of 65°F, with an atmosphere moving in a very gentle stream, so as not to be perceptible, is most agreeable in rooms that are not overcrowded'. In 1852 he added that 'when there is a difference of 5°F between the dry thermometer and wet-bulb thermometer next to it, I have the least number of complaints'.[44]

Yet between February and March of that same year Reid and his team fielded continuous complaints from unhappy MPs, and the issue of universal comfort became the subject of several 'heated' parliamentary debates.[45] For example, on 4 February, Joseph Hume, MP for Montrose Burghs, reported having to leave the chamber because he could no longer stand what he considered its sweltering temperature. Captain Fitzroy added that the situation was more complex, stating that MPs were exposed 'to puffs of alternate hot and cold air'. In another debate on 10 February it was suggested that the atmosphere felt too hot but also suffered from 'tremendous draughts'. The gallery was particularly warm due to rising hot air and the strong radiant heat of Barry's gas chandeliers, which produced 'a burning sensation, such as if I were exposed to a red-hot

iron', stated Denham Jephson Norreys. Spot measurements taken by the physician Goldsworthy Gurney during a sitting on 19 March confirmed the discrepancy – the temperature on the main floor reached as low as 61.5°F then rose to 68°F on the gallery and 73°F above the seats. While maximum temperatures of 73°F do not appear exceptionally high, the perceived temperature would have also been affected by the heavy clothing worn during parliamentary sessions as much as by the heat generated by a particularly argumentative debate. As house physician John Leslie noted, 'thermometers tell one tale, the body another'.

Driven by the discontent of many MPs, a select committee was appointed in March 1852 and Gurney was commissioned to examine the internal conditions. The committee also conducted interviews with the speaker, sergeant-at-arms and several MPs on their experiences. In an effort to quantify the physical conditions described, Gurney, with engineers James Mather, James Hann and John Hutchinson, measured air speed, atmospheric pressure and humidity inside the chamber.[46] They found that internal currents arose when the volume of hot air extracted through the up-cast shaft was greater than the quantity of fresh air rising through the floor. In order to regain equilibrium, gusts of air were then forced into the chamber via open doors and unsealed air valves below the floor and above the ceiling. Reid's inability to satisfactorily address these currents, he told the select committee, was less a matter of technicalities than politics: neither architect nor ventilator had communicated directly with the other since 1846, and six years later Reid found himself in a long and drawn-out embroilment over who ultimately controlled the climate of the House of Commons. Although on paper he had free reign to apply his principles to the chamber, Reid's design was not self-contained and was therefore left, by and large, at the mercy of Barry. The architect, Reid told the committee, had built doors that greatly impacted on the air currents in the house, had installed glass chandeliers that undermined his own integrated system and refused, throughout the entirety of the project, to furnish Reid with plans.[47]

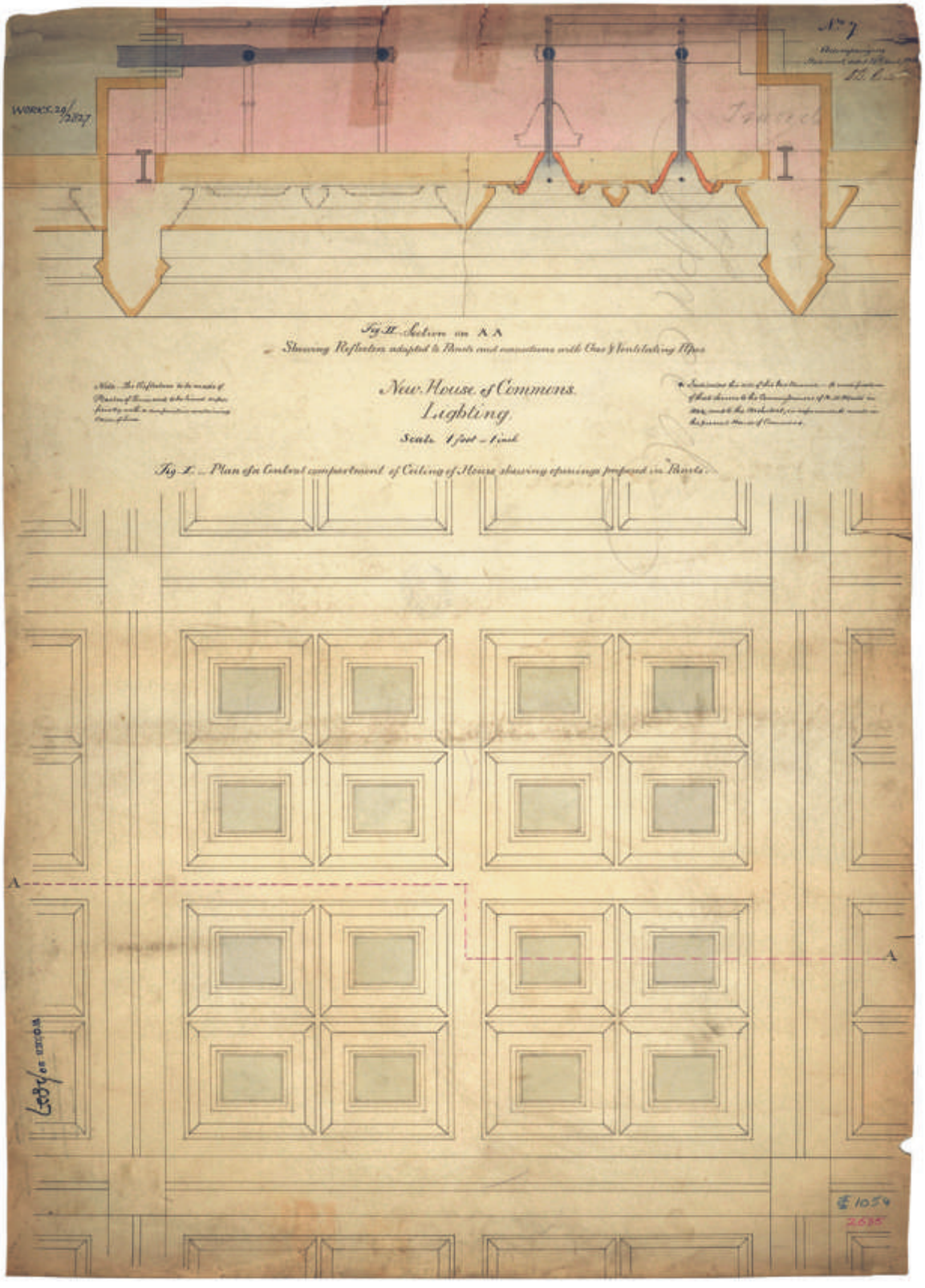
Nevertheless, between April and May 1852 Reid made a series of technical alterations in a final attempt to improve comfort.[48] Foremost among these was his introduction of a new lighting system, to reduce the perceived temperature inside the gallery, and the reorganisation of the ventilation arrangements above the ceiling to allow cool air directly into the gallery. However, recorded figures suggest that the maximum temperature difference between the floor and gallery was only marginally reduced, from 6°F to 3°F.[49] A steam-driven fan was then installed to counteract the low air pressure and boost the air supply, but logbooks covering this time report that currents remained an issue, largely due to the difficulties of synchronising the fan-powered supply with the stack-driven extract.

In November 1852, following the failure of these corrective measures, Reid was dismissed from his post. Day-to-day operations were transferred to the engineer Alfred Meeson, who, with Gurney, administered further tests to try to alleviate the rising currents, but to no avail. After a brief operational life of two years, the house then commissioned Gurney to remodel the entire system. Perhaps more of a politician, and distancing himself from his predecessor, Gurney promptly assured members that he did not require any drawings of the chamber to develop a successful system. The solution he came up with adopted a purely stack-driven approach with local inlets that allowed the equilibrium between the quantity of incoming and outgoing air to be naturally maintained without mechanical aids.[50] Logbooks do not give any readings for this period, but interviews with MPs between May and July 1854 suggest significant improvements in climate. The sergeant-at-arms also reported that temperatures were more tightly managed and draughts markedly reduced.[51] According to Robert Smith, MP for Northampton, the atmosphere was fresher and did not become oppressively hot. The MP for North Riding noted that draughts occurred only occasionally and Edward Bouverie, MP for Kilmarnock Burghs, found that the attendants were able to adjust the temperature with more efficiency. In its second report, dated 26 May, the commons committee formally concluded that Gurney's interventions had been successful in improving thermal comfort and recommended the permanent adoption of his system.

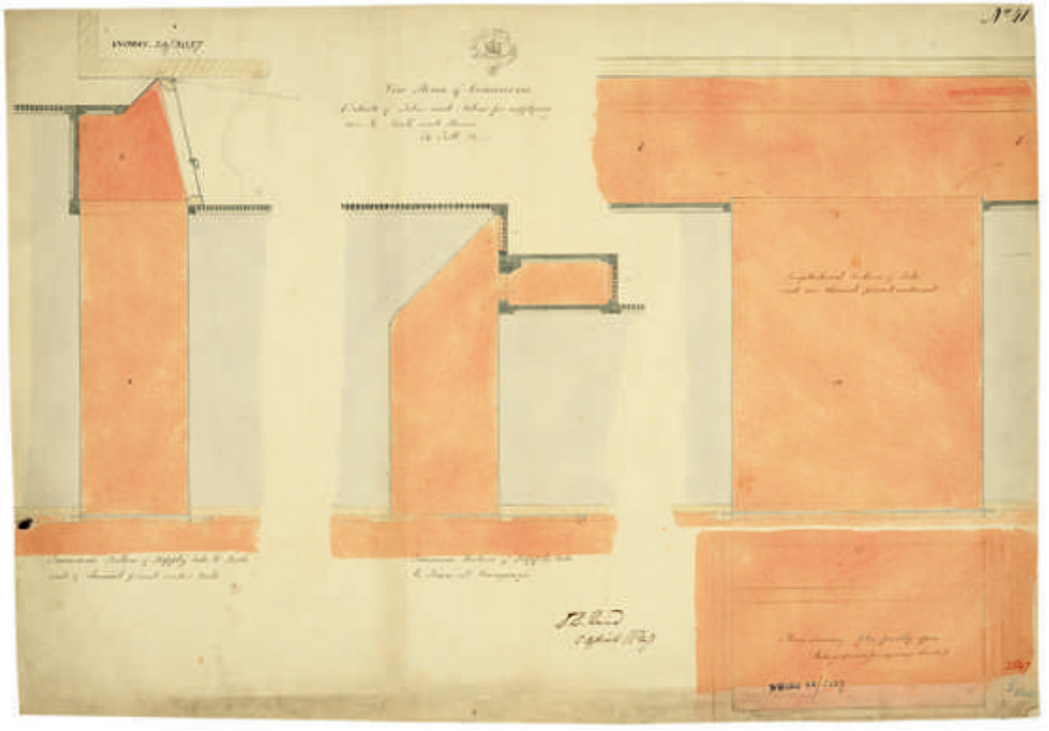
Over the next 90 years the system became the subject of a continual process of technical fine-tuning, incrementally erasing Reid's original design. Except for the fragments of the air supply channels in the roof and basement of the Palace of Westminster, none of the original physical features have survived – the last remaining traces were lost during the air raids of 1941. Reid, too, faded from London. In 1856, following his hostile and public dismissal, he moved to the United States where he taught for a year at the University of Wisconsin-Madison and served as a medical inspector for the national sanitary commission before his death in 1863.

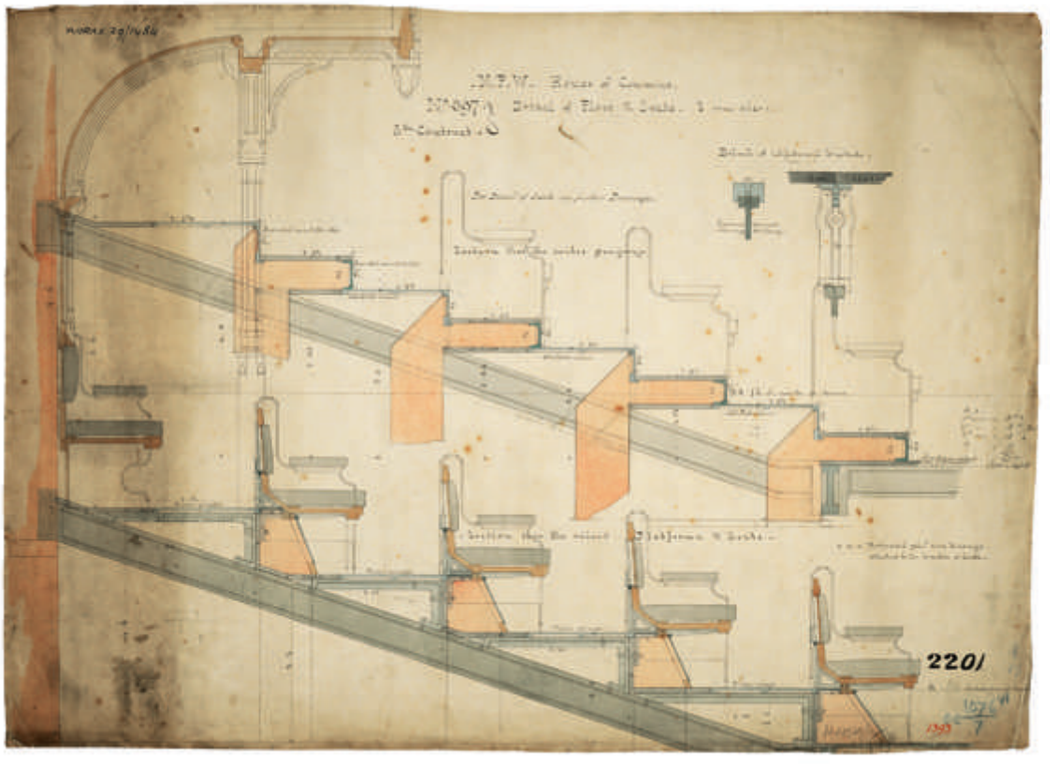
Despite his fall from grace, and the dismantling of a system for which he had made his name, Reid had still developed something radical – although not so much in terms of the mechanics of his invention, but in his pioneering of the idea that an architectural environment should respond to individual perceptions of reality. Yet the irony of his successes is that in exposing himself to an especially modern concept of comfort, he left himself vulnerable to an equally modern concept of peer review. As a succession of MPs complained of differing degrees of discomfort, Reid was ultimately derailed by the same system he originated. This in turn exposed certain character flaws when he came to defend himself. Indeed, the physicist was known for his difficult personality, and many times throughout the select committee's 1852 transcript he seems to crumble under pressure, skirting the blame for his failed invention in the House of Commons, evading questions and even disregarding the on-going nature of his own scientific method, claiming over and over the impossibility of improving the ventilation system and exhibiting a predilection towards melodrama: 'I have always stated that the difficulties which a ventilator has to labour under are between the Scylla and Charybdis of the dust below and the products of combustion above'.[52]

Ultimately, however, it is not the struggle between dust and smoke that can be seen to define the rise and fall of David Boswell Reid, but the other, and even more fearsome Scylla and Charybdis of the architect and the consultant. Reid, in these terms, is not victim to monstrosity but *is* one of the monsters himself. Having been hired to provide an environment and a system, he soon found himself battling Charles Barry who in many ways had been tasked with the same thing. That their ensuing rivalry played itself out in the middle of the world's most famous debating chamber only enhances its mythology, as much as the control they were fighting over – not just over ownership and representation, but for the science or artfulness of their discipline – shows Reid and Barry as progenitors of the most modern kind of architectural practice.



Plan and section of Reid's proposed
House of Commons lighting system, 1848
© National Archives





Air inlets around the bench seats in the House of Commons, Reid's original schematic drawing, 1847 (*above*), construction drawings from Barry's office, 1850 (*below*)
© National Archives

1. The debate has been recorded in Winston Churchill, 'House of Commons Rebuilding', *Commons Sitting HC Deb, 1803–2005*, 28 October 1943, vol 393, pp 403–73.
2. Report from the Select Committee on House of Commons Rebuilding, HC SC 194344 (109) (London: HMSO, 1944), p 6.
3. Report of the Select Committee on the Ventilation of the Houses of Parliament, HC SC 1835, 583 (London: HMSO, 1935); David Reid, *Brief Outlines Illustrative of the Alterations in the House of Commons, in Reference to the Acoustic and Ventilating Arrangements* (Edinburgh: Neil & Company, 1837); *Illustrations of the Theory and Practice of Ventilation* (London: Brown, Green & Longmans, 1844).
4. A detailed study of these experimental studies can be found in Henrik Schoenefeldt, 'The Temporary Houses of Parliament and David Boswell Reid's Architecture of Experimentation', *Architectural History*, 57, 2014, pp 175–215.
5. Letter from Alexander Milne to David Reid, 24 January 1840 (Work 11/12 no 30–32).
6. David Reid, *Rudiments of Chemistry: With Illustrations of the Chemical Phenomena of Daily Life* (Edinburgh: William & Robert Chambers, 1836), pp 184–85; *Elements of Practical Chemistry* (Edinburgh: MacLachlan & Stewart, 1830).
7. See Moritz Gleich, 'Architect and Service Architect: The Quarrel Between Charles Barry and David Boswell Reid', *Interdisciplinary Science Reviews*, 37/4, 2013, pp 332–44; Peter Collins, *Changing Ideals in Modern Architecture, 1750–1950* (Quebec: McGill-Queens University Press, 1998); David Cannadine, *The Houses of Parliament: History, Art, Architecture* (London: Merrell, 2000); Henry-Russell Hitchcock, *Early Victorian Architecture in Britain* (New Haven, CT: Yale University Press, 1954); Rosemary Hill, *God's Architect: Pugin and the Building of Romantic Britain* (London: Allen Lane, 2007); Barnett Cocks, *Mid-Victorian Masterpiece* (London: Hutchinson, 1977).
8. M H Port, *The Houses of Parliament* (New Haven, CT: Yale University Press, 1976), p 103.
9. Robert Brucemann and Donald Prowler, 'Nineteenth-Century Mechanical System Designs', *Journal of Architecture Education*, 30/30 (1977), p 12.
10. Robert Bruegmann, 'Central Heating and Forced Ventilation: Origins and Effects on Architectural Design', *Journal of the Society of Architectural Historians*, 37/3 (1978), p 152.
11. Report from the Select Committee of the House of Lords on the progress of the building, HL SC 1846, 719; Report from the Select Committee on Westminster Bridge and new palace, HC SC 1846, 177; Second report from the Select Committee on Westminster Bridge and new palace, HC SC 1846, 349; Third report from the Select Committee on Westminster Bridge and new palace, HC SC 1846, 574.
12. Robert Bruegmann, *op cit*, p 153.
13. Letter from Charles Barry to H M commissioners for the completion of the New Palace of Westminster, 20 February 1849, National Archives, work 11/13 no 546; letter from Meeson to J Thornborrow, 13 August 1855, National Archives, work 11/14 no 8814.
14. Set of drawings dated 5 April 1847, National Archives, work 29/2905–59.
15. Letter from David Reid to H M commissioners for the completion of the New Palace of Westminster, 29 June 1848, work 11/13 no 462; drawing modifications proposed for the supply of fresh air to the new House of Commons, 7 June 1848, National Archives, work 29/3066; valves at ingress of fresh air at central portion of River Front roof and turret near SW angle of Westminster Hall, Reid, 29 June 1848, National Archives, work 29/3068.
16. Transcript of interview with David Reid, 26 March 1852, in *Second Report of SC 1852*, Q373, 406–07.
17. Plan and section of ceiling supply with heating pipes, 5 April 1847, work 29/3046; heating apparatus in the air chamber in the roof over commons lobby, 22 January 1850, work 29/3083.
18. David Reid's statement explaining the arrangements for the warming and ventilating of the New House of Commons, 5 April 1852, in Second Report of SC 1852, pp 545–8; 'Dr Reid's Arrangement for Warming and Ventilating the New Houses of Commons', *Civil Engineer and Architect's Journal*, 222/15 (September 1852), p 292f. The valves are shown in several drawings, including 'Longitudinal Section', 1847 (undated), National Archives, work 29/2905; 'Warming and ventilation – plan of roof', David Reid, 5 April 1847, National Archives, work 29/3027.
19. David Reid's statement explaining the arrangements for the warming and ventilating of the New House of Commons, 5 April 1852, in the Second Report of SC 1852, pp 545–48.
20. Transcript of interview with David Reid, 30 April 1852, *ibid*, Q3573.
21. Letter from Charles Barry to commissioners for the completion of the new palace, 6 July 1848, National Archives, work 11/13 no 464; interview with David Reid, 26 March 1852, in Second Report of SC 1852, Q402–3.
22. Letter from David Reid to Viscount Duncannon, 7 July 1840, National Archives, work 11/12; letter from David Reid to Department of Woods and Forests, 28 April 1841, National Archives, work 11/12, no 45.
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25. Letter from David Reid to Viscount Duncannon, 7 July 1840, work 11/12, no 34.
26. See Henrik Schoenefeldt, 'Adapting Glasshouses for Human Use: Environmental Experimentation in Paxton's Designs for the 1851 Great Exhibition Building and the Crystal Palace, Sydenham', *Architectural History*, 2011, pp 233–73.
27. Registers of temperature control and ventilation for the House of Commons 1853–1854, Parliamentary Archives, OOW/5.
28. David Reid, *Ventilation in American Dwellings* (New York, NY: Wiley & Halsted, 1858); David Reid, *Brief outlines illustrative of the alterations in the House of Commons, in reference to the acoustic and ventilating arrangements* (Edinburgh: Neil & Company, 1837).
29. Statement accompanying David Reid's letter to the Commissioners of Woods, 10 March 1848, National Archives, work 11/13 no 387.
30. Interview with David Reid by the Select Committee of 1852, 20 April 1852, HC SC Second Report 1852, Q3598.
31. Transcript of interview with David Reid, 26 March 1852, in Second Report of Select Committee, 1852, Q642.
32. Letter from Lord Campbell, 11 September 1843, in *Extracts from official documents, reports* (UCL Library, Hume Tracts); the New Houses of Parliament, HL Deb 21 February 1843, vol 66 pp 1033–6; the New Houses of Parliament, HL Deb 5 June 1845, vol 81 pp 120–22; progress of the New Houses of Parliament, HL Deb 24 April 1846, vol 85 cc 970–76.
33. Third report from the Select Committee on Westminster Bridge and new palace, HC 1846, 574, Q985.
34. Ceiling above equalising chamber with supply tubes, valves and flaps, 28 June 1851, work 29/3100. Section through centre gangway, raised platforms and seats, 10 January 1851, National Archives, work 29/3093.
35. Interview with David Reid, 30 April 1852 in Second Report of Select Committee, 1852, Q354-5.
36. Report of the Select Committee on Houses of Parliament, (1844, 448), Q317-28, 387.
37. *Ibid*.
38. Henrik Schoenefeldt, 'The Crystal Palace – Environmentally Considered', *Architectural Research Quarterly*, 12, 2008, pp 283–94; Report of the Commission on Heating, Lighting, Ventilation of the South Kensington Museum (1869); Walter Thornbury, 'The Metropolitan Meat-Market', in *Old and New London* (London: Cassell, Petter & Galpin, 1878), p 495.
39. Interview with J Leslie, Second Report of Select Committee, HC SC 1852, Q3137-43.
40. Morrill Wyman, *A Practical Treatise on Ventilation* (Cambridge: Metcalf, 1846), pp 214–19.
41. David Boswell Reid, 'The Revision of Architecture in Connection with the Useful Arts', *Builder*, 5 May 1855, pp 208f; David Boswell Reid, 'Eight Lectures by David Boswell Reid on "Progress of architecture in relation to ventilation, warming, lighting, fire-proofing, acoustics, and the general preservation of health"', (*Smithsonian Annual Reports*, 1856), pp 147–86.
42. Gustav Theodor Fechner, *Elemente der Psychophysik* (Leipzig: Breitkopf & Härtel, 1860).
43. Report of Select Committee on Houses of Parliament, HC SC 1844, 448.
44. The humidity of the air was determined by taking two parallel readings, one from a dry-bulb thermometer and the other from a wet-bulb thermometer. The greater the difference between the two readings, the higher the atmospheric humidity.
45. See Ventilation of the House, HC Deb, 6 February 1852, vol 119, pp 231–34; The Queen's Speech – Report of Address, HC Deb, 4 February 1852, vol 119, pp 162–72; Imperial Parliament, *Daily News*, 5 February 1852, p 3; 'The Science of Ventilation', *The Times*, 9 February 1852, p 4; Ventilation of the House, HC Deb, 11 February 1852, vol 119, pp 400–16; Editorial, *Builder*, 14 February 1852, p 97; Ventilation of the House, HC Deb, 16 March 1852, vol 119, pp 1147–50.
46. Second report of Mr Goldsworthy Gurney on the ventilation of the new House of Commons, HC 1852, 252 (371).
47. See Second report from the Select Committee on Ventilation and Lighting of the House, HC SC 1852 (474).
48. David Boswell Reid, Report of Measures required for the health and comfort of the honourable the House of Commons, in obedience to resolution of the house, dated 11 February 1852 and 10 March 1852, work 11/14 no 711–14. For a more detailed account of the experiments see Henrik Schoenefeldt, 'Reid's Short-lived Ventilation System for the Permanent House of Commons', *Studies in the History of Construction*, 2015, pp 167–82.
49. Temperature at the House of Commons, taken by the messenger of the sergeant-at-arms, 22 March – 4 May 1852, HC 1852 (402).
50. First Report from the Select Committee on Ventilation, HC SC 1854 (149); letter from Works to Gurney, 7 April 1854, work 11/14 no 850; letter from Gurney to Works, 7 April 1854, work 11/14 no 842; letter from Gurney to Office of Works, 10 April 1854, work 11/14 no 847.
51. Report from the Select Committee of the House of Lords, appointed to enquire into the possibility of improving the ventilation and the lighting of the House, HL SC 1854, 384, Q839–81.
52. Second report from the Select Committee on Ventilation and Lighting of the House, HC SC 1852 (361). Twenty years earlier, in 1831, Reid had been involved in an equally fractious enquiry, having a very public falling out with the chemist Richard Phillips, who had pointed out a number of inaccuracies in one chapter of Reid's *The Elements of Practical Chemistry*. Reid responded by publishing a 20-page pamphlet titled *An Exposure of the Misrepresentations in the Philosophical Magazine and Annals*, denouncing Phillips' critique as that of 'an infatuated, and, unaccountably, totally and grossly ignorant person'. Phillips in turn retorted that: 'You have appealed to the public, and expressed your willingness that your book should stand or fall by their decision. I also am perfectly content that the same tribunal should determine, which of us has substituted words for facts.' See Richard Phillips, 'A letter to Dr David Boswell Reid', 1831, p 28.





Above: Geoffrey Bawa, London, 1955
Courtesy David Robson
© Geoffrey Bawa Trust
Below: The 1934 Rolls-Royce drophead coupé at No 11, 33rd Lane, Colombo
© Sebastian Posingis

Bawa's Rolls

Max Moya

At the Architectural Association in the mid-1950s Geoffrey Bawa was considered the school's tallest, oldest, most exotic, most outspoken and wealthiest student. His height was no doubt a consequence of his parentage, being the second son of Benjamin Bawa, a successful Sri Lankan lawyer of Muslim and English extraction, and Bertha Marion Schrader, whose ancestry was even more complex, being part Sinhalese and part German, Scottish and Dutch. His great age on enrolling at the AA – he was 35 years old when he began his studies in 1954 – was connected to the fact that architecture was his second degree. For after his high-school education at Royal College, Colombo (the 'Eton of Sri Lanka'), Bawa had studied English at St Catherine's College, Cambridge – where he dressed in a cape and carried a cane – then continued a legal training at London's Middle Temple before becoming a barrister in 1944 (all of which would explain his confidence and lack of inhibition). Very soon, however, Bawa seemed to tire of the legal life and left to travel the world for a couple of years. Returning home, he bought an abandoned rubber estate in Lunuganga, where he planned to design and construct for himself an Italianate garden like those he had seen in Rome and the Veneto after the war. Recognising that his grand plan called for a certain level of technical knowledge, he apprenticed with the Colombo practice Edwards, Reid & Begg, but when his mentor H H Reid died after one year he returned to London and retrained as an architect at the AA, even if during his third year he chose to live in Italy. On those occasions when his presence was required at the school, he would drive the whole way in a bespoke 1934 drophead coupé Rolls-Royce 20/25 (a ritualistic commute that clearly advertised his affluence).

As David Robson has pointed out in *Bawa: The Complete Works*, Bawa's cars offer a sort of parallel historiography to his buildings. And from Robson we also know that the allure of the automobile was instilled in Bawa as a boy, with his father's Sunbeam Tourer, his mother's Daimler and the Humber owned by his brother Bevis (who was even taller, older, darker and more rakish). Aged 25, having just passed the bar, Bawa bought his first Rolls-Royce – a Phantom One, 'with an enormously long bonnet and a maximum speed of 150km per hour'. In 1949, during the period when he worked as a lawyer in Colombo, Bawa then exchanged this car with his brother's blue open tourer. His third and favourite Rolls-Royce was purchased in England in 1950, where its original white coachwork was embellished with black running boards and wheels, and then shipped back to Sri Lanka. When Bawa began his architectural studies at the AA this car would accompany him to London, and when he graduated in 1957 it followed him back home.

Bawa died in 2003, having lived a second life as an architect far more distinguished than his first brief life as a lawyer. If you visit the house he designed for himself at number 11, 33rd Lane, Colombo, you will see the ingenuity with which he worked. You will also notice immediately that the house's sole inhabitant is his beloved 1934 Rolls-Royce, for a clause in the Bawa Trust statute, explicitly added by Bawa himself, stipulates that the car has to remain indoors, immobile and never driven, out of fear of the damage that might be inflicted on it by the roads and the ferocious road users of Colombo. Little is said in the same document about the space in which it sits – the magnificent entrance hall of the house. Filled with the Rolls, this space gives an even more participatory role to the car than Le Corbusier's celebrated curving ground-floor half-circle at the Villa Savoye, and is also more daring than the *porte cochère* in Luis Barragán's own home, where the garage acts as a prologue to the *real* hall inside. But look at the quality of the light in the garage of number 11, the delicately perforated wooden door, the high-gloss black-and-white epoxy floor and the elegant *batik mandala* hanging on the wall, and you realise that in Bawa's house the carriage entrance *is* the receiving hall, for what is good for the Rolls is more than good enough for you and me.

Contributors

Paolo Berdini was an art and architectural historian who taught at Stanford and Columbia University. He received his PhD from Columbia with a thesis on Jacopo Bassano, which served as the basis for his subsequent book, *The Religious Art of Jacopo Bassano: Painting as Visual Exegesis* (1997) and was the author of a wide variety of essays and books on subjects as diverse as Walter Gropius, Caravaggio, the architectural patronage of Cardinal Richelieu and Michelangelo. He was the first to translate Colin Rowe's *Mathematics of the Ideal Villa* into Italian (1990) and to write extensively in that language on the contribution of the English critic. Berdini received his architectural training both at the University of Rome and Cornell, where he graduated with Rowe as his thesis advisor in 1985, with a proposal for a new project envisioning a branch of the Warburg Institute in Italy.

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Colin Rowe was born near Bolton-on-Dearne in South Yorkshire in 1920 and studied architecture at the University of Liverpool, architectural history at the Warburg Institute and at Yale with Henry-Russell Hitchcock on a year-long Fulbright scholarship. He taught at the University of Liverpool (1950–52), the University of Texas-Austin (1954–56), the University of Cambridge (1958–62) and Cornell University (1962–92), before retiring briefly to London (1993–94) and ultimately to Washington, DC. His books include *The Mathematics of the Ideal Villa & Other Essays* (1976), *Collage City*, with Fred Koetter (1978), *The Architecture of Good Intentions* (1994), the three-volume *As I Was Saying* (1996) and, with Leon Satkowski, *Italian Architecture of the Sixteenth Century*, published posthumously in 2002. Rowe died in Washington, DC in November 1999. His ashes are scattered at the Temple of the Four Winds, Castle Howard, Yorkshire.

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Mario Tedeschini-Lalli is a journalist and scholar whose long journalism career includes 40 years as a reporter and editor, mostly on foreign affairs; he later served as editor for various digital and multimedia news outlets, primarily with the Gruppo Editoriale L'Espresso, of which he is now deputy director for innovation and development. His scholarly publications include essays on the history of the Middle East, Italy and the media. His further research on Steinberg's architectural and interior design work will be published in a forthcoming issue of *Territorio*, the journal of the school of architecture at the Politecnico di Milano.

AA files

73

AA files

Various	3	A Ship Called Patrick Hodgkinson
Matthew Mullane	40	Hendrik Christian Andersen's World Conscience
Mariana Siracusa	48	Paul Otlet's Theory of Everything
Eva Branscome	58	Ship to Shore
Nicholas Olsberg	73	Counter, Original, Spare, Strange
Mike Dempsey	84	Man About Town
Helen Thomas	88	Rudolf Schwarz and Another Kind of Modernism
Thomas Weaver	94	Model-maker Grimm
Jonathan Sergison	101	In Conversation with Alberto Ponis
Timothy Brittain-Catlin	121	Good Fairies
Fabrizio Ballabio & Alessandro Conti	129	Sentimental Education
Marrikka Trotter	138	Ruskin's Rocks
Hans Frei	145	The Mathematics of the Shinohara House
Gabriela García de Cortázar	154	Palladian Feet
Ida Jager	165	The Brothers Kraaijvanger
Alex Schweder & Ward Shelley	170	The Fourth Little Pig
	172	Contributors

73

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A Note on the Display Initials
The display letters in this issue, again drawn by Adrien Vasquez from the John Morgan studio, appear within Gabriela García de Cortázar's essay on the battle drawings of Andrea Palladio. Printed in the bright blue Pantone 072U of this issue's second colour, the letters are made up of cavalry figures in the style of Palladio's illustrated edition of Polybius' *Histories*, which the architect worked on in the years immediately before his death in 1580. (The work was never published, and the British Library holds one of only three copies in existence.) The *Histories* itself was written *c* 140BC and offers an account of the various Roman campaigns, including the defeat of Hannibal and the destruction of Carthage. These particular figures feature the Roman *equites* or cavalrymen and their mounts in regulated alignment and, like those by Palladio, are rendered to show the minutiae of their every helmet, lance, hoof and swishing tail.

A Ship Called
Patrick Hodgkinson



with contributions from John Miller, Neave Brown,
Adrian Gale, Kenneth Frampton, Peter Carolin,
Lionel March, Sally Odd, David Levitt, Anthony Richardson,
David Bernstein, Dugald Campbell, Peter Myers,
Birkin Haward, Jeremy Dixon, David Shalev, Su Rogers,
David Chipperfield, Brendan Woods, Pierre d'Avoine,
Keith Bradley and Rodrigo Pérez de Arce









Patrick Hodgkinson, aged five, rowing Geoffrey Hodgkinson and Kitty Palmer; with Derek Pitt-Pitts, winners of the Baden-Powell Trophy, Charterhouse, 1947; as a teenager at the family home in Norfolk; on a motorbike in his National Service navy uniform, 1948
© Hodgkinson family archive

The architect Patrick Hodgkinson died earlier this year having effectively lived two lives, the first as a designer in practice, the second as a teacher. He excelled in both, communicating the intelligence of his ideas whilst always remaining somehow both flamboyant and solipsistic. Born in 1930, Hodgkinson began his architectural training at the AA in 1950 as perhaps the most adept of an extremely accomplished student cohort that included Neave Brown, John Miller, Kenneth Frampton, Adrian Gale and David Gray. 'Ferociously private, ferociously independent and ferociously single-minded', according to Gale, Hodgkinson responded to the projects assigned to him with a succession of exacting proposals, culminating in a ground-breaking housing scheme that offered new models of low-rise, high-density living – and a project that secured him work with the *éminence grise* of English postwar architecture, Leslie Martin.

Despite his relative youthfulness, Hodgkinson would soon occupy a position close to the centre of a group of architects that gravitated around not just the studio of Leslie Martin, but the firm of Lyons, Israel & Ellis and the LCC Architects' Department, and which included figures like James Stirling and James Gowan, Alison and Peter Smithson, Douglas Stephen and Colin St John Wilson – 'an in-group', Reyner Banham once wrote, 'who all know one another pretty well, who are edging into their forties, who are sufficiently established to be able to begin to realise their automotive fantasies, and frequently talk about architecture – *much* more frequently than most other comparable groups, much more intensely, much more eruditely'. This erudition seemed to express itself best in a collective pursuit of a self-consciously British take on modernism, the products of which could be seen to represent the high-watermark of English twentieth-century architectural culture, not just in terms of the innovations and subtleties of their design language, but also for their egalitarianism and patronage. Hodgkinson's own principal contributions to this canon were Harvey Court, the student housing block he produced with Leslie Martin for Gonville & Caius College, Cambridge and the Brunswick Centre in Bloomsbury, both now Grade-II listed.

In 1970, two years before the Brunswick opened, Hodgkinson's contract as the building's architect was terminated, as the client–developer McAlpine assumed the twin duties of the building's design and construction – a move that heralded a new model of developer while also precipitating the collapse of both Hodgkinson's office and to a certain extent his previously unshakable sense of self-belief. This, in turn, prompted a move into teaching, working first at the AA, and then briefly at Cornell University, before finding a permanent home and a renewed self-assurance at the Bath University school of architecture, where he taught from 1981 through to his retirement in 1995.

The following text looks to present the story of these two lives through a constellation of oral histories by Hodgkinson's friends, colleagues and students, covering more than seven decades, from the 1940s through to the early 2000s. In the process it reveals the many pioneering aspects of Hodgkinson's architecture and ideas, while also illustrating the continuing ability of a certain strain of British architecture to talk engagingly about design and education through the things that it likes and remembers best.
—Thomas Weaver

Previous: Patrick Hodgkinson, onboard *Jak*, *c* 1970
© Hodgkinson family archive

John Miller

I first met Patrick when we were students at Charterhouse in the 1940s, long before our time together at the AA. The structure of English public schools then was such that you were never supposed to mix with other boys outside your particular house, and Patrick – or rather Hodgkinson P G as he was known – was in a different house. My first and still most enduring recollection of him was of this small figure, wearing his jacket completely buttoned up – as was the custom – and with that slight tic he had of always gently nodding his head, shuffling from one classroom to another, a portfolio under his arm. In those days I wanted to be a painter, and would spend most of my time in the school's art department, which did offer a kind of bridge with the other houses, vigorously sloshing gouache onto my own socialist realist paintings of factory workers. Patrick, in contrast, was already only interested in architecture, and would typically be found in the same studio, intently humped over a wedge-shaped drafting table, with his hands and arms shielding what it was he was working on. Whenever anyone approached him or asked what he was doing he would just lean in even closer to the surface of the table. The art master later revealed to me that Patrick was working on a measured drawing of a barn.

After Charterhouse we did our national service – I went into the army and Patrick went into the navy – and then simultaneously in 1950 we both fetched up at the AA, alongside Adrian Gale, Ken Frampton, Neave Brown and all sorts of other people. Somehow Patrick – in between school, the navy and the AA – had assimilated a number of skills in terms of graphic techniques but also design. He displayed these in our very first project, a brief set by our first-year master Leonard Manasseh (the most sympathetic and wonderful man) to produce our own interpretation of the primitive hut. The shrewder students chose for their site areas in the South Seas which would require minimal structure and cladding, yet somehow echoed the same spirit as the Festival of Britain pavilions. Foolishly, I found myself doing a stone hut somewhere in Scandinavia, with a heather roof, which I built as a model from the ground up and which got more boring the further up I went. Patrick, on the other hand, produced the most exquisite modern version of a Highland croft, with its end walls doing the classic thing of projecting above its thatched roof line, but instead of having a stone wall, he set the front facade back a few feet, rendered it and painted the whole front lemon yellow. The model he made was an enchanting object. Top marks.

Later that year there was a project to design a workshop at Betty Ventris's house in Hampstead, next to The Old Bull & Bush, which was a first essay for all of us in how to understand building construction and create a design that had some kind of quality to it. Again, Patrick produced the most fabulous scheme – load-bearing brickwork, vertical windows with delicate soldier-course lintels and lots of other beautiful little brick details. To my mind now it looked like it was done by someone who knew perfectly Mies's brick houses in Krefeld, but with a light rinsing of Aalto. I can't remember how it was received by our tutors, but to us – the also-rans – it was a knockout. And so it went on. With each new brief Patrick produced a masterpiece.

At the same time, he remained incredibly secretive about what he was doing, and for most of his time at the AA he would work from home. But there were a few occasions when we had to do group projects, and we would therefore see more of him in the studio. On one of these he collaborated with Neave Brown, Colin Glennie, David Gray, Christopher Stevens and Anna Tomlinson (who would later become his wife) on a project for Vigo in Kent. My own group designed the most tedious of schemes – row after row of rather abstract Hilberseimer-influenced terrace housing – whereas Patrick's group produced what looked like a picturesque Cornish hillside village, with houses somewhat reminiscent of those by Eric Lyons.

Neave Brown

On the Vigo project our group all worked together except, of course, Patrick. I remember the site featured both a level plain and a steep hill. Colin Glennie and I placed our housing units on the flatter plain, because this meant they could be cheaper and easier to assemble, while the others all had their own housing schemes occupying the more picturesque hillside. Patrick was never involved with our group meetings and discussions and only at the very end did he roll up with his own contribution – the village pub. It immediately amazed us because its design was so convincing, not just in terms of its modern aesthetic but also its more Victorian associations of a pub. For us, in a curious way, this also established the way his mind worked. Patrick never took an exclusive view that would eliminate alternatives. He didn't work with principle that way. Instead he only ever worked with pragmatics and a certain attitude.

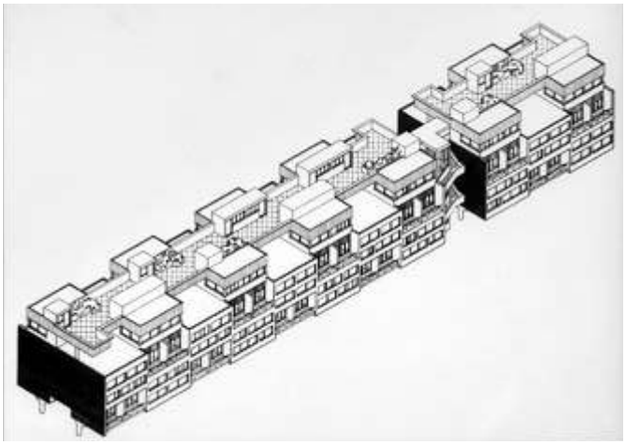
John Miller

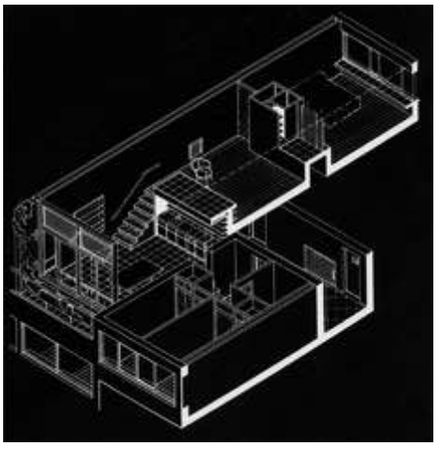
In the summers Patrick would typically vanish, only to return the following September wearing a thick tweed jacket and bright knotted tie, carrying an elegant black leather portfolio which held drawings and designs he had produced over the break. In the third year his most memorable schemes were for a Finnish Seamen's Mission, sited somewhere near the Blackwall Tunnel, and for a social housing block in Lambeth. In both Patrick displayed his newfound obsession with split levels. The projection of the planned spaces of these interiors on their exterior surfaces was simply magical. But his best and most influential AA project was for a social housing proposal in Lambeth, produced in his fourth year – part of which he spent in Finland with Aalto. At the time we all thought it was a brilliant idea, and even today I consider it quite ingenious. Patrick developed this notion that in an apartment you could separate the sleeping areas from the more social areas, which he arranged in a stepped section, with the living room at the top and then half a level down you had the kitchen, and then a study still further down – all pretty lavish, to Parker Morris standards. The sleeping accommodation would then be arranged in a block between these stepped pieces. In terms of the whole composition, you could divide up the block and allocate the bedrooms to one side or the other. It was so clever.

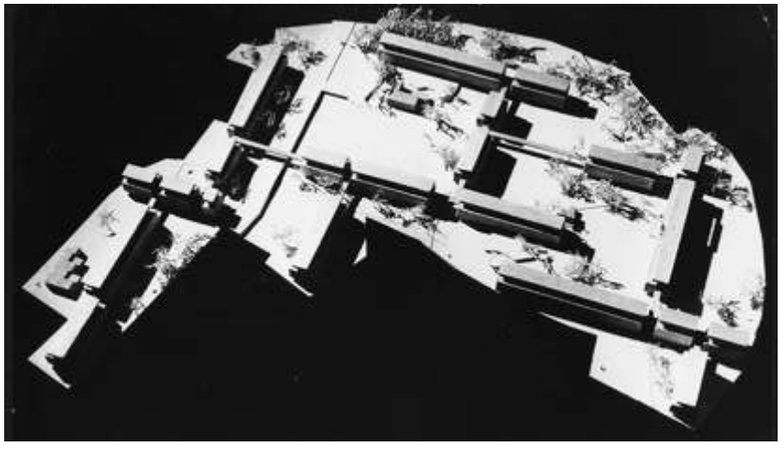
Patrick Hodgkinson, fourth-year student project for Lambeth, axonometric drawings, site model and section, 1953; and project for St Pancras, with Leslie Martin, site and housing models, and elevation, 1957–58
© Hodgkinson family archive

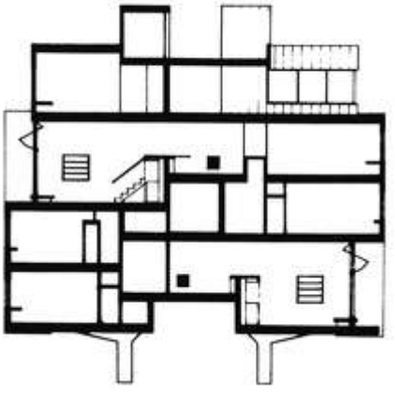
Neave Brown

In 1953 Le Corbusier came to London to receive the RIBA gold medal. As soon as I heard about the award I wrote to him ('*Cher maître*'), asking if he would have time to meet with a small group of architectural students over lunch. A week later I got a letter from his secretary saying that he would be delighted to join us. I then had the terrible dilemma of who else to invite. Oh God, it was tough, what a decision! In the end there were a few of us including Patrick Hodgkinson, Ken Frampton, David Gray, John Miller, Adrian Gale and others. At that time Patrick had this wonderful old open-top car – a Bayliss-Thomas – and we picked up Le Corbusier from the Berkeley Hotel, with Patrick driving like a demon through the streets of London. Corb just sat in the back seat, trying to keep his hat from blowing off while exclaiming, '*Oh la jeunesse, oh la jeunesse*'. We took him to a nice little Greek restaurant just off the Euston Road. On arrival, Adrian offered him a cigarette ('*Fumez-vous, maître?*'). He was absolutely lovely with us, very sweet and never difficult or patronising. I remember taking a satchel with me, with a pad of paper and some pencils. After our food we all talked about architecture, mostly in French, and he produced all these funny little drawings to explain his ideas. Because I'd organised the whole thing I made damn sure I was sitting next to him. And of course, I kept the drawings. I still have them now – seven or eight sheets of sketches.

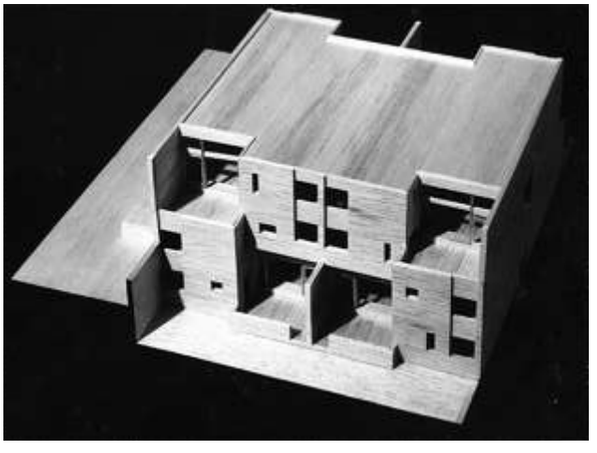


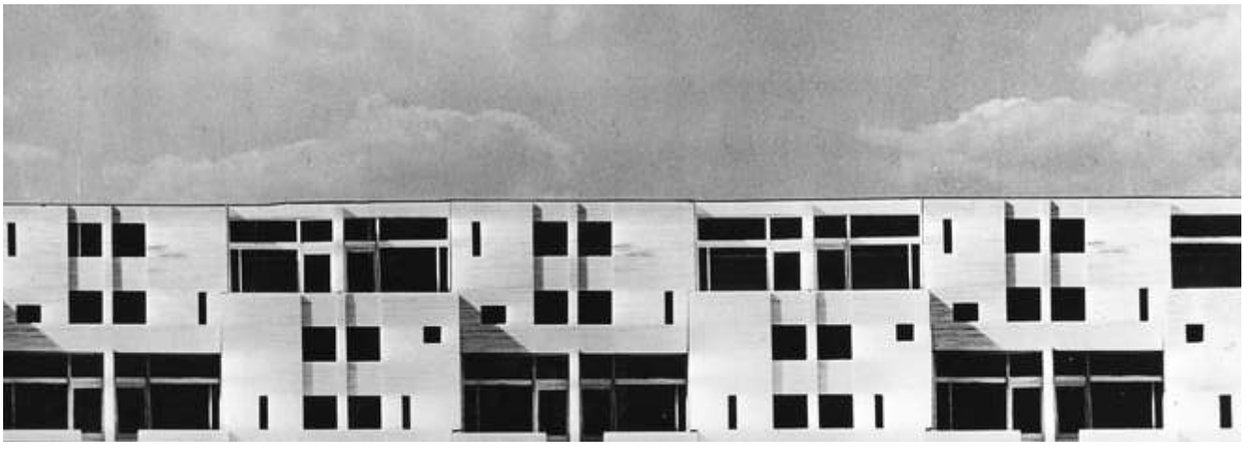


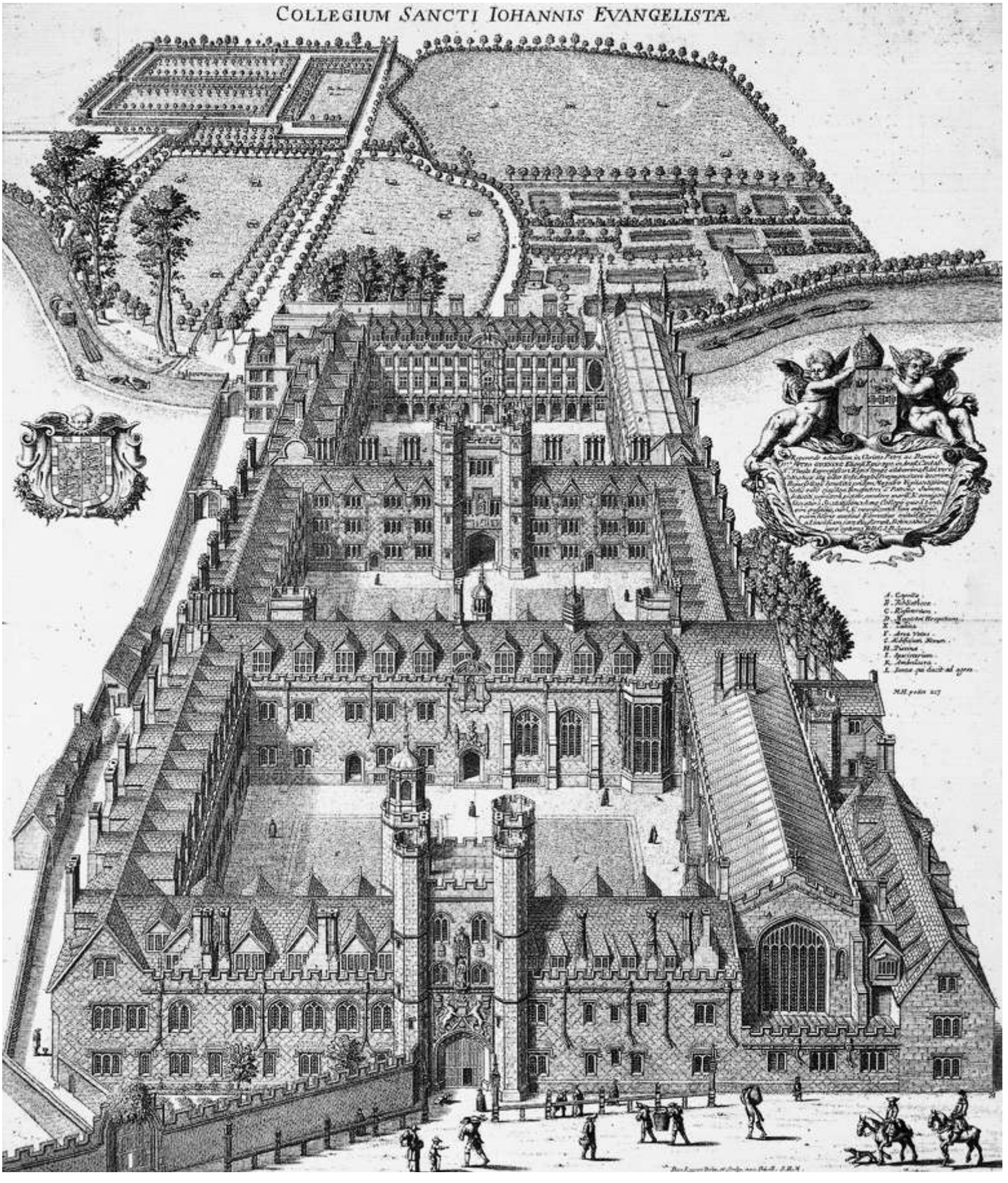











COLLEGIUM SANCTI IOHANNIS EVANGELISTÆ

In my fourth year at the AA I was still doing slab-block housing, but increasingly with the other students in my group we started to look at other things, like the work of Aalto and also, and perhaps especially, at an English typology. I remember, for instance, sitting with Patrick – who was way ahead of me – and studying how the London Inns of Court worked, where you had a continuous architecture of different enclosures producing different hierarchies and sequences of spaces without simply saying 'I am a building'. Within those spaces you even had special areas, like chapels and meeting rooms, which were part of the same institution. This also seemed to mirror the way the Oxbridge colleges were organised, as well as using the same typologies implemented by the great English architects in Bath, Winchester, Leamington, Bristol, Brighton, etc. Patrick, John Miller, David Gray and I would talk about this all the time – how to find a way to accommodate an English culture and sensibility within our ideas about modernism. So of course we took on the complex of modernist ideas, including building techniques, function and the free plan releasing the lives of its occupants, so that housing was no longer defined by the social strata of the parlour, living room and front hall, but we also wanted to challenge and infuse into modernism elements of the English cities and culture around us.

Patrick was easily the most influential of our AA student group. And his key design project was not so much his fifth-year thesis, which was a masterplan for the University of Cambridge, as his fourth-year project for a housing scheme. Whereas all the rest of us did Corbusian slab-blocks – me included – Patrick turned up with a continuous, low-rise building, with high-density, split-level sections clustered around a *rue intérieure*. The whole thing was simply an astonishing achievement for a student. We all looked at it with awe – students and tutors alike. He was a sort of genius, partly because there was an aspect of him that was very disciplined, orthodox and traditional, while in another sense he had a totally independent way of thinking about things. And that housing project was the scheme that got him his job with Leslie Martin, for whom he designed a housing proposal for St Pancras that really should have been built. Patrick and I became friends, but all along he made it clear that I was the naive, half-American, messy, enthusiastic innocent, whereas he was the sophisticate, and was going to be England's answer to Alvar Aalto. He never did this with any bluster or self-aggrandisement; he never quite joined in with the conversations, but rather just quietly, independently asserted himself.

Adrian Gale

Housing is the flesh of a city, and more than any other single typology both Patrick and Neave were architects of housing. They were untrammelled by any other kind of architectural distraction. Perhaps this is why the two of them were always slightly anxious about the other. Even though he would never admit it, I also think Neave owes a lot to Patrick, certainly to his idea of keeping people close to the ground, which was fundamental to the way Patrick worked. Right from the beginning there was a kind of simmering rivalry between them, which Patrick would only very occasionally refer to. There were also several occasions when each would worry whether the other actually liked them very much.

John Miller

Patrick was always secretive about work, and also about his relationships with his girlfriends, but at the same time he had this whole other side of his character, delighting in a wonderful repertoire of vulgar songs which he'd picked up in the navy. I remember being on a bus with him once, and as we passed the Albert Hall he started singing, 'Chase me Charlie, I've got barley, Up the leg of my drawers'.

Adrian Gale

Patrick was ferociously private, ferociously independent and ferociously single-minded, and never really wanted to do anything in a way that people expected it to be done. It wasn't as if he wanted to challenge what other people were doing – although, perhaps that *was* part of it – but simply that he thought in a different way. Of course, socially he could be contrary, but I don't think there was any kind of contrariness to the way he worked. But I must admit, most of the time I spent with Patrick was taken up not with discussing work but with laughing. He had an infectious sense of the ridiculous, and was a wonderful verse-maker, lover of limericks and nonsense and a witty correspondent. I've kept many of the letters and postcards he sent to my wife and me – most of which were actually addressed to my wife Audrey, who I think he was slightly in love with – and which demonstrate his gift for wordplay and quotation. In one of his later letters, from December 1987, he wrote to say that he was 'determined to walk this Christmas away, like Groucho Marx who failed to catch up with a departing train at Penn Station and turned to those still on the platform: "There, I've chased the nasty thing away forever".' He goes on to write that among his presents that year was a dictionary of quotations which he'd read enthusiastically in the early hours of the morning, and found a P G Wodehouse quote that offered a 'suitable description of my venerable head of school, Ted Happold: "He's the tubby chap over there who looks as if he was poured into his clothes and forgot to say when".'

St John's College, Cambridge,
from David Loggan,
Cantabrigia Illustrata, 1690

Kenneth Frampton

As a student I always felt especially close to Patrick. Amongst other things we had much the same sense of the absurd, and his laughter was quickly ignited by any account of suitably ludicrous behaviour on my part. The image of him that remains engraved in memory is of a lithe, scant figure in suede shoes and a khaki corduroy suit, whose pocket would always be filled with a packet of Senior Service cigarettes, to which Patrick would sooner or later resort. One could hardly claim he was a chain smoker, but on the other hand he smoked enough to give himself a perpetual cough, which provided another mannerism – together with the flick of his hair – with which he mediated his essential modesty and shyness. At the same time he drove a heavy barrelling antique car with carefree exuberance and reckless gusto.

As always when one evokes the past there are certain vignettes when this or that happened to leave a lasting impression. Above all, perhaps it is his extraordinary ability as a draftsman, and the way he could draw in pencil with T-square and set-square at breakneck speed without leaving the slightest trace of either perspiration or graphite. Later, there are evening cameos I recall, once at dinner in Patrick's small terrace house in Cambridge with Colin Rowe, who was wearing a striped blazer and complaining eccentrically about the dearth of synagogues in the town. Then, a few years on, another dinner at his house in Bayswater. This time the honoured guest was Paul Rudolph who expounded at length on the quality of life English architects were able to enjoy while being paid much less than their American counterparts. This was when the Foundling was on the drawing boards in the office below, and Patrick was at the height of his powers. Around the same time, Douglas Stephen, Michael Carapetian and I succeeded in publishing the anthology *British Building*, which included Michael's photographs of the two Cambridge masterworks of Patrick's life – Harvey Court at Caius College and the house for Lord Adrian. Every time I look at these images I am pleasurably reminded, once again, of Patrick's exceptional talent.

John Miller

After the AA I was encouraged by Peter Smithson to work with Lyons, Israel & Ellis. While I was there Ellis heard about Patrick and brought him in for an interview. They offered him a job, but in the end he chose to take up another position with Leslie Martin in Cambridge. His future would

have been totally different had he accepted the job with Ellis. Anyway, so off he goes to Cambridge. I join him a couple of years later when Sandy Wilson headhunts me for the same office. Patrick was then keeping an eye on Harvey Court, which he'd more or less completed, but most of the time he was working on the Law Library in Oxford. I was supposed to work with him, but it was impossible, largely because I realised that the territory he had established for himself on this project was resolutely his own, and that I, or anybody else, was not really expected to mark it in any way. He was quite good humoured about it, but I spent most of my time waiting around for him to invite me to assist on some small detail or other.

He would drive to the Martin office in Great Shelford at hair-raising speed in his bright red Fiat cinquecento, characteristically hunched over the wheel as he did so. As soon as he arrived, there then followed the same ritual – he would reach into the side pocket of a jacket that was slightly too long for him and pull out a pack of cigarettes. He favoured three brands, Senior Service, Gold Flake or Players, each with their distinctive packaging and colours. He'd hold the pack with his left hand and with the fingernails of his right he'd pull down the cellophane wrapper. His thumb would then push the bottom of the packet upwards and a row of cigarettes would reveal themselves. He'd pull one out and then there'd be an elaborate business of tapping both ends of the cigarette on the table, followed by him reaching for and clicking his lighter, all the time laughing and still nodding with that childhood tic of his. I remember this ritual and all his precise gestures as if they were yesterday.

While he was working with Leslie Martin, Patrick was living in a small artisan's cottage in Portugal Place in Cambridge. At the back there was a tiny courtyard, only about one-and-half metres deep by four or five metres wide. Patrick paved it, and created an inbuilt planter and brick seat big enough for three or four people to sit very comfortably. He also managed to transform the cottage's interior in a style that, thinking about it now, was so much of its time: a floor covered in rush-matting, French pinoleum blinds, a stainless steel Pither stove which sat on its own raised white-tiled hearth, and a couple of Matisse cut-outs framed on the wall. He also had an amazing eye for furniture, and would often spot things in junk shops that were not necessarily modern, but in some way imbued a modern spirit. For example, he once found an original late-nineteenth-century army officer's chair, with strap arms and with a half-and-half leather and canvas seat and back. I always coveted that chair. Even before, in his flat in London, he'd recovered other pieces, like an original bentwood armchair of the type Corb always favoured, or a lamp, also very similar to those Corb used in his early houses, which comprised a rigid metal rod that projected perpendicularly from the wall, and with the bulb at the end. Patrick was able to find all these things and with seemingly minimal effort could somehow conjoin a spare and sophisticated European modernism with more idiosyncratic English elements.

Neave Brown

The apparent Englishness of the things Patrick liked, as much as his aesthetics, is interesting. Indeed, he had all sorts of views on, for example, English literature, in spite of the fact that he was actually not terribly well read. Many people at the time argued that it was necessary to do something English with modernism, worked out from a cultural view of literature, music, painting, etc. The same thing happened after the First World War, when there was a similar drive to anglicise an emerging European cultural identity, even if it never quite metamorphosed into anything especially creative. But with Patrick, he never had a kind of programmatic idea to transform a continental piece of modernism into an English piece of modernism – his view was not a stance to absorb Englishness, rather it was his own Englishness that he took to any given situation. He also never thought through a priori principles, but only ever through pragmatics (especially the creative pragmatism of Aalto). And he absolutely detested all forms of dogmatism. For example, I never once heard him make some grand statement about modernism, or about politics or social programme; he felt it would have compromised his ability to take on complex situations. He never even spoke about the future, or established a politically identifiable attitude towards a future world. It was not that he didn't consider or observe these things, but that his intelligence moved him in a different direction. And it was this approach that allowed him to produce the work that he did, not just at the AA, but also the university buildings and housing he did with Leslie Martin and his design for the Foundling, all of which absorbed the modern message of someone like Le Corbusier while at the same time completely and utterly undermining the things Le Corbusier was actually proposing.

John Miller

During the period we were in Cambridge together Patrick and I would plan quite elaborate summer weekend trips – often to Norfolk, to places like Holkham beach or to various stately homes. His family was from Suffolk, and he had a great affection for East Anglia, even if it was the landscape of these places that seemed to appeal to him more than the architecture. I remember on one occasion we drove, rather brazenly, through the main gates of a large private country estate and then hid our cars under the bows of some weeping ash trees that lined the approach to the house. We proceeded to have an elaborate picnic, with hams and cheeses and all sorts of delicious things. Afterwards, looking out towards the main house, I started to get a bit twitchy because I could see the owners looking at us through binoculars. That kind of thing never worried Patrick. When we eventually left, he waved regally at a passing car which had come to check up on us. Perhaps it was a kind of *noblesse oblige*, because Patrick always accepted the fact that he was entitled to this kind of life.

Patrick's principal job at the Martin office was Harvey Court, which very much to Patrick's annoyance was later attributed to Sandy Wilson. To me it was clearly a Patrick scheme. No doubt about it. Sandy had worked on an earlier design – a wide-span concrete-frame building set around a lawn, a kind of sub-Miesian aesthetic – whereas Patrick had always been a great lover of Aalto, a totally different world. This love had imbued all his designs.

Peter Carolin

As a student at Cambridge I remember seeing Patrick at the opening of Sandy Wilson's extension to the school in 1958, an event attended by Le Corbusier and Henry Moore, and of course I also remember seeing him speeding through the streets in his little red Fiat. Some time later I worked with Sandy, and stayed with him for 15 years or so, before I left to work on the *Architects' Journal*, and then returned to Cambridge as head of school. It was in this capacity that I actually first met Patrick, when he acted as an external examiner, but over the whole of this period we were really just passing acquaintances.

After Sandy died in 2007 I found myself having to write a number of obituaries, as I'd done for Leslie a few years earlier. In preparing these texts I kept returning to Harvey Court, which I have long considered a simply astonishing building, and which appears in books on both Leslie and Sandy. When *The Architectural Review* published the building after its completion in July 1959 it credited it to Leslie and Sandy, with Patrick as an assistant. I wrote about the authorship of the building in similar terms in my obituaries. This prompted Patrick to write to the editor of one of these publications complaining about the lack of acknowledgment of his role. He even described me as 'a Sandy Wilson geek'. At the time I thought this was

Leslie Martin, with Patrick Hodgkinson, Harvey Court, Gonville & Caius College, Cambridge, 1962 © John Donat / RIBA Library Photographs Collection





quite amusing, but I *was* troubled by the thought that my words may have been injudicious. So I started looking through Leslie's *Buildings and Ideas*, the Wilson practice brochures and the two books on Sandy's work, *An Architecture of Invitation* and *Colin St John Wilson: Buildings and Projects.* What I discovered was really quite disturbing. There's no consistency of attribution on Harvey Court and the Oxford libraries – Patrick either gets no mention or his role is downgraded. But the most shocking instance is the appropriation of the St Pancras housing scheme – which is wholly Patrick's, having been developed out of his AA fourth-year project. Leslie, no doubt fully sensitive to the fact that it *was* Patrick's scheme, did not even mention it in *Buildings and Ideas.* I've always felt that as architects we should never feel too concerned about what others may believe our contributions to have been, because our close friends, colleagues and family – the people who matter – know what each of us has done. But at the same time I did feel that the failure to properly credit Patrick was a wrong that should be righted.

And so I wrote to Patrick and we arranged to meet at the RIBA drawings collection at the V&A in an effort to get to the bottom of it. I turned up at the appointed hour, and after some considerable period Patrick arrived, huffing and puffing and apologising for having got lost in Hyde Park in his walk from Paddington. I remember him talking incredibly loudly, which I tried to compensate for by lowering my own voice to a whisper. I can still picture Charles Hind from the RIBA politely offering hushed apologies to all the other readers in the library. We first looked at the Harvey Court drawings, in particular the initial scheme fathered by Sandy, with its arrangement of four concrete blocks, three facing inwards and the fourth outwards, with a lawn in the centre. Patrick said that with its open corners no one could call it a court (even if Leslie and Sandy were then obsessed with court buildings), and as he worked on it he was unhappy about the design. Ten days or so before it was to be presented to Caius he therefore went to see Leslie and said he had a much better solution. Leslie told him to go ahead while Brian Bunting continued to draw up the first scheme. Patrick's alternative scheme was very obviously a court. According to Patrick, Leslie thought this design was marvellous and very much a solution driven by a single big idea, an approach Leslie always loved, and so he insisted this was the version the two of them should present to the college. Patrick said that Caius bought it straight away, and one woman on the committee – Marjorie Hollond, then bursar of Girton, who would go on to be one of Patrick's clients – even homed in on the stepped inner facade and exclaimed, 'Oh, just like the Mappin Terraces', which pleased Patrick no end.

Patrick then agreed to take on the job, on the understanding that Sandy would have nothing to do with it. At the V&A, as we worked our way through the drawings, he continued to describe his design, noisily rejecting references that Sandy later claimed for the building, for example that its longitudinal staircases were an allusion to Aalto's MIT building – 'Rubbish', asserted Patrick, it came instead from Gino Valle's Zanussi building in Pordenone. Its roots lay not in modernism but in the arts and crafts, evident in the brickwork, distinct from the concrete of Sandy's first scheme, which he said owed a debt of gratitude to Lethaby and Voysey. This older pool of associations was even spotted by another critic – when the building opened Cedric Price, who a few years earlier had been a student at Cambridge, wrote in *Granta* that Harvey Court was a fourteenth-century building with 13-amp plugs. Apparently Leslie was furious about this, but Patrick loved it.

Having exhausted the subject of Harvey Court, the conversation turned to the other great Martin building, the group of Manor Road libraries in Oxford. In *Buildings and Ideas* this is credited to Leslie, Sandy, Patrick and Douglas Lanham, who saw the building through working drawings and construction. Like Harvey Court, this project went through two versions, but unlike Harvey Court the first scheme was considered by Leslie to be significant enough to be published alongside the final scheme. Both versions have also always been included in Sandy's own publications. Patrick much preferred the first version, but suggested that it was killed by the law librarian because the sightlines were such that he wouldn't be able to shoot every reader from the controlling enquiry desk, just most of them. He said he therefore designed the scheme that got built 'under protest, and with Leslie looking over my shoulder'.

The principal organising device adopted by Patrick in the first, rejected, scheme was the tartan grid – one of its earliest uses in Britain. He recalled that this grid was borrowed from an earlier design he had done in the Martin office, a pharmaceutical factory for SKF at Welwyn, and which he developed because it accommodated the services and spatial requirements so well. Sandy later wrote about the Oxford grid's provenance as coming from Louis Kahn's Jewish Community Centre in Trenton, but Patrick contradicted this and said he adopted the idea from Wright – not from any particular building but, rather, from a study of ideas he wrote about in general terms. Ultimately Leslie wasn't really interested in doing an industrial building so the job was passed over to Philip Dowson at Arup Associates, who over the years have often claimed the tartan grid as their own invention.

Leslie Martin, with Patrick Hodgkinson, Bodleian Law Library, Oxford, 1964
© John Donat / RIBA Library Photographs Collection

Over lunch we then discussed the third of the Martin projects with which Patrick was closely associated – the unbuilt scheme for local authority housing in St Pancras, which appears in Sandy's books as Weedington Road. Patrick explained that in his fourth year at the AA, before he went to work with Aalto, he undertook a theoretical study for a housing scheme in Lambeth. The design was exhibited at the AA, and it was after seeing this exhibition that Sandy actually recommended Patrick to Leslie. When the two of them met shortly afterwards, Patrick therefore voiced his surprise at Leslie's enthusiasm, because his Lambeth scheme – which enabled families to live close to the ground in high-density developments – was designed precisely in opposition to the Unité-inspired LCC slab blocks that Sandy had played a major part in designing at Bentham Road and which Bill Howell's group developed at Roehampton. According to Patrick, Leslie simply replied, 'Ah, but we were wrong and you were right' – a deference completely at odds with Leslie's status and Patrick's inexperience, and which Patrick clearly appreciated. Even in the introduction to his book, *Buildings and Ideas*, Leslie writes, 'I owe a special debt of gratitude to Patrick Hodgkinson for his contribution in the early years'. In contrast, Patrick's relationship with Sandy was never so affable – just look at the scathing piece he wrote about the British Library for the *Journal of Architecture* – but by looking back through the drawings of these early schemes and in hearing Patrick describe so meticulously their every detail and nuance, it seems clear now that he should be credited for his *primary* role in the design of Harvey Court, the Oxford libraries and the St Pancras housing.

Peter Myers

When I started working with Patrick on the Brunswick Centre it wasn't long before I visited Harvey Court. It's an interesting building, not just in its own right, but also in terms of its relationship to the Brunswick. It's a really intelligent building. And of course, I also quickly picked up on Patrick's dislike of Sandy Wilson and his annoyance regarding the building's attribution. For me, the really strong supporting evidence that Patrick was indeed the main architect responsible for Harvey Court concerns the building's engineer. Harvey Court was engineered by Frank Newby. Patrick and Newby had been friends for a long time, having both worked with Felix Samuely before they met again through Martin's office – in Patrick's case this was during his time at the AA (Patrick told me he took a somewhat cavalier attitude to the amount of time he had to spend at the school

and would often accept work and positions in offices during his studies – his time spent working with Aalto being another case in point). I think there is no possible way Sandy Wilson would have appointed Newby to such a job without a prior collaboration. And so when I discovered that Newby was the building's engineer and that he had also worked with Samuely in the 1950s I really felt this was an elusive detail that proved Patrick's authorship of the building. I could well imagine Patrick and Newby working out the building together.

The Oxford libraries, I think, is another matter entirely. For me, it's a building that was affected detrimentally by the entry of people like Philip Dowson onto the university's architectural scene, and a new, somewhat doctrinaire approach to design. When I visited it I never got the sense that it was a Patrick building. Besides, he never talked about it when we worked together, unlike Harvey Court. The only library he spoke about was Stirling's building in Cambridge, which he absolutely hated. As a building he thought it was just hopeless; that the books would buckle and the people inside would cook. He was right, of course. Once Patrick had made a decision or taken a view on a building or architect he stuck with it. And his view on Stirling was that he was functionally inept and a wilful formalist. But I must admit his attitude towards Stirling was also unduly influenced by a bruising encounter in 1969. Some time that year British Rail arranged an auction of a number of architectural drawings of nineteenth-century railway buildings that they had in their collection – really fabulous drawings, by people like Philip Hardwick, all on Whatman paper, with ink lines and watercolour wash and signed by all the contractors involved. I went along with Patrick to look at them and he got terribly excited, soon highlighting several pieces he wanted to buy. But on the day of the auction he came back to the office absolutely crestfallen. Jim Stirling had bought the whole lot. On every drawing he outbid everyone, including Patrick. It was then that Patrick realised that if Jim Stirling wanted something then Jim Stirling was going to get it.

Neave Brown

While he was still working on the Law Library Patrick introduced the Foundling job into the Martin office. At the time Leslie made it perfectly clear that he had no interest in working with the private sector on a commercial job, much preferring anything associated with a public commission and the whole local authority or state programme of English culture after the Second World War. Leslie's disinterest was still apparent after Patrick persuaded him to accept the job, because he made Patrick solely responsible for the commission with himself acting only as an occasional consultant. Soon afterwards, of course, Patrick took the Foundling out of the Martin studio and used it to set up his own office. In this sense, Patrick was somehow able to see the social and architectural potential of a job without being concerned by the political and commercial aspects that had so troubled Leslie Martin.

Dugald Campbell

In Patrick's own office, as late as 1967, Leslie Martin would still occasionally arrive to look over the Brunswick drawings, usually dressed in a business suit and white sandshoes. His taxi was instructed to park outside with the engine and meter running, because these visits were always very short.

John Miller

The story goes that Patrick got the Brunswick job – or the Foundling as it was then known – through his sister Joy. It may well be apocryphal, but supposedly one day she was at the hairdresser's and she struck up a conversation with a woman sitting beside her. This woman recounted that her husband, the developer Alec Colman, had a problem – he couldn't find a suitable architect for a big project he was planning. Joy immediately said that her brother was an architect and they exchanged details. Soon afterwards, Patrick and the developer met up and they immediately got along – the fact that Patrick was working with Leslie Martin, in those days a figure of no little renown, seemed to act as an extra enticement for Colman. Not long afterwards the deal was clinched, and Patrick brought the commission for the Foundling into the Martin office, even if it later became his personal project and the basis for his own office. In the early days there were a lot of people working on it, including an American called Jaque Robertson, who would become the partner of Peter Eisenman. This group even had their own special room in the mill at Great Shelford.

David Levitt

My recollection is that in 1958 the developer Alec Colman marched into a property auction and bought the Foundling estate, before the sale had even started. The site was made up of 250 or so properties and it was expected that, like all other private landlords, he would continue to screw the tenants, who were all living in terrace flats, very much like the ones that still line the adjoining streets today. But Colman had other ambitions. He proposed knocking down the existing estate and building two perfectly horrible tower blocks, commissioned from a Birmingham-based practice called Covell & Matthews. On seeing this scheme the LCC said, no chance. Unsure what to do next, Colman asked the LCC to recommend an alternative architect and was told to go and see Leslie Martin, who at that time reigned supreme.

Neave Brown

In the early days of the Foundling job, when Patrick was with Leslie, I was still working with Lyons, Israel & Ellis, but we would often talk about the commission and the difficulties of its design. I was living in a small flat in Philbeach Gardens at the time and I remember being woken up one night, at about 2am, by a loud knock on the door. I staggered out of bed and opened the door to find Patrick standing there with a box under his arm. I asked him what the bloody hell the matter was, but he pushed past me and hurried up the stairs. The box, which he placed on my living-room table, contained a study model of the Foundling which showed his solution – the whole complex as an open-ended street, with double blocks and a staggered section. It was the only time I can think of when he showed himself in public in that kind of excited state, presenting a design that was fantastically interesting but still only part way there.

David Levitt

In the Martin office, one of the first ideas for the site was to build at high density by building around the edge, which I think partly came from research done by Lionel March, who was then assisting Leslie and who would later set up his Centre for Land Use and Built Form Studies. When Patrick was handed the job he was encouraged to work with these first ideas, but he soon adapted them around the idea of making the outer face of the perimeter blocks match the scale of the surrounding streets, while the inner face of the same blocks would extend much higher. I remember he was especially pleased by the fact that his scheme achieved the same density of units as before, but with a far higher proportion of open space. At that time, in 1960, I was working in the Martin office while completing my final year at Cambridge, and I helped Patrick with a site model of the estate and his first designs.

Lionel March

I'm not really sure that Patrick did inherit a number of ideas from me. I rather think it was the other way around. What I do remember is going to visit David Levitt in the Hodgkinson office and looking at the car-parking designs for the Brunswick. At that time I was very interested in urban modules and I was working with Leslie Martin on the megastructural project for Whitehall – part of which involved one-, two- and three-storey levels of subterranean

car-parking – and so the designs Patrick and David had produced were incredibly useful. Later, Leslie worked with Colin Buchanan from Imperial College in researching even more ambitious proposals for London, based around the idea of cellular and linear growth. One of these cells even absorbed Patrick's Foundling estate, and part of this research is published in Leslie's essay, 'Grid as Generator', which appeared in the book we edited together, *Urban Space and Structures*. Of course, Leslie never asked Patrick if he could use his project this way, he just did it, and I do remember Patrick being very upset about this. Nevertheless, I always had a good relationship with him, and some years later, when Patrick was teaching at the AA, he invited me to his unit to give a lecture on my work with the Centre for Land Use and Built Form Studies.

John Miller

Even while building up his own office from within Martin's studio, Patrick had what I consider the mistaken idea that he was not interested in anything small scale. He only wanted to work on big, complex commissions. You have to remember that between 1965 and 1985 there were far more troughs in the building industry than peaks, and so when Alan Colquhoun and I set up our own office at the same time we fought for everything and never turned down any kind of commission, no matter how small. In contrast Patrick typically refused these more mundane jobs. Neave Brown even offered him some separate commissions through Camden, but it never worked out. The one exception was the house he later built for Lord Adrian in Burrell's Field, Cambridge. Its exterior was all very Aalto, with the vertical slats of a timber-clad first floor, and a plan that revealed his continuing obsession for diagonal composition. The first scheme he did for Martin's Law Library was also very similar – another square split diagonally which, like the house for Lord Adrian, had an entrance on one of the corners. The whole thing started to get very tricky when Patrick arranged the two other libraries also housed in the same block – English and Statistics – with their own diagonal axes, and with his favourite half-levels, which produced a rather unstable central space. The building always felt as if it wanted to frontalise but couldn't because of the diagonal axis. But anyway, sadly, in some respects, the lawyers at Oxford didn't buy into this proposal and this scheme was dropped.

David Levitt

Silly idiot that Patrick was, while we worked on the Brunswick he generally refused to take on any other work, but there was a small job which he fiddled around with at nights, producing a number of fine drawings for the restoration and conversion of a small fortified manor house, Markenfield Hall, near Fountains Abbey in Yorkshire for Lord Grantley. Besides this and the house for Lord Adrian, it was otherwise only the Brunswick.

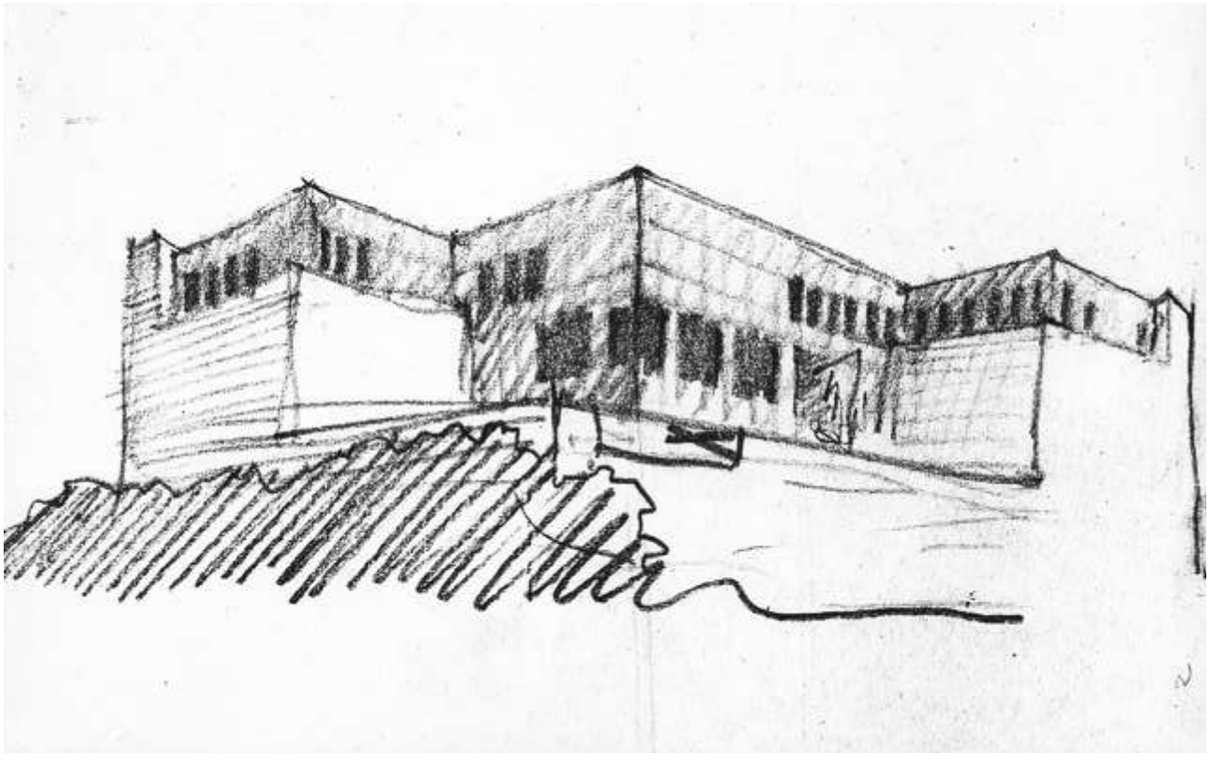
Sally Odd

I was the first person Patrick ever hired for his new office. And in those days, it wasn't just the Brunswick; there were other smaller jobs. I had studied at the AA and Patrick was on my final jury, during which I presented a library project for the London patent office. He immediately offered me a job. I remember negotiating with him to have ten days' holiday and started in July 1963. The office was then in a small semi-basement room in Lincoln's Inn. On the first day he asked me if I could type – I couldn't, besides, I was hired as an architect, not a secretary, but because there were only two of us he needed help with all his letters. Soon afterwards we moved to Porchester Terrace, and by then the office had grown to four – Patrick and I, together with David Levitt and Tony Richardson. The only words I could use to describe the Porchester office are 'very civilised' – it was a really nice atmosphere and the studio also had a small kitchenette next to it, filled with lovely Thomas china cups and saucers for our morning coffees and afternoon teas. I used to alternate my breaks, spending time either with Patrick's secretary Jackie or chatting with the Brunswick blokes. I never worked on the Foundling project itself. My only responsibility was two houses in Cambridge – a house for Lord and Lady Adrian in Burrell's Field, and later the conversion of a second house at 3 Madingley Road.

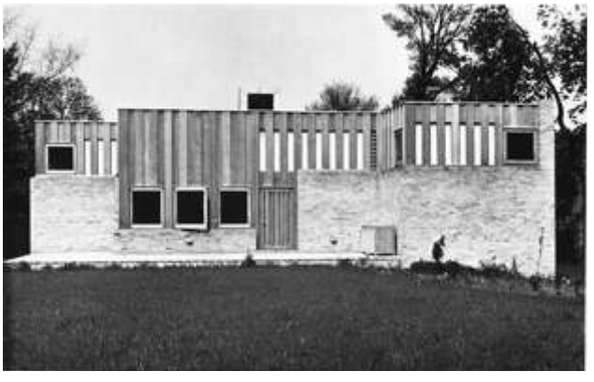
By the time I joined in the summer of 1963 most of the working drawings for the Adrian house were completed, all by Patrick, and it was already on site. The house was engineered by Frank Newby but I only ever had dealings with the Clerk of Works (a role that, of course, no longer exists today) – a wonderful older chap who taught me so much about how to actually build a house. I'd travel to Cambridge every week to oversee the build and meet with the enlightened, but also highly eccentric clients, Lord Edgar Adrian and his wife Lady Hester Adrian. He was an eminent scientist, Master of Trinity College, and had won a Nobel Prize for physiology. She was also very distinguished in her own right, in medicine. But I never once saw them together. The house, although a single property, was divided into two, with a study area for him, another for her, and a shared space in the middle – the initial idea was even that the house could eventually revert to Trinity's ownership and be used as student housing (this was the basis of the agreement for the Adrians to use Trinity land). When I met with him and raised certain issues, he'd say, 'You'll have to speak with Lady Hester about that.' Similarly, during separate meetings with his wife, she'd often say, 'That's Lord Adrian's area. You should ask him.' They were always very business-like, but we got along very well. I'd usually take the train to see them, although sometimes Patrick and I would go together, driving at great speed in his two-seater Volvo. We would chat all the way there and back, with him explaining the design to me or simply telling funny stories. My only anxiety at the time was that I'd imagined architecture to be a very serious profession, and I was having so much fun.

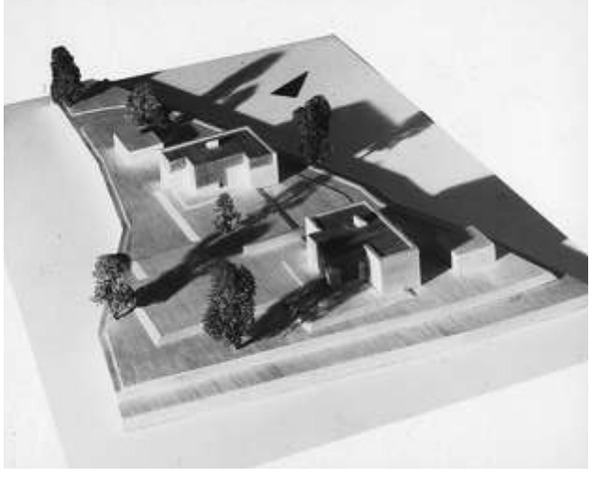
The second Cambridge job, on Madingley Road, must have come into the office some time in 1964. It was a fairly straightforward interior conversion to an existing nineteenth-century stone house – the office title for the job was simply the Stone House – slightly art nouveau in character, with lots of lovely details which Patrick was very keen to preserve. The client was Henry Arthur Hollond, a senior fellow of Trinity and professor of English law, but when we first visited the house it was still occupied by the former owner, a fellow of St John's College, who was old and rather decrepit and something of a hoarder. Every room was absolutely packed with decaying boxes, and in the garden, which was wild and overgrown, there were three huge Rolls Royces filled with stacks and stacks of rotten newspapers. I drank my first ever whisky in the pub with Patrick after that first visit. Later I remember visiting professor Hollond in his luxurious chambers in Neville Court. He'd always invite me for an extremely lavish lunch – things I'd never eaten before, like lobster and caviar, all arranged on a massive tray. Professor Hollond himself was rather old – he must have been 80 – and he'd talk to me, not so much about the design of his house, but his anxieties about living with his wife. The two of them had never actually shared a house together, even though they'd been married since the late 1920s – he'd spent so much of his life in his Cambridge college, where in those days women were not allowed to stay overnight, and his wife, Marjorie Tappan Hollond, was a lecturer in economics and bursar of the women's college, Girton. She was American and also nicely eccentric. She had this whole 1930s look, with swinging beads and floppy hats, and would drive around in a Bentley. When she picked me up once to take me to the house she said, 'My dear, I can never remember whether one should drive on the left or the right, and so I tend to stick to the middle.'

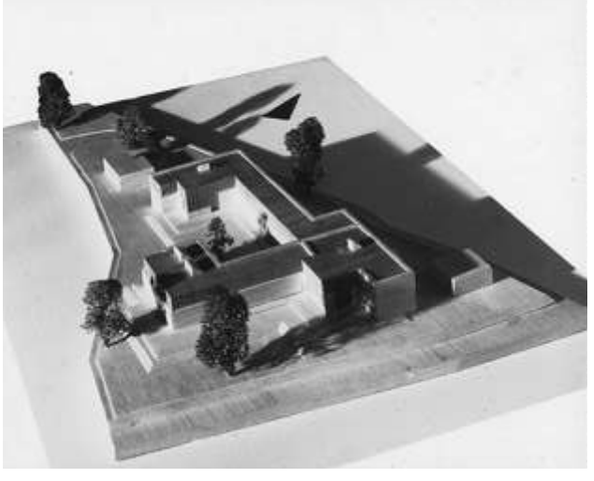
On another occasion she came to London to look at bathroom fittings with me in Boldings on Bond Street, which was a very superior kind of shop. Inside I remember her climbing into every single bath, trying them out for size. She even sat on every single toilet. She was











completely nutty. I think Patrick partly chose me for this job, and the one with Lord and Lady Adrian, because he thought I could deal with these people. And I could! Marjorie and I got along very well. We had another little outing to Harrods to look at light fittings. She knew what she wanted. As soon as we were inside she asked to see the manager and when he arrived she told him that she had once seen some beautiful 1930s Tiffany lampshades in the store on sale. He apologised and said that these were no longer available, but she insisted he go and look in the store room, and blow me, a few minutes later he came back with the Tiffany shades. Nothing but the best for Mrs Hollond.

With the Stone House just about complete Patrick offered me the chance to join the Brunswick team with David Levitt and Tony, but I knew how late those blokes used to work, and by then I really wanted to have some kind of social life. Patrick seemed to understand this completely and was really wonderful about it. He immediately helped me find another position, calling a friend at the University Grants Committee, which then centralised the procurement for all building work for the universities, and secured me a new job on its design team. I owe Patrick a huge debt of gratitude. He always behaved with such elegance.

Anthony Richardson

The thing that first attracted me to the Foundling was its formality, and the fact that it was making a Georgian statement in an old Georgian suburb in 1960s London. I had seen the scheme published in a magazine when I was working at Lyons, Israel & Ellis, and so I rang up Patrick and he invited me to join the team. He had only just moved the office to London. It occupied a former legal chamber designed by Robert Taylor in the late eighteenth century – Stone Buildings, just off Chancery Lane in Lincoln's Inn – which he was sub-letting from Leslie Martin's favourite quantity surveyors, Monk & Dunstone. The office then comprised Patrick, Sally Odd, who worked on Lord Adrian's house, and David Levitt; David Bernstein then joined at the same time as me, and so for a year or so there were just four of us on the Foundling. Soon afterwards we moved to 32 Porchester Terrace. In England at the time everyone was very interested in the structure of the city and in megastructures. We didn't want the Barbican, which we thought was a complete mess. We wanted an orderly world. We wanted a contemporary version of Nash, an architecture for the whole of London imagined from the top down. Even Leslie Martin was thinking the same way – just look at the scheme he did with Lionel March for Whitehall, which imagined knocking it all down and building a vast megastructural axis through the centre of London with Westminster Abbey in the middle of it all. I remember thinking that this really was the model for the future growth of the city.

David Shalev

I met Patrick in 1963 when I first arrived in England from Israel. I was looking for a job, as one does, and went to see him in his office in Lincoln's Inn. I was incredibly impressed, both by the expansive space of his studio and by Patrick himself. He always made an impression. I was young then, of course, but I was also quite experienced. I had been working in Israel for Dov Karmi, whose son Ram overlapped with Patrick at the AA, completing the large Negev Centre in Be'er Sheva. The building isn't there any more, but it was very much of the same genus as the Brunswick – built entirely in concrete, with a stepped section and providing a combination of commercial space, offices and houses. In the early 1960s we were all doing these kinds of buildings. But anyway, I didn't get the job. Someone told me later that Patrick was worried I would be telling him what to do.

David Levitt

After graduating I went to work with Philip Dowson at Arups for 18 months or so, but then in 1963 I got a call from Patrick to ask if I'd like to join him in his new office in Lincoln's Inn, working on the Brunswick. When we moved to the grander Porchester Terrace house and office Patrick really showed what a good shopper he was. Like Jim Stirling, who was also something of a collector, he'd disappear over an afternoon before coming back with the most amazing stuff – furniture, paintings, books, etc. By then he'd become very comfortably off, and even bought a dark blue Aston Martin to speed around in.

John Miller

I remember on one occasion driving with Patrick and his second wife Jackie to Cliveden, where Patrick had heard there would be a furniture sale. Jackie was wearing a large floppy hat, and as he sped along in the Aston she had to press the rim down over her ears to stop it blowing off. There was something of the 1920s and 30s about Patrick – the exuberance of open-top cars and big band music, for which he always had a great affection. When we were at Charterhouse we would read a little-known novelist called Dornford Yates, or at least that was his pen name, whose books described the slightly raffish style of the period, with fast cars and fast women. Patrick would have enjoyed these books, as we all did, but there was something of this style in him too – an association he would have enjoyed far less. In some ways his more particular architectural style could even be attributed to an earlier period, to people like Lutyens and an English Edwardian tradition, or at least to the habit of an architect discreetly advertising his office with a brass plate on the door. Anyway, we arrive at Cliveden and are confronted by a huge collection of stuff. Patrick immediately spots a library sofa in buttoned crimson leather, with a kind of pedestal in the middle that is simply enormous. It must have been at least 3m square. I asked him if he was serious about getting it, and Patrick just said he'd find a place for it (he didn't!). There was a lot of fantasy going on with him at the time.

Patrick Hodgkinson, house for Lord and Lady Adrian, Burrell's Field, Cambridge, 1964
© Hodgkinson family archive

Adrian Gale

I think money meant a lot to Patrick, and he certainly demonstrated what you could do with a good salary, with the houses he lived in, or the boats he sailed or the various cars he owned. He was actually always interested in motor cars. At the AA he had a vintage Bayliss-Thomas, and after he got the Foundling job he bought a second-hand open-top Aston Martin – someone like Patrick, sporty and very romantic, felt that he needed to have a car like an Aston Martin – which he drove at terrifying speed, and which he clearly loved. But in a curious way he also treated his cars incredibly badly, and when he drove he would always crunch through the gears. With a six-cylinder engine, like in an Aston Martin, you needed to be able to get through the gate of its transmission smoothly, but Patrick was always quite muscular with the gear lever and that poor car really suffered. For someone so refined, Patrick could really be quite rough and ready. He may well have picked this up from his father Geoffrey, who was a gentleman farmer and quite rough and ready himself. I would describe him as nail-like. I only met him a couple of times at their rather grand family flat in Knightsbridge. They had an enormous dog that once leapt from their first-floor balcony onto the street and apparently did himself no harm whatsoever. I remember his father had a rather narrow view of what a man ought to do every day, which was to go into work. When we were students at the AA he'd only ever ask Patrick what time he was due in at the office.

Peter Myers

Before Patrick bought the Porchester Terrace house it had belonged to Lord Samuel. It was really a very accomplished London terrace – four storeys, with an attic and a large basement that was occupied by an Irish couple who looked after the whole house. Patrick did one

or two small things with the interior when he got it, but not much. There was also an echo of Leslie Martin's mill at Great Shelford, in the sense that it was both a family home and an architectural office – Martin lived upstairs at the mill, just as Patrick did in Porchester Terrace. It was a world on its own. Once you went in, it was very difficult to think of any reason why you should go out again.

John Miller

I still remember the beautiful big rooms at Porchester Terrace, which again Patrick furnished very sparsely, even if by then he'd given up on rush matting and instead had lovely polished wooden floors and white marble. When you went to visit, his secretary would greet you from behind a desk that Patrick had designed, made of 1 inch-thick sheets of plywood, with trestle bases also made of inclined sheets of ply. There was such a strange but rather compelling juxtaposition between the luxuriousness of the Edwardian details in the house – its brass door handles, ornate balustrade and an elaborate dumb-waiter that extended the height of the house – and this plain, almost brutalist furniture.

Adrian Gale

Patrick was really the first among us to introduce plywood furniture, which very quickly we all started to adopt for our own homes and offices. There were thick slabs of plywood with white melamine tops everywhere. He never seemed interested in the chrome and tubular steel of a German tradition, nor the stuff coming out of Denmark with Jacobsen, which was all too sweet for his taste. Rather, Patrick only ever liked furniture that showed its rudimentary material qualities, which of course really meant the furniture of Aalto. He adored the time he spent in Aalto's office, and in many ways his love of Aalto was another way he was slightly out of step with everyone else, and our own rival adoration of Mies and Le Corbusier.

Anthony Richardson

The Porchester Terrace office was in the ground-floor front room. Patrick had the garden room at the back and models were made in the basement, in what had been the wine cellar. It was not an office in the Lyons, Israel & Ellis sense of the word. It was an atelier. We all sat on Aalto stools and worked at desks laughingly designed by Patrick – they were hugely heavy and had laminated tops, onto which we attached our Maylines. It was all very convivial, and we would work very long hours, fuelled largely by our enthusiasm for the project, even if this dwindled as the scheme became more complex, and more compromised.

Peter Myers

I went sailing with Patrick one weekend on the Orwell near Pin Mill in Suffolk, where he moored his fine timber yacht. We drove there in the Aston, a dark blue drophead coupé. It was garaged in another building in Bayswater as the cloth top kept getting vandalised when he parked it outside the house. I remember en route to Pin Mill we were tailgated by some Teddy Boys in a hotted-up Jaguar. The road we were roaring along was quite narrow, with hedgerows either side – somewhat reminiscent of the lane which did for T E Lawrence on his motorcycle. But Patrick was always pretty fearless and just put his foot down. Soon we were well past the 100mph mark and the Teds just a dot of belching smoke and steam in the rear-view mirror.

David Levitt

For such a big project, the Foundling, or Brunswick as it became, was very low key and low tech, and it had a very compact team: Patrick, of course, Tony Richardson, David Bernstein and myself. Later the team grew with the addition of Dugald Campbell, Chris Hulls and Peter Myers, and there were other assistants, like Birkin Haward, who did a number of perspectival drawings, and some of the models were made by Jeremy Dixon, who had recently graduated from the AA. I remember him being incredibly fastidious – not just in terms of the construction of his models but somehow how he organised everything else. At lunchtime, when the rest of us would head out to get a bite to eat, Jeremy would stay behind, unpacking and arranging his sandwiches in the same careful, circumspect way he unpacked and arranged all his pieces of balsa wood.

Jeremy Dixon

I don't remember exactly how the introduction was made to Patrick Hodgkinson, but I suspect it was through Tony Richardson, who was in my year at the AA; we'd collaborated together on some of our fourth-year projects. Sometime around 1965 he asked if I could assist on a model – ever since I was a child I have always enjoyed making models, and during my time at the AA I'd developed quite an expertise in their construction – and so over a few weeks one summer I came to the office in Porchester Terrace to help out. The workshop was in the basement of the house – a tremendously elegant property; I mean, highly enviable. For a young architect living in a tiny flat in Bloomsbury it was a fantastic illustration of how the other half of the architectural profession lived – with considerable grandeur and style. The model itself was quite big, around 8ft long, and was to be made out of a Canadian yellow cedar hardwood. I was employed as an assistant to a very engaging chap called Julian Thompson who was a professional model-maker – but as I discovered, his previous profession was as a button-maker, turning handmade buttons, and he'd been introduced to Patrick through Derek Sugden. He was incredibly skilful. He was also quite alternative – he had long hair and a big beard – but in my experience lots of model-makers are rather independent thinkers and never consider themselves part of the architectural mainstream. He later went to work with Arups and their model-making department, where he acquired the nickname Jelly Thompson, and where his independent character revealed itself through his frequent habit of altering a scheme if he didn't like something or other.

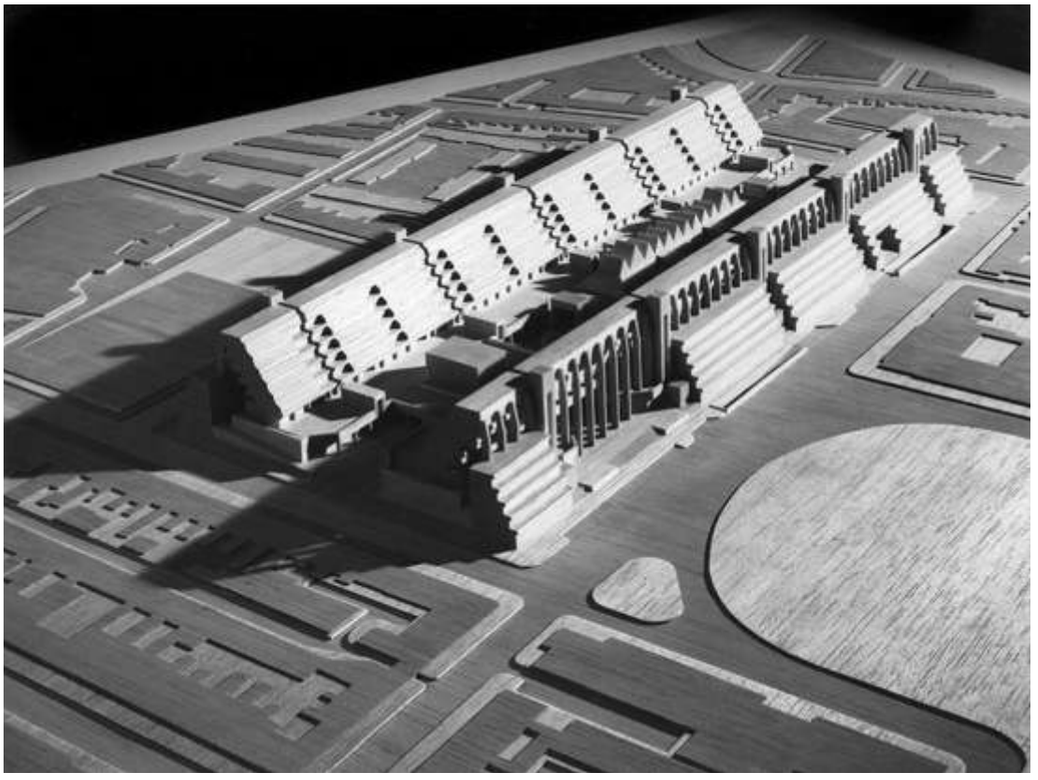
The Brunswick proposal itself always intrigued me. When I was at the AA I had reacted against a lot of high-rise housing schemes, and the same was clearly true of the generation before me, led by Patrick and Neave Brown and their two seminal projects, the Brunswick and Alexandra Road. They had seen the limitations of high-rise living, but at the same time they were not prepared to give up on the grand urban project and a wilful confrontation with big urban ideas. And so they produced low-rise but high-density designs that also incorporated ideas about outdoor space. In the case of the Brunswick, Patrick also created a scheme that related to the scale of Bloomsbury but was in no way a piece of nineteenth-century pastiche. All very interesting.

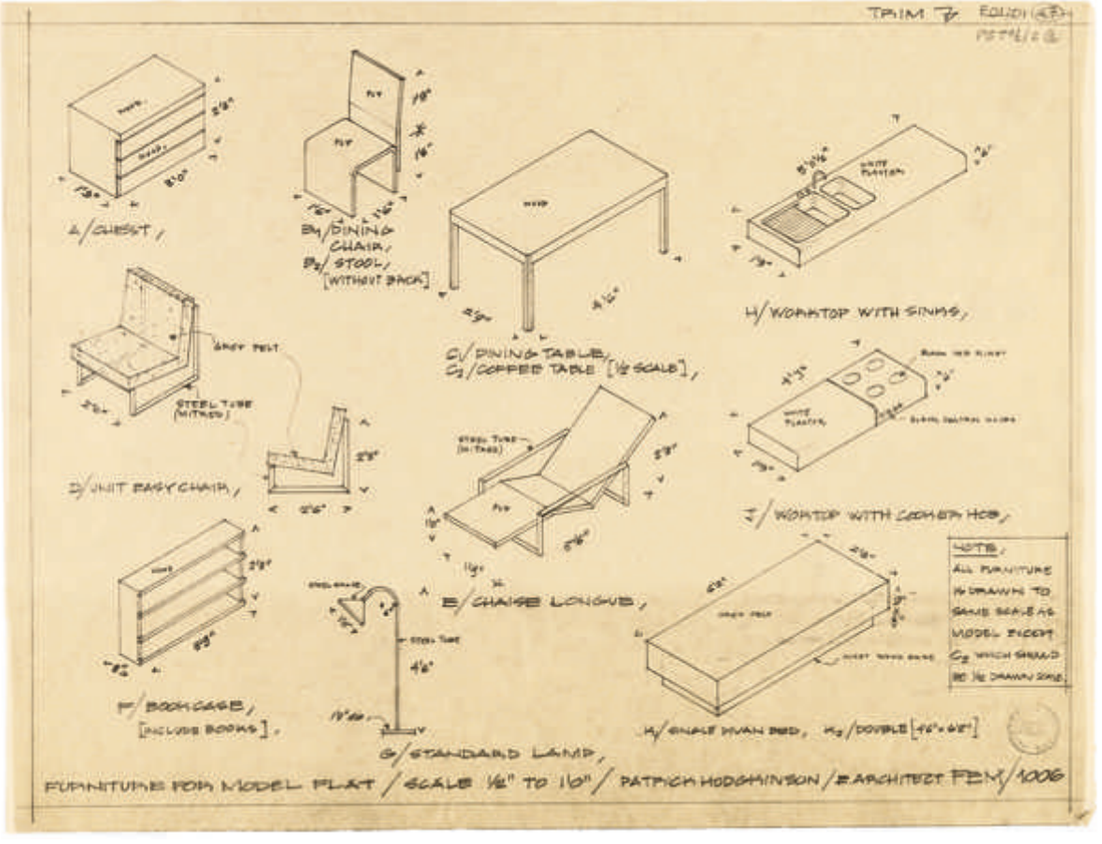
The technique of making the model was also an interesting one. We'd cut the hardwood pieces to close to their right size, and then we'd work with disc sanders and carefully constructed jigs to get the precise shape and dimensions. That first, big model was made entirely this way – and I must admit I am frankly amazed I still have all my fingers. Subsequently, Patrick asked me to produce another, smaller model of the scheme, which I made with balsa wood, and which again employed jigs and lots of sanding, but because it was balsa I could work on it at home in my little flat on Doughty Street.

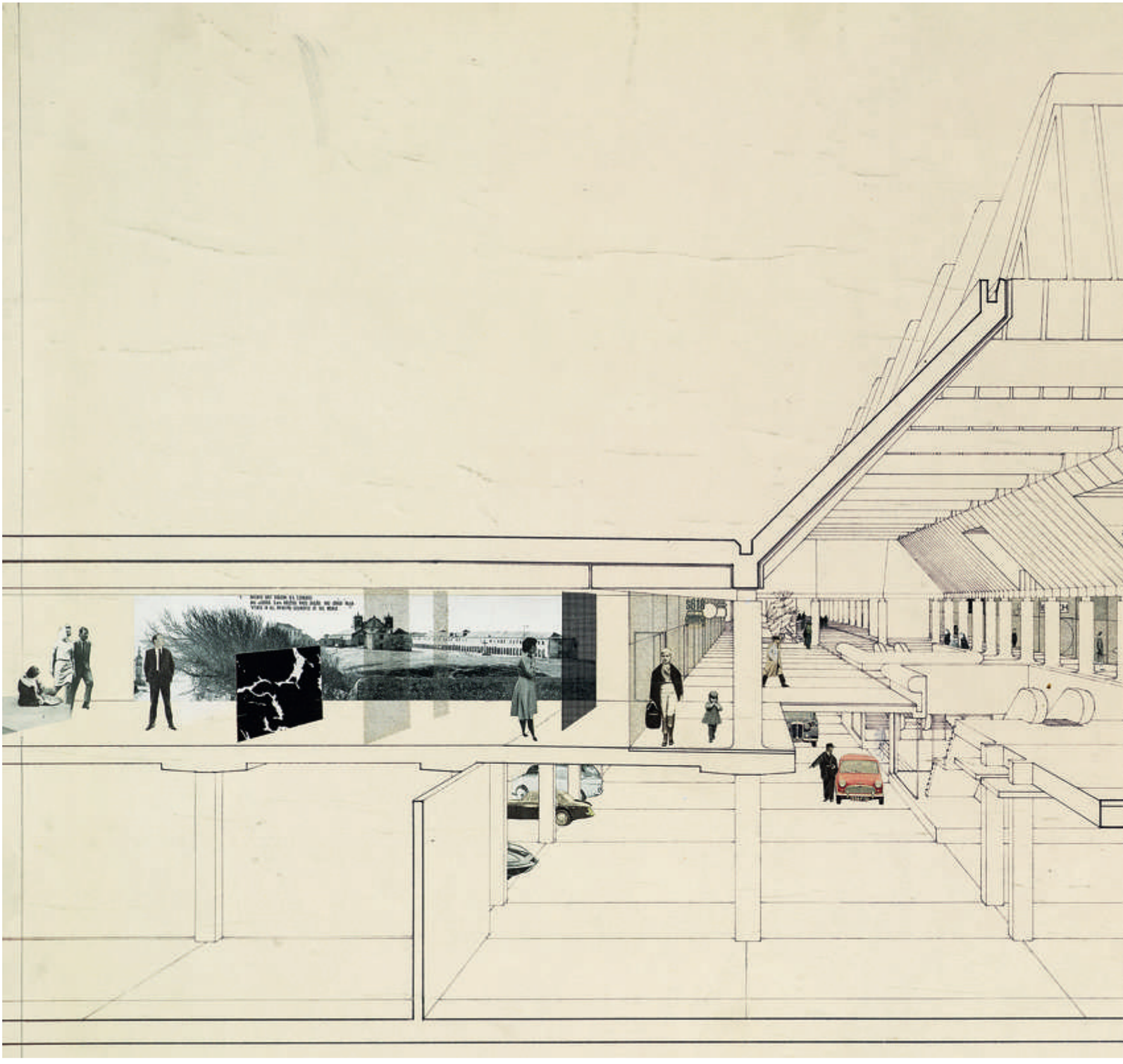
Birkin Haward

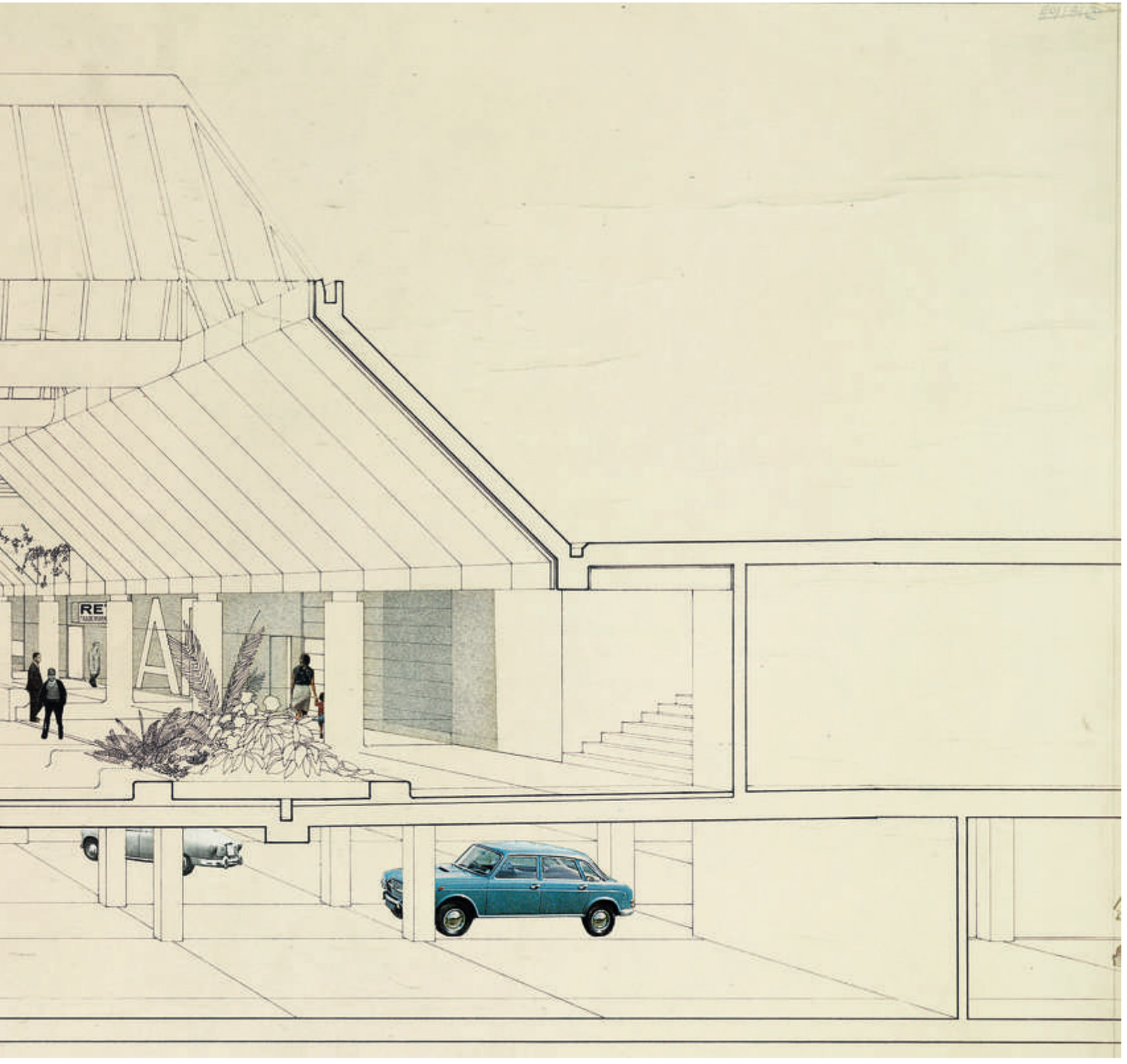
In the early 1960s, when I was a penniless AA student, I used to produce drawings for various offices to help pay the rent. Among them were perspectives for the Smithsons, Colquhoun + Miller and Leonard Manasseh. Before these got in the way of my AA work, I also did five

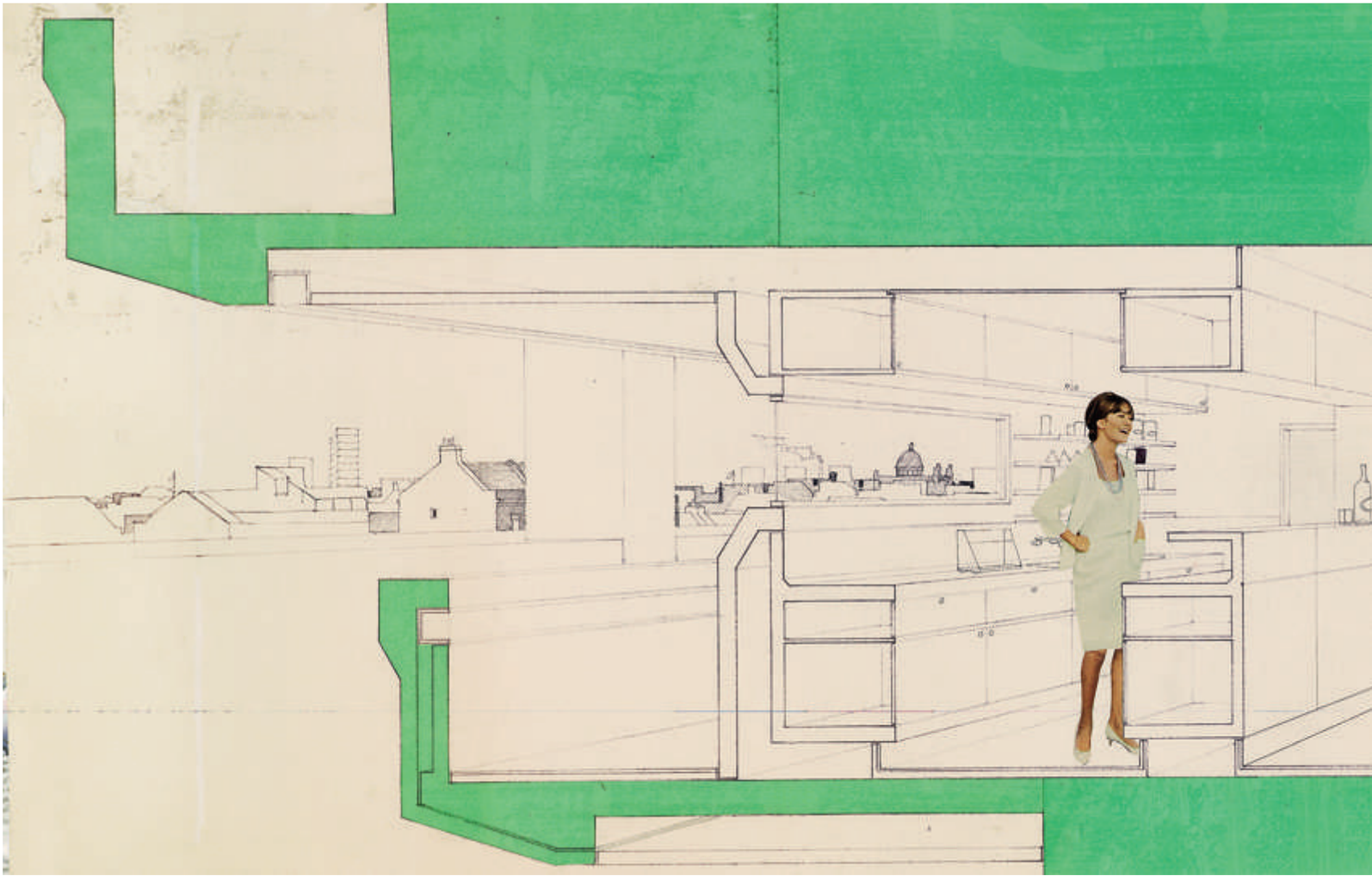
Julian 'Jelly' Thompson & Jeremy Dixon, Brunswick Centre model, 1965
Patrick Hodgkinson, furniture for model flat, Brunswick Centre, 1965 © RIBA Drawings Collection
Overleaf: Birkin Haward, perspectival collage through the central 'street', Brunswick Centre, 1965 © RIBA Library Photographs Collection




A/CHEST,
B4/DINING CHAIR,
B2/STOOL,
[WITHOUT BACK]
C1/DINING TABLE,
C2/COPPER TABLE [½ SCALE],
D/UNIT EASY CHAIR,
STEEL TUBE (MITRED)
E/CHAISE LONGUE,
F/BOOKCASE,
[INCLUDE BOOKS],
G/STANDARD LAMP,
H/WORKTOP WITH SINKS,
I/WORKTOP WITH COOKER HOB,
J1/SINGLE DIVAN BED, J2/DOUBLE [46"×6'4"]
NOTE,
ALL FURNITURE
IS DRAWN TO
SAME SCALE AS
MODEL EXCEPT
C2 WHICH SHOWN
AT ½ DRAWN SIZE.
FURNITURE FOR MODEL FLAT / SCALE ½" TO 1'0" / PATRICK HODGKINSON / ARCHITECT PEM/1006









drawings of the nascent Brunswick Centre for Patrick Hodgkinson – I think it was Tony Richardson, who overlapped with me at the AA, who arranged the commission. The money was very welcome, although I have to say they were hard work – particularly the big sectional perspective with the receding balconies and conservatories – because, of course, this was in the days before you could set things up on a computer. As the drawings developed I would go round to the office in Porchester Terrace, usually at the end of the day, for a detailed briefing and checking over what I'd done – mainly with David Levitt and David Bernstein. When I'd finished I recall that Patrick, who was ever charming, would invite me upstairs into his rather grand living room and I was given my first experience of a really stiff cocktail, or two, to send me on my way.

David Bernstein

I came to London from the US in 1964. Initially I worked with William Whitfield while also teaching part-time at the AA, but the reason I came over in the first place was to try and find a job with Leslie Martin, whose work I had seen and admired from magazines in the US. I interviewed with Leslie, but he didn't have any positions available and so he suggested I try Patrick. He immediately offered me a job. There were four desks, with David Levitt and I facing Tony and Dugald. Patrick worked in a garden-facing room. It was all very convivial. When I worked in New York for various architects I would always moan about them in the evenings – my wife thought I was a professional malcontent. Even Whitfield's office was a bit strange, because he was never there, preferring to work from home, which meant that as his assistant I was always shuttling between his flat and the office. Patrick's office was a delight in comparison – I liked the Porchester house, the other guys I was working with, the building we were designing, and I liked Patrick. All of the team used to cycle to work, but perhaps I was the most eccentric because I used to ride a tandem with my wife. She worked as the senior registrar at the AA, and we'd bike from our flat in the Cromwell Road to Queensway underground station; she'd then jump off and catch the tube to the AA School, and I'd go on to Patrick's office.

Dugald Campbell

Arriving each day at 32 Porchester Terrace, walking up the front steps and through the front door with your own key, was not like going to work. The ground floor consisted of a large hallway, with a curved stair up to the first floor on the western side, the drawing room was to the north, an admin office to the east and Patrick's study and the garden to the south. The rooms were large, high-ceilinged with huge double-hung sash windows and parquet floors with recessed wells for the Persian carpets that the last owners had taken with them. Patrick had filled these wells, flush to the parquet, with jointless white linoleum. We worked on long boards with custom-made 5ft parallel motions specially ordered from Mayline. Drawings were always in pencil, usually Faber Castell F leads, all done on heavy duty Finnish detail paper. Every time we clocked up another 100 drawings all work stopped for champagne, either in Patrick's living room or out on the deck on the first floor – Lanson Black Label, as I recall.

Initially I had to learn the building, largely under Tony Richardson's tutelage, whilst also trying to pick up the extent of the changes to the original design that Camden council's purchase of all the flats had entailed. Because I had earlier worked with Ernö Goldfinger, designing the service shafts for Balfron Tower, I was assigned to the services on the Brunswick. In particular I spent a great deal of time working on the supply and exhaust ventilation for the two levels of car parking, the retail docks and stores and the driveway around the perimeter of the basements. Later I worked on the detailing of the columns in the shopping centre and all the handrails. To help me with these, Patrick gave me a copy of Elizabeth Beazley's book, *Design and Detail of the Space Between Buildings*, in which he had marked pages illustrating thin wrought iron railings in various English fishing ports. My final run of detailing was for the saw-tooth glazed roof over the central portion of the shopping street, some 30 per cent of which had to open in case of fire. Patrick's solution was a system of pulleys, counterweights and fusible links that again owed a great deal to his love of sailing boats and their rigging.

Anthony Richardson

In my first year on the Brunswick team the two Davids worked on the flats and everything above and I worked on the podium level downwards, responsible for all the studios, offices and shops. The set-up was actually very traditional. One of us would propose something and Patrick would then say yes or no, or he would himself adapt and amend the drawings we produced. A case in point was the columns in the shopping centre. When we started to design these we drew them as simple square concrete columns, with no decoration or any form of base or capital. But Patrick, under the influence, I think, of Howell, Killick & Partridge – who had invented a system which involved decorative concrete pieces hanging off concrete structural columns – embellished these first designs. I wasn't convinced, but his argument was that the thinness of the original columns didn't adequately express the grandeur of the urban space we were creating. And this kind of urban statement always won out, because we all felt this is what the scheme was really about.

David Bernstein

In addition to the housing, I worked on the enormous columns immediately above the cinema. I must have drawn those things 20, 30 times. We went through so many versions because the engineers for the project – who were part of McAlpines, nice guys but very crude in terms of their ideas – said they had to be 1m square and go straight up. But Patrick had something else in mind, and so there'd be a constant process of trying to bring the McAlpine engineers around to his way of thinking. 'Could they be a bit longer and less wide?' he'd ask. And then some time later when a few concessions were made, 'That's good. Now how about making them even longer and even a little less wide?' And then eventually, 'Now can we make each end narrower and chamfer the top?' One of Patrick's qualities was that he never gave up. He had such a clear vision for the Brunswick and he pursued it so doggedly that he usually got his way. If he hadn't been so talented it would have been very awkward, but the thing is, he was so talented.

David Levitt

The initial designs for the flats were much more luxurious than those that exist now. They had much wider frontages, bedrooms on either side of the living room, a double skin that allowed air to be brought in directly from outside and a continuous winter garden that ran along the inner face and which could be opened out towards the balconies in the summer. It was all about as much as the LCC building's regulation department in Vauxhall Bridge Road could stomach.

Neave Brown

The irony, or indeed tragedy, of the Foundling commission was that the private parts of the original brief – the luxury flats and commercial shops – that Leslie Martin resisted, turned out to be the very same parts that ultimately defeated Patrick, because when McAlpine took over the development from Colman the budget was slashed and the whole development was reimagined as social housing with an integrated supermarket. Patrick had to totally redesign everything and it became incredibly compromised, and compromise was something that he had great difficulty in accepting. He did fantastically well to complete it in the end – it is a staggering achievement, simply dumbfounding – but it caused irreparable personal damage.

Previous: Birkin Haward, perspectival collage through a flat, Brunswick Centre, 1965
© RIBA Library Photographs Collection

David Levitt

Everything changed on the Brunswick job because in 1965 Harold Wilson's labour government introduced the Rent Act, which among other things protected tenants from eviction and extended security of tenure to include furnished properties. This sent Colman into a tailspin, because he was intending to serve notice on all the existing tenants. His whole financial model was based on filling the new luxury flats with people on much higher incomes. But with the Rent Act in place, his only options were to either compensate the original tenants or rehouse them. In the end, he struck a deal with Camden whereby he would have the flats redesigned, on a smaller and less grand scale but still to Parker Morris standards, and in return Camden would lease them, rehousing all the original tenants. With much grinding of gears in Patrick's office the entire scheme was then redesigned as council housing. His solution was to break the 18ft grid, which originally extended through the whole height of the building, and to make everything above level 2 on a new 13ft 6in grid, which allowed for smaller units.

Anthony Richardson

The change in grid had a huge impact because all the services coming down from the smaller grid of the flats had to adjust to the wider grid below. Effectively, they all had to dodge sideways. And putting kinks in pipes is really the recipe for some future disaster.

David Levitt

The adjustment of the building's grid was actually the first and last of the really big changes, but we also had to rethink how the building was finished. In the beginning we entertained the idea of tiling the building, and then of cladding it in brick – partly inspired by Lasdun's Royal College of Physicians – before Patrick hit on the idea of painting it in crown cream to mimic the Nash terraces. I remember he'd get very cross if anyone related his ideas for the Brunswick to brutalism or to Le Corbusier. After the change to council tenancies, I was in charge of the paint specifications and spent about six months trying to find a finish that would work with our reduced budget. By then Patrick never mentioned Nash, but instead trotted out Sant'Elia as the building's preferred reference.

Peter Myers

Banham makes a connection between the Brunswick and Sant'Elia and other Italian architects of the fascist period, but I must admit I'm not convinced. Personally, I never heard Patrick talk about Sant'Elia or Mario Chiattone or any of the architects around Adalberto Libera. I don't think he ever really knew about them, or had any interest in them. The only Italian architect I ever heard him express admiration for was Gino Valle, who did a very interesting factory building for Zanussi that was also, I think, an influence on Patrick's earlier Harvey Court.

Anthony Richardson

Patrick never really acknowledged any mentor other than Aalto. His whole style, even his whole approach to drawing and his lettering, were taken from the model of the Aalto office. When people said the chimneys at the Brunswick were clearly inspired by Sant'Elia he would give them a blank look. All of us knew that he understood what they were suggesting, but he was devoted to Aalto and would recognise no other influence.

Dugald Campbell

Patrick would divide the salaries for all of the members of the office into 13 parts, so that at Christmas we would receive two monthly paychecks and a nice bonus. He was incredibly generous like that. This meant that in December Pete Myers and I would always walk straight over to Ben Weinreb's architectural bookshop in Bloomsbury to look for something to blow our bonus on. We used to tease Pete by saying he was the kind of guy who if you dropped him out of a plane above the Sahara Desert, within a few hours he would find not only a bookshop but one selling rare editions of incredibly interesting architectural titles. He was always looking for things in Weinreb's or Hatchard's. That Christmas we found a fantastic copy of one of the *Wendingen* folios of Frank Lloyd Wright's work, printed in the 1920s on amazing Japanese rice paper. Today it would be worth an absolute fortune, but back then £50 was pencilled onto its inner page and we thought we could do it if we went halves, and figured out ownership later. However, when we handed over the money to the guy behind the till he first just silently looked upwards towards the neighbouring dome of the British Museum, as if seeking divine intervention, and then announced that a 1 had been accidently rubbed out and that the real price was £150. Too much, even for our combined Christmas bonus.

Neave Brown

Bizarrely, one of the unwitting agents of the destruction of Patrick's vision for the Foundling was Sydney Cook from Camden council. On one occasion, on a site visit towards the end of the project, he unwittingly expressed to McAlpine his admiration for some of the concrete. This gave McAlpine the excuse to abandon all of Patrick's original painted finishes, and so what was imagined as cream-coloured formwork, very much in the spirit of Nash's London, became a kind of megastructure of raw concrete.

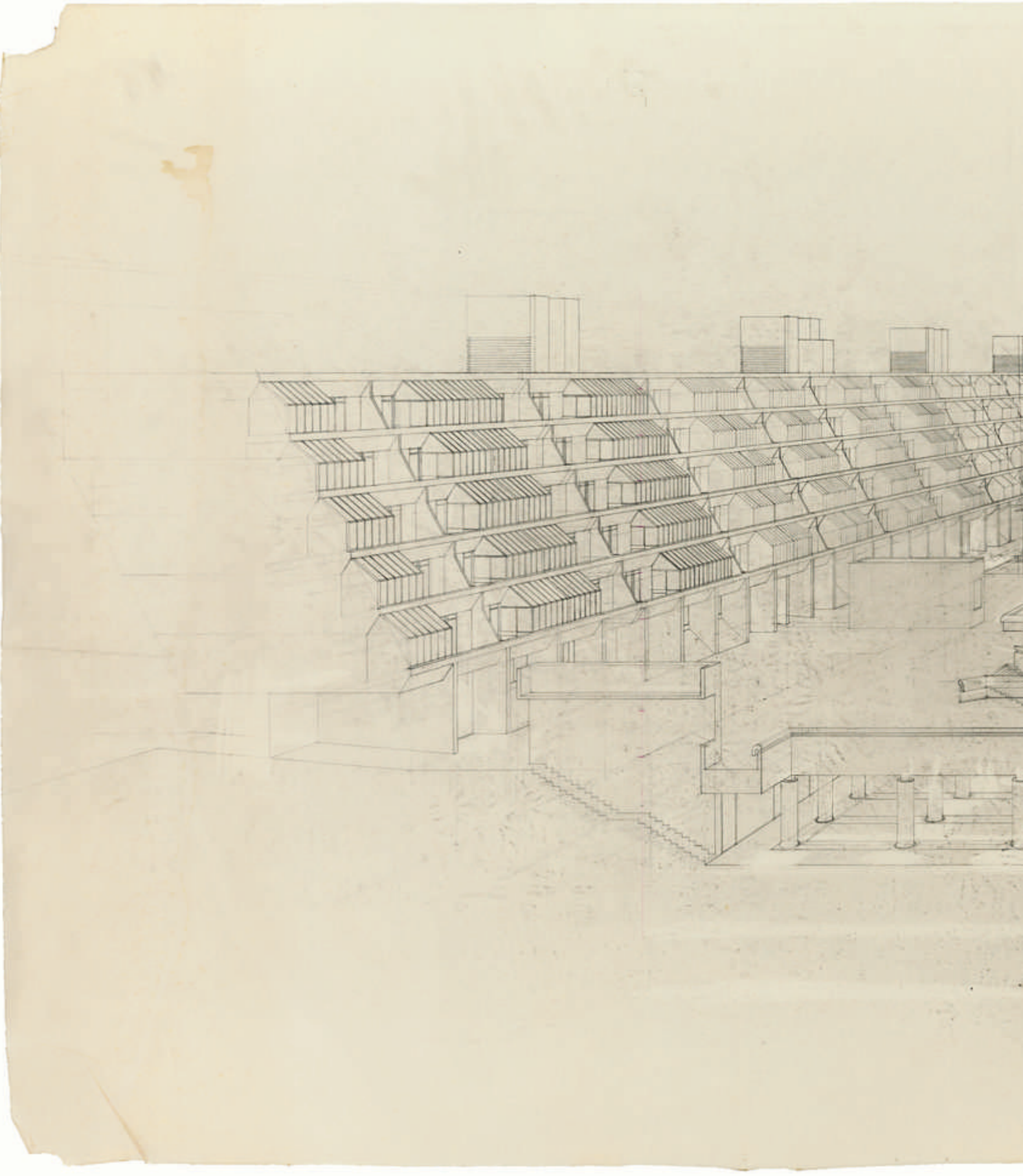
David Levitt

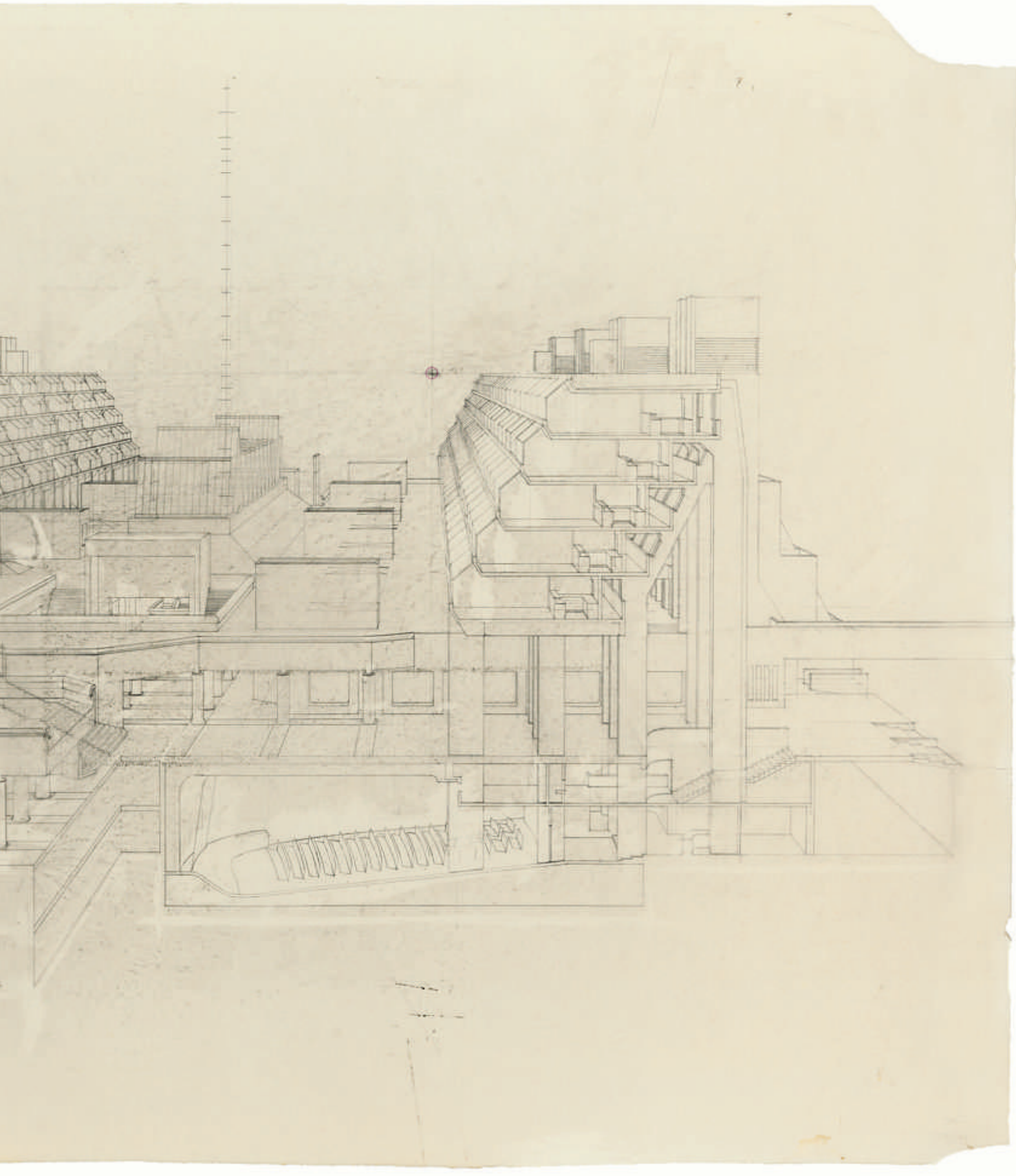
My sense of it has always been that when the retailers who had originally signed up for the development suddenly discovered they would be sitting beneath 400 council flats, they all buggered off. The knock-on effect was that Colman soon got into financial difficulties and the specification for the job as a whole got downgraded. He then sold the entire development on to McAlpine. Patrick worked with them for a period of time, but the fateful day came when he went to a meeting at the Dorchester, which McAlpine also owned. Patrick returned to the office some hours later with a blank look on his face and told us that he'd been asked for all the working drawings to be completed in a very short time-frame. When he said this simply wasn't possible because of the size of the office, McAlpine insisted on taking over the whole scheme with their own in-house design department. Even though Patrick and Peter Myers stayed with the job until 1970, by 1968 all the other members of the team had left – including me and David Bernstein, who set up our own office together.

Peter Myers

I started working on the Brunswick towards the end of 1967, after two years spent with Utzon on the Sydney Opera House, and left two and a half years later. I'd initially come to London to study urban design at the AA, but soon ran out of money as I wasn't eligible for any form of local authority grant. I asked Leslie Ginsburg, who ran the programme, if the school could provide any help, and he said he could get me some money from a bursary set up by Rothmans in South Africa. This was the height of the apartheid era and I felt strongly that I really couldn't accept anything from Rothmans, so I left the AA and immediately looked around for some office work. A friend of mine, Dugald Campbell, was then working with Patrick, and he set me up with an interview. Patrick offered me a job immediately and I started right away. During that period, between 1967 and 1970, I worked almost entirely on the construction of the Brunswick as a concrete building, detailing all the formwork lines, as well as producing many of the drawings for publication – for example, most of the drawings that appear in the 1972 *Architectural Review* issue were done

Overleaf: Peter Myers, pencil underlay of final presentation drawing, Brunswick Centre, 1971
© Drawing Matter Collections





by me, and which together with some accompanying underlay drawings by Patrick are interesting to me now if only because they contain notes and comments by him, showing that the building was being refined even as it was being built. Although this was only a relatively short stretch of time, many things came together in terms of the execution of the building – not least Patrick's idea that the building would not so much be built as poured. The Brunswick was resolutely a concrete building. I experienced this first-hand because I had to oversee so much of it. I was the one, therefore, who had to deal with the Irish workers employed by McAlpine. They were a really rough bunch. For certain sections they'd even hold the formwork in place by hand as they poured the concrete. And there'd always be fist-fights breaking out. It was one tough site. I guess they got me down there because they thought that as an Australian I was the only one who could take the abuse.

Because I arrived on the team as late as 1967 I never knew the building in its previous guise, as luxury flats and shops. And so I never experienced any feelings of disappointment about what might have been lost. For me, the Brunswick was only ever a scheme for social housing. But interestingly, I don't think Patrick experienced any disappointment either. Of course, he was annoyed that the Duke of Norfolk wouldn't budge on the land to the north, keeping the Territorial Army in place, and therefore blocking the possibility of extending it in that direction, and yes, the original brief had also changed, but what had remained throughout was his sense that he had discovered a new type of building – a high-density development in the centre of London that provided flats, shops, amenities and outdoor public space for a whole social strata. This was also a type that somehow enabled its tenants to feel autonomous yet still included within a larger community. In many ways, then, I think the reimagining of the Brunswick as council housing under Harold Wilson's new labour government was actually much more in keeping with Patrick's own ideals. The sense of ownership Patrick was interested in was not proprietorial, but was about the identity and association he wanted all the occupants to feel towards this new, collectivised chunk of urbanity. I think these sensibilities also reveal Patrick's long-standing empathy for the *Gemeindebauten* of Red Vienna, especially Karl Ehn's Karl Marx-hof, and the idea that these were communal structures designed to be occupied by generation after generation of families.

I don't see Patrick's wealth, and the trappings of this wealth – his fantastic house, his boats and cars – as necessarily at odds with these ideals. The money he had was always there – his father was a very well-off Suffolk corn farmer – and actually, as the project became more fraught and because McAlpines were so tardy paying our fees, Patrick even sold one of the family properties – an enormous house in South Kensington – and ploughed the proceeds back into the practice just to keep it, and the job, going. Patrick gave everything he had to the building. I can think of very few architects who would have done that.

David Bernstein

David Levitt and I left the Brunswick office in 1968. Frankly we could have left sooner because our work on the building was done and Patrick was not picking up any other jobs, or even looking for them. He was pretty well connected and I guess he imagined that after the Brunswick he would simply pick up another big commission and jobs would roll in. But it didn't work out that way. For our own practice, David and I operated at a completely different level, forming a housing association and trying to find places for low-income families to live. And so immediately after working on an enormous building in the middle of Bloomsbury we found ourselves converting pretty humble two-storey houses in Tottenham – that is, humble in comparison to the Brunswick in terms of the architecture, not its social ambitions, because I think the Brunswick was very egalitarian.

Neave Brown

I don't ever really think of 'what might have been' with Patrick but there is something heart-breaking about what happened to him. All jobs have their compromises, which in many ways are things that take place in an outside world. We can resolve these in the best ways we can, but harder to resolve are the resistances we carry in our own internal worlds. The exclusiveness of Patrick's inner world meant that he was intensely and fundamentally vulnerable to anything that threatened the always rather secretive ways he operated. He never felt he could express doubt, uncertainty or confusion. On the Foundling he felt that he had designed something magically complete. And when this design was manipulated in order to realise the building that does exist he simply experienced a profound sense of indignation. Ultimately he couldn't deal with the very pragmatism and changing circumstances that he himself had always advocated.

Anthony Richardson

I'm not sure that Patrick really was defeated by compromise and by the realities of a developer taking control of his design. He was a deeply patrician figure and in many ways he put the fear of God into the McAlpine directors.

Brunswick Centre, 1972
© Richard Einzig / Arcaid

Whenever they came to Porchester Terrace he would serve tea in the most beautiful cups and would assert his power through his own grandeur. He always presented himself as a man who knew exactly what he was doing. But at the same time, I think the dynamics of his relationship with Colman and more particularly McAlpine did overlap with the growth of the intelligent developer. Such a person didn't exist when the Brunswick first started – clients then would put their trust in architects and relied on them to tell them what should be done – but as the project developed McAlpine evolved. Today, of course, it has reached the stage when no developer would ever ask an architect what it is they want to do.

David Chipperfield

I had lunch the other day with David McAlpine and ironically even he was bemoaning the change in the relations between architect and developer. It was slightly surprising to me because he was talking with a kind of fondness for the days when architects would develop their own projects. He came up with all of these big firms, led by powerful but charismatic figures like Richard Seifert, T P Bennett or Fitzroy Robinson, and argued that it was these people who had the vision and were in control of their projects, not the developers. And even though these architects were operating in a commercial sector, they brought with them a cultural authority. For him, this gave the whole process a certain clarity, even meaningfulness. That's all disappeared, of course, and in every way imaginable.

Peter Myers

The thing that I think is really important to understand is that even if McAlpine became the main contractor and in the process got rid of Patrick, they built the building because the documents they inherited from him were so bloody good. Just look at the sheer amount of time someone like David Levitt spent making sure the winter gardens worked, mechanically, functionally and aesthetically, and all the window prototypes he produced with Crittalls. The same was true for all the other members of the team and their own areas of responsibility. So I'm sure that when McAlpine first took over the job they thought they'd do whatever the hell they wanted, but when they looked through all the drawings and saw their level of detail and accuracy, they soon realised that in the end it was cheaper for them to build the thing as Patrick had designed it, rather than redesign it themselves. More than anything else, I think that is a real testament to the quality of the documents we produced.

By 1970 everyone else from the Brunswick team had left the office, but for me and Patrick.




BLOOMSBURY

There was a chap called Crispin Osborne who worked with him for a short while later, on a library project for Wellington Square in Oxford and for a yacht club in Woodbridge, but otherwise everyone had gone. I went back to Australia in February that year, but before I left I went to Kegan Paul's in Bloomsbury and bought him the best Hiroshige print I could afford. Patrick seemed thrilled when I presented it to him. He'd never encountered Hiroshige's Tokaido drawings before, and they're really quite breathtaking. In return he immediately rushed off to Hatchard's in Piccadilly and came back a short while later with a pristine copy of Louis Ambler's *Old Halls and Manor Houses of Yorkshire*, published in 1913 by Batsford. I still have it. The book features drawings and images of various houses, all lovingly drawn and photographed. For Patrick it was an endlessly regenerative treasure; so much so that I would be confident in claiming – despite Reyner Banham's contrary assertions – that it is the austere yet beautifully judged rural architecture of pre-industrial England that is the formal inspiration for Patrick's two best works, Harvey Court and the Brunswick Centre. Of course, as Banham shows, it is tempting to link Patrick with Sant'Elia, particularly as their works appear on both the cover and inside *Casabella* 268 from 1962 – an issue which prompted Patrick to contemplate his misfortune, because it credits Harvey Court only to Leslie Martin and Sandy Wilson.

Patrick's love of Ambler also revealed a side of his character that no one has ever really addressed – that he was very much a man with deep rural English sensibilities who just happened to go on to become a very good English urban architect. His architectural roots are in the countryside much more than the city. And by the countryside I don't mean a kind of Holkham Hall aesthetic – a landed architecture of Palladianism and neo-classicism – but the much older medieval halls of northern England, and Yorkshire in particular. His lineage, in this way, was actually very close to someone like Ernest Gimson, the late-nineteenth-century arts and crafts architect and designer, and like Gimson, Patrick had an intense interest in English rural building his whole life.

In this sense Patrick could not have been more different from someone like Sandy Wilson. He was not an intellectual, nor did he ever pretend to be. He was also no aficionado of the contemporary English arts scene. Rather, his most passionate interest was reserved for buildings that had been wrought over a long period of time. For instance, he was very much taken by Monpazier and the *bastide* towns of the Huguenot part of France. When he was a student he travelled extensively in this region, and with his plate camera took a number of photographs. I think this is also why he got on so well with Aalto. They both recognised in each other a common interest in, not what you'd call vernacular architecture – which sounds too academic – but simply in finely wrought buildings that had been lived in and worked on for a very long period of time.

Pierre d'Avoine

I first saw the Brunswick Centre in that seminal issue of *The Architectural Review* when the building first opened in 1972. I then experienced it physically later in the 1970s, after I had moved to London following my studies in Birmingham under Adrian Gale and John Winter. In those years I was quite a cinema buff and I'd always go to the Renoir, located within the Brunswick, to see European and art-house films. It was on leaving the cinema, either through the main entrance, or more especially through the fire exit – which took you up through the bowels of the building – that I really experienced the amazing spaces of the Brunswick. In those days it was all so much more porous and more mysterious. You could walk all over it and experience its more idiosyncratic, interstitial areas as you wandered into the hinterland of the spaces around the A-frame. Of course, cinema and architecture then collided when Antonioni released *The Passenger* in 1975, which features the famous scene where Jack Nicholson walks across the podium level of the Brunswick and sees Maria Schneider's character sitting on a bench. Antonioni clearly appreciated the style of the building. And even in that short tracking shot, you can see the effectiveness of the open-endedness of the original building, with an older Georgian grain framing the vista through the building.

Anthony Richardson

By the time the Brunswick opened I must admit I was fairly disillusioned with the idea that it was going to herald a revival of the grand urban gesture. In many ways, all of the members of the team thought the same way – that the redevelopment of London should be paused, so that rather than imagining the redesign and rebuilding of vast tracts of land we would instead concentrate on adapting and converting those buildings that already existed: we would heal the city, focusing much more on piecemeal bits of infill, rather than trying to amputate or graft on some new prosthetic. I realise that a decade earlier we had represented the very position we were now questioning, but our thinking had changed. I blame Jane Jacobs.

Brunswick Centre, 1972
© Richard Einzig / Arcaid

David Shalev

After he was kicked off the Brunswick job Patrick really went to pieces. He had always been incredibly sharp but in that period his anger, which was also always there, took over. I remember going to see him at the time. His studio was still full of all those fantastic Brunswick models, but it seemed to be just him, working alone on various projects. He was obviously looking for more work, but at the same time I had the feeling that he was hoping he didn't get any. Of course, he never spoke about these things. Patrick was a talker, but never about himself. It just felt that he was eating his anger.

We were all worried about him. But it was Su Rogers who decided to pick him up by the scruff of the neck and sort him out. She was teaching at the AA and arranged for him to come in and do some crits for her. Some short while later I came back to the AA to teach Diploma Unit 7 and soon found myself with too many students, and again it was Su who suggested I take on Patrick. Later we also had Brian Richards, and so there were three of us teaching the unit. I would set the brief, located in lots of different sites across London, and our hobbyhorse was always urbanism and context – our thinking was that the gaps between buildings were just as important as the buildings themselves or their interiors. We never interfered with style. That was up to the student to decide. Of course, students were always naturally modern – they never came up with pastiche proposals – but the one thing we always insisted on was that their projects were contextual. The three of us would never actually teach together. We all worked with the same brief, but each of us looked after our own particular students, coming together only for common tutorials and crits. In these presentations and in all his teaching Patrick was instantly positive and always very open. Teaching immediately became his kind of meadow. We all felt it enabled him to get architecture coursing through his veins again.

Su Rogers

I taught first year at the AA in the early 1970s, and then ran an intermediate unit with David Shalev and then Peter Allison, before I left in 1977 to join John Miller at the RCA. I had wonderful students in both AA years, including a very young David Chipperfield. We took them all on lots of visits to see various buildings, and would invite in as many architects for crits as we could arrange, including Patrick. At that time John and I would occasionally see him during sailing trips in Cornwall and at dinners in London. He didn't seem to have any architectural work and so I encouraged him to come and teach. Not all good architects make good teachers, but Patrick had obvious ability. He was never outwardly critical, but would only ever ask












about the decisions the student had made. He could also be slightly reticent, even shy, but that was all part of his charm.

David Shalev

In the AA at the time there was Elia Zenghelis and Rem Koolhaas, and people like Isi Metzstein, Dalibor Vesely, Peter Cook, Robin Evans and, God forbid, Zaha Hadid. We all hated one another. But it was very diverse. Our studio was sandwiched in between the unit spaces of Isi on one side and Zaha on the other. Isi would always challenge his students, telling them how wrong they were, while Zaha's room was constantly in turmoil. We'd hear her screaming at her students, or banging on the plasterboard divide between our two spaces so hard that our own students' drawings would shake and fall off the wall.

David Chipperfield

I was Patrick's first ever student. And so I was there at the pivot point in his career. I had been studying with Su Rogers' and David Shalev's intermediate unit, which was a very happy place to be. Su, in particular, is very underrated as a teacher, and at the AA she was a very important presence. I hesitate to say it, but she had a maternal quality. She cared about her students. She also got us excited about architecture, not just through the buildings we visited but the people she invited in, like Jim Stirling and Patrick Hodgkinson. The following year I signed up to Peter Cook's unit, but it quickly turned into a bit of a nightmare, and so with Su's help I found refuge back with David Shalev. He already had too many students, and so an arrangement was made whereby I would be tutored one-on-one with Patrick.

Each week I'd go to his house in Porchester Terrace. At the time he only had one assistant working with him – the brilliant Crispin Osborne, who would later work with Stirling – and the whole place, although still very grand, had a sort of after-the-party feel to it. He was clearly still very hurt by what had happened on the Brunswick. I remember when *The Passenger* first came out I called him up and said, 'Patrick, you must be really proud. Your building is in an Antonioni film. Jack Nicholson and Maria Schneider, it doesn't get much better than that!' But he never really wanted to talk about it.

But despite the very obvious crisis he was going through, he was always very attentive with me. I had nine months of Aalto, Asplund and a bit of Corb, all accompanied by Patrick's distinct mannerisms – smoothing his hair back with the palm of his hand, flicking ash from his cigarette and laughing with a slight hyena cackle. Of course he would also talk at length about all those English influences he liked so much – of halls, colleges, Inns of Court – which was actually a very common aesthetic at the time. The artists then were just the same. People like Ben Nicholson would always talk of their admiration for things like the Cobb in Dorset, or other deep-rooted aspects of English architecture and landscape.

Patrick was also clearly not used to teaching. In a way he was quite insecure about it. But he quickly developed this great technique of always asking why I was doing something or other. If I responded by saying, 'You're right, I shouldn't have done that', he'd reply, 'No, no, I didn't say that, I was just asking why you did it like that.' The more direct teaching, or instruction, would see him lead me through various precedents, partly through his reminiscences, as well as talking through typologies and his commitment to the idea that the plan was the generator. We'd endlessly be looking at plans. When my own designs had developed further, David Shalev would be more involved, taking a pencil and telling me to move my staircase or repositioning other elements. Patrick never taught like that. He would just observe and question.

After I completed my fifth year I helped him with a model and drawings for a yacht club project in Woodbridge, and in return he tried to get me a permanent position with Denys Lasdun, who he was very fond of, but there was nothing available, and so instead he fixed me up with a job with Douglas Stephen, the David Niven of architecture. I remember when I eventually completed my first job in my own practice – a shop – he was very surprised. For him and architects of his generation, a career was launched by the design of a university, or a school or a significant piece of social housing. He never quite realised that these kinds of commissions were not available to us.

Adrian Gale

In the autumn of 1977, during the period he was back at the AA with David Shalev, Patrick and I also shared a semester teaching at Cornell. We did a kind of double act. I started the project – I think it was for an auction house in New York – and he completed it. At the time he was living with us, having moved out of Porchester Terrace after his second divorce, still searching for some kind of base. He clearly missed home life, and seemed to very much enjoy inserting himself into our own family life. The search for a hearth ran very strongly in him.

Brendan Woods

At Cornell, Patrick had been up for the deanship, but Colin Rowe put the boot in and he was soon out of there. The two of them never got along.

Stills from Michelangelo Antonioni, *The Passenger*, 1975
© Metro-Goldwyn-Mayer

Patrick was a moralist and very straightforward, whereas Colin was a guardian of all things mischievous and byzantine. But Colin was not alone in his antipathy. Patrick told me that he was once invited to supper by James Stirling – he'd actually briefly taught with him at Yale in the mid-1960s – and his host kept referring to him simply as 'the Rat', by which he meant 'the Rationalist'. This, understandably, had really upset Patrick. At Bath – which came along as an opportunity for Patrick to recoup, to get away from London and perhaps also from a certain sense of shame he was experiencing – Peter Smithson was another figure with whom he had this ongoing rivalry. Peter would play on the fact that he was whimsical and a bit of a genius, but people like Patrick and Neave thought the Smithsons' housing models were fairly uninventive. Patrick's own earlier schemes for Lambeth and St Pancras were legendary in comparison. This was work that was employing real intelligence in terms of its plan and section. You could never say the same thing about Robin Hood Gardens.

Neave Brown

After Patrick returned to England from teaching in the US I suggested that he approach Michael Brawne, who was then running the school of architecture in Bath with Ted Happold, and with whom I had done some teaching myself. Both of them were slightly hesitant about the other – both had their own, somewhat entrenched views and both had a rather theatrical sense of self – and Patrick, for one, couldn't bear the idea of going anywhere where he would find himself restrained. As a European teaching in the US he would've been used to having a certain autonomy, as the special guy brought in from afar. But of course at Bath he wasn't so exotic. Nevertheless, Patrick took the job and flourished. And interestingly, the first work he set for his students returned to the models of the Inns of Court and the Oxbridge colleges we had explored at the AA. I remember he had them all make wooden site models which showed these structures as continuous, almost organic environments, very much in opposition to the notion of the modern object building. In a funny way, just like his design work, his teaching showed Patrick as both deeply conservative and deeply creative.

Keith Bradley

Patrick began teaching at Bath halfway through my studies there, and arrived not so much as an outsider but as someone very much part of the culture then already existing in the school, with people like Peter Smithson, Michael Brawne, Ted Happold and Neave Brown. We knew him as someone who'd worked with Aalto, and of course as the designer of the Brunswick, but

what we didn't know, and soon discovered, was simply how charming and engaging he was. Patrick was never a scary teacher, unlike Peter Smithson, and for sure unlike Michael Brawne, who was terrifying – highly academic and quite intimidating, with an affected voice that really landed on you. In contrast, Patrick always came across as much softer and more avuncular. He also had a more open mind than we'd expected, introducing us to architects – like Lethaby, for example – who we'd never been encouraged to look at before, and emphasising a more ingrained English architectural tradition. In this sense, his understanding of reference extended far beyond the other architects immediately around us – so he was much more interested in someone like Robert Smythson, the Elizabethan architect, than the other Smithsons closer to home.

His tastes, then, were always quite broad. But the one thing he was explicit about rejecting was any form of dogma, or the idea that we should observe a set way of thinking about things. To be fair, though, Peter Smithson was quite similar – at the time he would organise these walks around Bath on which he would highlight the value of other architectural traditions – and the two of them seemed to get along very well (once Peter even entrusted Patrick with the task of trying to convince his son, Simon, who was a young architect, *not* to join the office of Richard Rogers. He failed. Simon is now a partner there). Patrick was also one of the very few people who could get Alison Smithson to engage – coaxing out a response from her in some event or another and generally getting her to take part. It was different with Brawne, who was much more of a hard-line modernist and functionalist. To a certain extent the tradition of the school prior to Patrick's arrival was for students to be coached according to the dictates of their tutor, to follow the master, usually Brawne – more like the AA model. Patrick changed this, not just by introducing a more diverse outlook but in the freedom he afforded us in terms of the briefs he set. The only precondition in his studio was that we would work in small groups – he always advocated collaboration – and that the site for all of us would be a particular city, usually drawn from any number of great European cities, through which he would emphasise their specific historical context. When I studied with him it was Paris, which meant the *hôtel particulier* and the traditional pattern of its streets.

His ideas about cities had clearly changed since his days working on the Brunswick, which he had always framed as a piece of heroic, top-down, John Nash-inspired planning. But in his teaching he rejected Beaux-Arts models. He wasn't a classicist, and so the Paris he was interested in with us was the Paris before Haussmann, not after. I think you can also see this in his love of Bath; although a classical city, it still had that English free style. Of course, at the same time he was still totally and utterly obsessed by the Brunswick – he even had a section of it framed on his office wall – but while he may never have admitted it, I got the sense he was increasingly aware of its flaws. And his critique would come through the other things he would reference, notably the way he celebrated more organic, integrated and flexible architectures, instead of isolated or rigid models, which the Brunswick had clearly become.

Rodrigo Pérez de Arce

Patrick phoned me up out of the blue in what must have been the mid-1980s and asked me if I would like to teach with him at Bath. He said he had been reading my texts on urban transformations, part of which had been published in *AD* in 1978, and very much liked the ideas I was discussing. I must admit I was surprised but also delighted when I got this call. When I first came to England from Chile in the early 1970s the three buildings I wanted to see more than any other were Stirling's Engineering Faculty, the Smithsons' Economist Building and Patrick's Brunswick Centre. At that time, I was even living on Marchmont Street in Bloomsbury and could see the Brunswick from the windows of my flat. I was also teaching a unit at the AA, and so before agreeing I first spoke to Alvin Boyarsky, who was a very good friend of Patrick's and considered him, along with Stirling, as the most promising British architect. He encouraged me to take the job, which I accepted one day a week, in combination with my AA teaching.

I'd usually take the train down with Peter Smithson, who was also living in London, and we'd always have lunch together with Patrick, David Gray and a few others. Lunchtimes, as I soon discovered, were very important at Bath. The discussions were always animated and Patrick, in particular, was a fantastic raconteur, witty and very engaging. I was essentially working as his teaching assistant, and we would always discuss the details of each design agenda, which was both urban and architectural, even if the principal one was simply the selection of a particular city – we did Paris, Berlin, Barcelona and, less heroically, Sharpness in Gloucestershire. The school was quite technical – famously conjoined with the engineering department, and jointly run by an architect, Michael Brawne, and an engineer, Ted Happold – so it was a bit like Andorra, administered by both a Spaniard and a Frenchman – and there was less ideology than I expected, and more technical, specifically architectural discussions.

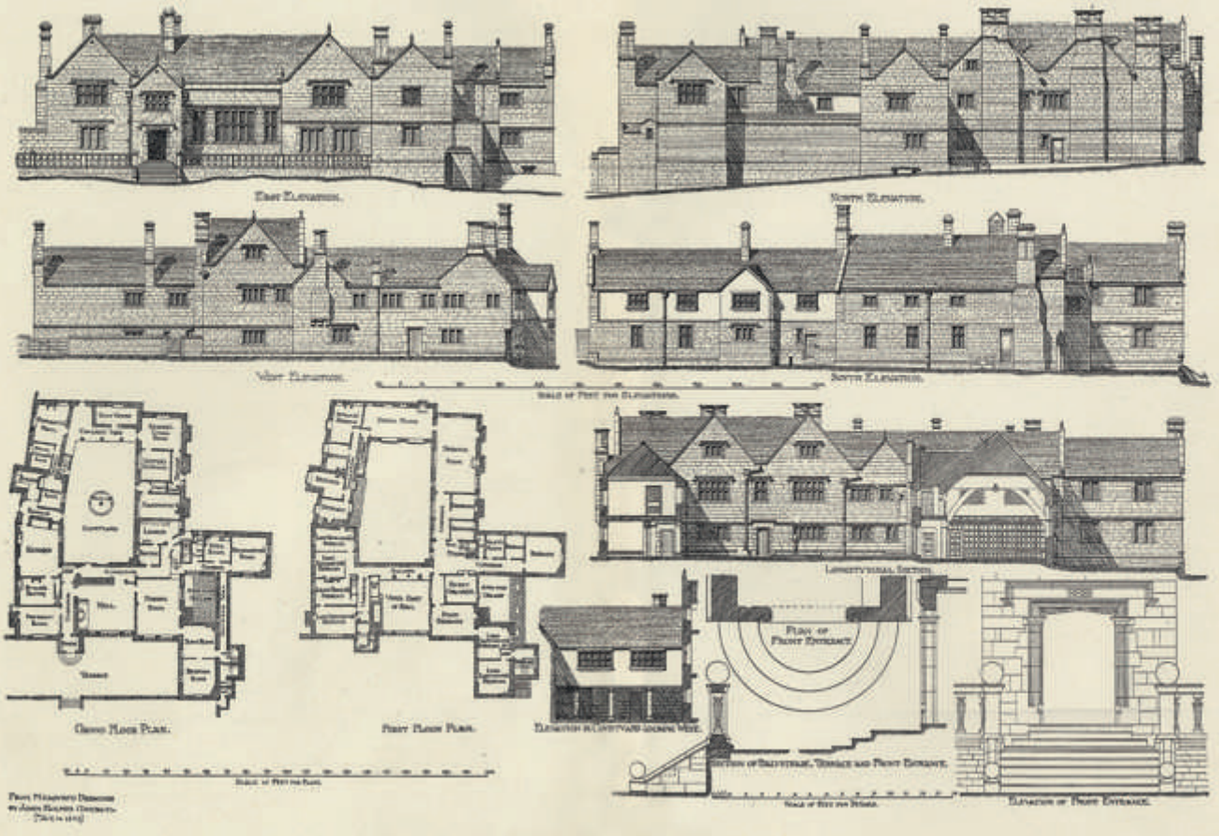
Patrick and Michael Brawne never got along. Patrick was very funny, and Michael didn't have much of a sense of humour. Patrick's interest in history revealed itself through the buildings we visited, whereas for Michael history was only ever to be found in a textbook. And Michael was an academic, while Patrick was a practitioner who just happened to be working in the academy. You could see Patrick's close affinity to the profession in the way he taught. In the studio, during desk crits, he would always annotate the students' drawings with a very thick pencil. I often think about this now, especially with my own students who, of course, only produce things digitally. But back then, in annotating with a thick pencil, Patrick could be very precise with his ideas, and deliberately imprecise with figures. You could never do that now with AutoCAD, which doesn't allow for imprecision. And so at Bath there was a way of always thinking through drawings, which with Patrick came through in a very powerful way.

And yet despite his attention to formal ideas, Patrick would also be full of references and had a very animated sense of history. He would frequently talk about his time with Aalto and about a Finnish and Scandinavian sensibility, and he would also talk in depth about French models, especially the *bastides*, about Italy, in particular Franco Albini, who everyone was obsessed with then, and Carlo Scarpa, and also US urban patterns, notably Savannah, Georgia and New Orleans. But somehow, despite this variety of references, teaching at Bath for me was always about teaching in England; whereas teaching at the AA was somehow another country altogether.

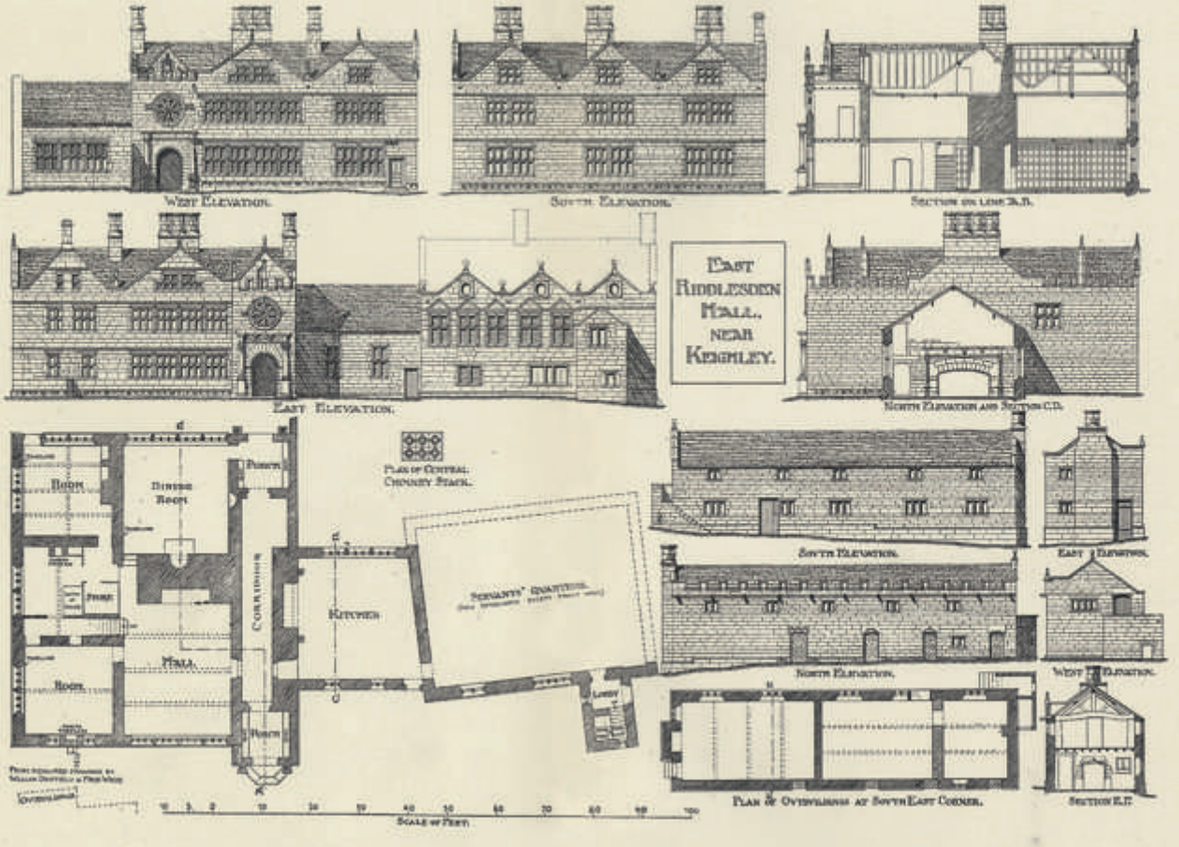
Brendan Woods

I got a teaching position at Bath sometime at the end of the 1980s. I had been working with Tess and Julyan Wickham and during an event at the RIBA Julyan approached Patrick on my behalf – 'Have you got any teaching, Patrick?' – before adding, 'Don't worry, it's not for me.' Some short while later I found myself running the school's fourth year, working at the campus on Claverton Down, which you'd drive up to from the main railway station (which once prompted the very dry Wilfried Wang to remark, 'I see, in Bath Down is up'). I'd travel from London each week and would teach over two days, often dining with Patrick before he'd disappear into the night; no one quite knew where he actually lived. I remember there'd recently been a fire in his university office – no doubt started by one of Patrick's smouldering cigarettes – and the books that had survived were all stacked on the floor in a kind of Manhattan grid. If I asked

Plates from Louis Ambler, *Old Halls and Manor Houses of Yorkshire*, 1913



East Riddlesden Hall, near Keighley.







about a particular title he'd regally wave his hand and say, 'Fifth Avenue and 23rd Street', or some other cross street.

Keith Bradley

The working model at Bath, and one Patrick thoroughly supported, was based around a studio culture. Students would not work at home and then only show up for tutorials and crits. They were there the whole time. And in many ways, Patrick was also there the whole time. He was a constant physical presence. You'd always see him walking around the studio, moving from desk to desk, in his signature tweed jacket and cords, often wearing a silk cravat – quite snappy – and engulfed in the fug of his cigarette smoke. We were all amazed that he lived for as long as he did, because even then – in 1981, when he would have been just 50 or so – he had this constant rasping cough. Most of us thought he would drop dead at any moment. We also thought he didn't have any other life, and I think in reality he didn't. The studio at Bath was his home. Yet we all very much liked him and would often invite him to dinners or events. He was very good at being friendly and social but still being our teacher. He would also organise big dinners in the school himself, preparing a huge paella or some other big communal dish, and on foreign trips he would blow through the budget with one delicious meal after another.

Brendan Woods

In addition to teaching studio Patrick gave a series of lectures, often on a singular architect, or a specific building or typology. I seem to recall an especially good one on Utzon. There is a very interesting essay called 'Platforms and Plateaus', first published in *Zodiac* in 1962, in which Utzon discusses the way Mayan and Aztec temples are raised up above the jungle. Patrick spoke very convincingly about the qualities of this text and about Utzon in general. I think it was Peter Smithson who used to talk about what he termed 'second-tier architects', with Lewerentz being his main exemplar – architects who were one step removed from the mainstream. Ted Cullinan would often impersonate Smithson's northern drawl, eulogising another second-tier architect: 'Lutyens knocks Frank Lloyd Wright into a spatial cocked hat'. Patrick was equally drawn to these kinds of architects, and their work and ideas would often form the subject of his lectures. At the same time he also lectured on aspects of the English landscape. At Bath he developed an interest in all those studies from the 1950s and 1960s which looked to recover a local English landscape tradition – books like Guy Underwood's *The Pattern of the Past* and William Hoskins' *The Making of the English Landscape* – or an older tradition with people like Alfred Watkin. Underwood, in particular, wrote about how the apses of English country churches had their entrances in all manner of different places, which he related to ley lines and subterranean waterways, and this was something that fascinated Patrick.

He would also live out certain rural fantasies over weekends we'd spend in a house I'd converted near Monmouth in the Wye Valley. He'd turn up in an open-top MG wearing plus fours and with a hamper of duck's eggs and wonderful wines and cheeses. Patrick was extremely good company. We used to visit places like Goodrich Castle or Lethaby's church at Brockhampton. Back at the house he slept in a little bedroom off the boot room. On one occasion I slept in an adjacent room and boy was he noisy. Through the walls I could hear lots of a kind of verbal wrestling with various demons. In the morning I asked, with a certain concern, 'How'd you sleep Patrick?' To which he responded with a brisk 'Fine!'

Pierre d'Avoine

Patrick's lectures made clear his fondness for less celebrated architects – architects Pevsner would have called 'anti-rationalists' – with his championing of people like Michael de Klerk or Gaudí, or later on, Giancarlo De Carlo and Luigi Snozzi. But he would also occasionally lecture about his own work. The one he gave most often was called 'A Ship Called Architecture', in which he was disarmingly straightforward. There was also a humility to him that didn't seem forced or contrived, even in his willingness to place himself within a lineage of English modernism. At the same time he could invoke more idiosyncratic sources, for example, certain quasi-mystical traditions within the English landscape – even the more spiritual ideas associated with places like Avebury and Stonehenge – without denying himself other contemporary or pop references (Herb Greene's Prairie Chicken House being a particular favourite).

I got to know him in the 1990s when I was a fifth-year master at Bath, a position I shared with Richard Padovan. I'd missed the more heroic period, when the school featured Ted Happold, Peter Smithson and David Gray, but it was still an impressive place, and for the students Patrick – who taught sixth year (one of the peculiarities of Bath was its extra year) and ran the diploma school – was *the* figure, teaching with a huge amount of authority but also with a lightness of touch. The culture of the place was quite relaxed – tutors were relatively unburdened by administration and were simply encouraged to teach – and in a very nice, social way, at the end of the summer Patrick would invite a number of us down to discuss the briefs we were thinking of teaching over a pub lunch, his smoker's cough always following immediately on from his laughter. Patrick was supportive and generous but also quite controlling, and his studio model quite straightforward – a brief should always be built around a design proposition and always feature a building at the end, and particular attention should be given to a precedent study. At the same time he was no dogmatist in terms of insisting on the centrality of the design. For example, a very important aspect of his pedagogy was the value he placed on writing. He arranged for very good people to come in and advise the students, and their dissertations were never seen as peripheral or secondary to their portfolios. The viva for these theses was taken very seriously, and he also made sure that all the completed dissertations were displayed so that everyone could read them. It was an incredibly integrated model, and one that I hadn't experienced before or since.

Top: Patrick Hodgkinson, model for a library for Wellington Square, Oxford, *c* 1977
Bottom: Patrick Hodgkinson, model for a yacht club, Woodbridge, *c* 1977
© Hodgkinson family archive

Neave Brown

Patrick always expressed himself best through his design work. But he also wrote especially well. He actually wrote better than he spoke, and his writing is full of reference as well as very nice turns of phrase and a wonderful sense of humour.

Peter Carolin

I hugely regret now not having known Patrick when I edited the *Architects' Journal* because he wrote beautifully and was a wonderful critic. He was incredibly articulate about architecture, and so interesting discussing the people he admired.

Keith Bradley

After graduating from Bath I returned a few years later to teach with Patrick, from 1990 through to his retirement in 1995. There was no real difference in him as a colleague to how he was as a teacher. He was incredibly level. And he somehow found interesting things in every project. I can never remember him dismembering a student, unlike other more celebrated teachers. Instead he would always emphasise something, no matter small, that interested him, and he allowed students to present in any way they liked. The only thing he insisted on was a certain civility or gentility, which of course is how he always presented himself. And in his supervising of the written theses he liked students to articulate an assumption, to express an opinion not necessarily grounded in

academic theories, and he liked them to express this largely through narrative. Writing for him was about telling stories.

Pierre d'Avoine

What I learnt at Bath, which has coloured much of my subsequent thinking in teaching and in practice, was Patrick's insistence that what we should always look at is the space in between buildings, and not just the buildings themselves. I think a lot of this also came out of Peter Smithson's earlier teaching, but Patrick would talk about 'meat and potatoes' – the meat being the architecture, the single, special monument, and the potatoes being the ordinary, but equally important, structures – the everyday matrix that holds a city together. He would typically explore these ideas through the model of the fortified French *bastide*, whose grid, he argued, was so nuanced and flexible in its ability to contain both public buildings and more everyday housing, as well as the street and public space. But he would also cite seemingly more mundane English towns and their own particular morphologies, to which I introduced my own interest in the inter-war suburb and the edges of towns, including Bath.

In the school the design crit was always an important moment, and it was the most obvious point in the year when Patrick would publicly show himself. There would be a nice mixture of guests, with younger practitioners as well as big hitters like Neave Brown or Joseph Rykwert – and Patrick was always happy to cede the floor to these visitors. So it was all quite high pressure, even theatrical. At the same time, Patrick would try and generate some levity, and in early June each year, before the final push on the design projects, he would try and help the students ease off a little, first by organising an annual trip to the Epsom Derby – he was a great lover of horse racing, but perhaps more for the ritual of it than the actual horses – and then by arranging a picnic crit, with the students pinning their work to trees in the garden of a nearby country house.

Patrick retired from Bath in 1995. To celebrate we arranged for a day out at Bath races and a huge number of his friends and students came along. Over the following years we stayed in close contact, and at the end of the 1990s, just before he embarked on the redevelopment of the Brunswick, we actually managed to work together on a design project – a competition to regenerate the royal dockyard at St Mary's Island, Chatham. At the time I was living in a flat in Queensway which belonged to Mark Fisher and Patrick would show up with champagne and kippers and lots of shellfish and would stay for a few days working on the design. I wouldn't say our proposal was especially collaborative. Patrick took the lead with a scheme that featured half of the Brunswick section, located alongside the great sweep of the river at Chatham. This created a grand, rather urbane river frontage and an undercroft beneath a raised plinth of shops and public spaces, while my contribution, a complementary low-rise matrix of housing, was placed in a kind of hinterland behind – but actually, conceptually, it was really strong. We didn't win, but it was a very enjoyable experience. I also got the sense that this was a man who was still highly adept as a designer. In no way did I feel he had lost his touch. The quality of marks he was making on the paper and the strength of his ideas were all very convincing.

Brendan Woods

From the early 1980s on there had been a number of schemes for the Brunswick by assorted architects employed by assorted developers, all of which basically looked to increase the square footage of the building, and therefore its revenues. I seem to remember an especially awful brick scheme by some unknown architect. Patrick would be the first to hear about these proposals, and would immediately see them off – usually by getting on the phone to Denys Lasdun, 'Have you heard what they are thinking of doing to *my* building?', to which Denys would no doubt reply, 'That's perfectly dreadful Patrick, I'll write to Norman St John-Stevas immediately.' There was another scheme by David Rock which featured a tower in front of the main portico which Dan Cruickshank, of all people, supported. The rumour was even that Patrick had been drawn into this proposal, but then he caused all manner of annoyance when he withdrew his support some short while later.

David Levitt

Ever since the Brunswick opened in 1972, and despite the way it all ended with McAlpine, Patrick would make such a nuisance of himself if anyone so much as raised a Rotring to alter any aspect of the building, no matter how small. And his own pen was pretty vituperative if you ever crossed him (or if you had any kind of relationship with Sandy Wilson). Nevertheless, various people had bought and sold the freehold of the building over the years, all hoping to make some money out of it, despite the fact that it had always been limping along financially. But then in around 2000 along comes a young developer from Allied London called Mike Ingall who liked the building and could see its potential underneath all the grime. He then met with Patrick, thinking that the only possible way to muzzle him was to employ him. And so Patrick got together with a Bath firm called Stubbs Rich and they produced a scheme for the redevelopment of the Brunswick. The proposal they came up with was extraordinarily dreadful – I put this down to the fact that Patrick hadn't designed anything since 1970. It featured a Greek restaurant projecting out of one side of the building, supported on three or four caryatids, another restaurant on the southern end with its own massive glass fish tank cantilevering over the pavement, and a canopy running above the shop entrances on the podium level with scalloped edges. All very nasty. But anyway, Ingall took the proposal to Camden. They absolutely hated it. The Twentieth Century Society were even more damning. At the time I was still on more than Christmas-card terms with Patrick, having stayed in touch ever since I left the office, and so he called me and asked if David Bernstein and I would help out with a revised proposal.

Brendan Woods

Patrick was the type of person who, as they say in the north of Ireland, would take a 'scunner' to you – meaning, if you crossed him, that was it. We were good friends but there were times when even I got close to the scunner. For example, when he got the joint appointment with Levitt Bernstein he saw it as a fantastic opportunity and was extremely excited. At one point I remember talking to him about the possible greening of the building, introducing Virginia Creeper to the staircase towers, which I thought would be great, but this really upset him. We also had a fierce exchange of letters about his plan to introduce concierges over my preference for key access. For a while he even entertained the idea of adding an extra storey to the building, which had been part of the first scheme, but he was eventually persuaded that this was not such a great idea. His other proposals took him off to Paris to look at various underground supermarkets, including Les Halles and the design Renzo Piano did at Bercy, because he still clung to the idea that the Brunswick should be open-ended. Some of his other ideas, though, were bizarre. In particular, he came up with something called the 'eye-catcher', which comprised a semi-circular portico, raised on *pilotis*, placed in front of the main portico, intended to be used as an elevated bar or restaurant space. Most people thought this was simply awful.

David Levitt

As I soon discovered, many of Patrick's ideas for the building continued to be completely nuts. We therefore had this kind of running battle. Interestingly, he was not trying to recover any aspect of the original design. He'd moved on. But everything he suggested was bizarre. My alternative solution was to think instead how Patrick would have originally approached the problem of the building. And so somewhat

strangely, I found myself quietly working away sabotaging Patrick by channelling my own inner Patrick. Ultimately he acquiesced, and the redesign progressed, even if he remained very much against putting the supermarket at the north end of the site, much preferring the public space to continue all the way through. My argument – apart from the practical problem of where else could you find 40,000ft^2 to put a supermarket – was that Handel Street had always been temporary because the council had never managed to get rid of the Territorial Army, whose building sits behind it, and so you had a pretty nasty neo-Georgian off-grid view closing the vista, meaning blocking this view would be no great loss.

Brendan Woods

At each end, the Brunswick used to have a series of public-service ramps which were designed so as to allow fire engines to drive up onto the podium and put out any blaze in the shops or flats. Fire regulations have since changed and so these are no longer necessary. In the revised development, putting in the shops along Bernard Street then became a fantastic way of readdressing the street. It also solved the problem of what Neave Brown called 'endage', even if he never saw it as a problem – when I asked him once why Alexandra Road ends the way it does he just said, a little impatiently, 'It's just endage'. He's actually right about this matter-of-factness. You can also see it in any nineteenth-century Islington street, or the open corners around any London square. Of course, this openness was also the reasoning behind Patrick's long-standing desire not to have a supermarket blocking the north end. He wanted it to be a thoroughfare. I actually opposed the supermarket in the Levitt Bernstein scheme, but I've grown to accept it, and now see the Waitrose there – like all other Waitroses – as a kind of secular chapel.

David Levitt

When it was eventually all completed I must admit I was really pleased. My only disappointment was that a disagreement between the freeholder and Camden meant that no money whatsoever was spent on the common parts of the housing, and the stretch of professional chambers underneath the flats was never opened up in the way we imagined. Rather like what happened to Patrick with the original building, Ingall also got cold feet towards the end, worried that he wasn't going to make any money, and so he turned it into a design–build contract. The waterproofing problems the estate now has are entirely a consequence of this, with all responsibility shifted onto the contractor. But on the whole I'm astonished that we managed to pull it off.

Ingall eventually sold the development, at a massive profit, to the Post Office Pension Fund, who took no interest in the estate whatsoever, and they in turn sold it soon afterwards to a man named Len Lazari, who runs a family investment company. He also owns that lovely art deco building in Mornington Crescent. This means that for the first time in the Brunswick's history the tenants' association has immediate access to the owner, who very much likes the building and doesn't seem anxious to sell it any time soon. And I should say that among the tenants are me and my wife. We moved in just before work on the redevelopment started – I kept reassuring her that this stained heap of concrete would soon be really very nice. It's a great place to live, not just for the architecture, but for the varied community of people who live there.

Brendan Woods

It was largely though working with Patrick that I rediscovered an interest in the Brunswick, and soon afterwards I got a flat there for me and my wife Jess. I remember when we were walking over to meet with the estate agent who did we bump into but Neave Brown. I knew all about his friendship and rivalry with Patrick. We told him we were looking to buy a flat there, and he seemed to quietly acknowledge this. I subsequently heard that some days later he was having a birthday party, which Patrick attended, and as soon as he arrived Neave mentioned that he'd met me and that I wanted to get a place in the Brunswick. Patrick was apparently pleased. But Neave then added, 'Wrong building!'



Patrick Hodgkinson, onboard *Lotta*, 1976
© Hodgkinson family archive

John Miller

Looking back, it's hard to imagine how it all might have gone for Patrick. If he had continued on the same trajectory as those early years in the 1960s he would have really made a name for himself. Later, of course, he reinvented himself as a teacher, but as a practising architect he really could have achieved great things.

David Chipperfield

For me, Patrick will always be a slightly tragic figure. I really treasured him as a teacher and as a person, but I think in many ways he was very ill-prepared for the new world of architecture after the mid-1970s. His talent would suggest he could easily have become a kind of Jim Stirling figure, but the successes enjoyed by Stirling, or someone like Denys Lasdun – who was incredibly capable and agile, producing very strong work while always maintaining a certain attitude – showed they were better prepared to deal with change. Jim was also big enough and robust enough to handle his celebrity, and of course he could rely on James Gowan, who provided the spine and rigour to the work they produced together. Patrick, in contrast, always felt he had to be both – selling the architecture *and* designing it – and suffered as a result. Yet still, we should respect him for what he did produce. If he had been an Italian architect he would still be part of the discourse. He would be a kind of Giancarlo De Carlo figure – that is, precisely the kind of architect who Patrick himself celebrated.

David Shalev

The early 1970s was a really good time for architecture in this country – not just for Patrick's Brunswick Centre, but for Neave Brown's Alexandra Road, Alison and Peter Smithson's Robin Hood Gardens and our own work in Camden. But today everything has gone to pieces. Today we have nothing but bureaucracy and mindless commercialisation, or a kind of design culture that's only interested in either flat-packs or luxury. It's never about people. It's as Joseph Rykwert once said, that cities are no longer built by architects but by developers and interior designers. Architecture has gone, even in the schools. Its whole ethos doesn't exist any more. Which of course also means that urbanism doesn't exist any more. In many ways, I think Patrick discovered this before anybody else. The rage we all saw in him after the Brunswick job collapsed was in hindsight him stubbornly fighting for a profession that was dying. Today we all suffer through developers telling us what to do, which Patrick first experienced 40 years ago. And now, just like him, we're banging our heads against the wall. It's now our turn to be angry all the time.

Hendrik Christian Andersen's World Conscience

Matthew Mullane



Frontispiece, Hendrik Christian Andersen,
Creation of a World
Centre of Communication, 1913

Across a sequence of maps stretching from the inlands of Belgium to the seaside suburbs of New Jersey, a city plan is inked into eight different locations like a heavy red stamp. Self-contained and symmetrical, the city stubbornly refuses to respond to the environments it lands on. Anything that could potentially distract from its message is cropped out. This is a metropolis that could seemingly drop from the sky and impose itself on any location, which would then be transformed into the intellectual and political centre of the whole world.

That at least was the plan set out in *World-Conscience*, the 1913 publication in which the maps appeared. The book's subtitle proclaims the benign motivations behind the absolutist impulses: this was the work of 'an international society for the creation of a world centre to house international interests and unite peoples and nations for the attainment of peace and progress upon broader humanitarian lines'. The World Centre, according to its progenitor, a first-generation Norwegian-American called Hendrik Christian Andersen, would be 'as a fountain, ever flowing, ever receiving from all parts of the world, giving in abundance, freely and unselfishly'.[1]

The idea of building a single World Centre might seem absurd to us, even in our hyper-globalised age, but Andersen's project was part of a broader trend of monumental city plans that aspired towards unity at a time of increasing international turmoil. These included grand plans for capitals like Canberra, Berlin, Washington DC and New Delhi, along with more obscure projects like Léon Jaussely's 'Une place du peuple dans la métropole d'un grand état démocratique' (1902) or Karel Petrus Cornelis de Bazel's 'World Centre of Peace near The Hague' (1905).[2] In contrast to the singular monumentality of those urban plans, however, Andersen's project turned the city into the red stamp of a bureaucrat that could be impressed on any country possessing sufficient confidence in its own central place in the world order. Concessions to the site were minimised to a few minor alterations based on water access and train connectivity, but regardless of whether it was placed on the shores of Lake Neuchâtel or New Jersey, the main core of the city remained the same, with its Beaux-Arts symmetry yielding to neither site nor political situation.

What's more, Andersen fully believed the design could be built. For decades he waged a propaganda campaign aimed at converting politicians, economists, industrialists, philosophers, religious leaders and philanthropists to his cause. He had an audience with Pope Benedict V, who presented a gold medal, Andersen trumpeted, 'as a slight recompense, He said, for the humanitarian work I was endeavouring to accomplish'.[3] His obsessive letter-writing also brought him fleeting brushes with more temporal seats of power – with Woodrow Wilson and Le Corbusier, among many others. And he maintained a much longer, more intense correspondence with the author Henry James. Their intimacy can be gauged from a letter James wrote to Andersen in 1902, on hearing of the death of his brother. Unable to travel to meet Andersen, the author begged the much-younger man – his 'beloved boy' – to come instead to him, 'so that I might take consoling, soothing, infinitely close and tender and affectionately-healing *possession* of you … I will *nurse* you through your dark passage.'[4]

The passion that broiled under that levelling, bureaucratic red stamp is also evident in Andersen's personal files, stuffed with scraps of paper on which he has scribbled a self-styled philosophy that is at once practical and messianic, with himself in the role of a new global messiah, of course. In public, however, he worked hard to maintain a more professional image. Under the headline 'Un Progetto Grandioso: La Creazione di uno centro mondiale', a 1913 Italian newspaper feature shows Andersen gripping an unrolled piece of paper, ostensibly the plans for his city. The gesture is unnatural and Andersen looks awkward holding the paper, keeping it taut with his fingertips as if it were a scientific specimen ready for pinning rather than a working drawing. An outtake from the same photo shoot shows a more ostentatious version of his architect character, now holding a compass as a symbol of the mathematical reasoning that guides the lines of his new city. But his staged pose reflects a somewhat confused notion of what an architect was supposed to be. The smock draped over his shoulders is an artefact of his Beaux-Arts training, a symbol of the architect-artist in the atelier, while the waistcoat and tie underneath identify him as a gentleman with the ability to operate as an architect-dealmaker in the corridors of power. This costume, then, conflates two epochs of architecture, blurring the split between the Beaux-Arts and the modern bureaucrat. Andersen embodied this liminal position: he was a nineteenth-century thinker, his heart brimming with romantic hymns to the beauty of mankind, attempting to operate in a twentieth-century world of international institutions and business deals.

But while Andersen was Beaux-Arts-trained he was not an architect but a sculptor. Like his brother Andreas, he went first to Boston's Cowles Art School before moving to Paris to study at the Académie Julien and the École des Beaux-Arts. And while Andreas gravitated to the neo-romanticism of their home country of Norway – acquiring along the way patrons like Isabella Stewart Gardner – Hendrik focused his talents on the allegorical and the grandiosely neoclassical. Installing himself in Rome – where he perhaps imagined himself a latter-day Bertel Thorvaldsen – he filled his studio with hulking towers of flesh be-plaqued with a pithy 'Hope' or 'Serenity' to plainly communicate their meaning. For Andersen, these were vessels of moral and even spiritual transformation. His written descriptions swelled with evangelism, but not everyone around him was so easily converted. In a letter from 1904 his loving admirer Henry James paid due homage, but also sounded a loud note of caution:

they terrify me so with their evidence as of madness *(almost) in the scale on which you are working! It is magnificent – it is sublime, it is heroic, and the idea and the composition of your group-circled foundation, evidently a very big thing. Only I feel as if it were let loose into space like a blazing comet – with you, personally, dangling after like the tail, and I ask myself where my poor dear confident reckless Hendrik is being whirled through the dark future, and where he is going to be dropped.*[5]

Andersen's work failed to garner wider attention. Again a letter from James points to one possible reason for this: 'Also I sometimes find your sexes (putting *the* indispensable sign apart!) not quite differentiated enough – I mean through the ladies resembling a shade too much the gentlemen'.[6] Spurned by the cities he wished to morally improve with his sculptures – New York, Buffalo and Washington DC – Andersen wrote in his diary: 'It strikes me more and more that a city cannot be wholly made over. Its interests and deep rooted plans, good or bad, are too personal and full of sentiment, and even though lacking in hygiene or easy communication must stand for what they are.'[7] The obvious conclusion was that if no city was willing to accept his sculptures, then a new city would have to be made. This new urban zone, liberated from the weight of history, was briefly conceptualised as an 'Art Centre', a monumental space made explicitly for experiencing his sculpture. But soon even this

could not contain the scale of his ambition, and the 'World-Centre of Communication' was born.

That the concept took on a life outside of Andersen's head was largely thanks to Olivia Cushing-Andersen, widow of his brother Andreas. An aspiring playwright, her influence is clearly recognisable in the project's transition from Andersen's manic private notes to mass publications. After her father's death in 1907, she spent a large portion of her inheritance on the new city project. Moving in with Hendrik, she provided enough funding to turn their Roman home and studio at 3 Piazza del Popolo into a 'Communication Office' broadcasting their vision to the world.

Before the city took physical form, the project gestated as a collection of sketches and writings suffused with a potent, if also unfocused, quasi-Theosophist spirituality with a strident moralising tone.[8] Andersen's working notes are a delirious assortment of prophetic imaginings. With weighty religiosity he describes 'a centre wherein the greatest and most progressive intellectual talent of the present age might find every advantage for free, clear expression' materialised in 'a temple of intellectual concentration, of religion in the highest progressive sense, the beginning of a world pulse through which the best of the human intellect be felt "en masse", free and open to all nations and people of the whole world'.[9] Repeatedly he emphasises the idea of 'concentration', which for him not only creates a stronger bond between citizens of the world but also results in people 'drawing themselves nearer to God'. This was his 'divine mission, be it ever so humble – for it must be divine since God called us all into existence, great and small, one and all'.[10]

While Hendrik was busy philosophising and evangelising, Olivia followed her own divine mission. Like Hendrik's sculptures, her plays are allegories tuned into a higher plane. Characters have names like 'Spirit of Day', 'Children of God' or, simply, 'A Man'. They do not converse about the mundane details of everyday life, but speak past each other about unity and peace in settings that include 'Primeval Wilds' and 'Somewhere in the Celestial Spaces'.[11] Though presented under the guise of political and economic centralisation, the setting for Hendrik's city is equally vague – and equally celestial – being placed 'somewhere on the Young Earth under the Open Sky'.

Andersen's mission may have been divinely ordained, but he had little practical knowledge of how to carry it out. His early working notes rarely include what could be called architectural ideas – the reality of a city with buildings, roads, infrastructure and the needs of living people were all afterthoughts to his desire to symbolise unity through his massive figural sculptures. But even 'poor dear confident reckless Hendrik' realised that if the city concept was to develop, expert help was required.

Through his schooling in Paris and Cushing's extensive social network, Andersen met Ernest Hébrard (1881–1933), winner of the 1904 Grand Prix de Rome, who was then at work on a sumptuously produced edition of his archaeological survey of Diocletian's Palace at Split. Hébrard belonged to a new set of architectural thinkers who blended Beaux-Arts training with progressive municipalist ideals, fashioning a style of urban design around the vocabulary of civic improvement and internationalism. His method was immediately attractive to Andersen, who engaged both him and his brother Jean, a professor of design at Cornell University, to draft plans, elevations and programmes for the entire city. Given the relative formlessness of Andersen's ideas, the Hébrard brothers had ample room for manoeuvre. In a letter to Jean, Andersen insisted 'in thinking this over you must allow no limitation to come in either to expense or as space'. The point was to 'make out of whatever you do or suggest an ideal that would be comprehensible to the American public, whom ultimately it has to be presented to'.[12]

Soon – there being no limitation as to expense – a 40-person atelier was hard at work, developing drawings that would reproduce well and fold into an extensive publicity campaign.[13] Since the project had no particular site or institutional affiliation, the team chose to promote it through the medium of print. *Creation of a World Centre of Communication* – a *de luxe* presentation of the work, limited to an edition of 500 copies – was sent to elite institutions and luminaries. Less illustrious individuals received a more portable edition, *World-Conscience,* along with an invitation to join a pro-centralisation pacifist group, the 'World-Conscience Society'. By the end of 1913, books had been sent around the world and the society had members in 21 countries, including notable names like Otto Wagner and W E B Du Bois.[14]

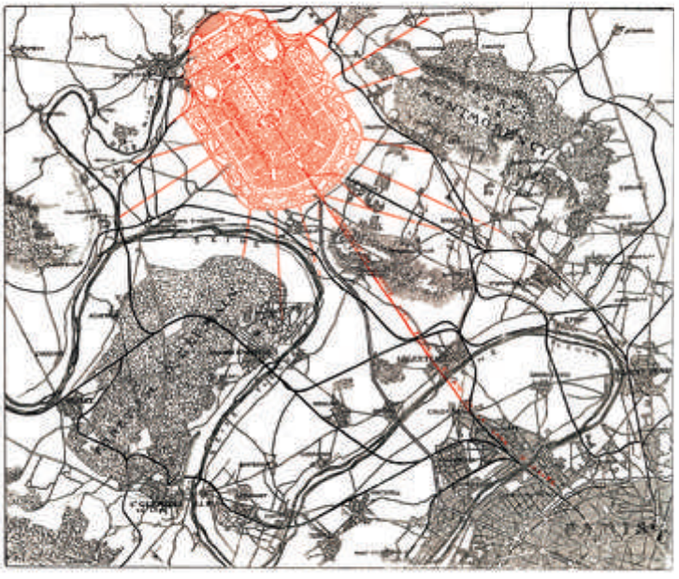
Immediately portentous, *Creation of a World Centre of Communication* begins with a series of spectacular images – a full-page frontispiece that transforms Andersen's allegorical sculpture into a twentieth-century Colossus of Rhodes, welcoming the reader to Hébrard's designs. This is then followed by a gatefold 'general perspective' depicting the city in a shaded mist as an airplane hovers in the foreground, symbol of a forward-looking modernity. The visual narrative of the book is one of constant decrescendo, the dazzling city perspectives and photographs of Andersen's sculpture gradually giving way to plans and sections, with the more technical images seemingly being reserved for engaged readers who might be interested in sponsoring the project. As the perspectives flip from isometric and planar to diagrammatic, the visual logic of the city plan starts to reveal itself; the extreme symmetry of the plan shows its fractal nature, stretching at all scalar levels from ornament to plans of individual buildings and outward to the entire city. In much the same way that the Beaux-Arts style was exported around the world (either through exchange or colonialism) as an 'international' architecture, here we have the style's logic amplified to not only cover the world, but *become* it. The world, in Andersen's naive approximation, would not only be united by his design but sublimated by it, satisfying his wish to 'build a pedestal out of the whole earth'.[15]

Henry James was not impressed. Just as earlier he had begged Andersen to seek the '*smaller* masterpiece; the condensed, consummate, caressed, intensely filled-out thing' in his sculptures,[16] now he pleaded:

For that, dearest boy, is the dread Delusion to warn you against – what is called in Medical Science Megalomania *(look it up in the dictionary;) in French* la folie des grandeurs, *the infatuated & disproportionate love & pursuit of, & attempt at, the Big, the Bigger, the Biggest, the Immensest Immensity, with all sense of proportion, application, relation & possibility madly submerged... Cities are* living *organisms, that grow from within & by experience & piece by piece; they are not bought all hanging together, in* any *inspired studio anywhere whatsoever, and to attempt to plank one down on its area prepared, as even just merely projected, for use is to – well, it's to go forth into the deadly Desert and talk to the winds.*[17]

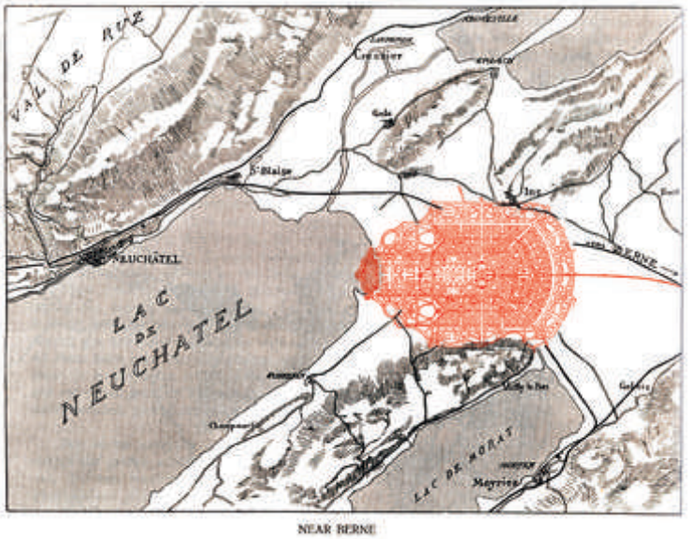
But go forth Andersen did, as the project underwent an optimised translation from architectural idea to propaganda campaign. Like Andersen's sculptures, the city's meaning was neatly

PARIS



NEAR PARIS

SWITZERLAND



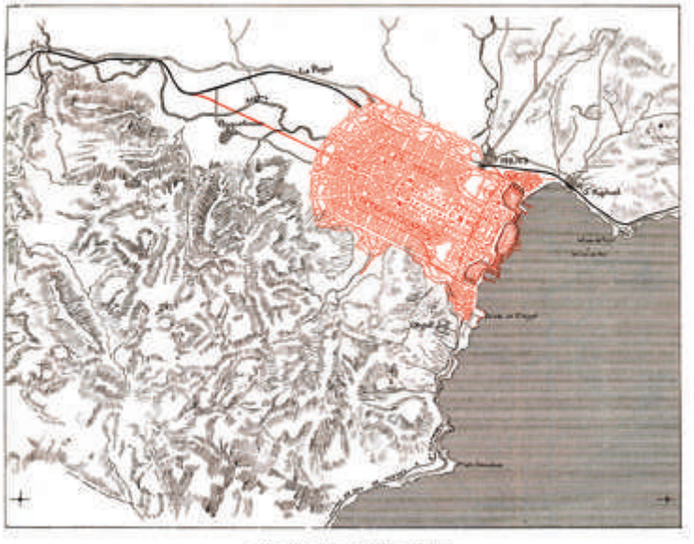
NEAR BERNE

THE UNITED STATES



NEW JERSEY (USA)

THE RIVIERA



ON THE RIVIERA NEAR FRÉJUS

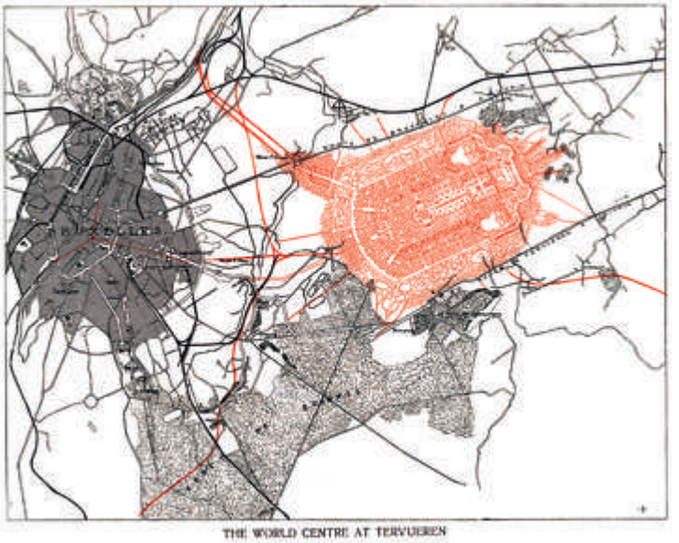
Above and overleaf:
Selected maps, Hendrik Christian Andersen,
World-Conscience, 1913

SAN STEFANO



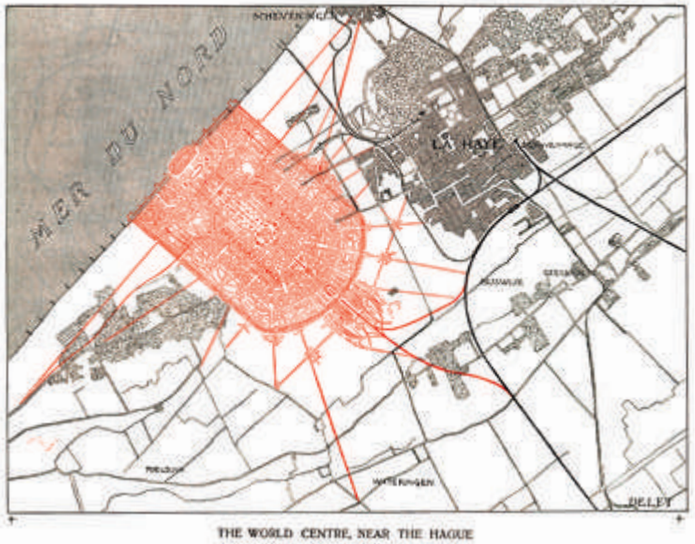
NEAR CONSTANTINOPLE

BELGIUM



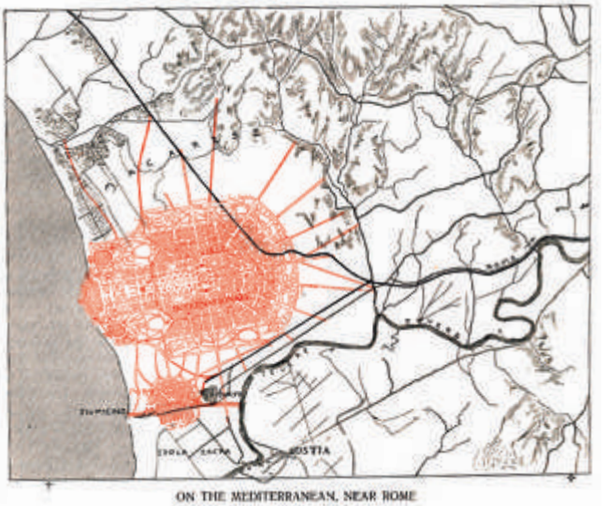
THE WORLD CENTRE AT TERVUEREN

HOLLAND



THE WORLD CENTRE, NEAR THE HAGUE

ROME



ON THE MEDITERRANEAN, NEAR ROME

encapsulated by a single allegorical gesture that could be relabelled simply by changing the name on a plaque. In this sense, the city's design was cleverly both spectacular and banal, an empty (but attractive) signifier waiting to be filled.

The smaller partner publication, *World-Conscience*, reveals this logic more plainly. Where the deluxe tome sought to impress, this book was in essence an investment portfolio, designed to say 'we will build wherever the plan finds the most support'. Possible sites included Belgium, Switzerland, Paris, the Riviera, San Stefano, Rome and New Jersey. Itinerant and iterative, the red-outlined city is so complete and closed in its operation that it could be constructed anywhere – there being no difference, in this scheme of things, between Switzerland and New Jersey, say. In its reproducibility, the city illustrates what Andersen referred to when he called the world a 'pedestal'. Of course the creation of such a neutral substrate for the project depended upon a determined ability to ignore the world's complexities.

And these complexities were brought into stark relief the following year. With the outbreak of war, pacifism went into retreat – as did Andersen himself, fleeing back to the United States. The disruption of his established network of affiliations meant a strategic recalibration was required: now, rather than relying on a broad appeal for 'peace', he decided to communicate the project in the terms most attractive to politicians – economic data. Anticipating the importance of postwar reconstruction, he therefore began to promote the World Centre as a future hub of finance, industry and trade. The propagandistic mutability of the project permitted this essential change in the character of the city – from ethical to economic – without its form being altered in any way.

Displaying the same talent for outsourcing that had guided his hiring of the Hébrard brothers, Andersen commissioned 'a detailed study of the economic advantage of a World's Centre' from Jeremiah Jenks, chairman of the Alexander Hamilton Institute in spring 1915.[18] It was an advantageous appointment. Jenks was an economist and professor at New York University. A scholar of American immigration, he also frequently advised the US government on issues of trade. Warming to the project, Jenks piloted it through a series of research stages to assess its viability and introduce it to possible funders. He organised a survey of a variety of national and international associations to gauge their interest in the project. The accompanying three-panel pamphlet described the World Centre as 'a model city designed to serve as a centre for all business, intellectual and social activities'.[19] Over the course of just two years, the project's philosophical aspirations had all melted away, leaving behind the idea that 'the basis of progress in individuals and nations is economic success'.[20]

Some eager wheeler-dealers immediately leapt on board. 'Sentiment cuts very little figure' in these 'stirring days', wrote one US businessman, E B Webster – 'stirring days' being one way of referring to a world war and the collapse of the established geopolitical order. Regarding the ideal location for the new city, he confidently pronounced 'I feel quite sure that the Gulf of Mexico is the place'. The newly opened Panama Canal was bound to make Cuba the 'most advantageous in the entire world'. [21]

As further data flowed in from the Alexander Hamilton Institute, Andersen realised he needed a way to convert the numbers into a pragmatic programme of postwar reconstruction. Again he sought out a partner to temper his philosophising and rationalise his plans, this time reaching back to one of his contacts from Rome, Gaetano Meale, an Italian judge, pacifist and writer who published political tracts under the pseudonym 'Umano'.[22] Meale/Umano's 1889 *The End of Wars Through the Federation of Peoples* had vented his disgust with war and his disillusion with the self-interested actions of nation-states, a philosophy perfectly in line with Andersen's own. Umano was given the task of writing an essay for the revised 1918 edition of the publication, *Creation of a World Centre of Communication.*

Andersen's preface to the new volume makes it clear that the project was now to be thought of as a distinctly postwar solution. Furthermore, a plan for peaceful cohabitation at an international scale could no longer be based on history and philosophy alone: 'War, stimulating the quickest and most efficient means for destroying life, is today the most complete scientific development in existence', Andersen writes. 'Only one thing can counteract it: a counter-science – that is, the science of legitimately controlling international affairs.'[23] That science was to be provided by Umano's self-described 'positive science' of governance, which proposed to cure global strife with an 'International Constitution' and an 'International State'.[24] To reinforce his claims, Andersen then selectively quotes President Woodrow Wilson: 'The free people of the world must draw together in some common covenant, some genuine and practical cooperation that will in effect combine their force to secure peace and justice in the dealings of nations with one another'.[25] While this ventriloquising makes Wilson sound like he is lending his support to a World Centre of Communication, he was of course referring to a purely institutional configuration of international cooperation, not one specifically incarnated in a 30,000-acre city. Though the target of a sustained propaganda blitz, the US president in fact only responded once to the project, and that was some years later, in 1922: 'I cannot believe that the plan is practicable, but I can quite understand that the motives which led to its proposal are worthy and disinterested', he said, somewhat diplomatically.[26]

Though the World Centre underwent significant conceptual changes during the war years, the general design and structure of the city plan remained unaltered. By the time of the publication of the updated book in 1918, Ernest Hébrard was in Thessaloniki. Busy with devising a new masterplan for the city after a disastrous fire, he now distanced himself from Andersen's project.[27] The images in the revised edition are both reduced in number and recycled. Drawings of 'Un Palais des Congrès', 'La Tour du Progrès' and 'La Haute Cour de Justice' are strategically highlighted to appeal to organisations like the League of Nations. With architectural detail minimised to a gloss of legal and institutional signifiers, the book demonstrates how Beaux-Arts symbolism was malleable enough to represent anything a prospective client wanted, from economic prosperity to international justice.

The revised edition was nearing completion when Cushing-Andersen fell ill and died on 24 December 1917. She is credited as co-editor in the final published volume, but should also be recognised as a partner in all manners of planning and communication, helping to sustain the project through the war. Her death marked a significant shift in the project's lifespan, effectively ending its most fruitful period.

The 1918 plan failed to generate the impact Andersen had hoped for. One particularly striking letter from Theodore Wesley Koch, head librarian at Northwestern University, to Andersen's friend in Rome, Edgar Ansel Mowrer, points to what could be defined as its fatal flaw: 'You cannot build an institution or a League of Nations

out of stone and mortar. Architecture cannot create an idea or institution; it is merely the expression of an idea or institution.'[28]

On the other side of the world, though, someone did take notice. In 1919 Andersen began negotiations with Sun Yat-sen, founding father of the Republic of China and newly appointed leader of the ruling Kuomintang party. Andersen pledged to 'work continually' to secure 'the very important position that I feel [China] should have in the League of Nations, as well as in the history of the development of humanity'.[29] Sun in turn wrote to Andersen, 'Your idea of a World Centre will bring all the countries together. Although the idea of a World Centre may seem to many people who are not able to see far, as a dream and an impossibility, yet like my dream of a democratic form of government for autocratic China will surely become a living reality.'[30] For Sun, Andersen's project may have seemed like a perfect analogue to his own efforts to unify a fragmented China. It offered a means to centralise foreign assistance and to expedite the country's integration into a modern internationalist network.

Sun did not live to see his dream realised. With his death in 1925, the World Centre's prospects in China fizzled out. The following year, Andersen wrote to a colleague of his exasperation: 'I, as you know, have knocked at the front and back doors of all the rulers and royal houses of Europe, only to have a cold diplomatic NO, we don't understand your dream, handed to me as an answer to the cry of my soul, and to the unselfish begging for the aid in creating a "City of God" for the benefit of humanity as a whole.'[31] Yet there was light at the end of the tunnel. The Sun Yat-sen-shaped hole had been filled by a new partner in his adopted homeland, who really did understand his vision. Andersen's friends were initially sceptical about his new benefactor, but he assuaged their concerns:

I quite understand your sentiments about HM Mussolini – but to know him, is to study him at close range and to see the marvellous, and I may say, miraculous work he has done for Italy, which in time will influence the progressive spirit of the whole world to great advantage … after an intimate talk with Mussolini he offered freely the land for the building of our city – give him, I beg you, credit for this noble and generous humanitarian act.[32]

This inversion, from internationalism to nationalism, had been foreseen by A Trystan Edwards in a critique of the project published in *The Town Planning Review* as far back as 1914: 'it never seems to have occurred to him [Andersen], however, that the cosmopolitan culture which he rightly imagines to be inevitable can exist side by side with an intense nationalism'.[33] As nations began to consolidate power and draw up new borders, Andersen's World Centre turned into a potential device for autarkic centralisation. Accordingly, the World Centre for Peace was repackaged as a 'World Centre of Administration'.

Across a series of letters, Mussolini promised a site near Fiumicino for the World Centre, and preliminary plans were drawn up by FW Fitzpatrick, a long-time American supporter of the project who also submitted the news for publication in *Architect & Engineer* under the optimistic headline, 'Artist's Dream Coming True'.[34]



Hendrik Christian Andersen, 1913
© Hendrik C Andersen Papers,
Library of Congress, Washington, DC

In a more extensive article published in 1926 in *Emporium*, Antonio Nezi extolled the virtues of this 'city like no other – spirit, heart and brain of the world'.[35]

Bearing in mind the factional state of the Italian Fascist party during this time, we can see a parallel with Sun Yat-sen's interest in the city as a tool for national political centralisation. Where Sun sought a conduit to channel international funding to strengthen a unified China, Mussolini sought a nationalising measure that would diminish foreign influence.

What is most striking about the translation of Andersen's project from pacifism to fascism is its formal consistency. Though the withering away of support caused him endless anxiety, Andersen remained stubbornly consistent and conservative in his aesthetic sense while the whole world changed around him. 'What I beg is that the original plans should not be corrupted in its architectural form which I have worked upon for many years, and which provides the life for international communication in such a practical and monumental form',[36] was, for example, his response to Paul Otlet's request to exhibit the city in 1933. So the project remained confined to the same plans Hébrard had drafted two decades earlier. And Andersen also used these drawings when he made one final attempt to promote his project with the 'World-City Conference' held in Rome in 1935. If Andersen's initial support of fascism is hard to gauge, by this time he was an unabashed supporter of Mussolini and an apologist for Italian colonialism.

By the late 1930s, interest in Andersen's project had evaporated. The institutions that were supportive of the World Centre in the 1910s and 1920s had either dissolved or altered their course of action, gearing up for the exigencies of yet another world war. At the same time, and in terms of architecture, the rise of European modernism made Andersen's unflinching attachment to Hébrard's original Beaux-Arts design aesthetically and programmatically obsolete.

Andersen died in December 1940. Six years later, and only a year after the end of the Second World War, Lewis Mumford presented a talk to RIBA on the topic of a new world centre to house the United Nations. He addressed the general concern that not enough thought had been given to the architectural aspects of the project: 'the fact is that the United Nations, in the very act of giving body and form to its charter, have pressed for a hasty decision on a matter for which there has been little adequate preparation in anyone's thought, little serious reflection of any kind', he noted.[37] Mumford, on the other hand, was no stranger to the topic. He had been present at the 1935 'World-City Conference' in Mussolini's Rome. And he pronounced: the only plan that came up to the measure of such a daunting project was that of Andersen 'and a group of able colleagues [who] made a remarkably searching study of the political and cultural requisites for a great world capital'. However, he continued: 'instead of stimulating criticism and leading the way toward further improvements, Andersen's proposals, published in a very limited edition, were allowed to gather dust, so that by now they have interest only for the antiquarian'.[38]

Andersen's more ornate books, with their marbled pages, leather binding and thick paper, certainly have an antiquarian appeal. But the working processes they represent – propagandising, investment-seeking, network-building, outsourcing and rebranding – are far from being dusty, outmoded practices. Rather, they are the architectural strategies associated with contemporary globalisation. Andersen tailored his campaign to fit new geopolitical situations. In its most ideal form, the city was streamlined to become a frictionless object that could be easily dropped into place anywhere on the 'pedestal' of the planet.

In a letter from September 1913, James declared his outright opposition:

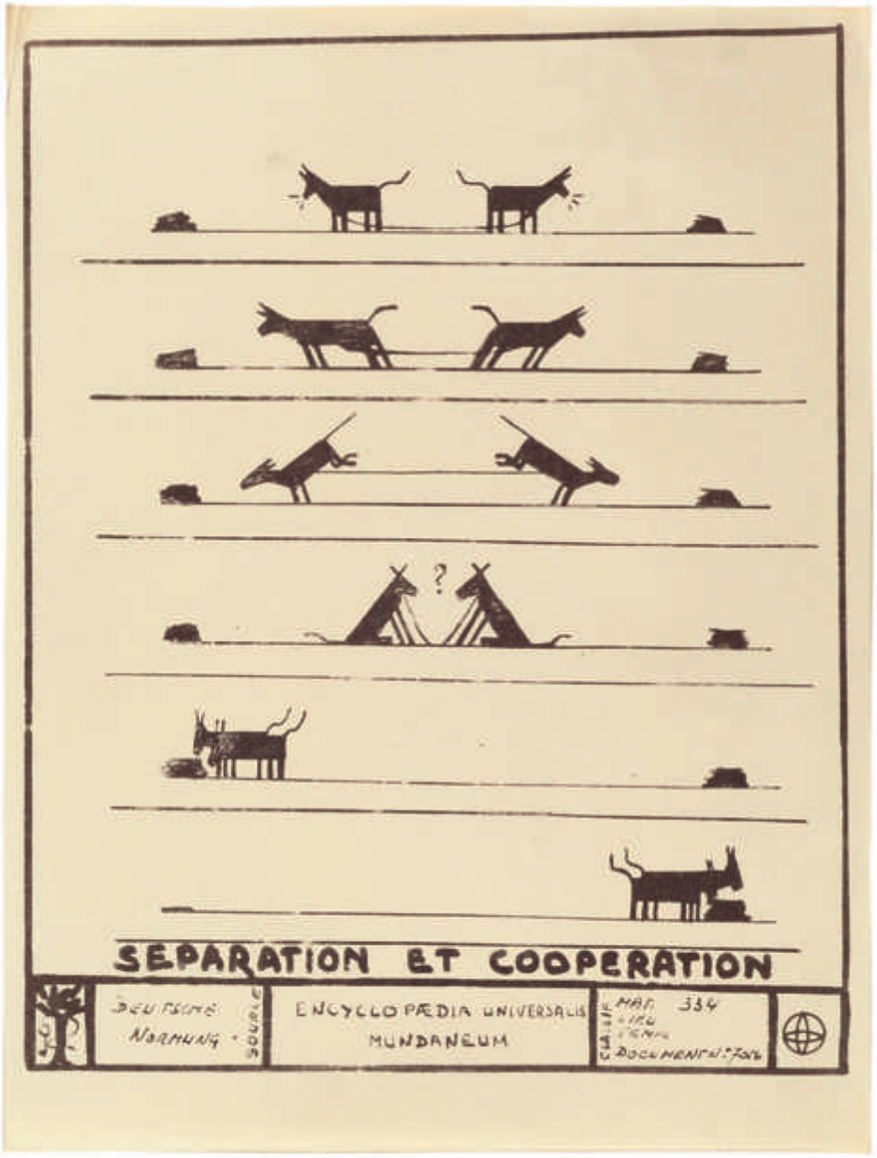
I don't so much as understand *your very terms of 'World' this & 'World' the other... I simply* loathe *such pretentious forms of words as 'World' anything – they are to me mere monstrous sound without sense. The world is a prodigious & portentous & immeasurable affair... It is so far vaster in its appalling complexity than you or me, or than anything we can pretend without the imputation of absurdity & insanity to do it, that I content myself, & inevitably* must *(so far as I can do anything at all now,) with living in the realities of things.*[39]

James' scepticism about 'World anything' reads today as a rejoinder to an architectural discourse that, a century later, has reframed the idea of a 'world project' in all its complexities as a global reality. Despite the evolution in terminology, many of the strategies used by James' confused confidant resonate. Andersen leveraged the Beaux-Arts style's international cachet and empty symbolism as a kind of geopolitical camouflage which enabled him to shunt the project from place to place, opportunistically seeking the most fertile ground for his city, regardless of the political implications. Like the many projects that float in the realm of digital dissemination and capitalise on a positive but vague belief in betterment through global connection, the World Centre's architectural being was secondary to its efficaciousness as a multimedia propaganda campaign. But as the city's allegory changed so did its political affiliations, a game that drew Andersen into darker and darker corridors that only echoed back his own megalomania. James wrote Andersen a letter in November of 1912, early in the project's lifespan, warning him of its inherent dangers, concluding with a touching handwritten postscript that illustrates James' true care, worry and love: 'I feel how you know that I can't by that impersonal machinery, dearest Hendrik, touch you, & draw you close, half as tenderly as I would on better & above all nearer ground'.[40] Ironically, the typewriter's 'impersonal machinery' that cleaved James from his own feelings was also the tool that allowed Andersen to work from his office and disseminate his project 'as some prince in a fairy tale might spend *his* [life] if he had been locked up in a boundless palace by some perverse wizard, and shut out thus from the world and its realities and complications'.[41] Though devised under the pretences of global connectivity, the project existed through acts of personal, professional and political separation. As James grew sicker and Andersen deepened his commitment to the city project against all warnings, he ultimately isolated himself on his own pedestal made out of the whole earth, denying the ground on which real emotions and real worries flowed towards him. The pedestal was therefore only ever stuck – between two centuries, two sides of the Atlantic, two World Wars and two different ideas of what an architect should be, artist or bureaucrat.

1. Diary entry, 28 June 1911, Box 1, Papers of Hendrik Christian Andersen, Manuscript Division, Library of Congress, Washington, DC. Hereafter this collection is cited as LOC HCA.
2. For more on these projects, see Wolfgang Sonne, *Representing the State: Capital City Planning in the Early Twentieth Century* (Munich: Prestel Verlag, 2003), pp 241–56.
3. Andersen met the Pope in January 1919. See letter from Andersen to the Vatican, 5 November 1919, Box 13, LOC HCA.
4. Henry James, *Beloved Boy: Letters to Hendrik C Andersen, 1899–1915*, edited by Rosella Mamoli Zorzi (Charlottesville, VA: University of Virginia Press, 2004), pp 26–27. The James–Andersen correspondence is available in typescript at the Library of Congress, the Hendrik C Andersen Museum in Rome and the Henry James Collection of the Clifton Waller Barrett Library of American Literature, Special Collections Department, University of Virginia Library. Where available, I cite the published letters of James for ease of reference.
5. *Ibid*, p 54.
6. Susan E Gunter and Steven H Jobe (eds), *Dearly Beloved Friends: Henry James's Letters to Younger Men* (Ann Arbor, MI: University of Michigan Press, 2001), pp 58–59.
7. Andersen diary entry, 28 June 1911, Box 1, LOC HCA.
8. Andersen's precise religious affiliation is hard to pin down; he would later meet the Pope and show a certain devotion to the Catholic Church and its early twentieth-century internationalist extensions. However, his writings also indicate an esoteric Theosophical approach that refers more to abstract notions of divinity and supreme good than specific denominational cues.
9. Andersen diary entry, 30 March 1908, Box 1, LOC HCA.
10. *Ibid*.
11. See Olivia Cushing-Andersen, *Creation and Other Biblical Plays* (Geneva: Albert Kundig, 1929), a posthumous collection of her plays published with an elegiac preface by Andersen.
12. Letter from Andersen to Jean Hébrard, 6 December 1909, Box 15, LOC HCA.
13. Letters to Hébrard, 11 December 1911 and 3 October 1911, Box 15, LOC HCA.
14. For a full list, see Andersen, *World-Conscience: An international society for the creation of a world centre to house international interests and unite peoples and nations for the attainment of peace and progress upon broader humanitarian lines* (Rome: World Conscience Society, 1913), pp 35–48. Andersen used his connections in the international pacifist movement to distribute his work. This movement gave him an *entrée* to individuals held in high standing in business and government, including, most famously, Henri La Fontaine and Paul Otlet. For more on their support for Andersen's city, see Paul Otlet, 'Un projet grandiose de Cité Internationale', in *Ghent Planning Congress 1913: Premier Congrès International et Exposition Comparée des Villes* (London: Routledge, 2013), pp 79–85 and Giuliano Greslari and Dario Matteoni, *La Città Mondiale: Andersen, Hébrard, Otlet, Le Corbusier* (Venice: Marsilio Editori, 1982).
15. Andersen, studio notes, 6 December 1917, Box 45, LOC HCA.
16. Henry James, *Beloved Boy*, *op cit*, p 55.
17. *Ibid*, pp 101–02.
18. Letter to Andersen from Jeremiah Jenks, 25 March 1915, Box 17, LOC HCA.
19. 'The World Centre' pamphlet, Box 17, LOC HCA.
20. *Ibid*.
21. Letter from E B Webster to Andersen, 20 April 1916, Box 20, LOC HCA.
22. The recommendation of Gaetano Meale came from Edgar Ansel Mowrer and Lilian T Mowrer, whom Andersen and Cushing-Andersen would regularly meet in Rome. The Mowrers' recollections provide us with one of the very few published biographical portraits of the pair. See Edgar Ansel Mowrer and Lilian T Mowrer, *Umano and the Price of Lasting Peace* (New York, NY: Philosophical Library, 1973).
23. Olivia Cushing-Andersen and Hendrik Christian Andersen, *Creation of a World Centre of Communication* (Rome: World Conscience Society, 1918), p 1. Sections are indicated in future citations as pagination repeats across sections one and two.
24. *Ibid*, section one, p 66 and section two, p 5.
25. Cushing-Andersen and Andersen, *op cit*, p III.
26. Letter from Woodrow Wilson to Andersen, 12 December 1922, Box 20, LOC HCA.
27. After the war, Hébrard took the opportunity to exercise a world project of a much different sort with the French colonial government in Indochina, planning and building in contemporary Vietnam. For more on Hébrard's life, see Haris Yiakoumis et al, *Ernest Hébrard 1875–1933: la vie illustrée d'un architecte, de la Grèce à l'Indochine* (Athens: Editions Potamos, 2001).
28. Letter from Theodore Wesley Koch to Edgar Ansel Mowrer, 20 July 1921, Box 18, LOC HCA.
29. Letter to Sun Yat-sen, 16 April 1919, Box 19, LOC HCA.
30. Letter from Sun Yat-sen to Andersen, 19 June 1919, Box 19, LOC HCA.
31. Letter to David Starr Jordan, 22 March 1926, Box 17, LOC HCA.
32. *Ibid*.
33. A Trystan Edwards, 'A World Centre of Communication', *The Town Planning Review*, vol 5, no 1 (1914), pp 15–16.
34. See Box 18, LOC HCA. F W Fitzpatrick, 'Artist's Dream Coming True', *Architect & Engineer*, vol 84, no 3 (1926), p 114.
35. Antonio Nezi, 'Una città come nessun'altra. Anima, cuore e cervello del mundo', *Emporium*, vol 64, no 379 (1926), pp 32–50.
36. Letter to Paul Otlet, 4 March 1933, Box 18, LOC HCA.
37. Lewis Mumford, speech given at the Royal Institute of British Architects on 12 July 1946, reproduced in *The Architects' Journal*, 25 July 1946, p 70.
38. *Ibid*.
39. Henry James, *Beloved Boy*, *op cit*, p 111.
40. *Ibid*, pp 106–07.
41. *Ibid*.

Paul Otlet's Theory of Everything

Mariana Siracusa



Paul Otlet,
Séparation et coopération, *c* 1936
© Mundaneum, Mons

'He is one of those ardent youths with grey hair', Le Corbusier wrote in 1929, of the then 60-year-old Belgian lawyer, bibliographer and peace activist Paul Otlet. Explaining why he was joining forces with Otlet to create the Mundaneum – a repository for all the knowledge of the world – he declared that the older man had 'traversed the whole range of social and economic phenomena in which we, the young, find ourselves facing already formulated tasks. These tasks, which we are already forgetting, others formulated before us. They were the visionaries, the organisers of ideas, the generators of magnetic currents'.[1]

The idea of using new scientific methods and technologies to create an archive of everything – the theory being that everything from the past was now known and classifiable – had been in the air for at least a generation. For example, at the Paris Exposition of 1900 Patrick Geddes had given tours of his Index Museum – an *Encyclopaedia Graphica* that aimed to appeal to the visitor's eye with 'a whole kaleidoscopic succession of beautiful and instructive objects with which even the child-visitors may play for weeks without being able to soil'. Along with these objects, he urged forward-thinking museums to exhibit 'vast world-imagery' – such as an 'astoundingly perfect relief model of all Switzerland', 'a working geyser or a lunar volcano' or a 'striking reproduction of the system of ocean currents; in fact, a miniature ocean actually in motion'.[2]

At the same Paris exposition Otlet had presented representative sections of a Universal Bibliographic Repertory that he was developing with the fellow lawyer Henri La Fontaine – 'universal' meaning it was not restricted by time, place or language. The pair would go on to pursue their grand project to synthesise all human knowledge over the following decades: 'At the same time that the means of communication make the world smaller and smaller, the population which lives in it is increasing greatly', Otlet wrote in 1915. It followed, then, 'that it is impossible to keep each group in its territory. International contacts are established and multiply; a world-life is manifested in every domain'. For Otlet, the consequences of this development were clear:

There is a twofold result: on the one hand interests become established beyond political frontiers, every one being more or less involved in the universal circulation of men, products and ideas; on the other hand, antagonisms multiply along with the point of contact, and the spheres of friction grow larger. As a rule, governments have not been sufficiently aware of this profound transformation. As a result, all of this international life, both so fecund and so dangerous, has been left almost completely to its own devices, rather than being framed in institutions which could give it organisation and establish necessary checks and balances.[3]

The weakening of nation-states and the crisis of colonialism, the excessive growth of industrial production, the rising influence of the labour movement and the campaigns on behalf of women's suffrage were among the 'multiplying antagonisms' that stoked global instability even before the outbreak of the First World War. Many sought the answer to these perceived evils of modernity in organisation. A single all-encompassing system, they believed, would bridge differences and prevent humanity from self-destructing in acts of rank stupidity. Some thought that the foundations of this international organisation would be political, others economic. Only a few maintained that culture would be an important element to consider. Paul Otlet and Henri La Fontaine were among them. Writing many years later, a decade after the end of the world's first total war, Le Corbusier described their thesis as follows:

in order to heal a world being re-made, it is indispensable to know the comparative states of nations, peoples, races and cities which today participate in that worldwide process… It will be useful to review human history, to learn what man has done, to activate this knowledge, to endow it with courage, to measure how high thoughts had led us, how low mistakes can drag us down.

And the way to activate this knowledge was to collect in one place all the witnesses of human history – of 'high thoughts' and 'low mistakes' – captured in books, newspapers, magazines, statistics, laws, patents, images, diagrams, objects. In a word, documents.

Otlet had first become interested in documentation while working for the legal firm of Edmond Picard, which was putting together a compendium of Belgian jurisprudence. There he met La Fontaine, whose main interest was international law, and together, from 1892, they worked for three years to create a bibliography of social knowledge for Belgium's Société des sciences sociales et politiques. During this period they also established contact with Melvil Dewey, inventor, in 1876, of the Dewey Decimal Classification System, and with his permission they worked to expand this system to link all branches of human knowledge. The result, which they began to publish in 1904, was the Universal Decimal Classification, a numeric scientific system that they hoped would become the worldwide standard for libraries and bibliographic institutes. In parallel, Otlet and La Fontaine founded the Institut International de Bibliographie in 1895 and also started work on their Universal Bibliographic Repertory, which by 1934 had reached 15 million entries. Their zeal did not stop there: in 1907 they co-founded the Union of International Associations, a research institute and documentation centre.

In 1910 Brussels' hosting of the Universal Exposition offered Otlet and La Fontaine the opportunity to develop yet another idea – a new city of knowledge that could accommodate international institutions. Otlet immediately began work on defining its programme. But this was not his first venture into the realm of architecture and urbanism. In 1894 he had commissioned Octave van Rysselberghe to design his Brussels townhouse in art nouveau style, while Henry van de Velde did the interiors. Between 1898 and 1906 Otlet then collaborated with van Rysselberghe on the development of a seaside resort on the hunting grounds of the Otlet family estate in Westende, a project he had inherited from his father Édouard Otlet, a Belgian politician and entrepreneur who had made his fortune in the tramway industry. Here Otlet was able to address complex urban planning issues for the first time, for the resort required not only villas and tourist amenities but also a water tower, a power plant and a post office with telephone and telegraph services.[4] Though Westende was destroyed during the Second World War, its construction proved Otlet was capable of turning ambitious dreams into reality. He had similar intentions for the city of knowledge in Brussels, and lent his support and encouragement to the project for a 'world centre for communication' developed by Norwegian-American sculptor Hendrik Christian Andersen and French architect Ernest Hébrard.[5] The monumentality of the plan fit perfectly with Otlet's and La Fontaine's internationalist ideals.

President not just of the Union of International Associations in Brussels but of the International Peace Bureau in Bern, La Fontaine was awarded the 1913 Nobel Peace Prize for his efforts during the Hague Conventions of 1899 and 1907, which produced the first multilateral treaties governing the conduct of warfare. That same year, 1913, he approached the American industrialist and philanthropist Andrew Carnegie and convinced him to support a project for a world museum, the Palais Mondial, to be sited in Brussels. The following year, the Germans overran neutral Belgium at the start of the First World War (and among the war's many casualties was Otlet's son).

The United States was more successful in maintaining its neutrality, and did not enter the conflict until much later, in April 1917. Just a few months after that, Woodrow Wilson set up a commission to pursue the development of a programme for peace 'with full knowledge of the position of all the litigants'. Its initial findings informed his *Fourteen Points* of 8 January 1918, which were intended to help define the terms of any eventual peace treaty, and in which Wilson called for open agreements, free trade, freedom of navigation, reduction of armaments, the right of nations to self-determination and, most importantly, the creation of a League of Nations.

Working for 15 months in total secrecy, first at the New York Public Library and later at the American Geographical Society, the commission produced nearly 2,000 reports and 1,200 maps of every region of the globe. The secrecy of the research was perhaps the most problematic aspect of this otherwise important endeavour, though the commission was also hampered by the tendency of its members to view their own recommendations as constituting the sole 'scientific' solution for any given issue. Twenty-one members of the group accompanied Wilson to the Paris Peace Conference, the meeting of Allied victors which opened in January 1919. Otlet and La Fontaine were part of the Belgian delegation. Once negotiations were under way, however, it became clear that diplomatic solutions could not be tackled in the manner of mathematical demonstrations.[6]

'Paris was a nightmare, and everyone there was morbid', said another delegate, the chief representative of the British Treasury, John Maynard Keynes. In his words, 'a sense of impending catastrophe overhung the frivolous scene'. The 'Big Four' players at the conference – the US, UK, France and Italy – failed to address not only the economic problems that Europe would face after the war but also the cultural differences that needed to be overcome if future wars were to be avoided.[7] While the Treaty of Versailles, signed on 28 June 1919, did make provision for the foundation of the League of Nations, it remained narrowly conceived, as a political organisation with no economic or cultural mandate.[8] At the same time, many people, including Otlet, believed that nations would not be able to put aside self-interest unless they had a broader grasp of the complex global situation. Despairing at the injustice of the terms of the settlement, Keynes tendered his resignation three weeks before the treaty was signed:

The future life of Europe was not their concern; its means of livelihood was not their anxiety. Their preoccupations, good and bad alike, related to frontiers and nationalities, to the balance of power, to imperial aggrandisements, to the future enfeeblement of a strong and dangerous enemy, to revenge and to the shifting by the victors of their unbearable financial burdens on to the shoulders of the defeated… The treaty includes no provisions for the economic rehabilitation of Europe – nothing to make the defeated central empires into good neighbours, nothing to stabilise the new states of Europe, nothing to reclaim Russia; nor does it promote in any way a compact of economic solidarity amongst the Allies themselves; no arrangement was reached at Paris for restoring the disordered finances of France and Italy, or to adjust the systems of the Old World and the New… It is an extraordinary fact that the fundamental economic problems of a Europe starving and disintegrating before their eyes, was the one question in which it was impossible to arouse the interest of the four. Reparation was their main excursion into the economic field, and they settled it as a problem of theology, of politics, of electoral chicane, from every point of view except that of the economic future of the states whose destiny they were handling.[9]

Another contemporary figure much taken with the future life of Europe was H G Wells, who, when not writing about time-travelling machines or invading Martians, devoted considerable thought to ways of improving society. He was particularly keen on the idea of a 'World Brain', a 'sort of mental clearing house for the mind, a depot where knowledge and ideas are received, sorted, summarised, digested, clarified and compared'. Echoing Keynes, he gave his own impressions of the Paris Peace Conference:

These people, these politicians, these statesmen, these directive people who are in authority over us, know scarcely anything about the business they have in hand. Nobody knows very much, but the important thing to realise is that they do not even know what is to be known. They arrange so and so, and so and so must ensue and they cannot or will not see that so and so must ensue. They are so unaccustomed to competent thought, so ignorant that there is knowledge and of what knowledge is, that they do not understand that it matters.

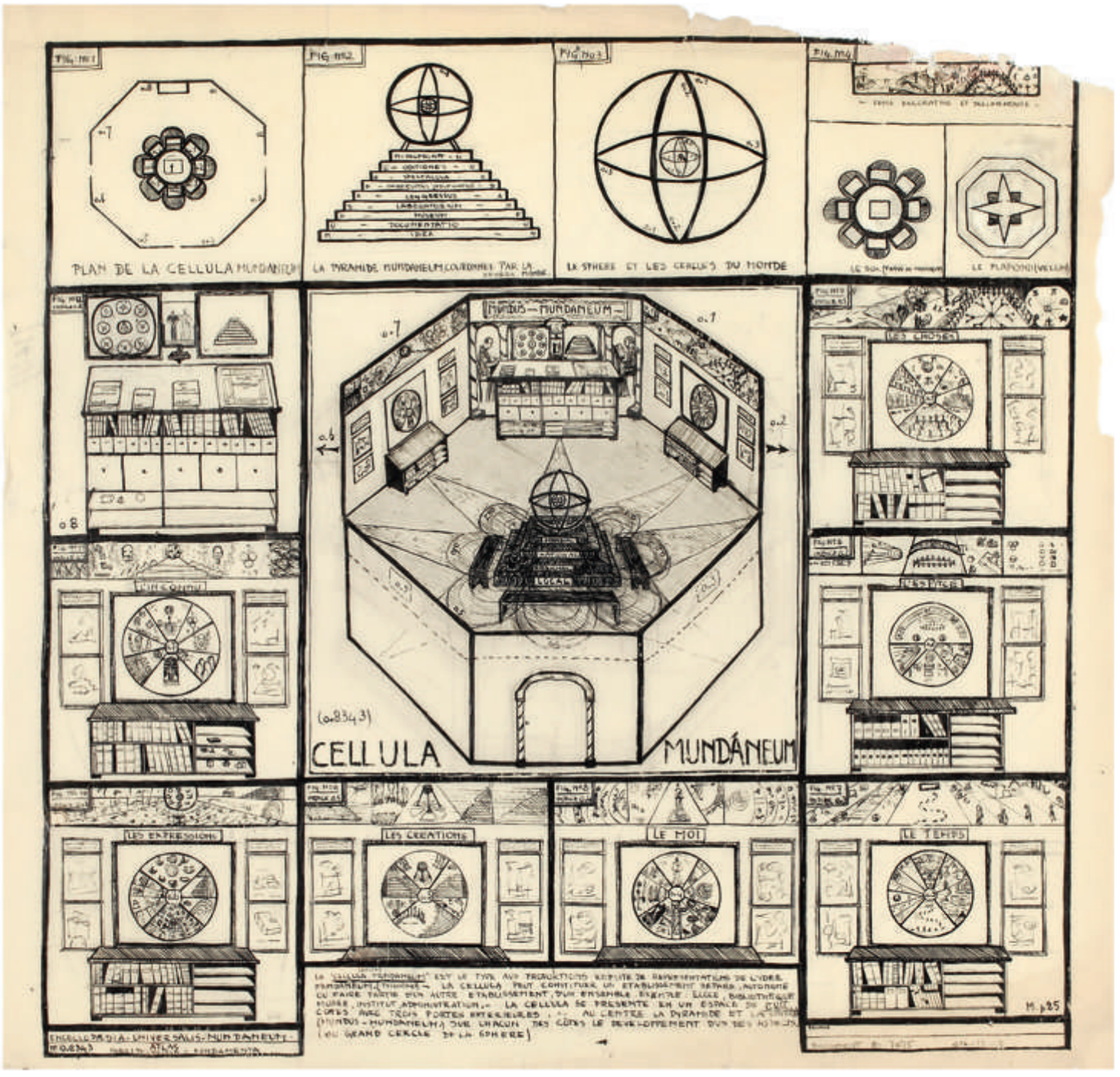
The same terrifying sense of insufficient mental equipment was dawning upon some of us who watched the birth of the League of Nations. Reluctantly and with something like horror, we realised that these people who were, they imagined, turning over a new page and beginning a fresh chapter in human history, knew collectively hardly anything about the formative forces of history. Collectively, I say. Altogether they had a very considerable amount of knowledge, uncoordinated bits of quite good knowledge, some about this period and some about that, but they had no common understanding whatever of the processes in which they were obliged to mingle and interfere. Possibly all the knowledge and all the directive ideas needed to establish a wise and stable settlement of the world's affair in 1919 existed in bits and fragments, here and there, but practically nothing had been assembled, practically nothing had been thought out, nothing practically had been done to draw that knowledge and these ideas together into a comprehensive conception of the world. I put it to you that the Peace Conference at Versailles did not use anything but a very small fraction of the political and economic wisdom that already existed in human brains at the time… We live in a world of unused and misapplied knowledge and skill. That is my case. Knowledge and thought are ineffective.[10]

Damned by both Keynes and Wells, the political failure of the Paris Peace Conference would even go on to filter through the shady events surrounding the competition for the League of Nations headquarters in Geneva, when Le Corbusier's modern project was rejected in favour of a compromised academic solution by Nenot, Flegenheimer, Lefèvre, Broggi and Vago. The competition had required the building to have representative qualities, testifying to pacifist ideals and the desire to bring together the world's nations in a spirit of fraternity, materialising in stone the internationalist ideologies behind the fragile world peace.[11] What was needed, therefore, was a 'palace', and not merely a building that supported the functions of conferences and assemblies.[12]

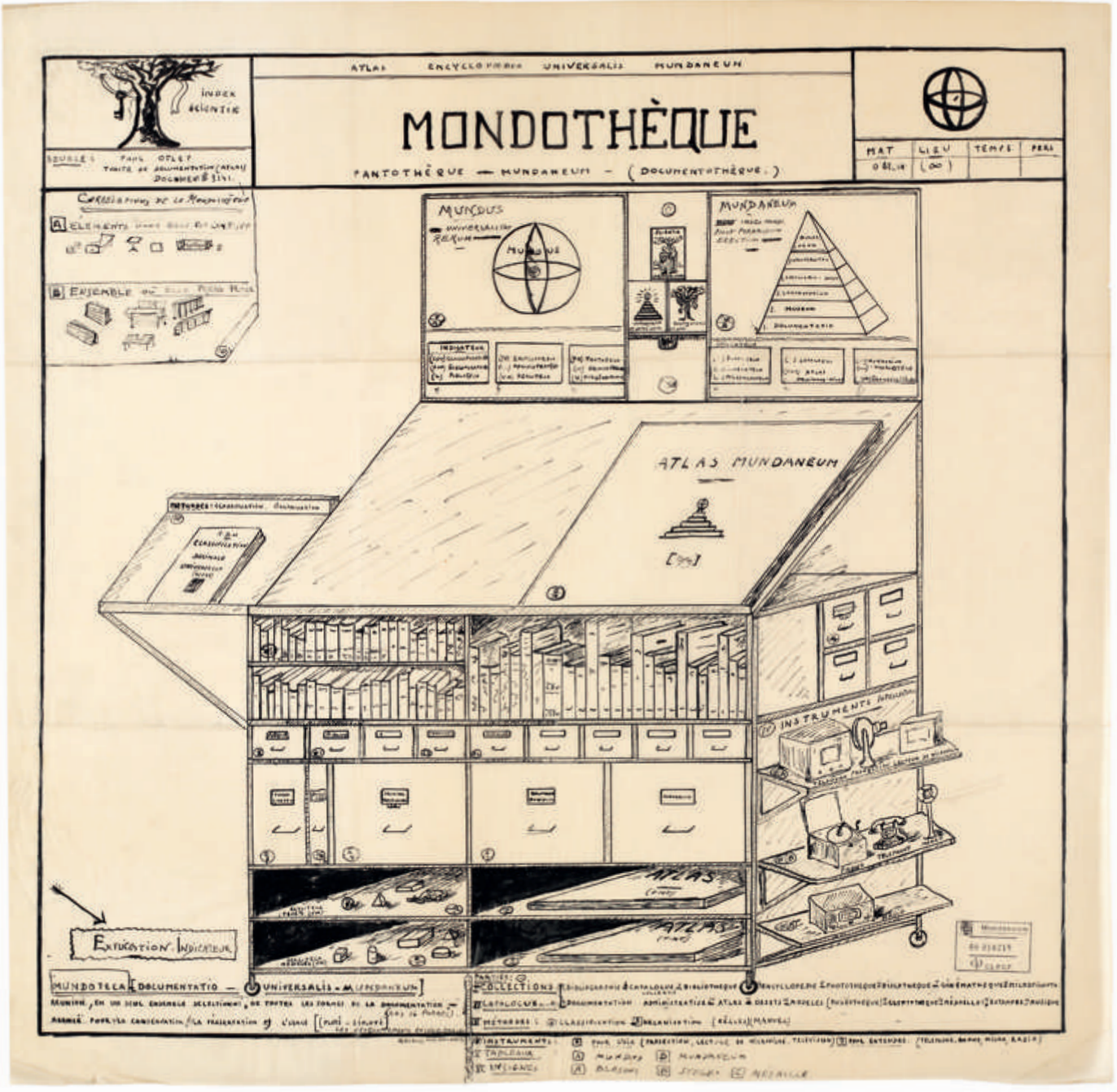
The apparent necessity for such a building explains Le Corbusier's deep concern with layering the building on the site in a dialectic relation to both the lake and the Alps, and his attention to a hierarchical construction of space, and in particular the creation of an architectural promenade that would lead towards the ideal centre of the world – the Assembly Hall.[13] What was actually built – the Nenot and Flegenheimer scheme – was more a 'cathedral' that concluded the general development of a style, to use Berlage's words, or, as Sigfried Giedion put it, 'The recipe for pseudo-monumentality is always the same: take some curtains of columns and put them in front of any building, whatever its purpose and to whatever consequences it may lead.'[14]

Yet regardless of whether it was modern, fraternal or simply pseudo-monumental, this universal organisation – in order to function at its best – had to be as inclusive as possible. Otlet and La Fontaine therefore continued to push for a 'wider League of Nations' that would encompass not just governments and treaties but also cultural, scientific, economic and industrial associations. According to their vision, this wider association – the Mundaneum – would be built alongside the League of Nations in Geneva's Ariana Park, and would combine with it to form the epicentre of the world's intelligentsia.

The Mundaneum was clearly predicated off an idea: the idea of universalism, a synthesis of the world's knowledge. Yet it was also an institution that gave material existence and organisation to that idea. In the process it offered a method of collecting, condensing, categorising and presenting data combinations; of simplifying, guiding and coordinating areas of interest; of unifying and standardising, ordering and ranking, planning and adjusting, representing and reproducing everything in its correlations and universal characteristics. Here, then, was the promise of a material body of documents and collections – books, encyclopaedias, archives, repertories, atlases and tables – and a corresponding set of architectural typologies that would house these collections – library, museum, scientific society, university and institute – that would eventually grow into a city, the 'world city'.[15]



Paul Otlet,
Cellula Mundaneum, 1936
© Mundaneum, Mons



Paul Otlet,
Mondothèque, *c* 1936
© Mundaneum, Mons

Significantly, Otlet presented the elucidation of this city not as a consequence of artificial and abstract processes but of natural forces, comparing humanity and society to a great river that sprang from small beginnings and evolved slowly. If the prewar period had been more or less calm, the years between 1914 and 1936 were tumultuous, waters rushing in torrents that could only be calmed by the establishing of the institutions of the world organisation. Ultimately, Otlet believed, the course of the river would be regularised and amplified. And the key to this regularisation would be documentation.

The Mundaneum would therefore record the reality of individual ideas, scientific studies, educational materials, techniques and industrial objects. Yet it would not just contain things in different spaces and times; it would also be open to the unknown. At the same time, consistent with its more abstract urban aspirations, the Mundaneum was intended as a replicable prototype, the first step towards establishing the alliances that would underpin the greatest world civilisation. Its institutions – themselves seen as machines – would in this sense give voice to unifying forces, culturally bridging space in the same way that navigation, aviation and radio had done before them.

Otlet viewed the scale of both this ambition and organisation as entirely feasible, and for each of the Mundaneum's institutions he explored the financial and legal conditions for its realisation, negotiating with landowners and politicians and commissioning architects to draw up plans[16] – not least Le Corbusier and Pierre Jeanneret, who in 1928 were hired by Otlet to give physical form to his vision of the Mundaneum, and whose resulting proposal was perhaps best and most comprehensively described the following year by Karel Teige:

The purpose of the World Museum, according to Otlet, would be to demonstrate the present state of the world, its complex mechanism, the community and interdependence of the individual phenomena of life. Here the world would be divided into three categories according to location, time and type… The museum would collect vernacular and characteristic things, not rare and costly objects; copies, casts, facsimiles and reproductions would suffice. Its aim is not preservation, but systematic exposition and demonstration, an encyclopaedic and composite museum, a tool and aid for research and scientific work, the collections of which are accessible at anytime (like school collections). It would be under continuous critical review and could be reorganised any time, so that its usefulness could really be maximised. This whole museum is supposed to be a sort of 'idearium'; a picture of the thoughts that are hidden under facts.

Le Corbusier worked out the design of the World Museum in accordance with this programme formulated by Otlet. The basis of the museum is threefold in character (categories of place, time and kind), therefore a triple aisle unwinds in a spiral. The top of the spiral is the prehistoric epoch, descending it becomes wider and so incorporates more and more space for the detailed collections of recent centuries. Designed in the shape of a graduated pyramid, the building has no staircase. Unless one uses the elevator, one enters by spiral ramps 2,500m in length from the ground level to the top. The visitor enters the museum from the top, and as he comes down, the collection unwinds before him in chronological sequence.

The museum halls open onto balconies, which give a panoramic view of the mountains, of high and airy free space. Across from the doors to the balconies are located doors, which open into the interior space of the pyramid – a great vault with bearing columns. Located at the bottom is the 'Sacrarium', something like a temple of ethics, philosophy and religion. A great globe, modelled and coloured, at the scale of 1:1,000,000 with the planetarium inside, is situated in front of the museum building.

The library of the Mundaneum is intended, according to Otlet, to be the world centre of books, an institution to aid international cultural cooperation; at the same time it is supposed to catalogue all 'problems of ideas', to establish archives for all those problems, and to be a modern documentary encyclopaedia.[17]

But the clarity of this description also serves as the prelude to some harsh criticism. Teige goes on to assert that the Mundaneum is an architectural error, a delusion. In his opinion, the building is unmodern, archaic, a compromised, obfuscating solution. Clearly siding with Hannes Meyer in the tussle between humanist and utilitarian ideals,[18] Teige believed that the remit of modern architecture was to 'scientifically' resolve precise tasks of rational construction, rather than to give voice to ideological and metaphysical flights of imagination. The error of Le Corbusier's proposal, then, lay in its quality of monumentality, in its striving to be a 'palace'. More generally, Teige asserted that Otlet's ideological stance was an unrealistic pipe-dream, a utopia lacking a concrete rationale.

Le Corbusier's response to 'My dear Teige' was a text titled 'In Defence of Architecture', in which he made a clear distinction between architecture and construction, and stood by his choice of monumentality.

If a precise, indisputable function requires that spaces be organised along an axis that unfolds as a spiral, should I deny myself the architectural consequences of this function simply because the cube is contemporary?… I have allowed the museum of human creation to follow a spiral, not to be 'the last word in fashion', but to assure, through this unique means, the absolute continuity of events in history. I cannot see any other way of doing it. If, on this spiral, I raise the standard elements of a tripartite nave to organise the programmatic elements of object, place and time, I am creating, by means of a spiral, a constant, continuous and optimal overhead lighting condition for all places… Underneath the whole floor area of the spaces enfolding along the spiral, I have gained warehouses, storage rooms and areas for temporary sorting, which will delight future curators. Each cell of the museum will have its own adjacent storage space below it; each of these storage spaces, thanks to the spiral, is in continuous contact with an access route on tracks outside, hidden from sight, thus permitting the handling of objects as easily as in a freight yard, without disturbing the visitors… I will have freestanding partitions arranged like screens or windbreaks. This will create spaces that are very small or extremely large, separated one from another, or directly or subtly linked. In this way I am free; I can do as I wish; I can create a museum with innumerable perspectives that are all different, and where each area can be sized to suit what it is meant to accommodate… Given this arrangement, the building has taken the form of a pyramid… Organisation is itself the key, virile substance that guides and corrects all that is sachlich*, all that is muscle and bone.*[19]

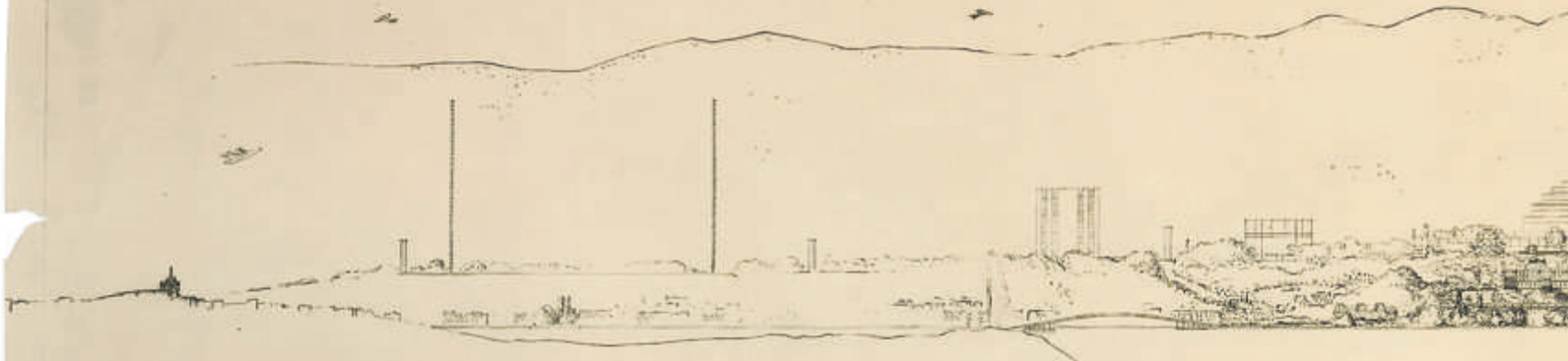
Despite the extent of this apologia, a look at Le Corbusier's later museums, however, suggests that he absorbed Teige's criticism. Dispensing with the ziggurat form, he shifted his focus to the interior and the idea of unlimited growth – for example, in his Musée d'Art contemporain (1931), the Musée des artistes vivants (1931), the Centre d'esthétique contemporaine (1937) and the Musée à croissance illimitée (1939) – and explained his new thinking perhaps best in a letter to Christian Zervos from 8 December 1930:

The museum has no facade*; the visitor will never see a facade;* he will only see the interior of the museum*… The museum rises in some neighbourhood or outer suburb of Paris. It rises from a field of potatoes or beets. If the site is magnificent, so much the better. If it is ugly and made miserable by mean allotments or factory chimneys, it doesn't matter; by constructing partition walls we will compose with factory chimneys, etc, etc.*[20]

The Mundaneum as a city of knowledge may not have been realised, having attracted very little support, but Otlet, right up until his death in 1943, never let go of the idea. After his plans for Geneva failed to materialise he focused on a more manageable project, the *Encyclopaedia Universalis Mundaneum*, which consisted of a series of charts and tables – syntheses of the documentation that he had collected on an array of topics. The panels this documentation were printed on offered something inherently standardised, upgradable and collaborative.

Overleaf: Le Corbusier and Pierre Jeanneret, Mundaneum, Musée mondial, Geneva, 1929
© FLC / ADAGP

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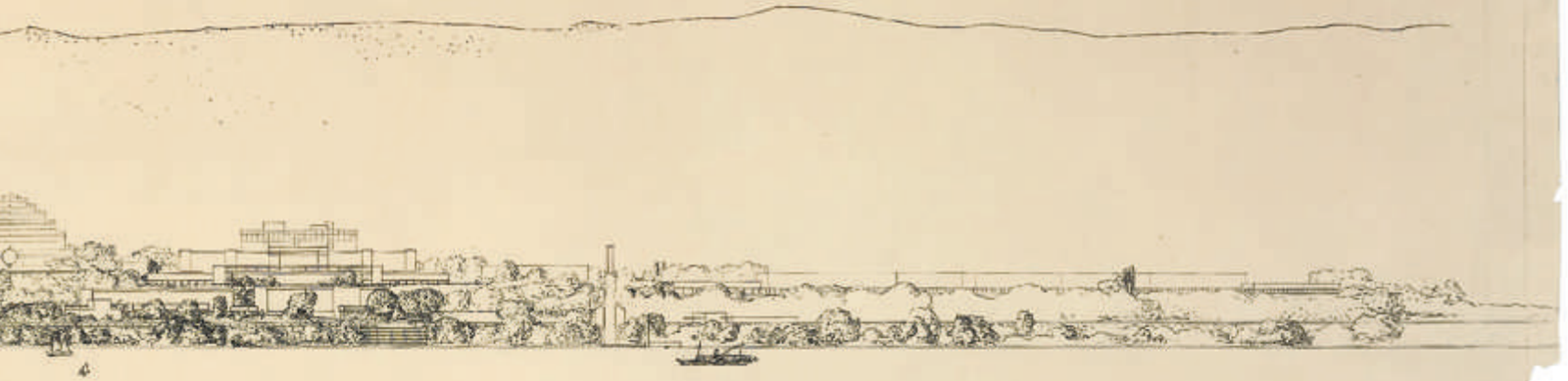
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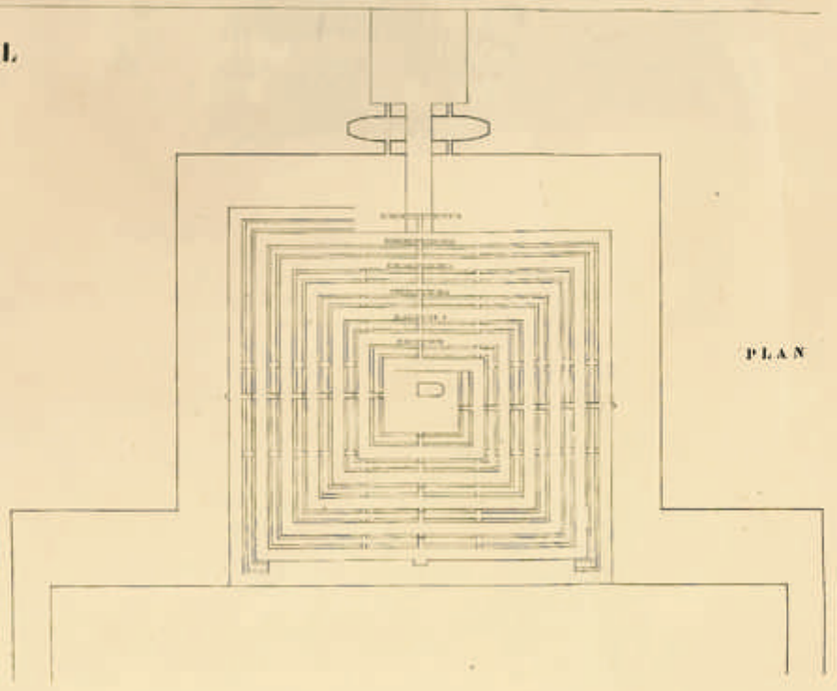
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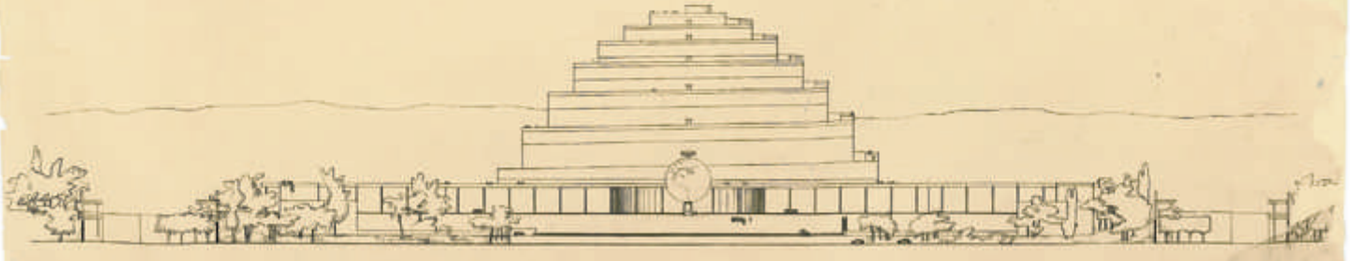
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More importantly still, the tables permitted complex wholes to be presented in a simplified form, making them ideal didactic tools.

Otlet's interest in the presentation of content – for him a vital means of securing the transmission of knowledge to future generations – was also informed by his contact with Otto Neurath, whom he met in 1929. Neurath's main concern was to democratise the dissemination of culture and information through a new universal form of graphic representation.[21] His Gesellschafts- und Wirtschaftsmuseum (Museum of Society and Economy), founded in 1925, exhibited facts rather than artefacts, the everyday rather than the curious and the strange. Its essential purpose was to convey social and economic data to the masses in order to raise working-class consciousness and to undermine modern capitalism's fetishising of objects.[22]

For Otlet, however, graphics were not enough in themselves to universalise knowledge, and a fundamental role would also be played by developing technologies. He had been interested in new mediums since the very beginning – as early as 1901 he had remarked that the book was tending towards a photographic form, an idea he developed further in his 1906 publication with Belgian engineer Robert Goldschmidt, *Sur une forme nouvelle du libre: le libre microphotographique*. Here Otlet articulated his dream that documents, organised through a 'monographic principle', would be linked by telecommunications and made available to anyone holding a particular device.[23] A network of information therefore still remained the goal, but here it was to be constructed and housed not at the scale of the city, but through the communication technologies of the telephone, radio, cinema and television, and which collectively would form a new kind of 'mechanical brain'.

Many of these ideas would later be developed by Richard Buckminster Fuller, who would understand the dream of a unified world as possible only in mind and spirit, even if the symbolisation of this idea would ultimately take the form of a spaceship, a whole world that contained us all. The image of Fuller, looking down on earth from his glazed cockpit, would go on to become the defining emblem of architecture's more worldly ambitions, but in many ways Otlet can be seen to have got there first, not least because his telephones, radios and cinemas – and more immediately his museums, libraries, encyclopaedias and other systems of classification – were, if not interplanetary, then interdependent: each was a point of entry to the other, each may have involved different intellectual and social processes but each, in a sense, incorporated all the others.[24] Material preservation was therefore only ever related to a preoccupation with totality. And by allowing humanity to share knowledge, this global system would be the means of achieving a form of common ground and, with it, Otlet's ultimate goal – world peace.

1. Le Corbusier, 'In Defence of Architecture', *Oppositions*, no 4 (October 1974), pp 93–108. Originally published in *Stavba*, no 7 (1929).
2. Patrick Geddes, 'The Index Museum: Chapters from an Unpublished Manuscript', *Assemblage*, no 10 (December 1989), p 65. For the background to Geddes's project see Alessandra Ponte, 'Building the Stair Spiral of Evolution: The Index Museum of Sir Patrick Geddes', in the same issue of *Assemblage*, pp 46–64.
3. Quoted in W Boyd Rayward, *The Universe of Information: The Work of Paul Otlet for Documentation and International Organisation* (Moscow: International Federation for Documentation, 1975), p 206. Note headed 'Explication' with a manuscript minute by Otlet: 'Note remise à M Durand, Préfet de Police, à Paris, le 21 décembre, 1915', Otletaneum.
4. Jean Delmee, 'La SA "LA Westendaise" 1898–1906, naissance de la plage de Westende, le rêve urbanistique de la famille Otlet', *Belgisch Tijdschrift voor Nieuwste Geschiedenis*, vol XVI, nos 3–4 (1985), pp 447–72.
5. Giuliano Gresleri and Dario Matteoni, *La Città Mondiale: Andersen, Hébrard, Otlet, Le Corbusier* (Venice: Marsilio Editori, 1982).
6. For a full account of the work of the commission see Lawrence E Gelfand, *The Inquiry: American Preparations for Peace, 1917–1919* (New Haven, CT: Yale University Press, 1963).
7. The 'Big Four' were President Wilson and Prime Ministers David Lloyd George of Britain, Vittorio Emanuele Orlando of Italy and Georges Clemenceau of France.
8. Thomas J Knock, *To End All Wars: Woodrow Wilson and the Quest for a New World Order* (Oxford: Oxford University Press, 1992).
9. John Maynard Keynes, *The Economic Consequences of the Peace* (New York, NY: Harcourt, Brace and Howe, 1920).
10. H G Wells, *World Brain* (London: Methuen Publishing, 1938). For a critical assessment of Wells's World Brain see also William Boyd Rayward, 'H G Wells's Idea of a World Brain: A Critical Re-Assessment', *Journal of the American Society for Information Science*, vol 50, no 7 (May 1999), pp 557–79.
11. Ciro Luigi Anzivino and Ezio Godoli, *Ginevra 1927: Il Concorso per il Palazzo della Società delle Nazioni e il Caso Le Corbusier* (Calenzano: Modulo Editrice, 1979).
12. Le Corbusier, *Une Maison – Un Palais* (Paris: Éditions Crès, 1928).
13. Kenneth Frampton, 'The Humanist vs the Utilitarian Ideal', *Architectural Design*, March 1968, pp 134–36.
14. Sigfried Giedion. 'The Need for a New Monumentality, in Paul Zucker (ed), *New Architecture and City Planning: A Symposium* (New York, NY: Philosophical Library, 1944).
15. Paul Otlet, *Monde, essai d'universalisme: connaissance du monde, sentiment du monde, action organisée et plan du monde* (Brussels: Editiones Mundaneum, 1935).
16. Wouter van Acker, 'Hubris or Utopia: Megalomania and Imagination in the Work of Paul Otlet', *Cahiers de la documentation*, June 2012, pp 58–66.
17. Karel Teige, 'Mundaneum', *Oppositions*, *op cit*, pp 83–91. The article was originally published in *Stavba*, no 2 (1927).
18. Kenneth Frampton, *op cit*.
19. Le Corbusier, 'In Defence of Architecture', *op cit*, reprinted in French in *L'Architecture d'aujourd'hui*, 1933. The English translation was published in *Oppositions*, *op cit*, pp 93–106.
20. Letter from Le Corbusier to Christian Zervos, 8 December 1930, 'Musée d'art contemporain, Paris, 1931'. The original text was first published in *Cahiers d'Art* and reprinted in Le Corbusier and Pierre Jeanneret, *Oeuvre complète 1929–1934* (Zurich: Éditions H Girsberger, 1935), p 73.
21. Nader Vossoughian, 'The Language of the World Museum: Otto Neurath, Paul Otlet, Le Corbusier', *Transnational Associations*, nos 1–2 (January–June 2003), pp 82–93.
22. Nader Vossoughian, 'Mapping the Modern City: Otto Neurath, the International Congress of Modern Architecture and the Politics of Information Design', *Design Issues*, Summer 2006, pp 48–65.
23. The documents of the Mundaneum were classified using the Universal Decimal Classification according to his 'monographic principle'. Texts were dissected into their basic elements so that they could then be reassembled in new kinds of documents. This process would ultimately transform libraries and museums into 'offices of documentation'. Dissecting and recomposing books and other sources of information would not only constitute a revolutionary reorganisation, but would also result in a transformation and modification of information as shown in Charles van den Heuvel, 'Building Society, Constructing Knowledge, Weaving the Web: Otlet's Visualisation of a Global Information Society and his Concept of a Universal Civilisation', in W Boyd Rayward (ed), *European Modernism and the Information Society: Informing the Present, Understanding the Past* (London: Ashgate Publishers, 2008).
24. Charles van den Heuvel and William Boyd Rayward, 'Facing Interfaces: Paul Otlet's Visualisation of Data Integration', *Journal of the American Society for Information Science and Technology*, vol 62, no 12 (December 2011), pp 2313–26.

Le Corbusier and Pierre Jeanneret, plan, section and elevations, Mundaneum, Musée mondial, Geneva, 1929 © FLC / ADAGP

Ship to Shore

Eva Branscome









Left column: First *ss Flandre*, from Le Corbusier, *Vers une architecture*, 1923; *ss Flandre*, 1951; *ss Flandre*, tugged into Manhattan, 1951
Right: Le Corbusier, *Aménagement du Paquebot Île de France*, 1936 © FLC / ADAGP

Aircraft Carrier City in Landscape is one of the twentieth century's great architectural drawings and possibly the most enigmatic project of its author, the Austrian architect Hans Hollein. The image itself was created in 1964 and collages the looming silhouette of an aircraft carrier onto a panoramic sequence of black-and-white photographs of gently undulating hills and a patchwork of bucolic cornfields in some undefined *Mitteleuropa* landscape. Mounted on plywood and formatted as a long, thin rectangle – more cinemascope than any movie screen – it appears as if it were a still from some vaguely familiar film. It is also strangely timeless. Is this playful pop science-fiction or more terrifying eastern bloc propaganda? Is it supposed to be ironic? Might it even be real?

For Hollein, the title of the piece offers a clue to his understanding of its reality, for this collage is presented to us not so much as a nautical, nor even a pastoral model, but as something resolutely urban – an engineered, self-contained city, wherever it happens to land. More typologically, it can be seen as the successor to a strain of modernist thinking that imagined the boats of today as the perfect models for the cities of tomorrow. Of course, the architect *par excellence* of this association was Le Corbusier, in whose manifestos architecture is frequently allegorised through cruise liners, not least in the cheery, highly animated colour cross-section of the steamship *Île de France* that the architect kept in his collection and is now moored in the archives of the Fondation Le Corbusier in Paris. Hollein's brooding aircraft carrier, in contrast, is far more menacing, glowering on its hilltop as the silent nemesis of all of this shipshape heroism.

Yet just as Le Corbusier's championing of these vessels was born out of personal experience – driving, flying and sailing – so too was Hollein's, for six years earlier, in 1958, he had crossed the Atlantic on the beautiful French ocean liner the *SS Flandre*, one of perhaps the last generation of travellers to make that journey by sea (BOAC's transatlantic air service between London and New York was introduced the same year). Aged just 24, Hollein had left his hometown Vienna to take up a Harkness Fellowship, following in the footsteps of earlier fellows, like the radio broadcaster Alistair Cooke, and preceding another young architect, Rem Koolhaas, whose own fellowship in 1972 funded the writing of *Delirious New York*. In Hollein's case, the grant supported two years of further study at the Illinois Institute of Technology, under Ludwig Hilberseimer, and at the University of California, Berkeley.[1] It was then imagined that he would return to his war-scarred home country and dedicate himself to its re-education and reconstruction.

By serendipitous circumstance, *SS Flandre* was the same ship on which the architect Denise Scott Brown had arrived in the US the year before. In an oral history recorded for the Archives of American Art in 1990, she was still gushing about the experience decades later, marvelling at the luxury of the vessel, in obvious contrast to the austerity she had experienced in London and earlier still in her hometown of Johannesburg.[2] Curiously, *Flandre* was also the name of the first ship illustrated in Le Corbusier's *Vers une architecture* in 1923 – the *ur*-liner that announced the section 'Eyes That Do Not See I: Liners'. As such, it became the very representation of modernity, a machine for living while circumnavigating, completely isolated from the rest of an old-fashioned world. Sadly, however, its particular promise was shortlived, for in 1940 that *Flandre* struck a mine in the Bay of Biscay, broke in half and went under.

The second, reborn *SS Flandre* was launched in 1951. Financed by the US Marshall Plan, it was the pride of the fleet of the Compagnie Générale Transatlantique, or French Line, and the largest vessel to be built in France after the end of the Second World War. The ship could accommodate 1,663 people. Less than half of these were passengers: closeted in luxury and serviced by an army of staff, their transit across the Atlantic presented the opportunity for 'six glorious days in an atmosphere of gaiety and liveliness', according to a company brochure.[3] Indeed, the cabins were of the highest standard, both in first class and tourist class, and on-board facilities included a dining room, smoking room, library, cinema, private bar, lido, gymnasium and beauty salon. A separate dining room and playroom for children made for a calmer voyage, while games of shuffle board and deck tennis were laid on for those needing to build up their appetite for the French culinary splendours served by its impressive kitchens. Being at sea was no barrier to more rural pursuits either, notably an on-deck version of clay-pigeon shooting, while dog walking services were provided for those who had brought along their pooch. This, then, was truly a splendid ocean liner, one that – given its name and nautical lineage – might even be considered a paragon for contemporary architectural and urban thinking. Such an association, however, would have to wait, because at the very end of its maiden voyage the *SS Flandre* had mechanical problems and had to be tugged into port in Lower Manhattan 24 hours behind schedule. It then spent the next nine months marooned in New York while its generator was extensively overhauled. As a result, the giant ship soon mockingly acquired the nickname 'The Flounder'.

Back in service in 1952, the liner eventually settled into the Le Havre–New York route, and no further embarrassments were reported. Hollein himself made no comment on his ocean-bound experiences or on the vessel itself. He was actually far more enthralled by the terrestrial city that greeted him on his arrival than by the ersatz city on offer during his cruise. 'One writes many programmes and itineraries of what to do and what to see', Hollein reported, 'but when I got my first glimpse of land upon my arrival, when I passed by the skyscrapers of Manhattan and looked through the canyons of the streets one after the other… I sensed that greater, bigger and much more exciting things were going to happen than any programme and itinerary could imagine'. He even went so far as to identify the core attraction: 'Thinking about what interested me most in America, I couldn't think of anything more interesting than America herself.'[4] This brief self-analysis was actually the culmination to a more extended series of texts, for throughout his stay Hollein was obliged to report back regularly to his sponsor, the Commonwealth Fund in New York. Hollein turned the writing of these reports into its own kind of project, travelling to all the various Viennas in the US (Vienna, Georgia; Vienna, Ohio; Vienna, Wisconsin, etc), from where he further mused on the cultural appeal of America and its émigré relationship to his native city.

Perhaps one explanation for Hollein's mute response to the architecture of the *SS Flandre* was that on 17 August 1958, midway through his crossing, the US launched its first ever lunar rocket, *Pioneer 0*. With this, the parameters of architecture were fundamentally disrupted. An exciting, but also terrifying, era had begun. Old orders, old cultures and technologies, even old power structures, were being called into question. And just as governments were now apparently superseded by new technocratic affiliations like the National Aeronautics and Space Administration (NASA), founded that same summer, so other tokens of modernity, like the ocean liner, were instantly rendered *passé*. Nothing, it seems, could have better represented this redundancy than an architect rhapsodising about the ballroom of a luxury cruise liner when he could instead be dreaming about intergalactic space stations.

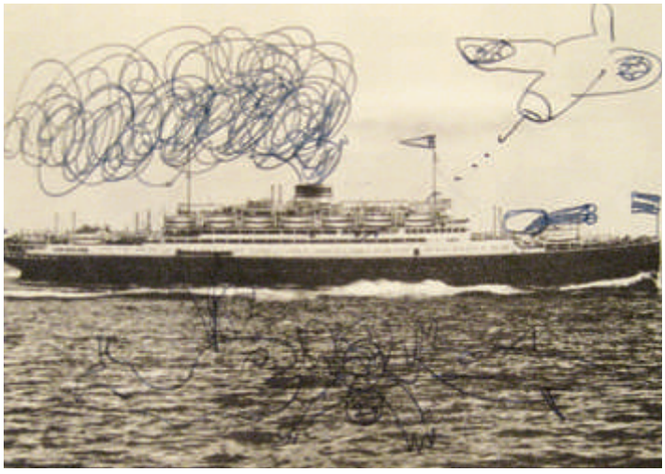
Hollein had clearly got the message. For not only did he have nothing to say about the *SS Flandre*, but over the ensuing two years of his American sojourn he increasingly reflected on new models of architectural enclosure, new environments and a new totalising architecture. Such thinking was even canonised in a manifesto of sorts, titled 'Plastic Space', which he submitted as part of his master's thesis at Berkeley in July 1960. Read today, this text seems to alternate between somewhat hallucinogenic passages of youthful philosophising ('space, space in space, space in space in space, space – a determined activated region in indefinite three-dimensionality') and other, more cognisant, mission statements ('Total space embraces the whole universe/A continuous system of manmade spaces governs our world/

Nature no longer determines the areas of our activities/Manmade spaces are the spaces of our time').[5] Another manifesto, dating from the same year, also written in English verse form, was less upbeat:

architecture
is in exile now
on the moon
or at the north pole
while people are building
houses
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houses[6]

The rather affected literariness of these and other writings from the period seems to show Hollein attempting to find an appropriate tone, even if his less mannered, descriptive prose reveals him to be an accomplished writer. At the same time it appears as if he was also experimenting with different visual styles. For example, on his return voyage in the summer of 1960 he produced a strange little sketch over a souvenir postcard of the sister vessel to the *Saturnia* on which he was then travelling, borrowing the graphic style of appropriation and juxtaposition of the *Übermalungen* or 'Overpaintings' by his fellow countryman Arnulf Rainer.[7] Just like in the collage of the aircraft carrier, here two very different worlds are colliding. The postcard shows the elegant ocean liner *Italia* sailing on the high seas. On top of this image Hollein then adds a thick plume of smoke puffing out of the ship's funnel and two flags, the red-and-white Austrian triband at the bow and the Stars and Stripes at the stern. From this we can infer that the ship is homeward bound, sailing full speed ahead. But other additions convert the luxurious passenger liner into a warship – there is now a large cannon on deck and the vessel is under attack from a fighter aircraft (although, disregarding other more obvious interpretations, it is unclear whether the stars on the wings of this airplane identify it as Soviet or belonging to the US Air Force). Further threats reveal themselves in the adjacent waves, as a spouting whale and smirking shark take chunks out of a passenger who has foolishly jumped overboard. Another drawing made the same year, soon after Hollein settled back in Vienna, adopts a similar style.[8] Here, a pencil sketch of a characteristically nautical modernist villa – designed by Hollein himself – is made instantly ludicrous by the addition of a funnel and smoke – architecture as a boat, once again, puffing away but going nowhere fast. Both drawings therefore abound with Hollein's signature cynicism and dark humour, but the childlike nature of their iconography somehow undermines what it was that he was trying to challenge.

Over the next two years, as Hollein reintegrated himself into his home city, he continued to develop both his written and graphic work through his parallel careers in architecture and art. A particular focus for this reintegration became the Galerie St Stephan (later Galerie nächst St Stephan), a somewhat curious art venue established in 1954 on the city's Grünangerasse, and run by the charismatic, but also provocative, Catholic priest Monsignore Otto Mauer. The gallery was initially founded as a place for intellectual exchange not just in artistic discourse, but also in theology, medicine, sociology and law. While it eventually became the base for a group of artists practising a Viennese version of *Art Informel* steeped in Catholic references, the gallery also offered a platform for other, alternative artistic practices. Among these were a series of events later organised by the artist Oswald Oberhuber, which included a memorable happening in 1967 by Joseph Beuys. While still under the auspices of the priest, Hollein had delivered a performance of his own manifesto, *Zurück zur Architektur*, to a packed and enthusiastic gallery audience on 1 February 1962.



Hans Hollein, postcard of the *Italia* with sketch, 1960
© Nachlass Hans Hollein

The success of this event soon prompted a follow-up, this time a joint exhibition with the artist Walter Pichler – 'Hans Hollein, Walter Pichler – Architektur: Work in Progress' – which opened at the Galerie St Stephan in May 1963. Although nominally a collaboration, the show presented work that each artist had developed individually. For Hollein, this meant a series of images that argued against the reducibility of architecture to a set of long-established typologies (housing, in particular), and for its greater responsiveness to new technologies and infrastructures, as well as to politics, intellectual thought and bodily experiences, including sexuality and even suffering. In this sense, the exhibition can be understood as the first public testing-bed for his later, famous proclamation, *Alles ist Architektur*, or 'Everything is Architecture'.[9]

'Today, for the first time in the history of mankind', Hollein wrote in the exhibition catalogue, 'we build what we want, producing an architecture that is not determined by technology, but one that makes use of technology – a pure, absolute architecture'.[10] These ideas were then illustrated with a plethora of images of technological constructions, both ancient and modern – from Mayan and Mesoamerican temples to iron foundries, oil rigs and space rockets. And significantly, also among these totems of the modern world was a photograph of an aircraft carrier, the first time such a vessel had appeared in Hollein's work. This particular aircraft carrier – the nuclear-powered *USS Enterprise* – had been built in the years while the young architect was in America, and was launched in 1960, just as Hollein was making his way home.

Somehow, more than the other examples he presented, Hollein seemed to be especially drawn to this military vessel. We find it again in other sketches and visualisations from the same period, and in an extended descriptive text written by Hollein that formed part of an unused page layout for the Viennese architectural journal *Bau*, which Hollein edited from 1965, along with Oberhuber, Pichler, Gustav Peichl, Sokratis Dimitriou and Günther Feuerstein:

THE AMERICAN AIRCRAFT CARRIER ENTERPRISE

A city of our time, far in advance of the results of today's urban planning and architecture. 348m in length, covering approximately 18,000m², sitting 20m above water and with a 4,600-man crew.

Cost: $500 million (equivalent to the cost of approximately 26,000 American single-family homes, equipped with every form of luxury). It has among other things 2,000 rooms, and as many telephones, 500 radar antennas, sacred spaces for Catholic, Protestant and Jewish services, a hospital with approximately 100 beds and all medical facilities, its own waste disposal system, its own television studio, and with escalator connections between all decks. Five different film screenings are shown daily.

In constructing the Enterprise *3,000,000 drawings were necessary (this corresponds to a single drawing 1m high by 3,000km long). You can stay at sea for years.*

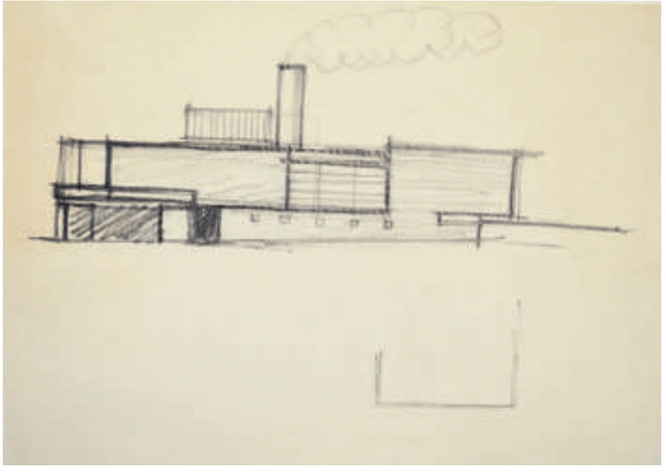
The lower deck has only five windows, portholes that reference back to the old Enterprise *and were installed here for sentimental reasons. Many members of the crew cross the ocean without actually ever seeing it. The* Enterprise *can be completely closed off from radioactive contamination.*[11]

The *USS Enterprise* (which later morphed into the famous *Star Trek* spaceship) therefore provides the eponymous aircraft carrier in *Aircraft Carrier City in Landscape* and the hilltop part of this two-part collage. But what of the landscape itself? The rolling terrain featured in the quartet of photographs that forms the panorama of this image is actually located just outside St Margarethen in Burgenland – the easternmost and least populous state in Austria – and the last town before the border with Hungary. Although geographically peripheral, St Margarethen has played a central role in the development of the Austrian state because the stone for many of Vienna's buildings – including St Stephan's Cathedral and most of the structures that line the Ringstrasse – were quarried from this region.[12]

In 1959, during Hollein's US fellowship, the oldest of St Margarethen's quarries – the Römersteinbruch, dating from Roman times – had been established as the site for an annual art event in which sculptors worked over three summer months with local stonemasons and labourers. This *Bildhauersymposion* or 'Symposium of Sculptors', as it became known, was the brainchild of Karl Prantl, a native of this region who had studied painting at the Academy of Fine Arts in Vienna before turning his attention to sculpture, producing work almost exclusively in stone. A year earlier Prantl had managed to convince the Burgenland government to commission him to create an artwork at the crossing with Hungary. The resulting, oversized sculpture, simply titled *Grenzstein* ('Boundary Stone'), would act not just as a landmark of artistic resistance against the political and military division of this landscape, but as a symbol of permeability along an otherwise impenetrable Iron Curtain.[13]

Over the next five summers, these symposia quickly gained momentum, both artistically – with Prantl, soon aided by the psychologist Friedrich Czagan and the sculptor Heinrich Deutsch, pulling in an ever more varied cast of characters – and in terms of their political and international ambitions. There was even a plan to place stone sculptures produced during the symposia along other borders across Europe.[14] Although this never happened, the idea of a wider dissemination remained central, with the hope that participants would return home and initiate their own collaborative events. And indeed, soon enough these *Bildhauersymposia* generated a number of worldwide successors, not least the 'symposium' held in the Platz der Republik in West Berlin in October 1961. Organised by five local artists, including the sculptor and graphic artist Erich Reischke, this was a protest action against the division of the city. In the end, it attracted many participants and onlookers, and was even assisted by the US military, who helped crane in a number of large boulder sculptures while the Russians watched in bewilderment and wonder from the other side of the Wall.[15]

In the summer of 1964 Hollein was in Burgenland, even if it is not entirely clear if this was prompted by a direct invitation from Prantl to take part in that year's St Margarethen Bildhauersymposion, or whether he was simply a passing observer. But what we do know is that by then he was becoming established on the Viennese art and architectural scene. The year before, alongside his successes at the Galerie St Stephan, he had initiated his 'Transformations' series of artworks, in which a photograph of an everyday object is scaled up and collaged into a barren landscape. The first of these featured an old railway boxcar, another favourite image from the series he had exhibited with Pichler in 'Architektur: Work in Progress', which was then 'transformed' into an incredibly charged proposal for a Monument to the Victims of the Holocaust. Here at last, it seems, Hollein had found his most appropriate medium – one which provided an effective channel for all of his irreverence and humour while also delivering something incredibly strong graphically. These images also, not unimportantly, allowed him to parody Le Corbusier's monumentalising of cars, planes and boats as a new architecture, by transforming equivalent technologies into their own kind of anti-monument.

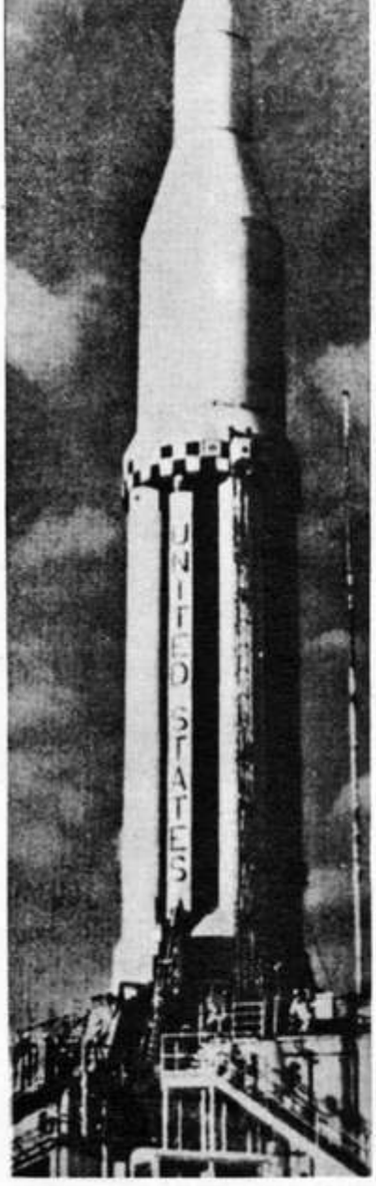


Hans Hollein, pencil sketch of a modernist villa, 1960
© Nachlass Hans Hollein

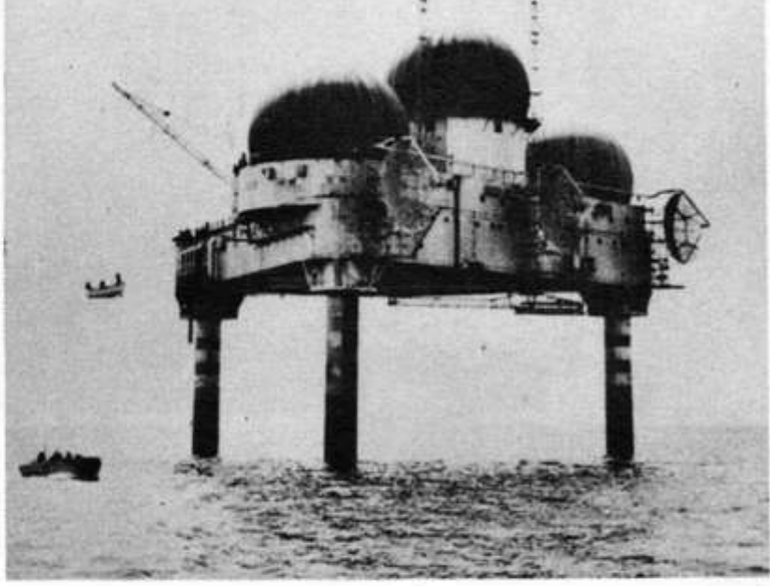
And so in 1964, while Prantl's sculptors were in the quarry of St Margarethen, chipping away at the local stone, Hollein used his visit to Austria's border zone to continue his highly polemical series of collages. The base images for these composite drawings were generated by his own black-and-white photographs of the surrounding countryside – the summer cornfields, lanes and woodland copses of Burgenland.[16] Onto four resulting prints of this conjoined landscape he then placed a cut-out of the *USS Enterprise* and mounted the whole ensemble onto a single sheet of plywood exactly 1m long. An iconic drawing had been made. But at the same time Hollein produced three other images of the same project (because *Aircraft Carrier City in Landscape* is actually composed of four separate drawings): a more zoomed-in perspective of the same *USS Enterprise* photograph mounted onto a different section of the hillside; an aerial perspective from higher on the plateau that shows another view of the aircraft carrier looking down onto its flight deck; and a more graphic piece that collages a technical axonometric cut-away section of the aircraft carrier into the line art of a more abstract landscape.[17] Hollein must have felt a certain satisfaction with the resulting images, because he then used the same base photographs for two further collages – *High-rise Building, Sparkplug* and *High-rise Building, Theodolite* – which projected their own everyday objects as more vertical monuments in the same rolling landscape.

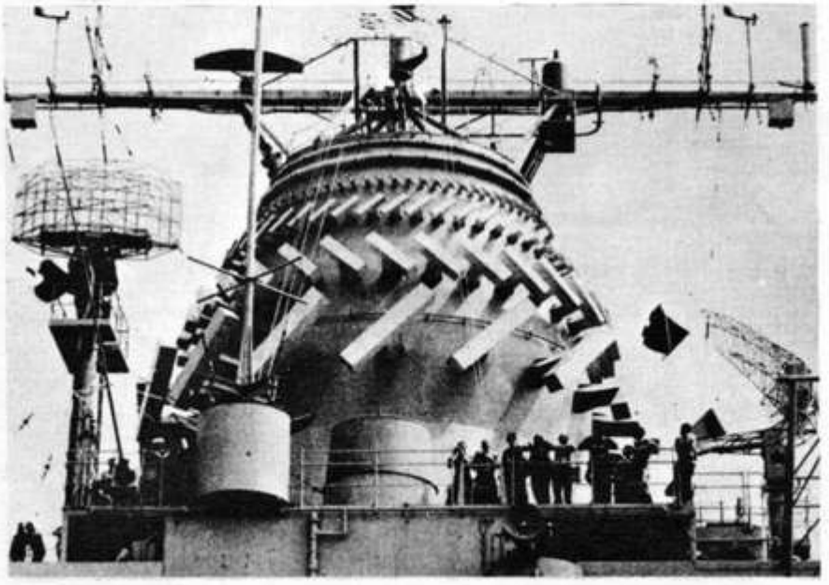
When Hollein first presented these works many colleagues and critics, then as now, typically focused their gaze on the hulking aircraft carrier. Among them was Hollein's collaborator at *Bau*, Günther Feuerstein, who has argued, more recently, that the aircraft carrier is the reincarnation of a baroque monastery – a self-sufficient, isolated, defensive, all-male living unit.[18] The Catholicism of this analogy is further supported by Hollein's close affinity with the Galerie St Stephan, and its founder Monsignore Mauer, who would officiate at Hollein's wedding to his wife Helene Jennewein, and more generally by the fact that in the 1960s, when these works were produced, nearly 90 per cent of Austrians considered themselves Catholic, and the country's culture as a whole was steeped in its rituals and practices.

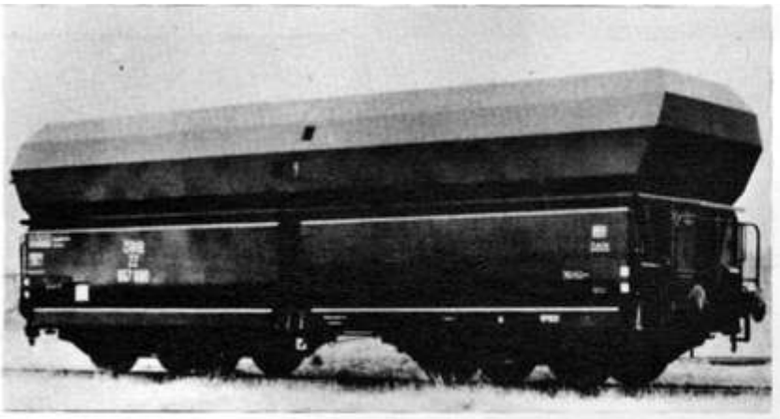
But Hollein himself seems to have played against this tendency to focus on the terrifying warship, because within the image there is actually another inversion. What initially seems like the most bucolic of landscapes is actually

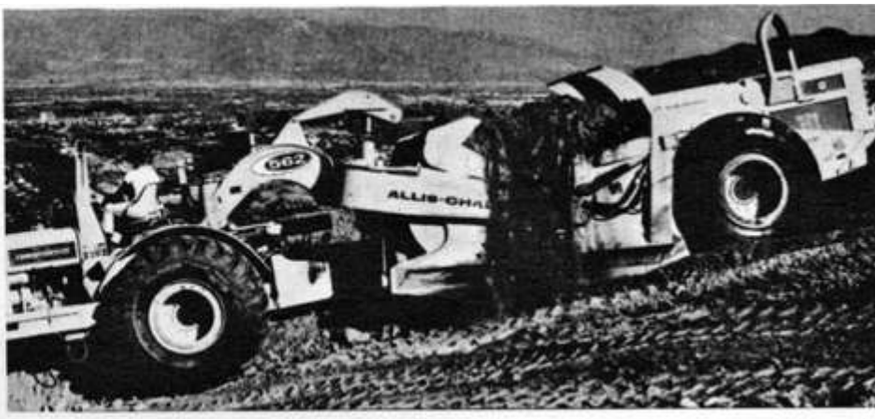

UNITED STATES







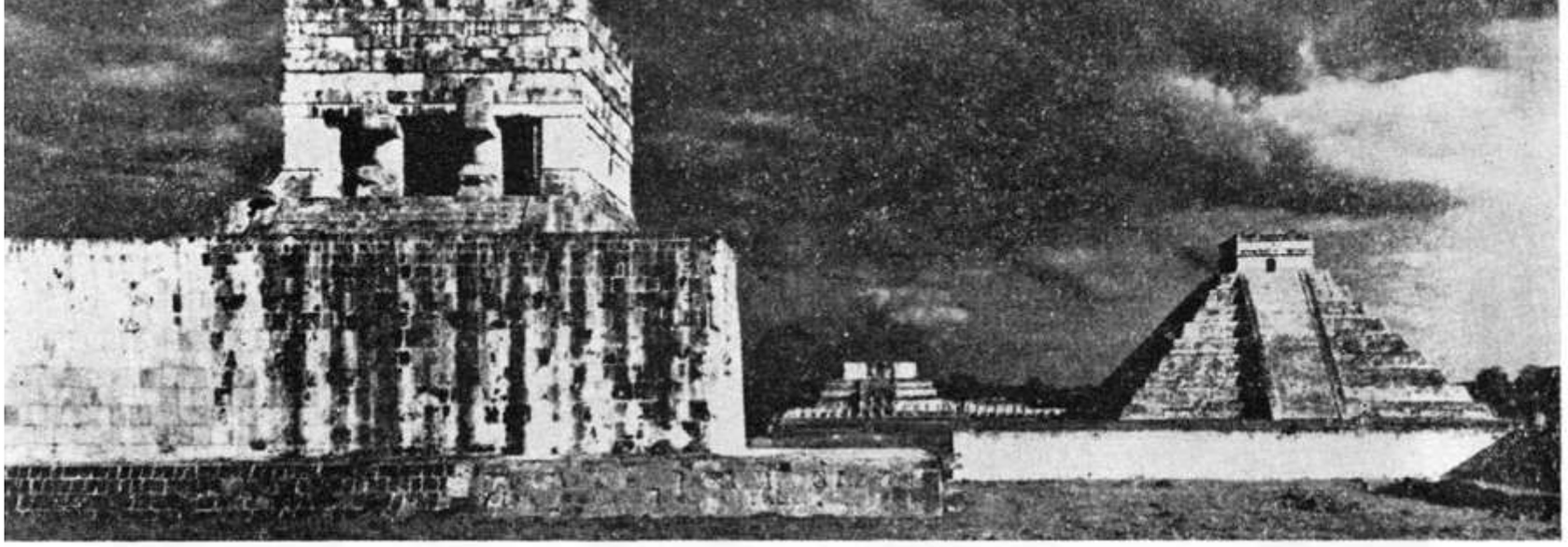


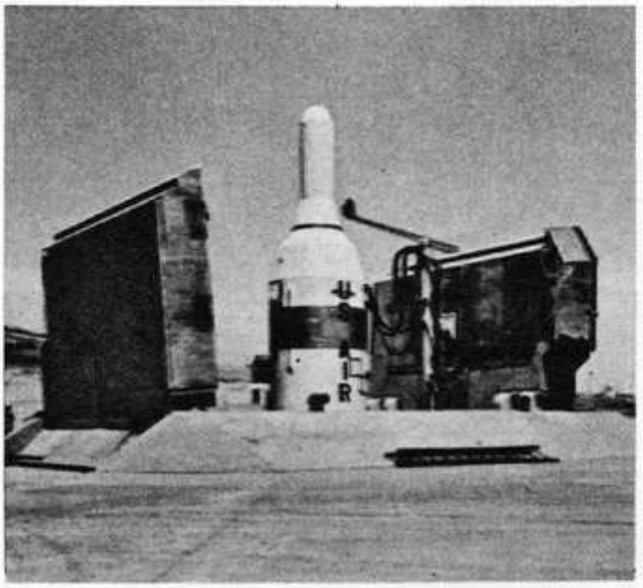

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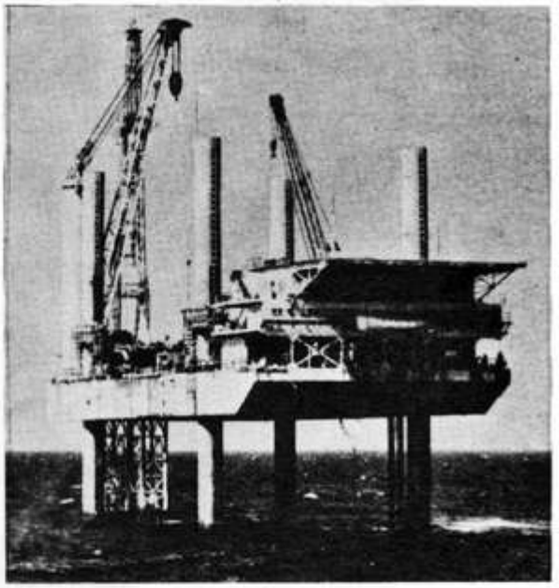




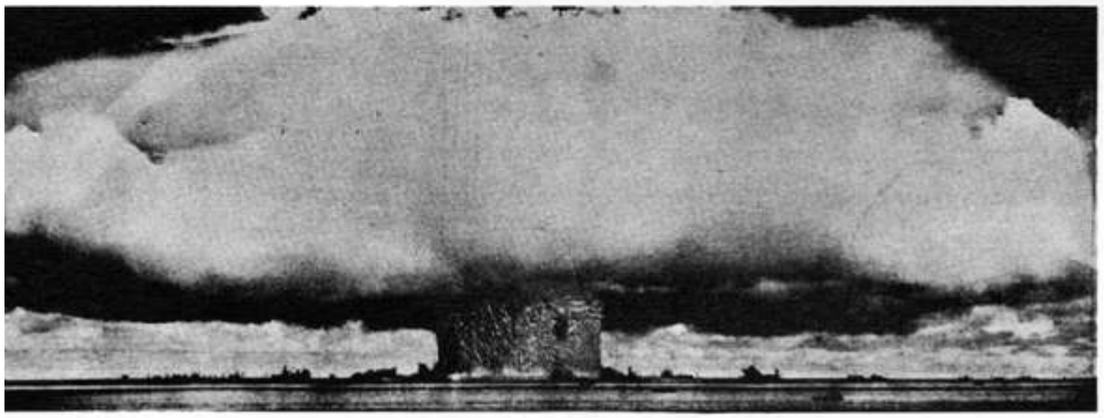


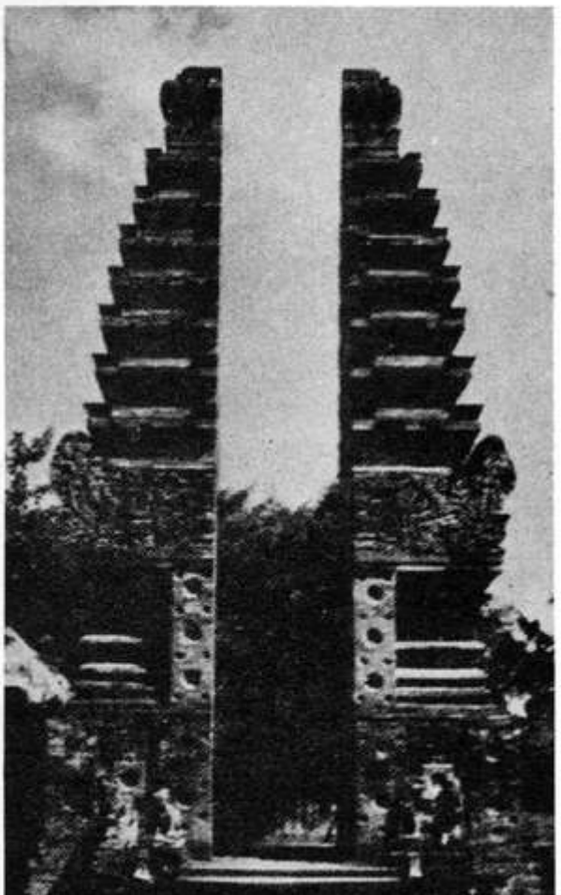


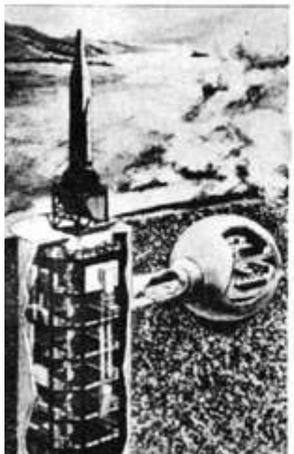


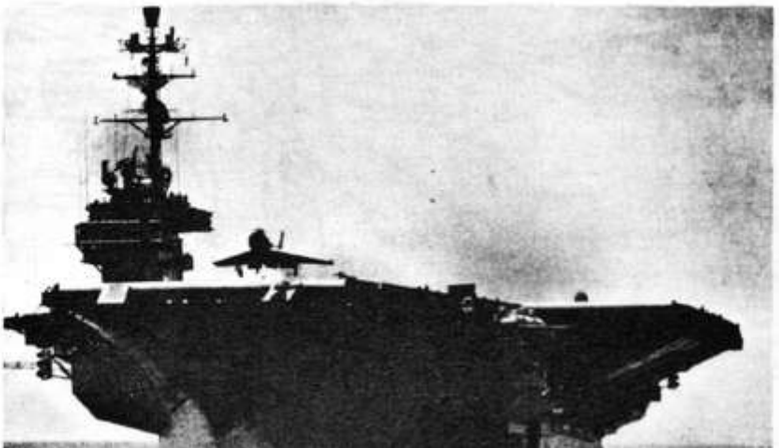


Hans Hollein,
unused page layout for
Bau magazine, 1965
© Nachlass Hans Hollein









an illusion, for Hollein very deliberately photographed this section of countryside along the demilitarised zone that ran immediately parallel to the east–west border – a stretch of landscape pockmarked with hundreds of landmines. The meadows, in this sense, are not benign but malignant. And it is the aircraft carrier that is the victim, marooned on its hillside and robbed of its mobility. Indeed, as evidence of his enduring fascination with his homeland (Austria, a landlocked country, becomes his real ship, with no sea to sail away on) Hollein followed *Aircraft Carrier City in Landscape* with a series of site photographs around St Margarethen that dispensed with buildings or collaged objects altogether, declaring the forms of the land itself to be the only necessary architectural statement. He then speculated on this further in 1965 in the first issue of the relaunched *Bau* magazine:

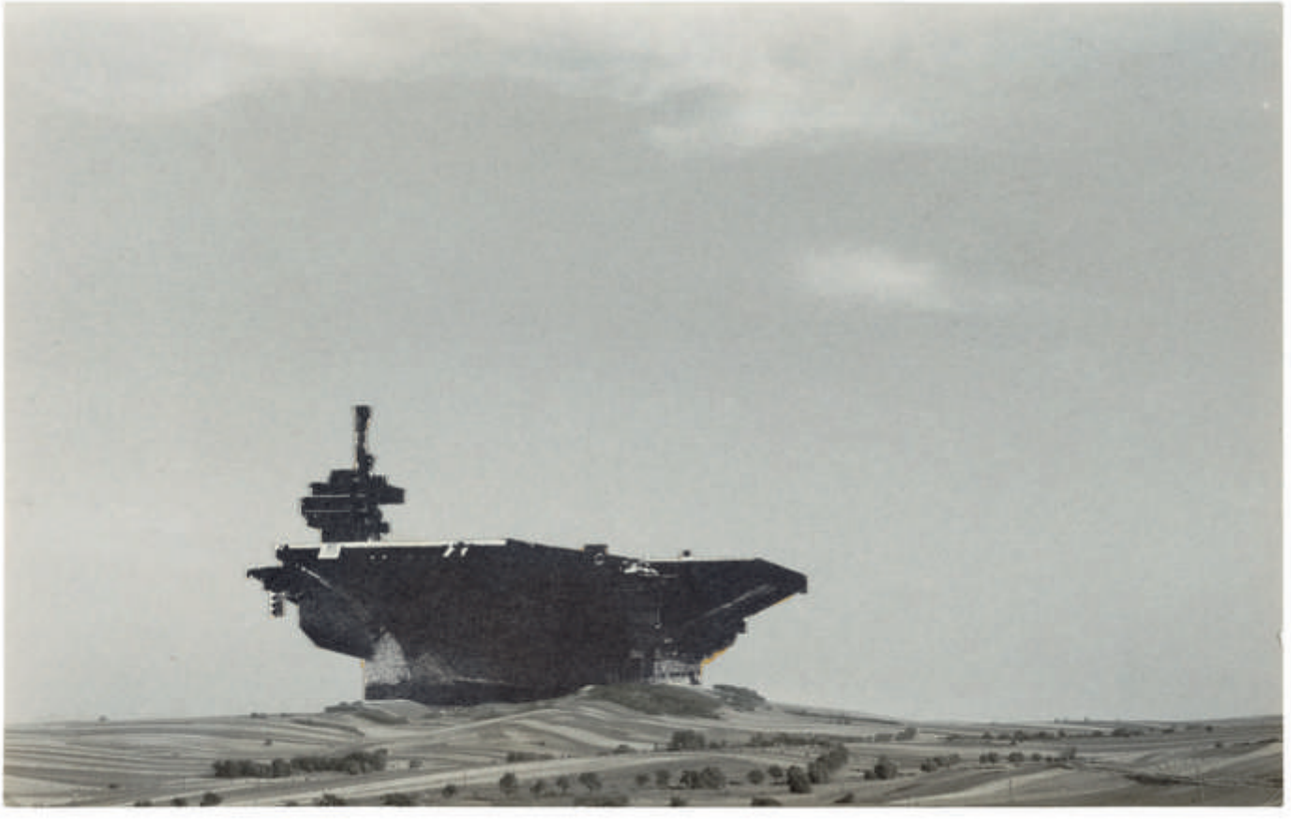
We also dig into the earth. Everything that does not have to be on the surface can disappear from there in order to preserve the precious free landscape for mankind. Thus we approach the time of the perfect environment (closed environments), above ground, underground, above water and underwater, as they are already anticipated by polar stations, artificial islands in the sea, aircraft carriers, NORAD command centres, etc – self-sufficient units which lead to the station, the city in space. (Here, in this perfect manmade environment, lies the great opportunity for architecture, to show what it can and should be doing – when no changing sky, no sun, no changing colours of the seasons throw their forgiving shadows over our errors.)[19]



Hans Hollein,
Burgenland landscape, 1964
© Nachlass Hans Hollein

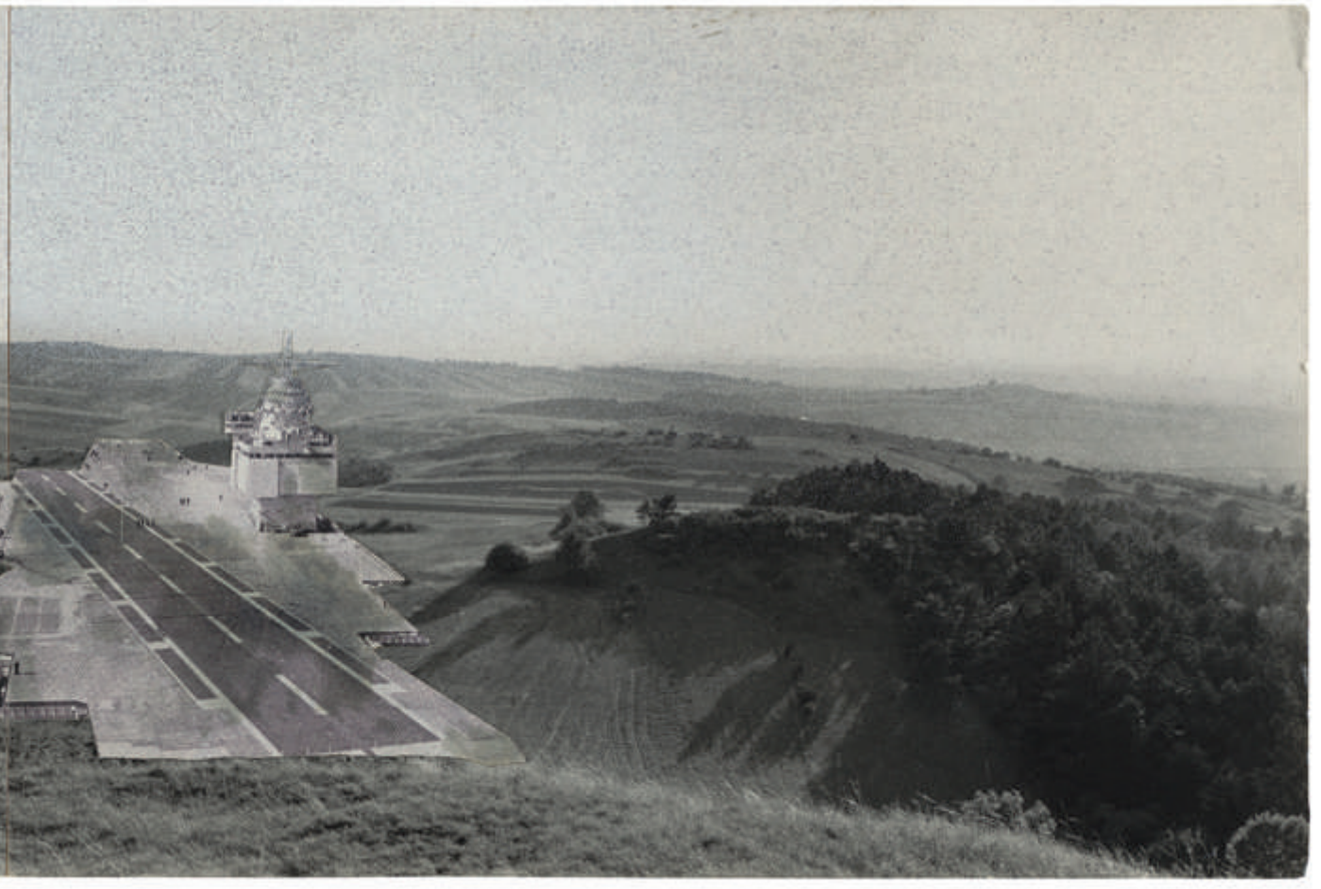
Of course, the other perfect manmade environment, devoid of any sky, sun or shadow, where architecture shows what it should be doing, is the museum archive, and it is here, appropriately enough, that *Aircraft Carrier City in Landscape* ultimately resides. For in 1967, just three years after Hollein had first produced these collages, Arthur Drexler, then director of the architecture department at the Museum of Modern Art in New York, and almost certainly acting on the prompts of Philip Johnson, bought the full set of four drawings, together with a number of others from the 'Transformations' series. The ship therefore came full-circle, docking once again in Manhattan, but this time not floundering, only flourishing, and in its very immovability and groundedness it remains a symbol not of some future, technocratic urbanity, but of the architecture we always knew existed.

1. The handbook given to the Commonwealth Fund Fellows in 1958, including Hans Hollein, explained the organisation: 'The Commonwealth Fund is an American Philanthropic foundation endowed by the late Mrs Stephen V Harkness and the late Mr and Mrs Edward S Harkness. It was founded "to do something for the welfare of mankind"... In maintaining international fellowships in all fields of study within this broad programme of philanthropic interests, the directors of the fund are impelled by a belief in the value of international opportunities for education and travel, and by a conviction that mutual amenity and understanding between countries will thereby be promoted".' Handbook for Harkness Fellows, 1958, 'Division of International Fellowships, Handbook for Harkness Fellows, 2 March 1951 – 13 January 1969', folder 1014, box 85, series 13.9, Division of Publications (Sleepy Hollow, NY: Rockefeller Archive Centre–RAC), p 1.
2. Oral history with Denise Scott Brown, 25 October 1990 – 9 November 1991, by Peter Reed for the Archives of American Art at the offices of Venturi, Scott Brown & Associates, Manayunk, Philadelphia, PA, USA, www.aaa.si.edu/collections/interviews/oral-history-interview-denise-scott-brown-13059#transcript.
3. *SS Flandre*, brochure of the French Line, Compagnie Générale Transatlantique, 1951.
4. Report by Hans Hollein in completion of the Harkness Fellowship, 15 November 1960, from 'Hollein, Hans, 1958 – Germany, Architecture', folder 777, box 96, series 20.2, Harkness Fellowships (Sleepy Hollow, NY: Rockefeller Archive Centre–RAC).
5. Hans Hollein, 'Plastic Space', deposited at the University Library at Berkeley in July 1960 as a partial requirement for his master of architecture, College of Environmental Design, University of California, Berkeley. For the full manifesto see the Hans Hollein website, www.hollein.com/ger/Schriften/Texte/Plastic-Space.
6. Hans Hollein, 1960, reprinted in the catalogue for the exhibition 'Hollein' at the Feigen Gallery, Chicago, Illinois, 22–28 June 1969, np.
7. Private archive of Hans Hollein, Prinz-Eugen-Straße, Vienna.
8. *Ibid*.
9. Hans Hollein, 'Alles ist Architektur', *Bau* 1/2 (1968).
10. Exhibition catalogue to 'Hans Hollein, Walter Pichler – Architektur: Work in Progress', Galerie St Stephan, Vienna, May 1963.
11. 'Loses Blatt mit der Seitennummerierung 118', from the private archive of Hans Hollein, Prinz-Eugen-Straße. Translation by the author. The technology and self-sufficiency of the *USS Enterprise* later made it the model for the spacecraft in the TV series *Star Trek*, which went on air in 1966 and borrowed the same name for its own fictitious starship.
12. Alois Vogel, 'Zehn Jahre Bildhauersymposium', *Arbeiterzeitung*, 26 February 1969, p 8. See also Jutta Birgit Wortmann, *Bildhauersymposien: Entstehung – Entwicklung – Wandlung. Dargestellt an ausgewählten Beispielen und ergänzt durch Gespräche mit Beteiligten* (Frankfurt am Main: Europäischer Verlag der Wissenschaften, 2006), p 44.
13. Much later, on 19 August 1989, another important event happened at this same border crossing – The Pan European Picnic, during which the Hungarian minister of state and reformer Imre Pozsgay invited Austrian and Hungarian civilians to come and sit at a bonfire together and eat roast pork while contemplating the idea of a Europe without frontiers. As a symbolic gesture the border gate was opened for a two-hour period during this picnic. The event was for Austrians, but a large group of East German tourists holidaying the other side of the border somehow also received invites. When the time came to open the border, many young men, women and families appeared, carrying backpacks filled with their most essential items. They walked in complete silence to the gate, pressing against it until it broke, and then flooded across. The Hungarian border guard in charge commanded his men not to shoot but to look the other way. Almost 1,000 East Germans escaped into Austria that day which acted as the spur, less than a month later, for Hungary to open all of its borders to Austria, which in turn set in motion the fall of the Iron Curtain. See Nicholas Brautlecht, 'Picknick für die Freiheit', Goethe-Institut Australien website.
14. Jutta Birgit Wortmann, *Bildhauersymposien: Entstehung – Entwicklung – Wandlung. Dargestellt an ausgewählten Beispielen und ergänzt durch Gespräche mit Beteiligten* (Frankfurt am Main: Europäischer Verlag der Wissenschaften, 2006), p 53.
15. *Ibid*, pp 136–38.
16. I would like to thank Erich Pedevilla for pointing this out to me in a conversation from 2014.
17. Hans Hollein would also go on to produce a reprint edition of the most celebrated aircraft carrier image, smaller in size and distinguished by its more contrasted tones. One of these prints can be found in the collection of the artist Claes Oldenburg, whom Hollein met through the 1967 'Macrostructure' exhibition at the Feigen Gallery in New York. In 1980, increasingly aware of the power of the image, he even made a version of it for the Italian homeware company Alessi, manufacturing a silver tray in the shape of the aircraft carrier flight deck, and coffee pots and milk jugs as its control towers.
18. Günther Feuerstein, 'L'Architecture Autre – The Other Architecture', lecture, Darwin Building, University College London, 21 January 2009.
19. Hans Hollein, 'Zukunft der Architektur', *Bau* 1 (1965), p 11.

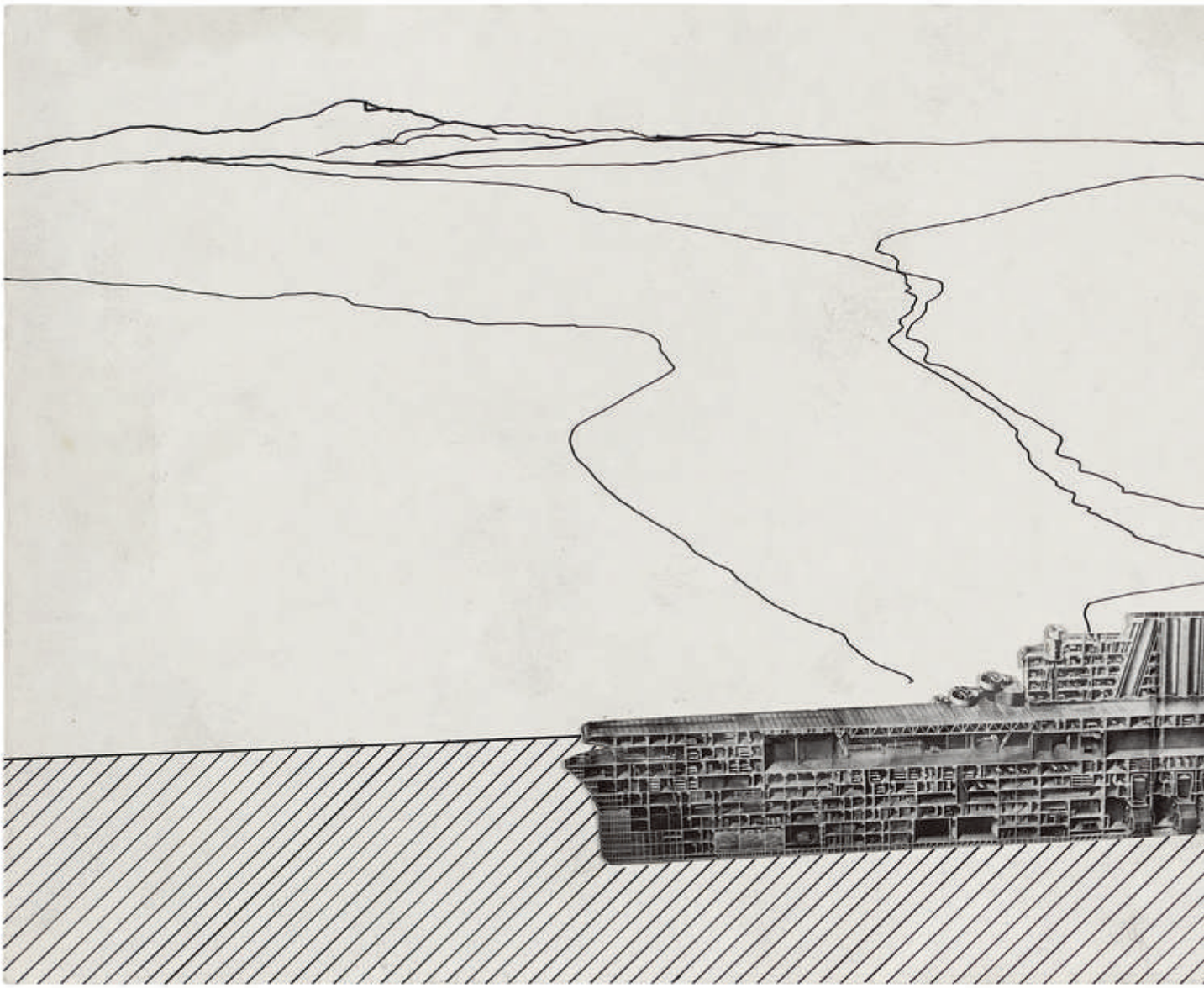


Hans Hollein, *Aircraft Carrier City in Landscape*,
perspective, 1964 © Hans Hollein 2016 /
MOMA, New York / Scala, Florence





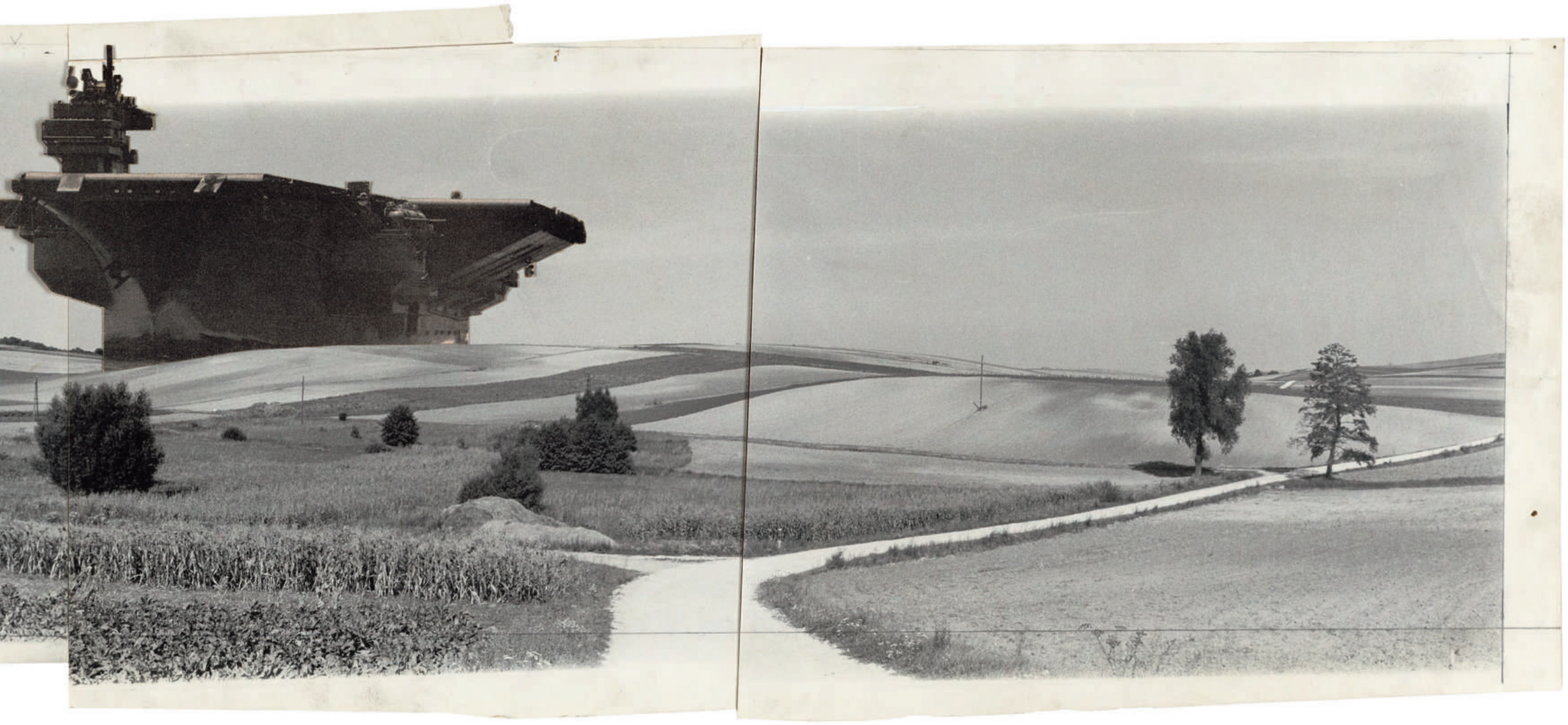
Hans Hollein, *Aircraft Carrier City in Landscape*,
aerial perspective, 1964 © Hans Hollein 2016 /
MOMA, New York / Scala, Florence



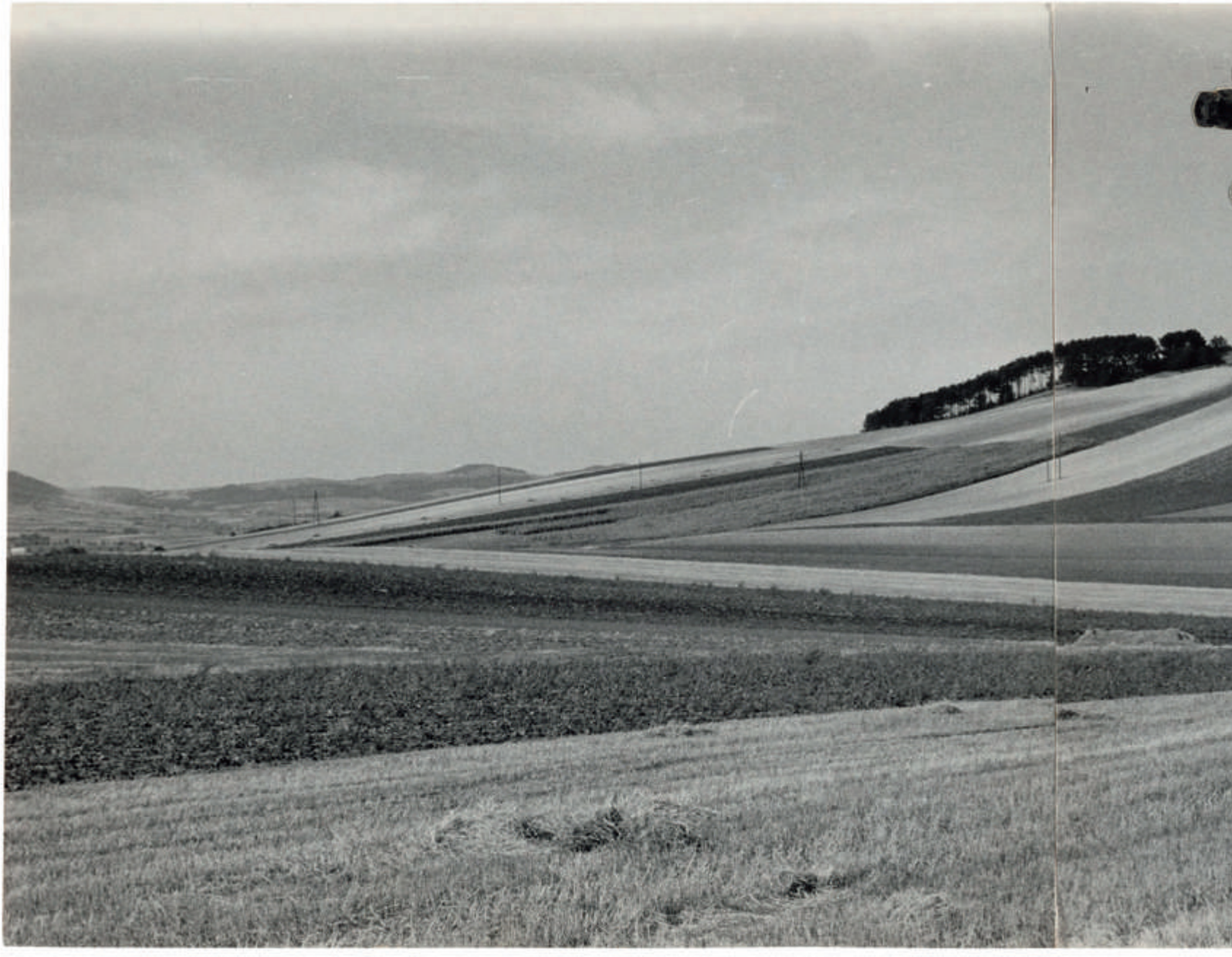


Hans Hollein, *Aircraft Carrier City in Landscape*,
section, 1964 © Hans Hollein 2016 /
MOMA, New York / Scala, Florence





Hans Hollein, *Aircraft Carrier City in Landscape*, exterior perspective, 1964 © Hans Hollein 2016 / MOMA, New York / Scala, Florence





Hans Hollein, *High-rise Building, Theodolite*, 1964 © Hans Hollein 2016 / MOMA, New York / Scala, Florence



Hans Hollein, *High-rise Building, Sparkplug*, 1964 © Hans Hollein 2016 / MOMA, New York / Scala, Florence

Counter, Original, Spare, Strange

Nicholas Olsberg



John Piper, *Milton Ernest*,
from *Victorian Dream Palaces*, 1977
© Tate, London, 2016

In March 1961, a century after the British architect William Butterfield began the first of ten successive additions to Rugby School and its chapel, the school's debating society took up the motion that 'This House Wishes that Butterfield had Designed More of the School Buildings'. Among those in opposition was one person who regretted the misfortune that works so unsuited to their purpose should be so durable and permanent. A respected local architect made the common complaint that by the time Butterfield undertook his major works at Rugby (between 1867 and 1885) his early creative genius had burned out, so he had repeated the same building with only a little variation in its dressing. The headmaster echoed another commonplace critique, offering that Butterfield was simply a church architect inept in his handling of domestic buildings. But John Summerson spoke persuasively in favour, describing the architect as an 'unfathomable individualist' whose 'towering and deeply expressive' buildings were portraits of the unique character of his age, in their earnestness, efficiency and grandeur. Then, somewhat rashly, he closed with the shockingly inflammatory words 'a magnificent Victorian monument', thereby ensuring the motion was roundly defeated, by 75 votes to 45.

Don't you dote upon the Middle Ages, Mr Carker?... Such charming times!... So full of faith! So vigorous and forcible! So picturesque! So perfectly removed from commonplace! Oh dear! If they would only leave us a little more of the poetry of existence in these terrible days!
Charles Dickens,
Dombey and Son, 1848

It has been a long time since we have scorned the idea of the 'monument', or have been offended by 'magnificence', or equated the idea of the 'Victorian' with a dark, sexless, moralistic and forbidding world. Where once our view of its vaunted probity might have been filtered through Lytton Strachey's characterisation of the false sincerity of its illustrious men, or Steven Marcus's 1960s portrayal of a society assiduously concealing a life of vice, our present understanding, or misunderstanding, of the Victorian age is more complex, subtle and inflected. We now look upon that near-century as varied and changeable. Yet Butterfield – the most essential, consistent and original of its major architects – remains a contentious monolith. With one or two clichéd images in mind, his work is still debated in much the same terms as it was by the Rugby schoolboys in 1961. He seems frozen mid-nineteenth century, standing for diapered brick churches, for a strange contradiction between the garish and the ascetic, for the first flowering of Anglo-Catholicism and for a sort of insular, anti-intellectual brand of Englishness. His work is still seen as something freakish and eccentric that always – even to his greatest admirer, the odd and errant poet Gerard Manley Hopkins – 'errs on the side of oddness'.

In fact, Butterfield worked largely in stone, rather than in brick. He travelled on the Continent for six weeks every other year, studying every early fresco in sight and spending days measuring and drawing churches and their details – that is, when he wasn't taking tutorials in Italian irregular verbs. All the same, his secular and domestic works outnumber his ecclesiastical spaces. And far from burning out by the time of his work at Rugby, the 1870s and early 1880s were the productive height of his career. Tiny village schools, minor estate buildings, modest parsonages, quiet collegiate residences and humble cottages run alongside his monumental works throughout his life. Above all, his old-fashioned high-church principles were grounded not in what he scorned as the false emphasis on private devotions, on representational sacred art or on 'feelings' and 'fancy rituals' revived by the Anglo-Catholics of the 1850s, but in the idea of a national congregation of all estates joining together in equality to rehearse with precision the ancient English rites of common worship. His was an apostolic and apocalyptic vision of Christianity, where the founding of the church was the central historical event, with faith in its creed and authority being the obligation of the present, and the coming judgement the promise of the future. In this scheme of things, the English church was the true bearer of his nation's history and the principal guardian of a sober, distinctive and harmonious English society, while its parishes and landed patrons, its schools, colleges, charities and hospitals were the sole agents of a moral agenda for national education and 'social improvement'. All of this was clearly expressed in Butterfield's scrupulous obedience to ancient rubrics relating to the pattern, symbols and performance of the liturgy in the plans of his churches, in the adherence to precedent and creed that governed his approach to their decoration, and in the absolute denial of all earthly hierarchies that he wrought into their spatial sequence, their entry points and their progressions of light, so that only the boundaries between the worldly and the divine were evident. But it appears just as emphatically in the apparently secular aspects of his work, not least its extraordinary economy. Everything is intended as the visible expression and instrument of a particular sense of England, to be both preserved and advanced by the English church and its allied institutions.

Butterfield's is in every sense a missionary architecture. He calibrates the placement and proportions of bell tower, porch and entry gate to landmark the parish church as exactly and emphatically as possible, varying each element to meet the different scales and order of town, suburb or village. His charitable homes, seminaries, schools, hospitals and colleges all carry into modern language, often to extraordinary height and scale, the syntactic odour of the medieval monastery and lay communities – a language enriched through his lifelong work at the hostels of St Nicholas on Salisbury Close and St Cross in Winchester. That medieval vernacular, often at its stoniest, most archaic and English, is just as potent in his cottage rows, his little parish and national schools, his schoolmaster's houses and village parsonages, even his great country house at Milton Ernest Hall. All are planned to a moral scheme of domestic life or childhood experience, incisively efficient, economical and modern. But inscribed in the landscape with a deep feeling of permanence, they echo with the distant strains of continuity.

As for magnificence and gaudiness, most is not of Butterfield's making. Unlike his contemporaries, writes Henry-Russell Hitchock, Butterfield was a pragmatist. He refused to fly buttresses or lace vaults that bore no relation to structure. His buildings feature no carved capitals, no terracotta reliefs and no gargoyles. In an expansive age he left room for accretion, either by avoiding the overweening symmetries that might prevent it or by planning his designs in phases. And while Butterfield's plans were dictated by liturgy, they took shape through his adept deployment of modern technologies. In an age of steam and smoke, he welcomed ornament manufactured in tile, iron or glass. Rather than applying colour he built it into the fabric of his work. He designed gas lights for his churches, invented simple beam systems to hold up a great roof, measured the

air flow to specify a flue, gauged the efficient height of a chimney, worked out hygienic drainage for a sink in a hospital and built into his walls at Rugby a safe niche system for scientific experiments. Above all, he matched design and material to cost, availability, timing and the builder's skills.

Only ten years after that debate at Rugby, Paul Thompson took Summerson – and Nikolaus Pevsner – to task for the way they had tried to rehabilitate Butterfield with their rather backhanded praise of 'ugliness' and, through his own exhaustive catalogue and analysis of Butterfield's work, laid the foundation for a less glib and reflexive appreciation of his genius. With this knowledge in hand, then, why do we continue to look at Butterfield as Norman Shaw did – as a lone idiosyncratic artist going up an unfamiliar inlet 'on a boat of his own'? As early as 1951, Pevsner himself had ventured two reasons for our inability to 'assess values' in high Victorian architecture, or to look at it with a discriminating eye: 'lack of knowledge and lack of accepted criteria'. The mistakes we still make no longer arise for want of available knowledge, but the curious absence of criteria remains.

At least two almost accidental obstacles stand in the way of a more generous, informed and open reading of Butterfield and his work. One is Balliol College Chapel (1857), a much-derided and conspicuous attempt to follow Ruskin's recommendation to build in bands of highly finished, highly coloured stone. (This is perhaps the only building where Butterfield strays so far from his usual precedents as to reach a kind of exotic territory.) The second is the too-famous London church of All Saints, Margaret Street (1850–59), intended as the beacon of the Ecclesiological Society and extravagantly funded by members and the imperious political patron Beresford Hope. The interiors were flamboyantly decorated in an attempt to revive the church fresco, first in a figurative and narrative manner that Butterfield never approved and later in more egregious redecorations of its walls. Though he continued to love the asymmetry of the massing of All Saints and its constructive details – as evidenced by the drawings that hung forever after behind his desk – and supplied new instruments and furniture whenever asked, Butterfield spent most of his life avoiding such showy rituals and gaudy scenes.

The reasons for eschewing such ostentation are not, however, explained in any journal or notebook. Unlike most illustrious Victorians, Butterfield left no volume of recollections, nor did friends and family choose to publish a traditional memoir. His drawings and papers are scattered. Notoriously reclusive and secretive, he gave no lectures, refused to attend his RIBA gold medal ceremony and never, from 1844 onwards, exhibited drawings at the associations. In his most productive later years he refused to approve printed illustrations of new work, not only because these black-and-white reproductions eliminated the colour that was so essential to the designs, but also because it was not in his 'disposition' to see his work presented in those forms. But while his built work covers ground in every corner of England, as well as Scotland and Ireland, New Brunswick, Melbourne, Cape Town, even Madagascar, much of it has been mangled by time. Between the Luftwaffe, developers, school modernisers and church refits, many of his finest urban works have been destroyed, demolished or totally disfigured – including six London churches and chapels, as well as major parish churches in Newbury, Leeds and Portsmouth, the SPG Offices Viollet-le-Duc so admired, and his only London convent hospital. Gaslight fumes and city fog have darkened the polychrome brickwork rather than softening it, as intended. The careful calibration of light in a number of churches is now distorted, either by intensely coloured memorial windows or the mania for adding a clerestory.

Butterfield was ruthless in his adherence to uncluttered space and lucid sequence in the planning of his churches, drawing people in through a simple gate or shelter, welcoming them in a space of wide simplicity under a high-beamed roof, seating them communally and low, and then focusing all their attention on a very gradually raised square-ended sanctuary, a sort of glowing treasure chest that was designed to 'speak only of heaven and of the risen and glorified'. Indeed, this relentless approach to the vista of the chancel left even his friends at the Ecclesiological society askance. But empty space, the great feature of his sacred work, is now routinely disguised by the accretion of furniture, monuments, figurative sculptures, stations of the cross, banners, screens, roods, embroideries and decoration.

But in addition to these architectural anomalies, there is a fundamental obstacle to a fair and complete understanding of this pillar of Victorian architecture, in the form of Paul Thompson's 1971 monograph itself. Though profoundly informed and exhaustive in its excavation of the corpus, the book is constructed in topical segments that scatter different elements of the life and projects across 500 pages, making it difficult to trace the arc of his career or follow the narrative of each work. Its illustrations, almost entirely black-and-white photographs, are didactic rather than evocative and include none of the colour working drawings that most truthfully – and often most seductively – present the ideas. Apart from its essential discussion of the Oxford movement and Butterfield's patronage, and a glance at his 'influence', much of the essential context is also missing. For 50 years, Butterfield was building in an era of rapidly accelerating urbanisation and social, political and technological change. To understand his work, then, we need to chart it chronologically, alongside these changes – alongside the growth and new character of the railway towns, resorts and suburbs in which much of his work was made, for example; or the disruption of inner-city suburbs (the locations of his London churches) as the merchant and professional classes moved out and the infrastructure of railways and goods distribution came in; or the effect of the great Whig church reforms and the growth of national schools, to which his parsonages and schools were essential; or the epidemics and urban distress that led him to his long study of cemeteries and funeral practice; or the efforts to develop hygienic means of rehousing the rural population, to which his cottage groups so signally contributed. There were vast changes, too, that were specific to the construction industry. The telegraph and the penny post, improved canals and express trains made it possible for an architect to take on and supervise work further afield. At the same time he no longer had to rely on local suppliers of bricks or stone, and could assign work in one city (as Butterfield did at Keble) to a builder from another (Rugby), or treat a favoured contractor, like Joseph Norris in the southwest, as a regional builder.

But as much as Butterfield exploited the advances of the steam age, his practice was deeply informed by his lifelong study of early English forms, which he used not as a source of applied motifs or as a means to produce high spectacle, but as object lessons in reducing shape, space, light and decoration to the expression of structure. In Philip Webb's words, he treated his favourite precedents as a 'logical system' for plan

Overleaf: William Butterfield, Temple Reading Room and Art Museum, Rugby School, 1878–79
© Architectural Archives, University of Pennsylvania, Gift of Holmes Perkins

Temple Reading Room

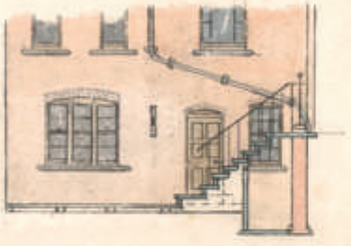
and Art Museum. RUGBY SCHOOL. No6



South Elevation.



East Elevation

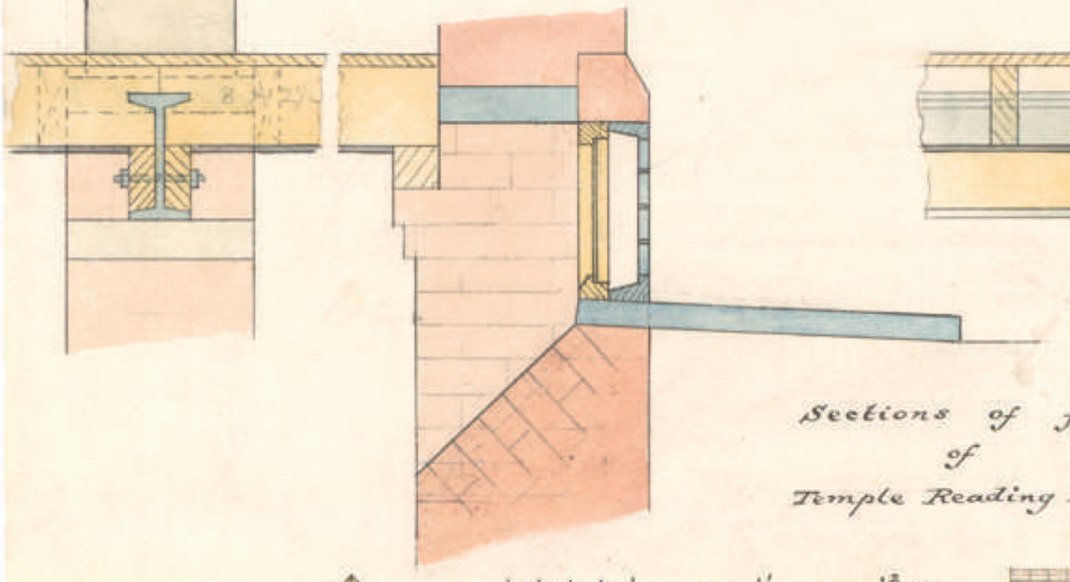


T. W. Jex-Blake

Temple Reading Room

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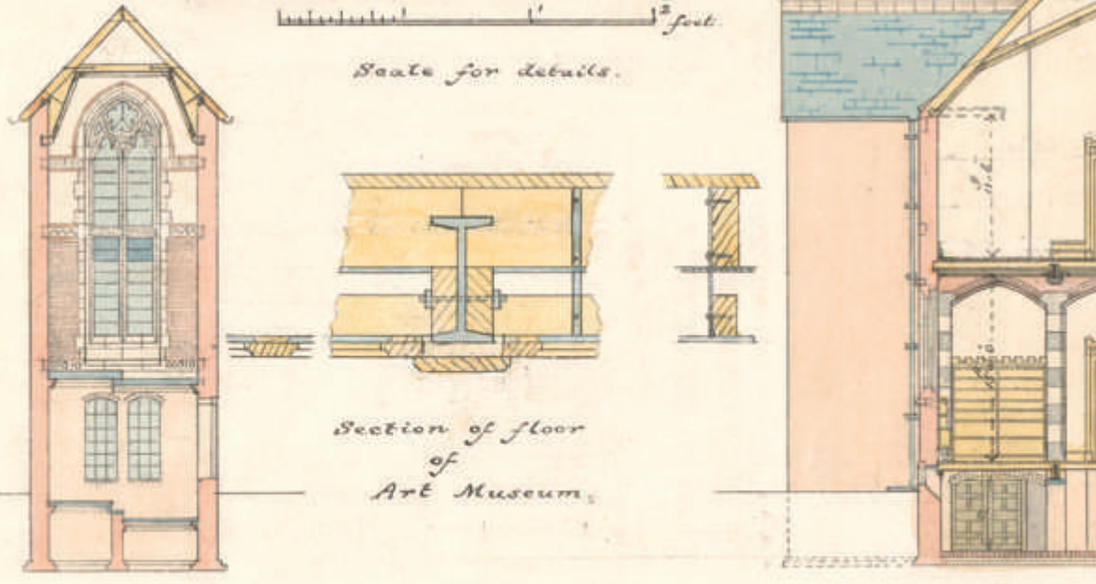
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Sections of floor
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Scale for details.

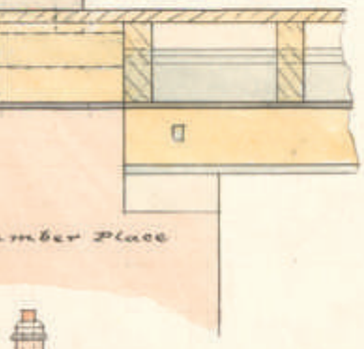


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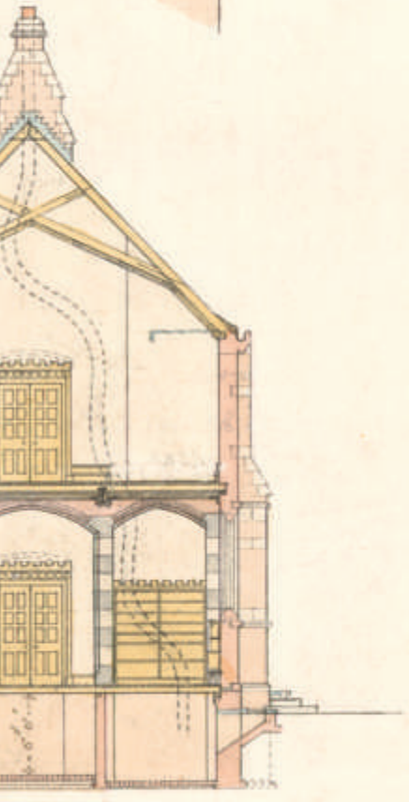
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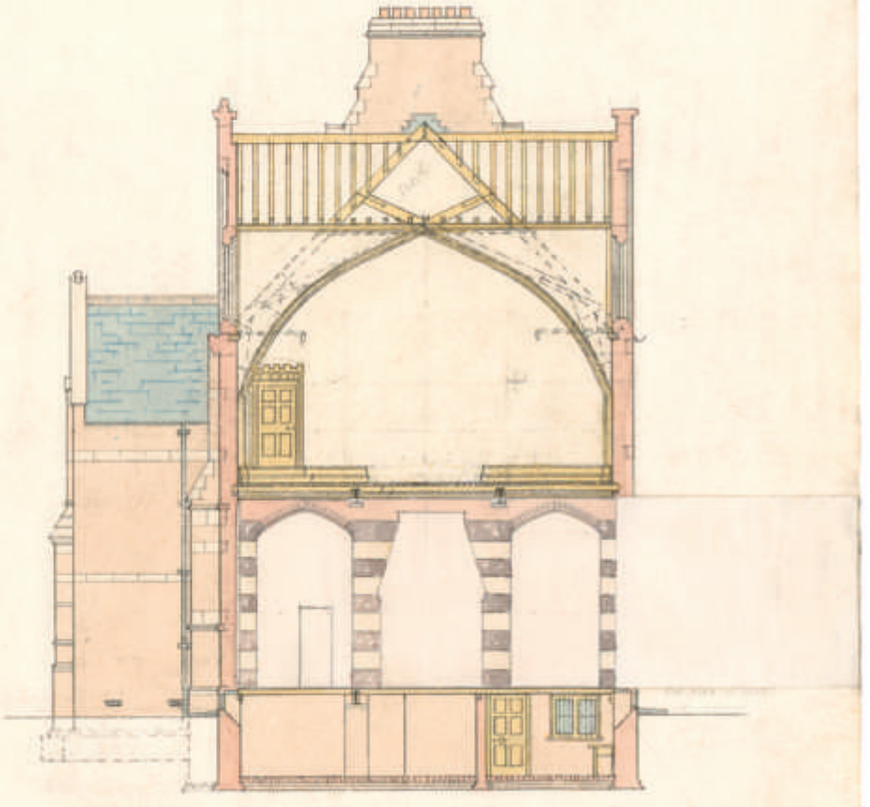
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Plan of Marble piers at A·A·



Section on line G·G·

T. W. Jex - Walker

Fred Powell & Son

50 40 30 60 feet.

and form in order to produce a coherence in a whole that no longer depended on rhyme or repetition.

It is therefore essential to resist the notion that Butterfield belongs to some generic canon of 'High Victorian Gothic' and to see instead how his practice was distinct. He lived and worked for much longer than Street, Scott, Woodyer, Teulon, Burges or Carpenter, though he started before most of them, and the scope of his work – almost certainly by choice – is markedly different and markedly more limited and less prolific. There are no municipal buildings, no competitions after the early 1840s, no commercial buildings, no railway hotels or museums. With the exception of the single great hospital in Winchester, even the churches, primary schools, grammar schools, boarding schools, Keble College, cottage rows and London row houses all come from private patrons rather than diocesan or governmental commissions. He is fully in charge of every building after the late 1840s. There must have been a clerk among his draftsmen, but he never assigned the design of details, and personally directed each work – even as far afield as Melbourne. Every building is a *gesamtkunstwerk* of his devising. Here was an architect with the boldest national and moral intentions, working in the sector of the public realm that he felt could most likely realise them, and serving an interlocking group of patrons whom he educated so assiduously to his intentions and methods that they came to regard themselves as partners in his process.

Butterfield was also not just a builder of churches and dedicated religious houses. He built for use and in answer to need. He said that he would readily agree to 'build a pig-sty, if a pig-sty were needed', and at Ardingly College farm he did just that. Nevertheless, a sense of religious purpose, and a distinctive system of ethics, underpin almost everything that he built. He designed the wards of his tuberculosis home in Axbridge to open so that the sisters' prayers in the chapel could be heard. He saw his quadrangles and courts and lodgings at Rugby, Winchester College, Merton and Keble as a kind of monastic ensemble propagating manly Christian virtues. The teacher's house attached to his model for a one-room school in the second set of *Instrumenta Ecclesiastica* is presented as the scrupulous working out of a pious and moral dwelling system; likewise, his labourers' cottages and his tradesmen's houses in Paddington. His gymnasium at Rugby reads as a sacramental space in light for the exercise of the body, and the libraries at Keble, Rugby and Lord Coleridge's house in Ottery St Mary can be read as almost sacred chambers for the exercise of the mind, housing the knowledge of the divine in nature and printed repositories of guides to right thinking. In this, as in their search for a specifically English modernity that could echo the memory of the 'better' England of the high Middle Ages, all of his buildings were directed towards a more meaningful purpose that came out of obedience to the spirit (but not the letter) of precedent and was intended to last through the ages.

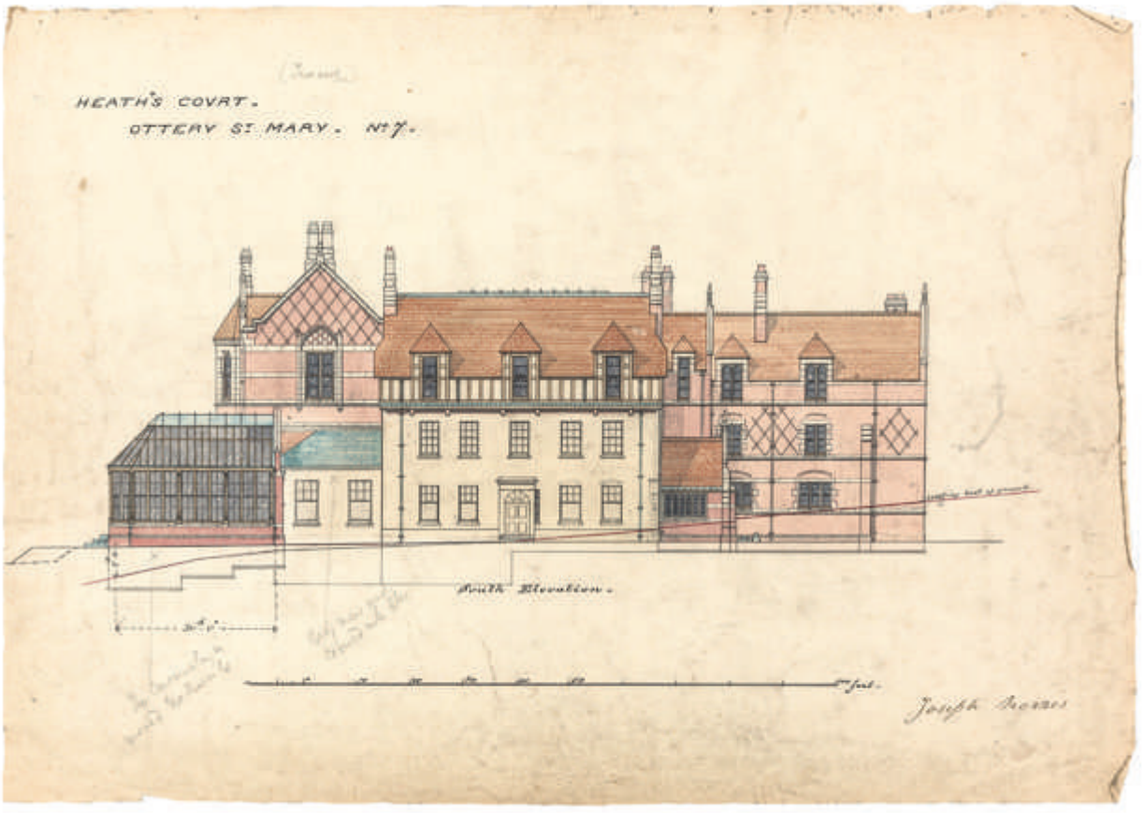
We generally have no trouble accepting that the cause of architecture is to effect a grand purpose. Frank Lloyd Wright saw the home as a design 'for the growth of the spirit', and Le Corbusier's late works speak of 'heralding a new era for humanity'. But in the case of Butterfield, the principles he invoked – and what his buildings were meant to express and advance – were grounded in concepts now far removed from our cast of mind: the notion that we are living and governed by the rubrics of Christ's kingdom and its apostolic authority, or the idea that the nation is a Christian college of all estates brought together by the church both on earth and, as he so frankly put it, 'in doom'. This was a pattern of thinking readily recognisable to his own generation but already 'quaint' by the time he died, and extraordinarily remote from our own. Thus we are bound to consider, with whatever scepticism we choose, his ideal of churchmanship, his adherence to that difficult lamp of architecture Ruskin called 'obedience', and his determination to lay aside any human construction of beauty, not as Summerson would have us believe, in favour of a wilful ugliness, but in order to discern and defer to a higher and less penetrable ideal of divine beauty – that is, to echo Gerard Manley Hopkins' well-known words, the beauty that emerges from the various, the contrary, the piebald, the multiple and the strange. Only then can we begin to reconcile the contradictions we find between the oddness, vividness, force and individualism that we see in Butterfield and his own sense of his works as simple, severe and serene.

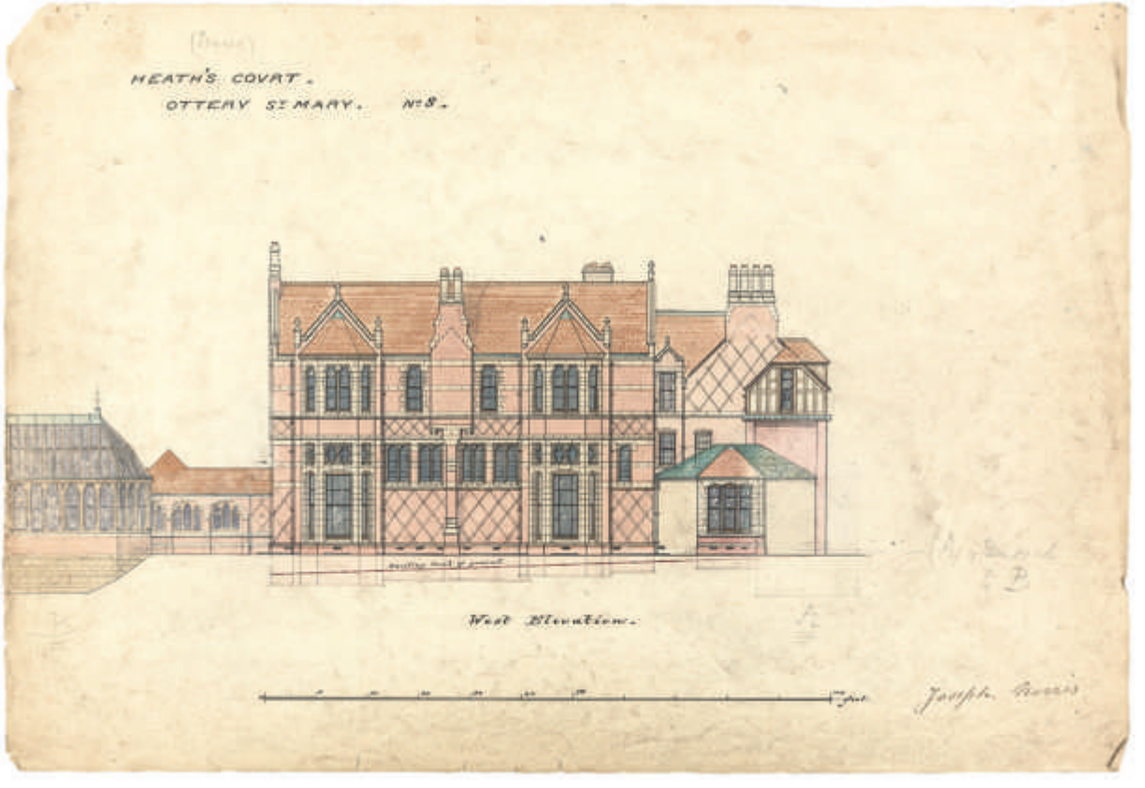
By the time Butterfield died, his welding of the Whiggish and late-Georgian concept of the moral universe to the ideal of an England reformed by re-learning the poetic and ethical lessons of the thirteenth century was already an anachronism. But for the generation that came after him – among them Hopkins, Webb, Lethaby and Norman Shaw – he was still the master. In 1900 the arts and crafts architect, teacher and designer Halsey Ricardo published the first of two memorial essays that set out to establish Butterfield as a figure of unsurpassed conscience, independence and artistry, and the sole architect whose work could stand apart from 'the general heap of litter which the nineteenth century has compiled'. Ricardo – Butterfield's friend and neighbour on Bedford Square and, before that, a pupil at Rugby – describes in almost metaphysical terms Butterfield's linking of beauty with efficiency, and fragility with strength. And he sees in the architect's work an allegory for understanding the present moment. It is as if Ricardo has become the narrator in Thomas Hardy's hymn-like ode, 'The Darkling Thrush' (published that same year, 1900). Leaning against the coppice gate in fraught contemplation of the doubts and fears ushered in by the new century, Hardy's man listens closely to an aged thrush 'fling his soul / upon the growing gloom'. For Ricardo, in turn, Butterfield's architecture is 'some blessed Hope', speaking of an ageless confidence in simple means used to attain great purpose.

Ricardo places Butterfield apart because:

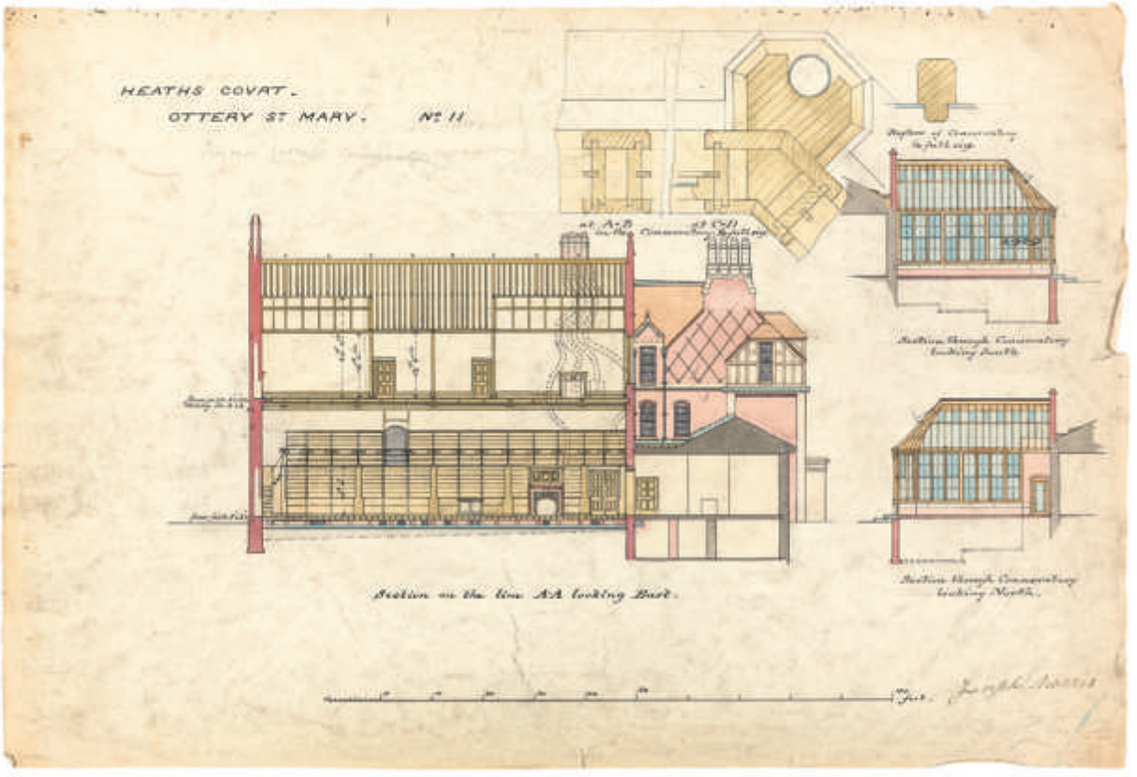
His buildings are meant for use... It is this loyalty to existing fact, this sincerity of purpose, that ... separates them, by their manliness, their straightforwardness, their quiet strength, from the buildings of other men. In his work one is conscious of a reserve of power; he reaches impressiveness and dignity without straining for them. There is mystery and romance in what he does, but got so simply and ingenuously that though the effect is supreme, the means seem quite ludicrously inadequate.

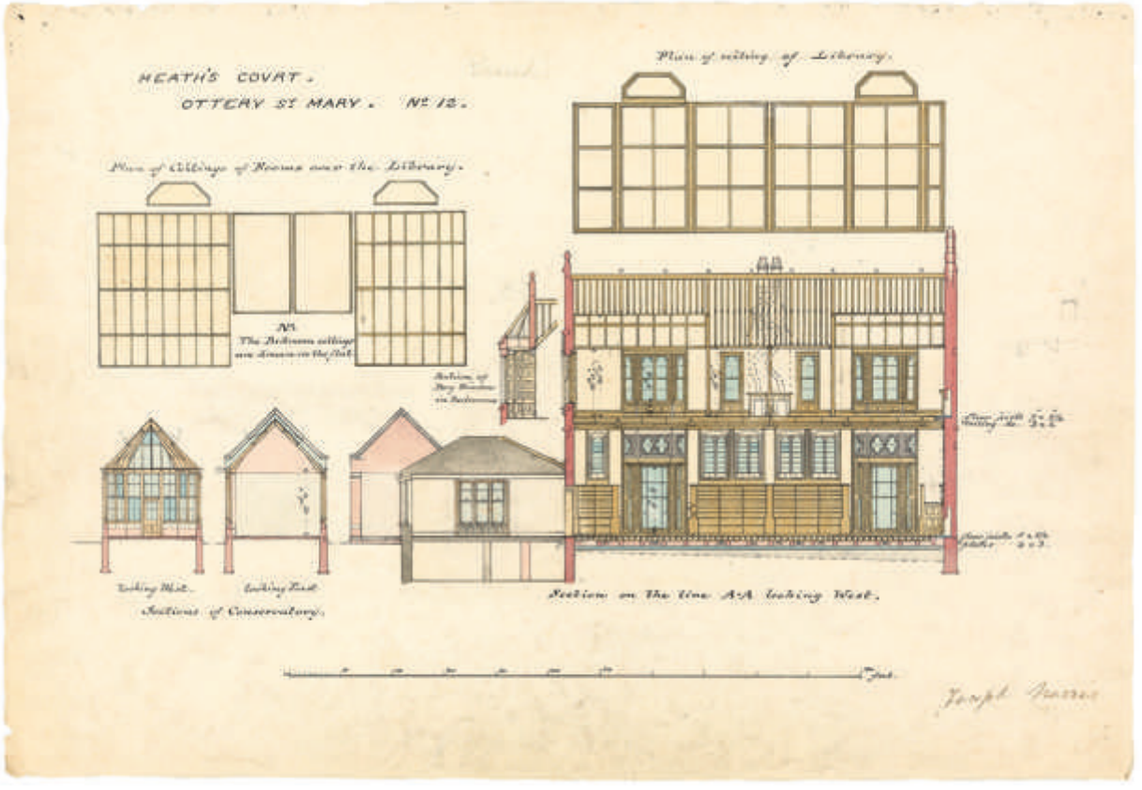
After a nod towards All Saints, Margaret Street – not for its decoration, but for its brilliant economy of plan, which carved a rising precinct from a mean rectangular lot – Ricardo carves a route from Rugby Chapel to Keble College, selecting seven other works along the way as his signal points of reference. Four of the works are secular and in brick – the new schools at Rugby, the new model Royal Hampshire Hospital at Winchester (designed and built under Florence Nightingale's guidance from 1863 to 1869); the Keble quadrangles with their great library and dining hall, started in 1867; and the Chanters' House – known as Heath's Court – in Devon, a vast expansion of the Coleridge family's country home for Butterfield's friend John Duke Coleridge in his first years as Lord Chief Justice in 1880–82. Three are later parish churches: the towering ensemble that makes





William Butterfield, Heath's Court
(Chanters' House), Ottery St Mary, Devon, 1880–82
© Drawing Matter Collections





William Butterfield, Heath's Court
(Chanters' House), Ottery St Mary, Devon, 1880–82
© Drawing Matter Collections

up the brick slum church and clergy house for St Alban the Martyr in Holborn, which Butterfield completed in 1862, much of it lost in the Blitz; the quiet symphony in stones at Babbacombe, from 1865–74; and the more vivid stone church of St Andrew's Rugby, which Butterfield started in 1876 and which, 20 years later, would be the last work he saw to completion. Ricardo adds one example of restoration, noting the meticulous fidelity in the long sequence of revisions to the medieval hospice of St Cross in Winchester, where Butterfield served without fee for 45 years, from 1853 until the end of his life.

Ricardo does not note that Butterfield, like Pugin, took the human history of St Cross as the model of a charitable community, nor that the rising and falling architectural disposition – its low, unselfconscious and easy ranges of dwellings forming the abutments and close to a strong, open, settled and unforbidding chapel – gave him the vocabulary of a loose connected ensemble for the schools, convents and college that were to come. He fails to acknowledge Butterfield's vast but scattered inventory of small country parsonages, cottage rows, farm buildings, small schools and teacher's houses, sketched and admired by Philip Webb and the genesis of much that came out of the first arts and crafts generation. Otherwise, this is a scrupulously balanced selection from the relatively small catalogue of Butterfield's major monumental works, and if we were to reconsider starting points in the line of *Pioneers of Modern Architecture*, where Butterfield surely belongs, this would still form the core of the list we would start with. These are buildings of their time and for their circumstances. Each finds proportions and economies of material and means to match their purpose and budget, and – as Ricardo expounds in detail at Rugby Chapel and at Keble – each suggests that ancient patterns and recollections could be recalled in a modern mode. We can now add to this list other late secular works marked by their decorative simplicity: St Michael's Hospital at Cheddar (1878–82), built largely in roughhewn local stone to house 48 tuberculosis patients and, eventually, a mortuary, lodges and chaplain's house; and the toweringly efficient brick ensemble of Exeter Grammar School (which Ricardo may not have known, as it was then only recently finished).

Until near the end, when Butterfield seemed to give up his lifelong rebellion against classical symmetry, nearly every building was treated as a changeable ensemble, sometimes even a collision, of differences in scale, height, volume and rhythm, both horizontally and vertically. There is often apparent symmetry, but it is rarely real, and if one facade seems close to achieving it then the other will surely break it. Sometimes this is done with future accretions in mind, but it is never wilful, since the height, fenestration and articulation of entries and cover are determined by the function of that segment in the structure. And they are always brought together by one means or another – often by a common string course or fixed roof line and always by common gestures in the shape and pattern of their structural expressions.

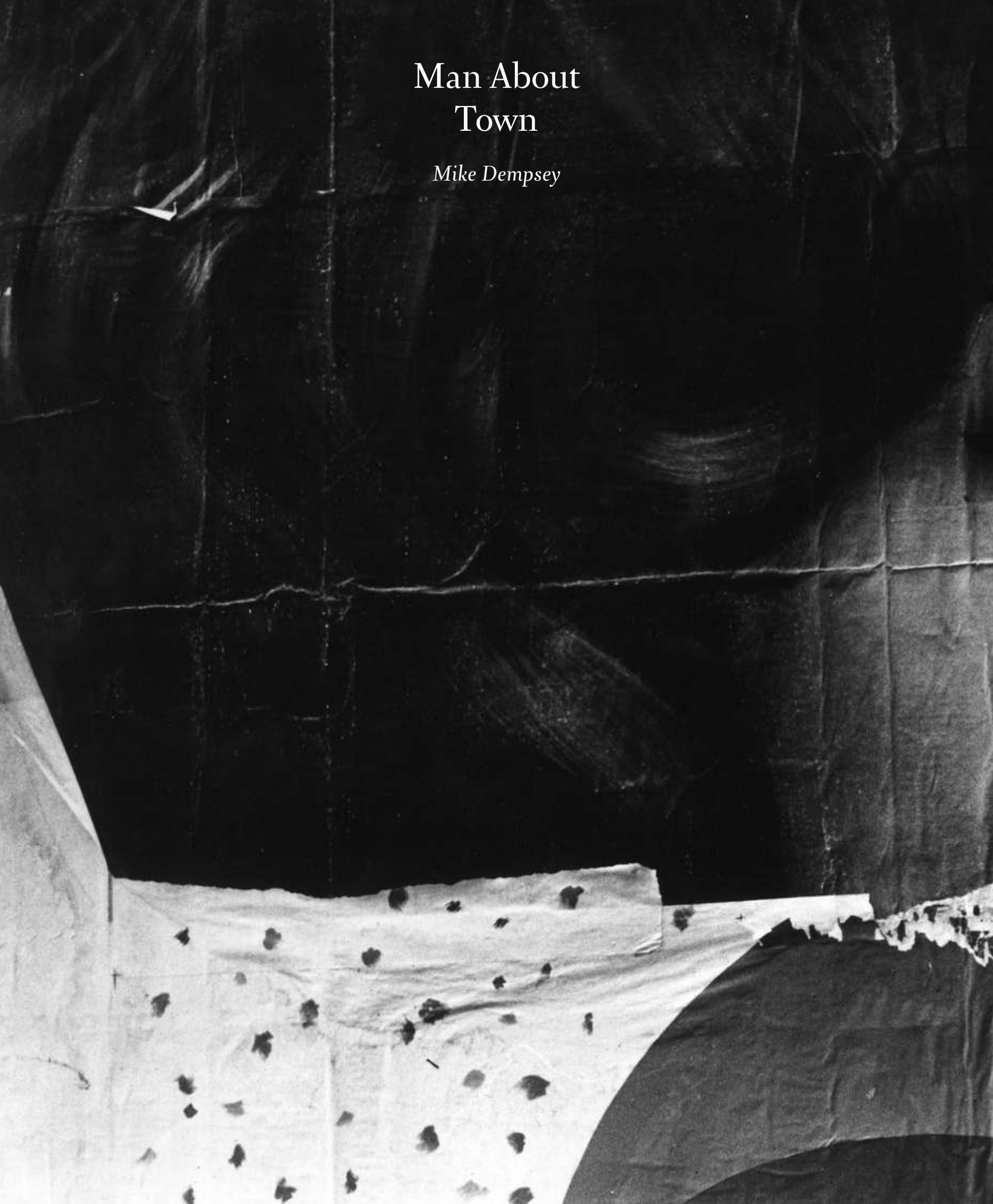
Butterfield also eschewed certain modes of representation, notably the perspective, though the few that are known, like his rendering of Shottesbrooke, are marvellous in their precision. His mature drawings, in which his draftsmen follow a repeated formula, are a statement of the builder's art, serving both as elaborate instructions from which his contractors could not swerve and as precise statements of specification on which quotes can be based, signed and held to. Favouring the general section, they are completely in character with the intention of the built work, in their use of colour (an extraordinary blue wash that captures the light of the windows), in their crafted calligraphy, and in their two-dimensional synopsis of the relentless logic underlying the spatial whole. At the same time, Butterfield gave unrivalled attention to how his drawings were laid out on a page and how they would communicate his first principle of design: that the building be seen and conceived as a whole and built with a unified approach to construction, proportion and detail. Notes on the measurements of floors and ceilings are precisely written in the smallest hand, in a way that extends the lines of the divisions they specify. No punctuation mark or joint is missed. On the page Butterfield shows the same passion for materials as a mason or carpenter in the quarry or the lumberyard, as if he had found them himself and, in Ricardo's words, 'mingled them with a lover's fondness' on the site.

A lover, perhaps, but an exacting one, since he required his builders to clear, wash and sweep a site before he entered for inspection. Carpenters, masons and bricklayers recalled him striding through in perfectly polished boots, with all the imperial frostiness of Mr Gladstone, whose dress and demeanour Butterfield emulated, and with whom he shared the idea that the church should be the government's instrument in improving the nation's education and its moral life. But he had a deep knowledge and affection for the workmen's crafts. As one who had started his career among the desecrated, whitewashed ruins of the Middle Ages, he was passionately committed to using their best constructive skills in the most durable materials so that the texture, shapes and colours of his buildings would last. When the fledgling building trades unions staged their first great dispute in London, they turned to this odd and impolitic figure when asked to nominate a board of arbitration. But there was never any question of who was in charge. Butterfield left his builders no room for improvisation. In consequence, Ricardo notes, 'As far as a man may go, who does not actually hew the stone, lay the bricks, and shape the timbers, he had his hand on the work. There is nothing permitted but what has been foreseen, and this … gives his work a rigidity, an inability to minister to any but the exalted moods'. What may at first read like Ricardo's sole complaint is perhaps his greatest praise, for he sees in the result of that rigid execution buildings that – though they take neither the human form, nor the recipes of classical order, nor the flamboyance of nature – through their proportions in their settings appear 'happy and at their ease'.

In personifying these inanimate projects Ricardo grants them 'a heart which is alive', and ultimately captures what is most powerful about Butterfield's works: that each one displays a nearly human, and sometimes humanly awkward character. Each one strives for the same sentinel, English and manly qualities in architecture that Butterfield called on mankind to display in society. They show that they are useful. They are conspicuous in their efforts to encourage a moral life. They speak of a way (in the promises uttered in the General Confession) that is 'godly, righteous and sober'. Above all, they speak vehemently of these solemn, forceful and vivacious things – through their complex plays of proportion, their simple height and grandeur, their curious conjunctions of palette, mass and line – perhaps in ways the quietly contentious and reclusive fellow who made them could not. It is there, in the oddly anthropomorphic effect that comes from portraying what Ricardo calls the 'beauty of an earnest soul, awake' that the real glory of their apparent oddness lies. This is not ugliness, but a vision for modern times of what Hopkins called 'God's better beauty, grace … counter, original, spare, strange'.

Man About Town

Mike Dempsey





It is hardly more than 30 years since the new concept of the graphic designer as graphic architect became accepted. It has only been a living reality in Britain for about 15. This fundamental discrepancy between the dates 1930 and 1946 has deep significance… In 1930, the intelligent designer was longing for an inner and outward discipline in a world still in pieces after World War I; in 1946, he was longing for greater freedom after the limitations and restrictions of a Second World War. Dennis Bailey, the young English graphic designer, is a typical example of this curious dualism and contradiction. A strong individualist, reacting vigorously against any discipline which others might attempt to impose on him as a person, he himself imposes the greatest possible discipline on his work.

This was how, in 1961, the design critic Charles Rosner began his short *Graphis* profile of Dennis Bailey, a 30-year-old illustrator who was then coming into prominence as one of the most 'imaginative and original' young graphic designers in Britain. Also a sort of coming out for the influence of Swiss style on an emerging English generation, the profile was accompanied by eight pages of Bailey's designs for book covers, exhibition catalogues and posters, which revealed the ease with which he worked with both image and text. This in turn was a reflection of Bailey's own seemingly limitless sense of movement – an Englishman then living in Paris, who five years earlier had got his start in Zurich working for the very magazine now profiling him.

Born in Bognor Regis in 1931, Dennis Bailey – tall and tousle-haired – attended evening classes at the Worthing school of art from the age of 14. In 1950 he enrolled to study illustration at the RCA, where his fellow classmates included David Gentleman, Alan Fletcher, Len Deighton and Raymond Hawkey. In those days the RCA was rather sedate and locked into a Victorian revivalist mode, with an emphasis on traditional handcraft and representational work. Its rector Robin Darwin, a Slade-trained painter completely at odds with the undercurrent of modernism, was far more at home drinking fine wine poured by white-gloved servers in the splendour of the senior common room, Darwin's own Oxbridge-inspired contribution to the life of the college. And yet Bailey slotted into this view of the world and concentrated on learning the craft of the illustrator. Over the course of his studies, however, he increasingly mingled with students from the Central School of Art & Crafts just a few miles down the road, joining them in less prescribed pursuits – like huddling around cast-iron radiators and smoking Gauloises while discussing cinema, jazz and books. By the time he graduated, these rival attractions seem to have won out, because Bailey based his thesis on photography, a discipline Darwin had point-blank refused to recognise as an art form.

After graduation Bailey stayed in London, working as a tutor and taking on a stream of freelance work that included book jackets and covers for Jonathan Cape's spring and autumn catalogues and a hand-painted mural for the Austin Reed shop in Piccadilly – commissions that allowed him to push his own abilities while at the same time recognising his limitations. 'One of the reasons I became interested in typography', he recalled in 1980, was because of 'what happened to my illustrations after I'd finished them. I would be completely in control of the work up to that point, but once I'd passed it over I would often be disappointed at the use made of it. That made me want more of a hand in how pictures looked on a page.'

That opportunity came in 1956, when aged 25, Bailey moved to Zurich to join the staff of *Graphis*. The bi-monthly magazine and design annual published the work of illustrators, graphic artists and designers from all over the world. There he was exposed to the Swiss scene and the likes of Max Bill, Siegfried Odermatt and Karl Gerstner. The work of European and American designers also came across his desk, including projects by Saul Bass, who was then making early waves with his title sequence for *The Man with the Golden Arm*. Bailey's colleague at the time was the graphic designer Sandro Bocola. The two became firm friends, immediately bonding when they discovered they had both been born on the same day and in the same year (even if Bocola's mother later spoiled this amazing coincidence by admitting to a mistake on his birth certificate). Walter Herdeg, the magazine's co-founder, publisher and editor, oversaw every detail of production. Although conservative in his design preferences (favouring Garamond type and justified text), 'he was extremely catholic in his editorial tastes', according to the American graphic design critic Stephen Heller, who was also a long-time *Graphis* correspondent. Testimony to this was the wide variety of cover art, which featured work by Miles and Alan Fletcher. While Bailey stayed just nine months at *Graphis*, the experience was formative: 'When I changed over to graphic design, it was Switzerland which showed me how. In front of my eyes every day – on the hoardings, in the shop fronts, even in the Christmas decorations – was this very clean, almost Miesian approach to design, with a strong style and feeling of order.'

When Bailey moved back to London his work took a new direction. 'After I worked for Walter Herdeg, he said to me that the one thing I ought never to attempt was to earn my living as a graphic designer' – a piece of careers advice to which he then offered his own punch-line: 'and that was one reason I decided to do so'. Where before he had seen himself largely as an illustrator, producing cosmetic drawings to decorate a page, now he became one of a small group of designers who adopted the Swiss style for their British clients. Among the first of these were the publishers of *Queen* magazine, who asked Bailey to restyle their magazine; not long after, in 1959, the exhibition designer Alan Irvine invited Bailey to design a poster, catalogue and the exhibition graphics for the Worshipful Company of Goldsmiths. Other jobs soon followed, including a commission from the Arts Council to create the catalogue and poster for the 1961 'Architecture Today' exhibition. In its tight geometric configuration of shapes and clean typography, the exhibition poster was 'indistinguishable from the Zurich Constructivist designers', Richard Hollis noted in his *Swiss Graphic Design: 1920–1965*. It also bore an uncanny resemblance to the work of Josef Müller-Brockmann.

Despite this steady stream of work, in 1960 Bailey returned to Europe – this time to Paris to revive the graphics of *Olympia* – an ailing literary magazine set up by Maurice Girodias of Olympia Press, which published both 'erotic' novels and a more distinguished range of authors, among them Beckett, Durrell, Nabokov, Burroughs and Donleavy. And it was here that Bailey began to untether himself from the rules of Swiss design. Produced in one colour, the magazine offered a way to push the latent capabilities of the elements that made up each page. An article titled 'L'Amour est un art', for example, cropped a post-impressionist painting so that its three willowy sylphs fitted perfectly inside an exclamation point that was typeset big enough to fill an entire right-hand page, a graphic jest – of an image becoming type, and type in turn becoming an altogether new image – that could be seen almost allegorically as the role Bailey was creating for himself.

Previous: Dennis Bailey, Paris, 1962
Photograph by Sandro Bocola
Courtesy Nicola Bailey

Bailey had been trained in illustration but in everything else he was self-taught, constantly embedding and re-embedding himself in new cultures, ideas and – as John Berger would describe it a decade later – ways of seeing. This auto-didacticism, combined with *Olympia*'s greater freedoms, soon enabled Bailey to develop a style that was entirely self-possessed and wholly his own – a *Graphis* sense of rigour combined with his uniquely British sense of humour. More than anything, this style was defined by a continuous evolution, spurred on by Bailey's willingness to not only evaluate his own work, but apply those reflections directly to his practice. 'A feature of my career and of my personality', he reflected, 'is that I'm constantly at the point of having to review what has happened before, and what I am going to do next.'



Dennis Bailey, self-portrait, 1980
Courtesy Nicola Bailey

In many ways *Olympia* embodied the metropolitan life Bailey was living in Paris. Joined again by his *Graphis* colleague Bocola, they shared an apartment–studio on the rue Campagne-Première, Montparnasse – where the Dadaists had stayed at the Hotel Istria and where Man Ray also had his studio. Richard Hollis once recalled visiting and being in awe of his friend – relaxed, dressed in his preferred Ivy League style and 'always with an attractive girl on his arm'. But with its shoestring budget *Olympia* was shortlived, and so in 1964 Bailey once again moved back to London.

On his return he succeeded the editorial designer Tom Wolsey as art director of *Town*, then the hippest men's magazine in Britain, with its mix of culture, fashion and world news (its hipness slightly at odds with the fact that its publisher was Michael Heseltine, later secretary of state for defence in Margaret Thatcher's Tory cabinet). To some extent, *Town* was influenced by the German magazine *Twen*, art directed by Willy Fleckhaus and greatly admired by the graphic design fraternity in the UK. Working in a small team, Bailey commissioned illustrators and photographers, among them David Bailey, Don McCullin and Clive Arrowsmith. Although budgets were tight, the cachet of the magazine meant he was able to get more or less anyone he wanted. 'If I was going to have to work in a job', he said, 'this was exactly what I wanted to do.'

Bailey's work at *Town* came to an abrupt end when Heseltine accused him of passing malicious gossip onto *Private Eye*, and promptly barred him from the *Town* offices. Bailey loathed his publisher, but the accusation was unfounded. Nevertheless, in anticipation of his imminent sacking he left, even if he later regretted this because of the pay-off he would have secured. Despite this abrupt end, Bailey remained inspired by the freedoms *Town* offered to try out new ideas, and so soon set himself up as a freelancer for various editorial departments, including *House & Garden*, *The Observer* and *The Architectural Review*, for whom he undertook many perspective drawings. As a typographer, illustrator, graphic designer and art director he was essentially a one-man show, able to keep pace with the changing nature of the media, even if it was the immediacy of graphic design that fascinated him most:

The timespan between conception and realisation can be extremely short, a matter of hours. Going into a magazine office in the morning, knowing that there are two pages that must be filled that day, and having to send the finished artwork down by six, is very exciting. I used to enjoy doing covers for the Economist*: I'd go in on a Wednesday afternoon without a notion of even what the subject was to be, and by Friday morning I could go and pick up a copy on the bookstalls. (And if it wasn't quite as good as it might have been, there was always next week.)*

From 1967 Bailey continued his freelance design and illustration practice, with more commissions from the *Economist* as well as the Royal Academy, RIBA, British Council and Arts Council, and continuing cover design work for Penguin, with whom he had worked since the early 1960s. At the same time, he heard that the Chelsea School of Art, headed by Edward Wright, was looking for tutors. Bailey hugely admired Wright and applied, taking on a post soon after, and where he would follow the model of his old tutor at the RCA, John Minton, in instructing his students and enthusing them at the same time. In recognition of his work, in 1980 Bailey was made a Royal Designer for Industry.

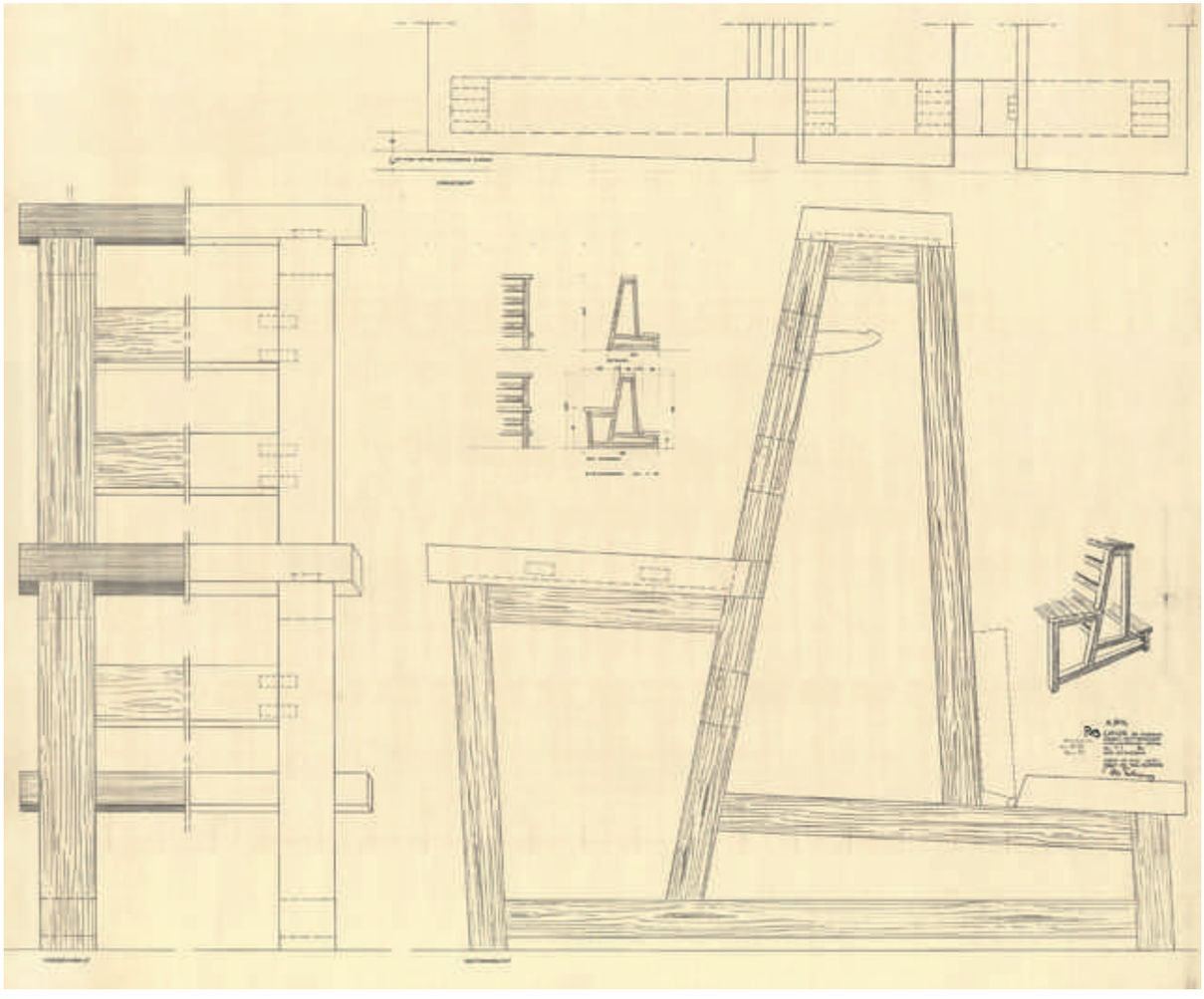
That same year he received a commission from the Architectural Association. The then chairman, Alvin Boyarsky, had been bitterly disappointed with the design of the first issue of his new house journal *AA Files*, art directed by António Lagarto, and in particular by its postmodernist cover created by Nigel Coates. On the recommendation of Edward Wright, Bailey was invited to design the second instalment. Architecture was actually an important part of his formation. At school he had always enjoyed drawing buildings, and during his time at the RCA he had taken on several commissions for Hugh Casson, then professor of interior design, turning his two-dimensional plans into more volumetric perspectival renderings. Casson even offered to fund Bailey through architecture school, but the prospect of another seven years of education did not appeal. His work at the AA, though, offered a chance for him to reconnect into the world of architecture. The commission itself turned into a design responsibility that spanned the next 38 issues and 19 years, under just one editor – Mary Wall – and later assisted by his wife Nicola, who would go on to succeed him as the journal's art director and manager of the school's print studio. The design featured a new masthead, set in Caslon 540 (originally metal-set by Alan Kitching, then cut up to make the AA ligature), beneath which he placed full-bleed images treated as if they were facades, spanning front and back covers and spine (and which recalled his early catalogue work for Jonathan Cape). Bailey also established the generous format of the journal (still in place today), a deft understanding of images and an understated typography, the elegance of which somehow perfectly suited both the historicism of the journal's more scholarly essays and the visual bravura of the school's architectural work.

Dennis Bailey's enduring role with *AA Files* and with the school itself is perhaps explained by the things both he and the AA seemed to share, not least an appreciation of tradition and culture juxtaposed against a more fiercely independent streak. 'Deep in it all is a contradictory streak in Bailey's temperament', Rosner had written in 1961, as if anticipating this future pairing, 'from time to time it drives towards more expansive people, their way of life and their shores. It is the lure of the sun, of attractive talk and a different sense of time', even if ultimately 'his Englishness is deep-rooted, so is his curiosity'.

Dennis Bailey, 1931–2016

Rudolf Schwarz and Another Kind of Modernism

Helen Thomas



Rudolf Schwarz, detail of pews, St Andreas, Essen-Rüttenscheid © Maria Schwarz / Historisches Archiv des Erzbistums Köln

'The French and the Germans are at the two extremes of the human chain, since the former regard external things as the source of all ideas, and the latter regard ideas as the source of all impressions' – opined the remarkable woman of letters Madame de Staël in 1810. Herself French-Swiss, and one of the defining figures in European culture at the time, she was suggesting that such a distinction could be a basis for defining national characteristics, or rather national failings, which she pithily described as: 'Germans make the mistake of often putting into conversation things appropriate only to books, while the French sometimes put into their books things appropriate only to conversation'.

Madame de Staël's words provide an apt summation – a prophecy almost – of how the German architect Rudolf Schwarz, born some 90 years later, would inhabit and respond to the unfolding of Germany's fraught twentieth century. In his buildings and his writings, Schwarz turned the spiritual into physical reality using his intellect, sometimes through negotiation with other minds, but principally through reflection on his own religious beliefs, knowledge and immediate experiences. Although he had several important collaborators throughout his life, he always took on the conceptual authorship of his work, which was defined by a deep theological philosophy. As his wife Maria Schwarz explained, when describing the design process for one of his most important postwar churches, St Anna in Düren: 'Our married life consisted of an intense intellectual bond, you could say. Even so, it is clearly his design.'

The nature of his reflections was responsive to the impressions he received and created, and the variety of his work, particularly after the Second World War, reveals an interesting if not always comprehended or acceptable undercurrent in German culture. Again, Maria Schwarz succinctly captures this aspect in recalling: 'Lots of people have never understood the stone wall in Düren. But there are no readymade recipes in Schwarz's work. Each project is a new start. Embarking on each project afresh and perceiving what sort of reality exists in the specific situation means that each time you have to jettison all of your previous assumptions and face that reality quite nakedly. The way in which that reality is perceived and discovered is what is so moving about his projects.'

Born in Strasbourg in 1897, Schwarz studied architecture at the Technical University of Berlin-Charlottenburg. His studies dovetailed precisely with the years of the First World War. In 1919 he enrolled as a student of Catholic theology, history and philosophy at the University of Bonn, but stayed only a few months before leaving to begin training as a government architect. His training combined practical experience in the offices of Jacob Koerfer and Heinrich Krings with studies that would lead to a doctorate in engineering from the Technical University of Berlin in 1923 (his thesis was on early typologies of Rhineland churches). In 1923–24 Schwarz was an assistant in Hans Poelzig's master studio at the Academy of Arts in Berlin. He followed a cultural tour through Italy and Greece with a visit, somewhat closer to home, to the medieval castle at Rothenfels am Main. The castle was the headquarters of the *Quickborn* (literally: 'gushing source') youth movement led by Romano Guardini – the Catholic counterpart to the Protestant youth movement known as the *Wandervogel* (literally: 'wandering bird'), whose members were generally anti-urban, anti-industrial, vegetarian, teetotal – all in the name of getting closer to nature.

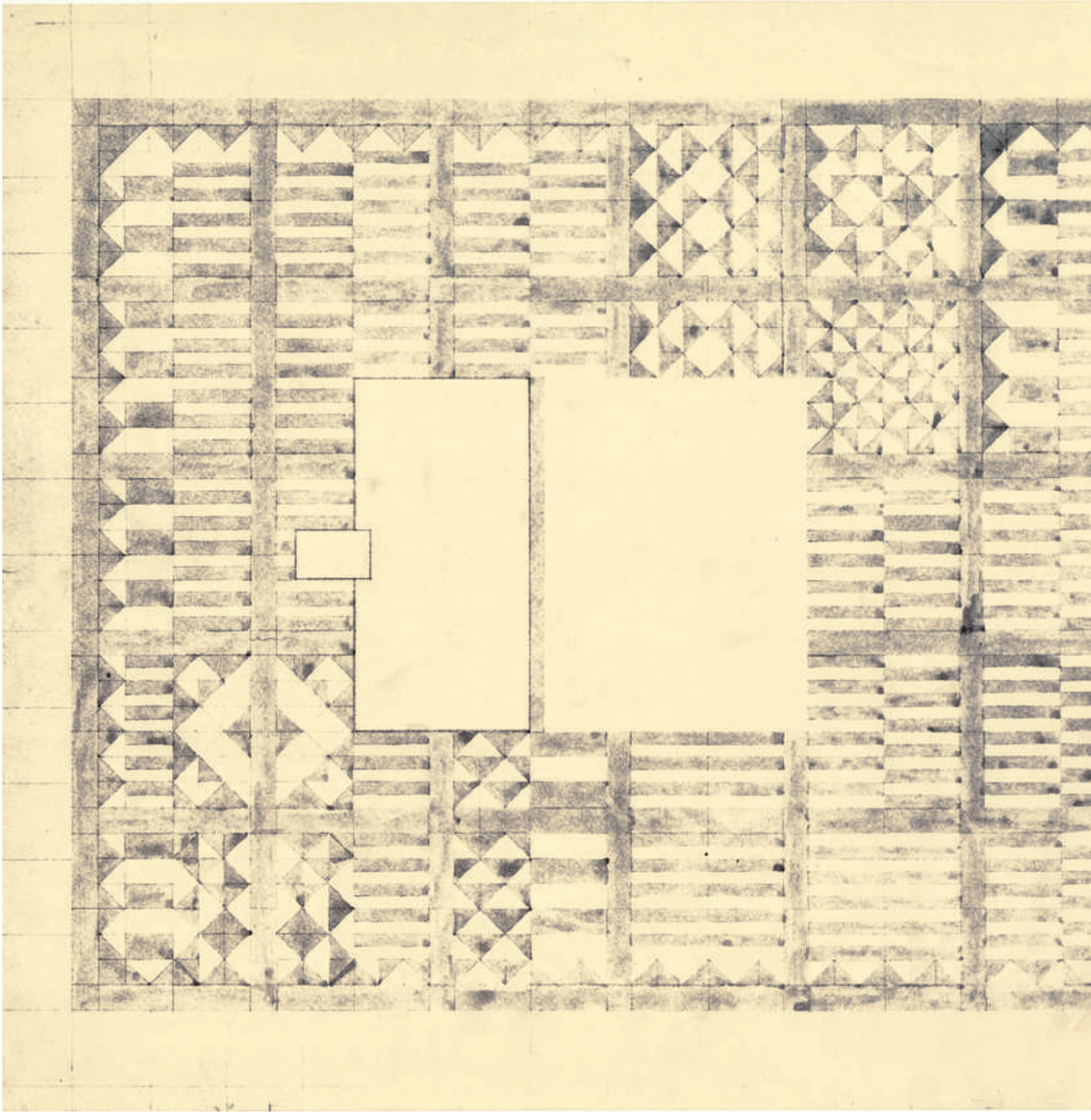
At Rothenfels, Schwarz carried out his first independent architectural works when he began acting as architect for the site – a role he would maintain until 1940. During this period he also collaborated with Hans Schwippert to design a Youth Centre (1928) and a Women's School (1929–30), both in Aachen, and both aligned with the contemporary *Neues Bauen*. The small chapel of St Albertus Magnus in the village of Leversbach (1932) broke away from this fashionable imagery to take on another kind of modernism, more rugged and idiosyncratic in character.

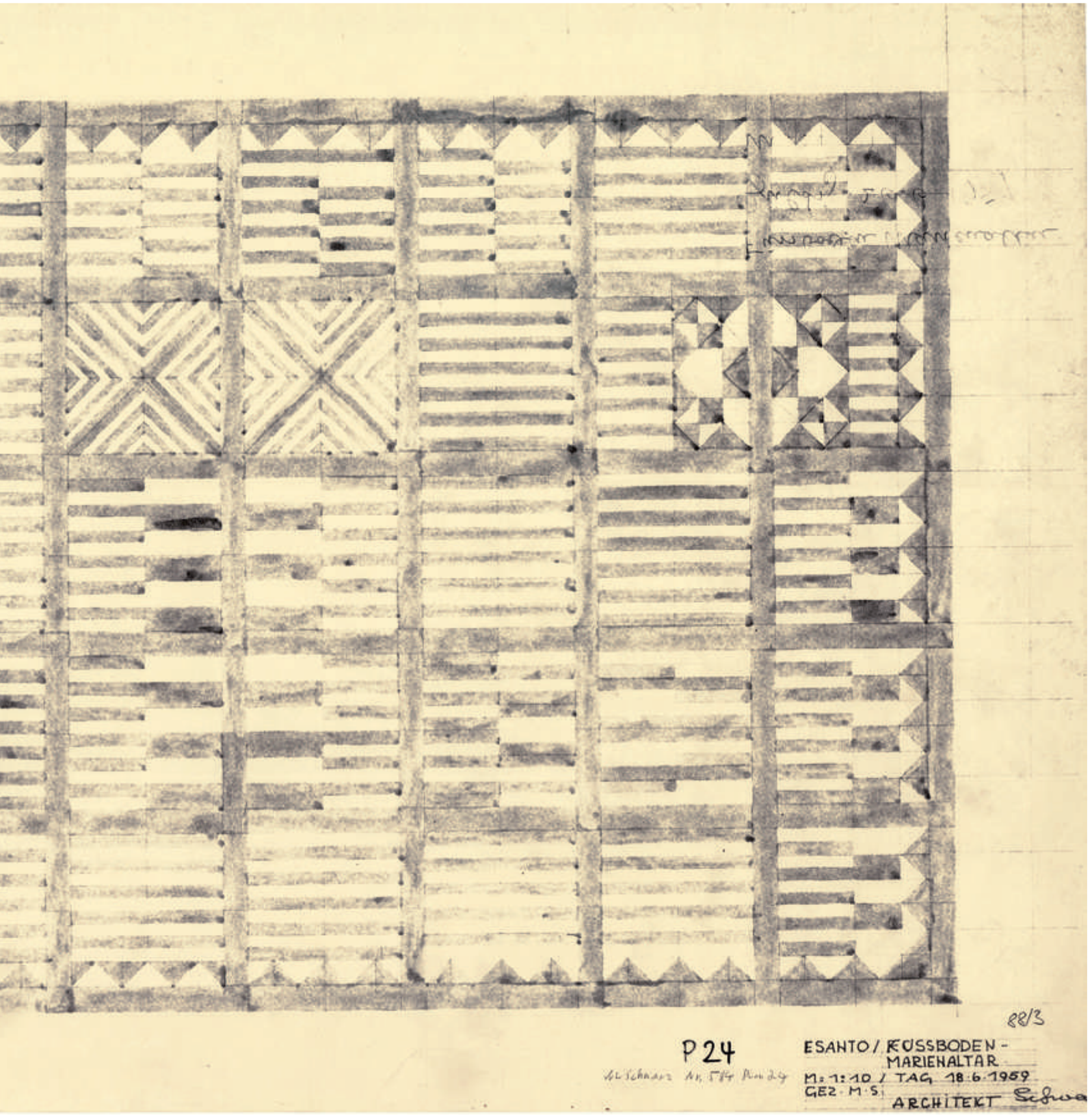
Schwarz's best-known interwar building, however, is St Fronleichnam (Corpus Christi) in Aachen (1928–31), again built with the assistance of Schwippert. While included in a modernist canon by contemporary commentators, it embodied both Schwarz's spiritual and metaphysical agenda and his challenge to the ascendancy of new building technologies and mass-production techniques – a challenge articulated in a series of essays collected in a 1928 publication, *Wegweisung der Technik*. The development of the church's form was also influenced by Schwarz's personal understanding of both gothic architecture (where his views were critical) and the baroque (to which he was more sympathetic). All these things connected the work to an alternative tradition of modern architecture to the prevailing *Neues Bauen*.

The gothic – as Schwarz described it in a lecture to matriculating students at the Kunstakademie in Düsseldorf in 1953 – was a form invented and shaped by the European Middle Ages. It could be regarded, he said, as a 'functional intellectual form, or be misunderstood as a technological functional form. It arises from the inwardness of things, and its surface is not more than a description of structural force, of tension and compression. It tries to pour every object, from its lowest function to its most radiant expression, into a single shape. This common vessel is appropriate to every level of existence and to all of its purposes and manners, no matter how contradictory.' Relating his own experience as a student, he explained that his tutors, 'obsessed beyond reason with the rationality of their theory, were gothic materialists – odd though it may sound'. Wedded to functionalism, they had misunderstood and misappropriated gothic form, teaching a 'gothic without God'. This, he insisted, was 'the reason for the almost touching propensity of later functionalist architects to explain their work in terms of the paltriest purposes'. For Schwarz, whose principal works were churches, the issue of function was compelled to surpass the limits of efficiency.

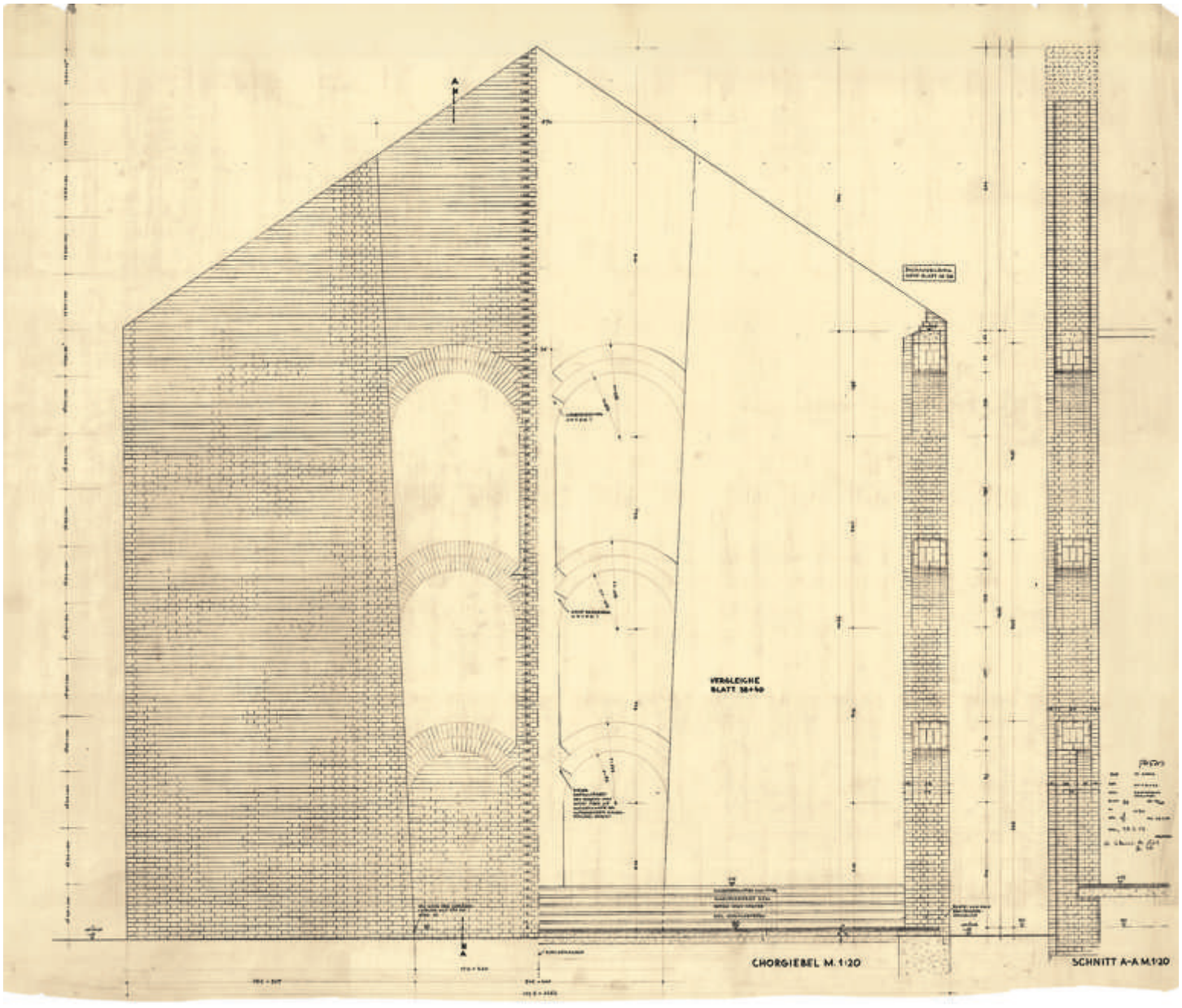
Schwarz himself combined teaching and practice throughout his long career. His first teaching post was at the technical college in Offenbach, in 1925; his last at the Düsseldorf Kunstakademie, where he held a professorship from 1953 until his death in 1961. His most significant contribution, however, was to the school of arts and handcrafts in Aachen, which he joined in 1927, on the recommendation of Guardini and Dominikus Böhm, becoming its director the following year, around the same time as he was embarking on the design of St Fronleichnam. During his tenure at Aachen, Schwarz reformed the school's beaux-arts model of teaching, setting up a system that echoed the early Bauhaus's return to the medieval *Bauhütte* – literally, 'builder's hut', referring to the church masons' guild. He organised specialised departments for architecture, metalwork, painting, sculpture and crafts, supplemented by 14 workshops in ironwork, carpentry, monumental painting, tailoring, printing, goldsmithing, embroidery (for vestments, of course), graphic design, sculpture and architecture. Real commissions were used to generate studio projects, and students from the school participated in architectural competitions with designs for the various crafted elements, particularly objects associated with liturgical processes, in the case of religious commissions. These objects were part of the project – their use essential to the overall coherence of the design of the sacred space – and they were manufactured in the school workshops. The importance that Schwarz placed on the continuity between the design of the building and the objects that are housed within it, first developed in the school at Aachen, would remain with him throughout his creative life. These early pedagogical experiments would come to an abrupt end, however, when the school was shut down in 1934 by the National Socialists. The school's curriculum, and its director, were evidently incompatible with Hitler's 'Civil Service Restoration Act'.

But Schwarz had other outlets for his creativity. He was co-editor of *Die Schildgenossen,* the journal of the *Quickborn* movement*,* in which his earliest essays were published. He also wrote several books expounding his architectural and planning theories, among them *Vom Bau der Kirche* (1938) and *Von der Bebauung de Erde* (1949). His willingness to be difficult, discursive and even provocative, especially in his more





Rudolf Schwarz, chapel floor layout,
St Antonius, Essen-Frohnhausen
© Maria Schwarz /
Historisches Archiv des Erzbistums Köln



Rudolf Schwarz, end elevation and section,
St Anna, Duisburg © Maria Schwarz /
Historisches Archiv des Erzbistums Köln

journalistic writing, was integral to his practice and his role within German architecture. In 1953, however, his forthright irony landed him in hot water when he published an article in *Baukunst und Werkform* titled 'Bilde Künstler, rede nicht' (a reference to Goethe's aphorism: 'Don't talk, artist! Create!'). Widely seen as a direct attack on the Bauhaus and on Walter Gropius in particular, the text compounded Schwarz's outsider status. In the article he takes aim at the Bauhaus 'technologists', who, 'prone to "repulsive orthodoxy", turned usable kitchen fittings into useless ideology'. However, the main target of his assault were the 'Bauhaus literati', whom he grouped together with the 'later Masters of the Thousand-Year Reich' under the heading of 'unspiritual terrorism of dictatorial groups'. Ultimately, he asserted, 'What was bad about the Bauhaus was not so much its technical failings, as its unbearable phraseology... What these literati wrote was not German, but the jargon of the Communist International'. The 'Bilde Künstler, rede nicht' article perhaps represents a moment when Schwarz's opinions should have been confined to conversations, rather than put down in print.

The Bauhaus Controversy is described and analysed by the historian Wolfgang Pehnt in his biographical monograph *Rudolf Schwarz 1897–1961: Architekt einer anderen Moderne* in 1997. Beginning in the 1970s, Pehnt was the first to write seriously about Schwarz and his work, opening the way for a reassessment of an architect who had been marginalised not just by what Pehnt referred to as his 'desecration of the Temple' of the Bauhaus, but by his association, during the war, with the National Socialist regime. For three years, from 1941 to 1944, Schwarz had directed building and reconstruction projects in occupied Lorraine, part of a larger contested territory on the border between Germany and France. The region included Schwarz's native city of Strasbourg – a German city from the time of the Franco-Prussian war until the end of the First World War, when it was annexed by the French.

Coming to terms with postwar German culture – making sense of the transformation in German identity and means of production – was the theme of the *Darmstädter Gespräche* – a series of annual discussions established in 1950 with the aim of mapping out a democratic renewal of the country's intellectual and cultural life. Participants included heavyweights of the philosophical world – Theodor Adorno, Max Horkheimer, Martin Heidegger, José Ortega y Gasset – as well as practitioners, including, in the 1951 meeting on the theme of 'People and Space', Rudolf Schwarz, who contributed a paper on 'The Objective of Architecture'. At the same meeting Martin Heidegger presented his now-famous talk 'Bauen, Wohnen, Denken', a response in part to the postwar rise in homelessness. Other participants included Sep Ruf, whose work, along with that of architects such as Egon Eiermann, came to represent a new German modernist architecture for the *Wirtschaftswunder* years.

The majority of Schwarz's buildings date from this period of postwar reconstruction. On returning to Germany in 1946, after a brief internment in a prisoner-of-war camp, he became director of the reconstruction authority for Cologne, and combined this work with private practice in Frankfurt and Cologne with his wife Maria. At the time of his return Cologne, like many cities across Germany, had been reduced to rubble. In this ruined landscape, the immediate tasks facing Schwarz and other postwar architects such as Emil Steffan, Hans Döllgast, Böhm and Schwippert – those architects who had remained, and had not emigrated before the war – were fundamentally different from the issues that had preoccupied architects during the Weimar Republic (1919–33). In the context of this crisis Schwarz concerned himself with the construction of buildings that addressed the uncomfortable present they were located in – buildings that could contain the communal life that was so essential to the refugees returning to the bombed-out cities. The question of how to rebuild – and of how to relate the new construction to what remained and what had been there before (with its problematic associations with recent history) – provoked intense debates. Which was most appropriate: restoration, or reconstruction?

For Schwarz there was a third possibility, based around the maxim of 'construction instead of reconstruction', which he called interpretative preservation. In 1946 he embarked on his most political building – a spare reinterpretation, or in his words a 'pure and reduced form', of the Paulskirche in Frankfurt, 1946–48, which reopened as an assembly hall on the centenary of the meeting on the site of the first freely elected parliament for all of Germany in 1848. Between 1949 and 1955 Schwarz was engaged in remaking the Gürzenich in Cologne – the city's festival hall, its parlour, which had been destroyed by bombing. The new structure embraced the ruin of St Alban, whose 'vaulting had collapsed and all that was left was a puzzling collection of arches, pillars and walls under the open sky', so that 'the time-darkened outer walls of the church became the interior walls of the hall' – as he described the work in his book *Kirchenbau: Welt vor der Schwelle*, published in 1960.

Of the many churches Schwarz built, St Anna in Düren is perhaps his most renowned. In *Kirchenbau* he describes encountering the rubble of the church, which he had known as a gothic structure, among the ruins of the town: 'I saw St Anna again after the war. After returning, I went to Düren at once, during the first few days. The city was a deserted wasteland of rubble with little crosses dotted here and there, and sometimes a few flowers commemorating the dead who were lying under the debris. In front of St Anna, the crosses had the names of the priests on them.' Schwarz and his collaborators – Maria Schwarz and Rudolf Steinbach – used the rubble of the old church to construct an entirely different building. 'The whole interior is visible at once from wall to wall, and is only divided by the rows of slim pillars, as if by a veil', he says in *Kirchenbau*. 'This grand, protective shape is like an open mantle, so that the building in turn becomes a protective cloak ... not the mantle of Great Mother Anna, but a declaration of maternal love arising out of eternal goodness, a theological image.'

Schwarz often organised his buildings in his mind and writings according to a pragmatic development of the six spatial types he had set out in his early book, *Vom Bau der Kirche* (1938). In *Kirchenbau* he describes St Anna in Duisberg (1952–55) as being akin to St Fronleichnam, in that the whole interior is a sacrosanct area that needs to be concealed from the entrance. Once the freestanding gallery has been negotiated, the small congregation is arranged in rows facing the altar and exposed to space all around, which is provided by a 'plethora of windows, and the building is entirely based on the formal world of the brick, which is executed down to the tiniest detail'. Of St Antonius in Essen-Frohnhausen (1956–59), Schwarz notes that he often built T-shaped churches in order to bring the congregation especially close to the altar: 'The square of the ground plan became a little holy city for us, within which we were able to found various sites in the way that public buildings are distributed in a city, and we were able to equip them carefully ... In the flow of the space there is also an area dedicated to the Virgin Mary: a severe white marble block on which an image of Mary is placed. Another stone carpet is set in front of it.'

In his descriptions, Schwarz also attends to the small things in his churches: the altar, tabernacle, ambo and confessionals. This attention to detail, to the craft of each object, was in part a legacy of his early teaching experiments in Aachen, to be sure, but was also the result of private and intense conversations with his wife: 'During our hikes, we were often deeply moved by the magnificence of the trees and the tiniest flowers. Visual experiences in nature shaped our designs', Maria Schwarz recalled in a conversation with Maria Conen. And each detail of the work held within itself a conflation of memory and purpose. Describing the font of St Anna, Düren, she said, 'holy water thus flows over the child's head directly into the holy earth. When the child has grown a bit older, the mother will be able to point out the place where the baptismal water entered the earth. And the child will be able to touch the spot, and the whole process of baptism will become something living and palpable.'

Model-maker Grimm

Thomas Weaver



Bernd Grimm, in his workshop
at the Ungers house and archive, 2016
Photograph by Albrecht Fuchs

The standard line on the German architect and theorist Oswald Mathias Ungers (1926–2007) is that if there is a single contemporary figure who represents architectural abstraction in all of its most abstract forms, then surely Ungers is it. His catalogue of built works may be extensive – with a marked shift in style from his earliest houses and apartment blocks in the 1950s to his museums and office towers in the first years of the new millennium – yet today his entire oeuvre is sold to us through its reducibility. Accordingly, Ungers is presented as the architect *par excellence* of the white box, or of a whiter, purer box within a box; sometimes he is even elevated to a whole other metaphysical realm, as the designer of an impeccably organised square grid, which floats ethereally over our appreciation of any space both real or imagined. As the ultimate form of separation, this transcendence has even abstracted his very identity: creator of deeply cerebral buildings, author of perfectly repeatable (and highly desirable) pamphlets, theorist of a particular kind of *Verfremdung*, or unfamiliarity, Oswald Mathias Ungers now only ever seems to exist within his own acronym, OMU.

Even abstract architectural theorists, however, have to live somewhere, and for Ungers his home was a brick house he built for himself in 1959 on the corner of Belvederestrasse in a sleepy suburb west of Cologne. It was here that the architect lived with his wife Liselotte and their children, Simon, Sybille and Sophia, and where he also based his office. Just a stone's throw away is a second building – Ungers' famous Haus III or 'House Without Qualities', a 70th birthday present to himself, completed in 1996, which a passing Francesco Dal Co described, appreciatively, as 'an untouchable, obsessive parallelepiped', 'clinically pure' and 'ice-cold'. In contrast, the family home seems to be full of qualities. Designed like a kind of mini city, or more explicitly as a modern take on Hadrian's Villa, it is arranged over three levels and structured around a series of interlocking spaces, which the architect obsessively tinkered with and amended over the years of its occupancy, culminating in 1989 with the addition of an annexe to contain his ever-expanding library.

To visit this house and library – now home to the Ungers Archive for Architectural Research – is to immediately cast off all preconceived notions of abstraction, even a certain otherworldliness, not least because it is so packed full of stuff. On the upper floors is Ungers' art collection, largely drawn from eighteenth-century neoclassicism (works by Galli-Bibiena, Piranesi, Boullée, Schinkel and von Klenze) and twentieth-century conceptualism (sculptures by Le Witt, Judd, Andre and Naumann); in the basement is the archive itself, which keeps all the sketches, drawings, models, photographs and publications produced by the Ungers office; while at the rear of the ground floor is the magnificent library, home to over 12,000 books, among them complete editions of Vitruvius' *De architectura libri decem*, a 1485 copy of Alberti's *De re aedificatoria*, a 1538 anthology by Dürer, alongside sought after first editions by the modern masters (Malevich, El Lissitzky and Le Corbusier).

There is something slightly incongruous about this library, in particular, because it doesn't feel like the lair of an architect as metaphysical *Übermensch*. Instead, it feels like the home of a bibliophile, or someone who constantly appears to have felt the need to surround himself with the things he loved the most. The Ungers house, in this sense, is far closer to the Soane House than you might otherwise imagine – on Belvederestrasse, as on Lincoln's Inn Fields, you appreciate a cosmos of architecture through its physical fragmentation, with each metonymical piece or synapse triggering an emotional and architectural response. The library, then, is experienced as a kind of architectural anthropomorphisation – which, classically, could be seen to operate within the tradition of the Renaissance *studiolo* (think of Antonello da Messina's *Saint Jerome in his Study*), or less classically, like one of those 1970s science-fiction movies where miniaturised human figures are planted inside the body of a life-size host, because inside the library of the Ungers house you feel as if you are inside Ungers' brain.

Yet, as the cerebral cortex of a highly rational architect, there is also an obvious sense of control. The library was designed as a perfect cube, and internally the purity of this form is reinforced, structurally as much as visually, by its double-height, 6m × 6m white concrete frame. In contrast, the dark wood of the bookcases lining its walls acts as a foil, as does a similarly dark timber spiral staircase, which accesses the upper gallery. More than the building's structure or detailing, though, the systems at play are articulated by a series of striking plaster pieces which punctuate the actual books. Located on grid, and in their own particular hierarchy, they follow a seemingly precise pattern. On the lowest level, inset above the ground-floor openings, are several relief models (showing the German cities of Cologne, Berlin, Trier and Karlsruhe during a particular moment in their historical formation, together with two other grid cities, Berne and the ancient Greek city of Miletus). Above them, ringing the upper gallery, are multiple plaster busts by the Scottish artist and poet Ian Hamilton Finlay, each sitting on an elongated rectangular plinth. And at the very top of the space, just below the ceiling, there are a number of inscriptions, again modelled in plaster, which have been taken from a German translation of Paul Valéry's 1923 book, *Eupalinos, ou l'architecte*. These elements are then complemented by perhaps the most engaging of all these plaster pieces – several impeccable, and substantial, models, displayed in the recesses off the library's ground-floor, and which present various canonic buildings, among them Bramante's Tempietto, Boullée's Cenotaph, Palladio's Villa Rotonda and Terragni's Casa del Fascio.

These reliefs, inscriptions and models were all produced by one man, Bernd Grimm, whose role in creating this cubic, tomb-like space, and his collaboration with the pharaoh-like Ungers, has gone largely unnoticed. Through his work, it also seems possible to track a particular strain of neo-classicism, not just in postwar German education and design, but at the core of Ungers' own architectural identity. Grimm himself was trained at the Kunstakademie in Hamburg, not in model-making, nor classics, nor even architecture, but industrial design. However, after taking an influential class with the local architect and classicist Lambert Rosenbusch, he increasingly turned his attention towards the study of antiquity. To this end, midway through his degree, he received a bursary to travel to Perugia, where, as if re-enacting a moment of *cinquecento* mentorship, Rosenbusch encouraged him to physically survey a number of key buildings, notably the Temple of Clitumnus, a small sixth-century church which sits on the bank of the Clitunno, near Spoleto in Umbria.

After his return to Hamburg, Grimm then set about modelling the temple on the basis of his detailed drawings, even if his tutors were not so convinced of the value of this exercise – the industrialists thought it wasn't industrial, and the other architects and design professors thought it simply wasn't relevant. Undeterred, Grimm first considered making the model out of cork, in the spirit of earlier eighteenth- and nineteenth-century architectural models, but in the end resolved to use plaster, largely through the expertise provided by

one of the Kunstakademie's workshop technicians, who himself had learned his skills from a *gipsformerei* or plaster-casting company in Berlin. The model was built at 1:10 scale and took more than a year to construct (with Grimm working over the evenings and weekends). He actually had to build it twice, because a first version fell apart under its own weight. And even if his tutors were initially very doubtful of its relevance, after he completed the model it remained in the Kunstakademie as a sort of proud trophy for the next 25 years.

More immediately, the completed model attracted the attention of the archaeology department at the local museum. Clearly impressed by the precision of his Temple of Clitumnus, they commissioned Grimm to construct another plaster model, this time of the Temple of Mars Ultor in the Forum of Augustus in Rome, built at a scale of 1:50. As before, Grimm first thoroughly researched the building, staying for several months in Rome, from where he made multiple drawings, supported by a grant from the Deutsches Archäologisches Institut. And it was in the workshop of the institute – more typically used to repair the building's crumbling plaster mouldings – that he constructed the final model. Soon afterwards it formed part of a large exhibition, curated by the Hamburg archaeologists, at the Martin-Gropius-Bau in Berlin.



Back in Germany once again, Grimm needed a job, and so using a railway map he plotted a course from Hamburg all the way to northern Italy, along which he marked suitable design firms, museums and architectural offices. The first stop was Bielefeld in North-Rhine Westphalia, or rather the nearby Schloss Harkotten, the 1970s base of the German car designer Luigi Colani, and then home to the design firm Dieter Sieger. When Grimm arrived, however, he found all the offices closed, and so he went back to the train station and continued to the next stop along the line – Cologne. On his list there was the architectural office of OM Ungers, whose work he had only really seen in various coffee-table magazines, like *Schöne Wohnung*. But one profile had been accompanied by a photograph that showed the architect standing in his library, with all his books behind him, including his large folios by Vitruvius. Attracted more to Ungers' antiquity than to his modernity, Grimm resolved to approach the office and ask for a job.

The following day, with his portfolio held under his arm, he walked to 60 Belvederestrasse and rang the front bell. Ungers himself opened the door. Grimm asked if there was any work available. Ungers said there was nothing at present, and besides, he already had a long list of people interested in working with him. But when Grimm pleaded for just five minutes of his time, Ungers yielded, and ushered him up to the library space, then on the first floor of the main house. Here, Grimm proceeded to flick through his portfolio: the first pages showed a design for a bread-slicing machine he had made while at the Kunstakademie. Ungers just sat quietly and looked out of the window. But when Grimm turned to his model of the Temple of Clitumnus, the architect suddenly leaned in and stared intently at the photographs. He then proceeded to interrogate Grimm as to exactly how he had made the model. Grimm described the whole process, from the historical research, hand surveys and site photography, through to the technical challenges of working with plaster. Ungers was entranced, but acknowledged that, as much as models like these would keep him entertained, they were also a thing of pure luxury for an architect such as himself, more used to working three-dimensionally quickly and cheaply with wooden blocks and card. But still, he kept returning to the photographs. The interview ended with Ungers promising to sleep on it: he'd let him know the following day.

The next day Ungers phoned Grimm and said he could start immediately. At the time, Ungers had 20 or so people working for him in Cologne, with a second satellite office in Karlsruhe, handling the big, corporate buildings in Frankfurt. Grimm imagined that his duties would be as part of a team, making all kinds of models for the various projects, but he soon discovered that he would be working alone, as a kind of *sonderling* or office misfit, constructing Ungers' luxury objects. Asked what he needed, Grimm replied that all he required was cold running water, a large supply of alabaster plaster and a strong, perfectly flat marble table. These facilities ultimately found their place in a new basement workshop, constructed as part of the redevelopment of the office with the new library annexe, and where Grimm's first commission was to make plaster models of two of the Frankfurt skyscrapers – Hochhaus City West and the Torhaus – both at 1:200. Ungers was delighted with the result, not simply in terms of the craft of their making, but the almost intellectual craftsmanship that translated modern details, like glass curtain walls, into plaster reliefs (in this case, insetting what were in reality flush window details 1mm deep in the model, so that the eye could read the pattern of their fenestration). Ten further models followed, all featuring the office's high-rise buildings, in Cologne, Düsseldorf, Frankfurt, Neuss and Berlin.

In presenting these projects all at the same scale and all in white plaster, Ungers was not only able to survey a series of his more recent buildings as a single constellation, but could suddenly see their architecture more abstractly. And interestingly, in looking to further test this abstraction, he then sought to apply the same technique to an architecture that was neither his own nor contemporary. The idea was to generate a canon of favourite buildings, his desert island architecture, that he felt had been especially influential on his work and ideas, and which would be rendered as *denkmodelle*, or theoretical models, defined not so much by their realism as their essentialism. But where to begin? In one of Ungers' earlier books, *OM Ungers: Bauten und Projekte* (1985), there is a reproduction of a

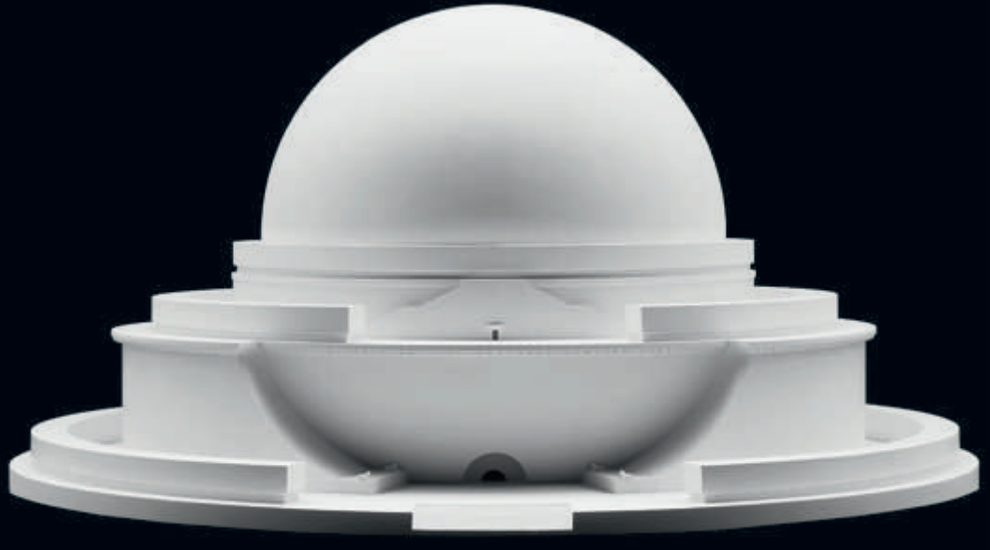
Above: Oswald Mathias Ungers, front elevation, house on Belvederestrasse, Cologne, 1959
© Ungers Archive for Architectural Research
Opposite: Bernd Grimm, *Hochhäuser*, 1992–94
Photographs by Stefan Müller © Bernd Grimm / Ungers Archive for Architectural Research























drawing by Schinkel of his project for a palace on the Acropolis, and other illustrations of the same structure reappear among his collection of historical drawings, in his library, as well as in his lecture slides and presentations. In many ways, the Parthenon *is* his primitive hut, at least in terms of it representing some kind of moment of inception. He even went so far as to theorise this, arguing that the origins of architecture lie in the form of the tent (the Parthenon), the cave (the Pantheon) and the volume (the Great Pyramid at Giza) – a trilogy that invited a new programme of plaster models that Ungers christened the *Architekturikonen*.

Each of these models took Grimm almost nine months to construct, and in view of their scale, size and weight (the Parthenon alone required 200kg of powdered plaster) they had to have their own structural core, constructed with *Tischlerplatte* or blockboard. The plaster, then, is simply surface, but it is one in which each individual element is custom-cast in silicone and then finished by hand. The time taken to manufacture these pieces was more than matched by the research that preceded them, and the discussions Grimm would have with Ungers in their daily afternoon meetings would be not so much technical as historical, archaeological or even theoretical (especially with the Parthenon, because so little of the complete building exists to survey).



With the next *Ikon*, the Pantheon – by far the most complex model Grimm has made – these investigations were even more studious. Built as a 1:50 sectional model, its vast dome presented all kinds of technical and structural challenges, just like the original building. But in some ways harder to resolve was the decision as to exactly which Pantheon to render – the original temple or the building we see in Rome today. Ungers and Grimm spent many hours in his library studying a folio published in Paris in the late-eighteenth century by Piranesi's son, Francesco Piranesi, which describes the changes made to the building over the centuries. The main decision concerned the entrance. As Piranesi Jr shows, on entering the building you step down slightly into the main space, but originally, as in any temple, you would have had to climb a flight of steps up into the interior – which is ultimately how they modelled it, placing the building on its own stepped plinth. A similar discussion preceded a subsequent model, a 1:15 reproduction of Bramante's Tempietto. This time the source book was Serlio's *I sette libri dell'architettura* (*Seven Books of Architecture*), which expounds at length on Bramante's concern for centrality and symmetry, evident in the way he consistently designed his buildings from the middle outwards. Bramante's Tempietto sits in the courtyard of the church of San Pietro in Montorio – a courtyard that used to be circular but is today a square. So should the model be a circle in a square or a circle in a circle? Again, the decision was to go with the original or most idealised solution – a choice partly prompted by the choice of modelling material. Both Grimm and Ungers always felt that a wooden model brought too many of its own qualities, its own unique grain, to the conception and composition of a whole, whereas plaster, in its pure white neutrality, spoke much more to what they wanted to achieve – an architecture of the ideal.

The long gestation of each of these models, and the way they increasingly consumed the time of both Grimm and Ungers – as well as attracting the curiosity of other members of the office – meant that the various stages of their production soon became absorbed into the rituals of the practice. And so when Grimm first completed the basic frame and silhouette of the model, they would have a *richtfest*, or topping-out ceremony, just as they would have done with a building, followed by another, bigger celebration when the whole thing was finally completed. The transportation and storage of the completed models also became another kind of ritual. Before they found a permanent home in the library, each model was stored in a barn next to the country house Ungers built for himself in the late 1980s in Eifel, on Germany's western border with Belgium. This then generated its own yearly, slightly surrealistic spectacle – a huge and immaculate plaster model, almost luminous against the verdant green of the surrounding landscape, tilted at 45 degrees as it was slowly carried by a tractor and trailer up to the crest of a grassy slope. Grimm would walk alongside the tractor, nervously biting his fingernails in case any cracks appeared, an understandable response, even if it robs us of the more cinematic, and pleasing, image of him megalomaniacally imploring the tractor upwards, like Klaus Kinski's Fitzcarraldo, pulling his operatic paddle steamer over a jungle mountain.

In total Grimm constructed ten *Architekturikonen* (the Parthenon, Pantheon, Great Pyramid at Giza, Tempietto, Boullée's Cenotaph, Castel del Monte in Apulia, built for Frederick II, Terrangi's Casa del Fascio, Palladio's Rotonda and the mausoleums at Halicarnassus and of Theoderic, near Ravenna), in addition to the city reliefs in the library and the plaster blocks inscribed with the Valéry quotations – finishing the last of them, with a certain sad but perhaps appropriate synchrony, shortly before Ungers died in September 2007. The models, in this sense, were the German architect's last great project, monuments to his love for both the physicality of the architectural object and the abstraction of the architectural idea, just as they are also testimony to Grimm's parallel project, reinventing the model-maker as a kind of intellectual craftsman. That something so abstract and yet so real sits neatly on grid within something else so abstract and yet so real – the house on Belvederestrasse – only appears to affirm Reyner Banham's seemingly casual reference to the Ungers house as a 'manifesto', and one whose subtleties thrive in its idealism, just as they do in its concrete, or rather plaster, reality.

Previous: Bernd Grimm, *Architekturikonen*, 1993–2005, photographs by Bernd Grimm (Parthenon, Pantheon, pyramid) and Stefan Müller
© Bernd Grimm / Ungers Archive for Architectural Research
Above: Oswald Mathias Ungers, rear elevation, house on Belvederestrasse, Cologne, 1959
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Alberto Ponis *in conversation with* Jonathan Sergison



The very first time I met Alberto Ponis – in Ticino, some six years ago now – he invited me to visit him at his home in Palau on the north coast of Sardinia. Happily taking him up on his generous offer, that same summer I accompanied him on trips to see many of the houses he had designed in this corner of the island – an experience made memorable not only by the quality of the architecture but by the hospitality of the owners, all of them still Ponis's personal friends. Since that first encounter we have had many others – in Palau, Nervi, Mendrisio, Zurich – and our discussions, in relaxed informal settings, always end up focusing at length on architectural issues, even if Alberto typically describes the origins of his work on the island as a form of self-imposed exile.

The conversation that follows was conducted in July 2016, together with Thomas Weaver, in the studio and home that Ponis built for himself and his family close to the harbourside of Palau in the 1970s. We were surrounded by drawings, files, a few models, set squares, stencils and other drawing paraphernalia accumulated over the course of many years. It quickly became evident that Ponis had never been formally interviewed, and in diligent preparation he had assembled a carefully catalogued folder of materials as a form of reflection on his work and ideas. Later, as he relaxed and started to speak more freely, the conversation took on a more candid and revealing tone. This candour, and his ability to tell a story, is what is presented here, in edited form, as the conversation itself ran over the best part of two days, over dining tables as well as drawing tables, and while visiting other houses he had designed in addition to his own.

Re-reading it now, I am reminded of Ponis's special personality and his peculiarly English turns of phrase, witness to the period he spent in London in the early 1960s, and also of the fact that Alberto – like a number of other interesting, but largely overlooked, postwar Italian architects – is engaging precisely because he has concentrated his efforts on realising buildings rather than on establishing a parallel academic position or the more common route of relentless self-promotion. It is gratifying that this work is now starting to be acknowledged, not least in the recently published *The Inhabited Pathway: The Built Work of Alberto Ponis in Sardinia*, which clearly satisfies a long-standing need to present this work and formulate an intellectual position around it. This position consistently emerges from an interpretation of the circumstances in which his buildings are located, and more particularly from a series of personal fascinations with topography, landscape and vernacular structures. The result is a body of work distinctly more worldly than local, distinguished, like his responses in this conversation, by how measured it is, by its sensitivity, its strength of character, humour, generosity, but above all its originality.

—Jonathan Sergison

Alberto Ponis,
Sardinia, *c* 1975

JS *Alberto, we've been talking about your architecture and the ideas embedded within it for many years now. Our friendship and the richness of your work perhaps makes it difficult to decide where to start this conversation – should we begin with your upbringing, or your approach to design, your various projects or even your relationship to Sardinia and the island landscape that has been integral to all of your buildings? Of course, we can hopefully cover all of these things, but perhaps – as we sit here in your home and studio – it might first be interesting just to talk about typology, specifically the idea of a house, which has been the single constant in all of your work. I'm curious to know whether you understand your designs in these typological terms, or instead think of each commission not as another house but as another landscape, or client or form?*

AP I must start concentrating now because, I have to admit, I never tend to consider my work in these conceptual terms. I suppose if I had to pick a single theme it would not be type but speed – here in Sardinia the main characteristic of my work is that I have to be quick in giving instructions and never have much time to *ragionare*, to think, to discuss. Actually, the first time in my life when I had a moment to sit back and consider these things was in 1983, when my wife Annarita and I were recovering from a car crash. A tough old guy drove into the side of our Volkswagen. I broke most of my ribs and Annarita broke her shoulder. We were hospitalised in Sassari and then had to convalesce in bed for 40 days. That was the first time I really started to think about my work, because before then I was just too busy producing it.



JS *I've never heard you describe this accident before. It reminds me of the story of Aldo Rossi and the cemetery at Modena, which he developed while recovering from his own car crash.*

AP It was while I was recovering that I actually started to conceptualise how to present and publish my work. Before then I didn't have the time or right mindset to get into any form of research. I just had to keep building houses. I've designed more than 300, and none of them was presented to me as a 'do-it-in-any-way-you-like' commission. And no single project was the same. The clients each responded in different ways. Frankly, some of them were also more interesting than others. But I made sure I looked after all of them, and considered every detail of their houses. For example, in each of the hundreds of bathrooms I have designed I think carefully where to place the soap and loo paper around the tub and on grid with the wall tiles. I find a place for everything. Which means that for 40 bloody years or so I've been here all winter designing houses that people use in the summer. The huge amount of work this requires means that I have great difficulty thinking of them in anything other than physical terms.

JS *But the sheer mass of houses you have done is astonishing – as you say, more than 300. And the vast majority of these are located in one place, here on the north coast of Sardinia. Even if you've never had the chance to reflect on the ideas implicit in your work, the relationship between a repeating typology and a variable commission does seem interesting to me.*

AP In a way they are both the same thing. But remember, I didn't choose these commissions. They came to me. Of course it started with houses, but more than their house-ness these projects all suggested to me a strong relationship to the ground. That, I think, is the really fundamental thing about all of the buildings I have produced. And that is also what prevented all these hundreds of commissions from becoming simply mechanical, repetitive or boring. For me, the differences in ground conditions are what made the whole process fun. I've always enjoyed playing, respectfully, with the suggestions of a site, and never making the architecture a replica of another project, like the developers did elsewhere on the Costa Smeralda. It was early in my career that I began to understand the differences implicit in each site. Suddenly, something clicked. Each house became special, and was somehow made more *nobile*, more noble, by the ground around it.

JS *You seem to have made that realisation quite early on, and to have held on to the sense of satisfaction it gave you. Many other architects would think, after doing a few houses, 'When am I going to get a museum to design, or a skyscraper or an airport?' Whereas you seem more than content with the jobs that came your way.*

AP I was always energised with the intensity by the experience. And as I mentioned before, each job brought different conditions, and a different site. Right from the very beginning these sites solicited in me a kind of creative impulse to do something that played with the formal and the informal, with the crystal and the rock. It all became like an artist's composition, like painting. Perhaps I should have said this before when we were talking about concepts. The painterly is fundamental to my work. I have always painted the houses I have made, and have made drawings that could easily be lifted out of a simply technical realm into something more pictorial. This attraction or sensitivity to painting always provided a kind of extra element that made even a small house – like the tiny Yasmin's Studio I designed a few years ago – seem no less important than any large-scale project, like a hotel or even an airport.



JS *And did you treat these commissions sequentially, working on one, and then another, and so on?*

AP Yes, absolutely. Each commission was entirely independent – there has never been anything systematic about the work I have done. I guess the only repeating element, as you said, is that they are all houses. And I *do* have a strong sense of what a house is. I can say that partly because I know that my brother hasn't got it – you need a negative so as to know the positive. I'm not trying to be deliberately polemical or provocative here. It's just that my brother Aldo, who is also an architect, has never been interested in a house of his own: everywhere he has lived has seemed a bit sad to me. From the living room window, for example, you'll only ever see another house not more than 10m away. I need more distance. I need to see something else from my window. And I need to occupy something I have created. I guess this sensitivity came from my father. He was a mechanical engineer and ran a textile company, but he also had a very poetic, very aesthetic side.

JS *Perhaps we could use this link into your father to talk more biographically about your childhood?*

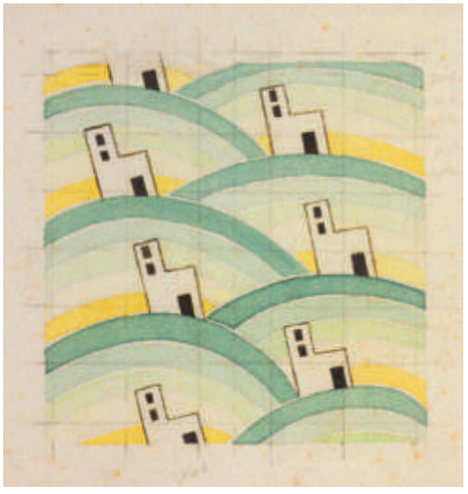
AP My father, Mario Alberto Ponis, was a big influence on me. He was born in Florence in 1893 and fought in the First World War. He was on the right side, let's say, not the Right side. He was in the Italian Air Force – Pilot 17.

Alberto Ponis with his brother Aldo, after putting out a fire, *c* 1975; Mario Alberto Ponis, *c* 1916



I have a framed photograph on my wall of him standing in front of the propeller of his Caproni biplane. He was flying combat missions in the war with Albania. He was a very handsome chap – he looked a bit like Clark Gable – and was a real womaniser. My mother had some problems keeping him under control. After the war he set up a company in Genoa called MITA (Manifattura Italiana Tappeti Artistici) which specialised in the hand-weaving of carpets and tapestries. My father invented and patented all the looms on which these textiles were produced. He would work with lots of artists and designers who produced his textile designs, all of which were typically modern in character, regardless of whether they were abstract or figurative. The architects of the various houses, hotels or even ships these fabrics were intended for would always be meeting with my father, discussing materials, patterns and colours. It was like a whole kind of Bauhaus in miniature, with painters, sculptors and architects constantly passing through. Later he even commissioned a Bauhaus-style building to house his factory. This was my first encounter with modern architecture. It was designed by Luigi Daneri – all very rationalist, with open-plan spaces to accommodate the looms, a white rendered facade and slate for all internal and external detailing.

JS *Your father's successes, as an entrepreneur, must have meant that you enjoyed a rather privileged upbringing?*



AP Yes, absolutely. He made a lot of money, and was always very generous with it. Actually he made most of his money over the five years between 1937 and 1942. During this period he made all kinds of devices and garments to protect pilots – as a pilot himself he knew about these things. His inventions were designed to help pilots who had ditched on water, or to protect them from the cold; he even devised new ways of airdropping food. To cater for the demand he switched to mass production. In the war years he had hundreds of women working for him. After the war he returned to the production of textiles, and continued working with lots of architects and designers. He did many of the textile designs for Giò Ponti's buildings, for example, and only really stopped work at the end of the 1960s, when he lost motivation in the face of the commercialisation of fabric design and the industrialisation of its production.

JS *And where were you living at the time?*

AP The family home was a typical Genovese villa – built in 1600 – in a beautiful location, on a bay in Nervi, just along the coast from Genoa. From my bedroom window I could see the fishermen setting off, or the women washing their bedsheets and the old *leudo* sail boats loading up with various goods.



JS *Did you stay in Nervi throughout the war years or were you evacuated?*

AP My father temporarily moved his factory and his family. In a way, I was just the right age. I was 11 in 1944 and my brother was nine – old enough to understand the seriousness of it but too young to be sent away to fight.

JS *Do you remember experiencing a physical sense of fear?*

AP Fear is not really the right word for what we felt. As a child it was all like a kind of game. But of course there was bombing. We learned very quickly that as soon as the air-raid alarm went off we had no more than ten minutes to run for cover. We were also told that if we ever heard the whistling of a bomb then it was just

MITA factory interior, 1940 and textile design, 1932; a *leudo* in Nervi harbour; Florentine studio apartment of Alberto Ponis, *c* 1956



about to land and blow up. For several years after the war, even in Florence, I remember that whenever I experienced any kind of fright my first instinct was to throw myself to the ground.

JS *You had moved to Florence to begin your architectural studies. Why did you choose that particular school?*

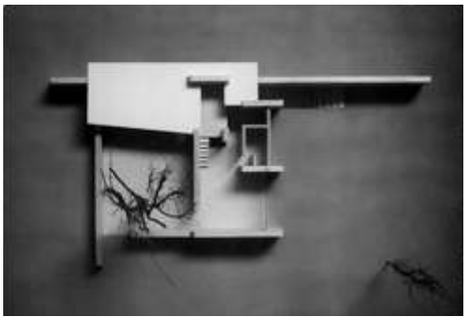
AP I'd decided that I wanted to become an architect when I was much younger – I must have been just nine or ten – but when the time came to enrol I discovered there was no architecture school in Genoa. This was actually a piece of luck, because it forced me to leave home and become independent. In Italy at that time the two best architecture faculties were in Florence and Venice. In Florence there was Ludovico Quaroni and Adalberto Libera, while Venice had Bruno Zevi, Lodovico Barbiano di Belgioioso and Luigi Piccinato. I chose Florence because it seemed as if the school was more exciting and had a nice mixture of young and established architects. The city then was also quite different to now – many of the bridges over the Arno had been destroyed during the war, and so you experienced and navigated the city quite differently. You think of Florence now teeming with tourists but back then it was absolutely deserted.

JS *Where were you living?*

AP I rented a *pensionato* on the Piazza dell'Indipendenza, but every two weeks or so I took the train back to Genoa with all my dirty shirts which I deposited with my poor mother. She would do all my laundry and prepare a huge plate of lasagne. I filled my stomach and then would sleep until late the next day. It was a very digestive relationship. Back in Florence my apartment was just a short walk from the faculty, which at the time was located in two separate sites, on the Via degli Alfani and in the cloister of the Piazza San Marco, just next to those wonderful frescos by Fra Angelico. We would study the architecture of Alberti and Brunelleschi and then go and look at their loggias. It was such a privilege. We also looked closely at the Renaissance artists and the frescos by Giotto, Uccello, Botticelli and Masaccio.

JS *But you were also drawing too, no? I've seen some of your sketchbooks from the time and they are full of fantastic drawings.*

AP I drew from morning till night. In pencil and ink. Freehand and with set squares and rulers. And I was very well taught. The big stars in the faculty – people like Giovanni Michelucci and Quaroni – only checked in on us once a week or so. Our everyday contact was with their assistants. Libera, in particular, had great assistants called Rodolfo Raspollini and Domenico Cardini, who were not known internationally but were very good architects and fantastic teachers. They taught us how to draw, and also helped us focus on things specifically related to a building – to its structure or roof, for example.



JS *What was your graduating project?*

AP I designed a pavilion for the Venice art biennale. It was located on a site later filled by Sverre Fehn's Nordic pavilion, and was a lightweight steel and wooden structure, partly open and completely immersed in the greenery of the site. But the conception of a pavilion at that time was totally different to how we understand a pavilion today, not least because these were permanent structures, more like houses or homes for a particular country (like Carlo Scarpa's Venezuela pavilion). Later, in Rome, I had the opportunity to show Scarpa a model I made of my proposal. He didn't say much about my design, except that he wouldn't have had grass in the courtyard garden but would have left it as cement.

JS *You once told me that you went on a student trip to London, which became the impetus to move to England after you finished your studies?*

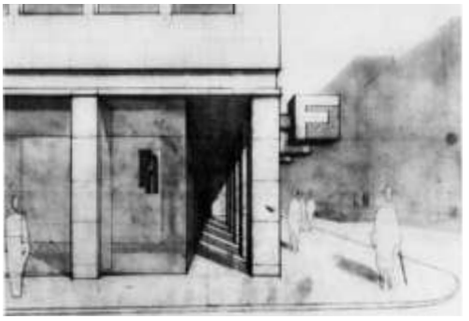
AP That's right. In my fifth year there was a prize that funded a trip to London for 12 students of Quaroni's from Florence, and 12 students of Carlo Aymonino's from Rome. I was lucky enough to be selected as one of the Florentine students. We all stayed in a student hostel on the outskirts of the city and promptly caught Asiatic flu. We had to be quarantined for a while. But despite this, I loved it. It was a *coup de foudre*. I remember being especially transfixed by the colours of London, which are not the pastel Mediterranean tones I had grown up with. They are much brighter, stronger – reds and greens. It was all so new and fantastic that I immediately decided I had to come back. And so as soon as I graduated I began to look into finding work with an English practice. Because my thesis was in essence an interior project I was initially looking at interior designers. I found one that had an Italian branch and they interviewed me and agreed to take me on. Before I could move, however, the office went bust. I decided to go all the same. I remember my father being a bit peeved: he would never have explicitly opposed me, and was always very affectionate, but it was clear that he wanted me to stay, working as an architect alongside him at MITA. But my mind was made up. And because I didn't want to always rely on his financial support, I borrowed some money from a friend – Enrichetta Ritter, who was an assistant at *Domus* to the editor Lisa Ponti, daughter of Giò Ponti. Enrichetta gave me 50,000 lira and a list of names of English architects I should contact – people like Hugh Casson and H T Cadbury Brown. I also met with Belgioioso and Ernesto Rogers and asked them for their own recommendations. Rogers gave me the address of his nephew, Richard, who had recently graduated from the AA.

JS *And did you go and see all these offices when you finally got back to London?*

AP I interviewed with all of them. I arrived in November 1960, the rainiest November in English history. I remember meeting with Richard Rogers at his office in Hampstead. He liked all my drawings but because I couldn't speak a word of English he told me in his own fluent Italian to come back when my language skills had improved. But then, after another interview, I got an offer of a job with the architect's department at the London County Council – the salary was £650 a year. While I was deciding whether to take it, I visited the LCC studio spaces and discovered that I would have been one of 600 other architects, which really gave me the creeps, and so I turned them down. I then got a better offer from Middlesex County Council – £850 – but rejected that too because I didn't want to work in the suburbs. Some short while later, though, I interviewed with Ernö Goldfinger at his office on Dover Street, Piccadilly, and he offered me a position, which I accepted immediately.

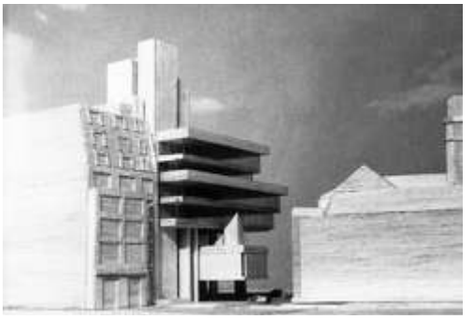
JS *How was it working for Goldfinger?*

AP Goldfinger was a simply impossible person, always bullying his assistants to the point of tears. But because my English was so bad, I used to speak to him in French, which I had studied and knew quite well. I soon discovered that in French Goldfinger became quite docile, even reasonable – apparently he was reminded of the pleasant times he had spent in Paris. Another colleague, a young woman from Denmark, noticed this too and used the same tactic. We suddenly gained a rather privileged position in the office, even if this didn't exactly endear us to the Brits working there. But one Brit who I did get along with was Goldfinger's secretary. She also worked as a secretary for the Smithsons, and so she was quite used to being shouted at. We got married some short while later.



JS *But what about the work? What sort of projects were you doing?*

AP I produced drawings – in feet and inches, an entirely new unit of measurement for me – for a bank in Elephant & Castle and some perspectives for a branch of Air France on Piccadilly. But I didn't stay long. Goldfinger didn't seem to respond especially well to the drawings I had done, while I wasn't so enthusiastic about the modular grid that he used on every single one of projects. But one lunchtime, as I sat in Green Park eating my sandwiches, the newly completed St James Place apartments caught my eye. A friend in the office told me they had been designed by Denys Lasdun, who was then really making a name for himself. So some time towards the end of 1961 I went to visit him and applied for a job. The office didn't have any vacancies at the time, but it was about to move into a larger space on Queen Anne Street. Denys just said come back in January and we'll take you on. So that's what happened.



Student project for a studio-house; Ernö Goldfinger, Air France building, Piccadilly, drawing by Alberto Ponis; Denys Lasdun, Royal Institute of Chartered Surveyors, model by Alberto Ponis

JS *After the difficulties with Goldfinger, how were your communications with Lasdun?*

AP My English was still very limited, but somehow this propelled me into a very direct relationship with him. Because I wasn't a registered English architect I couldn't do working drawings, but again, a bit like with

Goldfinger, this limitation became a privilege. It meant that I worked directly with Denys on the initial designs, which were mostly expressed through the sketches, drawings and models I produced for him. The very intense engagement these generated and the discussions we had became a new kind of university for me.





JS *I know that you remained on very friendly terms with Lasdun – and he and his wife Susan visited you here in Palau on a number of occasions – but you must also have met lots of other interesting people in his office at that time?*

AP I enjoyed a very close friendship with three other colleagues, who all shared a studio space with me in the Queen Anne Street office – Michael Brawne, Ted Cullinan and Charlotte Baden-Powell. At the time I was working on a project for the Royal Institute of Chartered Surveyors, which sadly was never built, Charlotte was doing a swimming pool in Liverpool, Michael a tower in Cambridge and Ted was busy with the UEA campus. We used to have very intense discussions about architecture, with Michael always arguing that detail was the essential part of any design, which enraged Ted who only ever considered detail secondary to the bones of a project. We carried these discussions over into the evenings and weekends and even entered some competitions together. I had already entered one while I was with Goldfinger – a building for the Ministry of Works in Parliament Square. It was won by a chap called William Whitfield, but I got second prize. Encouraged by this I then entered four more, including one with Charlotte for the Museum of Ulster, which again earned us a second place. Just think, if I had won these my life would have been quite different. I would have become an English gentleman – Al-burt Ponis not Al-bare-toe Ponis.



JS *Were you also still enjoying other aspects of English culture and living in London?*

AP It was still wonderful. I had a place in Norland Square in Holland Park, and would go out in the evenings for dinners, talks or to the theatre. I remember seeing Louis Kahn lecture at the RIBA in 1962, when he drew the three squares of Bryn Mawr College on a blackboard. I also remember, not long after I first arrived, going to see Jonathan Miller, Alan Bennett, Peter Cook and Dudley Moore perform in *Beyond the Fringe*. My English was still very rudimentary but I absolutely loved it. I also went to see a monologue by Laurence Olivier, and didn't understand a word of it, but I loved that too.

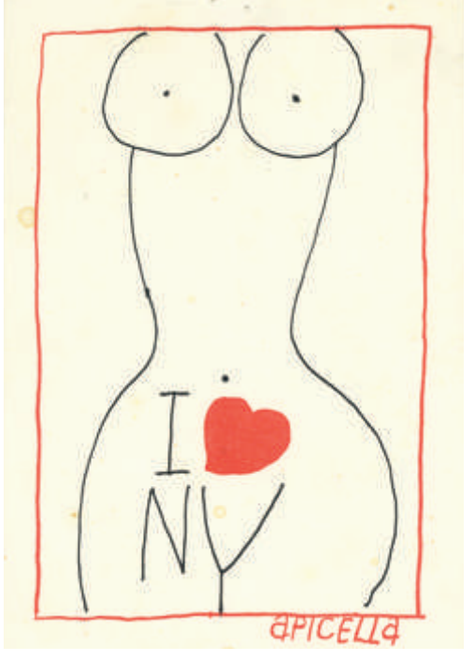


JS *But did you also maintain a connection with Italy, or with an émigré Italian population in London?*

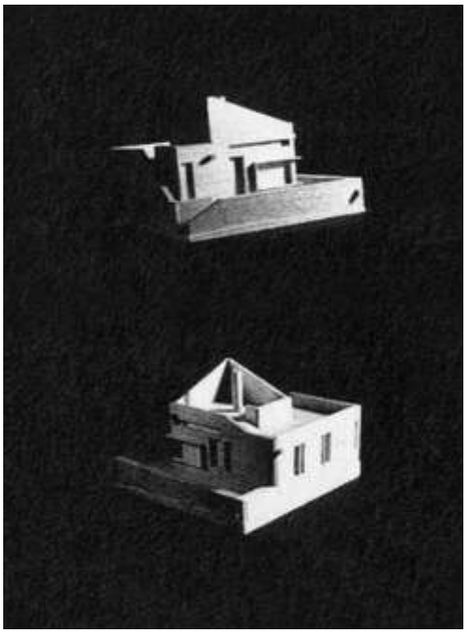
AP Absolutely. Like all Italians living in London at that time, once or twice a week I'd go out to an Italian restaurant and catch up with all my fellow countrymen. My great friend then was Enzo Apicella, who was a designer and cartoonist from Naples who had moved to England in the mid-1950s. He was a really very popular chap. His cartoons appeared in *Punch*, *The Observer*, *Private Eye* and *Harpers & Queen*, but he also did the interior design for lots of restaurants – especially the Italian *trattorias* that were being set up by the restaurateur Mario



Cassandro in competition with the more established French-style restaurants. Of course, out of national loyalty, I never set foot in any of those bistros. It was a really very effervescent atmosphere. Our favourite places, all designed by Enzo, were Aretusa on Romilly Street in Soho, and Meridiana and Tiberio in Mayfair. And it was in Tiberio one evening that Enzo asked me if I would be interested in assisting him with the design of what he called a 'sample' house for a new tourist development in Sardinia. This development, in Porto Rafael, on the headland of Punta Sardegna, was being funded by a small fellow called Dino Da Ponte, who was a Romanian banker – his real name was probably Pontescu, or something like that – but he chose a Venetian name, I guess, to lend himself a noble air. Da Ponte also had a partner called Vincent Poklewski Koziell, who was an aristocratic Polish gentleman and close acquaintance of all the important people in London, even including members of the royal family. He recently



Denys and Susan Lasdun onboard the *Orfea*, Corsica, 1977; Charlotte Baden-Powell and her cat; Alberto Ponis and Charlotte Baden-Powell, competition model, Museum of Ulster, 1964; Alberto Ponis, Norland Square, 1965; Enzo Apicella, postcard, 1965



published a funny book of his London reminiscences called *The Ape Has Stabbed Me*. So anyway, Da Ponte meets Enzo and asks him to design a prototype house that could be easily built and replicated across his stretch of land in Sardinia. He adds, by the way, that he is flying to Porto Rafael the following week and wants to take these designs with him. Enzo immediately called me, and suggested we do it together – because he was an interior designer, not an architect, he thought he could produce a few nice coloured drawings of the interior and I would design the basic form.



JS *How did you manage to juggle this first commission with your work for Lasdun?*

AP I told Denys about this job. The atmosphere in the office then – this would have been the spring of 1963 – was euphoric because we had just won the commission to design the new National Theatre. Denys was very generous and understanding with me, and let me take a couple of weeks off.

JS *And you did design this prototype house?*

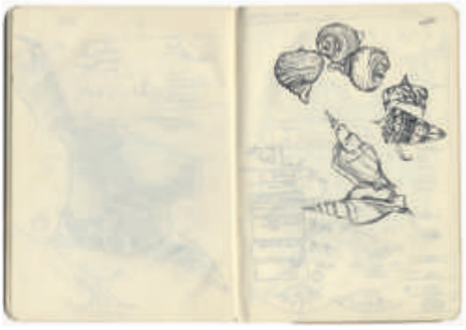
AP I did it over two evenings. At that time my favourite architects were Coderch, Stirling, the Smithsons and the other Team X designers, and so I followed them in making it a very simple design – 81m² and square in shape so that you could join two together and make a double. The more problematic bit was the roof, because in a house of that scale the roof is always the main part. I was told that in Sardinia it could get very windy so I decided to extend the parapet, creating a roof-top solarium and a nice shelter from the wind, and this later became a theme of the whole project. I then produced a number of drawings and made a balsa wood model – I actually still have this with me today; I keep it with me as a sort of amulet. A few days later I gave these drawings and the model to Enzo, who added his own beautiful coloured perspectives and passed it all on to Da Ponte, who seemed to really like it. The following week we all flew off to Alghero.

JS *Did this feel like the beginning of something, the next phase of your life?*

AP At the time it just seemed like a short break, an ephemeral distraction. Definitely not something new. Besides, there was nothing there. When we flew, there wasn't even an airport to land into, only a field. I remember it was so windy the pilot made about six failed attempts to land before we finally made it down. It then took us practically the whole day to travel the 150km or so from Alghero on the northwest coast to Palau on the other side of the island. The only activity that generated any noise whatsoever was a tiny ferry that plied the channel between Palau and the island of La Maddelena. We stayed in a little hotel on the harbour. I sat down next to a chap in the hotel bar and introduced myself: 'Hello, I'm Ponis.' He said, 'Hello, I'm the mayor of Palau.' And then along came this handsome arrogant guy called Roddy Wilson – Da Ponte's technical assistant in his Anglo-Italiana company. Da Ponte had bought 140 hectares of land between the fortress at Monte Altura and Punta Sardegna.

JS *Had the British already arrived in Palau by that time?*

AP No, that was another magnification *a posteriori*. Porto Rafael had been founded in the 1950s by the artist Rafael Neville and was named after him. Before he arrived there was nothing there, only malaria. He came from a family of Spanish aristocrats, and his father was the Hollywood director Edgar Neville. Rafael Neville was very eccentric and would hold fantastic parties. He held the option on a parcel of land which he then sold on to Da Ponte and which became the first site for my Sardinian work. The same thing was happening elsewhere on the island, not least on the Costa Smeralda, which was bought in the early 1960s by Karim Aga Khan. There were also many other, much more boring English developments around



Models, prototype house, Palau, 1963; sketchbook, 1977–79; Sardinia, *c* 1963

Cagliari, for example, which quickly turned into very dull resorts like Rimini or any of those places along the Riviera. It was a stroke of luck, really, that I found myself on what I only later realised was the nicest part of the whole island – not only was it undeveloped but it had a wonderful topography, with incredible rocks and traditional *stazzi*, or shepherd's huts, typically stone cells 4 × 4 × 4m, with plastered walls and wooden beams, usually made from juniper.

JS *I've always been impressed by the way you've very consciously tried to absorb the particular characteristics of this place – its landscape and geology, but also its vernacular traditions. For someone who grew up in Nervi and Florence, and who then came to Sardinia immediately after the urbanity of London, the Punta Sardegna must have seemed like a whole other world?*



AP It was. But you have to remember that my transplant from England to Sardinia was not immediate. After I left Lasdun in 1963 to build the first of my houses – the Casa Altura – I kept an office in London for almost seven years, and was constantly travelling back and forth. I had a studio on Charlotte Street, just along from the wonderful Tiranti architectural bookshop, with a number of other refugees from Lasdun – Charlotte and Michael, Peter Collymore, and briefly John Winter, who'd been with me at Goldfinger's. All of us were in private practice, but none of us could afford a dedicated office space. So we collectively shared one. I would work there during the winter months and then go back to Sardinia to oversee construction. So I wasn't like Garibaldi, one day suddenly saying goodbye and going off on his *Spedizione dei Mille*; I moved more gradually.



JS *And who were your clients in those first years of your practice?*

AP Mostly English couples. This is why it made sense to keep an office in London. They all wanted holiday homes in Porto Rafael or along the Punta Sardegna. I was so excited to finally build something after three years of doing only competitions. The English economy, in that very happy atmosphere before Harold Wilson arrived and immediately cut all exports, was also very strong at the time. You could get a lot for your money in Sardinia.

JS *And where were you living when you did stay on the island?*

AP The first year I was here I stayed in the Hotel Serra in Palau, but I really needed a place of my own. I asked the hotel owner if he knew of any vacant properties and after several months he told me that a little house nearby was available for rent, as the tenant had recently died. It was a very modest, single-storey structure, with a small courtyard and windows overlooking the Via Capo d'Orso – a slightly more urban version of the shepherd's *stazzo*. I quickly signed the lease, painted the interior white and moved some furniture in. It soon became both my home and my office, although to call it an office is a bit of an exaggeration – it was the small room next to my bedroom (when you find yourself in a desert, your tent is where you sleep, eat, drink and work).



JS *What about your English wife? What was she doing while you were setting up your new home and office?*

AP Her grafting to Sardinia wasn't quite so successful. The real problem was that she hated rocks. She liked only sand. Whereas I, as you know, absolutely love rocks, so much so that like an Egyptian pharaoh I sometimes think that I'd like to be buried with one of my rocks. And so in the summer mornings while we were still living in the hotel she would take a bus to Santa Teresa Gallura, a resort on the north coast. She only wanted white beaches. I'm afraid that for me was reason enough to file for divorce. And so we split and she returned to England.



JS *I wonder whether that's the first time a love of sand has been filed on a divorce paper?*

AP It must have been a first.

JS *Before we get on to some of the houses you designed, can you talk a little bit about this house – your second home and studio in Palau – which you completed in 1975 and which you refer to in one of your books as the Casa Definitiva, the Definitive House?*

AP I was very fond of the small first studio, but after eight years there we needed something bigger. I had five other people working with me and so many commissions that I'd even had to rent the place next door to accommodate everybody. But the process of moving out was again very gradual. It took almost two years to find a suitable plot, close to the port here in Palau, to secure a loan – which took me 20 years to pay off – and then to design and build the house, which was actually the fast bit. I had to do it quickly because I had so many other houses to design and build for my clients, all in time for summer.

JS *Many architects find it almost impossible to build for themselves. Did you have any problems being your own client?*

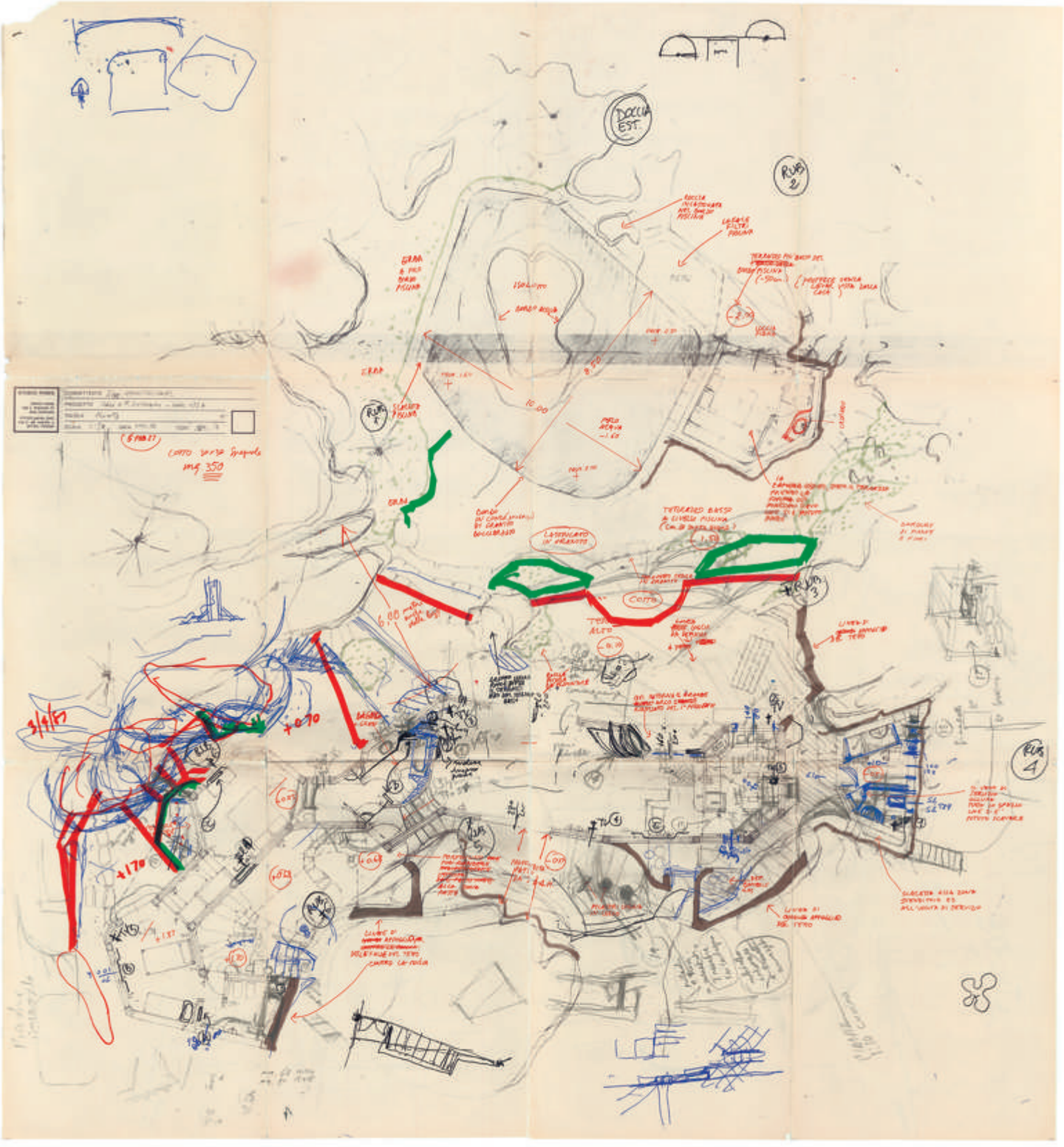
First home and office, 1964;
Studio Ponis, *c* 1969;
sketchbook, 1977–79



AP No. I did it so quickly that I never had a chance to get self-conscious. I actually designed this house in Rome while sitting at the bedside of an American girlfriend – she was convalescing at the time. She was a good friend of Gloria Steinem and helped initiate me into feminism (I had to starve my brain of this whole macho Italian thing). And so while I was there I worked on the boundary of the site and sketched out the plan – where to put the two courtyards, the relationship of the garden and the separate spaces of the house and studio. By the time I moved in I had split from my girlfriend and, I have to admit, I was resigned to living in this house by myself. But then I met my wife Annarita and had a family. I realise you cannot write a biography that always says 'I was lucky', 'I was lucky', 'I was lucky', but in my case it's true. There was also an element of luck in the way I got my commissions. And in many ways, the informality of the way I designed my own house was also mirrored in the way I worked with my clients. Actually, I never really think of them as clients. I can't say they were close friends either, but the holiday atmosphere of the commissions and of Sardinia as a whole meant that it was all very warm and convivial. We would meet and talk about the design at the beach, or go swimming together, or in the evenings eat and drink at Rafael's café. I have to say that things were also very informal with building permits. For a number of the first houses I did in the 1960s we filed the papers requesting permission to build them six months *after* they had been built. Today I would go to jail if I behaved like that. In this sense I was lucky chronologically as well as geographically – at that moment, during the birth of Sardinia, there was so much tolerance and so little bureaucracy.

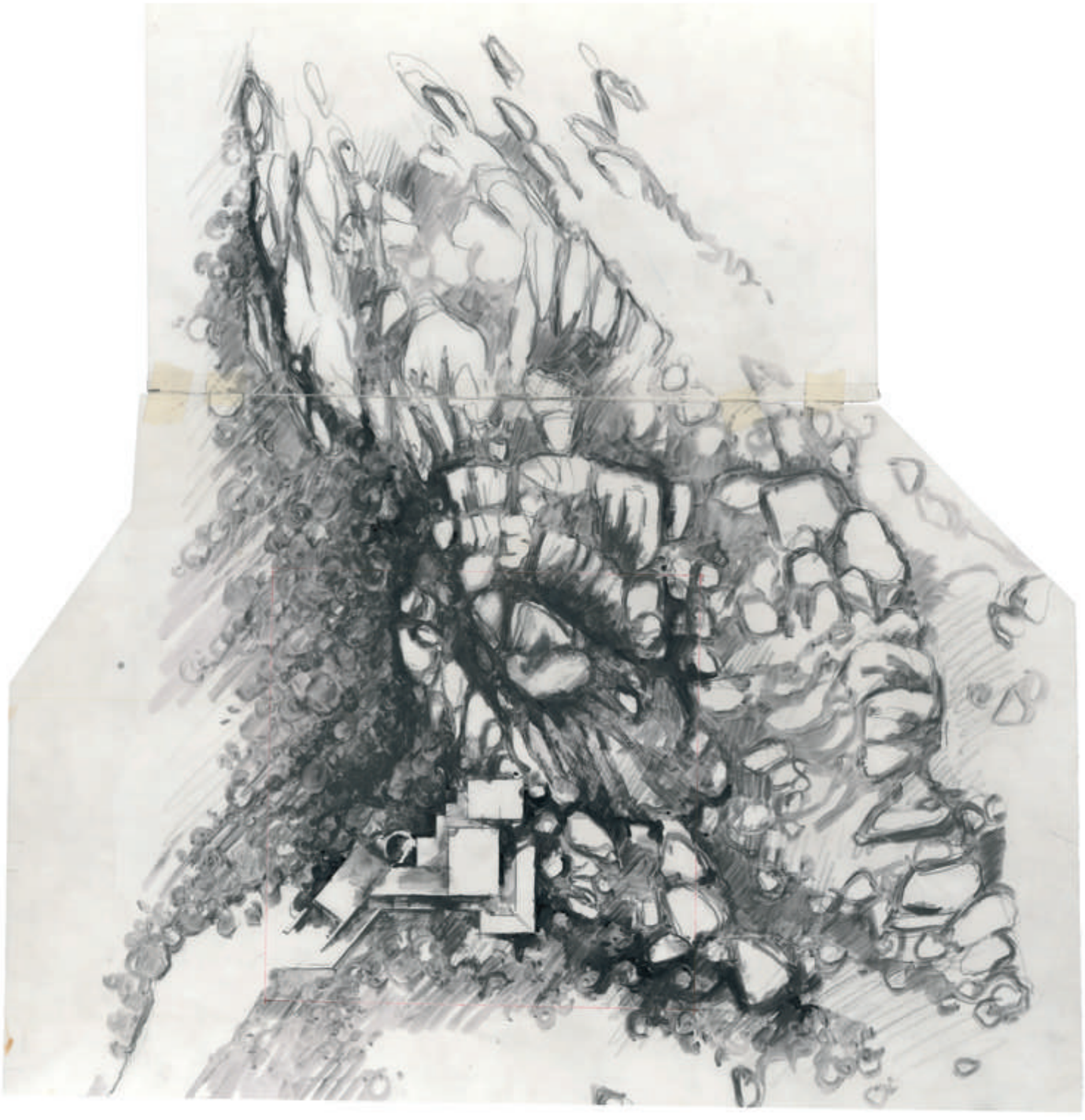
JS *Can you talk a little bit about those first houses?*

AP I designed and built four houses between 1963 and 1967 – the Casa Altura, Casa Magri, Casa Schild and Casa Martinez. The Casa Altura developed out of the prototype I made for Da Ponte – 81m², geometric and compact and with a sheltered roof-top solarium. I marked out

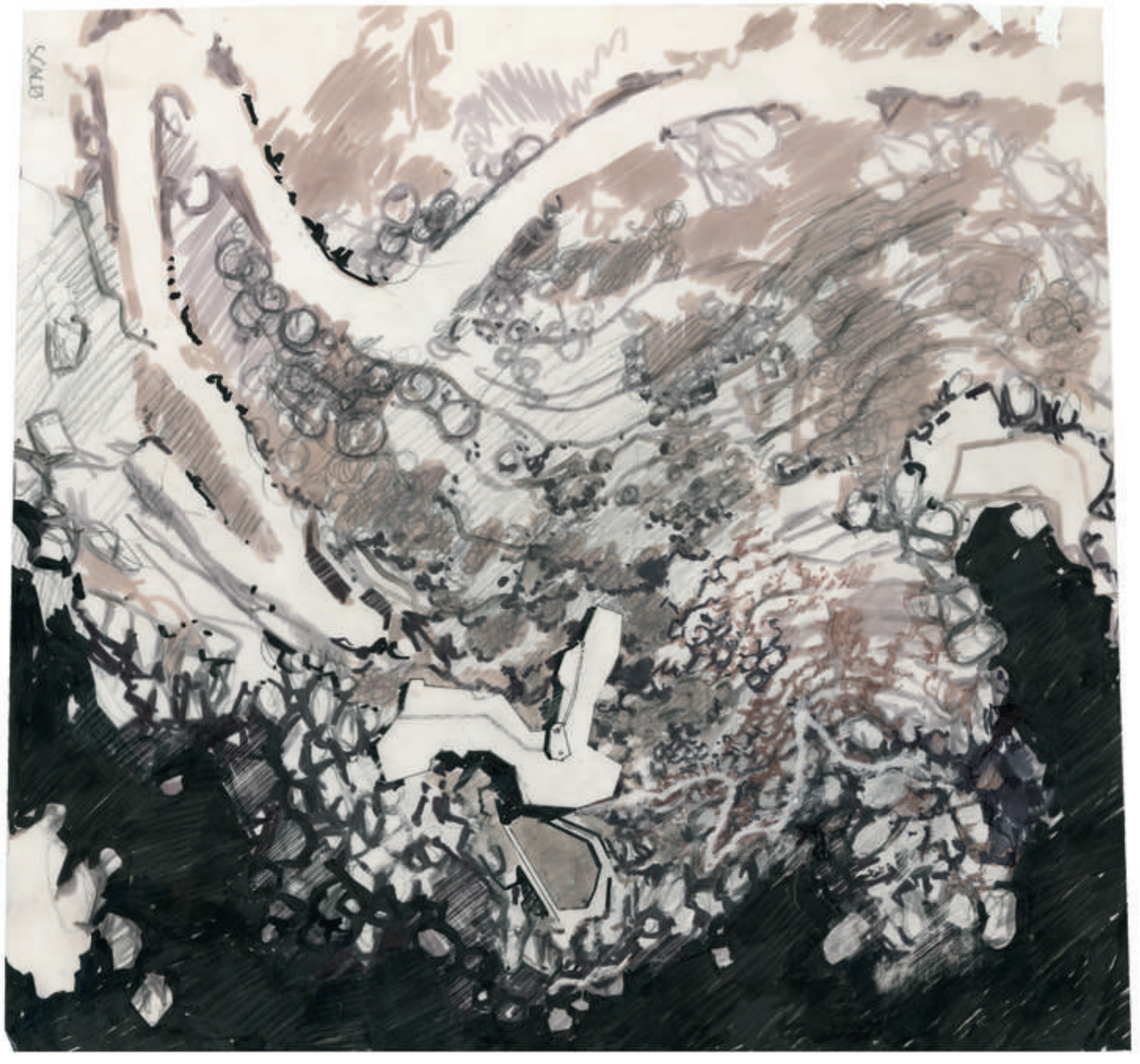

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Working drawings,
Casa Heintzschel,
Punta Sardegna, 1986



Casa De Carli,
Costa Paradiso, 1974



Casa Scalesciani,
Costa Paradiso, 1977



the whole plan physically, on site, including the addition of a large L-shaped glass wall to provide panoramic views over the sea. But when I returned to Sardinia a month later, with the construction having reached the roof line, I received a nasty baptism into the realities of working here when I discovered that the builder, in an effort to create more shelter from the wind, had rotated the house so that its large window now faced inland, not out to sea. We had to demolish it and rebuild the whole thing. The Casa Magri used similar geometric, compact forms but the whole composition was more articulated in response to the site, meaning each room had a very specific relationship to its surroundings. Soon after I completed this house, and as other holiday homes began to appear all over the Costa Smeralda – typically built in pseudo-Catalan or pseudo-Provençal style – I found that my clients were increasingly questioning my more rational architectural designs. And so for the Casa Schild I knocked off the right-angled corners of the house and made a more curving plan. I did this simply to please the client, but I was also pleasantly surprised by the result, not least because it enhanced the relation of the house to the landscape. The last of this first clutch of four houses, the Casa Martinez, took this another step further – it was deliberately sited on an irregular, rugged site, and slotted neatly in between various rock formations. The plan for this house was not produced on a drawing board, but marked out with boards and wires on the site itself. The whole thing became an enormous sculpture.

JS *When I look at the way you've made these houses and the decisions you've taken I'm struck by the level of care you invest in them. Not just the precision with which they are sited, but also the way they are painted in colours that match*



the ground, or roofed with handmade tiles designed to blend with the surrounding rocks. It seems that you've built so many houses in this corner of Sardinia because people have responded to these sensitivities – and so even if, as you say, you are lucky, I think your clients are also lucky to have one of these houses. But looking at these early houses again with you now, and at a few others from the early 1970s in your more characteristically Ponis style, like the Casa Hartley and Yasmin's Studio, it also seems as if each house demonstrates an interesting set of contradictory forces – that they are somehow both modern and traditional, formal and informal, organic and rational. Were these contradictions also something you designed?

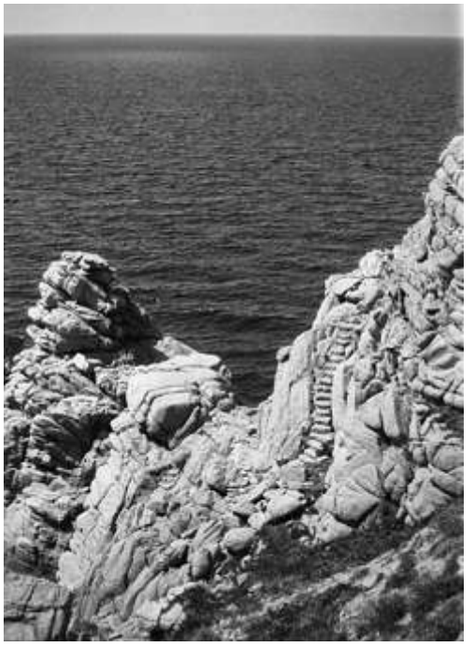


AP I think they were a consequence of my move from London to Sardinia, and the change I had to make in my architectural sensibilities. You can see this especially in the first houses, which were really decisive for me, moving from something modern, formal and rational towards this crazy organic thing I developed here in Sardinia. But ultimately I discovered that the characteristics of a house are not something I should impose, but should only come from the site. When I realised this, I felt I had really discovered something important. It also enabled me to be more critical of my first two houses, in particular, which seem to be lacking something, especially an ability to really grab the site, to attach themselves fully to the earth. I think from the early 1970s my houses did do this. And again, reflecting on this now, I think this is something I inherited from my father – a sense of terrain, materiality and place.

JS *For me, this sensibility reaches its zenith with my favourite of your houses, the Casa Scalesciani, which I really think is one of the twentieth century's great Mediterranean houses – easily on a par with Utzon's private house in Majorca, Konstantinidis's weekend house in Anavyssos or Coderch's Ugalde House at Caldes d'Estrae in Barcelona – and a house that induces a real quickening of the heartbeat, not least because of the extremity of its site.*

AP I very much like the fact that the house is so unexpectedly out of proportion with the almost down-to-earth nature of the commission. I designed it for Juan Scalesciani, an Argentinian property developer and a passionate Italophile. He wanted a holiday home with an open kitchen, a series of rooms and a small saltwater pool. While the brief was simple, the site was much more extreme – a jagged, very steep rock face that drops sharply down to the sea. Just walking to the site was dangerous enough, never mind building there. You held your breath as you inched along a narrow cliff-top path. It was really frightening. My first approach was to create a snaking series of rooms covered by a single ski-slope-style roof, but Juan wasn't happy with an imposed geometry. Eventually our solution was to follow much more closely the contours of the site – a more irregular, articulated shape, like a kind of armadillo or a crystal, that would provide a sequence of spaces as if each room was holding the hand of the other so as to prevent it from crashing down the rocks and into the sea.

JS *The result is that the plan of the house is amazing, with no room having four orthogonal sides. The whole thing is about facets, and about the way the very volume of the house expands and contracts according to topography, so that you get an internal landscape and an external landscape. You've also managed to create all these intriguing spatial relationships, looking into one space from another, or out to the view. The whole thing is so inventive.*



AP I just wanted the form and shape of the house not to appear in any way gratuitous but instead almost inevitable.

JS *You can also see that in your sketchbooks, which document not only your personal observations of a site – its topography, rocks and colours – but also quite formal things like the silhouette of a chimney pot, which I know you are very particular about. But perhaps more than these sketches it's*

Casa Altura, 1963; sketchbook, 1972;
Casa Scalesciani steps, 1977;
Casa Schild, roof terrace, 1966



the plans of your various houses that are such a pleasure to look at, and which, as you said earlier, are at the same time both technical and very artful – you demarcate the outline of the house very precisely on architect's tracing paper, but then you fill in the rocks or sea or pathways with much more expressive, painterly strokes, as if it were a canvas. Actually, one of the intriguing things about these plans is that you seem to be drawing the rocks more intently than the architecture, or rather the profile of the architecture emerges quietly, naturally, out of the profile of the rocks.

AP I always try and develop my houses around a rock or sequence of rocks. The rock is like the light or fire in the centre of a tent, and all the architectural volumes then start to define themselves by fanning around it. In this sense, it is always the site that makes the design.

JS *That making must also involve numerous trips to the site? I don't see in your studio or any of your papers a complete set of working drawings down to the very last detail. It seems that these houses were made according to a model almost from another age, working with artisans and builders, and a very understanding client of course, so that you were able to make decisions as you built the house.*

AP There is also the freedom to change your mind while you are building, even if this means temporarily stopping the construction, or removing something and starting again.



JS *This reflective and self-critical attitude reminds me of four films I recently saw at the Venice biennale in which Álvaro Siza talks about a number of his projects. In one in particular – an apartment he did in Venice – the tenant was asking Siza why he didn't place a window in a wall which would have given him a view from his bathroom. Siza replies that adding a window would have been a sin because it would have destroyed the composition of the whole facade. And yet when pressed, Siza reflects that today he would have added the window.*

AP I would have added the window.

JS *Me too. Because the advantages of having it seem more important than the formal benefits of not having it.*

AP It was an admission of failure.

JS *Yes. He was acknowledging that he had made a mistake. But when you visit your own houses do you see things you wish you could correct, even if, as you said, you are constantly correcting things as you build it?*

AP I think my character, my attitude, has always been guided by trying to find the most practical solution – not practical in terms of where you enter, or trying to design the shortest or most ergonomic route through the house, but more in terms of establishing views or operating *en cadre*, framing certain things.

JS *But do you ever think, on reflection, 'I wish I had moved that window over to one side'? Or 'I wish I hadn't really listened to my client and had stuck to what I believed in'?*



AP No, never. And I've never done an extension to any of my houses. But of course, as I said, while building my houses I have made changes. Sometimes really quite fundamental changes, like demolishing a whole floor because I felt it was too high. But the way I have worked has always allowed for these kinds of revisions to happen.

JS *You are making me so jealous Alberto. In my office, contractual certainties and financial pressures mean that this way of working just isn't an option any more.*

AP To a certain extent this model is not repeatable for me either, largely because the sites don't exist any more. There are no more extreme locations or rock faces, like at the Casa Scalesciani. They've all been built on, or now because of all the red-tape you have to wait five years to get the building permit. But I think it's also important to say that when I was working with my builders I wasn't just turning up on site and deciding, 'Let's do this and that'. Of course, all my commissions began with a site visit, but then the whole process had to mature through lots of thinking and drawing, and constantly making checks when we did start building. For sure, I've had to modify things once they've been built. Sometimes I made a mistake, or at other times I suddenly noticed the opportunity to really improve something. And only my good relationship with the builders I've worked with has allowed me to do that. In these instances, I try to be as honest as possible, explaining the mistake or the improvement. If you are honest and respectful, builders are fantastic. And I never abuse this trust. I never roll up on site and say, 'Sorry guys, I forgot to tell you, the kitchen is here, not there.'



Sketchbooks, 1967–74;
interiors, Casa Martinez,
1967 and Studio di Yasmin, 1971

JS *As an architect who has built more than 300 houses in a relatively small area you must have got to know practically every single builder on the island?*

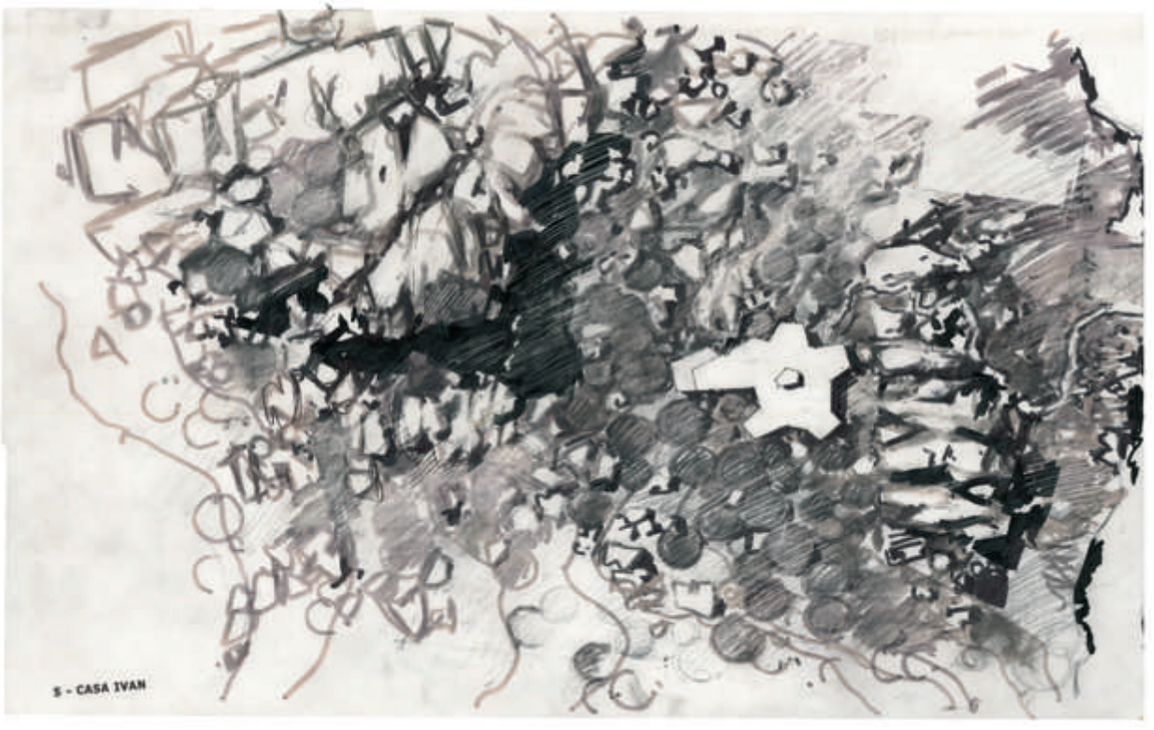
AP Yes, I know most of them. Of course, I also know to choose builders who are more receptive to my designs, but over the years my relationships with them have tended to be very affectionate. On many of my houses they would bring their families along on a Sunday to show them the construction. I could see their pride in the building. And when my favourite builder died – Salvatore Nattivi, who built the Casa Scalesciani and the best houses on the Costa Paradiso – my whole office went to the funeral. He was more precious than any other collaborator. There is also an issue of morality when working with builders in Italy. It has always been the case that builders here offer architects certain sweeteners to get a job. I remember when my father built his factory he had to choose between two architects – Luigi Vietti, who would later build Porto Cervo for the Aga Khan, or Luigi Daneri. He chose the less glamorous Daneri because he would never insist on a kick-back. I've always followed by father's moral code, and have never taken any kind of bribe. This has also allowed me to work the way I have – for example, when the first builder I worked with rotated the plan I had no problem getting him to pull the house down and rebuild it. I've actually never had any problem with any builder. No threat, no menace. And remember, this is not Switzerland! This is Sardinia!

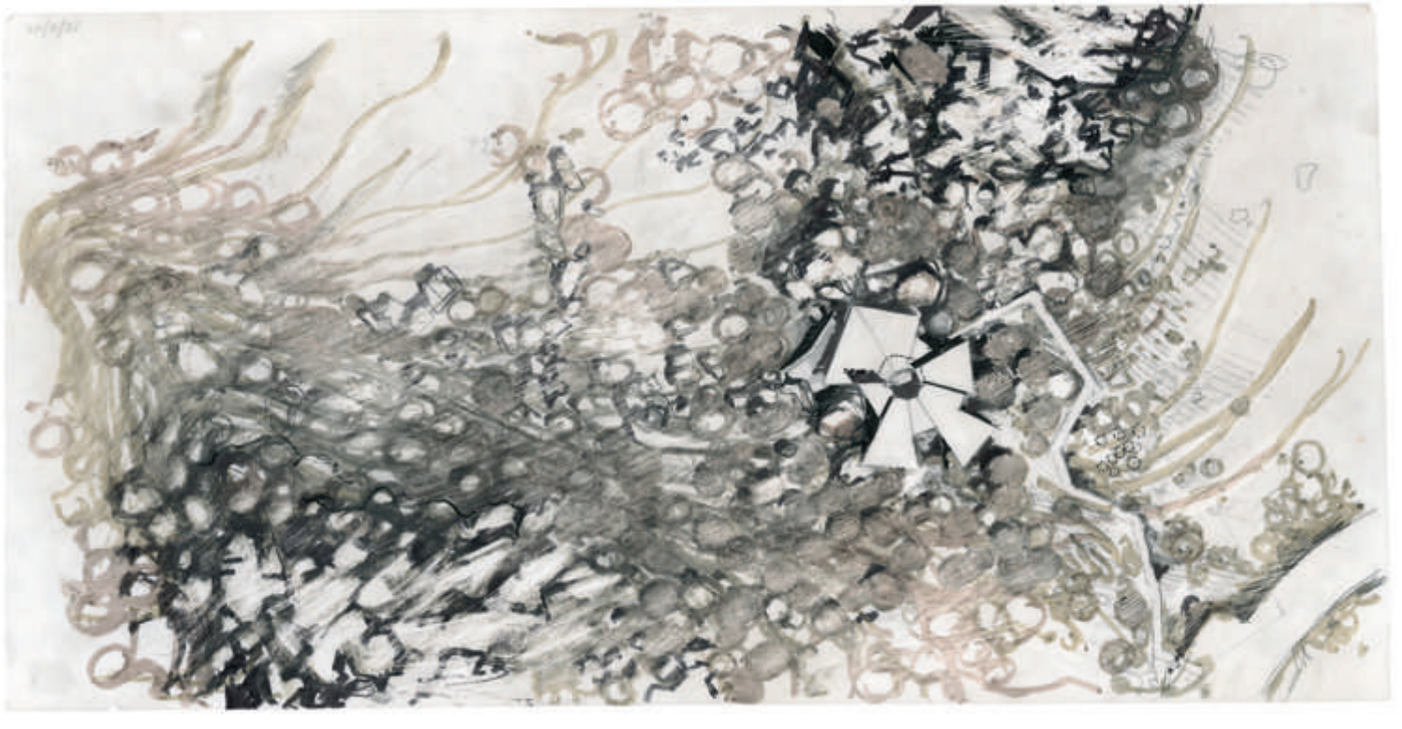




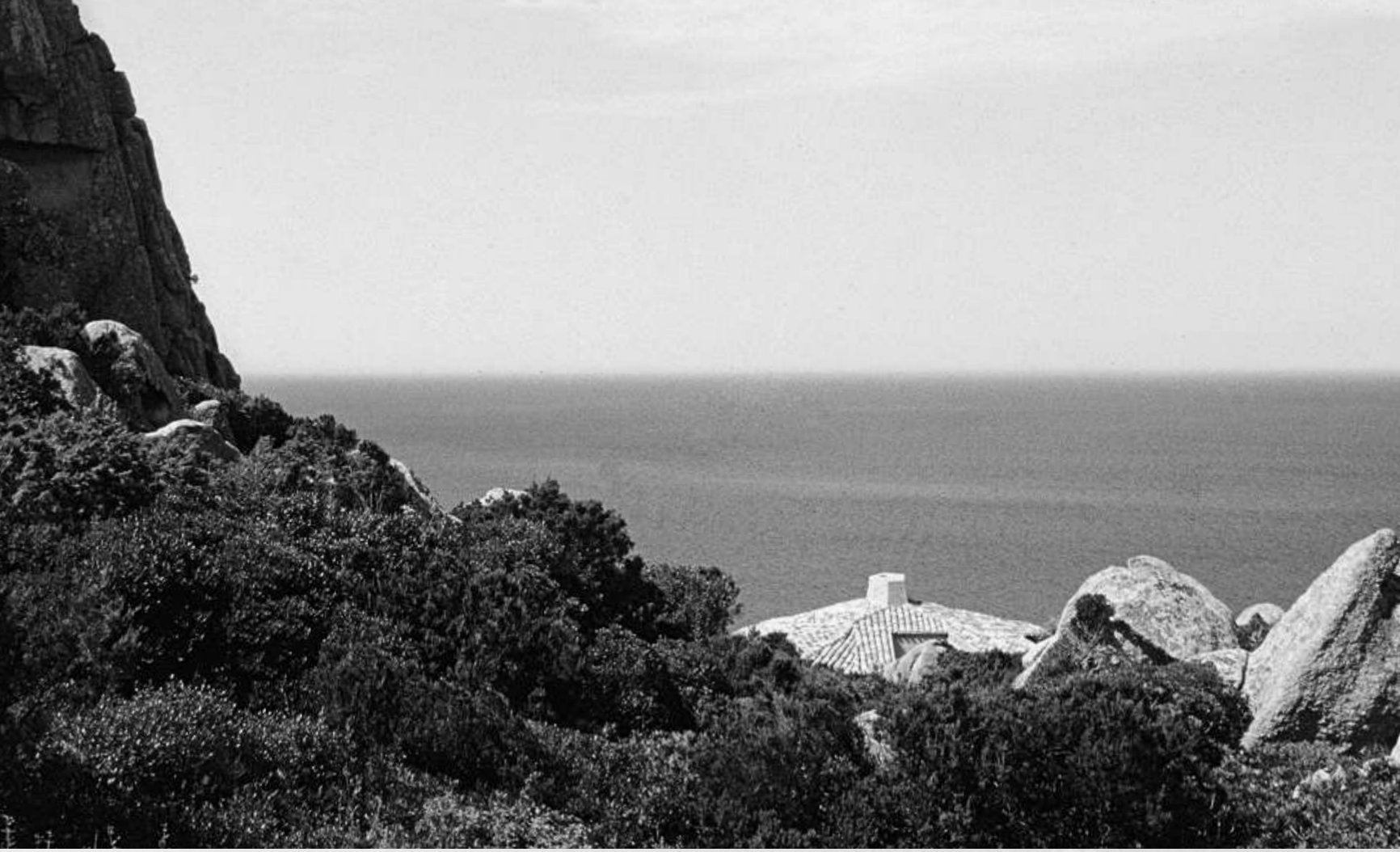
Casa Hartley, Costa Paradiso, 1970
Studio di Yasmin, Porto Ulisse, 1971

Opposite:
Casa di Ivan, Costa Paradiso, 1994
Casa Figini, Costa Paradiso, 1973





Overleaf: Casa di Ivan, Costa Paradiso, 1994
Casa Hartley, Costa Paradiso, 1970
Casa Scalesciani, Costa Paradiso, 1977
Studio di Yasmin, Porto Ulisse, 1971

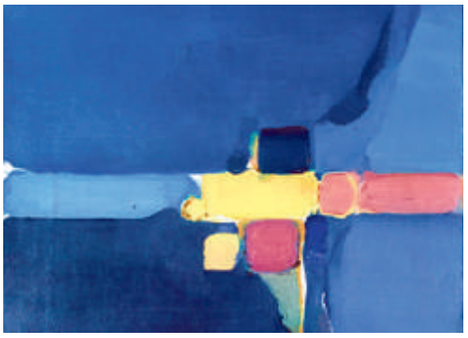












JS *I was talking to your wife Annarita yesterday and she was saying there was a period in your life, after you had built all these wonderful houses, when you left Sardinia and started looking for other kinds of projects.*

AP It's true. After the 1970s, which was really my most productive period, I did go through a kind of temporary crisis. I entered a number of competitions for other kinds of buildings: one in Cagliari, another in Rome for a high school, which we won and built, and I even collaborated with Denys on a competition in Genoa for the Carlo Felice Opera House – we came second to a project by Aldo Rossi. And as Annarita says, we did leave Sardinia for a while. But this was prompted more by the period of terrorism we were then suffering through. There was the Aldo Moro episode in 1978, when Italy's prime minister was kidnapped in Rome and eventually killed by his captors, the Red Brigade. In Sardinia, over the next few years, there were lots of kidnappings, though these were not political but typically organised by local bandits looking to get ransoms from wealthy families staying on the island. In 1979 the singer Fabrizio De André was kidnapped, as was one of my clients, Rolf Schild. It was a terrible moment. They took him and his wife and daughter and held them for a number of months. It seems they confused his name – Rolf Schild with Rothschild – and thought he was from a far more wealthy family. He was eventually released but only after paying a ransom. It was frightening being in Palau at that time and also because Annarita was then pregnant with our daughter Martha, we left for Nervi. Not long after, we had the car accident, so it was a difficult time.

JS *When did this crisis end?*

AP It didn't end so much as evolved into something else. I continued designing and building houses, but the pattern of our life changed, with me coming to Sardinia for three days every other week. In the late 1980s and early 1990s I also started painting much more. I had always liked to paint, but from that moment on I started painting every day. At the same time, I was also producing my books, and so my architecture began to appear through these other forms.

JS *The books must also have been a device through which you could think about your legacy?*

AP Yes, probably, but I think that tendency is almost automatic when you reach a certain age.

JS *Books and magazines also seem to be your way of staying connected with the world. I say that sitting here surrounded by your magnificent collection of architectural magazines. I must admit I very much like the simultaneity of being here on an island in Sardinia, and enjoying all the advantages of an isolated, cut-off island life, but also remaining so connected with architectural culture.*

AP You're right. I started subscribing to all these magazines as soon as I moved here from London. I was on a desert island but I didn't want to feel disconnected, so I started getting *The Architectural Review*, *Architectural Record*, *L'architecture d'aujourd'hui*, *Inhabitable* and *Domus*.



JS *From the various publications that have featured your own work it seems that a more recent appreciation of your architecture has come from central and northern Europe rather than Italy. Why do you think this is?*

AP When I was working on the first book the people I approached first were in Italy – the publisher Electa. I remember going to see them with a mock-up and flicking through the pages with one of their commissioning editors. He looked at all the photographs and drawings and then said, 'Honestly, Mr Ponis, who do you think would really be interested in this work?' So I said, 'Alright, goodbye.' I then went to another Italian publisher Skira, who were more receptive, but it still took eight years for them to publish my book. In between I tried with the English publisher Phaidon, partly because I'd heard that its owner at the time, Richard Schlagman, wanted to buy the Casa Scalesciani,



but that didn't work out, nor did my approaches to Lars Müller. More recently, as you say, a large book of my work has been published in Switzerland by Park Books, *The Inhabited Pathway*. But even that wasn't easy, and it was only after my friend and colleague Christoph Mayr Fingerle showed a draft design that we had prepared together to Park Books that they agreed to produce it.

JS *But there has also been a Swiss embrace of your work in the form of Walter Angonese's studio at the Accademia in Mendrisio, doing precedent studies on a number of your houses and making immaculate models of them so as to learn from them.*

AP Of course, I was delighted by that, and very grateful to Walter. But the strange thing is that but for initial design models (made from balsa wood in a style I inherited from Denys) I never made models myself – working directly with the site meant a model would have been redundant – and so what they made was actually not rational but instinctive.

JS *But as we know, Alberto, you're part rational, part irrational.*

AP There you are. I guess it's up to each of us to decide on which side we want to really belong.



Previous: Casa Scalesciani steps, Costa Paradiso, 1977; paintings and sketchbook, *c* 1990–96; Alberto Ponis, Palau, 1967
All images © Alberto Ponis

Good Fairies

Timothy Brittain-Catlin

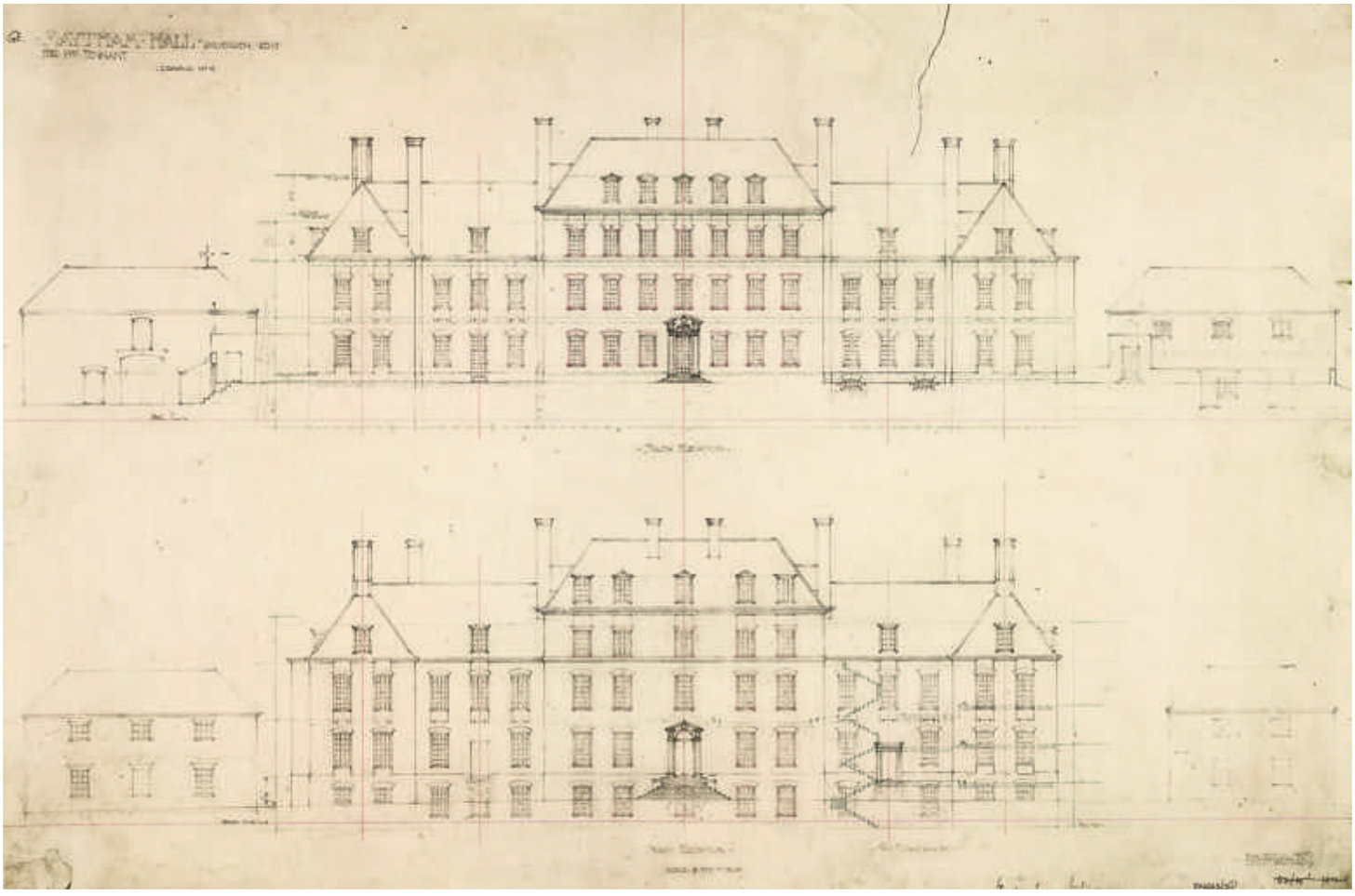
Not all school trips are miserable. One early summer, back in the mid-1970s, a group of young urban teenagers flew by British Airways helicopter from Penzance to the Scilly Isles for three or four days. We stayed in Hugh Town on St Mary's *in an actual hotel*, and no more than two to a room, leaving our classmates to their youth hostels and dormitories in North Yorkshire or Snowdonia, their bracing walks up hills to nowhere, their communal washing up, their hideous freezing showers. Halfway into this unexpected treat, my friend Nick and I took a boat out to Tresco to see the Abbey gardens and lost track of time. Towards 6.30pm it struck us that the return ferry was due any moment at the southern end of the island, and we hurried back, fearing we might miss it. But just as we rounded the final corner, racing towards the pier, it steamed into view. We were not marooned. I still remember this as a pleasing moment of comfort, set within that flat and grassy landscape below the ruins of an old stone battery, the rocks and islands shimmering and sparkling between the blue late-afternoon sea and sky.

Possibly one of the reasons that the experience sticks in my mind is that Nick's father Alastair Service, having heard of my interest in his book, *Edwardian Architecture and its Origins*, not long afterwards sold me a copy at his author's discount. Later he also gave me his *Edwardian Architecture: A Handbook to Building Design in Britain, 1890–1914*, in which he wrote a long and generous inscription. And thus, like most other people, I learned to look at Edwardian domestic architecture through his eyes, for 40 years ago Service provided the first comprehensive overview of the period and nothing has come up since to challenge it. The consistent message has been that the houses in this period were the culmination of cash and genius, especially in the case of Edwin Lutyens, who was lavish with both. Charles Latham's much reproduced *Country Life* photographs of artistically contrived interiors reinforced the idea that Lutyens'



houses, in particular, were intense set-pieces that could only be discussed in terms of a hermetic formal beauty – a beauty destined to shrivel as the Great War decimated the ranks of the housebuilders.

Nearly all of Lutyens' greatest houses were designed over the 'long' Edwardian era that runs between the late 1890s and the beginning of the Great War. It is worth seeing the names and dates in succession to be reminded of what an extraordinarily productive period this was: Orchards and Tigbourne Court were underway in 1897–99; Greywalls and Deanery Garden in 1899–1901; Little Thakeham and Lindisfarne in 1902; Marshcourt in 1904; Lambay in 1905; Heathcote and the additions to Folly Farm in 1906. In 1909 he completed Great Maytham, and in the following three years he started the design of Castle Drogo, the Salutation in Sandwich, and then the astonishing extensions to Barham Court a few miles away, in which the narrow end of a William-and-Mary mansion is made to rear up, creep down and almost engulf a village lane – all this for a front door, a service wing and a billiard room.[1] From the books and articles on these houses you can learn how Lutyens' style changed from Jacobean to neo-classical, as his plans moved from the wilful to the intricate and the sophisticated, the moment of transition being provided by the development of Greywalls from the orthogonal early studies to the eventual geometrical masterpiece. There is some reference by Lutyens himself to his idiosyncratic use of proportions and detailing, mainly drawn from watching Surrey builders at work in the 1870s and 1880s, but that, and profuse allusions to genius, is about as far as the interpretation of these buildings has stretched.



Previous and opposite: Edwin Lutyens, front elevation and garden house, Great Maytham, Rolvenden, Kent, 1909 From Lawrence Weaver, *Houses & Gardens by E L Lutyens*, 1913

Other studies, such as Clive Aslet's *The Last Country Houses*, and *Edwardian Country Life*, Helena Gerrish's account of the garden designer and architectural editor H Avray Tipping, are unusual in that both write about this period as if it was beset with moving and memorable moments of personal experience or imminent threat. This is actually what makes both authors so convincing as storytellers, for it surely cannot be true that houses of this scale are reducible to exercises in aesthetics and exhibitionist workmanship, with so little engagement with the many other aspects of real life that the housebuilders of the 1910s would have known. Real people are not that interested in architects; real people spend their lives trying to recapture the happiness they once knew or saw, even those fleeting sunlit moments; real people worry about life and death and bad health. If they can, they chatter about politics, or play at it, just as they play about with motor cars and billiards; they try to invest their money in projects that will represent the things that they believe in for a few years longer. Somewhere there will be messages about these, hidden in their houses and gardens.

Money

Money, then, first. It was a sudden supply of cash on a vast scale that created Lutyens' Great Maytham Hall, a large country house in a relatively austere mid-eighteenth-century manner at the centre of an agricultural estate near Rolvenden in West Kent. The architectural style of the house, its straightforward plan and its simple relationship with its garden do not

conform to the usual Lutyens mould, with the result that the Lutyens experts have had very little to say about it. And yet if probed from different angles it starts to yield some of the messages about Edwardian building that have so far been obscured.

Great Maytham was designed for Jack Tennant, the brother of Margot Asquith, the inveterate diarist, and thus the brother-in-law of Herbert Henry Asquith, the chancellor of the exchequer and future prime minister. Margot moved all her life through fascinating buildings of one kind or another and yet never showed any interest in their architects or the sort of things that appeal to architectural historians. Here she is writing on 13 June 1906, barely a week after the death of her father, the Scottish industrialist Sir Charles Tennant, describing the apportioning of his estate between his sons: 'Jack & Frank have got about 40,000 a year & Eddy about 80,000 – I confess without bitterness of *any* sort that I think papa made a mistake.'[2] The mistake, evidently, was not to provide as generously for his daughters. During his lifetime he had supported Margot and her husband in the maintenance of their house in Cavendish Square in London, but it turned out that that was where his generosity towards her ended. On the other hand, the two younger brothers' annual income of £40,000 each – nearly £2.3 million in today's terms – was based on the fact that they had inherited a million pounds apiece – the equivalent of well over £57 million a century later.

And evidently Jack, properly Harold John, Tennant (1865–1935), Margot's junior by a year, spent a considerable part of his inheritance on the building of Great Maytham. It was close to London, but very far geographically (and in spirit) to The Glen, the Victorian house in Peeblesshire where the family had grown up. It was far, too, from Tennant's parliamentary constituency of Berwickshire, which he had represented since a by-election in 1894, and furthest of all from the Tennant family's innovative bleaching works at St Rollox on Clydeside, the source of Sir Charles's fortune. But it is The Glen which provides the starting point for the architectural history of the Tennant family, the benchmark for everything they were to build in the twentieth century and, for some, an indelible monument in their history (incidentally, it still belongs to them). It had been designed by David Bryce in 1854–55 in what Osbert Lancaster called the 'Scottish Baronial' style – a style possessed by 'mental and moral gloom' according to *Country Life* in 1912.[3] But Margot loved it, even declaring that 'the hills at Glen are my true biography' in her own 1920 score-settling autobiography.

A few days after Sir Charles's death, Margot mused on how Jack, who was apparently her father's favourite,[4] might fill his shoes: 'Jack has got more of his push & ambition, keenness & self-confidence but Jack is more touchy & self conscious & not so generous in a losing game.'[5] A week later, deprived of a legacy, she asserted that 'Money is a horrible thing: it changes the best – no one hardly puts it in its true proportion to the shortness of Life.'[6] By the time work began on Great Maytham in January 1909 her husband had become prime minister and her brother had risen to his most senior government post to date: parliamentary secretary to Winston Churchill at the Board of Trade.[7] Yet still Margot was sniping: 'Papa made a foolish will. He left money to people who have not the scope to use it' (the subtext being that she definitely knew how to spend).

Although she had several friends in the area and was a frequent visitor to both Folkestone and Margate on the Kent coast, Margot did not visit her brother's magnificent residence until



Opposite: Edwin Lutyens, front and rear elevations, Great Maytham, Rolvenden, Kent, 1909 © RIBA Library, Drawings and Archives Collection

1911, well after its completion. A further sign of the nature of their relationship was Jack's failure to respond to his sister's request for money to cover the expenses of her extended family in 1913 – as prime minister, Asquith earned much less than he had done in private life, as a lawyer. Four years later Jack was still warning Margot about her extravagant ways.[8] Despite outwardly maintaining good terms with her brother and regularly visiting his family, Margot, one of the most voluble of all Edwardian high-society hostesses, had nothing at all to say about the house, least of all about its style, plan or detailing.[9] Nothing useful at all to the architectural historian, that is – except possibly, as we shall see, a probably spiteful comment on the 'sensible' character of Jack's second wife, May. Great Maytham is therefore a story about money and the bad feeling it can bring as much as it is about anything else.

Politics and Building

The role of money is again important here, because it not only offered Lutyens a new commission, but also contributed the necessary backdrop to an influential political and social circle. Margot moved among artistic people as much as politicians, and their interests tells us about the aesthetic background in which Great Maytham was conceived and designed, as well as its significance and its status. JM Barrie was a friend, in her eyes 'a prince among children',[10] and she enjoyed the elevated if gossipy intellectual life of a coterie of Oxford university graduates called The Souls, which centred, by the beginning of the twentieth century, on the Balfour family, with the eventual Conservative prime minister AJ Balfour and his brother Gerald at its heart.

The family home of the Balfours was Whittinghame, a conventional neo-classical house in East Lothian by Robert Smirke and William Burn that Margot thought looked 'municipal'.[11] But for her sentimental affection for the baronial gloom of The Glen, it might reasonably have been assumed that Margot shared the prevalent taste among the aesthetic gentry for the romantic, picturesque neo-Georgian, which had evolved from the free 'Queen Anne' style of the 1880s, created by architects, notably JJ Stevenson and TG Jackson, who were politically Liberal. A deluxe edition of JM Barrie's genteel 1906 'Regency' comedy *Quality Street*, with watercolour illustrations by Hugh Thomson, depicted interiors and houses in this style, mixing early eighteenth-century proportions with

features a century younger: shallow bow windows, verandas and delicate ornaments applied to solid 'Queen Anne' brickwork. Real buildings were also made like this: many of the best were designed by the 'artistic' architect Horace Field, who counted prominent Liberal Party members among his clients in Hampstead, Westminster and Surrey. In 1904, not long before Great Maytham was commissioned, Field had designed a pair of houses in Great College Street behind College Garden in Westminster for two members of the Liberal government from the northeast of England, Charles Philips Trevelyan and Walter Runciman.

Indeed, one of the most striking aspects of this core group of Edwardian Liberals and Liberal Unionists – and a few Conservatives, such as the Balfours, who were on intimate social terms with them – is quite how much they built, and how original it often was. In this sense, Great Maythem can be seen as an outstanding example of a continuous building campaign by the Liberals and their social circle that lasted at least from the 1880s up to the outbreak of the First World War. Initiating this campaign, Clouds, in Wiltshire, was perhaps the first great new Liberal country house and the centre of much bohemian activity associated with the party and its social circle, commissioned in 1886 by Percy Wyndham, the grandfather of Pamela Wyndham, who was married to Jack and Margot's oldest brother Eddy, later Lord Glenconner. But if the architect of Clouds was Philip Webb, most of this social circle would turn to Lutyens when they wanted houses that precisely suited the new ways of living of the period – not just large new mansions for those who had missed out on inheriting an old one, but seaside villas and country cottages with garden rooms, playrooms, garages for motor cars, and much else.



Enter the Good Fairies

The former 'Souls' were increasingly bound closer together by family connections and friendship. Margot's early suitor Peter Flower, considered an unsuitable match by her family, was the younger brother of the Liberal politician Cyril Flower, Lord Battersea from 1892, who commissioned Lutyens to design The Pleasaunce in Overstrand, Norfolk, in 1888, and she met her future husband for the first time at one of Cyril's London dinner parties.[12] But it was the Liberal Unionist Alfred Lyttelton, the client for Lutyens' Greywalls, who was most likely the dominant figure in the rebuilding of Great Maytham and the appointment of Lutyens as its architect. Lyttelton sat at the heart of The Souls and he seems to have acted as an inspiration for those around him.[13] 'The good fairies at his birth gave Alfred Lyttelton every gift of body and spirit' wrote the *Spectator* in 1913, in a long and effusive obituary at his death from a cricketing injury at the age of 56; it went on to say that 'his mind was of the Whig cast, warmed and broadened by the early influence of Maurice [sic] and Ruskin'.[14] Lyttelton was a nephew of the Liberal prime minister William Gladstone, and had been briefly married to Jack Tennant's adored sister Laura, who died in 1886, just a year after their

wedding. He would have known Lutyens through Barbara Webb, whose circle met regularly at Flower's Overstrand Hall and at Mells, the Somerset home of the Horner family, who were also friends and clients of Lutyens. Lyttelton, parting from Gladstone over Home Rule for Ireland, served as colonial secretary in A J Balfour's Conservative government; his second wife Edith, known as DD, was part of the extended Balfour family and A J's brother Gerald, member of parliament for Leeds Central, was married to Lutyens' sister-in-law Betty. It is striking that Gerald chose Lutyens to design his house, the Jacobean-vernacular Fisher's Hill in Woking, even though his own brother Eustace was a successful and fashionable architect.

The fairies had given Lyttelton amongst other things a gift for sporting prowess, and by the turn of the century he had developed a passion for golf: Greywalls, of 1900, was located close to Muirfield golf course and the Balfour lands at Whittinghame in East Lothian. In 1906, the year in which he left active politics in the wake of the defeat of the Balfour government, he commissioned Lutyens to remodel an old rectory at Wittersham in Kent, not far from the smart links courses near Rye. This was a small work, an interpretation of an early eighteenth-century type of house: seven bays, two floors; a relatively large proportion of fine brickwork wall to windows, and these had exposed sash frames and small panes in the real Queen Anne manner. Its elevations incorporate a number of eccentricities: a pediment ornamented with a Venetian window; a narrow colonnade with Tuscan columns that stands in front of an entrance wall that sinks into the house in a gentle curve; unexpected large round windows on the upper floor of the garden front. These features testify to the great pleasure that Lutyens had in engaging with the materiality of buildings, an outstanding example of an Edwardian rethinking the earlier realism of the gothic revivalists. As Jane Ridley has pointed out, that same year Lutyens also designed one of his last Elizabethan-style houses – New Place, in Botley – and was disappointed by it: it seems it was from this period onwards that his interests became almost exclusively neo-classical. And Ridley also notes that DD did not like the small windows that up to that point had been characteristic of Lutyens' vernacular Jacobean style.[15]

As Wittersham House was being remodelled, work began on the restoration of Lympne Castle, on the other side of Romney Marsh. The architect was Robert Lorimer, brought down from Scotland, and the client was Jack Tennant's brother, Frank, presumably keen to spend his equally large share of the family fortune. Here, too, proximity to a golf course influenced the choice of location – as the Tennant family biographer Simon Blow has commented, 'with an income of £40,000, there was no need to go near an office'.[16] If, as Margot seemed to imply, Jack Tennant was not a particularly original person, then this combination of factors may have been enough to persuade him to embark on his own building programme in the area. Drawings from the Lutyens office at the RIBA Drawings Collection indicate that Great Maytham was designed over two years beginning in 1907, with the elevations finalised towards the end of that period.[17] Significantly, Lutyens' office drawings give the client's name as 'Mrs Tennant', rather than Jack Tennant himself. Perhaps he was not able to muster the enthusiasm to manage the commission for his own house.

In fact, the client's less than forceful personality, his choice of architect, his remodelling of an old structure, the house's proximity to London, the golf courses at Rye and the houses of fellow politicians are all ingredients that make Great Maytham usefully characteristic of Edwardian country houses in general. And yet at the same time the house that Lutyens built here is in many ways remarkable. Though it looks quite different from most of his other houses, it does resemble Wittersham House in its general style, but is much longer and narrower. Its wide northeast front faces the entrance drive in a palatial way that contrasts strongly with many of Lutyens' earlier complex routes. Being part of the landscape, rather than a contrivance in it, was not a typical characteristic of Lutyens house and garden ensembles. A striking aspect of the design is that the entrance hall is low, rising to double-height only over the staircase to the left of the front door; the room seems underscaled relative to the mass of the house. In fact, the historian and conservation architect Peter Inskip saw this hall as being merely part of an entry sequence through to the large garden behind, which is open to the landscape to the southwest beyond, the unexecuted (or demolished) external terraces or stairways around its edge intended to amplify the effect.[18] At the earlier Greywalls a visitor would go through a number of changes of angle *en route* from the entry lodge to the drawing room and walled garden in what was to become the consistent Lutyens theme; at Great Maytham, by contrast, one proceeded directly from the gatehouse to the entry hall, from the entry hall to the drawing room, and from the drawing room to the terrace and view all without a single change of direction. Even the new stables are aligned with the house, for they are incorporated into the large symmetrical gatehouse at the road end of the entrance drive. As at Wittersham, however, there is some idiosyncratic detailing along the entrance front: here, the two entrance doors in the recesses either side of the five-bay central block ought to be symmetrical, but they are not. The layout of the house suggests some direct substitution of Edwardian pleasures for Georgian necessities: the laundry building in an outhouse to the southern side of the main block survived the reconstruction and was turned into a squash court with a games room attached; and Jack's billiard room – he had been an enthusiastic player in his youth – was incorporated into the main body of the house, close to his bedroom.[19]

Some have seen the design as consciously austere; in a catalogue note for the Hayward exhibition Colin Amery described the house as the 'Lutyens version of the traditional Whig seat' – that is, a mansion intended to represent the mercantile or agrarian culture of the immediate post-Stuart, post-baroque era.[20] Ridley calls it 'a conventional great house'.[21] In other words, architectural histories of Lutyens are disappointed by Great Maytham and cannot quite plumb its depths. Certainly, when compared to Heathcote, the intense and ornamented neoclassical villa in Ilkley designed immediately beforehand, the style, planning and detailing do seem to be austere; in fact Great Maytham shares only the use of lush, purplish *fleur de pêche* as a decorative marble, albeit in a more restrained way.

History and Place

If Great Maytham is seen the way that Edwardians saw it, it appears more remarkable still. Ridley refers to a letter Lutyens wrote to his wife in April 1911, in which he declares that Edward Hudson at *Country Life* had been 'awfully pleased with it', and praised the effect achieved for the budget.[22] Hudson's staffer

Edwin Lutyens, dining room fireplace, Great Maytham, Rolvenden, Kent, 1909
From Lawrence Weaver, *Houses & Gardens by E L Lutyens*, 1913

Lawrence Weaver wrote it up for the magazine, and it was one of the buildings chosen for inclusion, alongside Wittersham House, in his subsequent *Houses and Gardens by E L Lutyens*.[23] In this description Weaver retold from Hasted's 1798 *History and Topographical Survey of the County of Kent* the story of the Great Maytham site: its original ownership by the Carew family, and its transfer to the Monypennys in 1714. Seven years after that, James Monypenny built on it a five-bay, two-storey brick house with structures at the side in the early Georgian manner, of which there is some record.[24]

Under a later ownership in 1893, this first Great Maytham was badly damaged by fire, and was cheaply rebuilt because the insurance payout was inadequate – according to Jack's daughter Alison, quoted in a recent historic buildings survey.[25] Its most famous resident, the children's novelist Frances Hodgson Burnett, who lived there before the Tennants bought it, nevertheless found this second and short-lived incarnation of the house to be

a charming place with a nicely timbered park and a beautiful old walled kitchen garden. The house is excellent – panelled square hall, library, billiard room, morning room, smoking room, drawing room and dining room. Seventeen or eighteen bedrooms. Stables, two entrance lodges to the park and a square tower on the roof from which we can see the English Channel.[26]

In photographs, this phase has something of Osbert Lancaster's 'Wimbledon Transitional' style, with pale rendering covering the brickwork and a row of heavy half-timbered gables; a clumsy porch was added, as were the lodges, which still exist.[27] Weaver's article noted that very little of this house survived; his helpful plan suggests that the footprint of the new central bay of the house sat over the shell of the old one, the string course marking the height of the original structure. In fact the article is remarkable for how little it says about the design of the new building, nearly all of the text being taken up with its history, some observations about materials, and discussions of the garden and stables.

Thus for the most part Weaver saw the house as a foray into a form of historical experimentation: 'Mr Lutyens has picked up the thread of early eighteenth-century design where Monypenny dropped it in 1721', he wrote. It is possible that the history of the core of the house was part of a larger idea that was circulating in Weaver's mind at the time. The year after his article on Great Maytham appeared, *Country Life* published his book *Small Country Houses: Their Repair and Enlargement – Forty Examples Chosen from Five Centuries*. If there is one aspect of Edwardian domestic architecture that has not yet received its due attention, it is the interest paid to the domesticating of old buildings, especially of run-down vernacular ones, an idea that seems to have been launched by the conversion in 1885 of an old granary in Cambridge into a home for the astronomer George Darwin by J J Stevenson. Weaver's case studies included W D Caröe's own home, Vann, remodelled in 1906 from a group of farmyard buildings near Godalming in Surrey, with a garden room added by Gertrude Jekyll. The former barn became a billiard room with little alteration and, all in all, the project realised the picturesque house and garden utopia of the arts and crafts movement.[28] Another building included in the book was Margot Asquith's Wharf. In 1912 Margot asked the architect Walter Cave to design a small house on the Thames at Sutton Courtenay in Oxfordshire, and this went up in a plain brick style that is part Tudor and part Queen Anne. More remarkably, she then asked Cave to attach and remodel the old house next door as an extension, and to turn a barn on the waterfront into a 'studio' – in fact, a sitting room and bedroom – as a private retreat for herself. This was perhaps the first time in the history of progressive architecture – that is, in the buildings of creative architects of high reputation working for fashionable and influential people – in which the reuse of old work formed so central a role (Philip Webb's Red House had, after all, imitated vernacular work rather than actually incorporated it).

Once the arts and crafts approach to architecture had been established on a large scale – and it suited the political atmosphere of the late Victorian and Edwardian period for it to take off in this way – texts on design tended to shift from the original polemical claims of the movement's founders and to speak more about the sentimental and associational values of old buildings. Many of the projects in Weaver's book – and plenty of others, for example by Lutyens, most famously twice at Folly Farm – give the impression of adding to old buildings when in fact they were all of a piece. Similarly, the farm buildings designed by Lutyens on the Great Maytham estate at Rolvenden Layne were carefully vernacular and ahistorically styleless, and Lutyens (and the Tennants) left the eighteenth-century walled garden in its place, designing new ornaments around it. Edwardian architects in precisely this period were playing around with how the history of a building was perceived – perhaps a potent of the future discontent with historical work altogether.

Life and Death

There is another important aspect of Great Maytham which not only represents a concern of the period, but reflects the life of the Tennants themselves. The family had been plagued by tuberculosis: Jack and Margot had lost four young siblings to it, and Jack's first wife Helen and their son also died prematurely. One of the first appointments Jack received from his brother-in-law H H Asquith was secretary to a departmental committee charged with investigating the health of workers exposed to toxic hazards; it was here that he met his 'sensible' second wife, who was knowledgeable in this field.[29] Could the long narrow plan and large windows of Great Maytham have been imposed on the architect by his clients, responding to the latest advice for the design of sanatoria? The timing of the project might suggest this possibility. In November 1909 *Country Life* published an article on the new King Edward VII hospital near Midhurst in Surrey, designed soon after 1901 by H Percy Adams, who specialised in this type of building. Surely the Tennants knew about this project, in addition to any other technical information they were aware of. The hospital had been designed around narrow wings with single-loaded corridors to improve cross ventilation, then considered essential for the health of the patients. Much of the building is in a more-or-less Tudor style, but the windows of the patients' rooms have proportions similar to those of early or mid-Georgian houses, and in fact originally had the same green-painted shutters that Lutyens chose for Great Maytham Hall (as well as a garden designed by Lutyens' collaborator, Gertrude Jekyll). Looking at the plan of the Tennants' house one can see not only that the two main bedrooms had windows on three walls – there are in fact no fewer than six windows in Jack's bedroom – but also that there are wide and open corridor spaces between them. With Lutyens, such ample circulation areas are generally intended to increase the grandeur of the spaces they connect. At Great Maytham, however, they are simply very wide corridors, the central one on the first floor

oddly turning 90 degrees to reach nothing but a window. Large numbers of windows are unphotogenically open in Weaver's images of 1912 (although that was not unusual in the book). Maybe the direct axial plan of the house and landscape are developments by Lutyens of the theme of health, the cold air blasting through the entire ensemble? It seems very likely that there was a connection, and not one that Hudson, Weaver, Lutyens or the Tennants would have articulated in public. How much Edwardian architecture was designed around health, around the personal and intimate worries of the people who paid for it?



Edwin Lutyens, garden elevation, Great Maytham, Rolvenden, Kent, 1909
From Lawrence Weaver, *Houses & Gardens by E L Lutyens*, 1913

The Fairies Had Been Here Before

Thus Great Maytham illustrates the renewal of an old house and its garden landscape that reconnected with the pre-Victorian, pre gothic-revival age, but also contained elements that spoke distinctly of its time – the up-to-date sporting and gaming facilities; the open garden and the relation with the county's distant landscapes – and possibly even a morbid fear of disease. Jack Tennant's very lack of original ideas about anything cultural, for which he was so lampooned by Margot, was therefore the reason why his house had so much to say about the current state of Edwardian architecture; but it was also why he was able to insist on a healthy, large-windowed style when his friends and his architect had not otherwise discovered it.

Yet not everything is rational. It turns out that Alfred Lyttelton was not the only person connected to Great Maytham whom the fairies visited. They had earlier appeared to Burnett, the famous writer, who according to her son had found there a 'Fairy Tree' … 'a splendid place for fairy-storytelling'.[30] Burnett's relationship with the house was sentimental on a grand scale, and the interesting thing about her fictional version of its walled garden, memorialised the world over as *The Secret Garden* in 1911, is that it was based on a conscious exaggeration on her part, or at the very least on a misunderstanding. She had rented the house from 1898 to February 1907, when the owner, Powell Edwards, negotiated its sale to Jack Tennant. The house, and in particular its walled garden with 'its leaping cascades of roses',[31] seems to have been something of a consolation to her after she divorced her much younger husband (and former assistant) Stephen Townsend in 1901, after only a year of marriage. Burnett's biographer, Anne Thwaite, considered that Burnett saw Maytham Hall as being 'her English country house' – that is, the model for the English country houses of her novels. 'How splendid to be like Maytham: hospitable, welcoming, rich, important', Burnett trilled.[32] As the critic Alison Lurie has noted, Burnett spent much of her latter life actively recreating for the benefit of local children the romantic scenes she had earlier invented.[33]

Of Maytham, Thwaite wrote that 'it was here in the rose garden that she felt the first ideas for *The Secret Garden*, as she made friends with a robin which would come to take crumbs from her hand 'the instant I opened the little door in the leaf-covered garden wall'.[34] The truth, however, was more complicated, as Burnett's son explained. By now living in Plandome, Long Island, in a house usually called 'Fairseat' but occasionally 'Maytham', she heard from some unkind correspondent that the new owners had turned her beloved rose garden into a vegetable patch.[35] But this was not so. According to Vivian Burnett,

> *Mrs Burnett's cherished rose-garden was changed, it is true, but transformed into a delphinium bed of unbelievable size and beauty. But Mrs Burnett never revisited the district, and was to carry with her always the picture of the rose garden reduced to rows of*

cabbage and turnips and lettuces under 'cloches'. Out of her regretful feeling about her rose garden grew one of her best beloved books, The Secret Garden.[36]

What's more, as recent research has pointed out, the layout and walls of the garden had never corresponded to Burnett's recollections of it.[37] So in fact the setting for *The Secret Garden* was as much a sentimental reimagining as a reality, just as one would expect from one of the most successfully sentimental writers of her age. And possibly this sentimentality and reimagined history were more a part of Edwardian architecture than we have allowed ourselves to think, as the same thing is true, of course, of Lutyens' recreation of the house of 1721. For just as the sickly Colin in *The Secret Garden* is restored to strength by reconnecting with nature – and thus also restored to his inheritance, which otherwise would have gone to his doctor – so Maytham becomes a great house again, its healthy windows wide open to its eighteenth-century past and its landscape. A magical moment or a regretful feeling, whether of a garden, a tree, a landscape, or a house, surely somehow became for Lutyens, as for Burnett, the prism through which a reimagining, a reliving, a remaking of the past were triggered. As it was for at least one of the boys who rushed down to the sunlit pier he would never forget.

I would like to thank Terry Farrell for his generous support throughout.

1. Texts from Margot Asquith's diaries are reproduced by kind permission of Christopher Osborn and Chris Fletcher, Keeper of Special Collections, Bodleian Libraries, University of Oxford. I am particularly grateful to Colin Harris, Superintendent of Reading Rooms, Bodleian Library, Oxford, for his generous assistance. These dates are drawn where possible from the chronological list provided by the Lutyens Trust.
2. *Margot Asquith's diary*, 13 June 1906, Bodleian Libraries, University of Oxford, MS Eng d 3204,165r-v. Michael Brock and Eleanor Brock's Margot Asquith's Great War Diary (Oxford: Oxford University Press, 2014), explains the problems of attributing an exact date to her diary entries, pp xvii–iii.
3. *Country Life* article about Hill of Tarvit, designed by Robert Lorimer, a house which combined the Scottish rural vernacular with dainty classical or Georgian decoration. 'Hill of Tarvit', *Country Life*, 20 November 1912, p 746.
4. Margot Asquith, *The Autobiography of Margot Asquith*, vol 1 (London: Thornton Butterworth, 1920), p 23.
5. Margot Asquith, diary, 9 June 1906 but transcribed later, MS Eng d 3204, 162r.
6. *Ibid*, 165v.
7. Margot Asquith, diary, 31 January 1909, MS Eng d 3207,9r. Jack Tennant's only appearance in Roy Jenkins' biography of Churchill (London: Macmillan, 2001), the most complete to date, is as under-secretary to the War Office under Lord Kitchener, a position he held from 1912 until just after Kitchener's death in 1916; Churchill was at that point First Lord of the Admiralty. He then served briefly in the cabinet as secretary of state for Scotland until his brother-in-law was replaced by David Lloyd George as prime minister in the cabinet coup at the end of that year. Margot despised both Churchill and Lloyd George, but she does not seem to have minded Jack's association with them.
8. Michael Brock and Eleanor Brock, *op cit*, p xcvi, n 1.
9. Simon Blow's description, in Simon Blow, *Broken Blood: The Rise and Fall of the Tennant Family* (London: Faber, 1987), p 112. The only references to Jack Tennant in Margot Asquith's diary for 1914–16 are when he came over to tell her pleasing gossip about Kitchener.
10. Margot Asquith, diary, September 1908, MS, Eng D, 3205.
11. Margot Asquith, *The Autobiography of Margot Asquith*, *op cit*, p 23.
12. *Ibid*, p 221.
13. Alfred Lyttelton's central role can be observed, for example, from the detailed description of Lutyens' clients' social circle in Jane Brown, *Lutyens and the Edwardians* (London: Viking, 1996).
14. 'Alfred Lyttelton', *Spectator*, 19 July 1913, pp 48, 49.
15. Jane Ridley, *Edwin Lutyens: His Life, His Wife, His Work* (London: Pimlico, 2003), p 129.
16. Simon Blow, *op cit*, p 126.
17. RIBA Library Drawings Collection, PA1623/3 (1–11); and see catalogue notes.
18. Peter Inskip, *Edwin Lutyens* (London: Academy Editions, 1979), pp 24–25. The terraces are shown in a print kept at Great Maytham.
19. Margot Asquith, *The Autobiography*, *op cit*, pp 12–13.
20. Hayward Gallery, *Lutyens: The Work of the English Architect Edwin Lutyens (1869–1944)*, exhibition catalogue (London: Arts Council, 1981), catalogue entry 170, p 122.
21. Jane Ridley, *op cit*, p 174.
22. 14 April 1911; *ibid*, p 178.
23. Lawrence Weaver, *Houses & Gardens by E L Lutyens* (London: *Country Life*, 1913), chapter 19, pp 257–56. The original article had appeared shortly beforehand in *Country Life*, 30 November 1912.
24. Edward Hasted, *The History and Topographical Survey of the County of Kent*, vol 7 (Canterbury: W Bristow, 1798), p 191. There is a thorough documentary history of the house and gardens in WA Landscape and Heritage's Landscape and Building Study, 'Great Maytham Hall, Rolvenden, Kent', ref 67240, for Sunley Group of November 2007: www.wessexarch.co.uk/system/files/67240_Great%20Maytham%20Hall,%20Rolvenden.pdf. This includes early maps and views of the house, although no view of the 1721 one. A sketch of this can be seen in John Faviell, *Great Maytham Hall*, printed privately, 1982, and on a website established by a member of the Monypenny family: www.robertsewell.ca/homes/MonypennyHomes.html.
25. WA Landscape and Heritage, *op cit*, 2-6-7, p 7.
26. Anne Thwaite, *Waiting for the Party: The Life of Frances Hodgson Burnett, 1849–1924* (London: Faber, 1992), p 179.
27. There is a photograph of this version of the house in Vivian Burnett, *The Romantick Lady* (New York, NY: Scribner, 1927), plate and caption facing p 346.
28. Lawrence Weaver, *Small Country Houses: Their Repair and Enlargement – Forty Examples Chosen from Five Centuries* (London: *Country Life*, 1914), chapter 6.
29. M C Curthoys, 'Tennant, Harold John (1865–1935) ', *Oxford Dictionary of National Biography* (Oxford: Oxford University Press, 2009), www.oxforddnb.com/view/article/58263.
30. Vivian Burnett, *op cit*, plate and caption facing p 322.
31. *Ibid*, pp 405, 313. See also Anne Thwaite, *op cit*, pp 209–10: much of Thwaite's description of life at Maytham is derived from Vivian Burnett's account.
32. Anne Thwaite, *ibid*, p 179.
33. Alison Lurie, *Not in Front of the Grown Ups: Subversive Children's Literature* (London: Sphere, 1991), pp 161–62; Anne Thwaite, ibid, p 181.
34. Anne Thwaite, *ibid*, p 182. About this friendship she later wrote a story called *My Robin* (London: G P Putnam's Sons, 1913). Vivian Burnett recorded that his mother often sat in the walled garden to write. See *Romantick Lady*, *op cit*, p 293.
35. The alternative name of 'Maytham' appears in the caption to Vivian Burnett's photograph of the house: Vivian Burnett, *Romantick Lady*, *op cit*, figure opposite p 328.
36. *Ibid*, p 327.
37. WA Landscape and Heritage, *op cit*, 2-7-3, 2-7-4, p 7.



Illustration by Charles Robinson for Frances Hodgson Burnett's, *The Secret Garden*, 1911

Sentimental Education

Fabrizio Ballabio & Alessandro Conti

In a 1940 issue of the *Journal of the Warburg and Courtauld Institutes* Rudolf Wittkower explored 'one of the central problems' of Renaissance architecture – namely, the relationship of a column to a wall. His particular focus was the ambivalent way the humanist scholar, architect and priest Leon Battista Alberti dealt with this thorny issue. In the *De re aedificatoria*, Wittkower notes, Alberti initially acknowledges the mundane and structural origins of the column as an element of support (quoting his apologia: 'I make no doubt, that at first the column was invented to support the covering'), before he then contradicts such an understanding by presenting the orders of Roman imperial architecture as a 'mere' means of ornamentation, which the wall – in all its 'excellence', structurally at least – can easily do without.[1] What is radical about this association, Wittkower argues, is that Alberti ('thinking in terms of the wall') saw 'the column first and foremost as decoration'.[2]

In many ways, the paradoxical nature of this assertion represents Alberti's distinctive contribution to an architectural conundrum that emerged only in the Renaissance. Vitruvius, in his *De architectura*, only ever saw these two elements for what they were – support and enclosure, structure and infill.[3] Even a *cinquecento* building as radical as Filippo Brunelleschi's Foundling Hospital, completed in 1445, reinforced this view. But with the publication of his famous treatise just seven years later, Alberti challenged this previously irrevocable reading of column and wall, and suddenly made their relationship open to interpretation. And it is in the context of this revisionism that we need to understand not just Alberti's almost comical definitions of the column (a 'certain strong continued part of a wall') and colonnade (a 'wall, open and discontinued in several parts'), but much of the work in the following century by architects such as Bramante, Raphael and Sangallo.

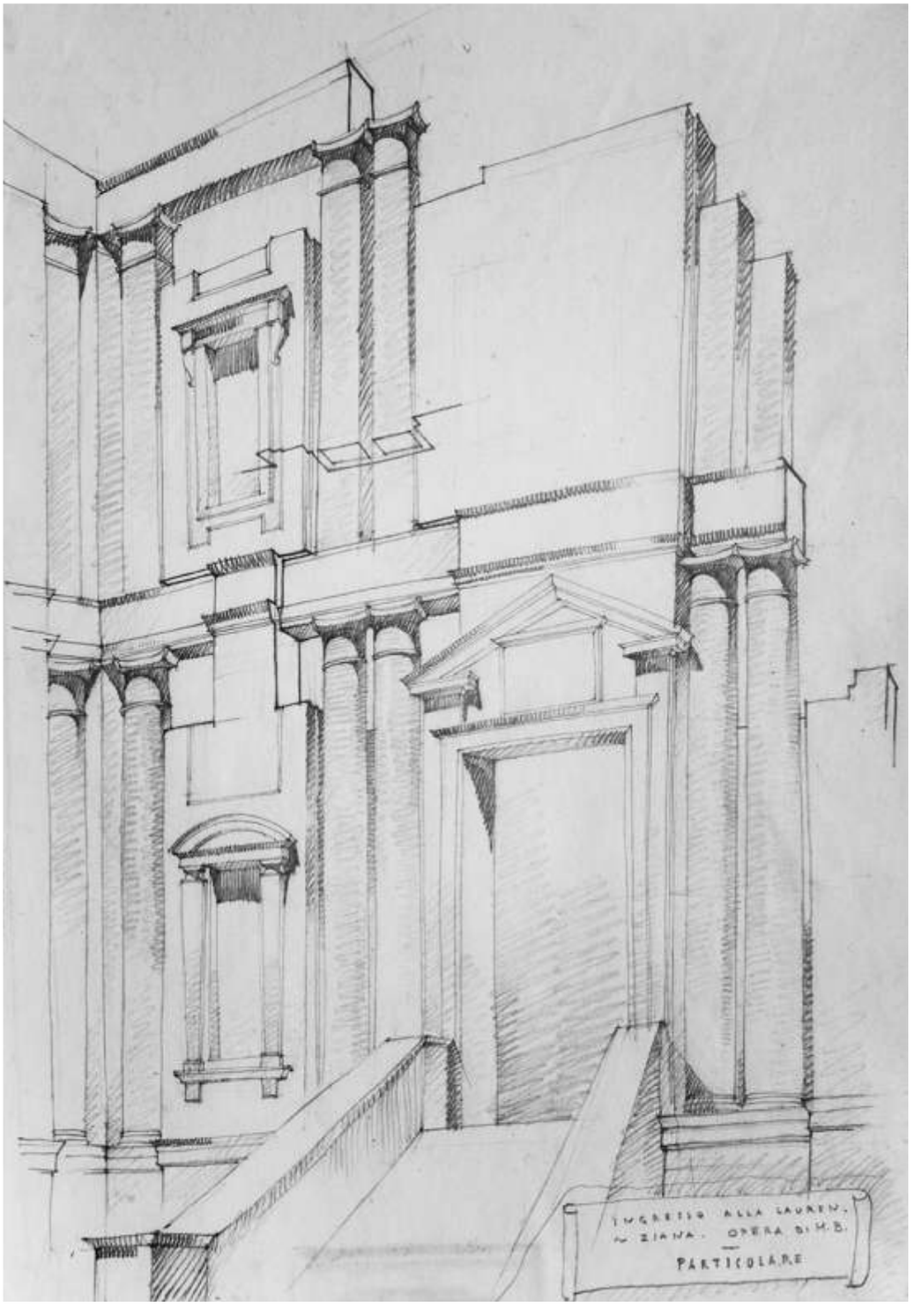
For better or worse, the equivocal relation of column to wall, and the suggestive or effective load-bearing function of either of these two elements, thereby becomes fundamental to an appreciation of *quattrocento* and *cinquecento* architecture, with its most celebrated practitioners vying with each other to render more and more of its subtle nuances. In contrast, historians and critics seem always to have been puzzled rather than enthused by this ambivalence. Or at least, this is the thesis of James Ackerman in *The Architecture of Michelangelo*, which laments the sustained incapacity of 'the moderns' (by which he is presumably referencing Nikolaus Pevsner's 'pioneers of modern architecture') to look at Renaissance architecture without submitting to the old structure-versus-ornament schism. For example, in the first lines of his chapter on Michelangelo's Laurentian Library – one of the most unorthodox and capricious interpretations of the Vitruvian code – Ackerman writes that the moderns, 'preoccupied with structural and utilitarian problems, followed the lead of Ruskin and Viollet-le-Duc in criticising Renaissance architecture as dishonest, unconcerned with the practical aspects of building'. He later argues that even when the same historians and critics admitted that 'purely visual delight is a proper function of architecture', they still 'tacitly allowed that Renaissance buildings could not be defended on technical or practical grounds'.[4]

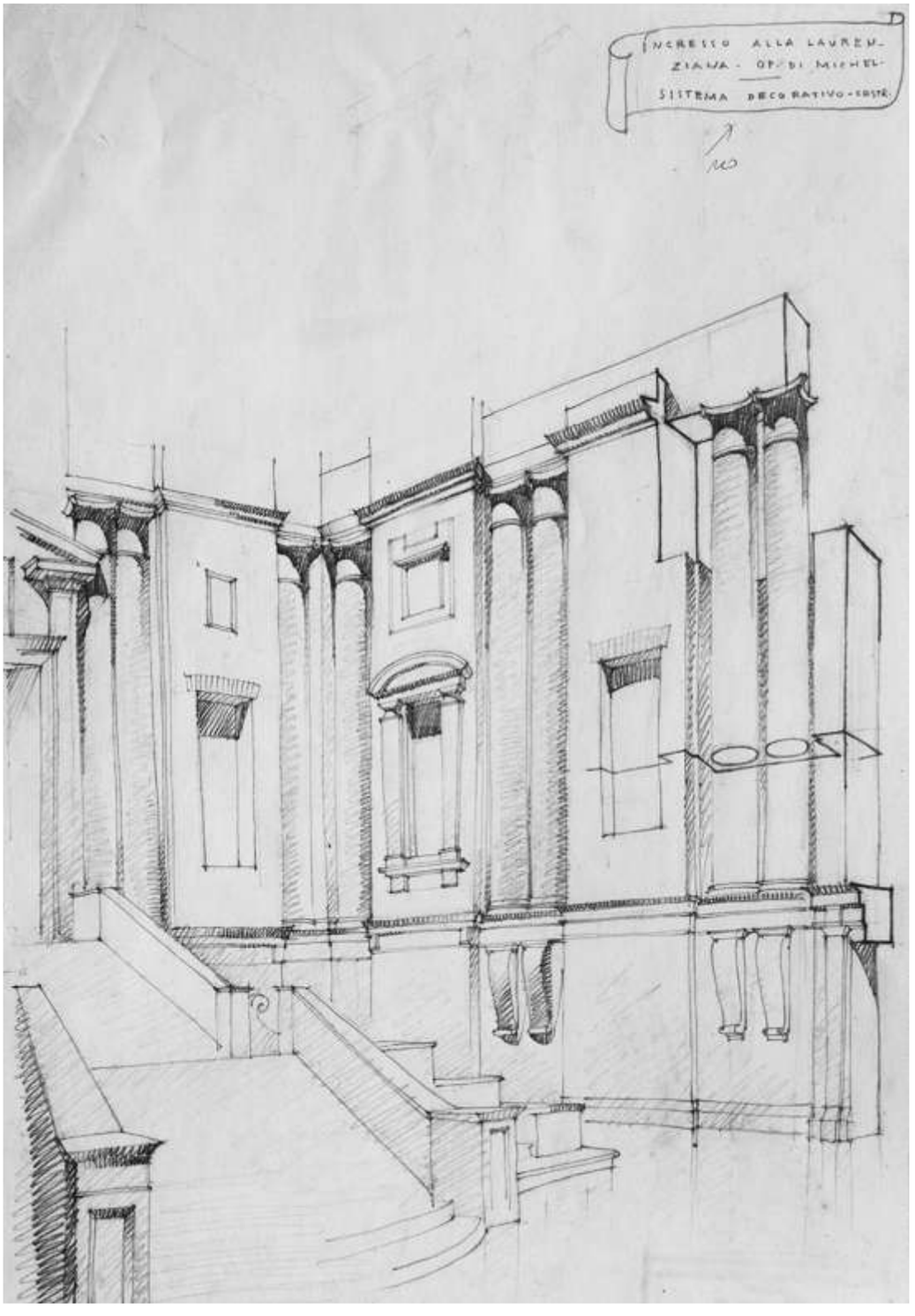
Ackerman wrote these lines in 1961; his polemic rooted as much in his own, contemporary context and its increasingly outspoken questioning of modernist utilitarian dogma as it was framed in terms of its Renaissance content. Yet such a critique was clearly not restricted to Ackerman's English-speaking world, and before long he was joined by a number of Italian architects and theorists, all of whom similarly questioned modernism's rigid infatuation with structure while celebrating, in particular, the more complex architectural endeavours of Michelangelo as a model to follow. Among them was the Roman architect and scholar Luigi Moretti, who set out a very similar enquiry in a paper titled 'Ideal Structures in the Architecture of Michelangelo and the Baroque', presented in 1964 at a conference commemorating the 400th anniversary of Michelangelo's death. 'An interesting and fundamental analysis for understanding the history of architecture and its basic semantic values', he announced, 'would be to compare the relationships between representative structures, or ideal structures, and real structures, or technology'.[5]

Whether or not Ackerman's book was a particular influence on Moretti is uncertain, and perhaps unimportant (all we know for sure is that an Italian translation did not appear until 1968). What is clear is that Moretti had been trying to get to grips with these 'basic semantic values' since at least the late 1920s, when he was a student at the Scuola Superiore di Architettura in Rome under the supervision of the architect and historian Vincenzo Fasolo and other members of the so-called *scuola romana*. This collective featured the city's leading architectural scholars – figures like Giovanni Battista Milani and Gustavo Giovannoni, in addition to Fasolo – who combined their academic careers with practice as architects, engineers or restorers, meaning they had a certain affinity for the pragmatic aspects of the discipline. Their own education, in fact, would have only been in engineering, because it was not until 1919 that an independent school of architecture was founded in Rome (curiously, this was the same year the Bauhaus was founded, albeit under an entirely different pedagogical premise). As a result, they became 'historians with a trowel', as Manfredo Tafuri would later, not unaffectionately, label them: though they had a distinctly modern appreciation of the logics of construction, their aesthetic leanings were radically conservative.[6]

Moretti's own kinship with these dualities – academic and practical – is evidenced by the range of different ventures he embarked on early in his career. For instance, within just two years of graduating *cum laude* in 1929 he had completed his first projects, among them the Palazzina in Viale della Pineta, and also won the prestigious Borsa Triennale per gli Studi Romani, a three-year scholarship funding the study of Roman monuments. At the same time he collaborated with the archaeologist Corrado Ricci on the conservation of a number of the city's ancient ruins, notably Trajan's Market along what is now the Via dei Fori Imperiali. Moretti's views on Michelangelo, and the perceived shrewdness of his work, can in many ways be traced to these fertile years of fieldwork – a period when he came into close contact (often for quite extended time spans) with the tactile, material dimension of Rome's more celebrated architectural history.[7]

And yet, tangible evidence of this interest also dates back even further, notably to the outline of an essay Moretti developed aged just 20, when he was still a student and assistant in Fasolo's 'History and Styles of Architecture' course. Accessible now in the architect's archive (managed by Moretti's nephew, Tommaso Magnifico) and accompanied by plates of drawings, this handwritten manuscript essentially outlines Moretti's early conceptual thinking about ideal and real processes of construction. In Italy, such a document is typically referred to as a *canovaccio* – a term denoting a preparatory text for a literary composition, although it can also be understood more literally as a blank canvas where, in broad brushstrokes, the author sketches out the fundamentals of a story or argument. Historically, however, the *canovaccio* is associated with a specific medium, notably the *commedia dell'arte* – a masked type of scenario-based theatre in sixteenth-century Italy. Here, the *canovaccio* was an improvisational tool, a rough script dictating only the acts and scenes of a play, while other elements, such as plot and dialogue, were left up to the actors to generate


INGRESSO ALLA LAURENZIANA. OPERA DI M.B.
PARTICOLARE



Luigi Moretti, perspective drawings of the vestibule
in Michelangelo's Laurentian Library, 1927
Photographs by Marco Provinciali
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themselves. Seen in this wider light, Moretti's manuscript can be understood as an instrument that enabled him to improvise, without inhibition, on a scenography of buildings and their constitutive elements, and in the process generate a new form of architectural criticism.[8]

At the heart of this manuscript and Moretti's particular *canovaccio* was the notion of *sentimento costruttivo* – a sensibility or feeling for construction – which he believed was the basis of all architectural thinking. What Moretti was implying here was that in the conception of a building there exists an 'ideal' construction process which *alludes to* without necessarily *incarnating* the realities and processes later to be enacted on the construction site proper, but which is still of fundamental importance in the determination and comprehension of any work of architecture. But as novel as Moretti made this sound, the conceptual distinction he was suggesting had been articulated before, not least by Giovanni Milani in 1920 in his three-volume *L'ossatura murale* – essential reading for every aspiring architect in early twentieth-century Rome.[9] Likewise, Moretti's fascination with the temporal nature of design processes, and more generally with the multiple timelines of architecture (conceptual, constructional and meta-temporal) is consistent with the work of his teacher, Fasolo, a former student of Milani's (even if Fasolo was more engaged with how the expressive intention of an architect could be seen in the imagining of a work, and not its real form).[10] But what *is* surprising about the youthful Moretti's *canovaccio* is not so much the novelty of his method as the daring with which it was applied. Never before had someone claimed that it was in the baroque, and more specifically Roman work of Michelangelo and Borromini, that one could plot the almost complete resolution of two otherwise split realities in a single architectural organism – the incarnation of an ideal construction process within a real one.

Predating Ackerman's concerns by more than 30 years, Moretti's *canovaccio* is also noteworthy for the form it takes. Again, following his Roman mentors (who, in the French tradition of Eugène Viollet-le-Duc and Auguste Choisy, saw the act of drawing as supporting the practice of history), Moretti produced an extensive set of illustrations as a graphic accompaniment to the arguments made in his text. These drawings – in particular a number of simple but very elegant perspectives – reflect Fasolo's conviction that in conceiving a building the architect thinks not through orthogonal projections but in an imagined three-dimensional space. Unlike other more conventional architectural renderings, they also make no claims to either numerical precision or proportional exactitude. Rather, for Moretti their sole purpose was to disclose the layered thought processes and constructional intent of a given work, which he did partly through his use of different inks to demonstrate overlapping systems. In a number of studies, portions of buildings are even meticulously sliced off to reveal their status independent of conditions of adjacency, while in others, architectural and decorative elements are partially removed to show how the multiple expressive (or ornamental) parts relate both to one another and to the overarching (or structural) whole.

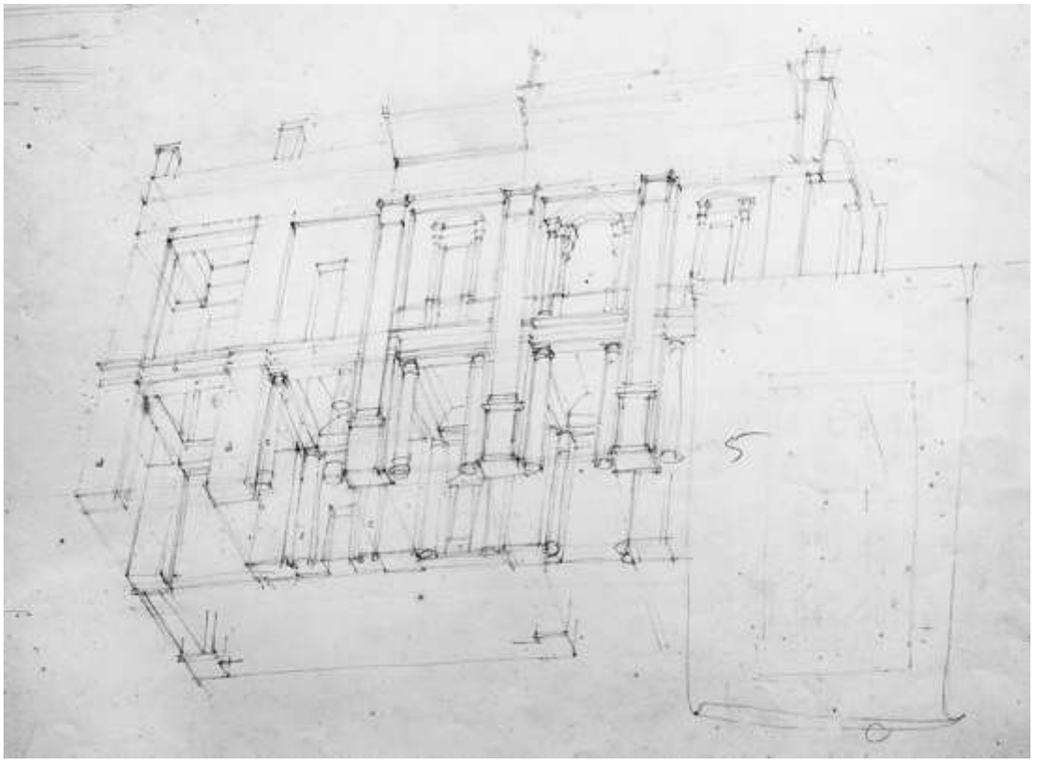
Two buildings in particular, both by Michelangelo, provide the focus for the most interesting of Moretti's illustrations.[11] In the first – the Laurentian Library in Florence – the *ricetto*, or vestibule, and the reading room are rendered in four separate perspectival views (which preceded Wittkower's 1934 paper, 'Michelangelo's Biblioteca Laurenziana' by almost a decade, and so did not benefit from the most substantial piece of scholarship on this structure).[12] The second – the Palazzo dei Conservatori within Rome's Capitoline Hill – was, in Moretti's view, the culmination of Michelangelo's built work, exemplifying how architectural ambition (or, as he would say, 'il sentimento construttivo') finds itself reflected in actual construction processes. The drawings, this time taking shape as axonometric projections of the building's underbelly, show the main framework progressively stripped of ornamental features in order to stress both representational and actual systems governing the distribution of its structural load – ie, the giant composite order of the main frame in contraposition to the tiling of a smaller ionic order carrying its own architraves and *volticelle.* Moretti gives further substance to the underlying tension that results from all these competing forces by emphasising Michelangelo's stated engagement with *ossatura* and *riempimento* (skeleton and infill); with loadbearing systems and surface articulation and, ultimately, with column and wall.

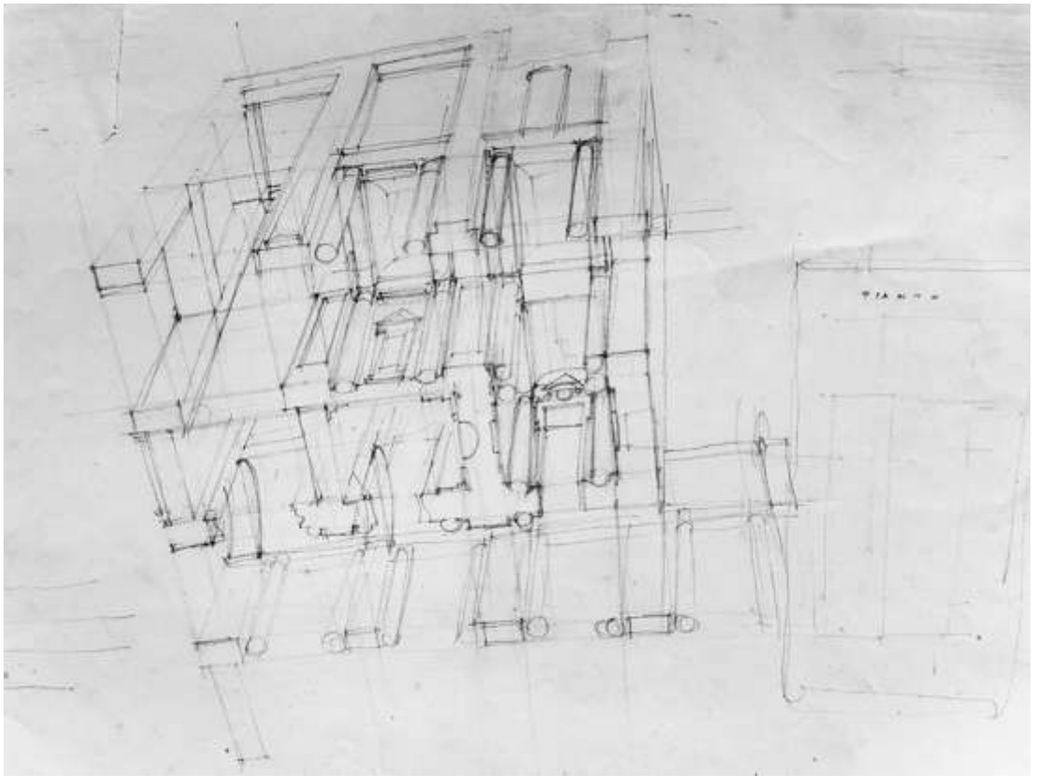
In 'The Column, The Wall' (1981), Hubert Damisch's own contribution to this longstanding, even classical debate, the French philosopher warns that the tendency to think of architectural structure through the logic of the frame, or in terms of the assembly of discrete elements within discontinuous systems, is symptomatic of a peculiarly modern condition – evidenced by the fact that in the architecture of antiquity, and more specifically the Roman architecture incanted by Vitruvius, the word 'structure' was associated with the continuity of masonry, not the distinctiveness of the column. It is only with Alberti, he claimed, that a concern for a somewhat 'logical' declination between the two leads to precisely those puzzling formulas that Wittkower would lament and which, more importantly, the young Moretti would desperately try to solve.[13]

And it was in working through this solution that Moretti encountered particular difficulties in his graphic reconstruction of the vestibule in Michelangelo's Florentine library, the ambiguities of which tended to evade the reading he was trying to put into place (much more so here than with Michelangelo's palazzos on the Capitoline Hill, where the clarity of the structural organism lends itself almost too convincingly to such contemporary analysis). Defined by the double order of paired columns and pilasters, along with transverse entablatures, this system was conceptualised by Moretti as a skeletal structure in which wall portions act as infill. At the same time, he acknowledged that the actual distribution of loads is not as neatly apportioned as the visual expression of Michelangelo's true *sentimento costruttivo*. This was a point Ackerman himself could never grasp, given his somewhat formulaic assertion that 'in the final design … the structural function of the column and wall are exactly the opposite of their visual effects' (even if Ackerman's own structural diagram is almost identical to Moretti's).[14] But where Moretti saw such opacity as representative of an intermediate stage in the artist's 'evolution', Damisch centred his arguments on the tragic recalcitrance of Michelangelo's vestibule. 'The conflict between members and surfaces', he wrote, 'their interpenetration, even their exchange of roles and functions, and the whole play of inversions and permutations, as well as of calculated ambiguities that could be characterised as baroque (or even mannerist), only brings out more clearly the respective qualities of the wall and the element of the order'.[15]

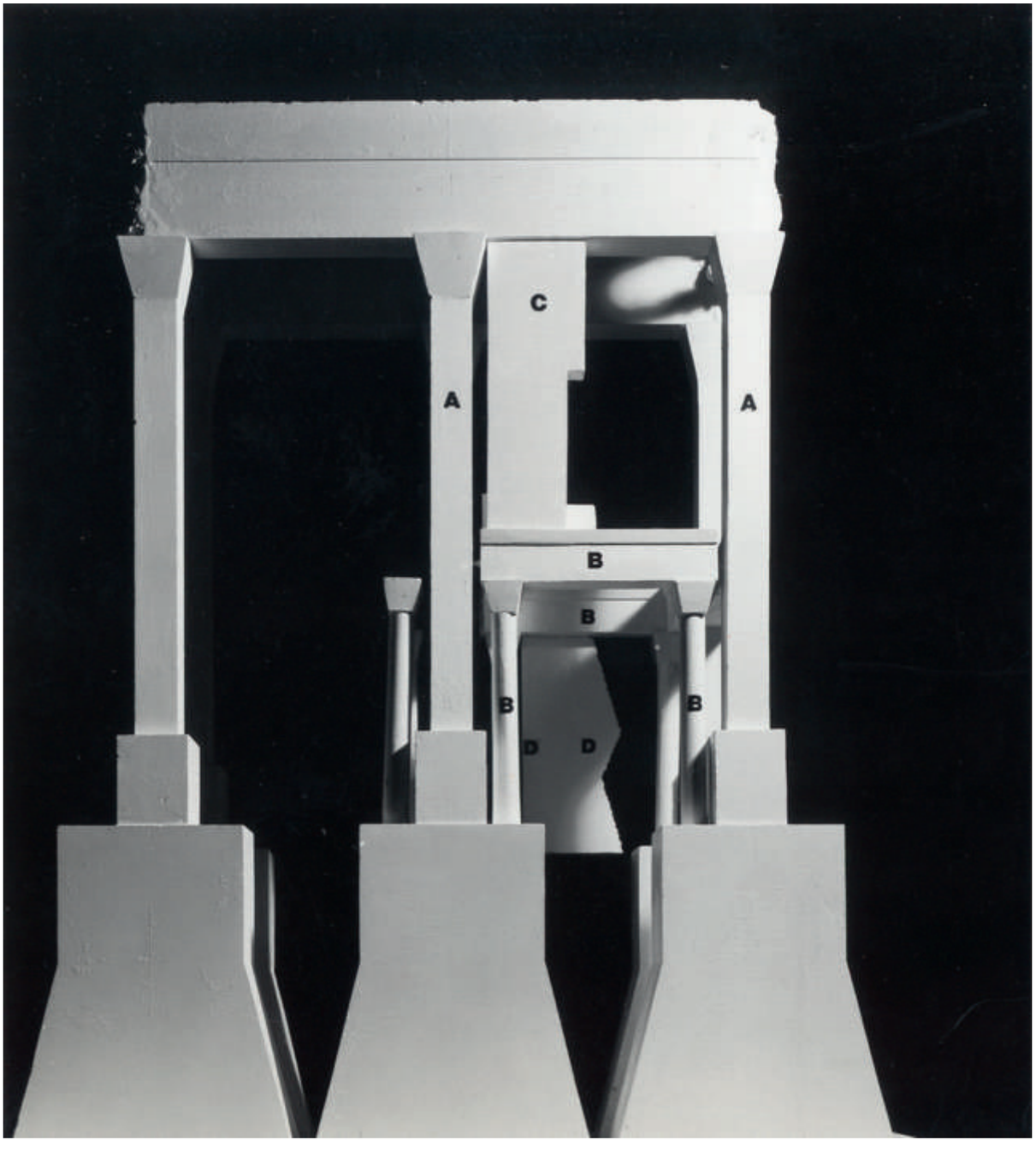
Yet Damisch's measured arguments about the inherent problems in the Renaissance recovery of Greek and Roman architecture should not diminish Moretti's scholarly achievements at this early point in his career (he was just 20 years old, after all). Indeed, the apparent resolve with which Moretti articulated his conclusions should be put down to this youthful exuberance, rather than used against him as evidence of any intellectual shortcoming. Later, Moretti would be defined both as a designer and a critic, by a subtle and highly informed interpretation of architecture's more engrained codes, even if it was not until 1964, and his conference paper on Michelangelo ('the divine one'), that he decided to revisit his audacious student hypothesis and expose it to public scrutiny.

Interestingly, in the intervening four decades Moretti's visual language remained largely unaltered (in his late 50s he was still producing the same elegant, expository perspective drawings he had first made as a student). But this long hiatus did offer time to explore new concepts and material and further develop his narrative. For a start, there

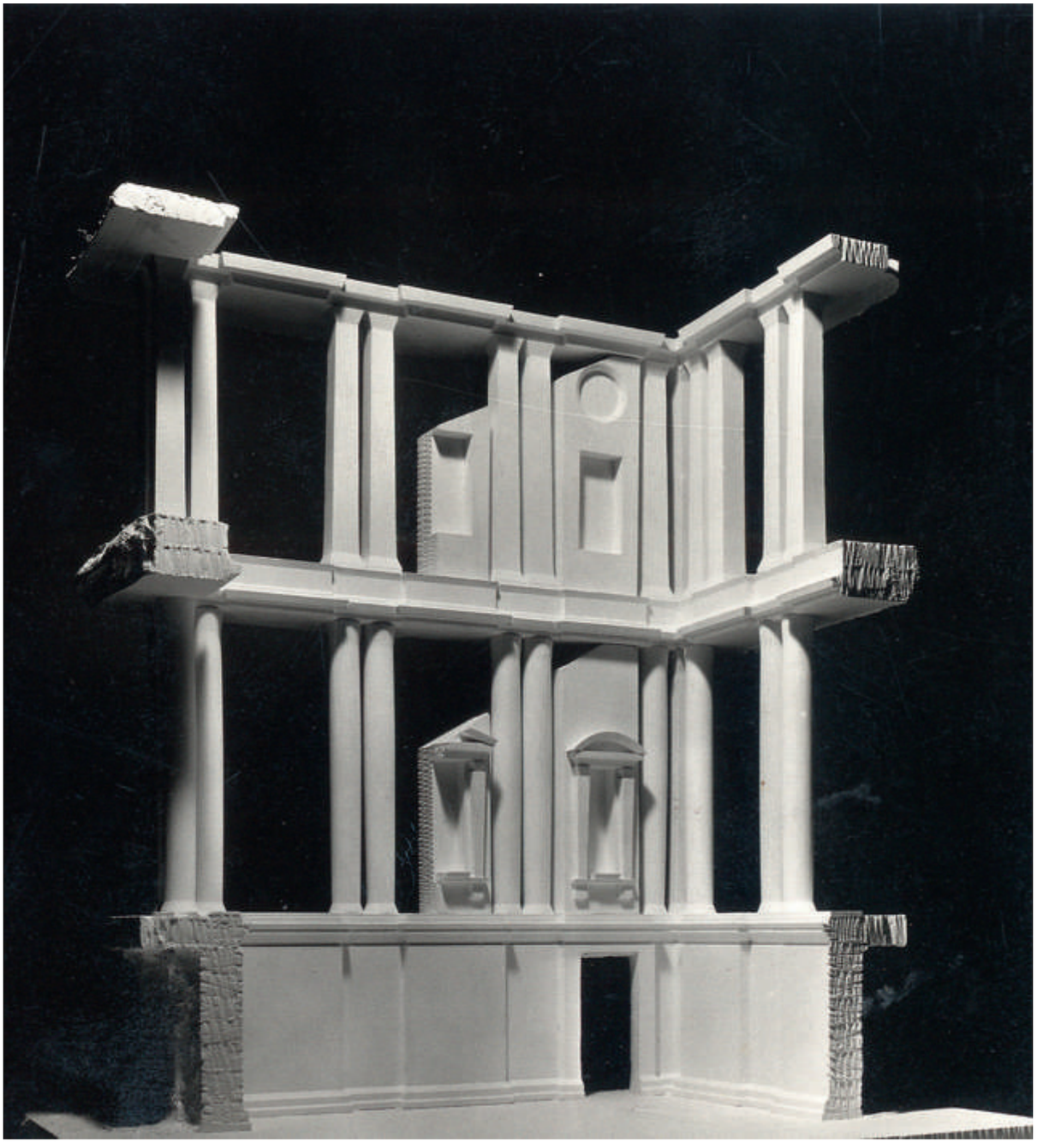




Luigi Moretti, perspective drawings of the facade
at Michelangelo's Palazzo dei Conservatori, 1927
Photographs by Marco Provinciali
© Archivio Moretti Magnifico, Rome



Luigi Moretti, plaster model,
Palazzo dei Conservatori, 1964
© MiBACT, Rome / ACS, no 1449 / 2016



Luigi Moretti, plaster model,
Laurentian Library, 1964
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was the somewhat inscrutable notion of *sentimento costruttivo*, which Moretti continued to unpick through his various articles on the idea of structure, largely published in *Spazio*, the magazine he founded in 1950. A work of architecture, Moretti was by then arguing, consisted of a 'general structure' to which numerous heterogeneous and independent other structures could be subsumed. These were structures of spaces, light, colour and material effect, but more than anything, given the qualities that distinguish architecture from any other art, they were structures of a built nature, which governed the distribution of forces as much as they expressed a sense of mass perceived by the human eye.[16] In this sense Moretti remained fascinated by the ambivalences of real and ideal forces, but by now his arguments were not predicated on finding a degree of correspondence between the two, but relied more on the poetic ability of the architect to place both in relation to one another under syntactic, semantic and even semiological terms (mirror to the wave of structuralist texts then published by Roland Barthes and Umberto Eco) – a skill, Moretti argued (in the spirit of a nascent postmodernism), at which Michelangelo was unequalled.

Freed from the burden of having to be incarnated in 'true' building processes, Michelangelo's ideal structures are therefore now assessed by their capacity to produce meaning – an essence, Moretti maintained, that is as much lyrical as it is technical. Similarly freed by his own poetic licence, Moretti's 1964 presentation made explicit reference to what he saw as the fictional character of Michelangelo's nested structures, which, in recalling the mythical pasts associated with their constitutive elements, seem to have been erected in different eras and by different people. This sense of time appears to have offered a special kind of spark for the more mature Moretti, who recognised in Michelangelo a storyteller's ability to enact a kind of meta-temporal narrative that synthesised past, present and future in the very materiality of stone and lime, bricks and mortar, in the process intermingling idealism with the pragmatic strictures of the building site (this reading, it should be noted, appeared two years *before* Aldo Rossi published his own temporal architectural musings in *The Architecture of the City*).

Again, as with the earlier *canovaccio*, Moretti illustrated this argument through references to Michelangelo's Laurentian Library and Palazzo dei Conservatori. The former is now presented as a kind of palimpsest of various histories, with Moretti describing the double order of paired columns as a segment of a classical *agora* or *stoa*, the intercolumniation of which has been filled over successive periods of time. As a result he distinguishes his own reading from that of Ackerman and others, who only ever referred to the library *ricetto* as a form of mural architecture in which a series of columns had been encased. Moretti went on to detect this dual timeframe – at once ancient and *cinquecento* – in almost all the other details of the space, not least in the doorway that leads into the main reading room, itself composed of two nested portals which are expressed almost independently of each other in terms of their formal articulation.

The same interpretative strategy defines his approach to the palazzo, where he identifies four separate 'strata' of elements: a main structure formed by the giant order of piers and terminal architrave; an independent, secondary, structure inserted between the piers and formed by a single *volticella* carried by four Ionic columns with adjoining monolithic lintels; an external wall enclosing the giant intercolumniation which sits above the exterior lintel of the secondary structure; and a wall enclosing the end of the portico, which leaves the inner columns of the secondary order encased (encased columns being for Moretti yet another identifying element of this pan-historical architecture). Curiously, in describing these elements, Moretti makes no reference to the structural veracity of the entire system, unlike Ackerman, who concluded that all elements 'really do the work that they appear to do' (which in turn prompted his famous description of the pilasters lining the piers as 'honestly ornamental').[17] Instead the focus is entirely directed to the temporal drama that Michelangelo had put on stage.



Maarten van Heemskerck,
Septizonium, 1536
© Berlin State Museums

In presenting these arguments at the conference in Rome, Moretti did not simply rely on the power of his own words, but – as with the earlier *canovaccio* – also employed a visual counterpart. Eight of these illustrations were his youthful perspective drawings, now recycled. In addition to these drawings, however, there were two white plaster models, photographed from multiple angles and set against a pitch black background. As a model-maker, Moretti was mostly known for his series of negative casts – bulbous and initially disorienting forms that reveal the volumes of internal spaces as opposed to the exterior shell of a building. Photographs of a number of these accompanied his essay 'Strutture e Sequenze di Spazi' (Structures and Sequences of Spaces), published in *Spazio* in 1952.[18] The text attests to his recent engagement with the 'void', an influence he credited to Bruno Zevi's *Saper vedere l'architettura* (1948), translated in English in 1957 as *Architecture as Space: How to Look at Architecture*.

The 1964 models, however, stem from a different line of research, as the direct offspring of Moretti's earlier enquiries into the possibility of making criticism through architectural means, to the point where they appear as nothing more than three-dimensional, material improvisations on his analytical student drawings. And once again, like these earlier perspective and axonometric views, Moretti's models depict the vestibule of the Laurentian Library and an idealised fragment of the Palazzo dei Conservatori.[19] Yet whereas the *canovaccio* drawings seemed to fall short in conveying the volumetric characteristics of Michelangelo's structures, the models were far more successful, not least because they allowed a much greater appreciation of their physicality – which had been rendered almost weightless in pencil and ink.

In both models, Michelangelo's ideal structures are also reconstructed in the form of a gradation, beginning with the longstanding primary structure (the double order of paired columns in the library vestibule and the giant order in the palazzo) and terminating with the composite (wherein the joints between the elements are deliberately highlighted). Moretti had used the same strategy in one of the *canovaccio* drawings of the Palazzo dei Conservatori to describe the ideal construction process of the portico-facade and its correlation to the real construction. But in view of his later

meta-temporal leanings, this comparative system gains further significance in the models. For if – when read from left to right – the models echo the mythical narrative of Michelangelo's own evocation of successive construction, then – from right to left – the impression is that of progressive decay, of a building becoming a ruin under the vicissitudes of time.

In appreciating these particularly ruinous qualities, one is reminded of the Roman drawings of Michelangelo's contemporary, the Dutch painter Marten von Heemskerck, which meticulously depict the crumbling state of the city's ancient buildings while revealing, with astonishing accuracy, their constructional makeup (and in the process helping later historians to better understand Michelangelo's own Roman structures, at St Peter's and on the Capitoline Hill). As anthem to these ideas, the top left of von Heemskerck's drawing of the Septizonium is inscribed *Roma quanta fuit ipsa ruina docet* – 'how great Rome was, its very ruins tell' – anticipating, by almost two centuries, the ruin lust so typical of seventeenth-century art. Tellingly, Moretti included a large number of von Heemskerck's drawings among the graphic material that accompanied his paper, and in many ways it seems to be these images, more than any other single source, that were the spur for his shared interest in an architecture at once contemplative and empirical, drawn from the past and yet also clearly anchored to the present.

Bruno Zevi's students also made so-called 'critical' models on the occasion of the same anniversary (for the exhibition 'Michelangelo in Prosa'): they got short shrift from Manfredo Tafuri, who dismissed them as 'abstract and a-historical sculptural games'.[20] Moretti's models, in contrast, were far more convincing, largely because they bore such a strong relation to the architectural language and tectonic principles of the architecture they were analysing. At the same time, the ideas these models appeared to convey, in terms of their overlapping historical associations, had powerful echoes of a postwar cultural zeitgeist, both in architecture and in art (it is no coincidence that three years later Robert Smithson would develop the notion of the 'ruin in reverse', or that the 'unfinished' – the *non finito* – would become such a persistent theme in Michelangelesque scholarship). Ultimately, though, the value of these models is the value of the architecture they depict – which is that in spite of their interpretative meta-temporalisms they still 'climb back into real architectural structures'.[21] And so, in their evocation of both a perfection of the highest order and the mundane practicalities employed to achieve this, they hinted at what Moretti saw as the greatest quality in Michelangelo's work – namely its capacity to not only improvise but to enact the ever-conflicted relationship between the ideal and the real, the timeless values of the orders and the aesthetic and structural necessities of the column and the wall.

So here's the methodology: if you begin with the orders then you're teaching the image, but begin with the wall and you're teaching reality.
Julien Gaudet, *Éléments et théorie de l'architecture*, 1910 [22]

1. Alberti expands on this idea: 'I will not omit here what I have taken notice of among the ancients, a contrivance certainly very excellent and praiseworthy: their best architects placed these apertures and the arches of the roofs of their temples in such a manner, that even though you took away every column from under them, yet they would still stand firm and not fall down.' Leon Battista Alberti, *On the Art of Building in Ten Books*, translated by Joseph Rykwert, Robert Tavernor and Neil Leach (Cambridge, MA: MIT Press, 1988), book I, chapter XII.
2. By placing the column in his category of ornament, Alberti touches on one of the central problems of Renaissance architecture. Thinking in terms of the wall, the chief feature of all Renaissance architecture, the column is for him first and foremost decoration.' Rudolf Wittkower, 'Alberti's Approach to Antiquity in Architecture', *Journal of the Warburg and Courtauld Institutes*, vol 4, no 1/2 (October 1940 – January 1941), pp 1–18. This text was later republished in Wittkower's book, *Architectural Principles in the Age of Humanism* (London: Alec Tiranti, 1971).
3. In reference to the engaged column, the solution typical of imperial Roman (as distinct from Greek) architecture – and which caused Alberti so much trouble – was articulated best by Vitruvius. He argued that this solution (which he termed the *pseudoperipteros*) was the result of modifications dictated by the 'requirements of sacrifices' and thus did not challenge the architectural (and structural) primacy of the column. He states: 'Other architects actually move the temple walls outwards and place them in the intercolumnations, so greatly increasing the size of the *cella* by removing the space occupied by the exterior colonnade; and while retaining other elements with the same proportions and modularity, they have evidently generated another type of plan with a new name, the *pseudoperipteral*. However, these types are modified to suit the requirements of the sacrifices.' See Vitruvius, *On Architecture* (London: Penguin Books, 2009), book IV, chapter VIII, p 6.
4. James S Ackerman, *The Architecture of Michelangelo* (Chicago, IL: University of Chicago Press, 1986), p 95.
5. Luigi Moretti, 'Le strutture ideali della architettura di Michelangelo e dei barocchi', in Michelangelo Buonarotti (ed), *Atti del Convegno di Studi Michelangioleschi* (Rome: Edizioni dell'Ateneo Roma, 1966), pp 444–54.
6. Manfredo Tafuri, *Architettura e storia*, interview given to 'La rivista dei libri' and then published in April 1994, p 10. An extract of this can be found in *Casabella* 633 (1996), p 73.
7. For more on Moretti's early years, see Annalisa Viati Navone, 'The Architect Luigi Moretti: From Rationalism to Informalism', *The Architectural and Town Planning Quarterly*, vol LVII, no 2, pp 3–41, and Cecilia Rostagni, 'Moretti, Michelangelo e il barocco', *Casabella* 745 (2006), pp 81–85.
8. A reproduction of Moretti's *canovaccio* can be found in *Casabella* 745 (2006), pp 70–80.
9. Writing in part II of his text, Milani argued that 'The solidity of a skeleton should not only be *real* but also *artistic*, so to say, and thus *apparent*'. See Giovanni Battista Milani, *L'ossatura murale: studio statico-costruttivo ed estetico-proporzionale degli organismi architettonici, con speciale riferimento alle strutture elastiche nelle loro varie e moderne applicazione pratiche* (Rome: C Crudo, 1920).
10. For more on Moretti's relation to the *scuola romana*, see Marco Stefano Orsini, *Moderne Architetture Romane: Architetture della scuola romana nel passaggio alla modernità, con particolare riferimento all'opera di Giovanni Battista Milani* (Rome: Gangemi Editore, 2015).
11. In the *canovaccio* Moretti limited his enquiry to Borromini and Michelangelo, but had originally intended to extend this to encompass works by Carlo Maderno, Pietro da Cortona and Ferdinando Fuga.
12. The first drawing highlights the structural organism of the rectilinear hall as seen through a worm's-eye-view of one of its shorter sides; the remaining three describe the 'ideal compositional elements' of the vestibule both in its current form – as a hypothetical reconstruction of an earlier study by Michelangelo (most likely, the 'study for the west elevation of the vestibule') – and following the late baroque representational technique of the so-called *prospettiva ad angolo*. See Michelangelo Buonarotti, *op cit*, p 48. On Wittkower's later paper, see Rudolf Wittkower, 'Michelangelo's Biblioteca Laurenziana', *The Art Bulletin*, vol 16, no 2 (June 1934), pp 123–218. Wittkower himself only ever offered minor considerations on the relation of load-bearing structure to representational structure in the *ricetto*, and which would become a more obvious subject of investigation only with James S Ackerman in 1961.
13. See Hubert Damisch, 'The Column, The Wall', *Architectural Design*, no 49 (1979), pp 18–25.
14. James S Ackerman, *op cit*, p 111.
15. Hubert Damisch, *op cit*, p 51.
16. See Luigi Moretti, 'Struttura come forma', *Spazio* 6 (1952) and 'Strutture e sequenze di spazi', *Spazio* 7 (1952–53).
17. James S Ackerman, *op cit*, pp 156, 159.
18. Luigi Moretti, 'Strutture e sequenze di spazi', *op cit*.
19. Moretti did, in fact, make models earlier, notably in 1931–34, during the period he spent working with the archaeologist Corrado Ricci and his Borsa Triennale per gli Studi Romani. One could even argue that it was Ricci who encouraged him to highlight a particular architectural fragment, and for it to then metonymically be seen as representative of a wider set of ideas. Among these 1931 plaster models was again one of the Palazzo dei Conservatori, whose existence is only preserved in a handful of photographs in the Archivio Moretti Magnifico.
20. The exhibition was curated under the direction of Bruno Zevi, Guglielmo De Angelis d'Ossat, Natalino Sapegno and Giulio Carlo Argan, along with Paolo Portoghesi, Mario Boudet, Vittorio Gigliotti and Luciano Rubino. It featured photographic material and abstract interpretative models of Michelangelo's architecture, constructed by the students of the Venice school of architecture. See 'L'opera architettonica di Michelangiolo nel quarto centenario della morte' and Bruno Zevi, 'Michelangiolo in prosa' in *L'Architettura cronache e storia* IX, no 99 (1964); and Paolo Portoghesi, 'Mostra critica delle opere michelangiolesche al Palazzo delle Esposizioni in Roma', *L'Architettura cronache e storia*, no 104 (1964), pp 80–91. Tafuri's critique can be found in Manfredo Tafuri, *Theories and Histories of Architecture* (London: Granada, 1980), pp 106–11.
21. Manfredo Tafuri, *ibid*, p 109.
22. The original quotation reads: 'Voilà la méthode logique: commencer l'enseignement par les ordres, c'est l'enseignement de l'image; commencer par le mur, c'est l'enseignement de la réalité', from Julien Gaudet, *Éléments et théorie de l'architecture* (Paris: Libraire de la construction moderne, 1910).

Ruskin's Rocks

Marrikka Trotter

The first rocks are the most common: rolled flint pebbles broken or cut to reveal dimly translucent interiors beneath a sand-coloured crust. Dark siliceous jellies fracture along shell-shaped curves; rust-coloured whorls float across the polished surface of a cloudy purple lagoon; a light grey flint is run through with a black cross-shaped fossil, tapering to a tightly lobed quatrefoil at the other end. Next come banded flints and chalcedonies; a pale silicate like scratched ice over a deep pond prefaces a profusion of delicately layered red, tan, white and grey, each thin line ruching in a minute amplification of the film below it. The rough rinds of chalcedonies are sliced through to reveal glassy nodules of purple and iridescent blue. There are miniature landscapes sugared with crystals; a bubbling carnelian the colour of oxblood and the opacity of cast glass; a series of quartzes flecked and interwoven with gold; chalcedonies stained with fernlike traceries of iron. Next are jaspers: saturated clouds and strings of colour set in mauve-grey stone; an oval slice of creamy white and yellow abuts a pink and white agate like an egg next to streaky bacon. Then quartzes, from veins to detached crystals, clear, opaque and smoky, progressing from the simplest pyramids to perfect tapering prisms. The last rocks are the rarest: roseate, milky and bright blue-green opals, green jaspers and deep purple amethysts.

This is the mineral collection 'especially founded on the forms of flint' that John Ruskin donated to the St David's boys' preparatory school at Reigate, Surrey in 1883. It originally contained 133 specimens and was accompanied by a detailed catalogue. The St David's collection was part of Ruskin's larger effort to incorporate the study of minerals into primary education throughout Britain – a goal he enlarged upon in an introduction to his unfinished textbook, *Institutes of Mineralogy*, where he ascribed particular value to minerals that were familiar, easy to find or affordable to purchase, durable, washable and able to be examined by children 'without danger to themselves, the furniture, or the carpets'. In addition to the St David's donation, Ruskin gave significant collections to St George's Museum at Sheffield, the Kirkcudbright Museum in Scotland, the Coniston Institute and Harrow. He also spent a good deal of his time between 1882 and 1884 arranging and rearranging the siliceous holdings of the newly relocated British Museum. Eventually given charge of a single case in which to illustrate 'the more common forms of native silica', Ruskin supplemented the museum's specimens and wrote an accompanying catalogue. Smaller collections went to Miss Bell's School for Girls at Winnington, Cheshire, the Whitelands Training College at Chelsea, the Cork High School for Girls, and Somerville and Balliol Colleges, Oxford. The St David's collection was one of only three donations for which Ruskin wrote a catalogue, and as Ruskin's editors remarked, that document stands out for being 'carefully written and most instructive'. Unlike many of Ruskin's mineral collections, which have either been dispersed over time or so altered that any original written material cannot be correlated with individual specimens, the St David's collection has changed hands only twice since the school closed in 1903. While some of the more valuable items have gone missing – most noticeably the majority of the (eminently pocketable) examples involving native gold – the rest of the collection is largely intact, and in some cases Ruskin's original labels still exist. With the St David's collection, then, it is uniquely possible to compare Ruskin's words with the original specimen to which they refer.

In Ruskin's view, banded and brecciated silicates, a group of rocks that includes the agates, jaspers and chalcedonies at the heart of the St David's collection, were valuable examples of a self-organising principle at work in the mineral world. Close observation of the striations and chunks of colour which characterise such stones revealed to Ruskin's eye that these had pulled apart from each other via an internally motivated mechanism he called 'tranquil division'. This was a chemical process rather than a physical one, in which the mineral components of each stone assumed compositional agency. Thus Ruskin's verbs in the St David's catalogue tend to treat his silicates as acting entities: flint 'develops' and 'purifies' itself; chalcedony 'throws itself into bands'; in the case of number 43, where 'chalcedony is the active and formative element', jasper 'submits'. A vein of quartz demonstrates 'energetic crystalline power' while a calcite crystal stuck to it has 'got hold of a crystal of iron, and swallowed it up, all to itself'. Ruskin's views ran counter to standard mineralogy, which, then as today, interpreted banded silicates as a sequence of individual deposits laid down in solution, in the same way that stalactites form in a cave, while their brecciated counterparts were seen as banded silicates that had broken into pieces which were then glued back together by subsequent coats of liquefied stone.

'Fawn-coloured flint, becoming chalcedonic on the inner surface. The outer surface, to me, inscrutable; the smaller and porous parts showing every state of incipient chalcedony.'

Ruskin accused those who held to this explanation of failing to observe or account for contradictory details in the rocks themselves. For instance, the nodules that others treated as tiny stalactites seemed in the case of silicates to form independent of gravity, often pointing in several different directions within a single stone. In the St David's catalogue, Ruskin accordingly chose to call them 'pseudo-stalactites', tetchily remarking in his entry for number 21 (now lost) that half of these formations dropped one way and half the other:

Modern geology would, of course, not scruple to explain this phenomenon by the theory that the world had been turned upside down in the interval. I prefer, myself, to direct attention simply to the circumstance, and to the farther interesting fact, that one stalactite in the middle dropped *sideways*.

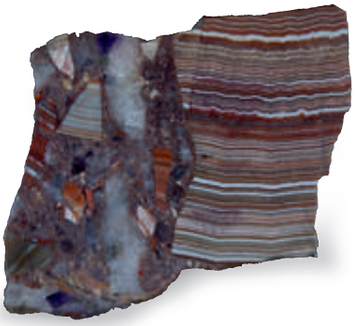
Here Ruskin's theorising ran ahead of his reason, since, as in the case of stalactites forming downward and stalagmites forming upward, gravity alone could account for his first observation: depending on the rate and internal variation of crystallisation, his sideways instance might have been the result of rolling the forming stone rather than upending its parent orb. Yet Ruskin also amassed more persuasive evidence in support of tranquil division. In particular, he noted that in banded silicates 'the basic films never exceed a certain thickness, nor the basic rods a certain diameter'. This, as he explained in a series of papers aimed at the geological profession between 1867 and 1870, seemed at variance with the idea that such coats and rods formed like baby strata, one at a time and in superimposition. Rather, Ruskin believed that examples like those in the St David's collection proved a chemical process was a work: bands and rods were all a uniform thickness because their formation was simultaneous, which meant they were collectively constrained to the same degree, and width, of separation.

This is the basic argument Ruskin's mineral collections were meant to demonstrate in the most persuasive manner possible. In the St David's collection, the rocks have been arranged to showcase silica's full range of formative potential, from the least organised flint flecked with fossilised organic material to the purest quartz arrayed in complete crystalline order. There is also an attention to colour – which surges and ebbs through the collection as if to pull a complex tapestry of molecular kinships through to the surface – and to form: cut and polished rocks are balanced by rougher specimens; the large examples are offset by small ones. The somewhat idiosyncratic inclusion of metals in the middle of the sequence and the segregation of gem-quality stones at its end seem calculated to periodically reinvigorate the observer's flagging attention.





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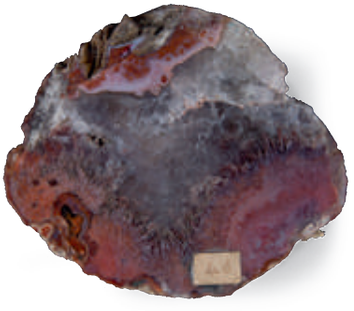
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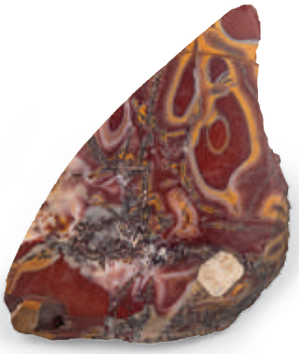
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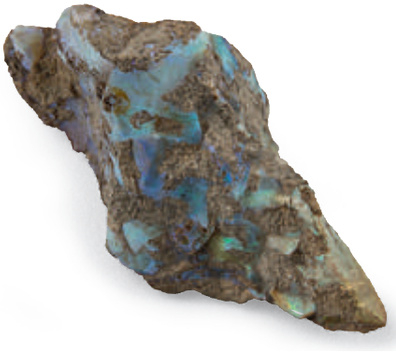
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23



24



An argument is being made, in other words, with subtler means than science alone.

Persuasion was important because of what was at stake. Following the Protestant exegetical tradition of typology, in which nature's forms and the processes by which they come into being are seen as 'types' – embodiments of eternal truths and models of correct human behaviour – Ruskin believed that the chemical and the conscious differed from each other only by degree. For him, the 'is' of mineral formation – its infinite chemical reproducibility giving rise to ever-new individual forms – merged into the 'ought' of ethical conduct until the laws of the first domain seemed equally applicable in the second. This was most literally demonstrated in the series of lectures Ruskin delivered along with his minerals to Miss Bell's School for Girls. In his talks, later published as *The Ethics of the Dust, or Ten Lessons to Little Housewives on the Elements of Crystallisation* (1866), Ruskin instructed his female pupils to persist in their own 'unconquerable purity of vital power, and strength of crystal spirit' and develop according to plan, as it were. The girls were to follow the example of mineral atoms, which always 'get into order as soon as may be':

For in the fulfilment, to the best of their power, of their adopted form under given circumstances there are conditions entirely resembling those of human virtue: and indeed expressible under no term so proper as that of the virtue, or courage of crystals.

Ruskin's 'crystal virtues' endowed minerals with a 'limited, though stern code of morals' focused on purity and form; his 'crystal quarrels' included an example he donated to St David's (number 68) in which quartz and iron combined to produce misshapen and imperfect results. Aside from what strikes us today as Ruskin's chauvinism – for his time, his view of female education was considered quite liberal – one of the more surprising aspects of Ruskinian ethics is the ease with which they were transferred from culture to nature – even inorganic nature – and back again.

Silicates were particularly valuable to Ruskin because they seemed to possess a second formative principle in addition to that of crystallisation: something he called 'the great diagonal – or spiral? – force of silica' that aggregated individual crystals into 'branches or coils' and propelled crystallisation along particular lines. Ruskin matched curves and shapes he found in siliceous minerals to components of living things, like birds' wings, and to pleasing aesthetic lines in the creative output of human beings. Ruskin believed these vectors developed independently, and only resembled each other because they obeyed a transcendent set of natural laws. In the St David's catalogue, he was eager to attribute seemingly organic forms to chemical processes alone. Flint's 'conchoidal' fracture thus looks 'exactly like the cast of a shell'; mineral formations are described as 'mimicking a fossil'; various moss-like structures are in reality 'entirely inorganic'. In the case of number 51, Ruskin mocked the 'greatest authority on mucose matter' for having claimed 'the embedded forms were all real mosses. I am myself, nevertheless, still under the somewhat contrary impression that Mr Bowerbank's mosses must all be real minerals!'

A second, and more troubling, dimension to Ruskin's focus on silicates emerges from their capacity to aggregate a variety of individual crystalline impulses into a larger whole. This had direct implications for what Ruskin believed to be the proper relationship between humans and their natural surroundings, in which people and their myriad productions were the final and most intricate outworkings of a self-assembling natural system that began with the simplest atomic configurations. There were thus composite natural-artificial landscape 'orders' akin to those of classical architecture: 'corresponding not only to the several species of rock, but to the particular circumstances of the rock's deposition or after-treatment, and to the incalculable varieties of climate, aspect, and human interference'.

Ideally such 'human interference' would take the form of large-scale environmental cultivation tailored to a particular inorganic context – a possibility Ruskin worked to instil in Britain when he founded The Guild of St George in the 1870s. Along with educational reform, the Guild was to shape and repair the critical physical junction between mineral and social life: averting floods, draining fens, checking sea-erosion, constructing breakwaters – 'dig the moor and dry the marsh', as Ruskin urged, 'to bid the morass give forth instead of engulfing, and to wring the honey and oil out of the rock'.

In the context of an ethical society, a correct alignment between human creativity and geological particulars could produce spectacular results. This is precisely the way Ruskin approached Venice. The underlying geomorphology of the Venetian archipelago, including its shallow seas, the narrow bandwidth and regularity of the tides, and the gradual but immense deposition of fine (siliceous) sediment by the Po and other rivers – all of these inorganic vectors combined in what Ruskin emphasised as 'the only preparation possible' for such a unique cultural achievement. Thus the St David's donation was ultimately part of Ruskin's larger campaign for an obedient nation whose ethics *resembled* the formational patterns of rocks because they were derived from the same divine source, and *responded* to this most basic foundation with an accretive, even 'coralline-like activity'. Distributing carefully arranged and annotated mineral collections to the youth of the nation was an efficient way to disperse granules of natural truth that both embodied right behaviours and inspired emulation.

'Jasperine agate with beautifully parallel and fine agatescent bands and central quartz. The flammeate, jasperine, red and grey stains are of precision and beauty certainly in their kind, not to be surpassed, and in my own collection unrivalled.'

Within this fundamentally geological system, human activity becomes something like a carboniferous crystallisation atop a siliceous substrate. It occupies the carbon-rich layer that Ruskin called the 'earth veil', stretched over the silica-rich bedrock of the world, and it ideally assembles 'lovely cities, crystallised, not coagulated, into form' from carbonate materials like limestone and marble. Architecture was thus both the calcined shell or deposit of the society from which it emerged and the ultimate index of the relationship between that society and its mineral environment. As such, Ruskin believed, it could be analysed just like any other inorganic product. His resultant transpositions from mineral to architectural form could be startlingly direct. Ruskin dismissed the Greek fret ornament, for example, because the only chemical substance it resembled was a crystal of bismuth, which could only be produced artificially. 'On this ground, then', wrote Ruskin, 'I allege that ornament to be ugly; or, in the literal sense of the word, monstrous; different from anything which it is the nature of man to admire'. Human agency, like silicate force, was best directed wherever it was able to abet the social conditions that permitted more admirable crystallisations.

Follow the threads that connect aphoristic moral statements, motivate arcane mineralogical disputes and intrude in architectural criticism before coalescing in an agate presented to the schoolboy's gaze. The picture of Ruskinian ethics that emerges represents an amalgam of nature and culture which is far more deliberate and thoroughly worked out than the iterations in architectural discourse today. Historically, Ruskin's project coincides with that of Charles Darwin, whose 1859 publication, *On the Origin of Species*, famously demonstrated that there is no organic life without struggle and adaptation. Contra this position, Ruskin's embrace of inorganic fixity is a conservative impulse that attempts to negate precisely the ways in which living beings are *other* than their inorganic environments. Agency there may be – even furious, wilful activity – but change in Ruskin's siliceous ethics is a recursive process: the achievement of an alignment across diverse forces, the decay of that achievement, and the attempt to reinstate it according to the same unalterable pattern. Predicating human behaviour on the self-organisational properties of minerals is ultimately an attempt to strip a critical animal faculty from the human subject: the ability to evolve and change.

Rock captions, extracted from John Ruskin's original catalogue, 1883

1
Agatescent chalcedony (ie, chalcedony throwing itself into bands), showing both the straight-levelled and concentric forms. An altogether exquisite example, cut and polished under my own direction.

2
Jasperine agate, in perfect brecciation. A small slice off the best piece I have in my own collection.

3
Still finer flint, with finer chalcedony. The latter, however, broken on the surface, showing delicate varieties of conchoidal fracture. Look with lens at those on the smallest piece above my old ticket, where the new number 15 should be put for indication. These fractures are, however, partly, where so finely rippled, indicative of the interior structure of the stone. See especially the sharp apex at the top.

4
Submitted for examination to the greatest authority on muscose matter, Mr Bowerbank; who sent me word back that it was a charming specimen; and that the embedded forms were all real mosses. I am myself, nevertheless, still under the somewhat contrary impression, that Mr Bowerbank's mosses must be all real minerals! At all events, the specimen is a superb, though a small one, and two or three film-slices might be cut for the microscope from its roughest end, without the least injury; and the question finally settled at St David's.

5
Yellow and red jasper, thrown into bands by the force of the containing agate, which, however, is so far bothered by the stolidity of the jasper that it can't form its own orbs and angles properly; but wriggles and loops itself about, partly in the style of the jasperine vermicelli. Small; but extremely valuable and interesting.

6
Red and yellow jasper variously coiled and squeezed, with veins of imperfect quartz, — a rare kind, which the traveller who gave it me told me he had ridden three days in a savage country to get. As I don't care about savage countries, nor whether a jasper, which one must ride three days to get (and can't make anything of when one has got it), is to be found in New Guinea or Old Guinea (this is, I believe, from New), I have no reluctance in parting with this specimen: but I believe it could not be easily matched.

7
Common mossy flint of the south coast, passing into pure chalcedony, in one part showing black arborescences of oxide of iron (rare). No one has yet given any account of the nature of the mossy matrix, which is extremely common, but extremely curious. Where the chalcedony is white, it begins to throw itself into sausage-like forms, which might be mistaken for stalactites, but are nothing of the sort.

8
Flint-chalcedony, making the best it can of itself. It cannot be seen in finer condition, showing the jasperine, spongy interior, edged with extremely minute sparkling quartz. Examine carefully with lens. I do not know how far these red parts are organic. It is very rare to find chalcedony of the two sides of the wall, as here; and still more rare to find it, as on the blue side, with superimposed pseudo-stalactites (to my great regret, broken short off). Cut and polished under my own direction.

9
Level Icelandic chalcedony, traversed by pseudo-stalactites, each with its proper rod of nucleus. Cut and polished under my own direction, and extremely instructive, if one could only understand a single word of what it says. Look at it against the light.

10
Slice of a jasperine agate of the finest quality, showing agatescent formation, inside as well as outside its quartz. The external bands, variously arbitrary, and unmanaged, or unmanageable, are chiefly notable because, on the interior of the narrow and consistent band of red jasper, which falls away at one end like the loose thread of a skein, there will be found a series of little circular domes, built into the quartz; white on the surfaces, and cut through into pretty violet sections.

11
Fine white quartz, partly forming a vein, partly disseminated through black indurated slate. The quartz forms fine sugary crystals at its surface, and is set with small crystals of sulphuret of iron and calcite. One of these calcite crystals, has got hold of a crystal of iron, and swallowed it up, all to itself; while another at the edge of the specimen seems to have taken three or four, like pills.

12
Compact quartz, vexed quite out of its moral character by sulphuret of iron, with, I think, a little zinc (the black glittering part at the bottom), and nasty carbonate of iron all over. This specimen is described in the Ethics of the Dust as illustrative of the temper of minerals that don't get on together.

13
Native gold in semi-crystalline quartz. I believe this Australian; but it represents the kind of gold, all over the world, which forms the nuggets in alluvial deposit. That is to say, the flawed and more or less brittle quartz gets knocked away, while the gold, in grains and masses of various sizes, falls to the bottom of the stream. This specimen was cut when I bought it, and the section shows the exact lines of contact between the gold and quartz: crystalline in the interior of the stone, where the metal is compact, and effervescing into moss in the cavities.

14
Portion of an imperfectly brecciated flint, coloured by iron oxide. I bought the whole piece in a dealer's back-shop for sixpence; cut it, and have kept the biggest piece, which I would not part with for five pounds. The finest example of pure red jasperine colour I have ever seen in silica. The white portions might be called white jasper, if they were a little less brittle, and the grey parts might be called grey chalcedony, if they were a little more clear. But on the whole, it is better called a high-caste flint, traversed by fibres of red jasper.

15
Blue agate, surrounded by a coat of scarlet jasper. It will be seen that the globular concretions of the agate are independent of this exterior coat; while yet the jasper is itself partly agatescent, and both are bent about by a brown concretion at the edge of the stone. The specimen is full of all kinds of puzzling interest.

16
Fragment of a large crystal, traversed, I believe, by black tourmaline. We won't stop just now to ask what tourmaline is, especially as I am not sure that this is tourmaline. Quartz never allows other minerals to get into the centre of it as a nucleus for its crystals, and, as a rule, keeps even those it is very fond of, either at its surface or just under, but with its closest personal friends it relaxes so far as to allow them to crystallise all through it and do whatever they like, going on meanwhile in perfect tranquillity.

17
Quartz in perfect crystallisation, with a friend whom it respects, but nevertheless keeps outside – topaz. This mineral is found continually embedded in quartz, at the surface, in this manner, but I have never seen a single instance of its getting inside it!

18
Quartz crystal showing its mode of growth by the accident of a pause when it had got halfway, during which its then surface was covered with mossy chlorite. It is singular that no mineralogist of any country on earth has ever brought up a school of miners, to take care of a good crystal when they had got it! This example was originally as perfect as anything could be, and has been only spoiled, as single crystals always are, by the miner's throwing it into his bag with other stones, and banging them about at his leisure.

19
A deeply interesting agate, formed as a ball in the hollow of a volcanic rock, and traversed, from its centre to the rock, by opposite tubular veins. The quartz crystals, in which the exterior band terminates, are coated with orange jasper. Their own sparkling cleavages seem like a diamond sand. The whole thing is a trifid lump of wonder, and I wouldn't give it away, if it didn't always split my head to look at it.

20
Acicular agate passing into jasper. What I mean by acicular agate, you will see by looking at it with a lens, but I don't in the least know how it came to be like that. I was always afraid of breaking the specimen, but think that a thin slice might be taken off the flat surface, which though broken, would be very marvellous under the microscope.

21
Brecciated jasper, in variously interrupted bands apparently floating in grey chalcedony. An example of extreme interest connected with the shell-like jaspers on the one side, and with brecciated agates on the other.

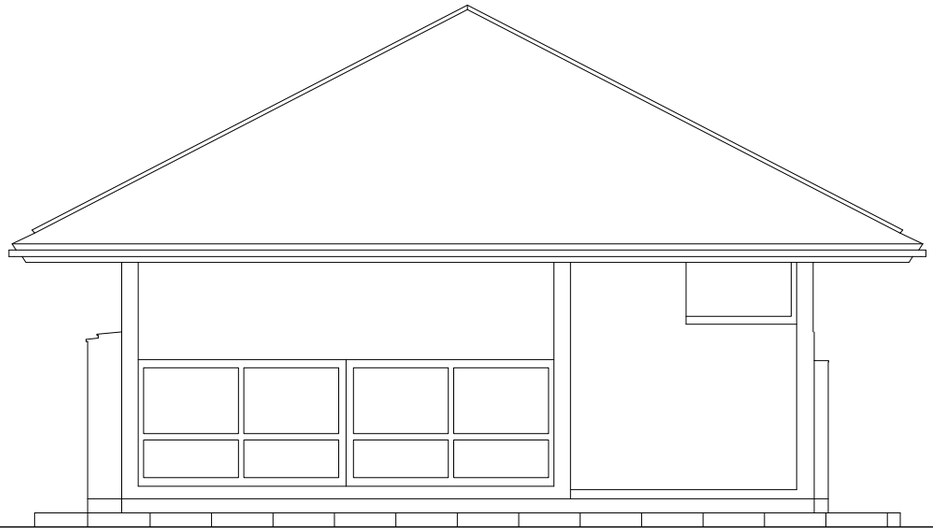
22
Brazilian opal, of the kind called hydrophane, which absorbs water on being dipped into it,and only then shows its perfect colour; it can't be too often dipped into water, but neither it nor any kind of precious opal should be exposed to strong heat of fire or sunshine.

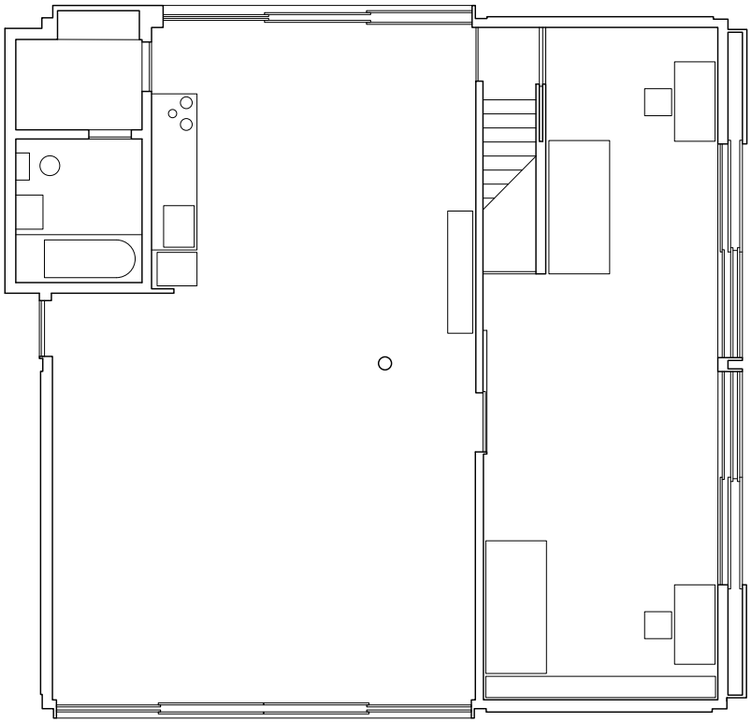
23
Precious opal, Hungarian, the best kind, diffused through the stone, not forming veins in it. The opals used in jewellery are pieces cut, as large as possible, out of this kind of rock and afterwards rounded and polished. I never heard of a rolled opal being found in any stream, or a round pebble of it found in any rock.

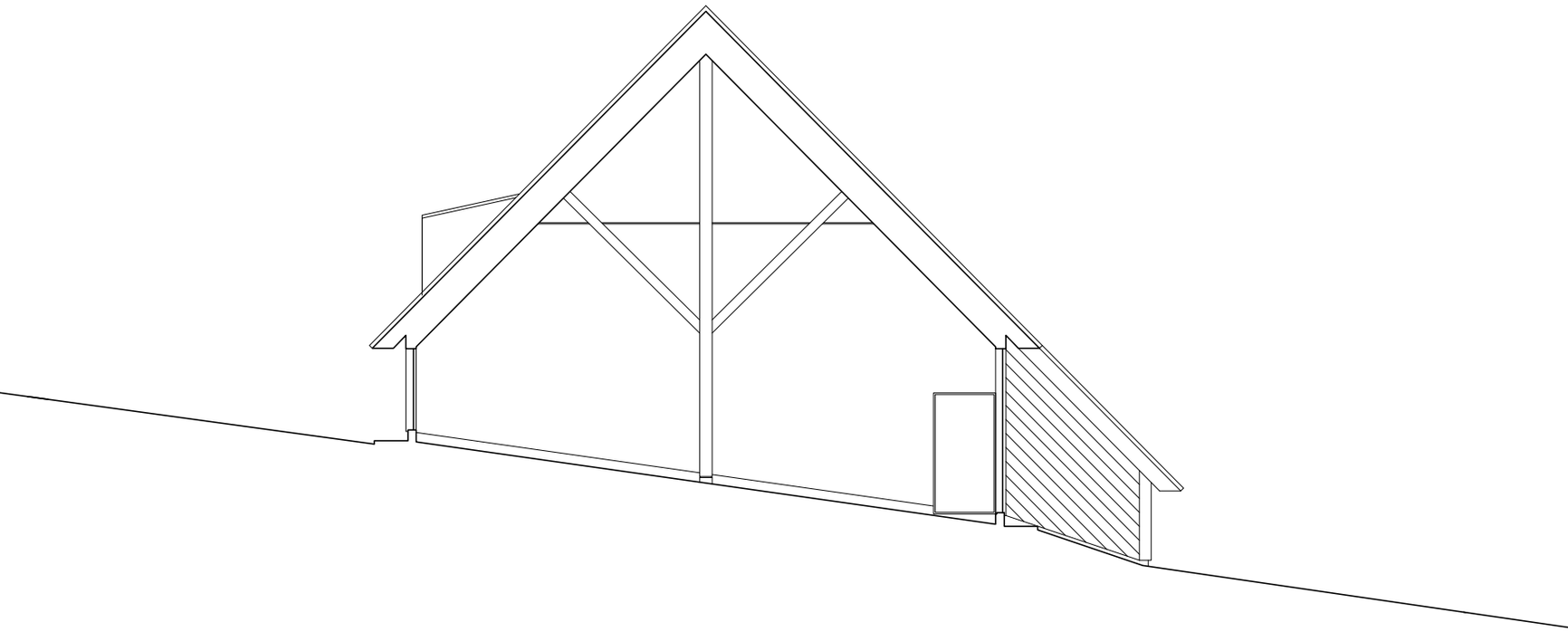
24
Fine chalcedonic agate, with arborescences and spots of oxide of iron, running between its zones, the spots being entirely independent of the arborescence. An extremely rare example (for the sake of getting which, and one or two others, I bought a whole collection). I should like the reference to it in my old collection, 1292, preserved in this catalogue.

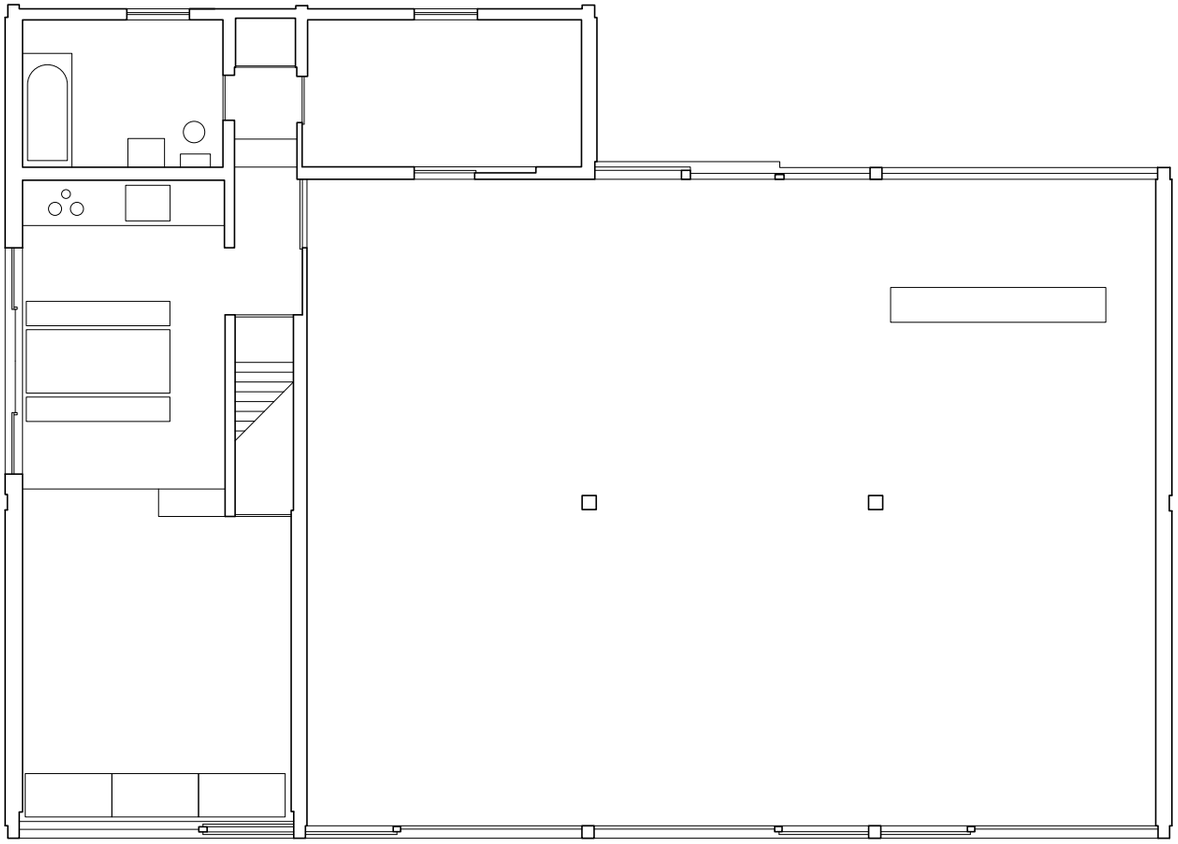
The Mathematics of the Shinohara House

Hans Frei









In 1949, drawn by the beauty of traditional Japanese architecture, a 24-year-old Kazuo Shinohara abandoned a career in mathematics and enrolled in the Tokyo Institute of Technology's school of architecture. Yet mathematics still maintained its hold, and Shinohara soon found he was able to give a new orientation to the long-standing, highly effective alliance of mathematics and architecture. Trained in both disciplines, he did not simply 'consume' mathematics in order to solve practical, computational problems – which is how Robin Evans characterised the typical architect's approach – rather, for Shinohara, there was an essential equivalence between these spheres, with mathematics serving him less as a means of calculation, and more as a way of thinking about buildings.

As an architect with an eye for the qualities of traditional Japanese construction (and also, later, for the 'beauty of chaos' he found in Tokyo), Shinohara believed that the things that mattered in architecture were essentially unquantifiable. 'The architect's work departs from the point where calculation has no access', he wrote. Nonetheless, he often framed architectural questions in mathematical terms, and would typically qualify his projects as the result of 'hypothetical' and 'quasi-mathematical architectural computations', or as a 'multiplication of abstraction by meaning'.[2]

In order to understand what Shinohara meant by these characteristically mathematical thought processes it is important, first, to bear in mind the difference between applied and pure mathematics, between precise calculation and mathematical thinking. This in turn comes down to a question of orientation. Numerical operations and the precision of addition, subtraction, division and multiplication are oriented towards the natural sciences – towards understanding the 'laws of nature' and then using this knowledge to intervene in the real world. An illustration of this would be the ability of architects to profit from advances in mathematics from the seventeenth century on, when suddenly more or less everything they imagined could be calculated – and therefore built. Mathematical thinking, by contrast, relates to that aspect of mathematics which is oriented not towards nature but towards art. It has to do with rules that cannot be derived from calculations, but must first be discovered intuitively, and then developed logically. Like works of art, mathematical formulas and models are expressions of the human spirit. In this respect, mathematics represents a 'beautiful elsewhere' (to borrow a title from a recent Fondation Cartier exhibition) – a place where mathematicians are freed from the constraints of both natural laws and practical considerations, needing to respond only to the formal necessities inherent in the specific properties of numbers and mathematical symbols.[3]

For me, thinking about mathematics is almost the same as thinking about architecture. It is like two sides of the same coin.[1]

Similarly, if Shinohara maintained that thinking about architecture and thinking about mathematics were essentially two sides of the same coin, it was because architecture, like mathematics, seemed to him to be a fictive realm with its own rules and necessities which are independent from, but not unrelated to, the laws of factual reality. And just as mathematicians devise new logical correlations between numbers and in the process invent spaces that cannot be entered (because they have more than three dimensions, for example), so, according to Shinohara, architects invent spaces by creating new bundles of spatial correlations that cannot adequately be described by numbers. It was not by chance, then, that he said it was necessary to proceed 'from the pursuit of material space to the pursuit of mental space, from everyday, real things to the fictional'. For 'the only thing that really exists is not the house as such, but fictive space'.[4]

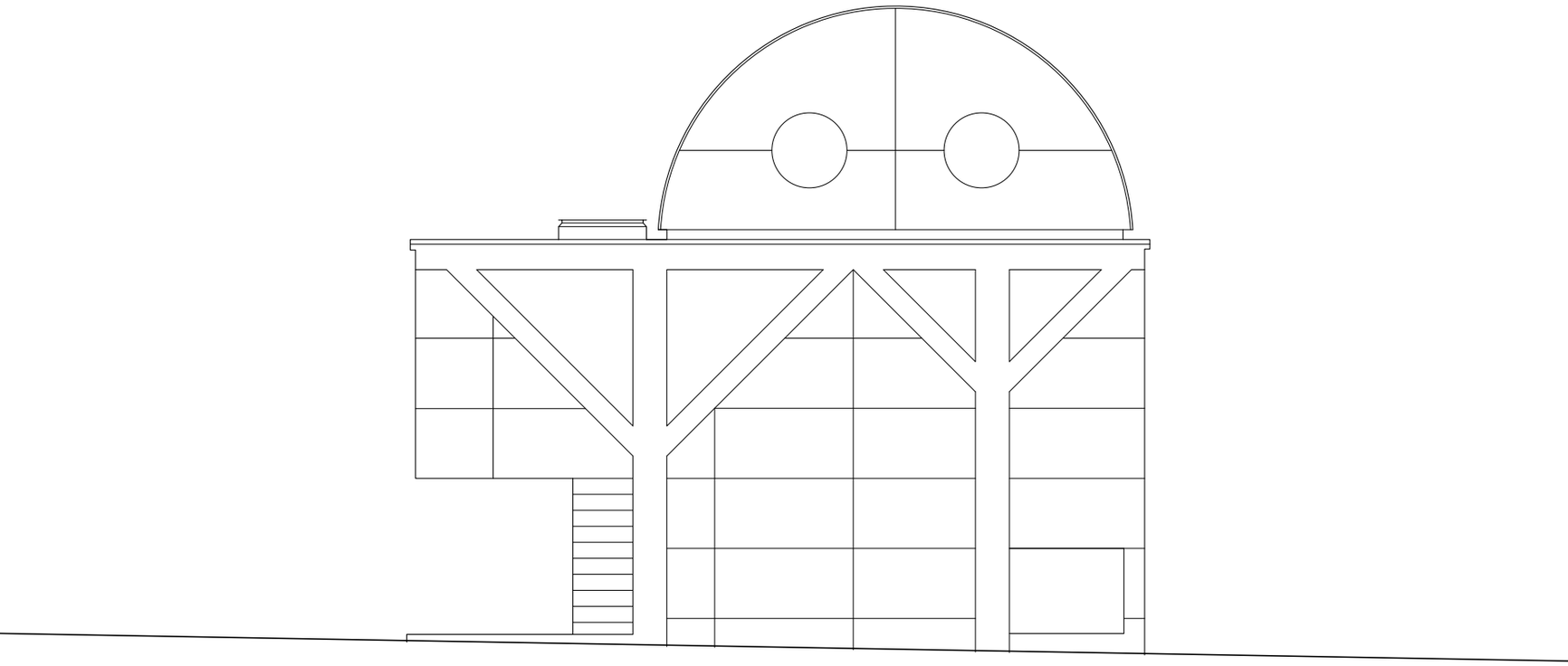
Elaborating on this idea, Shinohara's architectural intentions are perhaps best crystallised in what he described as his 'mechanism of fiction', which he was always seeking to apply in new ways.[5] If he spoke about space he would invariably add a qualifier – so you had, for example, 'philosophical space', 'abstract space', 'anti-space', 'meaningful space', 'fictional space', 'functional space', 'conceptual space', 'morbid space', 'naked space', 'severe space', 'ornamental space', 'pathological space', 'black space', 'split space', 'symbolic space', 'superfluous space', 'indeterminate space', 'many-faceted space' or 'wild space'. All these spaces somehow correlate to essential aspects of human existence. And they certainly go beyond the hard, calculable facts of reality, being primarily intended for the 'use of the mind', to borrow Max Bill's phrase. Yet this does not mean that the fiction necessarily distorts the facts, as we can see from applied mathematics: for the formulas, models and concepts invented by mathematicians in their fictive wonderland, far removed from the real world, have often proved to be highly effective tools for natural scientists (not to mention architects).[6] In a similar way, Shinohara used the same 'mechanism of fiction' to invent new forms of spatial expression that were intended to open up new ways of grasping the real world.

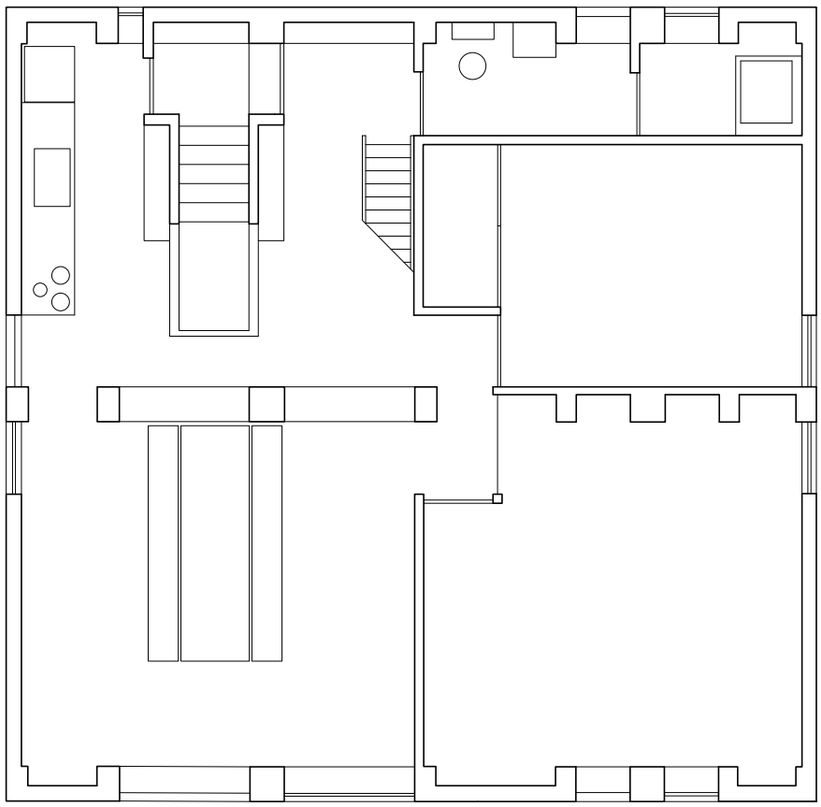
Shinohara built 42 works in total, of which 36 were private houses. Indeed, up to 1980 – that is, for the first 30 years of his career – private houses were his only concern. This output may have been negligible, in terms of the capacity of the Japaneese construction industry of the period, but its conceptual importance should not be underestimated. 'A House is Art' proclaimed the title of an early Shinohara text,[7] and for him, domestic space represented, in microcosm, the workings of the world: 'The world might ceaselessly flow through the small spaces of the house. Not merely a matter of devising frameworks and selecting materials, the act of designing a house is tantamount to doing battle with this world as it exists in small residential spaces.'[8]

This almost exclusive preoccupation with private houses, combined with Shinohara's 'quasi-mathematical' thinking, instinctively brings to mind Colin Rowe's famous essay 'The Mathematics of the Ideal Villa'.[9] Here, too, mathematics was more than just a convenient tool for exact calculation – though for very different reasons. Comparing Le Corbusier's Villa Stein at Garches with Palladio's Villa Foscari (the 'Malcontenta') built more than 350 years earlier, Rowe discovered that the two buildings – though completely different in terms of style, material, construction and programme – shared almost the same schematic disposition in plan. The implicit suggestion was that western architecture, from the Renaissance to modernism, based its dimensions on schemas that were grounded, not in the real world, but in an abstract, and therefore fictive order derived from numerical proportions.

However, for Shinohara, the marriage of mathematics and architecture was employed not to affirm the dominant western models of measurement, but to challenge them, as evinced by the way he consistently maintained that the mathematics of his own private houses was inspired both by a distinctly Japanese spatial sensibility and by topology. Refuting the oft-drawn parallel between traditional Japanese architecture and modern steel-and-glass construction, he insisted that these entailed absolutely incompatible conceptions of space. To illustrate the difference he referred to a celebrated, if composite, masterpiece of Japanese architecture, Kinkaku-ji (Golden Pavilion), in the northern part of Kyoto. When he visited this pavilion for the first time, shortly after its post-arson reconstruction in the early 1950s, he was overwhelmed, he tells us, by its 'subtle and inexpressible beauty of impermanence', its 'shining' and 'mysterious glance'.[10] Where western eyes might have seen nothing more than a timber construction painted gold and set into an empty space, Shinohara perceived an 'immaterial thing' made of the correlations between objects of different styles. The beauty of the pavilion was therefore seen to derive not from its relation to the natural

Previous: Kazuo Shinohara, House in White, Suginami, Tokyo, 1964–66
Kazuo Shinohara, Tanikawa House, Naganohara, 1972–74





setting, but from the way its builders had given 'exquisite formal expression' to an assemblage of transient effects that were constantly in motion, their boundaries to solid things unstable and porous.[11]

Yet Shinohara's deep admiration for the spatial qualities of historic Japanese architecture did not extend to a wholesale embracing of tradition. On the contrary, as in so many instances since westernisation, his relation to Japanese culture alternated between deep attraction and subtle aversion. The Zen-Buddhist idea of the void and of the transience of all living things had posed a barrier to development, he said. A mind-set that negated reality hovered like a 'dark and fatal shadow' over traditional architecture:[12] the Japanese conception of space needed to evolve, then, and adopt the kind of scientific methods that underpinned western architecture if it was to avoid lapsing into false sentimentality. In this respect he agreed with Sigfried Giedion's positivistic assertion, in *Space, Time and Architecture*, that there was a direct relation between the architecture of a period and the mathematical concept of space developed in the sciences in that period. The lack of such a scientific foundation, Shinohara ventured, perhaps explained why Japanese architecture had stagnated or become derailed.

However, he was less convinced by the connection Giedion made between non-Euclidean geometry (and particularly topology) and the fluid, transparent spaces of modernism: Giedion's 'lucid theory', Shinohara argued, might even have had 'the effect of destroying the essence' of modern architecture.[13] In fact, Shinohara insisted, it was perfectly possible to describe modern architecture in terms of classical Euclidean geometry. However, topology could be productively applied to questions of architecture if it focused on the properties of space, rather than those of forms. Adding the human dimension to these topological relations would eventually give rise to 'new relationships among things, people and spaces'.[14] In this sense, it was not the physical dimensions of things but the spatial relationships between them that formed the basis of Shinohara's 'mathematics of the private house'.

The dilemma Shinohara faced – his enthusiasm for the Japanese conception of space, versus his critique of its stagnation – was resolved in 1964 in one of his most important texts, 'The Three Primary Spaces', which he defined as functional space, ornamental space and symbolic space.[15] Each is considered as an immaterial thing generated by specific spatial correlations. Functional space is formed from 'the most primitive spatial ideas'; ornamental space concerns the aesthetic qualities of surfaces; and symbolic space is shaped by the cultural meanings attached to the objects it contains. The whole spectrum of spatial meanings, past as well as future, can be generated by combining aspects of the three primary spaces in different ways. Or as Shinohara himself put it, 'The basic architectural formal values do not extend beyond the limits of the three types of concrete spaces.'

With this concept Shinohara managed to combine a way of thinking that negated reality with a scientific approach wholly oriented towards the factual and the real. What united the two was the idea that everything that exists can be inscribed in an immaterial matrix. In other words, even if we only perceive spatial relations in the context of objects, it is not possible to ascribe to them the specific qualities of those objects. On the contrary, they should be seen as the outcome of a 'mechanism of fiction' that makes possible 'a direct exchange between humans and space'.[16] It therefore followed that there was no reason for Shinohara to limit himself to physical dimensions, in the Roweian sense. Instead, he released space from its conceptual dependence on material measurements and gave it a kind of vibrant physicality. And the resulting unfolding of a spatial sensibility – the virtually unlimited possibilities of modulating spatial expression – became the driving force in the design of his houses.

In these houses, from the mid-1970s on, Shinohara began to use the term 'space-machine' as a synonym for 'style'. The term owed nothing to Le Corbusier's 'machine for living' or similar allusions to mass production, but was inspired by Gilles Deleuze's use of the term 'literary machine' to describe Proust's magnum opus, *In Search of Lost Time*, and the radical shift it represented in the way a literary text communicated meaning.[17] Rather than being understood as a container for pre-set meanings, the text was now a producer of a range of emotions – affects – in the reader. Shinohara used his concept of a space-machine in the same sense, substituting a play of spatial effects and affects for the problem of meaning and representation in architecture. Out of this emerged four specific models: symbolic space-machine, functional space-machine, affective space-machine and chaotic space-machine.

Symbolic Space-Machine

Even as Japan was in the grip of an unprecedented frenzy of modernisation, Shinohara sought pointedly to revitalise Japanese tradition. He wrote several texts on this theme, among them his doctoral thesis 'A Study of Spatial Composition in Japanese Architecture' (1967), which presented the ordinary farmhouse, the *minka*, as a true 'treasury of meaning' on account of the cool logic of its spatial structure and the emotional warmth of the symbolic things it contained. Thus the symbolic space, the most Japanese of the three primary spaces, represented the common starting point – though not the ultimate destination – of the 14 houses of Shinohara's First Style, built between 1954 and 1969.

Uehara House, Shibuya, Tokyo, 1975–76

The early houses of this style oscillated between a translation into Japanese of modern western architecture (touches of the case study house, homages to Kenzo Tange) and an updating of Japanese tradition (touches of the *minka*, homages to his teacher Kiyoshi Seike). In both cases the austerity of traditional spaces was tempered with the blessings of technical civilisation. Later, however, this technological optimism would yield to a more antagonistic staging of traditional and modern values, as we see most clearly in the House in White (1966). Here, the references to Japanese timber construction are unmistakable: a tiled roof with deep eaves; the frontality of the setting; the two large, if extremely unconventional, shoji-screened windows in the living room; and the centre post, a smooth, peeled cedar log reminiscent of a *daikoku-bashira*.

Yet, with the exception of this great post, all of these elements appear at their most abstract: the external facades are rendered white, the internal walls and ceiling construction are of white plasterboard. Furthermore, there are none of the characteristically prized joinery details, and equally no evidence of ritual areas such as the *tokonoma* (alcove), *washitsu* (tatami-space) or *genkan* (foyer). All is incorporated into the unifying system of a pure white vertical box – which only makes the archaic materiality of the centre post all the more striking. Traditionally this post would have laid bare the structure of roof. But here that structure is hidden above a false ceiling. To be sure, we can still recognise the abstract spatial structure of the traditional farmhouse, along with the only remaining element of its symbolic order, but the mechanism that once tied them together no longer functions. The symbol has become a symbol for a symbol emptied of meaning. If the symbolic space, as Shinohara previously defined it, is now a space-machine that produces meaning about a certain kind of art, then that machine has come to a standstill here. The abstract spatial structure and the Kitayama cedar post are not talking to each other anymore. Only their silence still evokes the communication that formerly would have filled a traditional Japanese structure.

Functional Space-Machine

In terms of external appearance, many elements of Shinohara's Second Style (1970–74) were already laid down in his celebrated House in White (1964–66), most notably the austere, cubic shape of the buildings. And yet the break with his earlier style could not have been greater. There are no

more references to tradition; the construction is mostly of reinforced concrete, rather than timber. Even more significantly, the space-generating mechanism seems to have been put into reverse, for the functional space is in some respects the anti-space of the symbolic space. If the ideal symbolic space was powered by a 'hot' spatial mechanism that maximised the 'exchange between people and space', then the functional space has a 'cold' mechanism reducing this exchange to a (functional) minimum.

In introducing the functional space, Shinohara left Japanese tradition behind and entered the territory of modern architecture. The mood of Japanese society may well have shifted. In the wake of the student revolts of the late 1960s and a nascent disenchantment with industrialisation, following Expo 70 in Osaka a younger generation seemed to be taking note of traditional Japanese architecture. But at the precise moment when Shinohara's position was gaining some acceptance, he took up a new stance and changed direction. Far from being a homage to the spirit of the architecture of the early twentieth century, however, his interest in functional space was inspired by the desire 'to launch a frontal attack' against modernism (as he himself put it), as opposed to the rear-guard action he had waged under the banner of the symbolic space. Significantly, in this context, 'function' is used in a mathematical sense, as a correlation made visible by spaces, rather than denoting what the spaces themselves are used *for*.

By the time of the House in Higashi-Tamagawa in Tokyo (1973), the last of the ten houses in the Second Style, the mechanism of the functional space was fully developed. Its basic elements are the 'inorganic shell' and the 'fissure space'. Both break with the modernist stereotype whereby buildings have an inner structure that determines their outer shape. In the Higashi-Tamagawa House that relation is inverted. Looking at the windows and the external doors, you will see they are not holes cut out of a surface, but are designed instead as negative volumes cut into the basic cubic form. Seen from outside, the shell of the house resembles a body shape akin to a minimalist sculpture. It is like a mould into which the programme has been poured.

Externally, the fissure space is expressed as two extremely tall negative volumes, one of them 3.6m high (facing the street), the other 3m (towards the garden). Internally, the fissure divides the house into two asymmetrical parts. The simple partition wall seen in the House in White, for example, is now a discrete space having no other 'function' than to make visible what it separates. In this respect, it constitutes a third style of spatial organisation, unrelated to either the Japanese principle of spatial separation or the western principle of spatial connection, but essentially operating on the basis of 'disconnected linkings'. If Shinohara once called the fissure space a 'phase space', it was not a casual metaphorical allusion to quantum mechanics. For what these two kinds of space share in common is their contingent, uncertain quality. While with atoms the unforeseeable arises when electrons collide, in the fissure space it emerges suddenly on the basis of what he called 'second-by second phenomena' between the two parts of the house, between the built environment and the people who live in it.[18]

Affective Space-Machine

A further nine houses, built between 1974 and 1983, include a number of brilliant masterpieces, such as the Tanikawa Residence in Kita-Karuizawa (1972–74), House in Ashitaka (1976–77) and three buildings in Tokyo – House in Uehara (1975–76), House on a Curved Road (1976–78) and House under High-Voltage Lines (1978–81). An abrupt change in style is evident from the very first of this series, the (second) Tanikawa Residence: 'Winter house or pioneer cabin (house) / Summer space or church for a pantheist (need not be a house)', was the programme formulated by the client, the famous poet Shuntaro Tanikawa.

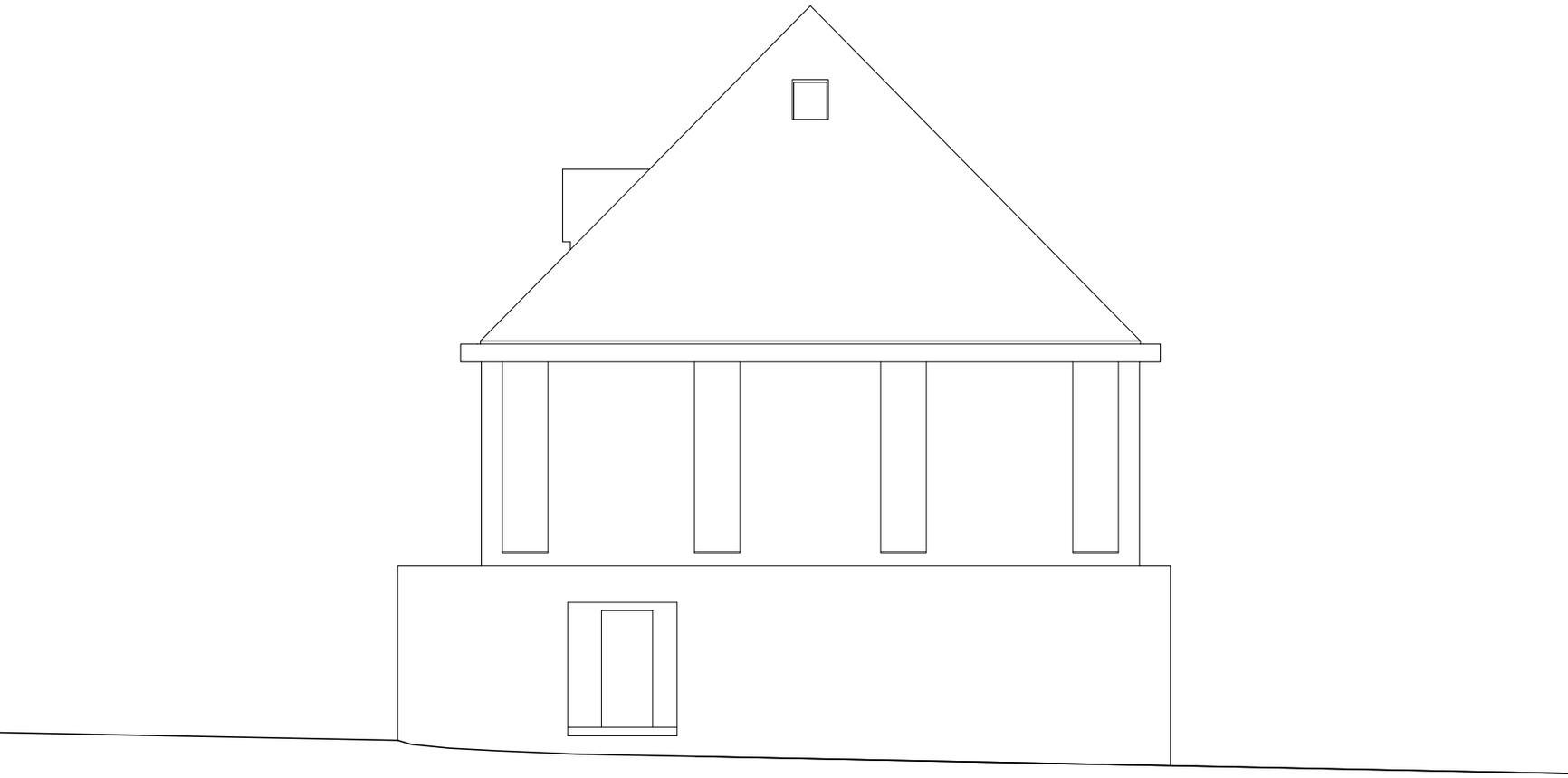
The approach Shinohara adopted in translating this brief was to let the roof float like a big metallic wing over the two parts of the house. The winter house occupies one quarter of the total surface area and offers the simple comforts of a cabin-like shelter over two floors. The summer space, by contrast, is a much larger volume extending from the ground underfoot to the underside of the roof, supported by two plain wooden posts with angled bracing. The floor of dark natural earth slopes away at 12°, as does the forest floor of the surrounding clearing. In consequence, the range of windows on the north facade is only 1.2m high, half the height of the windows on the opposite side, below the slope. The original furnishing (hardly altered today) was ascetic, consisting mainly of a stepladder-like sculpture and a wooden bench.

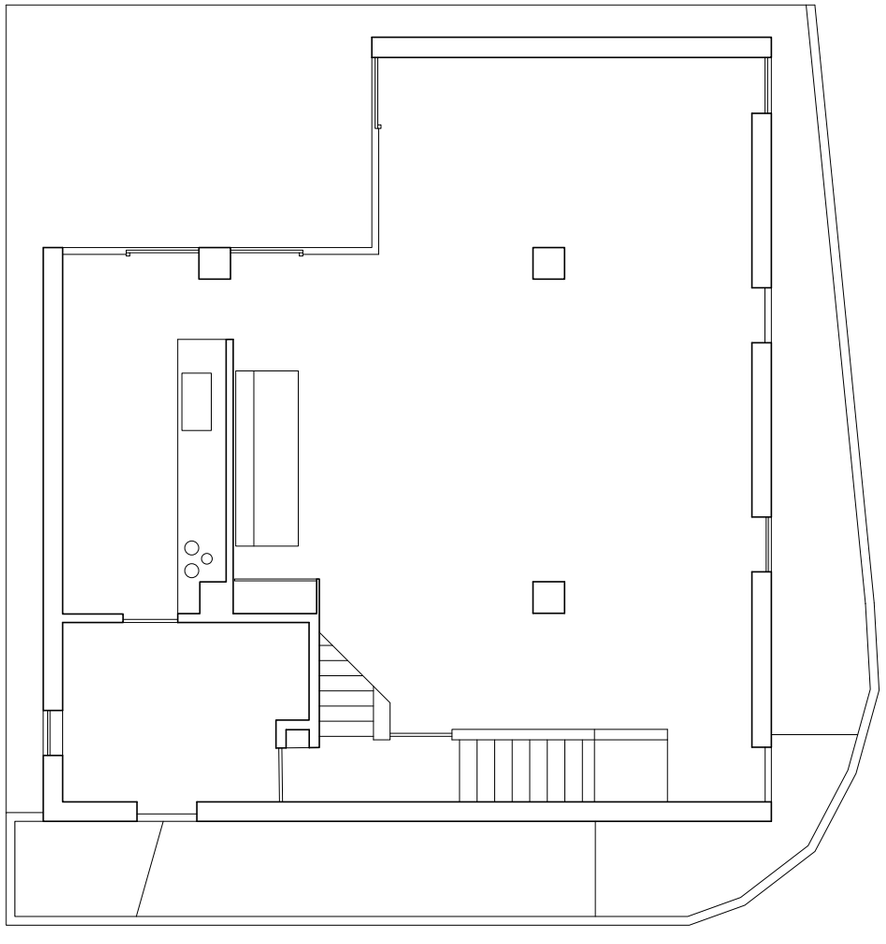
Not long after the Tanikawa Residence was completed Shinohara wrote a text with the somewhat enigmatic title 'When Naked Space is Traversed',[19] in which he described in detail how he had translated the unusual programme formulated by the client into a series of 'quasi-mathematical architectural computations'. These can be summarised in three main points. First, there was the 'illogical differential' between the angled roof and the inclined floor, which preserved, undiminished, the essential incompatibility between the natural setting and the human intervention. Secondly, the space is divested of its volumetric associations by the 'nakedness' of the elements, which refer only to themselves: the roof is only a roof, the forest floor only a forest floor, the post-and-beams only posts-and-beams. The point, Shinohara wrote, was to create a 'non-totality' that would reverse the sense of whole suggested by the symbolic and functional spaces that had preceded it. Finally, there was the driving mechanism behind the naked space, the act of 'transversal'. Shinohara quotes Deleuze, who describes the transversal as the means by which Proust sought to invoke distinct lines of communication between the views of the landscape from two opposite sides of a railway carriage, for example, rather than blending them together into a single image. Like the reader of Proust, the inhabitants of the Tanikawa Residence and their guests are obliged to direct their whole attention to the 'naked elements' and to define the relations between them through their very occupancy of the summer space. Together, all these constructs and theorems were seen as creating an affective space whose meaning was not determined a priori, but rather arises through *being* and *acting* within the space.

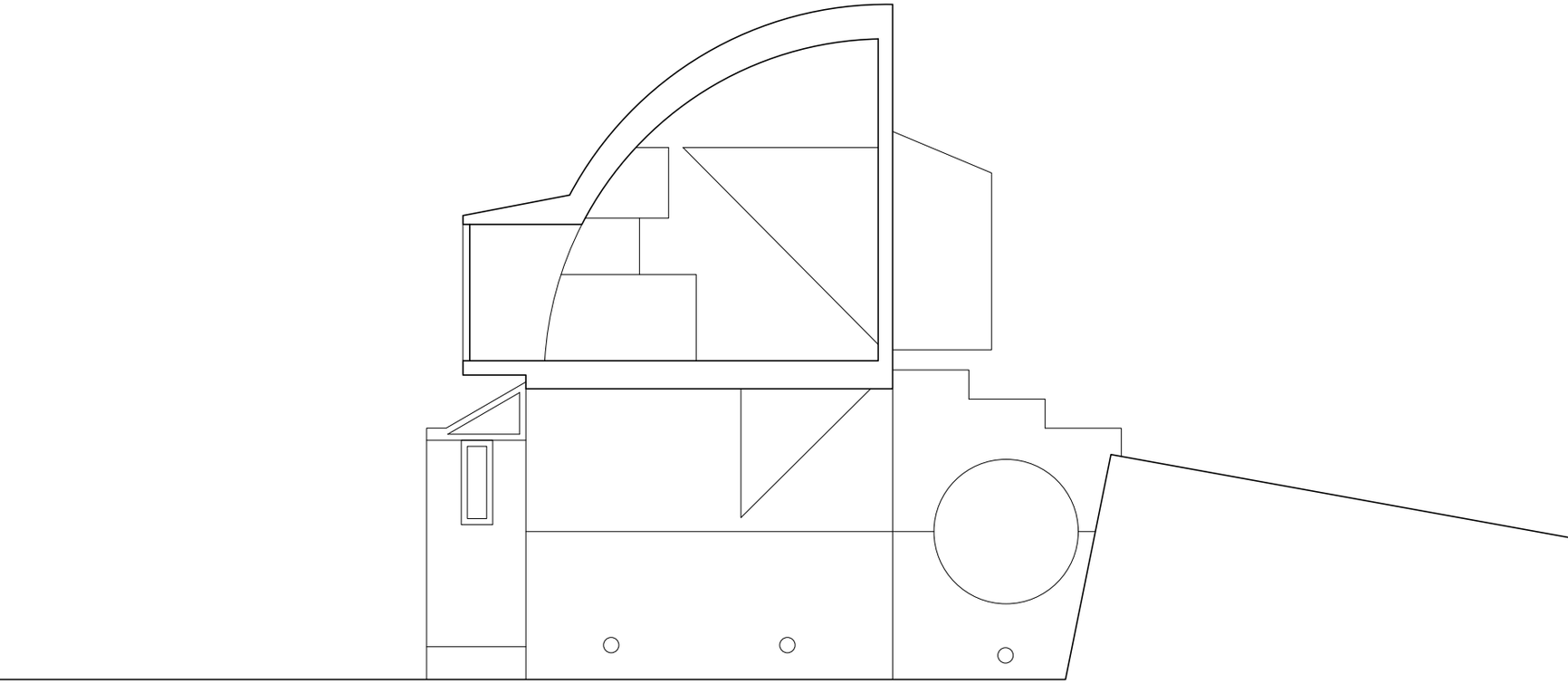
House on a Curved Road, Shibuya, Tokyo, 1976–78

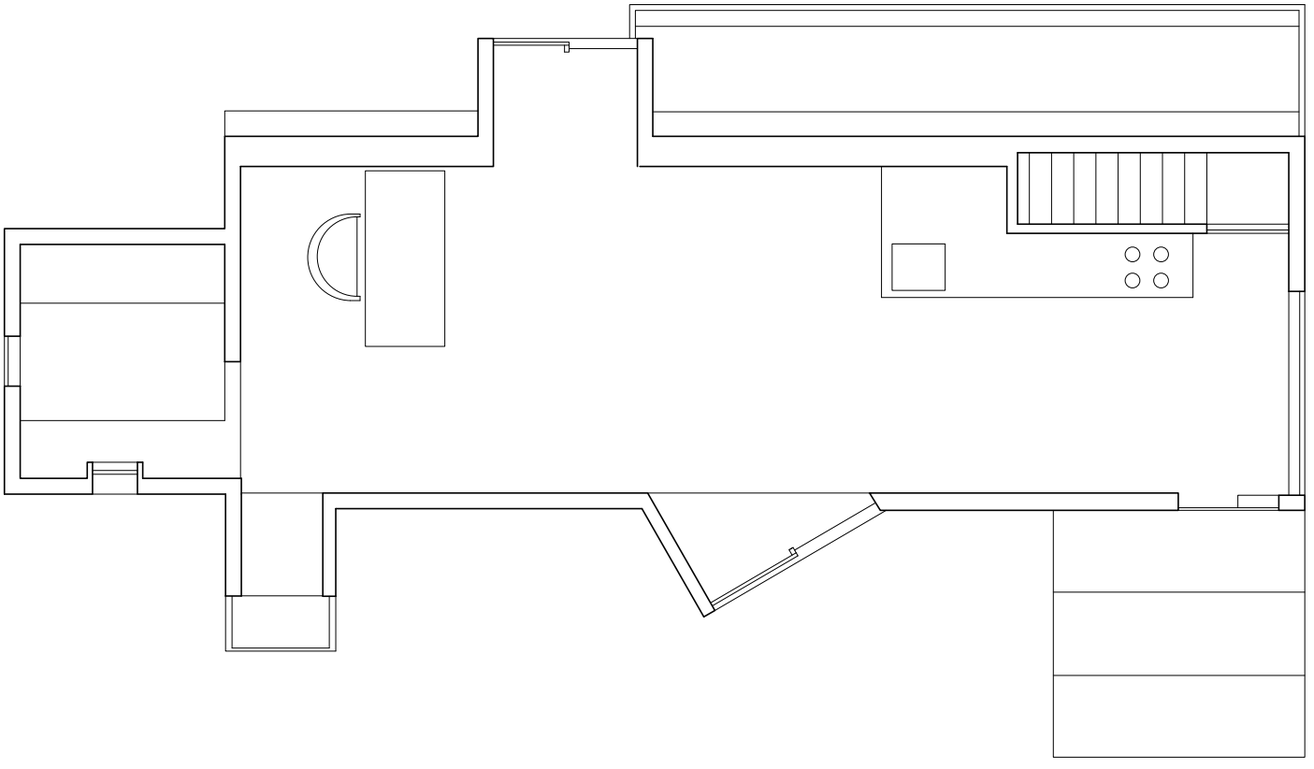
At the prompting of his friend, the critic and philosopher Koji Taki, Shinohara would go on to deepen his exploration of French literary theory and anthropology before Deleuze. A reading of Roland Barthes (*Writing Degree Zero*, 1954) and Claude Lévi-Strauss (*The Savage Mind,* 1962) proved particularly fruitful, as it gave Shinohara the opportunity to rethink completely the assumed architectural relationship between function and form. Rather than functions being expressed by a certain form, he now saw things as a matter of form 'affecting' readings and human behaviour more generally. To illustrate this idea, Shinohara often alluded to new developments in aviation and space-probing technology such as the F-14 A-Tomcat or the *Apollo 11* lunar landing craft. Packed full of electronic parts originating from very different systems, neither could be seen as a unified whole. And compared to the elegant, streamlined vessels of the early twentieth century, they were somewhat ugly, awkward-looking assemblages of forms. Nevertheless, they appealed to Shinohara as they revealed in his view the fundamental principles of the new – but still *affective* – spatial mechanism that characterised his later houses.

This affective turn was further reinforced by the impressions made by Shinohara's travel experiences, and in particular a brief foray into West Africa. In the streets of African capitals he experienced an overwhelming profusion of the 'direct exchange between humans and space' familiar to him from traditional Japanese building. This rediscovery allowed him to go beyond any simplistic comparison of 'eastern' and 'western' styles and to get *more Africa* into his architecture (something that Brian Eno would later insist was also essential in music and computing: 'The problem with computers is that









there is not enough Africa in them').[20] 'Africa', for Shinohara, may thus be understood as a trigger to break down old-fashioned hierarchical structures and in so doing induce more moments of street life into his private houses.

Chaotic Space-Machine

After 1984 Shinohara built only three further houses, in addition to four public buildings, most notably the Tokyo Institute of Technology's Centennial Hall. This extension of his building repertoire had consequences, reshaping the architect's attitude towards the relations of small buildings to the 'super big number set' of cities.[21] Where previously he had considered these to be near polar opposites, the small residential buildings were now the visible peaks of an immense, only partly visible urban fabric. The things that drive a city like Tokyo – not least its chaos – are the very same things that drive the mechanism of his fourth space-machine. Describing the design for his own house in Yokohama, Shinohara wrote:

I identified a number of separate functions in the house and for each function selected a discrete spatial element. These elements had to be primary geometrical shapes. Having set that condition, I made the elements as different from each other as possible. Furthermore, I selected, under similar conditions, unconventional geometric shapes for openings such as windows and doors. The three- and two-dimensional were not expected to have any overall unity.[22]

What Shinohara was describing here was a new bundling of spatial correlations that included chaos, randomness, white noise and a fluctuation of non-linear and non-deterministic phenomena. Perhaps not unjustly he thought of himself as being the first architect to deal with complexity theory. Yet like the House in Yokohama, none of the other late residences imitate in any direct way the existing complexity of their urban surroundings. Rather they have their own complexity, whereby the various 'systems' of each house – its materials, volumes and apertures – interact only locally with one another. In this way, the desired non-totality of the affective space-machine was further accentuated by a 'visual cacophony'. Typically Shinohara did not shy away from declaring this to be the very foundation of a new beauty, and a further step towards a 'direct exchange between humans and space'.

Shinohara's body of work was made up of a series of attacks and breakthroughs: to a large degree each of his 'styles' amounts to the anti-style of the one before it. In this way, Shinohara became an inspiration for many young Japanese architects without ever participating himself in one of the tendencies he might have helped initiate. The reasons for his progression from one style to another, for his continual attacks against the mainstream, are not to be found in a persistent striving for extravagance (even though in many cases his buildings do indeed appear extravagant). Rather, they are rooted in his fundamental attitude towards architecture, which he envisioned as having two aspects – just like mathematics. One side is oriented towards the hard facts of the here-and-now, the 'everyday tyranny of numbers', as Alain Badiou has called it. The other side is turned towards a fiction that produces a 'direct exchange between people and space'. Rather than being sensors receiving the signals of factual reality, his buildings offer ways of approaching that reality. In this regard they proclaim a tinge of a fictive elsewhere, of a Foucauldian 'heterotopia'. While neither idealising nor denying reality, his buildings nonetheless do respond to real conditions by – as Shinohara put it – 'striving to attain fictionality'.[23] Fictions – like mathematical formulas, models or concepts – ideally offer opportunities to see factual reality in new ways, and to give meaning to human existence.

Crucially, Shinohara's work oscillates between a factual reality that can never be precisely calculated and a fictional reality that is never altogether real. In drawing a distinction between the factual and the fictive, he freed the design of space from the straitjacket of figure–ground. In this sense, despite its immaterial nature, the void was for Shinohara the true substance of architecture. His spatial theory, based on a Japanese conception of space as well as, increasingly, on topology, was therefore a declaration of independence vis-à-vis the factual – as well as a repeated call for the autonomy of architecture. And so in the end, the many mathematical concepts that Shinohara used in his work as an architect were not so much prompts to calculate spatial correlations as they were invitations to invent new ones.

Opposite: House in Yokohama, 1982–84 (demolished)

All drawings by Timothy O'Hare

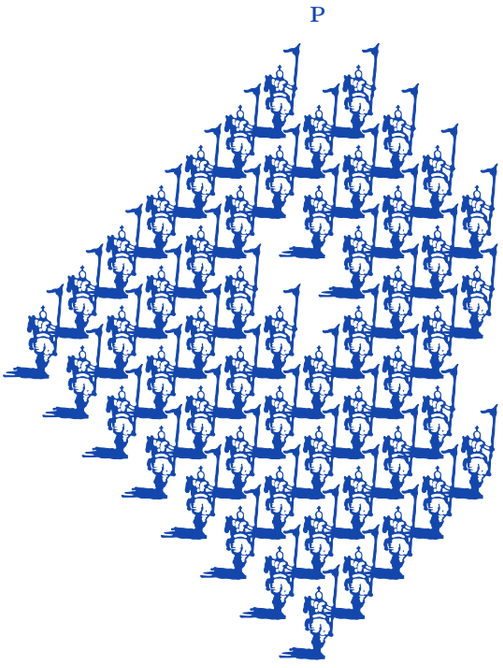
1. Kazuo Shinohara in conversation with Hans-Ulrich Obrist, *Quaderns* 265 (2013), p 27.
2. Kazuo Shinohara, 'Theory of Residential Architecture' (1967), *Japan Architect*, October 1967, p 42. See also Kazuo Shinohara, *16 Houses and Architectural Theory* (Tokyo: Bijutsu Shuppan-sha, 1971), p 14. Shinohara distinguished the word *keisoku* (計測), literally 'survey', from the world *enzan* (演算) suggesting a broader horizon. Thanks to the translator, Renate Jaschke, for pointing out this distinction.
3. See the exhibition catalogue, *Mathematics – A Beautiful Elsewhere* (Paris: Fondation Cartier, 2011), which includes this quote from the French mathematician Gustave Choquet: 'the theorem one is seeking has existed from time immemorial, but … in order to discover it, one must invent a path', p 92.
4. See Kazuo Shinohara, 'A Record of Significant Space' (1975), in Irmtraud Schaarschmidt-Richter (ed), *Kazuo Shinohara* (Berlin: Edition Axel Menges/Ernst & Sohn, 1994), p 133, and Kazuo Shinohara, 'Wohnausarchitektur und Autonomie', in Christian Kerez (ed), *Kazuo Shinohara, Schriften* (Zurich: ETH, 2008), pp 51–59 (first published in Japanese in 1964).
5. Kazuo Shinohara, 'The Mechanism of Fiction Never Stops Functioning', an open letter to Herzog & de Meuron, *Space Design* (SD) 2 (1998), p 115.
6. See Eugene Wigner, 'The Unreasonable Effectiveness of Mathematics in the Natural Sciences', in *Communications in Pure and Applied Mathematics* 13:1 (February 1960), pp 1–14. On the discussion of 'fiction' see also Walter Haug, *Die Wahrheit der Fiktion: Studien zur weltlichen und geistlichen Literatur des Mittelalters und der frühen Neuzeit* (Tübingen: Niemeyer, 2003).
7. Kazuo Shinohara, 'Das Wohnhaus ist Kunst' (1962), in Christian Kerez, *op cit*.
8. Kazuo Shinohara, 'Beyond Symbol Spaces: An Introduction to Primary Spaces as Functional Space', *Japan Architect* 173 (April 1973), p 88.
9. Originally published in *The Architectural Review*, March 1947, and then later republished in Colin Rowe, *The Mathematics of the Ideal Villa & Other Essays* (Cambridge, MA: MIT Press, 1977), pp 1–28.
10. Kazuo Shinohara, 'Die Japanische Tradition', in Christian Kerez, *op cit*, p 9 (first published in Japanese in 1960). See also Kazuo Shinohara, 'The Japanese Conception of Space', *Japan Architect*, no 6 , 1964 (reprinted in *Kazuo Shinohara Houses*, *2G*, nos 58/59, 2011, p 245).
11. Kazuo Shinohara, 'The Japanese Conception of Space', *ibid*.
12. Kazuo Shinohara, 'Der verlorene Klang des Raumes', in Christian Kerez, *op cit*, pp 42–50 (first published in Japanese in 1962).
13. Kazuo Shinohara, *Street With Human Shadow* (Kitakyushu: Centre of Contemporary Art , 2006), np. As the transcript of his last public lecture from 2004, this was the final public comment Shinohara made on Giedion. For Shinohara's discussion of Giedion's concept of space see also Kazuo Shinohara, 'Der verlorene Klang des Raumes', *op cit*; Kazuo Shinohara, 'The Japanese Conception of Space', *op cit*; and Kazuo Shinohara, 'Theory of Residential Architecture', *2G*, *op cit*, p 252.
14. Kazuo Shinohara, 'Beyond Symbol Spaces', from 'An Introduction to Primary Spaces as Functional Space', *Japan Architect*, no 173, April 1973, p 88.
15. Kazuo Shinohara, 'The Three Primary Spaces', *Japan Architect*, August 1964, pp 11–12, revised in *Japan Architect*, March 1973, pp 84–85.
16. Kazuo Shinohara, 'Die Japanische Tradition', *op cit*, p 31.
17. Gilles Deleuze, *Proust and Signs* (Minneapolis, MN: University of Minnesota Press, 2003 (originally published in French in 1964).
18. Kazuo Shinohara, 'Beyond Symbol Spaces', *op cit*.
19. Kazuo Shinohara, 'When Naked Space is Traversed', *The Japanese Architect*, February 1976, pp 64–69.
20. See interview with Brian Eno, *Wired Magazine*, May 1995.
21. Kazuo Shionhara, *Super Big Number Set City* (Tokyo: GA, 2001). A summary of the book is published in Kazuo Shinohara, 'Toward a Super-Big Numbers Set City and a Small House Beyond', in *Kazuo Shinohara Houses*, *op cit*, pp 277–87. See also Kazuo Shinohara, 'Rationalism Featured with Chaos' (1991) in *Kazuo Shinohara* (Berlin: Ernst & Sohn, 1994), pp 133–35.
22. Kazuo Shinohara, 'Chaos and Machine', *Japan Architect*, no 373, May 1988, p 27.
23. Kazuo Shinohara, 'Fiction and Reality', in Kazuo Shinohara, *Theory of Houses II*, *SD*, no 96 (Tokyo: Kajima Publishing, 1975), pp 56–63.

Translated from the German by Pamela Johnston

Palladian Feet

Gabriela García de Cortázar

It has always been easier to put a facade to Andrea Palladio than a face. Nonetheless, a few have been offered: a 1565 sketch of the architect as an old man by Federico Zuccari; another painted by Giovanni Battista Maganza in 1576; a 'conjectural portrait' engraved by Sebastiano Ricci in 1715; a study by Tintoretto from sometime in the 1570s, even if its authorship (it might actually be by El Greco) and subject (it may not even be Palladio) have been open to debate; and a portrait by Orlando Flacco, supposedly from life and alluded to by Vasari, although this work has never been found.[1]

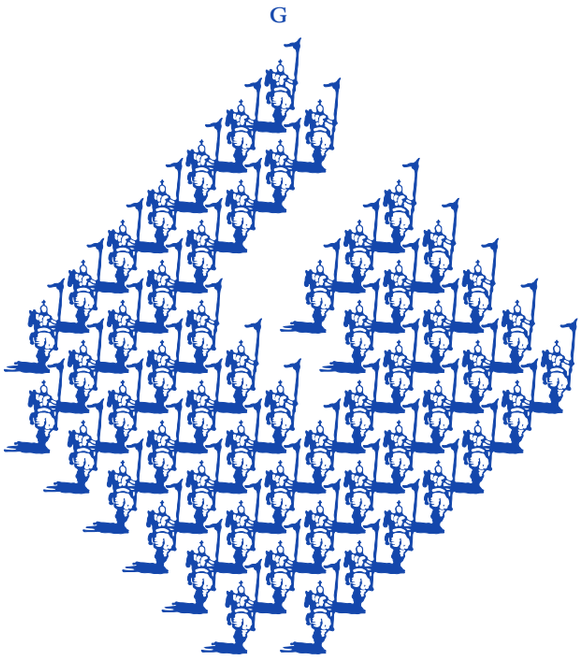


alladio's somewhat elusive visage is in stark contrast to the ubiquity of his architecture and ideas, disseminated not simply in the physical form of his buildings, but through his books, for Palladio was as active a publisher as he was an architect. His *Quattro Libri* (1570) is merely the most famous of these, because already by 1554 he had published two guides to Rome – the first explored ruins and notable buildings, the second churches and religious events.[2] A short while later he collaborated with the translator Daniele Barbaro on his 1556 Italian edition of Vitruvius' *Dieci Libri*, producing not only the woodcuts used to illustrate many of the ancient precepts, but also helping to develop this edition's distinctive format.[3] After completing the magnum opus of his architectural works, in 1575 Palladio then illustrated yet another book – a new edition of Julius Caesar's *Commentarii de Bello Gallico* (*Commentaries on the Gallic Wars*) published by Pietro de Franceschi, the brother of the Venetian printer who had produced the *Quattro Libri*. And still Palladio did not stop there: in the last years of his life he continued to indulge his enthusiasm for classical warfare, working on the design of a similar book, this time adapting Polybius' *Histories*. Sadly his death in 1580 meant that this volume remained unpublished.

Over the ensuing centuries there was very little discussion about this aspect of his work, until 1977, when the celebrated Renaissance scholar John R Hale discovered that an edition of Polybius' *Histories* in the British Library was actually one of three working copies belonging to Palladio.[4] But it still took more than 40 years for this manuscript to be reproduced, alongside Palladio's version of Caesar's *Commentaries*, in Guido Beltramini's excellent *Andrea Palladio and the Architecture of Battle* (2009).[5] The original versions of both books share the same format: each has 42 full-spread engravings, designed by Palladio yet most probably executed by the studio of the Venetian painter Giovanni Battista Zelotti.[6] These were then inserted into the continuous text with their own notational system, which in the finished versions would work as a reference between text and image.[7] The illustrations themselves were drawn as bird's-eye views and depict, in addition to the battles, the overall topography of the landscape, together with any adjacent military camps or cities, all in a figurative way. A number of plates even went so far as to offer a three-stage development of the conflict, like a kind of proto-film animation, so the reader could follow the drama of the event as it played itself out.[8]

In Beltramini's *The Architecture of Battle* these books are analysed within the context of Renaissance Italy and the humanist environment surrounding Palladio. They are also given a fascinating architectural reading, largely through the arrangement of troops.[9] Yet as wonderful as they are, the two books are not really architectural, or at least not in the terms established by Alberti, who decreed in his *De re aedificatoria* that the architect 'desires his work to be judged not by deceptive appearances but according to certain calculated standards'.[10] Palladio was a rigorous practitioner of this dictum, and these 'standards' meant his architecture was only ever drawn in plan, section and elevation, with the exception of just a handful of perspectives. He never presented architecture through any painterly strategy whatsoever. In contrast, his illustrations for the books by Caesar and Polybius are pictorial, and reconstruct not just battles but lost cities and unknown landscapes, putting into images what Caesar and Polybius only ever described through words.

It is important to recognise, though, that the *Commentaries* and unpublished *Histories* are not merely an eccentricity, or even an old man's retreat into a certain kind of infantilism. Rather, battles were present at the very beginning of Palladio's career, and in many ways are inseparable from the way he defined himself as an architect.[11] This is perhaps best illustrated in a drawing from 1540, when Palladio was in his early 30s and thinking very intently about the kind of architect he wanted to become. In this drawing (held within the RIBA collection at the V&A), we see on one half of the sheet a composite plan and section of the Colosseum, and on the other a variety of small drawings, even doodles. These include a detail of an Ionic capital, together with the profile of its volutes, and in the top-left corner a small, highly abstract rhombus composed of a neat arrangement of 41 lambdas. Read allegorically, the Colosseum could be seen to represent Palladio's interest in Rome and its grandiose antique buildings, and the column his love of systemisation and attention to detail. But what of the enigmatic rhombus? As Howard Burns pointed out in 1975, this figure is actually emblem to Palladio's studies of old battles – with this particular shape representing one of the three formations that a cavalry squad could assume, and was most probably copied from Aelian's *On Tactical Arrays of the Greeks*.[12] Old buildings, old details and old battles were therefore the cornerstones of a young architect's education.



ian Giorgio Trissino – Palladio's mentor – set him on this path in the late 1530s, escorting the young architect from his home in Vicenza to Rome. There he introduced Palladio to a classicism that encompassed 'the art of building, hydraulics, agriculture, theatre and the organisation of the militias'[13] – a largely written body of knowledge that his contemporaries would also have access to. What sets Palladio apart, however, was the corporeal way he chose to absorb this knowledge, embarking on extensive walking studies of Rome over repeated visits.[14] As much as these first-hand experiences in the city appeased Trissino, they also loyally followed a programme set out by Raphael a decade or so earlier, in his letter to Pope Leo X. To prevent the Roman remains from being lost, they had to be documented in a very specific way, Raphael insisted. Records could not be 'governed by chance or practice alone', but had to be supported by 'excellent theory', which meant 'surveying with a magnetic compass'.[15] This information then had to be conveyed so that 'all the measurements [could] be understood and all the members of the buildings be determined without error'[16] – that is, in plan, elevation and section, 'because an architect cannot get correct measurements from a foreshortened line'.[17] So even if others were also drawing ruins (not least Brunelleschi, Donatello, di Giorgio, da Sangallo and Peruzzi, to name just a few),[18] they were not necessarily *measuring* (the historian Margaret Muther D'Evelyn tells us that Sebastiano Serlio did measure a half-buried arch,[19] but only guessed at the measurements of hard-to-reach cornices).[20]

In contrast, Palladio did measure everything, and painstakingly so, for not only did he aspire to a complete knowledge of the antiquities of Rome, but (as he states in the preface to his first guidebook) he 'also wished to see and measure everything with my own hands and in minute detail'.[21] The resulting drawings were produced with a portable set of quills, pens and ink for sketching, together with the Renaissance equivalent of a tape measure and other surveying instruments. Among these, there is evidence he used a circumferator (a precursor of the modern theodolite) to model a building's bearings, plumb-lines for drawing cornices, and thin lead strips that could be bent to follow the profile of mouldings.[22] The process by which Palladio produced a drawing followed a prescribed pattern: after first making a sketch, he would then draw the main elements with an inkless metal or ivory stylus, compass and straight edges, creating a ghost drawing of incised lines (although at other times he would use red or brown chalk), and only then would he ink over them.[23] The accuracy and neatness of his lines was also complemented by his notations, using the Renaissance *piedi* or foot, which means that Palladio's survey drawings are not only a precise record of various buildings, but proof of his personal engagement with them – abstract *piedi* vouching for actual *piedi*.

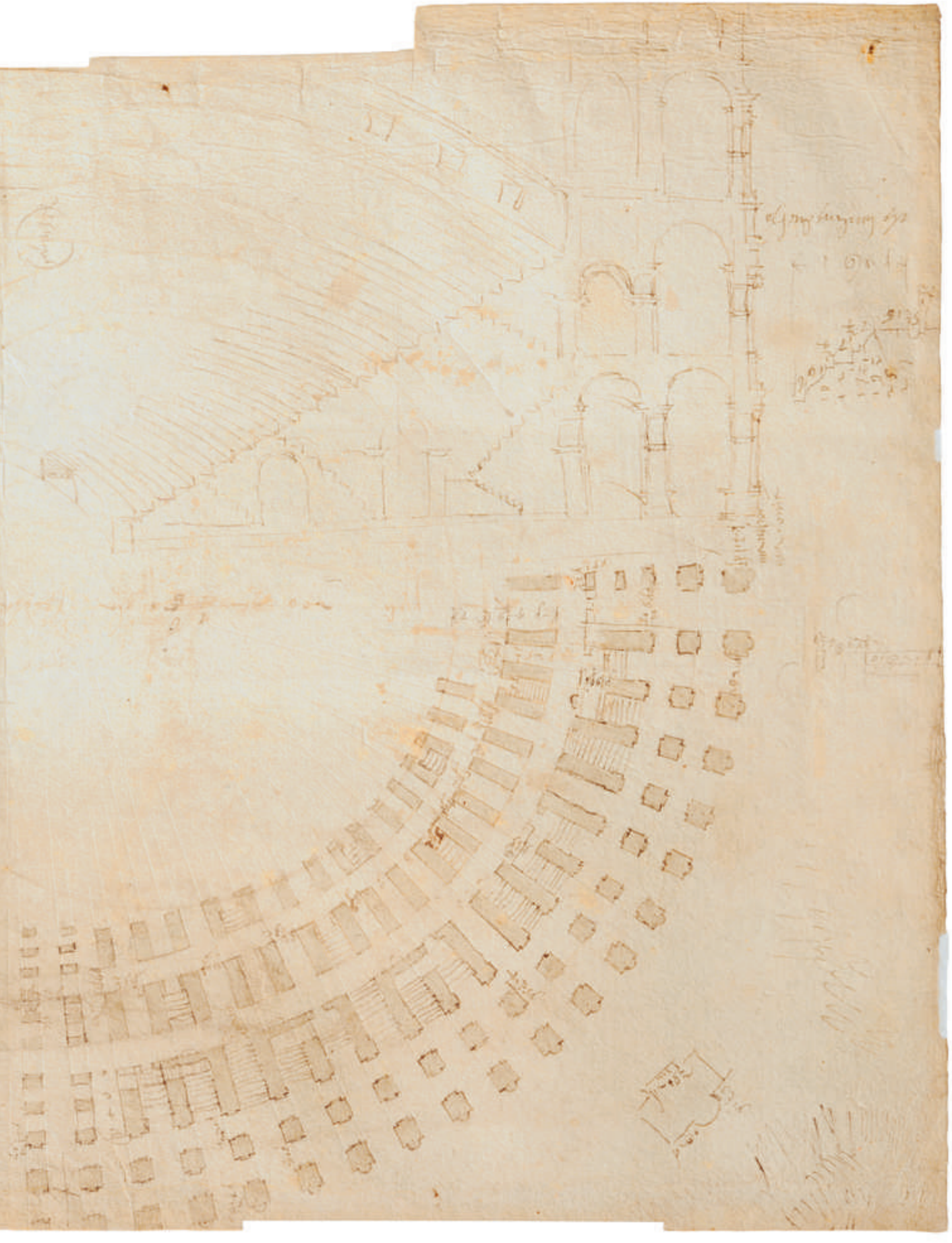
This form of incorporated, empirical knowledge was not something that could necessarily be asked of the other subjects encouraged by Trissino's tutelage, notably military matters, which for Palladio (through his close readings of Caesar and Polybius) was something acquired through the head rather than the feet. And yet at the same time armed conflict was not something entirely academic and removed, but was a fact of contemporary life. In particular, the early 1500s saw Palladio's beloved Veneto region convulsed by the War of the League of Cambrai, when an anti-Venetian alliance made up of the papacy and the kingdoms of France, Naples and most of the significant western European powers engaged in an eight-year battle with the Venetian Republic over its control of maritime trade routes. For the local *Longhi* (the aristocratic and conservative political faction, opposed by the merchant *Giovanni*) the only solution was to reorient their interests, looking to new sources of landed revenue rather than engage in risky sea trading. The key to the republic's independence therefore became an actively inhabited and exploited *terra firma*. Palladio's own villas, dotted all over the Veneto hinterland, are one very obvious register of this newfound landedness, but so too was the sixteenth-century humanists' sudden interest in the battles of antiquity, not least because it ennobled their current political crisis: as a republican island surrounded by a sea of hostile despots, the *Serenissima* looked upon itself as the true heir to Rome.[24]

The realities of military engagement were also changing, so it too was becoming intellectualised to the extent that urban humanists felt increasingly confident in resolving all forms of conflict, not on the battlefield but at their desks. This sixteenth-century revolution in the art of war was essentially brought about by the introduction of gunpowder, which precipitated the end of singular combat.[25] In the Renaissance there was no more chivalric one-on-one duelling. The expansion in the use of firearms also democratised the ability to hurt the enemy, with the infantry – composed of both pikemen and musketeers – suddenly becoming deadlier than the aristocratic knight. Defensive techniques accelerated at the same time, so wars increasingly became less about fighting and much more about strategy – mostly how to *avoid* battle. And it is this need for strategy that fundamentally defines a Renaissance attitude towards warfare: battles were no longer won with brute power, but with effective plans.

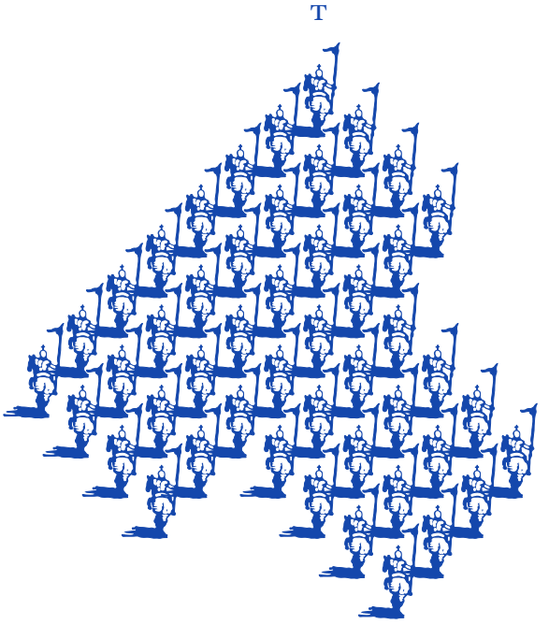
Success therefore depended on two things: a well-drilled army and a strategist. Training became paramount, as the anonymous mass of rank-less soldiers needed to learn how to work together as a single body, so as to be able to enact strategies such as the *caracole*, where

Overleaf: Andrea Palladio, sheet with studies of the Colosseum, the Temple of Saturn and cavalry in a rhombus formation, 1540
© RIBA Library, Drawings and Archives Collection





pikemen and musketeers take turns to defend and shoot. They also needed to be subservient so that they could respond without delay to the commands of a new figure that emerged in the sixteenth century, the sergeant major. He, in turn, had to have full knowledge of a kind of super-body, organising his legions effectively in the wider, more abstract field of space and time. For this he needed theory, which manifested itself in the use of diagrams and tables – to plot how the body (or bodies) would occupy and move across the field. All of which meant that from the sixteenth century on, battles could be planned. And planning, as we know, is what the humanists really saw as their forte.



his is the context, then, that both demanded and nurtured an intellectual involvement with the theory of warfare, something reflected in the frequency with which classic military treatises were being translated. These titles were immediately devoured by people like Trissino, his student Palladio, and those who would later become Palladio's clients, including Count Girolamo Chiericati and Iseppo da Porto, who acquired in this way a fluent grasp of the histories of empires and expansions through Caesar, Polybius, Aelian and Vegetius.[26] Among many new publications on the practice of contemporary warfare, Machiavelli's *Arte della Guerra* (1521) was central. Not only was the narrative polemical, but it was also radical in its use of visual aids.[27] This *Art of War* included a series of military diagrams composed of specially cut figures at the end of the book: O and O' and X signifying *fanti con lo scudo* (infantryman with shield), *fanti con la picca* (infantryman with pike), *velita ordinarii* and *straordinarii* (*velites* were the Roman light infantry), and so on. In their depiction, these battalions were also explicitly *all'antica*, supporting Machiavelli's most innovative (yet antiquarian) proposition that modern warfare had to look to the past and first and foremost adopt drills. And so, as with the buildings in the city, a Roman and Greek precedent needed to be revisited, as the *militia* was also bearer of the much sought-after *virtù*.

There was also a language specific to this militarism, just as there was to architecture, accelerated and disseminated by the evolution of printing techniques and by typographic figures. Machiavelli used cut symbols that were custom-made, but still based on Greek letters, whereas Francesco Robortello's 1552 edition of Aelian's *Tactics* also used custom blocks, but this time of small figurative icons. The so-called Bologna method, on the other hand, employed Roman letters, so that both text and diagram are made with the same elements, whereas a sixteenth-century edition of Asclepiodotus' *Outline of Tactics* would also include squares containing dots or letters to represent larger military units.[28]

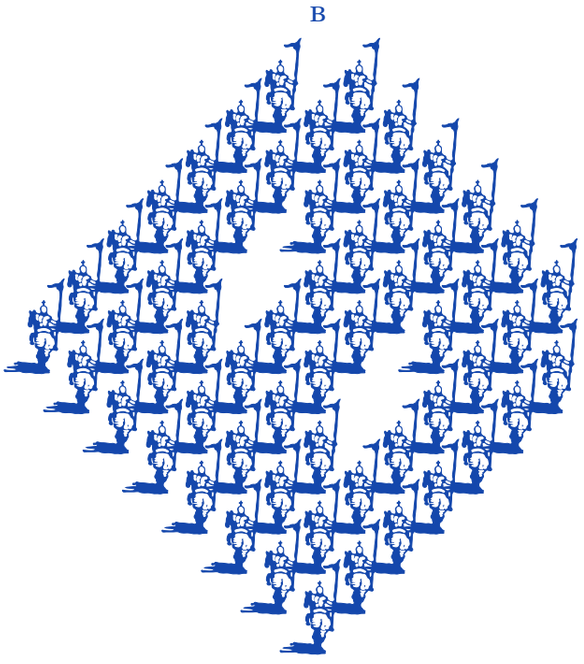
The illustrations Palladio produced for the histories by Caesar and Polybius expand and enrich this figurative representation of battle, while his early lambda rhombus reproduces Aelian's manuscript diagrams, displaying an interest in warfare that had moved away from building to paper. But between the two there also exists another enigmatic set of drawings by Palladio of military formations that are neither quite figurative nor diagrammatic, but are more characteristic of his professional assignation. If in the *Commentaries* and *Histories* it was Palladio the publisher and antiquarian at work, here it is Palladio the architect. Held in the library of Worcester College, Oxford, these drawings were only dated to the early 1540s by Howard Burns in 2002.[29] They are also the only drawings of their kind in existence – perhaps the same collector's zeal that removed Palladio's uglier sketches edited others out.[30]

The drawings themselves are made on a typical Palladian folio, folded in the middle (583 × 437mm when extended), and show a set of military formations composed of both little circles and circles with tails. Each formation offers two seemingly related blocks: a rectangle on top and a bracket lying on its long side below; a triangle on the bottom and a horizontal chevron on top; a horizontal bar with another angled above it on the top and a longer bar, also at an angle on the bottom; and a rectangle on top and a semi-circle with two flanking squares on the bottom. There is no legend indicating what these diagrams might mean. The only form of explanation is a handwritten note on the top corner of the verso sheet, summarising information obtained from Polybius' *Histories*: 'Note that each legion is of 4,200 infantrymen and 300 horsemen: in all there are 16,800 infantrymen and 1,200 horsemen, not counting the *extraordinarii* infantry and the *extraordinarii* horsemen, which are 800 infantrymen and 400 horsemen.'[31]

Although recently published and exhibited,[32] this set of drawings has not received the same attention afforded to Palladio's other military depictions for the Caesar and Polybius books, perhaps because of the more figurative, more pictorial, even more obvious nature of these engravings.[33] When mentioned at all, it is usually only in terms of their rarity, or to suggest that they use symbols derived from Machiavelli's *Arte della Guerra*, even if they are most probably referencing formations in Battista della Valle's 1539 *Vallo*.[34] This interpretation, however, satisfies neither of the two leading experts, Burns and Beltramini, who note that if Palladio had been copying the *Vallo*, his troops would be 'soldiers armed with muskets, who do not form independent battalions but are alternated with battalions of men armed with pikes'.[35] As Palladio does not state who is facing who, or which battle they represent or even if it is battle at all, they remain free of any historical narrative and thus a bit mysterious. Perhaps the drawings show two opposing armies, or maybe two moments in the evolution of a corps. Some Palladian scholars even go so far as to say that they are not directly indebted to any classical or contemporary source, and instead remark on their resemblance to building plans – that is, some parts of the formations simply look like Palladian villas.

The architectural quality of the drawings, however, *is* revealed upon closer inspection, for these plates were drawn in the same, technically precise way that Palladio drew his buildings. First, with a ruler and an inkless stylus, probably metal but possibly ivory, he traced a vertical line in the middle of the folded folio – a kind of line of symmetry. Then, when necessary, two parallel lines were offset from the central one, defining the outer edges of the two opposing blocks. Subsidiary lines – vertical, horizontal, diagonal or even radial – were then traced, creating a ghost structure for the two main blocks (with his compass leaving tiny holes as proof of its passing). Next, Palladio drew each circle and circle-with-a-tail with his inked pen (the repetition of the act of refilling his pen in its inkwell is made visible by the progressive fading and then darkening of the ink). The outlines of the blocks are not so extreme as to define a regulated place for each soldier, but their orderliness can be attributed to Palladio's precision as a draftsman and the mathematics he employed in setting up his page: the space of this page has been measured and the distribution of the ink carefully allocated. And again, in looking closely, it seems possible to suggest that in each page the two main blocks are always related as they always share the same vertical ghost lines. This leads one to wonder: would two opposing armies necessarily have the same size? Would they always be so precisely aligned that they can share a symmetry line as well as an external boundary? Probably not. This might be a case, then, of two moments in the evolution of the same battalion, in which the reorganisation of infantrymen with and without pikes remains somewhat enigmatic.

Drawn with the same instruments, and following the same processes as Palladio's plans and elevations, these formations also share another characteristic with his architectural drawings: they are all about space. The otherwise opaque handwritten note on top of the first sheet makes this clear, because it suggests that Palladio's interest is not only the design of an overall shape, but the position of elements within that shape – or more particularly, the way he very precisely draws each circle and its distance to all the other circles demonstrates that the drawings are not just about bodies in space, but about the space in between bodies. This is definitively the core of Palladio's interest, because in the introduction to Caesar's *Commentaries* he says so himself: first describing the number of soldiers involved ('according to Polybius, the legion of the ancients … consisted of 4,200 foot soldiers and 300 horsemen', although at the time of Caesar 'the legion had 6,100 infantrymen and 37 horsemen');[36] then specifying the type of soldier (remarking on the mixture in the infantry of light-armed soldiers, *velites*, and heavy-armed soldiers, *hastati*, *principes* and *triarii*, and describing the attire and weapons of both foot soldiers and horsemen); before pondering 'how they were ordered for combat and how much space the legion occupied, by length and by height (by length we mean in rows, by height in [vertical] lines)'[37] Doesn't that sound like an architect looking at the soldiers as if in plan? And, again like an architect, he seems interested not only in the extension of that space but also its regulation: 'we know that when the army marched, it was ordered so that each soldier occupied six feet and that the whole front of the legion was 1,536 feet and, when the captain moved the army against the enemy, he closed up the soldiers so that each occupied three feet, and so the front was 768 feet long'.[38] Palladio talking about his feet again.

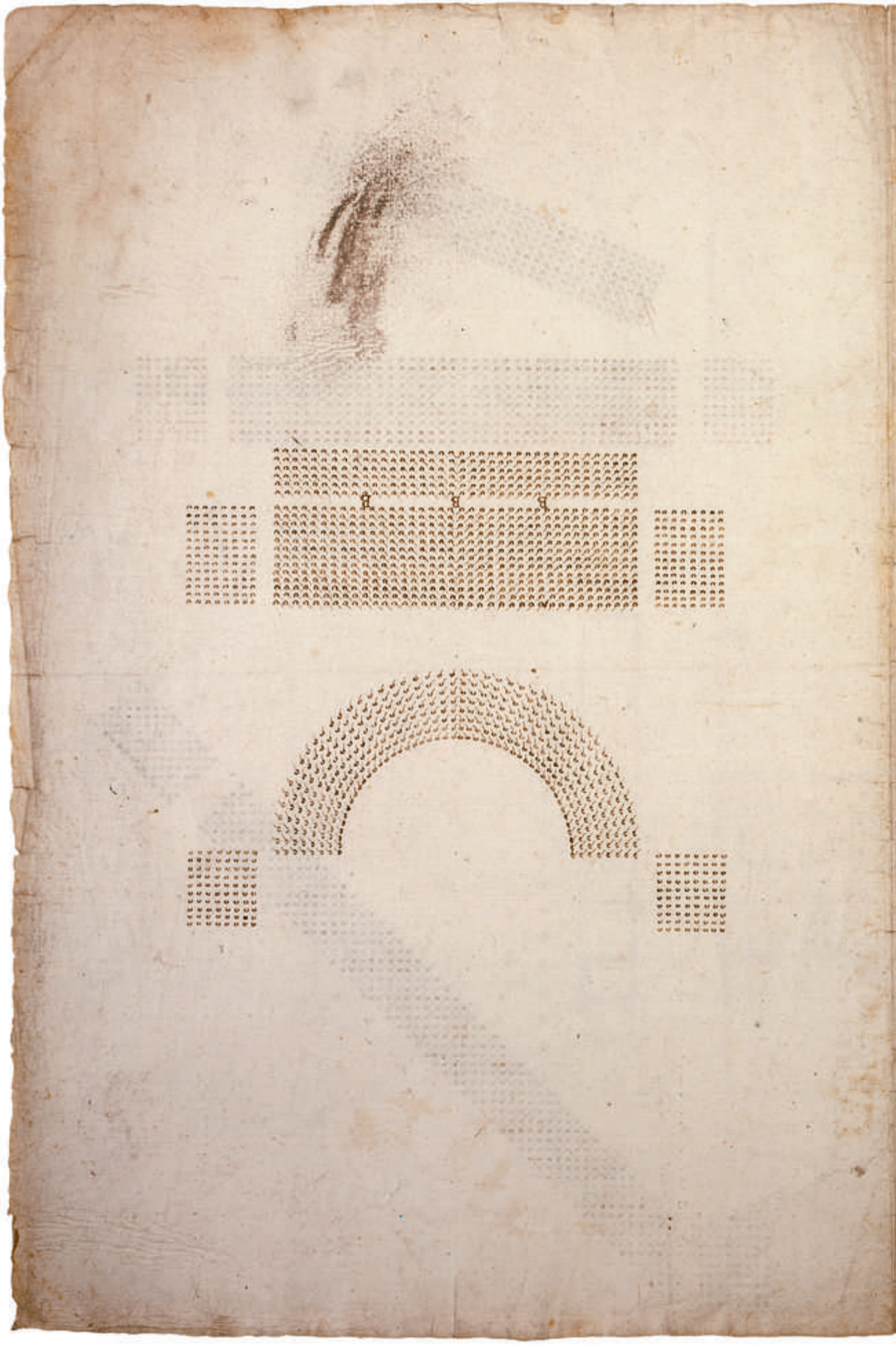


Overleaf: Andrea Palladio, studies of infantry formations confronting each other, *c* 1542
© Worcester College Library, Oxford

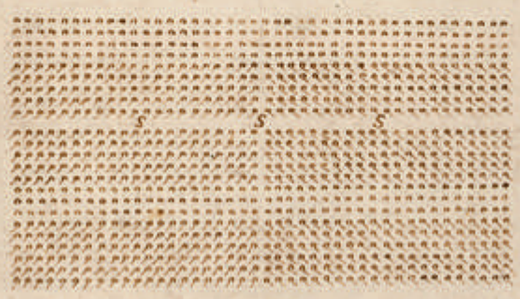
oth buildings and legionaries, therefore, demand a predetermined order, but of course the really radical thing about this militarised architectural object, in contrast to the standard villa, is that this order facilitates not stasis but movement. Later in his introduction, Palladio probes this very issue, trying to figure out whether in the course of a battle different battalions became separated or not. This in turn leads him to explore questions of space between the bodies of the soldiers and the super-body of the legions, which finally leads to his ultimate query: how a battalion moved.

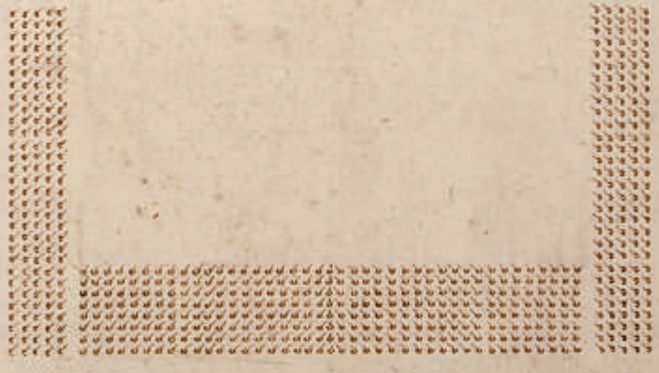
The particularities of this movement are explained by Palladio over the following pages: from the movement of individual soldiers (*declinatione*, each soldier turning a quarter circle; *mutatione*, each soldier turning a half circle); to that of the squad as a whole (*conversione*, the whole body turning round 45 degrees; *inflessione*, turning front to back as a whole; *diflessione*, moving from one flank to the other). More complex movements then complement this basic grammar, such as the manoeuvres typical of the famously versatile Roman phalanx (those manoeuvres being the 'Persian' or 'Cretan', the 'Macedonian' and the 'Laconian' – all movements that basically channelled soldiers from back to front), to the shapes they assumed when attacking (quadrangular, scissor, wedge, half-circle, etc). Like any good antiquarian, Palladio would also have known that the Roman phalanx was incredibly successful precisely because it was not a densely packed block of soldiers, but an airy kind of mass: the space between different kinds of soldiers (usually deployed in a chequerboard fashion) allowed for their evolution, resulting in an active front line.

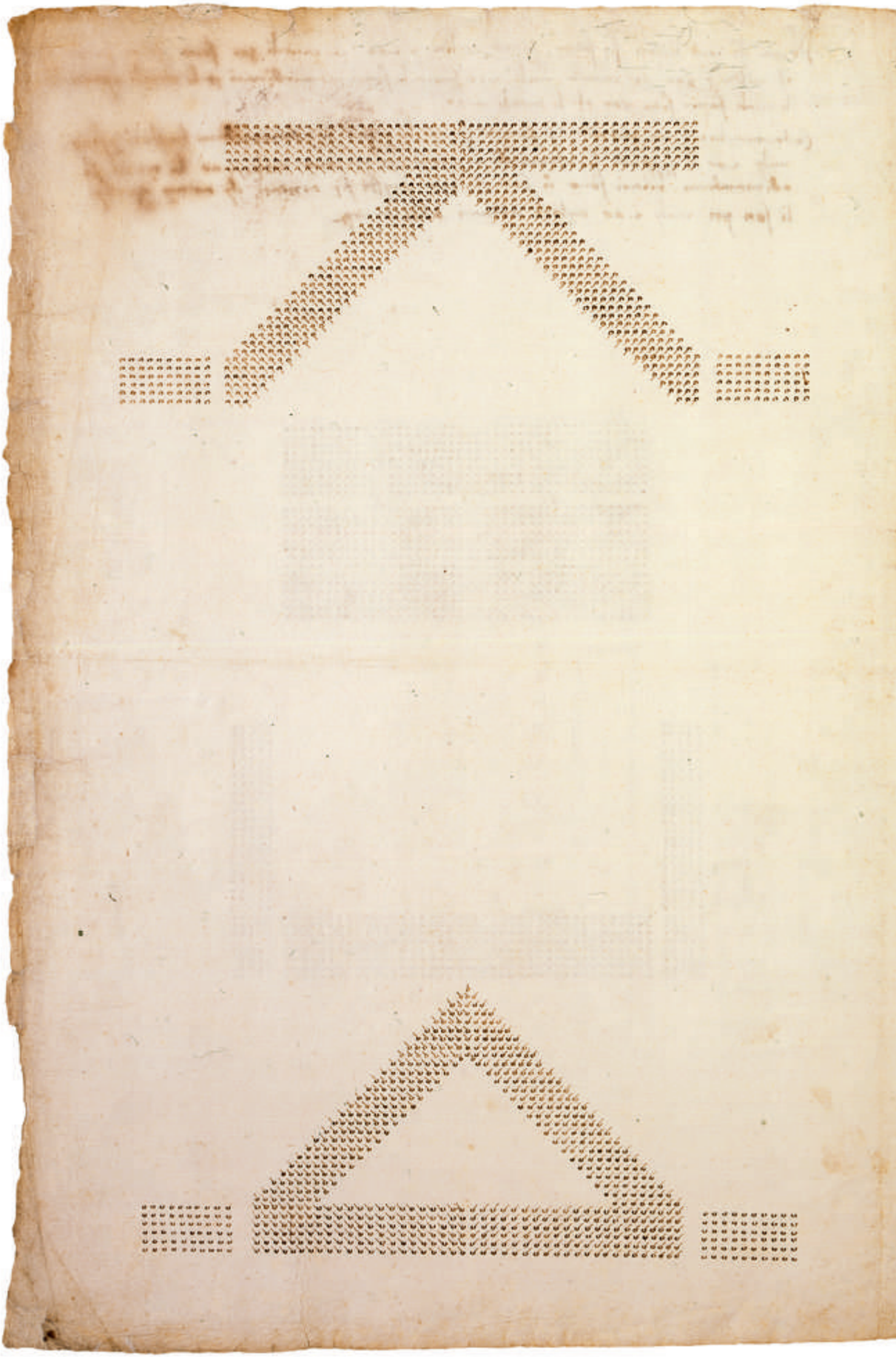
In carefully stating these particulars of the Roman army, and by going into such meticulous detail, Palladio is also making the case for his own agenda, not least the central importance of doing drills ('there can be no doubt that if the captains of our day trained their soldiers in the same drills, movements and instructions, these soldiers would achieve that perfection of the ancients, who were no more than men').[39] The idealism offered by the ruins of Roman architecture was therefore matched by the

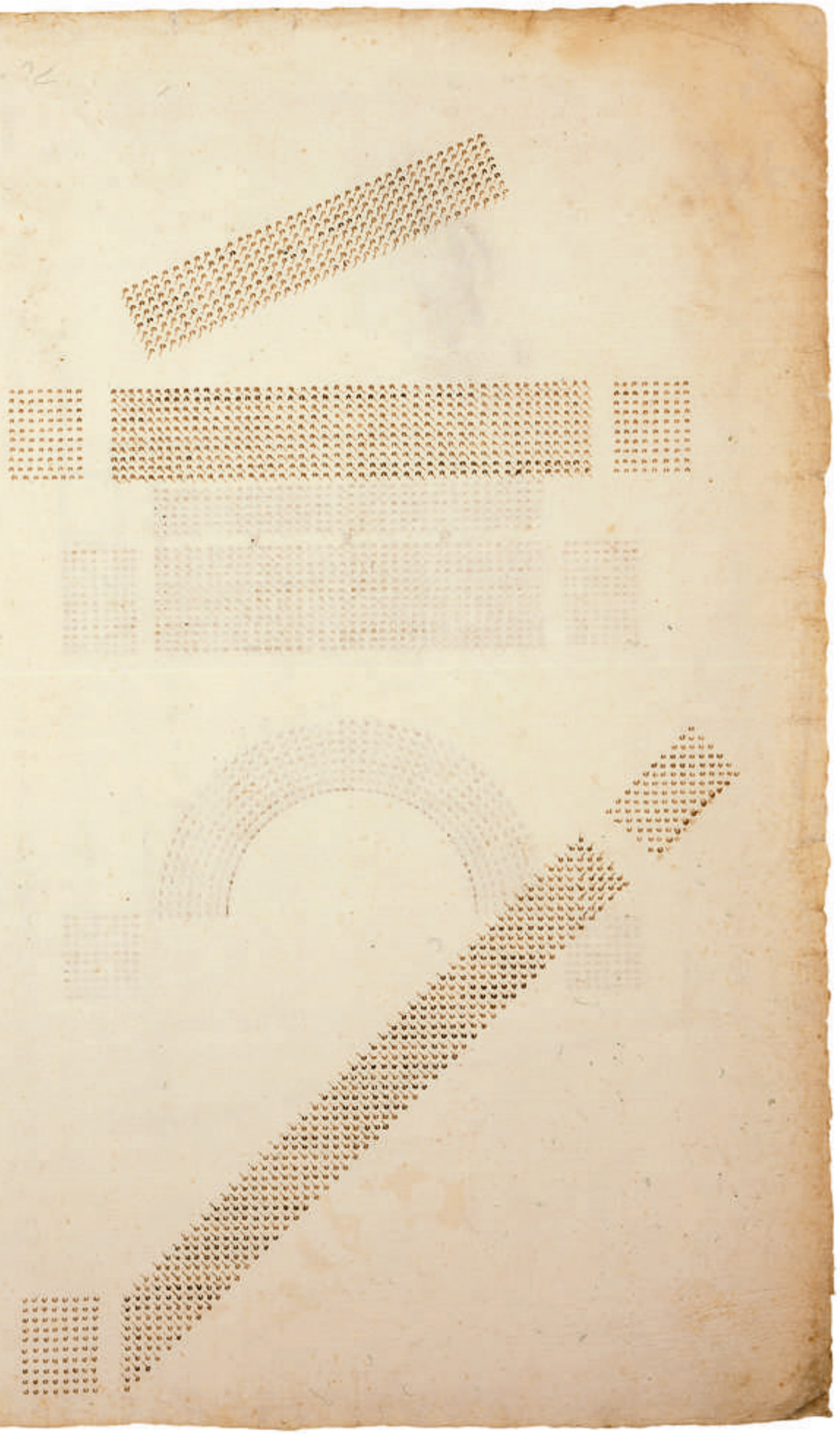


Nota ch ogni ligion fa fanti quatro milia e 200 et cauali 300 sono fanti
il milia e 800 et cauali mila 200 senza li fanti extraordinari et li cauali extraordi
li quali fanti sono 300 et li cauali 100
Cadauno ligion ha quatro fanti fanno fanti li primi si adimandano hastati e sono
mila 200 li segondi si adimandano principi et sono mila 200 li terci si
adimandano triari sono ii 600 et tutti questi fa armati ch armi grossi
li son poi mila 200 ogloci armati alla ligera









idealism of its armies. And in fully comprehending their systems, and therefore their imitability, Palladio felt he had to reconstruct both buildings and armies *as an architect*. This is what the Oxford drawings seem to be doing – making sense of the space produced in the different deployment of battalions. They could also represent a preparatory step in the production of his later, more pictorial engravings of the 1570s. Or they are simply trying to reconstruct an otherwise unknown territory through the space its bodies occupy. Indeed, in a sort of reverse operation – as he could not use his body to walk and survey the battlefield – his diagrams could plot one body next to another, carefully spacing them, adding one, two and three, finishing with a scaled-down version of the whole space. In other words, what the Oxford drawings may really demonstrate is that if the measures of a territory are unavailable, but if the space its military corps was occupying is known, then the first could be deduced from the second.

Of course, no causal connection between the Oxford diagrams and both *Commentaries* and *Histories* can be conclusively ascertained, yet what *can* be said is that the diagrams reside, historically as much as symbolically, in the in-between space of the printing press and the architect's drawing board. The symbols they use adopt the same language as other similar books, yet they are executed with the instruments, rules and methods of architectural design. This interstitial position allowed Palladio to cross what we would now call disciplinary boundaries: the language of the battle diagram enabled him to plan people (and not buildings, for once), and an architectural methodology opened up a comprehension of space within a genre that had become decidedly abstracted from space – or, for that matter, only concerned with the space of the page. For whatever reason he drew them, Palladio's diagrammatic battle drawings were also based on measuring 'everything with his own hands in minute detail' – first the space of the paper, but ultimately the projected space of an entire territory. And so in the end, even if there is no head that we can definitively attribute to Palladio, his feet – the feet he used to walk around Rome and the *piedi* he used to measure space – are what bridges his public persona with his other more obscure self, the common ground between buildings and battle, and, as if it needs reiterating, yet another measure of Palladio's greatness.

1. Guido Beltramini, *The Private Palladio* (Zurich: Lars Müller, 2012), p 88. See also Lionello Puppi, 'Ritratti E Celebrità – Quando El Greco Tolse La Maschera a Palladio, L'uomo Invisibile', *Stilearte*, 21 September 2015.
2. See Vaughan Hart and Peter Hicks, *Palladio's Rome: A Translation of Andrea Palladio's Two Guidebooks to Rome* (New Haven, CT: Yale University Press, 2006).
3. See Margaret Muther D'Evelyn, *Venice & Vitruvius: Reading Venice with Daniele Barbaro and Andrea Palladio* (New Haven, CT: Yale University Press, 2012).
4. The British Library copy can be found with the following call numbers: General Reference Collection 585c14, 293g20 and c194b415(17).
5. Guido Beltramini, *Andrea Palladio and the Architecture of Battle: With the Unpublished Edition of Polybius' Histories* (Venice: Marsilio, 2009).
6. 'The text used was a re-set and enlarged (from octavo to quarto) version of the Italian translation by Francesco Baldelli which Gabriel Giolito had first published in Venice in 1554 and followed up with a new edition in 1557 and a reissue in 1558. To this text, now out of copyright, Palladio prefixed a dedication and his introduction.' John R Hale, 'Palladio, Polybius and Julius Caesar', *Journal of the Warburg and Courtauld Institutes* 40 (1977), p 241.
7. Guido Beltramini, *Andrea Palladio and the Architecture of Battle, op cit*, p 36.
8. Guido Beltramini and Howard Burns, *Palladio* (London: Royal Academy of Arts, 2008), p 345. See also Guido Beltramini, *Andrea Palladio and the Architecture of Battle*, *op cit*, p 25.
9. 'His choice of a specific viewpoint provides the best way of seeing the deployments of troops in the field and the orography of the site, which is of crucial importance in winning battles. Palladio shows us the architecture of the battle, almost its ''anatomy''', *ibid*, p 54.
10. Leon Battista Alberti, *On the Art of Building in Ten Books* (Cambridge, MA: MIT Press, 1988), p 34.
11. Guido Beltramini, *Andrea Palladio and the Architecture of Battle*, *op cit*, p 14.
12. As Burns summarily pointed out in 1975, 'this reconstruction [of the Colosseum] is probably based on other artists' drawings. An incidental point of some interest is the diamond-shaped formation in the top right, a reflection of Palladio's interest (doubtless stimulated by Trissino) in ancient military formations', Howard Burns, Lynda Fairbairn and Bruce Boucher (eds), *Andrea Palladio: 1508–1580; The Portico and the Farmyard* (London: Arts Council of Great Britain, 1975), p 44. In contrast, Wolfgang Lodz writes about the same drawing in 1977 without even mentioning the lambdas. See Wolfgang Lotz, *Studies in Italian Renaissance Architecture* (Cambridge, MA: MIT Press, 1977), p 182.
13. Guido Beltramini, *Andrea Palladio and the Architecture of Battle*, *op cit*, p 14.
14. Vaughan Hart and Peter Hicks count five visits, Vaughan Hart and Peter Hicks, *op cit*, p xxvi.
15. Raphael and Baldassare Castiglione, 'The Letter to Leo x', *ibid*, p 185.
16. *Ibid*, p 188.
17. *Ibid*, p 189.
18. Cammy Brothers, 'Architecture, History, Archaeology: Drawing Ancient Rome in the Letter to Leo x & in Sixteenth-Century Practice', in *Coming About… A Festschrift for John Shearman* (Cambridge, MA: Harvard University Art Museums, 2001), p 136.
19. Margaret Muther D'Evelyn, *op cit*, p 17. She is referencing Sebastiano Serlio, *Il terzo libro di Sebastiano Serlio Bolognese nel qual si figvrano, e descrivano le antiquita di Roma, el le altre che sono in Italia, e fvori d'Italia* (Venice, 1540), p cxviii.
20. *Ibid*, p 18, referencing Serlio, *Il terzo libro*, pp ciiii, lvi.
21. Vaughan Hart and Peter Hicks, *op cit*, p 3. This corresponds to folio I in Andrea Palladio, *The Antiquities of Rome* (Rome: Vincentio Lucrino, 1554).
22. Howard Burns, Lynda Fairbairn and Bruce Boucher, *op cit*, p 85.
23. *Ibid*, p 84.
24. Denis E Cosgrove, *Social Formation and Symbolic Landscape* (Madison, WI: University of Wisconsin Press, 1998).
25. See David Eltis, *The Military Revolution in Sixteenth-Century Europe* (London: Tauris, 1998).
26. And writing new pieces themselves. See Guido Beltramini, *Andrea Palladio and the Architecture of Battle*, *op cit*, p 18.
27. 'Until [Machiavelli's *Arte della Guerra* was published in] 1521 no manuscript or printed book aimed at the *practice* of contemporary warfare had included diagrams.' John R Hale, 'A Humanistic Visual Aid: The Military Diagram in the Renaissance', *Renaissance Studies: The Journal of the Society for Renaissance Studies* 2, vol 2 (October 1988), p 283. This didn't mean that they didn't exist: they 'must always have existed but did not enter the mainstream of expressed culture: squiggles on paper, arrangements of glasses, knives, bits of bread'. *Ibid*, p 286.
28. *Ibid*, p 283.
29. Howard Burns, '"*Da naturale inclinazione guidato*": il primo decennio di attività di Palladio architetto', in Arnaldo Bruschi, *Storia dell'architettura italiana: Il primo Cinquecento* (Milan: Electa, 2002), referenced by Guido Beltramini and Howard Burns, *Palladio*, *op cit*, p 351. The writing on top of the sheet belongs to the 'epsilon handwriting' period – a habit adopted from Trissino, advocator of classical conventions for the Italian language.
30. The provenance of these drawings perhaps explains their uniqueness: the folio with military diagrams, along with only a handful of other drawings by Palladio, came to Worcester College library in 1736 directly from George Clarke, Oxford scholar and amateur architect. Clarke had already acquired them directly from John Webb by 1705 at the latest, therefore bypassing the fate of the main bulk of Palladian drawings, which found their way into Chatsworth after being acquired by Lord Burlington in 1719. The military diagrams are not listed in Harris and Tait's catalogue, but the architectural details are. See John Harris and A A Tait, (eds), *Catalogue of the Drawings by Inigo Jones, John Webb and Isaac de Caus at Worcester College, Oxford* (Oxford: Oxford University Press, 1979), p 9 and Timothy Clayton, 'The Print Collection of George Clarke at Worcester College, Oxford', *Print Quarterly* 9, no 2 (June 1992), p 124, footnote 6.
31. Guido Beltramini, *Andrea Palladio and the Architecture of Battle*, *op cit*, p 14.
32. *Ibid*, pp 20–24. The drawings were exhibited at the Palladio exhibition at the Royal Academy, London, in 2008, see catalogue entry 175a/b, and Guido Beltramini and Howard Burns, *Palladio*, *op cit*, pp 350–51.
33. In the 2002 article where he dates the drawings Howard Burns only devotes a footnote to the Oxford drawings. The article itself examines only Palladio's first years of activity and includes a small detail from one of the Oxford diagrams on p 385. In the footnote, Burns reads the drawings as architectural *form*, rather than as architectural *drawings*.
34. Guido Beltramini and Howard Burns, *op cit*, p 350.
35. *Ibid*, p 351.
36. Andrea Palladio, 'Of the legions, the arms and the orders of the Romans' (introduction to Caesar's *Commentaries*) in Guido Beltramini, *Andrea Palladio and the Architecture of Battle*, *op cit*, p 178.
37. *Ibid*, p 179.
38. *Ibid*.
39. *Ibid*, p 183.

The Brothers Kraaijvanger

Ida Jager

On 14 May 1940, like many thousands of his fellow citizens, the Rotterdam architect Herman Kraaijvanger (1903–1981) took cover in a cellar. Listening to the ensuing explosions, he had the feeling that the city above him would soon be lost. He was right. In just 15 minutes some 1,308 bombs fell – 158 of them 250kg – as the Luftwaffe swept away most of the city's densely populated port and largely eighteenth-century built fabric. The extent of the destruction was so great that it was several days before the smoke had cleared sufficiently for a reckoning to be made: some 800 Rotterdammers had lost their lives, more than 80,000 were homeless, 24,000 dwellings had been destroyed, and most of the shops and offices had disappeared.

In the immediate aftermath Herman Kraaijvanger joined many of his fellow citizens in pulling down some of the few surviving structures – just about still standing, but structurally unsound. Among these were several of his own buildings, including the famous Jungerhans china shop on Rotterdam's best street, the Coolsingel, with its cornice sculpture by the well-known artist Leendert Bolle. Along with his older brother Evert Kraaijvanger (1899–1978), who had trained as an engineer, Herman was a principal in the Kraaijvanger architectural practice, founded in 1927 with their father. Like many of their contemporaries, their professional life was split between a prewar and a postwar phase.

The feeling at the time was that Rotterdam had to start afresh with a clean slate. The city had lost its heart, literally and psychologically, but the planning authorities, at least, were determined that some good would come of it. Future inhabitants of the city, they imagined, would wend their way through wider streets and grander public spaces. Their living conditions would also be transformed. The old pattern of close-packed alleys and narrow back streets with degraded housing would have to go. Though no one dared say so, the German bombing had made it possible to realise the ideas they had been nurturing for decades to rid Rotterdam of its notorious slum districts.

In contrast to urbane Amsterdam, with its handsome seventeenth-century architecture and ring of canals, old Rotterdam had nothing much to attract tourists. A working seaport – the largest in the Netherlands – it was tarred with the brush of being 'an unattractive, materialistic city', a place where artists might be born, but would never actually choose to live. The dominant force in the city were the *havenbaronnen*, the shipping tycoons and dock owners whose giant warehouses lined the dock basins. While the magnates built elegant private estates on the city's leafy outskirts, the majority of Rotterdam's citizens eked out an existence in the rows of densely packed developers' housing that gave the city its urban grain.

But however strong the desire for renewal, the Rotterdam blitz was followed by five years under enemy occupation, when precious little was built. A shortage of materials meant that people had to make do with temporary shops and other ad hoc arrangements. Yet even during those bleak war years, plans for reconstruction began to be made. Under the watchful eye of the German occupation, the city architect W G Witteveen worked on a new masterplan in which the three-cornered centre of old Rotterdam was retained as the basic guideline for rebuilding the city.



Though work on this plan continued for four years, it would ultimately not be the blueprint for the city's renewal. Witteveen's successor, his former assistant Cornelis van Traa, had the courage to choose another direction. In his design, which became known as the *Basisplan*, the relationship with the previous urban layout largely disappeared, making way for a city with broad axial avenues, large rectangular blocks and plenty of room for traffic circulation. The most striking move was to banish housing almost entirely from the inner city, which henceforth would be dominated by shops, offices and banks. The Rotterdam of tomorrow was to be a functional modern city where trade and industry set the tone. On that point both planners and architects were agreed.

Nor were there any concessions to the conventional approach to postwar urban renewal, which was to give surviving buildings pride of place in a new plan. In fact, apart from the badly damaged Laurenskerk (St Lawrence's Church), the last vestige of medieval Rotterdam, only three major buildings had survived the bombing: the town hall, the stock exchange and the post and telegraph office, which stood next to each other on the Coolsingel. Rather than being solitary repositories of collective memory, these buildings were gradually embedded in a sea of almost identical blocks.

It was internationally recognised that Rotterdam, the most damaged city in the Netherlands, faced problems of reconstruction on an unprecedented scale, but after the end of war the new centre arose at an equally unprecedented rate: 'This is the story of Rotterdam, the city where man has rebuilt what man has destroyed' became a kind of mantra late into the twentieth century. The local historian Reinder Blijstra set himself the task of following his city's reconstruction on a daily basis, publishing the results in 1965 in *Rotterdam stad in beweging* – Rotterdam, a city in transition. His conclusion was unequivocally upbeat: 'the clear divisions, the open intersections, the main traffic routes, the management of the relation between city and river, the fine planning of the commercial streets, housing districts and parks are all the outcome of thorough and deep research.'

The Kraaijvanger brothers played a not inconsiderable part in this rebuilding. In the 1930s their firm had specialised in designing schools attached to monasteries, town houses and small-scale shops with dwellings. But from 1946 onwards its profile changed, as they focused mainly on shops, offices and banks. Almost all of these buildings – about 30 in total – were situated along major streets in the middle of Rotterdam, and even today they have a prominent role in the city centre.

The brothers were Catholics and their postwar rise to prominence had much to do with the strength of their middle-class connections, mostly with Catholic families, and their involvement in local and national politics. As well as building, they helped to steer policy as well-placed members of the city's ruling elite. Evert Kraaijvanger, for instance, was both

Rotterdam, *c* 1941 © Polygoon
Overleaf: Kantoor van Cats' Papierhandel, 1951
Lampe department store, *c* 1950
housing, Assendelftstraat, *c* 1950
© Kraaijvanger Archive






Lampe
marions
P&C



a constructor–technician and a politician who served for a long period in the Lower Chamber of the Dutch parliament and held office in Rotterdam as alderman for public works. Herman Kraaijvanger was not only a designer but a critic, a connoisseur and an accomplished pianist. He was an almost ubiquitous presence on postwar committees concerned with cultural affairs, and was a long-term member of the 13-strong supervisory board whose task it was to keep an eye on the architectural aspects of reconstruction. That committee was much concerned with decisions about building lines, street frontages and choice of materials. Witteveen, the wartime city architect, had categorised the brothers as A-class architects, which meant that after the German surrender they were in a position to apply to build on prominent sites for leading clients.

Because the Kraaijvangers were so well connected in Rotterdam society, and were naturally good at lobbying, their office expanded during the postwar years into one of the largest practices in the Netherlands. The aftermath of the war had put a great deal of bread on the table for their practice: 'The whole war destroyed whole towns and confronted our generation with situations we never expected to face. Never had we been so poor in resources, yet never had there been so many opportunities.'

The Kraaijvangers grasped these opportunities with both hands, as Rotterdam became a testing ground where they could give shape to their ideals about the planning of housing, the design of innovative office buildings and the creation of the latest shoppers' heaven. Variations on these projects quickly spread throughout the Netherlands. The Kraaijvanger brothers also got involved in one of the most crucial architectural and planning issues of the day. From time immemorial Rotterdam had been bisected by the River Maas. The question was how to find a way of connecting the north side of the river, which had lost its centre, with the south side, which suffered from long-term neglect and had swathes of sub-standard housing. The brothers made their views clear: 'If Rotterdam wants to be a single city, north and south must adjust to one another. There cannot be a tale of two cities. No reconstruction plan for the north which fails to address the south is acceptable.' Yet despite these words, their buildings were located almost exclusively in and around the centre of the north bank.

Their style of architecture was neither frankly functionalist, nor was it traditional. But since Rotterdam was the cradle of Dutch functionalism, represented by avant-garde architects like Van den Broek & Bakema, Van Tijen, and Brinkman & Van der Vlugt, the Kraaijvangers were looked upon as purely traditionalists. Their colleague Willem van Tijen labelled their work as 'shake-hands architecture', a derogatory term of his own invention referring to the effect when modernism and traditionalism collided.

The Kraaijvangers never expressed an opinion about this, and more generally were averse to architectural rhetoric and detested the dogmas imposed by the Bauhaus and Le Corbusier. Herman Kraaijvanger put it this way:

Heaven preserve us from the Bauhaus approach, a trend which leads to the dematerialisation of buildings. Of course we should make use of the new building materials, glass, concrete and steel, but not exclusively. Technique should not be overestimated. Look at the result in German architecture. It's mad that everything gets put together from concrete and glass. It all comes down to the same dreariness, whether it's a factory or a church.

Client-friendly, rather than dogmatic architects, the Kraaijvangers argued that they 'are here to give a service. Architecture has a great social task to fulfil. Our colleague Berlage put it well: ''to build is to serve''.' And the postwar clients who came to their door were generally sizeable businesses: prominent Dutch chain stores like Vroom & Dreesmann, Peek & Cloppenburg, branches of the Amsterdamsche Bank and the Nederlandse Handelsbank, as well as one of the best-known life insurance companies, the RVS. Among these well-heeled clients was also one of the largest Swiss insurance companies, Basler Transport Versicherung, which agreed to locate its head office in Rotterdam, rather than Amsterdam, on the condition that the Kraaijvangers designed the building. The building occupied a prime site opposite the city hall, and there were further prestigious commissions for the Kraaijvangers: a city-centre church with a cloister and ancillary buildings, the main postal sorting office next to the central station and, just a stone's throw away, the Doelen concert hall, which marked the high point of the brothers' career.

As a client, if you went to the Kraaijvangers you got a good solid building of some glamour and individuality. They always had an eye for the handling of materials, for detailing and for the applied and fine arts. Immediately after the war they even went on extended trips to England and America to study the latest developments in the design of department stores. This led to the creation of some innovative features, such as an open-grid ceiling with concealed ducts and flexible positions for lighting that came to be known as the Rotterdam ceiling. A ceiling of this type was first successfully installed in the Vroom & Dreesmann store which opened in 1950, at a time when the city centre was still practically empty. Its opening attracted thousands of people, with one newspaper dubbing it a chic American-style store in what was otherwise the desert of Rotterdam.

Vroom & Dreesman
department store, 1950
© Kraaijvanger Archive

Other trips were guided by their well-known liking for expensive natural stones, and the brothers regularly visited quarries in Belgium, Luxembourg, England (Portland stone) and Italy. Today this fondness for fine materials continues to distinguish Kraaijvanger buildings in Rotterdam's streetscape and gives them that extra touch – which one critic has even described as 'architectural nobility'. Behind the facades further areas of costly refinement are revealed, in the form of inlaid patterning in marble and granite, spiral staircases, elongated wall paintings and ceiling decorations, as well as a liberal allowance of splendid ironwork. Herman Kraaijvanger was strongly of the opinion that architects ought to avail themselves of 'the ideas of the painters and sculptors of today', if only to make up for the dullness of so much postwar architecture.

All of these details were facilitated by an army of artists who were always on hand to lend the finishing touches to a Kraaijvanger building. Especially noteworthy in this regard are the two great projects that the brothers undertook towards the end of their career. The first of these was the central sorting office, completed in 1959, which became known as the 'post cathedral' on account of the vast concrete and stained-glass work by the artist Louis van Roode that rose the full 20m height of the external southwest staircase. Each floor was illuminated from its own particular window, turning the side of the building into a colourful beacon at night. The second was the Doelen concert hall, inaugurated a few years later in 1966. Modelled on the Royal Festival Hall in London and designed in collaboration with the architect Rein Fledderus, the building won high praise for its opulent interior, with its 36 different marbles and gold leaf-lined boxes. The Doelen was first dubbed a palace of music – its two auditoriums both have outstanding acoustics. Soon afterwards it was called a palace of art, not just for the quality of musical performances that took place, but because art is integrated into almost every point in the building.

With the completion of the Doelen the last of the large empty sites in the city centre had been filled, and the *tabula rasa* that was wartime Rotterdam finally covered. The city had been destroyed at lightning speed, but its reconstruction had followed an equally rapid pace. By the mid-1960s Rotterdam featured hundreds of new office buildings, shops and banks, for the most part solid and block-like in shape, but among them your eye might catch the sheen of glazed brickwork, delicate varieties of natural stone, handmade bricks, friezes of decorative tilework and tall mosaic panels. When it does you are shaking hands with a finely wrought piece of architecture and are no doubt in front of 'a Kraaijvanger'.


Vroom & Dreesmann



The Fourth Little Pig

Alex Schweder & Ward Shelley

The story of The Three Little Pigs is not so much about swine or their construction savvy as it is about the moral imperative of hard work. We are told that one little pig quickly builds his house out of straw and another hastily fabricates his out of sticks. They sing and dance and play all day while their eldest brother constructs his house from bricks. This house takes much longer to build, but it is the only one that withstands the huffs and puffs of the wicked wolf. Foregoing pleasure is the price of survival. The moral of the story, then, is that hard work (as opposed to singing and dancing) pays off in the end, or that an architecture of permanence and solidity is better than something fast and light.

But what if the three little pigs had been four? In this retelling perhaps the younger sibling would construct a dwelling that could move with the huffing and puffing, rather than resisting it. In the process, this tilting, spinning house might even transform an otherwise threatening lupine gust into a way of making the whole building dance. Their lives would be saved, and the morals – both porcine and architectural – would change too.

Since first collaborating in 2007 our efforts have been driven by similar investigations into somehow satisfying both morality *and* pleasure. And we have typically done this by building a house, moving in and then seeing what happens. For example, our 2011 project, *Counterweight Roommate*, consisted of a thin tower with rooms spread out over five storeys and us (the roommates) tethered to either end of a rope. Scaling the building to get to the kitchen, the bedroom or the lavatory was a balancing act that depended on the body mass of the other person. We needed each other to survive. Interestingly, though, the relationships we set out to visualise were different to what actually arose. Making these discoveries is the point of inhabiting the structures we build.

Drawing again on the idea of working together, *ReActor* is a 15m-long spinning and tilting house that moves with the wind and the shifting weight of its occupants. During the initial planning stages we speculated that the wind blowing across the Omi Arts Centre site in Ghent, New York, would be something we would have to work together to overcome – a common enemy that would strengthen our relationship. But the space between what artists intend and what actually happens is where meaningful innovation occurs, and so our rival became our muse – a gentle breeze that spins the house as it balances on top of a 5m-high concrete column.

ReActor also seeks horizontal equilibrium, see-sawing as the occupants move toward and away from its centre. During our first five-day inhabitation performance we discovered that intentionally tilting the house helps the wind catch the structure to make it rotate more. From inside we went about our days – reading, cooking and watching the vista change, slowly and quietly, from our porches. When visitors stopped to look, we chatted with them about what the work meant, how it was built and answered detailed questions about how the bathroom works. These conversations were similar to those of our previous projects, but one question changed: 'How can you possibly live there?' became 'When can I move in?'



Alex Schweder & Ward Shelley, *ReActor*, 2016
Architecture Omi, Field 01, Ghent, New York
© Dora Somosi

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Timothy Brittain-Catlin is researching the domestic architecture of Edwardian politicians but is otherwise interested in architects as losers and failures. He taught architectural history and theory at the AA from 2001–07 and is now at the Kent School of Architecture, University of Kent. He is also vice-chairman of the Twentieth Century Society.

Alessandro Conti (1986–2012) was an Italian architect, musician, Kung Fu black belt and connoisseur of architectural history. His published research included studies on the architecture of Castel del Monte, Flora Ruchat-Roncati, Ivo Trümpy and Aurelio Galfetti's Lido in Bellinzona and the baroque investigations of Roman architect Luigi Moretti.

Mike Dempsey is a graphic designer and founder of Studio Dempsey. He has created everything from stamps for Royal Mail and film title sequences for Ridley Scott, Louis Malle, Dennis Potter, David Hare and Bruce Beresford, to visual identities for English National Opera, the South Bank Centre, Design Museum, the London Chamber Orchestra, British Screen and the UK Film Council. He also writes, broadcasts and blogs regularly.

Hans Frei teaches at the ETH, Zurich and works as an architect, focusing largely on theoretical and conceptual issues. A graduate of the ETH and the University in Zurich, he wrote his PhD on the architecture of Max Bill. Together with Cornell Näf he was a founding member of the design collective m22, and from 1997 to 2003 he was professor of architectural theory and design at the University of Kassel.

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Ida Jager is the author of a number of books on Dutch architecture, including separate monographs on Willem Kromhout and P J H Cuypers & J Duiker; an analysis of Amsterdam's late nineteenth-century infrastructure, *Hoofdstad in Gebreke*; a survey of twentieth-century graphic design in Rotterdam; and, most recently, a volume dedicated to the work of the Kraaijvanger brothers, *Evert en Kraaijvanger, architectonische noblesse*.

Matthew Mullane is a PhD candidate at the Princeton University School of Architecture, where he is currently finishing a dissertation on the history of observation in Japanese architectural discourse of the Meiji period. This research is an outgrowth of his interest in the phenomenon of 'world' architecture history and theory in the nineteenth and early twentieth centuries. He has recently published essays on these topics and their contemporary ramifications in *Architectural Theory Review* and *Art Papers*.

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Alberto Ponis is an Italian architect. Raised in Nervi, just outside Genoa, he trained in Florence under Ludovico Quaroni and Adalberto Libera before moving in 1969 to London, where he worked first with Ernö Goldfinger and then with Denys Lasdun. In 1963 he was commissioned to design a prototypical holiday home by a financier investing in Sardinia's then largely undeveloped Punta Sardegna. This commission eventually prompted his relocation to the island and the setting up of his architectural office. Over the next 40 years he designed and built more than 300 houses, all located on Sardinia's north coast. A selection of this work has recently been published in *The Inhabited Pathway: The Built Work of Alberto Ponis in Sardinia* (2014).

Alex Schweder is a New York-based artist who works with architecture and performance and whose projects have been exhibited internationally, including at Tate Britain, New York's SculptureCenter, Tel Aviv Museum of Art, San Francisco Museum of Modern Art and the Magnus Müller gallery in Berlin. He has been an artist-in-residence at the Kohler Company, Chinati Foundation and American Academy in Rome, and has been guest professor at the Southern California Institute of Architecture, Pratt Institute and the Institute for Art and Architecture in Vienna.

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Peter Wilson	3	Baldness and Modernism
Joseph Rykwert	17	Nightclubbing
Elain Harwood	21	In Conversation with Kate Macintosh
William Firebrace	39	Location Königsberg–Kaliningrad
Michael Hill	59	Sunlight in San Carlino
Dietrich Neumann	70	Mies's Concrete Office Building and its Common Acquaintance
Dagmar Motycka Weston	85	Dalibor Vesely's Flat
Simona Ferrari & Wataru Sawada	91	Tower of Azuma
Christophe Van Gerrewey	98	Goodbye Paper
Charles Rice & Kenny Cupers	112	Éric Rohmer in Cergy-Pontoise
Tim Benton	123	E-1027 and the Drôle de Guerre
Andrew Crompton	144	What's Inside a Gasholder?
Thomas Weaver	150	In Conversation with Peter Eisenman
Davide Spina	173	Il Drive-in
Nicholas de Monchaux	183	The Death and Life of Gordon Matta-Clark
Cynthia Davidson	200	When in Rome
Chris Behr	202	Garganelli with Broad Beans
	204	Contributors

74

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A Note on the Display Initials
The single display initial in this issue derives from a logo that Joseph Rykwert produced as part of his commission to design the Wips nightclub in Leicester Square (see pages 17–20), and whose typography shares certain similarities with the typefaces then being developed by the artist and typographer Edward Wright, a close friend of Rykwert's (several of his paintings adorn the walls of the historian's home in Belsize Park). At Wips, Rykwert etched this logo into an entrance sign and the club's glass ashtrays. We have introduced the display into the essay by Rykwert himself – a grafting complicated by the fact that a full alphabet was never produced, only W, I, P and S, which meant a certain amount of editing was required to create an opening using one of only four letters. Rykwert's archive contains drawings of this logo in both black and a combination green/blue. Our own chromatic pairing in this issue uses similar cover and inside-cover colours, but these derive more from the signature turquoise and swimming-pool aquamarines of David Hockney, whose work has just enjoyed a retrospective at Tate Britain.

Baldness and Modernism

Peter Wilson



Alison (1928–1993)
& Peter Smithson (1923–2003)

bald, deprived of hair. 1 Geoffrey Chaucer, *The Canterbury Tales*, 1387, 'His heed was balled, that schoon as any glas'—*Oxford Dictionary of English Etymology*

'Oh, look at his bonce! Ohhhh. Get away from me with that dirty big bald head.' —Mrs Dirt to her newlywed husband, 'The Phantom Head Shaver of Brighton', *The Goon Show*, 19 October 1954*

Modernism in architecture, according to Alison and Peter Smithson, came into being in the years 1915 to 1929 – 'an amazingly short time', they write in *The Heroic Period of Modern Architecture* (1981). Published at the tail end of the Smithsons' own, slightly longer productive period, the book presents a collection of modernist objects, projects and buildings, bookended by Auguste Perret's docks in Casablanca (1915) and Mies van der Rohe's Barcelona Pavilion (1929), or as they write in their cursive introduction, 'the rock on which we stand'. They go on to explain their selection of works as 'those buildings of that time which mean most to us personally' – 'us' being the self-styled 'second generation' of modern architects somehow constructing their own pedigree. Indeed, the idea of modernism suddenly raising its head during and immediately after the First World War has a propaganda-like brashness, consistent with much of the Smithsons' rhetoric. Peter Smithson's particular bonce even offers a kind of retroactive model for the actors in this history, all of whom appear to be validated through their own peculiar forms of instrumentalised baldness.



The Smithsons illustrated their book with a large constellation of black-and-white photographs – indeed, in many ways the book *is* the photographs – gleaned through pre-copyright dawn raids on a number of sources, including Le Corbusier's *Oeuvre complète*, back issues of both *L'Architecture vivante* and *The Architectural Review*, Henry-Russell Hitchcock and Philip Johnson's *International Style* (1932), F R S Yorke's *The Modern House* and *The Modern Flat* (1937), Johnson's own monograph on Mies van der Rohe (1947) and Bruno Zevi's *Storia dell'architettura moderna* (1950) – an extensive trove of borrowings excused only by the somewhat cursory acknowledgement, 'All photocopying has been done by Mr Bell of the RIBA Library'. The Smithsons presented these visual trophies as their own form of canonised liturgy, and one that by 1981 was remembering modernism not as a 'seen for the first time' actuality, but as a literal reading that the always contemporary M-word would imply (and so for the Smithsons, the backdrop against which they presented their canon was not the First World War but the Cold War, when both East and West saw themselves immersed in another kind of heroic modernism, played out through the iconography of the Space Race).

More immediately, this was also the moment of the 1980 'Presence of the Past' Venice Biennale, largely arranged around Paolo Portoghesi's self-celebratory PoMo *Strada Novissima*, which provoked a relativising response from the German philosopher Jürgen Habermas in the pages of the *Frankfurter Allgemeine Zeitung*. Titling his text 'Modernity: An Incomplete Project', Habermas argued that the signature of the modern is merely what any particular zeitgeist needs for an objective self-definition – a definition of 'the new'. The concept, he writes, was first used in the fifth century to differentiate early Christianity from the heathen practices of the Romans. The time of Charlemagne also understood itself as modern, as did the Enlightenment, with its scientific model of endless progress. Aesthetic modernism then unfolded with Baudelaire ('*la promesse du bonheur*') and the military metaphors of the avant-garde pushing forward into unknown territories, ever faster, further, higher (a forward directionality distinct from the Smithsons' more obviously normative and backward-looking modernism). Habermas continues this historical sweep with the observation that 'when the containing vessel is smashed, the structured form of the contained is lost' (an allusion to the ironic modernism of the surrealists); less optimistic than his tutor Adorno, he suggests that there are indeed 'reasons for doubt concerning the project of modernism' and its ability to survive the catastrophes of the twentieth century. He concludes, pessimistically, with the notion that in the future modernism will only be engaged through tradition, which would explain Portoghesi's biennale and, unwittingly, also the rock on which the Smithsons proudly stood. The only chink of light in this gloomy prognosis is the emergence of the ecology movement, in which he detects a cosmological ethic and potential new Aristotleism. Interestingly, before parametricism, and the arrival of Patrick Schumacher's incomprehensible *Autopoiesis*, Zaha Hadid adopted Habermas's 'unfinished project' of modernity as her theory of choice, quoting it for more than 30 years as both her defining principle and oft-repeated self-justification.

The Smithsons' taxonomy had actually been published before, in 1965, in a special issue of Monica Pidgeon's *Architectural Design*

*A note solves the crisis – 'Newgent Dirt is innocent, it was I who balded him while he slept', signed The Phantom Head Shaver

Above: Sergei Tretyakov (1892–1937)



Johannes Itten (1888–1967)

(there, the heroic period spanned a slightly wider time frame, 1910–1937, neatly anticipating a major Bauhaus retrospective at the Royal Academy in 1968). By the time of its reappearance in the early 1980s, however, this condensing of the history of the modern into the early years of the twentieth century seemed somewhat myopic, and may well have prompted Joseph Rykwert to write *The First Moderns: The Architects of the Eighteenth Century* (1983), which put back the date of the advent of modern architecture to encompass not only the humanist emphasis on Reason that evolved into the Enlightenment, but also the mystic and hermetic philosophy that underpinned much of French Revolutionary architecture. Of course, such complex prehistories are glaringly absent from the Smithsons' bald narrative, whose austerity, as much as its reduced chronology, seems to suggest it was written in haste during an all-night *charette*.

Bypassing figures such as Paxton, Sullivan, Wright, Behrens, Mackintosh, Wagner, etc, etc, the Smithsons' selection appears informed, not so much by careful research, as the monographs and journals they had closer to hand – an archive they metaphorically unpacked into a personal archaeology and taxonomy of modernism, editing out all the tragedies, comedies and ambiguities of the movement's inherently more complex and often stumbling pre-heroic evolution. Their own rendering of this potted, edited and scripted history as a vast landscape of images seems to be a nod, conscious or not, to Aby Warburg's *Mnemosyne Atlas*, begun in 1927 – though rather than the high-watermark of modernism, the project mapped what Warburg described as 'the afterlife of antiquity', arranging more than 1,000 separate images, similarly culled from books, magazines and newspapers, across 40 wooden panels clad in black cloth. Another, perhaps more appropriate, precedent would cast the Smithsons as merely re-enacting the canonical essay, 'Unpacking My Library' (1930), written by Warburg's sometime confidante Walter Benjamin, where each book, each photograph, is ascribed the iconic status of a trophy and the collection as a whole becomes a means of self-validation, underpinning and prescribing the trajectory of the impassioned collector's existence.

Further echoes can be found in Benjamin's *Moscow Diary*, written over the previous decade, in which he describes 'heroic communism' in terms very much akin to the Smithsons' own 'heroic modernism', not least because it, too, was over by the 1930s. 'Today, other orders are in force than those of Lenin's time', Benjamin writes, 'now it is made clear to every communist that the revolutionary work of this hour is not conflict, not civil war, but canal construction, electrification and factory building. The revolutionary nature of true technology is emphasised ever more clearly.'

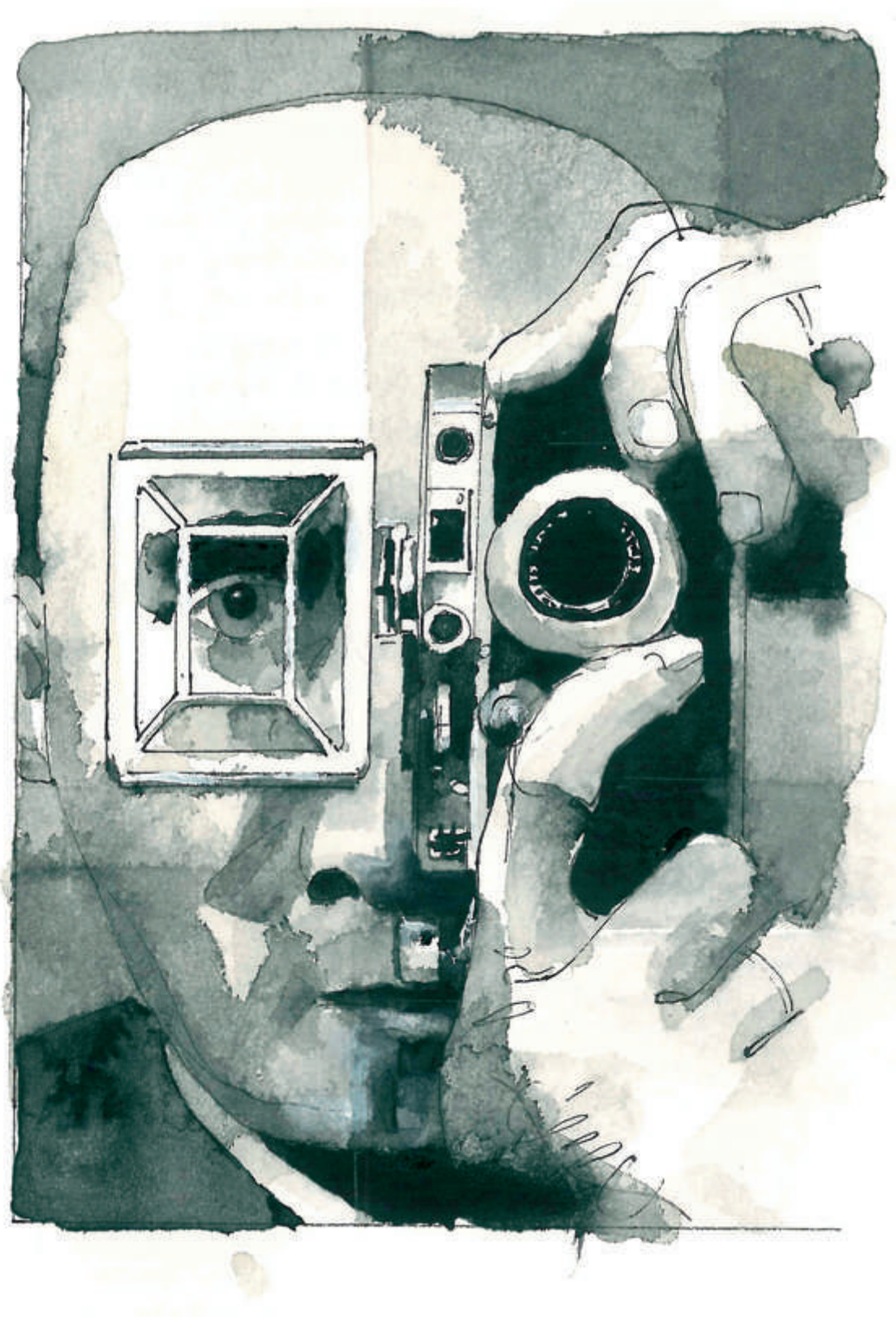
In Moscow Benjamin associated with Sergei Tretyakov, a Russian constructivist writer, playwright and special correspondent for *Pravda*. Tretyakov's works promoted a radical objectivity stripped to the bare narrative of things, a literary shearing that involved the removal of all the subjective irrationality of the nineteenth-century novel and, more generally, the mannerisms and idiosyncrasies of an entire bourgeois culture. In their place, his majestic bald head (photographed repeatedly by Alexander Rodchenko) somehow embodied the new socialist man, purged of any emotional or pathological baggage. At the height of his fame in the 1920s Tretyakov wrote agitprop with Vladimir Mayakovsky (nearly bald) and his plays were directed by Sergei Eisenstein (tremendously hirsute), before his fondness for foreign writers saw him arrested for espionage, dispatched to Butyrka prison in Moscow and sentenced to death (although he would fast-forward his execution by throwing himself down the prison steps). Tretyakov's operative aesthetic – the author-as-producer – was highly influential for Benjamin, as it was for Bertolt Brecht, another member of Moscow's German-speaking circle (and through Brecht, for the avant-garde East German theatre director Heiner Müller).



Frederika 'Friedl' Dicker (1898–1944)

Rejecting the classical 'psycho-biographical' drama, Tretyakov's last work proposed a biography of 'the thing', whose protagonists were imagined as wood, crops, coal, iron, cotton, paper and locomotives. As a modernist taxonomy, this neoplatonic list has echoes of the workshop courses at the Bauhaus – for metal, woodwork, textiles and glass – as well as the school's wider valorisation of the machine as both a means and a metaphor for production. This reduction of specific materials into their own subject area had been introduced into the Bauhaus curriculum through a compulsory preliminary course on colour, form, material and texture taught by Johannes Itten, perhaps the leading exponent of the Bauhaus boiled-egg look. Itten, Swiss and educated in Geneva and Bern, had set up his own small private art school in Vienna in 1916. Before tackling courses based around the line, the plane, the circle and the spiral, his students had first to warm up with some mental reflection and a few gymnastic exercises. Duly summoned to the Bauhaus by Walter Gropius in 1919, Itten relocated to Weimar and enrolled each of his 14 Viennese students with him.

Among this cohort was Franz Singer, also bald, who went on to become a distinguished architect, set designer and toy designer. Singer was a key member of the Viennese circle of artists and architects



Otto ‘Umbo’ Umbehr (1902–1980)

that gravitated around Adolf Loos and Hans Moller, but his *resumé* also includes a stint working in London in the 1930s as a design consultant for the John Lewis department store. Singer's girlfriend, Friedl Dicker, was another of Itten's 'disciples', and following an established Bauhaus pattern was in many ways more interesting than her male partner. Together with Georg Muche she played a fundamental role in establishing textile design at the school and was also heavily involved in both Lyonel Feininger's lithographic workshop and Lothar Schreyer's theatre troupe. In archival photographs she cuts a dash, sporting a head-hugging fashion accessory that also enabled the Weimar women to mimic Itten's hairlessness.

With his meditation and tantric exercises Itten became the anchorman for the mystic emphasis at the Weimar Bauhaus. As his colleague Lothar Schreyer wrote, 'When one day Itten declared that long hair was a sign of sin, his most enthusiastic disciples shaved their heads completely. And thus we went around Weimar.' The painter and choreographer Oskar Schlemmer describes this movement in more theological terms, writing in his diary on 14 July 1921 that 'Itten returned very enthusiastic from a Mazdaznan conference in Leipzig. The Bauhaus kitchen is introducing a Mazdaznan diet and will produce the new man. Itten contends he wants to turn the Bauhaus into a monastery.' Mazdaznan held that the earth should be restored to a garden where humanity could cooperate and converse with God. An esoteric synthesis of science, religion and philosophy, and like theosophy, a melting of Christian, Hindu and Zarathustrian traditions, its main proponent at the time was the Russian occultist Helena Blavatsky.



Peter Wilson,
Dance of the Bauhaus Vampires, 2015

Itten's teaching was also much influenced by the American John Dewey, who promoted 'learning by doing', an incidental teaching through informal association and a direct contact with things – especially with their characteristic and sensual impression (colour, shape, hardness, smell, taste). But it was Itten's parallel advocacy of an astral body, a mental body, a Buddhist body and an ethereal body that really induced the auratic cloud around his bald bonce. It all became too much for Gropius. As Schlemmer wrote later that same July, 'Itten and Gropius are duelling it out... Gropius wants work to mature through a contact with reality, painting and craft... Itten considers the contemplation of craft more important than the work itself ... progress vs introspection. Klee says next to nothing, Feininger talks about general feelings, Muche seconds Itten, Marcks seconds Gropius.'

Another Itten student, Otto Maximilian Umbehr, was so compelled by the spiritual redemption advocated by his art teacher that in 1923 he sent an ironic Mazdaznan letter to Walter Gropius, which led to his immediate expulsion from the school. He spent the next three years marginalised, living hand-to-mouth in Berlin, before his Bauhaus friend Paul Citroen took him in and gave him his first camera. Immediately energised, Umbehr reinvented himself under the new moniker Umbo and became Berlin's most prominent *Neue Sachlichkeit* photographer, producing portraits of the bohemian avant-garde in the spirit of the painterly works by his contemporaries Otto Dix, Max Beckmann, George Grosz and Christian Schad. Tragically, however, his photographs – like his hair – were lost, never to return, when his entire archive of over 60,000 prints and negatives was destroyed in an air raid in 1943. Today, one of the few remaining images by Umbo is a self-portrait taken after the war, in which he presents himself as a kind of cyborg, one eye framed by the rectangular viewfinder of his Leica, the other substituted entirely by its lens.

Somewhat predictably Itten's duel with Gropius did not go well, and in 1923 he too left the Bauhaus to set up his own art academy in Berlin. There, in addition to subsequent posts in Krefeld and Munich, he soon encountered the rising National Socialists – a foe even more formidable than Walter Gropius – who promptly shut down all of his teaching efforts. But the Nazis did at least accord Itten the honour of including his work in the 1937 *Entartete Kunst* (Degenerate Art) exhibition in Munich, which raised his profile enormously and gave him reason to retreat to his native Switzerland, settling in Zurich, where he became director of the Museum of Arts and Crafts in 1938 and then later, in 1949, of the Rietberg Museum for Non-European Art. In 1963 Itten – by then 75 and sporting silky grey hair (which would suggest his shaved head was merely a youthful affectation) – had published *Design and Form*, featuring student work from the Bauhaus and from his subsequent teaching. Many of the images appear in a soft smudgy charcoal style that in previous centuries would have been called *sfumato* (from *fumo*, smoke) – meaning, without lines or borders.

Oskar Schlemmer, the other great Bauhaus slaphead, had little time for Itten's mysticism, and instead deferred to a more artful



Oskar Schlemmer (1888–1943)

Gesamtkunstwerk expressed through a body–machine analogy. In a wartime diary entry as early as 1915 he even went so far as to define his idealised *Kunstfigur*: 'The square of the rib-cage, the circle of the abdomen, cylinder of the neck, cylinder of the arms and shins, spheres of the joints at the elbows, knees, armpits, ankles, spheres of the head, the eyes, triangle of the nose' – a 'new man' achieved through a rational derivation of proportions. Back in his hometown Stuttgart in 1919, Schlemmer was elected to 'the Council of Brain Workers' with the ambition of reforming the city's academy, not just through a new modern curriculum, but through his interest in scenography. As he wrote at the time:

They say that in Moscow the moderns are splashing whole quarters in colour, using blank walls and the sides of houses as surfaces on which to paint modern pictures – an artificial spring... I have a reputation in Stuttgart for being a modern painter ... with this vogue for modernism many days are sacrificed to visitors; especially architects... Gropius wrote me a very friendly letter from Weimar... I am becoming interested in dance, the fully plastic art of the human body, the geometry that applies to the surface of the dance floor.

Schlemmer would eventually realise this fully plastic art in his famous Triadic Ballet, which premiered in Stuttgart in September 1922 (with an audience largely composed of Bauhaus masters and students), and through its subsequent restaging at venues all across Germany celebrated the human body as the new artistic medium.

At the same time, the idea of reducing the body down to its own clearly delineated formal elements was also central to the dadaist ethos, as perhaps best illustrated in a 1920 watercolour by George Grosz titled *Daum Marries Her Pedantic Automaton George in May 1920, John Heartfield is Very Glad of It*, which depicts a coquettish bride on her wedding night looking over her shoulder to see that her husband (in this case, a self-portrait of the artist) has suddenly turned into a machine. Schlemmer's own hairlessness and somewhat robotic profile meant that he in turn appeared like the subject of a Grosz painting come to life. Such a modern transubstantiation clearly appealed to Gropius, who offered him a job at the Bauhaus. The mortal side of the man-machine that was Oskar Schlemmer entertained some doubts – 'Gropius has offered me a studio, but Weimar has its drawbacks, no place to swim' – but he nevertheless accepted the offer and over the following years oscillated between Weimar and Stuttgart, using the Bauhaus studios to design costumes for the Triadic Ballet.

Soon afterwards, the enlarged bald metallic heads worn by Schlemmer and his dancers became archetypal Bauhaus motifs, symbolising his successful exorcism of Itten's earlier cultish paradigm. After his mechanical figures performed at the 1922 Bauhaus Carnival, Schlemmer even noted that 'the Mazdaznan business has long since subsided'. One of the more interesting consequences of this succession was that the 'new man' was increasingly recast as the 'new woman', not least in Erich Consemüller's baldly erotic photograph of a woman (either Lis Beyer, or Ise Gropius wearing a skirt designed by Lis Beyer) seated in Marcel Breuer's Wassily chair while hiding behind one of Schlemmer's masks – an image that in many ways established the definitive Bauhaus emblem.

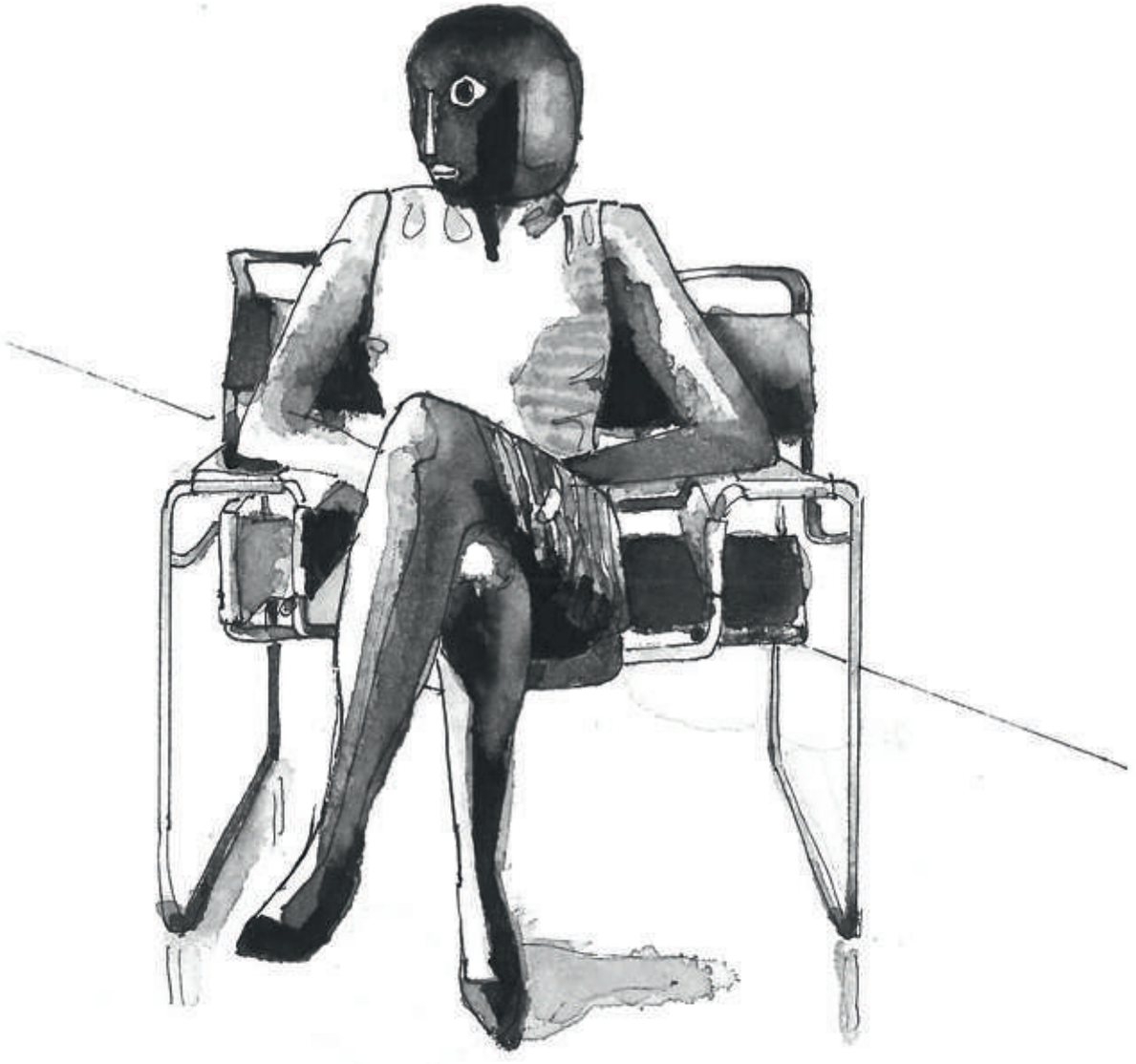


Josephine Baker (1906–1975)

But even an automaton-like human needed somewhere to live, and so it followed that the elucidation of a new kind of house – a living-machine – became a key theme in the school, with Schlemmer recalling 'students chipping and whittling away in the workshops', even though architecture itself was not formally part of the Weimar curriculum. In fact, Gropius was the only architect on the faculty, but according to Schlemmer he had little time for teaching and instead sat in his big office, exploiting the Bauhaus's growing reputation by raking in private commissions for factories and villas in Berlin. Schlemmer himself was less enthused by architectural practice, admitting in 1922 that 'I should not direct myself towards building houses, except the ideal house which my paintings imply and anticipate'. As it was, rampant hyper-inflation in Germany not only put a stop to the possibility of building, whether one liked it or not, but also, ironically, produced its own spatio-corporeal problem – when Schlemmer received his monthly Bauhaus salary of 50 million Deutschmarks he observed 'I can hardly sit down for the bundles of notes in my pocket'. But with the appointment of Itten's successor on the preliminary course, Wassily Kandinsky, architecture soon made way for more abstract studies in geometric form. Kandinsky announced his arrival in 1923 by gnomically declaring that the triangle is yellow, the circle is blue and the square red, which prompted Schlemmer to caricature a typical Bauhaus conversation:

Poelzig: *'The people need bread and movies.'*
Gropius: *'We have to clean up around here.'*
Kandinsky: *'The circle is blue.'*
Schlemmer: *'The circle is red.'*
Moholy: 'Vonderful.'

In 1924 the right-wing Thüringer Ordnungsbund party gained a majority in the local legislative assembly. The Bauhaus, long caught in the crossfire between Left and Right, immediately had its budget cut in half. The following spring, in March 1925, the regional government went even further and cancelled all of the school's teaching contracts. In response, Gropius formed an influential circle of 'Friends of the Bauhaus', including Albert Einstein. The cities of Mannheim, Frankfurt and Dessau stepped in with offers to take in



Lis Beyer (1900–1973)
or Ise Gropius (1897–1983)

the homeless modernists, and in the end the school chose Dessau – a small, bleak industrial city halfway between Magdeburg and Leipzig – largely because it was the only one of the three to be governed by the Social Democratic Party.

Schlemmer was optimistic about this move, seeing it as an opportunity to hold on to the best of the Bauhaus's students and teachers while at the same time dismantling Gropius's autocracy. A further benefit would be the prospect of uninhibited swimming in the Elbe. But on first seeing the houses Gropius had designed for the Bauhaus masters in 1925 he was shocked, imagining the local homeless poor staring at lordly artists sunning themselves on their flat (bald) roofs. However, with no alternative, the Schlemmers moved into their house at number 5 Burgkühnauerallee, with Paul Klee, the Kandinskys and Feininger as their new neighbours. Yet this somewhat gratuitous housing provision masked other budget cuts. Schlemmer's theatre workshop had to be greatly reduced: in 1926 his Triadic Ballet was performed to music by Paul Hindemith composed for a player piano – mechanical and stereotypical to match the mechanical body outlines of the doll-like dancers, who consisted of just one woman and two men performing 12 dances in 18 costumes (a dance of threesomes: ball/cube/pyramid; blue/red/yellow; form/colour/space). Schlemmer's own teaching course at the time was also reduced down to essentials. Titled *Der Mensch* (man, and everything related), it organised each component – the nude (students themselves modelled), figural drawing, art history, even hygiene – within a corporeal whole. At the same time, Schlemmer reported that the mayor of Dessau had withdrawn financing for the school's exuberant festivals, the last of which (signalling a paradigm shift towards the hirsute) was organised by Schlemmer himself on the theme of 'Noses and Beards' (reportedly Kandinsky had the best whiskers).

In 1927 Frau Schlemmer (Helena 'Tut' Tutein) and children departed for Ascona, leaving Oskar – now master of the Bauhaus theatre – with the upstairs studio, having had to cede the ground floor to Hannes Meyer and family (there was no alternative: the Meyers' bulky Swiss furniture would not fit up the stairs). 'An honest fellow', Schlemmer initially concluded of Meyer, who was tasked with setting up a Bauhaus architecture studio, 'Gropius can count himself lucky'. By January 1928, however, the sentiment had been revised: 'Hannes Meyer is very successful with the mayor … one cannot exclude the possibility that he will one day stab Gropius in the back'. One month later Gropius resigned ('Moholy is also leaving, Gropius's faithful drummer boy, also Breuer') and Meyer took over. Just a few months later Schlemmer wrote, 'I have never felt more alienated from the Bauhaus thanks to Meyer's total failure as a director'.



Gabriel Guevrekian (1892–1970)

These perceived failures meant that Schlemmer did not commit to teaching at the Bauhaus for the 1928–29 academic year, but instead retreated into his beloved school theatre troupe, for which he organised a year-long national tour. Towards the end of this stint, in June 1929, Schlemmer found himself in Basel, watching Josephine Baker flirt with her audience: 'She apparently likes bald heads for she adorned mine with one of her pearls which I have kept as a talisman', he gushed, still enthralled by the experience. Though not lacking in terms of coiffure, Baker wore her own hair like a skullcap – cut short with Medusa-like curls smoothed down and plastered with egg whites for stiffness and sheen. When she first debuted *La Revue nègre* at the Théâtre des Champs-Elysées in 1925, every jaw in the audience dropped. 'Her hairstyle had been done like a Greek boy's', recalled the socialite and future *Vogue* editor Diana Vreeland, 'and pressed into her flat black curls were white silk butterflies. She had the chic of Gay Paree.' Her closing routine – the banana dance, which she performed topless – soon became legendary. 'I wasn't really naked,' Baker said. 'I simply didn't have any clothes on.' For her admirers and imitators Baker later developed her own hair pomade – Bakerfix – which came in a glass jar adorned with her image.

After the completion of his theatre tour in July 1929 Schlemmer left the Bauhaus and took up a professorship at the state academy of art in Breslau. And so he was already away from Dessau when he heard in 1930 that Hannes Meyer had been fired by the city council for so-called 'communist practices' (an accusation that Meyer promptly substantiated by whisking his students off to Russia, where they planned the new satellite city of Nishnyi-Kurinsk). At the same time, Schlemmer's own paintings and wall reliefs, which had continued to adorn the school's studios (and which had been exhibited in the famous Bauhaus show in Weimar in 1923), were destroyed by the local Nazi party as 'degenerate art'. The situation in Germany was deteriorating rapidly, and by 1933 Schlemmer himself was fired from his teaching post in Berlin. Five years later, in 1938, while his works were being lauded at a Bauhaus exhibition at the Museum of Modern Art in New York, Schlemmer was working in a hardware shop in Stuttgart, selling painting supplies. He died in 1943, aged just 54, having spent the previous two years painting camouflage on army barracks as his contribution to the German war effort. The survival of his wife Tut, however, meant that his extensive body of writing (both letters and diaries) was preserved. Published in a collected anthology in 1972, it offers perhaps the single best first-hand account of the Bauhaus.

Following Meyer's sacking, Mies van der Rohe was appointed the new director of the Bauhaus and soon afterwards the school moved to Berlin. But Schlemmer's resignation in 1929 really marked the end of the Bauhaus party – not just coinciding with the year proclaimed by



Isamu Noguchi,
bust of Richard Buckminster Fuller, 1932

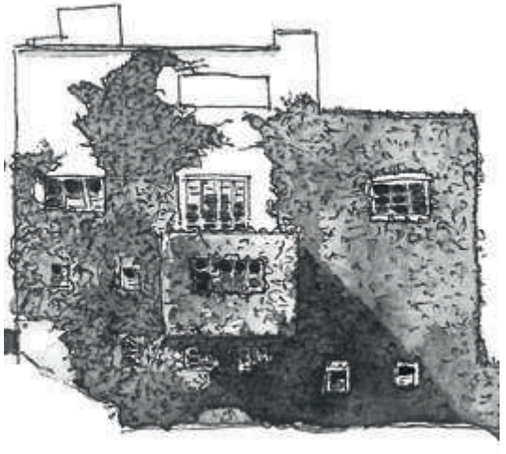
the Smithsons as the death of heroic modernism, but also marking the beginning of Hitler's rise to power. In fact, despite the Smithsons' ostensibly exact 14-year time frame, the sweep of images in *The Heroic Period of Modern Architecture* actually extends as far as 1933, an expedient that allowed for the inclusion of Mies's Tugendhat House (1930), Pierre Chareau's Maison de Verre (1931) and Le Corbusier's Immeuble 'Clarté' (1932). 1933 was also the year the Nazi regime finally closed the Bauhaus; its architecture course having run from 1927 to 1933, just six years.



The significance placed on the Bauhaus is therefore in inverse proportion to its years of operation. And yet, as much as its success shows what can be accomplished in an incredibly compressed period of time, the heroic accounts of the school are also a project in themselves, a highly professional media message disseminated largely by Bauhaus teachers in exile – by Gropius, László Moholy-Nagy, Josef Albers, Herbert Bayer, Marcel Breuer and Ludwig Hilberseimer. Thus the myth of the Bauhaus (the German facet of modernism's heroic period) was a direct consequence of the Bauhaus diaspora, not only in America, with Gropius et al, but also with Iwao Yamawaki's return to Japan, Munio Weinreb and Arieh Sharon in Palestine, Hannes Meyer in Russia and Mexico, and Ludwig Hirschfeld Mack in England and then Australia. Perhaps predictably, Bauhaus graduates were less welcome in 1930s Germany, except perhaps for Ernst Neufert, who had assisted Gropius in the construction of the Dessau building. Though he became very wealthy later in life with the international success of his *Architectural Standards Manual*, Neufert's career was set in motion with factory commissions from Albert Speer, who accepted Bauhaus functionalism as an efficient basis for the standardisation of industrial buildings. In the same spirit, and yet omitted from most architectural histories, are the Bauhaus graduates Franz Ehrlich, who designed the entrance gate at Buchenwald concentration camp, with its haunting inscription '*Jedem das Seine*' ('To Each His Own'), and Fritz Ertl (Nazi Party number 6418769), a member of the SS and architect of the Auschwitz-Birkenau concentration camp (where Ertl's fellow student Friedl Dicker was gassed in October 1944). As Jean-Louis Cohen has pointed out in *Architecture in Uniform*, the Auschwitz huts compressed the *Existenzminimum* beyond all imaginable limits, even if Ertl claimed at his trial that he had thought his windowless bald barracks were for animals.

The end of the Bauhaus also marks the emergence of another collective, for already in 1928 the first International Congress of Modern Architecture (CIAM) had convened at La Sarraz, Switzerland. A group photograph shows delegates, from the surrealist Max Ernst to the Dutch hardliners Mart Stam and Gerrit Rietveld, a dapper Sigfried Giedion and a scowling Josef Frank, arranged like angels in a medieval tableau around the central and focusing bald head of Gabriel Guevrekian – modern architecture's Yul Brynner, who despite his much-remarked on affability, always somehow presented himself as a gangster boss, dark-browed, wide-lapelled, double-breasted. A more self-consciously Lacanian decoding of the same image, however, would probably identify the half-obscured visage of Le Corbusier as the real (geometrical), imaginary and symbolic centre.

CIAM, of course, would go on to hold a succession of modernist architectural congresses all across Europe (culminating in Otterlo, Holland, in 1959 and the Smithsons' own heroic arrival), but its initiation was paralleled by the passing of the modernist baton across the Atlantic. Gropius arrived in the US, via England, in 1937 and took up a professorship at Harvard; the following year Mies, too, settled permanently in Chicago and his own teaching at the Illinois Institute of Technology. But both had emigrated in the wake of Josef and Anni Albers, who moved from the dissolved Bauhaus to the newly founded Black Mountain College in 1933. In North Carolina they found themselves within a liberal arts venue once again propagating Dewey's principles. And in the spirit of these self-same informal associations, it was there that Richard Buckminster Fuller encountered the composer John Cage and the choreographer Merce Cunningham and where, through Albers' teaching, an American abstraction emerged (Willem de Kooning, Robert Rauschenberg, Cy Twombly). In 1932 Isamu Noguchi, who had previously assisted Fuller with a model of his Dymaxion car, would even produce a new emblem to this moment, sculpting a bust of Buckminster Fuller as a blind and bald chromium-plated effigy, a home-grown American modernist idol.



Adolf Loos, Villa Müller, Prague, 1930

Today, in the manner of Itten, what was once bald now seems to have undergone a miraculous form of regrowth, evidenced best by Adolf Loos's Villa Müller (1930) in Prague. Designed for František Müller, who ran a local construction company specialising in reinforced concrete, the building celebrated the pure, unadorned material qualities of Müller's signature concrete in all it rawness. After the death of Müller's wife, Milada, the house was taken over by the city as an institute of Marxist-Leninism, but since the fall of communism it has been in the possession of the City of Prague Museum, who seem to have indulged in a softening of its material associations, not least in the way they have let



Max Schreck in F W Murnau's
Nosferatu, 1922



Le Corbusier & Mies van der Rohe, Stuttgart, 1926

the house's east facade become enshrouded beneath a thick covering of ivy, a kind of architectural toupee that would have displeased both its architect and client no end.

In all other respects, the heroic project of modernism's baldness still echoes as a compulsive and reflexive form of knowledge, and one that now, as part of a more inclusive historiography, unfolds in parallel with other modernisms. For instance, in F W Murnau's expressionist cinematic masterpiece, *Nosferatu* (1922), a fiendishly bald Max Schreck, in the title role, is simultaneously terrifying and terrified, although his own shock is perhaps attributable to the sudden realisation that his left hand will be adopted by Le Corbusier in Chandigarh.

Both Le Corbusier and Mies concealed their creeping baldness beneath a felt hat – just think of the famous photograph of their 1926 stroll around the Stuttgart Weissenhofsiedlung, an image that adorns the cover of the Smithsons' *The Heroic Period of Modern Architecture*. But today architectural baldness is somehow legitimised as a kind of minimalism, promoted in its heroic guise through the sullen-faced confidence with which Jean Nouvel, Jacques Herzog or Rem Koolhaas peer out at us from their *El Croquis* covers, and in its more everyday guise by the procedural germination of the diagram, by the chrome-plated Bauhaus chair as museum piece, and by Ikea (whose designed 'furniture for all' has a three-year use-by date).

According to Heraclitus 'one cannot step into the same river twice', and yet today the term 'modernism noir' has apparently come to embody a recycling of the formal clarity of high modernism. It is a category proposed by the art historian Gerd Blum in his discussion of Harald F Müller's *First Cuts*, an artwork installed in Annette Gigon and Mike Guyer's Prime Tower, Zurich's tallest building. Here Müller has installed 18 photographic appropriations in dot-matrix format (a form of balding), that oscillate between figuration and abstraction, between irony and melancholy, largely through their nostalgia for progress (the Eiffel Tower, moon landing, Philips Pavilion, Silver Arrows racing-car, Concord, CERN, etc). For Blum and for Müller, modernism noir admires all of the evidences and formal clarity of heroic modernism and yet rejects its totalitarianism. Instead it aspires to a contextualisation of pure form – to the new, to the place and to the bald.

Jean Nouvel (1945–), Jacques Herzog (1950–) and Rem Koolhaas (1944–)
All drawings © Peter Wilson



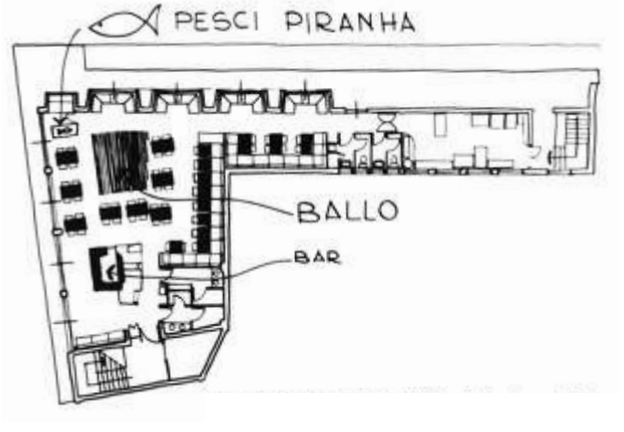
Nightclubbing

Joseph Rykwert



As recounted to the editor





Above: William Fawkes, 'Flook', *Daily Express*, 11 September 1965
Below: sketched plan of Wips, from *Domus*, no 414, 1964

I once designed a nightclub, you know. It was in 1963, just after the Beatles' first LP. My client was a man named Timothy Willoughby de Eresby, the son of Gilbert James Heathcote-Drummond-Willoughby – which makes me think of A A Milne's 'James James / Morrison Morrison / Weatherby George Dupree / Took great / Care of his mother / Though he was only three.' Gilbert Heathcote-Drummond-Willoughby was the 3rd Earl of Ancaster and the 27th Baron of Aveland, a Conservative MP for Rutland and Stamford, and then later a member of the House of Lords. He was married to the daughter of Nancy Astor. The family estate was Vanbrugh's sternly Doric Grimsthorpe Castle in Lincolnshire. And so Timothy Willoughby de Eresby came from very aristocratic stock. I met him through some mutual friends – a group of artists who were living in the Soane house, in the grace-and-favour top-floor flat at number 13 Lincoln's Inn Fields, which the museum director, John Summerson, would often sublet. During one of their parties I was introduced to Timothy and soon afterwards he offered me the commission.

At that time I was at the Royal College of Art, where I was the college librarian and a tutor in architectural history. I had graduated from the AA in 1947, alongside Steven Gardiner and Paffard Keatinge-Clay, and then worked as an architect for Maxwell Fry & Jane Drew on a number of West African projects, as well as with Richard Sheppard and also with Ove Arup. In the evenings, working on my own, I entered a number of architectural competitions – including the Coventry Cathedral competition – before securing more teaching work at Hammersmith School of Arts & Crafts and then at the Ulm School of Design. Back in London at the RCA I wasn't sure whether I wanted to be an architect or an academic, and so for a time I did both, lecturing in the college and also taking on a few design commissions. I had a drawing board set up in my RCA office. Whenever a project came along I would call Peter Eisenman at Cambridge and ask him to recommend a student helper. Peter was then doing his PhD with Colin Rowe, but his own teaching meant he always had a good supply of students. I seem to remember working with two or three assistants he had sent, but the best of them was Mark Livingston, and it was with Mark that I did the nightclub.

The club itself was called Wips – a private members' bar and revue – and was located on the top floor of a rather ordinary, international style block on Lisle Street, just off Leicester Square, above the Prince Charles cinema. Willoughby de Eresby was working with a partner, Nicholas Luard, who owned the famous Establishment Club on Greek Street, which had opened a couple of years earlier. Luard was known as Nicholas 'Lewd' and was equally well connected – friend of Peter Cook, with whom he owned *Private Eye* magazine, which meant he was the resident 'Lord Gnome'. It was said that he once threatened to sue a newspaper for having written that he had gone to Eton (it was Winchester). Willoughby de Eresby *had* gone to Eton. And so the two of them were young, wealthy, very sociable men, tapping into London's thriving club scene.

Previous and overleaf:
interior views of Wips club, London, 1963
© Joseph Rykwert archive

I remember one occasion when Timothy came to visit me at the RCA to discuss the commission. We had lunch in the senior common room. He brought along his lover, the American surrealist artist Harold Stevenson, who earlier that year had hung a four-storey painting of the Spanish bullfighter El Cordobés from the Eiffel Tower. He'd also exhibited, at Galerie Iris Clert in Paris, a vast 3m × 15m nude, *The New Adam*, which he dedicated to Timothy. At our lunch both of them wore orchids in their lapels. Timothy was extremely handsome. His sister Jane was also very beautiful. She was one of six maids of honour at the coronation of Queen Elizabeth II. I met her a number of times. At one of her dinner parties I even drank champagne out of her shoe, which enraged Lucian Freud, who was also there and also very much taken with Jane. He punched me in the face. I punched him back. Lucian was somehow both very aggressive and rather puny at the same time. It was my first and last fistfight.

My design for the club featured custom tables and lighting fixtures, chairs by Harry Bertoia and fur-upholstered walls. I had hoped for real fur, but this would have never passed fire regulations and so I settled for artificial fur instead. But still, it looked very realistic. I wanted the clientele to provide the colour, and so the interior palette was very muted – the fur walls and stepped ceiling were pale grey, the carpet a slightly darker grey, the furniture mostly satin chrome with black upholstery and the table tops all brilliant white. The only other colour was brass, which lined the walls of the bar and cloakroom. Its hard shininess contrasted nicely with the softness of the fur. Along one wall I also had installed a large aquarium filled with piranhas, which came from a local pet shop and which was parodied at the time in a cartoon in the *Daily Express*, but was more appreciably described as like a stalagmite rising from the floor in a piece published in *Domus*. I even designed the nightclub's logo, with lettering inspired by my friend, the artist and typographer Edward Wright, which I also had etched into the glass ash trays. The opening night was a great success. Lots of stars were there, among them Mick Jagger. Christine Keeler even pulled up in a black chauffeur-driven Daimler, but because this was just before news of the Profumo Affair broke the doorman didn't recognise her and so turned her away.

The following week I sent Timothy a bill for my design work, but by then he had already flown to Nice to go sailing with a friend in Cap Ferrat. Somewhere off the coast of Corsica he went missing at sea. His body was never found. On 19 August 1963 he was pronounced dead, assumed drowned. Because he was the only son of Lord Willoughby of Eresby, his death also signified the end of the hereditary Ancaster earldom, which finally died with his father in 1983.

My own career as a designer survived a little longer. I continued to work with Mark on a municipal hall in Dorking, Surrey, on an interior for Ben Weinreb's bookshop on Great Russell Street and on a mixed-use housing development, Inner Court, on Old Church Street in Chelsea. This housing scheme is still standing, and has recently even been reviewed for listing. Wips club, in contrast, only lasted a few years. After Timothy's death it was sold and renamed first the Ad Lib club – where John Lennon and George Harrison first took LSD – later The Revolution and then finally Tram. Five or six years later it was destroyed in a fire. The rumour was that the owner started it deliberately, an insurance job. But by then I was in Colchester, running the masters course in the history and theory of architecture at the University of Essex and writing *On Adam's House in Paradise*. I never did get paid for Wips.



Kate Macintosh *in conversation with* Elain Harwood



View of Dawson's Heights from the south, *The Architects' Journal*, 25 April 1973
© Sam Lambert / About The Image

It was back in 2007 that I tracked down the architect George Finch to talk about his work for the London Borough of Lambeth and discovered that his life-work partner was Kate Macintosh. Her own block of flats, an imposing citadel on a strange South London hilltop called Dawson's Heights, had intrigued me for many years. We spent a magical afternoon in the office they had built for themselves in the garden behind their early Victorian terraced house in Winchester, where George talked for so long there was barely time to interview Kate over tea as dusk fell.

A few months later I met the filmmaker Tom Cordell, who was looking for architects of the 1960s for his project *Utopia London*. It was obvious that he should interview George and Kate, whose work encompassed all he was trying to convey about the impact of the welfare state on postwar London. Tom provided the perfect vehicle for them to talk passionately about their beliefs in building a better city for ordinary people, particularly in the realm of public housing. 'Everybody's important', says George in the film, expressing the conviction that he and Kate wanted to build good housing, not simply accommodating the most unfortunate at the least cost. Not only did they contribute the most memorable interviews, but the film also featured many drawings and photographs from their personal archives.

Utopia London did much to advance Kate and George's architectural reputations. Dawson's Heights was turned down for listing by the Department for Culture, Media and Sport against the advice of English Heritage (now Historic England), but Kate's housing for the elderly and disabled in Streatham, and George's Brixton Recreation Centre are now rightly listed. George sadly died in 2013, but Kate goes from strength to strength in her campaigns to preserve the buildings she believes in and for energy conservation. It was a treat to interview her properly at last, this time at the long dining table in her home, with photographs and articles about her work spread before us, and with Kate bobbing up and down to feed me coffee and biscuits as I started to flag – something she never seems to do.

Kate was born in Rotherham but grew up and studied architecture in Edinburgh. In the early 1960s she was one of the first women architects from Britain to work extensively abroad, and returned to London intending only to complete her architectural qualifications. She is most proud of her first buildings, for the London boroughs of Southwark and Lambeth, though she worked for many years for East Sussex County Council in Lewes, chosen when she thought she might have to bring up her son as a single parent, and more happily for Hampshire County Council. At the same time she campaigned extensively for Architects for Peace, co-ordinated an exhibition on women in architecture at the RIBA (in 1983) and remains an activist on local issues in her adopted city of Winchester.
—Elain Harwood

EH *Kate, could we begin by talking about your wider family? I read somewhere that there are a number of other architects and engineers in the Macintosh family, who I assume had their origins in Scotland.*

KM The Scottish side of my family extends back over many generations, but I only know as far back as my great-grandfather, who grew up on a small croft in Ardersier, just outside Inverness. It's just a pile of old stones now. The farm was never large enough to sustain him and his six brothers and sisters, and so he moved south to London, where he married a buyer for Selfridges and set up a successful haberdashery business. My grandfather, Hugh Macintosh, was one of four children and must have shown some talent and interest in building and drawing. He got himself into the apprenticeship system and it spun off from there. I only really met him twice, but growing up I was always conscious of this ancestry and the idea that a notable career could come out of humble beginnings.

EH *What about your father?*

KM My father, Ronald Hugh Macintosh, was expected to go into the family's architectural firm, but I think all the schmoozing you had to do stuck in his craw so he decided against it. Instead he trained at night school to be a civil engineer, leaving architecture to his younger brother. My father had a very sensitive social conscience. He was especially indignant about the Great Depression in the late 1920s and 1930s and the hunger marches he witnessed on his daily commute. So he became a socialist and resolved to work in local government. He found a position with the Manchester city engineers, probably attracted by the history of radicalism in the city. This is also where he met my mother, who was an equally compelling figure. She had spent eight years in an orphanage while her own mother received treatment for tuberculosis. The family was too poor for her to continue her education so she went straight into work. She met my father at a social for the Spanish International Brigade. It was a lightning romance. They were married and he got a promotion by transferring to Rotherham, which is where I was born in 1937.

EH *What was your early childhood like?*

KM When I was three we moved to Nantwich in Cheshire, and by then the war had started. As an engineer my father was in a protected occupation and therefore wasn't called up, but when Hitler invaded Russia he joined the RAF, initially based at the Air Ministry in Stansted, working on a model to test the bouncing bombs for the Dambusters' Operation Chastise. He was eventually posted to China to construct airfields, but before he left we went on a family break to a lovely hotel in the Lake District. I remember he gave me two gifts: one was a booklet for making three-dimensional animals out of sheets of paper, the other was a little illustrated history of architectural styles by Frederick Gibberd, *The Architecture of England: From Norman Times to the Present Day* – I can still picture the illustrations even now.

EH *And so it was just your mother looking after you and your brother?*

KM Yes, and by then she was pregnant with child number three. To me, at least, it seemed to be a strangely liberating moment to be a woman, even within the constraints of war. She was on her own, relatively secure financially, and the only men that were around were fairly aged. It all seemed quite carefree. My mother also had no worries at all about us wandering off, and so that's what we did each day, exploring the town and surrounding fields.

EH *But didn't the family wander back up to Edinburgh?*

KM That was when my father came back from the war in 1946. He'd always had this yearning to go back to Scotland and applied for a job as deputy chief engineer with the Scottish Special Housing Association. I can remember him coming back from the interview, eulogising about what a splendid city Edinburgh was: the countryside came right into the heart of the city, and he had seen an urban fisherman casting his line into the Waters of Leith. It even had a castle! Of course, I was nervous about being uprooted and losing all my friends, but it seemed like the right time to be moving from a very small town to somewhere that offered more opportunity. So in the middle of the coldest recorded winter in 30 years we moved to Scotland. I can remember sitting in the car almost weeping with cold. Even worse, our removal lorry got stuck in a snowdrift, meaning we had to lodge for a time with an elderly landlady in her top-floor flat. That winter there was a national miners' strike and fuel was rationed. We had a nub of coal the size of a walnut to keep the fire going. When the snow melted we were able to move into a house at number 2 Eastcastle Road. It was a huge Victorian villa that my father had bought together with a banker. Our family took the ground floor and they had the upper floor. The rooms had 13ft ceilings, but there was no central heating. I can remember being told, after coming in from a walk on the hills, 'If you feel cold, just jump up and down.'

EH *Where did you go to school?*

KM Initially I went to the local council-run school in Bruntsfield, where the teaching was heavily reliant on corporal punishment. We had to learn to spell ten new words a night, which we were quizzed on the next day. If you made more than three mistakes you would get the strap. I've never been a very good speller, and though I never made the critical three mistakes I lived in fear of being punished. My father wrote an angry letter to the head, who was completely unsympathetic. So my parents, after some soul searching, pulled me out and enrolled me at the Steiner school located in a large Victorian mansion just around the corner from our home. There the whole atmosphere was much more relaxed and I was immediately much happier.

EH *They were soul searching because it challenged your parents' strong socialist ideology?*

KM The Steiner model believes that every child comes into the world with a unique gift. If you nourish this gift, like a plant, then it will realise its full potential and the world will be a better place. As far as my mother and father were concerned, this was a lot of self-indulgent nonsense – for them, a socialist ethos meant you had to suppress your individuality and contribute to the group effort. But what they did find appealing about the Steiner system was that it encouraged cooperation rather than competition, and also that it tried to relate subjects to one another rather than just fencing them off.

EH *So with your home life and your school life you have these two branches going off in different directions. It seems clear to me now how this might have influenced your work as an architect, but how did they impact your decision to go into architecture in the first place?*

KM When it came to deciding what direction to take I knew I wanted to pursue something that would allow me to use my skills in both the sciences and the arts, but I also wanted to do something that was socially useful. I discussed this with my father, who by this time was head of the Scottish Special Housing Direct Labour Organisation, the only labour organisation in the country to competitively tender for work and be successful. He suggested architecture, and for a man of his generation I think this was pretty far-sighted. Although he had taken me as a teenager to building sites, it had never occurred to me that architecture was a profession open to women. But even as he said it the idea clicked. I didn't even think to shop around and investigate different schools. Instead I applied to Edinburgh College of Art, now part of the University of Edinburgh.

EH *And did you take to it as fast as you did with your Steiner school?*

KM I must admit I didn't particularly enjoy the first year. During the course of the year Robert Matthew, who was famous as the former chief architect to the London County Council, the largest architect's office in the world, resigned as head of the school, having had enough of the college principal, a horribly petty-minded egoist called Robert Lyon (of Pitmen Painters fame), who resented him and started interfering with his staff appointments, which meant that Matthew promptly marched

Opposite and overleaf: assorted photographs of Kate Macintosh from her family album
© Kate Macintosh archive



































up the hill to the University of Edinburgh and set up a rival course. And so I just missed him. I also missed the incoming stream of ex-servicemen, which must have been an invigorating period because they knew what they wanted and also where they were going. The new head of school was Ralph Cowan, who was as charismatic as a turnip. His lectures were deeply soporific. You got the impression that even he was about to fall asleep.

EH *Were there many other women on your course?*

KM I was one of only two, in a year of 30 men, many of whom had done national service and had experience with technical drawing or working in an office. I had never wielded a drawing pen or T-square in my life, and therefore struggled with the curriculum, which was almost completely Beaux-Arts. I can remember trying to draw the *entasis* on the facade of the Parthenon using my grandfather's bow-type drawing pen. It was not an especially distinguished year for me as a student.

EH *Didn't they teach draftsmanship?*

KM We learned classical studies, Trajan lettering, sciagraphy and perspective, which I at least knew from school, and we had one or two Bauhaus-y things, which Matthew had probably introduced and which I enjoyed much more. The second year turned out to be much more about drawing, with some lectures in building construction and technical studies. They were also teaching what seemed to me like very peripheral subjects: the presentation and construction of buildings was entirely based on traditional forms, which was only useful if you were going into conservation. Nobody talked about design theory.

EH *So, putting aside classical columns, there was no discussion about how things might look?*

KM There was a sort of void at the centre of the teaching. Albert Richardson's *The Art of Architecture* was the gospel, the only book we were encouraged to refer to. It set out certain aesthetic rules – like avoiding duality and having a dominant feature – but that was it. All of the tutors operated with the same kind of myopia. But in a way, we benefited from this, because it meant we had to teach each other. In the second year I dated a chap two years ahead of me who encouraged me to look at Corb. The school had quite a good library, so I began to educate myself, and I would discuss what I was reading and designing with him. As a consequence, the staff accused me of allowing my boyfriend to do my work for me. And so I found myself in a no-win situation: either I flounder around on my own with no tuition and confirm the tutors' suspicions that women are a dead-loss, or I collaborate and discuss things with someone and get accused of stealing their ideas. I soon realised that there was no way I could prove that the work was authentically my own unless I did it all myself. The experience produced a knock-on effect because my whole professional life I've been the kind of 'cat who walks by herself'. I just couldn't bear the idea that nobody would know what I've actually done.

EH *Do you think this is a common experience for women architects?*

KM It's probably fading away now because more women are teaching and working as heads of school. But at that time there were members of staff who would take me to one side and say, 'Miss Macintosh, in our experience women don't stay the course. They get married, they have babies and they don't practise.' They were essentially saying, 'Don't waste our time.' On another occasion I had produced an exploratory design influenced by early Corb before he got into rough concrete. The plumbing was all over the place, but it was interesting. In my one-on-one crit – or rather, there were two members of staff to one student, keeping you strictly in the minority – one of the tutors, a fellow named Carnegie who I remember to this day, said to me: 'Miss Macintosh, we find that young lady students are very impractical. Have you thought about doing interior design?'

EH *Weren't you furious?*

KM I was enraged. But I had enough confidence then to already think, 'I'll bloody show you, mate.'

EH *Did you find that sexism also carried through into the student cohort?*

KM By then the only other woman on the course had dropped out, so I really was on my own. Most of the male students had come out of Edinburgh's Merchant Company Schools, which were single-sex and heavily militarised, and therefore they had no idea how to relate to a woman. Coming from a co-ed, relaxed day school, this added to my sense of isolation. However, I got on well with a chap whose father was the curator of the ceramics section of the National Museum of Scotland, another more mature student and a nice Indian guy. Alan Balfour was also in my year – he became head of the AA in the 1990s. But the general atmosphere was that as a woman you were a sort of foreign body – 'Can't we excrete you somehow?'

EH *Did things get better?*

KM They did. After the second year I had a wonderful holiday with friends from the Steiner school. We went to Italy, and from there I went on to Stuttgart. An architect/engineer named Ludwig Hilmar Kresse, who had done some consultancy work for my father in Scotland, very kindly agreed that I could work for a short time at his firm. I stayed in his house and I fiddled around (I wouldn't say I worked) with some drafting in his office, which was made up of a wonderful bunch of people – so friendly and relaxed and jolly and nice. It was just within walking distance of the Weissenhofsiedlung. And although it wasn't in a terribly good state then – I think the only house that still looked good was Corb's – seeing it was probably my first experience of real modern architecture. It was exhilarating. Afterwards I got the train to Berlin to see the Hansaviertel *Interbau* exhibition, so when I headed back to Edinburgh I'd got a good deal more under my belt and things were looking up. After my third year I did a year out in Robert Matthew's office. I couldn't have chosen better in Edinburgh because Matthew had long been a promoter of women, and there were women in the practice who were qualified architects. The whole atmosphere was really encouraging. I was working on his scheme for the Hutchesontown B Gorbals redevelopment. The crack designer was John Richardson, who was ex-AA and went on to do the Commonwealth Pool and Stirling University. His wife, Margaret, was also in the office, and she had worked at the LCC. She gave me a letter of introduction to a former colleague of hers. Entering the fourth year after this kind of experience, I really found my feet and began to enjoy myself. By the fifth year, encouraged by a tutor called Peter Whiston, I discovered Aalto, and things continued to look up.

EH *Did you go and see any of his buildings?*

KM I did, but only later.

EH *I wonder how much of his work was published and known at the time?*

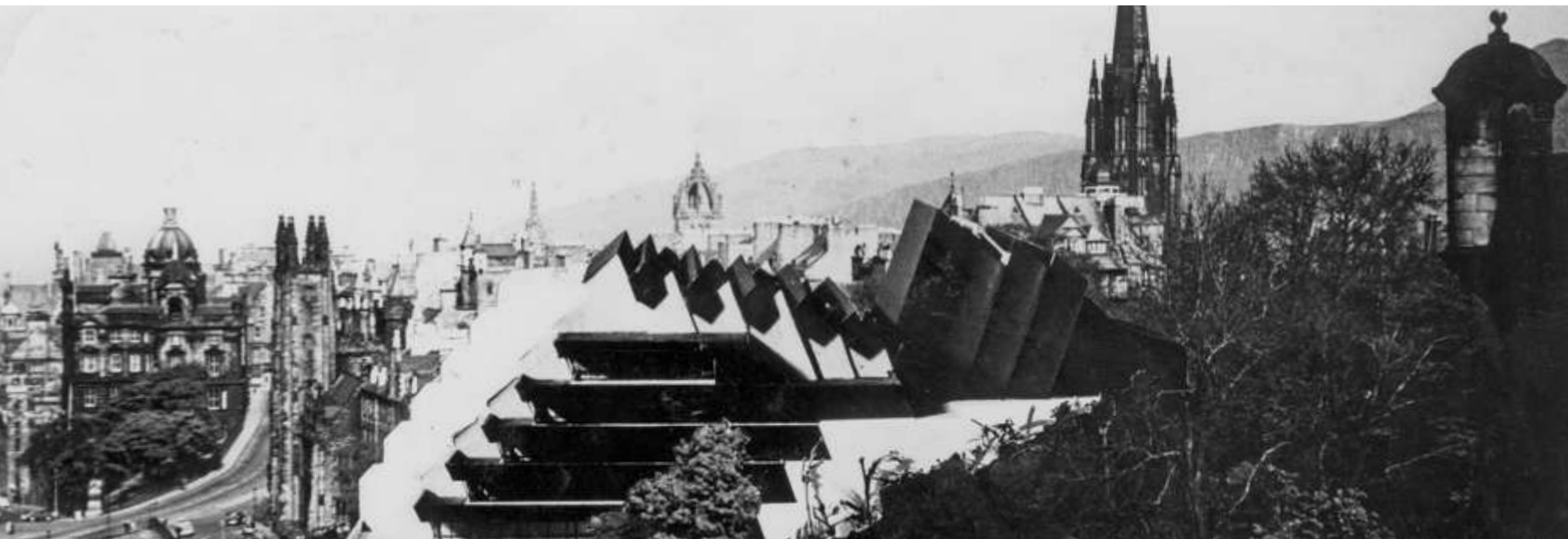
KM There was only one book on him in the library, but as soon as I discovered Aalto I felt the grab. At the school I remember the other influence was Denys Lasdun, who came up and gave perhaps the only memorable lecture we had. He introduced his talk by saying, 'Of course, Edinburgh is the archetypal city. It is really a very perfect example'. I immediately respected him for that. After the fourth year I went to work for the LCC – a group leader from the council had come to the school to recruit young designers. It was actually when I was at the LCC that I saw my first Lasdun building – this must have been 1959 and late one afternoon someone came into the office and started waxing lyrical about his Green Park flats, and so I duly hiked off to go and see them.

EH *What were you working on at the LCC?*

KM It wasn't so much what I was working on, as the people I was working with: Hugh Morris, who was about to leave to do the CLASP system for York University, and his wife Beeban; Martin Richardson and Philip Bottomley, who at that time was working on a very sculptural pile-up of housing which I think of now as a kind of a precursor to Moshe Safdie's Habitat in Montreal. I also went to see the Alton East estate in Roehampton, as one did, and was duly impressed, but I missed Rosemary Stjernstedt, who was probably on holiday, as was George Finch.







EH *Coming back into your fifth year all of this must have been a huge influence?*

KM I was influenced more by London, which just seemed to be the place where things were really happening. But the LCC approach to housing did inform the way I was looking at Edinburgh, which was then plagued by sprawl. This prompted me, together with another ex-Steiner pupil named Adrian Stungo, to stage an exhibition of LCC projects, primarily Roehampton, in the concourse of the now closed Princes Street station. We printed posters criticising the housing situation and the LCC architects donated us photographs. As soon as they went up, the railway people were asking us to take them down. We came to a compromise and the exhibition stayed up for a week.

EH *But also in your fifth year it seemed you were doing something that, at least on paper, seems to have influenced your later work for Southwark council?*

KM Oh yes, my thesis, a totally preposterous project. It was an opera house for Edinburgh, which only entailed knocking down a grade-I listed building where my year tutor, James Dunbar-Nasmith, lived. Luckily he didn't hold it against me.

EH *From the images you have shown me it looks a little bit like Dawson's Heights. What made you think of doing an opera house?*

KM Edinburgh had been talking about the need for a purpose-built opera house, particularly for festival productions, but they were seeking a deal with a developer who was proposing to work with William Kininmonth, an architect of little integrity in my view. So one of my aims was to raise ambitions. I received a small bursary to visit some opera houses in Europe, despite the fact that I absolutely cannot stand Wagner. When I came back I decided to design a huge, 2000-seat auditorium, and based the project on the German principle that you must have the equivalent area at either side of the stage – a feat that was very rarely attained in British theatres. I knew that I wanted to present the theatre as a collage, and so after I made the model, I went to *The Scotsman* to choose photographs of the site in Edinburgh. A photographer and I then carefully selected views of the model that would correspond to the newspaper's images. The facade was made up of satin-anodised aluminium corrugated panels and concrete clad in white mosaic. I designed it so that it was set back and stepping out to achieve a sort of craggy ruggedness. In the foyer spaces, for example, the idea was that you would walk out on the roof of the space below and enjoy the north-facing panorama over to the hills of Fife. Later, when I interviewed with Denys Lasdun, I showed him the collages and said 'I don't actually like it anymore'. He could be quite droll and just said, 'Don't worry, it didn't get built.'

EH *Did you know what you wanted to do after you had finished at Edinburgh?*

KM I was at a crossroads. I had been accepted at Columbia University on a full scholarship to do a master's, but ultimately I decided to go to Poland, where I'd received a British Council-funded scholarship to the Warsaw Polytechnic. The city then was enjoying a 'Polish October', a cultural renaissance, particularly in film, music, theatre, set design and superb graphic design, following the reappointment of Władysław Gomułka as leader. I travelled there via Greece, crossing through Yugoslavia hidden in the luggage rack of the train because I didn't realise I needed a visa to get through.

EH *And where did you live?*

KM I was staying in an unfinished block of student housing – in the whole of my nine months there the showers turned on only once – and working in the study office of a firm specialising in precast, prefabricated buildings. While there I became friends with a Finnish journalist named Aila Poukkula, and she invited me to stay with her in Helsinki. And so as soon as my scholarship was up I caught a boat across the Baltic Sea from Gdansk. Aila was living in the most wonderfully central location – an island right in the harbour where you could see Aalto's white marble-clad Enso-Gutzeit head offices contrasted against the huge, brick Uspenski Orthodox Cathedral. The Baltic liners would just plug in at the end of the street. From there I was also able to make my first Aalto pilgrimages, not only in Helsinki but also to Otaniemi and Jyväskylä Universities, Seinäjoki town hall and even the Imatra church. If there was no public transport, I hitched.

EH *Was it Aalto or something else that interested you in this part of the world?*

KM Aalto had something to do with it. But as a female architect I'd got really fed up with being regarded as a peculiar aberration. I just wanted to be an architect. And in Scandinavia women were doing that. Also, in Edinburgh the school stressed the similarities between Scotland and the various countries in Scandinavia – not only the climate but also the sort of ethos of social democracy and social responsibility. And so after a brief return to Edinburgh I made a more ambitious trip through Scandinavia and Northern Europe.

EH *Did you go with much of a plan?*

KM Not really – besides Aila, I had a few boyfriends who helped me out with places to stay (God, was I cheeky). What I really wanted was to work. And so when I arrived in Stockholm I knocked on the door of Lennart Bergström's office. He didn't have anything for me but told me to see his friend Léonie (Lola) Geisendorf, a student of Le Corbusier who was then doing a competition and needed help. I had never worked for a woman architect, and I suppose she became a sort of role model. She was living in a very palatial apartment in central Stockholm, and when we were pulling all-nighters for the competition she let me sleep on her sofa. Afterwards I went to Bergström's office and worked on a motel set somewhere in the outback of Sweden and a competition for a model house, which we won. But after less than a year I decided to leave to do a month-long French-language course in Besançon and then took the train to Copenhagen. A Dane I had worked with in Bergström's office named Björn Skoness showed me around and suggested I try to find work there. I did my usual thing of marching from office to office (interviewing with Arne Jacobsen who said, 'most of my work now is in the Middle East and they don't really appreciate women there') and got a job working on a town hall with a charming man called Klaus Bremmer. Both he and his wife were architects. She had her own separate planning office, and his was in the most gorgeous location in Nyhavn.

EH *So after the endurance test that was being a woman in an architecture school in the UK, you are welcomed with open arms by everyone you meet. That must have been incredibly validating? Why would you ever want to leave Denmark?*

KM Copenhagen was too perfect. I found myself getting too comfortable with the rhythms of the city, so after three months I decided that if I was going to make it back to Helsinki I had better go. I collected my bags from Stockholm and got on a boat – it was October and the sea was already freezing over. Once again I parked myself on the sofa of Aila, who co-opted the services of a very nice architect–friend to help me compile a list of offices to visit. He told me not to call but to just turn up, and so for two weeks I tramped through the jolly cold with my heavy roll of drawings. Everyone was very kind and welcoming. They would look at my work, give me coffee and sometimes lunch, and they would always say, 'I'm very sorry, *but*'. At the end of those two weeks the money was running out and I decided that if I wasn't going to get a job on that particular day I would have to go home. But that day I got two job offers. One was with the Ahola firm, and the other was with Toivo Korhonen, which I accepted. Korhonen was a Miesian and known as the black-and-white king, having won a competition for the University of Tampere, which was done in all-white cladding and black windows. He was impressed by my thesis and assigned me to the competition for an opera house in Madrid. I didn't join the office straightaway – Korhonen also wanted to practise his English, and so he invited me to

Kate Macintosh, opera house for Edinburgh, fifth-year thesis project, Edinburgh College of Art, 1961
© Kate Macintosh archive

work from the house he built for his family in Lauttasaari. The house was designed as a U-shape and built around a courtyard on a steeply sloping site that looked out over the sea. In the basement was a swimming pool and a studio, which was where I worked. Every evening he would get home from the office and go through what I had done. We'd have a cup of tea with his delightful wife and converse in English. I worked long hours but it was wonderful, and when the competition got nowhere he didn't throw me out – I went on to work in the office. Again, we worked long hours, but in the meantime a group of us independently entered a small competition for a rural infants' school. We won, but that meant I also had to make a decision, because I knew if I stayed this would be the beginning of a life in private practice. I still didn't have my part three and in Helsinki I would have had to sit exams in Finnish, so I decided to move back to the UK, promising myself I'd return. Of course I never did. That Christmas I made a final stopover in Copenhagen to stay with a family I had met. One of the sons was studying architecture, and his girlfriend was the daughter of Jørn Utzon. He and his brother took me to see the Kingo Houses in the snow and ice.

EH *What did you make of them?*

KM I had seen them in magazines, but in the flesh, when you come upon them through the marsh landscape and see them in the winter light, they are really something to behold – the red and ochre reeds almost bleeding against the deep, quiet snow. It was that and a sense of intimacy that I took back with me, a harmonious relationship to the whole environment.

EH *And what happened when you arrived back in England?*

KM This was in 1964 and I immediately applied for work with James Stirling and H T Cadbury-Brown – neither of whom had anything for me – and then to Denys Lasdun, who had just landed the plum job of designing the National Theatre. He offered me a position right away. With my interest in theatre and opera houses it was gratifying to go and work for him, but compared to the super democratic modus of Scandinavia, his way of operating was a shock to the system. Free exchange of ideas between groups was, to say the least, discouraged. When I started he asked me to look at the design of a small experimental theatre which was then part of the scheme (as was an opera house). It was later cut, but then reappeared as the Cottesloe. All I remember him saying is 'I hate 45-degree angles'. I only lasted about a year. From there I went to Southwark council.

EH *What prompted that shift – from private practice to a local authority?*

KM At that point I had literally no site experience, and so I felt it was time to get some mud on my boots. The boroughs were where you were pressured to get jobs on-site quickly, and so I applied to Lambeth, Camden and Southwark and got offered positions with the last two. Why I didn't take Camden has always been a little bit of a mystery to me, because I was then living in Marchmont Street, next to the site of the Brunswick Centre, and so the council offices were just up the road. I interviewed with Sydney Cook, head of Camden's architecture department, but he didn't particularly impress me. I also now feel that they had so many starchitects already, like Neave Brown, that I probably wouldn't have got a look in. Somewhat perversely, I therefore decided on Southwark, where they weren't exactly known for bringing in talent.

EH *Who was at Southwark when you started?*

KM Frank Hayes was the borough architect and planner, and he was assisted by Hans Peter 'Felix' Trenton, who succeeded Hayes in 1969 and whose nickname in the LCC was Trendy – whatever the new thing was he latched onto it. Frank was a very patrician sort of figure, but I don't think he had a lot of respect for Trenton – you'd hear him shouting at him in a very commanding voice down the staircase. I remember there were a lot of young US architects there, possibly dodging the draft, like Nick Jeffries, Rick Mather – the quiet American who designed the AA bar – and Jim Scott. There was also Tim Tinker – who went on to design the Heygate estate and was a very aloof personality, hardly ever condescending to speak to you.

EH *How did things run, in comparison with your work at the LCC or in Scandinavia?*

KM From a management point of view things were pretty bloody chaotic. I was plunged into designing a housing scheme in East Dulwich now called Dawson's Heights. A chap from Hong Kong was already at the office working on it and proposing to do the typical LCC thing of plonking three tower blocks on the site. Frank thought that this was perhaps not such a great idea, and so he established a competitive situation by also putting me on the job. He subsequently introduced a third player – an architect I had known in Matthew's office, Richard Burfoot. The three of us were then interviewed within the office with our own proposals – the Hong Kong guy with his towers, Richard with a low-rise scheme, and me with a stepped-ziggurat design.

EH *Where did the idea of the ziggurat come from?*

KM It was in part a contextual thing that allowed the buildings to relate to their surroundings – the two- and three-storey Edwardian properties typical of this South London suburb. The staggering of the two summits also minimised the blocking of both sun and view, so that two-thirds of dwellings got a view both to the north and south, and the remaining third still got one distant view.

EH *Did you have an ideology by that time in terms of what public housing ought to be?*

KM Soon after I started working on Dawson's Heights I went to see this slab block off Camberwell New Road. It was based on a central corridor with a window at either end, and in those days you could just walk inside. I knocked on a random door and chatted to a couple about what it was like living there. They said they felt isolated, they were restricted in what they could do, they weren't allowed to have pets and they were not permitted to put anything on the balcony because it was also a fire escape. As far as the flat was concerned their home was perfectly habitable, but that long corridor shouted at you. Even just visiting it felt intimidating. It seemed to me like a sort of silo created to contain people. And it's ironic because one of the things that attracted me to Southwark was its reputation for high-density, low-rise building, but there were two particular issues at Dawson's Heights that in my mind prevented this kind of solution. The first were the absolutely stupendous views from the hilltop site – looking north you saw all of London through to Hampstead Heath, looking south you saw the North Downs of the Surrey Weald. The second issue was the ground, which was a continuous landslip. These two conditions suggested to me that a restricted footprint was necessary to make the building affordable, and so it steered me away from a high-density, low-rise solution, which on another site I probably would have adopted. So to answer your question, I knew what I *didn't* want to do, but I was also aware of the strands I wanted to try to bring together.

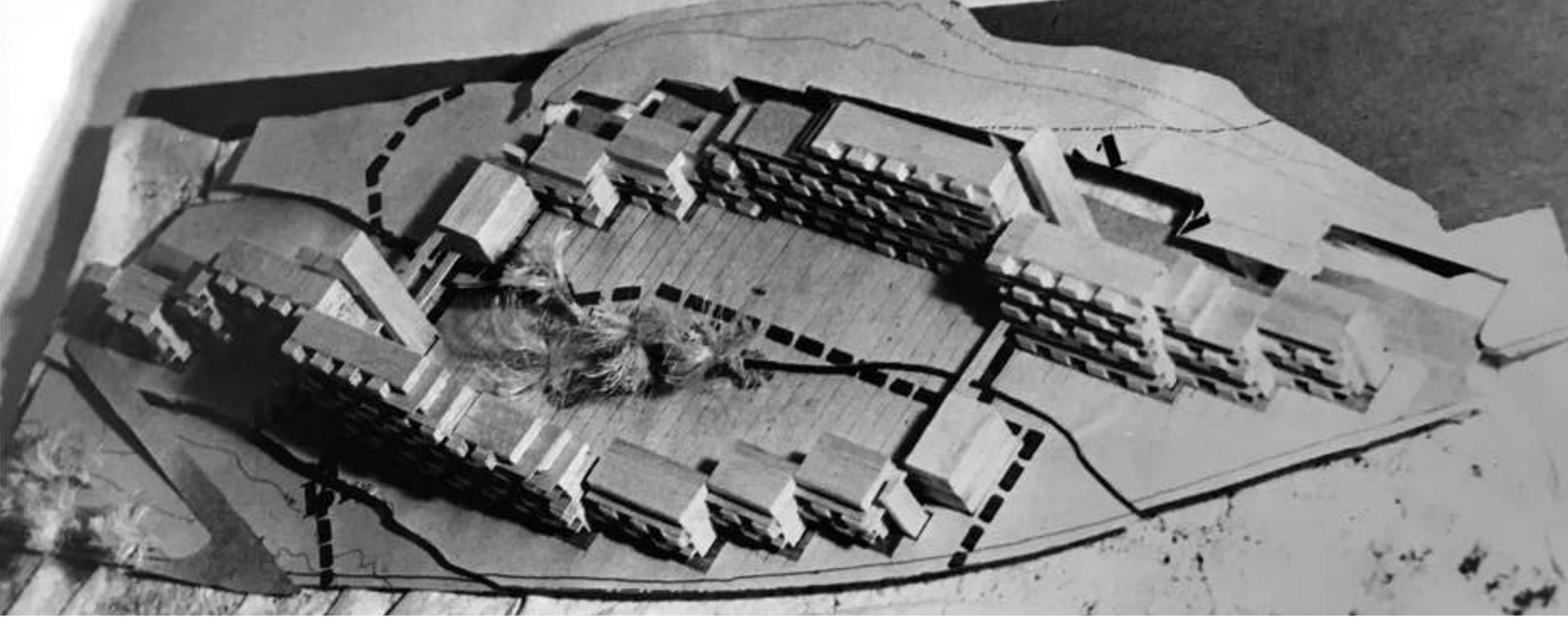
EH *And what were those?*

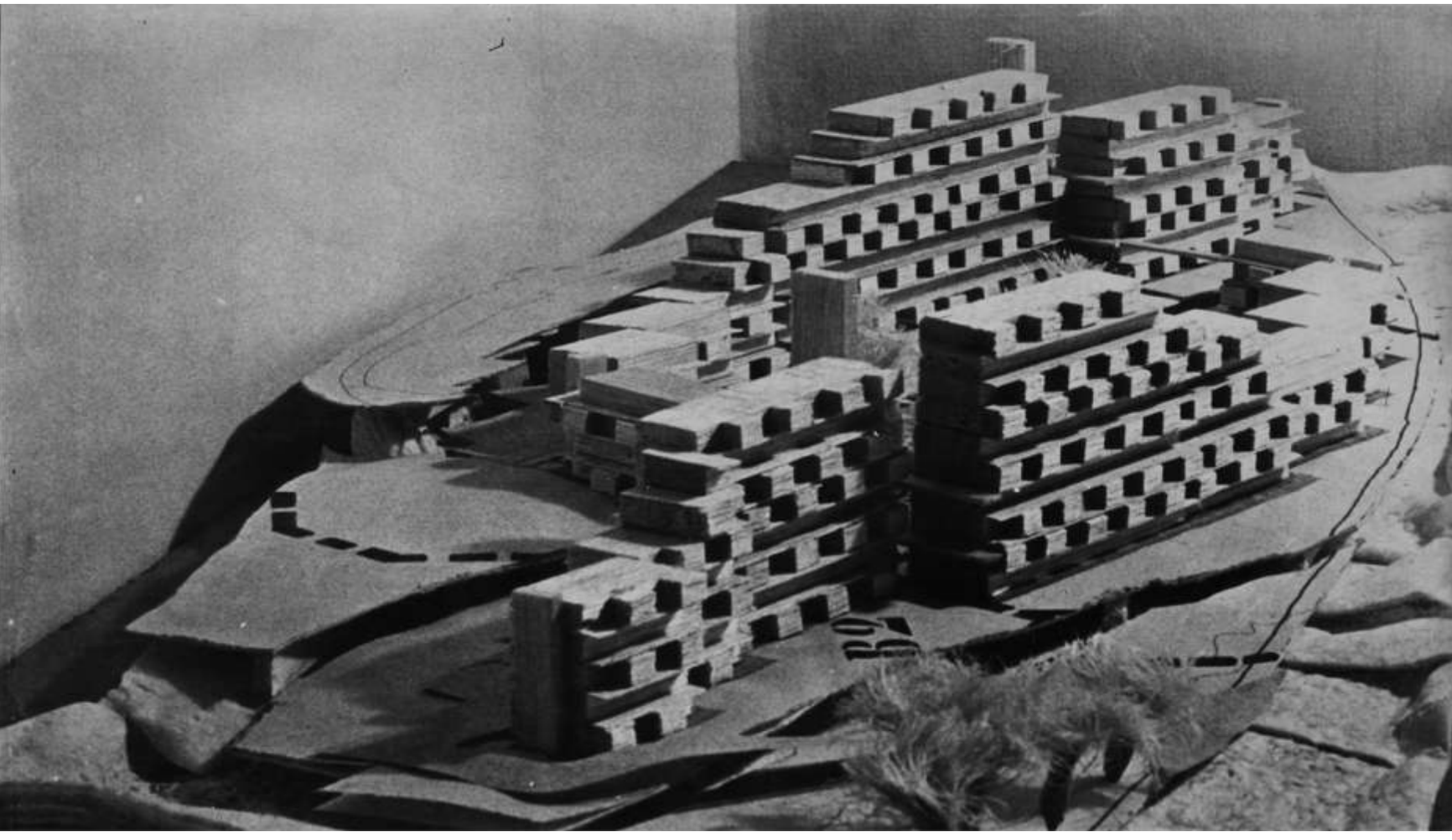
KM I wanted to exploit the drama of the hill-top location, not just for the residents but also for the surrounding area. Compared with Edinburgh – which abounds in landmarks, both natural and man-made – South London is pretty monotonous and difficult to navigate without a map. Of course, the fortress on the hill is a very Scottish theme, but as with the medieval castle, once you're within the walls, there is a safe, protective, tranquil space, embraced by the building and free of vehicles.

EH *But what about the programme and the arrangement of individual housing units?*

KM I was aiming for a mix of interlocking dwellings of varying sizes, which shared the common access routes. This was, in part, a reaction against the model of the mixed development that had become standard in the LCC, with smaller families in tower blocks and

Kate Macintosh, preliminary model of Dawson's Heights, 1965
© Kate Macintosh archive
Overleaf: view of Dawson's Heights soon after its completion, 1973
© Robert Kirkman



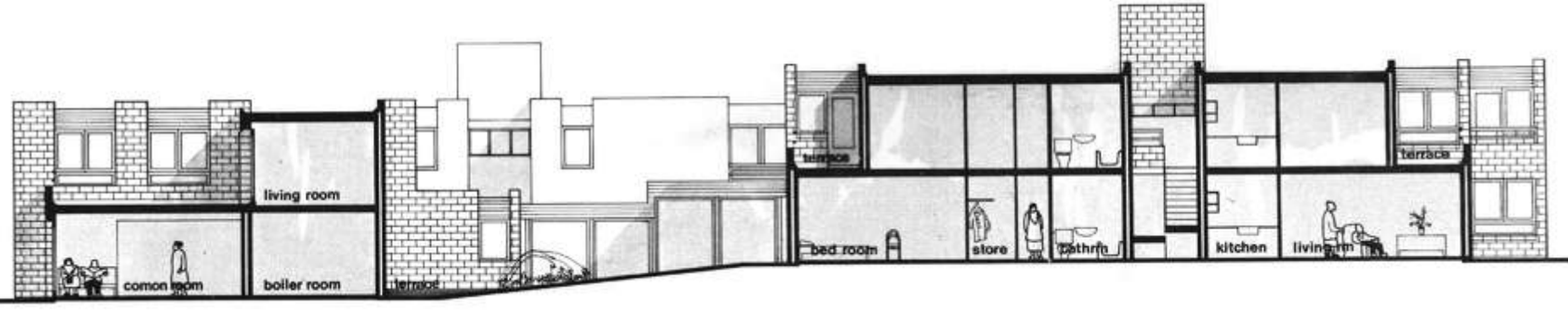


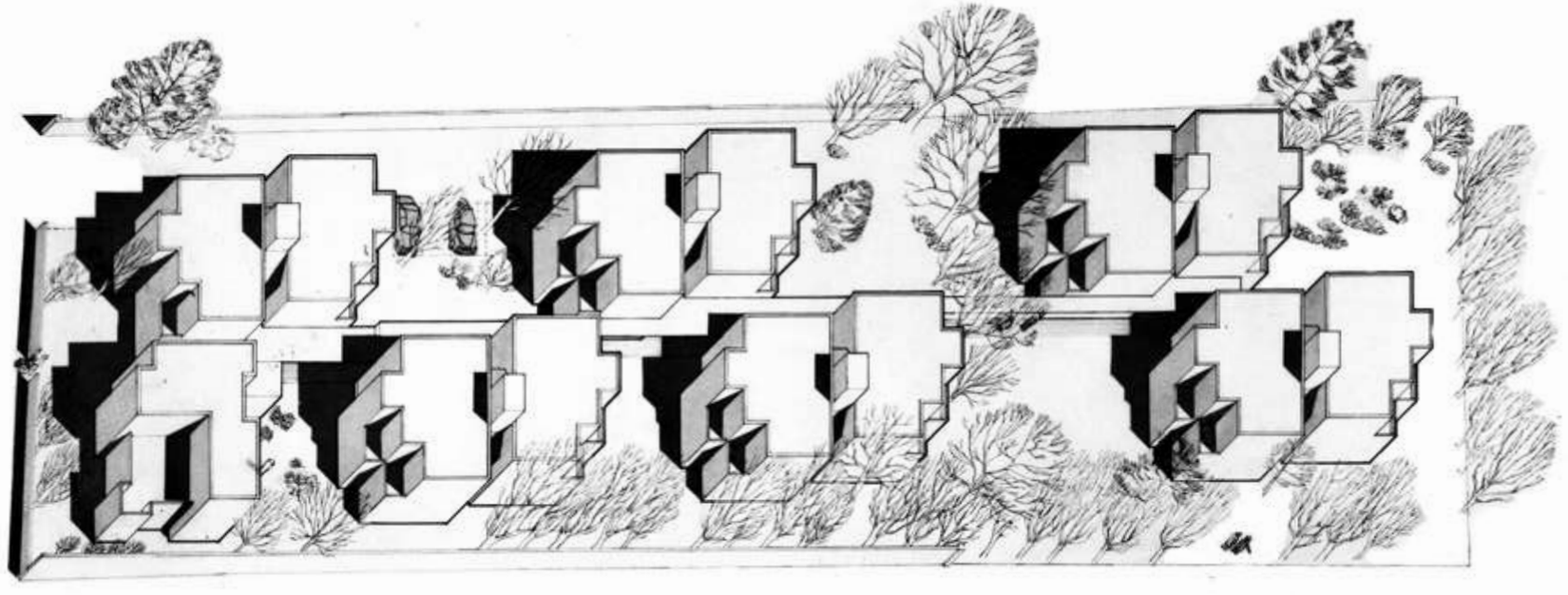









living room
comon room
boiler room
terrace
terrace
bed room
store
bathrm
kitchen
living rm
terrace



larger ones in walk-ups. Everybody had their place, categorised in what seemed like a highly artificial way. But I felt that people have different needs at different times in their lives, and if you have a mix of family sizes then they might be more likely to help each other out – or at least that was my naïve perception at the time. I was seeking to fulfil the Aneurin Bevan mantra of 'the doctor, the grocer, the butcher and the farm labourer all living on the same street, the living tapestry of a mixed community'. There were also these other ideas that had been percolating in the background. During my fourth year at Edinburgh I had a travelling scholarship to Northern Italy and I read Rudolf Wittkower's *Architectural Principles in the Age of Humanism*, which was an important influence. On the way back from the same trip I encountered the organic architecture of Hugo Häring. I found his whole strand of functionalism – which was always looking for what was most specific to the programme, specific to the site – immensely sympathetic, not least in its ability to bring together two ideas that have always driven me: my father's commitment to subjecting yourself to the discipline of economic building practice, and my own often poetic, even romantic response to the site. But of course when it comes to winning a job, you never say things like this to the QS.

EH *And you did win the competition for Dawson's Heights.*

KM Yes, even if my presentation was just a massing diagram and not a fully worked-out scheme. You could see in the chunky balsa wood model I made for the interview that I had not yet hit on the idea of split-levels, because the roofs of each floor were still running straight across. But I was clear that these should be through-dwellings because the views in both directions were so magnificent. The structural engineer was rooting for me, and the QS liked it because it was cheaper than building three tower blocks.

EH *And then you were off.*

KM No one could have been under any illusions about my ability to run a job – I was completely inexperienced – but no one held my hand either. I was just expected to get on with it. Both the consultants and the engineers were very good. They had two solutions for dealing with the unstable foundations. Dawson's Heights derives its name from the contractor who provided the rail link to Crystal Palace. He had dumped the excavation soil onto this hill, which he owned, imposing an additional load on the already unstable terrain. After removing all of this excess soil, the engineers dug a series of very deep trenches down the slope and filled them with gravel. Then between the actual foundations, which were 30m driven piles, they inserted ground beams and a slab. The split-level section allowed for a mix of dwelling sizes, with access ways every third floor, thereby intensifying the use of each communal route and reducing the number of lift stops. The plan's tartan grid of two wide and one narrow bays also allowed for the interlocking of different dwelling sizes, and therefore a complex mix of different families sharing an access way. Safety wasn't an issue because every flat had a balcony, and all of the balconies were fire escapes – which protected them from the QS's knife.

EH *How long did it take to come up with all that?*

KM Things moved quickly. I started at Southwark in 1965, presented drawings in 1966 and we were on site by 1968, which was altogether a very intense year. I had so many other things going on. First of all, in a patently obvious move to increase income and restructure their membership, the RIBA was proposing to demote the associate class, the vast majority of architects, and limit the fully recognised qualification to fellows. Looking at the sort of people who were fellows it certainly was not an elite class. Three of us in the Southwark office thought this was both hypocritical and insulting. I attended a special general meeting that coincided with a conference of the RIBA's regions and branches and spoke out against the proposal. Afterwards I wrote a letter of opposition that was published in the *AJ*, which spun into this campaign largely fuelled by people in public offices who felt a foundering of democracy. We got a requisition for a special general meeting – something that required a certain number of signatures from each class of membership, including fellows, a number of whom signed up in support (including Eric Lyons, I remember). We went to that meeting and won the vote, which aggrieved a lot of people. So 1968 marked not only the death of Martin Luther King, the Tet Offensive and the Paris student riots, but the start of my career in architectural politics. It was also the year I met George Finch.

EH *How exactly did that happen?*

KM We first met at a party in his flat. I must have had a quick word with him because I somehow registered that he was the architect for Lambeth Towers, which had been on the cover of the *RIBA Journal* in July 1965 and had stuck in my mind as a really interesting building. I made a note of his phone number and later called him up. 'I've got this quite big housing scheme near Dulwich', I said. 'As part of the brief I've got to put in an adventure playground. I really don't know anything about adventure playgrounds.' He told me his office was, coincidentally, holding a seminar on that subject and he asked me to come along. After that he invited me to look at one of his Wates blocks, which was then quite advanced, and I invited him to Dawson's Heights. We fell in love in Wellington boots and hard hats on a building site.

EH *But you also shared very similar ideals and interests.*

KM Absolutely. He was madly interested in theatre, he was a wonderful musician. Our politics were also absolutely indistinguishable. It just seemed that our whole value system dovetailed. And of course, given my background of socialism and my mother's struggles to come out of terrible deprivation, I found the fact that he had come from a working-class background and had got himself into and through the AA completely attractive and totally admirable.

EH *But he was already married and had five children!*

KM Life got fairly complicated. But what can I say, it was an *amour fou*. When we met, his wife Brenda was also having an affair. Otherwise I would have restrained myself, and I'm sure he would have too. It was Brenda who came up with the solution to set up a communal household. By this time I was living in Camberwell, which was very close to Dawson's Heights. With the help of my father, who put up £2,000, I bought a three-bay, five-storey Georgian terraced house in Camberwell Grove. I spent every penny and moment I could on this place so that by October 1969 George, his children, his wife and her boyfriend could move in.

EH *Wow, this really was the 1960s.*

KM At the time Grove Lane and Camberwell Grove were full of architects and artists working at Camberwell School of Art, like Anthony Caro, who had a studio just up the road. Whenever our bathroom was out of action, which was a lot of the time, I had no difficulty going from door to door asking if I could take a bath in a neighbour's house.

EH *And was your reputation as a housing architect in London beginning to grow as Dawson's Heights was progressing?*

KM I'm not sure how much of the work I was doing there was exposed to public view, but what I do know is that in 1968 I went on holiday with all the Finches and came back in September to find that I'd been taken off the job. I was heartbroken. It was like having your child snatched away from you. I later found out that the engineers had double the size of team that I had at my disposal with the design, so it's not surprising we were behind with the information. The same engineer told me that within weeks of my being taken off the job half the office was seconded to work on the scheme. I wrote a long letter to Hayes but it made no difference. And so having applied to Lambeth council, I handed in my notice.

Kate Macintosh, sheltered housing, 269 Leigham Court Road, 1972
© Kate Macintosh archive

EH *How did working at Lambeth differ from Southwark?*

KM The whole management structure was much better organised. George had been head-hunted by Ted Hollamby, who directed the architecture department, as one of his group leaders when he got the appointment in 1963. Don Eastaugh, whose group I was assigned to, would go through every working drawing produced by his team before it went out to tender. On larger jobs the group leader also went to the site meetings. We had an interior design section, a landscaping section, a graphics department, and someone from Arup had been seconded as our engineer. I started in March 1970 and initially joined their research and development group to work on their pilot metric project, 269 Leigham Court Road, which was one of the earliest sheltered housing schemes.

EH *In many ways it was not an ideal site for the elderly – it's in the middle of nowhere.*

KM I don't know how the council acquired the land, but the original four-storey Edwardian house in Streatham was demolished and what remained was a wonderful, mature garden. I developed the scheme as a series of pavilions. Five were standard – two-storeys with eight dwellings – and there were two street-facing blocks, one with dwellings on the first floor, over shops, and the other accommodating a common room and the warden's flat. The proportion of the one- and two-person dwellings was 3:1, which allowed me to create a step-back at first-floor level, giving each residence on that level a generous roof terrace. We decided to add the shop to help overcome the residents' feelings of isolation. It slows down passing foot traffic and continues to be an important point of exchange with the local people. The shopowners are also very obliging. The project was championed by Harry Simpson, who was the housing manager, and who didn't want a ghetto for old people. He wanted to produce a surplus of local authority housing to counter the stigma that this was only for people on very low incomes. If anyone preferred to rent they could apply to the local authority. Forget about right to buy – this way you would have genuinely mixed communities. Within that ethos anyone over the age of 40 should be able to live within sheltered housing, so you'd have able-bodied people mixed in with the elderly, creating a nice synergy of needs and wishes. That was the ambition, though of course we never achieved it.

EH *The wildness of the garden and the formal qualities of the buildings seem a little Scandic, almost a nod to the Kingo Houses you visited before moving to London.*

KM From a material point of view it was inspired by many of the things I'd seen in Scandinavia. In 1965 I had also visited the Atelier 5 housing complex in Halen near Bern, which reassured me that a deep plan could work with minimal-frontage housing, and also that concrete was perfectly acceptable as a finished material. Another formative experience had been the Leith Fort competition, which I'd observed as a student in Edinburgh. I can remember looking at the winning model, by the young architects Shaw-Stewart, Baikie & Perry, which was exhibited in the sculpture court at the college of art, and thinking it was really marvellous: two tall towers surrounded by low-rise housing. The architects also contextualised the precast concrete walls by adding rubble to the moulds, so that you ended up with these natural sandstone boulders reminiscent of traditional Scottish housing, without ever quite making this reference explicit. I was reminded of this when Ted Hollamby, who always wanted to have the final say, told me to 'make it crumbly'. When I came to present the scheme I said, 'I think it's crumbly'. But he didn't like the concrete blocks and he didn't like the flat roofs. He asked me if I could add pitched roofs. I refused. On the subject of the concrete blocks, I had chosen them because of their modular coordination, because at that point there were no truly metric bricks. There were also special blocks for going around corners and others for canted sills – and so it seemed to me that establishing this as a discipline greatly contributed to the aesthetic. I also felt that at a larger scale a building material can convey a certain sense of substance and continuity – the prime example being the wonderful stone blocks of buildings in Edinburgh's New Town. In the same way, I thought the concrete blocks might give the residents a sense of security.

EH *And so by now, your father's ideas of submitting oneself to the constraints and requirements of the building discipline had become your own way of working, and in turn your own impetus for expression. Was that liberating for you, creatively?*

KM It was. But mostly I just enjoyed the work – so much so, that in 1971 when George and I had our son, Sean, I took only the statutory maternity leave and was back at my drawing board three months after the birth.

EH *How did you deal with childcare in 1971?*

KM We had converted the basement of our house in Camberwell into a self-contained flat, with the idea of letting it out for zero-rent in return for child-minding services. Eventually I found someone, and that's how I got back to work. But by this time Leigham Court Road was on-site and so I was transferred to another project on Stockwell Park Road, which involved a huge team and a scheme I didn't particularly admire. By that time George had left to join Ron Ham's office.

Kate Macintosh, training tower, Halton Fire Station, Hastings, 1977
© Robert Kirkman

EH *Did that mean that you, too, were ready to get out of Lambeth?*

KM Yes, definitely. I approached Arup's, and also asked my friend David Rock for recommendations if I were to go into private practice. He suggested ABK. I knew about their work from a tour of some of their buildings in Oxford and Chichester and so I wrote to them. They didn't have anything but kept my letter on file. In the meantime I joined Arup Associates. I was working on the door schedule for the Central Depot in Kensington & Chelsea, which was already designed. It was a very interesting scheme.

EH *And in going to a multi-disciplinary firm with a strong emphasis on engineering you're following, quite closely, your father's footsteps.*

KM It's true, but as a designer used to the idea of the architect as initiator I was in a quandary about the pros and cons of interdisciplinary working. The management really had it sorted – all the chasing around that architects normally do was taken away. But soon after I got there two things happened: one was that I learned Arup had an office in South Africa – a fact I was not pleased to learn – and the other was that an offer came in from ABK. And so I left to join Peter Ahrends, Richard Burton and Paul Koralek. As an office, it was the closest thing I had experienced to the general atmosphere and ethos of the firms in Scandinavia. It was very democratic, everyone gathered together in the morning for coffee, over lunch and for afternoon tea, during which you were encouraged to speak directly with the partners. There were no doors, everything was open-plan, and I was working with Richard Burton, who was a very jolly person and, like me, he was interested in environmental issues. My first project – a golf course in Saint-Raphaël, near Cannes – was not something that in any way enthused me. Still, we enjoyed a nice trip to the Côte d'Azur, which was quite a contrast to the usual site visits I'd had with Southwark council. In the end, the project came to nothing, and was sort of the nearest thing to capitalism I was ever involved in. If I'd stayed no doubt I would have been able to do more sympathetic work – the first phase of Basildon New Town had just been completed, and I'm sure I would have worked on its subsequent phases.

EH *But then why did you leave?*

KM I was hugely enjoying my work but, fairly predictably, our domestic arrangements had begun to fall apart. George's ex-wife's lover had left, causing an asymmetry in the house and making her extremely resentful towards me. We reached the point where we all agreed the arrangement was no longer working. And although I owned the house, I had to draw up a legal document that laid out how we would divide the assets. Once that was in place, I promised myself that if one more really





intolerable thing happened I was getting out of there. The one more thing then happened. So with great regret I handed in my notice and moved with Sean to my parents' in Edinburgh.

EH *And George didn't follow?*

KM It was so complicated. He was absolutely torn in several ways loyalty-wise.

EH *How long were you in Edinburgh?*

KM Just three months. I learned from George Oldham, who was a fellow RIBA councillor, that he had recently been appointed as a group leader at East Sussex, and he said that they were still recruiting and suggested I apply. The office was in Lewes, which is a lovely but small county town, but what Lewes doesn't have Brighton does. When the offer came through I phoned George and asked, 'Do you want me to come back or not? If we are to set up house together, these are my conditions.' He said he wanted me back, so I accepted the job and a whole different phase of life began.

EH *And with that also came new typologies for you to explore as an architect – from mass housing in London and other local government buildings to fire stations. In one publication of your East Sussex work, for example, you are listed as a 'Fire Station Expert'.*

KM I did some other things as well (but the *AJ* had an editor who was really keen on fire stations). It was a difficult moment, though, because I really didn't respect the people I was working with. There were people in that office who had graduated from Brighton and had never worked anywhere outside East Sussex, so the atmosphere was very parochial and resentful of incomers. When I joined there were two divisions: one that dealt with education and the other was everything else – social housing, fire and police stations and magistrates courts. I went to the latter, and although I was increasingly unhappy there, the 13 years I spent in East Sussex were highly productive – we produced a building about every 18 months. There were only two designers in the office: me and a chap named Tim Williams. I did four jobs for the fire brigade, two old persons' homes, a children's home and a school.

EH *Fire station design was being revised then. Where did you start?*

KM Within the typology there were two aspects I wanted to consider. One is the highly disciplined, almost quasi-militarised aspect of what is a dangerous job – they've got to be fit, they've got to train constantly, and they've got to be up-to-the-minute on the latest chemical risks. The other aspect is the more human side, where they have to know each other very well, build up trust and maintain harmonious relationships. To deal with both of these aspects architecturally you generally end up with a two-storey domestic-scale building jammed up against a 1.5-storey industrial shed. And so for the first station I designed, in Hastings, I wanted to achieve something more elegant and unified. Still under the influence of ABK, I added a zinc wraparound, which stands up very well to the salty sea air.

EH *What about the drill tower? It looks rather noble and elegant.*

KM By this time George and I had bought a little place in Italy that we were visiting a lot. I thought, 'How often does an architect get a chance to design a vertical feature? I can make it at least as good as those village churches in Tuscany.'

EH *You were expanding your own vernacular.*

KM Absolutely. And so for another station that was on a former barracks site in Maresfield, I wanted to achieve a rural aesthetic – like a Sussex barn. This project was fun because the chief fire officer wanted to be able to hire out the training facility to adjoining counties. To accommodate building heights in these other areas, we added two extra storeys to the drill tower. There was also a firehouse for testing the recruits under the conditions of darkness, smoke, heat and humidity.

EH *What did the firemen make of you?*

KM I always had a very good relationship with the fire brigade. Unlike the office, I never had any chauvinist put-downs from the firemen.

EH *What about the other people you were working for?*

KM I have no idea whether this is true today, but social services in East Sussex were really the tops. There were a lot of advanced ideas coming from both the council and the directors of those homes. One officer in charge of a care home in Bexhill was just the most inspiring and enlightened woman. She wanted the whole atmosphere to be like a hotel. She wanted to take the residents on package-deal holidays, she wanted them to be able to drink at the bar before their meal, to have a menu to choose from and to help out, if they wanted, with food preparation. There was even a place to have your hair and nails done and a greenhouse. The idea was to design spaces where people could mingle, catch up and gossip.

EH *Mingling, as much as crumbling, seems to be a common theme in your architecture?*

KM It's all part of the socialist ethos. It's also why I went to Scandinavia – one of the attractions was this social-democratic regime that was both popular and worked. There were high education standards, low crime rates, a low prison population and there were not huge disparities of wealth. That's always the direction I've wanted to see society travel.

EH *Even though you were no longer in the same office, did you and George discuss these things, as much as your architectural projects?*

Kate Macintosh, training tower, Maresfield Fire Station, 1978
© Robert Kirkman

KM Constantly. In fact, my last project with East Sussex – the Battle Langton Primary School in Hastings (1986) – was partly influenced by George. A local forester we knew had wanted a self-build house and asked George and me to separately present designs. George got the commission, and designed it to be largely self-build. It had to be constructed completely out of timber, which was sourced from chestnut trees the forester cut down himself. The house was built in the woodland, and so in his design for the house George had gone up a storey in order to get the view over the trees. When I was designing the school at Hastings, this was on my mind. The building, which replaced an existing primary school, was on a steeply sloping site with stupendous views. The challenge was to nestle into the landscape and not be overpowering.

EH *It sounds like you had a lot of freedom to design how you wanted, yet you remained unhappy?*

KM By 1985 I was growing increasingly restless in the office, but the jobs kept coming. George was oscillating somewhere between unemployment and under-employment, which meant I was supporting all of us. I would constantly complain to him about the office – how my colleagues, if not exactly national front, were certainly male chauvinists – and so I resolved to leave. At that time there was a major exhibition of the work of Colin Stansfield Smith, who was head of the architects department at neighbouring Hampshire County Council. I was aware of Hampshire's influence and I knew Colin a little, and one weekend my own office hired a coach and drove up to see the exhibition. Colin was there and so was his colleague David White, who showed us around various projects. I was absolutely bowled over. When we got back to East Sussex, Owen Parry called the group leaders around and said, 'If you think we can set up an all-singing, all-dancing operation like Hampshire you're mistaken because our political situation is totally different. Our members would never stand for it.' He was probably right.

EH *But that was enough of a provocation for you to get out.*

KM Shortly after our visit David White died of a heart attack and his post became available. I applied and got through to the final interview stage, but the appointment – to Ian Templeton – was an internal one. Still, Colin said they wanted me at Hampshire. I asked him to make me an offer. A few weeks later he and Ian drove over to East Sussex and went on a tour of my buildings. What other county architect would go to that kind of trouble?

EH *What was it about Colin that made him so special?*

KM For a start, he'd been in the LCC before moving to Cheshire County Council under Jack

Whittle, and he had private practice experience with Emberton, Franck & Tardrew. He had charisma, he was persuasive and he was incredibly generous. Just as we were moving to Hampshire George was diagnosed with double kidney failure. After he received a transplant in 1987, Colin, bless him, employed George as a seconded architect to work on an important school in the outskirts of Portsmouth called Park Community secondary school. It was a complicated job, but George came alive. The organisation of the department was also very good. To stay competitive we were divided into three regions: north, southeast and southwest, which made things interesting. Compared to East Sussex, where there was no aspiration, the attitude was refreshing.

EH *I remember seeing one of your projects in Richard Weston's* Schools of Thought: Hampshire Architecture 1975–1991 *– another fire station.*

KM That was the Rushmoor fire station. Again, I was trying to unify the industrial shed with domestic accommodation. It was an important station because it serves the Farnborough Air Show. It was also influenced by other council buildings, like Farnborough College.

EH *So one Hampshire job could inspire another down the line. Did you also work on schools?*

KM Yes, there was one job in particular that attracted political kudos, which was the sports hall and music suite for Priory Secondary School in Portsmouth, adjacent to the two listed original buildings – an exercise in contextualism. I knew how blank and uninteresting sports halls could be, and so the design focused on the multipurpose aspects of the hall. It could be used for exams or let out for social events, and you could also look into the space from the viewing gallery in the music suite.

EH *It's very Queen Anne.*

KM You're right. I was finally working my way back to my grandfather.

EH *It's also quite postmodern – the inverted ziggurat of the central window, the semi-engaged columns and the blue glass windows are all good 1980s motifs.*

KM I must admit, I questioned myself about these PoMo qualities. George didn't like them at all – he feared I was becoming an apostate from the true faith. But as I got older I felt less and less inhibited about borrowing from the past. No designer is just one person deep. You're all standing on the shoulders of those who've come before you. I think it's more a question of how you internalise this lesson. You're not simply reproducing a slavish sort of copy. One of my problems with sports halls is that as you walk in you have no sense of scale. It could be double the size or half the size. It's so inhuman. We had just come back from a lovely trip to Ravenna, where we saw all of these wonderful ancient basilicas, and out of these memories I wanted the structure to have a sense of scale. Hence, the semi-engaged columns setting up a rhythm and the clear expression of the structural junction of truss to column. Another part of the commission was to revamp the degraded courtyard and dining room. When I first visited the school the courtyard was just an area of packed mud, and because the dining room was so small the kids would go outside and sit in the mud to eat their lunch. Can you imagine anything more depressing? So we designed raised paving and built-in seating, and I commissioned a local artist to create a mosaic inspired by Montjuic park in Barcelona. I was endlessly collecting glass bottles for her.



Kate Macintosh,
Solent Infants' School, 1995
© Joe Low

EH *As distinct as Priory Secondary is, when you look at any school built in Hampshire during this period there still seems to be a kind of office style. Where was that coming from?*

KM We were always talking and learning from each other, and we did a lot of *charettes*. The education department in Hampshire was also very good, and every school followed the same standard brief, which was more or less based on having spaces for more structured learning and places to make a mess and have fun.

EH *But then after another school in Solent and a home for disabled adults, you left in 1995 to set up your own practice with George.*

KM By that time Colin had left the council, and George and I just thought it was time to work on our own. Our first job was a garden studio for our own house in Winchester. In the early days of our relationship we had entered several competitions together but never got anywhere, but now we put ourselves on the RIBA clients' advisory service list and soon we had an invitation to design an adventure playground in Weston. The site was located between an extensive 1960s council estate and the edge of historic woodland, looking out over the Solent estuary. It was tight for the regular demand of 300 plus kids, and it sloped quite steeply, so there were challenges. We wanted the whole building to be an object for play. At the same time we wanted it to have a sense of being in harmony with nature, so we tried to make the building as green as possible – employing a steel frame to get it off the ground, designing with step-backs to provide a covered route and cladding the facade in green oak, which is about half the price of seasoned oak and easier to work. Working together on these things was so much fun.

EH *So you fall in love over an adventure playground twice – once in 1968 and again almost 40 years later.*

KM It's true! It was also wonderful to work in genuine collaboration. And although we worked on the design independently, we found that we were coming up with the same ideas.

EH *But now, of course, the harmony of this dynamic is complicated by the fact that there is another Macintosh architect, your son Sean. Did the boy have any other choice?*

KM Sean had seen a lot of architecture in one way or another, and as he reached the end of his school years we were worried it was so much the obvious choice, and that we didn't want him to feel pushed in any particular direction. But still, he decided he wanted to be an architect. I remember we went with him to visit various architecture schools, and in the end we decided mutually that the Mackintosh School of Architecture was the best choice. So our family keeps going backwards and forwards to Scotland. He's now at Arup Associates, re-enacting another family tradition and working close to engineers. He's a good, socially conscious architect, but he doesn't need me to remind him of the importance of that.

Location Königsberg–Kaliningrad

William Firebrace



Nicolas Grospierre,
House of Soviets, 2011
© Nicolas Grospierre

In the arrivals area of Khrabrovo airport hangs a wall-size black-and-white photograph of a large town featuring nineteenth-century buildings, church towers, a castle, bridges and parks. This appears to be the city one is about to visit, but it's actually Königsberg, the capital of East Prussia until it was almost completely destroyed 70 years ago and largely replaced on the same site by the Soviet city of Kaliningrad. Which is the material city and which is the immaterial? The answer is not so obvious, because after many years of absence the city shown in the photograph is now very tentatively returning to life, prompting an uneasy relationship with the lively if battered and often self-contradictory socialist city which superseded it. Complicating things further, each of these two Baltic cities is itself multiple, consisting of parts of other cities, some submerged, some only partly visible, some solidly present, some envisaged but never constructed, vying with one another for a place in the same location.

Phenomenon Noumenon

Königsberg's most celebrated inhabitant, the philosopher Immanuel Kant, attempted to specify the limits to understanding in his *Critique of Pure Reason* (1781). Here Kant proposed that the world is divided into 'phenomena' – which we experience through our senses and through reason – and what he termed 'noumena' – which exist beyond what is knowable and which therefore can never be understood. Noumena are the very essence of things. That which we experience with our senses is a manifestation of this essence. Philosophers have endlessly debated what Kant actually meant by this distinction, without ever quite arriving at any definitive conclusion. Kant himself even rewrote his theory various times, forever slightly altering the argument and changing the defining terms. But the essential idea of Kant's twin terms, phenomenon and noumenon – the appearance and the reality – remains, and might now be adapted to examine his native city in its twenty-first-century incarnation, as the synthetic Königsberg–Kaliningrad. This twin city is indeed part material and understandable to the visitor, part immaterial and always slightly beyond what can be comprehended. Boldly challenging Kant's assertion that we know nothing of noumena, the conjoined city might even offer some kind of inkling as to its elusive nature.

Adding a refinement to his theory, Kant went on to compare that part of the world which can be understood to 'an island, enclosed by nature, itself with unchangeable borders, the land of truth – enchanting name – surrounded by a large stormy ocean, the sea of illusion'. For Kant, Königsberg was itself like an island. He rarely travelled beyond the boundaries of the city, and then only to a small house in the countryside. 'Such a city', he wrote, 'can be a perfect place for acquiring both knowledge of people and knowledge of the world, where these can be gained without the need to travel'.

Cars

Ulitsa Portovaya: a large wharf building, brick walls and metal roof, beside the river Pregel. Long rows of expensive cars, mainly Mercedes and BMW, Toyota and Lexus SUVs, alongside some Italian sports cars. A few potential buyers. Two smartly dressed women carrying folders of papers approach:

'All these vehicles are for sale.'

'Really? I'm only visiting the city. Where do they come from?'

'There are assembly lines for BMW, Chevrolet and Hyundai near here, in the dockyard.'

'And the others?'



Immanuel Kant in silhouette

'From across the border. All our vehicles are imported legally, and with all the proper customs and registration documentation. Our prices are very competitive. We are not isolated here in Kaliningrad, but we have links to everybody, we can obtain any vehicle you wish. And yes, we can take credit cards or cash – euros or dollars, but please, no pounds sterling.'

Enclave

An enclave is a portion of a territory, a kind of island different in character from the other nations that surround it. The Kaliningrad oblast is such an enclave. Covering an area of 15,000km^2, it belongs to Russia even if it lies beyond its borders, over 1,000km from Moscow, bounded instead by the Baltic Sea to the west, Poland to the south and Lithuania to the north and east. The city's local football team, FC Baltic Kaliningrad, plays in the second tier of the Russian football league. Their most recent match was against FC Luch-Energiya Vladivostok – and so a team from the furthermost western point of Russia, against its equivalent from the east (Vladivostok overlooks the Sea of Japan, bounded by North Korea to the south and China to the west). The two cities sit more than 10,000km apart, across an eight-hour time difference, and for the away team, FC Luch-Energiya Vladivostok, this meant a 14-hour flight with one stopover. The match ended 0-0.

Kaliningrad has been part of the USSR since 1945, when Stalin took it as a personal prize from defeated Germany – its former self, Königsberg, having been for the most part reduced to ruins by RAF bombing raids and then by street fighting as the Red Army wrested control. The German population, already decreased from 370,000 before the war to just 70,000, were all expelled over the following two years. The new population consisted largely of Soviet military personnel, mostly Russians, White Russians and Ukrainians. In the city archives there are even unlikely photographs of new inhabitants arriving by camel, possibly from the southern republics of the USSR. And yet it was from out of this very diverse group of people, with no experience of living in the Baltic, that the current, actually rather homogeneous, population emerged.

The Kaliningrad oblast remained a restricted area until 1990, off-limits to foreigners and as a military base hard to access even for native Russians. But with the collapse of the Soviet Union the borders were opened. Initial reports in the western media described it as an urban disaster zone, the 'Black Hole of Europe', associated with car smuggling, drugs, prostitution and other forms of criminality. In the nearby port of Baltiysk, home to the Soviet Baltic fleet, the warships and submarines quietly rotted away, their nuclear armaments reportedly dumped into the sea – one more toxic agent added to the polluted mix of industrial effluent and untreated sewage. Over the years, however, these negative associations began to flicker with other, more positive affiliations. And so at one moment Kaliningrad was presented as the 'Calcutta of the North', at another as the 'Russian Hong Kong', a crossroads between the capitalist west and the new business zones of the east. There were even tentative proposals, firmly rejected by both the Russians and other neighbouring countries, for the oblast to be integrated into a reunified Germany, or to become a fourth Baltic state along with Estonia, Latvia and Lithuania, in a new confederation united by peace, trade and interchange. Indeed, for some years Kaliningrad








Aerial views of Königsberg, 1942
© vintag.es



Bridal couples on the beach of
Kaliningrad's Vistula Lagoon, *c* 1972
© Kaliningrad Public Archive (GAKO)

enjoyed the status of a Special Economic Zone. Factories were set up to manufacture automobile parts and digital technologies, with western companies such as BMW and Cadillac providing considerable investment. However, since 2004, when Poland and the three Baltic states joined the EU and the visa-free Schengen Zone, the oblast has been cut off from both the surrounding countries and the main Russian territory, with only a corridor linking it across Lithuania to Belarus and the Russian border. More recently, amid a general heightening of international tension, Russia has threatened to rebuild its Baltic fleet and to install missile launch pads in the city.

In the confused political geography of the southern Baltic there have always been mixtures of ethnic populations within nation states that are often isolated from their governing countries and then unexpectedly reconnected, which in turn isolates others, like some complicated game of Go. In the case of Kaliningrad, its status was inherited from Königsberg, because from 1920 to 1940 East Prussia was itself a German enclave, surrounded by Poland and the USSR, cut off from the main body of Germany. The status of an enclave is usually uneasy, uncertainly linked to the homeland, surrounded by potential enemies, but determined to assert its own identity. As a result, it tends to induce an individually minded populace, often proud of their special status and unwilling to be merely part of a larger block. Even at the time of being a supposedly closed city, Kaliningrad's citizens were known for being distinct. In 1969, *Der Stern*'s Moscow correspondent, Dieter Steiner, visited the city and reported that the youth were more relaxed than elsewhere in Russia – young men sported Beatles haircuts and mischievously sang 'You don't know how lucky you are, boy, back in the USSR'. Photographs from the late 1970s also show lines of bridal couples in suits and miniskirts wandering with guitars on the Baltic beaches, hardly the typical image of the Brezhnev years. Königsberg even had its own distant reply to this appropriation of 1960s culture. The long-legged model Veruschka, sounding Russian but actually German, had been born in Königsberg in 1939 as Countess Vera Gottliebe Anna Gräfin von Lehndorff-Steinort. Her aristocratic Prussian father was a key member of the German Resistance and was later executed for allegedly attempting to assassinate Adolf Hitler in the 20 July Plot. As a result Veruschka spent some years as a child in a German labour camp. After being 'discovered' aged 20 by the photographer Ugo Mulas, she became one of the It-girls of the swinging sixties, was featured repeatedly in fashion magazines and appeared memorably in Michelangelo Antonioni's film *Blow Up* (1966), in which David Hemmings makes love to her with his camera. If history had been a little different she might have been strolling along that Soviet Baltic beach.

Palace of Weddings

Ulitsa Frunze: a series of dilapidated 1980s housing blocks, ten storeys high, constructed of prefabricated concrete panels, located beside an urban highway. In front of the nearby Palace of Weddings stands a relief sculpture in concrete proclaiming the ideal socialist love match. A Soviet couple – he in a suit with slightly flared trousers, she in a loose-fitting dress – are shown standing lovingly together. Doves flutter around them and an olive tree sprouts unexpectedly at their feet. Just beyond the sculpture there's a restaurant frequented by fashionably dressed women sporting considerable quantities of jewellery:

'Is the Palace of Weddings still open?'

'Of course, people always need to get married. True love thrives in Kaliningrad.'



A small group emerge, led by a bride in a short white gown and veil, and a groom in a tight suit. They stand for a moment to the side of the relief while a photographer records the scene. A large black American car pulls up, the driver gets out and waits.

Prospekts

Kaliningrad still contains urban elements from many different periods, often so altered that the original is hardly discernible. For example, the island of Kneiphof, surrounded by the arms of the river Pregel, was once the heart of the German city, a densely populated mass of small houses alongside the cathedral and town hall. Renamed Pregel Island, it is now a quiet park, scattered with sculptures of miscellaneous Soviet worthies and oversize proletarian workers. Slicing across the island, from north to south, is Leninsky Prospekt, originally conceived as the grand avenue of the city, in imitation of streets such as the Nevsky Prospekt in St Petersburg, but in reality a multi-lane highway lined with housing blocks. Going north, this avenue passes both the site of the city's former castle and the now vacant House of Soviets, a late-1980s building nicknamed The Monster – two failed seats of government. It then turns northwest to Ploshchad Pobedy (Victory Square), the new centre originally created by the Soviets as a place for military parades. Leninsky Prospekt is crossed at right angles by another multi-lane inner-city highway, Moskovsky Prospekt, which is also lined over much of its length with typical 8 to 12-storey blocks of Soviet housing.

Elsewhere to the east and south the inner city is made up of an assemblage of housing blocks of various sizes and from various periods, sometimes fitting into the German street pattern, at other times forming their own grid. A ring road based on the layout of the old city walls encloses the inner city, passing various old brick forts, but even this is incomplete, with bits missing entirely and lacking bridges over the Pregel. The city has also now spread out uncertainly beyond the inner ring, with microrayons such as Leningradsky, Tsentralny, Moskovny – always similar names in every Soviet city – and networks of quiet streets without any apparent order, with suburban villas, huts, factories, parks and allotment gardens reaching out to a second, also incomplete, ring road 12km in diameter. Already in this description one can see that nothing is very clear in Kaliningrad – small scale and large scale, urban monsters and diminutive elements, natural and artificial, almost disappearing and not quite appearing, all without ever seeming to quite overlap.

Vanishing

The disappearance of Königsberg and the appearance of Kaliningrad in its place was a vital part of the Soviet image of the city, providing the foundation myth from which its urban plan emerged. Königsberg had to be seen to vanish so that Kaliningrad could be born. But just how much of the city was actually destroyed in the last years of the war is a matter of varying opinion. In the Soviet film *Meeting on the Elbe* (1949) – one of many shot in the city – Kaliningrad plays another town, Torgau on the Elbe, where US and Soviet troops met at the end of the war. In the opening sequences Soviet tanks surge past the remains of the old city gate and other nineteenth-century fortifications, as though displaying, through their effortless progress, the difference between modern and ancient warfare, Soviet power and German decadence. The old city centre is shown as a mass of ruins, variously inhabited by noble Soviet military, degenerate American capitalists

Ploshchad Pobedy (Victory Square), Kaliningrad, *c* 1982
© Kaliningrad Public Archive (GAKO)

concerned only with looting artworks, German spies and traitors. Confusingly, in this blending of different cities, part of the film was shot in Riga, further north along the coast in Latvia, and so there are interiors here that cannot belong to Königsberg at all.

Photographs taken from the ruined tower of the castle in the early 1950s illustrate the same central area as the film, but now the ruins have been replaced by a flat, vacant landscape stretching away into the far distance. The raw material of the city centre has vanished, Pregel Island looks like a field in the countryside surrounded by a river. Other images show the new city infrastructure – a wide straight road, the remains of what was once Langgasse, but which will become Leninsky Prospekt, its only vehicles being two trams moving in opposite directions. In the foreground are some empty plinths, previously supporting statues, and a small group of people, the only humans in this open landscape, wondering whether to cross the road.

In contrast there is another film, directed by Grigory Levkoyev in 1949 and simply titled *The Kaliningrad Oblast*, which shows people going about their daily lives. Cars pass down Mira Prospekt, crowds saunter in Ploshchad Pobedy, workers populate busy factories. There are happy farmers and fishermen, orators making noble speeches, animals in the zoo, children going to school, a football match in a stadium, a thriving Soviet town which had always existed, with few signs of the ruins. Documentary or mere propaganda? The film undoubtedly puts a rather positive gloss on what life must have actually been like, but Levkoyev was an interesting director with a background in making dramas with emotive scenes from Soviet history, now adapted with considerable visual flair to the latest territorial acquisition. The Kaliningrad of the period, usually characterised as a tabula rasa, must actually have been those very different cities at the same time, a disaster zone and a new beginning, simultaneously erased and reborn.

Reappearing I

The vanishing of the material city also leaves space for the immaterial, not least in the way the Germans who had been expelled from Königsberg continued to imagine its survival in its pre-war state – the nineteenth-century city of traditional streets and squares, with its castle and cathedral, forever unchanging since there was no knowledge of any subsequent developments. German publications in the 1950s, such as *Merian*, went so far as to continue to produce guidebooks to the city's sights long after they had all been demolished. As a result this city of the imagination always remains in a perfectly preserved state. Even after the opening of the border in the 1990s, and the arrival of large numbers of German tourists intent on rediscovering their former homeland, the old image somehow remained stronger than the new reality. Many of these visitors tended to ignore all aspects of the Soviet city and the achievements of its inhabitants, and instead searched for any sign of what had long vanished, only to leave in frustration, complaining that there was now nothing to see, a mere wasteland.

For the Soviets, in contrast, Königsberg was the symbol of fascist military power, a German outpost in what they maintained had really always been the territory of the Slavs. A 1945 *Pravda* on Königsberg seems to have been lifted from the pages of a gothic novel:

Taciturn and gloomy are the palaces, in their silent rooms are the archives and libraries of war, behind their thick walls, in schools and lecture rooms for war, decade after decade wars and



robberies have been planned. Around the city stand the massive buildings of the defensive ring. In the centre of the capital stands a fortress of solid stone, of enormous size, within which corridors, casemates and galleries are inserted, cut through and excavated. These reach deep under the earth.

Renaming this place – after Mikhail Kalinin, one of the original Bolsheviks and Stalin's henchman – changing its population, rewriting its history, destroying its fabric and creating a completely new identity on the same site were all interlinked strategies for asserting the claim that it had always been Slavic territory. Use of the name Königsberg, or indeed any use of the German language, was strictly prohibited. All streets and buildings were renamed, all written city records and documents were either destroyed or moved to Moscow. The same system applied throughout the oblast, where all towns were renamed, usually in a random way – Tilsit became Sovetsk, Wehlau became Znamensk, Pillau became Baltiysk, the new port for the Baltic fleet.

Harbour workers, Königsberg, 1934
© Friedrich Seidenstücker / Ullstein Bild / Getty Images

In fact, the pre-war Königsberg population had always been an ethnic mix, of Germans but also Poles, Lithuanians, Latvians and Jews, each with their own name for the city. The old Polish name was celebrated by the essayist Andrzej Mencwel in his love letter to the city, *Kaliningrad, moja miłość* (Kaliningrad Mon Amour): 'That I stubbornly use the name Królewiec is not a sign of revisionist refusal. Królewiec, the equivalent of the German Königsberg, has an extensive centuries-long use, and is as familiar as Rzym, Lipsk or Gdańsk. I just use the name which offers itself and has a historical background.' Indeed today, these older names are beginning to return to the oblast, having lost, as Mencwel says, some of their nationalist associations. Even Russian maps now show a variety of names, often transposed into Cyrillic script.

Reappearing II

And those vanquished and vanished Germans? Gradually, they too reappear within the literature and artefacts of the contemporary city, often as melancholic spirits flitting around after the party is long over. For example, Joseph Brodsky visited Kaliningrad briefly in 1963 to report on the local swimming team and his poem 'Otkrytka iz goroda K' (A Postcard from the City of K) describes a suitably mournful city with a ruined culture where, he writes, 'Rain nibbles at the leaves, stems and hems of waves. The river licks its chops and mutters darkly' and 'the trees are vaguely whispering in German'.

The contemporary writer Yuri Buida, from Znamensk – formerly Wehlau – and of mixed Russian, Ukrainian, Belorussian and Polish origin, gives us his own version of the city in the short story cycle *The Prussian Bride*. The Russian characters are haunted by the deported former occupants of the city. The mood is distinctly spooky. When a Prussian coffin is opened Buida writes: 'Before us, her arms folded on her chest, lay a young girl … she was wearing a white dress, seemingly of gossamer or the stuff from which butterflies wings are cut, and white shoes with gold heels. A tiny heart-shaped watch ticked at her wrist … the girl sighed and at the same instant her airy dress and smooth skin were turned into a cloud of dust, which settled slowly along her knotted spine.'

More recently Valery Galzov, a professor at the local university, reported in a 2015 article, 'The War and East Prussia in the Memory of the Inhabitants of Kaliningrad', that the children of Kaliningrad now consider the vanished German population as part of folklore, 'as inhabitants of the underworld, gnomes, dwarves, ghosts, the



View over the centre of Kaliningrad
from the roof of the cinema, *c* 1972
© Kaliningrad Public Archive (GAKO)



Hand-coloured photograph of the original
Amber Room, Königsberg, 1931
© Special Collections, UC Santa Cruz

secret people of Königsberg'. Fuelling these characterisations is the long-imagined view that there were caches of hidden German treasure, either buried in haste before their departure or lying under the ruins of their houses, all waiting to be discovered.

These extensive treasure hunts are described by Yuri Ivanov in *From Kaliningrad to Königsberg*, which tells wild tales of the (mostly fruitless) excavation of graveyards and the gardens of Prussians mansions and cellars. Ivanov, who arrived in Kaliningrad in 1945 as a child member of a military band, witnessed goods trains in the city being laden with the last material traces of the German populace – sofas, carpets, pictures and cases packed with porcelain. But the centrepiece of these legends was not any single domestic trove, but the fate of the almost mythical eighteenth-century *Bernsteinzimmer* (Amber Room), whose panels were said to have been made from more than six tonnes of amber harvested in globules from the Baltic sea. Designed by the baroque sculptor Andreas Schlüter for the Prussian King Frederick William I, it first went on display in the Berlin City Palace in 1707, but when a visiting Peter the Great took a shine to it, the room was packaged up and gifted to him. Reinstalled in his palace, Tsarskoye Selo, just south of St Petersburg, it remained there until 1941 when German troops looted the place and brought the Amber Room back to Königsberg. Ivanov claims that part of the room was secretly erected in the city castle, and that the only person allowed to enter, the Königsberg museum director Alfred Rohde, would sit for many hours in solitary contemplation of the Baltic sunlight glimmering through the translucent panels, the last person to experience the extraordinary atmosphere of this architectural highpoint of a particular German culture, at the very moment when the light was becoming shadow. As the Russians advanced on the city, the panels were placed in packing cases in the cellar of the castle – and then they disappeared without trace. These cases may still be underground in Kaliningrad, or at the bottom of the Baltic with the transport ship *Wilhelm Gustloff*, sunk by a Soviet submarine in 1945, or in a mine or, most likely, long since destroyed. Yet in Kaliningrad the myth of the Amber Room lives on. In the meantime a perfect replica, which took 14 years to create, has recently been unveiled back in the Russian palace of Tsarskoye Selo.

Public Archive (GAKO)

A 1980s building on Ulitsa Komsomolskaya: the one room accessible to the public features several ancient computers and is deserted apart from an archivist sitting at a desk. The woman has a prosthetic left hand made out of wood, and speaks a small amount of German.

'No, we do not have any of the watercolours of Navalichin, or any of the other socialist architects. We do not know what happened to them. But many records, particularly the more valuable works, vanished in the 1990s. Perhaps they were sold or stolen. You can look on our computers and see all the records of photographs taken in the socialist time. Then if you have a USB stick, we can give you copies, for a small fee.'

On the computer screen appear a sequence of images of schoolchildren, teenagers on a beach, small-scale military parades, workers in paper mills, farm labourers, wide streets without cars, shots of a city under construction – people and locations it is difficult to link to anything which exists today.

Palace

Kaliningrad was planned as an ideal Soviet city, free from the past, a completely new city for a completely new era. Dmitri Navalichin – artist, visionary architect and conservationist – arrived in Kaliningrad shortly after it was taken over by



the Soviets. He was head architect for the city from 1948 to 1955 and for the oblast as a whole until 1957, aided by a second Leningrad architect Arseny Maximov. Both men had been educated in the architecture school in Leningrad, which then had a reputation for being heavily influenced by Scandinavian design, and both had also trained as watercolourists and so arrived with a visual, almost scenic attitude to town planning, typical of a period when great emphasis was placed on architecture as urban theatre.

In the late 1940s Maximov produced numerous watercolours picturesquely imagining how a new city might grow out from among the ruins of Kaliningrad. But since the Soviets did not know how long they would control the city, and feared its imminent return to the Germans, the ruins were rapidly pulled down and the bricks – the material fabric of Königsberg – were taken by barge along the Baltic coast to Leningrad, where they were recycled as part of the reconstruction of that Russian city on the Neva. Archival photographs of the empty city centre are thus explained. Somewhere in St Petersburg today there must still be buildings made from the bricks of Königsberg houses.

Arsenal Maximov, watercolour, Kaliningrad, *c* 1948

Both Navalichin and Maximov originally favoured maintaining at least some aspect of the Königsberg street pattern and rebuilding many of its more celebrated German landmarks, such as the castle. These visions, however, would immediately fall foul of the Moscow central state institute for urban planning, GIPROGOR, which demanded the elimination of all traces of the German city. Navalichin therefore changed tack and became a proponent of wholesale redevelopment, producing a succession of increasingly grandiose schemes for a radically new Soviet city. His boldest project envisaged the construction of a massive building in full Stalinist style just north of Pregel Island, as the centrepiece for a radial plan with wide avenues reaching out towards two sets of concentric ring roads. At the points where the radial roads met the ring road, large vertical buildings were to be constructed, and there was to be a fine new bridge over the Pregel. Much of this plan was imitative of Moscow's own radial design, with its geometrical system of wide avenues and seven Stalinist high-rises (or 'Seven Sisters') at the intersections with the ring road. Navalichin's scheme was illustrated in a set of splendid watercolours – highly formal yet also rather fantastical – in which almost nothing of the original city survives. The luminosity of the paintings contrasts with the brutal nature of what was actually being proposed.

The Navalichin schemes were also highly impractical, produced at a time when the city's population was very small and the German workforce had all been expelled, leaving few labourers or skilled workers available for construction. There were, moreover, no architects to speak of other than Maximov and himself, no factories to produce the cut stone, or bricks or materials to build the new city. It is not surprising, then, that very little of his plans became a reality. Instead, over most of the 1950s, the city stumbled along with the most basic resources, its population living in the remnants of the built fabric. The piecemeal construction that did take place tended to be sited outside the city centre, where it was relatively easy to build small-scale housing blocks and gardens, unimpeded by any existing street pattern. In the inner city, the German plan, which formed the basis for the underground system of pipes and cables, was gradually taken over and adapted to service large, collective housing blocks rather than the nineteenth-century terraces.

As a result, the city grew very slowly and with moderation. The only significant element of Navalichin's plan that was realised was the new

'grand' avenue running north–south. Leninsky Prospekt is today a six-lane urban highway lined with banal Soviet blocks, rather than the elegant neo-classical buildings favoured by Navalichin. Construction moved so slowly that the avenue's street lighting was not installed until the late 1960s. The envisaged bridge over the Pregel was also only built in the 1970s, again in a style rather more mundane than magnificent, and the great sports stadium Navalichin had proposed for the east of the centre is only now being constructed for the 2018 World Cup. Time moves slowly in Kaliningrad.

However, the clearest visible signs of the urban scenery imagined by Navalichin are actually not along that central avenue but in an area northwest of the centre, beside Prospekt Mira, or Stalingradsky Prospekt, as it was at that time. In this more peripheral part of the city, less affected by wartime bombing, a number of large villas survived in the Amalienau and Mittelhufen neighbourhoods. The Soviet officer class and officialdom moved in, adopting much the same lifestyle as their German forebears (still evident today, in the form of high fences and large SUVs parked in the drives). But the modernist appearance of some of these buildings ran counter to the Stalinist model then in favour in Moscow. And so in a time of extreme poverty and with a large part of the town in ruins the Soviets devoted considerable energy to a programme of converting the facades into a more acceptable style. Along Prospekt Mira and Ulitsa Karl Marx just to the north various houses were given a new neo-classical dressing, with formal doorways, pediments, pilasters, screens of classical columns and Egyptian pylons added at roof level. The result is a strange Stalinist street theatre, the additions almost arbitrarily attached, random parts of a hastily assembled classical construction set. Elsewhere, the city opera house was also given a new facade, but like much of the civic building this took so long to complete that by the time it opened in the 1960s neo-classicism had fallen out of fashion and Khrushchev's more utilitarian architecture was the preferred national style.

In the late 1950s, and with his vision for Kaliningrad looking increasingly outmoded, Navalichin took up a post in Moscow as an architectural restorer. However, he would move back to Kaliningrad in 1989, at the time of *perestroika*, just a few years before his death, to list and record the few remaining German buildings, an unlikely return, reflecting his first concerns for the preservation of the main elements of Königsberg. His colleague Maximov remained in Kaliningrad and died in 2003. His watercolours, shown in exhibitions in Germany in 1992 and 2005, would become part of the new, softer Russian approach to the architecture of the German city.

Monuments

Far easier and cheaper to produce than buildings are monuments, and Kaliningrad, like any postwar Soviet city, has a significant number of them, largely dedicated to military victory. Among the most striking is the Monument to the 1,200 Guardsmen, located at one of the entrances to Victory Park, and featuring two sets of charging soldiers, waving flags and weapons, mounted on two massive plinths. The first construction of any kind in the city, it celebrated the dawning of a new era, and was for many years a popular spot for wedding photographs. Nearby, on Ulitsa Rokossovskogo, a dark green T-34/85 tank, dedicated to the Red Army, is mounted on its own concrete plinth; along Sovietsky Prospekt stands the Memorial to the Pilots of the Baltic Fleet, featuring two concrete aircraft pointed, like paper airplanes, towards the sky; while on Moskovsky Prospekt a torpedo boat sets off at a jaunty angle from a concrete wave to commemorate the Baltic Seamen. Beside a lake next to the former castle there is a statue to the submarine commander Aleksandr Marinesko, who in 1945 was sinking the



transport ship *Wilhelm Gustloff*, resulting in the death of over 9,000 people, the greatest maritime loss of life in history. The story is related by Günter Grass in *Crabwalk*, a book still considered controversial in Russia for its criticism of the memorials to Marinesko, much loved by Soviet veterans. In this particular memorial Marinesko stands within a cutaway section through the submarine's hull, peering through his periscope at what is now a smart new housing block. The combined effect of all these military monuments, which are uniformly kept in perfect condition and often surrounded by bunches of flowers, is a strange mix of nostalgia for a heroic but vanished past, and an almost pop art sensibility, with brightly coloured boats, guns, planes and tanks parked in the middle of the city. At the same time, as Kaliningrad's USSR generation gradually die out, and other purely Russian nationalist forces make their voices heard, these monuments have gradually become detached from their point of origin, relocating to a contemporary world where the Russian ownership of the city has acquired a rather different meaning.

Memorial to the Pilots of the Baltic Fleet, Kaliningrad, 2016
© William Firebrace

Now You Understand

Through their own materiality, which preserves something now past and therefore immaterial, the monuments suggest the quality of Kant's elusive twin terms, phenomenon–noumenon. For the victorious soldiers of the Red Army in 1945, however, the distinction no longer held. 'Now you understand, it's a material world', they wrote on the Kant memorial beside the cathedral. Designed by Friedrich Lahrs in 1924, the bicentenary of Kant's birth, the *Kenotaphion* has a flat roof supported by a row of square Bauhaus-style columns of pinkish volcanic stone. In 1993 it acquired a tablet quoting Kant's famous declaration: 'Two things fill the mind with ever new and increasing admiration and awe, the more often and steadily they are considered: the starry heavens above me and the moral law within me.' The memorial, next to the cathedral on Pregel Island, is a popular spot, and has even overtaken the Monument to the 1,200 Guardsmen as the preferred backdrop for marriage photographs. Bridegrooms in suits and brides in layers of white imitation brocade and chiffon queue up to lay flowers at the tomb, usually accompanied by large quantities of sweet Russian champagne.

Cosmonauts

On Prospekt Mira, set back a little from the road in a small square usually occupied by a few relaxed idlers, is yet another memorial, the Monument to the Conquerors of the Near Universe. A large vertical circle, curling out of a metal base, accommodates a cosmonaut looking up with one hand raised to the sky. The cosmonauts to whom the monument is dedicated are the three Kaliningrad citizens Alexey Leonov (the first man to make a space-walk, in 1965, and one-time Soviet candidate for the first man on the moon), Roman Romanenko (one of the first cosmonauts on the *Mir* space station) and Aleksandr Viktorenko (also a *Mir* cosmonaut). The monument acts as a kind of framing device, for through the great circle one can observe not only the changing atmosphere of the night sky but also the movement of the moon and the luminous planets.

Kant and Anti-Kant

Immanuel Kant, though clearly Prussian – even if he claimed, rather bizarrely, that his grandfather was a Scot – was never going to be eliminated from this socialist city, and over time has become an honorary Russian. In contrast to the west, where he has been valued for his philosophy of freedom and his almost mystical transcendental idealism, in the Soviet



Monument to the Heroes of Space Exploration
(Leonov Monument), Kaliningrad, *c* 1988
© Kaliningrad Public Archive (GAKO)



Union Kant was remembered primarily for his social thinking, and in particular for his emphasis on moral duty. More fundamentally, his idealistic philosophical system had prompted in turn the dialectics of Johann Herder and the historical materialism of Karl Marx and Friedrich Engels, leading thus to the revolutionary socialism of Lenin. In spite of his interest in both the material and the immaterial, Kant was therefore a point of origin for the whole socialist system. And so while almost all forms of German presence were erased, the Kant memorial on the side of the cathedral was one of the very few monuments guaranteed to be preserved.

Within Kaliningrad, Kant has steadily gained in materiality. A famous scene where the philosopher dines with colleagues appears in kiosks across the town on stamps, postcards, cups, plates and other souvenirs. In the 1990s, as Leningrad was reverting to being St Petersburg and Stalingrad to Volgograd, it was questioned why Kaliningrad continued to be named after a long discredited Soviet functionary and member of Stalin's inner circle. Since the city could not go back to a name derived from its German past, some suggested it should become Kantgrad or Immanuilisk, in honour of Kant. The matter remains unresolved, but Kaliningrad University has been renamed Immanuel Kant Baltic University, and a statue – a 1992 copy of the one that used to stand near the site of his house – now graces an overgrown park near the entrance to the university. The original was lost after it was buried after the war in the grounds of an estate outside the city.

Consistent with the logic of dualism there is naturally also an anti-Kant. A few yards from this statute is the entrance to the underground bunker belonging to Otto Lasch, the German commander who led the disastrous last stand against the Red Army. Inside is a terrifying and claustrophobic Cold War waxworks in which an elegantly periwigged Lasch, looking more like a late-eighteenth-century aristocrat or philosopher than a Nazi general, stands by his actual phone waiting for the last orders from the Führer, while a waxwork SS lieutenant nearby holds the leash of an authentically barking mastiff. In the background, various tableaux, created with loving care, show the town going up in flames as Red Army troops rush in. Underground, in this bunker, is the last carefully preserved nightmare of Nazi East Prussia, while in the garden up above stands the gentle figure of a philosopher, apostle of perpetual peace.

Kant was well known for his daily walks through the city, always following the same path and the same schedule. He would cross two of the bridges, the now vanished Krämerbrücke and Grünbrücke, into the lower city, and reputedly composed elements of his *Critique of Pure Reason* whilst walking along a small street leading out into the countryside. In the nineteenth century this street was renamed in his honour as Philosophendamm, by which time it ran through railyards rather than fields. Since renamed Ulitsa Elblongskaya, it is now lined with typical housing blocks and workshops and warehouses. A few chestnut trees and lakes still thrive, surrounded by the dockland sheds and cranes.

Apartment

Moskovsky Prospekt: a small flat in a housing block. Access from the exterior is via a narrow entrance and stairs; the lift is broken. Inside, the spaces are all immaculately clean, and there are just two rooms, one decorated with op-art wallpaper, offering views south over other blocks and fields. The kitchen has an old-fashioned electric stove but the bathroom is more contemporary. On a table sit two glasses of tea. The occupant is a middle-aged lady.



'So, you have come to Kaliningrad to do some research. You want to know what is happening today. Kaliningrad is individual, we are Russian but not like the rest of Russia. We are a kind of Baltic state, but not like the others. Moscow is really only interested in us because of the naval base, the city is here to serve the base. Here the Baltic never freezes, the submarines can go out all year round. And now, of course, we have the missiles, pointed at you, at the west. You must know we have some democracy, we vote for our duma and we have some independence. But in the end we are just a province.'

'And new architecture?'

'There are always plans, great plans. Look down over the fields, there are plans to build houses and factories there. But no money. Many people here have so little money. The city has never really been rebuilt so we still have wonderful fields right here in the centre. With fruit trees. In summer we go down and pick plums, apples, pears, berries.'

Opposite and above: Nicolas Grospierre, *Openwork Structure 1 (Kaliningrad Prefabricated Housing)*, 2011
© Nicolas Grospierre

Microrayon

The *microrayons*, those massive Soviet housing zones that characterised so many eastern bloc cities, were usually located just outside the traditional city centre. But in Kaliningrad, where there is no traditional inner city, what is usually peripheral becomes central. Microrayon 16, the most spectacular in Kaliningrad, lies along the eastern part of Moskovsky Prospekt, where a wall of mid-1970s blocks, ten storeys high and each at least 100m long, runs parallel to the six-lane highway. Their facades are lined with the vertical strips of the lift shafts and with panels pierced with bold circular openings. Whatever the dubious state of the buildings, one has to feel something for the boldness of urban construction on this scale, accommodating the population of a small city.

Somehow the grand scale also tolerates various levels of subversion, even gentrification. Besides the usual kiosks selling vegetables, meat, bread, flowers, there is a liberal peppering of private enterprise – pet salons, travel agencies, banks, garages as well as various operations with no obvious function. An optimist in this Baltic climate has even set up a business selling fibreglass swimming pools of considerable size, their bright blue interiors holding out the promise of a different lifestyle. In the blocks themselves the standardised panels have been adapted by the inhabitants, balconies being filled in, window systems changed. And then there are also large-scale revisions, with the entire facade being pulled away over all 12 storeys and a new corporate-style office building inserted vertically into the elevation, with a brand new facade of burnished bronze panels, clearly a large financial investment. These architectural additions are a reminder of those classical elements attached in the 1950s to German buildings in Prospekt Mira, but now it's Soviet megablocks that are being adapted to the tastes of a westernised contemporary capitalism. Just beyond this line of buildings a modern Scandinavian-style housing block is under construction, with elegant windows and timber balconies. What is one to think of this strange mix of dilapidation and revival, where one would expect to encounter a bleak Soviet slum but instead finds unexpected signs of new life, poverty and wealth closely intermingled? Should one share the optimism of the swimming pool salesman?

Soviet Style

The housing blocks along Moskovsky Prospekt are generic, and identical to any other block in any other Soviet city. But in Kaliningrad there are also more individual buildings revealing

a local version of 1970s Soviet architecture, modest, uncertain, but with a certain pop sensibility. In visiting these buildings, which often appear unexpectedly in otherwise bland neighbourhoods, one can almost discern another Kaliningrad about to emerge. Among them is the main bus station beside the vast expanse of Kalinin square, a long, low box with a facade of silvery panels, almost op-art in its dazzling reflection of the light. A few hundred metres away, on the lower half of Leninsky Prospekt, is the Ol'štn (Allstein) cafe by the then city architect Eugene Popov. A concrete building set between two stair shafts, with a roof distinguished by large vertical slots vaguely resembling historical dormer windows, it is adorned with period graphics of an elk and other creatures – socialist realism shifting into folklore. The nearby Oktober cinema is another long, horizontal form with elaborate glazing panels and a rooftop lined with a horizontal sign in elaborate script announcing the revolutionary month. Elsewhere, opposite the House of the Soviets, the House of the Allies – actually the telephone office – is a cube with a facade of panels with pyramidical reliefs, again reflecting the light in different directions, the whole again surmounted by a decorative Soviet-style frieze. And in the city zoo, one of the oldest and largest in Russia, there is a self-contained children's town, constructed in 1982 and composed of concrete reliefs and mosaics again with Slavic motifs by the local artist Nikolai Batakov and architect Pavel Gorbach.

Hippopotamus

Kaliningrad Zoo, Prospekt Mira: entry via gates surmounted by black stone statues of a penguin, a walrus and a bear. Inside, trees, cages, pits, animals and considerable numbers of visitors. Hippopotamus House. Dim interior with fetid atmosphere. Large pool with the backs of two hippopotamuses just visible above the surface of the water. A group of schoolchildren are being addressed by a zoo keeper wearing a smart uniform:

'The hippopotamus is the symbol of our zoo, and also perhaps of the city. The original Kaliningrad hippo was called Hans. He was one of only four animals to survive the storming of the city by the Red Army, along with a deer, a badger and a donkey. Actually, before the war he had been named Rosa, but he received a new, yes, very German name, Hans. During the attack on the city poor Hans was unfortunately shot seven times, and he lay for several days in a ditch, with nothing to eat or drink. He was nursed back to health with doses of vodka, and he survived for 15 years, into the period of Nikita Khrushchev.'

Silence, as everyone gazes at the backs of the animals, which remain motionless.

Monster

One building above all is particular to Kaliningrad, and usually seen as a symbol of the failure of the socialist city. Dom Sovjetov, the House of Soviets, is referred to locally as 'the Monster'. But perhaps, like many monsters, it is simply misunderstood. The building stands beside the site of the former German castle, which was finally demolished in the late 1960s on the direct orders of the USSR secretary general Leonid Brezhnev. Many proposals had been made for the site since the time of Navalichin, but nothing had been constructed, the void at the centre of the city a sign of the inability of successive Soviet authorities to decide on any consistent identity for Kaliningrad. But eventually a decision was made to replace the castle with a single tall building surrounded by open plazas – socialist open space appearing where before there had been feudal militarism.



Kaliningrad Zoo, 1982
Courtesy Kaliningrad Zoo

Such open plazas, much criticised today with the cliché 'bleak and windswept', were seen at the time as innovative propositions to create spaces matching the communal ambitions of the state, not so different from the open city spaces in Warsaw, Dresden and East Berlin, as well as in many cities in the west. With these criteria in place, a series of competitions were then held for the site in the early 1970s, the chosen winner being the Moscow architecture cooperative Meczenev-Institute, led by Julian Schwarzbreim.

Schwarzbreim, an architect of Jewish descent originally from Kiev, was by no means a typical 1970s apparatchik. He had designed an elegant circus building in Sochi, and would go on to produce another in Yekaterinburg, a square form with curious murals and an innovative open lattice-dome structure (such formal circus buildings were an important part of Soviet urban culture, and their absence in Kaliningrad is yet another sign of its separation). In 1973 his cooperative produced a daring plan for the centre of Kaliningrad, shrinking Pregel Island to a small area surrounding the cathedral, finally sinking the Atlantis of Königsberg, and turning this part of the Pregel into a lake, accessed by a series of new bridges. The whole was a kind of Brasilia on the Baltic, with the House of Soviets, towers and stadiums combining to offer a bold urban vision – ultimately too bold for the government of the period. Schwarzbreim was also an enthusiast for the 1920s constructivism of Ivan Leonidov, and his lively mix of blocks, technical inventions, lightness and daring revealed his awareness of international developments of the period, in particular Kenzo Tange and the metabolist movement in Japan. Even in those plodding Brezhnev years, why shouldn't Kaliningrad have been able to leap out of its indecision and mediocrity and find a place on the international architectural stage?

The House of Soviets was to house two government bodies, one for the city and one for the oblast. Neither body was known for any kind of architectural innovation. The Schwarzbreim proposal was for two 19-storey vertical blocks, each broken up into an upper and lower element by large U-shaped horizontal beams. At the base were two other large box-like elements, one above the other, each facing different directions, surrounded by an open plaza. The design was a composition of different rectangular forms, all with a certain dynamism, and inspired by Oscar Niemeyer's double blocks at Brasilia and Tange's 1960s Dentsu project in Tokyo.

Almost immediately, however, cost-saving measures fundamentally altered the nature of the structure. Only the cheapest materials were available and the Kaliningrad workforce was not capable of building a sophisticated piece of metabolism. Rather than being clad in glass, as intended, the two blocks were faced in concrete panels, so they appear just as heavy as the supporting structure. The ground level then became cluttered with supporting walls and a confusion of columns: instead of floating, the structure remained resolutely earthbound. Construction started in 1970, but without skilled workers progress was slow. In 1975 all construction projects in the USSR were called to a halt to concentrate the state's limited resources on buildings for the 1980 Moscow Olympics. Money remained tight in the years immediately afterwards and by the 1990s there were no funds left of any kind for Kaliningrad. By then the building's structure was mostly complete, but there was still no exterior cladding and no



Dom Sovjetov, the House of the Soviets
(aka the Monster), 1993
© Ullstein Bild / Getty Images



Jakob Emanuel Handmann,
Portrait of Leonhard Euler, 1753
Photograph by Martin P Bühler
© Kunstmuseum Basel

interior fitting out. And so it gradually became a vast ruin, visible from all over town, an all too prominent sign of the inability of Kaliningrad to complete such an ambitious project. For the 2004–05 celebrations of the anniversary of Königsberg-Kaliningrad, glass was inserted in the voids of the windows, and the building was painted a mix of light blue and white, as though camouflaged to fade into the Baltic sky. The glass was so badly fixed that a number of panes fell out and the building was soon walled off for safety. The great House of Soviets remains forever incomplete, a forlorn face with two eyes formed by the ends of the U-beams, a large forehead and a horizontal mouth of the low-level boxes. At some predetermined signal, will this humanoid figure, half-buried in the soil, suddenly come to life and tramp off across the flat lands of the oblast like some B-movie sci-fi robot? Probably not. The robot face still remains today, blank, stolidly waiting.

As the House of Soviets wastes away some have called for the old German palace to be rebuilt, a ghost returning in place of the very building which succeeded it. However, Schwarzbreim's Monster has also experienced a return to fashion, or at least acceptability. Within a general re-examination of Soviet culture two decades after the collapse of the USSR, the brutalist architecture of the 1970s and 1980s has attracted increased attention. For instance, French photographer Frédéric Chaubin's 2011 book *Cosmic Communist Constructions* shows images of Kaliningrad's House of Soviets alongside other examples of late Soviet architecture, such as the 1985 Druzba Sanatorium in Yalta and the 1976 Tashkent Circus. The building resurfaces in another compendium of eastern bloc brutalism, Nicolas Grospierre's *Modern Forms*: *A Subjective Atlas of Twentieth-Century Architecture*. Grospierre also finds space for the facade of the Kaliningrad bus station and the children's town zoo. Some of this interest is merely a half-mocking appreciation of the wackiness of Soviet brutalism, but there is a deeper and more sympathetic aspect too. In the republics detached from the control of the centre, such as those beside the Black and Baltic seas, architecture did develop its own very particular path, usually heavy-handed, but also individual, maybe even witty. For the moment, though, the House of Soviets still stands, visible from all over the city, a sign of yet another Kaliningrad which became material, but was never quite filled with the breath of life.

Missing Bridge

In Kaliningrad's public archive there is a photograph that shows a man, woman and young girl sitting on a barge moored on the river Pregel, looking out across the water at a series of housing blocks under construction. The smallness of the family on the barge contrasts with the scale of the building on the shore, but there is also a certain optimism to the scene, a city is being reconstructed around housing and homes for families like this. The scene could almost be from Jean Vigo's *L'Atalante*, or from any number of Italian neo-realist films of the early 1960s. It looks like Kaliningrad, but is not easy to place. Something is missing. An enquiry to Markus Podehl, German architectural historian, reveals that the photograph is of Navalichin's grand avenue, but before the wide road bridge over the Pregel was constructed. Today several lanes of traffic stream across it. Looking again at the photograph, the objects and people in the scene appear solid, unambiguous, understandable. But at the same time one gets a sense of a quietness, of a pause, a lull before something unexpected occurs.

Postcard Bridges

Leninsky Prospekt: the basement of a Kaliningrad department store, one of the few bookshops in the city. On the shelves there are many books on Soviet war heroes, as well as on football teams, cookery and car maintenance.



View over the river Pregel, *c* 1972
© Kaliningrad Public Archive (GAKO)

'Do you have any books on Soviet Kaliningrad?'

'No, why would people read them, that period is over.'

'But you have books on Königsberg, which is also over.'

'Yes, people are interested in the past if it far enough away. People like beauty.'

'And postcards?'

'The only postcards we have for sale are those here, also of the Königsberg bridges, all seven bridges.'

'Ah, Euler.'

'Euler?'

Bridges & Paths

At this late stage another figure emerges alongside the philosopher Immanuel Kant, affording a further method for considering the city: the Swiss mathematician Leonhard Euler, deviser of numerous innovative mathematic and algebraic formulations. In later life he became blind, thus living in a world of gradually vanishing phenomena, increasingly inclined to mathematical explanations. It was in his youth, however, as a resident at the court of the empress Anna Ivanovna in St Petersburg in the 1730s, that Euler famously formulated the classic Königsberg seven bridges problem. At the time the city had seven bridges: *Krämer* (chandler), *Schmied* (blacksmith), *Holz* (wood), *Grün* (green), *Köttel* (a place name), *Höhe* (high) and *Honig* (honey). All of them spanned the river Pregel, with four of them linking the central island of Kneiphof (now Pregel) to the north and south banks, one connecting Kneiphof to the area to the east known as Lomse, and two forming part of a route that ran across Lomse from the old city in the north to the cattle market in the south.

The question that Euler asked – and which he first considered so simple as to be barely worth a mathematician's time – was whether it was possible to walk across each bridge in turn, but only once, so that all bridges were crossed. There were two caveats: the islands could not be reached by any other route, and all the bridges had to be crossed completely, so no going halfway and coming back. By reformulating the question in algebraic terms and eliminating all other information other than nodes and connections, Euler eventually proved that it was *not* possible to cross all the bridges in this way. But at the same time as he ruled out a material path across the bridges, Euler's methodology prompted the emergence of an immaterial path, in the form of graph theory. A trail in a graph that visits every edge exactly once is now known as a Eulerian path.

Euler's surprisingly difficult brainteaser was made more complicated in 1944 when two of the city's bridges were destroyed by Allied bombing, and two others were removed a decade later when a new highway was constructed over Pregel Island. But the highway bridge is itself ambiguous, not least because it structurally attempts to jump right over the island, since the Soviet strategy was to ignore anything relating to the German, and so the island as a whole was no longer considered part of the urban fabric. Of course, the Euler theorem cannot cope with ambiguity: either there is a link, or there isn't. But today, counting the multi-lane highway as two bridges, gives us a total of five bridges, making a Eulerian path possible, so long as one begins and finishes on one or other of the islands.

The seven bridges problem doesn't only relate to Königsberg, but can be applied to any system with a similar amount of nodes and connections. The science of topology, which emerges from Euler's problem, is the study of

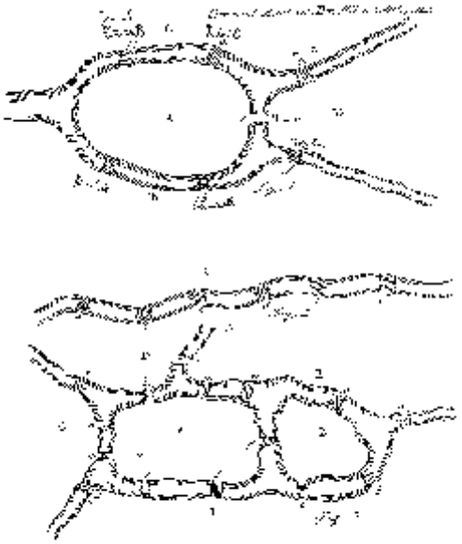
the spatial relations between figures and objects. Objects which appear very different can be considered similar, merely deformed through twisting, flattening or stretching. For instance, a plate is only a flat form of bowl; a doughnut is like a cup with a handle because both are a mass pierced by a hole; a triangle, square and circle are all simply the same form arranged in a slightly different way, creating an inside and an outside. But topology becomes much more sophisticated than these simple examples in the way it measures degrees of connections and distortions. Beginning with a problem which appears architectural – of a set of bridges – topology reaches out into mathematics, algebra and other sciences. And so while in Kant's phenomena and noumena we are shown a world irretrievably divided into the knowable and unknowable, in Euler's seven bridges problem we gain a methodology for linking the world we experience with the most complex abstract ideas.

No one – apart from a topological mathematician – could ever follow a Eulerian path around the bridges of Kaliningrad, and so what relevance does this abstract problem have to the city of today? Euler took an actual material city and transformed it into an immaterial problem whose solution could be applied to similar questions at any scale. Reducing the city to lines and nodes he removes most of what makes the city interesting – the material world of that bizarre list of bridge names, mixing proper names, colours, trades and foodstuffs – but it also allows one to relate the island and its bridges to other systems of points and connections.

The questions in Euler's puzzle are also specific to Kaliningrad as an enclave, both separate from and connected to the exterior. Which point connects to which? What happens to the whole complex if one adds or removes links? Can one go backwards as well as forwards? And could one even move through the whole system, along the Eulerian path, without repeating previous errors, without being stuck in a historical dead end, unable to move either forwards or back?

Reappearing Paths 1

If we look at the wider city, beyond the seven bridges, we can see that Euler's connections and nodes can be used to consider other urban locations. For example, a public square can be compared to an island, as an identifiable space linked in various ways to its surroundings. In Kaliningrad this unusual mix of different elements from various cultures is particularly clear in the area around Ploshchad Pobedy – Victory Square – named Steindamm in the nineteenth century, then Hansaplatz, and for a brief period Adolf-Hitler-Platz. In the immediate postwar period the Soviet authorities decided to make an enlarged version of this square the new centre for the city. The intention was to create a grand open space for military parades, featuring tanks, troops, banners and the party officials up on a dais. What fills this urban space today is a jumble of traffic lanes thronged with assorted cars, trucks and buses, cars parked almost at random, advertising signs, half-hearted attempts at pedestrianisation. At the centre of this lively square is yet another monument to the war, a 20m-high column. Beside the column there was once a large statue of Lenin, standing on a plinth made of recycled German gravestones, but in 2004 he was quietly relocated, no longer an appropriate figure to be placed in front of an orthodox cathedral in the new capitalist Russia. He now stands in a more discreet location to the south, near the main railway station, not far from his dodgy Bolshevik comrade, Mikhail Kalinin.



Leonhard Euler, Seven Bridges Problem, from *Commentarii academiae scientiarum Petropolitanae*, 1741
© The Euler Archive

Four buildings around Ploshchad Pobedy could be seen to exemplify the changing architecture of the city, some elements being rather different from how they appear, materiality thinly concealing an undefined immateriality. Firstly, on the southern side of the square is a large box-like structure with vertical pilasters on the facade, a flat grey roof, functional, undistinguished, seemingly a product of the early 1960s. In fact this building was once the elegant Handelshof, a trade hall designed by Hanns Hopp in 1923 in north German expressionist *Hansa* mode. The first building in the city with a reinforced concrete frame, the Handelshof featured a grand interior courtyard with a glass roof, an arcade of shallow pointed arches running along the base, a division of the clinker brick facade into horizontal bands and a remarkable entrance flanked by sculptures of Fortune and Mercury by Hermann Brachert. Under the Soviets the Handelshof was used as a municipal hall and today it continues to house part of the city administration. Already badly damaged during the war, in the Khrushchev years it was trimmed of its remaining architectural details. The clinker brickwork replaced by a coat of plaster, and a horizontal canopy added, the facades were thus rescued from despised German modernism to become a neutral Soviet shell. Hopp, originally from Lübeck, was later responsible for the design of other Königsberg buildings which brought into the essentially nineteenth-century city the spirit of 1920s *moderne*, including the minimalist facades of the Park Hotel (1929) and the long, glazed Bauhaus forms of the city's girls' school (1930), both of which still survive largely in their original state and offer a fresh approach to the architecture of the city, ultimately one of its many untaken paths. A declared member of the left wing, alongside other Königsberg architects such as Robert Liebenthal and Kurt Frick, Hopp ran into problems with the Nazi regime in the early 1930s and was lucky not to be eliminated. The war over and Königsberg in ruins, he moved to Dresden, then in East Germany, and was responsible for part of Stalinallee in Berlin amongst other buildings. A genuine idealist, Hopp continued to work for a succession of dubious regimes, and in the late 1950s he even produced a project that turned the centre of Berlin into a lake, with a large central building, all slightly reminiscent of Navalichin in Kaliningrad.

Opposite the former Handelshof is another German building with an impressive elevation, the North Railway Station from 1930, neo-classical in appearance and seen as a forerunner of fascist state buildings, but harmless enough. Navalichin had proposed adding a Russian-style tower to the facade of the station, which he found excessively Germanic. He even appears unexpectedly in Levkoyev's 1949 film on the city, *The Kaliningrad Oblast*, explaining his proposal to passers-by with one of his signature watercolours. However, during the early 1950s this variety of German architecture, built just before the fascist period, was near enough the approved Stalinist style of stripped down neo-classicism to be acceptable to the Kaliningrad authorities. And so the building survived unaltered. Later converted into the Seaman's Hotel, today it is occupied by various corporations, its once modernist facade now covered with advertising signs. The only evidence of the actual train station, from where one departs for the small towns that line the



Former cathedral, Kaliningrad, 1991
© Barbara Backhaus /
Ullstein Bild / Getty Images

oblast's Baltic coast, is a small ticket office behind the main building.

Slightly set back from the right side of the former station is a surprising intruder from another place and time, offering yet another path. A reproduction of Moscow's Khram Khrista Spasitelya, the Christ the Saviour Cathedral, constructed at a slightly reduced scale but still appearing oversized in relation to its surroundings, was manufactured at great cost in 2006. The original nineteenth-century cathedral in Moscow, a pastiche of medieval Russian architecture, was demolished in 1931 to make way for the new Palace of Soviets. A replica was then rebuilt in 1995–2000. The Kaliningrad model is thus a copy of a copy of a building. Its five golden onion domes and rather two-dimensional facade give it a surreal appearance, as though it had been created for a film set, because medieval Russian buildings such as these, genuine or fake, are entirely untypical for the Baltic. The new cathedral can hold a gathering of over 2,000 believers. The purpose is naturally to confirm, via a grandiose architectural structure, firstly the presence of the orthodox church in the centre of Kaliningrad – a city created by the atheist USSR – and secondly the continuing power of the Russian mainland at a time when the nature of the enclave is being brought into question.

The last of this quartet of buildings, just beside the cathedral, is a large and glitzy western-style shopping mall, its exterior covered in illuminated advertising placards and its interior filled with shops selling mobile phones, jewellery, lingerie, sports cars, cappuccinos and other items appealing to the more affluent citizens of the city. These consumer goods look right at first glance but on closer inspection seem slightly strange – the familiar mobile phones are just a little different, the various cafes imitate western chains but the products are just a little exaggerated, the cakes a curious shade of purple, the fizzy drinks a little too bright. Much of what is sold here is in fact fake, imitation packets holding imitation contents – a fake consumerism that matches the ersatz religion of the cathedral next door.

Reappearing Paths II

What seems interesting about Ploshchad Pobedy is that in the absence of a clear plan an urban game has been played out over successive decades by competing interests, yet somehow the result is an intriguing urban mix. Today these various interests – political, economic and social, some visible, others less so – continue to unfold over the centre of Kaliningrad without any obvious resolution. Among them are paths to an outdated future, with a succession of architectural proposals – for mini versions of downtown Frankfurt, with its clusters of towers, for postmodern tallboys and for deconstructivist shards. Competition winners have been proclaimed, and then quickly forgotten as neither political will nor external finance has been forthcoming.

There are also paths back into the past. In 2000 a German publisher produced a detailed proposal for rebuilding all the houses of Pregel Island, restoring it completely to its pre-1945 state in the tradition of Gdansk and Wroclaw, but this time as a vast island hotel, presumably mainly for visiting German tourists, afloat on a reconstruction of their sunken city. In the same spirit, a set of houses called the Fishers' Village has been erected to the east of Pregel Island in a contemporary version of *Hansa* style, vaguely medieval, vaguely German, deeply fake.

And then there are paths backwards and forwards simultaneously. In 2014 the city's



Immanuel Kant stamp,
Deutsche Bundes Post, 1961
© iStock / Getty Images

planning office ran an urban design competition for the city centre which was won by the St Petersburg collective Studio 44. The project proposed the renovation of the House of Soviets, the restoration of the castle, the addition of a number of large cultural buildings, the re-landscaping of Pregel Island to evoke the old street layout and, as an additional selling point, the reconstruction of Köttelbrücke and Schmiedbrücke, reviving the principal bridges of the Euler mathematical problem. Predictably this project has also been shelved as developers linked to Moscow put forward other proposals. No doubt more projects will follow, until finance and political power reach some form of agreement.

There are even signs of a path back into the times of Soviet control. For the USSR, Kaliningrad was of vital strategic importance because it offered an ice-free naval base on the Baltic. But after 20 years of military decline, the recent revival of Russia's nationalist expansionism under Putin has seen a number of new frigates assigned to the Baltic fleet in Kaliningrad, each armed with nuclear-capable Kalibr cruise missiles. Elsewhere in the oblast, Iskander-M short-range ballistic missiles have also been deployed. This gives a new, rather terrifying relevance to all those Soviet monuments of slightly cartoonish tanks and torpedo boats scattered through the city, which not so long ago had seemed like historical relics.

New Path

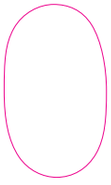
From that small station behind Ploshchad Pobedy a train runs north, past villas, housing blocks, factories and sheds. The carriage is almost deserted, the conductor plays *Grand Theft Auto* on his smartphone. The countryside starts as soon as the last buildings recede into the background, with clusters of oak, birch and conifer, ponds and lakes, meadows, open fields. There are few houses or inhabitants out here. This was all once cultivated, but the land, long untended, has gradually reverted to its pre-agricultural state, as it was before even the Prussians arrived. It is here that you realise that the city itself is an island, surrounded by this quiet, delicate, almost prelapsarian landscape, which extends almost without interruption to the Baltic coast.

Yes, now you understand, it's a material world. There is no avoiding the hard and apparently definitive graffiti on the Kant memorial. Euler and Kant as twin guides to the contemporary city? Euler transformed the bridges of Pregel Island into an abstract mathematical problem on the nature of connections, in the process giving rise to new topological forms. Kant proposed a world of noumena beyond our understanding alongside the material phenomena we can experience. Euler's abstract paths and patterns of connections link to Kant's theory – the world we experience through our senses as a reflection of a shadowy abstract realm. Wait long enough in Königsberg–Kaliningrad and an unexpected Eulerian path, one that looks suspiciously like an old path but which is in fact new, usually appears. The paths of the visible and material world are given form by the invisible and the immaterial.

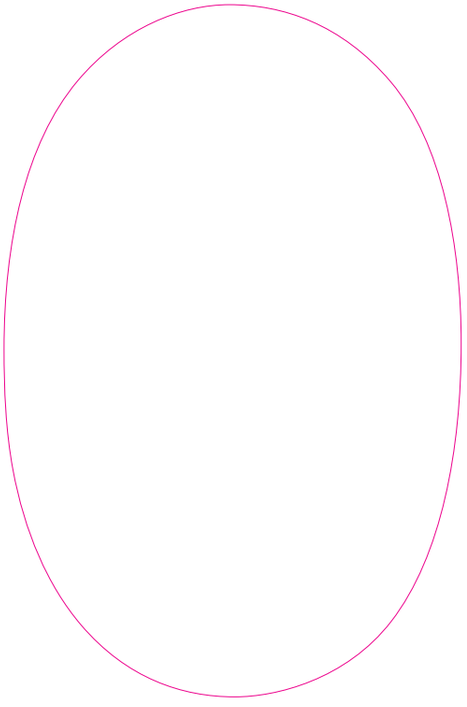
Many thanks to Bert Hoppe, Markus Podehl, Aleksandr Popadin, Yulia Bardun, Svetlana Chekina (GAKO). Books and articles used include: Markus Podehl, *Architektura Kaliningrada*, Gunnar Strunz, *Königsberg Kaliningrader Gebiet*, Bert Hoppe, *Auf den Trümmern von Königsberg*, Bert Hoppe, *Königsberg/Kaliningrad nach 1945 aus Deutsche Sicht*, Valerij Galcov, *Der Krieg und Ostpreussen im Gedächtnis der Einwohner der Gebiets Kaliningrad*, Juri Ivanov, *Von Kaliningrad nach Königsberg*, Uilleam Blacker, *Writing from the Ruins of Europe*, Baldur Köster, *Königsberg aus Deutscher Zeit*, Andrzej Mencwel, *Kaliningrad, mon amour*

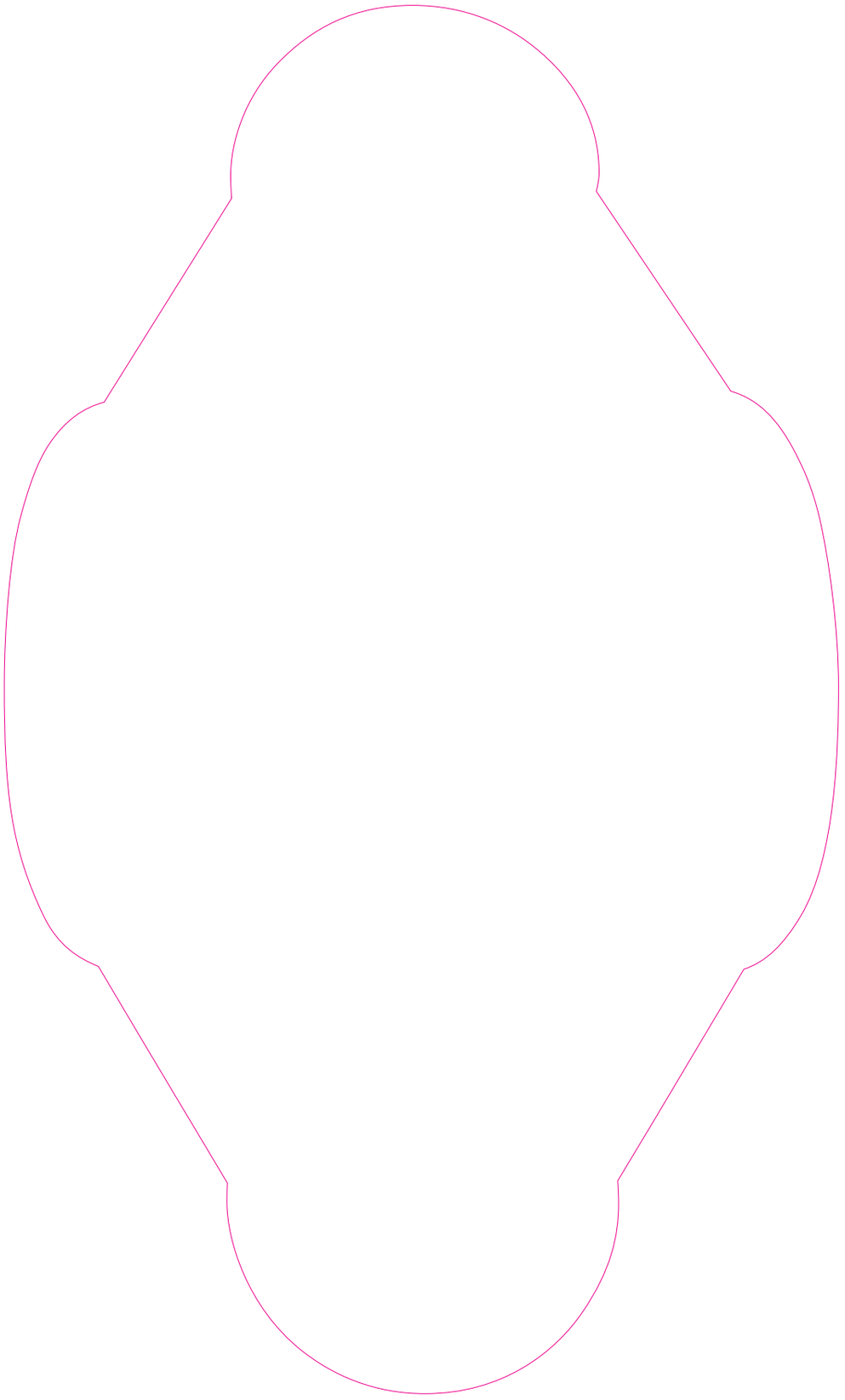
Sunlight in San Carlino

Michael Hill



Overleaf: cut-out views of the cupola,
San Carlo alle Quattro Fontane, Rome
© Leemage / Bridgeman Images





Note on measurement:
1 Roman palmo = 22.3cm

Twenty years ago restorers removed an organ stall and a metal pipe organ from one end of Francesco Borromini's baroque masterpiece, San Carlo alle Quattro Fontane (or San Carlino, for short).[1] The 1855 stall had cluttered the entrance. Worse, it had been fitted flush on Pierre Mignard's 1641 over-door oval fresco of the *Annunciation*, San Carlino's very first painting. The organ that had sat upon the stall was a modest one, and in 1909 it was replaced by a grander instrument, platformed at the higher level of the entablature, thereby breaking the reading of San Carlino's uniquely beautiful plan. The metal pipes undulated like the church itself, dipping in respect of the giant north window behind them; nevertheless, they impaired the light inclining to the floor, and partly veiled the window's moulded surrounds.

These intrusions, highly conspicuous in such a small space, were barely remarked on by twentieth-century commentators: photographs were mostly aimed the other way, and while one can hardly blame historians for not wasting time on physical anachronisms, it is odd that the analysis of a church renowned for the organic totality of its design was not adjusted to account for what could not be seen.[2] For example, Rudolf Wittkower's otherwise brilliant characterisation of the church's horizontal layers of light made no mention of the adverse impact of the organ; only Leo Steinberg observed that 'the original brightness of the interior has been dimmed by the new organ pipes'.[3] The non-commentary persisted after the stall's removal: with few having imagined what the church looked like without the organ apparatus, eyes were slow to see the space in its entirety once it was gone.



Francesco Borromini, San Carlo alle Quattro Fontane, facade sketches, 1638
© Albertina, Vienna

At least, that's my story. A long-term study of the geometry of San Carlino's ground plan led me to consider what the original side altarpieces would look like if replaced *in situ*.[4] Hitherto blithe to the experiential quality of the interior, I found that by turning around to face the direction of their painted light, other components of the church's spatial and symbolic programme came to seem more coherent. The light that entered via the huge north window (called the *fenestrone* in building documents) had a different effect to the light that came through the lantern and dome; moreover, the window casement seemed to dramatise the entry of light, as if it were an event. The north window suggested that Borromini was engaged with lighting effects from the beginning of his career, anticipating the dazzling *camere di luce* of Antonio Gherardi later in the century.[5]

A new facet of San Carlino's interior became visible, namely the significance of natural light. Scholarship on light in architecture has thrived over the last three decades, much of it focused on the theological meaning of light in the context of religious architecture: hence the idea, tacit in what follows, that a church like San Carlino reveals the Divine by means of its illumination.[6] Other research by the likes of Sergio Bettini has focused on the materiality of light, with the practical aim of showing either how light is controlled via orientation and window design or, alternatively, how light and shade were part of the design palette at large, like the colour and texture of materials, or compositional elements such as solid and void.[7] The latter approach, forensic and deliberate, seems more urgent to me in this case. How does the sunlight work in San Carlino?

The Windows

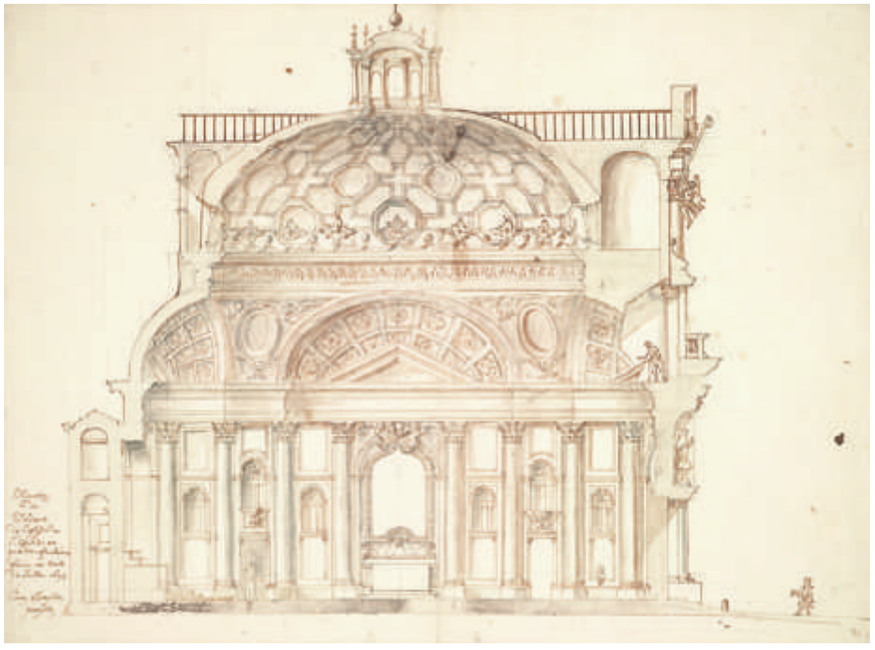
In his *L'idea dell'architettura universale* of 1615 Vincenzo Scamozzi enumerated the different types of architectural lighting. After the open sky, the second type was the bright perpendicular light that entered a building via an opening in the ceiling, in the manner of the Pantheon.[8] The topmost and the largest of the six direct lights in San Carlino is the lantern, comprised of eight windows in an octagonal *tempietto*. Strictly speaking, it is actually Scamozzi's third species, namely 'bright horizontal light', but perspectival diminution (the lantern is 33 *palmi* high) and the return angle of the white-stuccoed cornice create the impression that the blue ceiling of the lantern is suspended in a downward-facing ring of direct light. The resplendent dove of the Holy Ghost thus appears on a fragment of sky, as if it had burnt through the empyrean into the dome of the world.

The next four windows are the horizontal lights provided by octagonal openings at the base of the dome. The one on the north became a source of weaker light when the facade was heightened after Borromini's death in 1667, creating a top-lit cavity between facade and dome drum, visible in Francesco Bufalini's 1683 cross-section.[9] Most likely, this went against Borromini's intentions, as the original conception of the facade had an upper level at least 3m lower, no doubt to keep the drum free of obstruction. The north octagonal window was darkened when the cavity was filled in, *c* 1690, erasing the contrast between brilliant lantern and uniformly modulated dome. And the lighting of the dome suffered further injury when the east and west octagonal windows were closed around 1900. They were eventually unboarded around 1970, but it is worth remembering that San Carlino was gloomy for much of the twentieth century. [10]

The final direct light is that of the north window, punctured through the quartered sphere of the northern niche. Normally a church of San Carlino's size would require no more than lantern and dome apertures – as in Borromini's later Sant'Ivo della Sapienza. But San Carlino has a cruciform plan, with the niches seeming to be apses at the ends of coffered vaults; it therefore

has a pendentive zone, lifting the dome higher above the floor than in a church where the dome sits directly on walls. In such churches it was normal to install windows in the apses. In Pietro da Cortona's nearby and near contemporary S S Luca e Martina – a building San Carlino was in competitive dialogue with, according to Joseph Connors[11] – the windows in the apse niches brighten each barrel-vaulted arm of the Greek Cross. In reality, however, San Carlino is cruciform in name only and the huge north window, measuring 6 × 13 *palmi*, roughly the same size as the high altarpiece, is scaled more to the nave as a whole than to the niche in particular, as if it were to brighten a basilica of the sort built in late-sixteenth-century Rome, such as the Gesù, Santa Maria in Vallicella, Sant'Andrea delle Valle, and so on.

What makes the north window of San Carlino distinctive is the fact it is not set flush with the wall. Between the street and the interior the light passes through an antechamber, consisting of the facade wall thickness plus a wedge of space produced by the curvature of the niche springing from the windowsill. Such an intermediary space has a tempering effect. Between the glare of the rectangular opening and the sharply drawn shadows of the broken niche there is the glow of a shallow *camera di luce*, articulated by the edges and return angles of rosette and garland mouldings. In turn, the light that enters the church is one-directional, occupying a middle stratum between the windowless ground floor and the multi-directional lights of the dome and lantern. From the bottom up, the intermediate layer appears to separate the darker ground level from the high-keyed coffered dome, which buoys the blinding circle surrounding the lantern dove.



Simon Beusire, cross-section, San Carlo alle Quattro Fontane, 1694
© RIBA Collections

The Broken Pediment

The north window is thus the critical part of the interior modulation. But it is also a stage upon which the appearance of light is enacted. Before the window, the triangular pediment springing from the entablature is broken, unlike the one above the high altar. A pediment feigns to be the roof of an aedicule (literally, little building). When the pediment is broken it 'opens' the roof, allowing movement up and down, as when a painted or sculpted saint ascends from earthly to celestial realms. The broken pediment in the Sant'Agostino's Cavalletti chapel, for example, permits the *Madonna di Loreto* to climb to *Her Crowning by the Trinity* in the apse above. Alternatively, a broken pediment may offer a passport for real light to enter an image or, as in San Carlino, the actual room. The aligned relationship of window and broken pediment was observed by Domenico de Rossi, whose 1691 engraving in his *Studio di Architettura civile* shows the *fenestrone* architrave exactly coinciding with the width of the break in the pediment.

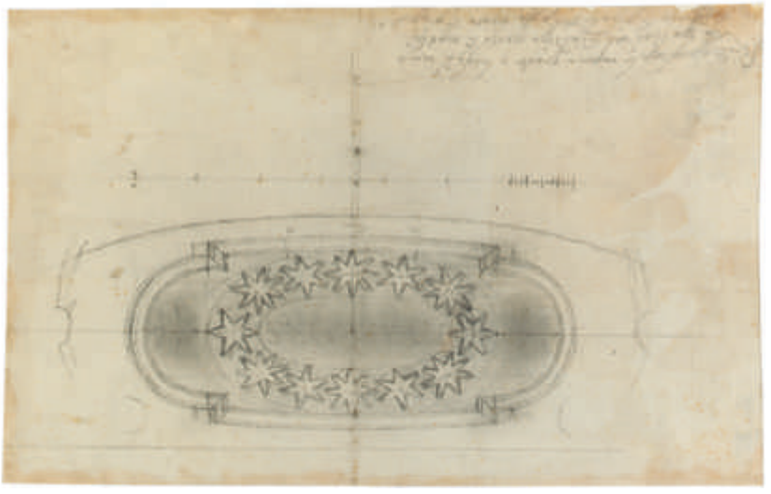
In 1651, ten years after the consecration of the church, but while it was still under Borromini's direction, a gilded balustrade (*ringhiera dorata*) was installed into the broken pediment.[12] In contrast to the plain iron grills of the chapels, the gilding on the balustrade delights the eye by sparkling in the sun. Seventeenth-century audiences understood the visual language of glory, in which gold heralds the entry of light into sacred space; those who thought on an allegorical level might also have seen gold as a metaphor for the materialisation in the world of the Divine.[13] It is possible that the balustrade was inserted for the safety of those who needed to traverse the entablature for reasons of maintenance. But a functional purpose need not preclude a symbolic one. Once the decor was complete, the dramatic potential of the interior became clear to Borromini: a gilded railing would theatricalise the pediment break as a component of a proscenium, staging an implied human figure in the middle reaches of the interior, between heaven and earth. In fact, a 1694 cross-section by Simon Beausire includes a figure leaning over the balustrade, providing scale to the apse. The broken pediment would be explicitly realised as a motif of the theatre of ascension a decade or so later in Sant'Andrea al Quirinale (only a few short steps from San Carlino and recalling it on almost every level), when Borromini's rival Bernini showed Sant'Andrea's soul exploding with outstretched arms through the pediment, midpoint between the altar and the gilded dome of paradise above.[14]

Trinitarian Panel of Light

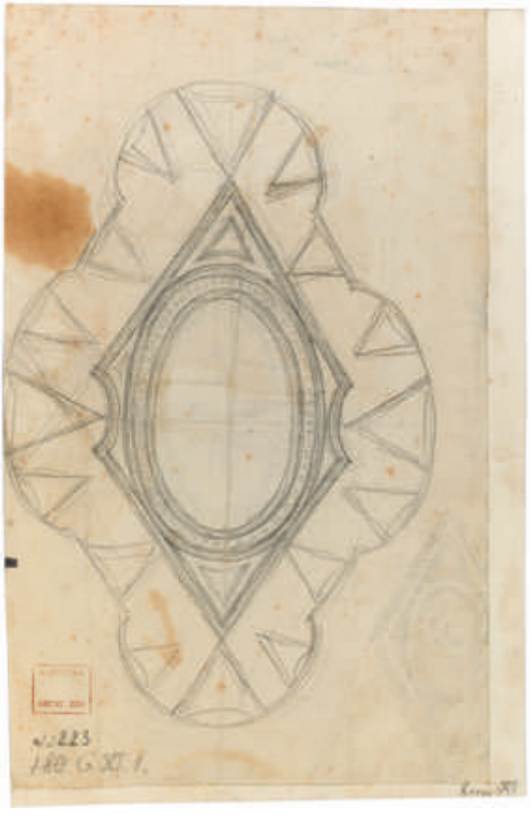
The gilded balustrade also delimits a room, which brings us back to the earlier description of the *camera di luce*, formed out of the space between the glazed window and the curved cornice. This might sound odd, because a *camera di luce* is usually associated with a hidden lateral light source, so that it appears to glow from within, whereas the north window appears full face. However, there is one detail that can only be seen when the window is out of view, and this detail confirms as clearly as any the proposition that Borromini manipulated the light of the *fenestrone* for symbolic reasons. I refer to the relief moulding of the Trinitarian panel on the underside of the steeply angled plane that connects the top of the window architrave to the edge cut away from the coffered niche.

Leo Steinberg thought that the panel was oriented for the viewer on the street, sloped to

face the light and meant by Borromini to be seen as an ideogram of what would be encountered on entering. Once inside, Steinberg continued, the detail disappeared into the steepness of its aspect.[15] The removal of the organ stall, however, allows one to take up a position directly underneath the cornice. From this vantage point, no glimpse can be had of the window; instead, the Trinitarian panel is isolated between the coffered apse above and curved cornice below. Moreover, the tilt of the panel towards the light makes it shine like a star. Revealed immediately upon entrance, the view indicates that Borromini was alert to the prospect of the viewer who, after crossing the threshold, pauses to survey the whole. Indeed, the *camera di luce* is the first point of an axis of lights that rises into the lantern and falls onto the seemingly cross-impregnated (actually an ornament of the crown at the base of the dome) octagon hovering above the high altar. In short, the panel announces the sacredness of the space just entered. The apparition is fleeting; a few steps forward causes the window to appear and the star to slide behind its angle of visibility.



Borromini composed the *camera di luce* relative to an oblique viewing angle.[16] From directly underneath the cornice, the fascia's inclination results in an elongation of the oval glory. And because the window is out of sight, the panel is apprehended as if it were seen squarely. This is important because the apparent shape of the Trinitarian oval visually rhymes with a motif seen one step before, on the underside of the entrance lintel, namely, an elongated oval of alternating eight- and six-pointed stars.[17] The travertine stars – carved by Borromini's assistant and confidant Francesco Masseri in 1665, 25 years after the Trinitarian panel was moulded in stucco – are cut with a sharp rebate so that they appear to float in space, like a crown. Indeed, there are precisely 12 stars, the number that comprises the crown witnessed by St John the Divine above a woman clothed in the sun (*Revelations*, 12:1), and the one attributed to the Madonna Immacolata. A different type of crown is also a family emblem of Saint Charles Borromeo, the co-dedicatee of the church, and such a crown had appeared on the facade of the other Roman church dedicated to Borromeo, San Carlo ai Catinari (1636–38, Giambattista Soria, Rome), completed the very year San Carlino was begun.[18] As evinced by the Catinari church, the other half of Borromeo's insignia is *humilitas*, and in a drawing of the crown, Borromini seems originally to have inscribed the same word across the horizontal axis, before erasing all but the final S. Thus two separate symbols were collapsed into the one motif.



Francesco Borromini, San Carlo alle Quattro Fontane, decoration over entrance (*above*) and stucco decoration (*below*), 1665
© Albertina, Vienna

Emptying the oval crown of the word made it open-ended, so that it now predicted the oval glory in the *camera di luce* and indeed the interior geometry of the church. At the same time, the symbol of Saint Charles Borromeo was woven into the very fabric of the church. Borromini was apt to adapt motifs in the direction of their symbolic and formal kinships, as demonstrated in his drawings of the morphology of the window grills of the oratory of San Filippo Neri, in which the devoted heart and the burning flame are merged in a single pattern. And when Borromini returned to San Carlino's facade two decades after completing the church, he used contrived angles of view and the logic of association to transform the ovular starry crown into the oval-gloried guiding star of the Trinitarian cross, lighting the way to the altar. In turn, on crossing the threshold from street to sacred room, one sees a stone carving become a panel of light.

The Paintings

The angle of the *fenestrone* fascia is such that if it were extended into the church it would cut across the upper parts of the side altarpieces. This angle also corresponds to the angle of painted light in the since-replaced 1643 altar paintings by Giovanni Domenico Cerrini.[19] That is to say, the raked lighting across the paintings as physical objects was layered over the fictive lighting of the paintings as narrative space. In addition, Master Giuseppe's 1653 altar painting in the Chapel of the Crucifixion is lit from the same direction as the chapel's direct light source, tunnelling towards an oval aperture on the facade. The light source is weak on both counts: the chapel is a pocket of shadow, while the painting's represented lighting has a meagre impact on the shrouded landscape.[20]

By contrast, the paintings on the long axis of the church receive their fictive light from on high. The first was Pierre Mignard's *Annunciation* of 1641, frescoed within an oval moulding above the entrance. It is difficult to be certain about the direction of light for this work, as it was largely destroyed by the organ gallery; however, the bright red knee of the Virgin in the part that remains suggests an elevated source, perhaps corresponding to the

lantern, thereby animating Gabriel's words to Mary, the Holy Spirit 'will overshadow thee'.[21] Four years later, the same painter added the high altarpiece *San Carlo Borromeo Adoring the Trinity*, which likewise receives its fictive light from the acute region of the dome.[22]

Aligning painted light and actual windows was common in site-specific paintings since Masaccio, and was explicitly recommended by Giovanni Paolo Lomazzo in his treatise of 1584: 'As a general rule, figures [in paintings] should be lit according to the way the light passes into the room.'[23] But there is more than one window in San Carlino, and the alignment is relative not only to proximity but to symbolic meaning. In allegorical terms, the light for the side altarpieces corresponds to the light from the facade window, whose purpose is to illuminate the earthly reaches of the church, while the paintings on the principal, high-altar axis are fictively lit by the lights corresponding to the heavenly zone above. The paintings executed under Borromini's direction support the proposition that there are distinct light zones in San Carlino: a middle and directional layer created by the *fenestrone*, and a flood-lit upper level created by the octagonal windows and lantern.

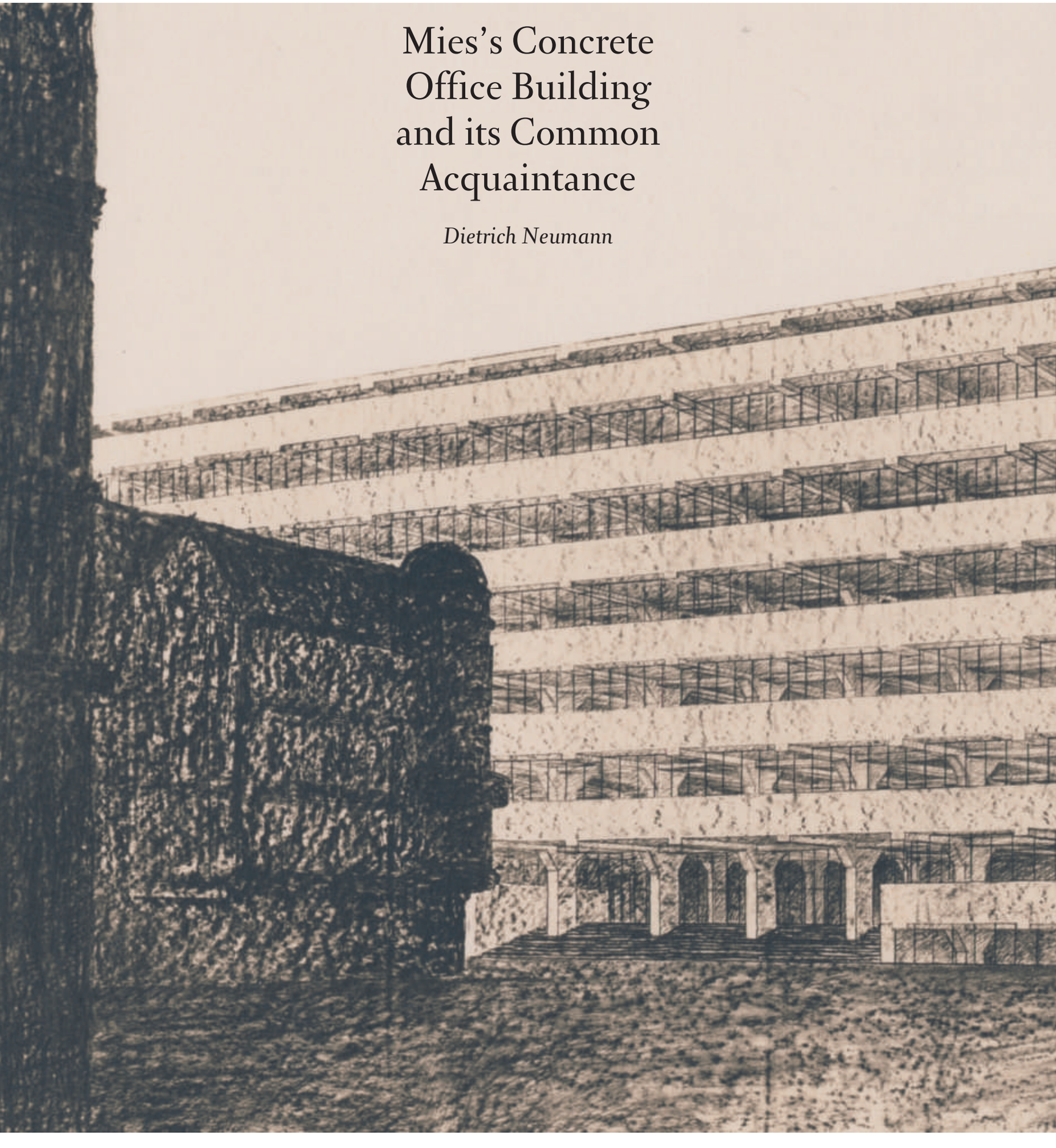
It is a commonplace among admirers of San Carlino that neither colour nor decoration distracts from the architecture.[24] White stucco, rather than coloured marble revetment, is indeed one of the features of the church. Yet as we have seen, Borromini also integrated gilding and paintings into the symbolic and formal programme. What obscured the significance of these elements was, firstly, the removal of Cerrini's side altar paintings and, secondly, the slightly later insertion of an organ stall, which covered Mignard's *Annunciation* fresco and blocked the view to the broken pediment and gilded balustrade above, key elements in the theatre of Holiness. The organ placed on top of the stall in 1909 then compromised the modulation of the middle layer of light, which buffers like a transparent cloud the realms of heaven and worshipper; above all, the organ hid the little *camera di luce* that lights the way for the incoming devotee. In so doing, the metamorphosis of the stone starry crown into the oval gloried star of light remained secret. Such are the physical details. Perhaps what also obscured the operation of San Carlino's north window was the habit of ignoring sunlight when interpreting architecture.

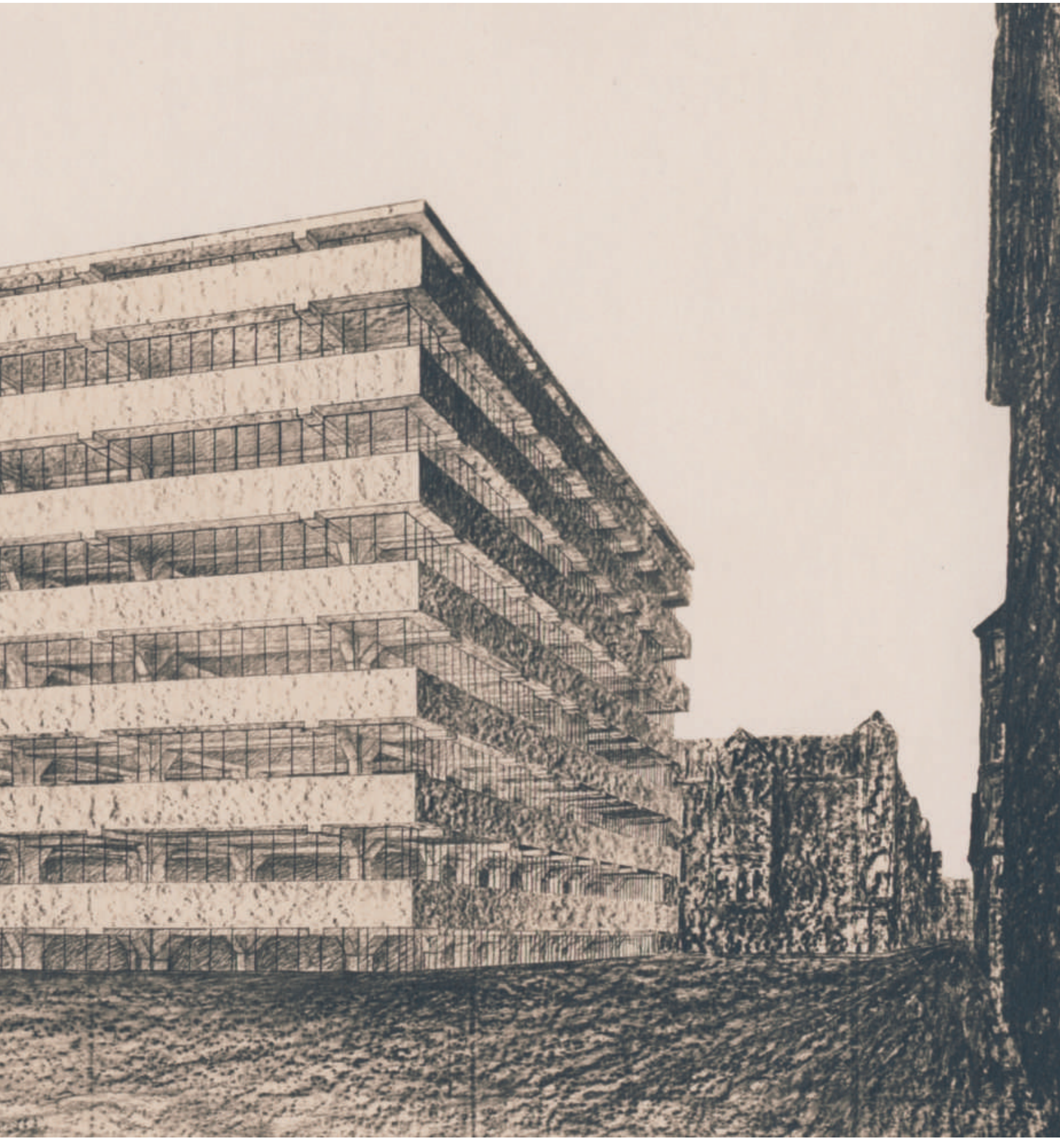
Many of these ideas were tested in conversation with Fabio Barry and Georgina Cole.

1. Paolo Degni, 'La cronaca del restauro dell'interno della chiesa di San Carlino alle Quattro Fontane', in Paolo Degni (ed), *La Fabrica di San Carlino alle Quattro Fontane: gli anni del restauro* (Rome: Bollettino d'arte speciale, 2007), pp 159–89. The 1855 organ loft originally housed a small pipe organ which did not intrude on the *fenestrone*.
2. David Watkin was unusual in reproducing a photograph of the interior oriented to the entrance, but the text does not refer to the organ: *A History of Western Architecture* (London: Laurence King, second edition, 1992), p 339, pl 499.
3. Rudolf Wittkower, *Art and Architecture in Italy, 1600–1750* (London: Penguin, third edition 1980), p 203; Leo Steinberg, *Borromini's San Carlo alle Quattro Fontane: A Study in Multiple Form and Architectural Symbolism* (New York, NY: Garland, 1977), p 10.
4. Michael Hill, 'Practical and Symbolic Geometry in Borromini's San Carlo alle Quattro Fontane', *Journal of the Society of Architectural Historians*, vol 72, no 4, December 2013, pp 555–83.
5. Carlo del Bravo, 'Sul significato della luce nel Caravaggio e in Gianlorenzo Bernini', *Artibus et Historiae*, vol 4, no 7 (1983), p 73; Fabio Barry, 'Lux and Lumen: The Symbolism of Real and Represented Light in the Baroque Church', *Kritische Berichte,* vol 4 (2002), p 25; Anna Bülau, 'Directed Light in Antonio Gherardi's Avila Chapel: Reflections on the Convergence of Baroque Sacred Architecture, Stage Design, and *Quadratura* Painting', in Daniele Mondini and Vladimir Ivanoci (eds), *Manipolare la luce in epoca premoderna* (Università Svizzera italiana: Silvana Editorial, 2014), pp 139–54.
6. James McQuillan, 'Geometry and Light in the Architecture of Guarino Guarini', PhD dissertation, University of Cambridge, 1991; John Hendrix, 'Ascesa attraverso gerarchie neoplatoniche in San Carlo alle Quattro Fontane', C Frommel and E Sladek (eds), *Francesco Borromini: Atti del convegno internazionale Roma, 13–15 gennaio 2000* (Milan: Electa, 2000), p 280; Fabio Barry, *op cit*, pp 22–37; Alexei Lidov (ed), *Hierotopy of Light and Fire in the Culture of the Byzantine World* (Moscow: Pheorer, 2013).
7. Charles Davis, 'Architecture and Light: Vincenzo Scamozzi's Statuary Installation in the Chiesetta of the Palazzo Ducale in Venice', *Annali di Architettura: Rivista di centro Internazionale di studi di architettura Andrea Palladio di Vicenza*, vol 14 (2002), pp 171–93; Paul Davies, 'The Lighting of Pilgrimage Shrines in Renaissance Italy', in E Thuno and G Wolf (eds), *The Miraculous Image in the Late Middle Ages and Renaissance* (Rome: L'Erma di Bretschneider, 2004), pp 570–80; Sergio Bettini, 'Ricerche sulla luce in architettura: Vitruvius e Alberti', *Annali di architettura: Rivista di centro Internazionale di studi di architettura Andrea Palladio di Vicenza*, vol 22 (2011), pp 21–44; Sergio Bettini, 'I lumi del Pantheon', in M Basso, J Gritti, and O Lanzarini (eds), *The Gordian Knot: Studi in offerti a Richard Schofield* (Rome: Campisano editore, 2014), pp 163–71; Daniele Mondini and Vladimir Ivanoci, *op cit*.
8. Vincenzo Scamozzi, *L'Idea dell architettura universale* (Venice, 1615), part 1, bk 1, ch 13, pp 137–39. Scamozzi's typology of light was explored in Charles Davis, *op cit*, pp 171–76.
9. The cavity is shown closed in Simon de Beausire's 1694 cross-sectional drawing (RIBA 21189). Bufalini published in Giovanni Giacomo de Rossi, *Insignium Romae Templorum Prospectus* (Rome, 1683).
10. Leo Steinberg, *op cit*, p 13.
11. Joseph Connors, review of Steinberg, *Journal of the Society of Architectural Historians*, vol 38, no 3 (1979), p 284.
12. Paolo Portoghesi, *Storia di San Carlino alle Quattro Fontane* (Rome: Newton & Compton Editori, 2001), p 176.
13. James MacQuillan, *op cit*, p 22.
14. Joseph Connors, 'Sant'Andrea al Quirinale: Payments and Planning, *Journal of the Society of Architectural Historians*, vol 41, no 1 (1982), p 19.
15. Leo Steinberg, *op cit*, pp 279–82 and 404–10.
16. Filippo Camerota, 'Architettura oblique', R Bösel and C Frommel (eds), *Borromini e l'universo barocco* (Milan: Electa, 2000), vol 2, pp 317–18. Camerota examines Borromini's designs with reference to the impact of Juan Caramuel de Lobkowitz, whose discussions in the 1650s of the oblique composition of Bernini's Piazza di San Pietro formed the basis of his *Archuitectura civil recta y oblique* (Vigevano, 1678). Yet already in San Carlino, Borromini demonstrated his mastery of effects derived from sharp viewing angles.
17. Paolo Portoghesi, *op cit*, p 176, quotes the contract with Masseri.
18. Birgitta Ringbeck, *Giovanni Battista Soria: Architekt Scipione Bogheses* (University of Münster: Münster, 1989), p 98. The crown and *humilitas* insignia are also on the 1638 high altar: Alessandra Anselmi, 'The High Altar of San Carlo ai Catinari, Rome', *Burlington Magazine*, October 1996, p 661.
19. A reconstruction of the plan of the paintings is provided in the author's 'Practical and Symbolic Geometry', p 578. See also Leo Steinberg, *op cit*, pp 8–9. Cerrini's paintings – of the *Holy Family* on the east wall and the *Martyrdom of St Ursula* on the west – remain in the corridor behind the church. The replacement paintings are *Ecstasy of S Michele* by Amalia de Angelis (1847) and *Ecstasy of San Giovanni Battista della Concezione* by Prospero Mallerini (1819). They neither participate in the interior light nor express the Trinitarian palette of blue and red.
20. Little has been said about the chapels in San Carlo. See Joseph Connors, 'A Copy of S Carlo alle Quattro Fontane in Gubbio', *Burlington Magazine*, September 1995, pp 594–95; Paolo Portoghesi, *op cit*, pp 90–91.
21. That Mignard might have calibrated the painted light source in the *Annunciation* to that of the architectural light of the lantern would be consistent with his unusual compositional choice of positioning the angel on the right. As Don Denny has observed, this position emphasises, at the expense of the Virgin, the universal authority of the messenger Gabriel, sent by the Trinity to incarnate the Lord: *The Annunciation from the Right from Early Christian Times to the Sixteenth Century* (New York, NY: Garland, 1977), pp 134–47. Picturing the Annunciation as an enactment of Trinitarian providential history would fit the iconography of the church, co-dedicated to the Trinity. See Michael Hill, *op cit*, pp 573–79.
22. The contract for the painting is dated 21 June 1645. See Jean-Claude Boyer (ed), *Pierre Mignard, 'le Romain'. Actes du colloque organisé au musée du Louvre* (Paris: Louvre, 1995), p 33. The church was consecrated on Sunday 14 October 1646. See Fra Juan de San Buenaventura, *Relatione del Convento di San Carlo alle Quattro Fontane* (Rome: Polifilo, 1999), p 58.
23. *'Tutti i lumi per regola generale si danno à corpi secondo il luoco cui passano, e percuotono il muro ò la tavola dipinta; la quale dolcemente hà di receverlo non altrimenti che se naturalmente lo recevesse essendo di rilievo.'* Giovanni Paolo Lomazzo, *Trattato del arte della pittura, scoltura* (Milan, 1584), bk 4, ch 21, p 238. See Leo Steinberg, 'Observations in the Cerasi Chapel', *Art Bulletin*, June 1959, p 185; Paul Hills, *The Light of Early Italian Painting* (New Haven, CT: Yale University Press, 1987), pp 132–34; and Louis Waldman, 'New Light in the Capponi Chapel in S Felicità', *Art Bulletin*, June 2002), pp 300–01.
24. For example, see Anthony Blunt, *Borromini* (London: Allen Lane, 1979), p 68; David Watkin, *op cit*, p 243.

Mies's Concrete Office Building and its Common Acquaintance

Dietrich Neumann





On Thursday 2 August 1923 a courier rang the doorbell at Am Karlsbad 24, Mies van der Rohe's office and apartment in Berlin's elegant Tiergarten district. His mission was a matter of some urgency: Mies had promised a text to accompany the publication of his visionary concrete office building, then on display in the annual Grosse Berliner Kunstausstellung.[1] It was to be featured that weekend in a major national newspaper, the *Deutsche Allgemeine Zeitung* (*DAZ*), and the print deadline was looming. This was a tremendous opportunity for Mies: for the first time one of his projects would reach a mass audience, several hundred thousand people, rather than the comparatively small readership of specialised architecture journals.[2] *DAZ* typically reproduced only a handful of images, and so those that did appear tended to stand out.

The project would soon become one of Mies's best-known designs. Its only surviving drawing – an enormous charcoal perspective on heavy brown paper – is today in the Museum of Modern Art in New York. Its notoriety, however, stands in inverse proportion to what we actually know about it. We know nothing about its site, plan and layout, about who in Mies's office worked on the scheme, or whether more drawings exist. The following notes try to suggest some answers to those questions.[3]

The courier at Mies's door that day returned empty-handed, as the promised text was still not ready. Though Mies had sent a photograph of his drawing the day before, together with some technical notes, he was still struggling to find the right words, as was often the case – writing (whether a statement, published text or lecture) was not something that came easily to the architect, especially at such moments of perceived importance. When Mies finally sent in his text the next day, it was too late: the Sunday supplements had already gone to press.[4] It has since been widely assumed that this missed deadline meant the project was never published in *DAZ*, but it did appear that weekend, albeit with a hastily written commentary by an editor who failed to grasp its significance.[5]

The previous year, 1922, had been especially momentous for Mies. He had not only separated from his wife and children and turned his apartment into an office, but had also changed his name, adding some polish by joining his mother's maiden name, 'Rohe', to his father's surname, 'Mies' (the word in German means 'mean', 'grotty', 'crummy') with the vaguely aristocratic 'van der'. The longer name came hand-in-hand with the adoption of a new letterhead, designed by his friend Gerhard Severain on an unusual oblong format. After designing a string of utterly conventional suburban homes, he now sought out the circles of the avant-garde and began to exhibit a series of visionary projects, aiming to become as visible as possible and redoubled his 'networking' efforts. Joining the *Novembergruppe* allowed him to present his design for a glass office tower (inspired by the results of the Friedrichstrasse skyscraper competition) in the group's section at that summer's Grosse Berliner Kunstausstellung. His enormous presentation drawing was probably larger than anyone else's at the show. He also became a member of the Bund Deutscher Architekten (German Society of Architects), cofounded the *Zehnerring* (Ring of Ten) with other progressive architects, and was invited to become a member of the Deutscher Werkbund.[6] The following summer the Danish architecture journal *Bygmesteren* became the first foreign publication to feature his work – thanks to the young Danish architect Knud Lönberg-Holm, who had visited him in the spring of 1923 – including images of the Friedrichstrasse skyscraper, a curvilinear glass skyscraper and the concrete office building.[7]


Neuartige Bürohausbauten.

Bürohaus mit Fensterwänden.

(Entwurf des Architekten Ludwig Mies v. d. Rohe.)

Das hier abgebildete Bürohaus ist dadurch charakteristisch, daß seine Außenwände auf ihrer ganzen Länge und auf den größten Teil ihrer Höhe aus Glas bestehen, also lichtundurchlässig sind. Eigentliche „Fenster" in dem sonst üblichen Sinne hat die Außenwand des Hauses nicht, sie wirkt vielmehr selbst als ein einziges Fenster. Im Gegensatz zu anderen Hochbauten hält die Außenwand nicht die Lasten der Decken tragen, diese werden von einer im Innern des Hauses liegenden Eisenbetonkonstruktion aufgenommen, die entsprechend das Knochengerüste des Hauses darstellt. Für den vorliegenden Entwurf ist ein gewöhnlicher Binder von 8 Meter Stützweite mit beiderseitiger Konsolenausragung von 4 Meter Länge als das günstigste Konstruktionsprinzip ermittelt worden. Die Binder sind untereinander 5 Meter entfernt und tragen die Deckenplatten, die am Ende der Kragarme senkrecht hochgewinkelt sind. Ueber der so entstehenden Brüstung liegt ein durchlaufendes, bis zur Decke reichendes Fensterband. Das Haus besteht ganz aus Eisen, Beton und Glas; Mauerwerk oder Holz ist nicht zur Verarbeitung vorgesehen. Die im Innern entstehenden Räume haben eine Tiefe von 16 Meter, was für die Einteilung der Arbeitsplätze günstig wirkt, sobald es sich um die Beschäftigung großer Bureaubetriebe handelt.

Such visionary projects were the only recourse for many architects at the time, as building work had come to almost a complete halt. Crippled by reparation payments after the Treaty of Versailles, Germany was in the grip of an economic and political crisis, with crushing hyperinflation (in 1923 a copy of *DAZ* cost 6,000 Reichsmark), strikes and confrontations in the industrial Ruhr area, and widespread public unrest.[8] In those difficult days, *DAZ* devoted much space to discussions of practical matters, to the benefits of frugality and ingenious ways of doing more with less. Which perhaps explains why Mies's project was not shown in the culture section, but on the first page of the 'Kraft und Stoff' (Power and Materials) supplement, typically devoted to new advances in technology. In this sense, Mies's starkly repetitive and brutally unadorned office building was presented as a functional and structural 'innovation' responding to the austerity of the times. Rather than conveying an understanding of the concrete structure, however, the accompanying text in *DAZ* seems to rely on the writer's vague memories of Mies's glass skyscraper for Friedrichstrasse from the year before:

What is most distinctive here is the use of glass in the exterior walls, extending over the whole length of the building … and creating a sense of transparency. The facade does not contain 'windows' in the usual sense, but rather is itself more like a single continuous window. In contrast to other high-rise buildings, the external walls do not help to carry the load of the floor plates; instead there is a loadbearing internal structure which in some way represents the skeleton of the building.[9]

The concrete office building was thus the first Mies project to reach a mass audience, albeit imperfectly. But it had in fact appeared in print twice before, in the Grosse Berliner Kunstausstellung catalogue and, just a few days before the *DAZ* article, in the first issue of a new avant-garde magazine (or more accurately, a hand-folded polemic) *G – Material zur elementaren Gestaltung*, edited by Hans Richter, Werner Graeff and El Lissitzky.[10] In *G*, drawings of the concrete office building were paired with a short, emphatic text, this time by Mies himself:

We reject all aesthetic speculation, all doctrine, all formalism. Architecture is the will of an epoch translated into space: lively, changing, new. Not yesterday, not tomorrow, only today can be given form. Only this kind of building will be creative. Create form out of the essence of the task using the methods of our time. This is our work.

Mies omitted these lines in the text he prepared for *DAZ*, choosing to instead highlight the fact that his work was appearing in the mass media:

It is no coincidence that important questions of architecture are being discussed in newspapers today. In focusing exclusively on aesthetics, the specialised art magazines – once the fulcrum of artistic life – have failed to take notice of the way modern architecture has evolved away from

Previous: Mies van der Rohe, concrete office building, Berlin, 1923
© MoMA, New York / Scala, Florence
Above: 'Bürohaus in Eisenbeton', *Deutsche Allgemeine Zeitung*, 5 August 1923

aestheticism and towards the organic, away from the formal and towards the constructive. Modern architecture has long since renounced the idea of playing a merely ornamental role in our lives. Creative architects want to have nothing, absolutely nothing to do with the aesthetic traditions of previous centuries. This area we gladly leave to the art historians.[11]

Otherwise, his texts for both *G* and *DAZ* are broadly similar, presenting the office building as a 'house of work, of organisation, of clarity, of economy', and whose interior spaces reflected the organisation of the company and the austerity of the times: 'maximum effect with minimal means'.[12] The most economic basis for the structure, Mies explained, would be a two-post frame where the columns spanned 8m and cantilevered 4m on either side (resulting in a cross-section of 16m). The girders would be spaced at intervals of 5m. These numbers and the precision of the drawing allow us to read the structural rhythm of the side elevation as 4, 8, 5, 5, 5, 5, 8 and 4m. The overall width of 49m suggests two 16m wings and a resulting 17m-wide interior courtyard.[13] Mies described reinforced concrete structures as 'skeletons by nature. No gingerbread. No tank turrets … skin and bone construction.' Strictly speaking, a steel-frame building would have been a better fit for such a description, which suggested a clear distinction between the loadbearing structure and its envelope. But this was not a realistic proposition in Germany in 1923, as the country's heavy burden of reparations was largely being paid in a currency of steel and coal. In a reinforced concrete structure, the separation of 'skin and bone' was not as obvious, as part of the load was taken on by the embedded steel reinforcement rods, and the concrete simultaneously served loadbearing and covering functions. Mies actually highlighted this quality when he described how the floor slabs would be turned up at their ends to form the building's outer skin.

Yet Mies made no mention at all of what is perhaps the most novel and mysterious quality of the design – namely, the incremental increase in the size of the floor plates. The progressive extension of each cantilever – barely visible from the vantage point of the perspective, but clearly indicated by the growing size of the corner windows – means, of course, that only one floor would have had the 16m-wide section described by Mies (floors above would have been wider, those below narrower).[14] One is tempted to compare it to the invisible convex curvature at the base of the Parthenon or the *entasis* of a classical column. Mies never talked about it, however, and critics have usually avoided addressing the issue, largely because this subtle, almost invisible gesture seems a most un-Miesian move in the context of his outspoken rationalism – one that dangerously comes close to the 'aesthetic speculation' he so forcefully rejected.

In the absence of any explanation by its author, there seem to be at least two ways of explaining the increasing floor size. The first is that Mies was simply trying to keep the exposed concrete from getting rain-soaked, by providing a clear drop from the edge of each floor. The second is that he was giving visual expression to the reduction in weight towards the top – for if the concrete columns on each floor maintained the same diameter, and thus had the same structural capacity, they would be increasingly too large for the load they had to carry, which decreases the further up the building you go. Increased floor space was a way of compensating for this.[15] Such explanations, however, could be a case of what Mies would later call 'a good reason' versus 'the real reason'[16] – which might simply be that the building looked taller this way. What we do know is that Mies painstakingly followed the city's height limitation of six floors, but provided eight useable storeys by adding a basement level and an attic floor. Though only half-height, this upper level appeared as tall as a full top floor.

No indication was given as to a potential site, but one might recognise a certain resemblance between the silhouette of the building in the background of Mies's drawing and the neo-Renaissance Hotel Kaiserhof on Alexanderplatz – at the time there was much discussion about interventions in Berlin's congested traffic hubs. Indeed, when a major competition was launched for the redesign of Alexanderplatz in 1928, Mies would propose a large central traffic circle surrounded by a series of solitary blocks. The block next to the railway station, slightly more complex than the others, bears a striking resemblance to his office building design. The bird's-eye view suggests further parallels, revealing an oblong outline with an interior courtyard, thin ribbon windows and the same number of storeys, including a compressed top floor.



Alexanderplatz, Berlin, 1898
© Ullstein Bild / Getty Images

By 1923 Mies had been promoted to the organising committee for the *Novembergruppe* section in that summer's Grosse Berliner Kunstausstellung. Probably not coincidentally, he exhibited more projects than any of the other architects in the group, and was one of only two to have their work illustrated in the catalogue. In addition to the office building and its model, Mies exhibited another four pieces – a model and a drawing of a concrete country house, a drawing of an interior and a 'residence in brick'. The last two drawings have been lost, but the brick house was in all likelihood different from the well-known brick country house he showed the following year.

A model of the concrete office building was shown alongside the large charcoal and crayon perspective in the Berlin exhibition. Mies's friend, Werner Graeff, recalled seeing it there, and noted that the horizontal spandrels between its ribbon windows were coloured red and grey. He also remembered 'a rather self-important' character from Mies's office standing next to the display: 'His name was "Gottschalk", or something like that … a terrible show-off who insisted that "he had designed most of it" and complained that "there was no mention of his name anywhere".'[17] All of which begs the obvious question: who was this man who claimed co-authorship of such an important project?

Overlapping with the Berlin exhibition, in mid-June a model and photograph of the same project went on display in Magdeburg. This suggests that there were in fact two versions of the concrete office building model, since the Berlin organisers would probably not have agreed to the removal of items mid-show.[18] The exhibition in Magdeburg was curated by the artists' society *Die Kugel* (The Sphere), and Mies was very keen to be represented there, not least

because the city had a vibrant art and architectural scene – quite literally so, as many of its buildings had been painted in an array of bright colours, on the insistence of Magdeburg's city architect Bruno Taut. Mies's glass skyscraper project had also been published in Taut's magazine, *Frühlicht*, in 1922.[19]

In that same month, June 1923, Mies was invited by Walter Gropius to participate in the International Architecture section of the first major Bauhaus exhibition in Weimar, opening on 15 August.[20] Mies accepted with alacrity. The show promised to attract a great deal of publicity. It was also an opportunity to make up for his failure to capitalise on Gropius's invitation to take part in his previous exhibition for 'unknown architects' in 1919.[21] In a letter, Gropius reported how 'delighted' he was with Mies's projects at the Grosse Berliner Kunstausstellung (which otherwise qualified as a 'horrible chaos').[22] He was particularly interested in the model of the concrete country house (which he mistook for a 'flat office or factory building'), declaring it 'new and lively'. The concrete office building, on the other hand, was 'too schematic' in his view. Mies wrote that he could not remove the model of the country house from the Berlin show, and offered in its place the models of his glass skyscraper and one of the concrete office building, currently in Magdeburg, as well as a drawing of the office building, '3.5m long and 1.5m high'.[23] Since the well-known charcoal drawing (2.89m long and 1.38m high) was tied up in Berlin until 17 September, Mies must have had another large drawing of the project.[24] (We do not know if this second drawing ended up in the show, as Gropius warned that he would 'probably not be able to present everything' Mies sent him.[25] And as a number of anxious letters in the archive reveal, Mies tended to be disorganised in keeping track of his own drawings, and also rather casual about returning material he had requested from other architects for group exhibitions.[26])

On schedule, the model of the office building returned from Magdeburg on 13 July, and was then sent on to Weimar two weeks later.[27] It shows up in an installation photograph from the Bauhaus exhibition, where it is paired with a model of the glass skyscraper in an urban constellation, as stipulated by Mies.[28] Across from it we see Gropius's own model for his Chicago Tribune competition entry. Less detailed than the model of the glass skyscraper or the concrete country house, the model of the concrete office building presents a long, low structure with reflective ribbon windows and a much more pronounced upward increase in its floors than the more familiar perspective sketch. A close-up view was included in a photomontage by the Continental picture agency, produced on the occasion of the Bauhaus exhibition and possibly commissioned by Gropius.[29] It shows Mies's curvilinear glass skyscraper, Gropius's Chicago model, a collection of his small houses and the model of an office building for the Sommerfeld Company. Mies's own office building is perched underneath in the foreground.

Gropius reported receiving requests from 'Berlin, Hamburg, Düsseldorf, Hannover' to take the show after its run in Weimar.[30] Mies, however, was less enthusiastic and in private confessed to his disapproval of its 'wild constructivist formalism' and 'artistic fog'.[31] And so (without telling Gropius) he worked together with Hugo Häring and Adolf Behne on a redesign, which would have included additional projects by Peter Behrens, Henry van de Velde and H P Berlage (all of whom Mies had already contacted), along with Häring, Hans Scharoun and others. When Gropius found out, he was livid, and in the end nothing came of the scheme. Instead, the Bauhaus exhibition was shown in a reduced format (without the models) at the Provinzialmuseum in Hannover.[32] Separately, the concrete office building was displayed in other locations, including the Jena Kunstverein (Art Association) show commissioned by the painter and graphic artist Walter Dexel, and curated by Mies himself – the first time he had acted in this capacity. The exhibition, held in November 1924, featured other material from his *Novembergruppe* colleagues under the title 'Modern Office Buildings and Factories'.[33]

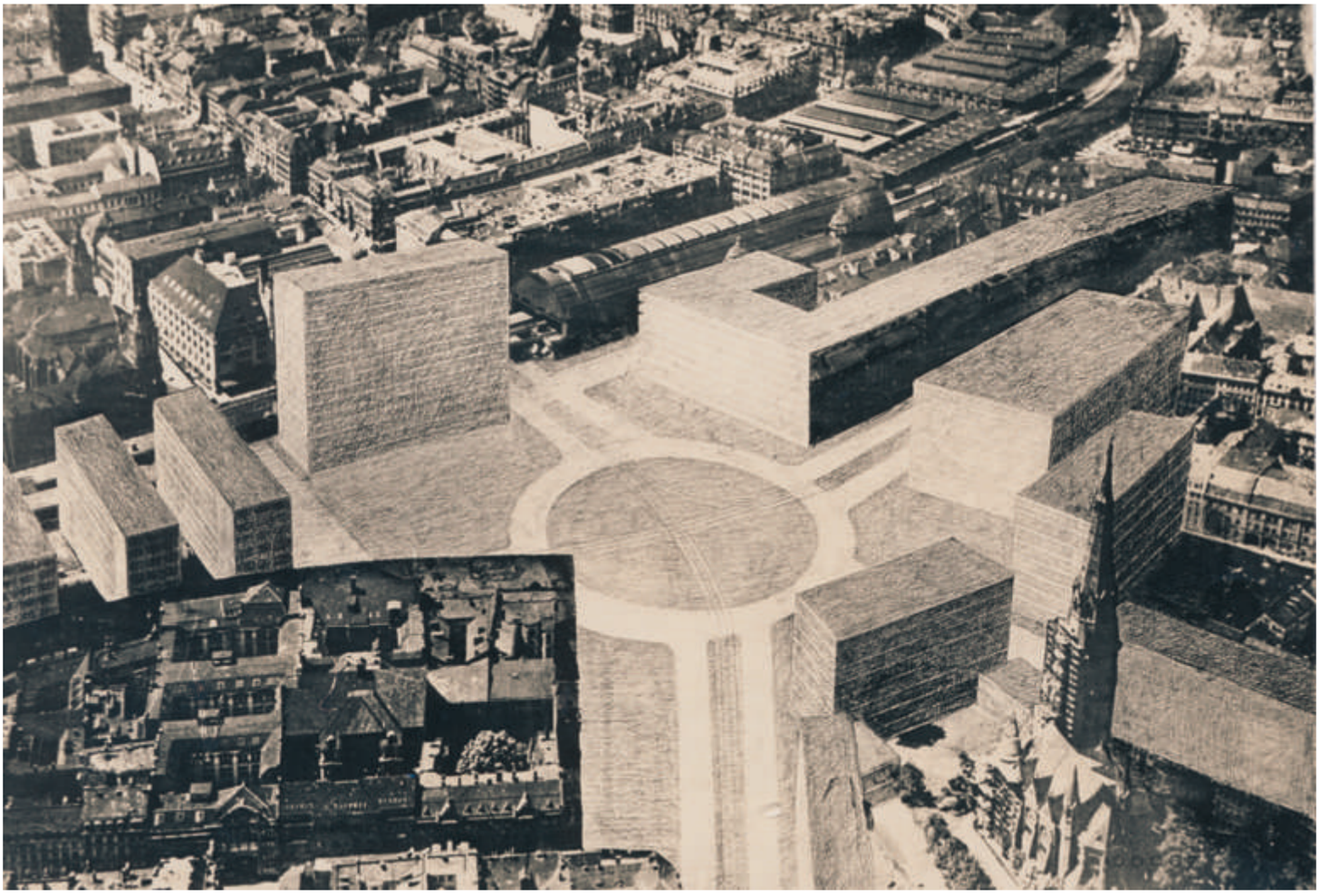


International architecture exhibit, Weimar, 1923
© BLDA-Brandenburg

Of all these public outings, Mies's participation in the 1923 Magdeburg exhibition proved particularly consequential. The following year he was invited to give a lecture by the new director of the Kaiser Friedrich Museum, Walter Greischel, who reported 'a lively interest in your architectural designs' in the city.[34] Appointed on Bruno Taut's recommendation, Greischel was a champion of modern art, and especially of German expressionists such as Emil Nolde and Erich Heckel. He was also friendly with the local factory owner and art collector Wilhelm Adolf Farenholtz. The invitation to lecture came at a significant moment, when three key positions in the city needed to be filled. Rudolf Bosselt, director of Magdeburg's renowned school of arts and crafts, had resigned after being subjected to public criticism by Taut. Mies was asked if he was interested in the position, but he declared that he was not.[35] The department of civil engineering was also looking for a new head. And in April 1924, Taut himself had resigned. Apparently not the most diplomatic of souls, he had won few friends in Magdeburg. Before he departed, Taut recommended Mies to Farenholtz as the ideal candidate to take over his role as city architect – the most prestigious and best paid of the three. It seems that Mies was open to the appointment, but did not want to have to compete for the post. Perhaps he felt it unnecessary. During the same period, in the spring and summer of 1925, he was in discussions with representatives of the city of Frankfurt regarding the position of city architect there (which eventually went to Ernst May).[36]

The first position in Magdeburg was filled on 28 August 1925, when the local council chose graphic designer and architect Wilhelm Deffke as the new director of the arts school.[37] Soon after, the deadline for applications for Taut's old job passed without Mies putting his name forward. Farenholtz wrote to Mies, telling him in confidence that he could not blame him for not throwing his hat in the ring. He hoped none of the candidates would be suitable, so that Mies's turn would come: 'In a certain sense time is working in your favour, because the more difficult the situation in Germany becomes, the more clearly people will realise that what is required is not an established bureaucrat but rather someone who is clear and purposeful and can see things in context.'[38]

As it turned out, the city council found it hard to reach an agreement. In November 1925 the situation was still unresolved, largely because the Socialists had rejected the



Mies van der Rohe,
remodelling of Alexanderplatz, Berlin, 1929
© MoMA, New York / Scala, Florence



Mies van der Rohe & Walter Gropius,
collage, 1923
© VG Bild-Kunst, Bonn

shortlisted candidates. Asked to help with the search for his successor, Taut approached Mies, who sounded out his chances with Farenholtz, asking whether he believed 'the Democrats could be persuaded to support my candidacy. Taut thinks the Socialists would have no objections to me.' Both he and Taut, he said, believed it was 'vital for the modern movement' that this position should not be handed to a 'lightweight'.[39] Happy that Mies was 'not averse to considering the matter further', Farenholtz promised to get back to him within the next few days, after having sounded out the council.[40]

However, he soon discovered that Mies's candidacy was by no means greeted with unanimous approval. By early December 1925 he was sufficiently concerned by what he had heard that he travelled to Berlin and met with Mies in the opulent Hotel Bristol on Unter den Linden. The meeting did not go well. Mies, by nature exceedingly sensitive, seems to have left in a huff. Later that day he wrote to Farenholtz explaining his change of heart:

I am asking you not to take my candidacy any further. I have also decided not to give the lecture... People there seem to presume that this is a particularly desirable post. But personally I would never have considered taking up such a position, were I not compelled to find some way to realise – give a right of abode to, as it were – this new approach to building, for there is no other reason I can think of why I should give up my present situation, where I am both free artistically, and materially much better off. That I do not care about such titles is quite clearly illustrated by the fact that I turned down the directorship of the Magdeburg school, as well as professorships at Breslau and Dresden.[41]

Mies was allowing himself some poetic licence here. His income at the time was hardly in the league of a city's planning director. For the past few years, commissions had been scant. The Ryder House in Wiesbaden had been left unfinished by the client, work on the Mosler House was complete, and the Wolf House in Gubin was still under construction. A few months before he had been put in charge of the Werkbund exhibition at the Weissenhof in Stuttgart in 1927, but the pay for this would have been less than a regular government salary. Sticklers for facts would also point out that he was never officially offered either the directorship of the Magdeburg school (where he was merely asked if he wanted to be considered) or professorships in Breslau and Dresden.[42]

What had triggered this upset? Farenholtz had told Mies that there were rumours circulating around Magdeburg that showed him in an unfavourable light. The substance of these rumours might be gauged from Mies's heated insistence that 'a circle of experts such as Der Ring' would not 'tolerate in their midst someone who appropriated the intellectual property of others'. Without naming names, Mies expresses his surprise about the identity of the man Farenholtz suggested as the most likely source of this slander. He would not have thought him 'capable of such wretchedness', he wrote, especially 'as he must know me very well, since we did a job together and a year later he asked me to work with him again on a project for a grain silo'.[43]

Farenholtz was taken aback by the vehemence of Mies's reaction, and tried to reassure him. It was true that he had learned of the rumours from Greischel, but 'neither Dr Greischel nor myself have been made aware of them from any other quarter'. He asked Mies to reconsider giving the lecture, or to at least come to Magdeburg to talk the matter over. In the meantime Greischel would obtain references from Halle, Dessau and Berlin. After all, he said, Mies was still an unknown quantity in Magdeburg: 'At present, it does not yet know what it stands to lose'.[44]



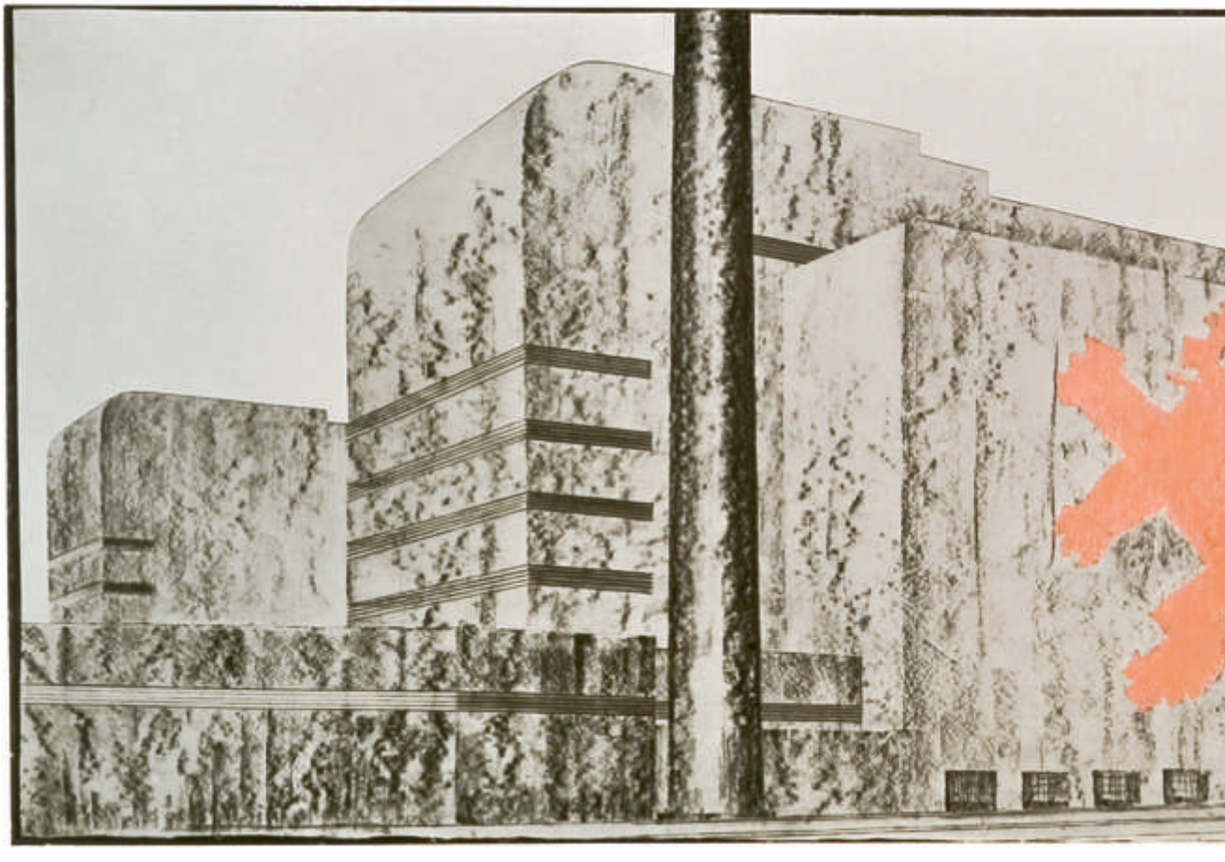
When Gropius received Greischel's request for a reference, he let Mies know in confidence that he 'had of course urgently advised them to hire you', but that he, too, had heard negative rumours emanating from Magdeburg, something to the effect that 'you had been dishonourably discharged by Behrens'. He told him this, he said, 'so you can be on your guard for those worms that are always at work when something decent is in the offing. I very much hope that the appointment will come about.'[45] Writing back, Mies confirmed that their 'common acquaintance' had indeed 'spread this and other rumours about me', but in doing so the only person he had damaged was himself: he certainly 'had no idea of how closely we are working with Behrens today' – possibly a reference on Mies's part to the upcoming Weissenhof exhibition.[46] In any event, Behrens chimed in with a supportive telegram to Greischel, stating that 'without a doubt, Mies would be a tremendous gain for Magdeburg'.[47]

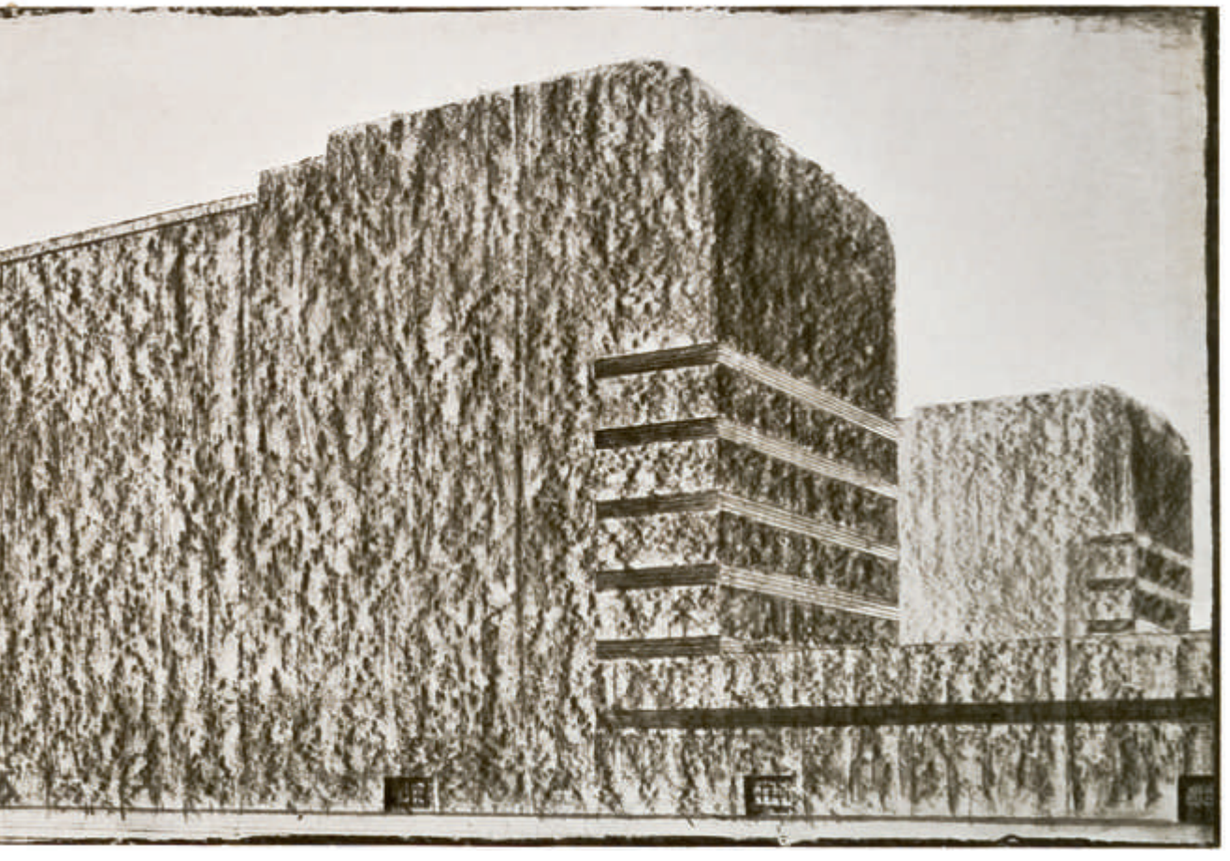
Peter Behrens' atelier, Potsdam, 1910
Wilhelm Deffke (*far left*), Walter Gropius (*fifth from left*), Mies van der Rohe (*eighth from left*)
© Bröhan Design Foundation, Berlin
Overleaf: Wilhelm Deffke, silo, Varna, Bulgaria, 1922

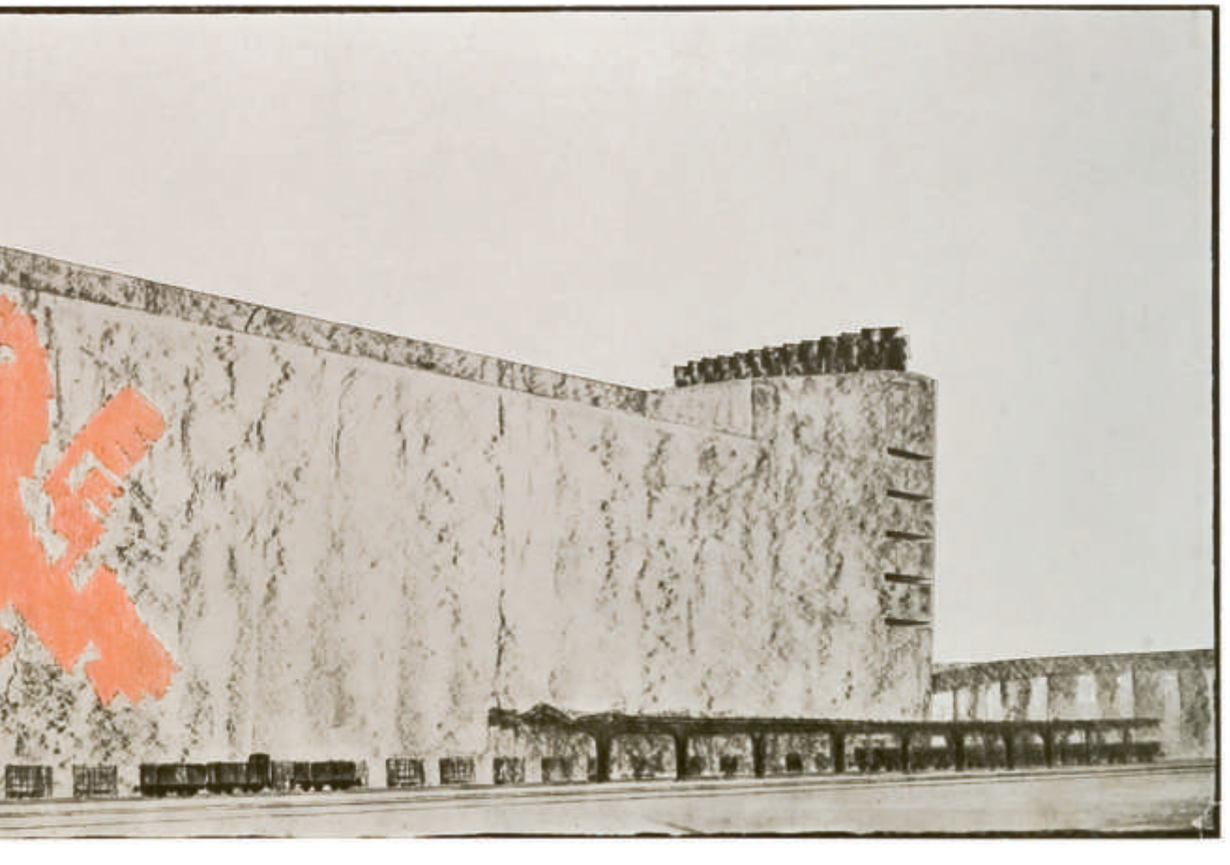
The identity of this 'common acquaintance' and Mies's detractor – unnamed in the correspondence – has only recently come to light with the publication of a well-researched monograph on Wilhelm Deffke, installed in 1925 as the new director of the Magdeburg arts school.[48] Deffke had worked for Peter Behrens from February 1909 to April 1910 (helping to design the famous AEG logo) – Mies and Gropius were there at the same time. After joining the Werkbund in 1913, he went on to found a graphic arts agency in 1915. He soon became a successful graphic designer, with commissions from the Reemtsma tobacco company and many other major German firms. From 1921 to 1928 he was listed as an 'architect' in the Berlin telephone directory, and between 1922 and 1924 he occasionally collaborated with Mies in a 'cooperative for architectural projects'.[49]

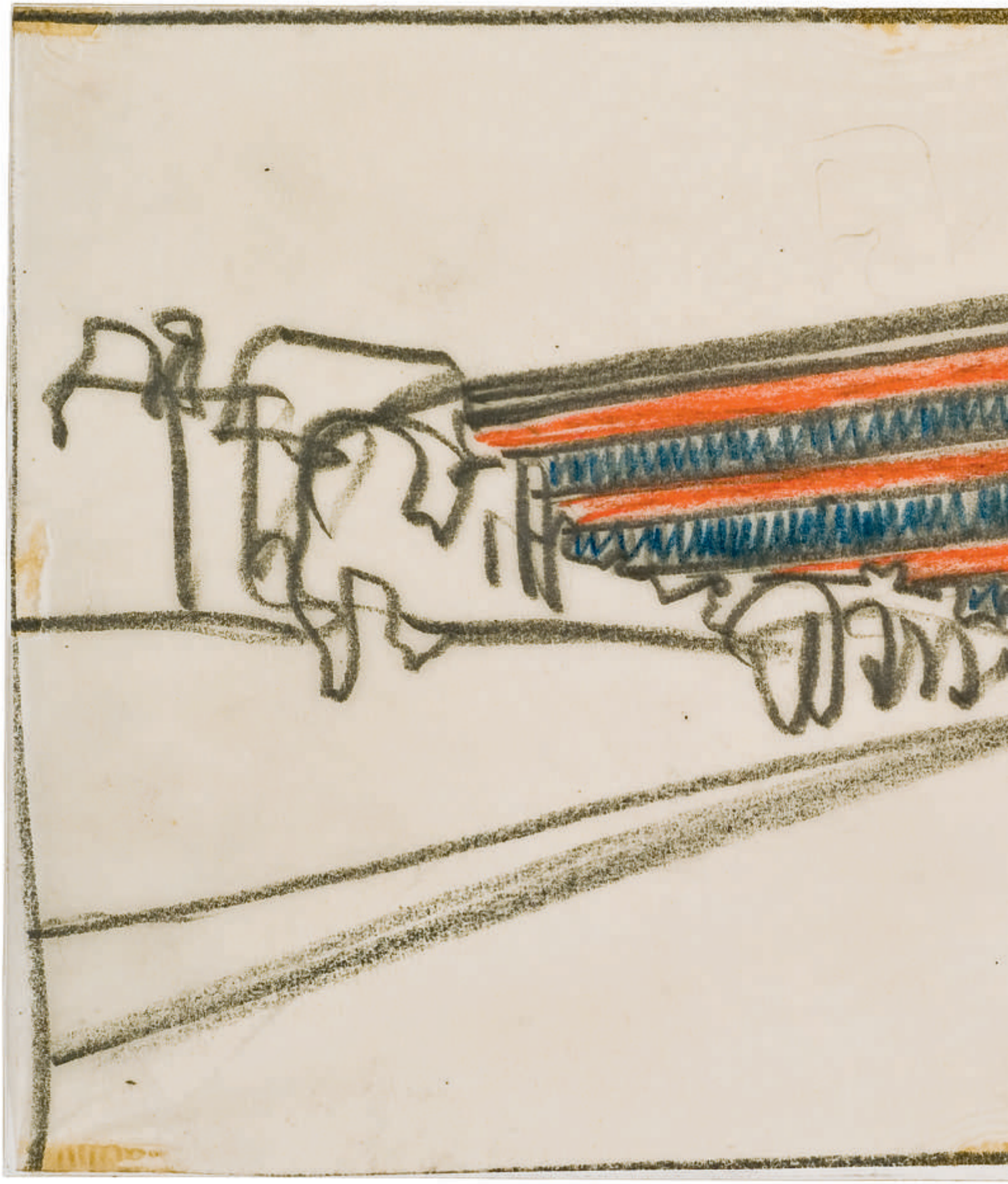
In this light, Deffke's design for a silo complex in the Bulgarian port of Varna, from 1922, is the most likely match for the 'grain silo' that Mies mentioned in his letter to Farenholtz. Three preliminary designs were made, of which two have been preserved. Particularly interesting in this context is the first version, for which we have photographs of two charcoal drawings (the originals have been lost). There is an undeniable resemblance, in the style of their rendering, to Mies's concrete office building. The perspectival system is very similar, as is the impressive contrast between the rough charcoal and the precise contours of the bands of windows. The paper was evidently placed on a sheet of chipboard or plywood, so that its rough-grained texture came through – an effective way of depicting raw concrete. Looking more closely, we can see that the drawings of both Deffke's silo project and Mies's concrete office building are characterised not only by their graininess, but by vertical lines suggesting that the underlay was a large plywood panel with ribbons of veneer – in the Mies drawing these are *c* 50cm wide. Since Deffke sometimes













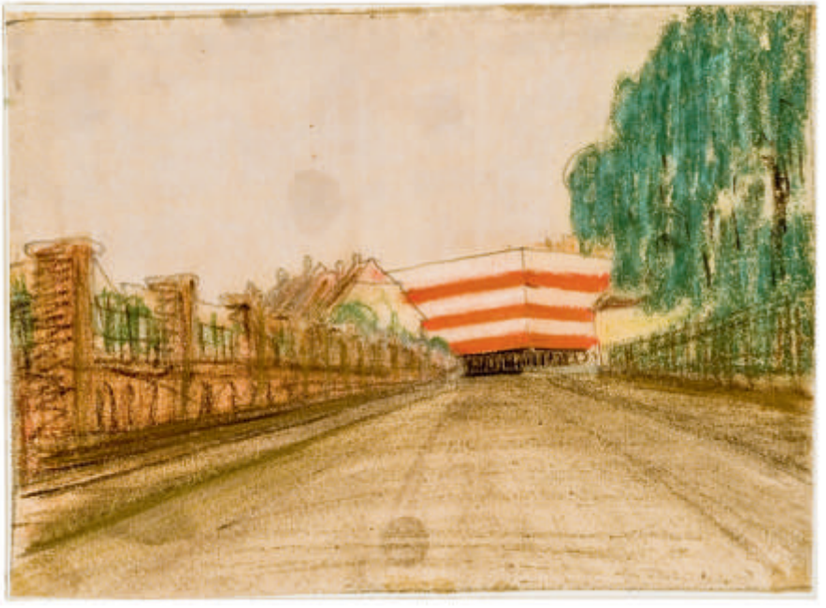
worked in Mies's office at this time, it is possible that both drawings were produced on the same board.[50] This not only allows us to estimate the size of Deffke's missing original drawing at approximately 4m wide, but more fundamentally implies that both drawings were produced by the same hand.

Mies, from early on, seems to have had a penchant for large presentation drawings. The unfinished perspective of his Bismarck Memorial competition entry of 1910 (probably executed with his brother Ewald, and submitted as a photographic reproduction) was 1.49m × 2.4m, and the rendering of the side elevation 1m × 2.14m. The perspectives for the Friedrichstrasse skyscraper and the concrete office building – at 1.73m × 1.22m and 1.38m × 2.89m respectively – seem to have been two of the largest of their time. Hans Poelzig's perspective of his skyscraper for the Friedrichstrasse competition (also executed *post factum* by a draftsman named 'Zimmermann') was 1.08m × 75cm.[51] Gropius' lost perspective for the Chicago Tribune Competition was about 1.4m tall.

In any event, knowing more about drawing conventions among Berlin architects in the first quarter of the twentieth century would allow a better understanding of the context of Mies's approach. Who would have drawn up presentation drawings in Mies's office? This question has hardly ever been raised, despite the fact that different hands can clearly be distinguished. Mies's own quick design sketches, with their identifiably loose style, bear no resemblance to the precise charcoal and crayon perspectives or watercolour renderings of his office's presentation drawings.[52] 'What constitutes a drawing by Mies van der Rohe?', Arthur Drexler, director of the department of architecture and design at MoMA, asked in 1986. He concluded that only those loose sketches in pencil or ink, usually from a small notepad, are 'indubitably by Mies and Mies alone', and conceded that everything else poses 'considerable uncertainty as to whether they are by draftsmen imitating Mies or by Mies imitating draftsmen'.[53] American architect George Nelson, visiting the office in 1935, reported that Mies was 'brilliant' and 'a fine draftsman', but 'lazy', preferring 'to have his drawings done for him'.[54]

We do not know for sure whether Deffke had a hand in drawing up the concrete office building and the concrete country house, but it is certainly possible. Mies habitually hired collaborators for individual tasks, such as the sculptor Oswald Herzog, who worked on the 1922 model of the glass skyscraper, or Curt Rehbein and Werner Graeff, who provided photographs. Carl Gottfried (1914–32), Hermann John Hagemann (1924–31) and Sergius Ruegenberg (1925–34) were among a few employees who stayed for several years with Mies. In this context, a graphic artist like Deffke could well have been brought in to produce large-format presentation drawings.

A further connection is suggested by another of Deffke's projects from this period: the headquarters building for the tobacco company Reemtsma, located in Erfurt. The company's owner, Philipp Fürchtegott Reemtsma, was clearly interested in avant-garde architecture, and would later hire Frankfurt architect Martin Elsässer to design his home in Hamburg-Altona in the early 1930s – the largest modern house in Germany at the time. Since Deffke's own work for Reemtsma ended in late 1921, the drawings for the project were most likely made in 1920–21. While two of the interior sketches clearly refer to the existing building, the exterior views may be ideas for a new building in the same location. Both versions are characterised by their radical horizontality – uninterrupted bands of windows alternating with dark red spandrels, with red being part of the corporate identity Deffke had devised for Reemtsma. Of course, red was also the colour used, along with grey, for the spandrels in the model of Mies's office building, as Graeff recalled. In one of Deffke's drawings, we find a remarkable detail: heavy crayon strokes have been added to the far corner in order to make it clear that the building gets wider as it goes up (just as in Mies's concrete office building), a fact not as obvious from the corner in the foreground. Other significant overlaps are the flat roof and the significantly lower top floor, indicated by a narrow band of windows.[55].



Above and previous: Wilhelm Deffke, Reemtsma HQ, Erfurt, 1921
© Bröhan Design Foundation, Berlin

Deffke undoubtedly had considerable talent as both a graphic artist and an architect. The confluence of the two can be seen in the exhibition stands he created for various companies in the early 1920s – generous and modern spaces into which logos, fields of colour and lettering were clearly integrated. The Tesma pavilion, designed for the 7th Berlin Tobacco Fair in 1924, offers a particularly clear illustration of Deffke's mastery of the formal and spatial language of modernism. On an almost square platform he set a series of six plate-glass walls at right angles to the pavilion's back wall, creating five interstitial areas of varying depth. Glass display shelves for the company's products lined two of the walls; the others served for visitor access. Placed on top of the *c* 2.5m × 2.5m plate-glass walls was a cantilevered flat roof of exactly the same dimensions as the base, bearing the company sign TESMA. Here Deffke was playing with the elements of a shop front, drawing the visitor almost imperceptibly into the installation. There were views through the space and other reflected views towards a huge logo that filled the back wall. Radically modern for its time, the design foreshadows Mies's glass room for the Weissenhof exhibition in Stuttgart three years later, as well as his stand for the German Linoleum Works in Leipzig in 1929 – and even the Barcelona pavilion that same year.

Whether or not Deffke had the concrete office building in mind when he accused Mies of 'appropriating the intellectual property of others' remains a matter of speculation. From Graeff's account of his visit to the Grosse Berliner Kunstausstellung we know that someone else *was* in fact laying claim to the (co-) authorship of that design. Rather vague in his recollection, Graeff thought that person might have been called Gottschalk, meaning possibly Carl Gottlieb, whom Graeff would certainly have known from occasional visits to Mies's office. Gottlieb, however, had worked for several years as a draftsman for Mies and would have been familiar with his *modus operandi*, whereas someone like Deffke, who thought of himself

as collaborating with Mies in a 'cooperative for architectural tasks', would have felt a more obvious need for recognition.[56] From this we might imagine it was a disgruntled Deffke, rather than Gottlieb, that Graeff encountered at the Berlin exhibition, staking his claim to the concrete office building. To support this conjecture, it seems possible that Deffke's sketches for the Reemtsma headquarters made an impression on Mies, who adopted essential elements of them for his own concrete office building. It is also conceivable that Deffke had a hand in making the large charcoal drawings for the visionary Mies projects of the years 1922–23, and that the design for the grain silo in Varna was developed in this context.

In early May 1923, at precisely the moment when the large drawing of the concrete office building was finished and delivered to the Grosse Berliner Kunstausstellung, Deffke sent a pencilled note to Mies informing him that he was 'finally in a position to pay back' the 3,000 German Reichsmark he had borrowed from him about a year and a half before.[57] While his final sentence – 'Keep me in good memory!' – sounds like a cheery farewell, the fact that he used simply 'Ludwig Mies' in the address (thus depriving Mies of the aristocracy of his newly adopted fuller name) was, perhaps, a first hint at diminished good will. And, as we know, in less than two years Deffke would be badmouthing Mies from his new academic post in Magdeburg. Besides, repaying a debt at a moment of hyperinflation dramatically recasts this reparation as more of a barbed parting shot. We can therefore well imagine the glee on Deffke's face, as he attached three 1,000 Reichsmark notes to his letter – the value of half a newspaper at the time. Perhaps in an attempt to retrieve this money, Mies had sued several companies on Deffke's behalf during the previous year – requesting payments for the unauthorised use of his logo designs.[58]

Epilogue

Just at the time when Mies van der Rohe was busy raising his profile through participation in exhibitions, publications and notably large drawings of visionary projects, his occasional collaborator Wilhelm Deffke was having his own dramatic brush with notoriety. In 1917 he had self-published a book of his trademark designs and corporate symbols in order to demonstrate his signature style of graphic simplicity and visual memorability. The first image in the volume 'Handelsmarken und Fabrikzeichen'[59] was the ancient symbol of theswastika, which Deffke had cleaned up and modernised: 'The ancient custom of our ancestors has preserved for us their unique letter and sacred sign, the swastika, the old Aryan *Fyrfos*, that undeniable seal that the Aryans imprint all over those places where they have appeared and advanced culture.'[60] Since the late-nineteenth century the swastika had been used by nationalist conservative groups in Germany, 'from youth hiking groups to secret racial societies', often in a curved and thin outline with short hooks, and it could also be found in places as different as the first Bauhaus seal and poetry books by Stefan George.[61] In May 1920 Hitler chose the swastika as a symbol for his National Socialist Party and soon it was becoming ubiquitous in the streets of Berlin – now turned 90 degrees and set in a white circle on red background.[62] Its form was close to Deffke's design, its arms heavy and straight, suggesting a perfect square. If, as one of Deffke's assistants later claimed, the Nazis had taken it straight from his book and once again his work was appropriated without acknowledgement – or if it had taken a more circuitous route into Hitler's sketchbook – we do not know.[63] While Deffke was not a fervent Nazi, he joined the party after its election victory in 1933 and defended his school's curriculum as being 'aligned with National Socialist ideas and opposed to narrow provincialism'.[64] This might have been part of an effort to stem the threatened closure of the Magdeburg art school, in order to protect it from the fate that had famously befallen the Bauhaus in Berlin earlier the same year under its head, Ludwig Mies van der Rohe.[65]

1. The Grosse Berliner Kunstausstellung ran from 19 May – 17 September 1923.
2. See Adrian Sudhalter's account of the four journals which published Mies's design for a skyscraper on Friedrichstrasse from 1922–24, in *Bauwelt* (1922), *Frühlicht* (1922), *Qualität* (1922/1923) and *G* (1924). Adrian Sudhalter, 'Friedrichstrasse: The Contexts of an Image, 1922–1924', in Andreas Beitin, Wolf Eiermann and Brigitte Franzen (eds), *Mies van der Rohe Montage Collage* (Cologne: Koenig Books, 2016), pp 68–85.
3. This essay is a revised and enlarged version of an earlier publication, Dietrich Neumann, 'Neue Überlegungen zu Mies van der Rohes Bürohausentwurf von 1923', *Architectura*, vol 44, no 2, 2014 (published January 2016). I would like to thank Hermann Kühn, Andreas Marx and Wolf Tegethoff for their comments on the earlier version. I would also like to thank Helmut Reuter, Berlin for the generous provision of photographs and Adrian Täckman, Copenhagen for access to documents by Mies from the Lönberg-Holm Archive.
4. See letters from the *Deutsche Allgemeine Zeitung* to Mies van der Rohe, 18 July 1923, 1 August 1923, 8 August 1923 (MoMA, Mies van der Rohe Papers, Folder 3, MvdR Manuscripts). The correspondence suggests that Mies had submitted a photograph of a drawing and a 'pencil sketch'. While the newspaper kept the photograph, it returned the pencil sketch to Mies on 8 August 1923.
5. See Fritz Neumeyer, *Mies van der Rohe: Das kunstlose Wort. Gedanken zur Baukunst* (Berlin: Siedler, 1986). Andreas Marx and Paul Weber, 'Zur Neudatierung von Mies van der Rohes Landhaus in Eisenbeton', *Architectura* 38, 2008, pp 127–66 (here p 134, footnote 18).
6. Letter from Deutscher Werkbund to Mies, 22 March 1924, *ibid*.
7. Knud Lönberg-Holm, 'Moderne Tysk Bygningskunst: Arbejder af arkitekt Mies van der Rohe, Berlin', *Bygmesteren Dansk Arkitektforenings Tidskrift*, 15 August 1923, pp 203–05.
8. Hyperinflation began in the autumn of 1922 when the cost-of-living-index saw a 15-fold increase. The occupation of the Ruhr by French and Belgian troops and the ensuing General Strike exacerbated the situation. In November 1923, when $1 was worth 4,210,500,000,000 Reichsmark, a new currency, the Rentenmark, was introduced (12 zeros were cut from prices) and stabilisation returned.
9. 'Neuartige Bürohausbauten: Bürohaus mit Fensterwänden (Entwurf des Architekten Ludwig Mies van der Rohe)', *Deutsche Allgemeine Zeitung*, Sunday 5 August 1923, morning edition), 'Kraft und Stoff' supplement, p 1.
10. *Grosse Berliner Kunstausstellung 1923* (Berlin: Grosse Berliner Kunstausstellung, 1923), p 34. It is tempting to speculate that the letter G, which seems to emerge out of the corner detail of the background building in the charcoal perspective was an homage to the newly founded magazine.
11. For both texts see Fritz Neumeyer, *op cit*, p 299.
12. Here Mies was echoing Hans Richter and Werner Graeff's editorial in *G*: 'The fundamental demand of elemental form-creation is economy. Pure relation of power and material. That requires elemental means, total control of means. Elemental order, regularity.' English translation quoted from Detlef Mertins and Michael Jennings (eds), *G – An Avant-Garde Journal of Art, Architecture, Design and Film, 1923–1926* (Los Angeles, CA: Getty Research Institute, 2010), p 101.
13. Dietrich Neumann, 'Three Early Designs by Mies van der Rohe,' *Perspecta* 27, 1992, pp 76–97. Ludwig Glaeser was the first to suggest the layout of the columnar structure and the floorplan with the central courtyard. See Ludwig Glaeser, *Mies van der Rohe: Drawings in the Collection of the Museum of Modern Art* (New York, NY: MoMA, 1969). See also Wolf Tegethoff, 'From Obscurity to Maturity: Mies van der Rohe's Breakthrough to Modernism', in Franz Schulze (ed), *Mies van der Rohe Critical Essays* (New York, NY: MoMA, 1989), pp 28–94.
14. Paul Weber recently suggested a warehouse design by Karl Paul Andrae as a source of inspiration. See Paul Weber, 'Ludwig Mies van der Rohe's frühe modern Architekturentwürfe', in Kerstin Plüm (ed), *Mies van der Rohe im Diskurs: Innovationen – Haltungen – Werke, Aktuelle Positionen* (Berlin: Transcript, 2014), pp 13–59. Another possible model is a school in Groningen from 1922–23 by L C van der Vlugt and J G Wiebenga, whose horizontal spandrels also cantilever out further the higher up the building extends.
15. Dietrich Neumann, *Perspecta* 27, *op cit*, pp 76–97.
16. Mies famously explained the vertical I-beam mullions on the outside of his Lake Shore Drive Apartments as structural devices stiffening the corner plates, but then conceded that the 'real reason' was that it simply had 'not looked right' without them. 'Mies van der Rohe', *Architectural Forum*, November 1952, p 99.
17. Ludwig Glaeser, interview transcript with Werner Graeff, 17 September 1972, Canadian Centre for Architecture, Montreal. See Andreas Marx and Paul Weber, 'Konventioneller Kontext der Moderne', in Jürgen Wetzel (ed), *Berlin Geschichte und Gegenwart, Jahrbuch des Landesarchivs* (Berlin: Mann, 2003), pp 65–107. See also Dietrich Neumann, 'Das Haus Ryder in Wiesbaden (1923) und die Zusammenarbeit zwischen Ludwig Mies van der Rohe und Gerhard Severain', *Architectura* 36 (2006), pp 199–220;
18. Andreas Marx and Paul Weber have rightly pointed out that the exhibition rules did not allow the removal of objects before the end of the show, which ran from 19 May to 17 September. It is not clear whether Mies flouted the rules, or had a second model made, or if a different model was shown in

Magdeburg. Andreas Marx and Paul Weber, 'Zur Neudatierung von Mies van der Rohes Landhaus in Eisenbeton', *Architectura* 38, 2008, pp 127–66.

19. The invite probably came from the critic Adolf Behne, a member of *Die Kugel*, and who published Mies's office building in his 1925 book *Der moderne Zweckbau*. Letter from Mies to Adolf Behne, 2 June 1923, Library of Congress, *op cit*. Mies promised to send Behne 'his best material' for the publication.
20. Letter from Gropius to Mies, 4 June 1923, *ibid*, private correspondence G.
21. Andreas Marx and Paul Weber, *Ludwig Mies's unrealisierte Teilnahme an der 'Ausstellung für unbekannte Architekten' (1919). Materialien zur Entwicklungsgeschichte Mies van der Rohes* in Werner Breunig and Uwe Schaper (eds), *Berlin in Geschichte und Gegenwart. Jahrbuch des Landesarchivs Berlin 2009* (Berlin: Mann, 2010), pp 195–263.
22. Letter from Gropius to Mies, 7 June 1923, and letter from Mies to Gropius, 14 June 1923, Library of Congress, *op cit*.
23. Letter from Mies to Gropius, 5 June 1923, *ibid*.
24. Two large charcoal illustrations also exist of the Concrete Country House, designed at the same time. Another indication that there were two drawings of the Concrete Office Building is a listing of 'two large views, one section, one model from Weimar' for a show organised by Mies for the Art Association of Jena. The show travelled on to Gera's Kunstverein and to Frankfurt's Staedel Institute. The quote is from a letter from Kunstverein Gera to Mies, 24 November 1924, *ibid*. See a detailed discussion of this in Andreas Marx and Paul Weber, *Architectura* 38, *op cit*, pp 127–66.
25. Letter from Gropius to Mies, 7 June 1923, Library of Congress, *op cit*.
26. The Mies papers at the Library of Congress hold several desperate letters from Walter Gropius to Mies, enquiring about the whereabouts of his central perspective for the Chicago Tribune Competition and his Erlangen Academy design, which Mies had requested on behalf of the *Novembergruppe*, and failed to return. They were to be submitted to the IAH (Internationale Arbeiterhilfe – International Worker's Help) group in Berlin for subsequent shipment to the General German Art Exhibition in Russia. Letters from Gropius to Mies, 8 September 1924, 11 September 1924, 27 October 1924; Mies to Gropius, 29 October 1924, *ibid*.
27. Letter from Mies to Gropius, 27 July 1923. Parts of the models were sent by express courier, others were brought a few days later by one of Mies's assistants, who was going to install them in Weimar. Both the model for the office building and for the curvilinear glass skyscraper remained in Weimar for over a year, until they were finally picked up by a representative of the Kunstverein Gera on 20 January 1925. The models were sent back from Gera to Berlin in two boxes on 19 February 1925. *Ibid*, private correspondence F.
28. In Weimar it was shown together with the model of the curved skyscraper in a spatial constellation, just as Mies had suggested, possibly together with a photograph of the large drawing, which was still on show in Berlin (letter from Mies to Gropius, 14 June 1923, Library of Congress, *op cit*).
29. Lutz Robbers, 'Dieser Typ lebt: Montagen architektonischer Bildlichkeit' in Andreas Beitin, Wolf Eiermann and Brigitte Franzen (eds), *Mies van der Rohe Montage Collage Aachen* (Cologne: Koenig Books, 2017), pp 86–103.
30. Letter from Gropius to Mies, 18 September 1923, Library of Congress, *op cit.*
31. Letter from Mies to Werner Jakstein, 13 September 1923, *ibid*, private correspondence G.
32. Letter from Adolf Meyer to Mies, 22 November 1923, *ibid*, private correspondence F; Mies to Gropius, 29 September 1923, Gropius to Mies, 2 October 1923, *ibid*, private correspondence G.
33. Letter from Mies to Walter Dexel, 29 October 1924 (private correspondence D); Mies to Gropius, 29 October 1924 (private correspondence G); Geraer Kunstverein to Mies, 24 November 1924 (*ibid*).



34. Letter from Walter Greischel to Mies, 29 August 1924 (private correspondence F). Mies agreed, but cautioned that an envisioned date in October was too early, as he wanted 'to assemble my latest studies in an appropriate format'. He mentioned that his standard honorarium was 300 marks. Mies to Greischel, 10 September 1924 (*ibid*).
35. Letter from Carl Krayl to Mies, 14 December 1924 and Mies to City School Deputy Hans Löscher, 31 January 1925 (*ibid*). I would like to thank Wolf Tegethoff for the reference to these letters.
36. Letters from Richard Lisker to Mies, 2 February 1925, 28 February 1925, 19 July 1925 (*ibid*, private correspondence L).
37. Bröhan Design Foundation, Berlin (ed), *Wilhelm Deffke: Pioneer of the Modern Logo* (Zurich: Scheidegger & Spiess, 2014), p 312.
38. Letter from W A Farenholtz to Mies, 10 October 1925, Library of Congress, *op cit*.
39. Letter from Mies to Fahrenholtz (sic), 14 November 1925, *ibid.*
40. Letter from Farenholtz to Mies, 17 November 1925, *ibid*.
41. Letter from Mies to Farenholtz, 7 December 1925, *ibid*, personal correspondence L.
42. Adolf Rading had asked Mies on 1 July 1925 if he might be interested in being considered for a professorship in 'arts and crafts' at the Breslau Academy, where Hans Scharoun was also being considered. Mies turned down the offer with uncharacteristic speed on 4 July and expressed support for Scharoun's candidacy, who accepted the position shortly afterwards. Letters from Adolf Rading to Mies, 1 July 1925 and 14 July 1925, *ibid*, personal correspondence R.
43. Letter from Mies to G W Farenholtz (sic), *ibid*, personal correspondence F.
43. Letter from Farenholtz to Mies, 9 December 1925, *ibid.*
45. Letter from Gropius to Mies, 11 December 1925, *ibid*.
46. Letter from Mies to Gropius, 14 December 1925. A year earlier, on 1 May 1924, Mies had written to Peter Behrens, inviting him to take part in an exhibition by the *November-gruppe*, to which Behrens agreed (letter from Behrens to Mies, 5 May 1924, *ibid*).
47. Letter from Lass (office of Peter Behrens) to Mies, 14 December 1925, *ibid.*
48. Bröhan Design Foundation, *op cit*.
49. *Ibid*, p 281, fn 18. In a curriculum vitae written in 1945, Deffke mentioned the years 1922–24, in another version, a year later, he claims the years to be 1917–1924.
50. Similar vertical lines can be seen in the two coloured chalk drawings for the concrete country house, also made in the period immediately before the 1923 Grosse Berliner Kunstausstellung. Both are of a similar width to the drawing of the concrete office building – 228.6cm wide, in comparison with 288.9cm.
51. Jochen Meyer, 'Hans Poelzig' in Florian Zimmermann (ed), *Der Schrei nach dem Turmhaus* (Frankfurt: Argon Verlag 1988), p 114.
52. The large charcoal drawing for the Friedrichstrasse competition (probably made in the spring of 1922), the perspective of the concrete office building, the colour views of the concrete country house and the Eliat House could all conceivably have been produced by the same draftsman. However, the presentation drawing of the brick country house of 1924 has a completely different character, as do the earlier drawings for the Bismarck Monument of 1910, the Werner House of 1913, the later presentation drawings for the Esters House (1928–30) or the detailed pencil drawings for the interior of the Barcelona Pavilion and the Neue Wache competition.
53. Arthur Drexler, 'The Mies van der Rohe Archive', in Arthur Drexler (ed), *The Mies van der Rohe Archive, volume I* (New York, NY: Garland, 1986), pp XI–XVII.
54. George Nelson, 'Architects of Europe Today: Van der Rohe, Germany', *Pencil Points*, September 1935, p 453. Reprint in *Building a New Europe: Portraits of Modern Architects: Essays by George Nelson, 1935–1936* (New Haven, CT: Yale University Press, 2007).
55. When Reemtsma was forced to give up the lease on its existing headquarters in 1922, he instead briefly considered a move to Berlin – which possibly provided the impetus for Deffke (and Mies) to rework the Erfurt project in line with the capital's larger scale (even if in the end, however, the company relocated to Hamburg-Altona).
56. Carl Gottfried drew the plans for most of Mies's early house designs – notably Warnholtz (1914–15), Feldmann (1921–23), Kempner (1921–23), Mosler (1923–26) and Ryder (1923–25) – and worked on the floor plans of the two glass skyscraper projects from 1922. At the time of the 1923 Berlin exhibition, however, the relationship between the two was strained, as we learn from an exchange of letters regarding Mies's Ryder house. As a result, Gottfried drew up the plans in his Potsdam home, instead of in Mies's office.
57. Letter from Deffke to Mies, 4 May 1923, Library of Congress, *op cit*.
58. See correspondence from Berlin attorney Winterberg to Mies regarding the companies Klees, Luecke, Reemtsma and Mauxion, between 22 December 1922 and 5 May 1924. Mies Papers, Museum of Modern Art: Projects/General Correspondence, 1920s, folder 6.
59. Carl Ernst Hinkefuß and Wilhelm H Deffke, *Eine Werbeschrift* (Berlin: Wilhelmwerk, 1917).
60. Sherwin Simmons, '"Hand to the Friend, Fist to the Foe": The Struggle of Signs in the Weimar Republic', *Journal of Design History*, vol 13, no 4 (2000), p 324.
61. I would like to thank Christoph Janik of the Bröhan Foundation for informative discussions on this subject.
62. Sherwin Simmons, *op cit*.
63. Maria Tress, 'Nachruf auf Professor Wilhelm Deffke', in Bund Deutscher Grafik-Designer (Düsseldorf, BDG-Mitteilungen, 1986), p 11.
64. Sherwin Simmons, *op cit*, p 336, fn 26.
65. While the school survived, Deffke was fired by the Nazi mayor of Magdeburg in 1934.

Wilhelm Deffke,
Tesma pavilion, Berlin, 1924
© Bröhan Design Foundation, Berlin

Dalibor Vesely's Flat

Dagmar Motycka Weston



Juan Gris, *Le violon*, 1916
Photograph by Martin P Bühler
© Kunstmuseum Basel

On 31 March 2015 the Czech-born architect, teacher and critic Dalibor Vesely suffered a fatal heart attack at his north London flat. For more than four decades, this flat had been his home, a haven of creative and contemplative life, and a respite from the active, sometimes combative world of teaching and university politics. It saw him through two marriages and several key academic engagements at the AA and the universities of Essex and Cambridge, with colleagues including Joseph Rykwert, Mohsen Mostafavi and Peter Carl. This was where he thought, wrote and devised seminal courses in the history and philosophy of architecture and in architectural design – two fields of study which, as he always stressed, were to be understood reciprocally. Testament to his belief in the essential cultural role of architecture, the flat contained Dalibor's multilingual library of nearly 7,000 volumes, representing an outline of an architectural culture as well as a personal intellectual journey. Alongside his books was his collection of artefacts, art, students' work, antique folk pottery and personal memorabilia. As Dalibor's third wife Frosso Pimenides observed, for him exploring London had limited appeal: the flat and the culture it contained was his real habitat, his world.

It was in the early 1970s, a few years after their arrival in England, that Dalibor and his second wife Jana moved into the two-bedroom flat on the top floor of Christopher Lodge, Highgate. A four-storey, international-style box built in 1966, the block has garages at ground level, a large shared garden and open-air staircases providing access to the flats. Dalibor sometimes told visitors that it had been designed by the young Kenneth Frampton (presumably during his time with the architectural practice of Douglas Stephen & Partners), although Frampton himself does not recall the project. True to modernist principles, all rooms inside the block receive ample natural light, either from the large north- or south-facing strip windows that run the full length of the facades, or from the three courts. Somewhat unusually, the flats also have a number of small pierced windows to the front and back, providing a series of illuminated recesses. Otherwise, the architecture, while elegant, is stripped of most symbolic elements.

The flat consisted of a large living space (which doubled as Dalibor's study and studio, and was connected by a serving hatch to a small kitchen) and two bedrooms, with all the major rooms positioned along the north face of the building. Over the years, new bookcases were added to house the ever-expanding library, so that all the rooms, including the toilet, were eventually lined with books on open shelving. Dalibor and Jana also designed other built-in elements including a low bench, spanning along two sides of the living area, which functioned as a combined hearth, display platform and rather spartan sofa. In addition there was a large fold-down table by the kitchen hatch (used in later years as Dalibor's main desk), a 'book column' made of narrow shelving, and a series of partitions and plinths. These elements sometimes appeared to slide with respect to one another, in a vaguely de Stijl manner. Other walls in the flat were textured with hessian wallpaper, and there was a theatrical colour scheme to walls and woodwork. Atmospherically lit and typically seen through a veil of cigarette smoke, all of this infused a laconic modernist interior with a very particular kind of architectural drama.

Dalibor's attitudes to art and architecture were rooted in the Central European milieu. He was born in 1934 into the vibrant cosmopolitan culture of interwar Prague, but his teenage years and early adulthood were set against a backdrop of authoritarian communism. Life for the middle-class Czech intelligentsia was therefore defined by dissent. This instilled in the young Dalibor the need for independent thought – something he displayed in his PhD at Prague's Charles University, ostensibly in engineering, but in the course of which he also studied art, architecture and philosophy. At the same time he attended some of the clandestine phenomenology seminars of the philosopher Jan Patočka, whose work, developing out of the thinking of his own teachers, Edmund Husserl and Martin Heidegger, would remain a fundamental and lifelong influence. In the later 1960s Dalibor pursued other philosophical approaches, notably in Munich, where he attended the seminars of Hans Sedlmayr and Ernesto Grassi, and in Paris, where he came into contact with Paul Ricoeur. Equally important was his friendship with the German philosopher Hans-Georg Gadamer and, more immediately, his connections with a large circle of Czech intellectuals and dissidents, including the playwright, philosopher and future president, Václav Havel.

After his studies Dalibor became particularly involved with the Prague 'Informel' group of avant-garde artists, which included Mikuláš Medek and Aleš Veselý (no relation). His role at the time seems to have been primarily to provoke discussion and to formulate the philosophical foundations of the new movement. Its chief concern, allied to that of phenomenology, was to express – through analogy and the physicality of the pieces they produced – the experiential, concrete dimensions of reality. Some of their work had close affinities with surrealist ideas and techniques, and the group was in dialogue with the Czech surrealist circle, led after the death of Karel Teige by Vratislav Effenberger. It was through these connections that Dalibor developed his involvement with surrealist ideas, which he reinterpreted with reference to architecture.

In the late 1950s and early 1960s much of the interesting intellectual and artistic culture in Prague was played out in the world of artists' studios, with which Dalibor was intimately familiar. His father Josef Veselý (a graphic artist and painter working in a realist and later a lyrical, figurative Art Protis manner) had a studio first on Čechova Street, near the family home in the Letná district, and later on the embankment of the Vltava near the modernist Mánes Gallery. The semi-private domain of the studio, often occupying a cellar or garret, was the setting for much cultural life in Prague. Safer and cheaper than a public venue, it was a meeting place for a wide range of people, and served as a dwelling, exhibition gallery, wine bar, café and even as a makeshift performance space and *samizdat* publishing house. It is an architectural paradigm which has played an important role in twentieth-century culture.

Having relocated to London, Dalibor maintained an allegiance to the many artistic and philosophical strands of his youth. These ideas, which consistently stress the communicative power inherent in spatial relationships, also underpinned his views on architectural design and are manifest in the flat and the collection.

Arriving at the top of the flat's external stair, a visitor would first be greeted by Dalibor's silhouette, identifiable behind the glazed front door. When the door opened his frame would be outlined against the background of a large reproduction of Juan Gris' *Violin*. This exhibition poster, a memento of a 1974 trip to Paris, announced both the dwelling of a musician and an engagement with the sensory world of cubist space. Dalibor was an accomplished amateur violinist, and often performed together with his brother Drahosh, who played the piano and flute. Inside, this interest was further reflected in a corner of the study devoted to an extensive music

Photographs by Will Pryce

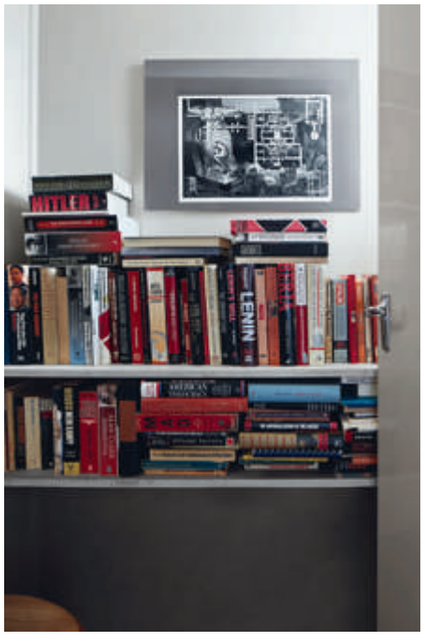











HITLER
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collection, featuring mostly Central European baroque repertoire – J S Bach, Mozart, Bieber, Zelenka, Haydn – with modern favourites including Janáček and Shostakovich. And indeed, on one level the study was always also a performance setting, in which music was seen not just as a simple source of pleasure but as an integral part of (architectural) culture, interwoven with other disciplines.

For Dalibor the baroque was key, because it constituted the last time western culture had been expressed as a coherent whole, with architecture forming a seamless synthesis with sculpture, painting, language and music. The baroque was of course the dominant architectural language of Central Europe and of his native Prague. Its strong presence in the city of his birth conditioned his later critical view of modern culture, notably his deeply held belief that the advent of the Enlightenment, along with the rise of modern science and technology, had precipitated a harmful split in western culture, with a now-aestheticised 'art' becoming separated from the increasingly specialised branches of science.

Yet at the same time his perspective was coloured by a sustained love of certain strands of early twentieth-century art, especially those – like cubism, purism, expressionism and surrealism – which prized the role of the imagination and explored the primary phenomena of perception, non-perspectival space and metaphor. This interest in modern art was no doubt strengthened by the fact that it was viewed with suspicion by the communist authorities. Dalibor continued to see in modern art the potential to create a richly allegorical culture, analogous to the baroque. This theme would resurface in the exhibition, *Aktualní nekonečno* ('Actual Infinity'), at the National Gallery in Prague in 2000, for which he acted as an advisor. It was also reflected in the striking number of books and objects in his flat that focused on the baroque and the modern. One of his most cherished volumes was a 1650 edition of *Obeliscus Pamphilius*, by the seventeenth-century polymath Athanasius Kircher, whose syncretic approach blended philosophy and theology, art and science, human and natural products in a *wunderkammer*-like manner, with analogy understood as a primary principle underlying cosmic order.

The traditional *wunderkammer* echoed also in a theme which informed Dalibor's understanding of the modern culture of dwelling. In response, perhaps, to the growing impoverishment of the nineteenth-century public realm, the private domain – the bourgeois interior – had taken on a new cultural significance. The less civic life was played out in public, the more modern culture became characterised by an inwardness. At the same time, there was a new interest in the austere poetry of daily experience, which was reflected, for example, in cubist or purist art. The dwelling-studio and its contents came to represent the inner life of the inhabitant, and to inspire their work. This sense of an introverted culture is summed up by Sigmund Freud's own thematic collection of antiquities in Vienna. It is memorably recorded in Edmund Engelman's 1938 photographs of Freud's study and consulting room at Berggasse 19, which Dalibor was fond of using to illustrate his talks.

Surrealist writers and artists were well aware of this approach, and collecting became an integral part of their own creative lives. Their evocative objects, however, were gathered with an eye for the sparks that could be generated from unexpected displacements and new conjunctions. Thus the thematic worlds of their studios nourished their work and expressed their ethos.

Just as the surrealists emphasised that in the pre-reflective world of experience everything is – in one way or another – connected, so Dalibor stressed the richness of situational relationships. Stepping into the flat, one became aware of such correspondences through his arrangement of his books, shelved as they were according to surrealist principles, with subject areas linked through analogy, spatial proximities and the symbolic orientation of space. As the library grew, however, more pragmatic principles increasingly began to take hold – books went where there was space, and were often arranged, as with most private libraries, by size. Many others also began to sediment in piles around his desk, on window sills, the coffee table and eventually even in the kitchen.

In navigating through such groupings, one would first turn right from the shadowy corridor into the living room-study, passing (as in a baroque library) through a small 'vestibule', with dark shelves full of books on the hermetic traditions – Flood, Dee, Paracelsus, Bruno, alchemy and the works of Frances Yates. (The counterpoint to this area of traditional occult sciences – the history and philosophy of modern science – was located on the opposite, light-filled side of the study, in the alcove under the long window.) Below this section were several shelves of books on the garden, mostly Renaissance and baroque. Two dark collages hung on the brown wall to the right. With the study often dimly lit by pools of lamplight, there was a sense of entering a domain of arcane knowledge.

Baroque interiors tend to use colour and materials according to a symbolic tradition related to the cosmic order. The lower, human zone – floor, wall panelling, study furniture, pews, confessionals and so forth – tends to be made of warm and tactile dark wood, evoking the chthonic level of the cosmos and human finitude. The walls – as the backdrop to the drama of saints and angels – tend to be covered with lighter pastel colours and artificial marbles and – in monastic interiors – with bookcases or specimen collections. Vaults, cornices and ceilings are usually an ambiguous transitional zone with white and gold cloud-like *rocaille* borders dissolving the solid body of the earth-bound building, opening it up to the heavens and a divine light.

The colour scheme of Dalibor's own flat, with dark parquet floors and woodwork, pale or colourful walls (grey pink, natural hessian, light and dark brown) and white ceilings, was suggestive of this tradition. The dark brown lower walls behind the plinth seating in the living room-study were equally dramatic. Reminiscent of warm wood panelling, these areas acted as a foil to the slender dark wood bookshelves (which carried their heavy load without any visible means of support). The most conspicuous use of colour was in the three areas painted with bold accents of intense Siena red: the fireplace wall in the living room-study and around the opening to the kitchen – places associated with fire and the domestic hearth – and in Dalibor's bedroom around the head of the bed, where the reference to fire was of a more metaphorical kind.

In addition to these tonal qualities, the living room-study contained two emblems of his belief in the key cultural role of the European city – the Turgot map of Paris, located beside the fireplace, and a bird's-eye view of Stockholm, placed above the kitchen hatch next to his desk. Elsewhere in his study there were further situational configurations. One of these was the fireplace and its attendant objects. Raised on the bench plinth (here covered with dark tiles) and set against a red background, it contained the hearth (with the fire alcove angled towards the seating), a white marble sculpted fragment of a man carrying a cross, a Joseph Cornell-like box assemblage with a mirror (constructed by Ken Turner as part of a workshop

run by Dalibor and Helen Mallinson in the late 1970s) and a dark architectural collage by a former Cambridge student, Clare Gerrard. Two white candles in ecclesiastic brass candlesticks were probably lit more often than the fire. The whole configuration – the focus of the room and a representation of dwelling and of primordial architecture – was suffused with strong secular-sacred overtones.

The other focus of the study was the dark wooden desk, suspended on one side from the wall and accompanied by two plain wooden chairs – a substantial one for Dalibor and a rather uncomfortable Thonet bentwood chair for the visitor. The bookcases on either side of the desk, within Dalibor's reach, contained mainly works on philosophy, and in particular phenomenology and hermeneutics – Husserl, several shelves of Heidegger, Patočka, Merleau-Ponty, Gadamer, Ricoeur and so forth. There were also many volumes of Nietzsche and a range of dictionaries. The objects surrounding the work area – computer equipment, equipoise lamp, basket of stones and fossils, ashtrays, coffee cups passed through the kitchen hatch – manifested a spontaneous spatial arrangement reflecting the spatiality of the body. This primary situational order, which Dalibor sometimes used as an illustration in his talks, had also been noted by Le Corbusier. On the floor, propped up against the desk, was a large volume by Vitruvius. It is tempting to see this as symbolic of the foundational role of the Roman writer in western architecture. However, given Dalibor's reservations about his somewhat pragmatic conception of architecture, here it seems to have been a case of the oversized book simply not fitting anywhere else. Elsewhere, a significant place seemed to have been reserved for architectural tools – Dalibor's old adjustable plastic set-square propped up near the desk, a small architectural scale taped to the bookcase – recalling certain metaphysical still lifes or Le Corbusier's depictions of the *vita contemplativa*.



Le Corbusier, *Le bol blanc*, 1919
© ADAGP / Fondation Le Corbusier, Paris

Other fragments were combined – often jarringly – to evoke specific, quasi-autobiographical meanings. In the dark corner of the study, for example, there was a grouping of baroque sculptures given to Dalibor by his father, which included a scale clay model by the sculptor Matthias Braun, a contemplative Chinese Scholar's stone (acquired during a visit to China with his friend, the US academic David Leatherbarrow), an antique Indian lock (a gift from the present author), artworks and personal memorabilia. Nearby was the 'column of books', comprising travel volumes on visited cities on the window side, with nineteenth-century German and French poetry in the shadows.

Facing the desk was an ink and chalk drawing by former student Athanasios Spanomaridis, alongside mementoes of Greek friends and the unit he taught at the AA in the late 1970s.

The second bedroom, was filled mostly with books about archaic and ancient cultures – Egypt, the Ancient Near East, Etruria, Greece and Rome. The bed alcove was presided over by a cast of one of the sixth-century BC *korai* found on the Acropolis. A smiling maiden, a *kore* is thought to be a votive figure or an attendant of the goddess Athena, and suggested here the realm of the feminine. Nearby stood Daniel Libeskind's Chiricoesque print with a fragmentary classical head, reflecting Dalibor's view of myth as latently present in the everyday.

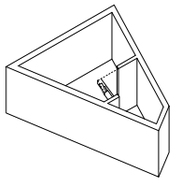
By contrast, the toilet was themed around evil and architecture's complicity in it, with a collection of books on various forms of authoritarianism and totalitarian oppression – Nazism, the concentration camps, Albert Speer, communism (Stalin, Lenin, Mao) and American theocracy. Above the books hung a collage by the architect Robert Wood, evocative of human bondage by a repressive mechanism.

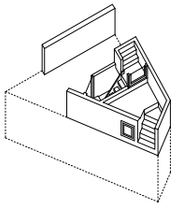
Dalibor Vesely's flat was the unprepossessing dwelling of a man who was completely absorbed in his work and who had little interest in ostentatious interior design. Nevertheless, for those who knew him and his work, his home helps to illuminate his life and view of the world. Foremost was his insistence, embodied in the things he gathered in his studio, on the crucial importance of a coherent, traditional culture – something he felt to be gravely assailed from several sides. The oppressive dictates he resisted in his youth are still with us: the obsession with progress and technology and the neglect of rich architectural traditions, instrumental values, an unthinking conformity with mind-numbing popular culture, rationality valued above poetry and the imagination. In a modest way, the flat therefore demonstrated the thematic thinking and love of analogy which always permeated Dalibor's understanding of architecture, and might even be seen as reflecting his phenomenological sensibility. Preserved now only in reflection and in a handful of photographs, it still manages to offer a compelling portrait of its former occupant, and a model of the studio-dwelling as both memory theatre and seat of creativity.

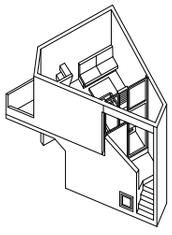
I would like to thank members of the Vesely family for giving me access to Dalibor's flat and for allowing it to be recorded. I am particularly grateful to Drahosh Vesely (who was immensely important in his brother's personal and intellectual life, and who over the course of several long conversations very generously clarified many aspects of their shared history), and to Martin and Dagmar Vesely for sharing reflections and memories of their uncle. Among many other friends and former colleagues of Dalibor's, I would like to thank Peter Carl, Frosso Pimenides and Eric Parry for providing some fruitful insights, and Will Pryce for his evocative photographs. Since 2016, Dalibor's library has been housed as a single collection at Charles University in Prague.

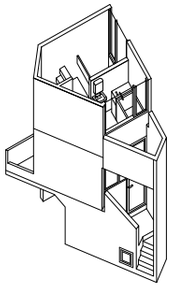
Tower of Azuma

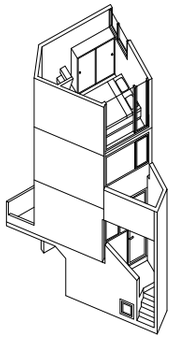
Simona Ferrari &
Wataru Sawada











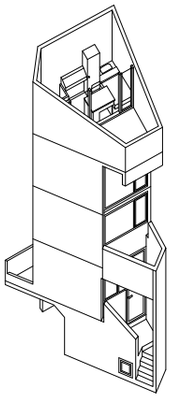
In 1965 the Japanese architect Takamitsu Azuma purchased a plot of land in Tokyo's Aoyama district with the intention of building a house for himself and his family. Barely six *tsubo*, or 20m², the tiny triangular parcel sat alongside a busy thoroughfare, Gaien Nishi-dori, a leftover from the widening of the street for the Tokyo Olympics a year earlier. Azuma took just seven months to complete what would become the most recognised of his many buildings, Tower House, a kind of miniature domestic skyscraper, that symbolised both a hyper-compressed *Existenzminimum* and the daring and style of 1960s Japanese design.

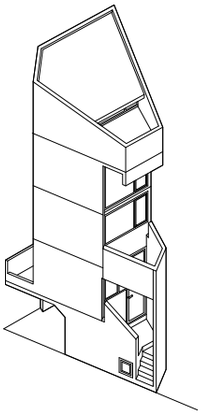
Azuma was born in Osaka in 1933, which was then still very much a merchant city. His father ran a small shop while the family lived in an apartment above – a highly compact model of living and working known as a *machiya*, typical of the city and also of nearby Kyoto. After graduating from Osaka University he went to work for the architectural division of the Japanese post office, which had a reputation at the time for producing elegant, albeit rather traditional buildings. As Azuma's interest lay in more contemporary design, he soon left to take up a position with Junzo Sakakura, who famously had run Le Corbusier's rue de Sèvres atelier in the 1930s, and who collaborated with the modern master (alongside his Japanese colleagues, Kunio Maekawa and Takamasa Yoshizaka, who also spent time in Paris) again in the 1950s on his only Japanese building, the National Museum of Western Art in Tokyo.

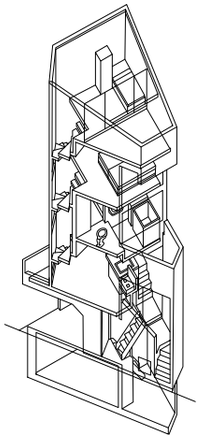
Between 1960 and 1963 Azuma worked on various projects in Sakakura's Osaka office before he was offered the chance to act as project architect on an important new commission for the western gate of Shinjuku station, then, as now, the world's busiest train station. Azuma moved to Tokyo and rented a small house in Jingumae; for the time being his wife and his young daughter, Rie, remained in Osaka, living and working in his in-laws' general store.

The expansion of the station was just one example of Japan's rapid urbanisation, fuelled by its accelerating economic growth, and given a further boost by the Olympics. This construction boom extended far beyond the urban centre, with Tokyo's suburbs, in particular, also undergoing dramatic change. Individual home ownership was still in its infancy – permitted only in the immediate aftermath of the Second World War, in response to the severe housing crisis. As Japanese families looked to the middle-class dream of a detached house and garden, the city's commuter belt soon became defined by unbounded sprawl.

The Azuma family, too, initially considered the option of settling in the western Tokyo suburb of Harajuku, but after visiting a number of apartments and even a few vacant sites they quickly realised that such a solution was not for them. By the early 1960s the desirability of suburban living was already in question, as these peripheral neighbourhoods tended to be defined by their isolation and a certain aridity, and by the long daily commutes that came with them. For Azuma and his wife, their preferred alternative was what they









Previous: axonometric sections of the Tower House
© Simona Ferrari & Wataru Sawada
Above: Takamitsu Azuma, 1:20 model of the Tower House, 1966
© Keizo Kioku / Collection of Azuma Architect & Associates



Beauty Salon
Antoine



Opposite: aerial view of the Tower House, 1967
© Yutaka Suzuki
Previous and above: exterior and interior views
of the Tower House, 1967
© Osamu Murai

had grown up with – the *machiya* set in a dense urban environment, animated by the close relationship between the activities of people inside their homes and the hustle and bustle of the streets outside.

In this situation, their only option was to find a pocket of land in the heart of Tokyo, big enough to build a family home, yet still affordable on a relatively modest architect's salary. As it turned out, a site soon offered itself to Azuma. Every day, on his way between the Sakakura Tokyo office in Roppongi and the Shinjuku station site office, he passed by a triangular plot on Gaien Nishi-dori. Although almost comically small, its size was actually more of a lure than a deterrent. In this period Azuma was flying back and forth to Osaka to see his wife and daughter, and over these weekend commutes he developed a growing affection for the compact spaces of the airplane and the model it offered for similarly compact, minimal living.

Having acquired the plot, the rhythm of Azuma's working life then fell into a set pattern – during the day all his attention was focused on the design of a vast piece of urban infrastructure, and in the evenings he would draw quietly on his own, imagining his incredibly small future home. Because of the demands of the Shinjuku project, and his desire to be reunited with his wife and daughter, he completed the schematic design extremely quickly, and then – acting as his own project supervisor – he subcontracted each aspect of the construction (structural engineering, formwork, electricity, plumbing, etc) as the build progressed. Whenever a key decision or dimension was required, he would visit the site at night, and use his own body as a kind of modulor. In this way, the emerging Tower House became its own sketch model, with Azuma designing the house *while* he was building it (at the same time Azuma did make a scale model of the building; covered in newsprint, it seemed to advertise the deliberate poverty and ordinariness of its materials as much as its form). The family even moved in long before it would have been considered finished by any normal standards. Rie Azuma still remembers the oddity of wearing shoes inside (the protection her footwear afforded was necessary, as the house was then still just a raw concrete shell).



Completed in 1966, the Tower House stands as a compact and monolithic volume, especially if approached from Gaien Nishi-dori, rather than the quieter back streets. Its facade is almost entirely blank and defined only by the striations and grain of its concrete and by the horizontal expansion joints of its clearly delineated five levels. On the first of these, at ground level, a carport is cut out of the concrete mass, making the house appear as a kind of bridge between the front street and rear alley. The main entrance is elevated a few steps, and leads first to a tiny enclosed courtyard, protected by an overhanging beam which acts as a form of gate to the house, and then to a glazed facade on the bevelled edge of the triangular site. On the floor above is located a double-height living, cooking and dining space – the extension of the kitchen countertop doubles as a small central table. A very basic stair, its cantilevered treads softened only by some cut-out pieces of blue linoleum, then leads up to the bathroom and, above it, the master bedroom, which like the living room opens out towards the courtyard. On the top floor is located the second bedroom and an appropriately small terrace, which again looks to connect inner and outer spaces by offering views down into the courtyard and up towards the sky.

Alongside the severity of its profile and the highly reduced nature of its plan, the other distinguishing feature of the Tower House is its concrete, rarely used at the time for domestic projects, though it had been adopted as the preferred material for civic structures by an older generation of architects – among them, Sakakura, Maekawa, Yoshizaka and Kenzo Tange. Of course, the model of the highly contained, largely windowless, raw concrete private house would become a kind of recurring trope in Japanese architecture, celebrated through notable examples such as Kazuo Shinohara's Uehara House (1973), the Row House in Sumiyoshi, one of Tadao Ando's earliest buildings (1976), Toyo Ito's U-House (1976) and Arata Isozaki's Aoki House (1979), all of which appeared in the decade *after* the Tower House was completed. Rather than precedent, then, what drew Azuma to the material was not just its affordability, or its ability to withstand the very immediate hazards of fire and earthquakes, but the way he could use it to break from an older model of appropriation – notably the late-nineteenth-century Meiji-period architecture, which took European materials – stone, brick, tile and stucco – and married them with more explicitly Japanese forms and details to produce a highly affected national style. Azuma looked to do something distinct, and was especially interested in the contrast between the unalterable qualities of concrete and the flexibility of wood. Yet he regarded both materials as natural, as demonstrated most clearly by his adoption of the technique of using planks of Japanese cedar to shutter the concrete, impressing the grain of the wood onto the surface of the cast concrete. But still, Azuma did not so much refine this model, as coarsen it, in the process making it his own. His very limited budget required him to work with the uneven boards most contractors rejected. The result was a single layer of concrete whose very roughness appears as a manifesto of his commitment to live in the very centre of a dense urban environment.

This rawness and organicism has obvious echoes of Antonin Raymond's Reinanzaka House (1926) and of the *béton brut* of Le Corbusier's National Museum of Western Art, which had opened in Tokyo's Ueno Park in 1959. Other elements of this building seem to have been influential, not least the use of atria and protruding beams. Azuma even went so far as to include these features, together with the importance of top-light and split levels, in his own, only partly playful, 'Five Points of Architecture'. And in examining the floor plan of the Tower House, several of these elements appear fundamental to the arrangement of the spaces. For example, despite working with a very limited 20m² footprint, Azuma never fully occupies the entirety of the plot, except in the basement.

Rather, his approach is to literally pile up each function of the house and then to use his five points (and in particular the courtyard and atrium) to connect them not just with each other but with the building's immediate surroundings and with the city as a whole.

Azuma referred to this concept of spatial composition, which established a strong sequence between rooms while at the same time maintaining a sense of flexibility, as the 'Tatami spirit', in recognition of the traditional use of the *tatami* mat as a kind of module for evaluating and tessellating any interior space. But, again, he made this system his own through the way he aggregated space – not horizontally, but vertically, partly out of necessity, because of the restrictions of the site, but also drawing on his experiences working with Sakakura on multi-level infrastructural projects. In this sense, the miniature house and the vast train station are very similar – both distribute their functions along a vertical path, and both are committed to a continuous sequence of spaces, where there are no barriers separating individual rooms or areas.

This carefully considered vertical arrangement allows a house of tiny proportions, built around a succession of platforms, each less than 20m², no bigger than a prison cell, to function with the same ease and efficiency as a much larger property. But its success also speaks of its urbanity. For Azuma, the house works precisely because of the way it operates not in isolation but in symbiosis with the city around it. And so even though he provided a kitchen, the larger dining space is in effect the network of nearby restaurants. In the same way, the study is complemented by the local cafe and coffee shop, and the bathroom by the traditional *sento* or public bath. This is something quite distinct from the autonomous suburban house – a far more interconnected model, both inside and out. It would also earn Azuma a place in Japan's architectural historiography as the pioneer of what is euphemistically referred to as the 'urban house'.



Rie Azuma, Tokyo, 2015
© Yusuke Obuchi

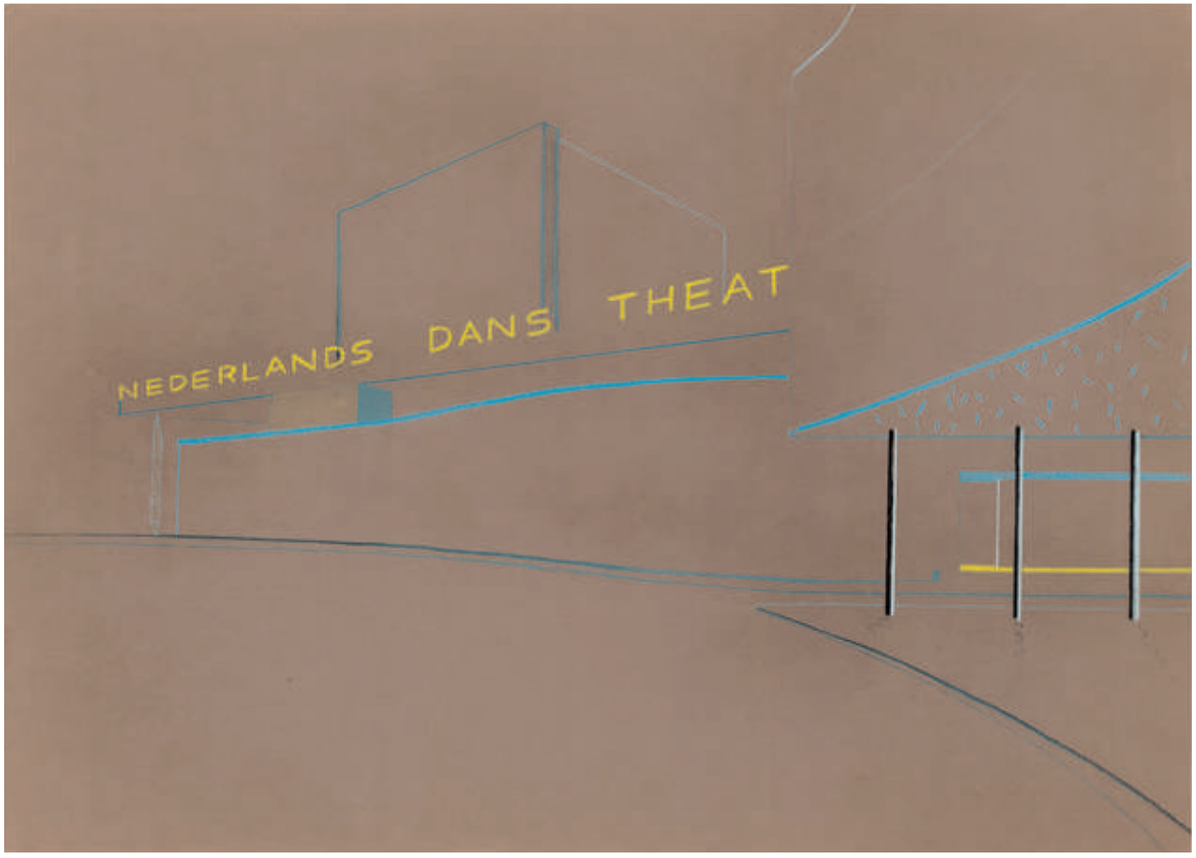
The originality of Azuma's achievement, however, would only be acknowledged some years later, because the established architectural community was initially rather ambivalent about the house. As Takeshi Ishido has recalled, Japan's most distinguished monthly architectural magazine, *Shinkenchiku* (New Architecture), was reluctant to commission any kind of review or profile. Photographs were taken, but they were never published as the editor at the time, Yasugoro Yoshioka, would not recognise the Tower House as a piece of architecture or even, perversely, as a house. But then 1968 saw the launch of a new architectural magazine, *Toshi Jutaku* (Urban House). Edited by Makoto Ueda, and with covers designed by Kohei Sugiura and Arata Isozaki, it sought to tap into the emerging generation of post-metabolist architects represented by Azuma and – as its title suggests – their preferred typology of the urban house. Among these young architects, all of whom were born in the 1930s, were Kazumasa Yamashita, Takefumi Aida, Minoru Takeyama, Mayumi Miyawaki and Makoto Suzuki, who would join with Azuma to form their own collective, ArchiteXt, in 1971. It was also in the pages of *Toshi Jutaku* that the youthful Tadao Ando would publish his first public declaration in the form of a manifesto for a more personal, idiosyncratic, city centre architecture called 'Urban Guerrilla House'.

Buoyed by the success of *Toshi Jutaku*, and his prominent place within the architecture it was advocating, Azuma would soon leave Sakakura's and set up his own office, which initially worked out of the basement of the Tower House, so that it really did become its own *machiya*. Azuma's early house commissions – the Yano House (1968), Inoue House (1969) and Akatsuka House (1969) – all demonstrate his signature interest in interconnected spaces, and also employ his now familiar five points of architecture. However, only the last of these, Akatsuka House, could compete in terms of its site, repeating the tower form from the first house, but this time not as an urban stack but as a woodland watchtower. Later on, in the 1970s and 1980s, Azuma's fascination for overlapping spaces would lead to the formulation of so-called 'slit space', for example in the Syohmoto House (1975). The slit here is a non-functional space, typically placed centrally within a staircase, somewhat reminiscent of Shinohara's more abstract conception of 'fissure space', but used by Azuma more pragmatically, as yet another device to interconnect disparate spaces and functions both inside and out.

Today, the historic grain of two-storey wooden houses out of which the Tower House emerged can only be seen in old photographs. During the asset price bubble of the 1980s the whole of Tokyo's Aoyama district was transformed. What was once a tower looking down on its vernacular neighbours, is now itself dwarfed by generic commercial buildings. And yet somehow the house still stands out, for its individuality and compelling roughness, if nothing else. It is also still occupied by the architect Azuma, though not Takamitsu, who sadly died in 2015, but his daughter Rie, who moved in as a six year-old and only left to complete her architectural training in the US at the age of 24. She would move back in when her elderly parents reluctantly had to move into a single-floor apartment nearby. Inside, the window frames have been changed, and the heating replaced, and one of Japan's more powerful earthquakes shifted the whole building over by 1cm, but otherwise everything is largely as her father designed it in 1965. As a result, Rie knows every surface, every protrusion, every aspect of the house down to the tiniest detail. When she wakes in the night and walks down the stairs to the bathroom she doesn't even have to open her eyes. She just knows every step. The house, in this way, continues to reassure her through its intimacy and idiosyncrasy, just as its central place within Tokyo offers the wider comforts of the city around it. Brought up an only child, Rie seems to have discovered in this familiarity a sense that the Tower House itself has always been her sibling, and continues to provide all the familial love and protection she needs.

Goodbye Paper

Christophe Van Gerrewey



OMA, Netherlands Dance Theatre,
Scheveningen, second version, 1982
© OMA / Rem Koolhaas

Between 1985 and 1989 the Netherlands Dance Theatre (NDT) in The Hague, designed by OMA, featured on the cover of a roll call of international magazines: *L'Architecture d'Aujourd'hui*, *Architecture Moniteur Continuité*, *Techniques & Architecture*, *De Architect*, *Archis*, *Quaderns*, *Architectural Record*, *Bauwelt* and *A+U*. The reason for this attention was paradoxical: it was the debut of an architect who had become famous because of his struggle to build. *House & Garden*'s architecture and lifestyle critic Charles Gandee described this development in breathless tones: 'Ten years ago Rem Koolhaas was regarded as one of the most brilliant stars on the architectural horizon. Time passes, but save for periodic reports of stalled commissions and ill-fated competitions, little was heard from him. OMA admirers began to wonder about the *wunderkind*. Happily, Koolhaas's low-profile years have finally drawn to a close, and the 43-year-old architect is back in the professional spotlight.' The title of Gandee's article says it all: 'Fancy Footwork: Dutch Architect Rem Koolhaas Makes a Stunning Debut with his Netherlands Dance Theatre'.[1]

This was not entirely accurate. Far from being low-profile, the Office for Metropolitan Architecture had become well-known thanks to exhibitions, publications and competition entries. Just a year after its foundation in 1975 an entire issue of *Architectural Design* was devoted to the work of Koolhaas, Madelon Vriesendorp and Elia and Zoe Zenghelis – the foursome that made up OMA at the time, and co-authors of Koolhaas's 1972 AA graduation project, *Exodus*. 1978 saw the publication of *Delirious New York*, which was widely reviewed, and over the following years OMA organised exhibitions at the Guggenheim, Max Protetch Gallery and the Institute for Architecture and Urban Studies in New York, the Stedelijk Museum in Amsterdam and, among other institutions, the AA. The office came second in two major international competitions, one for Parc de la Villette in Paris in 1982, won by Bernard Tschumi, and another in 1986 for The Hague City Hall, won by Richard Meier. Koolhaas *had* also built prior to the NDT – a police station in Almere, begun in 1982, was completed during the last six months of 1985, but OMA felt it wise – the statement is still present on the office's website – 'to keep the champagne bottles in reserve a little longer'. Despite its efficient but playful organisation – a series of rooms assembled behind a long blue wall, adorned with the neon letters POLITIE – its construction appears to have been difficult. More successful was the attempt to keep the project out of sight, although it was reviewed in *Forum*, home base of the Dutch structuralists: 'The location is abominable, the concept is dead, the joke does not work, and the building is only photogenic when photographed at cruising height. It is literally shaking: there are cracks in the wall. We have lost an illusion: Dutch architecture will not be saved by OMA either.'[2]

It is unlikely that saving the art of building in the Netherlands was ever OMA's objective, but it must have been clear to Koolhaas that the police station could not mark his official debut. Another building that failed to qualify was a cheerful and tropically tinged bus stop in front of Rotterdam Central Station, completed in the spring of 1987 (but demolished in 2004 to make way for a new station). And then there were OMA's contributions to architectural exhibitions – all of them too temporary to serve as a major first achievement – such as the textile and transparent non-facade tucked away at the end of the Strada Novissima in 1980, or the Casa Palestra in Milan in 1986, a pastiche of the Barcelona Pavilion, as an iron bar curved by a body builder.

The desire to build, together with the fear of being shelved as a paper architect, had been haunting Koolhaas since the beginning of the decade. In the introduction to an exhibition in Amsterdam in 1980 he wrote:

In the absence of specific commissions this work belongs to the recently invented category of 'paper architecture'. The effect of this status is ambiguous: the apparent advantage of a career as a paper architect is an accelerated development. More designs are made, so more problems are addressed and more themes are examined than in a conventional career. But the danger exists that drawing becomes a vicarious activity and the 'paper' reputation of its maker in the end stands in the way of realisation. His activity becomes a kind of fertiliser for 'real' architecture. The past four years (alarmed by the abundance of 'theoretical' projects – an almost overflowing reservoir of unproven claims and pretensions) OMA has taken to concrete projects in which previous assumptions can be tested. Goodbye paper![3]

The experience of getting bored with his work, combined with the suspicion that everyone was imitating OMA, pushed Koolhaas away from the drawing board, the writing table and the classroom. Although he would later express wonder at the fidgety ambition of his former student – 'When I asked Koolhaas why we had to turn our backs so fast on what we had just done so well, his answer was that it was necessary to be ahead of being consumed'[4] – Zenghelis seemed to agree, at least during the early years of OMA. 'The time for paper architecture is past', he declared to Deyan Sudjic in 1981. 'We decided that if people were going to take us seriously we would have to take the plunge, stop teaching and start building.'[5]

This explains why the 'three-dimensional' start of OMA was heavily anticipated and continuously deferred – sometimes of the architects' own volition, sometimes not. Even at the time, the NDT's debut seemed somewhat belated: Koolhaas's initial contact with its financial director Carel Birnie dates from early 1980. Birnie is the first defining client in OMA's pre-*S,M,L,XL* portfolio, followed by Jan Schaefer (Amsterdam's alderman for housing and instigator of the IJplein project), Dominique Boudet (client for the Villa dall'Ava) and Jean-Paul Baïetto (director-in-chief of Euralille). Koolhaas used his clients as intermediaries to inflate but also to negate his goals: Schaefer got a 1980s version of the Weissenhofsiedlung that prompted OMA to abandon, at the end of the decade, both the modernist canon and social housing; the masterful villa that Koolhaas built for Boudet elegantly mocked this cliché; and thanks to Baïetto, the predominantly economic ambitions of the European Union got turbo-charged in one small city in northern France. Birnie helped OMA to demonstrate that money is as indispensable for architecture as it is lacking, certainly in public projects. The tensions this provoked enabled Koolhaas to question the traditional values of architecture, hoping to resuscitate the discipline from within.

The idiosyncratic behaviour of Birnie may have been one of the reasons why it took so long to finish the NDT. A former medical student, amateur of opera and art, and a cultural entrepreneur and adventurer, Birnie bragged about his managerial skills, his independence from state support and his enormous courage. 'I take terribly big risks', he told a Dutch newspaper in 1987. 'Sometimes I take risks of a million, and nobody knows. I think it's foolish to keep on saying: the government, the government, the government. Always risks, always adventure, but in the end: it always comes together. That's what I find exciting.'[6] The seven years that Birnie

and Koolhaas took to realise their project were undoubtedly exciting, and the relationship between client and architect was strained.

For the chapter on the NDT in *S,M,L,XL*, Koolhaas opted not for a precise presentation but an account of the building process and its unlikely accidents and disasters. When the building opened in 1987, the architect gave Birnie a silkscreen of an early drawing with the dedication: 'To Carel, for everything you made (im)possible'.[7] Koolhaas spoke to a journalist about Birnie with a mixture of amusement and exasperation:

Carel had extremely tempting ideas at the time, about this incredibly Spartan simplicity he would pursue in the new theatre. He would even do without heating: if necessary, he would provide visitors with braziers in the winter to make sure they would be comfortable. As it turned out, he had somewhat peculiar ideas about what constitutes a brazier. He greatly exaggerated the simplicity of it all and subsequently proved incredibly ambitious. I quarrelled with Carel Birnie over just about everything. No hard feelings, though. Birnie isn't the easiest of men, he is Shakespearian, a mixture of Shylock, Prospero and King Lear.

Confronted with this characterisation Birnie replied: 'Such a remark says more about him than about me.'[8]

The NDT was co-founded by Birnie in 1959 as a splinter group of about 20 dancers distancing themselves from the conservative Dutch National Ballet, but also from the dominance of Amsterdam. During the 1960s and 1970s, the NDT moved between various locations in The Hague. At the beginning of 1980 Birnie invited three architects – Wim Quist, Carel Weeber and OMA/Rem Koolhaas – to make a proposal for a permanent base. He had converted the city to the cause, and also gave the impression that he had acquired sufficient funds. The NDT had been performing at the Circus Theatre in Scheveningen, a seaside resort of The Hague. Built in 1904, the theatre was 250m from the beach, with its monumental Kurhaus Hotel dating from 1885. Birnie's idea was to fill up the void area between the cupola of the theatre and an existing tramway with studios and offices. The first OMA proposal offered more: residual space between the existing theatre and new buildings could become a tent-covered auditorium. In what would become a constant balancing of supply and demand, Birnie raised his expectations: if an auditorium were possible, why not build one with red velvet chairs and a larger stage tower? Years later, when the project was finally under construction, the tables were turned: by that time OMA was constantly trying to raise the budget and the office archives hold numerous letters from Birnie threatening to end the collaboration: the expensive changes to the project needed to stop, and it would help if Koolhaas answered the phone for once.

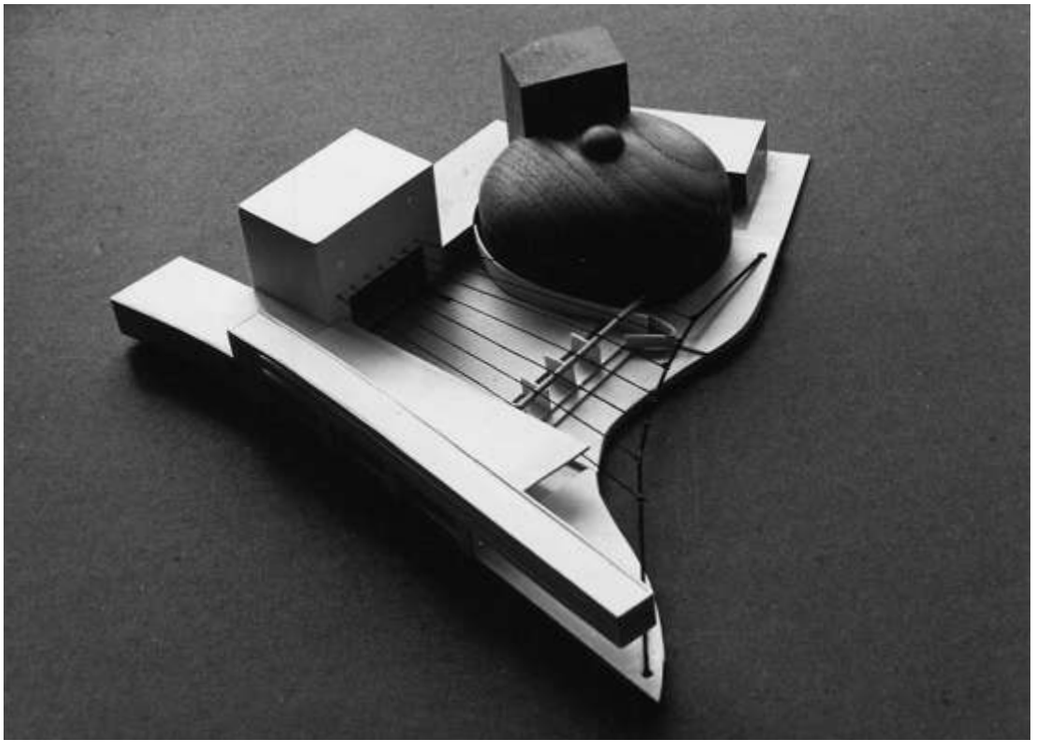
OMA's first design was simple, as an efficient red, black and white model shows. A threefold organisation divides the NDT into a curved beam with warm-up and dressing rooms on ground level, following the street; a straight beam with offices on top; and an auditorium with a proscenium and a theatre tower, next to the Circus Theatre. A foyer is generated as a triangular wedge – black in the model – between the functional zone and the theatre. This composition related both to the site and to the history of Dutch architecture and planning. In the 1960s the Circus Theatre was part of a plan for Scheveningen by Jaap Bakema, member of CIAM and Team X. Bakema designed a point grid of 60m^2 with towers to replace the existing fabric of cottages and hotels. The plan gave an even more dominant position to the Kurhaus hotel but decreased the size of the square in front of it in favour of apartment buildings.

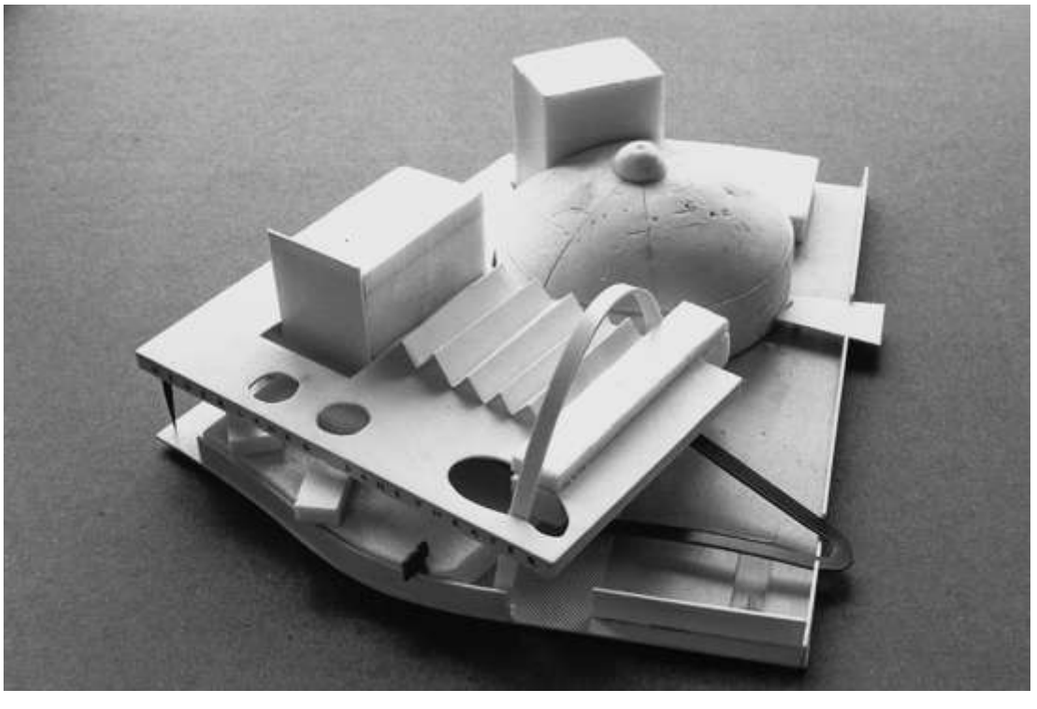
Although Bakema's symmetrical plan remained largely unfinished, OMA decided to take up its challenge. An attempt was made at developing 'a chain of public events that would go from the theatres past some entertainment centres, past the hotel, and toward the pier, to articulate a sort of spectrum of attractions'.[9] This proved unfeasible, but the first project did insert an informal diagonal route and a means of looking obliquely at the beach from the vantage point of the new building. Another reference was located in the other direction: a chapel, built in 1913 by Alexander Kropholler, a conservative Dutch architect who in the 1930s was a member of a fascist organisation. This controversial figure, author of an overview of twentieth-century architecture, was quoted in one of OMA's project files arguing that historical building could only profit from a variegated environment. Kropholler's church, with its slender brick tower flanked by nineteenth-century houses, is present in sections and facades, together with – on the other side – the atrocious apartment complex in front of the Kurhaus, built by a developer at the end of the 1970s in line with Bakema's plan.

NDT was typical of the contextualism of OMA's projects during the first half of the 1980s, evident also in projects like the Boompjes development plan for Rotterdam or the IJplein housing in Amsterdam. At the base of these proposals lay a stocktaking of information, and subsequently a narrative which reinforced the existing context and reclaimed architectonic, urban or cultural themes that up to then had been neglected or in danger of being lost, or had never even really existed, except as part of an individual or collective imagination. For OMA this was not only a means to anchor a building in a messy site, or to legitimise architecture in a sardonic way, making a show of explaining formal choices. As a method of developing a relationship with twentieth-century architecture it was also linked to Koolhaas's quest for self-renewal, and to his distancing from contemporary (or younger) architects. In this sense, the NDT enabled OMA to confront Dutch architecture (and the diametrically opposed generations of Kropholler and Bakema) and to develop a practice that neither wanted to erase projects or buildings, nor longed for a respectful or moderately contextual presence, but wished instead to exaggerate differences – to increase the tensions between contemporary, postwar and pre-war architecture to an almost ridiculous degree. 'Scheveningen is a reef', Koolhaas said, 'on which different architectonic and urban visions have run ashore'.[10] At the time, the same could have been said of many urban or semi-urban contexts. Indeed, the strategy of OMA consisted of hunting down and exposing the wreckage of the twentieth century, and in showing 'what was no longer possible' – the true characteristic of *being modern*, as Roland Barthes wrote[11] – while triumphantly transcending these aporia.

This is also true for the second project, developed around the turn of 1982/83. After the municipality – hand in glove with a consortium of private investors – decided to re-route the tram line and to fix the borders of the adjoining parcels (earmarking them for a police station and an office building), the size of the lot was reduced and the allocation of cubic metres for culture curtailed to ensure a particular mix of housing, offices and parking. What happened next at OMA has been described by Zenghelis.

After the meeting in which they learned that half of the volume needed to be eliminated everyone in Rotterdam was ready to quit: they had been working on this project for more than a year! And then Rem proposed to circumscribe a large open space with a long wall, covered by an





OMA, Netherlands Dance Theatre,
Scheveningen, first and second version, 1981–82
© OMA / Rem Koolhaas



OMA, Netherlands Dance Theatre,
Scheveningen, second version, 1982
© Jan Voorberg Archive /
Het Nieuwe Instituut, Rotterdam



immense flat roof. There was not much enthusiasm, but he nevertheless made a small model. When he showed it to me he still had his doubts, but because he had succeeded in liberating himself from all these obstacles I was convinced this was the best project ever made by OMA.[12]

The trick was pure bluff: a space bordered exclusively by a wall or by a ceiling is not a space and does not account as cubic metres. As Koolhaas put it in *S,M,L,XL*: 'wall without roof or roof without wall = $0m^3$; therefore, architecture of walls and roofs'.[13]

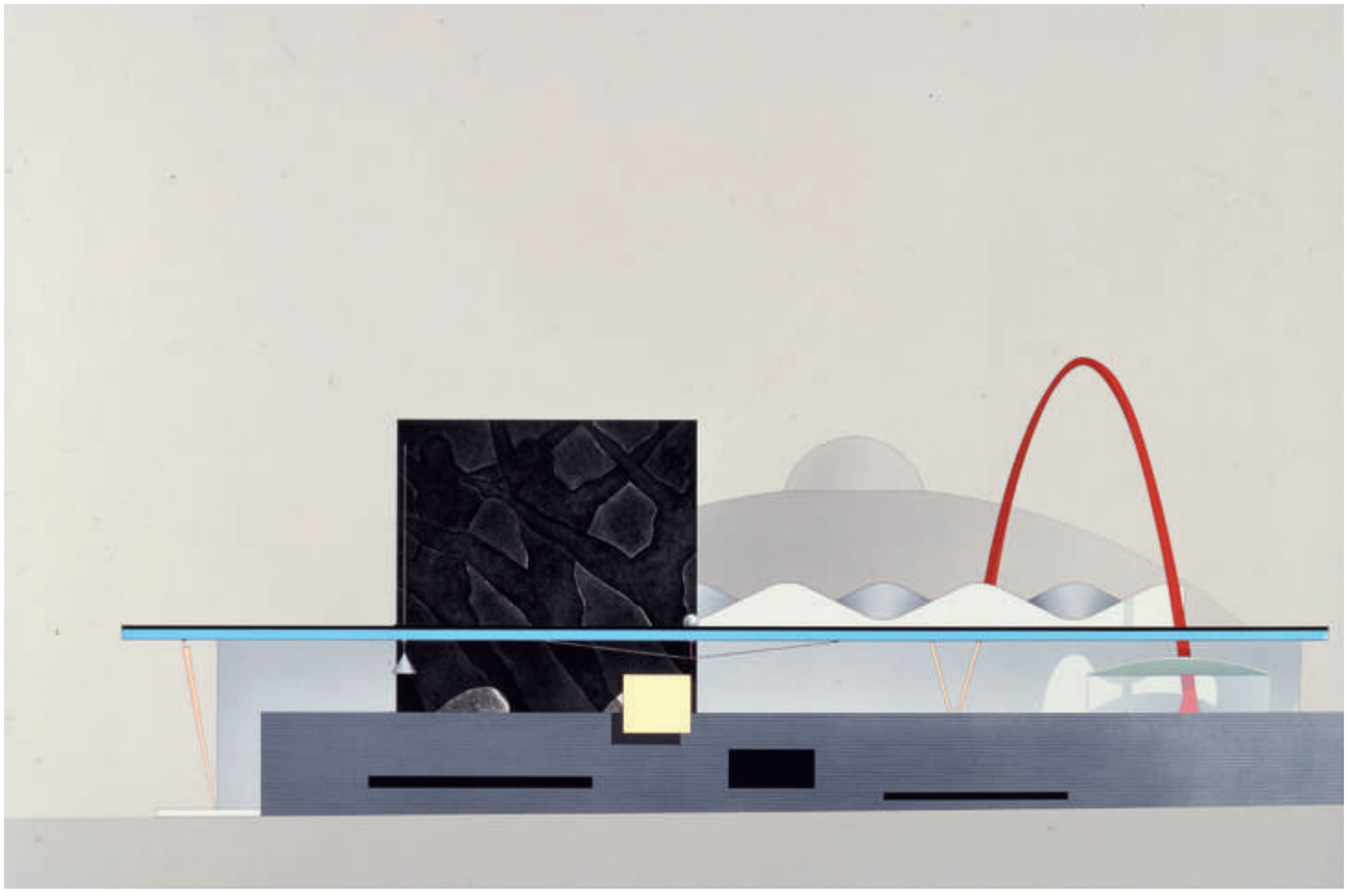
The second project continued as a collection and collision of elements, with as much open-air circulation space as possible. Another result of the 'discovery' of an 'architecture of walls and roofs' was that the NDT no longer tried to 'pimp' Scheveningen, but turned away from its surroundings. The cantilevered office strip above the exercise spaces was bent back and reduced to a wall, circumscribing the building lot and creating a forecourt. The other defining element was a floating and flimsy rectangular roof hovering over almost the entire site, and punctured to let light through. The roof was constructed with one beam, supported by – among other things – a conical pilaster, steel cables and a strut. A parabolic arch was placed diagonally over the flat roof, leaping away from the dome, as an afterimage delineating its shape. The auditorium and the stage remained where they were, next to the Circus Theatre as cut-outs in the shelf above the site, but the hall was covered with a distorted corrugated roof inspired by the school Gaudí built next to the Sagrada Família.

Essential for the development of both structures – the flat roof and the smaller wavy one – was the German-Hungarian Stefan Polónyi, recommended by O M Ungers when Koolhaas found no Dutch engineer adventurous enough for his liking. Looking back in 1993, Polónyi commented on the collaboration. It was important not only to create architecture with walls and roofs, but also to ensure that the roof was not recognisable as such – it needed to be a levitating object, not so much supported by a selection of elements as almost accidentally touched by them, while the elements themselves seemed liberated as individuals from the constructive function they could only fulfil collectively. 'Here on the left', Koolhaas encouraged Polónyi, 'let's attach a cone of solid steel underneath and, on the right, let's put a sphere of steel on top.'[14]

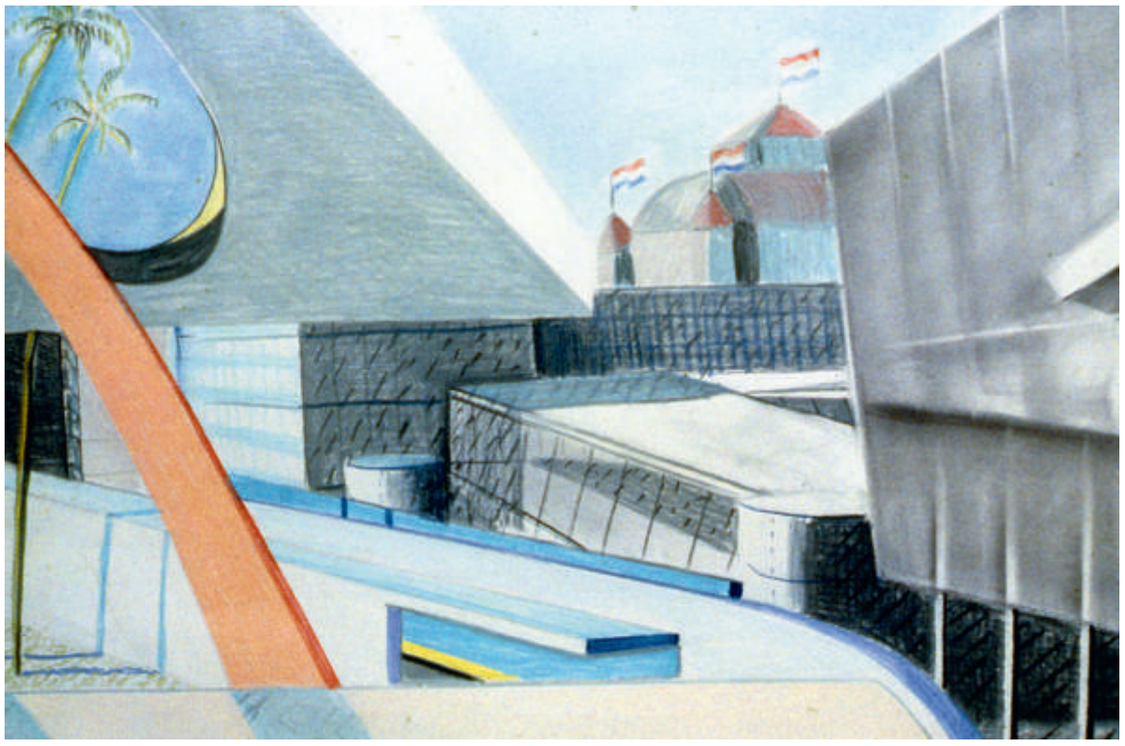
OMA wanted to avoid traditionally defined spaces at all costs. This second project for the NDT is in this sense a piece of architecture without architecture, in which the abstraction and reduction typical of the modernist canon is asserted, not only in terms of the elements used, but especially in the way the elements *meet* – or rather don't meet. This position was discussed when Koolhaas presented the brand new second project for the NDT in November 1982 at the University of Virginia – a presentation and ensuing discussion collected in *The Charlottesville Tapes*. 'We considered it a series of walls', Koolhaas concluded, to which Rob Krier – who together with his brother Leon in many ways represents the anti-Koolhaas, although opposites can attract – replied: 'This is exactly what I criticise in your designs. This is anti-space, not formulated space.' Koolhaas wittily dismissed the criticism: 'I have admitted in earlier conversations with you that I have a blind spot for space. That is a problem I am struggling with, but I think I have come a long way for somebody who is so handicapped.' Laughter erupted, but Krier's objection was justified: the second NDT project shows how OMA in the 1980s – and this would change in the 1990s – did not set out either to invent a new architecture or to reinstall a previous one. Instead, they approached the tools of modern architecture as a set of clichés that could be appropriated and given new life by incorporating them into unorthodox formulations and compositions.

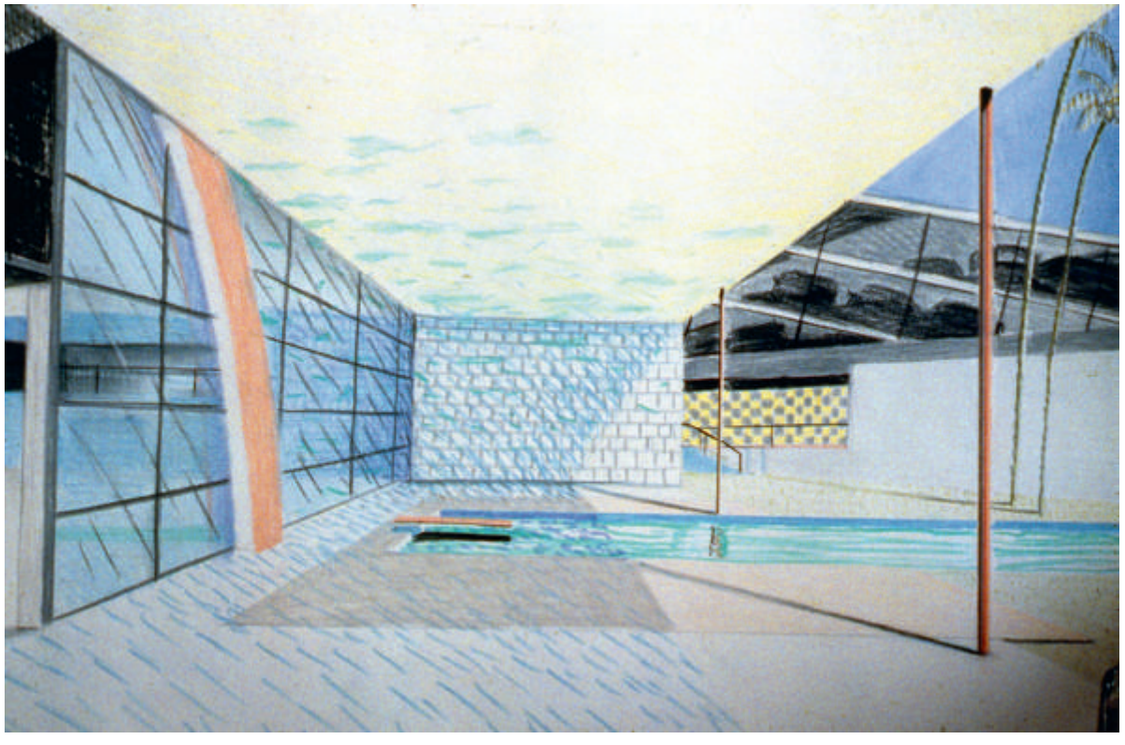
Of decisive importance in this regard was the early OMA collaborator Jan Voorberg, a self-taught woodworker-architect who operated without any kind of technical diploma. In 1980, when the competition for the Parliament Extension in The Hague was still undecided, Voorberg, who lived only 200m away from the site, published a plea in favour of the design by Koolhaas, Zenghelis and Hadid.[15] This action, though unsuccessful, not only contributed to OMA's notoriety, but also resulted in an invitation to work for Koolhaas (as project architect for the NDT and for the IJplein housing). Voorberg's appointment coincided with the setting up of the Rotterdam office. As numerous photographs in his archives show, he travelled around the world feeding his obsessional interest in twentieth-century architecture. It was Voorberg who compiled the database of urban projects that informed the IJplein housing, but his omnivorous attention was also directed towards vernacular architecture. One picture, taken during a trip to the US, shows a McDonald's restaurant with several parabolic arches like the one in the second design for the NDT – two arches as part of the front and back facade, but also a double arch in the isolated logo of the fast-food chain.

Voorberg made several models of the first and second designs for the NDT, and one of them is reminiscent of the photographs in *The Sausage Series* by Swiss artists Fischli & Weiss from 1979 – urban landscapes or situations made out of food, cardboard boxes or domestic residual materials. The model likewise demonstrates how no material is too banal or too boring to be excluded from the realms of art and architecture. The Circus Theatre accordingly becomes a sandwich, the stage tower is a piece of cake, the wall a thin slice of bread; the roof and the arch are coated with sugar sprinkles, while the (anticipated) police station and office building materialised in the form of a packet blancmange and some slices of dark ham. As with almost everything OMA did or produced, the model and the design were in no way unequivocal. Each seemingly programmatic or dogmatic intention could be countered by some nuance or objection, as the rest of *The Charlottesville Tapes* conversation about the second NDT project makes clear. Following Krier's remark on anti-space, Cesar Pelli accuses OMA's design of nostalgia because of 'the constant reference to Miami Beach, palm trees, McDonald's arches, kidney-shaped swimming pools'. Robert Stern agrees: Rem's 'nostalgia is supposed to be okay, but everyone else's isn't', while Rafael Moneo notices 'an attitude towards modern architecture as a kind of vernacular populism'.[16] Both the populism and the nostalgia in the second NDT project are contradictory. OMA never wanted to appeal, in an anti-intellectualist fashion, to a larger or popular audience – for this, Koolhaas is not naive or idealist enough. The references, the materials, the 'anti-spaces' formed by loose walls and planes – everything is directed at the architectural community. Koolhaas, then, did not try to abandon the boudoir that Manfredo Tafuri famously promoted in 1974; rather, by importing elements and methods from the outside world he wanted to show his colleagues how they were unwittingly living and working inside it. The nostalgia was – as Stern indicated – never his own; what he wanted to do was reveal the nostalgia of the other architects, because everyone else was still making all too traditional architecture, no matter how postmodern, pop or eclectic they pretended to be.



OMA, Netherlands Dance Theatre,
Scheveningen, second version, 1982
© OMA / Rem Koolhaas





OMA, Netherlands Dance Theatre,
Scheveningen, second version, 1982
© OMA / Rem Koolhaas

Koolhaas experienced this at the reunion that would lead to *The Charlottesville Tapes*.

What I find most nostalgic about this gathering is not its nostalgia for any particular style or any particular period, but nostalgia for an order, for a specific role for architecture, for the role of the architect as some kind of gentleman who appears and unfolds a drawing. I find that kind of nostalgia very unhealthy because it forces us to take part in these gloomy gatherings where nothing is right, everything is a mess, and we have to make beautifully noble statements. What I tried to do in [the second NDT project] is to show some of that.[17]

The difficulties involved in the realisation of the NDT were likewise brought into play to criticise architecture as an institution, as a profession and as a supposedly collegiate activity – to show architects how they were dominated by processes that were not only beyond their control but simply beyond their reach. This is narrated in *S,M,L,XL*. On 23 September 1983, OMA's second design was accepted by the city council. To celebrate, Voorberg went on holiday to Brazil. On 11 October he was murdered during a visit to the Pedregulho housing complex in Rio de Janeiro, killed simply because he was in the wrong place at the wrong time. Later that week, The Hague decided to cancel OMA's project in Scheveningen and to relocate the NDT to the city centre. The building volume doubled but the budget remained the same. Faced with the 'sterility of the site', Koolhaas declared their initial response was to 'take the embryo of the Scheveningen project, nourished in a more promising womb, and implant it here. Such an operation would have saved both a great deal of time and a large part of the architects' fee.'[18] This is the kind of trick, again challenging conceived notions of site-specificity and 'good practice', that OMA would repeat in a more radical form in 1999, when a house designed for the suburbs of Rotterdam was displaced and rescaled to become the Casa da Musica in Porto in 2005. But in the case of NDT the design underwent many changes from early 1984 on, in response to the site and to other buildings that were under construction at the same time.

Close to Central Station, the Spui neighbourhood was an impoverished area with a mix of workers' housing and small companies. After it was heavily bombed during the Second World War it was the subject of many abortive plans, often developer-led, such as Pier Luigi Nervi's 1962 proposal for an ensemble with hotels, shops, restaurants and a 140m office tower. In the late 1970s demolition was followed by redevelopment, beginning with the construction of two ministries and a large overpass. The area in front of the ministries was earmarked for a city hall with a public library and a concert hall and hotel, linked by a parking garage – a remnant of the Nervi plan. A competition for the city hall was organised in 1986: the jury, chaired by Aldo van Eyck, selected OMA, but the municipality implemented the project by Richard Meier. In models for OMA's city hall, the NDT – under development – was always present, although the mutual influence was limited to the sunken plaza in the former that connected to the triangular open space in front of the latter. Losing the commission to Meier in 1987 was almost as dramatic as finishing second in another competition in 1988, when it was decided that the Netherlands Architecture Institute in Rotterdam would be built, not by OMA, but by Jo Coenen – a loss that was partly responsible for a change in OMA's design for the Kunsthal on the opposite side of the Museumpark. Twice, in The Hague and in Rotterdam, OMA had had the opportunity to design two public buildings connected by a square and in both cases only one would be built.

Two other projects under development at the Spui were decisive for the NDT: a hotel, designed by Carel Weeber, and, above all, a concert hall for The Hague Philarmonic Orchestra (RO), designed by Dick van Mourik. The relocation to the Spui was partly for financial reasons, but it also had to do with the programme: the NDT was to be the world's first dance theatre. It is perhaps understandable that the municipality should have had its doubts about this first-of-a-kind achievement, even though the NDT already enjoyed a worldwide reputation – at the end of the 1980s there was talk of the American choreographer William Forsythe becoming artistic director, but he only wanted to come if Birnie was prepared to leave, which he wasn't.[19] According to Koolhaas, OMA's second NDT project was cancelled at the end of 1983 after van Mourik's office helpfully suggested to the municipality that considerable savings could be made if the NDT were combined with the concert hall at the Spui. 'They posited', Koolhaas said, 'the ridiculous thesis that the entire complex could be built for 18 million guilders. So the fate of our design for Scheveningen was decided. It was a paragon of the typically collegiate behaviour that prevails in the Netherlands, and it prompted us to reduce to a minimum the collaboration with van Mourik.'[20]

Nevertheless, a minimum of collaboration seemed expedient. Within an urban plan by Carel Weeber, and on top of the grid of the parking garage, van Mourik had been developing a concert hall. When the municipality was considering moving the NDT, one of the scenarios was to build a single stage, but with a different auditorium to the left and the right. Another possibility was a theatre hall overbuilt with a concert hall – an option that Koolhaas designated as 'the bull's model',[21] because the RO seemed to mount the NDT. Out of aversion for these proposals, which would have cancelled out OMA's authorship, the office began making sketches emphasising cohabitation or neighbourliness. The NDT at the corner of an L-shape with the hotel positioned partly in front, creating a kind of alley – a shared rectangular foyer between the two halls would be designed by OMA, the entrance hall in front was part of the design by van Mourik. 'We had to resign ourselves', Koolhaas said, 'to the fact that we couldn't exercise any influence on their project. So we decided to react to the things they proposed. That would turn out to be the only form of collaboration. We acted as if their building was already there. The two buildings give a kind of depth to each other. Although I have to say that they never reacted to our design.'[22]

OMA's project became – to use terms proposed by the office – one half of a Siamese twin, or a *cadavre exquis*, the surrealist technique for the collective assembly of words or images. The functional elements of the second project – stage, auditorium, backstage, dressing and rehearsal rooms, swimming pool, offices, storage and restaurant – were compressed into three strips 'inside a rectangular plan, as in the layout of a newspaper page',[23] to quote Roberto Gargiani. In extending this metaphor, the offices could be seen to form the masthead, closest to the square (and the hotel); warm-up rooms made up the headline, while the auditorium with the stage was the leading article. Connecting the three parts as a column on the left was the foyer. This rational order, however, only appeared in the plan. One compositional strategy of OMA – eminently present in the design for La Villette or the 1989 Paris World Expo – was the distorted and animated grid, a mechanism found throughout *Delirious New York*. In Scheveningen, this grid was suggested by the plan of Bakema; in the razed and undetermined environment of the Spui OMA decided to create, within the container of the building, both

the grid and its distortion – both the order and the moments in which it is suspensefully threatened.

In contrast to the Scheveningen design, the exterior of the final project was quite simple, and all the energy (as well as the majority of the budget) was invested in the interior. In Koolhaas's phrasing: 'Consider this building as a neutral grid, with now and then little areas that are quite special.'[24] Although views were created between, say, the studios and the dressing rooms, and although the functional zoning created an abrupt succession of programmatic difference, only the foyer contained a dizzying density of incidents. The most spectacular of these was the elevated metal Skybar, balancing on one glowing red beam and stabilised by a pole and a tie-rod – a structure developed by Polónyi, and a vestige or even a summary of the second project for Scheveningen. A balcony between the red wall of the dance theatre and the soft pink wall of the concert hall formed a platform to look at the foyer, but also an extension of the floor of the auditorium. Supported by coloured columns, it carved out a space for a cafe at ground level, slowly tapering off until the ceiling height was reduced to less than half a metre, with the lowest space being brightly lit as if it were the most essential part of the building. At either end of the long foyer was a glass facade, directed towards the city, while at the front of the building a golden cone was inserted into the entrance, like a nail knocked into the ground, but only halfway, to indicate the dividing point between concert and theatre hall. This shining volume, partly inside the foyer, partly inside the entrance hall, contained the ticket window on the level of the ground-floor foyer, while the widening upper floor housed a restaurant like a watchtower, with views onto the two adjacent buildings, but also the city.

The presence of the NDT was undeniably striking, but at the same time hardly clear-cut. There is a photograph by Hans Werlemann that shows the NDT in the dense and diverse setting of the Spui, and it is impossible to tell where the building begins and where it ends. This was a consequence of the composition of the volumes and the facades, as Jacques Lucan ascertained: 'The theatre is not a unitary building that affirms itself in an absolute and independent singularity; on the contrary, it almost becomes a chameleon if one considers all the different views of its different faces, responding, point by point, with their own means, to the multiple givens of the built environment.'[25] It also reveals the extent to which the NDT was, or was not, indebted to Robert Venturi and his theory of the decorated shed. In the absence of a singular form, it is more correct to describe the NDT as a collection of facades, each seemingly belonging to a different shed, and articulated or materialised in response to the adjoining parcels.

This idea is illustrated in a triptych of the facades: on the flytower on the front Madelon Vriesendorp painted slightly abstracted dancing bodies, whereas the rear facade, clad in black corrugated sheeting, has a roofline like a disrupted graph, first following the backstage spaces and the stage tower, and then the waves of the theatre itself – another device taken from Scheveningen. Here, the formal independence of the different parts and their facades was ensured by the decision to keep the supporting beam under the roof, rather than make it part of a hanging construction above. Inside, 1,001 seats were collected in a dark blue interior – Birnie had asked for an auditorium for 'at least 1,000 visitors'. Under the undulating roof with its visible beam structure, three gold-coloured acoustic screens hung against the large sidewall.

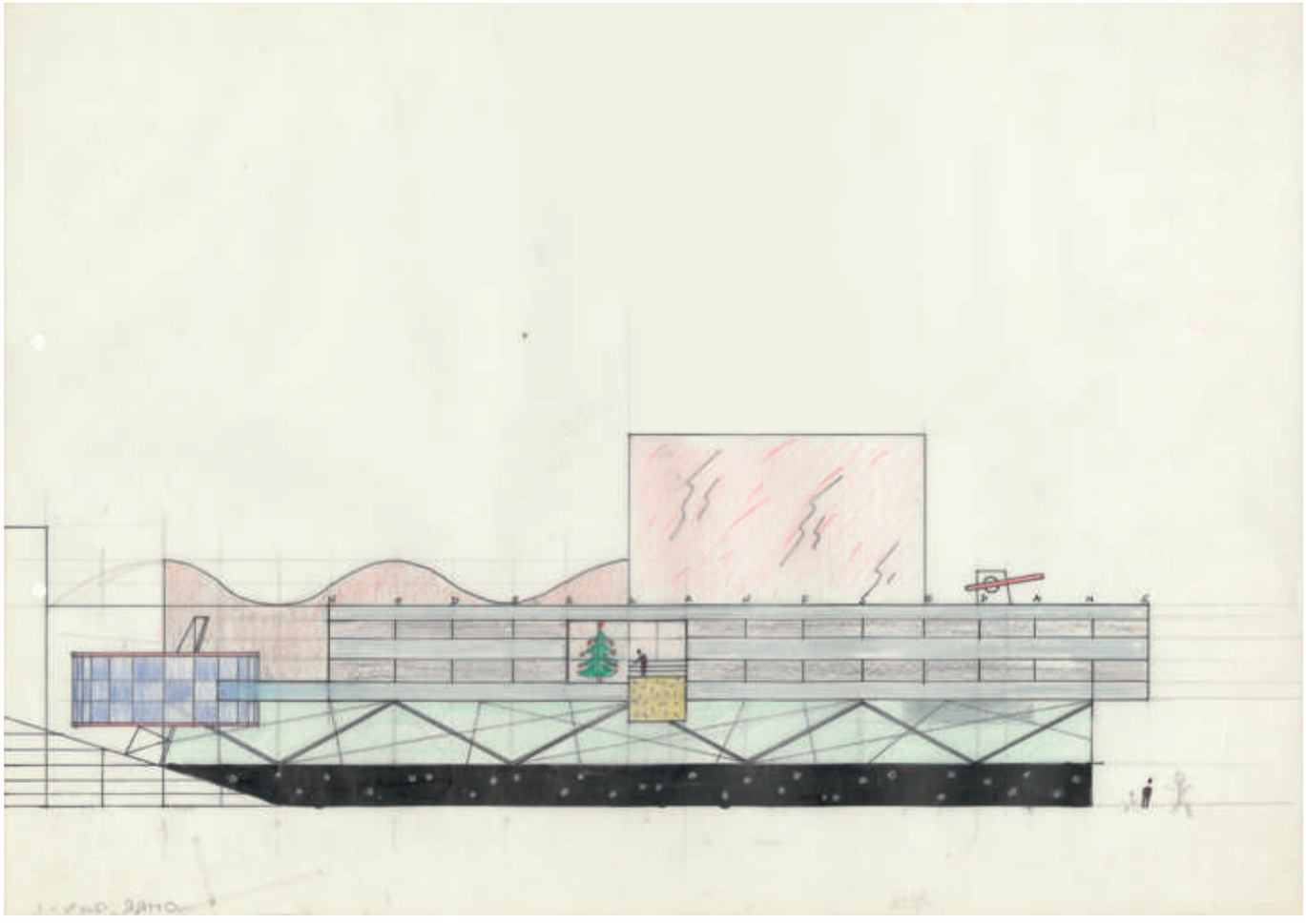
After the building opened in September 1987 the question most critics asked was not unexpected: how do OMA's architectural provocations function in the real world, now that Koolhaas has said goodbye to paper? Again, Koolhaas answered the question himself – or rather, he tried to argue that it didn't apply. 'It is better', he said, 'to regard the executed design for the NDT as a sketch for a building. A statement about a building that could have been; a *fata morgana* that, in order to be really built, would have cost three times as much.'[26] So, he had made his long-awaited debut as a real architect, and even now it wasn't for real! Once again, here is proof of Koolhaas's prodigious talent for making himself invincible, a superhero in a bulletproof suit woven of nothing but words. Almost everything that happened to him or to the projects of OMA would be reinterpreted – after the fact – as part of a plan.

Notwithstanding Koolhaas's comments, the NDT was received at the end of the 1980s as a real building, albeit an unconventional one. 'Those who are disappointed or dismiss the building for its lack of, or tacky, detail rather miss the point', Peter Buchanan argued in *The Architectural Review*. 'It is misleading to judge the building in conventional architectural terms.'[27] Writing in *L'Architecture d'Aujourd'hui*, Olivier Boissière went even further:

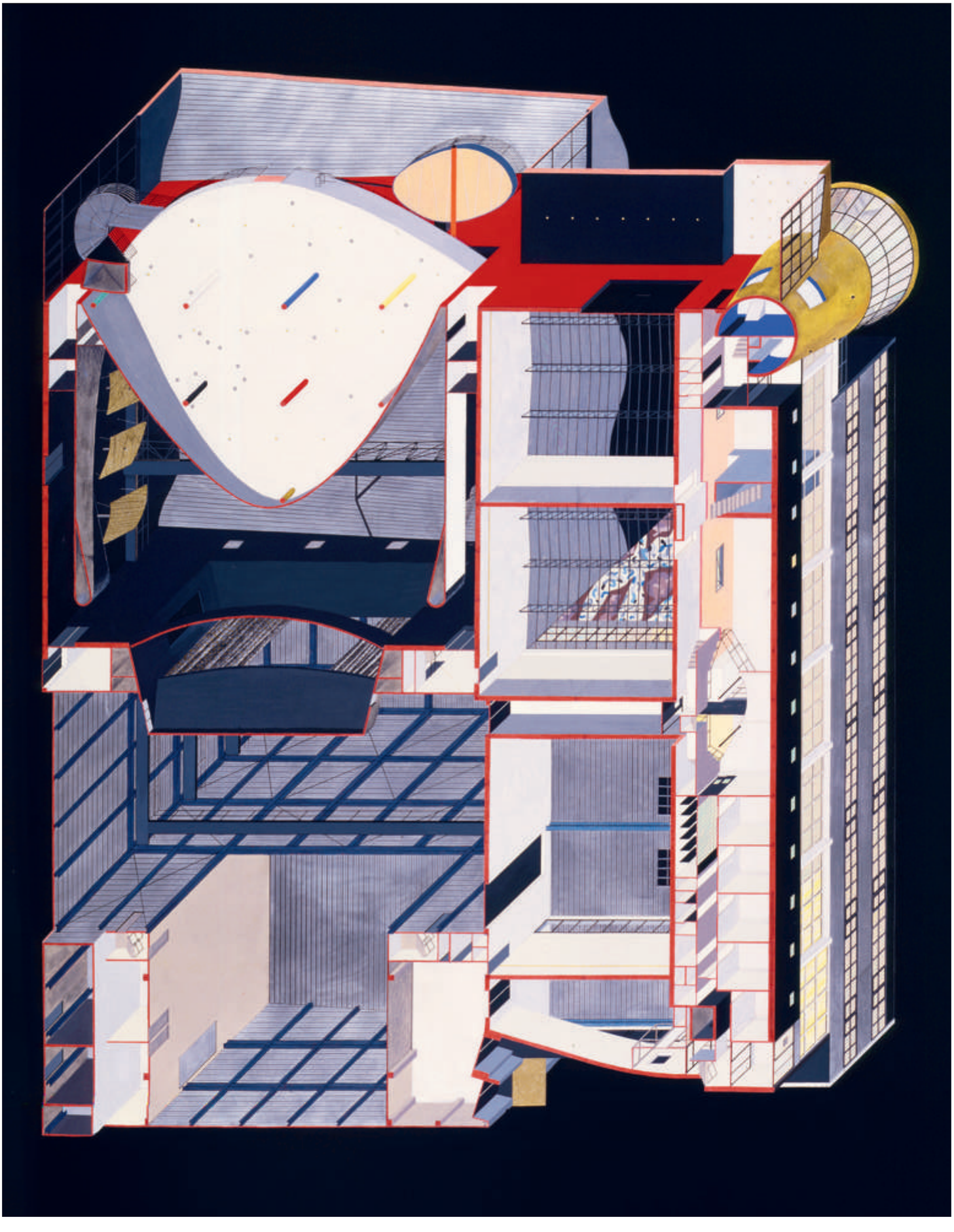
Does he know how to build, one wondered. The answer is yes! With a razor tight budget, Koolhaas offers a constructive exercise in which he demonstrates the savoir faire *that he admired in some American buildings, a mixture of resignation and meticulous attention: of course no detail in the Scarpa-sense of the term, but the right way of juxtaposing coating panels without joining them, for example, or of refining, without having room, a space for rest, of treating an invisible space as a piece of work in itself.*[28]

The American influence was certainly there. A steel skeleton was coated with corrugated steel, brick, aluminium or (on the inside) sheetrock: 'That's the way they build in California', Koolhaas said. 'I could never have made this building if I hadn't stayed so long in America.'[29] It was therefore a way of not only obeying budgetary requirements, but also of making materials meaningful and ideological – and using cheap and inferior American sheetrock to construct a public building was a provocation, certainly in the Netherlands. If in 2001 Koolhaas would make the pessimistic claim that junkspace was 'conceived in an incubator of sheetrock',[30] 20 years earlier it had still seemed possible to apply it as a critical tool and as an architectural element that intentionally provoked interpretation. Indeed, OMA's entire first decade had been more or less dominated by this strategy of using imported American elements – architectonic and urban – to expose Europe's stultifying conservatism, but the NDT project marked the first time a building material played a major part. 'We also use sheetrock', Koolhaas said in 1985 to Mil De Kooning, 'because it is a "different" material. For the world likes nothing better than that you continue making the same thing over and over.'[31]

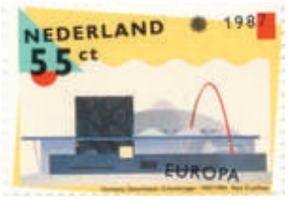
This perhaps helps to explain the greatest but also the most puzzling praise bestowed on the building. In a review in *Architecture Mouvement Continuité*, Hubert Damisch wrote that a visit to the construction site in the spring of 1987 inspired thoughts of Jean Prouvé. In the context, this seems far-fetched. Prouvé's ethos as a constructor – 'You do not calculate folded sheet metal, you experience it', as Damisch would later describe it[32] – is in no sense the guiding light of OMA's work. Even in the case of the NDT, constructional methods and materials were first and foremost *discursive* – they were used to express ideas, to criticise customs and to produce culture. Even Polónyi suggested as much: 'Koolhaas is particularly interested in the external image, in what might be called architectonic sculpture.'[33]



OMA, Netherlands Dance Theatre,
The Hague, third version, 1986
© OMA / Rem Koolhaas /
Het Nieuwe Instituut, Rotterdam



Maybe Damisch wanted – and he was not alone in this – to clearly approve of Koolhaas as a builder. The philosopher and the architect had become friends in 1972 in Ithaca; according to Koolhaas, the first time they had dinner together, Damisch's wife Teri told her husband, who preferred to remain childless, that she was pregnant.[34] At the same time, there *is* something in Damisch's conception of construction that is particular enough to apply to Koolhaas. 'The proof that this first realisation delivers', Damisch wrote in his review, 'is that architecture today cannot be called *interesting* unless it stubbornly acts against the suppression that construction suffers from, in all senses of the term'.[35] Damisch therefore understood *construction* in a philosophical sense, as an activity that adds separate elements together to obtain a meaningful and stable whole. This is a conception that is also, and not coincidentally, present in Paul Valéry's hymn to the art of building, *Eupalinos ou l'architecte*, in which he describes how the world is formed out of a chaos of isolated particles and objects, from which nothing can emerge without human and cultural intervention: '*Me voici, dit le constructeur, je suis l'acte*.'[36] Damisch's nomination of Koolhaas as a *constructeur* in this way represents on the one hand a late refusal of strict functionalism, but it is also a timely rebuttal of deconstruction, a theory that during the 1980s tried to rid architecture of all its ordering, interpretative, assembling and indeed constructive characteristics – and a movement that nevertheless included OMA at the 1988 MoMA exhibition 'Deconstructivist Architecture'.



For sure, the NDT was a building in which the constructive features of architecture continued to be defended, but against all possible odds. It was an iconoclastic building, made up out of images; a singular object that was almost impossible to distinguish from its environment; a piece of architecture that criticised the discipline but could not have been conceived without its conditions, traditions and limitations; a material construction that in a hyperconscious way needed to underline its cultural position; and a final exam for an architect who would remain sceptical of the profession but would also lift it to unprecedented and unsound fame.

As the final chapter in the history of the NDT, it may even seem fitting that it was demolished in 2016 as a consequence of the never-ending saga of politicking around the development of the Spui area. In 2010 Neutelings Riedijk Architects – Willem Jan Neutelings was an OMA collaborator on the third and final version of the NDT – won the competition for the Spuiforum, gathering concert, ensemble, opera and dance hall under one roof. The project attracted unwavering opposition, and one political party won an election in 2014 simply by campaigning against it. In 2015 a new cultural complex was presented. Designed by Jo Coenen, it should be completed in 2019.

Barring a few amused tweets, the disappearance of OMA's NDT has barely provoked any public comment. 'There was almost nothing, almost zero', Koolhaas reflected in a rare vulnerable moment. 'It has been very surprising, and that element of surprise has in a way pre-empted a feeling of tragedy or loss.'[37] But seeing another project in its removal, OMA asked Hans Werlemann, who had photographed the building after its completion, to also document its destruction. It was again a paradox that an architect who since the turn of the century has been provocatively criticising preservation should suddenly be confronted with a disregard for the protection of late twentieth-century architecture. The consensus that the NDT was obsolete, despite its continuing functionality, may also point to the decreasing cultural value assigned to architecture in the Netherlands today, or even to Koolhaas's increasingly mixed reputation in his homeland. His status at home has, admittedly, always been somewhat ambivalent, but in 1987 the Netherlands did ascribe official value to his work, producing a festive 55c postage stamp which featured the second project for the NDT in Scheveningen. But of course that was only a paper achievement.

1. Charles Gandee, 'Fancy Footwork', *House & Garden*, April 1988, p 38.
2. Madeleine Steigenga, 'Not Without a Scratch', *Forum*, April 1987, p 2.
3. Rem Koolhaas, 'Projecten uit de jaren zeventig, 7 nov. 1980 t/m 4 jan, 1981 zaal 24–25', in *Stedelijk Museum: Inhoudsopgave 1980* (Amsterdam: Stedelijk Museum, 1980), pp 99–100.
4. Elia Zenghelis, 'Text and Architecture: Architecture as Text', in Martin van Schaik and Otakar Mácel (eds), *Exit Utopia: Architectural Provocations 1956–76* (Munich: Prestel, 2005), p 262.
5. Deyan Sudjic, 'Enter the Prophets of New Sobriety', *Building Design*, 12 June 1981, p 2.
6. Trix Broekmans, 'Carel Birnie: manager van een dansbedrijf', *NRC Handelsblad*, 6 May 1987.
7. Rem Koolhaas, 'Cadavre Exquis', in OMA/Rem Koolhaas and Bruce Mau, *S,M,L,XL* (Rotterdam: 010, 1995), p 333.
8. Quoted in David de Bruijn, 'Commissioners: Carel Birnie', *OASE*, vol 29, no 83, p 12.
9. Rem Koolhaas, 'Dance Theatre The Hague', in Jacquelin Robertson (ed), *The Charlottesville Tapes* (New York, NY: Rizzoli, 1985), p 180.
10. Quoted in Janny Rodermond, 'Lichtvoetig OMA-ontwerp voor Danstheater in Scheveningen', *De Architect*, April 1984, p 35.
11. Roland Barthes, *Oeuvres complètes: Tome IV* (Paris: Seuil, 2002), p 397.
12. Patrice Goulet, '… Ou le début de la fin du réel. Entretien avec Elia Zenghelis', *L'Architecture d'Aujourd'hui*, April 1985, p 12.
13. Rem Koolhaas, 'Cadavre Exquis', *op cit* (note 7), p 331.
14. Stefan Polónyi, 'Interpreting the Supporting Structures of Architecture, with Rem Koolhaas', *Lotus*, December 1993, p 87.
15. Jan Voorberg, 'Tweede Kamerprijsvraag: pleidooi voor Koolhaas', *wonen-TA/BK*, vol 8, no 13, 1980, pp 2–3. See also Izak Salomons, 'Jan Voorberg', *Forum*, vol 28, no 3, 1983, p 42.
16. See Jacquelin Robertson, *op cit* (note 9), pp 185–86.
17. *Ibid*, pp 186–87.
18. Rem Koolhaas, 'Théâtre national de danse. La Haye', *L'Architecture d'Aujourd'hui*, April 1985, p 91.
19. Eva Van Schaik, 'Carel Birnie (1926–1995)', *Trouw*, 14 March 1995.
20. Jaap de Jong, 'Interview met Rem Koolhaas, Rotterdam, 27 November 1987', in Leen van Duin (ed), *Architectonische Studies 5* (Delft: Delftse Universitaire Pers, 1988), p 110.
21. *Ibid*, p 103.
22. *Ibid*, p 102.
23. Roberto Gargiani, *Rem Koolhaas/OMA: The Construction of Merveilles* (Lausanne/London: EPFL Press/ Routledge, 2008), p 110.
24. Rem Koolhaas, Leen van Duin, *op cit* (note 20), p 112.
25. Jacques Lucan, 'Rem Koolhaas: Un théâtre caméléon', *Beaux Arts Magazine*, no 60, 1988, p 73.
26. Rem Koolhaas, Leen van Duin, *op cit* (note 20), p 112.
27. Peter Buchanan, 'Koolhaas Container', *The Architectural Review*, September 1988, p 33.
28. Olivier Boissière, 'La Haye, le théâtre de la danse', *L'Architecture d'Aujourd'hui*, June 1988, p 33.
29. Rem Koolhaas, Leen van Duin, *op cit* (note 20), p 112.
30. Rem Koolhaas, 'Junkspace', in Chuihua Judy Chung, Rem Koolhaas and Jeffrey Inaba (eds), *Project on the City 2: Harvard Design School Guide to Shopping* (Cologne: Taschen, 2001), p 408.
31. Mil De Kooning, 'De economie van de verbeelding. Rem Koolhaas in gesprek', *Vlees & Beton*, no 4, 1985.
32. Hubert Damisch, *Noah's Ark: Essays on Architecture* (Cambridge, MA: MIT Press, 2016), p 235.
33. Stefan Polónyi, *op cit* (note 14), p 87.
34. Robert Somol, 'Being O M U's Ghostwriter', in Emmanuel Petit (ed), *Reckoning with Colin Rowe: Ten Architects Take Position* (London: Routledge, 2015), p 94.
35. Hubert Damisch, 'Cadavre exquis: Théâtre nationale de danse, La Haye', *Architecture Mouvement Continuité*, December 1987, p 22.
36. Paul Valéry, *Oeuvres complètes: Tome II* (Paris: Gallimard, 1967), p 130.
37. Anna Katz, 'Amid Zero Protest, OMA's Netherlands Dance Theatre Meets Its End', 4 April 2016, www.metropolismag.com/architecture/cultural-architectureamid-zero-protest-oma-netherlands-dance-theater-meets-end/

OMA, Netherlands Dance Theatre, The Hague, third and final version, 1987
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Éric Rohmer in Cergy-Pontoise

Charles Rice &
Kenny Cupers



Title sequence, Éric Rohmer,
L'Ami de mon amie, 1987
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Student, artist, engineer, bureaucrat, scientist – these are the citizens of the *ville nouvelle*. In the opening sequence of his 1987 film, *L'Ami de mon amie* (*My Girlfriend's Boyfriend*), Éric Rohmer introduces us to each of these characters in turn, consciously placing them within the architectural setting of Cergy-Pontoise, a new town constructed in the 1970s and 1980s northwest of Paris.

Heralded in that fateful year, 1968, Cergy-Pontoise marked a departure from the much-maligned barracks-like *grands ensembles* that had mushroomed on the outskirts of French cities after the Second World War. The planners of those large housing estates had thought to provide the inhabitants with modern kitchens and bathrooms, yet they had failed to supply other basic amenities, such as shops or schools, or transport connections to alleviate long, cumbersome commutes to the city centre. The *villes nouvelles*, by contrast, represented a radically new direction in state-sponsored planning. Much more than simply housing, they were to be cities in their own right, offering new urban lifestyles built around integrated and interconnected centres of living, work, commerce, culture and leisure.[1] Cergy-Pontoise was the first of five *villes nouvelles* to be built in the Paris region. Located on a bend in the river Oise, it was easily reached from Paris with the recently constructed RER, the commuter railway network into which the new towns were plugged.

As they interact in this new urban reality, Rohmer's characters are choreographed with a sustained hesitancy: they are not entirely sure how to belong there, or, for that matter, how to relate to each other. Their existence is subject to a strange displacement which is captured in the film's title: what does it mean to be defined in terms of a girlfriend's boyfriend?[2] Whether as characters in a film, or citizens of a *ville nouvelle*, they exist as the flesh of a particular set of ideas about the social and the spatial – theoretical constructs which resonated equally in the planning of the *villes nouvelles* and the making of films in France during this period.

When Rohmer turned his filmic gaze on Cergy-Pontoise he was doing so as something of a constructed subject himself. Born Maurice Schérer in the provincial town of Tulle in 1920, he became Éric Rohmer in Paris at the age of 30, his cinephilia usurping his identity as a classics teacher. Rohmer had come to the city a decade earlier with ambitions to enter the prestigious *École normale supérieure*. That dream, which sprang more from his parents' desires than his own, was frustrated by his shyness: tongue-tied, he failed the oral entrance exam on three occasions. While pursuing plan B – teacher-training – he began to frequent the film clubs that thrived in Paris after the war, nourished by the lively intellectual scene. His very first piece of film criticism, 'Cinema, The Art of Space', published under his birth name in *La Revue du cinéma* in 1948, would prove to be of seminal importance for the iconoclasts, most of them half a generation younger, who would go on to define the French New Wave – Claude Chabrol, François Truffaut and Jean-Luc Godard, among others. For Godard, Rohmer's text presaged 'the takeover of modern cinema', proposing 'a definition of cinema as an art of direction, an art of movement in space'.[3]

There is a remarkable consistency between Rohmer's early writings and his later films.[4] With *L'Ami de mon amie*, the directed movement is underpinned by a construction as deliberate as the *ville nouvelle* in which it is set. The subtitle of the filmscript, *Les Quatre coins*, refers to a parlour game in which five players have to try to occupy the four corners of a square.[5] At the beginning of the film, Alexandre (engineer) is in a relationship with Adrienne (artist), as Fabien (scientist) is with Léa (student). Blanche (bureaucrat) is the 'fifth player', and her movement through the film leads to a change in position of the other four. Blanche meets Léa, who in turn introduces her to Alexandre. With Léa's encouragement, she tries to pursue him, but Alexandre is more interested in Léa, so she becomes involved with Fabien instead. The game unfolds, and at the end the couples are reconfigured – Blanche with Fabien, and Léa with Alexandre, Adrienne now being displaced. This may be a neat, symmetrical resolution of the game, and thus of the film's narrative, but what draws us in is the way in which the game is played out through a series of very specific relations to places in the *ville nouvelle*, grounding the abstract geometry of *Les Quatre coins*.

In this regard, the opening scenes are worthy of close attention. After each character is established spatially in their place of work, Léa makes the first move in the game. She approaches Blanche in a cafeteria, and the two women strike up a conversation. They continue to chat as the film cuts to an outside location, the covered plaza at the centre of the cultural and administrative centre – designed by Claude Vasconi and Georges Pencreac'h and completed the same year, 1979, as the pair's infamous Forum Les Halles in Paris. The women talk about where they live, the newness of their location becoming apparent in the way they justify their domestic arrangements. Blanche defends living in the Belvédère – Léa calls it a 'barracks' – a neoclassical crescent of cast concrete columns and mirrored glass designed by Ricardo Bofill and finished in 1986, just in time for filming. Though she has no real friends locally, and her love life is a 'total blank', Blanche says she feels comfortable there, enjoying her independence. On the other hand, Léa feels rootless, dividing her time between her boyfriend Fabien's place in Cergy, the medieval village from which the *ville nouvelle* takes its name, and her parents' place in the nearby affluent suburb of Saint-Germain-en-Laye.

This attempt at locating the characters through their dialogue is doubled by the way in which the camera frames them in the surrounding space. Their stroll into the plaza is tracked by a gentle panning of the camera. As they pause by a parapet, Blanche steps back to regard Léa, allowing the camera to frame her separately against the surrounding facade. Léa holds her position, Blanche walking into the frame to sit beside her. When they begin to walk again, the setup is repeated, the camera once more panning gently to a point where Léa leans against a parapet, Blanche remaining apart and then walking into Léa's frame as she proposes that they meet again.

The movement and positioning of the camera is as deliberate as the movement and positioning of the characters relative to each other, and there is enough self-consciousness in these movements for the geometrical setup of the scenes to be perceptible. At the level of the story, this comes across as good-natured hesitancy; Léa and Blanche have only just met, and in some sense they are circling around each other as the camera tries various ways of positioning them in relation to the intricate backdrop of Vasconi and Pencreac'h's vaguely high-tech architecture. And this architecture, in an attempt to blur the boundaries between inside and outside, culture and government, recreation and bureaucracy, invites citizens to appropriate the spaces they traverse. The acts of leaning, sitting and hanging out become elevated to a theatre that softens





Prefecture (*above*) and town centre (*below*),
Cergy-Pontoise, 2016





Cultural and administrative centre,
Cergy-Pontoise, 2016

the monumental geometry of the atrium and the coldness of its glass, steel and tiled surfaces. The characters' physical relation to each other and their surroundings is doubled by what we might call a tonal relation. The pastel shades of their clothes are offset by the strong blue and green of the building facade.[6] The effect is a softening of the foreground; they do not blend into their surroundings so much as trial a way of moving through these spaces, as if, in the brand-new surroundings of the *ville nouvelle*, this would be just as legitimate a way to find a relation to their place as their *métier* or their choice of domicile.[7]

This was a place forged out of a combination of political will and technocratic expertise. De Gaulle had called on the nation to modernise and reclaim the grandeur it had so painfully lost in the Second World War and in Algeria, and indeed, in the immediate postwar years France had experienced rapid economic and demographic growth. Buoyed by the optimism of the 1960s, the planners of the *villes nouvelles* extrapolated this rate of growth into the long-term future: by 2000, they contended, Paris would have no less than 14 million inhabitants, doubling its existing footprint. For the planners of Paris, directed at that time by the charismatic Paul Delouvrier, this massive growth called for a new approach, one that could envision 'the city in its totality', from the concreteness of the everyday to the large-scale form and infrastructure of the urban territory at large. Their strategy – motivated by the desire to break not just with the old radioconcentric structure of the capital but with the mass production of standardised housing – was to channel future urban growth along two major 'preferential axes', onto which the *villes nouvelles* would be grafted. In terms of scale, these new developments dwarfed existing projects internationally, being up to five or even ten times larger than the measly British new towns.

Design strategies for the *villes nouvelles* were directly shaped by the growing denunciation of the *grands ensembles*, as incubators of all manner of social ills. The famous Guichard directive of 21 March 1973, signed into law by Olivier Guichard, a former colleague of Delouvrier and an enthusiastic supporter of the Gaullist project, effectively put an end to this sort of development. Not only did the *villes nouvelles* escape this legislative condemnation; they were actively helped by the perception that they were the antithesis of the earlier model. If the *grand ensemble* was the city taken apart, then the *ville nouvelle* was the city put together in one place. In the meantime, too, these projects had not remained in the realm of thought. By the late 1960s, large swathes of land had been earmarked, infrastructure works had started, and the first buildings had appeared on the horizon of Paris and many provincial cities.

Yet the *villes nouvelles* were not the product of a singular blueprint. As political ambitions shifted, none of them grew as large as originally planned and many projects were transformed and adapted over the following decades. The first plan for Cergy-Pontoise was drawn up by the Prix de Rome architect Henry Bernard, who proposed a representative, symbolic centre with administrative buildings bounded by dyke-like structures. His prefecture was the first building to be completed there in 1970. A brutalist, inverted ziggurat – or 'simplified version of Boston City Hall out of Chandigarh', as Andrew Saint memorably called it[8] – the building contained a large public atrium, a cinema, a restaurant, a bar, an art gallery and about 15 shops, including a hairdresser, a shoemaker, a travel agent and clothing boutiques. This approach to providing a range of amenities responded to some of the everyday problems associated with the *grands ensembles*, where the first inhabitants had to tramp through muddy construction sites for years, without access to any cultural or commercial facilities. At Cergy-Pontoise it was envisaged that these facilities would expand as the town centre coalesced around the prefecture.

Theoretically, the *ville nouvelle* was understood as a systematic and cohesive town – something greater than the sum of its parts – yet the parts themselves reveal the shifts in architectural sensibilities that occurred through the 1970s and 1980s. New construction phases were often poorly integrated with previous ones, with little coordination between the various architects involved. For Andrew Saint, again, the result was 'a painful jumble of architectural effort of the kind which seems typical of the French new towns' – though he had to admit that 'no one except architects seem to mind the muddle'.[9] New residential quarters, such as Cergy-St-Christophe, abandoned the centre's late-modernist principles in favour of an awkward combination of smaller-scale, contextualist structures and full-blown postmodern classicism. Cergy-St-Christophe's train station, completed in 1988, is a redbrick structure surmounted by an enormous clock that signals the start of a pedestrian street which runs through residential and commercial perimeter blocks. As it rises up to Bofill's Belvédère, the axis becomes monumental, pivoting at the 36m-tall obelisk at the centre of the crescent. Tilted at three degrees towards the cut the axis makes through the crescent, the obelisk marks the beginning of sculptor Dani Karavan's Axe Majeur,[10] a monumental line through the landscape which leads – via an open plain, a stand of columns, a monumental stair and a riverside amphitheatre – to an enormous bridge across the Oise and the recreational lakes nestled in the river bend. One of François Mitterand's *grands projets*, the Axe Majeur resembles André Le Nôtre's Terrasse at St-Germain-en-Laye. Both defiantly mark the landscape or, rather, both produce the landscape as a monument, in turn offering spectacular, elevated views of Paris on the horizon.

In the midst of this axial formality, Rohmer manages to maintain the playful hesitancy between his characters, all the while overlaying the architectural geometry of the site with the subjective geometry of the characters' changing relationships. At Cergy-St-Christophe train station, Blanche meets Léa, whom she has invited to dinner at her apartment at the Belvédère. Together they walk up the pedestrian axis from the station. The camera, positioned directly on axis, frames them frontally on their approach, cutting through 180 degrees to watch them recede. When they reach the obelisk, Léa pirouettes, as if to perform the geometry of the crescent.

A structuring geometry of relations also frames the conversation of the characters inside the flat. While Léa plonks herself down on a sofa, Blanche seems unsettled, initially sitting on the floor, and then leaning uncomfortably against a coffee table. Her unease in her sparsely furnished flat is palpable. Léa launches into a monologue about all of Fabien's failings, but Blanche's restlessness causes her to stand up after a while. She moves to the window, breaking the filmic 'axis of action' and, along with it, Léa's self-absorption: looking around the room as if for the first time, Léa remarks how lonely it seems.

At other times dialogue directs a more comedic sense of the characters' negotiation of the ambiguous spaces of the *ville nouvelle*.

Having coffee with Blanche and Léa in a café, Alexandre proclaims his own satisfaction with his situation: '15 TV channels, a lake, tennis courts, golf soon, two legit theatres, who could be bored? … I was made for big cities, but I feel more a part of Paris here than if I lived right in the centre. I cover all of metropolitan Paris from here, north to south, east to west. I'm a metropolitan man!' Yet Alexandre's grasp of his geographical reach is undercut by what could be called a locational deficit. His air of contentment evaporates when his girlfriend Adrienne storms into the café, accusing him of not having waited for her in the main square, as they'd agreed. Alexandre looks around, perplexed. 'But this is called the main square!', he counters. Clearly each of them thinks the town centre is in a different location.

Watching *L'Ami de mon amie*, we might imagine that Rohmer's cinematic realism would offer some insights into the *ville nouvelle* in use, into its success or failure.[11] Rohmer had what his biographers refer to as a 'quasi-masochistic interest in new architecture'.[12] Despite his classicist inclinations, which caused him to view Le Corbusier as a 'personal enemy',[13] the *villes nouvelles* gave him a context to consider modern architecture outside his beloved Paris, where the perceived destruction of the historical fabric caused him considerable anguish. Rohmer's interest developed over the course of several film and television projects, beginning in 1965, when he made a TV version of *Le celluloïd et le marbre*, a series of texts exploring the relation between cinema and the other arts that he had written for *Cahiers du cinema* a decade before. Meeting and interviewing architects – among them Georges Candilis, Claude Parent and Paul Virilio[14] – made him 'aware of his own contemporaneity', as his biographers note. 'Filming in the present, in a realistic way … required capturing the metamorphoses of the urban landscape and the development of new spaces.'[15]

The *Ville nouvelle* series, broadcast in 1975, consisted of four documentaries, each around an hour in length: the first instalment, *Enfance d'une ville*, observes the construction of Cergy-Pontoise. This project prompted him to elaborate his thoughts on the relations between contemporary architecture, planning and living: 'The [architectural] works are successful if they are integrated into an overall conception of the residents' everyday lives. The results give rise to a way of life… Architectural thought must challenge itself and that's difficult, but cinema is the bearer of a discourse on the space of the city.'[16]

Rohmer's cinematic work also traces a shift in attitude. His 1984 film, *Les Nuits de la pleine lune* (*Full Moon in Paris*), partly set in the *ville nouvelle* of Marne-la-Vallée, describes the tension between old Paris and the developments on its periphery. But *L'Ami de mon amie,* made just three years later, wholeheartedly embraces the *ville nouvelle* as a new kind of urban reality: 'Utopian and concrete at the same time, where the fiction and the characters can develop without hindrance. Cergy seduced me', Rohmer declared.[17] For him, this was an opportunity to capture 'the first times of a city and the first times of a fiction, and then the way in which they take shape'.[18]

As a filmmaker Rohmer was famous for embedding his actors in the cinematic world of his creation. He would draw them into long conversations about their lives, extracting emotional experiences that he would later incorporate into the dialogue. Both of the leading female actors in *L'Ami de mon amie*, Sophie Renoir (Léa) and Emmanuelle Chaulet (Blanche), lived in Cergy-Pontoise during the shoot.[19] Yet, rather than being subjects whose experience of the place might be measured against Rohmer's (or the planners') concerns about the quality of life in the *ville nouvelle*, their experience is communicated as something like the problem of contemporary life itself.

A 'new way of life', with ample time for recreation and leisure, was the main selling point of the first advertising brochure for Cergy-Pontoise. The future inhabitants, it promised, would be able to 'work close to home, slide down the hills to bathe in the lake, venture to the countryside or the coast on Sundays without the nightmare of traffic, go out in the evening without needing to reserve tickets weeks in advance, enjoy the liveliness of an urban centre without the irritation of its noise, drive or leave the car as you please, let the kids go to school by themselves without risk'.[20] Lifestyle – or *style de vie*, to use the proper French term – was a new concept in 1960s France, based not just on a radical reduction in working hours and a corresponding increase in consumerism, but on an awareness of a wide diversity of needs and aspirations among the population. Perhaps not surprisingly, ideas about lifestyle became a more explicit focus of political thinking in the wake of the 1968 protests. Urban planning ideology gradually warmed to the idea of people as consumers with the right of mobility and individual choice. And even though it had originated in the centrist policies of de Gaulle and Delouvrier, Cergy-Pontoise became a beacon of this new, more consumer-oriented approach: its heart was a pedestrianised shopping quarter, its backbone the transformation of a nearby river bend into an extensive leisure environment.

The importance of leisure and consumption for everyday life in Cergy-Pontoise becomes evident in the film as Blanche and Fabien – who keep on bumping into each other in the town's shopping quarter – begin to spend more time together. Rohmer films them swimming and relaxing by the lake among a crowd of Sunday afternoon picnickers, the images approximating a contemporary version of Seurat's *Un dimanche après-midi à l'Île de la Grande Jatte*. As they wander away from the crowds and into the surrounding woods, their conversation renders the idealism of this image more complex:

Fabien: *This is great. Better than the smell of fried fish and trash. I brought Léa here one Sunday. She swore she'd never be back!*

Blanche: *I feel like I'm in a foreign country. Here I accept things, like smells, that would disgust me anywhere else. Actually, it's like travelling through time, when the workers would picnic on the banks of the Seine. I thought those days were over.*

Fabien: *These people aren't from Cergy. They live in crowded tower blocks in crummy suburbs. To them, this place is the Palace of Versailles!*

Blanche: *I prefer the smell of hot dogs to exhaust fumes in a Sunday afternoon traffic jam.*

This smug commentary on their leisure-filled lifestyle neatly illustrates the perceived gap between the *villes nouvelles* and the *grands ensembles*, with the inhabitants of the former turning up their noses at the tenants of the latter – who are mostly 'workers', resettled from decrepit postwar housing or newly arrived from the country. Here the resemblance between Le Nôtre's La Terrasse and Karavan's Axe Majeur is historically instructive, if a little troubling. As the couple wander further, they reach a high point in the landscape where Fabien points out the way in which the different quarters of Cergy-Pontoise have been laid out to follow the bend in the





Le Belvédère (*above*) and Axe Majeur (*below*),
Cergy-Pontoise, 2016





Le Belvédère (*above*) and Axe Majeur (*below*),
Cergy-Pontoise, 2016

Oise. The Belvédère appears on the horizon, its place in the landscape revealing the ultimate significance of its Potemkin classicism.

There is a risk in continuing to add scenes from *L'Ami de mon amie* to an analysis of the *villes nouvelles*. The more they are described, the more characters' existential conditions, choices and motivations become a way of reading the *villes nouvelles* themselves, as if, in a kind of filmic retrospection, the characters' desires are seen to have been fulfilled or stymied by the instruments of planning and architecture. At the same time, it seems counterintuitive to want to curtail this kind of investigation, as it adds a richness to the interpretation of the *villes nouvelles* at that moment in the late 1980s, when Cergy-Pontoise was finally complete. In a film that is so locationally specific and dialogue-heavy, what is there to know or understand other than the characters' thoughts and motivations regarding the conduct of their lives in this place?[21] This is one way of making sense of the seductive appeal of Cergy-Pontoise for Rohmer: as a new, concrete place where a fiction could develop without hindrance.

The thorny question of a film's relation to a putative reality had been dogging Rohmer for some time before the making of *L'Ami de mon amie*. In 1970 he was interviewed in *Cahiers du cinéma* by Pascal Bonitzer, Serge Daney, Jean-Louis Comolli and Jean Narboni. The critics continually returned to the way in which his films' critical and popular reception tended 'to take the discourse proffered *in* the film for the discourse *of* the film itself'.[22] Referring in particular to *Ma Nuit chez Maud*, released the previous year, they argued that the film's success owed much to the idea that 'the reflections made by the characters produce and legitimise the pleasure of the viewers, who are delighted to see someone thinking in their stead.'[23] This problem – of a fiction in and of a new place becoming the real legitimation of that place – followed Rohmer to Cergy-Pontoise, where *L'Ami de mon amie* was shown to great acclaim. The head of the development authority conveyed his gratitude in a letter: '[Your film] is a marvellous thank you to all those who have built Cergy-Pontoise, and please believe they all liked it and are extremely grateful to you for it!'[24]

Rohmer's interlocutors also extended this problem to the way spaces were constructed in his films, again referring to *Ma Nuit chez Maud*:

There is a place, the location where you filmed: this place pre-existed. And yet what is striking when we watch the film is that the further the scene [in a domestic interior] progresses, through the means of constructing and articulating the shot, through the exchange of looks, a filmic place is created which no longer has anything to do with the pre-existing place, and this filmic place is much more interesting, it's the fruit of a real labour.[25]

It was this real labour of filming that most interested the critics, committed, as they were, to a neo-Marxist interpretation of film's effects. Yet Rohmer resists their attempt at interpretation, reiterating his own account of his work as a filmmaker.[26] Inspired less by Marx than by the realist theory of the cofounder of *Cahiers du cinéma*, André Bazin, Rohmer says that he looks to get as close to reality as possible in order to show things 'as they are', with the constructed set being as real a place for him as any on-site location. In a nimble attempt to reposition their dialectical thinking in relation to Rohmer's account, the interviewers call what he creates an 'imaginary real... So, we can no longer say that the film is a document on this set, it's the opposite: the set informs the film.'[27] They are interested in the gap implied by an 'imaginary real' – a gap which they maintained would have to be shown in and by the film, and which might indeed constitute the film's 'reality' as a constructed world.

Behind these differing viewpoints lies the history of *Cahiers du cinéma* and the struggle for the soul of French filmmaking and film criticism. Rohmer was part of the initial editorial team when *Cahiers* was founded in 1951, and he became its editor upon Bazin's untimely death in 1958, but he was ousted in a putsch in 1963 – replaced by Jacques Rivette, who then cleared the way for Comolli and Narboni to take up the reins in 1965. By this time, Rohmer's idealist view that 'it was not the world that ever changed, only art' was emphatically rejected.[28]

Rohmer's theory of cinematic space comes from his deeply felt sense of the classical, and more specifically from the Bazinian idea of cinema as the 'seventh art'. In his very first published text from 1948, 'Cinema, The Art of Space', Rohmer asserts that what is spatial about cinema – as distinct from theatre – is the relation between what he calls 'the interior of each shot' and 'the total space to be filmed'.[29] This involves an interplay between the flatness of the cinema screen and what it encompasses, and the inherent spatial depth and movement in time of the scenes filmed. The organisation of this relation should not, he says, end in an aestheticised image, but rather should form the basis for new meaning, new significations. To illustrate the point, he chooses slapstick films, because they are 'the least suspected of aestheticism'.[30] For Rohmer, the purely cinematic humour of Buster Keaton, its 'rigorous nature and geometrical activity' on screen, emblematises what he calls a 'geometry of the comical'.[31]

Within a Bazinian legacy, the putative realism of film is not about a transparent relation to what exists, but is something more akin to what film historian Tom Gunning calls a 'stark confrontation with the materiality of the world'.[32] Following Gunning's analysis, the consequence of this is to unmoor 'this new art from the centrality of the human, from the creative expression of subjectivity, and even from the language and rhetoric of meaning'. The material presence film makes visible is 'palpable', but 'untranslatable'.[33] Gunning emphasises the way in which Rohmer's scenarios revolve around 'symmetries, coincidences, ironies and pointed moments of recognition ... the playing out of precise scenarios in a contingent universe' – all of which aptly describes *L'Ami de mon amie*. The vehicle of this playing out is dialogue, yet language is an '*element* of his film, not its means of narration',[34] or, as Gilles Deleuze would have it, 'the character acts and speaks himself as if his own gestures and his own words were already reported by a third party'.[35] He characterises this as a free-indirect style, whereby the speech act becomes autonomous sound image.[36] We could reach back to Rohmer's own theoretical pronouncements on this point. In his analysis of F W Murnau's *Faust* (1926), for instance, he writes that Murnau was able to 'dehumanise those subjects richest in human emotion'.[37]

In spite or perhaps because of Rohmer's meticulous preparatory work with his actors, and the particular way he sets up dialogue in this process, the film moves beyond a realm in which action or motivation flow from thought or feeling. What we have referred to as the hesitancy of Rohmer's characters stems from this disconnection, to which the camera bears unstinting witness in its careful, geometrical setup.

This interpretation provides us with a way of understanding how subjectivity is produced, not only in Rohmer's films, but also in the *villes nouvelles*, as planners grappled with the idea of the towns' future inhabitants. In the decade following the upheavals of 1968, the question of how to understand and anticipate inhabitants' needs and desires radically transformed planning as a profession and a process. The shift in which the *villes nouvelles* participated was not only a shift towards a consumer-oriented notion of lifestyle, but also a shift away from *urbanisme* towards what became known as *programmation*. *Urbanisme* implied the composition of urban form – the traditional approach to the city in France, where urbanists were generally trained as architects. *Programmation,* by contrast, took as its starting point the social content of an urban location. The vast scale of the *villes nouvelles* demanded a strategy that focused on 'the problems of the centre, the force lines, leisure, and transportation in a flexible and living diagram' – as opposed to 'rigid French-style masterplans'.[38] Accordingly, the plan for Cergy-Pontoise included not only the areas marked for development but also the existing village of Pontoise and the forests and lakes that were being reframed as recreational zones. This was a plan of relations and connections – an urban network, rather than a set of hermetic boxes. All of this required much more than just the masterly hand of a Beaux-Arts-trained architect–urbanist, the technical expertise of engineers or the norms established by a ministry. The precondition of the new method of city building was the intense collaboration of a large team of experts including architects, urbanists, engineers, economists, geographers, sociologists and others, all working together to create long-term, scientifically grounded visions, diagrams, reports and studies.

Yet, however central *programmation* became to the planning of the *villes nouvelles*, its scope remained ambivalently defined. Was it a new type of expert knowledge, a means to intervene in how the planning process was established and conducted? Or was its primary purpose to allow for consultation with the future inhabitants? And what about the sociologists, who had a key role to play? Were they there to study and channel the desires of the future population, or to study planning itself as a sociological process? The planning of Cergy-Pontoise brought these fundamental ambiguities to the surface. As we have seen, the first plan was drawn up by Henry Bernard, who proposed a representative, symbolic centre. Bernard's plan was opposed not only by the prefect of the department but by the appointed urbanist, Jean Coignet, who criticised its lack of openness and attention to social life. Coignet had the bright idea of consulting children, because 'it's them, rather than the adults, who are most directly concerned with the *ville nouvelle*'.[39] And so with the help of the Ministry of Education he organised a drawing competition in primary schools throughout the region. It was lauded as a huge success, attracting nationwide attention – the Musée de l'homme even proposed to analyse the drawings ethnographically. But funnily enough, it did not lead to guidelines for planning.

While sociology became increasingly central to French planning during the 1960s and 1970s, it also became progressively more critical. A new generation of sociologists tended to oppose the instrumental use of sociological data in urbanism. They no longer understood planning as a neutral form of expertise employed in the name of the common good, and aimed instead to unveil its fundamentally political nature. Urban planning discourse would be reshaped over the course of the 1970s by this new brand of sociology, heavily inflected with neo-Marxist and poststructuralist theory.

The contested uses of sociology in planning the *villes nouvelles* maps onto the filmic conundrum debated by Rohmer and his *Cahiers* interviewers. While Rohmer was concerned with the 'reality' created for his characters within the spatial construct of the film, his interviewers were concerned with the setup of the film per se, proposing a theory of film as a particular kind of work, with the work of the critic embodying a particular kind of politicised engagement.[40] And so it was for the expert teams working on the *villes nouvelles*. Some – let's call them the 'directors' – were concerned with a sociology 'on site', specifically the ability to construct the reality of the *villes nouvelles* according to a rigorous understanding of the needs and desires of its current and future inhabitants. Others – let's call them the 'critics' – were concerned with a sociology of the planning process itself, the very work of the construction of the *villes nouvelles* being implicated in the politics of the social. In truth, these positions might not be so easily distinguishable. Yet this attempt at schematisation reveals the fractures in the understanding of the subjects of the *villes nouvelles*. On the one hand they are presented as having desires that can be identified and channelled by planners through their sociological research, on the other they are shown experiencing themselves as desiring subjects, commenting on their own position in a new, constructed context, but always at one remove. In the end, Rohmer's characters are the theoretical citizens of the *ville nouvelle*. They are not abstractions, but remain theoretical in the extent to which they are aware, and can be seen to be aware, of their sociological constitution, defined as much by the places they occupy as by Rohmer's own meticulous 'sociological' preparations for the film, in which he 'relied on actors who provided him with clichés'[41] – his own version, perhaps, of children drawing pictures. Here, filming and planning enter into a relation. The characters of *L'Ami de mon amie* are there not simply to live out, or be seen to live out as proxies, the expectations of planners' programmes, except as they could be articulated as the motions of a parlour game, a veritable geometry of the comical.

Read together, then, the filmic world of *L'Ami de mon amie* and the material construction of Cergy-Pontoise attest to what we might call the social project of French theory. The uniquely important role which theory played in postwar French culture is well documented – where else did high-brow theories, from neo-Marxism to poststructuralism, become explicit reference points for anything from film criticism to state bureaucracies? But taken together, what Rohmer's film and Cergy-Pontoise convey is the expansive lifeworld in which such theory mattered.

1. For a history of French new town planning, including the sources used in this article see chapter 5 of Kenny Cupers, *The Social Project: Housing Postwar France* (Minneapolis, MN: University of Minnesota Press, 2014).
2. The film was also released under the English-language title, *Boyfriends and Girlfriends*, perhaps in an effort to simplify the construction through the use of the plural.
3. Interview with Jean-Luc Godard by Alain Bergala, in *Jean-Luc Godard par Jean-Luc Godard* (Paris: Éditions *Cahiers du cinéma,* 1985), p 9, quoted in Antoine de Baecque and Noël Herpe, *Éric Rohmer: A Biography*, translated by Steven Rendall and Lisa Neal (New York, NY: Columbia University Press, 2016), pp 43–44.
4. See Tom Gunning, 'Éric Rohmer and the Legacy of Cinematic Realism', in Leah Anderst (ed), *The Films of Éric Rohmer: French New Wave to Old Master* (Basingstoke: Palgrave Macmillan, 2014), p 25.
5. The full script is published in *L'avant-scène cinéma*, December 1987. For a discussion of symmetry in the film see Jacques Aumont, 'L'extraordinaire et le solide', *ibid*, pp 3–12, and Thomas Ennis, 'Games People Play: An Analysis of Éric Rohmer's *L'Ami de mon amie*', *Nottingham French Studies* 31 (1993), pp 121–27.
6. For a detailed, albeit overly symbolic, analysis of the use of colour in Rohmer's films, see Fiona Handyside, 'Colour and Meaning in the Films of Éric Rohmer', in Simon Brown, Sarah Street and Liz Watkins (eds), *Colour and the Moving Image: History, Theory, Aesthetics, Archive* (London: Routledge, 2013), pp 150–59.
7. Kristin Ross has discussed the postwar shift from the more traditional notion of 'métier' to that of 'career' in French cultural life. The characters in *L'Ami de mon amie* could be said to embody this shift towards what Ross calls 'experience at work: the cumulative perfecting of skills, the ascent towards accomplishing more and more highly appreciated and rewarded tasks'. Kristin Ross, *Fast Cars, Clean Bodies: Decolonisation and the Reordering of French Culture* (Cambridge, MA: MIT Press, 1995), p 168.
8. Andrew Saint, 'New Town Score', *Architects' Journal*, 8 November 1989, p 27.
9. *Ibid*, p 28. Saint's comments are part of his review of an exhibition about Cergy-Pontoise held in the prefecture building in 1989. His overall judgement is positive, especially relative to the British New Town experience: 'Cergy, on its handsome horseshoe site overlooking the Oise, is sitting pretty. The fact that it could put on this grandiose exhibition without any of the popular sociology or spoon-feeding which would be felt necessary for a similar exercise in Britain is a tribute to its peculiarly French sense of confidence', *ibid*.
10. Éric Rohmer's continued interest in the development of Cergy-Pontoise meant that in 1985 he was asked to become a 'sponsor' for the development of the Axe Majeur quarter. He was able to access major buildings while they were under construction, and talk with the architects. He organised the shooting schedule of *L'Ami de mon amie* to coincide with the completion of Le Belvédère. See Antoine de Baecque and Noël Herpe, *op cit*, pp 395–98.
11. Perhaps inevitably some of the critical writing around *L'Ami de mon amie* wants to read it as a kind of social document. See in particular Leah Anderst, 'Rohmer's Poetics of Placelessness', in Leah Anderst, *op cit*, 191–201; Fiona Handyside, 'The Margins Don't Have to Be Marginal: The *Banlieue* in the Films of Éric Rohmer', in Helen Vassallo and Paul Cooke (eds), *Alienation and Alterity: Otherness in Modern and Contemporary Francophone Contexts* (Oxford: Peter Lang, 2009), pp 201–22; Fiona Handyside, '"J'ai aimé vivre là": Rethinking the Parisian Suburbs in Annie Ernaux and Éric Rohmer', *Nottingham French Studies* 48 (2009), pp 43–55.

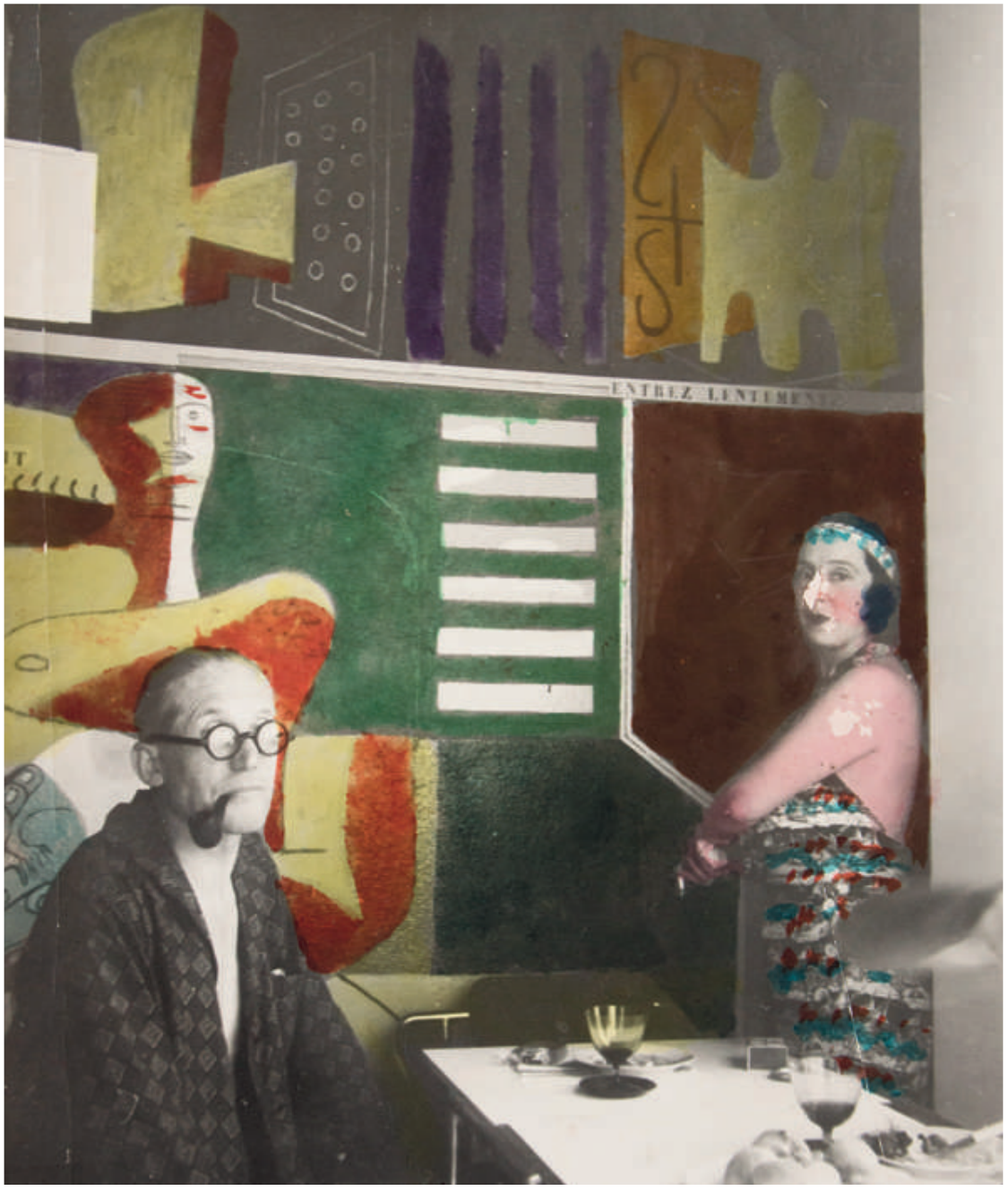


12. *Ibid*, p 383.
13. Noël Herpe and Philippe Fauvel, 'Cinquième entretien: "Architecture d'Apocalypse"', *Éric Rohmer: Le celluloïd et le marbre* (Paris: Éditions Léo Scheer, 2010), p 156, quoted in Antoine de Baecque and Noël Herpe, *ibid*, p 594.
14. Claude Parent and Paul Virilio were also the subject of Éric Rohmer's TV documentary *Entretien sur le béton* (*A Conversation About Concrete*), 1969.
15. Antoine de Baecque and Noël Herpe, *op cit*, p 382.
16. *Ibid*, p 386. This series emerged from two previous proposals Éric Rohmer had put together in the late 1960s: *Architectopolis* and *Architecture présente*.
17. Antoine de Baecque, 'Interview: Architecture-fiction' (*Libération*, 29 March 2002), *ibid*, p 396.
18. *Ibid*. In 1993 Rohmer would complete another feature film with an architectural subject, *L'Arbre, le maire, et la médiathèque* (*The Tree, the Mayor and the Médiathèque*). The story, directly engaging Rohmer's ambivalent relation to contemporary architecture, is one of developmental hubris in the context of socialist policies for the diffusion of culture via the architectural means of the médiathèque, which in the film comes across as a dubious, populist programme directly threatening rural heritage.
19. See Antoine de Baecque and Noël Herpe, *op cit*, pp 373–78. Bizarrely, and echoing his own change of identity, Rohmer rechristened Chaulet on discovering her in a stage play, replacing her given name Frédérique with Emmanuelle.
20. 'Cergy-Pontoise ville nouvelle, brochure de promotion, 1968', Archives nationales, Centre des archives contemporaines, Fontainebleau, CAC 199110585/009.
21. This is indicative of the way Éric Rohmer's oeuvre is treated in the major English-language monographs on his work: C G Crisp, *Éric Rohmer: Realist and Moralist* (Bloomington, IN: Indiana University Press, 1988); Derek Schilling, *Éric Rohmer* (Manchester: Manchester University Press, 2007); and Keith Tester, *Éric Rohmer: Film as Theology* (Basingstoke: Pallgrave Macmillan, 2008).
22. Pascal Bonitzer, Jean-Louis Comolli, Serge Daney and Jean Narboni, 'New Interview with Éric Rohmer', *Cahiers du cinéma*, no 219 (1970), republished in *Senses of Cinema* 54 (April 2010), online at http://sensesofcinema.com/2010/feature-articles/new-interview-with-eric-rohmer. Rohmer had countered this injunction himself in a letter to a critic, where he stated 'My characters' discourse is not necessarily my film's discourse'. Éric Rohmer, 'Letter to a Critic [concerning my *Contes moraux* (*Moral Tales*)]', in Éric Rohmer, *The Taste for Beauty*, *op cit*, p 80.
23. Pascal Bonitzer et al, *op cit*.
24. Antoine de Baecque and Noël Herpe, *op cit*, p 398.
25. Pascal Bonitzer et al, *op cit*.
26. Éric Rohmer's interview is prefaced thus: 'Everything in this interview with Éric Rohmer opposes us to him.' At one point he and his interviewers disagree over whether historical materialism is a science, though the interviewers do explain their interest in Rohmer's cinema, and the purpose of the interview by stating that 'it is the impurity and complexity of our differences that have retained our interest.' *Ibid*.
27. *Ibid*.
28. Emilie Bickerton, *A Short History of Cahiers du Cinéma* (London: Verso, 2009), p 39. In a later interview with Narboni, one which prefaces a collection of Éric Rohmer's writing on film, Rohmer says that his earlier dogmatism about the specificity of cinema as an art, and the idea of its coming age of classicism, had been rethought by the middle of the 1960s, when he found himself 'agreeing with *Cahiers*' new viewpoint' under Rivette's editorship. Jean Narboni, 'The Critical Years: Interview with Éric Rohmer', in Éric Rohmer, *The Taste for Beauty*, *op cit*, p 3.
29. *Ibid*, p 19.
30. *Ibid*, p 22.
31. *Ibid*, p 23–24. Éric Rohmer distinguishes Buster Keaton from Charlie Chaplin, whose visual gags, he argues, are readily communicable and would be reproducible by means other than the cinematic.
32. Tom Gunning, *op cit*, p 25.
33. *Ibid*, p 26.
34. *Ibid*, p 30.
35. Gilles Deleuze, *Cinema 2: The Time-Image*, translated by Hugh Tomlinson and Barbara Habberjam (London: Athlone, 1989), p 183. For Éric Rohmer's own thoughts on indirect discourse, see Éric Rohmer, *The Taste for Beauty*, *op cit*, pp 84–92.
36. Gilles Deleuze, *op cit*, p 243.
37. Éric Rohmer, *The Taste for Beauty*, *op cit*, p 26. In 1972 Rohmer completed a doctoral dissertation on F W Murnau's *Faust*.
38. 'L'expérience française des villes nouvelles, Fondation nationale des sciences politiques, Jean-Eudes Roullier', CAC 19840342/171.
39. Bernard Hirsch, 'Oublier Cergy … L'invention d'une ville nouvelle, Cergy-Pontoise 1965–1975, Récit d'un témoignage' (Paris: Presses de l'École nationale des Ponts et chaussées, 1990), p 58.
40. Emilie Bickerton characterises this moment as a shift away from the *politique des auteurs* which typified *Cahiers* during Rohmer's tenure, and towards a new politics, 'with the aim of developing a more rigorous theory, rather than a vague, non-transferable quality of taste'. Emilie Bickerton, *A Short History of Cahiers du Cinéma*, *op cit*, p 52.
41. Antoine de Baecque and Noël Herpe, *op cit*, p 375.

Cergy-St Christophe train station, 2016
All photographs © Charles Rice

E-1027 and the Drôle de Guerre

Tim Benton



Le Corbusier and his wife Yvonne in front of
one of his murals at E-1027, photographed by
Madeleine Goisot and hand-coloured by Yvonne, 1939
© ADAGP / Fondation Le Corbusier, Paris

We are at the movies, looking at a reconstruction of Eileen Gray's bedroom-boudoir for Monte Carlo, which she presented at the Salon des artistes décorateurs in May 1923. The film is *The Price of Desire*, directed by Mary McGuckian and released by Pembridge Pictures in 2015. The voice 'off' – Le Corbusier – announces: 'When I first saw her exhibit, her innovation filled me with jealousy and awe in equal measure. We were contemporaries. Le Corbusier: a struggling painter whose architectural ambition was barely born; Eileen Gray: the great creator of luxurious interiors had already arrived. Our careers were destined to collide.' Le Corbusier, Jean Badovici and Fernand Léger, seen from behind, are then shown admiring Gray's exhibit: 'I've never seen anything like it', says Le Corbusier in French. Léger enthuses, 'I like it, I like it a lot, a sojourn into the never-before-seen … not an ounce of decorative influence'.[1] Léger challenges Le Corbusier: 'a new direction, hey Corbu! Each object defined by its function, transcending decorative art.' Le Corbusier sums up: 'Pure, functional, eclectic, elegant.'

Significant research seems to have gone into the film's script, not least in the way the screenwriter has picked out passages from a text Badovici wrote to accompany a black-and-white illustration of the Monte Carlo suite in the autumn–winter 1924 issue of *L'Architecture vivante*. Badovici captioned the installation 'Hall 1922', and noted that 'the form of any object is dictated by the function that it has to fulfil; its architecture is fundamentally functional. The smallest details have to be rigorously ordered in relation to the whole, which presupposes the absolute elimination of every element that is not useful to the construction of the whole; such ornament that remains is closely determined by the material.' Most of Badovici's text, however, is devoted to a celebration of Gray's sensibility and her ability to create 'an atmosphere of plastic infinity' and 'a mysterious, vivid unity'. Faced with the advance of science and reason, it is the task of the artist, Badovici maintains, to uncover the 'secret relations' that bind man to the universe – the 'hitherto unsuspected paths' that lie beyond science's grasp.

McGuckian's argument in the film is that Le Corbusier learned about modernism from Gray, and thus contracted an unpaid debt of gratitude which obsessed him throughout his life. However, even the most cursory look at his timeline immediately challenges this idea, because his diorama of the *Cité contemporaine pour trois millions d'habitants* and the model of his Citrohan II house – hardly the products of a struggling artist – had been exhibited the year before. These were widely reviewed and even shown on Pathé news. Le Corbusier's star was undeniably in ascendancy, as he captured international attention with his articles in *L'Esprit Nouveau* (1920–25), his outrageous urban schemes and his purist house designs. He would also publish the first edition of *Vers une architecture* in October 1923 – the same month that his plaster model for the penultimate project for the La Roche and Jeanneret houses went on show in the Salon d'Automne, along with models of the Besnus house and Maison Ribot project.

By then, Le Corbusier had already published the articles which would constitute his book *Urbanisme* and was about to write a series of texts, later published as *L'Art décoratif d'aujourd'hui*, that made clear his low opinion of the decorative artist: 'The decorator decorates. Why does he decorate? What is it that compels him to decorate, what law or truly human need? The boudoir, the dining-room boudoir, the library-boudoir, etc, are not the living spaces that should concern us.'[2] Warming to his theme, in May 1924 he defined precisely the difference between his approach and the position taken by Eileen Gray, as an interior designer: 'Is this at last, by some miracle, the much sought after definition of the term DECORATIVE ART? Against the *object-as-tool* they propose the *object-as-sentiment*, the *object-as-life*.'[3]

A more exact sense of what is meant by *object-as-life* is conveyed by an unpublished manuscript by Gray's friend Badovici.

Her eyes take infinite pleasure from caressing those structures derived from the new spiritual demands, digging deep into her imagination, which is not at risk of evaporating, given the life she leads and the atmosphere she breathes. You have to admire her beautiful use of materials, her skill as an artist, often her good taste and sensibility to beauty etc, etc… But it must be pointed out that she ends up producing unique objects set apart by their luxurious materials, their rarity of décor.[4]

In this light, it is difficult to imagine Le Corbusier seeing Gray's Monte Carlo boudoir – if indeed he ever went to look at it – as anything other than a highly original example of *les arts décoratifs*, anathema to the modern movement as he then understood it. As a result – and in spite of the obvious brilliance of Gray's work – it seems impossible to argue that it had any relevance to his very focused concerns.

The Price of Desire is a pleasant film with attractive and persuasive characterisations of the principal characters – Gray, Badovici, Léger and Le Corbusier – who are often seen together, drinking and debating.[5] Poetic licence dictates much of the detail, and why not, it's fiction after all? But the spine of the film turns on an argument that has an academic pedigree. This is the view that Le Corbusier was jealous of Gray, obsessed with her work and went out of his way to deface it, deny her authorship and hide his debt to her genius. So let us look into this view, which has become orthodoxy since the publication of an article by the historian Beatriz Colomina, variously titled 'War on Architecture' and 'Battle Lines'.[6]

Orla Brady as Eileen Gray, Francesco Scianna as Jean Badovici and Vincent Perez as Le Corbusier, *The Price of Desire*, directed by Mary McGuckian, 2015
© Julian Lennon

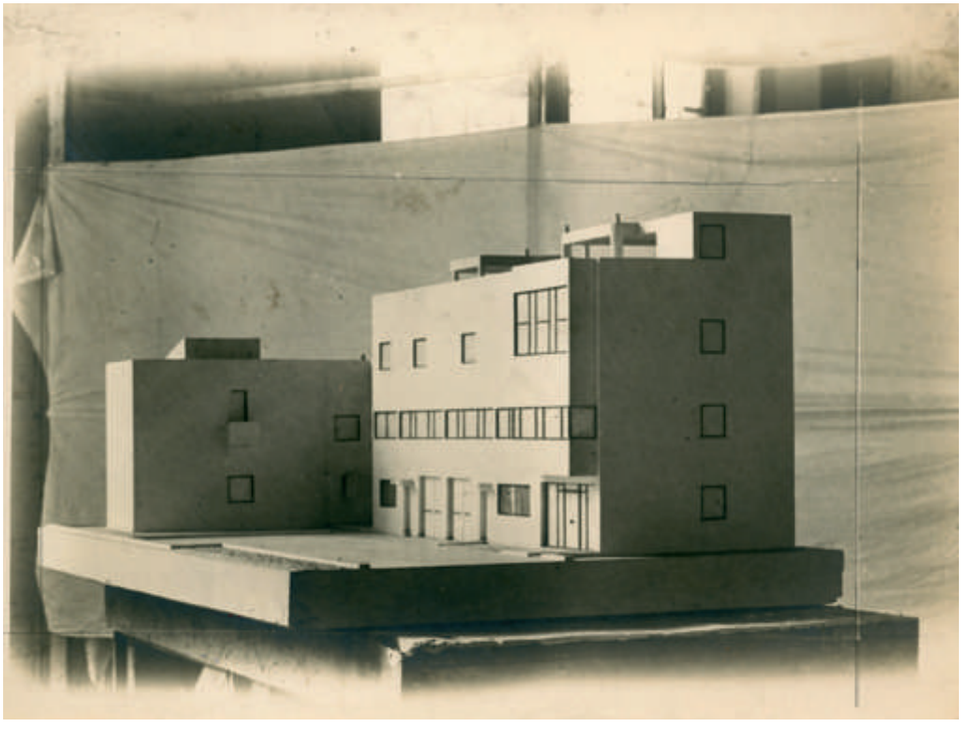
Let us begin with a simple question: did Le Corbusier, in fact, know Eileen Gray – did they ever meet in these early years? It is actually not an easy one to answer. Gray was certainly interested in Le Corbusier's work by 1922, when she asked her friend Kate Weatherby to obtain copies of *L'Esprit Nouveau* from Evie Hone.[7] Jennifer Goff, author of the most recent and most detailed biography of Gray, suggests that the two *did* meet at this time, at 20 rue Jacob, where Le Corbusier occupied a garret from 1917 to 1933 and where Gray attended at least some of Natalie Clifford Barney's literary salons, with or without her friend Romaine Brooks.[8] But Le Corbusier's plentiful letters to his mother make no mention of his being aware of the Barney set. And more generally, there is no clear basis to support Goff's claims. They certainly met after the Second World War, but there is no evidence that they knew each other before 1956.[9] I have been through all Le Corbusier's personal diaries of the 1920s and 1930s and have identified the dates for almost every page.[10] I can find no trace of Gray's name. If they met, neither thought it worth mentioning. The English journalist Frances Stonor Saunders has also asserted that 'Gray had met Le Corbusier. She was introduced to him through Jean Badovici, a penniless young Romanian architect who shared a garret with Greek journalist Christian Zervos.'[11] There is no evidence to support this either. Gray told a journalist in the 1970s that she and Le Corbusier had been friends but hardly ever saw each other, due to his continual travelling.[12] This probably refers to the postwar period. In the press release for the Heinz Gallery exhibition on Eileen Gray in London (1973), Alan Irvine claimed that it was Le Corbusier who persuaded Gray to move towards architecture.[13] Some prints of Le Corbusier's drawings, mostly of buildings from 1928, were in Gray's possession. Perhaps the undisclosed Gray correspondence in private and public hands will eventually provide more solid evidence.

But surely Gray and Le Corbusier must have crossed paths in Paris at any number of exhibitions or gallery openings? Le Corbusier certainly visited shows at the Salon des artistes décorateurs, but he preferred to exhibit at the Salon d'Automne, and it is extremely unlikely that he would have lingered in Jean Désert, the shop Gray opened to sell her work and that of her clients (he is not mentioned in the list of clients' addresses, conserved in the V&A's Eileen Gray archive).[14] Gray, for her part, was notoriously shy of exhibition openings and parties. She normally exhibited in the Salon des artistes décorateurs, of which she was a member, although she also showed some pieces in the











Salon d'Automne in 1922 and 1923.[15] Perhaps the two met, perhaps they did not. Whatever the case, they were certainly not close friends in the interwar period. It is significant that as late as 1958 Le Corbusier has to make a note of Gray's address in the rue Bonaparte, as if this was the first time he had written to her.[16] He still does not know how to spell her name. When he referred to 'Helen Gray' in his book *My Work* (1960), he was probably transposing into English the oral 'Hélène', which in French is phonetically transcribed 'Eh-len'. He was not alone. Badovici misspells her name ('Eillen') in the manuscript draft of his article about her work in 1924 (which suggests they did not know each other very well at that time), as does Louis Vauxcelles ('Eleen Grey') and Waldemar George ('Ellen') in pieces published in May 1920 and 1923 – all of which demonstrates the difficulty of understanding the name 'Eileen' (Ay-leen) in French.[17] Even in *Des Canons, des munitions? Merci! Des logis... svp*, a publication commemorating the Pavillon des Temps Nouveaux that Le Corbusier certainly proofread, the caption to an illustration of her Centre for Vacations and Leisure is labelled 'Eelen Gray'.[18]

And then there is the Badovici connection. Le Corbusier and Jean Badovici became close friends, and Gray and Badovici were friends and for a time, apparently, lovers. However, the remaining evidence suggests that Le Corbusier and Badovici were not close in 1923, as suggested in the film, but only became friendly in 1927 or 1928, by which time the intimate relationship between Badovici and Gray was drawing to a close. The correspondence between Le Corbusier and Badovici held in the Fondation Le Corbusier begins in December 1926, with a postcard addressed to '*Cher monsieur*' and signing off '*très cordialement à vous Ch E Jeanneret*'.[19] As late as 16 July 1928 Le Corbusier still addresses him as '*Monsieur Badovici*' and signs formally ('*Croyez, cher monsieur à mes meilleurs sentiments*') and with his real name rather than his more familiar sign-off 'Corbu'.[20] But a letter written barely two weeks later seems to signal a turning point. Addressing Le Corbusier as '*Cher ami*' on 1 August 1928,[21] Badovici responds to a strongly critical letter about the illustrations for *L'Architecture vivante*: 'It's not the kind of letter you send to a friend who loves you and defends you. It's frankly idiotic. If I did not have the greatest sympathy and profoundest admiration for you, I would have dropped you after that letter.' Le Corbusier appeases him with the ending '*amicalement*' in his response on 22 September 1928, and finally arrives at the salutation '*Cher ami*' on 8 November 1928.[22]

This is a year after Badovici published the first of seven special issues of *L'Architecture vivante* (autumn–winter 1927) on the work of Le Corbusier and Pierre Jeanneret. Before this date Badovici was actually somewhat hesitant about Le Corbusier's architecture. In a manuscript from *c* 1925 covering many subjects of life, death and the arts, Badovici refers to the La Roche villa as 'rigorously cerebral, not so much an "ivory tower" as a futurist "sanctum" for one's weekly Sunday rest, a refuge ... the incidence of light makes you think, at certain moments, that you're shut in an aquarium, if not in a rock crystal or a stony coral.'[23] At the same time he referred to Le Corbusier as a Swiss Lutheran and noted that the inhabitants of his houses would have to burn their belongings, for lack of cupboards and bookshelves. But he is more positive in a short text written to accompany three illustrations of the Ozenfant studio in the 1925 spring–summer issue of *L'Architecture vivante*, and in his notes about the villa 'Le Lac' and the Esprit Nouveau Pavilion in the 1925 autumn–winter issue, even if Badovici's real interest at the time was in Dutch, German and Russian avant-garde architecture.[24] The first albums he created for the publisher Albert Morancé in 1923 and 1924 focused on what is now called art deco: the work of Charles Plumet, the designs of Louis Süe and André Mare, and the furniture of Jacques-Emile Ruhlmann. In 1925 Badovici published a magnificent coloured edition of art deco interiors, including Gray's Boudoir for Monte Carlo of 1923.[25]

It is not until 1934 that we have evidence that Le Corbusier and Badovici regularly dined together.[26] On 14 December Le Corbusier asks 'Bado' whether he would prefer one of Yvonne's aiolis or roast veal. He invites him to bring '*le petit matelot*', a reference to Badovici's mistress, Madeleine Goisot. Le Corbusier's first visit to Badovici's house at Vézelay, 200km southeast of Paris, seems to have been that same year.[27] By then Badovici appears devoted to Le Corbusier. A set of notes, written in pencil, attempted to capture his feelings about his friend:

Le Corbusier is astonishing. Why is that? On reflection, it turns out that he's almost always talking common sense... Le Corbusier is too well read. He does not know how to stand naked before a naked statue. He has to dig out of his pockets a pile of notes and sketchbooks... Corbu told himself: to know what everyone knows is to know nothing! Knowledge begins where public ignorance ends! Real science, too, exists outside science ... Le Corbusier has taught all of us a lesson. We tried to create based on our own resources, with ingenuity and contradiction, but his thinking went further. He has a more opulent character. But do not try to find Le Corbusier in the Corbusian features of our art of the last century, because his greatness lies in the fact that his thinking has always been at a tangent.[28]

Above: Le Corbusier and Pierre Jeanneret, model of maisons La Roche-Jeanneret, Salon d'Automne, 1923
© ADAGP / Fondation Le Corbusier, Paris
Below: Eileen Gray, 'Une chambre à coucher boudoir pour Monte-Carlo', Salon des artistes décorateurs, 1923
From *Intérieurs Français*, 1925

To be clear, then, by the time Le Corbusier and Badovici became friends, late in 1928, Gray had already more or less moved permanently to Roquebrune on the Mediterranean coast, in the far southeast corner of France, to work on her first architectural commission – a seaside villa for Badovici, that would become her masterpiece, E-1027.[29] Le Corbusier did not go to Roquebrune before 1937 – a letter from the poet and art critic Pierre Gueguen to Badovici, written on 14 April that year, refers to this visit, where Le Corbusier was accompanied by his wife Yvonne.[30]

More, however, needs to be understood about the relationship between Eileen Gray and Jean Badovici. All the biographers insist they were lovers, and presumably this derives not just from the entwined code for the villa (E stands for Eileen, 10 for Jean – the tenth letter of the alphabet – 2 for Badovici and 7 for Gray), but from the accounts of Gray herself and her niece, Prunella Clough. Clearly, these have to be respected. And yet, as indicated earlier, Badovici did not know how to spell her name as late as 1924, and the only intimate correspondence that I am aware of between Badovici and Gray consists of an undated draft letter that mentions 'passion' but in a curiously stilted vein. Like all Badovici's draft letters, it is full of erasures and additions, and is difficult to decipher. No other letters are addressed to Eileen.

*Many thanks, dear Miss Gray for your kind words. Enjoy, Miss Gray, the rest you so need [...*the pleasure that the Côte d'Azur can offer you... *text in roman erased]. It was with the joy of one who is fondly attached to you that I read your reminiscences in your letter. [*My admiration and my need to confess and express myself... You cannot escape from yourself by fleeing to others; you have to search deep in your own being to find equilibrium ... *text in roman erased]. I am flattered ... that you have confidence in me, even more so for your kindness in wishing to make your gentle [illegible word]. In any case, I have tried to clothe this passion in the seemliest way possible. And in order to ennoble it have tried to set it alongside all that men hold most respectable.*[31]

Yet the Getty Research Institute Archives contain ample evidence of Badovici's entanglements with other women in the period 1928 to 1929, in the form of other extensive and often very peculiar drafts of love letters. In some cases the recipients are unidentified, but four women are named. Besides Madeleine ('Mad') Goisot, his mistress from about 1930 to 1946, there is Jacqueline ('Jack'), Lia ('Golia') and Odette, who Badovici seems to have met in Paris. The letters to Odette are among the most sensual and relaxed ('A moment of infinity ... It is so peaceful to detach oneself from the earth. A fresh taste of life. O-dette. It's an echo which plummets to the

bottom of my being like a stone down a well… Your fingers, Odette, descending in a startled spiral or bunched in a ball… Surround me with a hundred thousand similar fingers. I would so much like, my Odette … to kiss your breath in order to colour it').[32] The phrase 'kiss your breath' appears in other letters too. Elsewhere he writes, 'I want so much to kiss your opium nails'. Lia – frequently addressed as '*Lia, Lia délicieux bonhomme*' – remains a mystery. The letters to her contain many references to art and music and play on her irony and sophistication: 'Distance, politeness, cruelty. Picasso or Alexandrian arithmetic, humour, malice and above all charm.'[33] Jacqueline seems to be someone he encountered on a train. She came from Illats in the Gironde and was very young.[34] Although there is one letter referring to his waiting for her at Roquebrune, they would have most probably seen each other at Vézelay, since she lived part of the time with Badovici's friends Yves Renaudin and Olga Battanchon. The correspondence must date from 1928–30, because in one letter he offers to send her 'a beautiful book, all in colour, that I published four years ago': this must be the album *Intérieurs Français* published by Albert Morancé in 1925.[35] In his letters, Badovici constructs the conceit of two Jacquelines; the real one, who says no, and Jacqueline of his dreams, who arrives in a cabriolet: 'I apologise for receiving you in my birthday suit, Jacqueline. It's your fault; you arrived in your cabriolet without a warning! This evening we will go the whole hog. We will eat both the horse and the carriage. A feast!'[36] These implicit references to physical love-making aside, the overall tone in all of the letters is a highly coloured and sentimental spirituality. There is also a connection with his writing on architecture in that Badovici refers constantly to âme (soul) – in the love letters, being true to one's soul is to follow instincts and drop convention (and resistance). Another key word used constantly is *vie* (life) – if only the women would agree to live…

One particular letter, addressed simply to '*Madame*', is the most interesting of them all.[37] Respectful, his lust clearly unrequited, Badovici claims that he did not usually like to offer companionship to women, but that he would welcome the friendship of someone who had a real sense of life and who worked creatively. It is even possible that it relates to the beginning of his friendship with Eileen Gray.

Ah! How much I want to tell you, my dream-friend, of my dreamings. You know that I dare not open my eyes for fear of losing you. In my mind, you are a fixed point; the more I stare at it the more enormous it becomes. This is music for me. A coloured orgy! I dream that I am alive and my dream dies. Like a bastard, I knocked it down. Because I know that the dream is absurd. How can I live far from the light which surrounds you like a caress?[38]

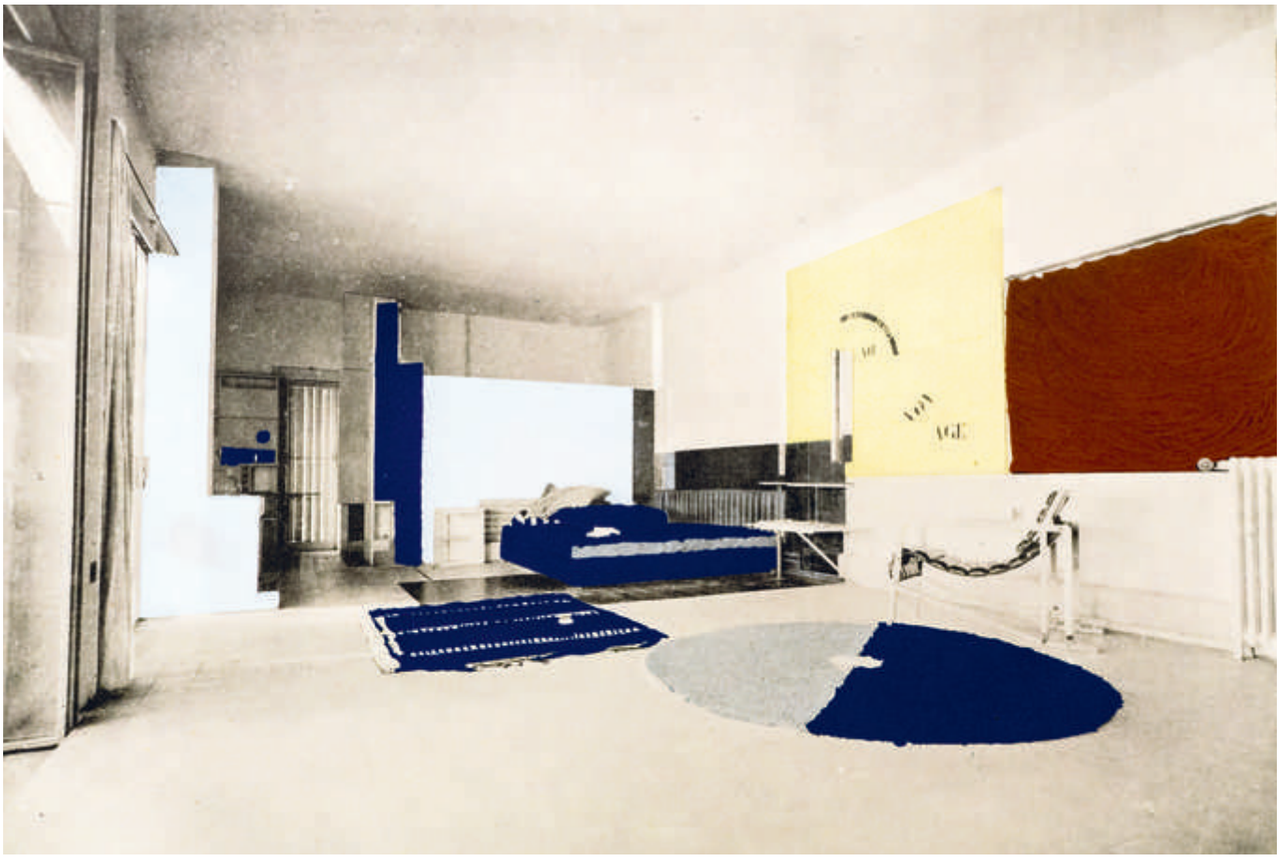
With Madeleine Goisot, Badovici was much more direct. In a letter written in January 1928 he accuses her of being 'made of ice inside, truly Eskimo … nose pressed against the window of your soul'.[39] Elsewhere, he accuses her of treating him like a child, or like a woman. Before long, however, the consolidation of their relationship is reflected by a shift into full purple-prose mode: 'Our intimate rhythm, in its surging, raises up our heart, and it's there that we seek the forms of friendship and of suffering', Badovici writes.[40] Though the couple stayed together until 1945, Yvonne Le Corbusier – a good friend – said that Badovici was *méchant* (mean) with Madeleine and it is clear that he was drinking heavily by the 1940s. A letter to Badovici (signed 'Gervais' and written at the end of the war) complains of his aggressive and unreasonable behaviour. 'For some time now, when you drink you become mean, jealous, and unguarded in your speech, which is a sign – no matter what you say – of an alcoholic disorder.'[41] At the beginning of their relationship, around 1930, Badovici refers to Madeleine as '*si jeune*'. She was not nearly as young, however, as Mireille Rougeot, the 18-year old mistress who replaced her after Madeleine Goisot's departure in 1946, and whose arrival prompted Le Corbusier to write crossly to Badovici in 1949, complaining that Mireille's presence would offend the sensibilities of José-Luis Sert and Paul Lester Wiener – 'these Spaniards from extremely respectable backgrounds' – who had come to work on the pilot plan for Medellín.[42]

Dipping into Badovici's correspondence also introduces us to the world of men and women in Vézelay, where Badovici bought eight properties between 1927 and 1937, hoping to create an artist's colony. Badovici first came to Vézelay in response to a request from his close friend, the painter Yves Renaudin, who was one of his neighbours in Paris.[43] Renaudin's lover, Olga Battanchon – also a painter, and one with a greater reputation – had bought two adjacent stone houses in Vézelay with a beautiful view. Badovici was asked to restore and modernise them. Around 35 undated letters in the Pompidou archive allow us to follow the construction of the Renaudin-Battanchon home, which seems to have been close to completion in 1928.[44] From these we learn that between August and October 1927 Badovici bought two very small houses on the rue de l'Argenterie, which he began to rebuild for his own use.[45] He then bought three additional houses on the rue de la Porte Neuve between 1927 and 1932, which he unified and renovated for visiting artists, as well as four other properties in Vézelay for storage or rental. Although Gray may have helped him purchase the houses on the rue de l'Argenterie, Badovici had a small income from renting and then selling the family home in Bucharest.[46]

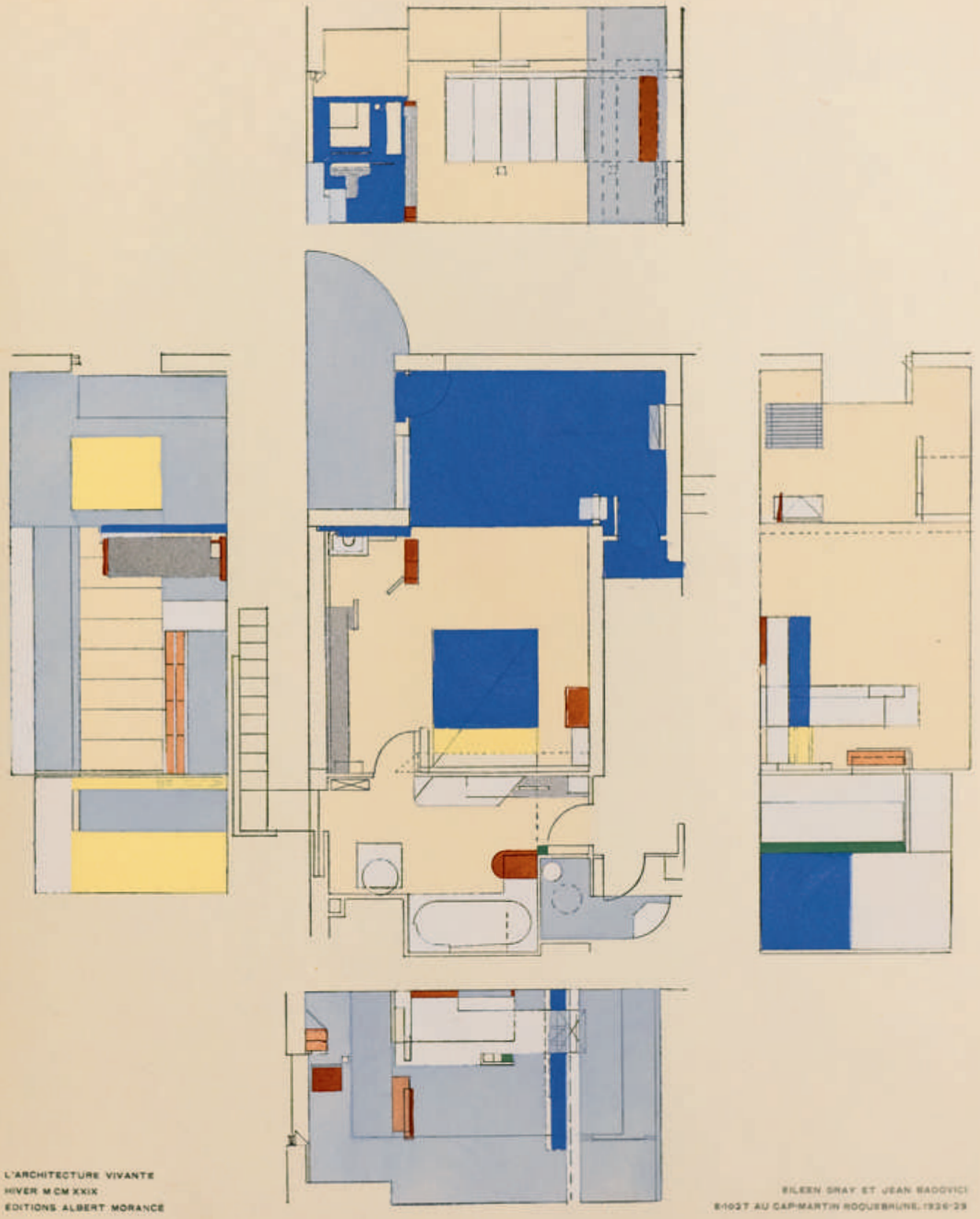
Eileen Gray & Jean Badovici,
living room and guest room, E-1027, 1929
From *L'Architecture vivante*, 1929

Based on some sketches in the V&A, the historian Caroline Constant believes that Gray played a significant role in the design of the Renaudin-Battanchon and Badovici houses in Vézelay. She may well be right, especially since these sketches include details of fixtures and fittings, including folding screens, which match Gray's design vocabulary. But certain, somewhat forensic, graphological features in these sketches give grounds for doubt. For example, Gray does not normally bar her 7s in the continental manner, nor does she use the comma, rather than the period, for the decimal point.[47] In fact, I see certain similarities between the handwriting on the sketch and Badovici's own hand.[48] Furthermore, there are few sketches of this kind in the Gray papers, but at least one very similar one in the Badovici archive. There are a number of other drawings for these two houses which, I believe, need further analysis. It is likely that some of them are by Renaudin, who supervised building work and corresponded with Badovici on certain key decisions. Attributing the three sketches to Badovici would also make sense from another point of view. In none of the plentiful correspondence with the builders or with Renaudin is Gray mentioned, even once. Yves Renaudin seems to have been unaware of her presence and never asks after her. And as we know, between 1926 and 1929 Gray was mostly in the south of France, working on the villa. Although her E-1027 adjustable table is visible in one photograph, the house was mostly furnished with Marcel Breuer's B11 tubular steel chairs and collapsible wood and metal chairs. If, as seems likely, Badovici was carrying on with Jacqueline and perhaps other women in the period 1927–29, Vézelay might also not have seemed a welcoming place for Gray.

Badovici's work at Vézelay is important for another reason. He is sometimes represented as the pure modernist, a foil to Gray's more sensitive approach. But if the Vézelay houses were in fact designed by Badovici, then they show him to be a master of the flexible adaptation of space, materials and lifestyle. This was in any case the impression formed by Le Corbusier, who began visiting Badovici in Vézelay from 1934. By this time, Le Corbusier had abandoned the principles of his 'Five Points for a New Architecture' – as evidenced by his house for Madame de Mandrot, designed in 1929 and built over the next two years.[49] The Vézelay houses are similarly representative of a different strain of modernism: set into the landscape, they have rough stone walls, no externally visible *pilotis*, no roof garden and no long window. A set of five photographs of Badovici's house, taken by Pierre Jeanneret, was even published by







L'ARCHITECTURE VIVANTE
HIVER M CM XXIX
ÉDITIONS ALBERT MORANCE

EILEEN GRAY ET JEAN BADOVICI
E-1027 AU CAP-MARTIN ROQUEBRUNE. 1926-29

Le Corbusier in *La Ville Radieuse*, together with a glowing description of its interiors.

The architect Jean Badovici, director of L'Architecture vivante*, has bought up some of these crumbling houses. He brings in the modern spirit. Here is his own home an old, old house with an oak-beamed ceiling. The height between storeys is 2.2m. He breaks through one floor; in this way he connects two storeys; he turns them into a modern living unit. Never mind archaeology! He settles in with the instruments of the present day. A few of us are gathered there, living and active beings of today: Fernand Léger the painter, Gueguen and Bonheur poets, Zervos, director of* Cahiers d'Art*; Ghyka [sic], painter. We are in a lair for men. On our shoulders are ceilings that suit us. Our eyes find varied and contrasted prospects; our steps have a lively movement. Everything is minute, but everything is big. It is a jewel-box on the human scale. It is a place of well-being, of calm and diversity, of measure and proportion, of thoroughly human dimensions. Harmony. All of us unanimous in recognising and proclaiming this.*[50]

The Swiss poet Romain Rolland, who had a house in Vézelay, also formed a positive view of Badovici's house. Writing of a visit on 23 April 1941, he related:

The house is tiny, all glazed on the north side in the Corbusian manner. A most ingenious use is made of every nook and cranny. He is less rigorous than Le Corbusier, whom he admires unreservedly as the greatest genius of our time, and combines old and new in his furnishings … The ingenious and complicated details betray an extraordinary sense of practicality. It's a series of 'Open Sesames'. Walls open and close, interlock and interpenetrate, so that a single space can be transformed into many compartments.[51]

Rolland then added that during the same visit Badovici 'showed us at some length the plans and photos for his villa at Cap-Martin'. Once again, Gray is not mentioned and one is forced to conclude that Badovici – typically presented as a rather innocent, dreamy romantic and consistent patron of her work – in fact made little effort to promote Gray's designs among his friends.

Caroline Constant believes that Gray collaborated significantly to the drafting of the early publications by Badovici and even assigns joint authorship to them. Given that the manuscripts are all in Badovici's hand, we should remain sceptical about this claim until further evidence emerges. The manuscript drafts for texts on André Groult, the atelier Martine, Francis Jourdain, Mallet-Stevens, Ruhlmann, Chareau, Michel Dufet, Suzanne Valadon are in the Getty Research Institute. These are in Badovici's hand and have no amendments by Eileen Gray. The question arises of Gray's contribution to the texts published in *L'Architecture vivante* in 1929, celebrating E-1027.

The only surviving manuscript on E-1027 is in Badovici's hand.[52] This is a draft for the 'description' of the house, published in *L'Architecture vivante* in 1929.[53] The manuscript consists of 24 pages and, like his love letters, features considerable erasures and additions. Were these corrections the result of Gray's intervention? Most of the differences between this text and the published version are simply condensations and simplifications of Badovici's verbose writing style. For example, the manuscript text:

*Now is the time to shout 'Danger!' I believe that the avant-garde, having stripped things down and purified the interior into a single synthesis, is not doing an honest job. By trying to turn the most basic things [*elements *erased] of life, such as chairs, tables, beds and cupboards into sculptural forms, they have fallen into a new excess, perhaps even more damaging than the previous one [*the classical plan *erased]. They are corrupting public taste with their cerebral efforts, to the point where someone coming with a [*honest *erased] well designed, comfortable and human element will cut a miserable and reactionary figure because the elite at the head of the movement call the shots not for the common good but in order to mark each other out as different.*[54]



Becomes in print:

To consider the construction of a table or a chair as a formal exercise, from the sole criterion of formal harmony, necessarily leads to excesses and illogicalities which will pervert public taste and make those who still have a sense of public utility seem reactionary.[55]

It is hard to see in these changes anything other than a simplification, imbued with some tact towards the leaders of the modern movement. It is of course probable that Badovici's text was the result of discussions with Gray (the text refers constantly to '*nous*'), but it is extremely unlikely that it was dictated by her. There are too many grammatical errors and exaggerations. It is hard to imagine Eileen Gray writing, 'Perret told me the other day: "Architecture is where you can fart at ease".'[56] An intriguing sentence cut from the printed version – regarding the need to remake the interiors on a 'human scale' – probably reflects Badovici's conversations with Le Corbusier, who was discovering the charms of the simple life of the fishermen in the Bassin d'Arcachon. He wrote, 'This is why our design has a little of the primitive in it, of the life of peasants with their equilibrium and their sense of the marvellous.'

Most authors have attributed to Gray the major role in the writing of 'De l'éclecticisme au doute', the article that accompanied the publication of E-1027 in *L'Architecture vivante* (1929), giving Badovici the role of interlocutor in the dialogue. Unfortunately, I have not found a manuscript of this text, and it is difficult to convincingly separate the two voices in the dialogue into Gray and Badovici. It is clear from Badovici's other writings that he was sceptical of the functionalist strand of modernist thought, as was Le Corbusier himself by 1929. Badovici had used the dialogue form in many of his essays in the 1920s, and where manuscripts exist for these texts they are entirely in his hand. 'De l'écleticisme au doute', then, should be read less as a conversation between Badovici and Gray and more as an opening up of the issues by both of them. It is an extremely important and subtle development of modernist thought, and many authors have analysed it in this sense. Gray is cited by Peter Adam as saying, 'A house is not a machine for living in. It is a man's shell', as if this was a criticism of Le Corbusier.'[57] But this is one of Le Corbusier's favourite slogans, appearing, for example, in the opening lines of his book *L'Almanach de l'Architecture Moderne* (1925):

The snail's shell. We know that the snail lives in its shell. But us? From the moment when mechanisation turned society upside down, they have tried to put the snail in, for example, a matchbox. Mechanisation must return the snail to its shell. A wise dream.[58]

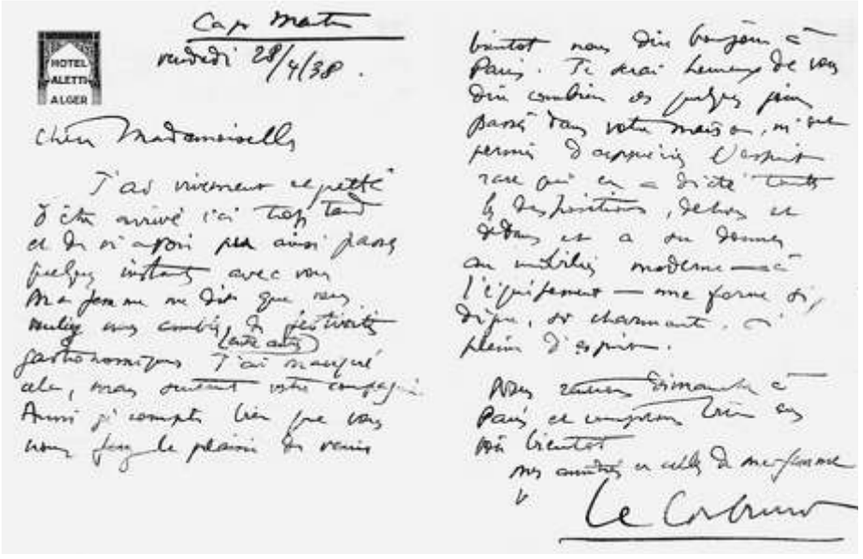
By 1928, and midway through the construction of E-1027, the intimate relationship between Badovici and Gray was under strain, with Gray later referring to his 'lies and silliness'.[59] When the site for E-1027 was first purchased, Gray bought for herself another plot of land in Castellar, just outside the town of

Opposite: Eileen Gray & Jean Badovici, plan and elevations of main bedroom, E-1027, 1929
From *L'Architecture vivante*, 1929
Above: Home of Yves Renaudin & Olga Battanchon, Vézelay, restored and adapted by Jean Badovici, 1927–28
© Tim Benton

Menton, a few kilometres further up the coast. From this, it is clear that Roquebrune was never intended as their shared, permanent home.[60] Gray would build Tempe à Pailla, her house in Castellar, in 1932; before that, she seems to have occupied an existing stone farmhouse on the site, which she painted white and called '*le bateau blanc*'.[61] And yet at the same time Badovici and Gray remained close (and would be so up till Badovici's death in 1956). While working on Tempe à Pailla, Gray also designed Badovici's new apartment in Paris on the rue Chateaubriand (Badovici later shared with Le Corbusier Gray's text and drawings for the ingenious storage solution she devised for him there). They also visited Mexico together in 1934, and Gray would install a memento of this trip in the dining room in Castellar, where a large plan of the temple complex at Teotihuacán hung on one of the walls.[62] For his part, during the house's construction, Badovici seems to have occasionally helped Gray with building permissions and in resolving disputes with the workmen.[63] He also assisted in the display of Gray's Centre for Vacations and Leisure project, exhibited in Le Corbusier's Pavillon des Temps Nouveaux at the 1937 Paris International Exposition. In return Gray helped Badovici present his application for patents for his lifeboat designs and for an unsinkable boat – a somewhat unfortunate metaphor – and in writing and translating into English his letters to officials in the Admiralty.[64]

This, then, offers some kind of historical context to the triangulated relationship between Eileen Gray, Jean Badovici and Le Corbusier. But what of Beatriz Colomina's account of the same dynamic, 'War on Architecture', and its numerous siblings titled 'Battle Lines'?[65] Consistent with her titles, here Colomina constructs a web around the theme of aggression: not just of a local case of 'breaking and entering', but of the domestic interior as a form of 'weapon' (an idea she wittily supports with a more urban illustration that turns the Champs Elysées into a gun barrel, with the Arc de Triomphe as its muzzle). Colomina's mastery of visual innuendo is also evident in her use of a 1917 erotic drawing by the young Jeanneret to accompany a discussion of his much later drawings of a Spanish and an Algerian girl, made in 1931, and now lost, as recounted by the architect Jean de Maisonseul. She then expands upon this particular theme by seeking to explain Le Corbusier's paintings in Roquebrune (which a famous photograph shows him painting naked) as a calculated aggression by Le Corbusier on Gray, comparable not only to the eroticised colonisation of Algeria – another chapter in the male assault on women's sexuality, their identity and achievements – or to modern architecture's more symptomatic assault on domestic space, but also, more specifically, to a form of architectural rape.

Let me be clear about this. I consider E-1027 to be one of the outstanding works of modern architecture and design.[66] There is an ugly side to Le Corbusier, on which I have insisted since my first book about his villas in Paris (1984). I have written another book about Le Corbusier's paintings in E-1027 which accepts that they are an intrusion into the aesthetic of the house.[67] I have also tried to explain why they were painted and to understand Le Corbusier's frame of mind. However, the more I have gone into this, the less satisfying I have found Colomina's arguments, and those of others who have taken a similar line.



Postcard from Le Corbusier to Eileen Gray, 28 April 1938
© ADAGP / Fondation Le Corbusier, Paris

The only significant piece of correspondence between Le Corbusier and Eileen Gray in the accessible archives is a letter written on 28 April 1938, just before or just after the painting of the first of his two mural paintings in E-1027 (Le Corbusier arrived directly from Algiers in Roquebrune on 27 April and left on 1 May). This letter stands out among Le Corbusier's correspondence. It is very formal, addressed to '*Mademoiselle Gray*' and includes polite references to her cooking and to E-1027. I know of no other letter to a woman with whom Le Corbusier had any sort of regular acquaintance beginning in this formal way (his usual form of address for female friends was '*Chère amie*'). He noted 'the rare spirit which dictated all the arrangements, inside and out, and gave to the modern furnishings – the equipment – a form so dignified, so charming, so full of wit'.[68] Six months later Le Corbusier wrote to Badovici from his hospital bed in St Tropez. He had just suffered a terrible accident – while swimming from the 'green jetty' to the 'red jetty' in the bay, a speedboat ran him over, cutting his head open and creating a gash in his leg that Le Corbusier later described as 'as long as the Ville Radieuse' (one can clearly see the scar of this wound in the famous photograph of Le Corbusier, naked, painting the second set of murals in 1939). In the letter Le Corbusier asks if Badovici could photograph the two paintings, and then adds: 'Please convey once again to Eleen [sic] Gray my thanks for her friendship. Pierrefeu very happy to have spent some time with her.' It is possible, therefore, that Gray had visited him in hospital. Alternatively, she may have replied to his letter of 28 April. In any case, there is still no evidence that they had met.[69]

Something that tends to go unsaid in accounts of the house is that the murals at Roquebrune were painted at Badovici's request. Two years earlier, in 1936, he had invited Le Corbusier to paint a mural in his country house in Vézelay, the success of which prompted the second commission (for which Le Corbusier was meant to have been paid – he later said – with half a dozen bottles of gniole). And so Le Corbusier's work at E-1027 arose out of an invitation – and not an invasion. In July 1941 Badovici described the resulting paintings as 'resplendent' and concluded: 'it's funny how well the paintings go with the shack and the sea… Hats off to Corbu – and a thousand thanks.'[70] But at the same time Badovici was probably aware that Gray's reaction might not be so effusive. In January 1942 Le Corbusier heard from his wife Yvonne, who wrote: 'Bado is completely crazy. I got him scared. I told him you were perhaps going to go to St Tropez. I know he's petrified you might run into Gray there. I did it just to bug him. He's still as mean as ever to Mad [Madeleine Goisot]; he pisses me off.'[71] But what exactly Badovici was so afraid of is not clear. Was it about what Gray might say to Le Corbusier? Or about him giving the game away, if she was still unaware of the existence of the paintings?

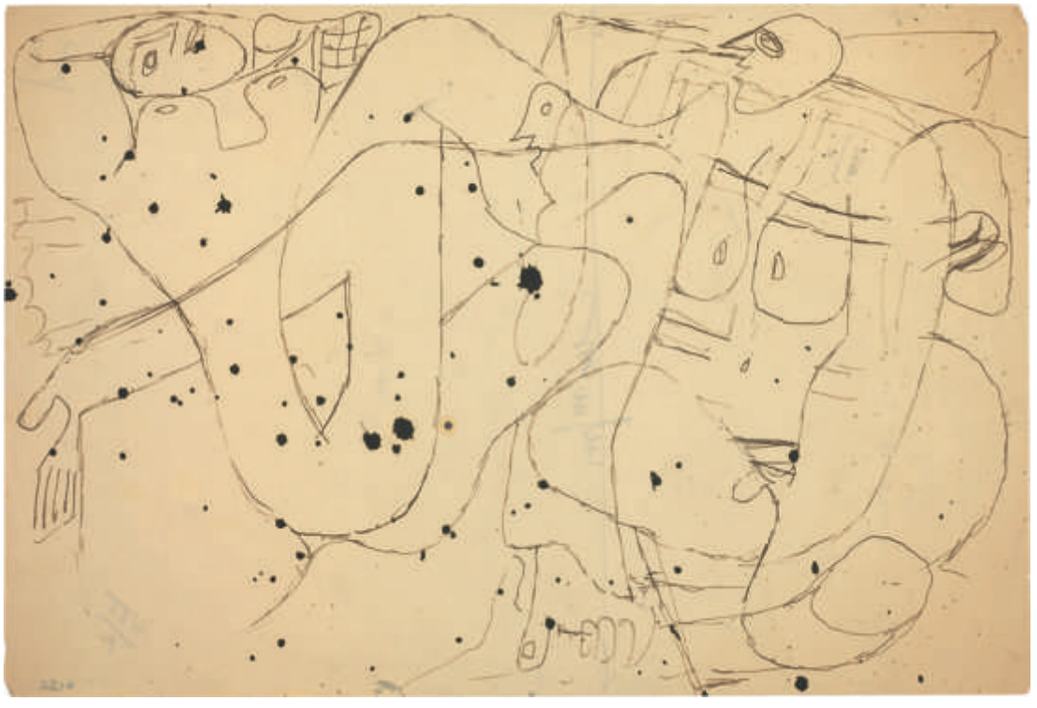
Architects, let's be clear, do not own the houses they design. And although the house in Roquebrune is typically referred to as 'Eileen Gray's E-1027', its owner and client was Badovici. Le Corbusier admired E-1027 and said so, but I see no reason to imagine that his decision to paint the seven mural paintings in the house in 1938 and 1939 had anything to do with Gray.[72]





Le Corbusier, 16mm film stills showing one of
his murals at E-1027, with Madeleine Goisot, 1938
© ADAGP / Fondation Le Corbusier, Paris



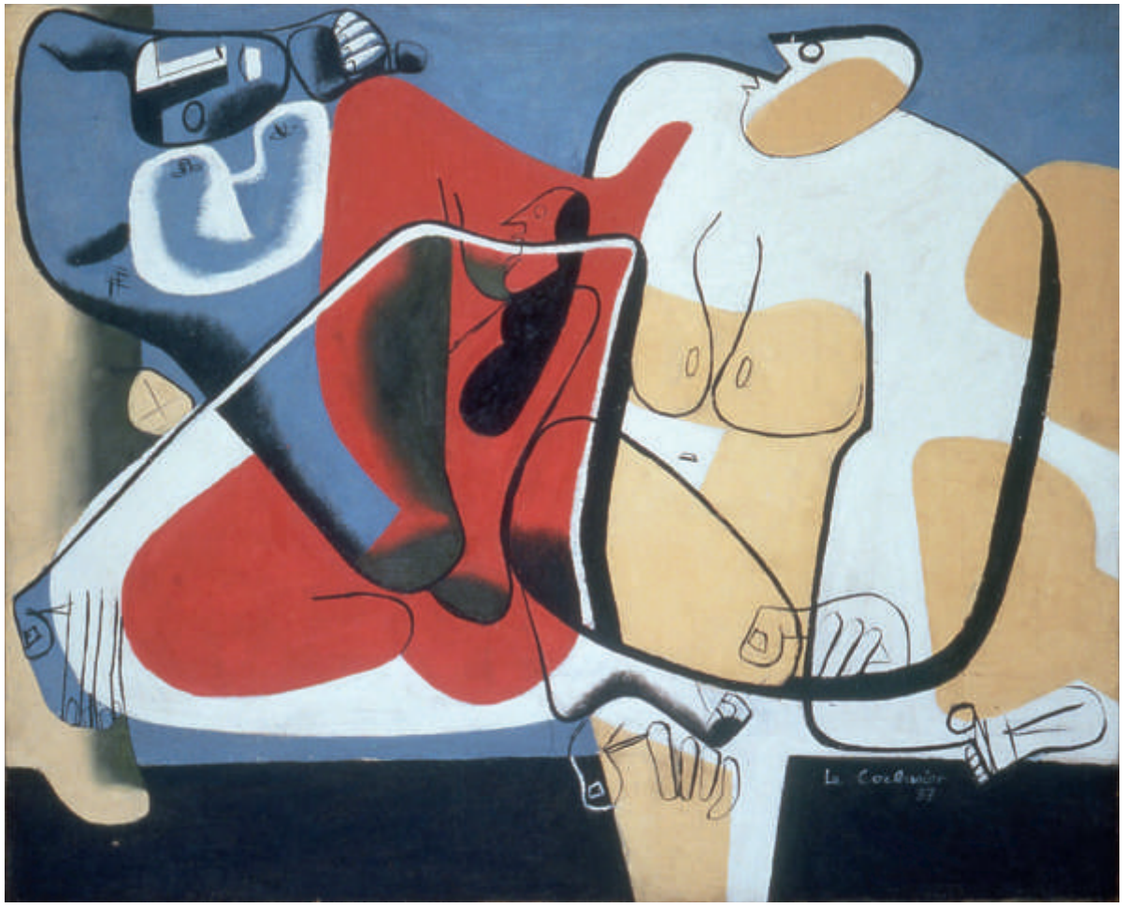


Above: Le Corbusier, *Trois nus féminins accroupis*,
Le Piquey, *c* 1936
Below: Le Corbusier, mural study for E-1027, 1938
© ADAGP / Fondation Le Corbusier, Paris



Le Corbusier, *Nu féminin lisant*, 1932
© ADAGP / Fondation Le Corbusier, Paris





I have tried to explain his reasons for making these paintings, which run counter to everything he published in the 1930s.[73] In my view they represent an egotistical and inconsiderate gesture, encouraged by Badovici, which permitted him to express himself at a time of great personal frustration.

According to Peter Adam, Gray never went back to E-1027 after 1931 and it is probable that she only found out about the paintings as late as 1946 or 1948, when Le Corbusier published them in the fourth volume of his *Oeuvre Complète* and in *The New World of Space* as well as several other publications.[74] Gray might justifiably have been upset by the captions he provided for the illustrations of his paintings, in which he claims that the surfaces he painted on were 'dull, sad walls where nothing was happening'.[75] This assertion even led to an angry exchange of letters between Le Corbusier and Badovici between 1949 and 1950 and a temporary interruption in their friendship,[76] though it is worth noting that nowhere in their correspondence does Badovici mention the name of Gray. Nor does her name appear in any of the accessible correspondence between Badovici and his other friends who stayed in his houses at Vézelay and Roquebrune in the 1930s or after the war. It's as if both Badovici and Gray wanted to keep their friendship a secret.

Another weapon in Colomina's attack is the suggestion that Le Corbusier built his Cabanon in 1952 in order to 'occupy and control the site by overlooking it'. If Colomina had visited the house, she would have realised that the Cabanon was tucked away on the other side of Thomas Rebutato's fish restaurant and overlooked no part of the neighbouring site. The reasons for Le Corbusier's befriending of the Rebutato family have been told elsewhere and had nothing to do with E-1027, to which he did not have ready access after 1949.

But the most substantive part of Colomina's argument in both 'War on Architecture' and 'Battle Lines' turns on the relationship between Le Corbusier's supposed lifelong obsession with the colonised, feminine 'other' – his sketches of Algerian women – and the mural paintings he added to E-1027 in 1938 and 1939. To me, the main flaw in this argument is that it rests on the very shaky ground of an article, 'Le Corbusier et les femmes d'Alger', written by the artist Samir Rafi.[77]

An eccentric and reclusive character, Rafi established a reputation in his native Cairo before moving to Paris in the 1950s to work with the cubist painter André Lhote. He claimed to have had three interviews with Le Corbusier in April–May 1964, which he then transcribed and which Le Corbusier corrected and signed off.[78] The problem is that the only surviving interview is dated 19 July 1958, and it deals solely with the purist period.[79] As part of his research for a doctoral dissertation on purism, Rafi had sent Le Corbusier a long handwritten letter on 3 October 1957 introducing himself and setting out his argument – namely that Le Corbusier's drawings were derived from his architecture and not, as Le Corbusier himself said, the other way round.[80] Though he could hardly have been impressed, Le Corbusier eventually agreed to an interview. Rafi took shorthand notes, and sent a typescript to Le Corbusier, who sent it back covered in corrections: 'I'm returning the stenographic copy to you … having crossed out the things that have nothing to do with my problem, which is a problem of architecture and urbanism. I would ask you to bear this in mind and to refrain from muddling problems which are really distinct from each other and about which you are ignorant.'[81] After this discouraging start, no more interviews took place before April 1962, when Rafi wrote requesting another meeting to discuss the dates of some of his purist paintings.[82] There is no evidence in the Fondation Le Corbusier of any further meetings.

Rafi's claims notwithstanding, there are reasons for doubting the veracity of his article – not just that it contains many factual errors, or that Rafi had an interest in promoting a particular argument, but that almost all the documentary evidence seems to have disappeared. Moreover, there is a very obvious value judgement to be made about the drawings he published as evidence of his argument. Rafi claimed to have heard from Le Corbusier's own lips that he had drawn 'hundreds' of sketches of Algerian women in three sketchbooks, beginning in 1929. In fact, Le Corbusier's first trip to Algiers was in 1931, followed by further trips in 1933, 1934 and 1938. But these sketchbooks have disappeared. The two known sketchbooks from the first two trips were recently published by Danièle Pauly.[83] Out of 160 pages of drawings, only seven include nudes.

Nevertheless, Rafi argues that it was the experience of sketching the women in Algiers that changed Le Corbusier's painting style and introduced him to the nude. He writes 'these sketches mark a turning point in the evolution of Le Corbusier; they are the first time in his career that he made these studies of the nude after nature'.[84] He then continues: 'But this discovery of the human body was made in parallel with the discovery of the organic, human-scale architecture of the Casbah.'[85] All this is completely wrong. Le Corbusier drew nudes and sketches of 'organic' vernacular architecture throughout his life. It is also nonsensical to assert, as Rafi does, that, Le Corbusier 'would never again have the opportunity to start again [drawing nudes], and the nudes that one finds in his canvases after 1929 are all taken from the three sketchbooks he made in Algeria'.[86]

Above: Le Corbusier, *Deux femmes assises et silhouette esquisse*, 1928–29
Below: Le Corbusier, *Trois personnages*, 1937
© ADAGP / Fondation Le Corbusier, Paris

In fact, largely from 1926 onwards, Le Corbusier was drawing nudes, mostly at Le Piquey on the Bassin d'Arcachon, that would be incorporated into paintings such as *Les Deux Lutteuses*, 1927–28.[87] He also made a series of sketches of Josephine Baker and her troupe in the review *La Folie du Jour* at the Folies Bergère in 1926, and worked these up into an album of 50 watercolours for his friend Marcel Levaillant, including several of Baker nude.[88] At the same time he sketched nudes, probably in brothels, on his travels in Spain, Argentina and Brazil between 1928 and 1929. The inspiration for the greater majority of his other nude drawings and paintings was overwhelmingly his future wife Yvonne and the working women he studied at Le Piquey, which he observed and sketched as if nude.[89] In reality, the seed of Le Corbusier's mural paintings in Roquebrune is not so much the women he sketched in North Africa, as what Pauly calls 'Les Géantes'.[90] These include several drawings of a seated woman reading a book, foreshadowing the right-hand figure in the mural. There are also several drawings in which Le Corbusier begins to make compositions out of two or three figures.[91]

And yet, still according to Rafi, on Le Corbusier's return to Paris the drawings of Algerian women became entwined with an obsessive study of Delacroix's *Femmes d'Alger,* hanging in the Louvre. None of these studies survive. Le Corbusier is supposed to have drawn and redrawn these figures on tracing paper between 1929 and 1937, returning to the theme in the 1960s, only to burn them at the end of his life. The sole evidence they ever existed is Rafi's article, with its illustrations of eight sketches – to which we will return. On the other hand, the composition of 'Trois personnages' did occupy Le Corbusier in the 1930s. A painting with this title, dated '1937' by Le Corbusier, is discussed by Jean-Pierre and Naïma Jornod in their two-volume *Catalogue Raisonné.*[92]

The Jornods identify seven studies for *Trois personnages*, none of which bear any resemblance to Algerian or Moroccan women.[93] One of these studies indicates the beams from a rustic shed, which probably locates it among the sketches at Le Piquey, which Le Corbusier visited for the last time in September 1936.[94] On another drawing, the representation of a book prefigures the curious 'swastika'-shape motif in the right-hand woman.

Despite this, Colomina centres her argument on the *femmes de la Casbah* drawings of Algerian women that may or may not have existed in the mysterious three sketchbooks that Rafi refers to, and which she certainly had not seen. Nevertheless she feels able to assert:

The whole mentality of the femmes de la Casbah *drawings is photographic. Not only are they made from photographs, they develop according to a repetitive process in which the*





Le Corbusier, mural (*above*) next to entrance to guest bedroom and (*below*) next to main entrance, E-1027, 1939 (*both now destroyed*)
© ADAGP / Fondation Le Corbusier, Paris









Le Corbusier, murals in the guest bedroom (*top left*), in the entrance (*top right*), in the living room (*bottom right*), and next to the bar (*bottom left*), E-1027, 1938–39
© Manuel Bougot

images are systematically reproduced on transparent paper, the grid of the original graph paper allowing the image to be enlarged to any scale.[95]

It is true, as Pauly and Stanislaus von Moos have long since demonstrated, that Le Corbusier made some drawings based on the postcards he bought in Algiers.[96] But this has nothing to do with the drawings of Algerian women to which Rafi refers. Colomina continues:

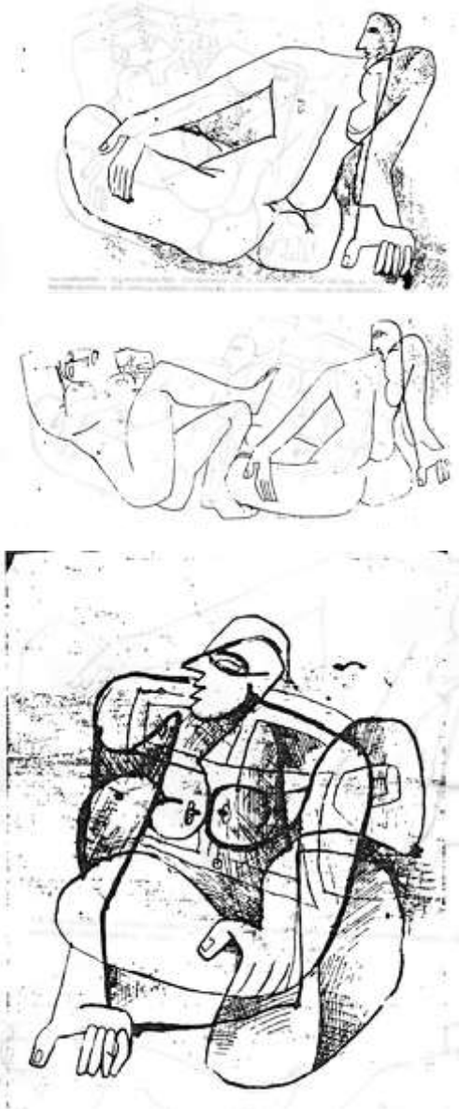
This photographic sensibility becomes most obvious with the murals at Cap Martin… Le Corbusier used an electric projector to enlarge the image of a small drawing onto the 2.5m × 4m wall where he etched the mural in black… The mural was a black-and-white photograph.[97]

Colomina turns everything into photographs, but this is going too far. Once again, this idea may have derived from Rafi, who wrote: 'On the white wall of a house at Cap Martin, 2.5m by 4m, he enlarged his drawing by means of an electric projector.'[98] It is hard to know what kind of projector Rafi had in mind – presumably it was an epidiascope – or indeed how Le Corbusier could have found room for such a device in his suitcase on his trip to Algiers, since Roquebrune was his first stop directly after leaving the boat. More fundamentally, Colomina seems to be confusing the mural made by Le Corbusier with a crude copy made by the local house painter Jean Broniarsky. Although Le Corbusier restored the mural in 1949, it continued to deteriorate. In 1978 a new wall was constructed in front of the original and Broniarsky made a copy based on a slide projection of the original, incising the lines heavily into the plaster. Colomina's use of the word 'etched' suggests that she is indeed referring to the reproduction, rather than the original. Even though Le Corbusier sometimes referred to this mural as a *s'graffitte*, he did not incise the lines into the plaster, but painted directly onto the surface of the wall. Just after executing the painting in April 1938, he took 127 photographs of the mural with his cine camera.[99] On some of these photographs you can see traces of the charcoal lines he had sketched freehand on the wall. Colomina also drew attention to the so-called 'swastika' motif in the figure on the right. This was accentuated by Broniarsky when he repainted the mural in 1978 and further highlighted by a young man who squatted the house in the 1980s and picked out some of the lines in white.

A further aspect of Rafi's argument, and essential for Colomina's interpretation, is that the monochrome mural executed by Le Corbusier on a wall under the *pilotis* of E-1027 in 1938 is directly related to the *Femmes d'Alger* project and his sketches of Algerian women.[100] Seizing on Rafi's claim that Le Corbusier drew and redrew his sketches on tracing paper, Colomina goes on to imply a mechanical routine similar to photography:

Le Corbusier's violation of Eileen Gray's house and identity is consistent with his fetishisation of Algerian women… In these terms, the endless drawing and redrawing is the scene of a violent substitution that in Le Corbusier would seem to require the house, domestic space, as prop.[101]

Colomina also takes at face value the strange explanation of the mural painting by Madame Schelbert, who had purchased the house in 1960. According to her, one of the three women, on the right, represents Badovici, while another was Gray (both of whom Schelbert had never met), while the head of the third woman represents the child they never had.[102] This, according to Colomina, constitutes an attack on Gray's bisexuality. And yet it is extremely unlikely that Le Corbusier would have intended to represent Gray in this painting; the woman at Badovici's side during the period of their friendship was Madeleine Goisot. Furthermore,



Three drawings published by Samir Rafi in his article 'Le Corbusier et les femmes d'Alger' and attributed by him to Le Corbusier, 1968

as we have seen, the mural painting was based on a previous oil painting, *Trois personnages* (1937), which had no connection whatsoever with Roquebrune or with Badovici, and was more closely associated with Le Piquey.[103]

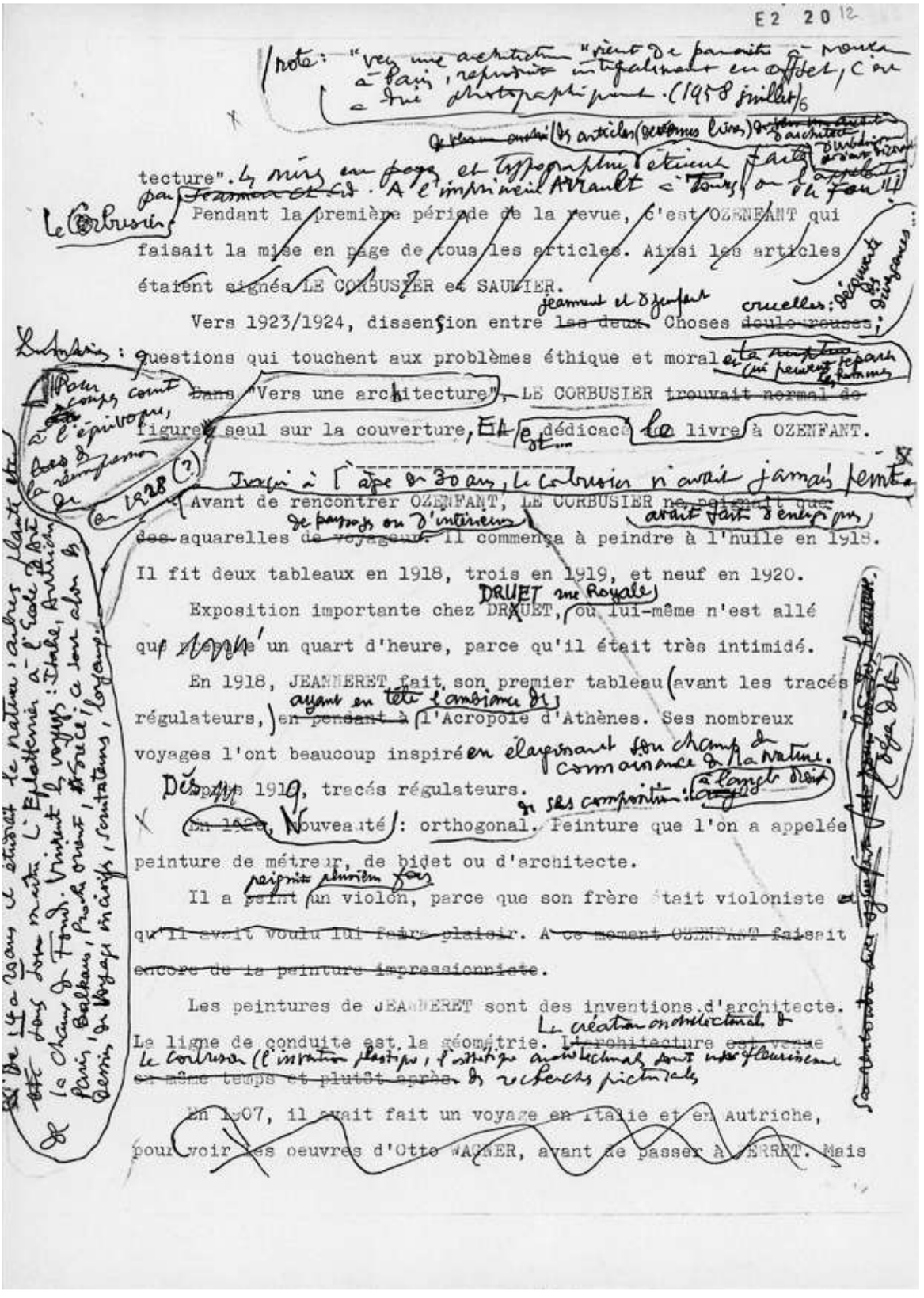
Rafi illustrates eight drawings on tracing paper which he claims were part of the *femmes de la Casbah* set. They have nothing to do with Eugène Delacroix's *Femmes d'Alger* and do not look like sketches from life: to my eye, they are crude copies and variations of the mural. Danièle Pauly, who wrote her thesis on Le Corbusier's drawings, has not included these sketches in the Fondation Le Corbusier's *catalogue raisonné* and considers them to be fakes.[104] Apart from the details copied literally from the mural (profile of the right-hand woman's face, the repeated motif of the hand, the left-hand woman's breasts, and so on) there is nothing in these drawings that looks convincingly like Le Corbusier's hand. One of them is clearly a later drawing derived from the mural at Roquebrune, complete with the 'swastika' motif. A tell-tale detail is the shape to the left of the woman's face, which represents the foot and knee of the missing central character. Rafi clearly did not know how to fill in this part of the sketch.

Rafi's biographer, the Egyptian artist Abdel Razeq Okasha, made friends with the reclusive artist in the last two years of his life. He recalled: 'Rafi had always been confused and bewildered; he used to document everything on pieces of paper, scattered all over his tiny house. He was a closet of secrets that I was never able to unlock, despite the fact that I might have been the only one allowed to enter his third-floor studio.'[105] Rafi liked to copy other artists' work and was criticised for it, but defended this practice; it was 'part of the attempt to benefit from a collective approach'.[106] Again, Rafi might have been completely sincere and accurately remembered things Le Corbusier told him, but there is good reason to doubt it.

Nevertheless, Colomina continues to bring together ideas and associations which have very little to do with each other, and concludes, in the same spirit, with something of a tour de force:

So if Le Corbusier 'enters the house of a stranger' by drawing, could 'the house' stand in here for the photograph? By drawing he enters the photograph that is itself a stranger's house, occupying and re-territorialising the space, the city, the sexualities of the other by reworking of the image. Drawing on and in photography is the instrument of colonisation. The entering of a stranger is always a breaking and entering – there being no entry without force no matter how many invitations. Le Corbusier's architecture depends in some way on specific techniques of occupying yet gradually effacing the domestic space of the other.[107]

To which I can only say, to paraphrase General Pierre Bosquet, '*C'est magnifique, mais ce n'est pas Daguerre*.'[108]



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tecture". Pendant la première période de la revue, c'est OZENFANT qui faisait la mise en page de tous les articles. Ainsi les articles étaient signés LE CORBUSIER et SAUGIER.

Vers 1923/1924, dissension entre les deux. Choses douloureuses; questions qui touchent aux problèmes éthique et moral. Dans "Vers une architecture", LE CORBUSIER trouvait normal de figurer seul sur la couverture, et dédicacé le livre à OZENFANT.

Jusqu'à l'âge de 30 ans, Le Corbusier n'avait jamais peint. Avant de rencontrer OZENFANT, LE CORBUSIER ne peignait que des aquarelles de voyageur. Il commença à peindre à l'huile en 1918. Il fit deux tableaux en 1918, trois en 1919, et neuf en 1920.

Exposition importante chez DRUET, où lui-même n'est allé que pendant un quart d'heure, parce qu'il était très intimidé.

En 1918, JEANNERET fait son premier tableau (avant les tracés régulateurs,) en pensant à l'Acropole d'Athènes. Ses nombreux voyages l'ont beaucoup inspiré.

Dès 1919, tracés régulateurs.

En 1920, Nouveauté: orthogonal. Peinture que l'on a appelée peinture de métreur, de bidet ou d'architecte.

Il a peint un violon, parce que son frère était violoniste et qu'il avait voulu lui faire plaisir. A ce moment OZENFANT faisait encore de la peinture impressionniste.

Les peintures de JEANNERET sont des inventions d'architecte. La ligne de conduite est la géométrie. L'architecture est vécue en même temps et plutôt après des recherches picturales.

En 1907, il avait fait un voyage en Italie et en Autriche, pour voir les oeuvres d'Otto WAGNER, avant de passer à PERRET. Mais

Transcript of interview with Le Corbusier
by Samir Rafi, with Le Corbusier's comments,
returned to Rafi on 19 July 1958
© ADAGP / Fondation Le Corbusier, Paris











I would like to thank Maristella Casciato, Caroline Constant, Tag Gronberg, Mary McLeod, Josep Quetglas, Danièle Pauly, Cloé Pitiot, Stanislaus von Moos and Thomas Weaver for their very helpful advice and comments on the text. Abbreviations: GRI (Getty Research Institute, Badovici collection, 880412; the material is arranged in boxes and folders; the documents are not identified individually); NMIEG (National Museum of Ireland, Eileen Gray Collection); V&A (V&A Museum Archive, Eileen Gray Collection; all document references cited here should be prefixed with AAD/1980).

1. The phrasing is taken from an American review of Gray's shop (*Chicago Tribune*, 7 June 1922), titled 'Odd Designs at Art Studio of Jean Désert; Furniture in Bizarre Forms and Styles', where visiting the shop is described as 'an experience with the unheard of and a sojourn into the never-before-seen'.
2. The first of these articles, 'Les pieds dans le plat…' was published in *L'Esprit Nouveau* 18, issued on 1 November 1923. Le Corbusier, 'Salon d'Automne', *L'Esprit Nouveau* 19, 1 December 1923, np.
3. Le Corbusier, 'L'art décoratif d'aujourd'hui', *L'Esprit Nouveau* 24, 1 June 1924, np. The reference to Adolf Loos is to his article 'Ornament et crime', published in French in *Les Cahiers d'aujourd'hui* (no 5, June 1913), and reprinted in *L'Esprit Nouveau* 2 (15 November 1920).
4. Jean Badovici, seven-page manuscript headed 'Eillen Gray', GRI, box 1, 3 ms folder II, notes, nd. This seems to be a first draft for the text published in *L'Architecture vivante* in 1924.
5. Orla Brady plays a soulful Eileen Gray, Francesco Scianna a rakish Badovici, Vincent Perez a forever youthful Le Corbusier and Dominique Pinon plays Fernand Léger as a peacemaker. Léger, Le Corbusier and Badovici certainly met in 1936 or 1937 to discuss the pros and cons of mural painting, since Badovici wrote about this discussion in an article ('Peinture murale ou peinture spatiale', *L'Architecture d'Aujourd'hui* , March 1937, p 75) but they certainly never met together at E-1027.
6. Beatriz Colomina, 'Battle Lines E-1027', *Centre: A Journal for Architecture in America*, no 9 (1995), pp 22–31. Reprinted as 'War on Architecture: E-1027: House Designed by Eileen Gray at Cap Martin', *Assemblage* 20, April 1993, pp 28–29; 'Battle Lines: E-1027', in Diana Agrest, Patricia Conway and Leslie Kanes Weisman (eds), *The Sex of Architecture* (New York, NY: Harry N Adams, 1996), pp 167–90; 'Battle Lines: E-1027', in Francesca Hughes, *The Architect: Reconstructing Her Practice* (Cambridge, MA: MIT Press, 1996); and in Beatriz Colomina, *Privacy and Publicity: Modern Architecture as Mass Media* (Cambridge, MA: MIT Press, 1994). A French version, with a three-sentence introduction, was published as 'Une maison malfamée: E-1027', in *Tracés*, 2015, in the *Revue d'esthétique* (edited by Jacques Fol and Christian Girard, 1997) and again in Michael Speaks (ed), *The Critical Landscape* (Rotterdam: 010, 1996). See also the more nuanced piece, Lynne Walker, 'Architecture and Reputation: Eileen Gray, Gender and Modernism', in Brenda Martin and Penny Sparke (eds), *Women's Places: Architecture and Design 1860–1960* (London: Routledge, 2003), pp 87–111. An early critique of Colomina's article was written by Françoise Fromonot, who deplored the mishandling of source material and apparent lack of interest in Gray's own architecture ('Sexe et architecture: Ubu reine', *L'Architecture d'Aujourd'hui*, 311, June 1997).
7. Jennifer Goff, *Eileen Gray: Her Work and Her World* (Kildare: Irish Academic Press, 2015), p 337.
8. *Ibid*, p 337. The role of Natalie Clifford Barney in bringing together leading figures in what has been described as 'Sapphic Modernism' has been well described in Jasmine Rault's book, *Eileen Gray and the Design of Sapphic Modernity Staying In* (Farnham: Ashgate, 2011). Rault also provides a good bibliography on leading women in avant-garde Paris.
9. A large number of documents referring to Eileen Gray and Jean Badovici were inaccessible to me at the point of writing. Peter Adam is reputed to have a collection of over 1,000 letters from and to Eileen Gray. An important collection of Badovici's documents are in the Centre Pompidou archives but only some have been made available to researchers. Another collection, in the possession of Renaud Barrès, is also inaccessible for the time being. It may be that answers to some of the questions posed in this article will emerge from these collections.
10. Le Corbusier's 'agendas' of the 1920s and 1930s were not conventional diaries. Simple notebooks, they were filled in from the front with meetings and from the back with sketches and notes for lectures or articles. To date the pages require a good knowledge of Le Corbusier's correspondence and movements.
11. Frances Stonor Saunders, 'The House that Eileen Built', *Guardian* Weekend, 21 July 2001, pp 31–37, p 33. Saunders went on to claim that Gray and Badovici published *L'Architecture vivante* together, which is certainly untrue.
12. See interview by Mo Teitelbaum, 'Lady of the Rue Bonaparte', *Sunday Times* Magazine, 22 June 1975, pp 28–33. Teitelbaum paraphrases Gray: 'It was in that house by the sea that she put into practise her humanistic approach to architecture, for which Le Corbusier was to applaud her, to become her friend. 'Yes we were good friends, but we saw so little of each other, you know. He was always travelling … all over the world.' In this interview Gray made no mention of her discontent with Le Corbusier's paintings. Nor did she mention them in the brief interview that she gave to Charlotte Benton and myself in 1974.
13. NMIEG 2004-, 75
14. AAD/1980/9/2.
15. Albert Boeken sent a manuscript review of her work at the 1923 Salon d'Automne to Gray on 5 January 1924 (V&A) and there is a clipping by G de Pawlowski of the Salon d'Automne of 1922 noting some pieces of furniture, carpets and lacquerwork by Gray. Pawlowski was highly critical of Le Corbusier's diorama of the *Cité contemporaine de trois millions d'habitants* at the same exhibition, calling it the 'ruins of Palmyra in the plain'.
16. Note on a scrap of paper referring to the Philips Pavilion, 'Elen Grey 21 rue Bonaparte', FLC E2(3)481.
17. Badovici, seven-page manuscript (GRI 880412, box 1, 3ms, folder II notes nd, and also in typescript in the V&A archive. Waldemar George, 'Le 14e Salon des artistes décorateurs', Ère Nouvelle, 8 May 1923. Louis Vauxcelles, 'La vie artistique', *L'Amour de l'Art*, November 1920, pp 243–45.
18. Le Corbusier and André Maurois, *Des Canons, Des Munitions? Merci! Des Logis… svp Monographie Du 'Pavillon Des Temps Nouveaux', À l'Exposition Internationale, 'Art Et Technique', De Paris 1937*, collection de l'équipement de la civilisation machiniste (Boulogne: *L'Architecture d'Aujourd'hui*, 1938), p 96. The fact that Le Corbusier agreed to place Gray's magnificent model and drawings of this project alongside plans by members of CIAM no doubt reflects the intervention of Badovici, but also the appropriateness of the subject to the political theme of the pavilion. The introduction of paid holidays by the Front Populaire was an extremely popular move. See Caroline Constant and Jacques Bosser, *Eileen Gray* (London: Phaidon, 2003), pp 175–77.
19. FLC E1(5)7.
20. FLC E1(05)10.
21. FLC E1(5)11.
22. FLC E1(5)12 and FLC E1(5)13.
23. GRI, box 1, 3ms folder notebooks, nd; subfolder notebook no 3, green notebook, 'Pax Labor'.
24. In 1925 Badovici published the Ozenfant studio, the villa 'Le Lac' at Corseaux and the Esprit Nouveau Pavilion and in 1926 the Ternisien studio and the villas La Roche-Jeanneret, but these issues were dominated by the work of the Dutch, German and Russian modernists (*L'Architecture vivante*, 1925 (I), pp 20–22 and 1925 (II) pp 30–32 and 37–39, 1926 (II) pp 14–18).
25. Jean Badovici and Raoul Dufy, *Intérieurs Français* (Paris: Éditions Albert Morancé, 1925). Gray annotated two of the *pochoir* coloured plates of her furniture in her edition of this album, complaining of mis-representations in the colouring (NMIEG).
26. Letter of 14 December 1934 (FLC E1(5)16, addressed to 'cher Bado' and inviting him to dinner).
27. In some lecture notes dated 8 January 1934, Le Corbusier mentions 'Badovici, Vézelay' as a topic (FLC B2(11)12). The first definite document is from 8 June 1935 – a telegram in which Le Corbusier announces his imminent arrival by car to Vézelay (FLC E1(5)18).
28. From a set of pencil notes, of which one refers to the date 1934 and another refers to Le Corbusier's accident in August 1938 (GRI, box 1, 3ms, II misc notes, nd).
29. As late as 16 July 1928 Le Corbusier still addresses him as '*Monsieur Badovici*' and signs formally ('*Croyez, cher monsieur à mes meilleurs sentiments*'

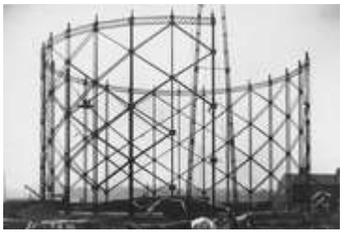
and with his real name rather than 'Corbu' (FLC E1(05)10).

30. GRI, box 6.
31. GRI, box 1, 3ms, folder notebooks, nd; subfolder, notebook no 4, loose items.
32. GRI, box 1, 3ms, notebooks, nd, notebook no 2, loose items.
33. GRI, box 6.
34. *Ibid*. The first letter in the sequence is addressed to '*mademoiselle, ou Jacqueline tout court*'. The correspondence must date from 1928–30 because in one letter he offers to send her '*un beau livre que j'ai publié il y a 4 ans tout en couleur*'. This book must be the album, *Intérieurs Français*, published by Albert Morancé in 1925.
35. GRI, box 6.
36. GRI, box 6.
37. *Ibid*.
38. *Ibid*.
39. This phrase was repeated in letters to Lia, probably August 1929 (GRI, box 6) and to Jacqueline.
40. GRI, box 9.
41. GRI, box 6.
42. Le Corbusier to Badovici, 8 July 1949 (FLC E1(5)74).
43. Renaud Barrès, Christian Derouet, Elise Koering and Cloé Pitiot have all had access to documents I have not seen, and we can expect publications from them which will certainly go further than these preliminary notes. I have only had access to those documents in the V&A, the Museum of Ireland and the Bibliothèque Kandinsky in the Centre Georges Pompidou that have been put online and the Badovici collection at the Getty Research Institute. Christian Derouet, consultant to the Musée Christian Zervos at Vézelay, organised an important exhibition and catalogue. See Christian Derouet, *Le Corbusier à Vézelay* (Vézelay: Musée Zervos, Fondation Le Corbusieer, 2015).
44. One letter, from Badovici in Roquebrune to Olga, is dated 14 April 1928 (CGP 1_47).
45. Christian Derouet, *op cit*, p 7.
46. See the letter from one of Badovici's relatives, probably his uncle Iorgu, to Badovici on 25 March 1928, referring to the sale of the family home, after a legal case to eject a sitting tenant (GRI, box 6). The house was sold for 1,250,000 lei, with perhaps some deductions. I am deeply indebted to Stefania Kenley for translating and interpreting the Badovici correspondence in Romanian.
47. Gray is not consistent with the writing of the number 7; see for instance her sketch for the de Stijl table (V&A, 9-172-2). But in most of her drawings, the sevens are unbarred (eg, plan for camping unit, NMIEG, 2000-96) or her letter of 22 March 1943 (NMIEG, 2000-193-001). It is less clear whether she ever used the continental comma for the decimal point.
48. Note the J ('Jacqueline' in the letter, 'jardin' in the sketch), the B ('bravo' in the letter, 'bar' in the sketch) and the D ('Daudet' in the letter, 'du' and 'divan in the sketch).
49. Tim Benton, 'The Villa De Mandrot and the Place of the Imagination', in Michel Richard (ed), *Massilia* (Marseille: Éditions Imbernon, 2011), pp 92–105.
50. Le Corbusier, *The Radiant City: Elements of a Doctrine of Urbanism to Be Used as the Basis of Our Machine-Age Civilisation* (New York, NY: Orion Press, 1967), pp 54–55.
51. Romain Rolland and Jean Lacoste, *Journal de Vézelay 1938–1944* (Paris: Bartillat, 2013).
52. I would like to thank Cloé Pitiot for first drawing my attention to this text.
53. Eileen Gray and Jean Badovici, 'E-1027: Maison en Bord de Mer', *L'Architecture vivante*, 1929, pp 11–26 (reprinted, Marseille: Éditions Imbernon, 2006).
54. GRI, box 2, copy 1.
55. *L'Architecture vivante*, 1929, *op cit*.
56. GRI, box 2, copy 1.
57. Peter Adam, *Eileen Gray, Architect/Designer: A Biography* (London: Thames & Hudson, revised edition 2000), p 309. Adam does not give the source.
58. Le Corbusier. *Almanach D'Architecture Moderne* (Paris: G Crès & cie, 1925), p 5.
59. Peter Adam, *Eileen Gray: Architect/Designer – A Biography* (London: Thames & Hudson, 2000), p 256.
60. The purchase of the site for Tempe à Pailla dates from 30 March 1926 (information generously supplied by Renaud Barrès). On 24 April Gray purchased three adjoining plots in order to protect the view.
61. Caroline Constant and Jacques Bosser, *op cit*, p 146. Adam says that Gray continued to live in E-1027 until 1932 (Peter Adam, *op cit*, p 117).
62. They also travelled together to Peru (1929), Stuttgart (1927), Berlin (1931), and Mexico and New York (1934). See Peter Adam, *op cit*, pp 114–15 and 128.
63. A draft of the contract for the sale of land for Tempe à Pailla is in Badovici's hand (GRI, box 6).
64. For example, letter from Gray to the secretary of the Admiralty, 30 April 1939 (GRI, box 6).
65. Beatriz Colomina's writing on E-1027, continually reprinted, is taken as gospel and therefore no longer queried or checked. For instance, the Wikipedia page on Jean Badovici cites her in asserting that Le Corbusier was not 'granted full authorisation' for painting his murals in E-1027, which is untrue as they were in fact the result of a direct commission. For a more general text on Colomina's writing and scholarship, see Sylvia Lavin, 'Colomina's Web: Reply to Beatriz Colomina', in Diana Agrest, Patricia Conway and Leslie Kanes Weisman, *op cit*, pp 183–90, in which Lavin writes of the 'extraordinary qualities of Colomina's cloth', and 'the huge, almost promiscuous number of threads that she has joined together in their making'.
66. I have relied on Jennifer Goff's biography, although I differ slightly on some questions of interpretation. Equally important is the exhibition catalogue – Cloé Pitiot and Jennifer Laurent, *Eileen Gray* (Paris: Centre Pompidou, 2013) and Caroline Constant, *Eileen Gray*, *op cit*.
67. Tim Benton, *Le Corbusier Peintre à Cap Martin* (Paris: Éditions du Patrimoine, 2015). See also Christopher Eric Morgan Pearson, 'Integrations of Art and Architecture in the Work of Le Corbusier's Theory and Practice from Ornamentalism to the "Synthesis of the Major Arts",' PhD, Stanford University, 1995.
68. Gray kept this letter and donated it to the Fondation Le Corbusier after his death (FLC E2(3)478).
69. Letter from Le Corbusier to Jean Badovici, *c* 6 October 1938 (FLC E1(5)111).
70. Jean Badovici letter to Le Corbusier, July 1941 (FLC E1(5)49). *Baraque* (shack) is the word used by Le Corbusier, Badovici and Gray herself to describe E-1027.
71. Letter from Yvonne to Le Corbusier, 6 January 1942 (FLC R1(12)177).
72. There are eight murals, if you count the painting of the pebble next to the mural under the *pilotis*.
73. Tim Benton, *op cit*.
74. Le Corbusier, *Oeuvre complète, 1938–1946* (Zurich: Artemis, 1946), pp 158–61, Le Corbusier, *New World of Space* (New York, NY: Reynal & Hitchcock, 1948); André Bloc (ed), 'Le Corbusier (Numéro hors série)', *L'Architecture d'Aujourd'hui* 19 (April 1948) and Stamo Papadaki and Joseph Hudnut, *Le Corbusier Architect, Painter, Writer* (New York, NY: Macmillan, 1948).
75. Le Corbusier, *op cit*, p 158. See also 'The mural paintings brightened only the most unpleasing walls of the house. The "good walls" remained white.' Le Corbusier, *New World of Space*, *op cit*, p 99.
76. Tim Benton, *op cit*, pp 78–82.
77. Samir Rafi, 'Le Corbusier et les femmes d'Alger', *Revue d'histoire et de la civilisation du Maghreb* (January 1968), pp 50–66. See also Stanislaus von Moos, 'Les femmes d'Alger', in Danièle Pauly (ed), *Le Corbusier et la Méditerranée* (Marseille: Parenthèse, 1987), pp 191–209.
78. Alex Gerber, who wrote a thesis on Le Corbusier's trips to Algeria from 1931 onwards, knew Rafi and backed up his claim that he had a continuous correspondence with Le Corbusier in the 1960s. See Alex Gerber, 'L'Algérie de Le Corbusier: Les Voyages de 1931', thesis, EPFL, Lausanne, 1993, p 46.
79. FLC E2(20)4 and E2(20)7-001-009. The only other record of Samir Rafi's name in the Fondation Le Corbusier is a pen note by Le Corbusier following up the interview on purism, explaining the joint authorship of the book *La Peinture Moderne* (FLC E2(20)16).
80. FLC E2(20)381-385.
81. FLC E2(20)7-006.
82. FLC T2(05)18. In a manuscript note, Le Corbusier says only that some of the dates of his paintings published in *L'Esprit Nouveau* were wrong and offers some information on *La Peinture Moderne*, explaining that all the chapters were written together with Ozenfant, except for chapter IX on purism, written by Ozenfant (E2(20)16, undated).
83. Danièle Pauly, *Le Corbusier Albums D'Afrique du Nord* (Brussels: Fondation Le Corbusier et AAM Editions, 2013). The 1931 album is reproduced on pp 47–107, the 1933 album on pp 109–209.
84. Samir Rafi, *op cit*, p 52.
85. *Ibid*.
86. *Ibid*, p 53
87. Naïma Jornod, Jean-Pierre Jornod and Le Corbusier, *Le Corbusier (Charles Edouard Jeanneret): Catalogue Raisonné de L'Oeuvre Peint* (Milan: Skira, 2005), vol 1, p 421.
88. Danièle Pauly, *Le Corbusier et le dessin* (Paris: Fage éditions, 2015), pp 214–18.
89. *Ibid*, pp 202–07.
90. Danièle Pauly, *Le Corbusier, Le Jeu du Dessin* (Paris: Éditions Hazan, 2015), pp 84–91.
91. I would like to thank Danièle Pauly for her expert help with these drawings.
92. Naïma Jornod, Jean-Pierre Jornod and Le Corbusier, *op cit*, p 196 (FLC 455). See also Tim Benton, *op cit*, pp 62–67. Another version of this composition is Jornod cat 198 (FLC 376).
93. FLC 434, 1430, 435, 348, 3067, 1196 and a pen sketch in a private collection. To these should be added FLC 142, 1403, 6152. FLC 3618 is probably a later study for the painting 'Trois figures Bado' of 1943, along with FLC 20 and 3915.
94. See Tim Benton, *LC Foto: Le Corbusier, Secret Photographer* (Baden: Lars Müller, 2013).
95. Beatriz Colomina, 'Battle Lines: E-1027', in Francesca Hughes, *op cit*, p 19.
96. See for example the sketches FLC 114, 2564 and 1023 copied from coloured postcards, discussed in Danièle Pauly, *Le Corbusier et le Dessin ce Labeur Secret*, *op cit*, pp 22629. See also Stanislaus von Moos, 'Le Corbusier as Painter', *Oppositions* 19/20 (1980), p 91.
97. Beatriz Colomina, in Francesca Hughes, *op cit*, p 19.
98. Samir Rafi, *op cit*, p 59.
99. See Tim Benton, *LC Foto*, *op cit*, pp 386–88 and 398–99.
100. The monochrome mural painting under the *pilotis* of E-1027 does not have an official title. Le Corbusier referred to it as a *s'graffitte*, although it did not use this technique.
101. Beatriz Colomina, in Francesca Hughes, *op cit*, p 17.
102. Eileen Gray sold the house Tempe à Pailla at Castellar, near Menton, to the English artist Graham Sutherland in 1954.
103. Badovici published a drawing by Le Corbusier of the composition of the mural in his album *Oeuvre Plastique Peintures et Dessins – Architecture* (Paris: A Morancé, variously dated 1938 and 1939).
104. Stanislaus von Moos, who accepts the credibility of Rafi's evidence, still acknowledges that 'some of the drawings illustrated by Rafi … are fakes' – Stanislaus von Moos, *Le Corbusier: Elements of a Synthesis* (Rotterdam: 010, 2009), p 351, n 42.
105. Abdel Razeq Okasha, *Memories and Works of Samir Rafi* (Cairo: GEBO, 2013). See also the review by Rania Khallaf in *Al Ahram* weekly, 3–9 January 2013, http://weekly.ahram.org.eg/News/813.aspx.
106. *Ibid.*
107. Beatriz Colomina, in Francesca Hughes, *op cit*, pp 21–22.
108. General Pierre Bosquet, commenting on the disastrous charge of the English light cavalry during the Battle of Balaclava in the Crimean War, 1854: '*C'est magnifique, mais ce n'est pas la guerrre: c'est de la folie*.'

Le Corbusier,
16mm film stills,
E-1027, 1938
© ADAGP /
Fondation Le Corbusier,
Paris

What's Inside a Gasholder?

Andrew Crompton



Hendon, London

The interesting ones were the original British type, with an exposed frame and a telescopic cylinder that went up and down. The gasworks they belonged to have all been demolished, although a few gasholders – like the 'Siamese Triplet' at King's Cross, or the grade II-listed Gasholder I at the Oval – have been spared. None of them actually work any longer. Why, then, should we suffer any kind of anxiety about pulling them down?

Holders were air-tight containers designed to store highly poisonous coal gas, which made their interiors some of the most inaccessible and hazardous spaces imaginable. If you'd ever encountered an active one, you would have found that its central cylinder sat within a basin of water. This water continued inside the cylinder, creating a deep pool upon which – you might be surprised to learn – a small boat would be moored, just like Gollum's underground lake in Tolkein's *The Hobbit*. In the old days, gasholders were inspected internally every 20 years or so. First the holder would be lowered, though never completely, and then the gas inside purged before an engineer with a torch climbed through an air-tight hatch. At that time, the engineer would have been a man and so it is unlikely that any woman has ever been inside a working gasholder. Breathing apparatus might be used in an emergency. The boat, quite naturally, was used to get around. Sometimes engineers turned up bodies and discarded firearms that had worked their way inside from the outer basin. But other things also lurked in the dark.



Kennington Oval, London



Sevenoaks, Kent

Gaythorn Number IV, an early Victorian gasholder in Manchester, was decommissioned in 1986. The water inside was drained before its columns, in the stretched Tuscan order typical of a holder's frame, were deliberately shoved in to smash its dome. Photographs of this decommissioning in the National Gas Archive in Warrington reveal a sort of hill inside the gasholder, similar to the cone at the bottom of a wine bottle. Known as a 'dumpling', it formed an island in the centre of the pool. The Gaythorn cylinder was so light it took only eight inches of water pressure to lift it into the air. Gasholders like these were soft machines similar to airships, and were spoken of in aerial terms. Prior to its destruction it had stayed aloft for 125 years. The domed crown was its sky. It bounced if you walked on it, and in icy weather you had to tread carefully. An empty holder was said to have 'landed' – something that was hardly ever attempted because, like an airship, it would buckle without any gas pushing it up. As a precaution, a prop was therefore placed on the centre of the island of every gasholder, with the water gently lapping around it, to support the dome if it ever came down.



Gaythorn, Manchester

When Belfast Gasworks closed in 1979 the coal gas industry reached the last of its many ends. Personal knowledge of the industry is now vanishing and there might already be no one left alive to tell of rowing by torchlight to inspect the thing that stood waiting to hold up the sky in the middle of an island in a lake. Often these props were made of concrete, a few were wrought-iron posts, as at

Gaythorn, but the oldest were stacks of pitch pine – Ezekiel 41:22, 'a wooden altar three cubits high and two cubits square', comes to mind.

Gaslight was the master invention of the nineteenth century, the greatest breakthrough since oil lamps were invented in the Palaeolithic era. Prior to this, the best light had come from whale oil lamps or candles. Gaslight immediately made these look feeble. Its success drove down the price of spermaceti oil and saved the whale from an early extinction at the hands of whalers like Ahab, just as nitrocellulose later saved the elephant from billiards.

It did not take long for every town in Britain to have its own gasworks. These followed a standard layout, with a wall and a gate behind which a community of engineers, scientists, clerks, salesmen and three shifts of workers distilled coal into a solid, a liquid and a gas. The solid residue this process produced, foamed like an Aero bar, was coke. The liquor was sold as raw material for chemicals, dyes and drugs. And the gas, a mixture of hydrogen and carbon monoxide, was stored in holders that rose with the sun then sank when the lamplighters went to work. All this was overseen from adjacent laboratories where chemists in white coats analysed, calculated and controlled. These scientists knew their coals and were taught to be cautious, because if the gas supply failed then not only would the lights go out but, even worse, poisonous gas could escape. Holders, therefore, might go up and down but they must never, ever land.



Croydon, London

Gasholders all look roughly square from the side because a cylinder as high as it is wide has the greatest volume-to-surface-area ratio of any shape that can collapse by sliding along itself. In other words, their design is the answer to a question in geometry. They were not meant to look like temples but they did. In 1853 John Ruskin noticed a recent one from his bedroom window. He knew the enemy when he saw it. This is from the preface to *The Stones of Venice*: 'There is not the remotest possibility of any success being obtained in any of the arts by a nation which thus delights itself in the defilement and degradation of all the best gifts of its God; which mimics the architecture of Christians to promote the trade of poisoners.'



Bow Common, London

Croydon Gasworks take that! Of course, the irony is that many of those who read Ruskin's rebuke would have done so by gaslight. If you could travel back in time you would see gaslight as yellow, but the Victorians saw it as brilliant white, and so would you too when, after half an hour or so, your eyes had adapted to it. Gaslight was the sign of civilisation itself, at least until the electric lightbulb appeared. Even then, gas gave electricity a run for its money – the invention of the gas mantle in 1890 increased its brightness and it survived well into the twentieth century.

Jane Austen wrote by candlelight, Dickens by naked flame gas and Sherlock Holmes by gas mantle, though you would not know this from reading them. The light itself is never described and no novel ever visits a gasworks. Gas is invisible in more ways than one and its effects were never to be spoken of. It was taboo in the gas industry to mention suicide. Who minded that every street in the country was dug up, that gas caused explosions, that it was smelly, that gas mantles were radioactive or that gasworks generated horrid toxic waste. Early gas also contained so much sulphur that when it burnt it produced sulphuric acid whichrotted clothes. Yet all this did not stop people demanding the light it provided. And apart from Ruskin, not many people seemed bothered. Mostly they just laughed at the gas industry, as in the song *The Gas Man Cometh* by











Linacre, Liverpool

Overleaf: Bow Common, London





Flanders & Swann ('Twas on a Monday morning the gas man came to call / The gas tap wouldn't turn, I wasn't getting gas at all / He tore out all the skirting boards to try and find the main / And I had to call a carpenter to put them back again'). Nor did these drawbacks stop the technology spreading to Europe, South America, Hong Kong, Cape Town, Bombay, Delhi and Australia. A well-known pair of holders still stand in Venice next door to the Biblioteca San Francesco della Vigna. In Rome, between 1852 and 1910, a cluster stood in the Circus Maximus. You can even see them in plate XXXV of Rodolfo Lanciani's *Forma Urbis Romae*.

In Britain the gas network has been spreading underground for 200 years and is now the largest single object in the UK. How strange to think that no one person has ever set eyes on more than the tiniest part of it. For safety reasons gas pipes are completely buried, with no manholes like those for water or electricity. All you can ever find are small signs to warn excavators and, out in the countryside, little Day-Glo red roofs on poles. These wayside shrines mark the path of high-pressure mains through which gas, which today is methane, flows at about 25 miles per hour – hidden streams of energy connecting towns in long straight lines.





Linacre, Liverpool

Wherever the gas network does come to the surface there will be a gas meter. These are things we avoid touching or even looking at. Instead, an inspector reads it on our behalf and at the same time surreptitiously checks its seals to see that we have not tampered with it. Meters are delicate low-power devices that tick over using only the energy generated by the flow of the gas itself. Its metal case is a vessel that fills with gas and in the process compresses a set of bellows making the whole meter function, in the same way an iron lung makes a paralysed patient exhale. When they are exhausted a valve switches the flow back into the bellows, thereby expelling the gas into the body of the meter. These measured breaths are counted by clockwork. It therefore follows that with its bellows, levers and gears, the device that a gas meter most closely resembles is a cuckoo clock.





Linacre, Liverpool

The more one looks at the paraphernalia of gas the odder things get. One would like to ask: what exactly is this single biggest thing that has spread among us? Perhaps the reason we do not see it clearly is because it is part of our environment. Marshall McLuhan put it this way: 'Environments are invisible. Their ground rules, pervasive structures and overall patterns elude easy perception.' Indeed, we are inside gas like we are inside our clothes, but with this difference – the pervasive structure of coal gas belongs to Victorian society, not our own, so the social structures and ideas embedded in coal gas are now beginning to look conspicuously odd, just as nineteenth-century dress would look out of place today. Traditionally, inside an oil lamp there was a genie. Inside a gas light, inside the entire gas industry, was something no less peculiar. Let's test this peculiarity by taking a sideways look at how coal gas is made.



Llanidloes, Wales

In darkness miners harvest the carbonised remains of an extinct tree which is immolated on an everlasting fire supervised by figures in white coats who account for all parts of the sacrifice in the correct manner. The vital product, the apotheosis of coal, is stored within a darkened chamber inside a circular temple that rises on an island in a lake. In the middle of that temple is an altar ready to hold up the sky should it ever fall. The law demands that the sky must never fall or people will die. The fruits of this process travel in long underground lines of power to every household where a tin god ticks in the lobby. This is a smelly fetish to which we are bound by contract



Sevenoaks, Kent

and which is attended by a uniformed official who once a quarter sees that the householder is solvent and collects a tithe. The gas man cometh and we laugh at him as we laugh at the vicar. Thus light and death enter the modern home.

In the coal gas industry, society and technology are enmeshed in a vivid example of what Bruno Latour calls 'symmetrical anthropology'. A whole mythology is deposited in our language and, it ought to be added, in our material culture as well. So perhaps Ruskin was right after all, and it really was a temple he saw from his window, and not a Christian one either.

So what's inside a gasholder? Gas, and other things. Gasholders were leviathans that rose out of dark pools whose huge interiors contained an internal landing device similar in function to an aircraft undercarriage which stood untouched, unseen and unused for generations. It is easy to invest them with numinous significance. Images of their demolition therefore show both the destruction of a storage vessel and the desecration of an altar.

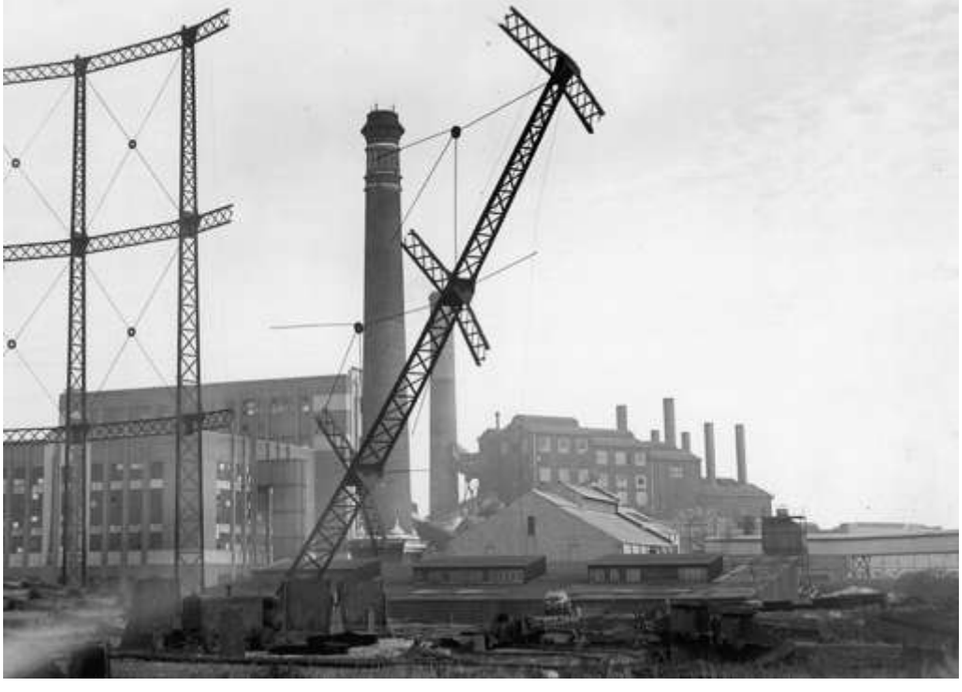
In 2016 the four remaining holders at King's Cross were reworked. Three of them are so close together that their frames kiss each other. This famous triplet has been converted into flats; one is reminded of how housing was similarly slotted into the Avebury Henge complex. The fate of the fourth survivor, King's Cross Number 8, is perhaps even stranger. It has been reconfigured as Gasholder Park and the circular space inside is now filled in with a lawn. It is the wrong shape for croquet and too small for bowls. When I stepped towards its centre a uniformed attendant immediately appeared and told me to clear off. Theo Crosby once wrote that grass is the enemy of cities, and instinctively one agrees with him. All the same, laying down some turf was probably the right thing to do here. The important thing is that the cone and the thing in the middle have vanished as anything remotely authentic might attract the wrong sort of visitor and obviously nobody wants that to happen.



Fulham, London



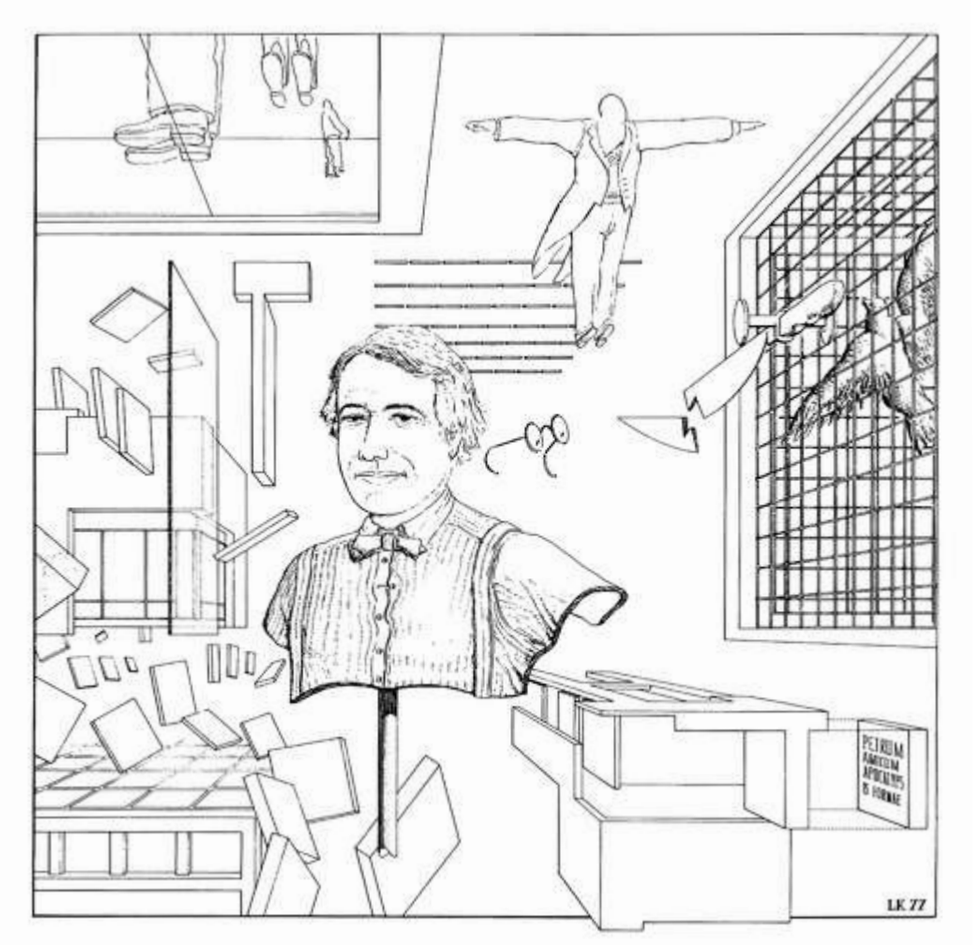
Stapleton Road, Bristol



Croydon, London

Thanks to Greg Keefe and Kerry Moore,
National Gas Archive, Warrington
All images © National Gas Archive, Warrington

Peter Eisenman *in conversation with* Thomas Weaver



The architect Peter Eisenman has frankly lived a life too long and involved for just one conversation. Born in Newark, New Jersey in 1932, he studied architecture at Cornell University before volunteering for the Korean War – compelled by a somewhat deluded sense of military duty he now ascribes to having read Konstantin Simonov's *Days and Nights* as a child. After being demobbed, he worked for Percival Goodman and, briefly, Walter Gropius before consciously abandoning a life dedicated solely to architectural practice and signing up for a masters at Columbia University and a PhD at the University of Cambridge. There he came under the spectral influence of Colin Rowe, who fanned his already growing sense of architecture as an intellectual discipline by historicising it through the heroism of both a Palladian and modern narrative. Back in the US at Princeton in 1963 he taught for several more years and then set up his Institute for Architecture and Urban Studies in New York, part school, part club, part debating society, part publisher, part architectural frat house (perhaps Eisenman's definitive architectural type). Through his institute he then continued to teach, exhibit and publish architecture, together with designing a succession of private houses, each more cerebral than the one before.

In 1977 the 45-year-old Eisenman would be immortalised in Léon Krier's famous portrait – in many ways, still recognisably the Eisenman we know today. Although he would go on to live multiple other lives – the deconstructivist, the early adopter of digital design, the architect of both a memorial to the holocaust and an entire City of Culture, all the while writing and teaching (at Harvard, Princeton, again, the Cooper Union and currently at Yale) – for this particular conversation the period that ends with Krier's teasing portrait seems more than long enough. It also mirrors the timeframe of an excellent recent publication on the architect, *By Other Means*, edited by Mathew Ford and with a fine essay by Jeffrey Kipnis.

Léon Krier,
portrait of Peter Eisenman, 1977
© Léon Krier

I met with Eisenman in April this year over two morning sessions at his office on West 25th Street, in the shadow of Daniel Burnham's Flatiron building and the latest crop of pencil towers that now skewer the New York skyline. Eisenman was preparing his next class at Yale on the latest of his many theoretical curiosities, an architectural reading of Theodor Adorno and Edward Said on late-style, but he still had no problem whatsoever talking with characteristic intelligence and candour about his own early style.—*Thomas Weaver*

TW *Peter, I want to begin with the visual prompt of Léon Krier's famous, but still great, portrait of you. Drawn in 1977, it shows your head and upper torso, dressed in your signature striped shirt, with bow-tie and braces, and with your round wire-framed spectacles flying off to the side. Around you, also floating in space, Krier depicts other characteristically Eisenmanian elements – columns and load-bearing walls, grids and frames – all arranged within their own single-point perspectival box. In the bottom right-hand corner he writes, in cod Latin,* 'Petrum Amicum, Apocalyps is Formae'. *Now, to me at least, it seems as if this drawing represents the endpoint of the first phase of your career and the completion of the making of Peter Eisenman. In your house projects from this same period, you famously suggested that the drawings* are *the architecture and that, as built, the houses themselves are merely a representation of this architecture…*

PE I still believe that now.

TW *… If we adopt a similar logic here, we could perhaps argue that the drawing of the architect* is *the architect, both a construction* and *a representation. And so what I'd like to do with this conversation is to unpack this construction, and see how it formulated itself (whether apocalyptic or not). A year after Krier made this portrait you were very public about the fact that you were entering psychoanalysis, which presumably meant you, too, were ready to unpack this same thing. And so if we assume the analytical mandate, let's start by going back to your childhood and family. Tell me about your mother, Peter.*

PE My mother came from a wealthy, upper-middle-class Jewish family, the Lowys – the same family as Richard Meier, who is a second cousin of mine. Her grandfather had left his hometown Strasbourg in 1848 – the year of the revolution that established France's Second Republic – and settled in Newark, New Jersey. Already by then he was very wealthy and would apparently walk around the city in a top hat and carrying a cane. As a secular Jew he was even buried in Newark's gentile cemetery. His daughter married my maternal grandfather, David Heller, who was also very well-off, and worked as a developer, constructing the first apartment buildings in Newark's suburbs as well as lots of other developments along the eastern seaboard, in New York, Connecticut and Maine. I was very close to him as a boy. My love of sports really comes from him. Our weekly ritual was to sit in the bleachers together and watch the local ball game.

TW *Were you as close to your mother or father?*

PE To be honest, I don't remember much of them from this period. Other than my grandfather, the person closest to me was my maid, an African-American woman from Virginia named Frances. It was Frances who really raised me. She'd come to our house at six in the morning and leave at eight at night. But the really defining thing about my childhood was that as a young boy of four or five I had scarlet fever and pneumonia, which meant for long periods I was in an isolation ward.

TW *That's interesting. So as an architect your first memory is being alone in an empty all-white space.*

PE I can still picture my parents looking at me through the hospital window. It even got to the point where our family doctor advised my mother to take me to Florida because he thought I was not strong enough to survive the winter. I remember we drove the whole way, and stayed in Miami Beach from November 1937 through to February or March 1938 – long enough for me to be enrolled in the local nursery school on Collins Avenue. In the spring we drove back to the family home in East Orange, a suburb of Newark, quite distinct from the more salubrious South Orange, where my mother had spent her childhood.

TW *Hearing about all these little extravagances, Peter, I hadn't realised how posh you are.*

PE I hadn't realised it either! At that time I was just living in a kind of bubble. But you're right, my mother, especially, was very privileged. She was the first girl in her class to own a car, and she was also the first girl to take the Grand Tour – years later when I made my own way to Europe I used her steamer trunk. After France and Italy she went to New Jersey College for Women and then Cornell Summer School. She was really quite a catch for my father, who was more lower middle-class. His family had come over to America later, in the 1880s, from somewhere beyond the pale – on the border of the former East Germany, not quite Russian, nor Pole, nor Prussian. The name Eisenman derived from the fact that they were iron traders. The first real intellectual on that side of the family was my uncle Bill, who went to college at Ohio State in 1911 because it was the only school outside of New York that would accept Jews. He later worked for Pfizer and with Selman Waksman on a cure for polio. My father, in contrast, was expected to take over the family chicken farm in South Jersey, but after attending Rutgers – which was quite anti-establishment in the 1920s – he developed an interest in left-oriented politics, even though he, too, would eventually become a chemist, working for the Hudson Bay Company and for various German and Canadian firms specialising in the treatment of hides. Like my uncle Bill, he was something of an intellectual. On my high school graduation he gave me two books: *Technics and Civilisation* by Lewis Mumford and Henry Adams' *Life of America*. He couldn't understand why I had no interest in reading them.

TW *Was home life quite bookish?*

PE It was, but I wasn't. I wanted nothing to do with all of that. I was just up in my room the whole time, inventing my own world. I even created a newspaper called the *Eisenman Eastern News Service*. I was a real nerd. Worse than that, I was a nothin'.

TW *So you're a slightly weird kid?*

PE More than slightly. I have to tell you something quite formative: in 1937 when I was just five years old I would go to high school football games *by myself*. My mother would take me across the street, give me a quarter for the price of admission, and I would run down into the concrete stadium. I knew exactly where I needed to go – which was on the visitor's side, not the home team, and I would sit there stoically every Saturday rooting for the away team. All the other kids in the neighbourhood would be running around together but I'd be there for hours watching the game, meditating. Actually, that's wrong, there were no thoughts in my head at all. I was just sitting there. The only thing I did collectively was swimming. I swam on the high school team and later I swam in college. I became quite preppy. I wore a sweater with a letter on the front.

TW *Was that important to your family – to be athletic?*

PE No, but it was important to me. I swam competitively from the age of seven until my second year at Cornell, when the coach said that I had to choose between swimming and architecture. For a long time swimming was my only claim to my being in the world.

TW *Let's go back to the house itself. Can you describe the family home?*

PE I should first explain a fundamental difference between my father and my mother. My father was raised in a rural area, on a farm, whereas my mother was resolutely suburban. My first years were spent in East Orange, although we also used to have a house on the Jersey shore, which we'd relocate to, lock, stock and barrel, every summer. But in 1940 my father said he wanted us to move out of suburbia, which he hated, and that my younger brother and I should be raised on a farm. So he bought a place in Colts Neck, central New Jersey, and we all moved in the fall of 1940. However, almost immediately my mother said she couldn't stand it and insisted we move back to the suburbs. She won out, and this time we relocated to the more upscale South Orange, my mother's hometown. Our place was at 222 Conway Court. I still remember the phone number: South Orange 242-79. The house itself was a very nondescript three-storey structure. Just like every other building in South Orange, or even like the majority of housing stock in the whole country, it had been built in the period between 1918 and 1929.

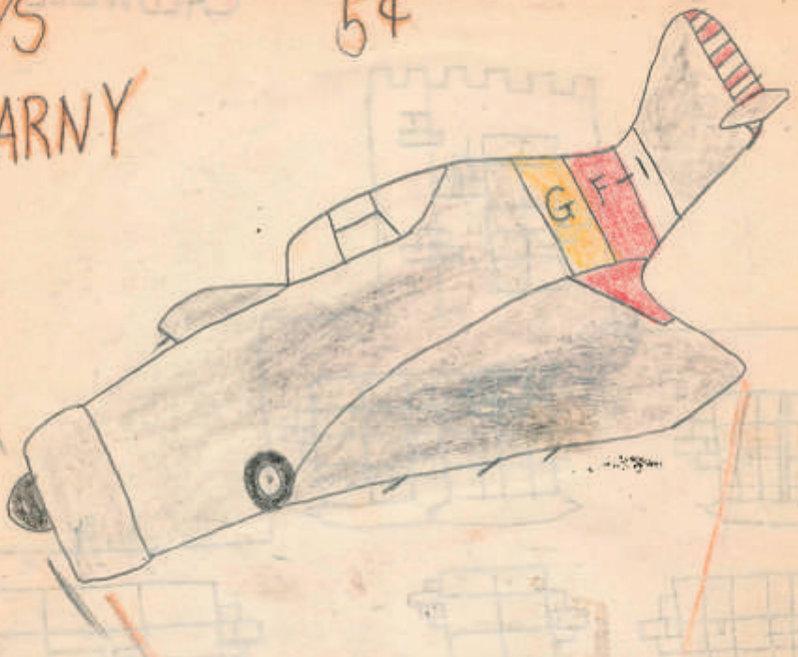
TW *Where did you go to school?*

PE I would walk up the hill to the local school, and then later I went to Columbia High, the same school my mother had attended.

DEC. 12, 1942

ALDWELL
VS
KEARNY

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On the first day of fourth grade, when I was eight years old, I had another formative experience (which my shrink tells me now was all my mother's fault). I was sent off to school in what were called knickerbockers, but when I got there I discovered that all the other kids were wearing long pants. I looked totally different and felt so humiliated. As soon as I got home I yelled at my mother, telling her she should have known. Thinking about it now, it was a really big mistake on her part. But at the same time I was still very childlike. The maid was still around, and every day she would make me either a baloney sandwich or a Velveeta cheese sandwich. That's all I would ever eat. I never experimented with anything. I was constantly being banished from the dining table to the kitchen because I refused to eat what was being served. In those suburban days in South Orange I actually saw very little of my parents. My mother spent all her time playing bridge, gin rummy and mahjong with her friends, and my father was always at work in New York.

TW *Did your parents have a loving relationship?*

PE No, I don't think they did. But they did travel well. They would fly off on vacation by themselves to Frankfurt, Montreal or Mexico City. In this sense they were far more worldly than their suburban friends. They'd stay in the very best hotels and eat at the finest restaurants.

TW *And did they do culture? Did they visit museums and look at art?*

PE My mother never engaged with culture. She wasn't really interested in anything other than her own being. My father was interested in political culture, but there was nothing artful about their shared world. As an upper-middle-class Jewish couple they were also very secular. I was never bar mitzvahed. We only went to services twice a year, for High Holy Days, but these occasions were more social than theological. The front seats were reserved for us because my grandfather had founded the congregation of German Jews and had built the synagogue (I remember Richard Meier's family would be sitting one row behind us). My mother would always hang back outside until just before the service was about to begin and then would march proudly up to the front. At the end we would all sing *God Bless America* and then march back out again. She really was an awful snob. Later, whenever I brought one of my friends back home, she would deliberately mispronounce their names. For example, when I introduced Bob Slutzky she said, 'Slut-ky? I wonder what kind of name that is. Refugee, probably.' It used to drive me crazy. At around that time I remember cornering my father one evening and saying I had something really important to tell him. 'I hate my mother', I said. He replied, 'I understand, but don't ever say that again.'

TW *At what point did you start thinking about escaping this world? Was it when you went off to Cornell?*

PE My move to Cornell was actually very fortuitous. It all began with my younger brother Robert, who was a stutterer. For a number of years he used to see a famous psychoanalyst in New York called Smiley Blanton, who had been one of Freud's patients in Vienna. Smiley interviewed me and my parents several times to talk about my brother's ability to deal with stuttering. In the small talk during one of these interviews my father mentioned to him that I'd soon be going away to college to Rutgers. Smiley thought that I was too delicate a person to go to a state university. I had actually already applied to Harvard. My cousin George was at Harvard Medical School. He'd married a minister's daughter and was a champion pole vaulter. To me, George was the model of how to live a life. So I applied to Harvard, even though psychologically and culturally I wasn't up to it, and didn't get in. Rutgers was the backup plan, but Smiley suggested I try Cornell instead. I applied and was accepted. On the first day my parents drove me up there and dropped me off outside the dormitory. I soon met my roommate, who had been to Andover, and the whole of the college was full of fraternities and WASP kids who couldn't get into Harvard, Yale or Princeton.

TW *But you like a little bit of that, no?*

PE Oh, I liked it a lot. Or rather, I came to like it a lot.

TW *Did you immediately begin with the idea of studying architecture?*

PE I had no idea what I should study. My father said I had to major in chemistry. So in that first year I was taking six hours of German, chemistry and calculus, and I was failing. The only thing I was succeeding at was swimming. As a freshman, I wasn't allowed to be on varsity, but it looked like I had a big swimming career ahead of me. But I was so disinterested in my academic courses that I was on probation. I went to see my dorm counsellor, an upper classman named Bill Trautman, a nice, responsible guy who was studying architecture. I'd always loved drawing and making models as a kid, but boys in the late-1940s didn't take art in college because it was considered far too effeminate. Bill suggested I also try architecture, which immediately struck a chord. I then went to see the dean of the school of architecture, Tom Mackesey, and told him I wanted to transfer. He said he'd accept me, but only if I passed all my subjects. I remember back home during spring break telling my parents I wanted to be an architect. My father simply said, 'Is this another one of your jokes?' I told him I was serious. He agreed to keep paying my fees, but only if I did well after the first year. If I didn't he would pull me out. Not just out of Cornell, but college altogether. So back in Ithaca I started studying like crazy. The problem was German, which I was especially bad at. Next to me in my class there was a kid who was much smarter than me. And so in the final exam I asked him if I could copy half of his paper, and I'd take the other half myself. In the end, I got 50 per cent on his half and 10 per cent on my half and passed, just. It's the only time in my life I can say I consciously cheated, but to me it wasn't cheating; it was something that needed to be overcome because I was damn well gonna get into architecture. It was finally something I could aspire to.

Peter Eisenman, match programme for an imaginary high-school football game, featuring a Grumman F4F Wildcat flying over a stadium, 1942
Courtesy Peter Eisenman

TW *What seems interesting to me about this – especially in light of your later career – is that your understanding and appreciation of architecture is not pragmatic or technical but idealistic.*

PE No question. It had nothing to do with the reality of building. It was all about the fantasy of architecture. But it was a fantasy I was immediately good at – I did well in my first year of architecture, after summer school in Oregon to catch up on all my classes, and everybody was pleased, including me. It was the first time in my life I was an A student.

TW *Who were your teachers?*

PE In my second year I had a guy named Gerhard Kallmann, and in my third year I was taught by Paul Rudolph. I got a first mention – basically the highest grade – with a piece of Beaux-Arts-style copying of a Frank Lloyd Wright project. Later that year Rudolph was on my jury for another project to design a yacht club. When I heard this I again looked at Wright and did a version of his Yahara Boat Club. But Rudolph failed me – he said you can copy once but not twice. That was my big lesson from Paul Rudolph. So I had to take another summer session to catch up again. My thesis project in my fifth year was for a synagogue in West Caldwell, New Jersey. I can't tell you why I did a synagogue. It wasn't as if I was announcing my Jewishness, because there wasn't any Jewishness to announce. I guess it was because I'd heard they needed a synagogue and thought I could do it. Looking now at photographs of my model and drawings it looks heavily influenced by Erich Mendelsohn, but it did win me the number one design prize – the Charles Goodwin Sands Memorial Medal.

TW *But then you couldn't just walk into an architectural career because the Korean War got in the way.*

PE Three days after I graduated I was on a plane headed to Korea. But by then I was already a US Army lieutenant. The Korean War had started in 1950 and in order to avoid being

drafted immediately I joined the Reserve Officer's Training Corps. I knew I would have to go over there eventually, but I also knew there was a huge difference between going as a lieutenant or as a private.

TW *Warfare also seems to be one of the things that really interests you. I recently saw a drawing you produced as a kid in the early 1940s showing a US Wildcat fighter plane flying over a stadium – synthesising your great passions, sports, warfare and architecture – and I know you've read, and still read, lots of military novels and histories.*

PE It was clear to me as a child what war represented. It represented rationing – meat only once a week, and no trips in the car, because of gas rationing. But it also represented a world of tactics and strategies and heroism. I had a huge map of the Russian front on my bedroom wall. After the Russian victory at Stalingrad my father gave me a copy of *Days and Nights* by Konstantin Simonov – one of the great narratives of the Russian victory – which I did read, avidly. I realised then that the Russians were really the saviours of the Second World War. More than that, they saved civilisation. For me, therefore, war had nothing to do with the millions who were slaughtered. It was much more heroic. This delusion stayed with me throughout my early adulthood. And so by the end of my time at Cornell I actually volunteered for Korea. I *wanted* to be a soldier.

TW *And did you fight?*

PE When I first arrived I said I wanted to go to the frontline. And so I was stationed with an artillery battalion attached to an infantry regiment close to the DMZ on the northern border. But then a cable came in from headquarters saying they'd checked through all the personnel files and my particular skills were something they required back in Tokyo. They wanted me to be the eighth army swimming coach and the eighth army architect. Which was a big deal. But I wanted to be a frontline soldier, and so I went to my colonel, who was the battalion commander, and said, 'Sir, I respectfully request permission to stay with the unit.' No one could quite believe that anyone would actually turn down such a cushy job in Tokyo and want to stay in Korea. But the colonel loved this, and I became his pet.

TW *But wasn't it a bit hairy on the frontline? Weren't you afraid?*

PE Evidently, yes. It really affected us all psychologically, and at night we would be screaming out in our dreams. We were stationed on the side of a hill, monitoring the border. Once a month each officer had to walk the perimeter for 24 hours. I realised then that if there was any kind of attack I was expendable. We dealt with our fears by drinking. Each night we'd finish off a bottle of Gilbey's gin. We'd get completely blotto. Two years of that and I was ready to get the hell out of there. After being demobbed, most of the guys went back to the US and to their wives and girlfriends, but there were two other single guys out there from Yale who I became close to – Terry Williams and Rodney Wagner. Together we saved up all our leave, giving us two months to do whatever we liked. I planned the whole thing, using the military supply routes that each week flew from Tokyo through Manilla, Saigon, Bangkok, Calcutta and Delhi. We stopped off at all these places. We stayed in fancy hotels, and got driven around in official cars (I think Rodney was actually in the CIA – hence the preferential treatment). We explored Nam Penh, we went to Angkor Wat, we went skiing in Shimla where Rudyard Kipling had skied, and we really had a wild time.

TW *Did you meet any nice women?*

PE Lots, but not the kind of girls you'd bring home to mommy.

TW *Certainly not your mother.*

PE It was crazy. We drank, fooled around and smoked opium in Thailand. Can you believe that? Two Yale-ies and a Cornell guy smoking opium in Bangkok.

TW *This may sound far less important, but did you also see any architecture?*

PE Yes, in Chandigarh we even got a personal tour led by Pierre Jeanneret. In India we saw as much as we could. I remember trips to Agra, Jaipur, Bhubaneswar and Fatehpur Sikri. We saw everything.

TW *And you liked seeing architecture in the field, close up?*

PE I really did. And I saw more things in Japan. One of my colleagues at Cornell was a Japanese-American and he was there at the same time and showed me around. There were no high-rise buildings then, it was all pre-war stuff – including Katsura in Kyoto, which was absolutely amazing. You can actually see the influence of Japanese architecture on a project I did a few years later when I was back in the US, a fraternity house for Ithaca that looked like an early Kenzo Tange building.

TW *So your Grand Tour is not European but eastern. And then when the two months were up you headed back to the US?*

PE That's right. But in the US I had first to serve out a final month at Fort Devens in Massachusetts before I could be mustered out of the army. There was absolutely nothing to do there except go out every evening to nearby Wellesley and drink too much beer. That was one month of pure libertinism. Compared to how I went in, I left the army a completely different person. And when it was over I moved to New York City and shared an apartment with Rodney Wagner on Bethune Street in the West Village. Rodney had a job at Morgan Guaranty and I looked around for an architectural position. In the evenings we'd play squash at the Yale club.

Peter Eisenman, Synagogue for Suburban Newark, Caldwell, New Jersey, 1955
Cornell University, fifth-year thesis project
Courtesy Peter Eisenman

TW *How did you finance yourself? Did you have an army pension?*

PE I applied for a pension. I even went along to the Armoury when I heard they were looking for Korean veterans, but all they wanted was to sign me up for a camping trip. There was no way in hell I was going to go camping with old army guys in upstate New York. And so I quit right there and severed my connection to the military. I then made some enquiries with various architectural offices, including Marcel Breuer. He didn't have anything, but through a Cornell friend I soon got a job with Percival Goodman. Percy was a very good guy. He was head of Columbia's graduate architecture programme and had designed a number of modern synagogues. He was also a very good urban theorist and a vocal critic of Robert Moses. Together with his brother Paul he wrote a famous book called *Communitas*, which was a left-wing diatribe about housing. Really interesting. It's an important book in my formation. After a year with Percy I then went on to Edgar Tafel, who was a Wright disciple, one of the Taliesin guys.

TW *I can't imagine you liked all that Usonian touchy-feely stuff.*

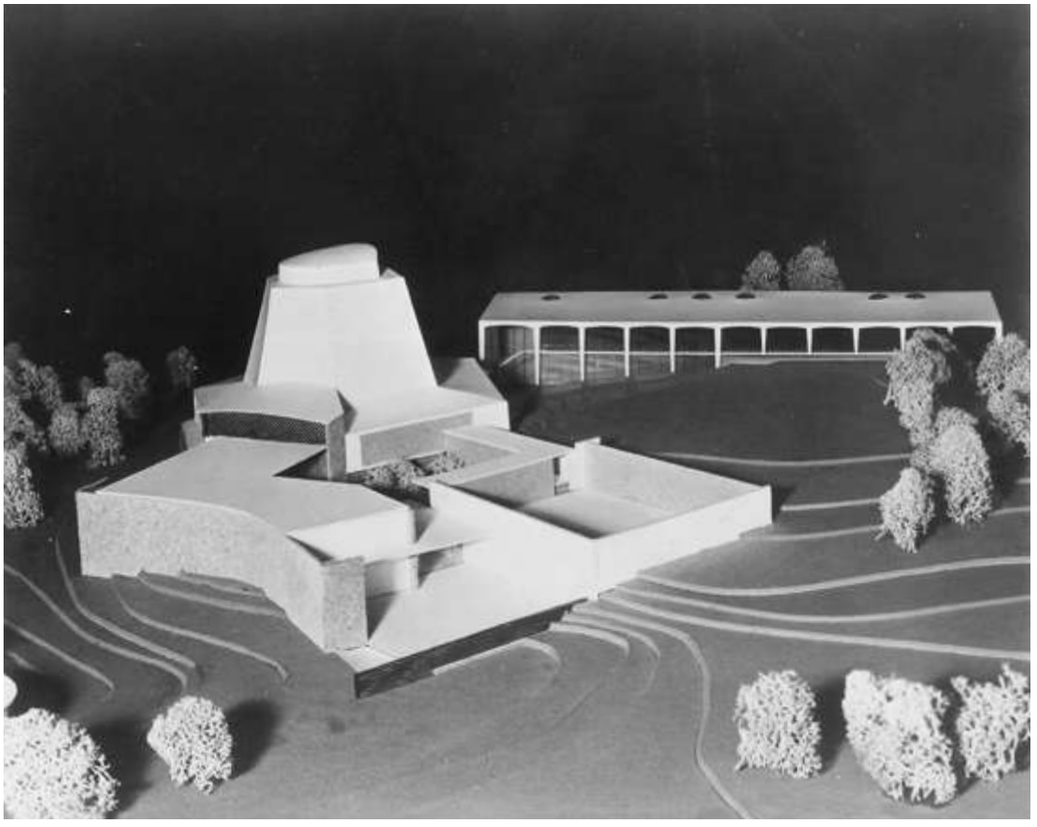
PE Hated it. And I couldn't stand Tafel. Through another buddy I then heard that Walter Gropius was looking for assistants at his Architects' Collaborative office in Cambridge. And so I moved up to Massachusetts. In the end I only stayed six months. I'd always considered Gropius the great spiritual leader of modernism, but when I got to TAC I discovered his office was just doing crass commercial stuff. I was assigned to detailing three buildings for Brandeis University. I produced books and books of details. It was boring as hell.

TW *By that time Gropius must have retired as dean of the GSD at Harvard, but was he a presence in the office?*

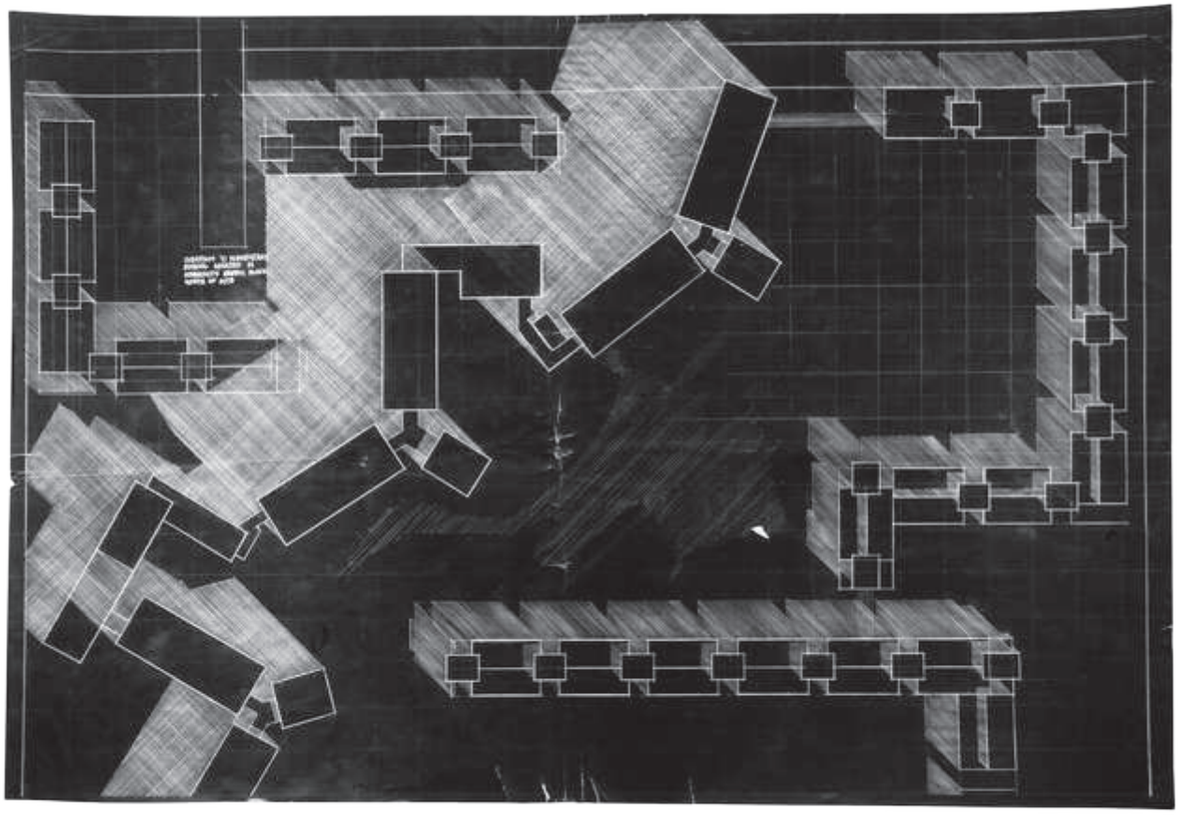
PE I didn't see much of him. The bigger presence was Ben Thompson, who also taught at Harvard and who'd set up the Design Research chain of stores, which imported European and particularly Scandinavian design into the US, but my great friend at the time was a guy called Jerry Howes, who worked for Josep Lluís Sert.

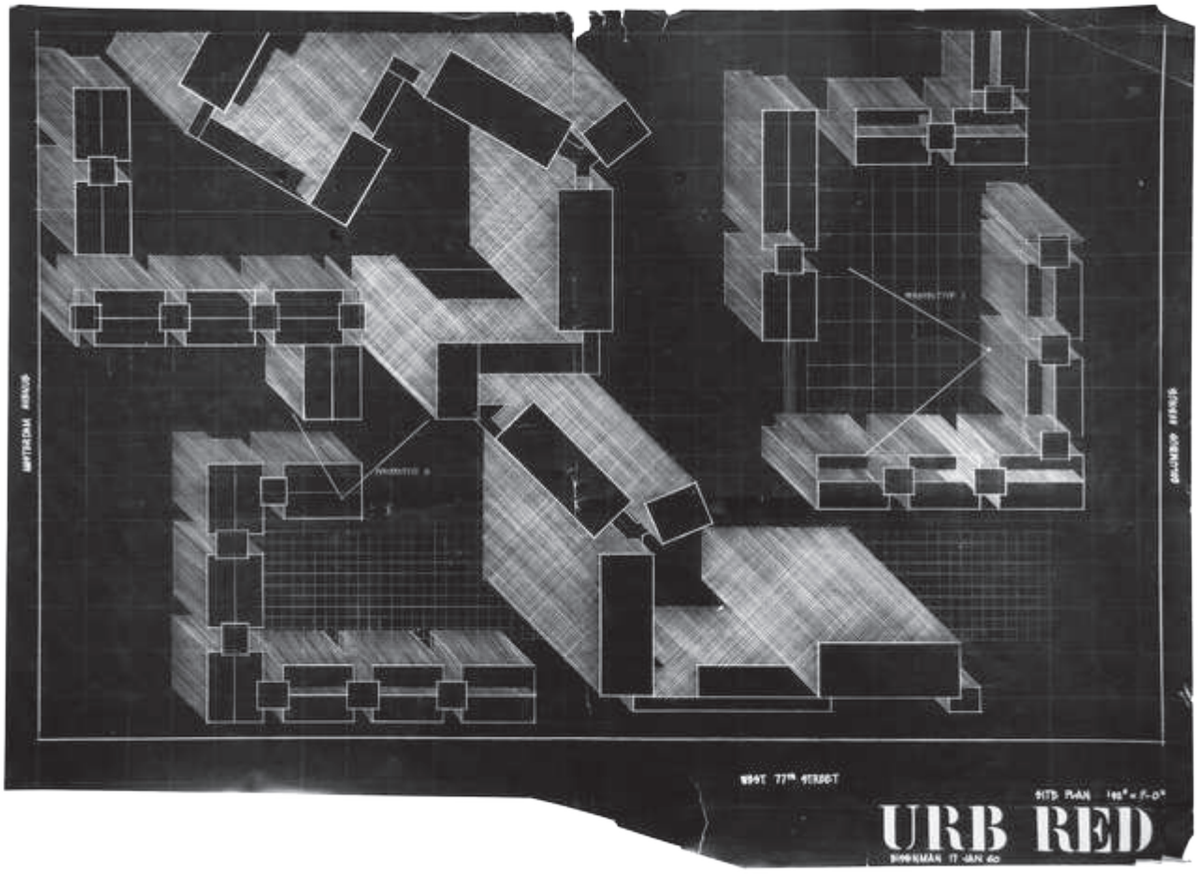
TW *Even if you disliked the Gropius office was there something about Harvard itself that you liked – the elitism, the protectionism of that strange, introverted campus world?*

PE I loved the elitism, and that sense of being at the very top of the world. I was living in Serge Chermayeff's apartment on Linnaean Street – he had a six-month leave of absence








WEST 77TH STREET
SITE PLAN 1/16" = 1'-0"
URB RED
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from Harvard and sublet his place to me. And it was also at Harvard that I first met Michael Graves. He was working for Carl Koch. We'd often have lunch together on the banks of the Charles. It was all very idyllic. But I also realised it was a closed world, and that I had reached about as far as I could go in architectural practice. And so I went back to Percy Goodman and asked his advice. He said, 'Look, Peter, there are two ways to approach this. You can work your way up the corporate ladder and eventually become a partner with Gropius, or you can go back to school at Columbia and become something else.'

TW *So at that stage you didn't have to have a masters to practise?*

PE No, I'd got a professional degree from Cornell. I didn't need any more education to get my licence, but still, in 1959 I chose to go back to school. Columbia offered me a scholarship and in the end, working under Percy's supervision, I completed a two-year masters in one year. It was at Columbia that I did the fraternity house project, together with a number of large-scale urban housing proposals – Sloatsburg, with Michael McKinnell, and URB RED in New York – no doubt under Percy's influence. For my thesis I entered the Liverpool Cathedral competition and was awarded eighth place.

TW *That particular project seems infused with more obviously Scandic elements, or early brutalism. There's even something a bit gothic about it.*

PE You'll like this – at Columbia, for my history courses, I had the choice of either studying the Renaissance with Rudolf Wittkower or the gothic with Robert Branner. And you know what? I chose Branner. Can you believe it? I was a gothicist. At the time I was also sharing an apartment on 112th Street with Mike McKinnell, who while still a student would win the Boston City Hall competition, together with Gerhard Kallmann, his professor, and a design that was resolutely brutalist. These things just seemed to be in the air, or at least in the pages of *AD*, which we read religiously. Another roommate at the time was a Brit called John Fowler who later went to work for Rudolph and did all those wonderful renderings and sectional perspectives. Mid-way through my year at Columbia, in November 1959, John invited Jim Stirling over for dinner. Jim had taught him in London at the Regent Street Poly and was then at Yale as the first Davenport Professor of Architecture. It was the first time we met. I remember we ate Chinese food and because we didn't have enough chairs we just sat on the floor. After dinner we all showed Jim our drawings. He took one look at my Sloatsburg scheme and said, 'Peter you are clearly a good designer, but you know absolutely nothing about architecture. You need to go to Cambridge and study with Colin Rowe.'

TW *There seem to be lots of moments in your life when this happens – when an outsider, like Smiley Blanton or Bill Trautman or in this case James Stirling, offers what turns out to be a crucial recommendation.*

PE And they were all right on the money. But Stirling's advice was especially important because it helped me to make the move from a designing architect to a thinking architect.

TW *And so that's what you did? You went off to Cambridge after your graduation?*

PE Well, not quite. I actually went off to Paris on a Fulbright scholarship to study gothic cathedrals.

TW *So Stirling was right. If your understanding of architecture was restricted only to the gothic cathedral then you really did need to know more.*

PE Yep. How 'bout that? So anyway, to prepare I spent the next two months in New York studying French, eight hours a day, five days a week. After a term of that I thought I was fluent. I went over to Paris on the *SS Flandre*.

TW *Really! You know, the* Flandre *is the boat that Le Corbusier illustrates in* Vers une architecture*. It's also the same liner that Denise Scott Brown takes to the US when she sets out from England and the one Hans Hollein catches when he comes over with his Harkness Fellowship in 1958.*

PE When I arrived in France I take the boat train from Le Havre to Paris. At the Gare de Lyon I jump into a taxi and say to the driver, in my perfect French, '*Je voudrais aller à rue de whatever, s'il vous plait*.' 'Hey buddy', he replies, 'You'd be better off speaking English.' Maybe I'd subconsciously been thinking about Jim's recommendation, but I got so upset by this that I immediately abandoned the Fulbright and caught a ferry over the Channel and made my way to Cambridge. When I arrived they were impressed that I had placed eighth out of 450 entries in the Liverpool Cathedral competition. Leslie Martin, who was head of the school, told me he needed someone to teach first year because Sandy Wilson was going to Yale – actually succeeding Jim. He offered me the job of first-year master and I accepted.

TW *So you hadn't even met or communicated with Colin Rowe at that stage?*

PE No. We met during the term. He'd only just returned to England in 1958 – he'd been at Cornell before that and in Texas with the Rangers in the mid-1950s. At Cambridge he was the second-year master, but I also realised in retrospect that Colin was in the wrong place at the wrong time. He was a Corbusian in a school full of Aalto-ists. He was classical and they were all Nordic. And among the staff he was in a minority of one. This is why in my second year at Cambridge – when I decided to do a PhD – my dissertation was technically supervised by Leslie Martin. I was not allowed to be tutored by Colin, who kept on the sidelines. This is also why Wright and Aalto are in my dissertation – I had no interest in either, but Leslie only let me analyse Corb and Terragni if I included Wright and Aalto. For me, though, Cambridge was still *the* hot place to be in the early 1960s, with Leslie, Sandy, Colin and Patrick Hodgkinson, but at the same time I didn't realise how split it was. I remember going out to Leslie's mill one evening for dinner to meet Aalto himself. Since I subscribed to *Casabella* I brought along the issue they had published on his work. When I arrived Sandy, who was also there, sees my copy and grabs it, telling me I don't need it. He then waltzes up to Aalto, who promptly signs *my* magazine, 'To Sandy, all the best, Alvar Aalto'. That was Sandy Wilson.

Peter Eisenman, URB RED
housing project, New York, 1960
Columbia University, masters project
Courtesy Peter Eisenman

TW *Given the trajectory of your career, and your earlier design work at Cornell and Columbia, it seems as if you could easily have gone in this direction yourself – basically, you had a near-death experience with organicism and that whole Nordic strand of architectural design. But in hindsight, you also had a near-death experience with a then emerging strand of architectural writing, and the similar touchy-feeliness of phenomenology.*

PE Colin protected me from all that. Because, in the end, he did supervise my dissertation, even if he did this as an outlier. But he always wanted to be a fellow of a Cambridge college, specifically King's, nothing else would do. Leslie knew this and so put him up for a fellowship at Queen's. While I was there they organised this evening event when they were sort of testing out potential fellows. Colin goes, and in a way typical of him, gets drunk and flaunts his disinterest by standing on his head next to the high table. He didn't get the fellowship. By the middle of 1962 he was out of Cambridge altogether and back in the US at Cornell.

TW *And so the nature of your supervision was not formal or predetermined but covert?*

PE It really happened over two summer trips we took together. Of course, we had met over the year as teaching colleagues and we quickly became friendly – I guess he liked having an American to talk to. And so at the end of my first year, in the summer of 1961, I organised a big road trip. We were to basically make our way from north to south, following the path of the Rhine. We started in Holland and looked at the de Stijl stuff – which Colin absolutely hated – and then gothic cathedrals in Cologne and northern Germany, then down through Germany, taking in the brick houses in Krefeld and the Weissenhof in Stuttgart, before crossing into Switzerland and then over the Alps to see Terragni's work in Como and Palladio's villas in the Veneto. We drove as far south as Sicily, and then turned around.

TW *And you drove the whole way?*

PE Colin didn't own a car. I had a white VW Beetle and so I drove and Colin sat in the passenger seat, reading aloud the whole time from guidebooks and history books. The moment that really cemented our relationship was when we hit Zurich. Colin had arranged for us to meet up with Bernhard Hoesli – one of the original Texas Rangers, along with Colin, John Hejduk and Werner Seligmann. He was then the head of the ETH and we spent two days with him, looking at all kinds of things, including Le Corbusier's Heidi Weber house. On the first night he cooked us a Texas-style barbecue at his home. The following day he showed us his own buildings. That evening his wife – who was pure Texas aristocracy – insisted that we go to Mövenpick, which was the first restaurant in Zurich offering modern cuisine. I wanted to eat Swiss food, but they weren't interested in that. It was all very chic, but all completely plastic. It was like an American truck-stop diner. I remember she ordered shrimp Danieli for all of us in her thick southern accent. After we ate, Bernhard makes this huge *faux pas*. He says, 'Peter, what did you think of my work?' Now, I understood I was there as Colin's bulldog, and so I replied, 'You know Bernhard, I've never had a better day in architecture, travelling around Zurich with you. It was the most incredible day. And yet I can't imagine how somebody who knows so much about architecture can do such lousy work.' The evening ended right there. I remember as we walked back to our hotel Colin was so excited that his attack dog had bitten the ankle of this Frank Lloyd Wright guy.

TW *But then don't you bond even more when you go and see Palladio's villas?*

PE The key one was the Villa Pisani in Montagnana. Colin instructed me to stand in front of it until I could tell him something about the facade that couldn't be seen. So I stood there in the hot sun and he went off to have a cool drink in the shade. I suggested a few things but he kept telling me to try again until I said what he wanted to hear. It was in the tradition of an English Grand Tour.

TW *That's such an appealing, but also deeply romantic, model of pedagogy.*

PE Everybody thought we were gay. I can assure you we were not. In Cambridge Colin was seeing Denise Scott Brown's sister Ruth. There were many times when I'd ring the bell at his flat only to hear him shout out from the other side of the door, 'Noooo, not now!'

TW *I meant romantic in the way he imparted information, reading aloud to you, testing your Palladianism from under some entwined Veneto arbour.*

PE Oh, I learned alright. He wouldn't stop pushing out all this stuff. In Rome he would list all the Piccolomini popes to me, and explain how they differed from the Barberinis. I ingested so much information. I also learned to eat really well. Every night we'd dine in fantastic restaurants that I would pick out from the Michelin guide. But it was during that first trip – especially after seeing the work of Terragni and Palladio – that I also really developed the outline for my 'Formal Basis of Modern Architecture'.

TW *If the first trip followed the Rhine before extending further south, where was the second trip?*

PE The second one, during the summer of 1962, took a more horizontal route. We went from Brittany through France and southern Germany as far as Vienna. On our way back I dropped Colin off at Le Havre and he caught the boat back to the US for his return to Cornell. I then drove on to Cambridge alone, and actually moved into Colin's old apartment, surrounded by all his books, furniture and antiques, which would only be shipped over much later. That was the year I really thrived. Henry-Russell Hitchcock was in the apartment below – he was a visiting Pitt Professor of American History – and I remember taking him around all the English New Towns. Compared to Hitchcock, Colin was an absolute genius. It was also then that I became close with all the English architects who were friends with Colin – people like John Miller, Patrick Hodgkinson, Bob Maxwell, Alan Colquhoun, Neave Brown, Eldred Evans, Jim Stirling and the other great genius at the time, Sam Stevens.

TW *But if Colin was back at Cornell by then how did he continue your supervision?*

PE Through letters. Remember, Colin was not allowed to be my supervisor. It was strictly on an informal basis. But we were corresponding back and forth the whole time. I recently discovered over 40 of Colin's letters among my old papers. Jeffrey Kipnis and Mathew Ford published some of them in the *By Other Means* book.

TW *Those letters are hilarious. I especially like the way Colin addresses you as 'Pedro Boy' or 'Kiddywink'. And as much as he gives you very precise, really carefully considered comments on your dissertation, the two of you also spend a lot of time discussing which shade of khaki chinos he will buy for you and ship over. It reminds me now of your anxiety about your knickerbockers as a kid. In every school, Peter, you always seem to want the right pair of trousers.*

PE What can I say? I was still a nerd.

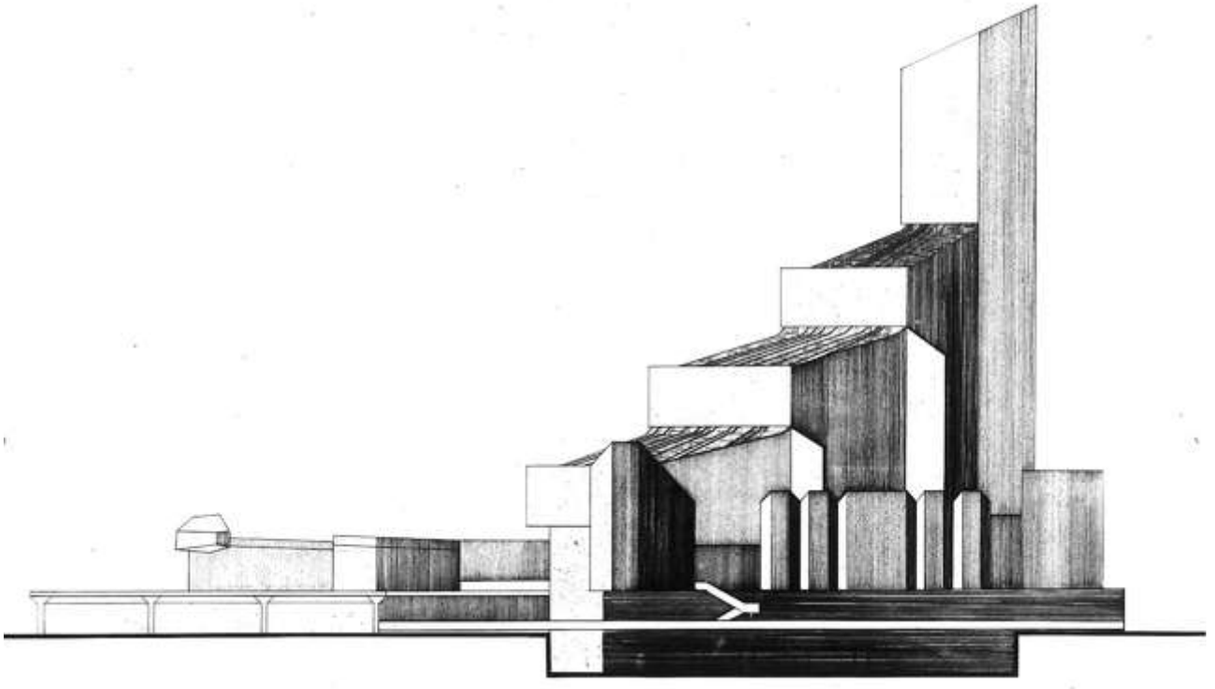
TW *I'm guessing you were also a nerd who was starting to amass a nice architectural library.*

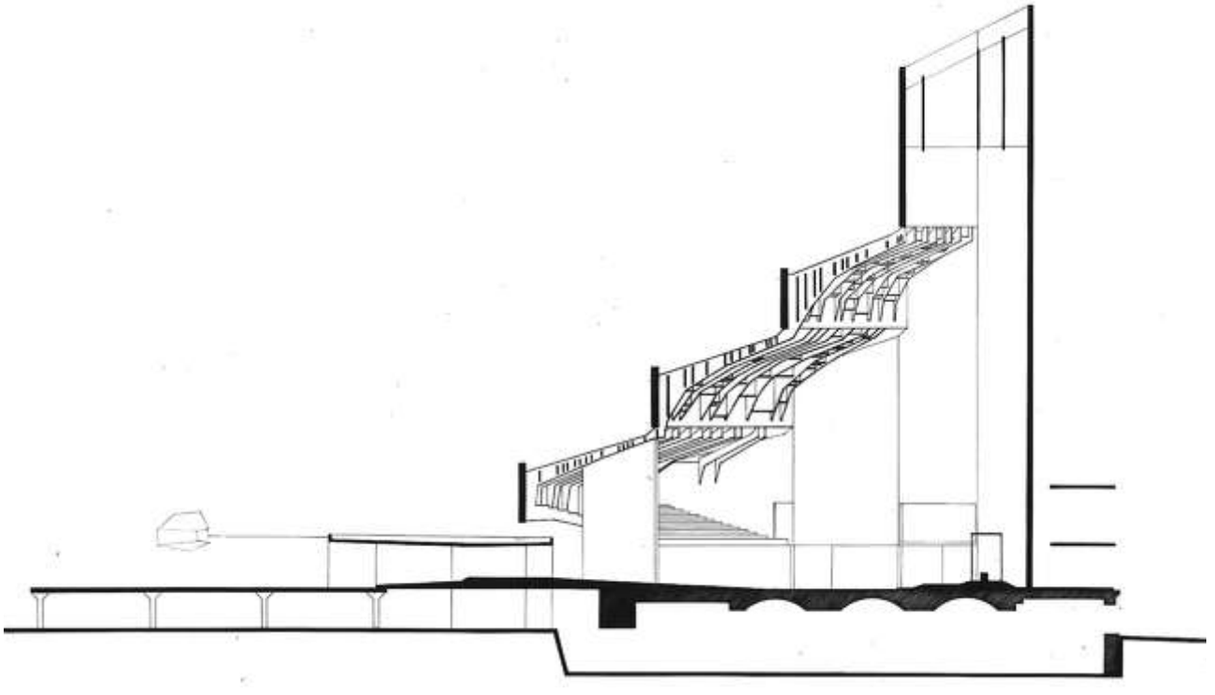
Peter Eisenman, Liverpool Cathedral competition entry, 1960
Columbia University, masters thesis project
Courtesy Peter Eisenman

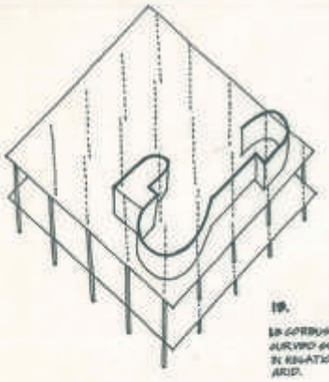
PE Oh, no question. In those Cambridge years my book collecting really exploded. Again, it really happened over that first summer with Colin. Before we left, Sandy had given me a copy of a book on Alberto Sartoris, because he knew I was interested in that period, and as I drove, Colin and I would talk about the importance of the early issues of *Casabella* for really showing all of that 1920s and 1930s Italian stuff. On our last few days in Italy, in Turin, before we crossed over into France, we visit a little bookshop in the *galleria* that Colin knew about, run by this old guy with a little fascist beard. We ask him about the *Casabella*s and he sends his assistant down into the basement to dig them out. He comes up through a trapdoor in the floor with this pile tied up with string. Mint. Probably never even opened. We guessed there were around 190 issues published before the Second World War. He brought up 125. I knew these were selling at other places for 600 lira per issue – about $10. And so I figured this lot was worth $1,250 – more than I could ever possibly have afforded. But anyway, I asked how much he wanted for them. He says 60 lira each (so just $1 per issue). 'Too much', I say. 'I'll give you 15 lira each.' 'Deal', he says. So I pay him, and he writes me out a receipt. The next day we come back to load them into the car and the guy is steaming – he realised how much they were really worth. But he had to hand them over. We piled them into the back of the Beetle and headed home. And those 125 *Casabella*s became the basis for my collection.

TW *Rowe must have been buying a lot of stuff too. The poor old VW would have been weighed down by the time you drove back.*

PE We had drawings too. At the Terragni studio they said that we could take any of the duplicate drawings we liked. We grabbed stacks and stacks of them. Of course, Colin was buying things for his own collection too. In the beginning, we'd always be getting into fights over who'd get a particular book, and so we came up with a plan – before arriving in a given city we'd agree that it would either be Peter's book day or Colin's book day. On that same trip I remember in another store Colin saw these seven issues of *Spazio*. 'Ah, I've been waiting for those', he says. But then I remind him, 'Hey Colin, you're forgetting, it's my day. Those *Spazio*s are mine.' He complained bitterly, but I got them. At the end of those trips my collection was amazing – you would have been blown away. After another 50 years of collecting I had an astonishing collection of architectural books and journals. I actually just gave over 3,000 pieces to the Beinecke Library at Yale. It's full of wonderful things. Not just books, but drawings and letters, including Corb's nine-page letter to the League of Nations. I got it at an auction somewhere. But in England I was getting most of my stuff at Ben Weinreb's

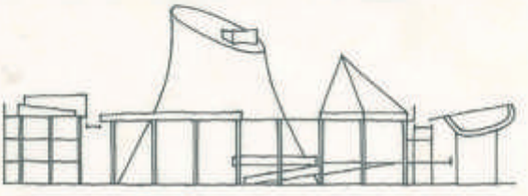






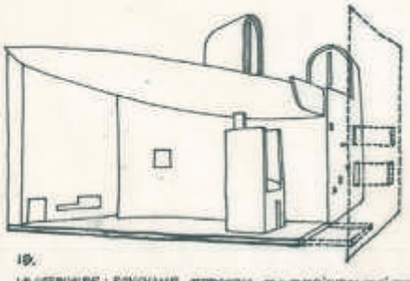
19.

LE CORBUSIER : PLANAR / CURVED SURFACES TRANSLATED IN RELATION TO AN ABSOLUTE AXIS.



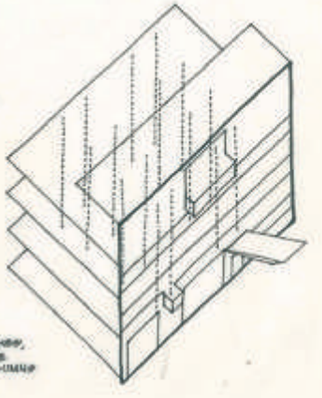
14.

LE CORBUSIER : ASSEMBLY PLACE, CHANDIGARH NATURE STATEMENT OF MASS-AXIS RELATIONSHIP.



18.

LE CORBUSIER : RONCHAMP, STRETCHING OF CURVED SURFACES FROM NO "MASS" IN RELATION TO A PICTURE PLANE OR ABSOLUTE AXIS



16.

LE CORBUSIER : MARSEILLES, FRONTALS OF SURFACES ORTHOGONALS OF VOLUMES

store in Bloomsbury. It's the same place Robin Middleton used to mine in setting up not just his library, but the one at Cambridge and the one at the AA. Ben would send me his catalogues and I'd phone back with a list of all the things I wanted. He still sent me these catalogues when I was back in the US, until the University of Texas bought the entire shop. Phyllis Lambert hired him after that to create her library at the CCA.

TW *Back in Cambridge, the other title you would add to your own library was your 'Formal Basis of Modern Architecture', because in the summer of 1963 you got your PhD.*

PE By then I'd also gotten married. It happened really fast. In March 1963 I went to watch a rugby match on television at the home of my first-year drawing assistant, a guy called Christopher Cornford. He was the son of Francis Cornford, the translator of Plato, and Frances Crofts Cornford, a poet and the granddaughter of Charles Darwin. Christopher and I used to hang out all the time. And so we're sitting there watching the game, and also there was this nice-looking woman who was his American niece. I said hello and she starts chatting to me. She actually keeps talking to me while I'm trying to watch the rugby. Anyway, one things leads to another, and four months later we get married. Cambridge was such a primed pillow. By the time of the wedding I'd pretty much finished writing the dissertation, and so I handed the manuscript over to my student, Tony Vidler, to fix the footnotes. My wife Elizabeth and I then went off on our honeymoon. We followed pretty much the same north–south route I took with Colin two years earlier. And then in Italy something really weird happened. We were driving toward Arezzo to see the Piero della Francesca frescoes, and at a little intersection near Cortona we pass this green MG. We then drive a few miles further to a little restaurant and five minutes after arriving, the same MG pulls up and out step Alvin Boyarsky and Colin. They were making their own summer trip. We then had this really great and slightly surreal lunch together – the restaurant had run out of food, and so whenever we ordered anything a guy would have to run up the hill into the little town and then come down laden with prosciutto or cheese.

TW *At the same time you are also offered a position at Princeton, which prompts your move back to the US. But I'm wondering why you didn't stay? You had lots of friends and a secure teaching position and you were within driving distance to lots of wonderful art and architecture. You also seemed to be enjoying yourself.*

PE It's true. I *was* having a great time. Cambridge was wild. Before I got married I remember going to one of Francis Crick's parties where the waitresses were dressed in little white aprons and nothing else. The place was completely bacchanalian. I also had lots of close friends. Jim Stirling, in particular, was a really sweet guy. But there were other problems, particularly with the provost of King's, and so I had to get out. I also knew I had to return to the US at some point or other – I didn't want to be an expat, and I missed American humour, American food and American sports (I'd been a season ticket holder at the Giants since 1957). And don't forget, Princeton was offering me an assistant professorship. There was even the idea that at Princeton I'd get Colin into the school and start something really interesting.

TW *Wasn't Princeton rather moribund then?*

PE There was no rather about it. It was still a school heavily influenced by Jean Labatut – totally Beaux-Arts and totally dead. The only interesting guy there was Michael Graves, who had just arrived. At that stage he wasn't postmodern at all. He was as rational as you can get. Colin and I actually visited him in Rome in 1961 on our first trip, when he was at the American Academy. At that time he was designing projects based on the work of Giorgio Morandi, but Colin and I quickly geared him towards Corb and Terragni. Some of the early houses he built are really incredible pieces.

TW *So by then you'd realised that you liked teaching, and also that you were pretty good at it. Soon afterwards you also became a father.*

PE Julia was born on 30 January 1966 – I remember it because it was 33 years to the day when Hitler seized power. I was playing poker in a snowstorm with Bart Giamatti, who would become president of Yale and the commissioner of baseball (his son is the actor Paul Giamatti). Bart was a really terrific guy. So I get a call from Liz saying the baby is coming. I rush her to the Princeton hospital, but the nurses there say the baby won't arrive till later the next morning and told me to go home. At 7am the next day I get a call: 'Congratulations, you're the father of a baby girl.' Two years later I did make it to my son Nick's birth. Before Julia arrived Michael and I would be at the school all the time. We didn't have an office, and so we practically lived in the studio. We taught parallel kinds of things – my courses were pretty much all focusing on Corb – and our students immediately started producing really great stuff. In the evenings I'd be working on my writing, trying to develop the Terragni material into a book, but Michael and I also found time to work on a few design competitions together – we did the AIA Headquarters, the Boston Architectural Centre Headquarters and the Berkeley California Museum.

TW *Did you ever think of setting up an office together?*

Peter Eisenman, drawings for 'The Formal Basis of Modern Architecture', 1963
Trinity College, Cambridge, PhD dissertation
Courtesy Peter Eisenman

PE I don't think that was ever the plan. I'd actually done other competition entries before with other people, even with Colin and Tony Eardley at Cambridge, producing a design for the Boston City Hall competition. I must admit that when my friend Mike McKinnell won it I was devastated, because if there was anyone I was going to go into practice with it was Mike. The original idea was that I'd only spend one year in Cambridge and then I'd come back to New York and set up with Mike. So when he won it with Gerhard Kallmann they went into practice together.

TW *But in your new, fully academic guise, did you get a sense then, in the mid-1960s, of the bomb that was about to go off in education, particularly architectural education, with 1968 and all that?*

PE In Princeton there was never any whiff of that. The bigger event for us was in 1965 when Corb died. Michael and I stayed up all night, and with two students we cut out every page of the *Oeuvre complète* and pasted them onto the walls of the school of architecture gallery. We then put a huge crepe-paper black cross over them. No one had ever done anything like that before. They'd actually never do it again – no one stayed up all night when Rossi died or when Stirling died. But back then there was a lot of passion in the air.

TW *I'm struck by how respectful you are of the canon…*

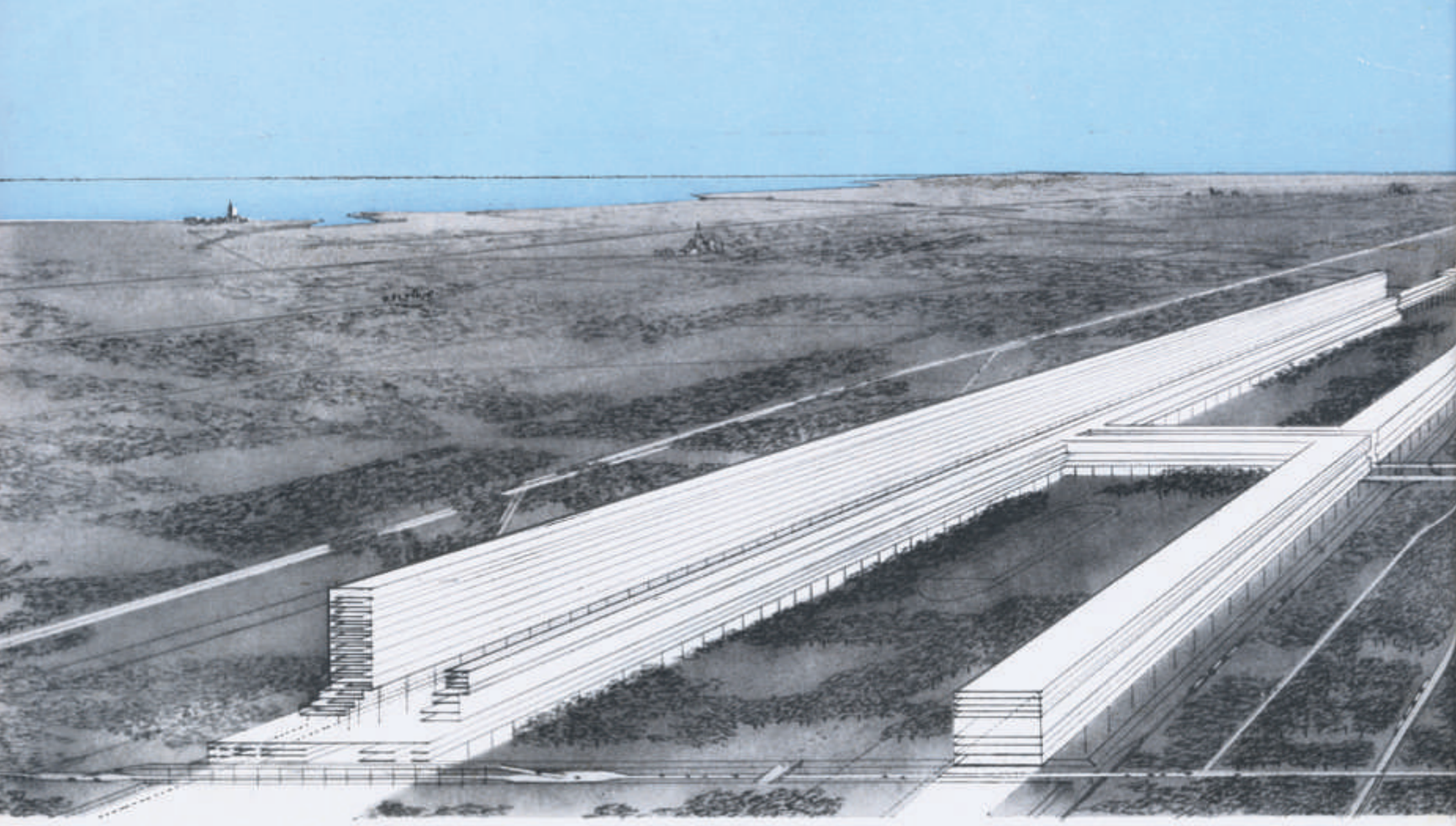
PE No question.

TW *… You celebrate the departure of the master, Le Corbusier, and you create your own masters and you have your own alliances. It's a very canonic model.*

PE But I don't see that as necessarily about convention or loyalty. When I read Harold Bloom writing about the western canon, to me this canon is intellectual and therefore 'other' because there is frankly nothing intellectual about the west at all. When I was in Korea and one of my army buddies asked what I wanted to be, I said 'I want to be a great architect'. Did I know what that was? No. I thought then that being a great architect was being Walter Gropius or Marcel Breuer – that is, a practising architect. In Cambridge I discovered another path, a more intellectual, thoughtful way of working. And in constructing that path for myself, since there was nothing to follow, it couldn't be revolutionary, it had to stick to the canon.

TW *So it really is Corbusian – it's 'architecture or revolution, revolution can be avoided'. But to maintain that canon and those connections did you keep going back and forth to Europe, reacquainting yourself with the architectural scene over there?*

PE I was basically trying to keep up with Jim, and so Michael and I went over a few times, not to Cambridge, but to London. In 1966 Jim showed us around his Leicester Engineering building, which really impressed me. I'm actually still amazed by it, as I am by the other



red brick buildings in Oxford and Cambridge. That trilogy is Stirling at his very best. That summer we also went over to Paris because Ken Frampton was working at the Maison de Verre. He arranges to meet us nearby, and then – typical Ken – insists we go to a Greek restaurant for lunch. We were in Paris for Chrissake, I wanted French bistro food. After lunch – again, typical Ken – he says 'I've got some bad news, guys, the house is closed for guests today'. He then strolls back inside and we only get to look at the facade.

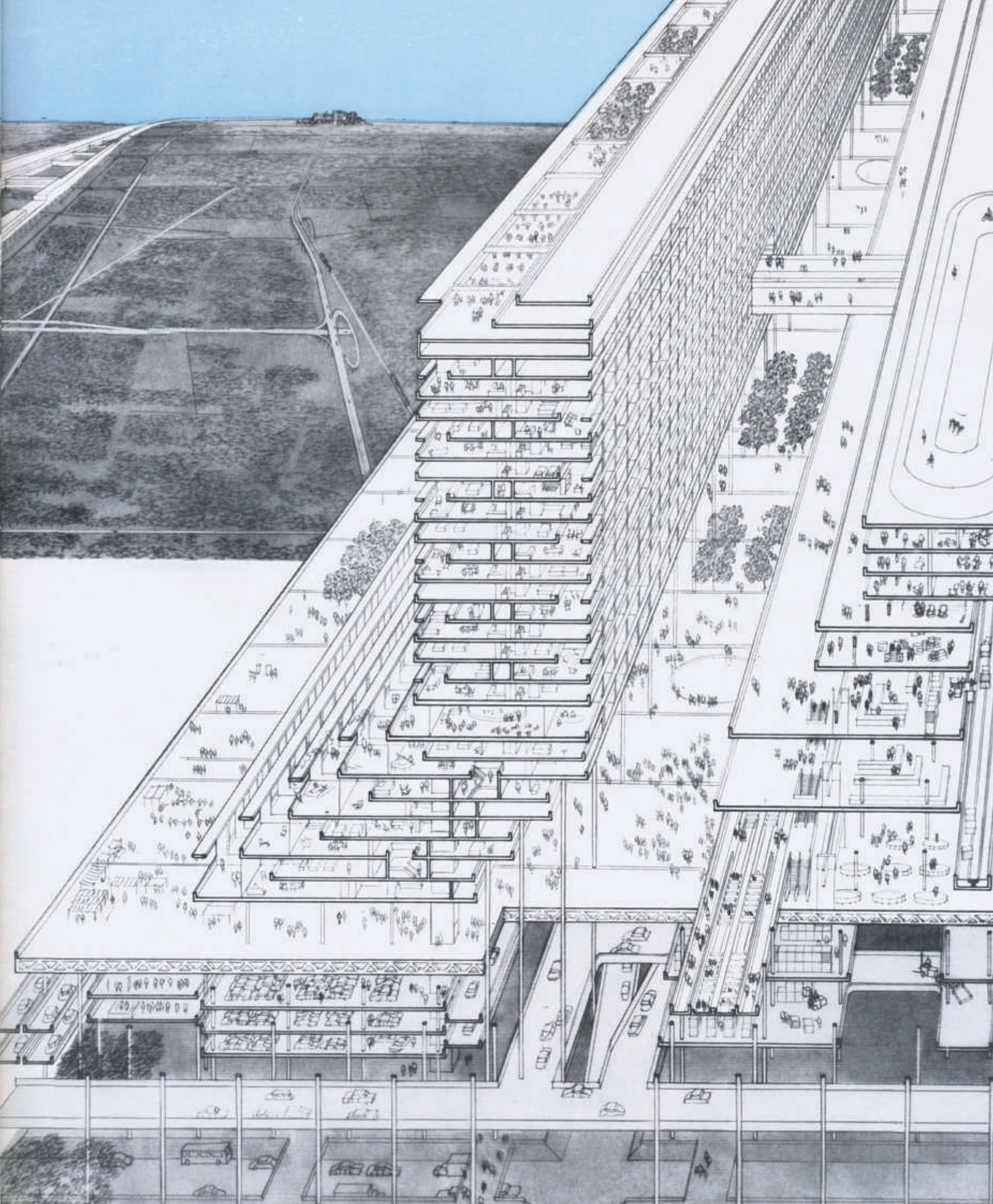
TW *Nevertheless, you and Michael still arrange for Frampton to come over to Princeton as part of your move to shake the place up.*

PE We definitely wanted to shake the place up, no question about it. And significantly we had the support of the president of the university. As two junior assistant professors we could walk into his office whenever we liked. In 1964, a year after we arrived, we told him we wanted to start a new group of young architects – what became the CASE group (Conference of Architects for the Study of the Environment). This would create a network between Princeton and other young architectural academics at Cornell (Colin), MIT (Stan Anderson and Hank Millon) and Columbia (Jaque Robertson and Richard Weinstein), promoted through a series of annual events (CASE 1, 2, 3, etc). He loved the idea so much he gave us 100,000 bucks – a helluva lot of money in those days. That's how we were able to fly Ken over. He'd never been to the US before. We arranged for him to take a helicopter from JFK to Newark, where he was met by Emilio Ambasz dressed in full chauffeur livery, and who drove him to Princeton in a black sedan. We then established more connections with England by bringing over the three Tonys – Tony Eardley, Tony Vidler and Tony Peake. We set up an alternative kind of studio in the basement of the school of architecture.

TW *But you were also designing. Didn't you produce a proposal with Graves for a linear city?*

PE That was the Jersey Corridor project, which the president helped fund by giving us another $100,000. It was an ambitious, silly thing – a one-mile-wide, 20-mile-long megablock in New Jersey. *Life* magazine published it, uncredited. But the project attracted the attention of the Museum of Modern Art. Through Tomás Maldonado, Arthur Drexler even came down to visit us, together with his senior curator Mildred Constantine. They look at all our huge models and drawings and immediately offered us an exhibition. Of course, Michael and I were delighted. We told him we could do it with our CASE group buddies, with each college team making a proposal for a different part of New York. The president was so thrilled he encouraged us to recommend the school's dean, after the retirement of Robert McLaughlin. We chose Robert Geddes, largely because we thought he'd be a friend. So Geddes is appointed and then comes the fateful day. We're all driving up to New York in Geddes' car to meet with Drexler, and Geddes says, 'Well, guys, if Princeton's going to go into this thing as Princeton, then I'm going to name who does the project.' I looked at Geddes wide-eyed and said, 'Bob, you don't understand. Drexler wants Michael and me. And if he can't have us he won't have Princeton.' So anyway, we work on the exhibition, and as the Princeton team we produce a scheme for the Manhattan waterfront. Titled 'The New City: Architecture and Urban Renewal', the show opened at MoMA in January 1967. That same month Michael and I were both up for tenure. Because we had worked so closely together over the previous years we had submitted the same application, based largely around the Jersey Corridor project. Michael refined the drawings and I wrote the text. A week later it's announced that Michael has gotten his tenure, but my application is denied.

Peter Eisenman & Michael Graves,
New Jersey Corridor project, 1965
Life magazine, 24 December 1965



TW *But why was that?*

PE It was Geddes' revenge. It was an attack on the attack dog.

TW *And you left immediately?*

PE I had actually arranged a sabbatical for that spring semester. I was going to go to Italy, and had rented out my Princeton apartment. But as soon as I heard about the tenure, I cancelled the Italian trip. The next day I took all of my stuff out of the studio and moved into the architecture workshop. I wouldn't set foot in the school. And it was from there that I plotted my next move. A few days later I arrange a meeting with Drexler in New York and pitch him the idea of the Institute for Architecture and Urban Studies. He thinks it's a great idea. He then arranges another meeting with René d'Harnoncourt, the head of MoMA, who also loves the idea. They agree to sponsor it and gave me two trustees, which is where the cash came from. Drexler would be its president and I would be the director. I also brought in Bob Gutman, a sociologist from Princeton who specialised in architecture, and Colin, who in turn recommended Bob Slutzky, who he'd met in Texas and was very high on. We hit it off immediately. And that's how it all started.

TW *You were moving fast.*

PE Oh, did we move fast. We secured a space in Midtown Manhattan and also arranged for Cornell and Yale – whose deans I was on very good terms with – to send us some of their students. And in the summer I severed all my connections to Princeton and moved into the city – to 50 Riverside Drive.

TW *Did you want the IAUS to be a new kind of ersatz university?*

PE I wanted a place that was somehow between a university and practice, and that would produce a new kind of practice and a new kind of architecture.

TW *But even if you didn't know what kind of institution it would be, were you more sure about what this new architecture would be like?*

PE Oh, I was still a formalist, pure and simple. Don't be distracted by the name. In the social upheavals of the late-1960s I had to do certain things. That's why we put 'Urban Studies' in the title. Frankly, we knew nothing about urban studies. I would have preferred to call it simply the Institute for Architecture, but at that time I needed a certain amount of cover.

TW *You weren't so discreet about the graphics. The poster you produced that announced the institute in 1967 has Vitruvian Man placed over Lower Manhattan – and you didn't use the more familiar Leonardo version, but Cesare Cesariano's seriously priapic figure.*

PE No one really knew that version at the time. That's why we chose it. But you have to admit, it does have a certain potency to it. Those first graphics were done by Emilio Ambasz – Massimo Vignelli would only come in later when we produced *Oppositions*. I met Emilio in my very first week at Princeton. This 18-year-old kid comes into my office and says 'I'm very upset'. I said, 'Oh, dear, why's that?' He said, 'My name is Emilio Ambasz. I come from Amancio Williams' office in Buenos Aires. I've never been to university, but I've come to Princeton to study at the Institute for Advanced Studies.' I explain to him that the institute is not for students, only academics, but he insists that's where he wants to be. The guy had chutzpah that you wouldn't believe. A week later he comes back and says, 'Peter, I'm still very upset. This place is a fraud and I'm going to go to the president and tell him this unless you help me get my degree in one year.' So I go to a faculty meeting and recount what Emilio had said, and everybody was terrified that he'd blow the lid on the place. Because he was right. The place *was* a fraud. And so you know what? We do help him and he does get his degree in a year. The next year he gets his masters. So he completed a four-year undergraduate degree and a three-year masters in two years. Unbelievable. That was Emilio.

TW *And so with a nice space in Midtown Manhattan, with financial support from the MoMA trustees, with students from other Ivy League colleges and with a cool poster everything was looking good.*

PE It was, but still we did have our own 1968 moment. In the spring of that year Colin decided he wanted to take over the intellectual direction of the institute. Having worked my ass off to get it up and running, there was absolutely no way I was going to let that happen. And so I arranged a late-night meeting with Drexler, Gutman and Slutzky and we changed the locks so that neither Colin nor his students could get in. It was a really ugly thing to do, but we had to do it.

TW *Wasn't Rem Koolhaas one of those Cornell students?*

PE That was a few years later, and a whole other story. Rem came over to the US in 1972. He quit the AA a year earlier when Ken Frampton – his preferred candidate – lost out to Alvin Boyarsky in the election for the new school chairman. In the US he went to Cornell to continue his studies with Oswald Mathias Ungers. In Ithaca he never speaks to Colin. Not one word. And then six months later he leaves because of the tension between Rowe and Ungers. So he goes to see Frampton, who is his buddy, and Ken suggests he come and work at the institute. I then set him up with an office and a place to work, and it's at the institute that he writes every single page of *Delirious New York*. I also manage to get Philip Johnson to contribute 10,000 bucks towards publishing it, and I even help him find a publisher – Sheldon Meyer, from Oxford University Press, who I knew because we sent our kids to the same nursery school. Rem tends to forget these things, but perhaps that's neither here nor there.

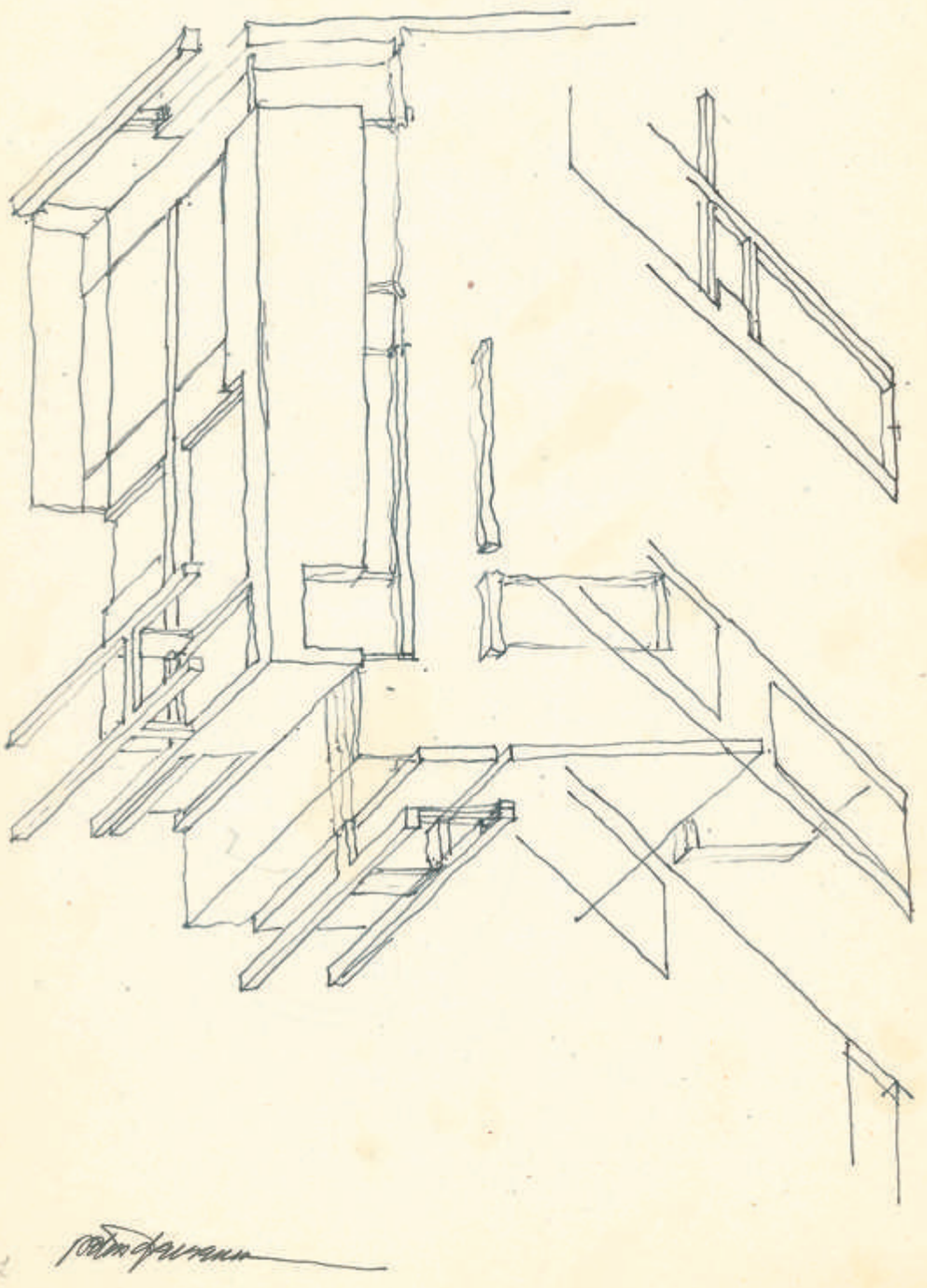
Peter Eisenman, House I,
Princeton, New Jersey, 1967–68
Overleaf: Peter Eisenman, House II,
Hardwick, Vermont, 1969–70 and House III,
Lakeville, Connecticut, 1969–71
Courtesy Peter Eisenman

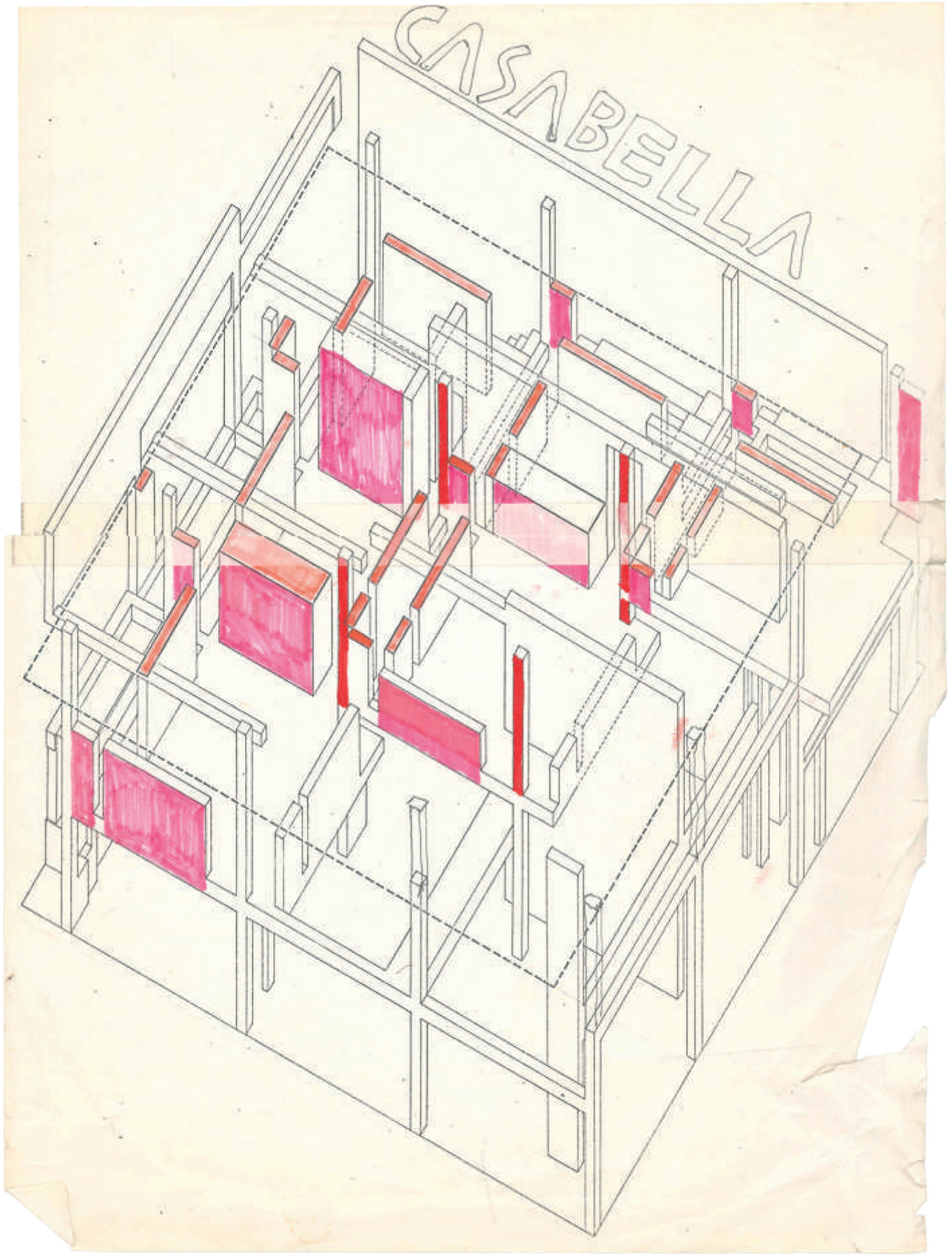
TW *In old black-and-white photographs of the institute you always see a group of now famous architects and academics, including Koolhaas, sitting around a table in a light-filled room, either eating or debating. But I've never been completely sure of what you actually did there, or how things were structured.*

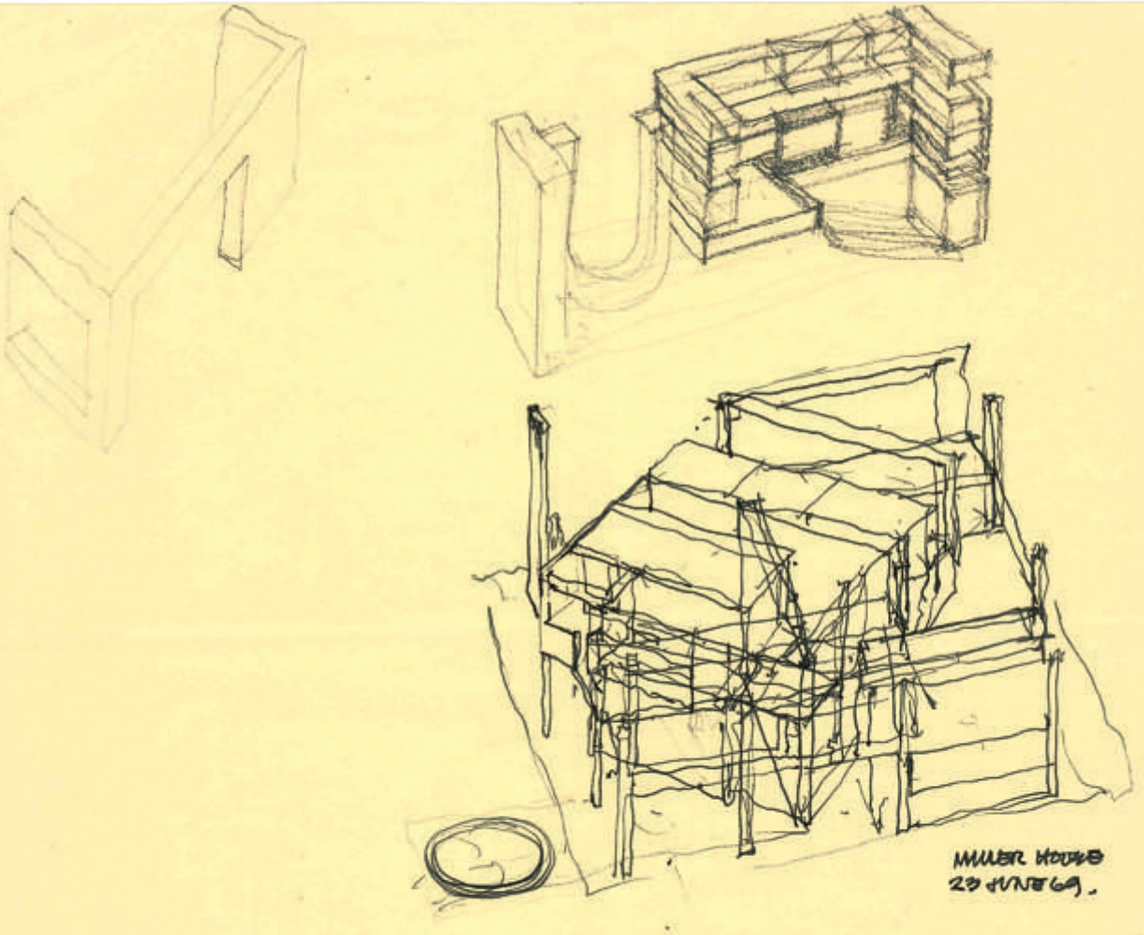
PE In the beginning we organised things around certain moments – practically every night there'd be a lecture or seminar or launch event. We'd clear the tables away and the open-plan space would become a kind of auditorium. We also produced catalogues, books, journals and exhibitions, we arranged competitions, discussions, seminars, even dinners. We were very social. Alvin Boyarsky adopted the same model at the AA, because by then we were in full bloom. In the early 1970s the institute then evolved into its own school. We set up allegiances with 12 different colleges that either didn't run or couldn't afford to run their own undergraduate architecture programme – places like Dartmouth, Brown and Vassar, as well as liberal arts colleges like Oberlin, Wesleyan, Hampshire, Smith and Sarah Lawrence. The fees from these places kept us alive. And so their students would come down and we'd teach them. Ken was teaching, and by then so too were Diana Agrest, Mario Gandelsonas and Tony Vidler. We were offering architectural education day and night.

TW *Is that how it eventually paid for itself, through fees?*

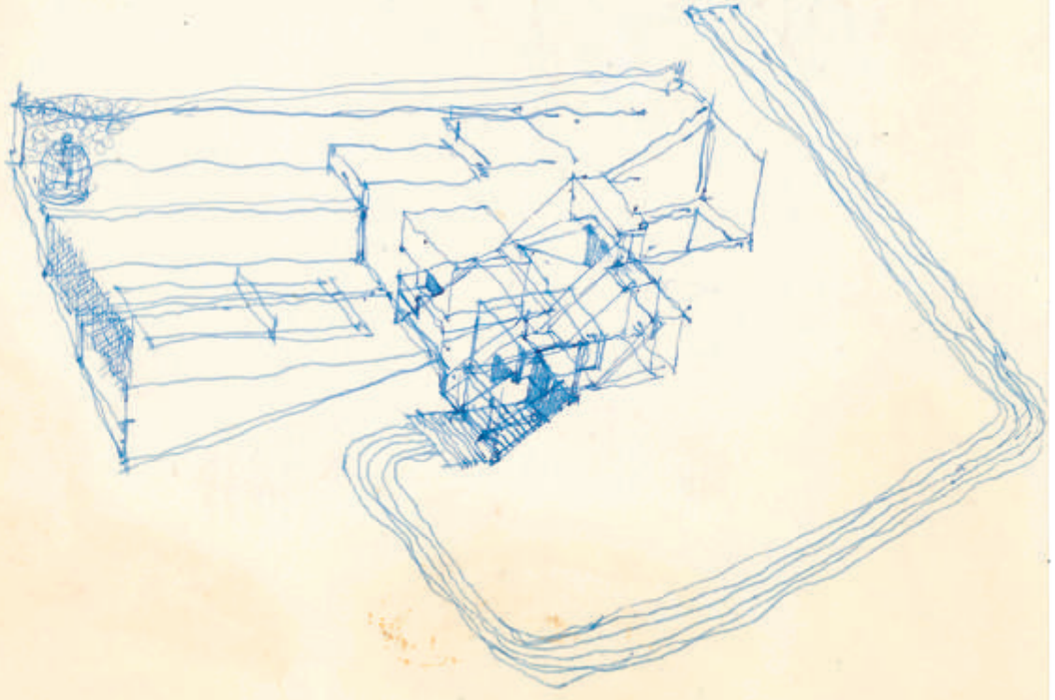
PE The fees would only cover part of it. We continued to get support from the MoMA trustees, and every Christmas Philip Johnson would write us a cheque for $50,000, even if Drexler was always anxious to keep him out of it. But still, I was always looking for more funding – producing all those publications and organising all those events, as well as paying all the teachers, was expensive. By the mid-1970s I even got the developer Gerald Hines involved. I had flown down to Houston to see him with one of our trustees. We thought we could maybe get $250,000 out of him, and so we decided to ask for $500,000. He knew why we were there – as soon as we walked into his office he simply says, 'What's the number?' I said 'Three'. He says, 'Three! What are you, nuts?' I said, 'If I didn't ask you for three, you'd say I wasn't doing a good job as director'. 'True', he says. 'I'll give you one-and-a-half.' We walked out of there with a cheque for $1.5 million in my pocket and couldn't believe it.




CASABELLA



HOC



TW *You spoke earlier about how your first move at Princeton was to bring over lots of English architects and historians, several of whom – like Frampton and Vidler – moved with you to the institute. But with this new funding, you seemed to orientate yourself more towards Italy, as Italian design, Italian theory and Italian graphics increasingly became part of your make up.*

PE My connection with contemporary Italian architects really begins in 1968. Immediately after the Aspen design conference, where I met Rafael Moneo, among others, I was invited to this little Basque town called Vitoria-Gasteiz for the Pequeño Congreso, a conference organised by a group of young Spanish architects. The other invited guest was Vittorio Gregotti, and we immediately hit it off. It was through Moneo that a number of Italian architects came to the institute. But of course, the other Italian axis was Aldo Rossi, who I met through John Hejduk. John and Colin were invited to the ETH by Bernhard Hoesli in 1972 for an exhibition and conference which also featured Rossi. John comes back to New York raving about Aldo. The following year, Rossi was in charge of the 15th Milan Triennale and he invited me, Michael Graves, Richard Meier, Charlie Gwathmey and John Hejduk to contribute. Manfredo Tafuri saw this show and then organised another exhibition in Naples – he wrote about our work in an essay called '*Les bijoux indiscrets*'. Richard was the only one of us to go, because he was the only one who could afford to keep flying over there. Although Tafuri never came to the institute, a connection had been formed. In addition to Gregotti, Rossi and Tafuri, my other great Italian conspirator is Massimo Scolari, who had also been in Aldo's triennale. I would organise an exhibition of his work – and Rossi's too – in New York in 1974. All of these meetings and exhibitions and connections between the New York and Italian architects then continued to have a domino effect all the way through the 1970s, with really important moments like Gregotti's 'Europa-America' biennale in Venice in 1976, *Roma Interrotta* in 1978, which Graves organised, and Portoghesi's biennale in 1980 and the *Strada Novissima* (which I was invited to participate in but turned down on Tafuri's insistence – probably one of my big mistakes).

TW *But in addition to your collaborations with all of these Italian architects, you also increasingly adopt a more engrained, Italian approach to design. Perhaps it was always there, but in the late 1960s and early 1970s it seems as if your work was more consciously echoing the wider connotations of Italian* disegno *– that is, design as a conceptual discipline, not technical, and one that deals with pure, ideal states, rather than mucky realities.*

PE In essence, yes. The houses I designed were all informed by a conceptual idea. That's why I argued that the drawings were the architecture.

TW *I must admit that for me this series of houses – which began with House I in 1967 and ended with House X in 1975, and constituted the work all these Italian exhibitions were showing – is the best thing you've ever done. Dense but simple, not least by virtue of the fact that they are all reducible to the idea of the house.*

PE It is probably the densest work I'd done up to that point. House I was basically Corb, House II was Terragni, House III is a mess, as far as I'm concerned, House IV was for the Triennale and was really didactic, House VI was great, House VIII never really developed into much, and House X became a crisis in my life.

TW *I don't want to go through the story of the making of each of them, but the first house, which you began in Princeton immediately after you left the school, was designed for a guy who ran a toy company.*

PE His name was Bernard Barenholtz and he owned a company called Creative Playthings. The commission was never meant to be a house. What he really wanted was a small display museum for his toys.

TW *But I like the fact that it becomes a kind of riposte to Banham, who had produced his 'A Home is not a House' with François Dallegret in 1965, whereas yours is a house that is clearly not a home. You are so obviously disinterested in any idea of domesticity or living.*

PE The more interesting house is House II, which dealt more explicitly with the column and the wall. I designed it for a radical professor of international law at Princeton named Richard Falk. At the time he was living with a former freedom fighter from the Hungarian Revolution. He was also a friend of Noam Chomsky's and his only instruction to me was 'I want a Chomsky house'. At that time I was working on deep structure and linguistic theory and so it seemed like an interesting commission. I immediately started working on the design. The site was beautiful – 100 acres in Hardwick, Vermont. The house was built – out of plywood – the following year, in 1970, by which time Falk had a new wife. They spent most of that year in Hanoi, where he was investigating the legalities of the Vietnam War. On their return they go straight up to Vermont to look at the house. They're devastated. She says to him, 'I thought we were getting a Heidi house?' He is upset at being so upset – because of course, being upset meant that he was really a middle-class bourgeois suburbanite, and not some roving intellectual. I think he really wanted a Heidi house too. So they moved into the basement and set up a temporary kitchen, bedroom and living room in revolt against their own house.

Peter Eisenman, House X, Bloomfield Hills, Michigan, 1975
Overleaf: Peter Eisenman, House VI, Cornwall, Connecticut, 1972–75
Courtesy Peter Eisenman

TW *Did Falk never warm to it, even after all the attention it attracted – and all of that provocation that it was cardboard architecture?*

PE No, never. For him the only provocation was the thought that he was ultimately bourgeois – which he hated. It was actually restored recently by a Dutch guy. It's for sale right now – yours for $850,000.

TW *House II really becomes the first of your projects to have widespread media dissemination. In one of your drawings you even anticipate this interest by hand-drawing the* Casabella *masthead onto an axonometric section. And of course there is that beguiling, much-published photograph of it on a snowy day, where you can't tell if it is real or not.*

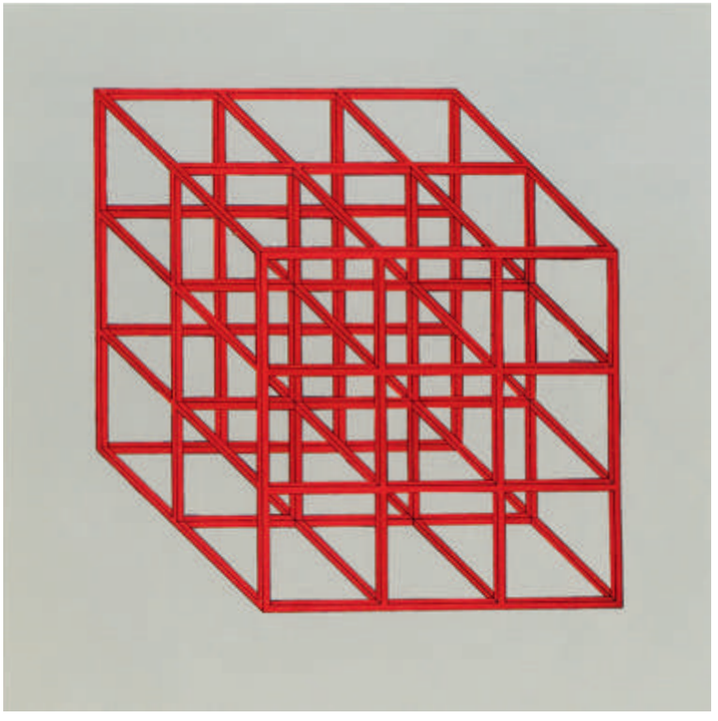
PE I was very careful about that. When a French magazine first published it I told them I didn't want any photographs with shadows. And so in print it really did look like a model because the plywood has no flashing. Their caption even said 'Model of House II' when it was the actual thing.

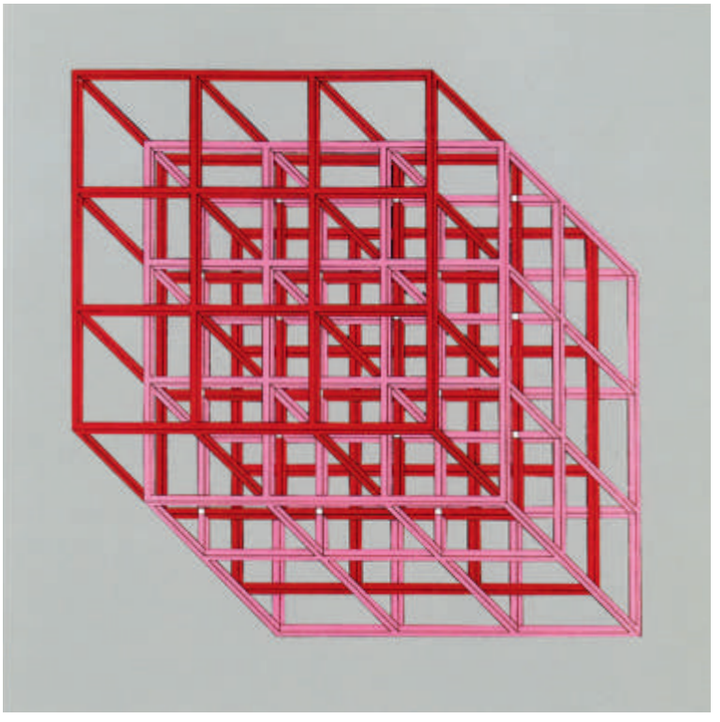
TW *What about House III? Were your clients happier with that one?*

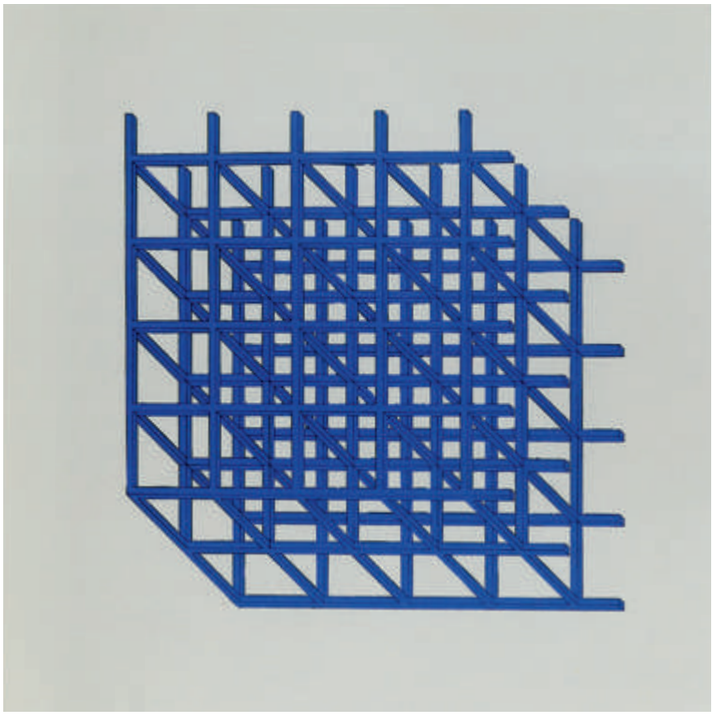
PE The client for House III was an advertising executive, Robert Miller, and he, in contrast, loved my work. However, his wife absolutely hated it. Nevertheless, he commissioned the house and we used to drive up to Lakeville, Connecticut to see the construction. This is the famous house where there is a column down the middle of the bedroom. Even though he'd seen this detail in the drawings, when he finally sees the column in the flesh, he says, 'We've gotta take that out'. I said 'Look, let's leave it for a year, and if you still hate it after that I'll have it removed at my expense.' Of course, at the end of the year he loves it, says it has totally transformed his life. He was a great guy. But the house itself was problematic. I was trying too hard. Sadly, not long after, Miller died. He's buried in a white cube at the end of Long Island. At his funeral they had a guitarist who played *Send in the Clowns*.

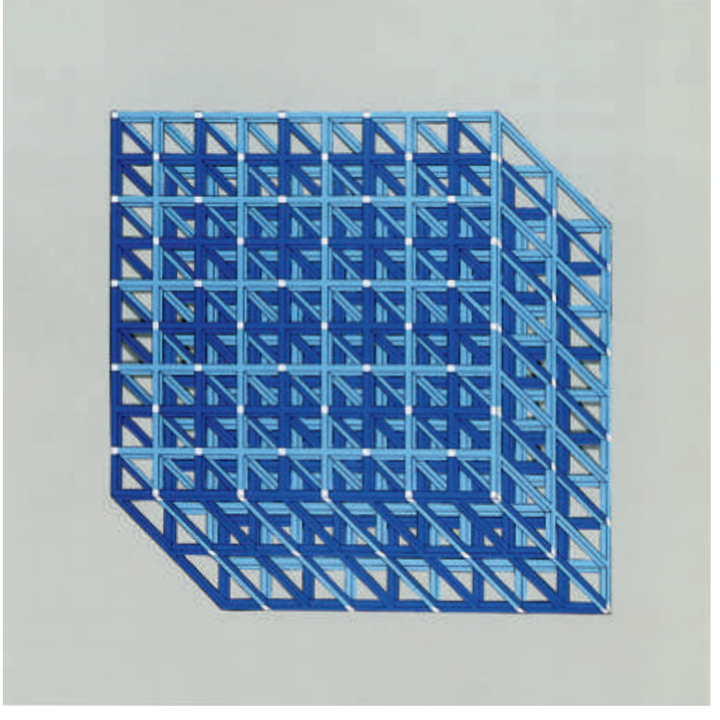
TW *House VI, which was also built, and was produced for the photographer Richard Frank and his wife Suzanne, who was a fellow at the institute, has probably the best set of drawings – all of those amazing coloured axos. Where did that particular style of drawing come from? It looks a bit de Stijl, even if I never think of your work as especially Dutch.*

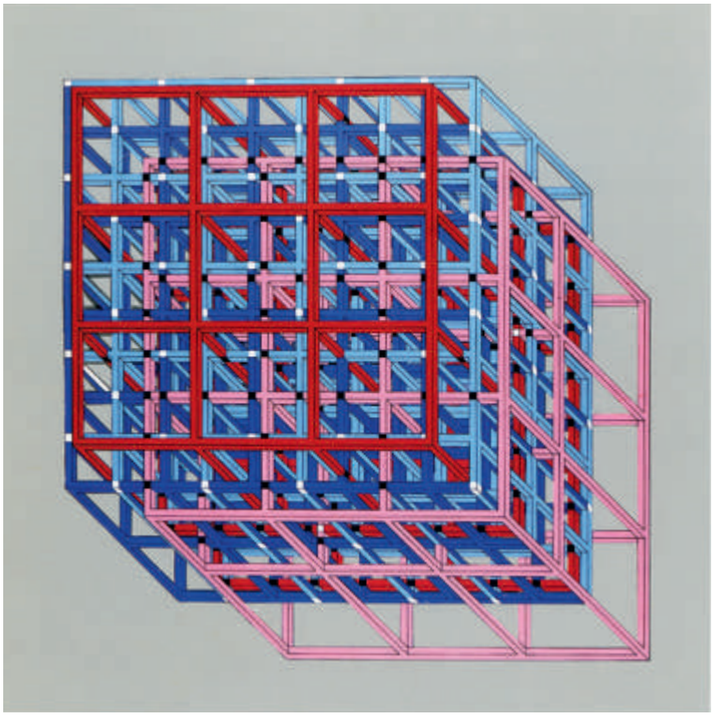
PE There's a slight smell of that – on the first road trip Colin and I went to every damn Dutch building you could think of, and many others you'd never have known – but the drawings that I knew and liked, and probably inspired me more, were the sectional perspectives that John Fowler produced for Rudolph and the worm's-eye views that Léon Krier borrowed from Choisy in his renderings for Jim.

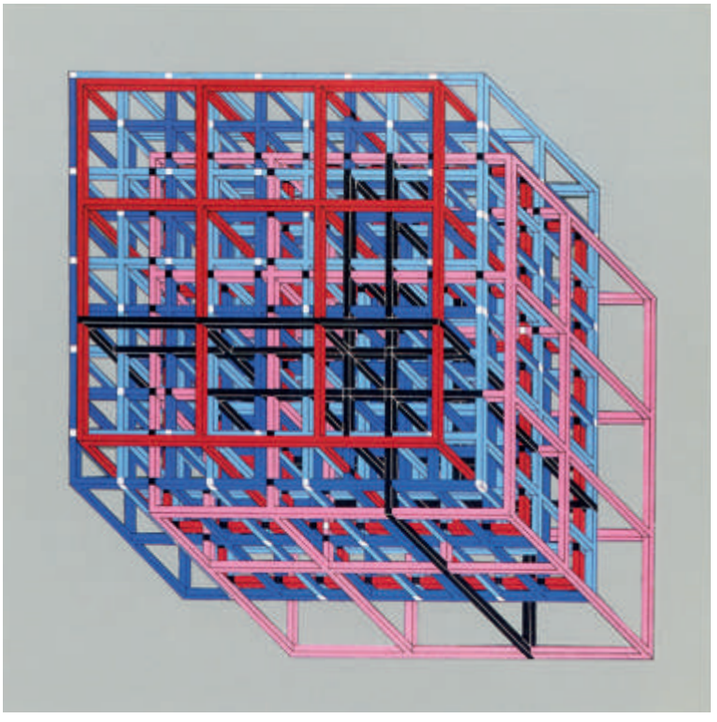


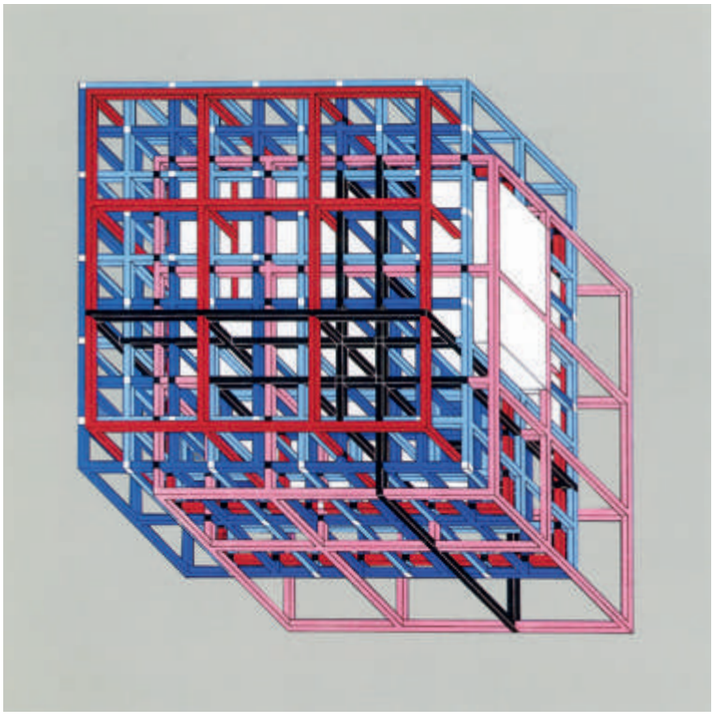


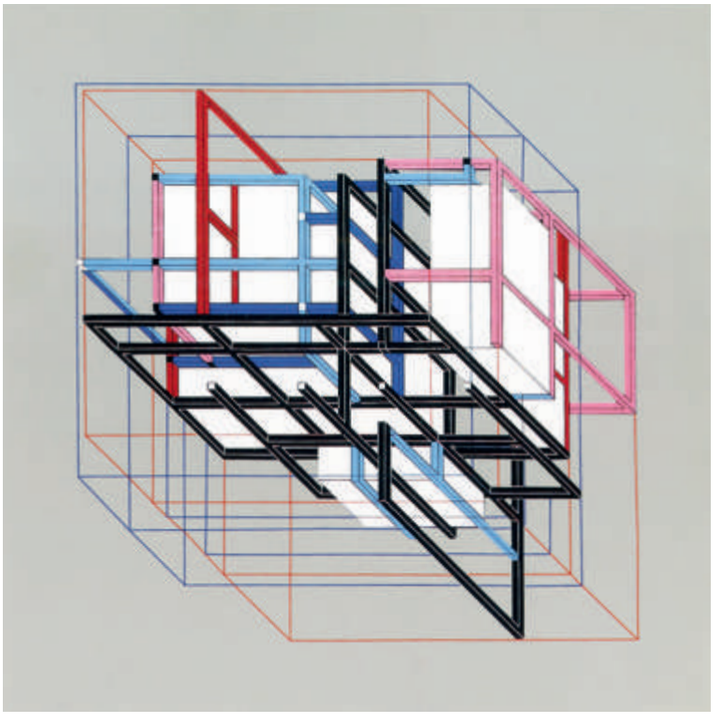












But when I look at the drawings of House VI now I just think of all the time and energy it took to produce them – sitting at my drafting table in the institute for hours on end, doing the line work with my Rotring and the coloured sections with tape and Letratone. Scolari always teases me by saying I can't draw.

TW *By the time you get to the last of them – House X – the axonometric has become a model.*

PE That was a helluva thing to conceptualise. It's a trick about monocular vision, it's a model set up to be photographed, rather than being seen as a model. The design is interesting, but the house itself was also problematic. It was for a guy called Arnold Aronoff, who was a concrete supplier – he did all the highways and big infrastructural projects in Michigan. I was designing it during the same summer I was in Italy working on the 'Europa-America' show. Aronoff wanted to build the house himself and even dug the hole on the site, in Bloomfield Hills, Michigan. All summer he kept insisting I send him the working drawings, and when these didn't arrive he fired me. He never even paid me. I remember sitting at a Century Club dinner with Philip Johnson in November telling him what happened. The next day I receive a cheque for $10,000 and a note – 'Long-term loan. Don't worry about it. Philip.'

TW *Despite Drexler's eagerness to keep Johnson away from the IAUS, in many ways he is the great overseer and patron of a lot of the things you were doing in the 1970s. You even built one of your repeating rituals around him – meeting for Century Club roundtable events every three months, alongside other local architects like Paul Rudolph, Kevin Roche, Harry Cobb and Stanley Tigerman. Johnson also writes the postscript to the* Five Architects *book, 'Not being able to follow the torturous path of his prose thoughts I look at House II and rejoice in its interpenetrating richness'.*

PE And Philip meant that. He was anti-theory, but he liked the work. He was always more interested in the work than the idea.

TW *In the same book Rowe writes a kind of perverse introduction that seems to undermine everything you were trying to achieve. He even begins it with a quote and call-to-arms from Aldo van Eyck.*

PE That's the nasty side of Colin. *Perfidious Albion* – that was Rowe.

TW *I know all these things overlap with one another – setting up the institute, teaching, exhibiting in Italy, designing houses – but can you talk briefly about* Five Architects *and how the New York Five came together.*

PE It was basically an extension of the CASE group, which by the late 1960s had split into a regional set of architects who were probably more interested in building than they were in thinking, or in being together. For one of these meetings – CASE 7, in May 1969 – Drexler invited Michael and me, together with a number of other architects of our choosing, to MoMA to present our more recent design work. There were six of us at that stage – myself and Michael, Gwathmey, Hejduk, Meier and Bill Ellis, who was with us at the institute. We each presented our first house to a number of architectural personalities, including Jim Stirling, Ken Frampton, Joseph Rykwert and Colin. It was such a success that Drexler said let's do it again next year. And so the following year we again set up in the trustees room at MoMA, but because Bill hadn't produced another house only the five of us presented. The meeting went just as well and we had a terrific discussion. I'd always liked the idea of publishing this material, but nothing had come of it. But then one weekend soon afterwards, as part of our regular Saturday ritual, I took my kids on the cross-town bus along 79th Street to visit my friend George Wittenborn's bookstore on the Upper East Side. George not only sold books but also ran a small publishing house. When I arrive I say 'Hey George, I've a great idea for a book for you.' I then describe how I could transcribe the presentations and responses from the CASE meetings and illustrate them with all the drawings. It would make a fantastic book. George says, 'Sure, let's do it. But what should we call it?' I suggested 'Cardboard Architecture' because that was the title of my project description for House I. George then announces it as a forthcoming publication. When the other four see this they are furious. 'Hey, Peter, that's your label, not ours.' We then tried to think of some alternatives but couldn't, and so in the end we just put our last names on the cover in alphabetical order. George publishes it in 1972 in a hardcover edition of 250 copies. They looked absolutely terrible – cheap paper, awful reproductions, terrible binding (nevertheless, Richard bought most of them up – you can't find one today for love or money). And that, I thought, was the end of it. But then one morning I was at my breakfast table reading the newspaper with my son Nick sitting across from me. He was about six years old at the time. I'm reading the sports section and Nick says, 'Hey daddy, you're in the paper.' I flip the newspaper around and there on the front page of section 2 is a full-page profile by Paul Goldberger, 'New York's Big Five', describing the book and presenting us as the next great thing. And it was immediately after that – as the New York Five – that we got invited to the triennale, to Naples and to Art Net. I was suddenly in a group that I had no interest in being in. I just couldn't escape it. (There was such a demand for the book that in 1975 I got Sheldon Meyer at Oxford to reprint it, and then later, still, MIT Press did an edition.) But then, after the Goldberger profile came out, these five other guys – Jaque Robertson, Bob Stern, Romaldo Giurgola, Allan Greenberg and Charles Moore – were so pissed off that they published a critique in *Architectural Forum* called 'Five on Five'. We then orchestrated it so that they would be their own group, the Greys, as distinct from us, the Whites, just to appease their jealousies. And still it didn't stop there. In 1974 Thomas Vreeland – who was a member of the original CASE group – organised a ten-year anniversary celebration in Los Angeles called 'Four Days in May' where they presented their own alternative group, the Silvers (which included Vreeland, Cesar Pelli and Craig Hodgetts). Absolutely everybody was there – not just all the Whites and Greys, but Vincent Scully, Bob Venturi and Colin Rowe. We took over the whole of the UCLA school of architecture. Classes were cancelled for the week. We were chauffeured around in these huge 1950s Cadillac convertibles. I remember on the first night there was a huge party at a nearby garage. Inside, I asked Tim Vreeland who was throwing the party and he said, 'That little guy over there.' 'Who's that?' I asked, but nobody knew. Someone else said he was a local developer-architect. He turned out to be Frank Gehry.

TW *Suddenly a whole new kind of architect had emerged. But what do you make of yourself at the time, or a few years later in 1977, when Krier draws your portrait?*

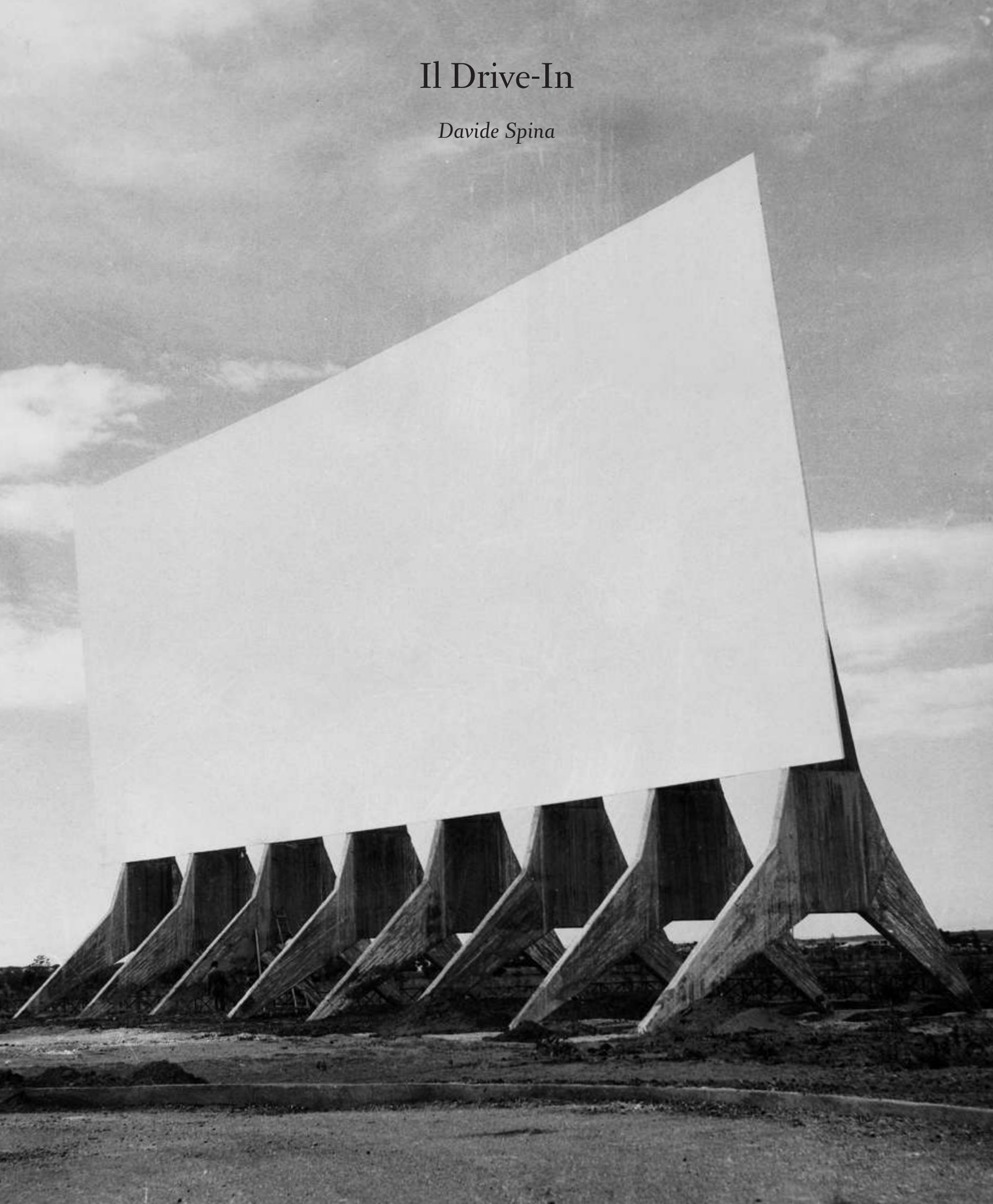
PE By then I was established. I had my look – with my handmade shirts with detachable collars, with my suspenders and with my half-hose and garters – and I was playing my role.

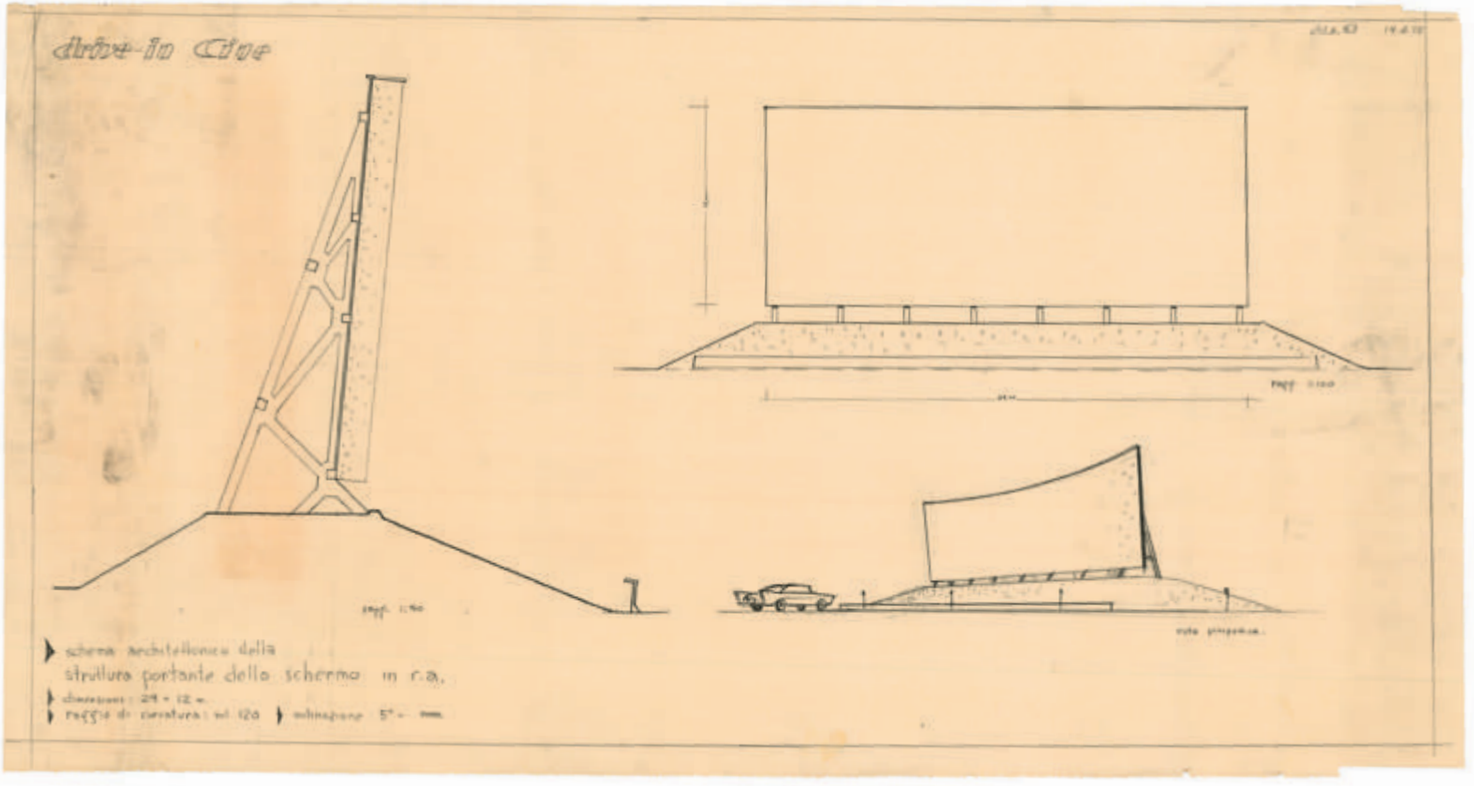
TW *You'd also done a hell of a lot. In 1977 you were still only 45, and yet you'd got three architectural degrees, you'd fought in a war, you'd secured and then lost an Ivy League professorship, you'd had an exhibition at MoMA, you'd created your own institution with its own books and journal, you'd got a wife and two kids, you'd had a cheque in your pocket for over a million dollars, you'd built several houses and designed several more, you even had your own, accidental, architectural group. I know you've never actually stopped, and have basically kept going at the same manic pace ever since, and that today you are still teaching and now theorising on late-style, among other things, but what would your professorial self of today make of the early-period Eisenman?*

PE When I lost House X I went into Jungian analysis. As a result, I began to do different work, larger scale and excavating the ground, which was analogous to my psychological work. This would move me from only thinking to my unconscious ground, to reality. But looking back, like most people, I would not change anything about your so-called 'early-period Eisenman'. It was what it was.

Il Drive-In

Davide Spina





Eugenio Galdieri, fourth design
of the Metro Drive-In, April 1957
© Galdieri Archive /
Central State Archive, Rome

On stage, a comedian in a stars-and-stripes shirt hams it up for the audience. At the punchline to every bad joke, preppy-looking teenagers leaning on car bonnets descend into forced paroxysms of delight, only to be drowned out by canned laughter, while a scantily clad woman serves milkshakes, smiling knowingly at the camera as she cantilevers over each of her customers. Nothing encapsulates Italy's fascination with America in the 1980s better than *Drive In*, a variety show broadcast on Silvio Berlusconi's TV channel, Italia 1, between 1983 and 1988, and featuring many of the ingredients of home-grown public life: trashy satire, shameless consumerism and a tinge of machismo – in a nutshell, Berlusconi's own recipe for success. Providing the setting for this profusion of vulgarity was a fictional 1950s drive-in cinema, an ersatz Americana of neon lights, pinball machines and chrome-plated convertibles, installed in one of the Cologno Monzese film studios, Berlusconi's production centre near Milan. Not only did the show neatly avoid the realities of the Reagan-era US, it also fuelled the escapist fantasies of the average Italian (male), providing relief from the vexations of the previous decade – the *anni di piombo* ('years of lead'), characterised by social unrest, political terrorism and a steady stream of depressing news bulletins. As the country rose out of the doldrums in the mid-1980s, *Drive In*'s explicitly American imagery and light-hearted entertainment sought to tap into a newfound sense of enjoyment.

But this was not the first time that America and its drive-ins had provided the backdrop to the erasure of a traumatic past and the consolidation of an affluent present. Some 30 years earlier – in the actual 1950s – Italy was still attempting to come to terms with the war and its entanglement with fascism, under both Mussolini and the Nazi occupation, while at the same time hoping to enjoy the *benessere*, or riches, of the so-called 'economic miracle'. In this period, the consumption of large amounts of US pop culture was seen as means towards a new end, or even an end in itself. Gripped by a mania for all things American, Italians could just not get enough of Jayne Mansfield and James Dean.

In 1957 a strange building, a consummation of this love affair, appeared on the outskirts of Rome. The Metro Drive-In was the first cinema of its kind to be built outside the United States, even if its giant concrete screen did not look like anything you would find in Kansas City, Missouri. Somewhat surprisingly the building is still there, 60 years later, partially concealed behind a rusting fence. Once a jewel of engineering that floated above an undeveloped flatland, it is now a weed-strewn fossil engulfed in the drabness of Rome's suburbia – too alien to appeal to a local population, too mundane to attract historians. Yet even though this real 1950s drive-in cinema never quite reached the same level of popularity as its fictional 1980s counterpart, its story is perhaps more telling of the relationship Italy imagined it enjoyed with America after the end of the Second World War, and of the ways architecture sustained this fantasy.

Somewhat ironically, the story of a building unmistakably evoking modern America began on the doorstep of ancient Rome, in the airy rooms of a *villino*, or detached house, near the Aurelian Walls. 'This project stands within an area destined for film entertainment, where the audience can watch the show from their own car … as it is done in the United States', was how Eugenio Galdieri introduced his vision in October 1953.[1] Galdieri, a recent graduate of the Valle Giulia architecture school, was probably acting on his own initiative, his papers showing no client or backer at this stage. He was just 28-years-old and, apart from the family house and the odd *palazzina* (typically the first job for many architects in postwar Rome), he had designed very little. However, for a project as idiosyncratic as a drive-in, perhaps the right connections mattered more than architectural experience, and Galdieri, as the son of the respected screenwriter, playwright and lyricist Michele Galdieri, was well endowed in this regard. So the young architect was literally born into the film world – and in 1950s Rome, the so-called 'Hollywood on the Tiber' years, that world was crawling with Americans, exploiting the availability of cheap labour, state subsidies and the Cinecittà studios to shoot a number of major productions in the city (among them *Quo Vadis*, *Roman Holiday* and *Ben Hur*).[2] Attuned to all the film industry gossip, Galdieri would therefore have heard about the latest American fad, the boom in drive-in cinemas, which many people imagined would soon outsell their more conventional indoor counterparts.

Anyone planning to build a drive-in theatre in the 1950s, whether in the US or in Italy, knew that the first prerequisite was affordable land in an area where people made extensive use of their cars – or at least, where it was imagined the car would soon be king. And in postwar Rome there was one place that perfectly fitted this brief: Casal Palocco, a swath of largely undeveloped land halfway between the city and the sea, and where the existence of a basic infrastructure and the involvement of various real estate companies, developers and builders formed ripe conditions for the creation of a suburb – ie, the perfect catchment area for a drive-in business. Casal Palocco was located towards the end of Via Cristoforo Colombo, the 27km-long motorway that runs from central Rome, through the EUR (Mussolini's showcase district), to Ostia (the city's seaside resort). In its early incarnation in the late 1930s this road was a flagship project of the fascist regime, which saw it as a means to propel the expanded city towards the sea and thence, allegorically, towards the faraway lands of the empire (which explains its original name, Via Imperiale). Stalled during the war, construction resumed under the new republican paradigm, with a different agenda: the road was now to provide the infrastructural support for the spread of a commuter lifestyle, attracting the car-loving rich who worked in the nearby EUR quarter, which was then transmogrifying into a mock American business district, complete with high-rise office buildings. This new, suburban ideal was especially well suited to Casal Palocco, because it offered exactly the right topographic and demographic mix: it was flat, sparsely populated and could be purchased cheaply and then turned into a healthy profit.

Among the main sponsors of this expansion was the Vatican-controlled developer and contractor, Società Generale Immobiliare (SGI). The company – a veritable real estate giant, with unrivalled political support, seemingly unlimited financial resources and strong transatlantic connections – had bought the Casal Palocco estate from an aristocratic Roman family immediately prior to the Second World War. By the mid-1950s it had already begun to develop a loose fabric of suburban houses for the affluent, even employing prominent architects like Adalberto Libera, Giuseppe Vaccaro and Ugo Luccichenti.[3] The scheme was the first of its kind in Italy, and yet because of its ostensibly vulgar character it would be largely ignored by Italian academe – in Manfredo Tafuri's *History of Italian Architecture*, for example, it is summarily dismissed as 'the golden suburb'.[4]

Previous: the concrete screen-cum-support structure of the Metro Drive-In, *c* 1957–58
© Galdieri Archive / Central State Archive, Rome

The young Galdieri, then, had all the necessary ingredients for a drive-in – the perfect verisimilitude of a car culture, suburbia and vulgarity. But still the design was not a straightforward process, largely because he had to start from scratch, first learning about this American building type before adapting it to a local context. His office archive shows the extent of this research, with letters to companies specialising in the supply of drive-in specific technical equipment, photographs of American examples and press clippings published in Italian car magazines. Galdieri poured everything he had learned into his first drawing of the outdoor cinema, a rudimentary plan dated October 1953. The choice of site, a plot bordering Via Cristoforo Colombo, next to SGI land, suggests that from the very beginning the drive-in sprang from, and was expected to develop a symbiotic relation with, the neighbouring real estate operation. Galdieri then spent the following two months preparing a more detailed design in collaboration with engineer Norberto Libori. By December of the same year, plans, elevations and a bill of quantities were ready for a pitch to AXA, the company that owned the parcel of land on which the architect envisioned his *cinema-arena per auto*.

Although obviously deferential to certain American models, this proposed design defies typological categorisation: the 22m × 16m screen is held up by four slender concrete piers, shaped like upside-down Ys and joined to foundation plinths via fixed supports. On the front, a stair-like structure (presumably also in concrete) bridges the space between the screen and the ground and supports three billboards. On the back, a rectangular tile-clad box, containing the office and the technical rooms, hovers 6.5m up in the air, supported by the same piers and connected to the ground level by a spiral staircase. Crowning the whole ensemble, a large neon sign flickers 'Cine Arena Colombo' at the passing motorway traffic.

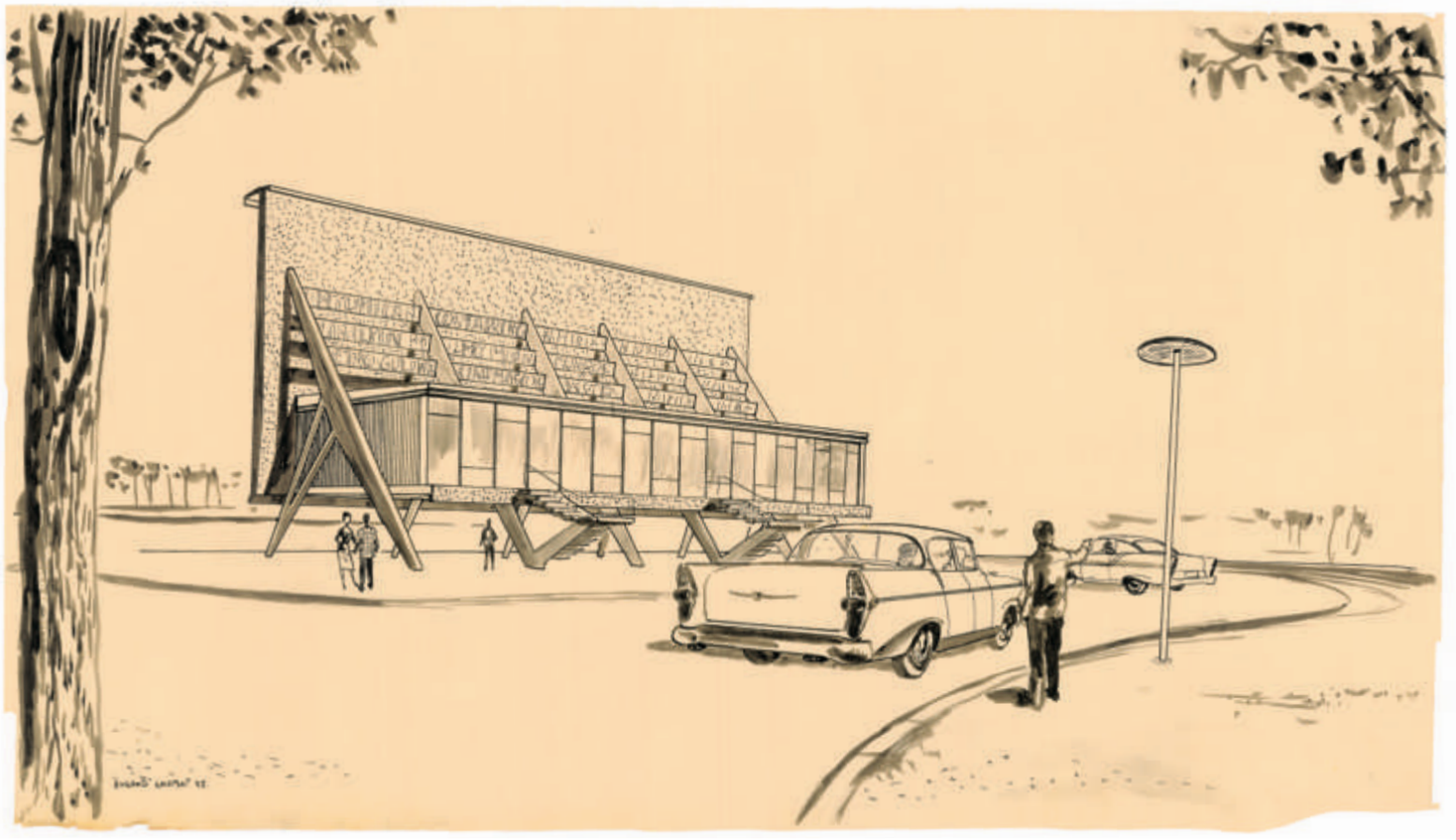
AXA appears to have shown some interest, because a few months later, in March 1954, Galdieri and Libori presented an amended scheme. The general layout is unchanged, although the whole thing has moved one block north (perhaps to allow cars to filter safely from the motorway) and the screen-cum-office box is smaller and more refined. The screen is also now closer to the ground, at the same height as the rectangular box (2.9m), and features a fully glazed rear – 'Brasilia-style', as Galdieri remarked years later.[5] The concrete piers are still there, but they are now connected by steel braces to create an unusual hybrid system. On top, the neon sign has gone. In typical functionalist fashion, Galdieri attaches a plan of the parking area, explaining how cars were expected to move in and out via arrows and dotted lines. A visualisation of the building in operation adds some gloss: large American sedans cruise by a marquee advertising a Danny Kaye film.

AXA was certainly more intrigued by this new design, because negotiations continued over the following months and in November 1954 Galdieri and his associate presented a third, even more ambitious scheme, where the drive-in is simply one element in a larger development extending along Via Cristoforo Colombo, a kind of automotive theme park featuring racetracks for Formula One cars, stock cars and go-karts, and a series of automobile workshops, with a hotel and a restaurant and rows of suburban houses thrown in for good measure. Letters in Galdieri's archive explain the reasons for the sudden amplification of the scheme. Earlier that summer, Formula One had come to Rome with a non-championship event at the Castel Fusano circuit – 6km of asphalt cutting through a thick forest of umbrella pines – and AXA hoped that the Grand Prix would be there to stay, not least because their land was just a short drive from the circuit. In their vision of the future, the area developed into a hub of 'facilities of a large car manufacturer' and as 'a centre for all the events related to motor sports', perhaps even serving as a base for one of the Formula One teams.[6]

Of course, this was all pure fantasy. None of this larger development materialised, though the local planning office did approve one part of the proposal – the drive-in – and Galdieri produced yet more drawings when design resumed under a more realistic agenda in early 1957.[7] By then, the young architect had stepped into character, driving a fire-engine red Studebaker Flight Hawk,[8] which acted as a kind of emblem of his commitment to the project, which he liked to present as 'an absolute novelty in Italy'.[9] The US motion picture company Metro-Goldwyn-Mayer (MGM) soon picked up on the idea, since 'in the film world everyone knows everything' – as Paolo Ferrari, the first manager of the Metro Drive-In, put it.[10] Alone among the American 'Big Five', MGM ran a few indoor cinemas in Italy. These including the renowned Astra in Milan and the Gioiello in Turin, both managed by the 23-year-old Ferrari, originally a small-town boy from Piedmont, who would go on to occupy top positions not only at MGM but also at Columbia and Warner Brothers. Ferrari recounts that 'at that time people talked about the success of drive-ins in America and this one in Rome seemed a great opportunity'.[11] Indeed, by the spring of 1957 MGM had formed a 50-50 partnership with a group of local cinema entrepreneurs and taken over the scheme. The drive-in's moment had come. A contemporary magazine feature even shows a model for a second, larger scheme in the northwest of the city, produced by the architect Emilio Lapadula, brother and partner of the more famous Ernesto, author of the ultra-fascist, square coliseum-like Palazzo della Civiltà Italiana in the EUR district.[12]

MGM's takeover brought substantial changes to the design, now rebranded Metro Drive-In, including the re-orientation of the screen to face east, in the American fashion, so that the setting sun would not interfere with the projected image. MGM also insisted on a cinema with a larger capacity, and therefore a larger screen, so the suspended office had to go ('a 38m × 21m screen could not bear another structure', Galdieri explained).[13] For the same reasons, the original Y-shaped piers, elegant, but not entirely convincing structurally, were first replaced by a more efficient truss structure, and then by an even sturdier eight-pier system. The new screen ratio and radius of curvature responded to MGM's 'Metroscope' widescreen standards, and its size required US-manufactured 'Century' projectors with 'Super Cinex' lamps. In order to assist its Italian designers in dealing with these technical criteria, MGM flew in two American specialists.[14] With help at hand, further refinements to the design were then made, establishing a set of ideal proportions between the screen and the first ramp (38m), between the screen and the projection booth (136m), between the ramps themselves (11.4m), and between the speaker posts (5.4m). Even the road bordering the plot came under scrutiny ('can we close and use as driveway?').[15] It is not clear, however, that the American engineers helped much with the 'topographic' aspect of the job – that is, the design of the ramps in the parking area. Galdieri explained the problem in a 1996 interview: 'I had to provide a space that worked both

Overleaf: Norberto Libori, first design of the Metro Drive-In, December 1953
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Central State Archive, Rome

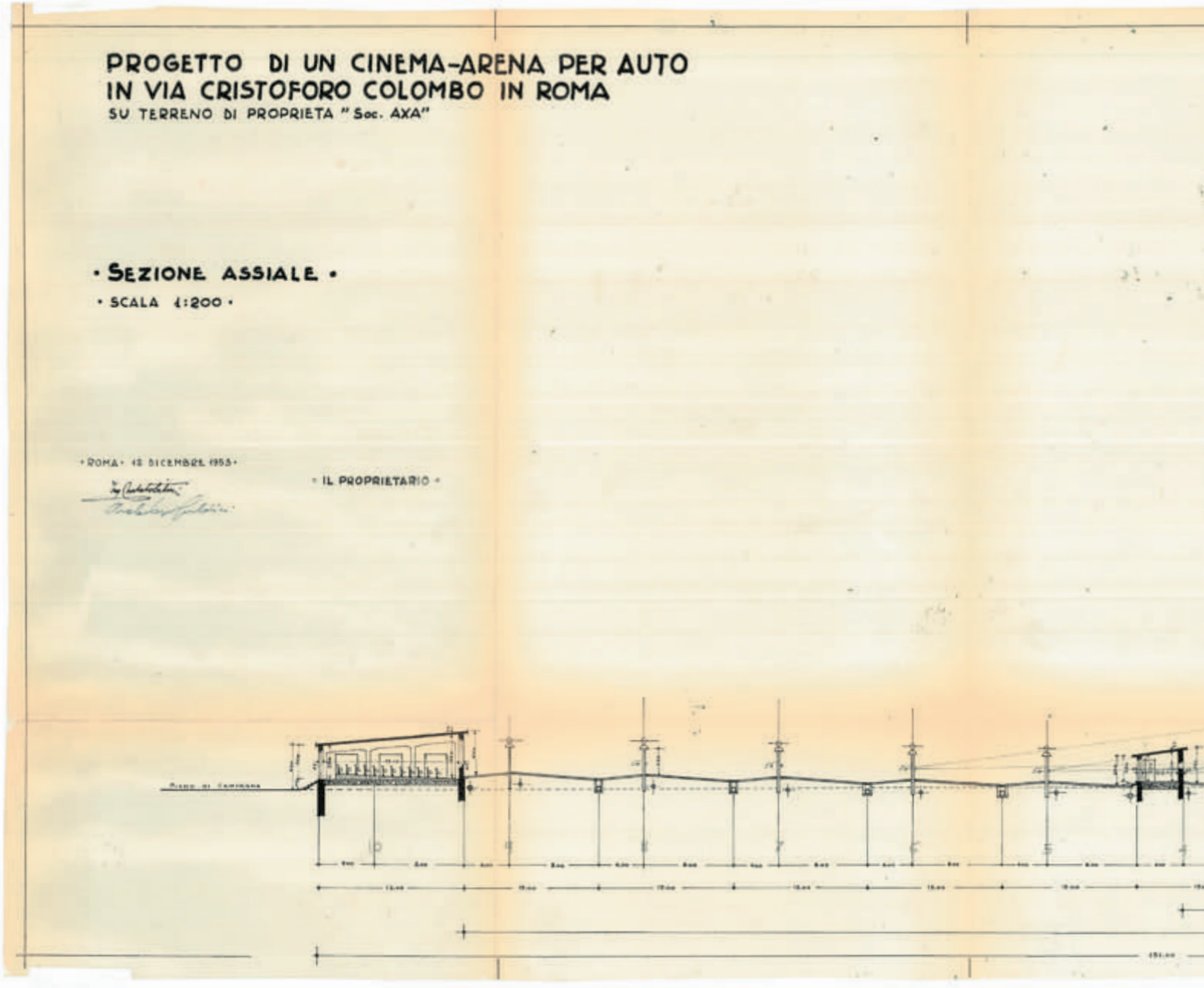


Eugenio Galdieri, third design
of the Metro Drive-In, early 1957
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for a Fiat 500 and the ambassador's Cadillac… for this reason I had to disregard all the American standards… The study of the undulating parking area is what intrigued me the most… I spent a long time on this issue and finally came up with my own solution' – a solution that essentially amounted to steeper ramps, which allowed for better vision through the smaller windscreens of the Italian car of choice, the Fiat.[16]

Building the Metro Drive-In took three months, and on busy days you would see up to 300 construction workers on site – at least, according to a newspaper feature published after its completion.[17] In contrast with standard Italian practice, Galdieri recalls that MGM granted him an unusual degree of authority over the site – 'in typical American fashion, I supervised the whole construction process… I even had to supervise the choice of food sold in the snack bar, tasting *supplis* [the fried rice balls commonly sold in Rome] and examining the quality of the toilet paper'.[18] As in the US, the finished structure featured a concession stand and a playground for children, but distinct from any American model this version also featured a large area for up to 250 Lambretta- and Vespa-riding patrons. All in all, it was a cinema of average capacity (comfortably accommodating 750 cars), yet its screen was larger than any catering to the same number of vehicles in the US.

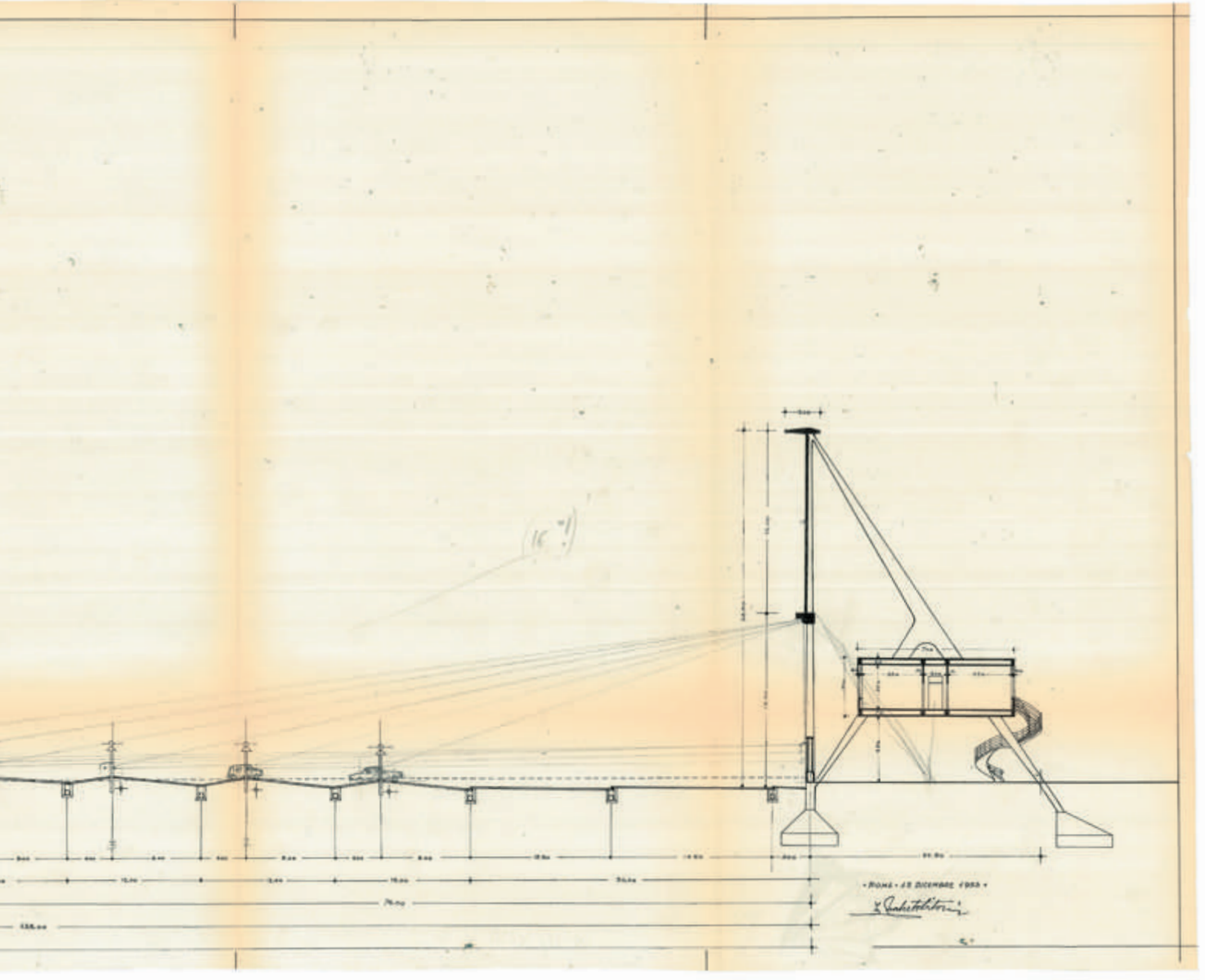
On the opening night of 29 August 1957, attended by the actress Viviane Romance and the film director Dino Risi, the place was packed (not with the envisaged Cadillacs, but with *topolinos* and Fiat 600s, a rear-engine model launched two years before). To the patrons the whole thing seemed somewhat alien. One of the reports in the newspaper the next day commented on 'a certain air of science fiction… not because of any Martians, but because of the ushers with their white suits and brimmed hats… and spotlights sweeping across the crowd'.[19] Everyone was overdressed – 'the ladies took the announcement of a gala event too literally and showed up in long evening gowns, but there was no one to talk to', while 'smartly dressed people lost their patience as they tried to slot their car between the speaker poles… beads of sweat pouring down the foreheads of these respectable family men'.[20] Further reviews and



reports on the drive-in followed over the next few days. While there was unanimous appreciation of the visual qualities of the building – 'an ingenious movie theatre, the sky is the roof, a concrete sheet is the screen[21]... the daring architecture is part of the show'[22] – broader assessments were mixed. Leftist dailies were sceptical about the experience – 'it was a really long drive to get there... it is not that comfortable in our cars... there was such a crowd at the concession stand'.[23] Conservatives, on the other hand, were more positive, with one even predicting 'a bright future for this form of entertainment'.[24]

In reality, however, the future was less sunny. Paolo Ferrari, who took over the management of the building in March 1958, recalled that just eight months after opening 'business was not good' because of 'problems impossible to solve'.[25] The first of these concerned the issue of importing an American car culture into 1950s Italy. Ferrari and Galdieri soon discovered that Italian vehicles were too small to allow for a pleasurable film experience – 'you would need an American *macchinone* (large car) to really be comfortable'[26] – and their technology was generally not geared towards comfort – 'the Fiat 500 lacked air conditioning... in summer it was too hot and in winter the windows would steam up'.[27] More generally, cars were also not part of the wider culture in Italy, certainly not compared to the central role they played in American society. 'In Italy having a car is already a sign of privilege',[28] observed one reporter. As a result, unlike the US, the interior of the car was never conceived as a mobile extension of the inner spaces of the home.

If, in America, going to the drive-in was less about watching a film, and more about hanging out *in* and *around* the car, in Italy this symbiotic relationship was never as strong. Cinema audiences in Italy were more invested in the actual viewing experience, which in drive-ins was handicapped by the technological limitations inherent to the medium – inferior image and sound quality were the inevitable consequences of screening films in an outdoor environment. Also, going to the movies in postwar Rome, and for that matter in Italy as a whole, was appreciated more as a collective experience than an individual one. Dino Risi, who knew the Italian



public well and would later produce smash hits like *Il Sorpasso* (*The Easy Life*, 1962), admitted to feeling 'very anxious' during the opening night, because, as he put it, 'the success of a comedy depends on the contagious laughter you get in a large seating area… Here you have seating areas of a maximum four people… basically every car is a seating area.'[29] In short, as private viewing boxes, cars were a bad match for the *commedia all'italiana* flicks that the public loved so much.

Also lost in translation was the fact that in America the drive-in was a place where a certain degree of informality was, if not encouraged, then at least accepted – no one would raise an eyebrow at a woman with her hair set in rollers or a man wearing a vest – but for a conservative and fashion-conscious country like Italy in the late 1950s this was a definite no-no. In addition, there were misplaced assumptions about who would come to the Metro Drive-In. Couples wearing upmarket clothes feature both in posters advertising the opening of the building (chatting beside a big sedan under a starry sky) and in Galdieri's own visualisations (lounging by the concession stand). But rather than the imagined masses of affluent couples stopping by on the way back from the beach, the actual audiences consisted mostly of 'families who could not afford a babysitter and therefore brought the children along to the movies' – basically the same customer base as in the US, except less of it and with less purchasing power.[30] Hardly enough to justify the $1.5 million investment that had gone into the building.

Perhaps more than its reception, though, it is the design of the Metro Drive-In that speaks most clearly of the pitfalls of transferring building types across cultures. Upon its completion, the drive-in was the only cinema of its kind in the world to feature a screen-cum-support structure made entirely from reinforced concrete. This structure was, as a British TV commentator rightly observed a decade later, 'an engineering achievement in its own right', and building it 'presented all the problems you would encounter in constructing a giant bridge'.[31] In 1957, Italy's king of engineering was Pier Luigi Nervi, who had recently published the influential *Costruire Correttamente* (Building Correctly). Galdieri, who studied under Nervi, 'not only at the Valle Giulia school but also at his studio', claims that his mentor told him, when they met a few days after the opening, that 'he wished he had designed it.[32]

Fictitious or not, the anecdote is revealing because it hints at the reasons behind the choice of material: if young Galdieri was to make a name for himself as the designer of a building that someone like Nervi would appreciate, then reinforced concrete – the preeminent material for signature buildings in postwar Italy – was the way to go. Of course, concrete was also cheap and therefore used extensively in other leisure buildings in Rome (a number of sporting venues for the 1960 Olympics, some of them designed by Nervi, were also in the pipeline at the time). However impressive these structures were, none of them used concrete to build something that was *not* normally built in concrete. As a rule, American drive-in cinemas featured screens made of painted plywood or asbestos panels mounted on a steel or wooden frame. This meant they were relatively cheap to assemble and they could also be quickly dismantled and moved to another location if required. In its native context, then, this building type had a slightly DIY, backyard quality to it, and could not function without the invention of a set of gizmos, all similarly low-tech and portable (car speakers and heaters, water and pesticide sprayers, and in certain southern US states, large nets to keep insects away).[33] In short, it was a 'non-architectural anti-building', as Reyner Banham appropriately put it.[34]

The Roman equivalent, in contrast, stood at the opposite end of the architectural spectrum – concrete, monolithic and, as Galdieri himself described it, 'unmovable' (which helps explain why it is still standing all these decades later).[35] Of course, the Metro Drive-In featured wiring, piping, speakers and heaters, but these ephemeral add-ons were counterbalanced by the permanence of concrete beams, brick infill, travertine cladding and ceramic tiles in the complex's outbuildings. And the gigantic concrete screen had a sculptural presence that spoke the Corbusian language of a 'correct and magnificent play of masses brought together in light', rather than being a machine, let alone a postmodern billboard.

Indeed, archival evidence shows that Galdieri pursued the concrete solution with unwavering conviction, even disregarding specialist advice. For example, a letter from Microtecnica, a Turin-based cinema equipment manufacturer, had warned him that 'screens in masonry [and by extension concrete] are not used in the US because they offer low levels of brightness … it is obvious that the client leans towards an American design… We trust that you will provide them with this information so that they can choose a solution that takes into account the experience of experts in the field'.[36] But their trust was misplaced. Galdieri chose *not* to inform MGM of Microtecnica's recommendation, because it would have foiled his attempt to author a 'spectacular'[37] and 'Nervi-like'[38] design. Somewhere over the Atlantic, then, the utilitarian character of the drive-in was lost, and its Italian iteration had something closer to the permanence and grandeur of a church or temple. Banham characterised it slightly differently, betraying his own allegiances – 'this whole argument hinges on the observation that it is the American way to spend money on services and upkeep rather than permanent structure as do the peasant cultures of the Old World'.[39]

Perhaps it is therefore hardly surprising that the only other all-reinforced concrete drive-in screen in the world is found inside a US Naval Station in another region with a strong *campesino* heritage – Andalusia, in southern Spain (built in 1960, it is still in use today). Further support for Banham's proposition comes from Ferrari's retrospective comments on the issue – 'while Americans built these screens, so to speak, in *papier mâché*, we made a gigantic concrete screen', and 'if you entrust the design of a cinema to an American architect he would make it in lightweight elements that could be moved or replaced if necessary. An Italian architect would clad everything in marble.'[40] Given this distinction, it would have been interesting to hear the views of Denise Scott Brown and Robert Venturi on this specimen of Italian roadside architecture, but unfortunately their own six-week stint in Rome, at the atelier of Giuseppe Vaccaro, ended in early 1957, just a few months before the opening of Galdieri's piece of Italian Americana.[41]

The Metro Drive-In, in this sense, speaks volumes about Italy's phantasmic relationship with America over the last century – and again the materiality of the building lies at the heart of the issue. For here the use of concrete was not a signifier of resistance to the US, as it was, for instance, in its contemporary, the Torre Velasca in Milan, an explicitly un-American skyscraper.[42] Rather, in lending permanence to what is usually an ephemeral building type,

Opening night of the Metro Drive-In, 29 August 1957
© Hulton Archive / Getty Images











Galdieri is commemorating and celebrating the very idea of the drive-in – an idea that already in 1957 was filtered through a certain nostalgia (for drive-ins were already by then a less profitable financial investment in the US). Somewhat inadvertently, then, Galdieri designed a concrete memorial to the American drive-in, not an actual one.

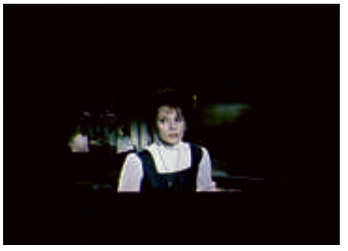
Ultimately, then, the Metro Drive-In belongs to that category of Italian buildings that misrepresent the spaces of American modernity, either by monumentalising them (as in the case of the Lingotto building in Turin – the factory), or by simulating them (as in the case of the ENI building in Rome – the office).[43] There is something irreparably decadent about this club of buildings, for they all bear witness to a protracted and delusional attempt to access the mythic space of modern America. The production design of the 1980s *Drive-In* TV show – a postmodern and more successful rendition of Galdieri's Roman drive-in – is in this way part of a longer Italian tradition, and one in which the dominant sensibility is the grotesque. As the Marxian dictum goes, 'history repeats itself, first as tragedy, then as farce'.

A building like the Metro Drive-In should be preserved as an *aide-mémoire* of this trope. Yet its preservation is highly unlikely. Like many of its American counterparts, the Rome drive-in is doomed to succumb to the forces of real estate development. The facility closed in 1986, and the current owner has plans to raze it to make room for a development of single-family houses. In 1997 a group of cinephiles tried to ward off this sad end by revamping the theatre with a summer-long series of screenings, but the venture had no substantial effect on the value placed on the building and it is only a matter of time before the wrecking ball strikes. When asked whether anyone had thought of listing the building, the head of the local heritage authority left no room for doubt – 'Why would anyone want to list that thing? It's just a concrete screen.'[44]









Screenshots from the British Pathé documentary, *Rome's New Drive-In Cinema, Aka Auto Cine*, 1967

1. Eugenio Galdieri, *Relazione Tecnica sul Progetto di Massima per una Cine-Arena per Automobili. Via Cristoforo Colombo*, typewritten report dated 14 October 1953, Galdieri Archive, folder EG DOC 1–7 / Drive-in, Roma.
2. The so-called 'frozen funds' were also key to the rise of the 'Hollywood on the Tiber' phenomenon. A 1949 law dictated that part of the profits from American films were barred from export and had to be reinvested locally. This fuelled the growth of the Cinecittà studios.
3. For a historical account of the Casal Palocco development see Bruno Bonomo, '"On Holiday 365 Days a Year" on the Outskirts of Rome: Urban Form, Lifestyles and the Pursuit of Happiness in the Suburb of Casalpalocco, 1955–80', in *Urban Planning and the Pursuit of Happiness: European Variations on a Universal Theme* (Berlin: Jovis, 2009).
4. Manfredo Tafuri, *History of Italian Architecture, 1944–1985* (Cambridge, MA: MIT Press, 1989), p 81.
5. Eugenio Galdieri interview, in Massimiliano de Falco, 'Splendori e Misteri del Metro Drive', *Gazzetta di Casal Palocco*, March 1996, p 27.
6. Typewritten memo from AXA to Eugenio Galdieri, 22 February 1955, Galdieri Archive, *op cit*.
7. *Ibid*.
8. Author's interview with Eugenio Galdieri's wife, Alessandra, 21 December 2015. A 1956 handwritten note by a car dealer urges him 'to collect it within the day'. Galdieri Archive, *op cit*.
9. Eugenio Galdieri, handwritten memo, date unknown. *Ibid*.
10. Paolo Ferrari, interview with the author, 22 December 2015.
11. *Ibid*.
12. Achille Perilli, 'Drive In', *Settestrade*, May 1956, pp 21–22.
13. Eugenio Galdieri, interview, *op cit.*
14. Paolo Ferrari, *op cit.*
15. Eugenio Galdieri Archive, *op cit*.
16. Eugenio Galdieri, interview, *op cit.* (Given his enthusiasm for the design of the earth ramps at the Metro Drive-In, it is not surprising that later in his career Galdieri would become a champion of earthen architecture.)
17. Renato Godino, 'Il "Drive-in" di Castelfusano: Versione italiana dei modelli americani', *Il Globo*, 10 September 1957, p 3.
18. Eugenio Galdieri, interview, *op cit.*
19. *Momento Sera*, 30 August 1957, p 5.
20. Riccardo Mariani, *L'Unità*, 29 August 1957, p 5.
21. *Ibid.*
22. *Momento Sera*, *op cit.*
23. Riccardo Mariani, *op cit.*
24. Unsigned feature, *Il Tempo,* 29 August 1957, p 4.
25. Paolo Ferrari, *op cit.*
26. Riccardo Mariani, *op cit.*
27. Paolo Ferrari, *op cit.*
28. Unsigned feature, *Il Giornale d'Italia,* 30 August 1957, p 5.
29. Dino Risi, interview, in Riccardo Mariani, *op cit.*
30. Paolo Ferrari, *op cit*.
31. British Pathé News, *Rome's New Drive-In Cinema, Aka Auto Cine*, 1967, accessible via YouTube.
32. Eugenio Galdieri, interview, *op cit.*
33. For a history of American drive-ins, see Kerry Seagrave, *Drive-In Theatres: A History from their Inception in 1933* (Jefferson, NC: McFarland & Co, 1992).
34. Reyner Banham, 'A Home is not a House', *Art in America*, volume 2, 1965, p 76.
35. Eugenio Galdieri, interview, *op cit.*
36. Letter dated 20 April 1957, Galdieri Archive, *op cit*.
37. Eugenio Galdieri, post-op project statement, undated, Galdieri Archive, *ibid*.
38. Eugenio Galdieri, interview, *op cit.*
39. Reyner Banham, *op cit*. Here it sounds like Banham is commenting on the Rome drive-in (which he did not know). Indeed, in the same text he talks about the differences between American and European approaches to building, but in very broad terms and with no reference to specific objects.
40. Paolo Ferrari, *op cit.*
41. Denise Scott Brown, 'Lavorando per Giuseppe Vaccaro' (Working for Giuseppe Vaccaro), *Edilizia Popolare*, January/February 1996, pp 5–13. Robert Venturi had lived in Rome for the two preceding years, as a fellow of the American Academy, where he stayed from October 1954 to October 1956. See Martino Stierli, 'In the Academy's Garden: Robert Venturi, the Grand Tour and the Revision of Modern Architecture', *AA Files* 56, 2007, pp 42–55.
42. In this respect see Adrian Forty, *Concrete and Culture: A Material History* (London: Reaktion, 2012), pp 111–13.
43. For analyses of these two buildings see, respectively, Reyner Banham, 'Fiat-Lingotto and the Vision of a Timeless New Order', in *A Concrete Atlantis: US Industrial Building and European Modern Architecture, 1920–1925* (Cambridge, MA: MIT Press, 1989), pp 236–53; Davide Spina, 'Sign Language', *AA Files* 68, pp 101–07.
44. Interview with the author, 21 December 2015.

The Death and Life of Gordon Matta-Clark

Nicholas de Monchaux

Each of us lives at least two lives. The first is the one we make for ourselves when living. The second is the one others make for us when we are gone. For the architect-turned-artist Gordon Matta-Clark, struck down with pancreatic cancer in 1978, his 39 years of posthumous life have been in many ways more influential, unexpected and remarkable than the 35 short years he lived above ground. To understand these two lives, and their essential differences, one of Matta-Clark's most-exhibited works, *Fake Estates: Reality Properties*, is especially relevant, not least because the artist, in his own life, never imagined it as complete.

Fake Estates is based on a set of tiny, vacant parcels of New York City real estate, purchased by Matta-Clark between 1973 and 1974. In the most prosaic terms, the work consists of the posthumously ordered contents of one of Matta-Clark's own files – documentation and tax receipts from these acquisitions. 'Posthumously ordered' because in life 'his study was just piles. It looked like he never went in there, but he knew where stuff was.'[1] In 1976 or 1977 he gave a box of these documents to his friend Norman Fisher; in 1979 or 1980, after Matta-Clark and Fisher were both dead, it returned to his widow, the writer and filmmaker Jane Crawford, who took one look at the disorder within and 'stuck it … away in a closet'.[2] The box contained unsorted photographs, maps and a standard manila folder, decorated with 11 annotated shapes in pencil: two squares, two triangles, a trapezoid and a number of long rectangles – the outlines of most, if not all, of the parcels of land bought by Matta-Clark and his friend Manfred Hecht.[3] Inside the folder were various papers relating to the purchases, along with photographs of 13 of the plots. These were then organised and assembled by Crawford in 1992 for an exhibit at the IVAM in Valencia.[4] In the catalogue for the show the work is backdated to 1973. Several of Matta-Clark's friends have since recalled an undocumented exhibition of portions of the same material at the 112 Greene Street Gallery in 1974.[5]

As a direct result of this indirect history *Fake Estates* becomes at least two artworks. The first encompasses the lifetime of the box after 1978: 14 very private years in a closet, followed by several decades of very public life as a mounted and framed set of specimens, discussed at length as a commentary on real estate, property, ownership and territory. The second version, though it shares similar themes, is much more incomplete, unsettled and discontinuous. This *Fake Estates* is not so much a collection of things or places, as a network of objects, thoughts and experiments, all tracing interconnected, tangent trajectories in Matta-Clark's unfinished practice. The unresolved ambition of the undertaking prompts a set of essential speculations – of which the documentary evidence of *Fake Estates* is only one constituent part.

Matta-Clark's encounter with property, or more grandly architecture, began before his birth. His father, the Chilean-born Roberto Matta, worked for two years in the atelier of Le Corbusier in the early 1930s before rejecting the master's work as suitable only for a (presumably non-existent) 'creature that lived in perfect harmony with society and his work'.[6] Abandoning modernism for surrealism, he moved to New York, where he offered serial demonstrations of his own incapacity to live in perfect harmony. In 1945 he would abandon his wife, the artist Anne Clark, and his twin sons, Gordon and John Sebastian, who were then just a few months old. Although he seems to have stayed in touch, even after going to Europe, he returned to Paris in 1948 after he was officially expelled from the surrealist circle (his infraction was to have carried on a very public affair with the wife of his friend, the proto-abstract painter Arshile Gorky, which was seen as contributing to Gorky's subsequent suicide). In turn, Matta-Clark's mother, after several 'unstable' years, would marry the writer Hollis Alpert, who became a surrogate father to the boys, who grew up between mostly in New York, but also in Paris and Santiago, Chile.[7]

Not surprisingly, then, Matta-Clark's relationship with his birth father was defined by a certain level of rage, as well as admiration. He was, in the opinion of those around him, perpetually and simultaneously competing with and disdaining Matta, his whole 'psychological drive', according to his one-time partner, Carol Goodden.[8] Painting, his father had declared, 'has one foot in architecture and the other in the dream',[9] and it was in following this one step that Gordon Matta (still carrying his father's name) entered his career through the door of architecture, arriving at Cornell University's undergraduate professional programme in 1962.[10] His first-year grades were lacklustre, though he scored higher in introductory English than in any of the other subjects, including drawing, design and architectural history. After being involved in a car crash – he was driving, and one of his friends was killed – he took a year out to study French literature at the Sorbonne. In Paris, he was once again in his father's direct orbit. On his return to Ithaca, Matta-Clark's grades did not so much improve as become more interestingly inconsistent: a raft of Ds in structures, but also the occasional A (in sculpture and junior design studio), mixed with many Bs and Cs, until his final year, which merited high Bs, As and an A+ in his design studio.[11] His performance may well have been a symptom of his own elliptical intelligence and aversion to authority, but it most likely resulted from the intersection of his strong personality and Cornell's changing pedagogy. For many years there had been a tug-of-war at Cornell between the school's prevailing Beaux-Arts history and a new Bauhaus influence. By the late 1950s, this conflict had been resolved in favour of the modern avant-garde, only to be in turn upset during Matta-Clark's years at the school by the sudden, enhanced influence of Le Corbusier, channelled through the intense reinterpretation and advocacy at the hands of Colin Rowe.[12]

Like Matta-Clark, Rowe had arrived at Cornell in the autumn of 1962 in what would prove to be the final stop at the end of a peripatetic itinerary that included two years at the University of Liverpool, a year in New York, six at the University of Texas at Austin, a previous year in Cornell and then three at Cambridge.[13] His career was also bookended by another geography – the two deeply influential sets of architects of which he was the historical and critical figurehead. The first were his colleagues in Austin, the so-called Texas Rangers, whose name was actually the title of a piece of Cornell undergraduate doggerel, penned in Matta-Clark's freshman year, and set to the tune of *Streets of Laredo*:

> *Oh I am a Ranger and I come from Texas*
> *Oh I am a Ranger and I'm teaching you*
> *We are Lee, John and Werner and we are all Rangers …*
> *Just git you the good book and you'll be one too.*[14]

The 'book' in this case refers to Le Corbusier's *Oeuvre complète*, while 'Lee, John and Werner' were Rowe's fellow refugees from Austin – Lee Hodgden, John Shaw and Werner Seligmann. Together with Rowe, John Hejduk, Bernard Hoesli and the painter Robert Slutzky, they had been brought to Texas by the school's dean, Harwell Hamilton Harris, to help 'stir up' its established methods. Which they did. But their programme that was as successful as it was ultimately ruinous to their employment (a faculty revolt over their teaching led directly to Harris's resignation, and without his patronage, the young Rangers soon followed suit).[15] In Ithaca the Texas methodology appropriated Bauhaus precedents of formal analysis and spatial practice and applied them as a generative tool to Le Corbusier's villas (particularly

Garches and Savoye) – a method informed by Rowe's famous 1947 essay, 'The Mathematics of the Ideal Villa', and made ritual through the 'nine-square grid' design exercise developed by Hejduk and Slutzky.

While Rowe himself characterised his role in the Cornell undergraduate programme as 'inconsistent' during Matta-Clark's time (his official title was director of the graduate programme in urban design), his influence must have been palpable both in the freshman 'Introduction to Design' course, taught jointly by Hodgden and Seligmann, and in Rowe's own lecture series on Renaissance architecture, which Matta-Clark took in his second year, after returning from Paris.[16] According to Anthony Vidler – Rowe's student on an identical course at Cambridge a year earlier – the survey dwelt almost entirely on formal studies of layered Renaissance facades.[17] We can imagine that it was precisely this endless overlaying of elevations that induced the following exchange in a 1974 interview with Liza Béar in *Avalanche* on the occasion of Matta-Clark's *Splitting*:

Béar: *You studied architecture at Cornell, didn't you?*

Matta-Clark: *Yeah, that was my first trap. But the things we studied always involved such surface formalism that I had never a sense of the ambiguity of a structure, the ambiguity of a place, and that's the quality I'm interested in generating in what I do.*[18]

Rowe's formally precise, para-historical approach to time, mass and surface also became central to the second connected group of architects: Peter Eisenman, Michael Graves, Charles Gwathmey, John Hejduk and Richard Meier – aka the New York Five or, as they came to be known, 'the Whites' (in recognition not of their race but the complexion of their Corb-inflected buildings, celebrated in a perfectly square and appropriately pale book, *Five Architects*, first published in 1972). In an introduction to the book, Arthur Drexler from MoMA renders explicit the retreat from politics that accompanied the group's formal concerns: 'architecture', he declared, 'is the least likely instrument with which to accomplish the revolution'.[19] Rowe begins his second, longer introduction by excusing the apolitical nature of the work through a different, factually correct if bizarrely optimistic, argument that in America a revolution had already taken place in 1776. He further presents the work as a necessary contrast, not just to the 'latent' politics of Miesian and brutalist styles then in vogue, but also to the collision of what he terms 'the computer' and 'the people'[20] – a reference to Cornell's technocratically inflected planners, who were educating Matta-Clark and others on the data-driven model of city planning and design, and who were parodied in another piece of undergraduate doggerel:

> *I walked uptown and down for a year*
> *counting cars at intersection*
> *And I made a chart with Zipatone,*
> *statistical perfections!*
> *I then was ready to draw a plan,*
> *but they said, 'No forsooth, you are not ready*
> *You must first calculate, analyse and comprise*
> *more nonsensical, irrelevant data!'*[21]

Matta-Clark would have been exposed to this approach not just in Ithaca but in extra-curricular visits to planning and government offices in New York City, where systems-based techniques would reach their apex under John Lindsay, whose mayoral office was equipped with a dedicated suite of RAND consultants.[22] It was also briefly but influentially in this second milieu that Matta-Clark undertook his only professional appointment as an architect, drafting maps and charts for the urban renewal of Binghamton, in upstate New York. 'Renewal' here meant tearing down much of the existing historic fabric in favour of a 'government plaza', arenas and highways. He did not enjoy the experience.[23]

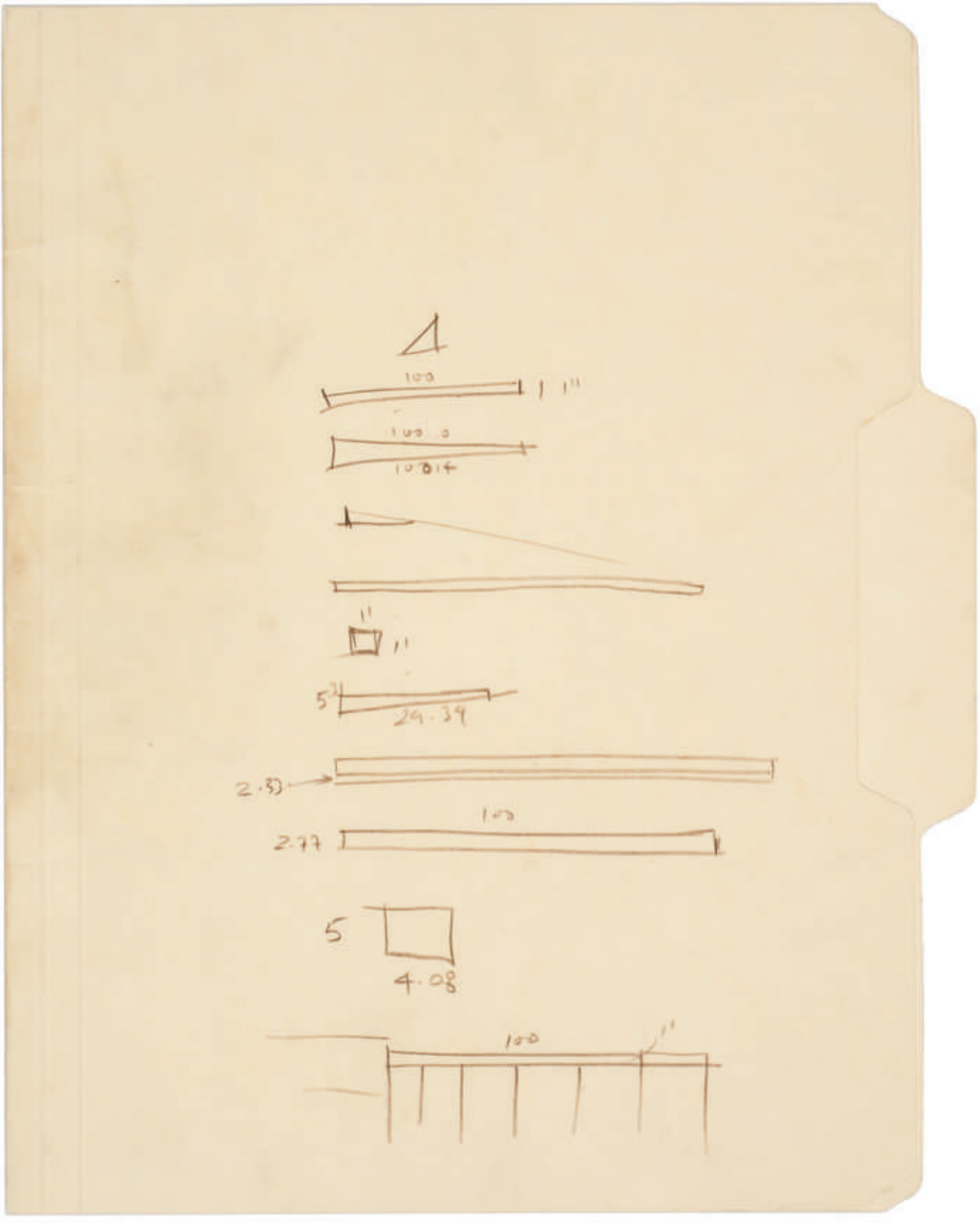
Binghamton was just an hour's drive from Ithaca, and so Matta-Clark stayed on after graduation. In the winter of 1969 he then got involved in Thomas Leavitt's ground-breaking exhibition 'Earth Art', when the Cornell campus became a temporary centre for the nascent land art movement, via a series of commissioned installations adorning its glacial landscape. Wielding a chainsaw, Matta-Clark helped the artist Dennis Oppenheim cut a long, dogleg trench into the frozen Cayuga Lake. He also seized the chance to lend his truck to his idol, Robert Smithson – so beginning an enduring friendship with the revolutionary practitioner. The young Matta-Clark would later spend days at the artist's studio and loft, finding himself the beneficiary of long lectures – particularly, Smithson's wife remembered, on the theme of entropy as a creative discipline.[24] Oppenheim would also become a close friend and confidante, easing his transition downstate and downtown soon afterwards.

Matta-Clark's arrival in New York in 1970 marked not just a new name (the addition of -Clark to Matta) and resolve towards artistic practice, but also a repurposing of much of the city he encountered. 'Work with abandoned spaces', he was to write in 1974, 'began with my concern for the life of the city, of which a major side effect is the metabolisation of old buildings. [In New York] as in many urban centres, the availability of empty and neglected structures was a prime textual reminder of the ongoing fallacy of renewal through modernisation.'[25] Part of this repurposing of the city was to renovate a series of former industrial spaces in SoHo, and make the neighbourhood his home. Here, Matta-Clark's architectural training proved especially useful, not as a theoretical foundation but a literal one: a set of practical skills and a material understanding of studs, pipes and sheetrock that set him apart from most of his peers. His growing experience would also become an invaluable resource for other artistic pioneers, giving rise to that quintessential paradigm of gentrification: the downtown loft.

In April 1972 Matta-Clark responded to a postcard from his father ('a bautiful [*sic*] architectural treat and the 1st postcard you have ever sent, a real surprise') with a long letter. A marked-up and heavily revised draft survives in the Matta-Clark archive. It describes Matta-Clark's recent move to his first loft, which had 'space for my sculpture-photography', with then partner Carol Goodden, a welcome relocation 'from a studio where we were constantly fighting with our landlord'.[26] The letter also dwells at length on the difficulties experienced by his brother. 'He has been in and out of hospital now finally committed himself to Belview [*sic*] where I visit him from time to time'. Beset by depression and delusion, John Sebastian (known as Batan) would tragically die after falling from his brother's window in 1976. Matta-Clark writes about the renovation of a loft for Batan to occupy or sublet on 12th Street, just south of Union Square (an attempt to repair both his troubled psychological state and his finances). Matta senior paid for the work, which was undertaken by Matta-Clark. 'I am now somewhat of a contractor', he concludes, reassuring his father that 'The rising value of the loft and equity (money payed [*sic*] back on mortgage) ~~increas~~ maesk it ~~an ok~~ [*sic*] the securest of investments'.[27]

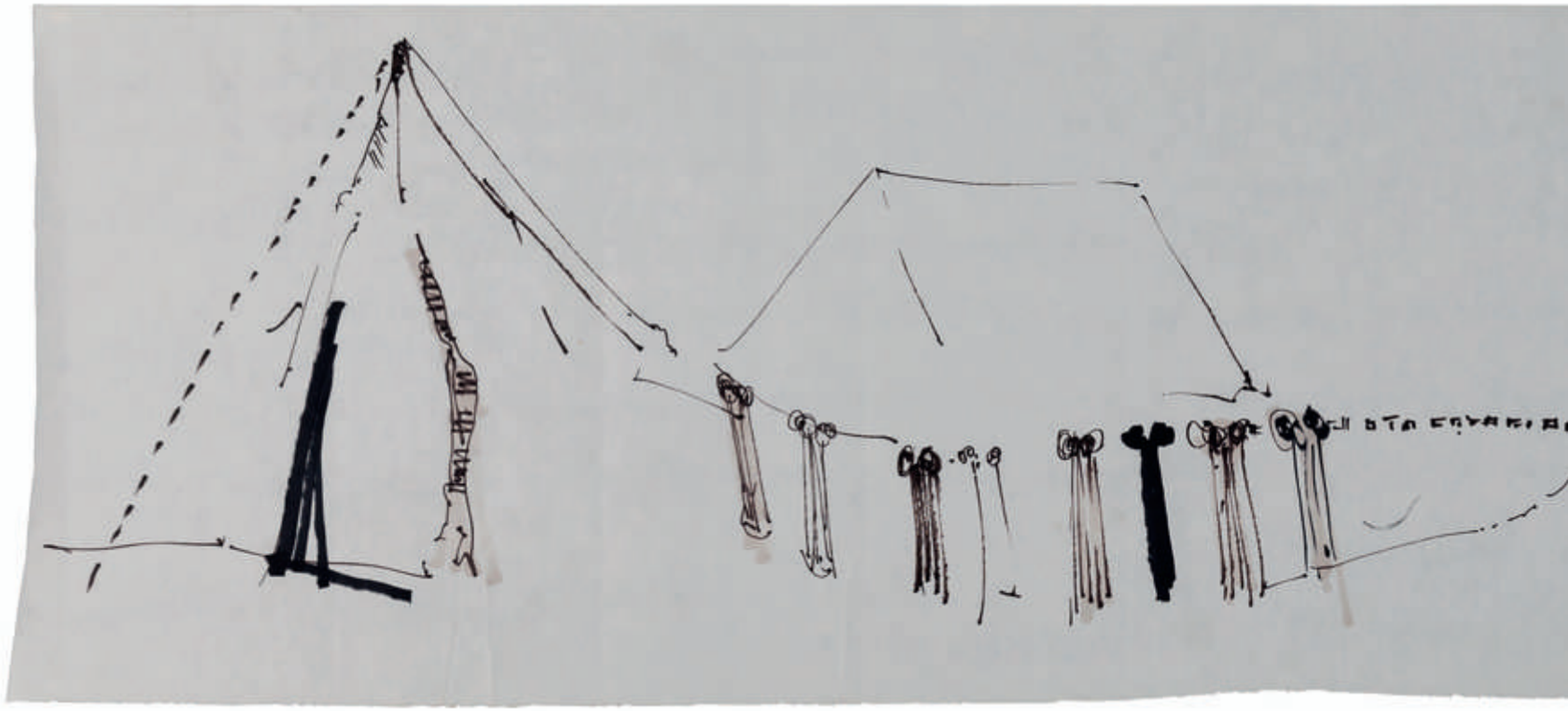
The work Matta-Clark himself identified as the beginning of a particular thread of production – cuttings, transformations and excisions of built fabric – is unimaginable without this experience of loft construction. It formed the essential basis, too, of the other inspirations cited by friends and colleagues for Matta-Clark's building cuts, such as a 'wall sandwich' Goodden recalled Matta-Clark cutting from an unneeded partition while renovating the restaurant/art space FOOD in 1972, or Manfred Hecht's description of the cutting works 'as an extension' of Matta-Clark's 4th Street loft renovation in 1971.[28] Such examples highlight the fact that the peculiarities of land use and value on which *Fake Estates* rests were not idle, artistic abstractions, but the lifeblood of 1970s New York. Near bankrupt and

Folder holding the deeds to 11 properties in New York City, with their outlines sketched on the exterior
© The Estate of Gordon Matta-Clark
Courtesy Canadian Centre for Architecture, Montreal
Overleaf: Gordon Matta-Clark, *Splitting (322 Humphrey Street, Englewood, New Jersey)*, 1974
© The Estate of Gordon Matta Clark / ARS
Courtesy SFMOMA


100
1"
100
10.814
1"
1"
5
29.39
2.83
100
2.77
5
4.08
100
1"







falling apart, the city was being held together and rebuilt by the artists of Matta-Clark's milieu. It also made economic sense, for in the case of Batan's 12th Street loft, an investment of $17,000 – the value of Matta-Clark's own labour – transformed an abandoned industrial space into a property that in 1972 generated $5,000 per year.[29]

Matta-Clark's career as a renovator and speculator (by 1976 he co-owned a whole building at 39 Walker Street, with Goodden and Oppenheim) also exposed him to the realities of cataloguing and acquiring property long before he attended the auction in October 1973 at which the first *Fake Estates* were purchased. One introduction to this world was provided by Alana Heiss, who specialised in identifying and acquiring abandoned property for artistic purposes, and who remembered him not as a 'selfless entrepreneur' but as someone who really 'loved making investments, funding spaces, buying properties'.[30] Which raises the intriguing prospect that – but for the interjection of cancer – Matta-Clark might have been known less for his creative use of the Sawzall and building jack, and more as a figure central to the remaking of SoHo.

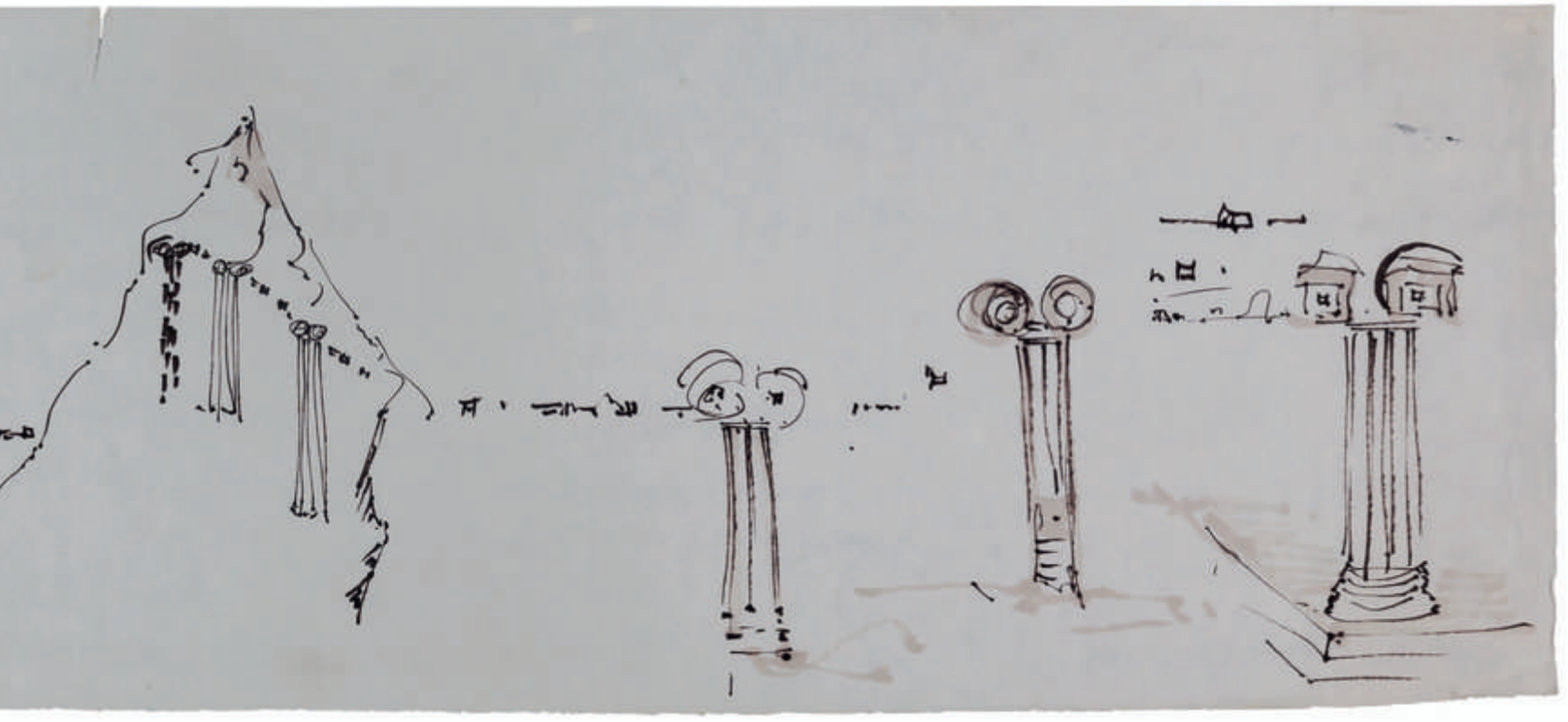
This work developing property would be crucial in moulding Matta-Clark's conception of his own architectural projects – a method that was as much concerned with processes and operations as it was with the physical shape of the city. It is also in this light that we can see the famously extended, tool-inflected building cuts, not just as they have come down to us – as precise, documented moments of staged, entropic intervention – but as a deliberate staging of the unending process of deconstructing and remaking the urban fabric through the hardened edge of renovation. Nowhere is this more apparent than in the top-to-toe *Splitting* of the house at 322 Humphrey Street in Englewood, New Jersey in 1974, a project which secured his artistic reputation almost as fast as it dismantled a dwelling. Matta-Clark only had access to the building (already slated for demolition) because the land beneath it had been bought as an investment opportunity by his dealer Horace Solomon, for whom he had already renovated and built two galleries. But while the splitting of Humphrey Street was even more deliberate than his previous building projects, the tools – string, level, Sawzall and chisel – were precisely the same. So too was the increase in value. The four attic corners of the house, preserved in the form of the work *Splitting: Four Corners*, today rest in the collection of the San Francisco Museum of Modern Art, with a value countless times that of the original structure. As Matta-Clark presciently wrote in a 1971 journal entry:

> *The piece is to buy a small piece of New York. Real.*
> *Sell the Air Right – Mineral and water to your truck.*
> *Exercise your air rights*
> *Comb your heir rights.*
> *A comfortable place to live between the bricks.*
> *Ash-Track*
> *An Abstract A (the History of property.)*
> *Wills!!*[31]

Gordon Matta-Clark, *Untitled (Drawing for the Judson Memorial Poetry Reading #7)*, *c* 1973
© Drawing Matter Collections

This heavily process-led approach to architecture, the city and the arbitrary nature of property continued to inform Matta-Clark's work, notably his collaboration with a group of contemporaries centred around New York's 112 Greene Street Gallery (the venue he co-founded in 1970 with Jeffrey Lew and Alan Saret). They called themselves the 'Anarchitecture Group', and consisted, among others, of Carol Goodden, Laurie Anderson, Tina Girouard, Suzanne Harris and Richard Nonas. Almost all of them were musicians, performance artists and sculptors; Matta-Clark was alone in his formal architectural studies. The name, a typical Matta-Clark neologism, could mean at least two things – 'an-architecture', from *an*, the Greek ἀν, meaning 'without' or 'wanting' (and with the implied word *an-archy*, 'without a leader'); or ana-(a)rchitecture, from *ana*, the Greek ἀνά, meaning 'back again' or literally 'architecture anew').

'Our thinking about anarchitecture', Matta-Clark explained to Liza Béar in 1974, 'was more elusive than doing pieces that would demonstrate an alternate attitude to buildings or rather to the attitudes that determine containerisation of usable space. Those attitudes are very deep-set… Architecture is environment too. When you're living in a city the whole fabric is architectural in some sense. We were thinking more about metaphoric voids, gaps, leftover spaces, places that were not developed.'[32] The name of the group was equally hard to pin down, changing with each mention, from 'Anarchy Torture', to 'An Arctic Lecture', to 'An Art Collector'.[33]



'Keep writing me, I'm very interested in your anti-architect Archit'etre', Matta wrote to Matta-Clark in an archived and undated letter, 'Archit'etre' being a cross-language pun meaning 'how to be an architect'.[34] Other audiences were also interested. During a poetry reading at St Mark's Church in New York's East Village, Matta-Clark even played to a certain latent architectural academicism by announcing that he would draw on a roll of butcher's paper an account of the history of architecture in a single line, from primitive tent to ionic capital and base (in an apparent nod to Gottfried Semper, who had illustrated something very similar). The idea was that at the end of the evening he would tear off sections of the drawing as gifts for the departing audience. Luckily for posterity, no one claimed such a gift, and so the entire drawing survives.[35]

Shortly later, at the Greene Street space in 1974, Matta-Clark's group showed something more banal, a collection of anonymous photographs at the Greene Street space, many of which were assembled from Matta-Clark's own archival expeditions. These showed, above all, architecture and city in flux: a train that had become a bridge, a house on a trailer on a boat, graveyards and skyscrapers, parts of Penn Station in the Meadowlands. A year before, Matta-Clark had sent the group an aerogramme – a single, folded page of lightweight paper – with a list of 20 proposals under the header 'Anarchitecture Ideas'. These included 'shopping cart housing', 'paper bag privacy', 'a photo of dog's sniffing each other's assholes', and 'photos of endless facades with a pile of the windows cut away'. It was also here that Matta-Clark made first mention of 'fake estate: property slivers with some projected ideas for them'.[36]

These 'slivers' and the threads of ideas they connect weave an image of Matta-Clark's work that is more complex and unfinished than it often appears today. One thing that does emerge is that by 1977 Matta-Clark was tired of cutting buildings. He was still also more than a little resentful towards the paternal bent of his architectural education, and in particular towards his own teachers in the Cornell crowd, who had begun to sift down to New York City with the setting up of the Institute for Architecture and Urban Studies (IAUS), co-founded by Peter Eisenman alongside the Cornell émigrés Slutzky and Rowe. Invited in 1976 to produce a piece for the institute, Matta-Clark borrowed an air-rifle from Dennis Oppenheim and proceeded to shoot out every one of its windows – 'I was extremely excited about that', Oppenheim recalls.[37] According to Andrew MacNair, curator of the resulting exhibit, 'Idea as Model', Matta-Clark's contribution was supposed to be something quite different – a partial, artful demolition of the windowless, sheet-rocked cube of a conference room in the centre of the IAUS space. But in the pre-dawn hours of the all-night installation, Matta-Clark violently changed tack. He entered the space carrying sheaves of photographs of shard-shrouded, defenestrated housing projects mounted on mat-board, and a gun. After asking permission to shoot out a few, already cracked panes in the lofty Chelsea studio, Matta-Clark then shattered every one.[38] And if the critical and historical position was implicit, the emotion was overt. 'These were the guys I studied with at Cornell', he reportedly explained, 'these were my teachers. I hate what they stand for'.[39] The windows were quickly replaced by an appalled Eisenman, while the catalogue to the exhibit, emerging several years later, only acknowledged how the installation made the gallery 'too chilly'.[40]

Regardless of its intent or interpretation, however, for Matta-Clark one of the great advantages of *Window Blow-Out* was the relative ease of its enactment. As his friend Les Levine remembers, 'he was tired of doing works – the building actions – that required so much physical dexterity. He was physically exhausted by them, and he wanted to make art that required less physical strength.'[41] A year earlier, Matta-Clark had spent two weeks in September 1975 cutting *Conical Intersect* into two masonry townhouses, set for demolition, adjoining the then rising Pompidou Centre. The strenuous labour was shared by his friend Gerald Hovagimyan, who some months before had performed a similar service on the trespass-laden masterpiece *Day's End* – a series of immaculate illegal cuts into the abandoned Pier 52 in New York. Recalling their discussions on site, Hovagimyan credits *Conical Intersect*'s inspiration to an influential media-piece by Anthony McCall, first shown two years earlier, titled *Line Describing a Cone*, which consisted of a dark, smoke-filled room, in which

Overleaf: Gordon Matta-Clark, *Window Blow-Out for the Institute for Architecture and Urban Studies*, 1976
© The Estate of Gordon Matta-Clark / ARS
Courtesy David Zwirner Gallery





CAROL JUST AS PROMISSED I'M SENDING A COLLECTION OF ANARCHITECTURE IDEAS TO SHOW RICHARD - TINA - SUZY -

① A



* A REACTION TO THE PRIME-CRIME AXIOM OF MODERN DESIGN FIGHTERS

① JUST A BLANK BOARD WITH NOTHING WORKS WRITTEN AS SHOWN

ASS HOLES

(1A) A PHOTO OF DOGS SNIFFING EACHOTHERS ~~BOTTOMS~~

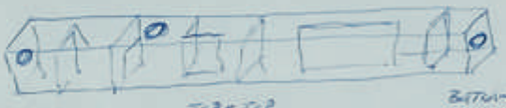
(2) IDEAS FOR ACCOMMODATING DOMESTIC PESTS

(2A) RAT RUN CITY A STEEL CASE FOR MULTIPLE DWELLING FOR RATS WITH A HANDY STANDLE FOR COMMUTERS WHO PREFER THEIR OWN RATS WHEREVER THEY GO -

(2B) DEAD FLY HOUSING



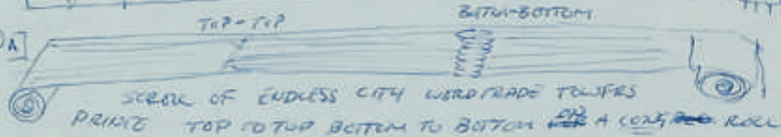
← ADHESIVE PAPER CAN ALSO BE USED AS CHILD CARE IDEA



(2C) MUST NOT FORGET OUR SIX LEGGED FRIENDS



(3) A]



SCROLL OF ENDLESS CITY WEIRD TRADE TOWERS PRINTS TOP TO TOP BOTTOM TO BOTTOM ~~AND~~ A COIL ~~AND~~ ROLL

B] ALSO PHOTOS OF ENDLESS FACADES WITH A PILE OF THE WINDOWS CUT AWAY



(4)



PONT MAKE BAKE OR A BRIDGE TORN APART BY HER LODGERS -

WITH AN EXPLANATION OF ALTERNATIVES TO A LIFE OF BUILDING

(5) A] BUILDING ARE FOR EATING A DIX LINES TO WOOD EATING PARASITES

B] FOR DISPLAY A GLASS BOX OF TERMITES AT WORK -

(6) THE UN-MONUMENT ALL HAS FAILED SINCE THE EIFFEL TOWER IN THE HISTORY OF MODERN GRANDEUR ONLY IT SATISFIES SINCE IT FULFILS THREE NON-MONUMENTAL STANDARDS

① IT IS JUST AS GOOD AT ANY SIZE ② IT IS TOTALLY UNFIT FOR PEOPLE A SUITCASE IS = AS GOOD AS REAL THING ③ IT INVITES THE VISITOR TO MOVE AWAY

(7) FAKE ESTATE

PROPERTY SLIVERS WITH SOME PROJECTED IDEAS FOR THEM

(8) SHOPPING CART HOUSING

THE STORY OF A BOMB ON WHEELS ~~AND~~ REVIEW OF HOBO HOMES WITH EXAMPLES OF CARDBOARD'S NEW PAPER SHELTERS -

(9) PAPER BAG PRIVACY

A] ALL THE EMPTY BOTTLES IN PAPER BAGS TO BE FOUND AT THE CORNER OF HOUSTON & BOWER - LARGE PHOTO OF SUCH A MULTIPLE CONTAINER AND EXPLANATION OF HOW WITH IN THE LAW IT INSURES A DRUNKARDS FREEDOM

B-] AN EXTENSION OF PRIVACY IS PRIVACY EXCHANGE WITH A COLLECTION OF VOYERIST SNAP SHOTS (SPACE FOR THE PEEKING) TOM -

(10) THE COLLISION BTWN A HOUSE ON WHEELS AND A BRIDGE SHOWN

A NEW YORK STATE MOTOR VEHICLE ACCIDENT REPORT PHOTO REPRODUCED WITH IMAGINARY OR FINAS 1ST HAND FACTS ABOUT ACCIDENT -

(11) THE PERFECT STRUCTURE



(RETURN TO AN INFINITE HORIZON OFF-MAN)

(12) HELP PRESERVE OUR ~~A~~ SHORT-AGE OF GAS-OLINE ENERGY BURN A NEIGHBORS HOUSE

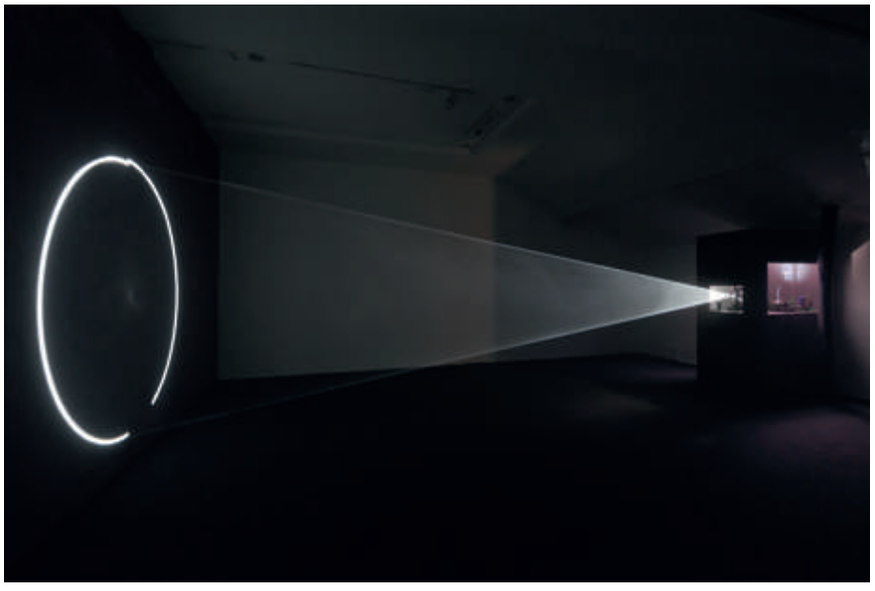
a projected white circle slowly appears on a black background, in the process creating a cone that somehow fills and remakes the space, without existing in any real sense at all.

In this light, we see Matta-Clark conceiving another way to ease the physical strain of producing his works. On 23 March 1976 he wrote to Bill Mitchell, then at the University of California, Los Angeles (UCLA) School of Architecture & Planning (and later dean at the Massachusetts Institute of Technology and director of its Media Lab).

> *Dear Bill Mitchel* [sic]
> *… As I explained over the phone, I am an artist who has been working sculpturally with buildings slated for demolition, by cutting them to alter their internal space. Since there are immense economical and physical barriers to overcome in producing a full scale work I have wanted to catalog a set of more idealised spacial* [sic] *variations by using computer graphic techniques.*[42]

A new direction, then, or at least a new tool and technique, and a return to the calculated urbanism of late-1960s Cornell. The UCLA computer laboratory was famous at the time for having produced the first computer-generated film of urban space, a 1966 cybernetic simulation of modernist proposals for downtown Los Angeles developed with General Electric's *Apollo* lunar landing simulator (presaging the 1968 speech in which the then Vice-President Hubert Humphrey declared 'the techniques that are going to put man on the Moon are going to be exactly the techniques that we are going to need to clean up our cities').[43] Earlier that year, in another attempt to re-appropriate the military-industrial infrastructure of the research university to creative and artistic ends, Matta-Clark had also approached the Centre for Advanced Visual Studies at MIT, through its director, Otto Piene, as well as a friend in residence, pioneering video artist Peter Campus. However, the financial realities of artistic practices at MIT soon became clear: 'I don't know how much computer time we can get for your plans', Piene wrote back, 'could you get your own other-than-MIT [funding]?'[44] Even without the requisite financial support, however, Matta-Clark remained characteristically optimistic. 'I also have a group of spacial-structural [*sic*] project "drawings" – that involve working with a computer', he writes to Paula Hutchings at UCLA in January 1976. And in March, to Munich gallerist Wolfgang Becker, 'This spring I have been getting back to making films, which, although very different, owe some small adherence to Anthony McCall … optics as much as computer graphics seems to be part of my search to chart and reoccupy space.'[45] 'For most of this technical entertainment', Matta-Clark adds, 'I will rely on those treasurehouses of Pentagon resourcefulness, the American scientific community.'

He was also relying on further explorations into more ephemeral physical form. In a November 1977 letter to Don Piccard (the son of pioneering aeronauts Jean Felix Piccard and Jeannette Piccard, and proprietor of the world's first hot-air balloon company) Matta-Clark writes: 'I am an architect and sculptor who has received some support in recent years from private and government funds for my work in experimental, environmental design. At present I am researching a project that will attempt to combine "net-work enclosures" with the structural lift of a series of tethered balloons.'[46] This balloon-net above the city – incompletely sketched by Matta-Clark at the time – also displays a certain conceptual incompleteness: a shape hovers, abstractly, above architecture and the city, even as it traces an aerial analogy to that most urbane of mathematical concepts, the network as a functional mechanism. But in then doodling over these balloons, Matta-Clark introduces a new kind of figure, implying the edges and nodes of infrastructure, circulation and social engagement – that is, the materials from which the city is fundamentally made.

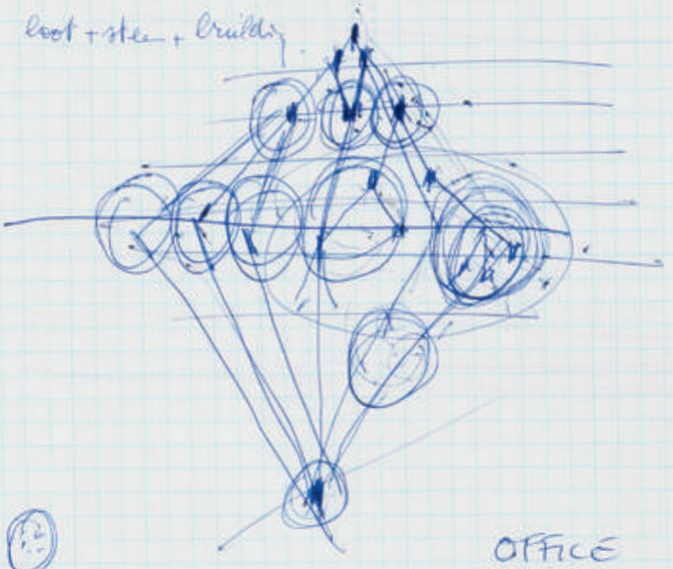


Opposite: Gordon Matta-Clark, aerogramme to the Anarchitecture Group, 1973
© The Estate of Gordon Matta-Clark Courtesy Canadian Centre for Architecture, Montreal
Above: Anthony McCall, *Line Describing a Cone*, 1973
© Anthony McCall
Courtesy Tate Modern, London

Many of these elements reappear in what would become Matta-Clark's final work, *Circus, or Caribbean Orange*, for the Museum of Contemporary Art in Chicago in 1978. The piece was to take the form of a combination of balloons and cables, echoing his installation for Documenta 6 in Kassel (a long ladder of netting raised up to an industrial chimney). But already then, as now, he seemed tethered to the artist he would posthumously become: Jane Crawford recalled that 'they wanted another cutting … and he felt he was being corralled into being the cutting artist when he wanted to branch out'.[47]

His friend Les Levine, in the same interview in which he reflected on Matta-Clark's 'exhaustion' with the solitary, physical reality of his building cuts, also spoke about his 'desire to help people', notably on New York's Lower East Side, to 'work with them'. Levine concluded, pessimistically, that 'he was never able to surrender to that space or idea',[48] yet there is solid evidence to suggest otherwise. A statement from Matta-Clark from 1974 or 1975 imagines that a 'specific project might be to work with an existing neighbourhood youth group and to involve them in converting the all too plentiful abandoned buildings into a social space. In this way, the young could get both practical information about how buildings are made and, more essentially, some first-hand experience with one aspect of the very real possibility of transforming their space.' He then continues, 'I would adapt my work to still another level of the given situation. It would no longer be concerned with just personal or metaphoric treatment of the site, but finally responsive to the express will of its occupants.'[49] And then in a letter in 1976: 'At the moment I am making good on a longstanding promise to myself involving a move from my past sculptural exercises to a direct collaboration with the people and their problems in a Lower East Side community of New York.'[50] Over multiple drafts in the summer of 1976, Matta-Clark proceeded to work out a detailed proposal for the scheme, *A Resource Centre and Environmental Youth Programme for Loisaida.* Submitted to the John Simon Guggenheim Foundation in late 1976, it resulted in a fellowship awarded in March 1977.[51]

The proposal itself begins by discussing a 'network of community groups and individuals



OFFICE

A) SHOWING THE BUSSINESS OF SALE
B.) SHOWING A REAL OFFICE
C) SHOWING MORE DETAIL REFERING TO EMPTY OFFICE
D.) PEOPLE STANDING INSIDE IN THE SPACE.

engaged in open space and rehab projects, sweat equity, community gardens, playlist, cultural events, alternative living structures etc'. Making use of one or more vacant lots and buildings, this enterprise would then 'effect theoretical-experimental innovations' towards the rehabilitation of further structures. What makes the whole process possible is the fact that 'throughout the Lower East Side, large amounts of reusable materials have become available because of the increasing rate of abandonment and demolition of building'.[52] Note here the word 'network', then part of the *lingua franca* of city planning. The term would have featured large in Matta-Clark's own scientifically inflected planning education (he kept a heavily marked-up copy of Norbert Wiener's *Cybernetics*, the system-planner's bible, in his own library), but it was also an essential component of the counter-theory developed by Jane Jacobs, which was grounded in both the city's social reality and in the science of networks and living systems.

It is hard to imagine Matta-Clark not being exposed to Jacobs' work, especially given the notoriety she gained in architecture and planning circles with the 1961 publication of *The Death and Life of Great American Cities*. More immediately, Jacobs also happened to live only two blocks away from his childhood home. In this sense, the neighbourhoods Jacobs helped save from scorched-earth urban development in general, and Robert Moses' Lower Manhattan Expressway in particular, were very much Matta-Clark's own. Indeed, following the final defeat of the expressway proposal in 1961, crowds flooded the streets in front of his house, and celebrations culminated in the burning of cars in nearby Washington Square Park – a spectacle unlikely to have gone unnoticed on a young New Yorker with anarchic tendencies.

Whatever its origin, however, Matta-Clark's vision – like Jacobs' – was of the city as a living organism. This idea, highlighted in his use of words like 'metabolisation' to describe the process of undoing and remaking built fabric, in turn informed his *Loisaida* project, which the artist framed as an educational environmental proposal, attentive not only to a building's 'internal needs' but to its inherent connections to 'surrounding areas and neighbourhood interests'.[53] More pragmatically, he explained that 'in order to demonstrate new approaches to solving the housing crisis, substantially deteriorated structures, weakened either by fire or age would be used ... with attention paid to providing more flexible floor space. One such alternative is to introduce concrete construction' into the fabric of abandoned timber and masonry structures. Matta-Clark justifies the use of this material on the grounds of cost-saving (although in reality this would have been minimal, given the expense of steel reinforcement and formwork), fire-proofing (certainly true, though less relevant in the resulting hybrid wood-brick-concrete structures), the ability to recycle a portion of the replaced wood, and then, 'finally from the design aspect, it would allow cadets to experiment with more advanced structural problems yielding greater spatial freedom'. This last point in particular seems to be advocating concrete construction and spatial flexibility – that is, two of Le Corbusier's Five Points of Architecture, and therefore a surprising realignment for Matta-Clark, not just with heroic architectural modernism, but with the paradigmatic formal model of his much-despised Cornell teachers.



With this reversion to the idea of the Corbusian free plan and to the social programme as the fundamental determinant in shaping an architectural environment, there is a sense of Matta-Clark's work coming full circle (even of returning to his father's legacy), as he approached his own end. In 1978, several months after his last cutting was completed, with explorations into computer graphics and urban education just begun, Matta-Clark wrote to Belgian curator Florent Bex: 'I am sorry to be the bearer of bad news but ... since I last wrote the doctors opened me up and looked inside with horror (they are such moral and spiritual cowards) closed me up with an advanced cancer of the pancreas and liver.'[54] Matta-Clark eschewed chemotherapy in favour of natural medicine and died in Nyack hospital on 26 August, surrounded by friends.

There was much in the life and work of Gordon Matta-Clark that implicitly or explicitly destabilised the very idea of inheritance. At the moment of their making, the architectural objects on which he practised his most celebrated cuts were already en route to oblivion – as ruins or demolition sites. So we are left with drawings and photographs as evidence, or perhaps even as displacement, of the work itself. Conversely, the actual parcels of land purchased for *Fake Estates* still exist, returned to the city in lieu of taxes after Matta-Clark's death. Again, though, the essential presence of the artwork has settled instead on the papers, deeds and drawings that document the transactions, whether saved in a banker's box or briefly affixed to a gallerist's wall. Matta-Clark's interest in data and documentation means that his work, so seemingly dependent on a built environment always under threat of disappearance, has itself now disappeared into the archive. From there it has become an essential reference for academics and architects interested in any condition of destabilisation or any operation of incision – even those architects whose work and ethos Matta-Clark was explicitly critiquing.

For academics, the most celebrated appropriation of Matta-Clark's archival legacy has been the 1996 essay, 'A User's Guide to Entropy', by Rosalind Krauss and Yve-Alain Bois, which considered the artist's moulding, layering, burning, cutting and dismembering an exemplar of 'entropic practice'.[55] But their text was also a pointed response to 1990s architectural practice, and especially the use of digital techniques to promote an illusory image of process and flow in the otherwise static products of the American avant-garde. While teaching at Ohio State University in 1987, Peter Eisenman, in particular, was exposed to a new generation of computer-modelling software, then under development by Chris Yessios, which allowed anyone to engage in the immediate and unexpectedly facile modelling of objects through deletion, staged subtraction and addition. Just ahead of his peers, Eisenman proceeded to absorb these technologies into his studio, reconceptualising his formal output in

Opposite: Gordon Matta-Clark, undated sketch (from a sketchbook for Office Baroque)
© The Estate of Gordon Matta-Clark
Courtesy Canadian Centre for Architecture, Montreal
Above: Gordon Matta-Clark, *A Resource Centre for Loisaida*, 1976, from *Gordon Matta-Clark* (Chicago, IL: MCA, 1992) © The Estate of Gordon Matta-Clark
Courtesy Museum of Contemporary Art, Chicago
© Canadian Centre for Architecture, Montreal


CAFÉ TRACE
CARAT



the process. Yet such activities also demanded a precedent, which meant that the very architects Matta-Clark had denigrated began citing him as their intellectual and artistic basis. For example, note how the second illustration in the essay introducing MoMA's 1988 exhibit, 'Deconstructivist Architecture', curated by Eisenman's assistant for his Ohio State studio, Mark Wigley, is Matta-Clark's house on Humphrey Street. In the text by Bois and Krauss one can sense the outrage at this turn of events, and a particular contempt for a conventionally architectural – and therefore self-consciously 'permanent' – evocation of building in transformation. Bois even quotes Matta-Clark to reinforce this disdain: 'What I do, you could never achieve, since that presupposes accepting ephemerality … architecture has only one destiny, and that is, sooner or later, to go down the chute.'[56]

Yet if the formal absorption of Matta-Clark's aesthetics of transformation into the heart of architectural culture in the 1980s and 1990s would likely have been anathema to the artist himself, how should we understand the reverse? That is, the unexpected inclusion of archetypically Corbusian columns, slabs and free plans into the renovated heart of the *Loisaida* proposal? As ever with Matta-Clark, one can perhaps explain this project through reference to another work. In 1974, following *Splitting*, the artist undertook another house-transformation in Niagara Falls, New York. 'BINGO', Matta-Clark explained, 'is the finalised title for a work that, in progress, was called Been-Gone by Ninth', and involved the use of a 'typical American small-town home that was to be demolished for urban-renewal'.[57] He then went on to describe how a major part of the exterior would be 'sectioned into nine equal parts, measuring five feet by nine feet. Eight of these facade segments were cut free, lowered intact and crated for transport … leaving the centre of the nine-part grid undisturbed.' The completion of the project – interrupted by the scheduled demolition of the house by the city – was to have entailed the same grid, with only the centre missing, on the reverse of the house. In other words, a return to Hejduk and Slutzky's nine-square grid problem, but here subject to an emphatic *détournement*, for instead of an enduring and utopian Cartesian plane, these 'nine equal parts' offer an adaptive and opportunistic edge for the house's unmaking and remaking. The Texas-Cornell grid therefore remains an instrument, but its purpose has been fundamentally reversed.

Colin Rowe's own allegiance to the nine-square grid and the absolutism of modernist doctrine also underwent a process of revision. From the late 1970s on he even opened up to the possibilities afforded by figure–ground in cities as built and lived in, rather than as planned, which would ultimately lead to *Collage City*, a book in which he and his co-author Fred Koetter would lament modern architecture's failure to embrace the conceptual and formal properties of collage – an underlying polemic they illustrated with repeated visual reference to Picasso's *Still Life With Chair Caning* (1912). In the context of Matta-Clark's work, a more apt counterexample to formal modernism would be Hannah Höch's violent dadaist collage, *Cut with the Kitchen Knife Dada Through the Last Weimar Beer-Belly Cultural Epoch in Germany* (1919), not only for its attack on an overstuffed male power structure, but for its use of the ready-to-the-female-hand kitchen knife as the agent of this rebellion.

In 1958 Jane Jacobs wrote a letter to Chadbourne Gilpatric of the Rockefeller Foundation proposing what would become *The Death and Life of Great American Cities.* Here she asserts 'that within the seeming chaos and jumble of the city is a remarkable degree of order, in the form of relationships of all kinds that people have evolved… Where it works at all well, this network of relationships is astonishingly intricate. It requires a staggering diversity of activities and people, very intimately interlocked (although often casually so), and able to make constant adjustments to needs and circumstances.'[58] In the book that resulted, she would go on to describe the city not as a 'set of file drawers', but, by contrast, an 'organism'[59] – a term that originally referred to a system consisting of independent parts, but today has come to mean the opposite: a living being, something informal, adaptive and continuous. Yet in describing the organs of our own bodies, say, we would never think of separateness and interconnectivity as mutually exclusive. The part, and the pattern of the whole, are perceived together.

Similarly, Gordon Matta-Clark's best work reminds us that form is not the end of architecture, but the essential means for its contentious transformation. As he and Jacobs both well understood, the formal language of modernism frequently acted violently against the city, often in the name of 'surgery' on it. Yet form is far from irrelevant to the city's survival. At its best it acts upon the city, not in the sense of confrontation (or, as is sometimes argued by formalists today, separation), but rather in the essential mode of collage undertaken by Höch – a momentary, essential figure against a ceaselessly shifting ground. And so from today's distance, we cannot truly imagine the shapes that would have emerged from Matta-Clark's own Weimar belly-cut in the form of the *Loisaida* studio exercises (all those excisions, remakings, repurposings and reinventions), or even whether they would have been real or virtual, concrete or conceptual, or everything at once. But what we can imagine is their precision, and their delineation of something distinctly and quintessentially urbane. In the end, these imagined outlines present not the inevitable failure of architecture to cheat death, but the city's enduring ability to frame and reframe life. Of course, it will always be the destiny of architecture to 'go down the chute', but it is in the nature of the city, in its shifting networks and networked metabolisms, to survive.



Previous: Gordon Matta-Clark, *Conical Intersect*, 1975
© The Estate of Gordon Matta-Clark / ARS
Courtesy SFMOMA
Above: Gordon Matta-Clark, *Bingo*, 1974, Niagara Falls, New York
© The Estate of Gordon Matta Clark / ARS
Courtesy David Zwirner Gallery

1. Betty Sussler, in Jeffrey Kastner (ed), *Odd Lots: Revisiting Gordon Matta-Clark's 'Fake Estates'* (New York, NY: Cabinet Books, 2005), p 47.
2. Jane Crawford, *ibid*, p 52.
3. The reason for the shared purchase remains obscure – perhaps Matta-Clark arrived at his first city real estate auction without even the $35 necessary to pay for the parcels that nobody else wanted, or maybe he was merely out of town at the time. Records, memories and the order of events are all today unclear. See 'Spaces Between Places: The Evolution of *Fake Estates*, Part 1', *ibid*, pp 38–48.
4. 'Mythology: The Evolution of *Fake Estates*, Part II', *ibid*, pp 51–59 (interview with Jane Crawford, p 52).
5. See the recollections of Carol Goodden and Jeffrey Lew, the proprietor of 112 Greene Street Gallery, *Odd Lots*, *op cit*, p 40.
6. 'Gesprach mit Matta', in *Matta* (Hannover: Kestner-Gesellschaft, 1974), pp 22–37. Translated and quoted in Nancy Miller, *Matta: The First Decade* (Waltham, MA: Rose Art Museum, Brandeis University, 1982), p 19. According to Matta, the surrealists greeted him by asking, 'What, are you with Le Corbusier? How terrible!' 'The masochistic and protestant Le Corbusier', Dalí was later to write, 'is the inventor of the architecture of self-punishment'. See Salvador Dalí, *Dalí on Modern Art: The Cuckolds of Antiquated Modern Art* (New York, NY: Dial Press, 1957), p 29.
7. Pamela Lee and Gordon Matta-Clark, *Object to be Destroyed: The Work of Gordon Matta-Clark* (Cambridge, MA: MIT Press, 2000), p 5. I am greatly indebted to this incisive and erudite history.
8. Goodden added, 'Batan was his guilt'. Goodden to Corinne Diserens, in 'Gordon Matta-Clark: The Reel World', in Corinne Diserens (ed), *Gordon Matta-Clark* (London: Phaidon, 2003), p 213.
9. Roberto Matta, quoted in Nancy Miller, *op cit*, p 21.
10. It was only after moving to New York in 1969 that Matta-Clark would add his mother's maiden name to his own. The critic Thomas Crow explains this by asserting that the name Gordon Matta-Clark is also that which would have been given to him had he been born in his father's native Chile, where a matronymic follows the traditional paternal surname. However, this is somewhat unstably grounded as a hyphen is never used in Chile, nor anywhere where this Spanish tradition is followed: Matta's father was thus officially Roberto Matta Echaurren, not Matta-Echaurren. See Thomas Crow, 'Gordon Matta-Clark', in Corinne Diserens, *op cit*, p 44. See, by contrast, Carol Goodden's memory, 'Gordon began to change his identity… He didn't want to be identified with his father, Matta, so he played with different names… He settled on Matta-Clark, and never seemed displeased with that.' *Ibid*, p 195.
11. Cornell University, academic transcript of Gordon Robert Matta Echaurren, Gordon Matta-Clark Archive, Canadian Centre for Architecture, Montreal (hereafter CCA GMC), 002:004.
12. Kenneth Frampton, 'Notes on American Architectural Education from the End of the Nineteenth Century until the 1970s', *Lotus International* 27, no 3 (1981), p 27.
13. Alexander Caragonne, *The Texas Rangers: Notes from an Architectural Underground* (Cambridge, MA: MIT Press, 1995), pp 10–11.
14. Colin Rowe, 'Texas, Pre-Texas, Cambridge', in Alexander Caragonne (ed), *As I Was Saying: Recollections and Miscellaneous Essays*, vol 1 (Cambridge, MA: MIT Press, 1996), p 37.
15. Alexander Caragonne, *The Texas Rangers*, *op cit*, p 64.
16. Colin Rowe, 'Cornelliania', in *As I Was Saying*, *op cit*, vol 2, p 6.
17. Anthony Vidler, 'Architecture-to-be: Notes on Architecture in the Work of Matta and Gordon Matta-Clark', in Betti-Sue Hertz (ed), *Transmission: The Art of Matta and Gordon Matta-Clark* (San Diego, CA: San Diego Museum of Art, 2006), p 68. The course was given in the year before Cornell switched to using letter grades, and so Matta-Clark earned a below-average 72.
18. Liza Béar, 'Splitting: The Humphrey Street Building, Interview with Gordon Matta Clark', *Avalanche*, December 1974, p 36.
19. *Five Architects: Eisenman, Graves, Gwathmey, Hejduk, Meier* (New York, NY: Oxford University Press, 1975), p 1.
20. *Ibid*.
21. The song continues, 'In the basement I stayed for another year / Filling up the calculator / There were jobless and homeless and dogless and boneless / And some with no refrigerator / They all had a number but never a name / Not a face for identification / But they all had a chicken in every pot / Perfection of standardisation.' See Colin Rowe, 'Cornelliania', *op cit*, p 3.
22. The RAND (Research and Development) Corporation was originally formed by the Douglas Aircraft Company to offer research and analysis to the US armed forces, but soon afterwards expanded into local government, finance, healthcare and education, with a model of problem-solving that evolved out of economics and computational data. See Jennifer Light, *From Warfare to Welfare: Defence Intellectuals and Urban Problems in Cold War America* (Baltimore, MD: Johns Hopkins University Press, 2003), pp 64–65.
23. Gerald Smith, *Partners All: A History of Broome County, New York* (Virginia Beach, VA: The Donning Company, 2006).
24. Pamela Lee, *op cit*, p 36.
25. Gordon Matta-Clark, undated and unaddressed proposal, *c* 1974, CCA GMC 001:073 1/5.
26. CCA GMC 002:038.
27. *Ibid*.
28. Carol Goodden, interviewed in Mary Jane Jacob, *Gordon Matta-Clark: A Retrospective* (Chicago, IL: Museum of Contemporary Art, 1985), p 39; Manfred Hecht, *ibid*, p 73.
29. In 2014 an apartment in the same building sold for $2.95 million. See '42 E 12th St Apt 2', www.zillow.com/homes/for_sale/31498514_zpid/days_sort/40.735429,-73.989261,40.731361,-73.995168_rect/17_zm/1_fr/.
30. Jeffrey Kastner, *op cit*, p 40.
31. CCA GMC 001:010.
32. Liza Béar, *op cit*, p 34.
33. Pamela Lee, *op cit*, p 105.
34. Roberto Matta to Gordon Matta-Clark, undated, CCA GMC PHCON2002:0016.
35. The drawing sits within the Drawing Matter collection. For more information, see the online article by Nicholas Olsberg, www.drawingmatter.org/sets/drawing-week/nicholas-olsberg-gordon-matta-clark.
36. CCA GMC 001:043 v.
37. Dennis Oppenheim, interview in Corinne Diserens, *op cit*, p 192.
38. Andrew MacNair, interviewed in Mary Jane Jacob, *op cit*, p 96.
39. *Ibid*.
40. Kenneth Frampton and Silvia Kolbowski, *Idea as Model: 22 Architects* (New York, NY: Institute for Architecture and Urban Studies and Rizzoli International, 1981).
41. Les Levine, interview in Mary Jane Jacob, *op cit*, p 95.
42. The letter ends, 'I am sorry we never got a chance to speak in person. It would have been a far more fruitful exchange'. CCA GMC 004:016.
43. 'HHH on the Space Program', *Aerospace Technology* 21, no 24 (20 May 1968), p 19.
44. CCA GMC 003:114. For more on Piene's work at MIT, as well as an extended recounting of MIT's funding-focused efforts in cultural production, see Arindam Dutta (ed), *A Second Modernism: MIT, Architecture and the 'Techno-Social' Moment* (Cambridge, MA: MIT Press, 2013).
45. The latter turn of phrase is especially interesting in light of Colin Rowe's intellectual formation in the Warburg Institute of the 1930s, where Ernst Gombrich and Erwin Panofsky brought the science of optics into art historical practice through works such as *Perspective as Symbolic Form* (written by Panofsky in 1924). Letter to Wolfgang Becker, 10 June 1976, CCA GMC 004:008.
46. CCA GMC 004:124.
47. Jane Crawford, interview by Thomas Crow, in Corinne Diserens, *op cit*, p 126.
48. Mary Jane Jacob, *op cit*, p 95.
49. CCA GMC 001:085.
50. Gordon Matta-Clark to Guy Baldwin, CCA GMC 004:057.
51. Gordon Ray, president of the John Simon Guggenheim Foundation, to Gordon Matta-Clark, 16 March 1977, CCA GMC PHCON2002:0016:004:062:001.
52. 'A Resource Centre and Environmental Youth Programme for Loisaida', proposal draft, 18 August 1976, CCA 001:086.
53. Gordon Matta-Clark, undated and unaddressed proposal, *c* 1974, CCA GMC 001:073 1/5.
54. Mary Jane Jacob, *op cit*, p 97; Gordon Matta-Clark to Florent Bex, 26 May 1978, CCA GMC.
55. Yve-Alain Bois and Rosalind Krauss, 'A User's Guide to Entropy', *October* 78 (Autumn 1996), pp 38–88.
56. *Ibid*. The particular irony being that Peter Eisenman's visually deconstructed buildings also proved particularly vulnerable to entropic deconstruction. Falling victim to 'staggering maintenance costs', House II was abandoned by its original clients, falling into extended disrepair for over three decades. And even the $43 million Wexner Centre was soon subject to a $16-million refit. See Gwenda Blair, 'House Proud: A White Elephant Reincarnated', *New York Times*, 10 October 2002, and Robin Pogrebin, 'Extreme Makeover: Museum Edition', *New York Times*, 18 September 2005.
57. CCA GMC 001:061.
58. Jane Jacobs, letter to Chadbourne Gilpatric, 1 July 1958, Jane Jacobs Papers, Boston College.
59. Jane Jacobs, *The Death and Life of Great American Cities* (New York, NY: Random House, 1962), p 172.



Hannah Höch, *Cut with the Kitchen Knife Dada Through the Last Weimar Beer-Belly Cultural Epoch in Germany*, 1919
© Hannah Höch / ARS / Staatliche Museen zu Berlin, Nationalgalerie

When in Rome

Cynthia Davidson



Dining in the academy cortile, Rome, 1957
From *Life* magazine, 23 December 1957
© James Whitmore

The idyllic academic retreat high on the Janiculum known as the American Academy in Rome is largely an architects' invention: a romantic one, born in the making of the Beaux-Arts-styled Chicago World's Fair, led by Charles McKim of the famed McKim, Mead & White firm, who believed a European education – an education in classical Rome – was essential to developing a civilising culture in a modernising world. And so as the technical wizardry of electrical illumination that so dazzled visitors to Chicago's White City of 1893 dimmed to a memory, the new American School of Architecture found a foothold in the Eternal City, opening to a handful of students and fellows in a rented palazzo in 1894. It was an inauspicious beginning, underfunded and undersubscribed, requiring dalliances with other study centres to survive, including the British & American Archaeological Society Library. Though McKim dug into his own pockets to help keep the school alive, ultimately it was subsumed into a new incarnation, the American Academy in Rome, which, newly incorporated and endowed with support from leading American industrialists like J P Morgan and Andrew Carnegie, moved into the Villa Mirafiore on Via Nomentana in 1904. In 1914 the academy then opened its own building, an elegant neo-classical design by McKim, Mead & White set in a verdant landscape (McKim, whose efforts had led to this moment, was absent; he died in 1907).

By the time Adele Chatfield-Taylor, a historic preservationist, was named president of the academy in 1988, the institution owned seven buildings, including apartments for scholars and the seventeenth-century baroque Villa Aurelia, even if all of these properties were in a state of disrepair, two so badly that they were condemned. But the resident Rome Prize fellows in the fine arts and humanities made do, spending hours in distant libraries and museums and walking the streets of Rome. There was actually little need to inhabit the academy, other than to sleep. The food wasn't even good enough to regularly lure residents or any self-respecting Italian to the academy's large communal dining tables, which were set up to engender conversations between the disciplines, enabling architecture to talk to music, art to medieval studies, and so forth. And so while the city itself remained the catalyst for much of the work that developed in the academy's studios, the other productive space – conversations over the dinner table – was not living up to its potential.

Chatfield-Taylor immediately realised this but faced other, more urgent, facility and funding problems. Significantly, she began with the landscape, the common ground for all of the properties, in part because half of the trees were diseased and dying. While she and the academy board established foundational endowments for fellows, the landscape work itself, driven by landscape architect Laurie Olin, became the literal foundation for all of the restoration and renovation to be done. As work slowly progressed, food then moved higher up the agenda, and Chatfield-Taylor turned toward the communal table with the help of Lidia Bastianich, the Italian-American chef famous for the New York restaurants Felidia and Eataly. After an initial foray into the kitchen it was clear that improving the space of the table meant far more than simply changing menus. It also meant changing suppliers and kitchen staff, whose jobs were protected by Italian labour laws. In other words, a complete rebuilding.

Bastianich laid the groundwork, seeking suppliers and consultants that would facilitate change, but withdrew when her own restaurants in the US demanded more of her attention. Ironically, it was over a 2004 dinner party in New York that Chatfield-Taylor met chef Alice Waters, famous for having set up the celebrated farm-to-table Chez Panisse in Berkeley in 1971, and spontaneously asked if she would 'fix' the food at the academy in Rome. 'Do you want to upgrade the menu or do you want a revolution?' Waters replied. With revolution the answer, the concept for the Rome Sustainable Food project was born. Like every

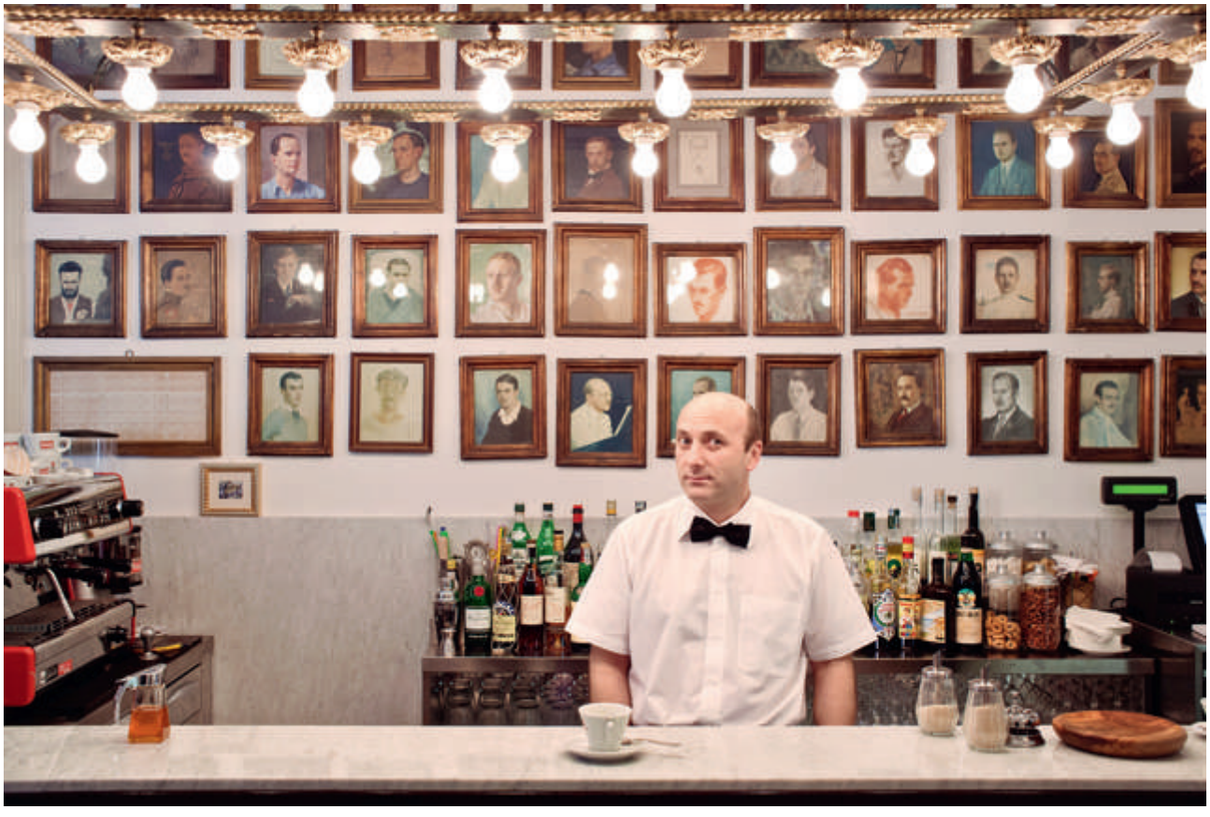
good idea, the concept required a plan, and the plan required an actor.

However, when Waters selected Mona Talbott, a former chef at Chez Panisse, to take on the academy's food problem, the resident cooks viewed her with suspicion and blocked her from even entering the kitchen. For six months she was limited to establishing supply chains with local farmers and cooking meals only in the academy's director's apartment. When the labour issues were finally resolved and Talbott did enter the kitchen, only two food items remained, and one of those was a can – *a can* – of salad.

The next day – the morning of 26 February 2007 (a day inscribed in academy folklore) – the bags of greasy crisps on display on the academy's bar counter suddenly disappeared, and early-rising scholars, intent on reaching the Vatican Library, were greeted with freshly ground coffee and newly baked scones. It is remembered as a magical change, with other wonderful aromas soon afterwards emanating from the kitchen for every meal, instantly lifting the mood of the entire place and drawing fellows, residents, staff and guests from the spaces of the city to the space of the table.

Today, head chef Chris Behr and his kitchen staff, including five interns, maintain the same levels of skill and care, preparing more than 39,000 meals a year – three times the number of meals served ten years ago. Italian is also frequently now heard at the table, not just because the fellows are paying greater attention to their Italian lessons, but because the cuisine is resolutely of the region. In the process, the Rome Sustainable Food Project established by Waters, with its fresh and simple practices of cooking organic and sustainable meals, its raised beds of fresh herbs, salad greens and tomatoes grown on the academy grounds, and the sourcing of eggs, vegetables and meat from local farms, has completely changed the culture of the academy. Food has become like the city: a catalyst for discovery and a community for developing ideas. To win a place at the American Academy in Rome is to eat very well, and fellows who love the solitude of their studios and libraries now look forward to the camaraderie of the table.

All of which is in evidence on a cool Thursday lunchtime in October, one of the last days for *mangiare fuori*, when at the long table in the McKim, Mead & White cortile, Behr found himself with bushels of fresh vegetables. For the small farmers who supply the kitchen according to Behr's 'bring me what you have' mandate, summer's end means that today, especially, he has a lot of green peppers. The task for Behr and his staff is therefore to find ways to 'remake' them, and keep their audience sated. This particular *pranzo* became *peperoni gratinati* and was set on the buffet alongside *pasta alla puttanesca*, *zuppa di patate*, *finocchi al forno*, *insalata di rape rosso e cavolo nero*, *ripassata di verza al balsamico* and mozzarella – seven 'light' vegetarian dishes, plus a *rape rosse e robola panini* (wine, viewed as detrimental to a productive afternoon, is served only with the evening three-course meal). Demand for the kitchen's recipes has now led to five small books, each on a food type, the first of which was *biscotti*. In it are instructions for making the small biscuits the kitchen bakes each day for the 4.30PM tea service. Packages of *biscotti* are also for sale at the bar, a popular spot for an *apertivo*, and where the barkeep will of course make anyone a stimulating *caffè lungo* whenever the need, academic or otherwise, arises.



Alessandro Imbriaco, The Barman,
American Academy, Rome, 2011
© Alessandro Imbriaco

Garganelli with Broad Beans, Dandelion Greens and Ricotta Salata

Chris Behr







The Rome Sustainable Food Project at the American Academy in Rome runs a series of four-month internships throughout the academic year

© Davide Franceschini / courtesy American Academy in Rome

Ingredients

100ml extra virgin olive oil
1/2 bunch fresh garlic, green part removed and white part diced
700g shelled broad beans (1.4kg to 1.8kg unshelled)
1tsp hot pepper flakes
1 large rosemary sprig, finely chopped
230g dandelion greens
450g *garganelli*
100g ricotta *salata*, grated

Broad beans and dandelion greens is a classic Puglian combination. Legend has it that Hercules was from Puglia, and that the region's foods helped him become so strong. If you are preparing this dish in early spring, when broad beans are young and tender, omit the dandelion greens – they overpower the beans' delicate flavour. But as the season progresses and the weather gets warmer, the beans get bigger and starchier – these start to fall apart when cooked and form a puree. *Garganelli* is a very unique quill-shaped pasta similar to *penne frigate*, but handmade with egg and flour.

Method

Bring a large pot of cold water to a boil. Then bring a medium pot of water to a boil. When the water in the medium pot comes to a rolling boil, salt it and blanch the dandelion greens until they are very tender. Remove using a slotted spoon and spread them out on a baking sheet. When the greens are cool enough to handle, squeeze out any excess water and roughly chop them. Add the broad beans to the same water and cook for 45 seconds. Remove using a slotted spoon and transfer to a bowl of ice water. Peel the beans by removing and discarding the tough and slightly bitter outer layer and gently squeezing out the two lobed bright green beans inside. If the beans are very small you don't have to peel them.

Put the olive oil and green garlic in a high-sided saucepan over medium-low heat. Cook, stirring occasionally, until the garlic is golden brown. Add the broad beans, a pinch of salt, hot pepper and rosemary and continue cooking over a medium heat until the beans are soft, tender and breaking down. If you are using late-season beans that are slightly starchy, add 237ml water to help them break down, adding more water if necessary, until they form a puree, with some bean pieces remaining, and turn off the heat. (If the broad beans aren't breaking down, use a hand blender to puree them a bit.)

Drop the *garganelli* into the large pot of boiling salted water and cook, stirring frequently, until the pasta is almost *al dente*. Meanwhile, add the dandelion greens (if you're using them) to the sauté pan and turn the heat to medium. Cook for one minute and then turn off the heat. Taste and adjust the seasoning. Drain the *garganelli* one minute before the indicated cooking time, reserving 60ml of cooking liquid. The pasta will cook for the last minute in the sauce and absorb its flavours. Transfer the pasta to the saucepan and turn the heat to medium. Simmer the pasta in the sauce for one minute, adding cooking water as necessary and stirring frequently to avoid sticking. Serve immediately with freshly grated ricotta *salata*.

Contributors

Chris Behr is the executive chef for the Rome Sustainable Food Project at the American Academy in Rome. He has worked at A16 in San Francisco, which pioneered Italian farm-to-table cooking, and was then appointed *chef de cuisine* at SPQR, who sent him to Rome to study Italian cooking in the field. After working in New York at the Balthazar Bakery and at Pulino's, he went to BKLYN Larder where he met Mona Talbott, who eventually proposed him as sous chef at the academy in Rome. He became executive chef in 2014.

Tim Benton is an architectural historian who taught at the Open University and occasionally the AA, as well as visiting professorships at the Clark Art Institute, Williams College, Columbia University, the Bard Graduate School and at the École Polytechnique Fédéral de Lausanne. He is the author of numerous titles, including *The Villas of Le Corbusier and Pierre Jeanneret, 1920–1930* (1984), *The Rhetoric of Modernism: Le Corbusier as a Lecturer* (2007), *LC Foto: Le Corbusier Secret Photographer* (2013) and *Le Corbusier, peintre à Cap Martin* (2015). He has also curated several exhibitions at the V&A, the MAXXI and the Fundación Juan March, Madrid, and more recently he has been working with the Association Le Corbusier-Etoile de Mer-Le Corbusier and the Association Cap Moderne to restore Eileen Gray's villa, E-1027, and Le Corbusier's buildings in Roquebrune-Cap-Martin and has co-curated three exhibitions on the site.

Andrew Crompton is a researcher at the University of Liverpool School of Architecture and is currently writing a book about the design of interfaces.

Kenny Cupers is associate professor in the history and theory of architecture and urbanism at the University of Basel. He is the author of *The Social Project: Housing Postwar France* (2014), *Use Matters: An Alternative History of Architecture* (2013) and *Spaces of Uncertainty* (2002, with Markus Miessen).

Cynthia Davidson is executive director of the Anyone Corporation and editor of *Log*. She is responsible for more than 40 books in print and oversees the Writing Architecture series published with MIT Press. She does exhibitions too, including co-curating the US Pavilion at the 2016 Venice Architecture Biennale, and has hosted a number of cross-cultural conferences on architecture at venues far and wide. Occasionally she writes for periodicals that begin with the letter A, including *Artforum*, *Arquitectura Viva* and *Abitare*.

Peter Eisenman is a New York-based architect and teacher. Educated at Cornell and Columbia University, he then completed his PhD at the University of Cambridge. Back in the US from 1963, he taught at Princeton University before setting up the Institute for Architecture and Urban Studies in 1967. His subsequent career has combined academic appointments – at Harvard University, the Cooper Union, Ohio State University and currently at Yale, where he is the Charles Gwathmey Professor in Practice – with professional practice and the completion of numerous projects, from a series of private houses in the 1970s to the recent City of Culture of Galicia in Santiago de Compostela. In addition, his many books include *Diagram Diaries* (1999), *Giuseppe Terragni* (2003) and *Ten Canonical Buildings* (2008).

Simona Ferrari studied architecture at the Politecnico di Milano and Vienna's Technische Universität, obtaining her masters degree at Tokyo Institute of Technology as a Monbukagakusho fellow. Since 2014 she has been working for Atelier Bow-Wow on various international projects, competitions and exhibition designs, among them the recent exhibition 'The Japanese House: Architecture and Life after 1945' at the MAXXI Museum in Rome and the Barbican.

William Firebrace is the author of *Marseille Mix* (2010) and *Memo for Nemo* (2016). His latest book, *Star Theatre,* on planetariums, will appear with Reaktion Books later this year. He is currently working on *Hop Baltic*, on the culture and architecture of a number of Baltic cities.

Christophe Van Gerrewey is assistant professor in architecture theory at EPFL, Lausanne and a member of the editorial board of *OASE*. He has published in journals such as *Log*, *Journal of Architecture*, *Architectural Theory Review*, *A+U*, *Archithese*, *2G*, *ARCH+* and *The Architects' Journal*, as well as authoring a history of Belgian architecture, *L'Architecture Belgique* (2014), and editing the collected writings of Geert Bekaert. He is currently preparing an anthology of writings on the work of OMA/Rem Koolhaas.

Elain Harwood became an architectural investigator with Historic England after studying building conservation at the AA. She first met Kate Macintosh when writing her book on postwar architecture, *Space, Hope and Brutalism* (2015). That book preceded more specific publications on postwar listed buildings, the architects Chamberlin, Powell & Bon and the architecture of Nottingham. She is currently writing on new towns, Ernö Goldfinger and postmodernism.

Michael Hill is head of art history at the National Art School in Sydney, Australia. His interest in San Carlo was sparked 30 years ago by a teacher who told him that the interior was like music, and his work on Borromini has also led him to study the writing of the art historian Leo Steinberg. He is currently researching how civic space can be shaped by the siting of public sculpture.

Kate Macintosh graduated in architecture from the Edinburgh College of Art in 1961 and then spent six months in Warsaw on a British Council scholarship before working over the next three years in various offices across Scandinavia. Back in England, she joined the architect's department of Southwark council, for whom she designed perhaps her best-known building, Dawson's Heights in Dulwich, and then moved to Lambeth council, where she was the architect for the now grade-II listed sheltered housing at 269 Leigham Court Road. She then moved to the south coast and worked for the councils of East Sussex and Hampshire on various fire stations, schools and old people's homes. In addition, she has lectured at numerous schools of architecture and was the first chair of the Women's Architect Group.

Nicholas de Monchaux is associate professor of architecture and urban design at the University of California, Berkeley, where he is director of the Berkeley Centre for New Media. He is the author of *Spacesuit: Fashioning Apollo* (2011) and *Local Code: 3,659 Proposals about Data, Design and the Nature of Cities* (2016), and is a principal of the Oakland-based practice Modem / Moll de Monchaux.

Dagmar Motycka Weston trained as an architect in Canada before undertaking postgraduate work at the AA and the University of Cambridge, from where she obtained her PhD in the history and philosophy of architecture. She has taught architectural history and design at the University of Edinburgh (where she is now an honorary fellow) and has contributed essays to numerous anthologies, among them *Chora II* (1996), *Symbols of Time in the History of Art* (2002), *Modernism and the Spirit of the City* (2003), *Tracing Modernity* (2004), *The Cultural Role of Architecture* (2012) and *Phenomenologies of the City* (2015).

Dietrich Neumann trained as an architect at the AA and in Munich and is a professor of the history of modern architecture at Brown University. Among his publications are *Film Architecture: Set Design from Metropolis to Blade Runner* (1996), *Richard Neutra's Windshield House* (2002), *Architecture of the Night* (2002), *The Structure of Light: Richard Kelly and the Illumination of Modern Architecture* (2010), *Visualising the City* (2012) and *Cities of Light* (2014).

Charles Rice is professor of architecture at the University of Technology Sydney. He is author of *The Emergence of the Interior: Architecture, Modernity, Domesticity* (2007) and *Interior Urbanism: Architecture, John Portman and Downtown America* (2016), and is editor-in-chief of *The Journal of Architecture*, the scholarly journal of the RIBA.

Joseph Rykwert is Paul Philippe Cret Professor Emeritus of Architecture at the University of Pennsylvania and the author of numerous architectural histories, among them *The Idea of a Town* (1963), *On Adam's House in Paradise* (1972), *The Dancing Column* (1996) and *The Seduction of Place* (2000). In 2014 he received the RIBA Royal Gold Medal for Architecture.

Wataru Sawada studied at the AA and worked for Fuminori Nousaku before setting up Sawada Hashimura in Tokyo with his partner Yuichi Hashimura. He teaches at Tokyo University of the Arts as a research associate and is currently exploring the idea of reference.

Davide Spina is a PhD candidate at ETH Zurich, where he is exploring the postwar activities of the Italian developer and contractor Società Generale Immobiliare. Prior to this he completed the architectural history MA at the Bartlett, UCL.

Peter Wilson is an architect and partner in the German-based practice Bolles+Wilson, currently constructing the National Library of Luxemburg. He was at the AA both as a student and diploma unit master for most of the Boyarsky years. His *Western Objects – Eastern Fields* book from that time now appears to be a collector's item. More recent work of the practice was documented in *A Handful of Productive Paradigms* (2009). He is also the author of *Some Reasons for Travelling to Italy* (2016) and has along the way received the Gold Medal from the Australian Institute of Architects.