

# **Histories of the Immediate Present: Inventing Architectural Modernism, 1930-1975**

**Anthony Vidler**



*Left to right: Dr Reyner Banham, Professor Nikolaus Pevsner and Sir John Summerson*

**Histories of The Immediate Present**  
**Inventing Architectural Modernism, 1930-1975**

**Proefschrift**

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**Prof. ir. W. Arets**

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Propositions accompanying the dissertation *Histories of the Immediate Present: Inventing Architectural Modernism, 1930-1975* by Anthony Vidler.

1.

The construction of an architectural history always conceals a desired contemporary practice.

2.

So-called postmodernism in architecture is less of an opposition to modernism than it is an expression of the *posthistoire* tendencies latent in modern thought since Hegel.

3.

Robert Maxwell once observed that if Reyner Banham wrote the history of the immediate future, Colin Rowe wrote the history of the immediate past. This would place Manfredo Tafuri squarely in the immediate present with respect to both past and future.

4.

Postmodernism was in part the unfortunate side effect of the resurgent interest in architectural history and theory in the academies of the 1980s and 90s.

5.

Recent calls for a "post-theoretical" or "new pragmatic" architecture appear to mask the re-emergence of traditional architectural anti-intellectualism.

6.

The definition of architectural irony would be the "abstract-realism" of Koolhaas which trumps both abstraction and realism, making both Eisenman and Venturi distinctly uncomfortable.

7.

If contemporary architecture is no more than a media event that generates the symbolic economy of late-capitalism, the sign "event cancelled" should be placed on every facade.

8.

The width of Walter Benjamin's "One Way Street," allowed for a narrow pedestrian path in the opposite direction.

9.

The relation of philosophy to architecture, while fraught with disciplinary tension, has nevertheless been of inestimable value to both domains of thought.

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The adage that history repeats itself, the first time as tragedy, the second time as farce,

is complicated in the case of typology, which appeared the first time as enlightenment, the second time as modernism, and the third time as urban critique. Only in its fourth iteration as the marketing tool of anti-urban development has it fulfilled its destiny as tragi-comedy.

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### ***Abstract***

*In this thesis I address the role of architectural history, criticism, and theory in the conception and practice of modernism between the early 1930s and the present. In the search for an authoritative modernity following the heterogeneous experiments of the avant-gardes in the first quarter of the 20<sup>th</sup> century, historians played a decisive role in the definition of programs, forms, and styles, that might be seen to unify an apparently fragmented and linguistically fractured field, and, equally importantly, to provide authority in history for an architecture increasingly seen as detached from its past. Henry Russell Hitchcock's *Romanticism and Reintegration* (1929) and his later *International Style* (1932) with Philip Johnson, had attempted at once to trace the origins of modernism to the late eighteenth century picturesque and to consolidate the disparate manners of the early Twentieth Century within a single stylistic rubric modeled on the "international" Gothic of the 12th century. Emil Kaufmann, on the other hand, in his *Von Ledoux bis Le Corbusier* of 1933, found the roots of a rationalist modernism in the Eighteenth Century Enlightenment, a theme later to be developed by Colin Rowe. Pevsner's genealogy of *the Pioneers of the Modern Movement* (1936) from the Arts and Crafts revivals of the late nineteenth century to Gropius, had framed modernism within the terms of the German experience and according to functional principles. Sigfried Giedion, fresh from his study of the Baroque, his support of Le Corbusier, and his participation in CIAM, argued in his *Space, Time and Architecture* (1941) for an architecture of space-time fusion derived from the new physical concepts of the early Twentieth century, and later in *Mechanization Takes Command* for an architecture based on technological advances, setting the tone for the scientific progressivism of Reyner Banham. Each of these histories was clearly influenced by a certain partisanship towards a particular form of modernism -- Hitchcock and Johnson's "white" style, Kaufmann and*

*Giedion's Corbusianism, Pevsner's support of Gropius -- that, in the period after World War II, was regarded suspiciously by the next generation of historians, themselves critical of what were seen as the evident failure of the early modern movements to achieve their stated social or technical goals. Colin Rowe, studying with Wittkower, found solace in the work of Palladio for the apparent closure of Le Corbusier's modernism after the 1930s. Banham, studying with Pevsner, found that the Anglo-German prejudice and temporal limits to his study had left a gap to be filled -- not only as between 1914 and 1930, but also substituting the Futurists for the Arts and Crafts movement as the "real" pioneers. Yet it is clear that Rowe and Banham, in their turn were writing history in an advocacy mode, the one with a sense of the inevitability of "mannerist" repetition, the other with an unbounded optimism in technological development. These new histories of modernism were quickly taken up by architects as authorization for their own practices and as reservoirs for references and sources. While Emil Kaufmann's Eighteenth-century had found its admirers in architects as diverse as Philip Johnson and Aldo Rossi and Pevsner had inspired a whole group of "Victorianists" dedicated to the revival of Nineteenth Century styles and to "Townscape" as a way of envisioning urban renewal. Rowe, first as a Tutor at Liverpool, then as a professor in Texas, Cambridge, and Cornell, formed a circle including James Stirling, Robert Maxwell, and Alan Colquhoun, and was to influence whole generations of architects, first in Austin Texas, then in Cornell, New York. Banham, as a coordinator of the Independent Group, was first a supporter of the Smithsons, then, with technological enthusiasm, of Archigram and many other megastructural experimenters.*

*The idea that the role of the historian was in some way to support contemporary practice, was to be challenged in the late 1960s by Manfredo Tafuri who castigated what he called "instrumental" or "operative" history in his *Teorie e storia dell'architettura* of 1968 in favor of*

*a more critical model, detached from its objects. Yet, originally trained as an architect, a collaborator on architectural and urban projects, and author of monographic studies on well-known architects, Tafuri could not help writing in a way that had an effect on his contemporaries -- on the typological experiments of Rossi, and even extending to the formal and linguistic projects of those he termed "architects in the boudoir" in the United States -- Peter Eisenman, John Hejduk, Richard Meier. Further, if the immediate result of his attempt to draw a line between operative and critical history was a generation of historians with an assumed objectivity, the very critique of this imaginary firewall produced its own reaction; but a reaction framed within the terms of Tafuri's own interpretative strategies that, while delayed, might well be called the "Tafuri effect" on recent design practice.*

*In this difficult intellectual context, I have taken the work of four historians and critics -- Emil Kaufmann, Colin Rowe, Reyner Banham, and Manfredo Tafuri -- as case-studies of the construction of modernist histories, each of which offers a particular vision of modernism, one followed by architects in their search to go beyond the avant-garde experiments of the 1920s while remaining faithfully "modern" in their practice.*

### *Acknowledgements*

My interest in the critical relations between architectural history and contemporary design was stimulated in 1960, at my first (and quite terrifying) tutorial with Colin Rowe in his modernist apartment on Fen Causeway in Cambridge. Handing me a copy of the then recently published *Architecture in the Age of Reason* by Emil Kaufmann, he asked, gesturing towards a folio of Colin Campbell's *Vitruvius Britannicus* lying open on the floor before him: "Well, and what do you make of *concatenation*?" This enigmatic question, over which I puzzled for many weeks, initiated my work on the late eighteenth century and Ledoux. Rowe's subsequent desk-critiques where *parti* after *parti* were layered over each other on yellow tracing paper in thick soft-pencil with trembling hand, with his extraordinary visual recall of historic compositions as formal diagrams, offered object-lessons in the tradition of modernist art-historical analysis from Wölflinn and Frankl to Wittkower.

But 1960, the first year of my studies at Cambridge, also saw the publication of Reyner Banham's *Theory and Design in the Second Machine Age*, a book immediately required by Colin St. John Wilson for his course on the history of modern theory. Banham's enthusiasm for Futurism -- a discovery he claimed as his own -- and Wilson's passion for the Dutch de Stijl movement created an excitement in the School of Architecture for research into the forgotten history of the avant-gardes, a history made the more immediate through the personal links of Professor Sir Leslie Martin to the pre-war *Circle* group, that included Naham Gabo, Anton Pevsner, and Ben Nicholson. Supporting this investigation into modernism's roots were visitors from the Independent Group like Eduardo Paolozzi, and Alison and Peter Smithson, as well as Jim Stirling, then occupied with the design of the History Faculty Library. The Smithsons'

special issue of *Architectural Design* on the "Heroic Period of Modern Architecture (1917-1937)" in December 1965 summed up modernism for our generation -- in some way as a sign of closure, but also of the need for competitive emulation. Against this, the unruly (from the point of view of Cambridge) incursions of Archigram, who set up their "Living City" exhibit in the front lobby of Scroope Terrace in 1964, provided a healthy sense of utopianism and continuity with the early modern avant-gardes. During the same years, between 1960 and 1964, an American PhD student, Peter Eisenman, who assisted Colin St. John Wilson in the First Year design studio, was developing his own thesis on the formal analysis of modern architecture under the guidance of Colin Rowe, with the formal acuity and inventiveness that has characterized his subsequent work.

Later, as my own work in history and criticism began to develop, my friendship with Manfredo Tafuri and his colleagues in Venice led to a certain distinction being drawn between the activities of historical interpretation, the critical assessment of contemporary architecture, and the practice of design. The example of Tafuri served, in the years between 1972 and his death, as an example of meticulous historical and formal analysis combined with a political and critical position towards practice.

The following thesis then, might well be considered my homage to these teachers, who, in different ways, have shaped my own thinking and work over the last forty-five years. It also represents my reflection on the difficulties, intellectual and epistemological, confronted by those who -- like Rowe and Tafuri -- trained in architecture, but turning to historical exegesis as a form of practice, find themselves caught in the modern bind between (as Nietzsche named them) monumental, antiquarian, and critical modes of historical thought; or those who -- like Eisenman-- trained in architecture, turn to history and theory as ways of authorizing and

generating a new architecture. In *this* sense, as it treats of many of those friends and colleagues that have touched my career at one moment or another, this thesis traces an unfinished intellectual autobiography.

Those who have read, listened to, and discussed parts of this work include: Carl Schorske, Kurt Forster, Michael Hays, Reinhold Martin, Beatriz Colomina, Mark Wigley, Alan Colquhoun, Robert Maxwell, together with many former students, including most particularly Spyros Papapetros. I also thank those institutions that asked me to deliver portions of this work in progress and especially the schools of architecture at Yale, Columbia, Princeton, UCLA, and the T.U. Delft. I am particularly grateful to the Mellon Foundation and the Center for Canadian Architecture for having provided the time and resources for the completion of this manuscript.

Finally, I want to thank those who sustained my work on this narrative as a PhD Thesis: Weil Arets, of the Berlage Institute, Rotterdam, who suggested the idea, and Arie Graafland of the TU Delft, who has nurtured it to completion with critical insight and judicious advice.

The thesis is dedicated to the memory of Ignasi Sola Morales, whose critical mind was continually wrestling with these questions and whose friendship sustained my faith in architectural discourse over more than twenty years.

Anthony Vidler, New York, 2005.

### ***Introduction***

Where Banham invented the immediate future, Rowe invented the immediate past. For my generation, those two were the poles of a debate and for some, the horns of a dilemma.

Robert Maxwell, 1996<sup>i</sup>

The first serious historical examinations of modern architecture began to appear in the late 1920s. Adolf Behne's *Der moderne Zweckbau* (1926), Adolf Platz's *Die Baukunst der neuesten Zeit* (1927), Sigfried Giedion's *Bauen in Frankreich* (1928), Bruno Taut's *Modern Architecture* (1929) and many other collections, began the process of assembling the evidence and developing the criteria for "modernity," based on which Henry-Russell Hitchcock's *Modern Architecture: Romanticism and Reintegration* (1929), Walter Curt Behrent's *Modern Building* (1937), Nikolaus Pevsner's *Pioneers of the Modern Movement* (1936), and Sigfried Giedion's *Space, Time and Architecture: The Growth of a New Tradition* (1941) were able to construct more or less coherent narratives of origin and development.<sup>ii</sup> As Panayotis Tournikiotis has shown, these narratives shared a common concept of history as a determining, unfolding force, capable of articulating questions of the past, present and future of architecture, as well as a belief in some form of socio-cultural *zeitgeist* that, if correctly identified, equally determines the respective "modernity" or non-modernity of the work.<sup>iii</sup>

They were also extremely partial narratives developing their genealogies from moments in the past that seemed to them starting-points justifying the specific contemporary practices they supported or admired. Thus Hitchcock, in *Romanticism and Integration*, sought the roots of his beloved "New Tradition," in the late eighteenth-century, and was uneasy as well as excited by

the work of the "New Pioneers," that he saw at once going beyond and disturbing the rationalism of Wright, Wagner, Behrens and Perret. Pevsner, in *Pioneers of the Modern Movement*, focused on the relations between Britain and Germany, seeing the origins of Gropius's rational-functionalism in the Arts and Crafts movement, conveniently ignoring the French contribution, while Giedion failed to include more than a mention of Mies van der Rohe in his *Space, Time and Architecture*, preferring instead to leap from Baroque movement to that encapsulated in Le Corbusier's villas of the 1920s

But whatever their partialities, these pioneer works accomplished what the modernist architects themselves feared the most: the historicization of modernism. For the transformation of the "Modern Movement" into modern architecture was, by 1940, complete, and fully assimilated into the art-historical canon, and given its place in the history of the "styles." Where once Le Corbusier had declared the end of "The Styles," and Mies van der Rohe had rejected academic art history in favor of "building-art," now Hitchcock was rewriting the entire style-history of architecture to define what he called an "International Style modeled on the spread of Gothic in the 12th century;" Pevsner was drawing a temporal line around something identifiable called the "Modern Movement;" and Giedion was articulating the relations and historical developments that tied together a modern vision and former styles as the basis for the international building code outlined by CIAM.

Whether modern architecture was seen to begin with the Baroque, Classicism, Neo-Classicism, Nineteenth-Century Eclecticism, or Arts and Crafts Revivalism, the flood-gates were now opened for a host of competing narratives, a variety of historically based modernisms, and several versions of a possible "unity" of style characterizing the "modern." Further, such a widening of historical reference and roots, meant that the history of modern architecture was as

dependent on the historians of other ages as it was on its own specialists: as modernity was defined, so its precedents were isolated -- and vice-versa, allowing historians of the Renaissance, the Baroque, as well as those of the newly defined Mannerist and Neo-Classical periods, to make reference to contemporary tendencies, if not define their own "styles" as a conscious or unconscious response to contemporary tendencies.

For what united all these historical forays into modernity with all other historical work in architecture, was their common basis in a analytical method that had emerged towards the end of the 19th century, a method that relied not so much on the identification of "stylistic" motifs as on the comparison of forms -- masses, volumes, surfaces -- in the abstract. Beginning with Alois Riegl's formal interpretation of ornament and his conceptual history of spatial vision, continuing with Heinrich Wölfflin's psychological analysis of form, and culminating in the spatial construction of history by Schmarsow and Frankl, the architecture of all periods was seen as a series of typical formal-spatial combinations, each tied to specific epochal "wills" or "drives," and each comparable to the next in a natural history of morphological transformation. What the clues offered by the shapes of eaves or drapery movements were to art historians like Berenson and Warburg, so spatial form was to architectural historians.<sup>iv</sup>

In this process, that I will call the "diagramming" of history, it is possible to trace the reciprocal influence of abstraction as it emerges as a force in art and architecture, and the exploration of more "scientific" methods in art history. Where modern architecture desired to shake off the stylistic eclecticism of the nineteenth century, modern art history obliged with a counter-stylistic mode of analysis that emphasizes perception, experience, and psychological effect on the one hand, and basic formal attributes on the other. In this sense, Frankl's *Die*

*Entwicklungsphasen der neueren Baukunst* (1914) appeared as the architectural counterpart to Wölfflin's *Kunstgeschichtliche Grundbegriffe* (1915).

It was no accident that the first histories of modernism were written by historians who had followed Riegl and Wölfflin in exploring the comparatively new territory of the Baroque and its extension into the modern period. Refusing Wölfflin's rejection of the Baroque in favor of the High Renaissance, Giedion in his thesis *Spätbarocker und romantischer Klassicismus* (1922), a work that relied methodologically on Riegl's *Spätrömische Kunstindustrie* (1901) even as it supplied the burthen of Hitchcock's *Romanticism and Reintegration*, began to fill the void left by Wölfflin between the Baroque and the modern. Pevsner's first book, a detailed history of Leipzig Baroque, was based on his dissertation of 1924 at the University of Leipzig under Wilhelm Pinder, was published in 1928, and explicitly indebted to Schmarsow's studies of Baroque and Rococo architecture.<sup>v</sup> His later studies in Mannerism and the Picturesque were directly tied to his belief that these styles pre-figured modernism. Emil Kaufmann, student of Riegl and Dvorak, formed his conception of a "revolution" in architecture around 1800 out of his conviction that the generation of Ledoux and Boullée had decisively broken with the Baroque to establish a new style-form that he called *Klassizismus* or "Neo-Classicism," which in turn had anticipated the modernism of Loos, Le Corbusier, and Neutra.

The enforced emigration of German and Austrian scholars in the 1930s brought these discussions to the attention of British and American audiences, giving a sense of historical legitimacy to a Modern Movement hitherto largely confined to the Continent. Emil Kaufmann, briefly in England and then taking up residence in the United States in 1942; Nikolaus Pevsner in England from 1933; Rudolf Wittkower moving to London in 1934 to join the Warburg Institute newly re-established from Hamburg: these scholars and more, quickly integrated into the Anglo-

Saxon intellectual culture of their hosts, were to provide the stimulus for a complete re-evaluation of modernist history after 1945, as they gained an English language readership hitherto denied them. Emil Kaufmann, hosted by Philip Johnson and the newly created Society of Architectural Historians in Boston began ten years of research and publication on neo-classicism, its roots and resonance to the present; Nikolaus Pevsner shifted his *zeitgeist* approach to national culture from Germany to England, and became a powerful force in contemporary architectural culture with his editorship of the *Architectural Review* after 1941; Rudolf Wittkower, publishing his Palladian studies in the *Journal of the Warburg Institute* from 1944, began to attract the interest of a younger group of architects interested in reformulating the principles of a modernism distinct in its social and formal approach from pre-war CIAM dominated theory and practice.

The unsung progenitor of this re-evaluation of modern history was Emil Kaufmann, whose linking of the pseudo-abstract designs of Ledoux and Boullée to the principles of the Enlightenment in his 1933 book *Von Ledoux bis Le Corbusier*, gave a depth to the idea of modernism that appealed to those wishing to sustain the inheritance of Le Corbusier, but needing to plumb new sources of rationalism in the face of its apparent betrayal in the postwar work at Ronchamp. Kaufmann's influence initially touched Philip Johnson in the early 1940s, endowing Johnson's own translation of Mies with neo-classical overtones; later, with the posthumous (1954) publication of *Architecture in the Age of Reason* Kaufmann found an audience in Britain and Italy, specifically with Colin Rowe and Aldo Rossi. Rowe himself was especially open to Kaufmann's thesis having in 1947, following his teacher Rudolph Wittkower, already pushed back the origins of Modernism even further to the Mannerist period, stressing the continuity of tradition in mathematical order and mannerist composition. His influence on contemporaries,

from Alan Colquhoun to James Stirling was profound. At the same time, Reyner Banham, in an attempt to outdo his own teacher Pevsner, offered the first scholarly assessment of modern architecture in a kind of continuation of Pevsner's *Pioneers*, treating what he called the "zone of silence" between 1914 and 1939. It is paradoxical, in retrospect, that Rowe's modernized neo-Palladianism, at first taken up with enthusiasm by the "New Brutalists," was to emerge as a foundation for Banham's own counter-modern idea of the New Brutalism, a stance Banham later rejected in favor of his conclusion that the Modern Movement had failed in its technological aspirations.

While the histories of modernism thus developed certainly rested on methodological, and often archival, bases that, from increased distance and primary research, were wider and deeper than that of their predecessors, their not-so-hidden agendas were, in different ways, still pointed towards contemporary practice. Kaufmann's Enlightenment was a clear moral fable for a renewed modern movement at a moment of serious social reaction in Germany and Austria; Rowe's modern Mannerism opened the door to a variety of formal and semiotic experiments that gradually shifted the argument from new modern to post modern; Banham's technological optimism and his call for "une autre architecture" supported Brutalists, Metabolists, and neo-Futurists. In this sense, the students of the first generation of modernist historians were as engaged in proselytization as their teachers: from Pevsner and Giedion to Rowe and Banham the objects of enthusiasm may have changed but not the message. History was at once source, verification, and authorization.

Among the first to criticize this "instrumental" use of history was Manfredo Tafuri, who himself trained as an architect and planner, had begun his career as a historian by assessing the present state of modern historiography. Published in 1968, the essay *Teorie e storia*

*dell'architettura*, identified the profound "antihistoricism" of the modernist avant-gardes, and attempted to distinguish between the realms of criticism, theory, and history, in such a way as to protect history from its complicity with practice.<sup>vi</sup> His criticism was precisely aimed at those historians -- Giedion, Zevi, Banham -- who had seen history as instrumental in giving meaning to architecture, who had "read in late-Antique architecture the premises of Kahn or Wright, in Mannerism those of Expressionism or of the present moment, in pre-historical remains the premises of organicism or of a few "non-formal" experiments."<sup>vii</sup> Here, in his rigorous refusal of those who posed as the "Vestals" of the Modern Movement, and his insistence on the historicization of the very instruments of criticism themselves, Tafuri attempted a de-mythologization of history, as complete as that assumed by his intellectual "mentor" Max Weber early in the Twentieth Century.

In the following chapters I examine the historical approaches of four historians of modernism: Emil Kaufmann, Colin Rowe, Reyner Banham, and Manfredo Tafuri. Each is seen in the context of their intellectual formation, the specific nature of the "modernisms" advanced by their historical narratives, and the influence of these models on practice. Rather than attempt a comprehensive review of the life and work of each historian, I have preferred to concentrate on a specific moment or group of writings that brings these issues sharply into focus and with especial concentration on the period between 1945 and 1975, a period of especial intensity in the debates over the role of history in architectural practice and education. Each of these different histories imagined modernism in a form deeply complicit with the "origin" they proposed. Thus the modernism conceived by Kaufmann was, like the late Enlightenment projects he selected, one of pure, geometrical, forms and elemental composition; that of Rowe saw Mannerist ambiguity and complexity in both the spatial and surface conformations of modernism; that of Banham took its

cue from the technological aspirations of the Futurists, but with the added demand of successful realization; that of Tafuri found its source in the apparently fatal division between technical experiment and cultural nostalgia represented respectively by Brunelleschi and Alberti. Inevitably, each spawned its own version of the contemporary “modern,” and each, sometimes with discomfort, supported a selective list of approved architects.

A final chapter discusses the contemporary effects of the diagramming of history pioneered by art historians, and especially in the work of late modern ironists like Rem Koolhaas, and in the application of diagrams to the emerging practices of digital design. My epilogue asks the more general question of whether the continued reliance on history by architects in the second half of the twentieth century should be seen as the apparently new phase of "postmodernism," or whether modernism from the outset harbored its own spatio-entropic critique in what has become known since Cournot as *posthistoire* thought.

In this investigation, then, I hope to demonstrate, not the pernicious effect of history on design, nor the need radically to separate the two, but rather their inevitable collusion that pervades all modern architectural discourse, a collusion that has given rise to some of the more interesting architectural experiments of the Postwar period, including Johnson's Glass House, Stirling's Staatsgalerie, Archigram's Living City, Rossi's Città Analogia, and, more recently, Koolhaas's Rotterdam Kunsthalle, to give only a very few examples.

## **Chapter 1. Neo-Classical Modernism: Emil Kaufmann<sup>viii</sup>**

I identify Modernism with the intensification, almost this exacerbation, of this self-critical tendency that began with the philosopher Kant. Because he was the first to criticize the means itself of criticism, I conceive of Kant as the first real Modernist.

Clement Greenberg, 1960<sup>ix</sup>

### *Autonomy*

The idea of “architectural autonomy,” the notion that architecture, together with the other arts, is bound to an internal exploration and transformation of its own specific language, has periodically surfaced in the modern period. Whether as a way of classifying the qualities of architectural “form” as opposed to “style,” or as a way of defining the role of the architect in an increasingly specialized professional world, the assertion of autonomy has been a leitmotif of modernism, from the end of the nineteenth century, if not earlier. Art historians, beginning with Wöfflin and continuing with Riegl and their heirs; architects beginning with Loos and continuing with Le Corbusier and Mies van der Rohe; critics beginning with Roger Fry and Adrian Stokes, and continuing with Greenberg and Krauss, all in different ways and with differing agendas have established their grounds of debate on the autonomy of modernist practices. In architecture, Aldo Rossi, Robert Venturi, and Peter Eisenman have, among many others and in very different ways, laid claim to the autonomy of architectural language.

Of all the writers and architects who have contributed over a century or more to the debate over autonomy, the Viennese historian Emil Kaufmann stands out as a consistent reference point for all subsequent discussions. For while, in retrospect, Wöfflin’s development of a formal method for characterizing architectural periods, and Riegl’s proposition of a historical and cultural specificity to the interplay of vision and space, could be seen as setting up

the grounds for a modernist idea of autonomy in architecture and the other arts, it was Emil Kaufmann who was the first to join the analysis of historical architecture to a philosophical position, derived from Kant, and who was the first to coin the phrase “autonomen architektur” drawing on Kant’s own concept of “autonomy” of the will. And it was Kaufmann that served to introduce the twin ideas of autonomy and modernism to successive generations of architects and critics, beginning with Philip Johnson in the 1940s, but continuing with Colin Rowe in the 1950s and Aldo Rossi in the 1950s and 60s. More recently his work was at the center of a historical re-assessment of autonomy and the avant-garde in the United States. <sup>x</sup>

Yet Emil Kaufmann’s thesis of the development of a modernism emerging in the work of Claude-Nicolas Ledoux in the 1770s and culminating in Le Corbusier, has had many detractors since the publication of his polemically titled *Von Ledoux bis Le Corbusier* in 1933.<sup>xi</sup> Since then the Viennese historian’s view of architectural progress has been castigated as simplistic by contemporaries like Eduardo Persico and Meyer Schapiro, used as a pathological symptom of the decadence of modernism by conservative historians like Hans Sedlmayr, and deemed a travesty of historical scholarship by researchers from Michel Gallet to Robin Middleton.<sup>xii</sup> Castigated as having “suffered from an excess of generalization,” blamed for his “obsessive search for underlying principles [...] pursued to an extreme degree;” and “undermined” in David Watkin’s words by a host of researchers following the lead of Wolfgang Herrmann’s debunking of the traditional Ledoux chronology in 1960, Kaufmann is now largely forgotten.<sup>xiii</sup> He is perhaps the only important member of the so-called Vienna School of the 1920s whose work has not been re-assessed for its scholarly and methodological qualities in the last decade. Hans Sedlmayr and Otto Pächt, even Guido Kaschnitz von Weinberg and Fritz Novotny, have been translated and their work analyzed in its historiographical and theoretical context. Yet, in

Christopher Wood's recent and important introductory study to his *Vienna School Reader*, Kaufmann is relegated to a footnote.<sup>xiv</sup>

His work has not always been denigrated however. With significant contributions to the history of French 18th century architecture throughout the 1920s, re-defining traditional "classicism" with the introduction of the idea of "neo-classicism," Kaufmann, in the second volume of Hans Sedlmayr and Otto Pächt's flagship journal of Viennese "strukturanalyse," published the first major assessment of the architecture of Claude-Nicolas Ledoux -- one to which Meyer Schapiro, despite his measured social critique of its formal approach, dedicated a large portion of his 1936 review of the Vienna School's methods. Walter Benjamin cited liberally from Kaufmann's brief, but trenchant, treatment of Ledoux's life and work in *Von Ledoux bis Le Corbusier*-- the first comprehensive monographical treatment of the French architect by any architectural historian, in his notes for the unfinished *Das Passagen-Werk*.<sup>xv</sup>

Further, Kaufmann's discoveries have inspired generations of scholars to work in the architecture of the revolutionary period, whether or not they agree with Kaufmann that something "revolutionary" was to be detected in the pre-revolutionary and monarchical Ledoux. It posed questions to the historiographical treatment of the "origins" of modernism, and by implication to the entire construction of historicist history from Nikolaus Pevsner to Sigfried Giedion. It interrogated the nature of abstraction in relation to the geometrical forms employed by the Enlightenment and the modernist avant-gardes, and thereby challenged the premises of anachronism in history and criticism. It opened up the imbricated problems of form and politics, architecture and society, in a way that directly challenged the cultural ideology of National Socialism in the 1930s. His sobriquet "revolutionary architect," in his book *Three Revolutionary Architects*, published in 1952, as applied to the trio of architects Ledoux, Boullée and Lequeu, a

trio he had largely discovered and, so to speak, invented, while much misunderstood, nevertheless succeeded in gaining them the attention of serious scholars.<sup>xvi</sup> His posthumous book, *Architecture in the Age of Reason*, was on its publication, considered the last word on eighteenth century European architecture.<sup>xvii</sup> Finally, Kaufmann's work set all these questions within a philosophical framework that has not ceased to inform critical theory: that provided by Kant in his insistence of the "autonomy" of the will as a fundamental premise of bourgeois freedom. The link established by Kaufmann between Ledoux and Kant, as Hubert Damisch has noted in his introductory essay to the French translation of *Von Ledoux bis Le Corbusier*, is one that, whether or not it is historically "verifiable", remains challenging to all interrogations of the nature of architectural language and of the place of the discipline in modern society.<sup>xviii</sup>

Beyond this, Kaufmann's work has had a direct influence on architectural practice, and especially in the way that the modernism of the 1920s and 1930s was received, in the first instance, in the United States immediately after the War. Emigrating to the US in 1941, Kaufmann was taken up by Philip Johnson who hosted his lecture to the newly formed Society of Architectural Historians in his Harvard apartment, and Johnson's Glass House of 1949 was, according to the architect, deeply indebted to a reading of *Von Ledoux bis Le Corbusier*.<sup>xix</sup> Kaufmann's writings, and especially his *Architecture in the Age of Reason*, posthumously published in 1955, were, when translated, strong influences on the theories of architectural "autonomy" characteristic of the Neo-Rationalist school in Italy after 1971, and especially on the theory and design of Aldo Rossi who reviewed his books in detail.<sup>xx</sup> More recently, Kaufmann has been re-interpreted as a theorist of an architectural "autonomy" based on linguistic and disciplinary codes, as proposed by Peter Eisenman and others.

Read today in the context of the detailed monographic research that was to modify his once seemingly over-simplified conclusions, and despite the bringing of other architects to the fore to counterbalance the image of the “three revolutionaries,” and the contextualization of their work in the light of new historical interpretations of “enlightenment” and “revolution,” Kaufmann’s analysis can be seen to regain much of its original force, as seeking to rise above stylistic differences and biographical details, to grasp the phenomenon of an “architectural enlightenment” in all its dimensions, intellectual and formal. At the very least, his theses bear re-examination as representing a critical stage in the development of the discipline of architectural history -- as important in their own way as those of Riegl, Frankl, and Giedion -- at the same time as they pose challenging questions to our contemporary conceptions of architectural form and our preconceptions of its political and social significance.

*Neoclassicism and Autonomy*

Emil Kaufmann was born on March 28, 1891 in Vienna; he studied at Innsbruck, and then Vienna with the Renaissance specialist Hans Semper, with the Byzantinist architectural historian Joseph Strzygowski, Emanuel Loewy (1847-1938), a historian of ancient Greek art, and the historian of Baroque Rome Ludwig von Pastor (1854-1928). He was especially drawn to the teaching of Max Dvorák, however, with whom he formed a close friendship and from whom he derived many of his analytical insights. He was awarded his doctorate in Vienna in 1920, and went on to forge an entire field by his “rediscovery” of three generations of French architectural theorists and designers from the 1750s to the 1820s. As Schapiro noted in his brief obituary in 1953, Kaufmann was unable to obtain a regular academic post (no doubt a result of rampant anti-semitism) and was obliged to work in a bank for much of his early career.

His first major article, written in 1920 and published in the *Repertorium für Kunstwissenschaft* in 1924, (interestingly enough side by side with another ground breaking architectural study by Paul Zucker, “Der Begriff der zeit in der architektur”) outlined the bases for his study of late eighteenth century architecture, by dividing a period generically known as “Classic,” albeit in a late moment, into two. As explicated by Georges Teyssot, Kaufmann’s essay, “The Architectural Theory of French Classicism and Neoclassicism,” [“Die Architecturtheorie der Französischen Klassik und der Klassizismus”] established *Klassizismus* as a period with a formal expression, or rather a structure, of its own.<sup>xxi</sup> Here, Kaufmann was underlining what he sees as the distinct difference between French developments and those in other “Baroque” countries. Between “classicism” in the mid-seventeenth century, and “neoclassicism” after 1750, there were for Kaufmann certain continuities of “clarity and truth” but sharp differences in composition, which seemed to him to move from a principle of harmony inherent to the work, and a principle of expression or communication provoking sensations beyond the work.<sup>xxii</sup>

After 1925, save for a slim book on the architecture of the city of Baden<sup>xxiii</sup>, Kaufmann concentrated his researches on the architects of the late eighteenth century, and especially Ledoux; he contributed the entry on Ledoux to the Thieme-Becker encyclopedia, and an article on the German painter, Ferdinand Georg Waldmüller.<sup>xxiv</sup> The concept of autonomous architecture, however, was present in none of these early studies, save perhaps by implication, as when, in 1929, Kaufmann characterized Ledoux’s architecture, with its geometrical play of masses, as “anti--Baroque.”<sup>xxv</sup>

Kaufmann’s first direct reference to “autonomen baukunst” was to occur in a short study of Ledoux’s church architecture, centered on the project for the Church of Chaux, (probably

designed in 1785, and published in Ledoux's *L'Architecture considérée sous le rapport de l'art, des mœurs and de la législation* in 1804).<sup>xxvi</sup> Contrasting Ledoux's scheme with Soufflot's design for Sainte-Geneviève, to which it obviously was a response, Kaufmann identifies it with the qualities of the new "neo-classicism" he saw emerging with Ledoux's generation. The Neoclassical as opposed to the Baroque church was organized as a solid geometrical block, with reduced decoration, and a distinct separation and identity of its functional parts -- separate altars, for example, on different levels, for festivals and marriages, as opposed to funerals. As Kaufmann wrote: "In place of the conception of architectural form as living, organic nature, there enters the feeling for strict geometry."<sup>xxvii</sup>

This theme is taken up in the same year in the book-length article on "The City of the Architect Ledoux," ["Die Stadt des Architekten Ledoux"] published in the second volume of the Vienna art-historical school's flagship journal, the *Kunstwissenschaftliche Forschungen*.<sup>xxviii</sup> In this first sketch of what was to become, three years later, his second book, Kaufmann gives the idea of autonomy a fundamental place, with the subtitle: "On the Realization of Autonomous Architecture" [Zur Erkenntnis der autonomen Architektur]. In this detailed study, Kaufmann, his critics notwithstanding, develops the argument for autonomy both historically and with deliberate recognition of the complexity of architectural practice.

Ledoux, for Kaufmann, is a transitional and pivotal figure in the shift from what he calls "Baroque" to what he has characterized as "Neoclassicism," and it is precisely the "mixed" nature of the work that allows the historian to understand this shift as an organic and slow process of internalization and cognition on the part of the architect as he confronted the overall problem of architecture in the Enlightenment and its proper means of expression in an epoch itself undergoing radical shifts in its intellectual, social and political forms. Thus Kaufmann's

argument moves slowly towards the “erkenntnis” or “discovery” of autonomy, through a number of stages represented by detailed analyses of Ledoux’s designs in roughly chronological order culminating in a long section devoted to “The Autonomous Solution” [“Die autonome Lösung”].

First Kaufmann analyzes the dramatic change in plans for the Saltworks of Chaux between the initial project of 1771 and the final project of 1774, from a unified, square, courtyard plan, to a number of separate pavilions grouped around a semi-circle, is a sign of the move from “Baroque unity” [*Barocken Verband*] to the Pavilion-system of the 19th century [*Pavillionsystem*].<sup>xxix</sup> The break up of the project into functionally defined and formally expressed units, was for Kaufmann an indication of the “principle of isolation,” the emergence of an “architecture of isolation” [*isolierneden Architektur*] that paralleled the emergence of the modern “individual” consciousness [*Individualbewusstseins*].<sup>xxx</sup>

This accomplished, it is, according to Kaufmann, in the project for the Church of Chaux that Ledoux finally effects the transition from Baroque “dynamic” composition, to Neoclassical “static” composition; the flattened, low, dome, the horizontal lines of the block reinforcing a sense of calm meditation, as opposed to the upward movement of Baroque churches. Further, the articulation of the different altars, one for festivals and marriages on the upper level, with a second for burials and memorial services below in the crypt, with its own entrances and exits towards the cemeteries, enunciates for Kaufmann a “principle of isolation” [*Prinzip der Isolierung*], one that corresponds to the sense of “distance” [*Distanzierung*] necessary for the communication of sublime effects.<sup>xxxi</sup>

Kaufmann then advances his argument with the analysis of the two symbolic monuments, the “Panarétéon” and the “Pacifère,” citing Ledoux’s statements that “The form of a cube is the symbol of immutability,” and “The form of a cube is the symbol of Justice,” as a way of

introducing the concept of “architecture parlante,” or “speaking architecture.”<sup>xxxii</sup> Kaufmann had discovered this term, not itself of 18th century origin, in a mid-19th century article satirizing Ledoux’s attempts to communicate ideas through buildings, and immediately saw it as both positive and apt in its characterization of the aspirations of late 18th century architects to develop a truly social language of forms.<sup>xxxiii</sup> The “symbolic system” that Ledoux wished to deploy was, of course, itself dependent on the separation of individual buildings as identifiable masses, and their shaping as readable signs. Here, for Kaufmann, the pavilion system, the isolation of parts, and the articulation of the appropriate “character” of each structure, led naturally to what, in reference to Ledoux’s design for the “Maison d’Education” he finally named “the new concept of the *autonomous* treatment of the materials.”<sup>xxxiv</sup>

In this way, Kaufmann established the complex development of Ledoux’s design practice as leading to the “autonomous solution” evinced in the series of nine-square plan houses deployed in the landscape of the Ideal City of Chaux, “all varied, all isolated,” as Ledoux stated.<sup>xxxv</sup> Such isolation, Kaufmann averred, marked the end of Baroque compositional practice, that of “concatenation” [*Verband*] and the beginning of the new building form [*die neue bauform*], a form characterized by the Enlightenment pressure for “clarification” [*Abklärung*].<sup>xxxvi</sup> Kaufmann thus prepared the analytical ground for the systematic comparison of Ledoux’s architectural method with the general method of the Enlightenment -- that developed by Kant:

At the time when Kant rejects all the moral philosophies of the past and decrees the “autonomy of the will as the supreme principle of ethics,” an analogous transformation takes place in architecture. In the sketches of Ledoux these new objectives appear for the first time in all their clarity. His work marks the birth of autonomous architecture.<sup>xxxvii</sup>

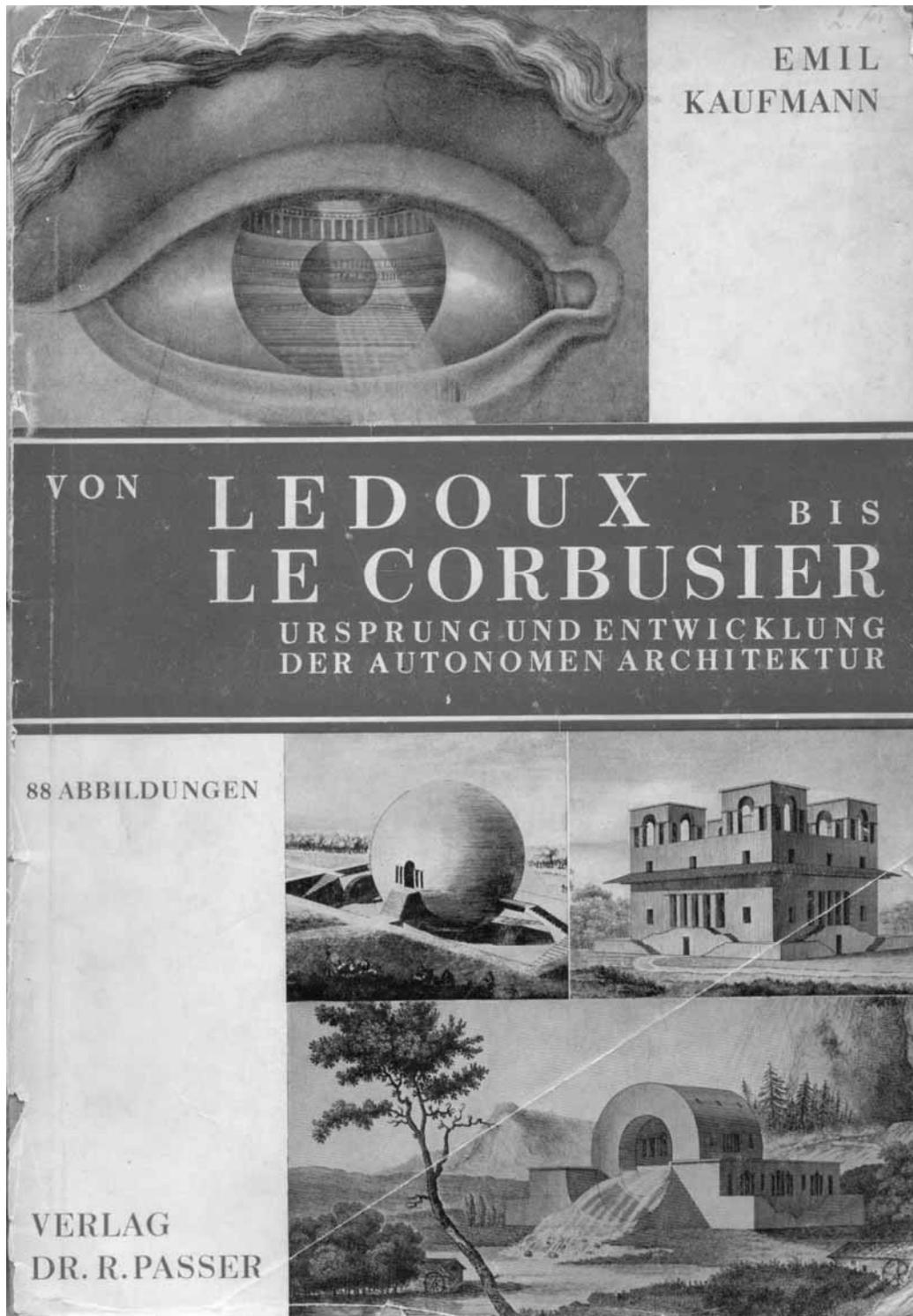


Fig. 2 Emil Kaufmann, *Von Ledoux bis Le Corbusier* (1933), Cover

The theory of autonomy was given its fullest development in Kaufmann's second book, a slim treatise entitled, polemically enough, *Von Ledoux bis Le Corbusier*, published in 1933, and summarizing and developing the arguments put forward in "Die Stadt." In the Preface, dated "Vienna, May 1933," Kaufmann outlined his methodological premise. This was to be, he wrote, "something more than a monograph, and different from the mosaic of an artistic life." Rather it was to be seen as "a part of the history of architecture which, through the interpretation of the work of Ledoux, appears in a new light" at the same time as demonstrating "the importance of the great movement of ideas around 1800 for the domain of art."<sup>xxxviii</sup> This theoretical aim was expressed in the subtitle to the book, no longer "Zur Erkenntnis der Autonomen Architektur" but now the more dynamic "Ursprung und Entwicklung der Autonomen Architektur." The substitution of "Origin and Development" for "Discovery" represented a both a firmer conviction in his own "discovery," and a sense of its historical implications for later developments.

From the outset, Kaufmann made it clear that he was seeing the French architecture of the Enlightenment and Revolution as equal or greater in importance to the already well-established tradition of German Neoclassicism as represented by Schinkel. His title, in fact, was a direct gloss on Paul Klopfer's *Von Palladio bis Schinkel*, an argument for the primacy of German architecture as it received the Renaissance tradition from Italy.<sup>xxxix</sup> Kaufmann by contrast is concerned to emphasize the role of the French and Latin traditions in the continuation of Palladio's legacy to the present. His work in Paris had convinced him that it was the Latin countries that counted in the development of modernism. While philosophy, under the aegis of Kant, and poetry following Hölderlin, could be seen to have constructed the intellectual and literary foundations of Romantic modernism, it was in France and Italy that the work of Enlightenment entered fundamentally into the visual arts, and especially architecture. This was

accomplished, Kaufmann argued, by the final break with Baroque modes of composition (“heteronomous” as he called them) and the introduction in their place of modern forms of disposition (“autonomous” or “free-standing”). Once ratified by the Revolution, and despite attempts to veil the radical nature of the shift by means of historical styles, autonomy survived to establish the abstraction of modernism as the apotheosis of Enlightenment reason. He wrote:

If we are well-informed about the historic role of Italy as the initiatory land of modern times in the domains of art and society, we remain, by contrast, ignorant of the role of France as pioneer of a new art and creator of a new architecture. Towards 1800, as during the Gothic period, the decisive innovations come from the French architects. In the following work, I am first concerned to render justice to the artist who was the first, not with a vague intuition of distant goals but with a clear and full self-consciousness, to traverse the long route from the Baroque to modern architecture: Claude-Nicolas Ledoux. Placed at the frontier of two epochs, before and after the Revolution, his work is the first to announce the new artistic aims; it is the tangible witness to the appearance of a new world. But it is also my concern to show how his ideas and those of his epoch are transmitted to us, and how, in a way, the unity of the last hundred and fifty years is reflected in architectural activity.<sup>x1</sup>

Kaufmann was immediately concerned to announce that it was the “revolutionary” period as a whole -- 1770 to 1790 -- with which he was concerned; precise dates, which for Ledoux were in any case hard to come by, were less important than a sense of the signification of the global shift in art and philosophy, as in the social and political realm. The years that saw the preparation of the “great revolution that was completely to transform the social system of the west” were “the same years in which the work of Kant matured:” “Globally, there was a profound (we could say

today, definitive) denial of the past; a clear and self-conscious rupture, a decisive step toward a new *autonomy*.” For Kaufmann, the interconnection between these movements and the work of Ledoux was not accidental, and established by Kant and Ledoux’s common respect for and indebtedness to Rousseau:

At the moment when, with the Declaration of the Rights of Man, the rights of the individual are affirmed, at the moment when, in place of the old heteronomous morality, Kant instituted the autonomous ethic, Ledoux laid the foundations of an autonomous architecture.”<sup>xli</sup>

The correspondence was direct: if for Kant the *Critique of Pure Reason* had accomplished “what numerous centuries had been unable to realize,” for Ledoux “the moment in which we live has broken the chains that shackle architecture.”<sup>xlii</sup>

From a study of Ledoux, Kaufmann averred, would emerge the answer to three critical questions: the reasons for the “abandoning of the aesthetics of Baroque classicism,” the “relations between the Revolution and architecture,” and the “profound signification of neoclassicism and the architecture of the end of the 19th century.”<sup>xliii</sup>



Fig.3. Emil Kaufmann, *Von Ledoux bis Le Corbusier* (1933), Title Page.

The general concept of architectural autonomy, was, for Kaufmann, represented by a wide range of large and small-scale formal moves. The first, and most fundamental, because the most radical shift from Baroque modes of composition, was the separation of buildings according to a quasi-functional identification, rather than their unified and hierarchical massing to include all functions. This step, taken by Ledoux at the beginning of his career as he jettisoned the courtyard preliminary scheme for the Saltworks in favor of a grouping of pavilions, was decisive:

the passage from the first to the second project reflects no less than one of the most important events in the history of architecture: *the dismembering of Baroque concatenation...*In a remarkable parallelism with the general historic evolution, concatenation is replaced by *the system of pavilionnate composition*, which, after that moment, becomes predominant: this is the free association of autonomous entities.<sup>xliv</sup>



Fig.4. Emil Kaufmann, *Von Ledoux bis Le Corbusier* (1933),

Ledoux's Primary Forms

In this transformation of compositional techniques, the instrumental force, both for the production of the buildings and their historical analysis, was the rational plan: it is the plan which as Kaufmann noted “allows us to discover the fundamental reasons for the determination of forms,” no doubt a first step that allowed for Kaufmann’s historical connection of Ledoux with the Le Corbusier of the plan as “generator.” And this plan, as with the three-dimensional form of the pavilions, is constructed, not by any reference to a Baroque observer, but purely geometrically. Geometry operates as a calculated control of form for use; not only does the “rationality of the plan” [*die Ratio des Planes*] exercise “absolute sovereignty,” but it offers a neutral system of order, entirely abstracted from the personal experience of a perspectival observer. Where “all baroque architecture was conceived as a function of the observer,” now “the center of the new buildings is no longer the heart of the whole ... It is no more than a geometrical point to which all the parts relate. The new buildings are assembled and not intimately linked [*Zusammen-gesetz, nicht zusammengewachsen*].<sup>xlv</sup> In accordance with the spirit of autonomy, the new pavilions are entirely self-sufficient: as opposed to the classical and baroque system, inherited from Renaissance aesthetics, where “to detach a part is to destroy the whole”, the pavilion rejects parts and becomes “an association of independent elements:”

If one wishes to characterize the architectural systems by formulae as reduced as possible one could define baroque association in these terms: one part dominates all the others and nevertheless all the parts form a whole; the deep sense of the pavilion system can be translated thus: *the part is independent within the frame of the totality*. [*Der Teil ist frei im Rahmen des Ganzen*] Between the two systems lies a Revolution.<sup>xlvi</sup>

Kaufmann was far from claiming that Ledoux ever threw off the Baroque sensibility entirely -- in different ways, all of Ledoux's work exhibited its transitional character -- indeed he stresses in his analysis of buildings from the 1770s (the Hôtel Montmorency, the pavilion at Louveciennes for the Comtesse du Barry) and the 1780s (the Hôtel Thélusson) that "the opposed principles were living *at the same time* in the artist" -- but he finds in Ledoux's "fanaticism" for geometry and rigorous planning an anticipation of the architect's later, more abstract projects.<sup>xlvii</sup>

Here Kaufmann sees the influence of the desire of the Enlightenment for "clarification," or *Abklärung*, which when applied to architecture called for the use of "massive blocks" superimposed in compositions that, rather than relying on the effect of a central, principle, motif, gained effect through the simple strength of masses themselves. And while Ledoux is still free in his use of Baroque motifs to give his buildings character -- the upturned urns and grotto in the Saltworks, for example -- his preference was for the architecture to "speak" by means of its own stereometric forms, as in the designs for the House of the Surveyors (a vast elliptical tube), or the Coopers' Workshop (with its concentric rings and intersecting barrel-shaped form):

*Experiments with forms themselves* count among the most astonishing initiatives of this epoch. The preference for the simplest stereometric configurations is indicative of the gravity of the spirit of the age. Thus one finds in the projects of Ledoux, severe cubes (as one sees for example in the Country House of Jarnac or the House for a Man of Letters), the House of the Woodcutters in the form of a pyramid, the cylindrical Country House (also the Barrière of the Boulevard of La Villette, still standing, and the cylindrical House of M. De Witt) and finally Spherical House of the Agricultural Guards.<sup>xlviii</sup>

Building up his argument for Ledoux as an originator of modernism, Kaufmann remarks on the fact that "our own epoch, linked to that of Ledoux, is open to experiments of the same kind

which, even if they are without issue from an architectural point of view, are no less very significant of the indefatigable research for new forms [*neuer Gestalt*].”<sup>xlix</sup>

Bringing together all these compositional innovations, is, as Kaufmann had intimated in his earlier writings, the project for the Church of Chaux. Combining the demand for a single, free-standing mass, horizontal and static, with the separation of functional elements such as the altars, on different levels, it also construed a new kind of neoclassical “sublime.” This was a sublime of “calm meditation in a solemn immobility,” a sublime of individual self-absorption and contemplation as opposed to the Medieval “sanctuary of unworldliness” or Baroque “spiritual elevation.” It was also a sublime of “distance,” reflecting the idea that objectivity and rationality requires a “keeping one’s distance.” [*distanzhalten*] [VLLC,33] Finally, the entire effect of the Church, its own enlightened spirituality is gained not by the introduction of painting, sculpture, images or symbols, but by “the autonomous means of architecture.” [*die autonomen Mittel der Architektur*]<sup>1</sup>

*From Kant to Le Corbusier*

*Autonomy* of the will is the sole principle of all moral laws and of duties in keeping with them; *heteronomy* of choice, on the other hand, not only does not ground any obligation at all but is instead opposed to the principle of obligation and to the morality of the will.

Immanuel Kant, *Critique of Practical Reason*, 1788.

The connection that Kaufmann sought between architecture and philosophy, and ultimately between Ledoux and Kant was provided and historically grounded by Ledoux’s reading of Rousseau. Rousseau was evoked explicitly and implicitly in many passages of *L’Architecture*. The obvious interpretation of “l’homme primitif” embodied in the plate illustrating the shelter of the poor; the enthusiasm for natural settings throughout the descriptions

of the City of Chaux; the references to “le pacte social” and finally the overall adherence to a “return to origins,” exhibited in Ledoux’s theory and design. The key passage for Kaufmann, joining this “return” to “autonomy” is that in which Ledoux justifies the separation of each function in pavilions in the second project for the Saltworks: “Remontez au principe .... Consultez la nature; partout l’homme est isolé.”<sup>li</sup> Kaufmann further draws parallels between Rousseau’s social thought and the institutions designed by Ledoux for his ideal “natural” society. The strange phallic-planned brothel or “Oikèma” masquerading as a “Fragment of a Greek Monument,” resonated for Kaufmann with the sensibility of Schlegel’s “Lucinde” a witness to the “autonomy of the pleasure of the senses” typical of the epoch.<sup>lii</sup> Beyond this, Rousseau was behind Ledoux’s emphasis on hygiene, physical exercise, education, communal living, and his more general preoccupation with the citizenry of his new ideal state as a whole -- a “universal citizenry” or *Weltbürgerlichkeit*. If Ledoux was by no means an egalitarian along the lines of later revolutionaries such as Gracchus Babeuf, he certainly believed in a “pacte sociale” that endowed the poorest member of society with architecture -- a characteristic that would later appeal to the socialism of Hannes Meyer who, in 1942, lauded Ledoux for having given the pyramid (previously reserved for the elite) to the masses.<sup>liii</sup>

But while the connection Ledoux-Rousseau may be obvious, that between Ledoux-Kant remains uncertain. For, at first glance, the question of “autonomy,” posited by Kant as the basis for moral principle, and taken up throughout the nineteenth and twentieth centuries as the watchword of bourgeois liberal politics, does not easily relate to architecture, either in theory or practice. First advanced in the *Critique of Pure Reason* as a “call to reason” to gain “self-knowledge” it presented the kind of paradox between law and self-will that has haunted political reasoning ever since. In Kant the “critique of pure reason” presupposes what he calls a “tribunal”

which will ensure the claims of reason; a tribunal that operates “not by despotic decrees” but “in accordance with its own eternal and unalterable laws.” As parsed by Adorno, this strange double imperative -- the freedom to give oneself laws -- represents the “supreme concept in Kant’s moral philosophy,” whereby “acting in accordance with laws appears as a function of freedom -- or, conversely, freedom manifests itself as a function of the law.” Such a principle might seem distant from any instrumental concept in architecture, save perhaps for a vague analogy between “freedom” and “order” in aesthetics.

For the generation of the 1920s however, Kant’s principle of autonomy represented far more than a simple appeal to reason, or a century-old claim in the philosophy of knowledge. It was historically and conceptually the founding principle of bourgeois society, a product, as Adorno had it, of “the enthusiasm of the youthful bourgeoisie which has not yet started its never-ending complaints that reason cannot solve anything, but which still feels confident of its ability to achieve things by virtue of the powers of its own reason.” Thus understood, the interrogation of autonomy was joined to the interrogation of bourgeois liberal democracy, under severe threat in the inter-war period. Inspired by the researches of the Marburg school, under the leadership of Hermann Cohen, many philosophers in the early 20th century, including Ernst Cassirer who studied at Marburg, were returning to Kant as the initiator of modern critical philosophy; Cassirer’s two studies *Freiheit und Form* (1916) and *Kants Leben und Lehre*, the first modern comprehensive philosophical biography, published in 1918, became the reference point for a new generation, including Kracauer, Adorno, and Benjamin who saw Kant, for better or for worse as the beginning point of an investigation necessary for the development of a truly “critical” theory. Adorno, in particular, saw Kantian autonomy as a double-edged sword, much in way that contemporary thinkers were characterizing Rousseau’s social contract as implicitly totalitarian.

For Adorno, questioning the implications of appeals to “reason” that had, under the impetus of science and technology already begun to exhibit their “dark side,” autonomy in Kant, as the “kernel of his philosophy,” articulated “a very dark secret of bourgeois society.”

This secret is the reality that the formal freedom of juridical subjects is actually the foundation of the dependency of all upon all, that is to say, it is the foundation of the coercive character of society, its conformity with law. That is what lies behind the very strange theory that in Kant reason is a tribunal which has to sit in judgment over reason as the accused.<sup>liv</sup>

It was, of course, the paradoxical nature of this dichotomy that led many humanists in the interwar period to interrogate their own objects of study from philosophy to art history, at a moment when bourgeois autonomy, and its supposed links to reason and liberalism if not social democracy, was challenged by the movement from the “freedom” of law to totalitarian “coercion.”

Kaufmann, in Vienna, was equally exposed to this neo-Kantian revival, but in taking up Kant as the founding father of modern bourgeois society, and specifically in 1933, he was making a very different point to that of the Berlin theorists. Where the Frankfurt school sociologists were already looking at the paradoxes and problematics of Kantian idealism, and Cassirer himself was struggling with the difficulties of reconciling Rousseau and Kant in essays published in 1932, Kaufmann preferred a generalized appeal to “Rousseau/Kant” as signifying an Enlightenment unified enough to provide an intellectual base, both for Ledoux, and his interpretation. Such apparent simplification, however, is explicable on two grounds. Firstly, Kaufmann was concerned to sketch the intellectual grounds for an architect who himself was anything but a systematic thinker, one who readily appealed to a wide range of authorities in his

attempt to justify new forms. Kaufmann's seeming confusion, in these terms, was historically accurate in delineating the discursive breadth of Ledoux's sources, and its impact on design. Certainly Cassirer's study of *The Philosophy of the Enlightenment* published in 1932 had, together with his essay on Rousseau of the same year, the aim of constructing such a unity of thought.<sup>lv</sup> Secondly, and equally important, Kaufmann's own intellectual agenda reached beyond a purely historical interpretation. Embedded in the title of *Von Ledoux bis Le Corbusier*, and in its appeal to Kantian thought, was an implicit challenge to the emerging cultural politics of Austria and Germany, and a covert appeal to a "united" front based on the rule of law and reason as the basis for the restatement of the ideal of a liberal, social democratic, state.

Published in May 1933, just a month after the Reichstag fire and Hitler's putsch, seems calculated to assert the social democratic values of Enlightenment, republicanism, and modernism, values under severe attack not only from Nazi ideologues who had denounced them, and the modernism that represented them as degenerate and bolshevik, but also from conservative Viennese art historians like Strzygowski and Sedlmayr. The latter, briefly a member of the National Socialist party and then a loyal supporter, was to wait until Kaufmann's flight to the US before developing his own thesis of the "loss of center" using Kaufmann's own material to set out a despairing thesis of decline and fall where Kaufmann had seen only progress and justice. In 1933, however, as Damisch has pointed out, it was an act of real intellectual, if not physical, courage to set out the continuities between the French Revolution and modernism, in a moment when Speer and his cohorts were finding monumental solace in the gigantesque revival of German neoclassicism.

Ledoux, in this context, was, more than a historical subject, a cover, or metaphor for the explication of liberal bourgeois society, if not a kind of utopian socialism in historical guise. The

real subject of the treatise would then be the architecture of Loos, Walter Gropius, Richard Neutra, and Le Corbusier -- the architecture of modernism developed between 1900 and 1929.

Kaufmann wrote:

The continuity of the development of post-revolutionary architecture can in a way be traced through to the beginning of our own period, which opens around 1900 with the Dutch Berlage and the Viennese Adolf Loos, a period one can usefully designate by naming its most self-conscious protagonist, the leader of the young French school: Le Corbusier [*den Führer des jungen Frankreich Le Corbusier*].<sup>lvi</sup>

The first mention of Le Corbusier in Kaufmann's writings is in a footnote to the article "Die Stadt," which points to the similarities between three statements by Ledoux, and the text of *Vers une architecture*.<sup>lvii</sup> The connection was understood as obvious as Ledoux spoke of "the appreciable feeling of a plan as stemming from the subject, the site, and the needs of the building, of the destructive effect of details on surfaces, and of the "forms described with a single stroke of the compass," the square and the circle as the "alphabetical letters used by authors in the text of their best works."<sup>lviii</sup>

Two years later, *Von Ledoux bis Le Corbusier* was to elaborate these analogies as systematically and historically grounded. Ledoux, Kaufmann argued in the last section of the book, was the progenitor of a modernism that was in no way formalist ("he did not confine his attention only to formal details, as did the Secession a hundred years later,"<sup>lix</sup> rather "in his research he envisaged the totality of the *reorganization of the body of the building itself* and of the *systems of large complexes of buildings*."<sup>lx</sup> ) Considering Ledoux's later works, and especially his group of town houses designed after the Revolution for Hosten, Kaufmann to

introduced his first modernist comparison, not to Le Corbusier, but to Walter Gropius: referring to Ledoux's late works, he notes:

The principal artistic quality of these projects is the "play of masses" that Ledoux looked for above all. The formal principle on which these realizations were based corresponds to the leitmotif of our present architecture, as Walter Gropius has expressed it in the first volume of the Bauhaus books: "a variety starting with the same fundamental type obtained by the alternate juxtaposition and superimposition of repetitive spatial cells."<sup>lxi</sup>

It is clear that in tracing the development of autonomous architecture after Ledoux, and through the nineteenth century, Kaufmann is aware of the deterioration in aesthetic content, and of the deleterious effects of the incessant repetition of the "pavilion system." Thus he analyzes the teaching method and influence of Jean-Nicolas Louis Durand, who systematized Ledoux's own system for the Ecole Polytechnique, repeating the fundamental elements of architecture as if they were so many geometrical points, lines and planes on graph paper, and sees its effects on architects like Dubut. But it is obvious that Kaufmann is here only attempting to demonstrate that despite the overt historicist "clothing" of the pavilions in question, varied according to taste and stylistic revival through the century, the survival of the pavilion, and its fundamentally geometrical/functional foundation allowed the principles of modernism to survive.

Kaufmann's assessment of the effects of autonomy on urbanism, is, for example, bleak enough, and parallel to that of Camillo Sitte at the end of the 19th century, castigating the pavilion structures around the Place de l'Etoile, the Place Royale in Munich, or the Ringstrasse in Vienna, whose buildings are set up, like isolated blocks:

in its isolation each one could without hindering its attractiveness, be displaced to another site. It is of little importance that the parts have been realized, one after the other, and of

different appearance, as in Munich, or contemporary and fit amongst themselves as in Vienna. The double aspect of the past century which, like Janus, looks at once forward and backward, appears even more clearly in that portion of the Ringstrasse with the monumental buildings of the Parliament, the City Hall, the University and the Theater. Conceived according to an absolutely heteronomous inspiration, the buildings are destined for show. In this intention, each of them carries an old suit, passing for Greek, Gothic, or late Renaissance. But in this diversity there is also a new trait: the total indifference to the effect of the whole. Each building remains in a total isolation, none is linked in an ensemble.<sup>lxii</sup>

Yet, despite the moribund, half heteronomous, half autonomous, aspect of the style revival buildings of the Ringstrasse, the principle of autonomy survived to triumph in the younger generation of modernists following Berlage. Kaufmann is not inclined to enter into a detailed analysis of 20th century modernism as a conclusion to his Ledoux monograph; the “evidence” of Le Corbusier and his contemporaries is enough to make the point. Interestingly enough, it is Richard Neutra, the Viennese exile in California, whose *Wie baut Amerika* had been published in 1927, who is selected as the spokesman for modernism’s continuity with the past, Roman and Baroque: Kaufmann, citing Neutra, writes

"It is a long way from the plastic formalism of the Greek world to the twisted facades of the Baroque, but this route is not illogical, it always crosses so to speak the same region: that of a certain spiritual attitude towards architectural creation." The general principle the development of which we have wanted to demonstrate here in architecture is defined by Neutra in these terms: "Dissociation, juxtaposition, the strict delimitation of concepts,

of the domains of thought and action, such seem to be the fundamental tendencies of this development." lxxiii

It is, however, with Le Corbusier that Kaufmann concludes his little book: a Le Corbusier represented not only by *Vers une architecture*, but by the translated version of *Urbanisme, Städtebau*, and more recently still by the first volume of his *Oeuvres complètes*, published in 1930. Kaufmann was thus able to refer to the already commonplaces of the “fascination for the straight line,” or the “return to the ‘fundamental realities of the sphere, the cube and the cylinder in great architecture’” but also to extend his comparison with Ledoux to the layout and projected monuments of the Mundaneum, with its already contentious pyramidal scheme for a World Museum, reminiscent of the pyramids of Ledoux and Boullée. Kaufmann, as opposed to the trenchant critiques of the Marxist Karel Teige, lauds the “idealism” of this utopia as directly relating to, if not influenced by, that of Ledoux:

The resemblance between the epoch of Ledoux and our own is not limited (this will be one of our conclusions) to formal and thematic aspects. This resemblance does not only rest in the fact that in his epoch as our own one sees the new and important problem of the masses emerge as the powerful motive of solutions. Independently of the new demands of the real, one discerns now as at that epoch a new idealism. It appears in *L'Architecture* of Ledoux as in the writings of Le Corbusier, in the project for the Ideal City as in the *Cité Modiale*. It is in this idealism, founded on the new ideals of ethics and law, in which is, in the end, rooted, it seems to us, before 1800 even as today, the renewal of architecture.<sup>lxiv</sup>

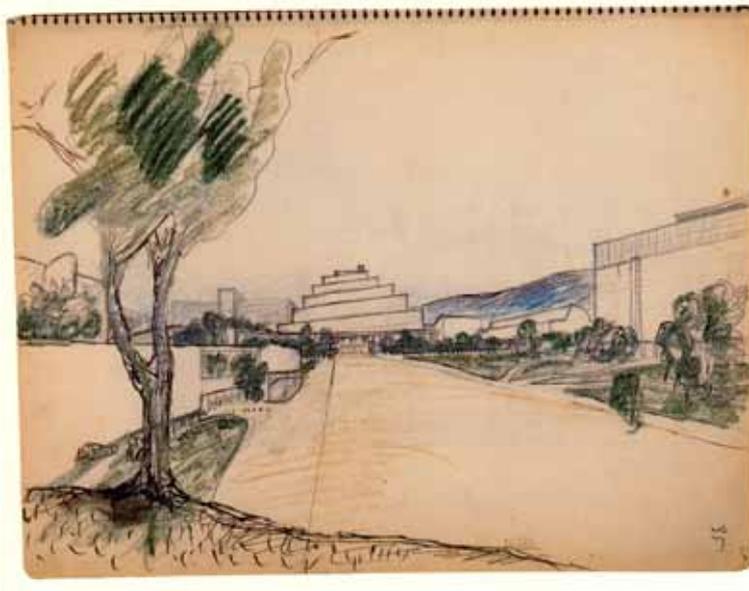


Fig. 5. Le Corbusier, Study for the Mundaneum, Geneva, 1928-9.

Kaufmann concludes:

Because Le Corbusier has no less faith in these than Ledoux, because in the one and in the other the intimate link between art and life is as strong, one must cite side by side the master whose work crowns the triumph of the new principles and he whose activity has opened the way for these principles.<sup>lxv</sup>

#### *Structural Analysis*

Kaufmann's methods of analysis, as well as those of the Vienna School to which he was loosely associated, have often been criticized for their incipient "formalism," and especially from the left in the 1930s. Thus Meyer Schapiro, responding to the confused and contradictory "formalism" of the Viennese School, in an incisive review of the publications of the "New Viennese School" of art history, tried to redress the historical problem in terms of a less reductive political position.<sup>lxvi</sup> Assessing Emil Kaufmann's article "The City of the Architect Ledoux," and the later *Von Ledoux bis Le Corbusier*, Schapiro, while recognizing the merit of

Kaufmann's rescue of Ledoux, pointed to the limitations of the formal approach in relating architecture to its social context. Kaufmann had attempted to join what he called Ledoux's principle of architectural "autonomy," -- the derivation of an architectural aesthetic from internal requirements of construction and use rather than from any external, imposed artistic conception -- to a similar characteristic of emerging bourgeois society -- "which thinks of itself as composed of isolated, equally free individuals."<sup>lxvii</sup> Schapiro argued that Kaufmann, in fact, had succeeded only in joining an architectural principle to a social principle, one found indeed in Ledoux's writings: "the correlation," Schapiro wrote, "is with bourgeois ideology, not with the actual class structure and conditions of bourgeois society, and depends more on quotations than on a study of social and economic history."<sup>lxviii</sup> In the light of our analysis of Kaufmann's theses of autonomy, we would have to conclude that Kaufmann might have readily agreed with Schapiro's critique: far from trying to develop a materialist history assuming the fundamental relations between base and superstructure, society and culture, Kaufmann's aims were surely more modest and confined to demonstrating the relations between thought about social form and thought about architectural form.

But Kaufmann's method was not only attacked from the left; like many social-democratic theses it was equally subject to criticism from the right. Indeed, Kaufmann did not have to look so far for his enemies as the Berlin of Hitler's putsch: Hans Sedlmayr, another distinguished student of Wölfflin, and an editor of the Vienna school's flagship journal, the *Kunstwissenschaftliche Forschungen*, in which Kaufmann had published his break-through article, had, during these years taken sharp issue with Kaufmann's democratic and idealistic reading of the architecture of 1800, and precisely from a conservative, soon to become fascist commitment.

It was Hans Sedlmayr, of all the Vienna School historians, who took seriously the lessons of Riegl, in opposition to his dissertation advisor Julius Schlosser, in conceptualizing a method of art history that completely integrated architecture; developing Riegl's concept of *Kunstwollen*, as reinterpreted by his contemporary Panofsky, into what he termed a "*Strukturanalyse*" or analysis of structural principles. These were not however the principles of structure, as an architectural historian might understand them. His treatise on Borromini's church San Carlo alle Quattro Fontane found its "structural" principle not in the architectural structure, nor even in the "structural" organization of its intersecting spaces and volumes, but rather in the decorative treatment of the wall. As Christopher Wood notes, "In other words, structure may reveal itself in apparently marginal or meaningless features."<sup>lxix</sup> Here Sedlmayr relies on Gestalt theory to introduce the notion of "shaped vision," that in his terms formed an objective and rational way of looking beneath appearances, of seeking out principles of form and organization not apparent in normal characterizations of function, style and the like. Wood and Meyer Schapiro before him, have pointed out the entirely "specious" nature of this "rationalism," criticizing its intuitionist and implicitly racist undertones.

In Sedlmayr's terms, while Kaufmann had (the method after all was scientifically correct) analyzed the formal shifts correctly, he had entirely misdiagnosed the symptoms. Where Kaufmann saw renewal in revolutionary and modern architecture, Sedlmayr saw decay and decline; where Kaufmann saw increasing health in society and architecture, Sedlmayr saw decadence and death. Architecture was but a sign of the "huge inner catastrophe" set off by the Revolution, a "loss of center" and stability imaged by what for Sedlmayr was the most characteristic motif of 1800, the sphere, with all its implications of the destabilization -- the literal deracination of traditional architecture. Kaufmann's heroes were Sedlmayr's devils: as the

latter observed of Goya: “The more we study the art of Goya, the more intense grows our conviction that, like Kant in philosophy and Ledoux’s architecture, he is one of the great pulverizing forces that bring a new age into being.”<sup>lxx</sup> Sedlmayr, sensing an ally in his fight against the demon of modernism, cites Ernst Jünger approvingly in characterizing the *musealen trieb*, the “face turned towards the things of death,” of the contemporary epoch.

More specifically, explaining his so-called “Method of Critical Forms,” a method he claims is “capable of separating the true from the false,” of “concentrating on that unconscious sphere of instinctive receptivity and of “possession” in which the soul of the age stands naked before us” - a method that is common to the pathologist and the psychologist – Sedlmayr finds in the image of Ledoux’s architecture one such apparently bizarre but fundamentally symptomatic form that describes the folly of the modern age: the Sphere House of the Agricultural Guards, than Kaufmann had seen as a brave innovation, a harbinger of modernist abstraction.

Such a radical new form, for instance, is inherent in the idea of using a sphere as the basic form of an entire house. Most people have treated this notion as nothing more than a bad joke or a very ordinary piece of lunacy, while the more charitable have looked upon it as an “experiment with form.” The thing is certainly insane enough, but if it were no more than that, we should hardly be justified in wasting much time over it.

A nonsensical idea, however, need by no means be wholly without significance... such abnormalities reveal very specific characteristics – “ce sont les abus qui caractérisent le mieux les tendances” Thus the sphere when used as the shape of a building is a critical form which ... is a symptom of a profound crisis both in architecture and in the whole life of the human spirit. Here we are beginning to deal with the zone of the unconscious ....<sup>lxxi</sup>

Sedlmayr saw this non-architectural form as the fatal symptom of an abstraction that had, with Le Corbusier reached its most nonsensical and anti-architectural end. Agreeing with Kaufmann that autonomy was the key (it “implies that architecture under Ledoux had as it were become conscious of its own true nature -- it was the same idea that animated Loos and Le Corbusier”) Sedlmayr castigates the Maison Savoye at Poissy, the epitome of Corbusian modernism for Sigfried Giedion and perhaps for Kaufmann too, as it rested “upon its supports upon the lawn” nothing more than the image of “a spaceship that has just landed.”<sup>lxxii</sup> Le Corbusier’s pictures, wrote Sedlmayr in disgust “are full of floating transparent things.”<sup>lxxiii</sup>

Sedlmayr is here opposed to the “autonomous” nature of this geometrical architecture – its apparent repulsion for the earth, an architecture wishing to fly, transparent, floating in the air; and thereby no longer holding to its tectonic foundations, and dangerously open to the deleterious effects of what he calls “paper architecture.” It is no coincidence that Sedlmayr uses Kaufmann as the scholarly source of every one of his critical description of the dreams, unhappy visions, and “shadow values” of Boullée’s and Ledoux’s architecture. Indeed, Kaufmann is acknowledged as the source of Sedlmayr’s whole study, as, in his postface, he admits:

The very beginnings of this work were inspired by the research of Emil Kaufmann on Ledoux, which came to my notice in 1930. I saw at once that Kaufmann had succeeded in making a discovery of the utmost importance towards the understanding of our age, but that at the same time he had not wholly recognized the true significance of his own discovery, and that the phenomena so clearly perceived by him were not correctly evaluated.<sup>lxxiv</sup>

Of course, this does not prevent Sedlmayr from claiming almost equal credit, as he recounts that he expounded the “thoughts ... developed here” in *Verluste der Mitte* in a lecture given in 1934,

and again in 1937 in a discourse that was not published,” finally to set them down in 1941, and giving them “in university lectures in 1941 and 1944.”<sup>1xxv</sup>

This debate between Kaufmann and Sedlmayr, has generally been seen, in art- historical circles at least, as the starting point for the reevaluation of Revolutionary architecture, as well as the origin of many myths only recently dispelled by less formalistic and more historically dispassionate research. But for the moment, I would want to hold such criticism, in order to follow up the fundamental distinction drawn by Hubert Damisch between what semiologists and their heirs over the last decades have spoken of as the “meaning of architecture,” considering architecture as a system of communication, and the question, posed by Damisch of “what architecture means” in a specific moment. According to these distinctions, when Kaufmann wrote in 1924 of classicism as demanding a “harmony” that confined “signification ... to the intrinsic qualities of the subject and their expression,” and of neoclassicism as seeing form as having “no other function than to be the support for thought, to transmit impressions, to provoke sensations ...” he was perhaps not so much seeing these two architectures as accomplishing this goal within their particular societies and cultures, as aspiring to that goal in their theories and ideals. Thus, similarly when he speaks of Ledoux in the same breath as Kant and Rousseau, he was perhaps not so much claiming that there is an inner essence in Ledoux’s architecture that is Kantian, nor certainly that Ledoux had read Kant or wished to be a Kantian architect, but more simply that there seemed to be a homology between, in their different realms, Ledoux’s use of separate, independent, geometric forms, and say, Kant’s desire for principles of independent critical judgment, and Rousseau’s return to the principle of “natural man.” I say, “more simply,” but in fact, such relations introduce a complexity in the interpretative structure that is belied by

the crude juxtaposition, and that goes well beyond the equally crude “social/economic/formal” postulations of Marxist art historians of the period.

Admittedly, Kaufmann has been cast as a reductive systematizer in his attempt to construct an interpretative scheme derived from Riegl’s *kunstwollen* that corresponded to architecture in particular. And yet, in his view, his notion of an “architectural system” offered a far more precise tool of analysis. As he defined it, “attention is focused not so much on problems of style, nor on descriptions of single features, nor even on the investigation into general form, but rather upon the interrelation of the several parts of the composition, and especially the relationship between the several components and the whole architectural composition itself.”<sup>lxxvi</sup> Here we have moved beyond a generic “will to form,” and even beyond Sedlmayr’s static “structural analysis,” to a flexible model that approximates not only to similar types in music and literature, as well as painting, but also, in this case, to the architect’s own design procedures.

The architecture of the late eighteenth and nineteenth centuries has much in common with classical and baroque art. But these common traits concern only the surface. The continued use of classical features creates a certain superficial resemblance between these periods preceding and following the Revolution. Only by an analysis based on the concept of an “architectural system,” can we appreciate how fundamentally the mode of architectural composition was transformed.<sup>lxxvii</sup>

By "Architectural System" Kaufmann explained, was meant the "interrelation of the several parts of the composition, and especially the relationship between the several components and the whole architectural composition itself," avoiding problems of style, the appreciation of "single features," and even "the investigation into general form;"

The comparison and matching of such a structure once identified with similar structures in thought and social life was entirely flexible and always shifting:

In the relationship between forms and system, each epoch establishes its own basic ideas of disposition and interrelation of parts. Either older forms are remodeled until they are perfectly adjusted to the new system of arrangement; or new forms proffered by new constructional methods are adopted if they accord with the new system; or natural forms are reinterpreted in keeping with the changed ideal of general disposition. The search for new forms is, therefore, a necessary consequence of the desire for a new system. Forms themselves are secondary factors; the system is the primary consideration.<sup>lxxviii</sup>

We might characterize this method, as opposed to the more psychological and teleological “structural analysis” of Sedlmayr, as not so much structural as “structuralist” paralleling similar contemporary attempts to identify systems of relationships in linguistics and symbols, by say, Cassirer and Panofsky in other domains.

But for all his reliance on the formal method, Kaufmann’s “structuralism” was grounded in a historical narrative; and even though his history fell short of Schapiro’s desired social and economic enquiries, it was, from its time, rigorously enough based in intellectual developments. Indeed it is clear that Kaufmann intends us to see his “architectural system” as on the same plane as and commensurate with, intellectual developments, as the manifestation, in other words, of the architect’s thought processes. This is what he means when he speaks of “peering behind the facade of architectural development” to “discover the metaphysical background of building” in a particular era.<sup>lxxix</sup> This notion of the particular era was fundamental to Kaufmann’s view of the specificity of history. As he noted in a review of Nils’s study of the work of Louis-Jean Desprez, “each epoch requires specific categories of treatment.” New material should not be interpreted

within the categories “derived, originally, from the production of another (as a rule prior) period,” but rather according to “some new approach adequate to their novel ways.” He concluded, “The idea of all-embracing categories is a chimaera. Still worse, of course, is the sterile application of categories formed on the accomplishments of a different period.”<sup>lxxx</sup>

Perhaps, while such an apparent “return” to Kaufmann’s autonomy cannot be seen to verify any more than a fascination with the history of modernist ideas, and certainly does not provide evidence of a “zeitgeist” theory of history, it does testify to the analytical force of Kaufmann’s initial hypothesis and its desire to go beyond the empirical data of history and find meaning in the apparently arbitrary forms of the architect. Writing in exile, in 1946, Kaufmann himself noted:

We live in a time in which the gathering and recording of factual data are often considered the unique end of art history. No doubt such activity is indispensable. Yet one should not overlook the fact that it does not require much originality to transform a card file into a book, after having added just a few details to the findings of many predecessors in a field labored, perhaps, through centuries. One should rate higher the biographer who ventures out into unmapped territory, who discovers a forgotten artist, or proffers a new picture of a personality, and an era. Such a biographer is more likely to err in his evaluations and comments than the simple compiler, although the latter is by no means infallible in his attributions. Art history should not care less about the epiphenomenon than the phenomenon. The biographer who struggles to grasp the meaning of artistic production will become a source of stimulus and progress for the discipline even when he errs. Needless to say, these remarks apply still better to those rare historians who, gifted with a keen vision, rediscover or reinterpret a whole epoch as, e.g., did the scholars who

about 1900 inaugurated the study of the Baroque, or those who somewhat later brought Mannerism to light. Interpretative history alone is constructive history.<sup>lxxxix</sup>

In this quasi-autobiographical justification, we sense not only the pathos of the lonely explorer, the destitute scholar searching for his “California”, but also the consciousness of the heroic role of scholarship itself as, building on its formative achievements, has the courage to invent its own future. More or less penniless, after 1942, Kaufmann had eked out a living on grants from the Fulbright Committee and the American Philosophical Society, finding in the Avery Library and numerous other collections more general material for his expanding studies of enlightenment and renaissance architecture. He died forlornly on his second journey to Los Angeles in 1953 in Cheyenne, Wyoming. It was with characteristic humility that Kaufmann admitted in his posthumously published book: “I do not believe that I have solved the momentous problem of how the architectural transformation of about 1800 came to pass.”<sup>lxxxix</sup>

*From Kaufmann to Johnson and Rossi*

The cubic, “absolute” form of my glass house and the separation of functional units into two absolute shapes rather than a major or minor massing of parts comes directly from Ledoux, the Eighteenth Century father of modern architecture (see Emil Kaufmann’s excellent study *Von Ledoux bis Le Corbusier*). The cube and the sphere, the pure mathematical shapes, were dear to the hearts of those intellectual revolutionaries from the Baroque, and we are their descendants.

Philip Johnson, *Architectural Review*, 1950<sup>lxxxix</sup>

In retrospect it was perhaps not entirely an accident, nor totally ironic, that Kaufmann’s belief that architecture’s “autonomy” was held to parallel the emerging “autonomy” of the bourgeois (modern) individual was to appeal so strongly to that paradigm of the high bourgeois

architect Philip Johnson. In 1940 Kaufmann fled to the United States; in August of 1942 he was asked to present his work to the newly constituted Society of American Architectural Historians at the Cambridge house of Philip Johnson, whose visits to Germany with Henry-Russell Hitchcock had alerted him to the growing interest in 18<sup>th</sup> century neo-classicism. The text of this talk, Kaufmann's first English-language article, was published in the next year in the *Journal of the American Society of Art Historians*.<sup>lxxxiv</sup>

In this talk, prepared to introduce Ledoux and his proto-modernism to an American audience for the first time, Kaufmann opened by linking the profound changes that took place in late eighteenth century "philosophy, literature, social life and economics," to an architecture in which "even a number of twentieth century features were revealed."<sup>lxxxv</sup> Ledoux's Panaration was compared to Le Corbusier's Mundaneum; the residence of the River Surveyors as a representation of "man's mastery of the flood ... presented so vividly that one might easily suppose some present-day expressionist had devised it for a hydraulic power plant;" the spherical Shelter for the Rural Guards seen as "only recently ... revived to dominate New York's World Fair." In sum, this "early cubism" was created by Ledoux as an "*architecture parlante*" that pointed to the future more than to its sources in the past: "important as it is to explain works of art by comparison and by analogies with predecessors, it is more important ... to ask not whence they come, but whither they lead."<sup>lxxxvi</sup>

Based on Johnson's own encounter with German history and theory, it was then Kaufmann who provided the convenient link between the neoclassicism of Schinkel, admired by both National Socialists and the then sympathetic Johnson, and the modernism of Le Corbusier and Mies, as he had described the trajectory of modern architecture beginning with the Enlightenment and culminating in Le Corbusier. Johnson had read Kaufmann's 1933 book *Von*

*Ledoux bis Le Corbusier*, and was easily able to reconcile Kaufmann's formal linkage of Ledoux and Le Corbusier with his own predilection for Schinkel and Mies -- "von Schinkel bis Mies" seemed a natural corollary to Kaufmann's "Von Ledoux bis Le Corbusier" as was the implied extension, "von Schinkel, Ledoux, Le Corbusier, und Mies, bis Johnson." But of course, the entire architectural career of Johnson, racing to keep up with the stylistic zeitgeist seemed to celebrate the aesthetic autonomy of the discipline.

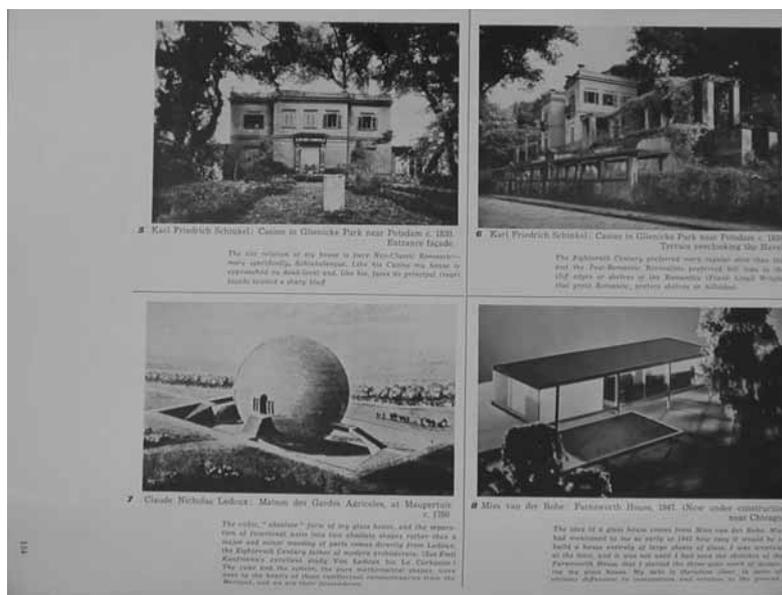


Fig. 6. Philip Johnson, Sources for the Glass House, Connecticut, Plate II, 1950.

Writing on his Glass House in New Canaan, Connecticut, in the *Architectural Review* of 1950, Johnson specifically cited Kaufmann's book in order to link the geometrical forms of Ledoux to his own cubic design.<sup>lxxxvii</sup> Architectural "autonomy," by which Johnson meant variously the free play of architectural language as style, the independence of architecture from society, and the personal freedom to change style at whim, thence became a watchword of his practice. Indeed the entire article was a neat and entirely unabashed collage of Kaufmann, Le Corbusier, and Mies van der Rohe, in eight easy stages. First, Johnson illustrates Le Corbusier's

1933 plan for a village farm in order to describe the approach to his own house: “the footpath pattern between the two houses I copied from the spiderweb-like forms of Le Corbusier, who delicately runs his communications without regard for the axis of his buildings or seemingly any kind of pattern.”

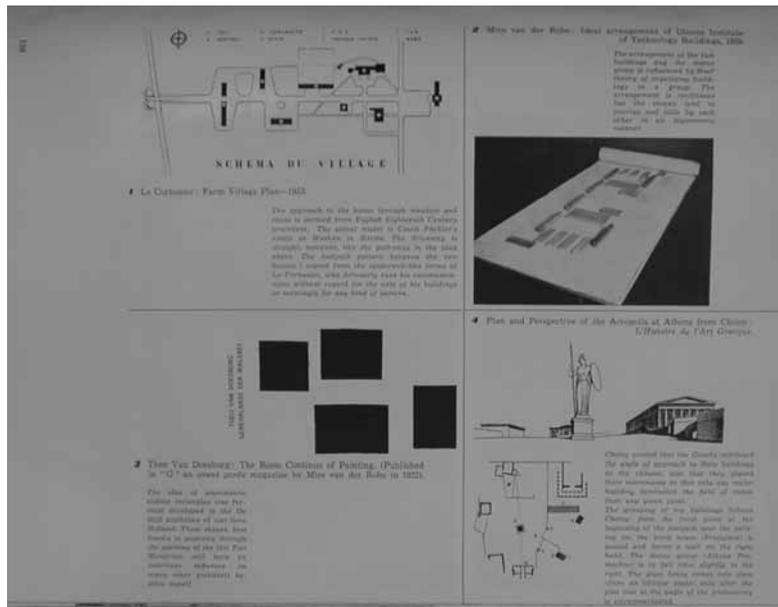


Fig. 7. Philip Johnson, Sources for Glass House, Connecticut, Plate 1, 1950.

Secondly, Mies’s plan for IIT, 1939 is adduced for the formal layout of the two pavilions in New Canaan. This precedent is followed quickly by Theo van Doesburg’s painting (the origin of Johnson’s “asymmetric sliding rectangles”), August Choisy’s plan and perspective of the Athenian Acropolis, one already commandeered by le Corbusier to illustrate the dynamic force of non-rectilinear plans in *Vers une Architecture*, Schinkel’s Casino in Glienecke, and, as a prelude to Mies’s glass-house idea, Ledoux’s spherical House of the Agricultural Guards, so much loved by Kaufmann and hated by Sedlmayr. But now, in 1949-50, Johnson has cast aside any overt residual affection for National Socialist culture, and prefers to follow the progressive path of modernism, from Ledoux to Le Corbusier; thence to Kasimir Malevitch and the Suprematist painting that afforded the plan of the Glass House with a circle in a rectangle, and

finally to Mies, who concludes the eight points of Johnson's new architecture with the Farnsworth House, 1947-1950.

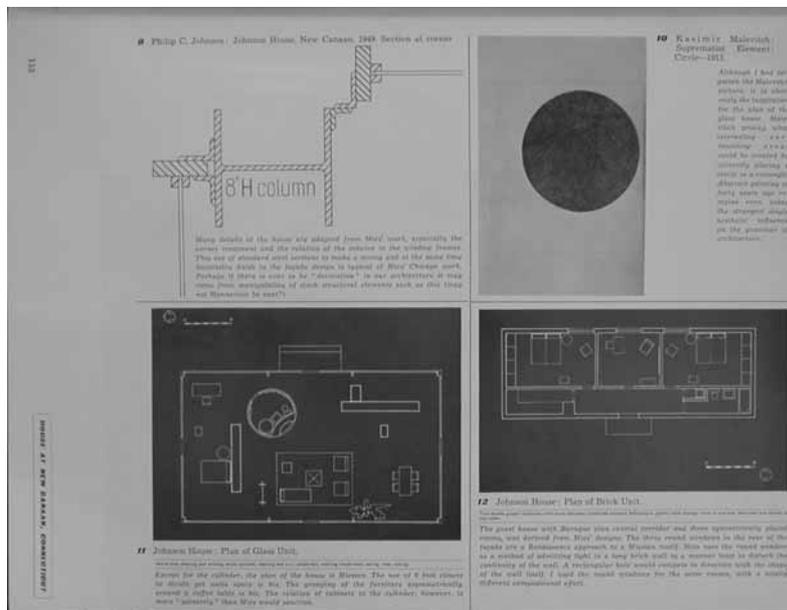


Fig. 8. Philip Johnson, Sources for the Glass House, Connecticut, Plate III, 1950.

Such a neat re-writing of history, in a reversal of the progressive movement described by the historians of Kaufmann's generation, will, of course, be a leitmotif of "postmodernism" from the 1960s on.

The paradox, of course, is that Johnson, often criticized for "betraying Mies" in the obviously box-like, and non-universal counter-horizontal space of the Glass House, was there following Kaufmann's principles of autonomy almost to the letter. Revealing his deeper affinities with German neo-classicism and Schinkel, but disguising them by a side-trip to France and liberal, idealist classicist modernism, Johnson in fact produces a transparent "Ledoux" box, that "proves" Kaufmann's thesis even more powerfully than Le Corbusier (too wedded to the horizontally open Domino diagram) could have ever accomplished. Perhaps this was the fate of "late modernisms", to authorize already written history rather than making it for themselves.

Thirty years after the completion of the Glass House, the architect Aldo Rossi, also working out of concepts he derived from Kaufmann's analysis of Enlightenment architecture, saw in the concept of "autonomy" a means of saving architecture from an increasingly disseminated field of aesthetic, social, and political authorizations, and understood the word to refer to the internal structure of architectural typologies and forms, as they formed part of the sedimented structure of the historical city.

For Rossi, the idea of an "*autonomous* architecture" was joined to that of a "*rational* architecture." Thus when in 1973, Aldo Rossi as curator of the international section of the Milan Triennale, sought to identify those architects who, in Manfredo Tafuri's words espoused an "autonomy of language," he collected them together under the banner of "Rational Architecture." The premises of a "Neo- Rationalism" that became evident in the Biennale represented the beliefs of many Italian and French designers, from Aldo Rossi to Bernard Huet and Leon Krier, that architecture was in some sense a discipline of its own, that its "language" was derived from former architectures, and that its form and role in the city was as much a product of an historical urban structure, as it was of social or political concerns. Where, that is, in the politicized climate of the 1960s, society had been seen as the generator of space and shelter, in the 1970s, perhaps in reaction to the evident 'loss' of architecture this implied, architecture asserted its own determinism. Fueled by Rossi's *Architecture of the City*, a kind of "structuralism" in urban analysis, and a semiotics of architectural analysis, thus emerged as the equivalent of the revival of Russian Formalism, so-called "Cartesian" linguistics, and deconstruction in literary studies. "Autonomy" of the text and of the building were seen as parallel and complimentary facets of the refusal of socio-political narrative, the vagaries of urban development planning, and what Nikolaus Pevsner had already identified in 1960 as "the return of historicism."

For Rossi, however, as evinced by his reviews and critical writings from the late 1950s on, “autonomy” also represented the purest heritage of Enlightenment, and thence the modern movement, for an age that had lost its sense of roots in the eclecticism, and more to the point, in the adjustments required by the post-fascist political struggles of the immediate postwar period. In this context, Rossi’s fascination with the geometrical forms of late Enlightenment architecture was more than a simple attempt to recuperate the sources of pre- and modernist minimalism, but was grounded in his reading of Kaufmann’s writings, not only of *Von Ledoux bis Le Corbusier*, but also of his post-war books, *Three Revolutionary Architects. Boullée, Ledoux, Lequeu* (1953) and the more general, posthumously published, *Architecture in the Age of Reason. Baroque and Post-Baroque in England, Italy, and France*. (1955).



Fig. 9. Aldo Rossi, *Scritti Scelti*, Cover, 1952.

It was these books that Rossi reviewed for *Casabella*, taking note of the earlier 1930s essays, and found in them a programmatic source for his “neo” rationalism, joining Ledoux, and Boullée (whose *Essai sur l'architecture* he translated and introduced in Italian) not only to Le Corbusier, but equally to his own modernist hero, Adolf Loos. The early critical writings of Rossi include

ample evidence of his study of enlightenment theory by way of Kaufmann, thence to be translated into research into specifically Italian examples (Milizia to Antonelli) and modernist parallels (Loos).

Hubert Damisch, in his preface to the first (1981) French translation of *Von Ledoux bis le Corbusier* entitled “Ledoux avec Kant,” with its echoes of Lacan’s own aleatory preface to the Marquis de Sade’s *La Philosophie dans le boudoir*, “Kant avec Sade,” notes this peculiar fascination of the 1970s with the idea of autonomy, as directly linked to the continuity of Kantian thought, asking what it would be to couple Kant’s analysis of the origins of geometry in the *Critique of Pure Reason*, with that autonomous geometry of Ledoux, in order to meditate on the special “autonomy” of architecture, from Ledoux, to Le Corbusier, to Loos, and thence to the autonomies claimed by the new Neo-rationalism of the late 1970s:

At our present moment, when the history of architecture hesitates between a renewed form of the history of styles and a form of institutional analysis which ignores everything that comprises the proper material of architecture, the idea of autonomy, to take it in the philosophical sense, takes on the value of a regulating concept. To think Ledoux *with* Kant, is to recognize that in architecture understanding does not proceed solely from history, or in other words, with Kant, that an understanding which *subjectively* presents itself as history with respect to the way in which it has been acquired, can participate, *objectively*, in one form or another of rationality. [20]

To think of Ledoux with Kant, Damisch concludes, is to ask what constitutes architecture as an object, not only of history, but also of thought, and thought that is constrained by conditions that are a priori formal, or in another sense, internal to the discipline of architecture.

*Conclusion*

In a conference honoring the career of Philip Johnson, and entitled “Autonomy and Ideology,” the theme was resurrected, but now in a more distant, historical, sense, as one that neatly joined the trajectory of Johnson’s work to a newly aroused interest in the various “modernisms” of the 1940s, 50s and 60s, and this once more to a preoccupation with the *discipline* of architecture. As presented at the 1998 conference, the Johnsonian saga, was fundamentally reliant on “autonomy” as it made its first appearance in the Glass House projects and building of 1948-9. This desired “return to disciplinary roots,” one that has naturally followed similar calls in the humanities and social sciences in the wake of the inter-disciplinary experiments and critical innovations of post-structuralism, seems to answer a number of concerns in a generation unconvinced by the pluralism of post-modernism. A return to the fundamentals of architecture, in the modern tradition generally represented by abstraction, minimalism, the pluralism of post-modernism, would counter architecture’s always suspect relations to the “society of the spectacle” and its consumerist aftermath.

Finally, as evidenced by the papers given at the conference, historians, critics, and architects agreed generally that “modernism” in some form, whether classic “high” modernism or the less polemical but more socially present modernism of the immediate post war period (corporate modernism, domestic modernism, suburban modernism), or even “counter-modernism” of the kind posed by Kiesler, was decidedly preferable to postmodernism, and more than this, to the “deconstructivism” that, in the Johnson itinerary, had supplanted it in the 1980s. Thus the conference proposed to satisfy a number of questions at once: Johnson was endowed with an over-arching theme that superficially at least made historical and critical sense of his otherwise eclectic work; postmodernism was definitively abandoned, together with the

relativizing theories that seemed to support it; and, in a nice turn of intellectual agenda, a new post-theory, pragmatic era implicitly opened up.

Beneath this often self-contradictory trajectory of the idea of “autonomy” in architecture, we can trace all the tensions evoked by the history of the concept of “Enlightenment,” in the twentieth century. From the general assumption of “progress” and “reason” common to the Third Republic and its liberal interpretation of the Revolution, to the contested domain of social democracy after the First World War, to the defensive pro-modernist posture of the idealist avant-garde and its Popular Front allies in the 1930s, to the despairing and negative critique of Enlightenment developed by Adorno and Horkheimer in exile, to the reassertion of democratic values in the post-War Frankfurt School against the pessimism of a withdrawn and posthistorical conservatism, and thence to the renewal of “form” and “structure” as a renewal tactic for architecture in the 1970s, and finally to the quasi-nostalgic revival of the idea of autonomy itself in the 1990s; all this attests to the power of Kant’s idea that, both formal and political, implies at once freedom and order, collective reason and expressed individuality. <sup>lxxxviii</sup> Thus, it is, I suggest in conclusion, no accident that from Jurgen Habermas’s attack on postmodernism in his dramatic lecture of 1980 entitled “Modernity: An Unfinished Project,” delivered in his acceptance of the Adorno Prize in Frankfurt, and taking off from the introduction of architecture to the Venice Biennale, to Fredric Jameson’s studies of Adorno’s “late” Marxism, Kant has been seen as central, not only in defining the trajectory of modernity in theory and practice, but also in critically re-defining the status of modernity in the present. And, finally, could we not say that in the recent interrogation of the architecture of Mies van der Rohe, architecture has been in the business of interrogating its own Kant? That in all the newly minted reassessments of Mies, culminating in the twin exhibitions last year, have we not been in some way reconstructing our

own “modernism” out of the shards of previous modernisms since the 1960s, and with the methodological material left to us by the first generation of modernist autonomists?

## Chapter 2. Mannerist Modernism: Colin Rowe<sup>lxxxix</sup>

There are two causes of beauty -- natural and customary. Natural is from geometry consisting in uniformity, that is equality and proportion. Customary beauty is begotten by the use, as familiarity breeds a love for things not in themselves lovely.

### *An English Palladio*

These words, attributed to Christopher Wren and published in his posthumous fragments, entitled *Parentalia*, in the mid-eighteenth century, are cited as an epigraph by Colin Rowe in his 1947 article “The Mathematics of the Ideal Villa,” and used so to speak as the framing device for a discussion of the comparative uses of geometry and associative form in Palladio and Le Corbusier. In the context of our discussion the implied opposition was between a radical “autonomous” architecture internally considered to derive its formal condition *as* architecture from geometry, whether typological or topological, and an architecture deriving its authority from an evaluation of its social and cultural symbolism drawn back through the Arts and Crafts to the Classical. In purely visual terms, this opposition manifested itself as between abstract and realist; in historical terms it might be seen as between an architecture that ostensibly extends the abstract formalism of the 20s avant-gardes, and that which returns to a re-statement of the literal forms of classical tradition. On an ideological plane we might say it stands as a contest between post-humanist modernism, and retro-humanist post-modernism; between an assumption of a humanist subjectivity disseminated and perhaps irrevocably lost, and one precariously surviving, perhaps to be regained.

It has been generally assumed, based on the testimony of Banham and Jencks, that Rowe took sides in this debate, that, in giving “the younger generation of architects the metaphor of the past, of history, of references, as a viable generator of present form,” (Jencks) Rowe was “the

true founder of postmodernist thinking in the field.” (Banham). And if Jencks’ remarks are displayed prominently on the jacket of *The Mathematics of the Ideal Villa and Other Essays*, then the testimony of a follower, Alexander Caragonne, does not disagree, as on the back cover of Rowe's *As I Was Saying*, he characterizes Rowe as important for his questioning of “the eternal verities of modern architecture as propounded by the giants of the early twentieth century.”<sup>xc</sup> Which has led to the conclusion, easy enough to confirm by a hasty reading of the essay titles and some of his students’ work, that Rowe was in some way an anti-modern, quasi-nostalgic humanist, dedicated to Biedermeier values and neo-classic form.

And yet a closer reading of his early essays, at least those written up to 1960, has revealed not so much the *anti*-modernist, as an impassioned *observer* of the modern in the light of the past, a believer in the irrevocable advent of modernity, and even in the existence of a modern zeitgeist. Certainly his by no means intrinsically negative analytical dissections of Corbusier and later of Mies van der Rohe, that have formed the approach of generations of scholars and architects, and his very willingness to introduce the work of the Five, indicates a sensibility not entirely adverse to certain versions of modern architecture.

The formal analysis of architecture, as developed out of the work of Wölflinn and Frankl, and advanced by the Vienna School, emerged in Britain with a slightly different history to that of the Kaufmann-inspired influences in the USA and Italy. In the 1920s, the force of Wölflinn's typologies of form were joined to the post-cubist analyses of Roger Fry, Clive Bell, and the psychological interpretations of Adrian Stokes. Reinforced by the influence of the Warburg Institute emigrés, most notably Rudolf Wittkower, the combined impact of these multiple but overlapping traditions formed a generation of architectural historians, critics, and architects, including Colin Rowe, Robert Maxwell, and James Stirling in Liverpool and Alan Colquhoun,

and Sam Stephens at the Architectural Association School in London, together with the London-based architects Alison and Peter Smithson, John Voelcker, and Ruth Olitsky. Of these, Colin Rowe working with his Master's Thesis advisor Rudolph Wittkower at the Warburg Institute, developed a coherent and powerful model of modern architectural history that was to influence generations of architects and subsequent historians and critics. Fundamentally opposed to the technological and progressive vision of his contemporary Reyner Banham, Rowe's interpretation of modernism was self-reflexive and, in the tradition of Riegl and Dvorak, sought formal precedents in history. But rather than proposing sources that were in some, post-Hegelian sense, genetic or formative, as Giedion looked on the Baroque and Cubist traditions, Rowe understood them as in some way homologous, structural, and parallel -- paradigmatic formal *procedures* allowing for deeper interpretation of difference and similarity.

The immediate impetus for Rowe's Master's thesis came from Wittkower himself, as he noted later in his article "Inigo Jones, Architect and Man of Letters" published in 1953.

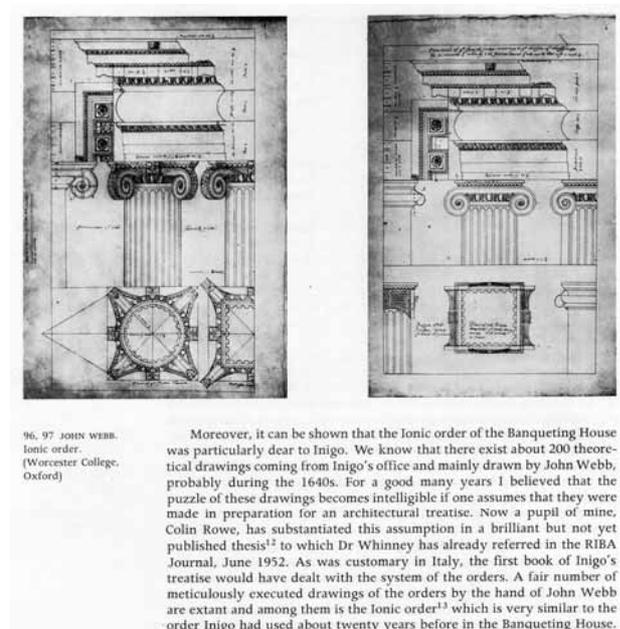


Fig. 10. Rudolf Wittkower, from "Inigo Jones, Architect and Man of Letters," 1953

This essay, devoted to a study of Jones's intellectual development through close analysis of his extant drawings -- a forensic examination that, in Wittkower's words, takes "a leaf out of Scotland Yard's book" in its recognition of the importance of the almost invisible pin-pricks of the dividers -- he posits that the architect had been preparing a theoretical treatise, along the lines of his Renaissance predecessors Palladio and Scamozzi, left unfinished at his death. Wittkower wrote:

We know that there exist about 200 theoretical drawings coming from Inigo's office and mainly drawn by John Webb, probably during the 1640s. For a good many years I believed that the puzzle of these drawings becomes intelligible if one assumes that they were made in preparation for an architectural thesis. Now a pupil of mine, Colin Rowe, has substantiated this assumption in a brilliant but not yet published thesis.<sup>xci</sup>

This "brilliant" thesis, 330 pages long, had been submitted by Colin Frederick Rowe in November of 1947 to the Warburg Institute at the University of London "for the degree of M.A. in the History of Art" which was awarded in 1948.<sup>xcii</sup> There were no preface or acknowledgements but we know that he was in 1945 "Wittkower's only student" and that Fritz Saxl and Gertrude Bing were also involved. Saxl and Bing were, in Rowe's own words "highly impressed by it."<sup>xciii</sup> From the evidence of Rowe's footnotes, he had also discussed aspects of the thesis with Francis Yates, also a member of the Warburg Institute.

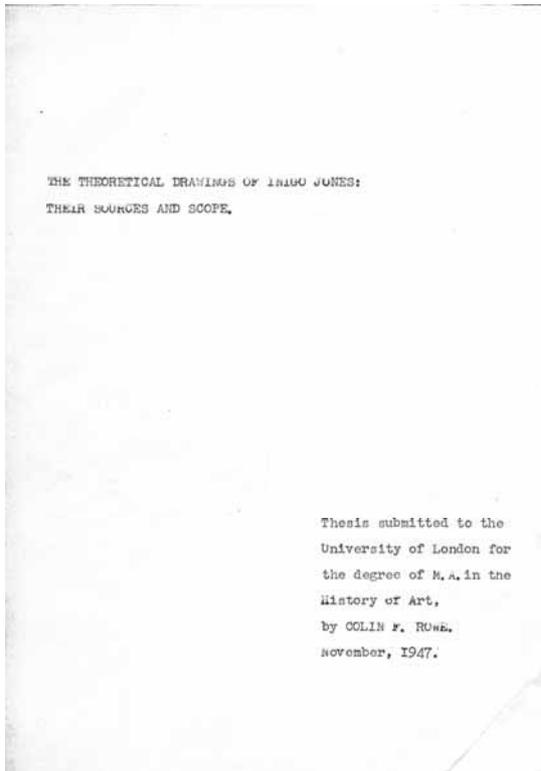


Fig. 11. Colin Rowe's Master's Thesis, Title Page, 1947.

Entitled, “The Theoretical Drawings of Inigo Jones : Their Sources and Scope,” the structure of the thesis appears simple enough. After a brief introduction to Jones, his biography, architectural formation, and “stylistic development,” it is divided into three main parts: an essay on the “English Architectural Treatise” in relation to its Italian and English antecedents; a central section on what Rowe considers to be Inigo Jones’ own treatise; and a third which catalogs Jones’ and Webb’s drawings “arranged” as Rowe puts it “as a Treatise.”

This was, then, the "architectural treatise" referred to by Wittkower, one that Jones himself did not write -- indeed Jones left little writing besides his marginal annotations to his copy of Palladio's *Quattro libri* and his posthumously published examination of Stonehenge considered as an antique Roman temple. But it is the burden of Rowe’s thesis” that there exists a corpus of drawings, some by Jones himself, some by John Webb in Jones’ office, that represent

the work in preparation for the publication of a major theoretical treatise on architecture, along the lines of those previously written and drawn by Serlio, Scamozzi, Palladio et al, a treatise left incomplete and unpublished at Jones' death: "The content and schematic feeling of the drawings [of this group] recall irresistibly the characteristics of the Renaissance architectural treatise," Rowe wrote, and "it is the object of this thesis to establish that these drawings represent the preliminary studies for such a theoretical work on architecture."<sup>xciv</sup>

In other words, Rowe's own Master's thesis consists of a theoretical argument for a theoretical treatise for which no written evidence exists, the planned existence of which relies on visual identification alone. It is, he allows, visual inspection that "suggests a preconceived system" comparable to those already developed by earlier architects of the Renaissance. Rowe himself, who was never to sustain the writing of a complete and fully developed treatise of his own, thus began his career as "a didactic exponent of architectural education" (as he characterized Jones) by completing (if not inventing) Inigo's own treatise for him. Such an exercise however, went far beyond the Scotland Yard detective work of his supervisor.

For, as completed in 1947, the same year as the publication of Rowe's own first and seminal article on "The Mathematics of the Ideal Villa," and three years before "Mannerism and Modern Architecture," it gives us a precise understanding of the development of his idea of modern "Palladianism" in its first iteration.<sup>xcv</sup> Indeed, the true subject of the thesis might be seen as "Palladio" rather than Jones, or more specifically, Jones as the eponymous hero of English "Palladianism," heir to the Mannerism of the late Renaissance, and precursor of Burlington and Kent, and perhaps even, as we shall see, the first "neo-Classicist."

The thesis, while hardly acknowledged by Rowe in his later career, was in fact an extraordinary synthesis of historical interpretation and formal analysis derived from Wölflinn

and, partially, from Wittkower, one that, so to speak, can be seen as constituting Rowe's mature approach. It still remains one of the most succinct studies of the nature and role of the Renaissance treatise in Italy and England. Two aspects of the work, however, stand out as informing the two seminal articles published by Rowe shortly after: "The Mathematics of the Ideal Villa," and "Modern Architecture and Mannerism." The first is his construction of Palladio -- Jone's model and standard -- as a theoretician and above all as a systematizer of the Renaissance tradition. "In the school of Palladio the diverse elements [of Renaissance architecture] become classicized, and absorbed into an academic repertoire, which was to provide a European model."<sup>xvii</sup> In his "architectural conservatism" and his neo-Platonic sympathies, Palladio "prolonged the Renaissance urge toward scientific clarity, reinforced his archeological preoccupations with a persuasive emotional depth, and a serious reserve of looseness and flexibility."<sup>xviii</sup> More interested in ideal harmonies than antique remains, Palladio found in the printed treatise a perfect vehicle for his own project: according to Rowe, the *Quattro Libri dell'Architettura* was the most influential of all treatises, as "those accurate, and austere programmatic pages" provided an "intelligible architecture, and the apparatus of artistic judgment for the Protestant world."<sup>xix</sup> "It [Palladio's treatise] is a methodical conception of the ancient world, which combines the dramatic qualities of Mannerism, with that voluntary sense of abstraction and balance, which Alberti had shown. ... Palladio always proceeds by way of the specific, to his generalization; and it is in this quality of rational embodiment that his compelling power seems always to lie. The particular admirations of Mannerism are reduced to a scheme analogous to that order which the Renaissance had postulated."<sup>xx</sup>

Secondly, if Palladio was the synthesizer, Jones emerged as the transmitter and historicizer of Palladio for an English audience. Eclectic in the face of what Rowe characterizes

as the “ambiguous inheritance of Rome and Venice, Jones used his edition of the *Quattro libri*, as model, standard, and commonplace book, jotting his observations of Palladio’s buildings as he visited them, daily notes, and notes on his own projects in the margins. For Jones, “the Palladian villa system offered a focus for the development of a whole complex of outside ideas.” References to the antique, and its Mannerist reconstructions, to Scamozzi’s classicism, to the restrained expansion of early Baroque, were all “regulated by a continual reference to Palladian ideals of scale and intelligibility.”<sup>c</sup> For this, “Palladio’s treatise seems to have provided Inigo, less with a model, than with a standard, around which his own impressions could cohere.”<sup>ci</sup>

Rowe, by a careful formal analysis of Jones’ designs from the Banqueting House on demonstrates the emergence of a gradual academicism, showing the gradual appearance in Inigo’s developed style of historicism, intellectualism and academic correctness: “An eclectic with a natural restraint and classical bias, he evolved from a decorative and graceful early style, through a period of historicism, in which a Mannerist element is implicit, to a final period, where a classicism is imposed upon this Mannerist basis.”<sup>cii</sup> We are thus presented with a thesis of Jones, systematizer of the systematizer, as he builds up a collection of more than 200 plates in readiness for their publication as the first English equivalent of Palladio’s *Quattro libri*.

### *Palladianism*

That the immediate post-war period, and especially in England saw a revival of interest in what was called at the time Palladianism, is now a commonplace of intellectual history -- indeed it was a phenomena that was itself almost immediately historicized. Banham is usually cited as a reference, as in his 1955 article, "The New Brutalism," he pointed not only to the prevailing tendency for naming movements along the lines of art historical styles (“The New Empiricism,” “The New Humanism,” “The New Brutalism”) but also to the then recent interest in Palladio and

Palladianism, stimulated by the work of Rudolph Wittkower, whose *Architectural Principles in the Age of Humanism* had been published in 1949, and which had explicitly informed the Smithsons' entry for the Coventry Cathedral Competition.<sup>ciii</sup> Banham wrote:

one can safely posit the interference of historical studies again, for, though the exact priority of date as between the Smithsons' design and the publication of Professor Wittkower's *Architectural Principles of* [sic. in] *the Age of Humanism* is disputed (by the Smithsons) it cannot be denied that they were in touch with Wittkowerian studies at the time, and were as excited by them as anybody else.

The general impact of Professor Wittkower's book on a whole generation of post-war architectural students is one of the phenomena of our time. Its exposition of a body of architectural theory in which function and form were significantly linked by the objective laws governing the Cosmos (as Alberti and Palladio understood them) suddenly offered a way out of the doldrum of routine-functionalist abdications, and neo-Palladianism became the order of the day. The effect of *Architectural Principles* has made it by far the most important contribution -- for evil as well as good -- by any historian to English architecture since *Pioneers of the Modern Movement*, and it precipitated a nice disputation on the proper uses of history. The question became: Humanist principles to be followed? or Humanist principles as an example of the kind of principles to look for? Many students opted for the former alternative, and Routine-Palladians soon became as thick on the ground as Routine-Functionalists. The Brutalists, observing the inherent risk of a return to pure academicism -- more pronounced at Liverpool than at the AA -- sheered off abruptly in the other direction and were soon involved in the organization of *Parallel of Life and Art*.<sup>civ</sup>

Now Banham, writing in 1955, was well aware that any “Palladianism” in British modern architecture had already been cast aside. He cited Smithson introducing this exhibition to an AA student debate -- “We are not going to talk about proportion and symmetry” as the architect’s “declaration of war on the inherent academicism of the neo-Palladians” and “crypto-academicism” in general. Banham’s own purpose in the “New Brutalism” essay was similar as he worked to identify a new “aformalism” emerging in the Hunstanton School, Sheffield University, and Golden Lane taking over from the “formalism” of Palladian reference -- a move, as we shall see, implicitly staged from a modernist/structuralist “typology” to a new modernist visual “topology.”<sup>cv</sup>

The historicization of the New Palladianism had in fact been accomplished, the year before, in a debate at the RIBA around the motion “that Systems of Proportion make good design easier and bad design more difficult” where Nikolaus Pevsner’s defense of the motion had been countered by Misha Black and Peter Smithson himself. Certainly, Smithson conceded, the issue “was important to architects as a matter of tooth and claw debate, in 1948 and 1948,” when Palladian buildings were understood as “something to believe in ... something that stood above what they were doing themselves,” but in 1954 the issue was “passé:” “The right time for the Palladian revival was 1948.” All the rest was no more than an “academic post-mortem” of the European post war impulse “as is also this debate at the RIBA.”

Smithson’s date of 1948 as the *high* point of Palladianism is interesting, for, of course, the often cited source of such principled Palladianism, Rudolph Wittkower’s *Architectural Principles in the Age of Humanism* had not been published until 1949, and this for the most part (if we believe the reviews) to a decidedly indifferent audience.<sup>cvi</sup> It had been read, however, by a group of young architects including the Smithsons, Colquhoun, Banham, and Colin Rowe: as the

Smithsons wrote in protest against A. G. Butler's negative review in the *RIBA Journal* (59, 1951: he had found it "exhausting," "unintelligible," and "almost a bore"):

Dr. Wittkower is regarded by the younger architects as the *only* art historian working in England capable of describing and analyzing buildings in spatial and plastic terms and not in terms of derivation and dates." For them *Architectural Principles* was "the most important work on architecture published in England since the War."

This however is written in 1951. And although Wittkower's central essay, "Principles of Palladio's Architecture," had been published in the *Journal of the Warburg Institute* in 1944 and 1945, articles not generally circulated to the architectural public, another catalyst for Palladian interest, or interest in Wittkower by the young architects should be sought. And we know, of course, that it was not in fact the publication of Wittkower's book that started the trend, nor indeed the previous publication of its central chapter, but rather the enormous impact of the article by his student Colin Rowe, who had, and precisely in 1947, coopted Wittkower's historical analysis for a sweeping comparison of form and principle with the Modern Movement, and, thence, by implication, with the demand for "principles" in the extension of a truly modernist architecture for the present. Thence the possibility of 1948, as the year of "Palladianism," poised between Rowe's publication of his first article and his teacher's publication of *Architectural Principles*, between 1947 and 1949.

#### *Diagramming Palladio*

Wittkower's analysis of Palladio did not, at least initially, imply any such relationship to contemporary design. As he writes in his conclusion, his aim was to provide an account of Renaissance proportional systems that, "though limited in scope, aims at being less speculative than some previous writings." This was, he noted, a "subject which had become historical."<sup>civii</sup>

But out of the two articles on Palladio's principles Rowe was able to seize on three concepts, that while apparently innocent of modernity in Wittkower, nevertheless took on an entirely new significance in juxtaposition with Le Corbusier's. First was the idea of architectural principles in itself. Wittkower had made it clear that his thesis was directly opposed to those writers in the British historical tradition who associated the Renaissance with individual taste and inspiration, rather than systematic thought and proportional theory, and his critique of Ruskin and especially of Geoffrey Scott resonated for a post-war generation seeking what Alina Payne, speaking of Wittkower's intentions, has termed "a conscious intellect-driven will to form aimed at conveying meaning, and hence, aimed at the mind rather than the senses."<sup>cviii</sup> Second was the detailed analysis of proportion and geometry as it revealed a constructive principle in Palladio's work. And third, and perhaps most important, was a page of diagrammatic plans of Palladio's villas demonstrating their reliance on a common schema of spatial distribution, modified and elaborated in each different example.

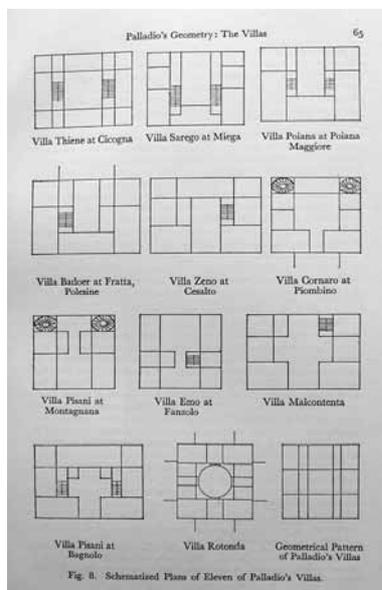


Fig. 12. Rudolph Wittkower, Diagrammatic Plans of Palladian Villas, 1945.

The section in which this last diagram appeared, "Palladio's Geometry: The Villas," was barely three pages long but its influence was to be formidable. Its purpose was to demonstrate Palladio's adherence to the "precepts of art," to "that which reason dictates," to "some universal and necessary rules of art."<sup>cix</sup> These included, in Wittkower's words, "a hall in the central axis and absolute symmetry of the lesser rooms on both sides," the insistence on which showed Palladio creating a "complete break with the older tradition," through the "systematization of the ground plan."<sup>cx</sup> The result was the creation of a typical plan, with "loggias and a large hall in the central axis, two or three living-rooms or bedrooms of various sizes at the sides, and, between them and the hall, space for small spare rooms and the staircases." Wittkower ranges some eleven "schematized plans" of villas built after the late 1540's finding that they were "all different statements of the same geometrical formula," "all generated from the same fundamental principle." concluding his geometrical summary with a typical plan incorporating the fundamental "Geometrical Pattern of Palladio's Villas."<sup>cx</sup> Beginning with the Villa Godi Porto at Lonedo, and continuing with the Villa Thiene at Cicogna, The Villa Sarego at Miega, the Villa Pojana, the Villa Badoer at Fratta, the Villa Zeno at Cesalto, and the Villa Cornaro at Piombino the variations of this plan circulated so to speak around the "type" of the Villa Malcontenta, and found their ultimate model in the Villa Rotonda, "the most perfect realization of the fundamental geometrical skeleton."<sup>cxii</sup> In sum, Wittkower considered the villas as "archetypes," "variations on a basic geometric theme, different realizations, as it were, of the Platonic idea of the Villa. Wittkower concluded by reconstructing Palladio's design method:

What was in Palladio's mind when he experimented over and over again with the same elements? Once he had found the basic geometric pattern for the problem "villa," he adopted it as clearly and as simply as possible to the special requirements of each

commission. He reconciled the task at hand with the "certain truth" of mathematics which is final and unchangeable. This geometrical keynote is, subconsciously rather than consciously, perceptible to everyone who visits Palladio's villas and it is this that gives his buildings their convincing quality.<sup>cxiii</sup>

Such an approach, Wittkower advanced, similarly informed the composition of Palladio's villa facades. Again Wittkower treats the three-dimensions of the villas as a geometrical abstraction - solid three dimensional blocks, they take the form of cubes. These in turn, "had to be given a facade" that was, so to speak, "grafted" onto its front -- most notably in Palladio's innovative move, as a temple front. Wittkower describes the process:

The facades of Palladio's villas present us with a problem essentially similar to that of the plans. In contrast to French and English, most Italian monumental architecture is cubic and conceived in terms of a solid three-dimensional block. Italian architects always strove for an easily perceptible ratio between length, height, and depth of a building, and all villas by Palladio have that block-like quality. The cube had to be given a facade. He found his motive in the classical temple front ... The idea that the temple is a magnified house throws an interesting light on Palladio's own crystalline conception of architecture. He cannot think in terms of evolution, but envisages ready-made units which may be extended or contracted.<sup>cxiv</sup>

These themes, not unnaturally, formed the foundation of Rowe's Master's Thesis. In the bibliography he lists the three articles that Wittkower published in the *Journal of the Warburg and Courtauld Institutes* on Palladio's "principles," and English neo-classical architecture; further he notes that his "resumé of Barbaro's theory" is indebted to Wittkower, quoting Barbaro from "Principles," and cites him again "for Palladio's conception of the temple springing from

the forms of the ancient house." But beyond this, the qualities of Rowe's own formal analysis indicate that the debt between advisor and student might well have been reciprocal. Where "Principles of Palladio's Architecture" had closed with a purely historical statement ("While thus the harmonic mathematical conception of architecture was philosophically overthrown in the age of "nature and feeling" and disappeared from the practical handling of proportion, scholars began investigating a subject which had become historical"<sup>cxv</sup> ), the Conclusion to *Architectural Principles* four years later ended in the present: "Les proportions c'est l'infini: -- this terse statement [of Julien Guadet] is still indicative of our approach. That is the reason why we view researches into the theory of proportion with suspicion and awe. But the subject is again very much alive in the minds of young architects today, and they may well evolve new and unexpected solutions to this ancient problem."<sup>cxvi</sup>

The double inheritance, or transmission, of the Renaissance from Palladio through Jones would be of simply academic interest if it did not form the basis of Rowe's own historical view, of architecture in general and of the Modern Movement in particular. For as elaborated in the London essays "Mathematics," and "Mannerism," (1947-50) and later reinforced by articles written in the Texas period (1954-56), Rowe's "Modernism" referred directly to the "Palladianism" of this first iteration in two fundamental respects: its crystallization in the work of a single, "systematizer," in this case, Le Corbusier; and its propagation through a central written treatise, in this case, *Vers une Architecture*. It relied on the initial experiments of two generations of multiple innovators from the Arts and Crafts to Expressionism, and on the completion of a few synthetic, paradigmatic works that encapsulated its ideals and their formal representation -- the Villas Stein and Savoye. It also relied, apparently paradoxically for one who was ostensibly opposed to the very notion of "progress" in history, on a coherent theory of

the historical *zeitgeist* for its assumptions of coherence and periodization. As Rowe, in the comments he drafted in 1954 for the use of Harwell Harris, the Chair of the Department at Austin, "It cannot be assumed that the present day is without an overt artistic urge, will, volition. No earlier time has been without one and there is no reason to believe that we are exempted from what has so far been universal. That modern architecture is not merely a negative rationalism, that it embodies a positive will, is proved by evidences which are daily before our eyes."<sup>cxvii</sup>

In this affirmation of Hegel, Riegl, Worringer and Wölfflin, Rowe is simply making explicit the underlying premises of his MA Thesis: first, that there was something called "Mannerism" and "Mannerists" to practice it, was there entirely assumed, even as such a movement was at once operating on already established Renaissance codes, and translating them into academic formulas for succeeding generations, thereby transforming the nature of Mannerism itself, and second, that there was something called Modernism, a more recent historical phenomenon, and while the process of identification and classification of its procedures and forms was more fluid, the art-historical method for identifying them was equally well-established.

### *Mathematics*

This then is the basis for Rowe's incisive, brief (taking up not more than four pages of the *Architectural Review*), but extraordinarily influential, first essay. Out of Wittkower's observations, he derives a founding concept -- the ideal villa -- and its principles of form -- geometry -- joining them to a comparison of Palladio's villas and Le Corbusier's modernist counterparts. In the formal tradition of Wölfflin and Frankl, the argument works more by juxtaposition than by derivation; Rowe is not, it seems, proposing any direct filiation between the late Renaissance and the Modernist architect; he admits that the villas of Palladio and of Le

Corbusier are "in different worlds," and insists that "the world of classical Mediterranean culture, on which Palladio drew so expressively, is closed for Le Corbusier."<sup>cxviii</sup>



Fig. 13. Colin Rowe, "The Mathematics of the Ideal Villa," First Page, 1949

The structure of this short essay is simple enough. Rowe begins with a comparison of Palladio's Villa Capra or Rotunda [sic] with Le Corbusier's Maison Savoye at Poissy, based on Palladio's eloquent description of his villa's rural surroundings, and Le Corbusier's similar description of his villa's site as "un rève virgilien;" he continues with a "more specific comparison" between Palladio's Villa Foscari or Malcontenta and Le Corbusier's house for M. de Monzie at Garches; he concludes by returning to the Rotunda and Savoye houses as examples of "the Platonic archetype of the villa."

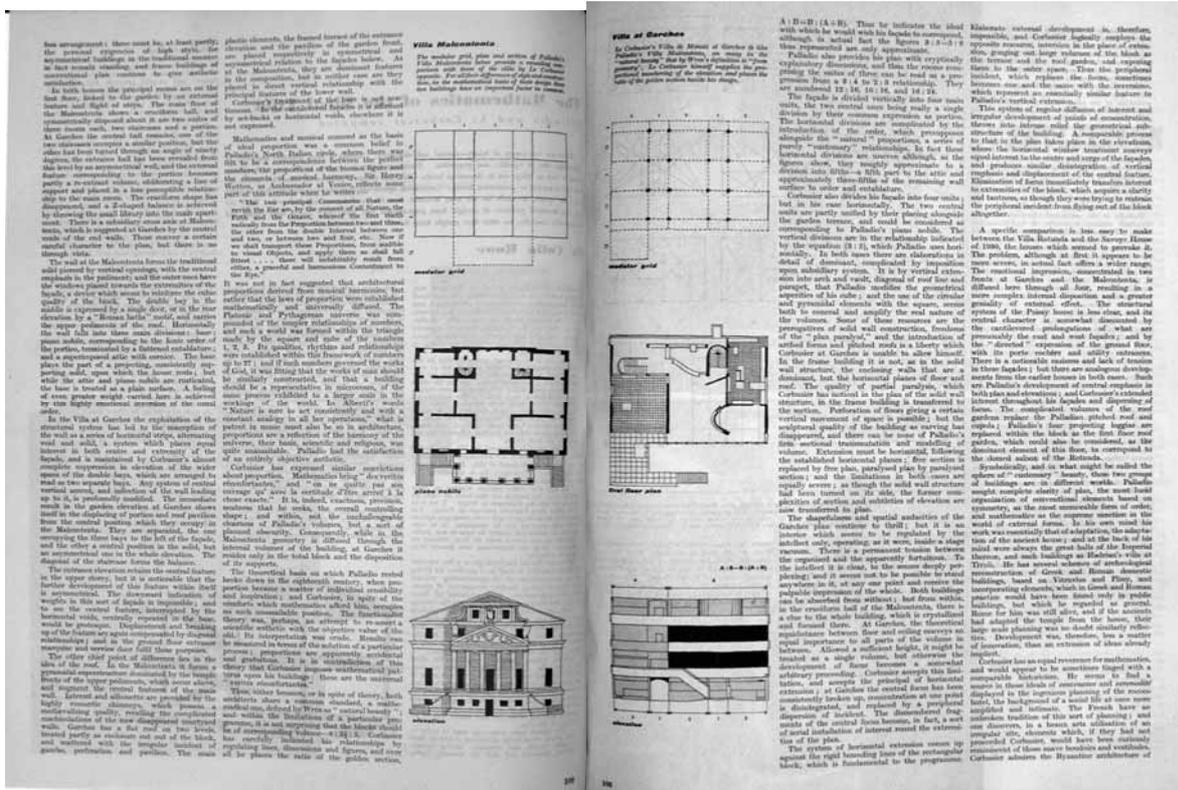


Fig. 14. Colin Rowe, "The Mathematics of the Ideal Villa, Second and Third Pages, 1949.

In each of these comparisons the influence of Wittkower is clear in the treatment of Palladio, and, by association, in that of Le Corbusier, and is fundamental to the analysis of the plans and their geometrical properties. Drawing on Wittkower's comparison of Palladian plan-types, Rowe develops what he calls "a diagrammatic comparison" to reveal the "fundamental relationships" between Garches and Malcontenta; in both, he claims, the "system is closely similar," and proceeds to elaborate on Wittkower's identification of "six 'transverse' lines of support, rhythmically alternating double and single bays."<sup>cix</sup> He cites the quotation used by Wittkower in support of Palladio's adherence to symmetry, and follows Wittkower's analysis of musical and geometrical harmonies, follows his teacher in seeing Palladio's study of public buildings resonate in the private realm, picks up on Wittkower's mention of Matila Ghyka's *The Geometry of Art*



They directly linked this cover to Rowe's article, which, they claimed, showed that "both [the Villa Malcontenta and the Villa de Monzie at Garches] are based on the belief that right proportions may be expressed in mathematical terms."

The debt to Wittkower is even more pronounced in the illustrations, where the diagrams of the "modular grid" of the plans, the first floor plans, and the elevations of Malcontenta and Garches are ranged vertically side by side in columnar comparison (an effect lost in the republication of the essay in *Mathematics of the Ideal Villa and Other Essays*), as a direct adumbration of Wittkower's own diagrams. All this, it must be said, without a single reference to Wittkower's or his articles; charitably one might simply conclude that articles for the *Architectural Review* were regularly without footnotes, which of course does not avoid the question of attribution in the text itself.

#### *Inventing Modernism*

After the act of Revolution, therefore -- which is largely iconoclastic in character -- comes the process of building anew.

The Editors, *The Architectural Review*, 1947.<sup>cxxii</sup>

It is significant in retrospect that Rowe's first article was to be published in the third number of *The Architectural Review* of 1947. For in January of that year, to celebrate the fiftieth year of publication, the editorial board, joined together for the first time in many years to issue a statement of policy, and to review the past fifty years of architectural development. Their "manifesto" mild enough by early twentieth century standards, was entitled "The Second Half Century," and looked toward a future both short term and long term in which the *Review* would play an important role in the architectural education of the profession and the general public. Richards, Pevsner, Lancaster, and de Hastings pronounced themselves as anti-revolutionaries:

the journal they wrote "does not set out to lead a political and moral or even a social revolution," determined to be more open-minded than their Modern Movement predecessors, and dedicated to "the cause of visual culture" in general, on a mission no more nor less than to "re-educate the eye" of its readers. In this task they were not only determined to continue the "Third Programme" pieces of high criticism ("scholar's table-talk conducted in public"), and the normal process of publishing contemporary architecture, but also to open up to a wide range of cultural artefacts not necessarily high architectural in form.<sup>cxxiii</sup> They had, indeed, a "call" "of quite a low-class, evangelical kind," one no doubt influenced by Pevsner's own Lutherism, and de Hastings' populism, and that was to sponsor the well-known investigations into pub architecture, townscape, and popular design that characterized the *AR* for the next two decades.<sup>cxxiv</sup> But this call also had an aesthetic side directed to the supposedly dogmatic modernism of the pre-War years: "The obvious short-term objective," they wrote, "must consist in getting back some of the scope and richness that the Act of Revolution discarded." This task demanded a "new humanism" for architecture, seeking "more direct contact with human aspirations," architecture "becoming more and more a vehicle for humanity's aspirations."<sup>cxxv</sup>

Such a program involved discarding many of the Modern Movement's doctrines which in the light of experience had become "negative characteristics," that could only be changed through re-activation of the arts of expression. The editors listed: "a new richness and differentiation of character, the pursuit of differences rather than sameness, the re-emergence of monumentality, the cultivation of idiosyncrasy and the development of those regional dissimilarities that people have always taken a pride in."<sup>cxxvi</sup> For Pevsner, of course, this perfectly matched his call for a return to the great English tradition of the Picturesque, and, as would be demonstrated by Alan Colquhoun's stern rebuke to Pevsner in 1954, many in Rowe's

circle were ready to combat the incipient "historicism" embedded in Picturesque (and Townscape) ideology, but in 1947, these "dangers" to Modern Movement orthodoxy were not so evident, and it is easy to trace elements of this new "freedom" announced by the editors of the *Review* in Rowe's own embracing of Pevsner's (and Wittkower's) "Mannerism," as well as in his visual approach to the conceptual, intellectual, "rules" of the Modernist game.

For, convinced, like many of his generation -- Banham and Colquhoun in Britain, Greenberg, and later Leo Steinberg in the US -- that the first era of the Modern avant-gardes was historically complete, Rowe saw his task with respect to the post-War practice of architecture and architectural history as defined on the one hand by the ideological and formal residue of avant-gardism, and on the other by the much longer trajectory of architectural tradition since the Renaissance. In the process he constructed a formulation of a more or less unified "Modernism" that served him as a critical armature for the rest of his life. Like Clement Greenberg, seeking to invent a similar "Modernism" for painting, and countering the Modern Movement's own myth of the "end of history," Rowe turned to history as a key to the isolation of specifically modernist moves in architecture, as well as more traditional survivals. His architectural analysis, out of Wölfflin, Wittkower, and Pevsner was, like Greenberg's approach to the canvas, neo-Kantian. If Greenberg sought to identify the roots and definition of Modernism out of the emerging "flatness" of painting after Manet, Rowe turned back further, to the Renaissance (as Tafuri was to do later) as the touchstone of a developed architectural manner. The "Modernism" thus defined, by both Rowe and Greenberg, from their quite different perspectives, was parallel to that of Eliot, as Terry Eagleton has characterized it, founded on a "Janus-faced temporality, in which one turns to the resources of the pre-modern in order to move backwards into a future that has transcended modernity altogether."<sup>cxxvii</sup>

In this context, Rowe's initial comparison between Palladio and Le Corbusier was in no way simply the arbitrary result of applying the idea of Mannerism to Modernism, nor a fashionable conceit adopted by a few young members of Team X and the Independent Group out of a casual reading of Wittkower, or a Sunday conversation with Rowe at Banham's house. Rather, for Rowe, Le Corbusier had emerged by 1930, *as* the Palladio of Modernity. As he wrote in 1959, in a meditation on "Le Corbusier: Utopian Architect," Le Corbusier's influence, like Palladio's, "has been principally exercised through the medium of the illustrated book; and if we wish to understand its nature, it is to his early treatise, *Towards a New Architecture*, and to the publication of his buildings and projects as his *Oeuvre Complète* that we must look. For in these books he evolves a frame of reference, persuades us to accept it, poses the problems, and answers them in his own terms; so that, like the great system makers of the Renaissance, Le Corbusier presents himself to us as a kind of living encyclopaedia of architecture, or as the index to a world where all experience is ordered and all inconsistency eradicated."<sup>cxviii</sup>

### *Mannerism*

It is perhaps inevitable that Mannerism should come to be isolated and defined by historians, during those same years of the nine-twenties, when modern architecture feels most strongly the demand for inverted spatial effects.

Colin Rowe, "Mannerism and Modern Architecture," 1950.<sup>cxix</sup>

Wittkower's influence is even more present in the second of Rowe's *Architectural Review* articles, "Mannerism and Modern Architecture" published a year after *Architectural Principles*, although Wittkower's fundamental work on Mannerism in the articles on Michelangelo's Laurentian Library in the *Art Bulletin* of 1934, or in his analysis of Palladio's Palazzo Thiene, Palazzo Valmanara, and the Loggia del Capitano in the first part of "Palladio's Principles" is still

unacknowledged. Indeed the summary of Rowe's article offered by the editors (presumably Nikolaus Pevsner), and probably written by Rowe himself mentions only Pevsner and Anthony Blunt:

Mannerism in architecture, using the term Mannerism as it was defined by art historians in the early twenties, has only recently received the kind of attention which used to be given to the Baroque. Indeed, general attempts to define the term in relation to architecture have, in England, so far been limited to two -- Nikolaus Pevsner's article in *The Mint* for 1946, and Anthony Blunt's lecture at the RIBA in 1949. Yet the conception of Mannerism is one which promises much for the better understanding of the art and architecture of more periods and places than one. In March Nikolaus Pevsner showed how it might be used to throw light on the fascinating enigma of the English Elizabethan style; in this article Colin Rowe applies it to the architecture of the Modern Movement. In doing so he breaks completely new ground, and reaches conclusions which may startle those who have been content to accept the Modern Movement's account of itself at its face value.

The Author: C.F.Rowe, MA, architect, is at present lecturing at the Liverpool School of Architecture. Is convinced that analogies between the architecture of the sixteenth and the present century cannot be ignored in any attempt to formulate a consistent theory for contemporary architecture.<sup>cxxx</sup>

Of the two sources mentioned here, the lecture by Anthony Blunt at the RIBA, published as "Mannerism in Architecture," in March 1949, was the most directly concerned with the concept of Mannerism applied to contemporary architecture.<sup>cxxxii</sup> He began with an attempt to define the word, which he insisted for his architectural audience was no mere "affectation" but a

distinct style in itself, first noted by art historians in painting around 1900. His prime example, following Wittkower, was Michelangelo's Laurentian Library, where, "all the principles which were manifest in Brunelleschi taken and ... simply inverted." Columns set into the wall, visual impression of great weight but small consoles; columns treated in "a wanton manner" wall interrupted "with brutality."<sup>cxxxii</sup> Such inversions were, he noted, "visible in even so apparently classical an architect as Palladio" illustrating the point using Wittkower's diagram of the facade of San Francesco della Vigna.<sup>cxxxiii</sup>

But for Blunt, Mannerism is more than a period style, but rather a phenomenon common to other times and places, from the rock tombs of Petra to the water colors of Blake and the architecture of the late Eighteenth century from Ledoux to Soane which is characterized by,

distortion of proportions, overcrowding of the space, and the extreme exaggeration, used to produce dramatic effect. One can find corresponding elements in certain architecture of the period also, for example in the work of Frenchmen like Ledoux... In his architecture we can see an arbitrary juxtaposition of elements which is strictly Mannerist, and in some cases direct borrowing from Mannerist architects like Giulio Romano.<sup>cxxxiv</sup>

In the context of Rowe's interpretation, however, it is Blunt's direct attribution of Mannerist elements to Le Corbusier that resonates. For Blunt, Le Corbusier's treatment of interior space, "in the sense that he frequently seems deliberately to avoid any completely closed form, and allows, on the contrary, the maximum degree of interpenetration, deliberate uncertainty, if you like, in the definition of the space."<sup>cxxxv</sup> Indeed he concludes his lecture with a direct quotation from Le Corbusier's *Vers une Architecture* praising Michelangelo's Saint Peter's.<sup>cxxxvi</sup>

The second of Rowe's acknowledged sources, Pevsner's article in *The Mint. A Miscellany of Literature, Art and Criticism* edited by the critic Geoffrey Grigson, took its place beside

pieces by W.H.Auden, Seán O'Casey, and Graham Greene, as a brief introduction to the "The Architecture of Mannerism." Written as if it were the first English exposition of the subject, it is also written to correct an empirically-minded England that, as Pevsner writes, "distrusts generalizations" and that leaves "the perfection and codes of law to more logical and less practical nations."<sup>cxvii</sup> He argues for the meaning of the word "style" introduced by German and Austrian art historians, for a more precise understanding of the terms of the field. "Fixed terms for styles of ages," he writes, "are there to keep a host of data in reasonable order," to help in "tidying up" works of art, and to separate Renaissance from Baroque, which would be (in his Wölfflinian terms) to separate "the static from the dynamic, the compact from the expansive, the finite from the infinite, the ideal from the over-real or over-expressive."<sup>cxviii</sup> He notes the clarifying effect of the discovery of "Mannerism" in 1924-25, and the relation of the term in its first application to painting, before considering to what it might refer in architecture.<sup>cxix</sup> His discussion of the "formal and emotional character" of the post-Counter Reformation buildings by Sanmicheli, Giulio Romano, Peruzzi, Michelangelo, Piero Ligorio, Ammanati, Vignola, Palladio, and Serlio established these works and their authors in the quickly established canon of Mannerism as it was received in England after the War. Terms like "uncomfortable balancing" (applied to the facade of Sanmicheli's Palazzo Bevilacqua); "lack of clarity," "dissonance," "precarious instability," "restlessness," "incongruous proximity," (applied to Giulio Romano's Palazzo del Te); "unstable relations" (applied to Peruzzi's Palazzo Massimi); "preciosity" (applied to Piero Ligorio's Casino of Pius); all added up to the characterization of the style as "self-conscious," "dissenting," and "frustrated," prone to "tendency to excess within rigid boundaries," a style "with the aim of hurting, rather than pleasing, the eye."<sup>cxl</sup>

Pevsner's article, with its range of reference, its careful formal analyses, its explanation of Mannerism as a style peculiar to an age of asceticism, of the rigorism of Pius V and Loyola, a "cheerless style, aloof and austere," with no faith in mankind and no faith in matter," evidently had a huge influence on the enlightened elite of England, and on Colin Rowe and his circle in particular.<sup>cxli</sup> Pevsner's digs at English pragmatism, at "modern architects" who "suffer from ... lack of visual discrimination," and criticism that "suffers from it to," naturally appealed to a generation anxious to reformulate the terms of theory and criticism developed by a connoisseurial class before the War. Finally, his recognition that Mannerism was not just an application of a painterly vision to facades, but a spatial problem, was in tune with modernist ideas of architecture in general: "architecture is not all a matter of walls and wall patterns. It is primarily organized space," he wrote, admitting that it was "much harder to write of space than of walls," demanding to be "wandered through" "at least with one's eyes," in a filmic manner.<sup>cxlii</sup>

Pevsner however, while he cites Wittkower on Michelangelo, is certainly not generous to his fellow-exile and London University colleague; he prefaces his long analysis of the Laurentian library with the flat statement that no-one previously had thought of Michelangelo in the terms of Mannerism as he defined it. While many scholars from Burckhardt to Schmarsow had noticed "incongruities," they had been interpreted as marks of "struggle," rather than the "paralysed, frozen" architecture Pevsner envisaged. Not incidentally, Pevsner passes over in silence Wittkower's in-depth analysis of the Laurenziana.<sup>cxliii</sup>

Wittkower's own idea of Mannerism was, in fact, not precisely that of his art-historical rivals. As elaborated in the 1934 article on Michelangelo, it was derived from a meticulous study of the reconstructed stages of design for the Laurenziana, concerned, as Margaret Wittkower noted in 1977, "with proving the existence of a 'Mannerist' style in architecture,"

where the term as introduced by earlier historians such as Voss, Dvorak, Frey and Friedländer, had been generated from a study of painting, and was not specific to architecture and its deployment of elements.<sup>cxliv</sup> Reinforcing this specificity, the article was to have been prefaced by a lost section entitled *Das Problem manieristischer Architektur*.<sup>cxlv</sup>

For Wittkower Mannerism in architecture was first and foremost to be identified in what he termed "an irreconcilable conflict, a restless fluctuation between opposite extremes." He saw this as the "governing principle of the whole building" of the Laurentiana, as supposedly load-bearing orders were recessed behind the wall they would normally articulate and support, thus reversing the usual status of wall and orders. Equally a stair that purports to climb upwards is given a cascading downward movement at its center; the stair itself fills a vestibule that properly would articulate a moment of rest for the visitor. Similarly the details exhibit "the same theme of insoluble conflict," with inner and outer door frames given "two different and irreconcilable meanings," triglyphs hanging like "dewdrops below the pilasters," and each element neutralizing the other ad infinitum: "every attempt to work out the architecture according to one system immediately leads to the other," to the point where "ambivalence" is the dominant impression. The observer is left with doubt, "plunged, without being aware of it, into a situation of doubt and uncertainty."<sup>cxlvi</sup> As opposed to the Renaissance sense of "self-sufficiency," of stability and lack of movement, and the Baroque exhibition of unequivocal, dynamic movement, Mannerism subsists on a "*duality of function*" "one of the fundamental laws of Mannerist architecture."<sup>cxlvii</sup>

If *conflict* is the first law of Mannerism, then the second is "the principle of *inversion*."<sup>cxlviii</sup> As demonstrated by the facade of S. Giorgio de' Greci in Venice, with its pilasters piled on top of one another in alternating meanings, foiling any attempts to read vertical axes in the facade, "inversion forbids an unequivocal reading of the facade; the eye is led to

wander from side to side, up and down, and the movement thus provoked can again be called ambiguous." Such a principle, claimed Wittkower, is entirely foreign to both the Renaissance and the Baroque, demonstrating the existence of the style called Mannerism, of which the Biblioteca Laurenziana is the "supreme representation."<sup>cxlix</sup>

Wittkower, however, did not leave his analysis entirely contained by the historical period between 1520 and 1600 that he had identified as Mannerist. Indeed, he was already in 1934 developing a tentative theory for the whole period, seen as an overall unity from the early 15th century to the mid-19th century. Mannerism then became a generic term for architecture that was neither entirely static, nor unequivocally dynamic: while art history "habitually" thought of the development of a sequence from static Renaissance to dynamic Baroque, Wittkower saw the concept of Mannerist ambiguity as one that could be "applied to both static and dynamic buildings," to the extent that "mannerism" often appears at different scales throughout the period. For Wittkower the true break was effected by the introduction of modern steel construction in the mid-19th century, that, like the Gothic period before the Renaissance, produced structures that had no need for walls. Between the 14th century and the 19th however, walls were the primary element, and allowed for the variegated play of the orders on and within their surfaces with no functional or structural impediment. Here, of course, Wittkower was following the general consensus, established by Giedion, that modern architecture was founded on the principles of the skeleton, and the "functional" demand for honesty in its representation. He does leave one loophole for modernist criticism, however, one that Rowe will eagerly exploit, in his characterization of the Laurenziana as "the beginning of a completely new approach to architecture.... the key to a wide area of unexplored or misinterpreted architectural history, and the explanation of much that was to happen in the next two centuries and beyond."<sup>cl</sup> And if

Wittkower himself could extend the period through to the 19th century, why should not an architecture no longer dedicated to the clarity of the Chicago frame, but rather to the ambiguity between surface and structure, historical tradition and modernity, be subject to analysis according to the same principles?



Fig. 16. Colin Rowe, "Mannerism and Modern Architecture," First Page, 1950

Rowe, despite his assertion that "the only general attempts [to apply the term Mannerism to architecture] in English" were those of Blunt and Pevsner, and ignoring Wittkower's magisterial essay on Michelangelo, assimilates the entire discourse to his treatment of modern architecture. The entry facade of Le Corbusier's Villa at La Chaux-de-Fonds is compared to the facade of the Casa di Palladio, Vicenza, Zuccheri's Casino, Florence, and to a Georgian house in Suffolk Street, London. Picking up on Blunt's characterization of Soane as Mannerist, Rowe even shows the re-emphasis on Mannerist motifs in Soane's own delineation of Zuccheri, for his lecture illustrations. And his reliance on Blunt reappears at the close of the essay when he quotes liberally from Le Corbusier on Michelangelo.



Fig. 17. Colin Rowe, "Mannerism and Modern Architecture," Second Page, 1950.

The center of the essay, though, is an elaborate but succinct reformulation of the history of architecture since the Renaissance in terms that pit the rationalism of structure and the moral ethic of the program, against the visual qualities of the eclectic and the picturesque, a tension traced through to the Modern Movement, split between the demands of reason and the satisfaction of the eye. Rowe finds this entire development, together with its tensions, to culminate in Le Corbusier, whose *Oeuvre Complète* is framed as "a production as developed and as theoretically informed as any of the great architectural treatises of the sixteenth century."<sup>cli</sup> But the real dilemma facing Le Corbusier, and one supposes, Colin Rowe and his circle following the evident success of "Mathematics of the Ideal Villa," was Corbusier's "incapacity to define an attitude to sensation."<sup>clii</sup> With mathematics operating as an "absolute value," a reinforcement of "universal and comforting truths," the question arises as to the "sensuous

appreciation" to be devoted to the resulting "cubes, spheres, cylinders, cones and their products."<sup>cliii</sup> In this ascription, the celebrated phrase "the masterly, correct, and magnificent play of masses brought together in light," opens up what Rowe sees as a "self-division" within Le Corbusier that was never to be closed: that between the "correctness" of an intellectual idea infusing the object from outside, and of a visual attribute of the object itself. Here Rowe is set to make the parallel between the post World War I world of Le Corbusier, and the world of the Counter Reformation, both contexts rendering balance and harmony impossible: "If, in the sixteenth century, Mannerism is the visual index of an acute spiritual crisis, the recurrence of similar attitudes at the present day should not be unexpected, and corresponding conflicts should scarcely require indication."<sup>cliv</sup>

In this way Rowe systematically compares the disturbances and exaggerations common to Mannerism and to Modernism: plans that are both central and peripheral, works that visually demand intellectual confirmation from the abstract viewpoint of the aerial view; deliberate and insoluble spatial complexities in Michelangelo and Mies alike; ambiguous spatial organizations in Vignola and Mies; and, finally, the intensity of discordant elements at different scales represented in Saint Peter's and in Le Corbusier's Salvation Army Building. This comparison allows Rowe, in his words, to "really measure the production of our own day:"

In a composition of aggressive and profound sophistication, plastic elements of a major scale are foiled against the comparatively minor regulations of the glazed wall. Here again the complete identity of discordant elements is affirmed; and, as at St. Peter's, in this intricate and monumental conceit, there is not release and no permanent satisfaction for the eye. Disturbance is complete.<sup>clv</sup>

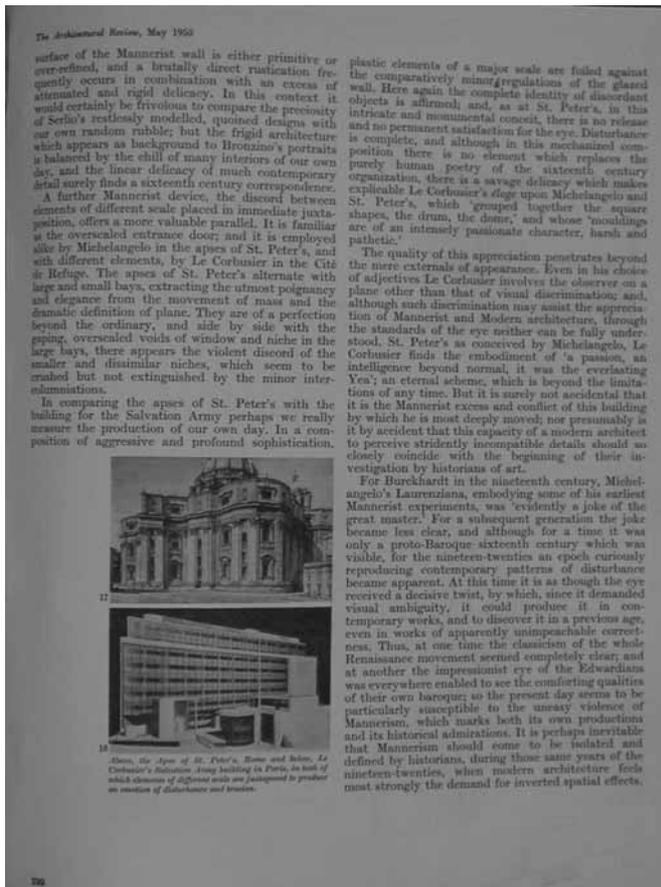


Fig. 18. Colin Rowe, "Mannerism and Modern Architecture," Last Page, 1950.

Not so much, then Palladio and Le Corbusier as in the first essay, but now Michelangelo and Le Corbusier, not so much Mannerism *and* Modern Architecture, but Le Corbusier "Michelangelesque" and Modern Architecture "Mannerist." Of course Mannerism, and Mannerists, were not in any sense setting out with such a goal -- to the contrary, they were the bold contrarians of their age. The supposedly blank panels of the Villa Schwob and the Casa di Palladio were construed respectively, and respectfully, within the codes of Modernism and "the architectural traditions of Renaissance humanism."<sup>clvi</sup> What Rowe identified as "Palladio's inversion of the normal" and Le Corbusier's "formal ambiguity" were intended deliberately to "disrupt the inner core" of Classical and Modernist coherence respectively. But equally, as Dvorak, Pevsner, and Wittkower had suggested, such disruption was far from classical in its

historical implications; rather it was a sign of a "universal *malaise*," and of the fundamental "inner contradictions" that afflicted Classicism and Modernism alike.

And, given such a historical sense of beginning, middle, and academic end, the slipping of Modernism into neo-Classicism, even as Palladianism slipped into late eighteenth-century neo-Classicism, was both inevitable and a sign of decline. In this ascription it would not be Wittkower but Emil Kaufmann who would, following the posthumous publication of *Architecture in the Age of Reason* in 1955 be Rowe's guide. For post-Corbusianism as post-Miesianism was, for Rowe, a moment of formal crystallization bereft of the ideological content that had (falsely but energetically) inspired Modern Architecture: the Revolution had failed. As he concluded his review of the 1959 exhibition of Le Corbusier at the Building Center, "the success of any revolution is also its failure." Modern architecture was now ubiquitous, an "official art" "rather than "the continuing *symbol* of something new, Modern architecture has recently become the *decoration* of everything existing."<sup>clvii</sup> Even as the neo-Palladian villa "at its best, became the picturesque object in the English park," so Le Corbusier "source of innumerable pastiches and of tediously amusing exhibition techniques" is rendered empty as "le style Corbu."<sup>clviii</sup> As he concluded somewhat despondently in "Mathematics of the Ideal Villa: "It is the magnificently realizable quality of the originals which one fails to find in the works of neo-Palladians and exponents of 'le style Corbu.' " But the distinction for Rowe in 1947 was clear: "The difference is that between the universal, and the decorative or merely competent; perhaps in both cases it is the adherence to rules which has lapsed."<sup>clix</sup>

Here then, and already in 1949, we may identify that sense of exhaustion, of the already seen, of the endlessly repeated formulae, that pervade his assessments of contemporary work, as if the critic/historian is, Spengler-like, already wasted by the *ennui* of living at the end of history.

In this waste-land, as we shall see, only Stirling seems to have surmounted the transition from Mannerism to neo-Classicism, as a latter-day John Soane, eclectic and combinatory, abstract and symbolic, parading whatever virtù might be salvaged from a formalism without ideology, a rhetoric without content from the very force of its jangled inversions.

*The End of Modernism*

This sense of the fatigued, detached, observer, is confirmed when we look at what Rowe wrote on the subject of the New York Five. For here we are left with no clear sense of critical authorization on the one side or the other, of the kind offered, for example, by Giedion in support of Corbusier, or, alternatively, Pevsner against Le Corbusier, no hint of that “instrumental” criticism so castigated by Tafuri as implicating the critic in the practice of the architect. Indeed where Tafuri himself at one point in his career was keen to engage the American Five, and certainly registered the impact of Rossi’s neo-Rationalist typology on Krier and others, albeit in a fundamentally critical vein, Rowe seems to have wanted to escape from any firm judgment on the issues raised. Thus the better part of the “Introduction” to *Five Architects* (1972) is taken up more with an autopsy of modern architecture’s failure in the face of its ubiquitous success, than with any extended discussion of the contents of the book. The burden of the argument rests on the disappearance of the moral and utopian impetus in European modernism, the seemingly non-ideological modern architecture of the USA, and the opening left for the recuperation of historical “meaning” through the resurrection and extension of modernist codes -- in his words, Eisenman who “seems to have received a revelation in Como; Hejduk seems to wish affiliation both to synthetic Cubist Paris and Constructivist Moscow” and the “obviously Corbusian orientation of Graves, Gwathmey, and Meier.” His conclusion that the argument posed by the Five was “largely about the physique of building and only indirectly about its morale,” avoided

any confrontation with the nature of this new formalism, qua architecture as meaningful language.<sup>clx</sup> Even in the two-paragraph erratum added as a loose page in the 1975 Oxford University Press edition, Rowe vouchsafes little more in the way of appreciation than an extremely contorted assessment of the “bourgeois,” “cosmopolitan erudition,” “belligerently second hand,” character of the work. Its only merit, apparently, resides in the fact that “it is what *some* people and *some* architects want” and thus difficult to fault “in *principle*.” at least.

In the end, and despite the ultimate brilliance of Rowe’s analytical vision, we are faced with a critic who believes that everything has already happened, one who might well be placed among those of the generation of 1945 who, fatalistically or dispassionately, found solace in the belief that the epoch of history had ended in *posthistoire* repetition and impasse.

*Modernist Mannerism: Stirling*

It was perhaps only with the architecture of James Stirling that Rowe found the inspiration to awaken from his pessimistic a-historicism, and find signs of life in the continued forms of late modernism.<sup>clxi</sup> Balanced between a belief in the project of modernity and a Rowe-derived interpretation of its neo-classic origins, Stirling afforded Rowe the example of a true “modernist neo-classic.” For other historians and critics, more concerned to interpret through the lens of a single-minded stylistic unity, Stirling’s architecture has afforded divergent criticisms. Some have seen his work move through a series of brilliantly eclectic modern styles, from his “Modernist” or “Corbusian” Thesis at Liverpool University (1950), the “Brutalist” and also “Corbusian” flats at Ham Common (1955-58, with James Gowan), the “Constructivism” of the Engineering Building at Leicester University (1959-63, with James Gowan) and the History Library at Cambridge (1964-67, with Michael Wilford), and the “Post” or “Late” Modernism of the later work. Banham cited Gowan’s motto “The style for the job,” Frampton entitled his essay of 1975

“Transformations in Style,” Summerson spoke of his “mannerism.”

Others have insisted that Stirling was a steadfast Modernist, freely utilizing the diverse vocabularies of the Modern Movement as appropriate to each commission. Others again have noted his allegiance to the traditional of British “functionalism,” to regional architectures, and building traditions outside of architecture, as evinced in the 18<sup>th</sup> and 19<sup>th</sup> century Liverpool docks, and celebrated in the special issue of the *Architectural Review* in 1957, six years after Stirling’s graduation from Liverpool School of Architecture. Still others have proposed a fundamental break with Modernism at sometime in the mid-sixties, or more precisely in 1968, when the young Luxemburg architect Leon Krier joined the office. Krier, with his love of neo-classicism and distinctive drawing style, is seen to have steered Stirling towards a kind of "Modern Classicism" beginning with the stern symmetry of the Siemens Office Building (1969) and the "crescent" for the Derby Town Center competition (1970). Krier, who redrew most of the earlier projects for the publication of Stirling's first volume of complete works, introduced Neo-Classical figures and furniture, with evident inspiration from Karl-Friedrich Schinkel. Finally, critics like Robert Maxwell have tried to embrace both of these last theses in one, holding that Stirling was in his words, a “crypto-classicist,” referring at once to abstract modernism and to historical precedent through the use of fragmentation.

Stirling himself, however, pointed to the strong relations between his developing thought in design and that of Colin Rowe; we only have to note the appearance of Stirling's essay on Garches and Jaoul in 1955, five years after Rowe's own "Mannerism and Modern Architecture," to chart the beginnings of this relationship, first cemented in the School of Architecture at Liverpool. A similar parallel might be traced throughout the 1960s and 70s: Rowe writing on La Tourette; Stirling on Ronchamp. Each had different aims, it is true, but both were enquiring into

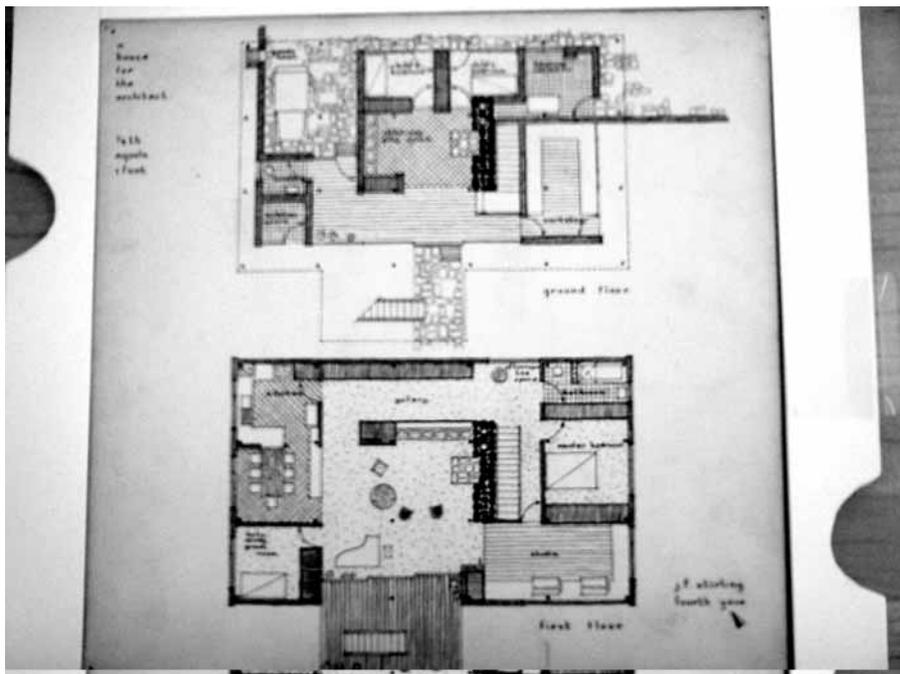
the fate of modernist utopia and its potential redemption.

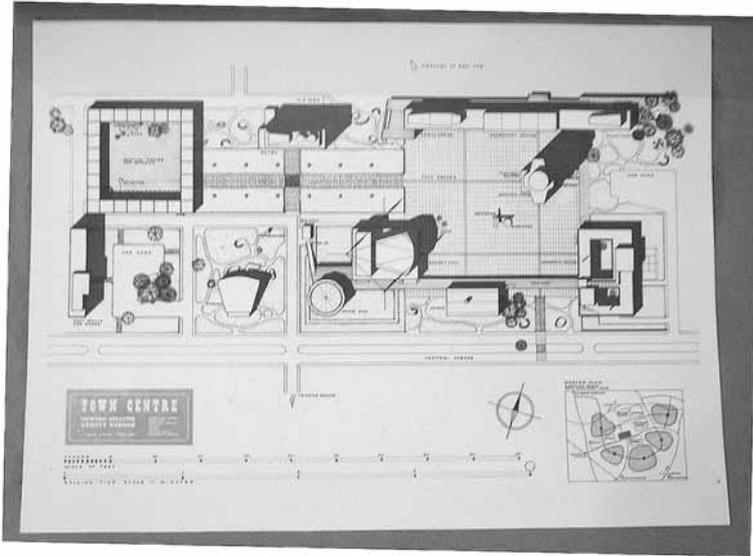
Certainly Stirling's early essays on Le Corbusier's own shift in style from the strict modernism of Garches and Poissy to the post-war work at Ronchamp and the Maisons Jaoul seem to confirm Rowe's "end of Modernism" hypothesis. Le Corbusier's move represented, according to Stirling "the Crisis of Rationalism." Comparing Garches to Jaoul, (that "represent the extremes of his vocabulary: the former, rational, urbane, programmatic, the latter, personal and anti-mechanistic."<sup>clxii</sup> He wrote: "If style is the crystallization of an attitude, then these buildings, may, on examination, reveal something of a philosophical change of attitude on the part of their author."<sup>clxiii</sup> A change that in formal terms could be characterized as from the urban, cubist, Parisian," to the vernacular, Provencal farmhouse." Written at the time of Stirling's own apparent shift from the Corbusian, vernacular of Flats at Ham Common, to the glass and brick expressionism and functionalism of the Leicester laboratories and the Cambridge History Faculty Library, this indicated to his critics that Stirling was entirely self-conscious of his own stylistic moves, and concerned, indeed, with style over substance.

Stirling also follows Rowe in his ingrained attraction to the neo-classic manner – whether that of Schinkel and Gilly, or the rougher, vernacular classicism of the Liverpool Docks that is demonstrated in the photographic documentation for his Fifth Year Design thesis at Liverpool. Further, it seems that the emergence of classical references in the projects for museums beginning with Dusseldorf and Cologne (1975), was not simply due to the influence of Leon Krier but also deeply inflected by the "Collage City" ideas of his former teacher and friend Colin Rowe. Indeed, it seems than Rowe's influence pervades Stirling's work from the outset, as it paralleled Rowe's own changing views of Modernism; from an early espousal of Le Corbusier, to a concern for the fabric of cities undergoing post-War redevelopment. The mingling of abstract

references to neo-classical building types - notably the Rotunda of Schinkel's Berlin Altes Museum "quoted" in the open rotunda of the Staatsgalerie Stuttgart - with motifs from Constructivism and Le Corbusier became a hall-mark of an intensely individual style that balanced brilliantly between tradition and modernity. Colin Rowe himself saw Stirling's mature work as the modern equivalent of the free neo-classicism of Sir John Soane at the beginning of the 19<sup>th</sup> century.

The Fifth Year thesis of 1950 was for the Plan of Town Centre and Development of Community Centre for Newton Aycliffe, in County Durham, prepared for by research in the United States two years before, where he developed the design for "A Community Centre for a Small Town in the Middle West USA."





Figs. 19-20. James Stirling, "House for an Artist," and "Town Centre," 1949-50.

This design, modernist in the style of Breuer, indicated his already developed enthusiasm for Le Corbusier by the sign of the Modulor prominently inscribed on the drawing.<sup>clxiv</sup> The Fifth Year thesis itself concerned the planning of a central zone of community facilities for a new town; one building of which, the community center, was developed in detail.



Fig. 21. James Stirling, Thesis for the Liverpool School of Architecture, Cover, 1950

In his book Stirling documented his research: his reading (in planning and architectural sources) and his travels – to the US, France, and through Britain, in search of an architecture for “community.” He visited the Cité d’Habitation, Marseilles, the Pavillon Suisse, Paris, both by Le Corbusier; Impington Village College, Cambridgeshire by Gropius; the Peter Cooper Union, New York; and closer to homes, the East Wavertree Association, Liverpool. The overall plan evidently takes its inspiration from Le Corbusier’s plan for the Mundaneum of 1929, including the “regulating lines” that proportion the siting of individual buildings. The Community Center, is equally, on the surface, Corbusian, raised up on pilotis. This has been noted by critics, of course, even though they have only known and reproduce a single façade drawing, and the Corbusian influence has been traced to Colin Rowe, newly returned from the War to Liverpool as an instructor, and to Robert Maxwell, a student at the same time. In his text Stirling even developed an aesthetic theory for piloti buildings, under the heading “Aesthetics of Structural Form”:

The natural outcome of placing a building on stilts is to make it hover, that is if the object on the posts has direction horizontal – outwards all round.

To put a box on edge (that is with greater height than breadth) on stilts is to contradict its verticality, this form should plunge into the ground like a spear. To place it on posts is against its direction. Only forms like a slab on its side, a table top, or a lying book, can be placed on posts and hover.<sup>clxv</sup>

Here, Stirling, in words that echo the tone of Colin Rowe, speaks to his decision to place the Community Center on pilotis, in a similar fashion to Le Corbusier at the Pavillon Suisse and Marseilles. This is much clear.

But amid a set of pages on which were glued small photographs of precedents and his own models, one page was missing a photo, one that has been discovered in another folder: it was of the Liverpool Dock buildings, brick neo-classical structures raised up on Doric pilotis, and photographed in a perspective that was exactly similar to that of his own design for the Community Center.

Whether or not the “losing” of this photograph from the thesis book was deliberate, its first inclusion provides a clue to the foundational character of what we might call Stirling’s double allegiance: to modernism on the one hand, but also to the functional roots of modernism, themselves forged out of traditional building modes, whether the Mediterranean of Le Corbusier or the more industrial forms of 19<sup>th</sup> century Britain, and “Classicism” – the “natural” style, so to speak of rational architecture, whether in Le Corbusier’s canon from the Parthenon to the Louvre, or in Loos’s sense of a “Vitruvian” lore. In Stirling’s case, the classical motifs of the British functional tradition, allowed him to join these strands together, sustaining the thoroughly modern character of the thesis while giving it a classical/traditional root. In any event, the photo supports the notion that Stirling was interested in regional and regional-classical architecture from the outset.

In 1955, comparing Garches and Jaoul, Stirling admitted that Jaoul was cozy and artistically brilliant, but for him it lacked the power of Garches, that crystalline statement of modern urban culture. Jaoul was "for the status quo," to be inhabited by any family, urban or rural; Garches, was for a brilliant circle of intellectuals; and, in the less programmatic Jaoul, Stirling felt was absent that utopian inspiration of Garches, that

anticipates and participates in the progress of twentieth-century emancipation. A monument, not to an age which is dead, but to a way of life which has not generally

arrived, and a continuous reminder of the quality to which all architects must aspire if modern architecture is to retain its vitality.<sup>clxvi</sup>

In this context, Stirling might be seen as consistently exploring all the dimensions of modernism, and pressing their implications into service as a source of invention that at once signaled a generalized acceptance of the modern, at the same time as recognizing the traditional “classical” roots of locality – glass houses and docks in Britain, classical museums and historical events in Germany.

Perhaps the most exemplary project demonstrating this complex dance of history and modernity, high classicism and vernacular, was that of the Staatsgalerie, Stuttgart. There, in a tour de force of the “collage” demanded by Rowe’s historicism, Stirling transformed the precedent – the Altes Museum of Schinkel, into a composition that combined a memory – the open ruin of the central “Pantheon” – with a modernity – the brightly colored steel and refractive glass lights, by means of a thoroughly traditional modern device – the promenade architecturale.

clxvii

Stirling’s double adherence to both modernism and traditional classicism was in retrospect not at all opposed to the main thrust of modernism itself as delineated in the 20s and 30s by architects like Le Corbusier and Marcel Breuer. For the Modern Movement as projected by Le Corbusier and others in the twenties, was a double-edged machine. On the one hand, it was committed to a modernism of form, embracing all the techniques of collage, montage and formalism in general in the service of the ideology of the avant-garde, whereby a formal strategy was to be place in the service of a new social order. On the other hand, such a modernism sought a “timeless” relationship with society, based on an abstraction of traditional, non-architectural construction; this was seen to go hand in hand with a universalization of the inherited principles

of classicism minus their representation in the classical orders. Thus, as we have seen, it was not seen as a contradiction that a villa might find its parti in a transformation of a Palladian type, its formal language in the evocation of Mediterranean peasant houses, and its iconography in motifs taken from ships, planes, and cars. And if this double vision between the new and the eternal, modern and classic, technological and traditional was not entirely clear to its protagonists in the 20s (despite the burden of Corbusier's writings in *Vers une architecture*) it was made crystal clear to Stirling's generation, by, among others, the criticism of Rowe – in the essays on “The Mathematics of the Ideal Villa” and “Mannerism and Modern Architecture” – and by the interest in local versions of the classical and functional traditions espoused by Pevsner and his colleagues in the immediate post-War issues of the *Architectural Review*.

## Chapter 5. Futurist Modernism: Banham

### *Modern Picturesque*

The influence of *The Architectural Review* on contemporary British architecture after Pevsner joined the editorial staff in 1941 can hardly be overemphasized as it attempted to promulgate a championship of modernism (hardly yet ensconced firmly in the British context) and a belief in the vernacular roots of authentic architecture. Pevsner, with considerable aplomb was able to transfer his faith in the German *Zeitgeist* to England, and adroitly managed to combine a historical interest in the unsung Victorian, the vernacular, the "Townscape" affinities of his fellow editors, and the functionalist modern. These concerns were welded together by what he saw as the fundamental genius of the English for the Picturesque, and, more importantly, the influence of the Picturesque on modern architecture itself.

He outlined these propositions in a sharp rebuttal of a radio talk by Basil Taylor that had accused *The Architectural Review* in particular of sponsoring a "picturesque revival." Pevsner argued that not only was Taylor wrong in his interpretation of the Picturesque as a movement, but that a significant heritage of the Picturesque could be found in the compositional practices of the Modern Movement.<sup>clxviii</sup> Against Taylor's attribution of characteristics such as "accidental" and "disorderly" Pevsner posed what he called the Picturesque's own terms, "varied" and "irregular," and claimed that it was precisely these that lay at the basis of modernism's success. He gave as examples, Gropius's Bauhaus building at Dessau, Le Corbusier's Stuttgart houses and the same architect's Centrosoyus project for Moscow. For Pevsner their aesthetic qualities include not only "cubic shapes, no moldings, large openings and so on," but more importantly, "the free grouping of the individual building, a mixture of materials, synthetic, natural, rough and

smooth, and, beyond that, the free planning of the whole quarter."<sup>clxix</sup> It was these qualities, Pevsner concludes, that differentiate modernism's "free exercise of the imagination stimulated by function and technique," from the "academic rule of thumb" the "straight-jacket of which had been discarded by the modern movement. For Pevsner, as for Hitchcock fifteen years earlier, "the modern revolution of the early twentieth century and the Picturesque revolution of a hundred years before had all their fundamentals in common."<sup>clxx</sup>

Taylor's talks, of course, had been aimed partially at the ubiquitous movement named "Townscape," sponsored by *The Architectural Review*, and heartily disliked by the modernist wing of British architects. Pevsner's idea of a "picturesque modernism," evoked a gruff reply from the Rowe circle in the form of a letter from Alan Colquhoun. Colquhoun followed Rowe in distinguishing between the eclecticism of Historicism, "closely connected" with the Picturesque, and the search for "the secret of 'Style' itself," proper to the Modern Movement.<sup>clxxi</sup> The Picturesque, for Colquhoun, while influencing modern practice, had to be characterized in its historical context -- distinguishing, for example, between the apparent "picturesque" of a Palladio, an Edwin Lutyens, and a Le Corbusier. "All three may be equally successful from the standpoint of the Picturesque, yet, clearly, each has a content which escapes definition in those terms."<sup>clxxii</sup> Central to Colquhoun's argument was that any picturesque qualities, such as free grouping and mixture of materials, were "meaningless" without others that offer a contrast such as visual hierarchy, reflecting functional hierarchy. The distinction, he claimed, was between purely visual qualities, espoused by Pevsner, and those that derive equally from didactic and mental constructs as maintained by Rowe.

Pevsner's reply to Colquhoun, asserting that he was only, and in a bounded way, speaking of the aesthetic, rather than the functional aspects of architecture, follows on from his earlier

critical essays written for the *Review* under the pseudonym of Peter F.R. Donner in the early 1940s. These pieces were, as the colophon stated, "frankly about the aesthetic aspect of architectural design," in the belief that modern architecture's functional basis in efficiency could now be taken for granted. The first of these pieces was a direct attack on Frank Lloyd Wright's recently published lectures at the RIBA, under the title *An Organic Architecture*, and especially on Wright's opposed categories of "Organic" versus "Classic." Against this, for Pevsner an entirely fallacious distinction, "Donner" prefers Dynamic and Static, "a more precise, more arguable and more architectural polarity ... of real heuristic value in analyzing new as well as old building."<sup>clxxiii</sup> His examples were both historical -- the symmetrical 17th century Fenton House, Hampstead versus the traditional Cotswold house -- and modern -- J. Frank's Stuttgart house as against Maxwell Fry's House at Kingston. Preferring "static" to symmetrical or classical, and dynamic to organic, allowed Pevsner to discriminate among varieties of these compositional qualities; but what annoyed him most about Wright's summary disposal of the classic was the inference that symmetry was equivalent to military order, "heels together, eyes front, something on the right, and something on the left."<sup>clxxiv</sup> To the exiled German in 1941, this represented somewhat of a provocation -- the equivalent, as Pevsner put it, of posing the "lounge chair" against the "goose step." After all, as he concluded, Fenton House, with its calm symmetry, could never be mistaken for a militaristic composition, for it had been built by his hosts, the English, that "balanced, quiet, self-certain race which has conceived, and chosen to live in, such houses, the only race that looks equally at ease in flannels and in white tie." It was Pevsner's hope that such balance might be evolved once more -- "Balanced shapes in domestic architecture, shapes to look both homely (*sit venia verbo*) and formal, neither slovenly in their homeliness, nor Prussian in their formal reserve."<sup>clxxv</sup>

Such a call for "balance" indicates that Pevsner's aim was directed less at Frank Lloyd Wright, who merely served as a convenient target, but the English modern movement itself, represented in this essay by Maxwell Fry. Here Pevsner was showing his continued reluctance to relinquish his support of the Gropius wing of modernism, one clearly demonstrated by *Pioneers*, and now displayed by his eulogy of Frank's Stuttgart house. For where Fry demonstrated an "alert tension," and a "complex pattern," in his asymmetries, Frank displayed a repose, a firmness, "and a deeply satisfying finality." His was the *juste milieu* of the "liberal, wise, gentle yet composed spirit," against the "single-minded concentration" of Fry, "not a manifesto ... not self-asserting." By implication and in contrast, Fry and the English modernists presented a rather "strained countenance," some "haste in the rhythm" of their fenestration, and left "loose ends" in their compositions. No doubt it was their adherence to the formal principles of Le Corbusier that led them to such anxious flights, for, as Pevsner noted, the rhythm of Le Corbusier was "far more pointed ... that of the dancer seemingly independent of the weight of matter," while Gropius was that of "an accomplished machine."

This implicit attack on Corbusian influences was transformed into a direct confrontation in a second article, again written under the Donner pseudonym, in October of the same year.<sup>clxxvi</sup> Here, Pevsner takes on Kaufmann, and explicitly his *Von Ledoux bis Le Corbusier*, as a way of exposing the "absurdity" of pure formalism, of *l'architecture pure*, as it was juxtaposed against the equally specious myth of the *machine à habiter*. Ledoux and Le Corbusier, conveniently brought together by Kaufmann, remain for Pevsner the ultimate examples of an impossible and "inconceivable" condition -- that of "Architecture for Art's sake, architecture as a pure abstract art."<sup>clxxvii</sup> Pevsner illustrates three of Ledoux's designs, a gate-house of "surprisingly modern appearance," the spherical house for the field-guard, and the pyramidal log hut of the woodman

as examples of his extreme "abstract formalism." These "abstract cubic values," Pevsner notes, following Kaufmann, confirm the Romantic principle of "the independence and sacredness of the individual," as "each block is severed from the ground, severed from its neighbors, and severed from use." Architecture has here "become an abstract art," with "nothing left of functional soundness." Indeed, Pevsner/Donner writes with withering bourgeois practicality, "it is unnecessary to point out that the shapes of the rooms in the spherical house are sheer lunacy from the practical point of view. No furniture can stand against its walls. Curved windows are prohibitively expensive. A curved door would prove a perplexing problem to joiner and builder."<sup>clxxviii</sup>

Such a characterization of what Ledoux himself termed *architecture puriste* is then applied to Le Corbusier, who in shifting the argument from one of volume to one of space, has transformed what in Ledoux "strike one as barren," into "fascinating and inspiring" explorations -- "even in his most alarming spatial performances." Pevsner admits to respect for Corbusier's "never-failing power of imagination" and "lucid and quick intellect," and describes the open plan of the house for the Stuttgart Weissenhofsiedlung Exhibition of 1927, as possessing a "generous unity of atmosphere .. combined with the most intriguing, most enchanting, variety of vistas in all directions" -- the essence of the Picturesque. Against this, however, is raised the same pedestrian critique -- one that he no doubt felt would amuse and satisfy his English readers:

Is the Stuttgart house less remote from the realities of life ... than Ledoux's spherical house? Might it not disturb the happiness of the Brown *ménage* if Mrs. Brown wants to go to bed at ten behind her low screen, the while Mr. Brown wishes to work on and smoke his pipe until 1.30? Or if Mrs. Brown has her bridge party when Mr. Brown comes home for business and goes straight to have a cold bath behind his screen" Some people

like to sing in their baths. He cannot. He cannot even splash freely. And if one of them falls ill, will it not paralyze the whole house?<sup>clxxix</sup>

The faintly ridiculous image of a middle-class English couple attempting to adapt their lifestyle to a Corbusian house succeeds with dead-pan effect. For Pevsner, as he ironically expresses it in conclusion, there remains an inexplicable contradiction between "Le Corbusier the spatial creator and Le Corbusier the writer who invented the widely used and nearly always misused theory of the *machine à habiter*."

In these two articles, and already in 1941, is laid that strange mixing of Picturesque visual criteria and a critique of functional pretense that will so energize Banham in his embracing of the Smithson's Hunstanton School as an exemplar of the New Brutalism, in Banham's terms precisely formed of these two, apparently discordant characteristics.

#### *Futurism Redux*

The Futurist city is back on many drawing boards, begins to be realized here and there.

Reyner Banham, 1957.<sup>clxxx</sup>

Reyner Banham, who chronicled the immersion of his contemporaries into the Palladian past, and who counted Rowe within his London circle, was nevertheless from the outset bound to another history, one that he would characterize later as that, not of the past, but of the "immediate future." His affiliation with the Independent Group, his early forays into the world of pop culture and science-fiction, and most of all, his work towards a PhD under the mentorship of Nikolaus Pevsner, persuaded him that of all possible worlds, the present had little to do with the Mannerist or neo-classic past. Rather, in the effort to fill in the historical "gap" left where Pevsner had concluded *Pioneers of the Modern Movement*, he became convinced, not only that the Modernists had been betrayed in their vision of a machine-age future by their adherence to

the remains of academic culture, but more importantly, that a proper history of the period would unearth those real movers and shakers whose understanding of technology and its promise had been unclouded by sentiment or tradition, those left out of the traditional histories of the Modern Movement. First in line were the Futurists, on whom Banham delivered a lecture at the RIBA in January, 1957.

Tracing the meager attention paid to his heroes in previous scholarship -- a footnote in Pevsner, a half-dozen paragraphs in Giedion's revised *Space, Time and Architecture* of 1953 -- he proclaimed that as a result of his work, "this tidy and apparently settled situation has blown apart like an art-historical time-bomb."<sup>clxxxi</sup> Flourishing Sant'Elia's *Messaggio*, and collating it with Marinetti's *Manifesto*, Banham proceeded to reinstate Futurism, not simply as one among the many avant-garde movements in the 1900s, but a major force, if not the major influence on the ideology of modernism. His aim was to join Sant'Elia to the Futurists once and for all, and to demonstrate the power of the architectural images of *La Città Nuova* (1914) as against, for example, the more academic, and less far-sighted, project for Tony Garnier's *Cité Industrielle*. For Banham the functionalist modernist, the evocation of the mechanical sensibility by Marinetti and its translation into images by Sant'Elia represented the real roots of a vision never to be realized by the modernists. But it was, he believed a vision, not of a merely symbolic order, as was that of Le Corbusier, but rather of an order of technological understanding by those who knew the interiors of the racing cars they drove. Out of this vision came not only Le Corbusier's *Ville Contemporaine*, but the imaginary cities of the Russian Constructivists, as well as the projects of Mart Stam, and, more recently, those multi-level, densely packed plans for center city renewal from the Barbican to New York. Banham's "time-bomb" concluded with a sly, back-handed homage to Nikolaus Pevsner in the conclusion of whose *Pioneers* he detected a

truly Futurist accent -- a book which "though it can find only footnote-room for Futurism as such, is nevertheless sparked and spirited throughout by the Futurist inspiration that has bitten deep into the subconscious of Modern Architecture."<sup>clxxxii</sup> In this way was launched the enthusiastic search for another architecture, that, in the conclusion to his own tribute to Pevsner, *Theory and Design in the First Machine Age* will find its post-Futurist hero in Buckminster Fuller.

*Historicism vs. Functionalism*

A revolt was bound to come against the formal rigidity and the uniformity of the '30s. However it is not odd and strange exterior effects which are the answer; the answer lies in planning, in siting, in landscaping, and so on. The individual building must remain rational. If you keep your buildings square, you are not therefore necessarily a square.

Nikolaus Pevsner, 1961.<sup>clxxxiii</sup>

It was in 1961, that Nikolaus Pevsner, one of the first historians, as Reyner Banham noted, to invent the idea of the "Modern Movement," sounded an alarm that has resonated ever since in the historical profession. In a now celebrated talk at the Royal Institute of British Architects (April 1961), Pevsner registered his unease at the changing role of history and the historian for contemporary practice.<sup>clxxxiv</sup> Where in the modern period, history and architecture were finally separated from collusion, he noted, now they seemed joined again as architects searched for precedents that looked for all the world like a return of historical styles into architecture; but, of course, not the Gothic or the Classic this time, as much as modern styles themselves -- "neo" versions of modernisms in Italy's neo-liberty style, in the work of Philip Johnson, in the neo-expressionism of Le Corbusier's Ronchamp. He added neo Art Nouveau, neo de Stijl, neo School of Amsterdam, and neo Perret" all of which he saw undermined the

fundamental principles of the Modern Movement: From the ethical injunction “form follows function” where the exterior is entirely transparent to the interior, with nothing that does not arise naturally from it, to the new tendency towards exteriors that were created, not necessarily against function, but in a way that as he said, “does not convey a sense of confidence in their well-functioning.”<sup>clxxxv</sup>

Pevsner’s conclusion was a striking admission of the self-hating historian: “Could you not say that the Return of Historicism is all our fault, and I mean myself, personally: (a) *qua Architectural Review* and (b) *qua* historian?”<sup>clxxxvi</sup> He thus blamed himself for the very effect of “the historian as such, and perhaps I should say, my own pitiable position in particular,” through his own book “on the Pioneers of the Modern Movement” of 1936, and his successive articles in the *Architectural Review* which were, he thought, “certainly misunderstood by many as an encouragement to the new historicism.”<sup>clxxxvii</sup>

For Pevsner, historicism signified “the trend to believe in the power of history to such a degree as to choke original action and replace it by action which is inspired by period precedent.”<sup>clxxxviii</sup> Pevsner was here using the word “historicism” in a way that associated it with a generalized and relativistic stylistic eclecticism. But this was only one, and perhaps the latest, of the connotations of a word that had been equally applied to a theory of historical method developed by the German school, and thence to a sense of historical determinism. Thus, Pevsner’s contemporary, the philosopher Karl Popper, saw in historicism a teleological view of history that had, for him, totalitarian implications. Popper was, of course, referring to those idealizing schemes of historical development that, following Hegel, saw history as some giant, impersonal force, replacing God, Providence, or worse, the individual, as the implacable agent of human destiny. Pevsner, however, was using the word in an entirely different sense, simply to

denote a resurgence of historical quotation of the sort that Modernism had tried to ward off once and for all by a combination of abstraction and the machine aesthetic. "Historicism," for Popper, represented a "poverty" of theory and a fascism in practice, that both flattened and constrained human existence; for Pevsner it signaled, paradoxically enough, a lack of "authenticity" of a style to the age, a betrayal of the manifest conditions of modernity as espoused by the Modern Movement.



Fig. 22. Reyner Banham, Nikolaus Pevsner, John Summerson at the RIBA, 1961.

Banham, whose ground breaking *Theory and Design in the First Machine Age* had just the year before been published as the book version of his PhD Thesis written under Pevsner, was a member of the audience that night, and offered an entirely differing, and more optimistic view. Banham who done his master the compliment of finishing the history of the Modern Movement where Pevsner had left off in his own *Pioneers of Modern Design*, while understanding the complaint, and indeed, shouldering some responsibility for having reintroduced historical

Modernism to the new generation, was loth to give up on his own double-barreled stance as, as he called himself in neo-Futurist tones, a *combattero*, staunchly defending the role of the critic and historian and perhaps even that of the critic/historian, if not that of the critical historian.<sup>clxxxix</sup> He opined that far from being a regression, the New Historicism, in so far as it looked to “strong” examples like Mies and Corb, was a sign of revolt against the mediocre accommodation of Scandinavian modern, and the British picturesque. “I suppose you can lock the cupboard and say ‘You must not have any more history, it is not good for you,’ or you can add water until the stuff is indistinguishable from anything they get elsewhere.” the responsibility “lies not ... with the historian but with the practicing architect or designer who is also a teacher: he must provoke stronger leadership than the historian can.”<sup>cxc</sup>

He outlined this kind of approach in the early 1960s, in a talk that, interestingly enough, followed Pevsner’s diatribe over historicism at the RIBA. In a sense it was the student’s response to the master; in another sense it was a map of Banham’s own future interests. He entitled the talk, “The History of the Immediate Future,” and opened boldly enough with the ringing statement: “History is our only guide to the future.”<sup>cxc<sup>i</sup></sup> This was, he cautioned not because history always repeats itself, but that it was, in so far as it was a social science, an extrapolative discipline. As a science would plot its experimental results in a graph, that would, if extended act as a guide to future behaviors, so “History is to the future as the observed results of an experiment are to the plotted graph.”<sup>cxc<sup>ii</sup></sup> The historian then had the task of plotting a curve from certainty toward where it will lead.” Banham then traced the major trends in architectural thought since World War II, operating on the assumption that “trends in architecture follow the strongest available influence that can fill the vacuum of architectural theory. History filled the gap in the early 50s, imitating Corb took over for some after that, others turned to Detroit styling

and appliance affluence, others again have gone to science-fiction, or to its historicist shadow, and at all times, of course, engineering has been a potent source of vacuum-fillers.”<sup>cxiii</sup>

Now, in the 1960s, he concluded, it was the Human Sciences that had emerged as the strongest forces: first the social studies and environmental studies of the 50s, then the perception studies of the late 50s; and then, logically moving from outside to inside, to the study of “how the human being works inside”; stimulus, involuntary response, neural and cerebral activity -- organism and the environment. In this regard, it was the New Biology, in line to overhaul Physics and the entire study of man, that was poised to act directly on architecture. He cited, interestingly enough, in the light of our own more recent experiences in bio-engineering, the work of Peter Medawar and MacFarlane Burnet who had won the Nobel Prize the year before for their work in immunological reaction -- the extreme disturbance of organism/environment -- and the theory of Clonal Selection. The pair had studied the irregularities in the fleeces of hundreds of thousands of Australian sheep, working out the theory of cloning that would eventually produce Dolly in our own time, tracing fleece mosaics to somatic mutations caused by cell reproduction damage.

Banham’s conclusion: “Either British and world architects will join the intellectual adventure of Human Science and transform architecture, or it will fail to make the imaginative leap, and turn introspective again.”<sup>cxiv</sup> His one codicil, interesting enough from a non-architect who purported to be ready to ditch architecture if it became an unnecessary burden on environmental design, was aesthetic: “the Human Sciences will not become architecture unless a means can be found to express them as surely as the forms of the International Style expressed the mechanistic inspiration of its Masters in the 1920s.”<sup>cxv</sup>

*Programmatic Modernism*<sup>cxvii</sup>

Reyner Banham once remarked on the fact that the history of a period does not always neatly coincide with the calendar. “For architectural purposes,” he observed, looking back from the vantage point of 1960, mid-century architecture – that of the Festival of Britain around 1950 – seemed less of a break with the past of modernism than that occurring later in the decade – after the building of Ronchamp, and closer to 1957.<sup>cxvii</sup> Indeed, as he pointed out, Summerson in his celebrated article of that year “The Case for a Theory of Modern Architecture,” described what he called a “Thirty-Year Rule” that measured changes in architectural taste and duly proposed 1957 as “a year of architectural crisis.” The “great divide” that both Banham and Summerson detected in the late Fifties, despite their squabbles over its architectural manifestation, was that between a Modern Movement, universalized through the activities of CIAM, and founded on the “mythology of Form and Function,” and a new, freer, style which, as Banham noted, was characterized not so much by the often claimed “end of functionalism,” but more the death of the slogan “Functionalism with a capital F, and its accompanying delusion that curved forms were the work of untrammelled fancy.” Against this “untrammelled fancy” that Nikolaus Pevsner was soon to characterize as a “New Historicism,” both Banham and Summerson were to propose alternatives based on what each thought of as the radical re-thinking of functionalism, one no longer in the largely symbolic guise espoused by the Modern Movement, but one based on “real” science. Banham, in search of what he called “une autre architecture” turned to the authority of military and corporate engineers, biological researchers, and social scientists; Summerson outlined a new concept of the program as the foundation of a “theory of modern architecture.”

The Modern Movement, as defined by its historians -- Pevsner, Giedion, Hitchcock, and then Banham, had been understood as fundamentally “functionalist” in character. The nature of this functionalism differed from historian to historian, but its rule over modern architecture seemed supreme -- it was a way of ignoring the formal and stylistic differences of the various avant-gardes, in order to provide a unifying alibi, or defining foundation so to speak for architectural modernity. It was from this Functionalist position that Pevsner, writing under the pseudonym Donner in the *Architectural Review* in the early 40s criticized Le Corbusier (formalist) and praised Walter Gropius (functionalist), and later excoriated the return of “styles” characterized as a New Historicism; it was from this position too, that the first generation of Modern Masters was criticized by Team X among others, as not being sufficiently broad or humanist in its functionalism. It was under this sign that John Summerson, writing in the *RIBA Journal* in 1957, constructed his “case for a theory of modern architecture.”<sup>cxcviii</sup> And of course it was under this sign that Archigram itself was to be denounced by these historians and architects - - by Giedion in the 1967 edition of *Space Time and Architecture*, and by the Smithsons in their *Without Rhetoric* of 1973.

Summerson rejected the idea of building up a theory of modern architecture based on the *existence* of modern buildings: to abstract formal characteristics from a select repertory of modern buildings, provide a grammar of form and then to illustrate how the forms embody the ideas, would, he claimed, only “add up to something like a Palladio of modern architecture, a pedagogical reference book” that would end up as a “hopelessly gimcrack” rag-bag of aphorisms, platitudes, and fancy jargon.” Rather a “theory” of architecture would be “a statement of related ideas resting on a philosophical conception of the nature of architecture,” that he found in the statement of a group of Mediterranean beliefs about reason and antiquity,

stated by Alberti, re-formulated in the age of Descartes, rewritten in Perrault's critique of Vitruvius, then again by Laugier, Durand, Viollet le Duc, Pugin, Berlage, Horta, Perret, and Le Corbusier:

Perrault said antiquity is the thing and look how rational; Lodoli seems to have said up with *primitive* antiquity, only source of the rational; Durand said down with Laugier, rationalization means economics; Pugin said down with antiquity, up with the Gothic, and look how rational; Viollet-le-Duc said up with Gothic, prototype of the rational. Eventually a voice is heard saying down with all the styles and if it's rationalism you want, up with grain elevators and look, how beautiful!<sup>cxix</sup>

Against this rational tradition, however, Summerson saw a new version of authority superceding the classical – that of the “the biological” as advanced by Moholy Nagy. As Moholy stated, “architecture will be brought to its fullest realization only when the deepest knowledge of human life as a total phenomenon in the biological whole is available.”<sup>cc</sup> For Moholy, notes Summerson, the biological was psychophysical -- a demanding theory of design matching a broad idea of function that called for “the most far-reaching implications of cybernetics” to be realized ... if the artist's functions were at last to be explicable in mechanistic terms.”<sup>cci</sup>

In this argument, Summerson traced the idea of the classical, the rational, and the organic, to its modern conception, a trajectory which moved “From the antique (a world of form) to the program (a local fragment of social pattern).” Hence Summerson's celebrated conclusion that “The source of unity in modern architecture is in the social sphere, in other words, the architect's program. -- the one new principle involved in modern architecture.”<sup>ccii</sup>

In his terms, a program “is the description of the spatial dimensions, spatial relationships, and other physical conditions required for the convenient performance of specific functions,” all

involving a “process in time” a rhythmically repetitive pattern that sanctions different relationships than those sanctified by the static, classical tradition.”<sup>cciii</sup> The problem he identified, as with a naive functionalism, was the need for a way to translate such programmatic ideas into appropriate form -- a problem to which Summerson offers no direct answer. Dismissing Banham’s 1955 appeal to topology in his essay on the New Brutalism, as “an attractive red herring (I think it’s a herring),” Summerson was not a little dismayed at the “unfamiliar and complex forms [that] are cropping up” in practice around him through the extension of the engineer’s role.<sup>cciv</sup>

Indeed his conclusion was pessimistic; sensing the incompatibility of a theory that holds two equal and opposite overriding principles, he concluded that any theory that posits program as the only principle leads either to “intellectual contrivances,” or to the unknown: “the missing language will remain missing” and our discomfort in the face of this loss would soon be simply a “scar left in the mind by the violent swing which has taken place”.<sup>ccv</sup>

Banham, writing three years later was more optimistic. While he sided with Summerson in deploring the style-mongering of the 1950s – “it has been a period when an enterprising manufacturer could have put out a do-it-yourself pundit kit in which the aspiring theorist had only to fill in the blank in the phrase *The New (...)ism* and set up in business” – he found that “most of the blanket theories that have been launched have proven fallible, and partly because most labels have concentrated on the purely formal side of what has been built and projected, and failed to take into account the fact that nearly all the new trends rely heavily on engineers or technicians of genius (or nearly so).” He proposed that what was needed was “a new and equally compelling slogan,” and suggested some of his own: “Anticipatory Design,” “Une

Architecture Autre,” “All-in Package Design Service,” and, perhaps even “A More Crumbly Aesthetic.”<sup>ccvi</sup>

It was to ask this question, as well as implicitly to answer it on behalf of a new architecture, that Banham introduced a series of enquiries under the title “Architecture after 1960” that he had initiated for *The Architectural Review*.<sup>ccvii</sup> Articles by scientists from English Electric, IBM (United Kingdom), The Nuffield Foundation, were balanced by Banham’s own pieces on “Stocktaking,” and “History Under Revision,” debated by architects, and questioned by the editors of the *Review*, all with notes, comments, side bars, and interpolated remarks by Banham.

Banham, as he made clear at the outset, was also replying to his immediate rival in historical criticism, John Summerson, who had, as we have seen, proposed that the only authentic source of unity in modern architecture, that could be seen to underlie the diverse languages of the avant-gardes, would be found in the program. And it was precisely this issue of the program, and how it could be framed, that interested Banham. For unlike Summerson, who expressed skepticism that any revision of the form-function dichotomy endemic to modernism could be overcome, Banham felt that with the correct inputs – from science, technology, sociology, and the like – the program might be made pivotal once more. Further, again unlike Summerson, who had concluded that there was no possibility of finding an architectural language to express any new programmatic aims, Banham advanced his theory of the image, joined to a hope that aesthetics might be once and for all subjected to science, as a way of subsuming all relationships, including “form and function,” within a broadly defined view of a new theory of the program. As he wrote of the Smithsons’ School at Hunstanton, “this is not

merely a surface aesthetic of untrimmed edges and exposed surfaces, but a radical philosophy reaching back to the first conception of the building.”<sup>ccviii</sup>

Thus the articles Banham commissioned, under the title “The Science Side: Weapons Systems, Computers, Human Science,” were the first step in setting out a new theory of modern architecture based on knowledge, rather than architectural precedent, modernist or traditional.<sup>ccix</sup>

Banham wrote:

***Tradition** means, not monumental Queen Anne, but the stock of general knowledge (including general scientific knowledge) which specialists assume as the ground of present practice and future progress. **Technology** represents its converse, the method of exploring, by means of the instrument of science, **a potential** which may at any moment make nonsense of all existing general knowledge, and so of the ideas founded on it, even ‘basic’ ideas like **house, city, building**. Philosophically it could be argued that all ideas, traditional or otherwise, are contemporaneous, since they have to be invented anew for each individual, but the practical issue is not thereby invalidated. For the first time in history, the world of **what is** is suddenly torn by the discovery of **what could be**, is no longer dependent on **what was**.*<sup>ccx</sup>

Towards this end, A.C. Brothers outlined the approach to weapons systems developed by English Electric, M.E. Drummond of IBM sketched the emerging fields of operations research, systems simulations, linear programming, and queuing theory, and the future head of the Bartlett School of Architecture, Richard Llewelyn-Davies wrote of the potential to mathematicize social activities. All this meant, to Banham, that finally the gap between the unquantifiable and the quantifiable was narrowed so that all aspects of the architectural program might be assigned mathematical values. Banham himself backed up this theory, by the parallel comparison of

architectural tradition and technological “progress” in two side-by-side columns (tradition lost the race), and by taking on the problematic question of the historical languages of modernism, in his “History and Psychiatry” where he took to task Nikolaus Pevsner, his PhD advisor, for having ignored the crucial period, 1914-1930. And he was hardly moved by Pevsner’s sharp riposte that “you can have ‘non-architecture’ that way before you know where you are.” Aesthetics, for Banham in 1960, was an open question, to be solved by the ever expanding domain of the program, including the quantification of experience and visual cognition.

Printed on bright yellow paper with red accents and bold typography, these articles were kicked off by his own, now celebrated article “Stocktaking,” with its parallel discussion of “Tradition” and “Design” and its obvious design-friendly conclusion, and followed by a group of essays on “The Science Side,” by experts on weapons systems, computers, and the human sciences; the series continued with a symposium of architects chaired by Banham on “The Future of Universal Man,” that paradigm of the traditional architectural subject; and concluded with Banham’s double bill on “History under Revision,” a combined questionnaire on “Masterpieces of the Modern Movement,” and a personal exorcism of his own teacher Nikolaus Pevsner, “History and Psychoanalysis,” where the master was put on the couch by the pupil. And just to demonstrate fairness, Banham allowed the old guard back to reply, still on yellow paper in a dyspeptic sequence of observations by the editors of *AR*: J.M Richards, Hugh Casson, H. de Hastings, and, of course, Nikolaus Pevsner. Banham, needless to say, had the last word, adding side-bar notes where he disagreed with the editors, and a final note. His message throughout the series was clear: “Functionalism with a capital ‘F’” was dead, long live functionalism, with a small “f” and a basis in real science.

While, however, Banham was clearly in favor of borrowing from technology in widespread fields – rocketry, as described by A.C. Brothers of English Electric for example offered a lesson in “total planning and teamwork” – he was as suspicious of the contemporary architectural fetishism of technology as he was of the Modern Movement’s mystique.<sup>ccxi</sup>

“Throughout the present century,” he wrote, “architects have made fetishes of technological and scientific *concepts out of context* and been disappointed by them when they developed according to the processes of technological development, not according to the hopes of architects.” And he concluded, with self-conscious irony against his own enthusiasms, “a generation ago, it was ‘The Machine’ that let architects down – tomorrow or the day after it will be ‘The Computer,’ or Cybernetics or Topology.”<sup>ccxii</sup> Electronic computing likewise, as he responded to the summary contributed by R.B. Drummond of IBM, “can stand as an example of a topic on which the profession as a whole has been eager to gulp down visionary general articles of a philosophical nature, without scrutinizing either this useful tool, or their own *mathematical needs* to see just how far computers and architecture have anything to say to one another.”<sup>ccxiii</sup> He gave the example of Eames, who in 1959 had spoken at the RIBA on the “mental techniques associated with computers” important for architecture; Banham calls for a more analytical approach, examining how computers might be used, and “how far.”

Dutifully Drummond outlined the contributions that computing might make to aspects of architectural planning in four areas: Operations research, Systems simulation, Linear programming, and Queueing theory. But, he cautioned, computers could add little to the aesthetic appearance of a building: “They deal in cold hard facts. They have no aesthetic sense whatsoever. Furthermore, they have no imagination. So, although I feel they may be used as aids to architecture, it is still for the human being to create that which is beautiful.”<sup>ccxiv</sup> Banham,

however, disputed this traditional separation between “mathematics” and “art,” as simply replicating the old form/function divide, pointing out “not only that mathematics is part of the traditional equipment of the architect, but that aesthetics and other aspects of human psychology are no longer mysteries necessarily to be set up against ‘cold hard facts.’”<sup>ccxv</sup> Further, the article by the future Professor of Architecture at the Bartlett School (and his own future boss), Richard Llewelyn-Davies of The Nuffield Foundation had opened the way to the analysis of supposedly “soft” social and psychological facts: “*Psychological matters* can be assigned *numerical values* – and statistical techniques make it increasingly feasible to quantify them – they become susceptible to mathematical manipulation .... An increasing proportion of the most jealously-guarded ‘professional secrets’ of architecture are already quantifiable.”<sup>ccxvi</sup> In a later response to Pevsner’s irritation that, throughout the series, “No architect really stood up to say that he is concerned with visual values (i.e. aesthetics) and that, if a building fails visually, we are not interested in it,”<sup>ccxvii</sup> Banham tartly responded to his former teacher: “No architect stood up to say that he was concerned with visual values because visual values are only one of six (ten? Fifty?) equally important values of design.” To Pevsner’s fear that “You can have ‘non-architecture’ that way before you know where you are,” Banham rehearsed his notion of a “scientific aesthetic.” Admitting that “Certainly a *fully* scientific aesthetic is impossible now – but it is a thousand-per-cent more possible than it was thirty years ago,” he explained “By a scientific aesthetic, I meant on that uses, as the basis and guide to design, observations (made according to the normal laws of scientific evidence) of the actual effect of certain colours, forms, symbols, spaces, lighting levels, acoustic qualities, textures, perspective effects (in isolation or in total ‘gestalts’) on human viewers.”<sup>ccxviii</sup> In sum, the 1960s series implied what would be the radical conclusion to Banham’s first book, *Theories and Design* published in the same year: “It

may well be that what we have hitherto understood as architecture, and what we are beginning to understand of technology are incompatible disciplines.”(329).

This emergence of a new sensibility to the architectural program considered in its broadest terms, recalls the optimism of Reyner Banham and John Summerson in the late 1950s that a closer attention to science – whether of perception, information, or technology – would in the end lead to a fundamental reconception of Modern Movement functionalism, not in order to free architecture from observance of function, but rather to cast functionalism in a vastly expanded field, that included, from Banham’s point of view, topology, perception, biology, genetics, information theory, and technology of all kinds.

*"Une autre architecture"*

Banham had spoken on “clip-on components” for the pre-fabricated service rooms of a house in his 1960 “Stocktaking,” but it was not until five years later that he developed a complete theory of “clip-on architecture,” in an article for *Design Quarterly*, reprinted in the same year as an introduction to the special issue of *Architectural Design* largely devoted to the Archigram Group.<sup>ccxix</sup> Here he traced the genealogy of “clip-on,” from the idea of “endlessness” with regard to standardization, and, according to Llewelyn Davies, from Mies, through to the notion of a “cell with services,” introduced by the Smithsons in their plastic House of the Future of 1955, by Ionel Schein in France, and by Monsanto in the US. The conception of the house as a mass produced-product, mass-marketed like a Detroit car, but put together with pre-fabricated components had inspired Banham to outline an unpublished article in the late 50s on “Clip-on Philosophy” in 1961. And Cedric Price’s Fun Palace, conceived by Joan Littlewood, and conceived by Price as a “giant neo-futurist machine,” ran very close to the programmatic revolution for which he was calling in 1960; a giant “Anti-building” seen as a “zone of total

probability, in which the possibility of participating in practically everything could be caused to exist. Three years later, Archigram had reversed the idea of clip-on by adopting that of “plug-in” but Banham was ready to fold this in to his theory: “too much should not be made of this distinction between extreme forms of the two concepts: technically they are often intimately confused in the same project, and the aesthetic tradition overruns niceties of mechanical discrimination.” In returning here to an “aesthetic tradition,” Banham revealed his real agenda with regard to “une autre architecture:” his call for an architecture that technologically overcame all previous architectures, to possess an expressive form. Against the way in which the “architecture of the establishment” had adopted prefabrication -- “the picturesque prefabrication techniques of the tile-hung schools of the CLASP system,” (a prefabricated system for school-building adopted by a consortium of local authorities in the 1960s), he was equally opposed to the theories of “cyberneticists and O and R men” who predicted that “a computerized city might look like anything or nothing.” For this reason he was enthusiastic over Archigram’s Plug-in City, because, as he wrote, “most of us want [a computerized city] to look like *something*, we don’t want form to follow function into oblivion.”<sup>ccxx</sup>

For Banham, Archigram’s projects – as he characterized them as Zoom City, Computer City, Off-the-Peg City, Completely Expendable City, and Plug-in City – were important as much for the technology on which they were predicated as for their aesthetic qualities. “*Archigram* can’t tell you for certain whether Plug-in City can be made to work, but it can tell you what it might look like.” Thus whether or not their proposals are acceptable to technicians or dismissed as Pop frivolity, they offer important *formal* lessons. Banham has thus traced a movement from propositions about the contribution of technology to aesthetics in the 1950s, to, with Archigram, “aesthetics offering to give technology its marching orders.”<sup>ccxxi</sup>

It was in 1972 that Banham wrote of Archigram: “Archigram is short on theory, long on draughtsmanship and craftsmanship. They’re in the image business and they have been blessed with the power to create some of the most compelling images of our time.”<sup>ccxxii</sup> To use the word “image” in this context was then, and is now, of course to conjure up all the specters of spectacular culture, of surface and mass ornament, that, from Kracauer, through Debord, to Baudrillard, have generally indicated a capitulation to the (postmodern) culture of capitalism at its worst.

But Banham, in this faintly dismissive characterization of Archigram as an image business, was in fact resting on a theory, developed only a few years earlier, which lent real substance to the sobriquet “image:” that notion of the “image” first posed by Gombrich in the 1950s and adopted by Banham in his characterization of that first “postmodern” British architecture movement, Brutalism. There, Banham uses the term to escape from classical aesthetics, to refer to something that, while not conforming to traditional canons of judgment, nevertheless was, in his terms, “visually valuable,” requiring “that the building should be an immediately apprehensible visual entity, and that the form grasped by the eye should be confirmed by experience of the building in use.” For Banham, this “imageability” meant that the building in some way was “conceptual,” more an idea of the relation of form to function than a reality, and without any requirement that the building be formal or topology. An image for Banham, whether referring to a Jackson Pollock or a Cadillac, meant “something which is visually valuable, but not necessarily by the standards of classical aesthetics” [12] and paraphrasing Thomas Aquinas, “that which seen, affects the emotions” not just the result but also the cause.<sup>ccxxiii</sup>

In architectural terms, according to Banham, this concept of the image "requires that the building should be an immediately apprehensible visual entity, and that form grasped by the eye should be confirmed by experience of the building in use."<sup>ccxxiv</sup> This implied that a building did not need to be "formal" in traditional terms, it could also be *aformal* and still be conceptual. Here he was attacking what he called "routine Palladians as well as routine Functionalists, and took the Smithson's Golden Lane project as an example that "created a coherent visual image by non-formal means" with its visible circulation, identifiable units of habitation, and the presence of human beings as part of the total image which was represented in perspectives with people collaged so that "the human presence almost overwhelmed the architecture."<sup>ccxxv</sup> In Golden Lane, as at Sheffield University, "aformalism becomes as positive force in its composition as it does in a painting by Burri or Pollock."<sup>ccxxvi</sup> This was a result of the Smithson's general attitude to composition -- not in traditional formal terms, but apparently casual informality: this was a compositional approach based not on elementary rule-and-compass geometry, but on "an intuitive sense of topology. It was, concluded Banham, the presence of topology over geometry that marked the inception of "un autre architecture," another architecture, which displayed its qualities through the characteristics of penetration, circulation, the relations between inside and outside, and above all the surface of apperception, that, finally, gave the image its force and substance: thus beauty and geometry were supplanted by image and topology."<sup>ccxxvii</sup> Image, for Banham, evidently related to what in 1960, he was to claim as the only aesthetic "teachable" along scientific lines: Banham 382-3 "no theory of aesthetics (except possibly Picturesque) that could be taught in schools, takes any cognizance of the memory-factor in seeing."<sup>ccxxviii</sup>

A year later, Banham, who was evidently straining to find an appropriate object for his image-theory in the Hunstanton School, found even the Smithsons wanting in their response to

his aesthetic conditions, in the context of the group displays in the *This is Tomorrow* exhibition at the Whitechapel Art Gallery. The “Patio and Pavilion” designed by the Smithsons, Nigel Henderson and Eduardo Paolozzi, collection of objects in a shed within a courtyard that in the Smithsons’ words represented “the fundamental necessities of the human habitat in a series of symbols,” was, for Banham, “the New Brutalists at their most submissive to traditional values... in an exalted sense, a confirmation of accepted values and symbols.” The installation by John Voelcker, Richard Hamilton, and John McHale, on the other hand seemed more “Brutalist” in character than the Brutalists, as the artists “employed optical illusions, scale reversions, oblique structures and fragmented images to disrupt stock responses, and put the viewer back on a *tabula rasa* of individual responsibility for his own atomized sensory awareness of images of only local and contemporary significance.” Ultimately, it was Brutalism’s refusal of abstract concepts, and its use of “concrete images – images that can carry the mass of tradition and association, or the energy of novelty and technology, but resist classification by the geometrical disciplines by which most other exhibits were dominated” that, for Banham represented the authenticity of the movement. Banham’s image, then, was not only a passive symbol of everyday life or technological desire, but an active participant in the viewer’s sensory – using all the techniques of modernist disruption – of shock and displacement – to embed its effects in experience.<sup>ccxxix</sup>

In this context, for Banham to have accused Archigram if imagism, would be to see Archigram as a movement concerned with the non-formal, non-traditional aesthetic, non-architectural; with the question of process unencumbered by geometry, with topologies rather than geometries, and thence to an “architecture” fundamentally disjointed from academicism and historicism. Indeed, this was what Banham, although he couldn’t quite see it through his Brutalist blinders, implicitly wanted.

Such a theory of the image, then, begins to deepen our own interpretation of what Archigram itself wanted, beyond the overtly brilliant subterfuges of advertising techniques, pop and op, collage and montage, super graphics, and the like that rendered the actual images of Archigram so seductive and arresting. For to see an underlying commitment to topology, and to the image as a confirmation of synthetic experience was to begin the process of building, out of Archigram a “program” for architecture that goes beyond its surface affects. It was in this sense that, for Banham, at least in 1965, before his retreat into more conventional architectural paradigms of the “well-tempered environment, that Archigram was to provide Summerson’s “missing language.”

Indeed, of all those interrogating “une autre architecture” in the 1960s, the Archigram group, under the cover of what seemed to be irreverent and harmless play, had launched the most fundamental critique of the traditional architectural program. The first issue of the magazine *Archigram*, in May 1961, consisting of a single page with a foldout and David Greene polemically substituting for the “poetry of bricks” a poetry of “countdown, orbital helmets, discord of mechanical body transportation and leg walking,” set the tone, and was followed by eight issues from 1963 to 1970, developing themes that embraced issues of expendability and consumerism at the broadest scale. Publicly announced in the Living City exhibit of 1963 at the I.C.A. and developed in projects for Plug-in City (Peter Cook, 1964), Computer City (Dennis Crompton 1964), Underwater City, Moving Cities (Ron Herron, 1964), Archigram explored all the potentials for technology and social engineering to re-shape the environment. Inflatables, infrastructures, pods, blobs, blebs, globs, gloops, were proposed as the engines of a culture dedicated to nomadism, social emancipation, endless exchange, interactive response systems, and, following the lead of Cedric Price, pleasure, fun, and comfort on the material and

psychological level, all designed with witty technological poetics to place the total synthetic environment, human, psychological, ecological and technological, firmly on the agenda.

The effect of Archigram's work over the years between 1961 and 1970, was to project into society a program and an aesthetic for the *total* environment; not "environmental design," or "computer-aided design," nor the high-technological idealism of a Fuller or the naturalist organicism of a Paolo Soleri, the psychological nihilism of the Situationists; or the ironic nihilism of groups like Superstudio or Archizoom, but an environmentalism that worked with every aspect of the contemporary environment, from consumer desire to ecological demand, from media to medium, from dream to the dream machine, from the suburban kit to the electronic tomato; to invent, not ways of being determined by the technologies of conservation and sustainability, not ways of being confined by building codes and practices founded on existing market economics and distribution, not ways of reinventing architecture, or ways of killing architecture, not ways of re-writing theory or simply introducing "new" concepts into old theory, not ways of redistributing architectural languages and forms across new technological surfaces, not ways of arguing one language against another, one historical precedent against another, one politic of class against another, but rather to throw out the whole, baby with bathwater, and start again with the elements of the known, combining them across genres, species, and disciplines in hitherto unknown ways, seeking multiple forms of synthetic environments. Warren Chalk, writing at a moment of "technological backlash," argued for this new approach, fully agreeing that "either the environment goes or we go," and that "Our very survival depends on an ecological utopia, otherwise we will be destroyed" but a utopia that has perforce to be built with a "more sophisticated technology, a more sophisticated science." Against what he called a "hippy-type philosophy," yet fully aware of the enormous

significance of Woodstock with its momentary welding of synthetic and natural environments, he calls for the building of what David Greene imagined as a “cybernetic forest” coupled with technological play of an order that would extend the “existing situation” and create a new “man/machine relationship” a “people-oriented technology.”<sup>ccxxx</sup>

As Greene wrote:

I like to think  
 (right now please!)  
 of a cybernetic forest  
 filled with pines and electronica  
 where deer stroll peacefully  
 past computers  
 as if they were flowers  
 with spinning blossoms<sup>ccxxxi</sup>

Whether represented “architecturally” in Peter Cook’s studies in metamorphosis, his “Addhox” kits for suburbia marketed as a set of parts (bay box, deluxe bay, leanto, garden screen, fun tubes, garden tray, etc) and the new prototypes of suburban expansion -- crater cities and hedgerow villages -- or in the bodily extensions of the cyborgs in their cushicles designed by Mike Webb, this “greening” of the machine, and machining of nature, developed from the “mound” philosophy Euston Station, 1964; Bournemouth Steps (1970-71); and of course the enormously elaborate competition project for Casino, Monte Carlo (1971) was personified so to speak by the image of the chameleon -- “people are walking architecture.” And people of course are assisted in their walking by a host of half natural half machine gizmos of which the electronic tomato, that in its promise to “direct your business operations, do the shopping, hunt or fish, or just enjoy

electronic instamatic voyeurism, for the comfort of your own home.” One could write the “program” then of Archigram as a series, more or less systematic of such extensions and expansions of traditional functionalism. We might also see them as pointing to the future -- our own present as their inventions might *seem* to write the specs for all the Sony home gadgets, the home offices, and universal remote controllers of today. But there is a crucial a difference: technological foresight is, for Archigram, not the end in view nor the answer they ask for -- not for Archigram the solace of having once been right. For their programmatic project was not only serious and instrumental -- it was certainly all that -- but also fun and ironic, serious and sensory at the same time; the profound difference between a programmable remote and an “electronic tomato” -- is that the remote is simply an extension in space and time of our finger, where the electronic tomato intersects the organic and the mechanical, the sensory and the functional, in such a way as to disturb all the verities of the functional program on the one hand and the psychedelic program on the other: thus, *The Electronic Tomato* (Warren Chalk, David Greene, 1969) together with “Manzak” (Ron Herron, LA January 1969) and the *Bathmatic* (Warren Chalk, 1970).

The destabilizing power of these images and their evident relationship to a tradition, identified by Tafuri as that of “Duchamp,” was clear; but so was their equal commitment to technology, new and as yet uninvented, and its potential for supporting a new society, or one that was, in the same way, yet to be invented. It was as if, in the ironic stance in front of traditional modernism, and the fundamental critique of its social, psychological and technological failings, these utopian images were dedicated to extending modernist principles to their extreme (and thereby ideal) limits. It was at this point that the image of utopia joined the program of total design imagined by those who, like Tomas Maldonado at Ulm, believed that an entirely new

version of the traditional *gesamtkunstwerke* was demanded by the complex environmental, social, and technological conditions of mass global society. Here it was that the “psychedelic” aspirations of the utopian left met, however uncomfortably, the systematic cybernetics of the rational center.<sup>ccxxxii</sup>

The momentary alliance between Archigram and Banham seems to offer more than a historical antecedent to contemporary experiments in virtual architecture and global visions. As Mark Wigley has pointed out, Archigram was more than a “sci-fi” and pop blip on the screen of architectural history but embedded in the very processes of architectural practice, imaginary and real. Banham’s insistence on the role of aesthetics – of the viewer and in experience – in the promulgation of a new architecture, adds to this significance, and invokes the possibility of re-conceiving the notion of program, in a way that occludes the fatal modernist gap between form and function, and incorporates environmental concerns, technology, and formal invention as integral to a single discourse. “Une architecture autre,” was, in 1960, a promise of “tomorrow;” its realization today has become not only possible but urgent.

*Beyond Architecture: Banham in LA*<sup>ccxxxiii</sup>

“Streets. Streets. Streets. Streets. There is such a confusion, life there is so intense, so diverse, so outlandish, it resembles nothing known.”

Blaise Cendrars, 1936.<sup>ccxxxiv</sup>

The subtitle of this section, “Banham in LA,” might be read on at least two levels: on the most evident level, it refers to the period between 1968 and 1971, when Reyner Banham discovered LA, lived for several months in LA, delivers a series of four talks to the BBC radio “Third Program,” and wrote the book, published in 1971, *Los Angeles: The Architecture of Four Ecologies*, followed by BBC Television’s program “Banham Loves LA,” broadcast a year later.

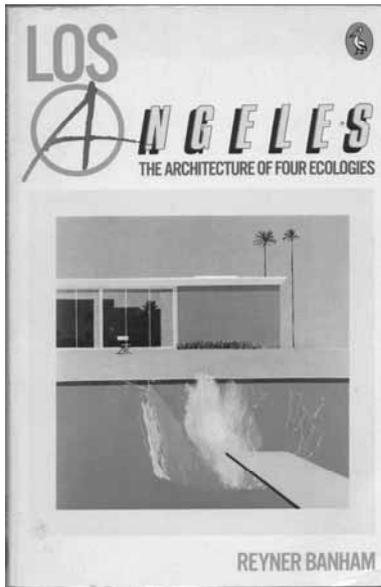


Fig. 23. Reyner Banham, *Los Angeles: The Architecture of Four Ecologies*, 1971

In this limited sense, LA was an entirely local phenomenon all-too common for that city: the quick visit, followed by the knowing accolade, from a foreigner who knew little or nothing, and spread false myths about a city already mythicized to the hilt by Hollywood or by its detractors. This is interesting enough -- it has spawned a literature in itself, from the art critic of *Art Forum*, Peter Plagens' dispeptic and vitriolic review of Banham's book "the trouble with Reyner Banham is that the fashionable sonofabitch doesn't have to live here," to Mike Davis, who spent decades trying to undo what he saw as the damage Banham accomplished. Indeed, so powerful has been the influence of Banham's book, just through its subtitle, that at least two new ecologies have been added since Banham's four -- Plagens' own "ecology of evil," Mike Davis's *Ecology of Fear*, both replies to what is construed as Banham's unregenerate and irresponsible boosterism, and even "schlockology" coined by the reviewer for the *New York Review of Books*: "LA likes to hate its detractors from back East, seeing them as cynical and ill-informed, but a booster from the outside is regarded with even more suspicion -- how come he likes it so much?"

On another level, however, Banham's Los Angeles served a more fundamental purpose in forging a kind of architectural history that had not yet been written, one that would take architecture as equal to, if not a secondary response to the ecological conditions of urban settlement. This was to be a "history" that went beyond the "local" histories of his master Pevsner as he and teams of assistants toiled at the *Buildings of England* series, or even that urban-architectural history developed by Summerson in his *Georgian London*. For Banham the promise of scientific functionalism led inevitably to a wider program than embraced not simply the demands of a client, or translated the *zeitgeist* of the moment into form, but took into account the broadest set of urban geographical conditions. Accordingly, in the *Los Angeles* he was to confront and surpass both the sacred book of modernism, Le Corbusier's *Vers une Architecture*, and the emerging urban geography of modernism, through his reading of the first modern study of LA, by Anton Wagner.

To publish a book "in praise (!) of Los Angeles" (the exclamation mark was added by the reviewer in the *New York Times*) in 1971 was, in the first instance, to go against a long-term trend of LA critique, given canonical form with Nathanael West's 1939 indictment of Hollywood in *The Day of the Locust*, and revived with the strong reaction to the deleterious effects of modern urban planning that emerged in the 1960s.<sup>ccxxxv</sup> In 1971, not more than six years after the Watts uprising, and at the height of Jane Jacobs' campaign for the preservation of "urban" communities such as the West Village in Manhattan, the city of Los Angeles was, in the eyes of most urban and architectural intellectuals, a decidedly negative example. As the architectural historian Thomas Hines, put it: "The thrust of this book will not likely appeal to Jane Jacobs or to Lewis Mumford or to orthodox planning theorists or to half the intellectuals of Southern California."<sup>ccxxxvi</sup> For many, the city of Los Angeles, as Francis Carney wrote in his review of

Banham's book for the *New York Review of Books*, was "Mumford's 'anti-city,' Reaganland, the Ur-city of the plastic culture, of Kustom-Kars and movie stars, nutburgers and Mayor Yorty and the Monkees, the Dream Factory, fantasy land, Watts and the *barrio*, glass and stucco-built, neon-lit, chrome-plated, formica-topped" if not the "*Schlockhaus* of the Western world," that was to say, "everybody's favorite horrible example."<sup>ccxxxvii</sup>

Banham himself had anticipated such criticism, frankly admitting that, "insofar as Los Angeles performs the functions of a great city ... all the most admired theorists of the present century, from the Futurists and Le Corbusier to Jane Jacobs and Sibyl Moholy-Nagy have been wrong."<sup>ccxxxviii</sup> And, given the long tradition of LA boosters and LA haters, he had in a balanced afterword conceded that "there are many who do not wish to read the book, and would like to prevent others from doing so," acknowledging that Los Angeles, while rising to the level of a great city, was "not absolutely perfect." [LA 236] Early reviews of the book were at least polite, if slightly incredulous; but it was the art critic Peter Plagens in a vituperative review in *Art Forum*, who established the book firmly in the tradition of LA boosterism, to the extent that, by 1990, Mike Davis, another opponent of the booster tradition, had ruefully to admit that Banham had produced a work that had become "*the* textbook on Los Angeles."<sup>ccxxxix</sup> Indeed, its very subtitle, despite the *TLS* reviewer's pain over the misuse of a word originally meaning the "study of" eco-systems, had become an invitation to invent further, and less engaging, "counter-ecologies:" the "ecology of evil" of Peter Plagens, and Mike Davis's own "ecology of fear."<sup>ccxli</sup>

But in considering the book entirely within the narrow genre of LA literature reviewers and subsequent readers have largely missed what, for Banham and much of his architectural public in Britain was one of its primary aims. As a work commissioned within a series entitled "The Architect and Society" edited by the British historians John Fleming and Hugh Honor ( a

series that included James Ackerman's elegant monographic essay on Palladio among others) the book was first and foremost intended as a new kind of work on a city, one that, rather than surveying major monuments and historical buildings one by one, took on the whole fabric and structure of an urban region. In this attempt, Banham worked to develop an entirely radical view of urban architecture, one that has had a major impact on the discipline of architectural history.

In this context, the book was very different from traditional architectural and urban histories that surveyed the major monuments of a city or considered its planning history, but without constructing any overall schema that would link the two. Its sub-title, "The Architecture of Four Ecologies," marked it out as special and different. Joining architecture to the idea of its ecology, this title immediately announced Banham's intention to pose the interrelated questions: what had architecture to do with ecology?, what might be an ecology of architecture, and even more important, what would be the nature of an architecture considered in relation to its ecology?

Taken together, Banham's answers to these three questions provided a road map for the study of urban architecture not just in its geographical, social, and historical context -- this was already a common practice among the social historians of architecture in the late '60s -- but as an active and ever-changing palimpsest of the new global metropolis. Not incidentally, they also entirely redefined the architecture that scholars were used to studying, now embracing all forms of human structure from the freeway to the hotdog stand, and a plurality of forms of expression not simply confined to the aesthetic codes of high architecture. Here, of course, lay one of the problems for his early reviewers: as a critic, Banham had established himself as an apologist for Pop Art and pop culture, a reputation that, together with his evident fascination with

technological innovation and change, made it all-too easy for the book to be seen as a Pop history of LA.

The very inclusion of traditionally “non-architectural” structures -- from freeways to drive-in restaurants, and thence to surfboards -- obscured the real seriousness of Banham’s intent to destabilize the entire field of architectural history. But on this he was explicit from the outset. “The city,” he wrote, “has a comprehensible, even consistent, quality to its built form, unified enough to rank as a fit subject for a historical monograph. Historical monograph? Can such an old-world, academic, and precedent-laden concept lay claim to embrace so unprecedented human phenomenon?”<sup>ccxli</sup> After all, the traditional history of LA architecture had already been written by his friend the architectural historian David Gebhard in a “model version of the classical type of architectural gazetteer.”<sup>ccxlii</sup> But Banham’s history was not to be confined in a study of, as he put it, “dated works in classified styles by named architects;” rather he wanted to embrace the “extremes” of hamburger stands, freeway structures and civil engineering. Hence his programmatic intent to insert these polymorphous architectures into a “comprehensible unity” that finds its place within their context -- the four ecologies.

It was in the summer of ‘68, that, following programs on the revolt of the French students, the “revolution” at Hornsey College of Art, reviews of the Velvet Underground’s LP, “White Light, White Heat”, the showing of Godard’s Weekend, the assassination of Robert Kennedy, reports from Vietnam, the Russian invasion of Prague, listeners were treated to the decidedly better news of Reyner Banham’s visit to Los Angeles in three easy, and apparently random stages: 1. August 22, vol 80: 235-236 “Encounter with Sunset Boulevard;” 2. 29 August, vol 80: 267-268. “Roadscape with Rusting Rails;” 3. September 5, vol 80: 296-298. “Beverly Hills, too, is a ghetto;” 4. September 12, vol. 80: “The Art of Doing Your Thing.”<sup>ccxliii</sup>

Banham began by recounting his perplexity at the layout of the city as a whole by telling the story of his mistake in assuming he would be “closer” to Sunset Boulevard at the Downtown bus station, rather than getting off in Santa Monica. Sunset he found was one of those arteries that traverse the side of the LA River valley from Downtown to the sea; his hotel in Westwood would have been far closer to Santa Monica. The point of the story was, further, to demonstrate to himself it seemed as much as to his audience, the wonder of the rooted Norfolk reared, London based, non-driving Banham feeling “at home in Los Angeles.” And even more curiously he concluded by arguing that indeed, London and Los Angeles had a lot in common -- made up of a conglomeration of small villages, spread out in endless single-family developments -- despite the vast apparent differences -- car travel, freeways, climate, scale -- between them. For Banham, the structural and topographical similarities were striking.

The second talk picked up on this theme to explore the infrastructural formation of LA, its basis not so much in freeways as the commonplace went but in the vast and expansive light rail system built up between the 1860s and 1910, Pacific Electric’s inter-urban network, that gradually, between 1924 and (extraordinarily enough) 1961, formed the backbones of Las working and living systems. This was however a preface to what was to enrage critics a couple of years later, Banham’s eulogy of the freeway system: this non-driver turned driver out of instant love with a city was exultant at the “automotive experience,” waxing eloquent over the drive down Wilshire toward the sea at sunset, and downplaying the notorious smogs in comparison to those in London: his proof: “a shirt that looks grubby in London by 3 p.m. Can be worn in Los Angeles for two days.”<sup>ccxlv</sup>

The third talk, examined one of these small individual “villages,” that made LA just like London, that of Beverly Hills, the exclusive community self-incorporated specifically to prevent

the schools from being invaded by other classes and ethnicities, the “most defensive residential suburb in the world,” an enclave of unrelieved middle class single-family dwellings, created to send children to school without the risk of “unsuitable friends.” The article was illustrated by a Ralph Crane photo of a typical upper middle class family by its pool. Banham noted “That apparently total indifference to the needs of all communities except one’s own that is one of the most continuously unnerving aspects of public life in Los Angeles,” that, on the other hand was “the ugly backside of that free-swinging libertarian ethic that makes so much of Angeleno life irresistibly attractive.”<sup>ccxlv</sup> This, from now on will be Banham’s didactic method -- that of contrast, for and against balancing each other, more often than not the “for” on the winning side. Beverly Hills, was then, like San Marino, and the Palos Verdes Estates, incorporated to protect middle-class residential developments against the intrusion of the poor and the unfortunate. It was a “self-contained, specialized area,” and a “socio” and “functional” “monoculture.” It was the proof of the fact that if you “insist on trying to use LA as if it were a compact European pedestrian city” you become campus-bound. Banham admits that he too nearly succumbed “At the University of California in Los Angeles (UCLA) you never stir out of the Rancho San José de Buenos Ayres. You live in digs in Westwood, stroll over to classes, eat in the Faculty Club or Westwood Village restaurants, go to Village bookshops and cinemas. In short you do exactly what we accuse Angelenos of doing, living restricted and parochial lives that never engage the totality of Los Angeles.” But he was saved: “I used to think that the amount of distorted and perverted information circulating about Los Angeles in quasi-learned journals about architecture, the arts, planning, social problems and so forth, must come from hasty judgments formed by lightening visitors. I now begin to suspect that it comes from visitors who may have spent a semester, a year, or even longer, in the city, but have never stirred beyond the

groves of academe -- eucalypts, jacarandas, bananas -- planted in the 1920s on the old Wolfskill ranch that too can be a ghetto.”<sup>ccxlv</sup>

Finally, Banham delivered his judgment on the pop culture of LA: its “doing your own thing” tradition of artistry, from the motor cycle pictures of Billy Al Bengston in the early 60s, to Von Dutch Holland’s painted crash helmets, and the ubiquitous surf board decoration down in Venice, to that monument to do-it-yourself culture, the Rodia’s Watts Towers, the do-it-yourself sublime. These were “not, as some European critics seem to maintain in any way naive or folksy. Their structure is immensely strong, the decoration of their surfaces resourceful and imaginative.”<sup>ccxlvii</sup> The same was true of contemporary pop artists, like Ed Ruscha -- his “26 Gasoline Stations”, his “34 Parking Lots”, his “Every Building on Sunset Boulevard”, were all, to Banham’s eyes, dead-pan statements that were content to “do their own thing,” neither judging nor criticizing.

In hindsight, what might then have seemed merely random radio ramblings, become entirely systematic, as we realize that Banham was carefully building up three of what would become his four final ecologies -- the beach, the foothills, and the freeways, as well as beginning the treatment of its alternative architecture -- that of “fantasy.” Subsequent articles in *Architectural Design* (“LA: The Structure behind the scene”<sup>ccxlviii</sup>) elaborated his take on the transportation network and its process of continual adjustment. By the Spring of 1971, the overall plan of the book had been set, and its complicated outline developed.

Of course, forty years later, Banham was able to bring other powerful framing devices to bear on LA, not the least his own espousal of pop culture, and his fascination with technological invention and change. Indeed, that is how many of his first reviewers saw the book -- a “Pop” history of LA as one wrote -- a book that was first and foremost journalistic, one that took LA

lightness and kitsch as lightly as they ought to be: comments ranged from “a stimulating piece of thoughtful journalism,” to “a light-hearted and affectionate tribute to Los Angeles,” to “everybody loves a lover.” No-one fully understood, I think, the real seriousness of Banham’s intent to destabilize the field of architectural history: but the first chapter gives him away: “the city has a comprehensible, even consistent, quality to its built form, unified enough to rank as a fit subject for a historical monograph. Historical monograph? Can such an old-world, academic, and precedent-laden concept lay claim to embrace so unprecedented human phenomenon.?”<sup>ccxlix</sup>

This after all had already been accomplished by his friend David Gebhard in a “model version of the classical type of architectural gazetteer.” But rather than a book on “dated works in classified styles by named architects,” his was to embrace the “extremes” of hamburger bars, freeway structures and civil engineering. Hence his programmatic intent to insert these polymorphous architectures into a “comprehensible unity” that finds its place within their context -- the four ecologies. Hence too, his commitment to as he says, “learn the local language” that he sums up with Wagner, as the language of “movement.”<sup>ccl</sup>

Thus, as a work commissioned within a series entitled “The Architect and Society” edited by the British historians John Fleming and Hugh Honor ( a series that included Ackerman’s elegant monographic essay on Palladio among others) the book was first and foremost intended as a new kind of architectural/urban history, one that, rather than surveying major monuments and historical buildings one by one, took on the whole fabric and structure of an urban region. In this attempt, Banham was forced by the special conditions of LA to develop an entirely radical view of urban architecture, and one that has had a major impact on the discipline of architectural history over the last thirty years.

Indeed LA turned out to be precisely the vehicle needed to blow up what Banham had earlier called “trad” history, precisely because it defied the “trad” city as a city, and the “trad” place of architecture on the streets and squares of the “trad” city; precisely because Los Angeles was a city where the structure of the regional space was more important than individual grids or fabric; precisely because of its semi-self conscious “pop” culture; precisely, finally, because it represented to “trad” historians everything a city should *not* be, it was possible to write the kind of history of it that was everything a history of architecture should *not* be.<sup>ccli</sup> It is in this context, then, that I want to approach the development of Banham’s thought as a *historian* rather than the “journalist” assumed by his reviewers, as he encountered LA, that apparently most unhistorical of cities, and to explore the effects of his complex response on the history of architecture and of cities.

*Towards an [LA] Architecture*

What puzzled his reviewers the most, if they did not like Plagens dismiss the book out of hand, was its complex narrative structure: a number of reviewers castigated its apparent lack of unity, and even suggested reordering the chapters. But Banham’s ordering was in fact a part of his conscious attempt to re-shape, not only how one looked at a city like Los Angeles -- an order forced by the unique form of the city itself, but also how one wrote architectural history in a moment of widening horizons and boundaries; when the very definition of architecture was being challenged and extended to every domain of technological and popular culture, and inserted into a broad urban, social, and of course, ecological context. Thus he self-consciously intersected chapters on the “ecologies” of architecture, with those on the architecture itself, and these again with notes on the history and bibliography of the city.

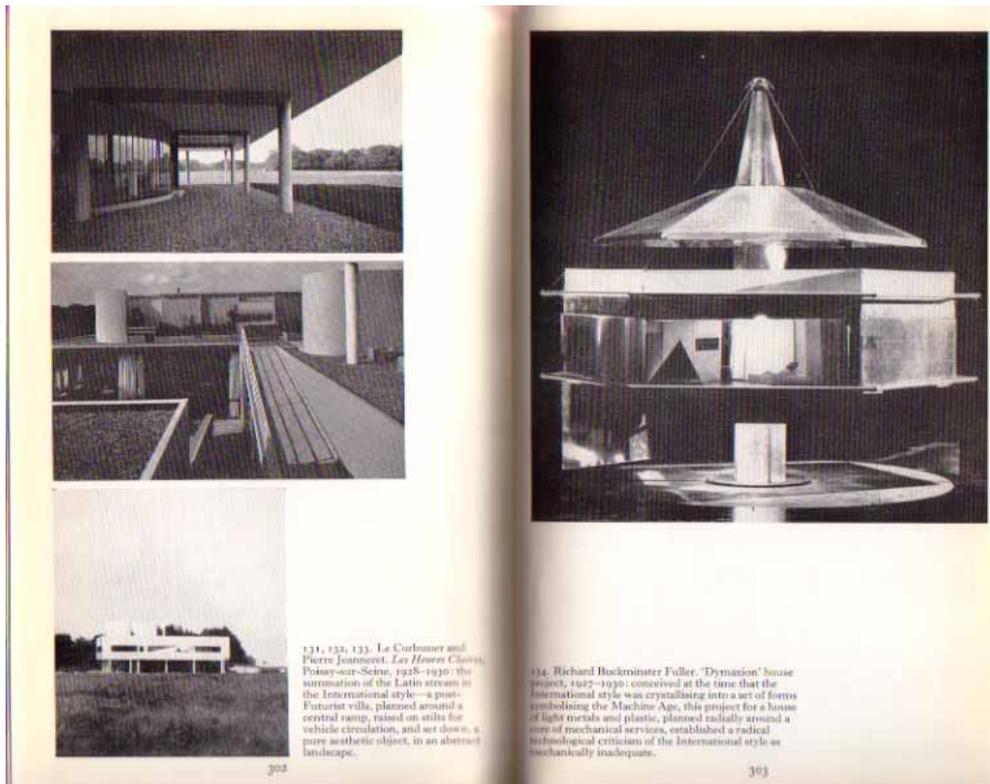


Fig. 24. Reyner Banham, *Theory and Design in the First Machine Age*, Comparison of Le Corbusier and Buckminster Fuller.

*Los Angeles* opens with a brief history of the geographical and infrastructural formation of the city, tellingly entitled “In the Rear View Mirror,” as if one could, as indeed Banham did, glimpse fragments of that not-so-long history while driving the freeways and glancing back(wards) into the rear view of the city. This was followed by four chapters on each of the four “ecologies” of the title: “Surfurbia” (the beach and coastline); “Foothills” (the Santa Monica Mountains); “The Plains of Id” (the great flat central valley); and the most important one of all, “Autopia” (the freeway system and its correlates). These ecological studies did not form a continuous narrative but were broken in sequence by four parallel chapters on the specific “architectures” of LA dealing with “The exotic pioneers,” “Fantastic” architecture, the work of the distinguished foreign “Exiles,” and concluding with a homage to the new LA modernism of

the 1950s embodied in the Case Study House movement, in Banham's eyes "The Style that Nearly" but not quite became a true regional genre. These were interrupted by four thematic chapters that stepped out of the systematic study of ecology and architecture to add notes on the development of the transportation network the culture of "enclaves" unique to LA, and a brief consideration of downtown. This last chapter was the most heretical with respect to traditional city guides. Where the latter would start with the old center and demonstrate a nostalgic sense of its "loss," in Banham's view a "note" was all that downtown deserved in the context of a city that had become an entire region, and where downtown seemed just a blip on a wide screen. Finally, Banham's programmatic conclusion was entitled "An Ecology for Architecture."

Such a complicated and multi-layered structure was obviously Banham's attempt to irrevocably break up the normal homogeneity of architectural narratives and urban studies, insistently inserting the one into the other in a kind of montage that worked against the narrative flow to instigate pauses for reflection and re-viewing; as if the historian/critic was circling around his objects of study, viewing them through different frames at different scales and from different vantage points. Obviously Banham had a programmatic aim here; the book operated as a kind of montage splitting the normal homogeneity of architectural narratives and urban studies and inserting the former into the latter as if exploding each in the process.

On one level, this structure was entirely new, one engendered by the special conditions of Los Angeles itself; it was a freeway model of history, one that saw the city through movement and as itself in movement. On another level, however, Banham the self-conscious historian of modernism, who had ten years earlier published the first full-length study of architectural theory and design between the Wars, was drawing inspiration from many precedents -- proclamations of modernism that called for the rejection of "high" architecture in favor of structures generated by

functional and technological demands; alternative modernist “utopias” from the technotopias of Buckminster Fuller to the contemporary work of the Archigram group in London; appreciations of the consumer society and its modes of representation, exemplified in the discussions and exhibitions of the Independent Group in London, and notably in their “This is Tomorrow” exhibition of 1956<sup>ccli</sup>; scientific prognostications of the future, and especially the potential effects of new biological, genetic, and chromosome research. All these paradigms and many more were formative for Banham’s radical rewriting of history and theory. But, for the purpose of exemplifying the special character of *Los Angeles*, two models are particularly significant; one that had a major impact on the narrative form of the book, the other on its “ecological” content. Both, in a way that indicates Banham’s polemical intention to criticize and continue the positive tendencies he detected in the first Modernisms, were themselves exemplary statements of high modernist positions.

The first was Le Corbusier’s celebrated manifesto-book of 1923, *Vers une architecture*, translated into English as *Towards a New Architecture*, a precedent which might at first seem surprising, given Banham’s often repeated rejection of what he called academic formalism and his critique of inadequate, modernist, functionalism. But Banham had early on taken it to be his mission as a historian to fill in what he called the “Zone of Silence:” the history of the Modern Movement between 1910 and 1926, that is between what Sigfried Giedion had taken as the subject-matter of his *Bauen in Frankreich* (1928-29) and his later *Space, Time and Architecture* (1940-41). The then commonly-held assumption was that the end of the great years of the Modern Movement should be dated around the time of the First World War; thus Nikolaus Pevsner, Banham’s PhD advisor, had concluded his *Pioneers of Modern Design* with the

industrial design exhibition of the Deutscher Werkbund in 1914; Giedion's *Bauen in Frankreich* had stopped even further back with the turn of the century.

Banham, in his PhD thesis, published in 1960 as *Theory and Design in the First Machine Age*, argued otherwise.<sup>ccliii</sup> Here he not only introduced his innovative view that the Futurist Movement's emphasis on technology was central to the history of modern architecture, but also undertook for the first time a close analytical reading of Le Corbusier's writings. *Vers une Architecture*, Banham wrote, was "one of the most influential, widely read and least understood of all the architectural writings of the twentieth century."<sup>ccliv</sup> In analyzing the form of this book, assembled out of individual chapters from earlier issues of the journal *L'Esprit Nouveau*, he found it without "argument in any normal sense of the word." It was made up of "a series of rhetorical or rhapsodical essays on a limited number of themes, assembled side by side in such a way as to give an impression that these themes have some necessary connection."<sup>cclv</sup>

Banham identified two main themes in Le Corbusier's chapters -- those that dealt with what Banham called the Academic approach to architecture, dealing with architecture as a formal art derived from Greek and Roman models, and as it had been taught in the Beaux-Arts schools, and those that dealt with Mechanistic topics: the engineer's aesthetic, ocean liners, aircraft, cars, and the like. These themes alternated, chapter by chapter, through the book, with the "Mechanistic" essays "firmly sandwiched" within the others." Banham further noted the rhetoric of the illustrations, the celebrated facing-page photos that pointed comparisons, historical and aesthetic. This, still one of the very best readings of Le Corbusier we have, is revealing in a number of ways.

First, it reveals the underlying mission of Banham's entire career, dedicated so to speak to freeing the "mechanistic" from the embrace of the academic. As he emphasized throughout



In this sense we might infer that *Los Angeles* was in some way Banham's response to, and triumph over, what he regarded as the central manifesto of 1920s modernism, and we would be reinforced in this conclusion by his sly acknowledgement to Corbusier in the last chapter, entitled not "Towards A New Architecture," but "Towards a Drive-In Bibliography." Which we might decipher as "(Driving) Towards a New Architecture."

### *Cultural Geography*

The second major influence on the content of *Los Angeles* was perhaps more substantial, and came from Banham's discovery of a work by Anton Wagner, a German urban geographer who had discovered Los Angeles as a thesis topic between 1928 and 1933 through the auspices of his uncle who had settled in Santa Monica in 1878. There, Wagner completed his research, finally publishing his monumental "geographical" study in 1935 with the title *Los Angeles. Werden, Leben und Gestalt de Zweimillionstadt in Südkalifornien* (Los Angeles. The Development, Life, and Form of the City of Two Million in Southern California).<sup>cclvii</sup> The subtitle of Wagner's book was, as he noted, calculated to evoke comparisons with that other paradigmatic modern metropolis, Berlin. Los Angeles, he noted in the Preface, was a "city which far exceeds Berlin in expansiveness," and he drew a map that superimposed the plans of the two metropoli to prove the point.<sup>cclviii</sup>

Wagner's research for the book was exhaustive, if not exhausting: throughout he recounts the results of numerous interviews of all types of inhabitants, and his understanding of the city was accomplished by a rigorous survey conducted, despite the distances involved, mostly on foot (unlike Banham's), as he explored and mapped its "lived space and access paths" (*Lebensraum*). At the same time (like Banham) he took his own photos: "I captured the appearance of the cities

and quarters in numerous photographs which still bring to mind the details of the cityscape, despite increasing spatial and temporal distance.”<sup>cclix</sup>

Interested in the play of “forces of nature” and “activities of man” -- the need to study all the geographical factors and the biosphere of the region -- and the urban landscape [“die städtische landschaft”] he started the book with a detailed study of the city’s geological history and structure -- its “geological dynamism” as he called it. Indeed, dynamism, was the watchword of Los Angeles for this European observer: “A quickly evolving landscape, and a city whose formation proceeded faster than most normal urban development, thereby encompassing much larger spatial units, requires an emphasis of dramatic occurrences, movement and forces. Especially for the current form of Los Angeles, becoming is more characteristic than being. This determines the method of representation.”<sup>cclx</sup> And he concluded: “For Los Angeles ... tradition means movement.”<sup>cclxi</sup> Present during the major Long Beach earthquake of March 10, 1933, he was well aware of the kinds of movement to which Los Angeles is susceptible, and characterized the building of the city as a struggle between nature and man: “the life of so artificial an urban organism ... depends on how much it is secured against catastrophes.”<sup>cclxii</sup>

Beyond this totalizing and systematic yet dynamic and processual geological “history” of the city, Wagner traced its successive development booms and the growth of its communities in meticulous detail from the establishment of the first pueblos and ranchos, which he maps, to the development of the rail transportation system, again mapped, to the aspect of every quarter in the 1930s. These maps, it should be noted formed the basis for many of those elegantly transcribed by Mary Banham for the later book, as well as forming the basis of Banham’s own perceptive history of transportation networks and land ownership patterns.

Like Banham some thirty years later, Wagner's physical survey of the "cityscape", as he calls it, omits nothing, however squalid; and no "architecture" however tumble-down or populist escapes his gaze and camera. He revels in the studio lots or "stage-set cities" (*Kulissenstädte*) as he calls them<sup>cclxiii</sup>; he speaks of the "cultural landscape" of the oil fields with their "drilling tower forests;"<sup>cclxiv</sup> he examines the stylistic and plan typologies of every kind of housing, from the modest bungalow to the apartment house and Beverly Hill mansion; above all he remarks on the eternal billboards -- "a major aspect that dominates parts of the frontal view, or elevation (*Aufriss*): the business advertisement ... The billboard that emphasizes the incomplete (*dasUnfertige*) in the landscape," taking two pages to describe the physiognomy of the billboard as it competes for view amidst the "inelegant posts and wiring of the telephone and electric lines."<sup>cclxv</sup> Wagner's conclusion to his epic study, is that "It is not only architects, statisticians and economists who should draw lessons from this work of urban geography, but everyone who is a member of an urban community."<sup>cclxvi</sup>

It is easy to see what Banham drew on as inspiration from this unique work: the idea of a city whose history is firmly rooted in its geology and geography -- a rooting that is itself as mobile as the ecological circumstances of its site; the idea of a city that is important as much for change as for permanence; the idea of the architecture of the city as less important than the totality of its constructions; the notion, finally, of taking the city as it is as opposed to any utopian, idealistic, or nostalgic vision of what it might be. As he wrote in the article "LA: the structure behind the scene," "Los Angeles represents processes of continuous adjustment, processes of apportionment of land and resources ... As far as Los Angeles is concerned, the land and the uses of the land are ... The things that need to be talked about first."<sup>cclxvii</sup> His history of LA development, of the transportation network, of the transformation of the city from ranchos

and pueblos into a single sprawling metropolis takes its cue at every moment from Wagner. Finally, Wagner's understanding that it is "movement" of every kind that characterizes Los Angeles, is echoed in Banham's own sense that if there is a "local language" to be identified in Los Angeles, it is a language of "movement."

In the light of such precedents, what appeared to critics as Banham's apparently light-hearted "drive-by" approach to Los Angeles, emerges as a tightly constructed part-manifesto, part new urban geography, that, joined together, form an entirely unique kind of "history." Answering Banham's own call for a post-technological, post-academic, even post-architectural, discourse, the book resolutely sets out to engage the city as it is, refusing to lower its gaze in the face of sprawl, aesthetic chaos, or consumerist display. Rather than, with Le Corbusier, calling for a "new architecture," Banham's manifesto prefers to ask for a new and uncompromising vision, one that might not immediately see what it wants to see, but nevertheless may be rewarded by glimpses of other, equally interesting and satisfying subjects. Rather than, with Anton Wagner, calling for a totalizing geo-urbanism, Banham's self-fabricated "ecology" provides him with an open framework for heterogeneity in subject-matter and observation.

The city of Los Angeles, then, was both vehicle and subject for Banham, and its strange attraction allowed him to forge a new sensibility in his own work, one that would, just over ten years later, be fully explored in the equally misunderstood work, *Scenes in America Deserta*. Like *Los Angeles*, this book was greeted as a "guide," an object in "a desert freak's checklist," but also like *Los Angeles*, its purpose was more serious and radical.<sup>cclxviii</sup> Treated as a set of personal "visions" of different deserts, it stands as a poetic evocation of landscape, to be set beside all its British and American romantic precedents; but treated, as Banham no doubt intended, as a new kind of environmental history, it is clearly the logical conclusion, the second

volume, of a work, that, as Banham made clear in *America Deserta*, has as its major purpose the complex examination of environmental experience as a whole. And while the “eye of the beholder” that looks in the rear-view mirror or across the Mojave is first and foremost Banham’s eye, by extrapolation it stands for a sense of the meaning of objects in space that goes far beyond the architectural, the urban, the regional, to engage the phenomenology of experience itself.

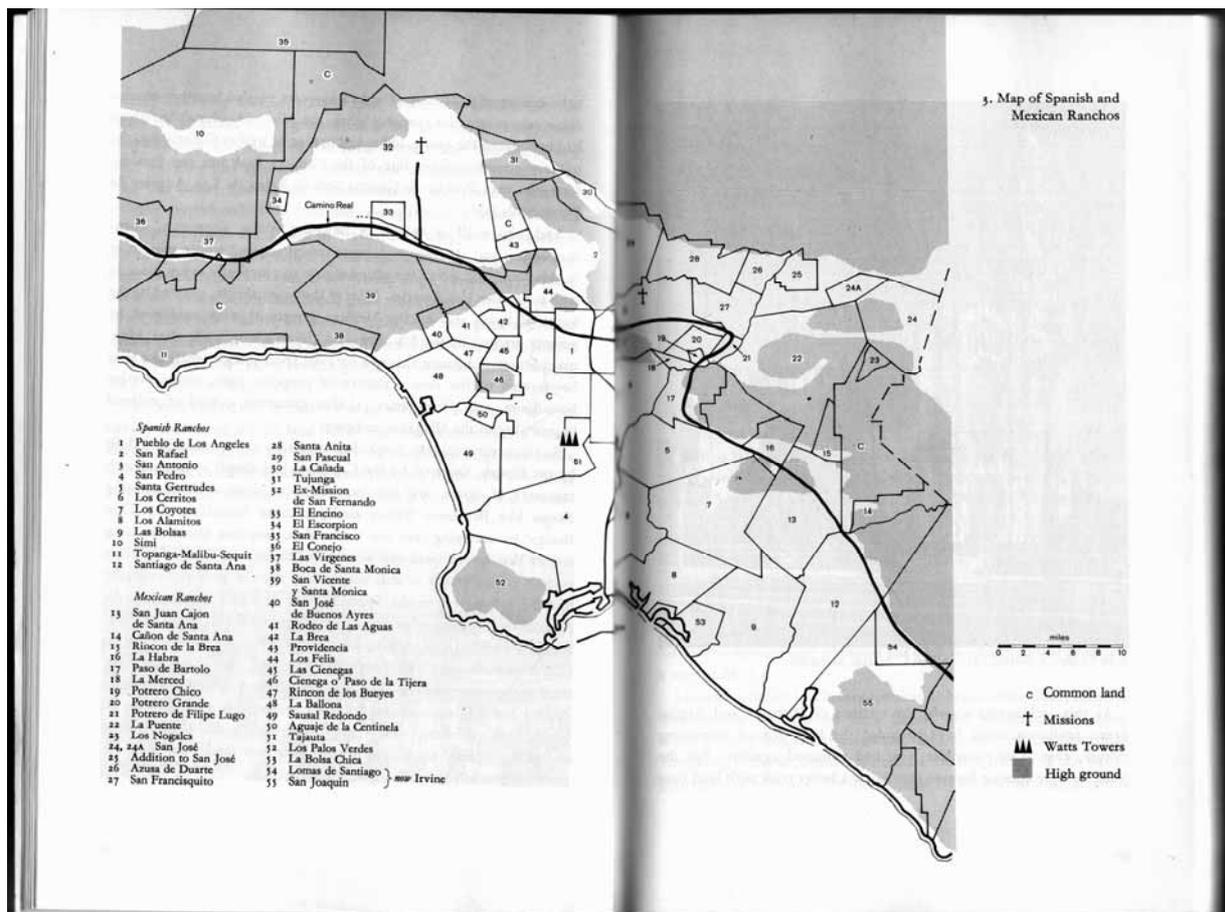


Fig 26. Reyner Banham, Map of Spanish and Mexican Ranchos, adapted from Anton Wagner.

#### **Chapter 4. Renaissance Modernism: Manfredo Tafuri<sup>cclxix</sup>**

##### *Legacies*

I read *Ricerca del Rinascimento* as if it were a last will and testament, a legacy.

José Rafael Moneo<sup>cclxx</sup>

Many different legacies are left by historians - categorizations into periods such as Burkhart left for the Renaissance; methods, empirical and philosophical, such as those propounded by Ranke and Hegel respectively; the revival of interest in hitherto ignored epochs as in Huizinga's "late" and "waning" Middle Ages; or the exploration of new subjects, as in Michelet's exploration of witchcraft; and there is, of course, the example set by the historical work itself. Art and architectural historians have left similar legacies - the revival of interest in late Roman art by Riegl, the formal analysis of Wölfflin, the spatial analysis of Schmarsow and Frankl, the social analysis of Hauser, and so on. All these and more are the commonplace topics of historiographical works and the received wisdom of the trade, so to speak. Historically categorized in themselves and at a sufficient historical distance to be comfortably debated, they are "disposable" so to speak for the periodic renewal of methodological approaches.

But when we turn to the "legacy" of more recent historians, we are less comfortable. As friends and students we mourn the passing of mentors, we count up their formidable publication record with some envy, we look to their first works as having "seminal" influence on their contemporaries, and we note in passing their last publications, often as not, given the rapid change in historical tastes, a little outmoded for the present generation. If the historians in question have in their lifetime succeeded in founding a school of thought or practice, or even set

out the guidelines of a method, their immediately posthumous reception may be even cooler if not antagonistic.

All these manifestations and more have been evident in the obsequies that followed the death of Manfredo Tafuri in 1994. The memorial issue of *Casabella*, published in January-February, 1995, is a collection of such responses - Vittorio Gregotti attempting to "save" the historian who fulminated against "operative" criticism for contemporary practice; Asor Rosa returning with some nostalgia to his early theoretical and political works as exhibiting the cool "disenchantment" of a post-ideological thinker; Giorgio Ciucci resurrecting the early Tafuri as if to ward off the difficulty of his late works for his former colleagues and students in Venice; specialists in the Renaissance like Howard Burns relishing his return to the historian's task of Renaissance studies, after so many contemporary and theoretical excursions, joining with some relief the early Tafuri, historian of Mannerism and Humanism, to the late Tafuri of the archives.<sup>cclxxi</sup> Yet there has been little attempt to investigate what we might, some five years after the end of a scholarly and critical life of over thirty years, understand as his contribution to general historiography, or to consider what we might recuperate for our own work.

This is, it has to be said, not entirely the fault of Tafuri's exegetes. His omnivorous interests, shifting from contemporary practice to historical minutiae, from global and universal generalizations to micro-historical investigations, from the study of a single building to the critical assessment of historiography and theory, from aesthetic judgments to detached irony, his allusive references to a Babel-like reading list, his aphoristic and periphrastic style, his continual attempt to immerse his work in that of a collective with other scholars, not to mention the execrable translations, with their impossible constructions, literal renderings, and hosts of English (or French or Spanish) mistakes on each page; all this has been difficult enough to

summarize as a comprehensible inheritance. In the United States the received mythology of Tafuri's life, based on the erratic and non-chronological translation of his work, tends to divide it (perhaps in an unconscious Hegelian formalism) into three phases: the architect-turned-historian attempting to stake out a territory as both a historian of Mannerism and Humanism, as well as a critic of postwar architecture in Italy (Ludovico Quaroni) while avoiding the engaged polemics of the older generation (Bruno Zevi, Ernesto Rogers) and his own contemporaries (Aldo Rossi); a central period of Marxism and critical historiography in Venice, stimulating a "school" of thought that rejuvenated the tired commonplaces of social-realist Marxism with a combination of Nietzschean nihilism (Massimo Cacciari) and culturalist politics (Asor Rosa); and a third period in retreat from the political engagement of the 1970s and '80s, a withdrawal to a pure historical and scholarly work that resulted in the last two volumes of essays on Venice, the Renaissance, and problems in research. From the point of view of the "American" Tafuri (and, it must be said, for many of his former colleagues in Venice), this last period of apparent withdrawal represents a problem - either institutionally, in the sense that it led to disputes over the direction in which to guide a recently founded Institute of Architectural History, or intellectually, in the sense that many who had been entirely engaged by positions stated in *Theories and History*, *Architecture and Utopia*, and *The Sphere and the Labyrinth* lost interest when the discussion turned back in time to apparently obscure 15th- and 16th-century debates in local politics, philology and philosophy. Inevitably, a generation in the US nurtured on the late '60s slogans of architecture as ideology, "no solutions in history," and strictures against "operative" criticism and history, and fed by intellectual *tours des forces* that intercalated the montage theories of Eisenstein, the pattern language of Piranesi, and the alienated voices of avant-gardists crying in the hollow void

of capitalist absorption, has found it hard to engage with equal fervor the complicated and archivally based arguments of prelates and lords in the 15th-century Veneto.

*Frames*

What allows me to pass from a history written in the plural to a questioning of that very plurality?

Manfredo Tafuri<sup>ccclxxii</sup>

There is, however, notwithstanding these difficulties, a more fundamental historiographic problem embedded in Tafuri's approach to the general and the particular; what historians since Ranke have understood as the implicit conflict between macro history (the grand universal narrative that gives "meaning" to the apparently random and particular nature of events) and micro history (the detailed investigation of cases and moments that gives macro history its support but that also complicates the big picture, sometimes disturbing it in unexpected ways). Tafuri, always aware of the dangers of historicism's universal and dogmatic narratives, and indeed, himself a historian of these narratives, whether embedded in history writing, political theory, or buildings, nevertheless insisted throughout his life on retaining a framework of thought that set his deeply worked case studies in a general context. In the early books, *Theories and History* and *Architecture and Utopia*, the disjunction between scales is less evident - they are themselves programmatic outlines, general pictures within which the research programs of the Venice school will be carried out. But the later books, beginning with *The Sphere and the Labyrinth*, adopt the method of what Walter Benjamin, faced with a similar problem in his study of German Baroque drama, solved by a so-called "epistemo-critical" preface that gave a philosophical overview to the book as a whole. No doubt deeply influenced by Benjamin's example, Tafuri's own "prefaces," including the resonant "Foreword" to his last book, *Ricerca*

*del Rinascimento*, stand as guardians of universalism, contrasting with the (deliberately) labyrinthine texture of the individual chapters, themselves neither clearly consequent of each other nor forming an immediately evident part of the grand picture.

Here, in the space of the disjunction between a historical case study and a "critical theoretical preface," we are returned to familiar historiographical ground. Siegfried Kracauer in his mapping of "The Structure of the Historical Universe," a chapter in his often ignored but fundamental *History, The Last Things Before the Last* published posthumously in 1969, posed the problem in terms of the correct historical distance. As in photography, the distanced vision is distinguished from the close-up by virtue of its perspective:

Any large-scale history - e.g., the history of a people - requires the narrator to step so far back from the given data that all the destinies of that people enter his field of vision... In the micro dimension a more or less dense fabric of given data canalizes the historian's imagination, his interpretative designs. As the distance from the data increases, they become scattered, thin out.<sup>cclxxiii</sup>

The problem for the historian is to navigate between these scales freely. Kracauer identifies two principles that, so to speak, control the traffic between the levels. The one, the "law of perspective," is in turn controlled by distance; the second, "the law of levels," relates to the migration of certain micro events into the sphere of the macro history, and is illustrated by Kracauer by the example of the "paradoxical relation between 'close-ups' and long shots" in the movies.<sup>cclxxiv</sup>

Tafuri first confronted this question in *Theories and History*. Against the (then) contemporary preoccupation with the post-Giedion understanding of architecture as space, Tafuri took note of the various structuralisms, from semiology to information science that were



Fig. 27. Manfredo Tafuri, Cover of *Teorie e storia dell'architettura*, [1968] 1973.

proposing a more “scientific” observation of the architectural object. Opposing a history that, in its very narrative forms, supported a supposedly organic idea of progress, and sustained “modernity” in architecture in a seamless conjunction with the ideology of capitalist development as a whole, Tafuri saw in semiology at least, a means of cutting through the ceaseless flow of criticism in the service of architecture and of producing the outlines of an “operative” criticism that would reendow history with an objective and materialist basis. And while he was to react equally strongly against the subsequent mythologies of “architecture *as* language,” the terms of semiological critique were present in his work to the end. But in *Theories and History*, the combined result of having punctured the balloon of “history in the service of architecture” and the mediated assessments of the ruling “scientific” methodologies, while preparing the ground for Tafuri’s preferred “instrumental criticism,” does not necessarily provide a clear picture of what a non-operative history might be, in narrative or subject terms. Indeed, the obvious influence of structuralist and post-structuralist theories on history seems to lead to a kind of stasis where the rejection of the over-arching narrative leaves no-narrative in its place. Caught, like Nietzsche, in the endless relays between “monumental,” “antiquarian,” and

“critical” history, Tafuri embraces the third, but at the same time inherits its dangers – that at the same time as bringing the past, so to speak, “before the tribunal, scrupulously examining it and finally condemning it,” unmitigated critique “takes the knife to its roots,” as Nietzsche has it. cclxxv

The gradual resolution of this tension, or rather its empirical and conceptual testing over many years and in different contexts at diverse scales, is the subsequent history of Tafuri’s own practice. To a large extent, it is “resolved” or in Tafuri’s words “accomplished” by the acceptance of a scalar rift between historical-theoretical summary and case study.

Such is the question posed by the Foreword to the *Ricerca* where the question of "perspectivity" becomes activated not simply as an analogue to the historian's method, as in Kracauer's photographic metaphor, but in terms of its own history; precisely, the relations between perspective theory and practice and the question of referentiality. Tafuri's meditation on perspective is set in a dense, two-page summary of the "project" that had marked Tafuri's entire career, and an attempt finally to bind it to the contents of the *Ricerca*. On the surface, it is at once a diagnosis of contemporary and modern architectural culture, and a hypothesis for its historical reformulation. For Tafuri, in 1992 as it had been in 1968, the problem is signaled by a "culture of architecture reflecting on itself," an internalized discourse of meaning that continuously identifies a "crisis" but fails to comprehend the way in which the nature of this so-called crisis is linked to culture as a whole, and equally refuses to acknowledge the unoriginality of its call to arms. But where, in 1968, this crisis had been characterized under the semiotic sign of "meaning" now in 1992 the question is raised in context of the postmodern (what Tafuri termed the "hypermodern"). Tafuri argues that “the current theoretical habitus does not differ considerably from those that have determined twentieth-century aesthetic choices; in fact, it

reproduces the familiar compulsion to overturn the dominant order,"<sup>cclxxvi</sup> replicating the sense of crisis felt by the historical avant-gardes as a function of a break from history itself, accompanied by a critical awareness of an "anguish of the referent," or, in Benjamin's terms, the "decline of the aura."

### *Anxiety*

To dispel anxiety by understanding and internalizing its causes: this would seem to be one of the principal ethical imperatives of bourgeois art.

Manfredo Tafuri<sup>cclxxvii</sup>

The words "anxiety" or "anguish" recur throughout Tafuri's writing. "To dispel anxiety by understanding and internalizing its causes," ran the opening lines of *Progetto e Utopia*, "this would seem to be one of the principal ethical imperatives of bourgeois art."["Allontare l'angoscia comprendendone e introiettandone le cause: questo sembra essere uno dei principali imperativi etivi dell'arte borghese."].<sup>cclxxviii</sup> Later in the same essay, Tafuri, as if citing himself in quotation marks, will use the same slogan -- "dispelling anxiety by internalizing its causes" -- with reference to Le Corbusier's Obus project for Algiers.<sup>cclxxix</sup> The same preoccupation will reappear in mature form in the "Foreword" to *Ricerca del Rinascimento*: "the theoretical anxieties (*ansie*) of the 19<sup>th</sup> century already exposes a sort of anguish (*angoscia*) in the face of an increasingly self-referential architecture." Tafuri writes: "if at the origin of the 'agony' (*agonia*) [of the referent] there lies the humanistic affirmation of the subject, how can we hope for a redemption based on subjective will?"<sup>cclxxx</sup> As Giorgio Ciucci has noted, this was Tafuri's working hypothesis to the end.

What is being registered in these quasi-nostalgic terms - anguish and decline - is, according to Tafuri, no less than the crumbling of the a priori foundations of referentiality seen

to have been established so firmly in Renaissance and Baroque art - the era of the "triumph of linear perspective" and "naturalism." In his argument, the "anguish" already being exhibited during the 19<sup>th</sup> century, was seen by the avant-gardes of the 20<sup>th</sup> century as a form of liberation, at the same time as their opponents were casting the notion of "loss" and "decline" in terms that, as Tafuri remarks, seemed to register the "aesthetic equivalent of a homicide or a mass catastrophe."<sup>cclxxxix</sup> Yet, considered from the point of view of a historian, rather than that of a nostalgic memory artist, such terms would seem to "exhibit a surfeit of meaning." Instead Tafuri suggests that one replace the term anguish with a more neutral term accomplishment; thus the "accomplishment" of the "referent" - the very triumph of the so-called Renaissance, is also accompanied by its successive displacement. Modernism, then, would be a displacement of referentiality, rather than a loss.

In this way, Tafuri counters the "foundationalist nostalgia" common to modernists - who would celebrate this "loss" - and their opponents. The commonplaces of postmodernism - that "compulsion to quote" that results in the fragmentation of language - are seen to be only part of a more general reflection on the "eclipse" of totality and plenitude that was the object also of high modernism - Le Corbusier's and Mies van der Rohe's "interrogations of the very principles of European rationality" thus join James Stirling's "ironies" as symptoms of the same "displacement" of the referent.<sup>cclxxxii</sup>

Against this "horizon," Tafuri situates his researches in the Renaissance: "Formulated in the space where the present finds its problems, they attempt a dialogue with the 'era of representation.'"<sup>cclxxxiii</sup> But, in distinction to former historians of the Renaissance, themselves largely taken up with the myth of "decline" and "eclipse" of "anguish" and "loss," from Wölfflin to Wittkower, Tafuri offers no preconceived version of this "representation" nor of the

"Renaissance" that previously characterized this period. What he does offer is a series of investigations of considerable narrative complexity into the debates that swirled around referentiality at the moment when they did not yet know themselves to be debates in a post-conceived "humanism" or "perspectivity." Their politics and aesthetics are presented, so to speak, in the raw; their shifts and turns of individual and group position analyzed in terms that at once join them to economic, opportunistic, and intellectual power struggles. History in this sense, and compared to the grand universal historicisms of the 19th and 20th centuries, is seen as a "weak force" that rather than resolving the problems of the past in a momentarily satisfying "solution" leaves them "living and unresolved, since they continue to affect (and to disrupt) the present as we know it."<sup>cclxxxiv</sup>

Certainly in the *Ricerca* Tafuri seems to "accomplish" what he had set out as the historical project in *Teorie e Storia* - to counter the avant-garde "myth is against history" (Barthes) with history against myth, to "rescue historicity from the web of the past" where modernism "from the very beginning, in the European avant-garde movements [presented itself] as a true challenge to history."<sup>cclxxxv</sup> Uniting under this anti-historical umbrella both Dada and De Stijl, Kahn and Rietveld - all movements that attempted to substitute the "myth of Order" for historicism - Tafuri acted to reinstate history, to resist the "eclipse" of history. Certainly, too, the studies in *Venezia e il Rinascimento* (1985) and *Ricerca* work toward a redefinition of architectural history on multiple levels: interdisciplinary and inter-institutional, they study "the nodes where events, times, and mentalities intersect," calibrating the ways in which "political decisions, religious anxieties, the arts and sciences, and the res aedificatoria become irrevocably interwoven."<sup>cclxxxvi</sup>

### *Disenchantments*

Total disenchantment produces great historians. And Manfredo Tafuri was a great historian of this kind.

Alberto Asor Rosa<sup>cclxxxvii</sup>

And yet, embedded in Tafuri's own examination of the notion of "loss" and consequent "anguish" is a sense that the historian too is implicated; that the "loss" spoken of with such rhetorical surfeit also haunts him in such a way as to raise difficult questions of interpretation and historical distance. For while in his early works, such as *Architecture and Utopia*, Tafuri makes it clear that the "loss" or "disenchantment" he speaks of is one construed by bourgeois ideology, and stems from what social scientists like Max Weber understood as the Wertfreiheit or value-free liberal ideal, in the last "Foreword" his historical perspective has shifted somewhat. In 1968, to take one example, a critic like Walter Benjamin, in his recognition of Baudelaire's experience of the city as "shock," is treated much like a companion in the struggle to define the historical parameters of modernity and the modernism that was its representation. In 1992, Benjamin is forced to take his place beside all other nostalgic bourgeois theorists of loss. In his discussion of the myths that have surrounded modernity and its "decline," Tafuri states:

Fortunately for us, the reception of specific moments in the history of modern criticism permits a "bracketing off" of the ideological sign originally stamped on them. For example, it is difficult indeed not to sense the close affinity between Sedlmayr's intuition of loss, Walter Benjamin's concept of the "decline of the aura," and Robert Klein's reflections on the "anguish of the referent."<sup>cclxxxviii</sup>

Such a "bracketing off" certainly allows Tafuri to construe a more generalized version of the modern anguish complex, even to trace it to the Renaissance; but in a deliberately shocking way, it also involves ignoring historical distinctions of an "ideological" nature, and not as simple as

the quoted "slogans" imply. In relation to the received history of political ideas, Tafuri's "bracketing" begs the question: is it indeed possible, or intellectually responsible, to bring together, except on a purely linguistic level, the nostalgic despair of a National Socialist ideologue, the resigned modernism of a German Jewish Marxist, and the phenomenological disquiet of a Romanian Jewish exile in Paris; the first, a melancholic survivor but unrepentant conservative; the second a suicide on the run from the Nazis, the third a survivor of, in his own words, "compulsory labor for Jews," and a refugee from dictatorship after the war? Or, for that matter, to join the sense of Sedlmayr's "loss of center" that is tied to a prognosis of doom, of Benjamin's loss of aura tied to a materialist understanding of the media and its political potential, and Klein's perspective theory which traced the "agony" of the disappearance of reference (the emergence of abstract art) to the problems raised by a subject with a fixed point of view. It is interesting in this regard that Tafuri himself, perhaps for reasons of rhetorical symmetry, translates what Klein actually calls an "agony of reference" into an "anguish of the referent," thus shifting the entire argument from the subjective process of referentiality to the object of signification and historically reifying what in Klein's terms was a living process activated by human subjects.

The pervasive sense of anguish that Tafuri describes in modern bourgeois society is, as he makes clear, intimately connected to what Max Weber termed the "disenchantment" of the world as experienced by the modern intellectual. Pervasive throughout all his writing, this theme was summarized succinctly in the late lecture *Wissenschaft als Beruf* ["Science as a Vocation"] of 1919: "The fate of our times," wrote Weber, "is characterized by rationalization and, above all, by the 'disenchantment of the world.' [Entzauberung der Welt]"<sup>cclxxxix</sup> This disenchantment or, a consequence of the stripping away of the "mythical" in the modern, a mythical that for Weber

gave the human condition a "genuine plasticity," was as Tafuri makes clear in the third chapter of *Architecture and Utopia*, a logical result of the triumph of rationalism, the "freedom from values" (Weber's *Wertfreiheit*) inherent in the acceptance of science as the dominating force in the world. Tafuri's historical project, on this level, was to reveal this disenchantment for what it was, and to see, with all the veils of ideology stripped away, the various avant-garde attempts to mirror this crisis of values as so many buffers against the anguish and shock of their disappearance. "Disenchantment" whether Weberian or later, becomes a repeated leitmotiv of his analysis. To take only one example from *Theories and History*, the late work of Paul Rudolph is signaled as disenchanted: "the 'signs' used by Rudolph... [are] disquieting for their skeptical disenchantment."<sup>CCXC</sup> Tafuri here seems to be echoing Weber's observation that "disenchantment" had produced a situation, for better or for worse, where "our greatest art is intimate rather than monumental," leading to the conclusion, that "if we try to compel and to 'invent' a monumental sense of art, lamentable monstrosities will be produced."<sup>CCXCI</sup>

But the "disenchantment" -- literally "de-mythologization" -- described by Tafuri seems also to have had deeper roots; if, as Weber remarked, a world without myths was the common inheritance of post-rationalist intellectuals, Tafuri himself can hardly be exempted from the group. As he revealed in an interview with Françoise Very in 1976, reflecting on the writing of *Theories and History*, he was far from having a critical distance from his own version of disenchantment. At the time of writing, he states:

We were locked in a castle under a spell, the keys were lost, in a linguistic maze - the more we looked for a direction, the more we entered magic halls full of tortured dreams... Once you entered the maze, Ariadne's thread was broken, and to go on from there you simply had to ignore Ariadne's thread.<sup>CCXCII</sup>

The book was written in the space of what he called "these magic halls full of tortured dreams" where de Sade and Piranesi conjured their visions against those of Enlightenment reason, in a contemporary context that seemed to echo that of the late 18th century - Tafuri cites Godard's "Une femme est une femme" and Peter Weiss's *Marat/Sade*. Indeed, disenchantment was, as Asor Rosa pointed out, a fundamental characteristic of Tafuri's stance as historian:

Once the phase of the "critique of architectural ideology" came to a close, this left behind in the mind of its theoretician a sense of total disenchantment, as if he had become a total stranger from the mechanism of values, procedures and connivance embedded in any discipline with an academic status.... Leaving the "critique of ideology" behind did not mean returning to architectural ideology, not even to the discipline closer to architectural historiography; rather it meant understanding that in this field too one should come as close as possible to the certainty of the datum, resisting both for the present and the past, all ideological seductions. ... There is a link between the ... inexorable demolition of all present and past structures of self-illusion and self-mystification - and the full revelation of a ... political vocation. ... Once no veil any longer exists, all that remains is to study, understand, and represent the mechanisms of reality [with the instruments of objective inquiries]. Total disenchantment produces great historians.<sup>ccxciii</sup>

The historian of disenchantment, himself disenchanted, thus is enabled to enter the disenchanted realm of history without ideology. Perhaps it is here, imbricated with the stance of the historian without ideology, that Tafuri finds himself on the interior of a discourse for which he stands not only as its historian but also its exemplary figure. In this sense, within the "bracketing" of the anguish of a Sedlmayr, a Benjamin, and a Klein under the sign of anguish and loss, and despite his understandable desire to restrain the "surfeit" of meaning they disclose, might we not now include Tafuri himself?

And by the time of the writing of the Foreword to *Ricerca*, the historian of disenchantment is sufficiently identified with the disenchanted historian, to enable these strange combinations, the result, it seems, of Tafuri's sense of a more urgent and general purpose that called for a consideration of the century's disenchantment "as a whole," and no longer concerned with small discrimination on behalf of a "good" or a "bad" kind. Thus Benjamin is paired to his apparent opposite, Sedlmayr, and Tafuri enabled to push back to the Renaissance, what, in the first place had seemed to him the provisional origins of the crisis of modernity. The "long Renaissance" is thus given an overarching position above the successive "modernisms" that it houses; the collapse of perspective certainty as a guarantee of the central position of the humanist subject is identified as a direct outcome of, and contemporaneous with, the verification of the perspective rule itself. Thus, in the first chapter of the *Ricerca*, the fiction of the "humanist" Brunelleschi is unmasked in the retelling of the "cruel and unreal comedy" whereby the architect-perspectivist is revealed as an unscrupulous manipulator of human "identities" in the service of de-stabilizing identity itself. Just as, we realize, in Tafuri's early essays on Alberti, it is the troubled, nightmare-ridden figure of a sociopath attempting through architecture to steer his way through imminent chaos, that takes hold over the serene mathematical and harmonious visions of a Wittkowerian analysis. In this unnerving vision of architecture as experiment (and all designs are experiments in the real, scientific, sense, for Tafuri) conceived as a metaphoric game with human subjects, the calculated "shocks" of the modernist avant-garde, the ruptures of Piranesian space, the anamorphoses of the late Baroque, take their place within the same frame and as symptomatic events in the same systemic history of perspectivism. And it is true that, on these grounds, whatever the motives or conclusions of the analyses, Sedlmayr, Benjamin, and Klein agree; like so many pathologists studying the same corpse, agreeing on the symptoms, but

vehemently rejecting the others' diagnoses. Tafuri's historical "bracketing" then, does not refuse political or ideological distinctions, but rather understands all such distinctions as pertinent to a autopsy of the age as a whole. For such a task, a Weber has to be accompanied by his Spengler; a Sedlmayr by his Benjamin; a Klein by his Tafuri.<sup>ccxciv</sup>

***Diagram Modernism : Abstracting History*** <sup>ccxcv</sup>

*Virtual Landscapes*

Its surface seems slick, perhaps reflective, often translucent, skin-like, visually viscous; its form appears curved, ballooned, bulging, segmental, warped, and twisted; its structure looks webbed, ribbed, and vaulted; its materials might be synthetic, resinous, metallic and alloyed; its interior would be cave-like, womb-like, tunneled, burrowed, and furrowed; its furniture and fittings are envisaged as soft, almost porous in texture, cast or injected, molded and sensitive to heat and light. Its architect calls it a “blob”, and compares it to a history of similar objects in nature that cultural theory since Bataille has identified with the *informe*. The techniques of its design are drawn not from architecture but from animation software that generates its complex forms with the help of digital avatars that work, independently of the architect ,to produce multiple iterations of possible combinations.<sup>ccxcvi</sup>

Or perhaps it resembles a smooth moon landscape seen as if from a low flying aircraft moving fast, its rifts, folds, crevices, escarpments, faults, and plateaus swiftly zooming into sight like the artificial terrain of a Star Wars Racer game; bundles of intersecting tubes and paths, vectors, and force fields are marked on its surface, as if the entire environment had been transformed into a vast fiber-optic network, or a magnetic plate whose tectonics were distorted by huge densities of attraction and repulsion. What seem to be the traces of human settlement are layered and compressed like so many geological formations, congealed into a solid geometry of crystalline forms. Neither a map, nor a model of an existing geography, this environment is a virtual model of data as if it were geography, inserted into the morphologically transformed structures of cities and regions. Its architects refer to topologies and topographies, and prefer to identify what they do as mapping rather than drawing.<sup>ccxcvii</sup>

Or maybe its edges are hard and sharp, its walls, if they can be identified, are transparent, or luminously translucent; its interiors are filled with semi-floating, egg-like enclosures; its levels are marked in bands or zones that respond to similar zones in plan; like some three-dimensional coordinate system at the scale of a building, it codes these zones in

color and material – a digital chip blown up extra-large – and intersects them with composite domains that automatically create neutral areas, mixed in use and ambiguous in form; its outer shapes are cubic or ovoid, mimicking in outline the advanced aesthetics of High Modernism, simplifying for the sake of semiotics references to the abstractions of Le Corbusier or Mies van der Rohe. Its architects speak of delirium as embedded in the apparently rational zoning schemes of modernism; they track movement and event in space like choreographers. Their projects and buildings share an ironic sensibility that prefers the arbitrary rigor of an imposed and consciously subverted system to any emotive expressionism. Their drawings are cool and hard line, black and white diagrams of functional forms.<sup>ccxcviii</sup>

Or, again, its roofs are clad in titanium or aluminum that turns gold, grey, and silver according to the light; they rise up in profusion like so many sails or shards; its forms are impacted and apparently randomly juxtaposed and intersected; its profiles are exuberant, like an expressionist utopia come to life, somewhere between the Cabinet of Doctor Caligari and a water color by Hermann Finsterlin; its intricate, lace-like structure creates a web of interstitial space, somewhat as if the Eiffel Tower had been chopped up and re-welded for its materials; its interiors are strangely mobile, flowing walls and undulating ceilings creating volumes of uncertain dimension. Its architects work with models cut out of brown cardboard, tearing them apart, sometimes scanning them digitally, always re-modeling in an apparently interminable analysis of design en abyme. Their drawings are thin trceries of wire-frame construction, digital or not, that affirm process rather than product, and refer to various traditions of the avant-garde, whether constructivist, dadaist, or surrealist.<sup>ccxcix</sup>

Such imaginary objects, composite portraits of contemporary architectural projects exemplify only a few of the design tendencies that have superseded what in the last decades of the twentieth century was called postmodernism. In place of a nostalgic return to historical precedents, often couched in “renaissance humanist” rhetoric, these new “blobs,” “topographies,” and “late modernisms” find their polemical stance in a resolutely forward-looking approach and their modes of design and representation in digital technologies.

Radically different in their forms and aims, they nevertheless find common cause in their espousal of the one representational technique that they share with their modernist avant-garde antecedents: their affection for what they and their critics call the “diagram.”<sup>ccc</sup>

*Diagram Discourses*

This tendency is exhibited on every level of meaning associated with the term “diagrammatic,” and runs through the gamut of a wide range of approaches and styles that at first glance seem entirely disparate – from diagrammatic caricature to theoretical discourse, modernist revival to digital experiment. Thus, included under this rubric would be works as radically dissimilar as Dominique Perrault’s new Bibliothèque de France, with its cartoon-like towers in the shape of open books, and Herzog and de Meuron’s renovation of Giles Gilbert Scott’s 1949 Bankside Power Station as the Tate Modern in London, with its sophisticated minimalism and cool, stripped down and vast interiors, lit by translucent panels, and retaining the simple parallel volumes of the old turbine house and ancillary spaces. More theoretically oriented, Bernard Tschumi, whose early theoretical exercises in the 1970s diagrammed the intersection of movement in space as creating events, according to a free adaptation of dance notation, and building on the rigorous typology of red follies on a grid he designed for the park of La Villette in Paris, has recently developed the genre in the design center of Le Fresnoy, where a new roof level spans across the existing pavilions of the former factory creating in a single “diagrammatic” gesture a rich complexity of spatial interaction. The urban projects of Rem Koolhaas, involving the physical planning of whole territories at a range of scales – “Small, Medium, Large, Extra Large,” to take the title of his own monograph – move towards a model of architecture as a form of data, anticipating the digital constructs of a younger generation of Dutch architects; his houses, conceived as subtle and ironic transformations of modernist precedents might almost be seen as diagrams of diagrams.<sup>ccci</sup>

Supporting this revival of diagrams, an entire theoretical discourse has been developed around the genre, following the coining of the term “diagram architecture” by the Japanese architect Toyo Ito in 1996 to characterize what he saw as a new sensibility in the work of his

compatriot Kajuyo Sejima.<sup>cccii</sup> The strength of Sejima’s architecture, he noted, derived from her extreme reduction of the building to a special kind of diagram, constructing it as far as possible as she represented it. As he wrote, “you see a building as essentially the equivalent of the kind of spatial diagram used to describe the daily activities for which the building is intended in abstract form. At least it seems as if your objective is to get as close as possible to this condition.”<sup>ccciii</sup> In this ascription, architecture itself becomes joined to its diagram – a diagram of spatial function transformed transparently into built spatial function with hardly a hiccup. The wall, which technologically takes on all the weight of this translation, thus carries the freight of the line, or vice versa. Sejima herself has developed the genre into a design method of distinct clarity, where simple black and white diagrams of function and space, are translated elegantly into building in a minimal aesthetic that goes well beyond the merely functional in a way that has led some critics to see echoes of Japanese mysticism in the intensity of her material abstractions.<sup>ccciv</sup>

From a less transcendental, and more neo-structuralist position, Peter Eisenman, whose elegant linear projections of complicated cubic constructions, generated from a combination of historical analysis of modernism and a study of syntactical visual language that derived from his reading of structural linguistics, became the paradigm of what the 1970s termed “paper architecture,” now finds a new intellectual receptivity for his diagrammatic drawings. His recently published *Diagram Diaries* at once re-frames his life’s work under a term whose revived legitimacy offers a means of inventing a pedigree for his digital experiments in morphological projection.<sup>cccv</sup> These projects and many more continue the late modern critical and ironic investigation of the modernist legacy of the last twenty years, while using the diagram as a device to both recall and supersede its formal canons. As Robert Somol notes in his introduction to *Diagram Diaries*, for the first time in the modern period, the diagram has become “the matter of architecture” itself, as opposed to its representation. “The diagram,” he writes, “has seemingly emerged as the final tool, in both its millennial and desperate guises, for architectural production and discourse”<sup>cccv</sup> Operating between form and word, space and

language, the diagram is both constitutive and projective, performative rather than representational. In this way, it is, Somol concludes, a tool of the virtual rather than the real, and a means of building (in both senses of the term) a virtual architecture, of proposing a world other than that which exists.

The diagrammatic turn in architecture, on another level, has been quickly assimilated into design practices that work with digital techniques of representation. Here the “virtual” qualities of the diagram pointed by Somol take on new significance for a medium that is rapidly supplanting the hand-drawn diagram, sketch, or plan. Despite the resistance of many architects, who mourn the passing of the oft-claimed relations between eye and hand, the evident speed with which digitized images of traditional modes of representation (perspective, axonometric, plan, etc.) can be modified and worked with has for many years supported the introduction of so-called “computer-aided design” into practice.<sup>cccvii</sup> But, more significant still, what has clearly emerged in recent buildings and projects, is an architecture itself not simply aided, but generated, by digital means, whether through animation, morphing, three-dimensional scanning and milling, in a way that would have been formally and technologically impossible hitherto. The forms of this tendency range from the ecstatic expressionism of Gehry, the topographical and regionalist mapping of new Dutch architects such as Ben van Berkel and Caroline Bos, or Winy Maas of MVRDV; the deconstructionist work of Hani Raschid; the new decorative and spatial orders of Donald Bates and Peter Dickenson of LAB Architects, Melbourne; and the explorations into the architectural *informe* by Greg Lynn and Karl Chu, whose animations and geometric permutations produce an almost neo-baroque efflorescence of formal experiments, fueled by software developed originally for the movie, aero-space and auto industries. In projects like these, the translation of geometry into building is the more direct as a result of the intimate relations between digital representation and industrial production, so that, for example, all traditional ideas of standardization can be jettisoned by a cutting or milling factory that runs automatically from the designer’s program, as was the case with the titanium panels, all of different dimensions, that surface the vaults of Bilbao. The digital effect of these schemes is further reinforced by the use

of materials with smooth reflective or translucent surfaces, and complex structures before only imagined in Expressionist or Constructivist utopias.<sup>cccviii</sup>

### *Modernist Drawing*

Architectural drawing has always been, as Walter Benjamin remarked, a “marginal case” with respect to the major arts.<sup>cccix</sup> In the sense that it precedes the building, that it is produced without reference to an already constituted object in the world, it has never conformed to traditional formulations of “imitation.” In the sense that it is a drawing towards the work of art itself, it is inevitably regarded as a supplement, part of the evolutionary narrative of a building’s production, but not to be valued as art per se. As the late Robin Evans noted, this is “the peculiar disadvantage under which architects labor; never working directly with the object of their thought, always working at it through some intervening medium, almost always the drawing, while painters and sculptors, who might spend some time working on preliminary sketches and maquettes, all ended up working on the thing itself.”<sup>cccx</sup> Yet it is true, as Evans also pointed out, that the architect’s drawing, as opposed to the painter’s and the sculptor’s, is generally the only work actually touched by the architect’s hand.<sup>cccxi</sup> This paradoxical separation between the artist and the work, the foundation of much architectural theory concerned with representation, was the occasion for Benjamin’s remark that architectural drawings could not be said to “re-produce architecture.” Rather, he observed, “They *produce* it in the first place.”

Architectural drawing is also seriously “technical” in nature, representing its objects with geometrical projections, plans, and sections that demand a certain expertise of the viewer, one trained to imagine the characteristics and qualities of the spaces represented by these enigmatic lines, as well as interpret them in their context of a long tradition of spatial culture, cued to their often sly and concealed references to former architectural precedents. Even when the architect employs a perspective rendering, this is hardly ever a simple matter of illustration; the particular point of view, the distortion of foreshortening or extension, the medium itself, are more often than not brought into play to emphasize the architect’s spatial idea, one that is supported by the position and scale of figures and furnishings, which, in turn provide clues as to the kind of life,

the nature of the everyday, envisaged as taking place in this space, and that the space itself will somehow reinforce. The architect works in code, code readily understood by others in the trade, but that is as potentially hermetic to the outsider as a musical score, or a mathematical formula. These encodings of representation have, throughout the modern period, suffered from a second level of difficulty. At a time when architecture was tied to the classical conventions, or later to the historical styles, the amateur might easily enough recognize the period or genre, identify the cultural reference, and comprehend the implied commentary. Modern architectural drawings however, depict a more or less abstract object, assembled out of geometrical forms, with few recognizable building elements such as columns or decorative motifs. Abstractions of abstractions they have increasingly over the last two centuries become little more than ciphers understood only by the professional circle around the architect, meaningless to client and lay - person alike. Le Corbusier's schematic evocations of infinite space, his evocation of a building's principal elements in a few quick lines; Mies van der Rohe's perspectives, often signaled by the thinnest of pencil lines situating a plane hovering in universal, gridded, space; such drawings suspended somewhere between a design process and a diagram, carry little weight as popular representations.

This apparent identity of the modernist drawing and its object, both informed by a geometrical linearity that tends towards the diagrammatic, has, throughout the modern period, led to charges that the one is the result of the other, that architecture has too-slavishly follows the conventions of its own representation. Modern architecture, concerned to represent space and form abstractly, avoiding the decorative and constructional codes of historical architectures, is thus accused of reductivism, of geometrical sterility, and thence of alienation from the human. This has been true since Victor Hugo first launched the attack in the first era of architecture's mechanization, and the issue has periodically re-surfaced over the last century to be reframed most succinctly in Henri Lefebvre's critique of modernism's "abstract space."<sup>cccxi</sup> For Hugo, the culprit was a geometrically regulated neo-classicism; for Lefebvre, the enemy was enshrined in modernism itself. In both cases, the complaint was as much to do with architecture's chosen

means of representation as with the built structures themselves. Hugo's complaint was that architecture, from the French Revolution on had been transformed into a geometrical caricature of its former self, exemplified in the cubic masses of Claude-Nicolas Ledoux's toll-gates built around Paris between 1785 and 1789, and confirmed by the powerful influence of the new graphic formulas of the Ecole Polytechnique, introduced after 1795, even as Henri Lefebvre's criticism of "abstract space" updates the critique to include the modernism of Le Corbusier. Both Hugo and Lefebvre ground their indictments on what they consider the root cause of the "fall" of architecture: representation, or more specifically, the too easy translation of the new graphic techniques used by the modern architect into built form. Architecture, that is, looked too much like the geometry with which it was designed and depicted. Geometry is thus seen as the underlying cause of architectural alienation, the degradation of humanism, and the split between architecture and its "public." And if for Hugo, architecture had become no more than the caricature of geometry, for Lefebvre, architectural blueprints and more generally the architect's fetishization of graphic representations as the "real," sterilized and degraded lived space. For Lefebvre, the discourse of the graphic image "too easily becomes – as in the case of Le Corbusier – a moral discourse on straight lines, on right angles and straightness in general, combining a figurative appeal to nature (water, air, sunshine) with the worst kind of abstraction (plane geometry, modules, etc.)."<sup>cccxiii</sup>

Such criticisms have been commonplace throughout the life of modernism. "Diagrammatic architecture" has been more a term of abuse than praise, signifying an object without depth, cultural or physical, one subjected to the supposed tyranny of geometry and economy – the commonplace of the "modernist box" caricatured by post-modernists. As early as 1934 at the height of modernist functionalism, the art historian and friend of Le Corbusier, Henri Focillon was warning that "in considering form as the graph of an activity ... we are exposed to two dangers. The first is that of stripping it bare, of reducing it to a mere contour or diagram ... The second danger is that of separating the graph from the activity and of considering the latter by itself alone. Although an earthquake exists independently of the seismograph, and barometric

variations exist without any relation to the indicating needle, a work of art exists only insofar as it is form.” “Form” for Focillon, as for many modern artists schooled in Adolf Hildebrand’s idealist notions of form since the turn of the century, was to be rather envisaged in “all its fullness.”<sup>cccxiv</sup> In this context, the diagram was to be avoided, a mechanical trap.

*From Durand to Le Corbusier*

Despite such criticisms, the diagram has held a privileged place in the development of modern architecture, as at once responding to the aesthetics of rationalism and the authority of functionalism. Beginning in the late eighteenth century, and in tune with the geometrical predilections of the scientific Enlightenment, a few architects began to turn away from the elaborate renderings, common to the late eighteenth century academy and its heir, the Ecole des Beaux-Arts. Ledoux, trained as an engraver and inspired by the plates of Diderot’s *Encyclopédie*, developed a geometrical style in representation that informed his built work. The architect Jean-Nicolas Louis Durand, appointed to the newly established Ecole Polytechnique after 1795, and responding to the demands of its new Director, Gaspard Monge, developed a method for representation -- a code of points, lines, and planes to be organized on the newly introduced graph paper -- that in his terms corresponded to the stereotomy and metric standardization of Monge, and the requirements of simplicity and economy.<sup>cccxv</sup>

Those who think that the aim of architecture is essentially to please the eyes, necessarily regard the rendering of geometrical drawings as inherent to architecture; but if architecture was in effect only an art of making images, at least these images should be true, and present objects as we see them in nature: but rendered drawings offer nothing geometrical to our eyes; consequently the rendering of geometrical drawings, far from adding to the effect or the intelligence of these drawings, can only make them cloudy and equivocal; which is by no means suitable to render them more useful, or even more capable to please. This kind of drawing should be the more severely banished from architecture, because not only is it false, but supremely dangerous. In whatever manner

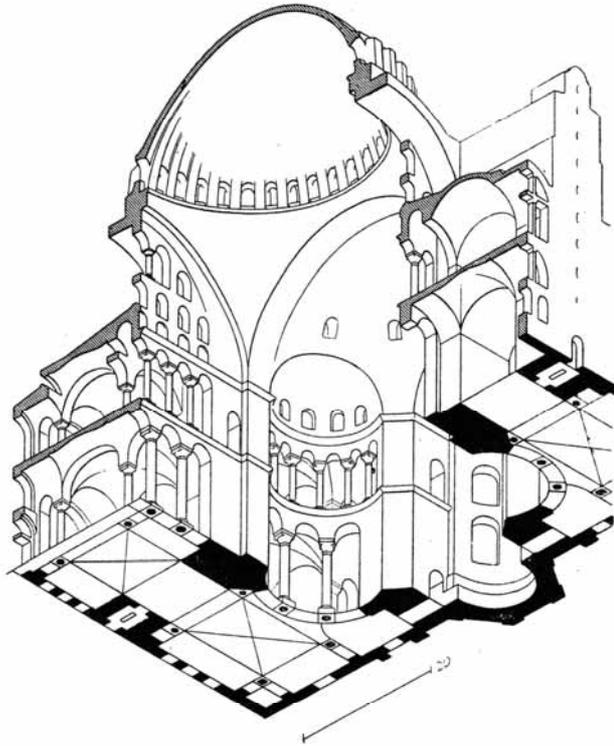
one considers this art, the projects the most suitable to produce the greatest effects in execution, are those which are disposed of in the simplest way.<sup>cccxvi</sup>

But, for Durand, drawing was also a way of constructing what the philosophers had attempted to invent for centuries – a kind of universal characteristic: “Drawing serves to render account of ideas, whether one studies architecture or whether one composes projects for buildings, it serves to fix ideas, in such a way that one can examine anew at one’s leisure, correct them if necessary; it serves, finally to communicate them afterwards, whether to clients, or different contractors who collaborate in the execution of buildings: one understands, after this, how important it is to familiarize oneself with it [drawing].”<sup>cccxvii</sup> In this sense,

Drawing is the natural language of architecture; every language, to fulfill its object, should be perfectly in harmony with the ideas of which it is the expression; thus, architecture being essentially simple, enemy of all uselessness, of all difficulty, the genre of drawing that it uses should be free from every kind of difficulty, pretension, and luxury; then it will contribute significantly to the speed and ease of study and to the development of ideas; in the opposite case, it will only render the hand clumsy, the imagination, lazy, and often even the judgement very false.<sup>cccxviii</sup>

Durand’s diagrammatic method, economic of time and resources, and readily communicable to the client, the engineer and the contractor, was widely adopted in the nineteenth century, although it did not, as its inventor had hoped, succeed in displacing the more elaborate renderings of the Beaux-Arts. Modernists at the end of the century, however, were quick to seize on its potential for conveying abstraction and function, among them Le Corbusier, who seized on the axonometric projections of historical structures published by the engineer Auguste Choisy in 1899, reprinting them in his articles on architecture for *L’Esprit Nouveau* between 1920 and 1923.<sup>cccxix</sup>

trente mètres d'ouverture); deux faces contrebutées par des voûtes en forme d'absides; les deux autres, maintenues par des arcs formerets épais, et épaulées par des contreforts.



Les deux grandes absides de butée répondent l'une à l'entrée, l'autre au sanctuaire; les deux arcs formerets correspondent aux deux faces latérales. A droite et à gauche se développent des collatéraux à double étage; et, soit qu'il s'agisse des voûtes des collatéraux ou des voûtes mêmes de la partie centrale, les massifs de butée prennent leur point d'appui dans l'enceinte même de l'édifice.

Fig. 27. Auguste Choisy, Hagia Sophia, from *Histoire d'architecture*, 1899.

Inheriting this double ideal, of a graphic representation that is itself a tool for the installation of the utopia it outlines, a geometrically driven modernism developed a special affection for the utopian diagram. Ledoux's claims for the circle and the square as the "letters" of the architect's "alphabet" echoed Enlightenment projects for the development of a universal language, and his *Ideal City of Chaux* demonstrated the use of such geometry as a pictogrammatic language of three-dimensional form for a Rousseauesque society on natural mores. Le Corbusier, with an architectural sensibility informed by post-cubist developments in

painting and sculpture, psychology and philosophy, found in “abstraction” a weapon against the historical styles and a powerful support for an architecture based on form (and its qualities of mass and surface) and space (and its qualities of enclosure or infiniteness). In this sense, abstraction was registered as a primary aesthetic quality, one that allowed for the proportional systems and historical styles formerly making up the aesthetic content of the “art” of architecture, to be superseded by its own constructive and space-enclosing elements expressed in the pure geometries now coincident with the technological potential of steel and reinforced concrete. “Architecture has nothing to do with the “styles,” wrote Le Corbusier in 1923. “It appeals to the highest faculties by its very abstraction. Architectural abstraction possesses that of the particular and magnificent that, rooting itself in the brute fact, it spiritualizes it. The brute fact is subject to the idea only through the order that is projected upon it.”<sup>cccxx</sup>

The neo-platonic echoes of this form of abstraction were clear, and Le Corbusier openly claimed continuity from earlier classicisms – from the formal and spatial order of the Greeks, the institutional and typological order of the Romans, and the proportional systems of the modern, French, classicists of the sixteenth and seventeenth century. The representational modes for this kind of abstraction were likewise derived from the linear obsessions of neo-classicists: the purity of the line, the trace that allowed a contour, whether of a landscape or a body, to represent the “essence” of a natural form, ready to be converted into architecture. Thus Le Corbusier’s characterization of the architectural drawing echoes all the commonplaces of “contour” theory after Winckelmann: “A good and noble architecture is expressed on paper by a diagram [une *épure*] so denuded that an insider’s vision is needed to understand it; this paper is an act of faith by the architect who knows what he is going to do...” And, like Winckelmann against the Baroque, Corbusier poses this essential abstraction against the conceits of the Beaux-Arts architect: “On the other side, the flattering renderings of the ambitious architect titillate the eager client. *Drawing is in truth architecture’s trap.*”<sup>cccxxi</sup>

The diagrammatic representations of such an abstraction were in this sense close replications of a “new world of space” as Le Corbusier called it, that was to dissolve all

traditional monumentalisms, styles, institutions, and habitats in the universal flux of the abstract. Transparency, infinity, ineffability, liminality, and the expansive extensions of the post-Nietzschean subject demanded as few boundary conditions as possible; the thinner the line, the more invisible the wall. Succinct and economical, the architect's "épure" reduced a project to its essentials; it described the fundamental organization of a building tersely, and in terms that seemed to correspond to the scientific tenor of the times; it was, in some sense the essence of the project, at once correct and analytic representation of relations, and a formal analog to the built structure itself.

Le Corbusier's moral stance in favor of the abstract drawing had its roots in the late Enlightenment, and his attitude towards drawing was remarkably similar to that of Durand. "Drawings," he argued late in 1939, "are made within four walls, with docile implements; their lines impose forms which can be one of two types: the simple statement of an architectural idea ordering space and prescribing the right materials -- an art form issuing from the directing brain, imagination made concrete and evolving before the delighted eyes of the architect, skilful, exact, inspired; or alternatively we can be faced with merely a dazzling spread of engravings, illuminated manuscripts or chromos, crafty stage designs to bedazzle and distract -- as much their author as the onlooker -- from the real issues concerned." Architectural drawings were thus divided into two species: those which reveal the underlying structure and organization of the project, and those which dissimulate in order to seduce the lay client. This contrast between the analytical and the sentimental, the rational and the deceptive, that echoes French critiques of rhetorical expression since Port Royal, was more than a formal distinction of representation, however, but rather a touchstone by which to verify the authentic modernity of an architectural work, one that discarded the "illusion of plans" (to cite the title of his attack on Beaux Arts stylistics in *Vers une architecture*) in favor of a design that represented its own "idea." The drawing -- a "simple statement of an architectural idea ordering space and prescribing the right materials" -- would thereby serve as an instrument of correction and production for an architecture that, as far as possible in the translation from design to building, would represent

itself transparently, so to speak, materializing its aesthetic and intellectual order as clearly as a mathematical formula.

*Diagrams of History*

Modernist diagrams have not, however, been received without their own diagrammatic transformation at the hands of followers, epigones and revivalists. Le Corbusier's rapid sketches, diagrammatic as they were, were redolent in spatial and aesthetic potential compared with those prepared by the following generation, either in drawn or built form. Thus the polemical and geometrically closed diagrams of Albert Frey, in their attempt to clarify the principles of modern movement environmental ideals, rigidly codify both technology and space.<sup>cccxxii</sup> Other followers of the first generation of modernists *built* diagrammatic buildings to exemplify modernist principles -- among the best known would be Philip Johnson's quasi-Miesian Glass House in Connecticut of 1949 (itself a codification of Johnson and Hitchcock's own codification of modernism as "international style"), and Harry Seidler's post-Breuer house for his mother of the same year in Sydney, a perfect, composite model of a villa with elements from Le Corbusier's Poissy, Breuer's early Connecticut houses, and Oscar Niemeyer's sense of color and space. Such diagrams, widely repeated in the 1950s, were essential in the gradual transformation of modernism from its status as a style for the cultural elite, or a minimal response to mass housing needs, to a generalized way of life for middle class suburbs.

Architectural historians, as they have sought to reduce the complexity of architectural experience to formal order have also played a role in the diagramming of space and structure, starting early enough with Paul Frankl and A. E. Brinckmann between 1914 and 1924.<sup>cccxxiii</sup>

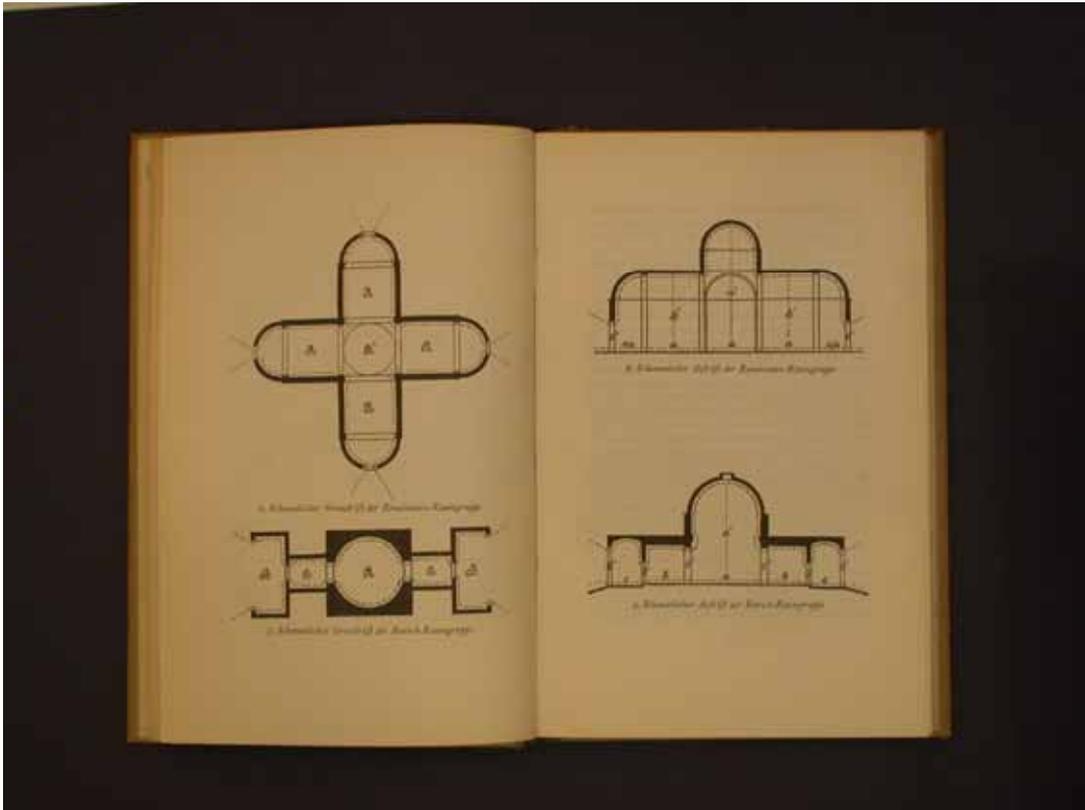


Fig. 28. A.E Brinckmann, “Schematic Plans of Renaissance and Baroque Spatial Groups,” *Plastik und Raum. Als Grundformen Künstlerischer Gestaltung* (Munich: Piper Verlag, 1924).

Their schematic renderings of historical space prepared the way for a host of similar spatial analyses, heavily informed by Gestalt psychology. Perhaps the most celebrated, and in the realm of architectural practice the most influential, was the page of systematized diagrams of Palladian villas published by Rudolf Wittkower in 1949.<sup>cccxxiv</sup> As we know the Palladian system thus delineated “scientifically” by Wittkower has many flaws in historical actuality. But the Wittkower diagram registered to a post-war generation of modernists looking for a geometrical and stable authority for form in the demonstrated absence of any single functional determinants. Alison and Peter Smithson, among others, were drawn by the idea of the existence of what might have been “architectural principles in the age of humanism” to develop a new a rigorous geometrical modernism.<sup>cccxxv</sup>

In 1947 this humanist diagrammatics was taken further, now with respect to the villas of Le Corbusier, by the architectural historian John Summerson who, in a lecture to students at the Bristol College of Architecture delivered in 1947 characterized Le Corbusier's transformation of the conventional house as a mark of his "witty, sublime-nonsensical approach to architectural design," his penchant for "sudden, irresistible" "topsy-turvydom." He was referring to the systematic reversals in function and spatial organization that appear, for example, in the villas at Garches or Poissy. If traditionally, a house had four walls, Le Corbusier constructed it out of four windows; if a house normally stood in a garden, Le Corbusier would have the garden in the house, and so on. We might add to Summerson's list: if a house stands on the ground, Le Corbusier raises it up, and if a house is centrally planned, Le Corbusier emphasizes peripheral movement.<sup>cccxxvi</sup>

Rowe's "The Mathematics of the Ideal Villa," published two years later had demonstrated that what for Summerson was nothing more than "witty nonsense" represented in fact a programmatic concern for marking the distance and the relationship between modernism and tradition, between the prototype Palladian villa of aristocratic and bourgeois life and the Corbusian version, between traditional space and modern space.<sup>cccxxvii</sup> Rowe's versions of the diagrams of Le Corbusier's villas at Poissy and Garches themselves become the canonical references for late modernist space, referred to by architects as diverse as Rem Koolhaas, in, for example, his own mutation of the twentieth-century villa in the recently completed House at Bordeaux, and Greg Lynn, in his appeal for (digital) geometry to be restored to its primary place in the generation of architecture.

*Program/Diagram: Koolhaas*

It was in 1980, at the height of the postmodern carnival, that OMA aka Rem Koolhaas was invited somewhat incongruously given the other participants, to take part in the Venice Biennale, organized by Paolo Portoghesi as a Strada Novissima and called "The Presence in the

Past,” envisaged as a melange of brightly colored historicist and pop pastiches. OMA's response was to declare a “New Sobriety.” Five years later, their exhibit in the Milan Triennale confirmed their distinct opposition to postmodern trends. Building on the fact that Barcelona had just decided to go ahead with a reconstruction of Mies's Barcelona Pavilion for the 1929 World's Fair, OMA imagined the posthistory of the remains of the original pavilion in a cuttingly ironic exposure of the vagaries of architectural destiny.

The crowds had gone. The king and queen had signed the book. The pools were emptied. Unlike the other temporary pavilions, which looked more like buildings, the German pavilion, which looked light, was too heavy to be moved easily. Since Germany was in a state of confusion, it was decided to leave the pavilion on loan to Spain until decision could be made. So it stood, a Gothic outpost in the land of the Moors. Meanwhile the political situation in Spain became tense ... For a few days it served as the headquarters of the anarchists but they quarreled about the use of the spaces ... Because of this experience the Anarchists were the first to declare that modern architecture didn't work, and once again the pavilion was abandoned. Later it was badly damaged, becoming the first modern architectural ruin, but no one noticed. The new regime decided, as a friendly gesture, on its repatriation.<sup>cccxxviii</sup>

In this bathetic tale of modernism abandoned, Koolhaas laid the foundations, already intimated in his 1978 book, *Delirious New York*, for a truly ironic acceptance of a discredited style, or rather “non-style.” In his 1985 competition entry for the Morgan Bank building, Amsterdam, and despite the four story height limitations of the site, he proposed what might be seen, for all intents and purposes, as a fragment of Hilberseimer's 1923 Chicago Tribune entry. And in the seminal essay of 1993, “Typical Plan,” Koolhaas outlined his own appropriation of

the theory of disenchantment in architecture. Here, Koolhaas turns the notion of European “utopia” on its head, and finds instead, utopia in the US:

Typical Plan is an American invention. It is zero-degree architecture, architecture stripped of all traces of uniqueness and specificity. It belongs to the New World.

The notion of the typical plan is therapeutic; it is the End of Architectural History, which is nothing but the hysterical fetishization of the atypical plan. Typical Plan is a segment of an unacknowledged utopia, the promise of a post-architectural future.<sup>cccxxix</sup>

Such a plan would be, he writes, the American equivalent of Musil’s *The Man Without Qualities* the modernist forbear of the man in the lonely crowd: it is, after all “the plan without qualities.” And, accordingly, he asks: “Does the plan without qualities create men without qualities? Was the space of Typical Plan the incubator of the man in the grey flannel suit?”<sup>cccxxx</sup>

The office building, as it evolved from the loft type to the “smooth space” of the RCA building to the World Trade center, was in the business of creating “new territories for the smooth unfolding of new processes, in this case ideal accommodation for business.”<sup>cccxxxi</sup> Smooth spaces without any specificity: “Supposedly the most circumscribed program, it is actually the most formless ... The office building represents the first totally abstract program.” It is, thus, “an architecture of the rectangle,”<sup>cccxxxii</sup> a perfect diagram, neutral, and purely objective: the architecture of the 1960s, was in these terms, a minimalism for the masses -- “a sensuous science of coordination ... That transcends the practical to emerge in a rarified existential domain of *pure objectivity*. You can only *be* in Typical Plan, not sleep, eat, make love.”<sup>cccxxxiii</sup>

From the early 1990s on, Koolhaas has taken on Typical Plan as his own response to what he considers the architectural pyrotechnics of individual post-modern and late-modern designers, making them cringe at his unrelenting surveys of world metropolis's, with their

western-style developments that could, as Typical, be literally anywhere. “Typical Plan is Western.... It is the stamp of modernity.”<sup>cccxxxiv</sup> This is an irony that he has extended to the largest as well as the smallest units of his design practice. For if the Typical Plan at work represents the habitat of modern business, then the man of modern business should be provided with a similar Typical Plan at home. We only have to look at the House in Bordeaux, for confirmation of this; a confirmation that once more returns to Mies and Le Corbusier for its “typicality” and that endows their Modernist visions with a sense of the culmination and end of modernism, the “end” as he puts it in Nietzschean terms, of architectural history, a “house without qualities” for a “man without qualities.”

*Program’s End: Koolworld*



Fig. 29. Rem Koolhaas, Cover of *Wired Magazine*, June 2003.

Forty three years after Banham’s *Architectural Review* “stocktaking,” reinforcing Banham’s view of a history out of sync with a calendar, Rem Koolhaas published his own

“review” of architecture in the new century, symptomatically, not in an architectural journal, but in *Wired* magazine, once the hip site of computer fetishism, now reborn as the oracle of post-silicon-valley-melt-down dystopia. “The Ultimate Atlas for the 21<sup>st</sup> Century,” is presented as an assemblage of thirty “spaces” for the new century alphabetically ranged from “ad space” to “waning space.” Like Banham’s “1960”, with its “science for children” approach to architects intimating their own imminent demise, but unlike Banham in its refusal of “solutions,” Koolhaas’s *Koolworld* produces a world vision entirely counter to any ideal of design, technological or aesthetic. This world is mapped with relentless “realism:” its new frontiers are those of population growth and its economic and social consequences – youth is mapped against the cost of pension plans; prisoners are mapped against domains of civil and political liberty; television ownership against illiteracy. Real alternative spaces – that escape control established for the purposes of tax evasion, waste disposal electronic and maritime, abortion, euthanasia, same-sex partnerships, human stem-cell cloning, are seen as “new islands,” mapped against the virtual spaces of global commerce and manufacture, politics and power. The only “architectural” image, and the last in the review, is that of a deserted Capitol at Chandigarh, “all that’s left from the Western imagination’s most radical attempt to organize public space.” New York, capital of the 20<sup>th</sup> century, is, as Koolhaas concludes, “delirious no more” in the 21<sup>st</sup>.

We don’t have to work too hard to imagine *Koolworld*: like many of William Gibson’s dystopias, and the projected fantasies of the Futurists before him,, it looks suspiciously like the world in which we live.<sup>cccxxxv</sup> Everything is changing, and at a pace we can hardly conceive of without the aid of new charts and different maps: “Borders are inscribed and permeated, control zones imposed and violated, jurisdictions declared and ignored, markets pumped up and punctured.”<sup>cccxxxvi</sup> New frontiers, new islands, new politics, new globalists, all mapped with a

precision that equals the *Oxford Atlas* of old, with its neatly designated “pink” zones for the British Empire, and later, the “blue” zones for the Commonwealth. The only phenomena that aren’t mapped (and this distinguishes Koolhaas from the Futurists) are new wars (breaking out and closing down perhaps too quickly to catch). But Gibson is still lurking in the background. What was once in Koolhaas’s terms “junkspace,” has itself become a victim of this rapid change: now “dumpspace” takes its place in the lexicon of spatial terms for the new world order, or rather, disorder. Like Gibson’s “zones” Koolhaas’s dumps fester, mold, and smolder; they offer asylum for the displaced and refuse for the contemporary rag-picker.



Fig. 30. Rem Koolhaas, "Wasteland," From *Wired*, 2003.

Space has changed its nature since modernism ruled the world: “our old ideas about space have exploded,” writes Koolhaas in a passage reminiscent of Walter Benjamin’s characterization

of the explosive spatial effect of movies. And so, the new spaces are mapped too – euro space, space, relationship space, boom space, voice space, home space, bush space, protest space, body space, research space, border space, tight space, art space, sex space, crowd space, future space, secure space, color space, blog space, robo space, dna space, ad space, golf space, limbo space, waning space, and finally, public space.

But the spaces celebrated here are, in contrast to the former utopianism of modernism, and of *Wired* itself in its first iteration, far from ideal. They are the desultory spaces of a world in decay, the end-of-the-line spaces of a modern movement gone very wrong, the threatening spaces of technology run amock, of information unlimited, the totalizing spaces of an ultimate globalism. If the gaze of Koolworld’s contributors was less relentless, we would be tempted to use adjectives like “Orwellian” – after all, as William Gibson has recently pointed out, Orwell’s “1984” was no more than his own “1948” set in the future for emphasis. Koolworld, however, makes no pretense of a future – it represents the here and now with hyper-objectivity.

And yet, there is also, as with much science fiction, a sense of nostalgia hovering beneath the apparently radical unmasking of present-day dystopia. For, perhaps with the exception of blog space, these spaces, far from new, have been around a long time – at least since the end of the Second World War. Euro space was, after all, the post-War dream; space space, and robo space were long ago extracted from comics and put into orbit; ad space was the fetish of the Situationists; relationship space, home space, and body space were the domains of the new psychology of R.D. Laing and the feel-good warmth of Woodstock. Such spaces were the leitmotifs of Archigram and other so-called utopian groups in the 60s, taking their cue, as Banham noted, from movies like “Barbarella,” or in the case of body space, “Fantastic Voyage.” And does not “fading space” provoke echoes of Robert Smithson’s essays on entropic space (a

space left out of Koolworld) in the 70s. In this context, Koolworld's move "back" into the future, invites comparison with that earlier "stocktaking" launched by Reyner Banham in 1960, not in the pages of a computer journal, but in the august, and until then, staid, pages of *The Architectural Review*.

All this of course is familiar enough to readers of Koolhaas and his recent forays into the "junkspace" of modern capitalism by way of guides to the development of the Pearl River Delta, and shopping-guides recently interpreted by Fredric Jameson as forms of an apocalyptic utopia that attempt to "imagine capitalism by way of imagining the end of the world. But the *Wired* "atlas" promises more than these deliberately extra-large collections: its insertion within the pages of the ultimate glossy of networked world, its contributions often indistinguishable from advertisements for speedy Hewlett-Packard printers, edges its survey of real junkspace uneasily into the territory of the virtual even as it challenges designers of real space to comprehend the sublime (an aesthetic term that appears once more in its post-post-modern form) of the virtual. This is, rather than the world of the future, an inventory of the present building up, in Koolhaas's terms, "a fragment of an image, a pixelated map of an emerging world." And this emerging world, while rejecting architectural terminology as inadequate for its description, retains architecture in its virtual dimensions: "think chat *rooms*, Web *sites*, and *firewalls*" writes Koolhaas.

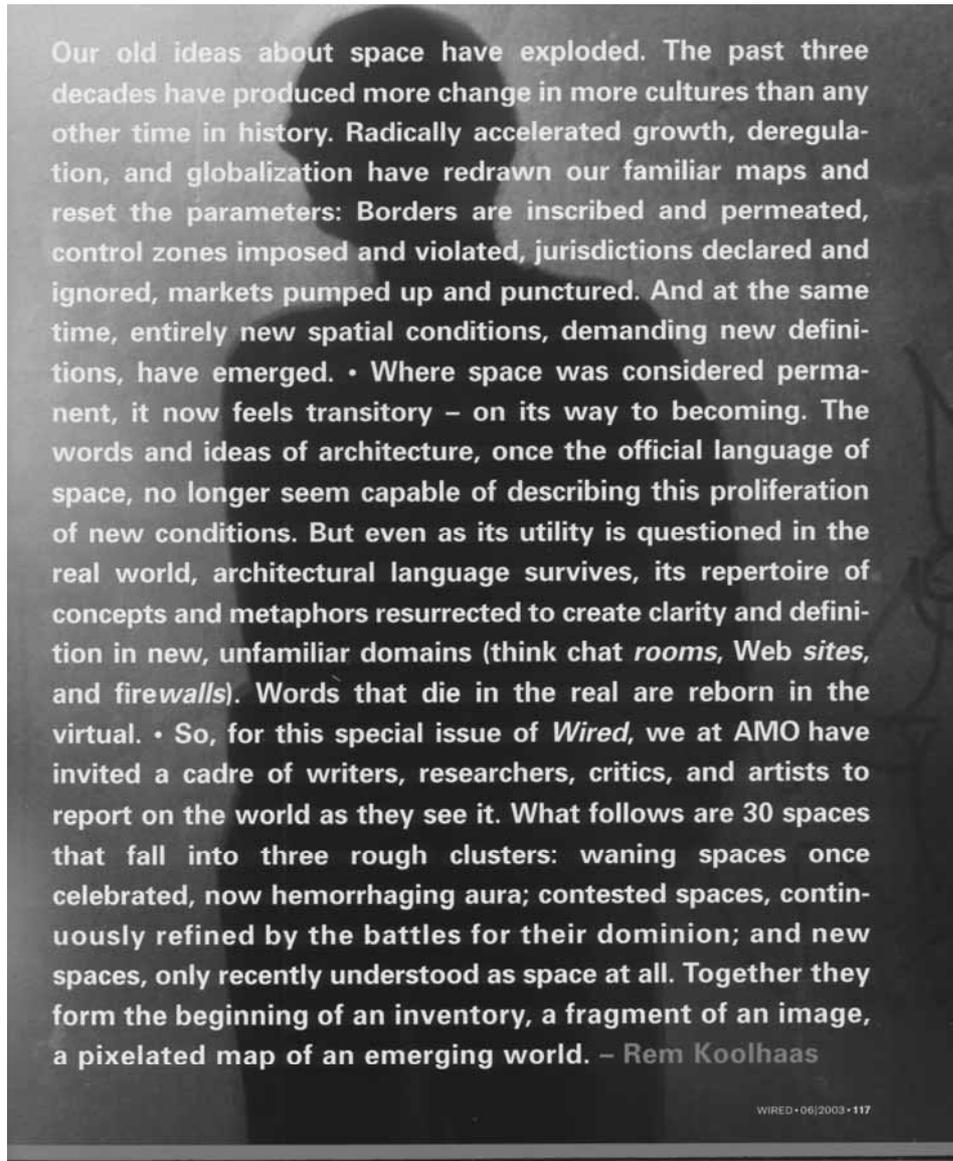


Fig. 31. Rem Koolhaas, "Manifesto," from *Wired*, 2003.

Architecture is then brought to the web to define its new spatial dimensions; even as Banham brought computers to the readers of the *Architectural Review*. If, for Koolhaas, to “report on the world” as his contributors “see it,” is not to claim a privilege for any form of information, only for its manner of framing, for Banham information, was, in and of itself, bound to change the architectural world. In 1960, the fundamental question was the nature of the “program” conceived of in the widest possible sense, adopted for architecture. Not “form

follows function,” but form is, in a real sense, program and vice versa. And here a critical difference between 1960 and 2003 seems to emerge. For Banham, a truly scientific program for architecture would take in all aspects previously left to tradition – including the aesthetics of perception, human response (visual, psychological, biological), technologies of the environment, and the like; science would simply reveal and propose the best solutions to the design of shelter. For Koolhaas, science offers no solutions but only knowledge; solutions are the province of the global managers of power and markets, architects, armed with the precise tools offered by information and visual mapping can only perceive and predict – their power is not in inventing the program, but identifying it. And here a second difference is evident: for Summerson and Banham, it was imperative to rewrite theory in order to promulgate their new sense of the program: theory was at once rational elucidation and manifesto. For Koolhaas, theory is just another architectural word to be relegated to virtual space and used if useful: more important, and supplanting theory in the architectural lexicon, is the catalog – on-line and potentially exhaustive, ready to be googled.

Now, forty years later, Koolhaas is, on the surface at least, no longer even interested in calibrating his new programmatic constructions to traditional architectural values; nor is he ostensibly interested in these concerns leading to “une autre architecture” as Banham put it. For Koolhaas, the terms of architecture have simply evaporated, or more properly, become virtual, as they have been adopted, like ghosts, into the terminology of the web and the net: chat rooms, firewalls, web sites, and the like. Architecture, as traditionally conceived in Modernism, is unequal to the task of description of and response to these “entirely new spatial conditions.” For Koolhaas, modernism, or rather the paranoid-critical response to modernism provided an adequate frame of reference, and an aesthetic paradigm, for architecture conceived as

programmatic hybridity in single buildings, or even for the scale shifts of building complexes, or the variety-laden repetition demanded by global consumerism – the architecture that is of the Rotterdam Kunsthalle, the Paris and Bordeaux Houses, EuroLille, and Prada. Koolworld announces the burn-out of Modernism as paradigm or anti-paradigm, and the emergence of something not yet clearly delineated – “a fragment of an image, a pixilated map of an emerging world.”<sup>cccxxxvii</sup>

And yet, perhaps inevitably, the language deployed to describe this world, is that of Modernism – the language of graphs, maps, charts, and apparent objectification -- not that different from Banham’s graphs of past, present, and possible futures, or Jencks’ prophesies of “Architecture 2000” (recently updated), or, before them, of Le Corbusier’s diagrams of historical progress, his mapped overflights of Brazil, and charted population studies of Paris. Koolhaas, too, still uses the all terminology of space, a terminology with a century of history and infinite qualifications, from the original *spielraum* of Wölfflin to the *espace indicible* of Le Corbusier and the multiple postmodern spaces since the 60s. For Koolhaas, one space has substituted for another – new ways of seeing reveal new spaces (a fundament of Modernist theory. Even “junk space” now upstaged by “dump space,” a space apparently escaping from “constraints, from selection, from the tyranny of style,”<sup>cccxxxviii</sup> has been anticipated by the Modernist space par excellence, that of the *informe*. Koolworld is still a profoundly Modernist world, and one suspects that beyond the bravado and anticipation of the new, the architecture that will undoubtedly emerge to represent this world will also be Modernist at root, and like its predecessors out of *Delirious New York*, *SMXL*, and *The Harvard Guide to Shopping*, entirely contemporary for all that.

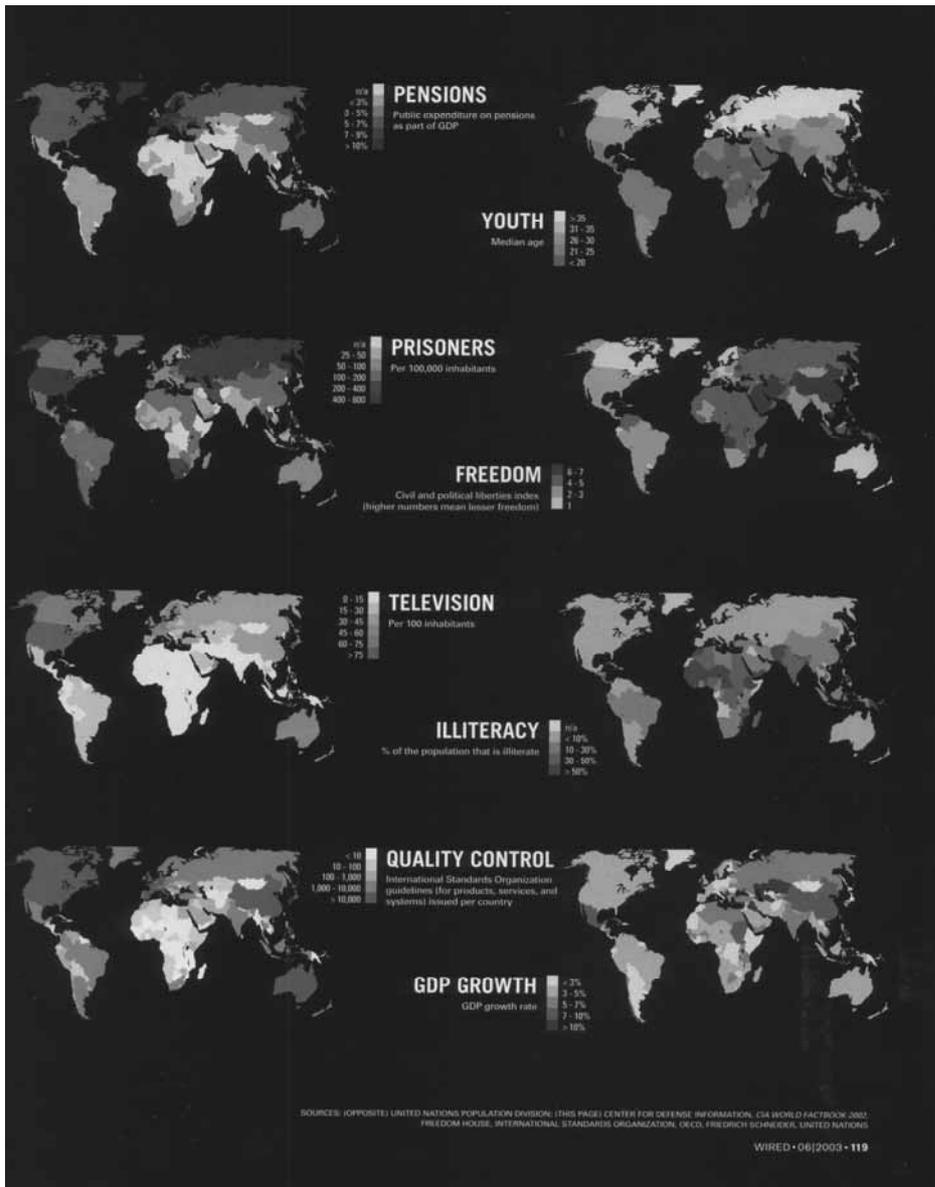


Fig. 32. Rem Koolhaas, Mapping the Global World, from *Wired* 2003.

### *Diagram Potential*

The recent attention to diagrammatic form in architecture may then be seen, on one level, as a testimony to the resilience of modernist ideologies, aesthetics, and technologies among those architects who had never thoroughly embraced the return to the past championed by neo-historicists and new urbanists. Thus, continuing modernists celebrate the diagram, in what one can only call a neo-modernist return by many architects to rationalist simplicity and minimalist

lucidity. Here the appeal to the diagram is both polemical and strategic. In its reduced and minimal form it dries out, so to speak, the representational excesses of postmodernism, the citational hysteria of nostalgia and the vain attempts to cover over the inevitable effects of modern technologies, effects that modernists had attempted to face with the invention of abstract aesthetics. In its assertion of geometry as the basis for architecture, it opens the way for a thorough digitalization of the field, but in a way that overcomes the simplistic and often rigid models based on functional analysis proposed by “Design Methods” theorists like Christopher Alexander in the early decades of computerization.

But the stakes of diagram architecture go beyond a simple reaction to the postmodern, and a somewhat retro affection for the old or not-so-old modern, which itself might be interpreted as a postmodern turn. The excitement of digital aesthetics, the potential of mapping, finally, space, time, and movement in formal terms, the possibilities inherent in direct milling from design to finished object, all these too might be understood, if not directly postmodern in affect, certainly as smoothing the transition from an old industrial to a new digital world – one where the distance between image and reality can no longer be measured by any critique of the spectacle.

More fundamentally, the intersection of diagram and materiality impelled by digitalization upsets the semiotic distinctions drawn by Peirce as the diagram becomes less and less an icon, and more and more a blueprint – or, alternatively, the icon increasingly takes on the characteristics of an object in the world. The clearest example of this shift would be the generation of digital topographies that include in their modeling “data” that would normally be separately diagrammed – the flows of traffic, changes in climate, orientation, existing settlement, demographic trends, and the like. Formerly these would be considered by the designer as “influences” to be taken into account while preparing a “solution” to the varied problems they posed. Now, however, they can be mapped synthetically as direct topographical information, weighted according to their hierarchical importance, and literally transforming the shape of the ground. The resulting “map,” however hybrid in conception is now less an icon to be read as

standing in for a real territory, than a plan for the reconstitution of its topographical form. Similarly, “blobs” however much they look like geometrical diagrams of form, architectural or not, are robbed of their iconic status in favor of their programmatic role in the production of the forms they image.

In this context, the question of architectural abstraction, whether in representation or in building, takes on an entirely new significance. For what seems to be at stake, is the instability provoked between the new formal vocabularies generated by the computer and their easy translation into built form, so as to produce, almost simultaneously, an image *as* architecture and architecture *as* image. That is, where traditionally, in classical and modernist works, the architecture might image an idea, be imaged itself, or produce an image of its own, but at the same time take its place in the world as experienced and lived structure and space, now the image participates in the architecture to an unheralded degree, a condition that calls for, if not a post-digital reaction, certainly a reevaluation of the nature and role of abstract representation in the production of (abstract) architecture.

For the question raised by the new digital diagrams is whether they are in fact abstract at all, at least in the sense of the word used by modernist aesthetics. Where Corbusian and Miesian diagrams held within them the potential of form to be realized as abstract spatial relations – abstractions of abstractions, so to speak – the digital drawing is nothing more nor less than the mapping of three or four dimensional relations in two, more like an engineering specification than an abstraction. The aesthetics of digitalization, moreover, seem driven less by a polemical belief in the virtues of an abstract representation of a new world, than by the limits of software’s replication of surface, color, and texture and its notorious aversion to any ambiguity: the potential openness of the sketch, of the drawn line in all its subtleties, is reduced to thin line clarity and all-over surface pattern. It would seem, then, that a new approach to aesthetics has to be forged in the face of such drawing, one that would take into account the changing definitions of the “real,” the “image,” and the “object” as it is subjected to the infinite morphings and distortions of animation. An aesthetics of data, of mapped information, would in these terms

differentiate itself from the diagrammatic functionalism of the modern movement as well as from the long-lived neo-Kantianism that has served modernism's aesthetic judgments since the Enlightenment. Modernism, in these terms has shifted from a diagram that is rendered as an abstraction of an abstraction, to one that is a diagram of a diagram.

**Epilogue: Postmodern or posthistoire?**

Now there is no longer any internal development within art! It is all up with art history based upon the logic of meaning, and even with any consistency of absurdities. The process of development has been completed, and what comes now is already in existence: the confused syncretism of all styles and possibilities -- posthistory." Arnold Gehlen, *Zeit-Bilder*, 1961

The history that we have been tracing, one of a consistent desire to renegotiate the terms with which Postwar architecture treated its own, and previous, history was, on one level a simple product of modernism itself. Modernism, we have been told, refused history in favor of abstraction; its functional promises and technological fetishism were nothing but failed utopias of progress; its ideology was out of touch with the people, if not anti-humanistic. Its formal vocabularies were sterile and uncommunicative. Which is why the verities of so-called "Postmodernism" seemed appealing insofar as they were apparently direct opposed. In the myth of the postmodernists, history was welcomed back as a counter to abstraction; any pretense to functional program was abandoned as over-deterministic and controlling; its language, drawn from the roots of humanistic architecture or the explicit iconography of advertising, was popular, if not populist. At its most extreme, as supported by a scion of the British Royal Family, it sought to return us to a more comfortable past rendered out of the whole cloth of classical (or better, village) style. It was, we were told, finally in touch with the people. In this formulation, modernism appears out of history, against history, and, in its strident, avant-garde attempts to break with history, was nothing but a failed utopia of escape from history. Postmodernism, on the other hand, seemed to accept history as value and speech, and insists on the fundamental

continuity of history, a history that comfortably ties us back to our humanistic roots, and thereby renders us, once again, more human.

And yet a closer inspection of the historical stances of the moderns and their postwar supporters has revealed the disconcerting fact that far from rejecting “history” as such, modernism perhaps respected it too much. In asserting the need to break with the past, whether in Futurist, Neo-Plasticist, Purist, or Constructivist terms, the modernist avant-gardes in fact understood history as a fundamental force, an engine of the social world. Whether conceived in Hegelian or Marxian terms, as transcendentalist or dialectical, history *moved*, and society with it. If the avant-gardes had any illusions, they were founded on the belief that this movement might be anticipated, its force applied to new and anticipated ends. Even the abstraction of modernist vocabulary was derived from the deep respect modernism evinced for history – a history, which from Heinrich Wölfflin and Auguste Choisy to Bruno Zevi and Colin Rowe, searched for essences and structures rather than stylistic affects. Indeed, it would be true to say that never was history more alive than in its so-called modernist “rejection.”

In this vein, however, Postmodernism might be said to have demonstrated a profound disdain for history in favor of an a-historical *myth*. Its ascriptions of “humanism” to the Renaissance were, after all, little more than the worn-out shards of mandarin connoisseurs from Bernard Berenson to Geoffrey Scott, the very end-game of the Renaissance revival, the Renaissance itself a fabrication based on mid-19th century myths of glorious Italy from Jules Michelet to Jacob Burckhardt. Postmodernism’s willingness to ransack history, as well as billboards, for its vocabulary, revealed it indeed as fundamentally disrespectful of history, and even more disrespectful of the present. For a Prince to imagine a restored country-village, and his architect to imagine a restored classical Atlantis, were two sides of an aristocratic illusion

founded on an anti-democratic, if not anti-social, ideology of the post-romantic period. Whether peasants in cloaks, or intellectuals in togas, society was imagined as stable and in place, with no untidy disruptions forced by industrial or political conflict. In fact, conflict was surprisingly absent from postmodern models of society and culture; its “history” was, as Manfredo Tafuri suspected, a history “without tears,” where the opposition, bluntly stated by Le Corbusier as “Architecture or Revolution,” was finally resolved in favor of architecture.

To think modernism, then, would be to think of history as an active and profoundly disturbing force; to take history on its own terms; realistically or idealistically to tangle with history and wrestle it into shape. It would be, indeed, to think historically. To think postmodern, by contrast, would be to ignore everything that makes history, history, and selectively to pick and chose whatever authorizing sign fits the moment. History is used and abused in postmodernism, it is feared and confronted in modernism.

And yet, as we have seen, the historical field after 1945 is more complex than this oversimplified binary opposition might imply. For starting with Kaufmann and continuing with Rowe, Banham, and Tafuri, the effort to overcome the polemics of modernism’s willed break with history, was itself a profoundly counter-historical move. To imply with Kaufmann that the Enlightenment and its geometries of reason were in some way forms of the eternal modern, or with Rowe, that the ambiguities of Mannerism were in some way re-emergent in modernism, or with Banham, that history constructed a trajectory for itself that might be graphed into its “future,” or finally, with Tafuri, that modernism was simply the end result of an epistemological break that ruptured the Medieval and Renaissance worlds, was to imply that history had in some sense come to completion. If the end might be predicted, or indeed had arrived, then the future was to be bereft of all but repetition.

Here it is that both postwar “histories,” as well as the commonly understood phenomena of “postmodernism” join the long-established tradition of *posthistoire* thought. *post-histoire*, was in fact premised on an idea launched in the 1850s, at the height of historicism's own apparent dominance. Invented as an idea if not as a term (historians disagree as to whether the word can be found in his voluminous works) by the mathematician Alexandre Cournot, *posthistoire* was applied to the moment when a human creation (whether an institution or an object) reached the stage when there was no possibility of its further development -- when all that could be done was its endless perfecting. The “posthistorical” phase as he called it, was the third, following the pre-historical and the historical, and an inevitable end-point of all cultures, already demonstrated by the static nature of Chinese bureaucratic society over the last millennium.<sup>cccxxxix</sup> For Cournot – and it is not impossible that he, or an account of his theories, was known to Le Corbusier, all cultural and social objects, from institutions to buildings and artworks, developed into types and type-forms in post-historical periods. As the Belgian philosopher Hendrick de Man described it, writing after the war:

The term posthistorical seems adequate to describe what happens when an institution or a cultural achievement ceases to be historically active and productive of new qualities, and becomes purely receptive or eclectically imitative. Thus understood Cournot's notion of the posthistorical would [...] fit the cultural phase that, following a "fulfillment of sense," has become "devoid of sense." The alternative then is, in biological terms, either death or mutation.<sup>cccxl</sup>

The posthistory of *post-histoire* after Cournot, is equally interesting: through Hendrick de Man, and, we might hazard, his nephew Paul De Man, to Arnold Gehlen and Gianni Vattimo, the concept evidently contained the potential to destabilize and criticize the dominant historicist tendencies of the late nineteenth century, from within, so to speak. And it was a concept especially suited for the characterization of the history of art -- in a way a history of things that, through stylistic or functional development, readily become thought of as "perfected." Thus, for Gehlen and de Man, *posthistoire* represented a kind of end game toward which everything they

looked at seemed to be tending; a relentless stasis, an endless return of the same, an impossibility of breaking out of the iron frame of bureaucracy and politics, and a corresponding search for charisma, the leader, the event that would break open the possibility of a different and more active future; thence their fascination with both mass worker-movements on the one hand, and Hitler's program on the other.

If, in the post-Nietzschean terms of Gianni Vattimo *posthistoire* is simply a recognition of the modern world as it is – a world of change without change, mutability without mutability, then “posthistoire” is a concept that allows the description of “the experience of the end of history.” Taking his cue from Arnold Gehlen who found the term useful to sum up the mentality that followed post-modern disillusionment in the great nineteenth-century narratives of historical progress -- the moment as Gehlen says, “when progress becomes routine.” Vattimo sees such routinization in the developments of technology and consumerism that while continuously renewed, nevertheless stay the same:

There is a profound “immobility” in the technological world which science fiction writers have often portrayed as the reduction of every experience of reality to an experience of images (no one ever really meets anyone else; instead, everyone watches everything on a television screen while alone at home). This same phenomenon can already be sensed in the air-conditioned, muffled silence in which computers work.

Flattened out, simultaneous, the world appears de-historicized. What made us “modern” -- i.e. the experience of living every day in a narrative history of progress and development reinforced by the daily newspaper -- now comes to a halt. The “master” narrative, once a secularization of religious salvation, now fails, and multiple other possible narratives rise up.<sup>cccxi</sup>

In the context of our argument, it is significant that Vattimo goes beyond other posthistoire thinkers in order to join the end of history argument to the emergence of post-modernism: He writes: “What legitimates post-modernist theories and makes them worthy of discussion is the

fact that their claim of a radical 'break' with modernity does not seem unfounded as long as these observations on the post-historical character of contemporary existence are valid.<sup>1111</sup>

Thus we are presented with the end of modernity and the end of architectural history, respectively, as the immediate corollary of a post-modern condition. In this way we might see postmodernism as a special moment in *posthistoire* thought, or better as a special case of *posthistoire* thought in architectural terms. Indeed, seen in this context, (architectural) postmodernism has had a continuous presence in the modern world from the late nineteenth century on. From Hampstead Garden suburb to the Prince's village; from the nostalgic *heimat* style of the 1920s to the New Urbanist settlements of the 1980s, from the Queen Anne and Renaissance revivals of Edwardian England to the mock Italian piazzas of New Orleans; from the streets of Sitte to the Strada Novissima of Portoghesi; all these counter-modernisms and anti-modernisms take their logical place in a world conceived of as, finally, without history, where all history has been transformed into an empty sign of itself, deprived of its force and discomfoting violence, combined in a luminous vision of a world without change. The addition of advertising, of the world of Las Vegas, to this iconographic soup was then a simple step entirely consistent with a view of the world as image of its past and illusion without future.

And this understanding of *posthistoire* thought in architecture does not exclude a great deal of work that, while it may *look* modern enough, but nevertheless corresponds to a counter-historical trend. After all, *posthistoire* already understands "modernity" itself as a closed and completed historical field, and the different styles of the modern have often enough been evoked in the same way as postmodernism evoked classical motifs. Thus "constructivism" can easily enough be resurrected under the guise of "deconstructivism," while we have seen ample evidence recently of a neo-expressionism, drawn from the languages of Taut, Scharoun, and the

sets of movies like *Dr Caligari*. We might suspect that even “hi-tech” itself, seemingly so innocent in its unabashed “modernity,” to fall into this category also. In much of this work, which seems on the surface to represent a continuity of the modern, we can detect stylistic conceit and historical reference as repetition rather than an inner understanding of the transformation dynamics of historical thought and practice.

Which opens the question: what then, outside the politically regressive and image-filled frame of the *posthistoire*, is left for historical thought, and thence for modernity conceived historically? In the first place, it is not difficult to understand, with Jurgen Habermas and others, that we are still, in some way, deeply involved in the modern, as historically defined. Whether we place the emergence of this tendency in the scientific and aesthetic academies of the seventeenth century, the philosophic thought of the eighteenth, the political and industrial revolutions of the nineteenth, or the scientific breakthroughs of the twentieth, it is clear that our *historical* response to all these phenomena is one of fundamental recognition, of affinity rather than estrangement. A recent example would be that cited by the Harvard historian of science, Peter Gallison, who has found important lessons for contemporary global positioning systems in the temporal conundrums of Einstein and Poincaré. Secondly, if this is the case, it is equally clear that “modernity” is a continuing project of re-evaluation and innovation, based on experiment and internal investigation.

In architectural terms this would involve, not the outward citation of an already formed language, but the internal study and development of architectural language in itself, or, alternatively and in conjunction with, a similarly rigorous and productive approach to the fundamental program of the work. It is in such a way that, for example, architects from Van Doesburg to Peter Eisenman have understood the nature of the formal language of architecture,

and others from Le Corbusier to Koolhaas have understood the radicality of the program. We might indeed begin to characterize the qualities of the modern in this way, thus bypassing the vexed question of style (itself a *posthistoire* concept) in order to construe historically and dynamically a sense of our own modernity. Such a task would involve an approach to modern history that refuses closure and finalism, and rather sees all questions posed by modernity as still open. In this formulation, the history of modern architecture would not seek to classify style or movement, even if this were a part of the historical record itself, but look for places where the uncomfortable questions of form and program with respect to society and its political formation were asked; where irresolution rather than resolution was assumed; where projects were started but not finished, not as failures but as active and unresolved challenges; where disruptions from outside the field inconveniently questioned the verities of established practices; where the very forms in which conceive of history itself have been put into question. This would involve a reassessment of disruptive moments and figures, not as curiosities and embarrassments, nor as washed-up utopias (utopia, after all, is a *posthistoire* concept), but as openings into the process, rather than the appearance, of modernity; it would also involve a serious reevaluation of the sacred cows of modernity, whose work has become, too quickly, canonical, in order to detect the internal inconsistencies, the still-open questions lurking behind their monographical facades; it would, finally, mean the opening up of those ideas of “modernism” so prevalent after the Second World War, and that were proposed in order to tidy up the erratic field of the early avant-gardes, and provide rules for being-modern in the era of reconstruction. Thus, to give some examples, movements and groups like Archigram, figures like Kiesler and Matta-Clark, icons like Le Corbusier and Mies, and concepts of modernism developed by critics like Greenberg and Rowe would all come under renewed scrutiny, as would historians themselves, like Pevsner,

Kaufmann, Banham and Tafuri, all attempting to construe “modernity” according to their own particular vision of the future in the past. Such historians should then be seen, not so much as contributing to our historical knowledge of earlier phases of the modern, although this is important, but more as instances of the processes of modernity’s self-reflection, themselves to be opened up as unanswered questions. Thus Kaufmann’s formal definitions of “autonomy” which resonated so powerfully in the practice of architects from Johnson and Rossi to Eisenman; Pevsner’s already nervous identification of the “return of historicism” in 1960 (a phenomenon which might lead us to question the apparent newness of the postmodern irruption in the 1980s); Banham’s interrogation of the “program” as calling for a new relationship between science and aesthetics, which gave so strong an impetus to the experiments of Cedric Price; Tafuri’s reinscription of modernity as constituted by the initial gesture of Renaissance, which did so much to open up the perceived nature of modernity itself; all these histories should be conceived as so many modernist projects in and for themselves, and used to challenge the preconceptions of our own historical consciousness.

What then might a modernism reconceived as a continuum, within which a *posthistoire* postmodernism found its momentary and recurring place mean for contemporary practice? In the first place we would not expect to see a resurgence of modern style, or styles, but rather a consistent resistance to style and a re-exploration of the potentials for abstraction to develop a coherent form of expression. Such abstraction would however not be founded on the various avant-garde languages of the 1920s. but rather on the programmatic and technological demands of the present. These demands would include a recognition of the no longer new technologies of the digital; technologies that until now have been too subservient to the software aesthetic that arrives with every new program, whether AutoCad or Rhino or Maya. They would also require a

critical response to questions posed throughout by modernism but not yet satisfactorily answered, in either political or architectural terms: the housing question that still haunts architecture and development on a global scale; the question of density that is posed by population explosions and land scarcity, also on a global scale; the ecological question of resources and modes of conservation that, with radical shifts in climate and diminishing energy sources poses fundamental problems for building of much wider implications than materials and “green building.” New demands, not fully posed by former modernities would include the full use of modeling techniques for assimilating, integrating, and ultimately forming data of all kinds in such a way that the consequences of programmatic decisions might be measured in terms that supported and evaluated design alternatives. These alternatives would not simply appear as random choices among beautiful surfaces or shaped blobs, but as arguments in form that proposed political, social, and technological interventions that implied a critique of business as usual. In sum, a new modernity would continue to address the questions of the present with the imagination of an avant-garde stance, but now with the wisdom of hindsight, and a long history of the modern on which to rely. In this way, a movement that ostensibly began by rejecting “history” would now find its ideological and experimental sources in its own history.

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## NOTES.

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<sup>i</sup> Robert Maxwell, "Introduction" to Colin Rowe, "Thanks to the RIBA -- Part 1," *The Journal of Architecture*, 1 (Spring, 1996) 3.

<sup>ii</sup> A partial list would include: Adolf Behne, *Der moderne Zweckbau* (Munich: Drei Masken Verlag, 1926); Gustav Adolf Platz, *Die Baukunst der neuesten Zeit* (Berlin: Propyläen Verlag, 1927); Sigfried Giedion, *Bauen in Frankreich, Bauen in Eisen, Bauen in Eisenbeton* (Leipzig: Klinkhardt & Biermann, 1928); Bruno Taut, *Modern Architecture* (London: The Studio, 1929); Walter Kurt Behrent, *Modern Building: Its Nature, Problems, and Forms* (London: Martin Hopkinson, 1937); Henry Russell Hitchcock, *Modern Architecture: Romanticism and Reintegration* (New York: Payson and Clarke, 1929); Nikolaus Pevsner, *Pioneers of the Modern Movement from William Morris to Walter Gropius* (London: Faber and Faber, 1936); Sigfried Giedion, *Space, Time and Architecture: The Growth of a New Tradition* (Cambridge: Harvard University Press, 1941).

<sup>iii</sup> See the excellent analysis by Panayotis Tournikiotis, *The Historiography of Modern Architecture* (Cambridge, Mass.: MIT Press, 1999), that must form the basis of any serious study of the works of Pevsner, Zevi, Benevolo, Hitchcock, Collins, and Tafuri. Influenced by the semiotic structuralism of his thesis advisor Françoise Choay, Tournikiotis restricts his analysis to the structural comparison of key texts, deliberately removing any discussion of context or authors, in the belief that "the context ... and the personalities ... have nothing to tell us about the nature of the *written discourse per se*." [Tournikiotis, *Historiography* 5-6] The present thesis, however, studies these relations specifically, understanding the writing of history, whether or not under the guise of objectivity, to form a practice immersed in the theory and design of

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architecture at any one moment, within a comprehensive practice that as, it embraces all aspects of the architectural field, might properly be called its "discourse."

<sup>iv</sup> See Harry Francis Mallgrave and Eleftherios Ikonou, "Introduction," to *Empathy, Form, and Space. Problems in German Aesthetics, 1873-1893* (Santa Monica: The Getty Center for the History of Art and the Humanities, 1994) 1-85, and Michael Podro, *The Critical Historians of Art* (New Haven and London: Yale University Press, 1982). For architecture the pioneering work was Paul Frankl's *Die Entwicklungsphasen der neuen Baukunst* (Stuttgart: Verlag B.G. Teubner, 1914).

<sup>v</sup> Nikolaus Pevsner, *Leipziger Barock. Die Baukunst der Barockzeit in Leipzig* (Dresden: Wolfgang Jess, 1928). In the Forward Pevsner writes: "Wilhelm Pinder und Franz Studniczka, Rudolf Kautzsch und Leo Bruhns, denen ich vielleicht, wenn auch nicht mehr auf Grund persönlich genossener Ausbildung, so doch auf Grund seiner für die ganze wissenschaftliche Methode dieses Buches vorbildlichen Arbeiten über das Wesen des Barockstiles, August Schmarsow anfügen darf" and refers to August Schmarsow's *Barock und Rokoko. Eien Kritische auseinandersetzung über da malerische in der architektur* (Leipzig: S. Hirzel, 1897). the second volume of Schmarsow's *Beiträge zur aesthetik der bildenden künste*.

<sup>vi</sup> Manfredo Tafuri, *Teorie e storia dell'architettura* (Rome and Bari: Edizioni Laterza, 1968; second edition, 1973).

<sup>vii</sup> Tafuri, *Teorie* 266 (my translation). The English translation of the second edition of *Teorie e storia*, translated by Giorgio Verrecchia with a Foreword by Dennis Sharp (London: Granada Publishing, 1980) is both thoroughly unreliable and filled with omissions and mistakes. The present citation is an example, where "esperienze 'informali'," referring to avant-garde

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experiments in the *informe* or 'non-formal' as they had been tied back to prehistoric architectures is rendered meaningless by the phrase "some abstract experiences."

viii This chapter grew out of three invitations: to present a paper at the conference "The Last Things Before the Last," organized by the PhD students in the School of Architecture at Columbia University; to respond to a paper by Barbara Johnson at a conference organized by T.J.Clark at Berkeley and the San Francisco MOMA under the title "What was Modernism and Why Won't it Go Away;" and to present a paper at the conference in Paris organized by *ANY Magazine* in 1999. A more developed version of was read at a Getty conference on architectural history and art history in the Spring of 2000, and at a symposium on the "Culture of Disenchantment" hosted by the Center for Modern and Contemporary Studies UCLA, 2001. I have benefited from the responses, conversations and debates at all these conferences. A version of this chapter was published as "The Ledoux Effect: Emil Kaufmann and the Claims of Kantian Autonomy," *Perspecta. The Yale Architectural Journal* 33 (2002)16-29.

ix Clement Greenberg, "Modernist Painting," *The Collected Essays and Criticism*, ed. John O'Brian, vol. 4 (Chicago: Chicago University Press, 1993) 85.

x For a brief summary of Kaufmann's life, see, Meyer Schapiro, "Obituary of Emil Kaufmann," *College Art Journal* (Winter, 1954) 144; James Grote van Derpol, "Emil Kaufmann, 1891-1953," *Journal of the Society of Architectural Historians* 12-3 (1953) 32. For the contemporary assessment of Kaufmann, see Georges Teyssot, "Neoclassic and 'Autonomous' Architecture: the Formalism of Emil Kaufmann 1891-1953," in Demetri Porphyrios, ed., "On the Methodology of Architectural History," *Architectural Design* 51 (1981) 24-29; Gilbert Erouart, "Situation d'Emil Kaufmann," in Emil Kaufmann, *Trois architectes révolutionnaires: Boullée,*

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*Ledoux, Lequeu*, ed. Gilbert Erouart and Georges Teyssot (Paris, 1978) 5-11. See also, Monique Mosser, "Situation d'Emil K.," *De Ledoux à Le Corbusier. Origines de l'architecture moderne* (Arc-et-Senans: Edition Fondation C.N.Ledoux, 1987) 84-89; Daniel Rabreau, "Critique d'Emil Kaufmann, 'Trois architectes révolutionnaires,'" *Bulletin Monumental* (1979) 78-81.

xi Emil Kaufmann, *Von Ledoux bis Le Corbusier. Ursprung und Entwicklung der Autonomen Architektur* (Vienna and Leipzig: Rolf Passer, 1933).

xii For responses to Kaufmann in the 1930s, see Meyer Schapiro, "The New Viennese School," *The Art Bulletin* 17 (1936) 258-266; Eduardo Persico, *Scritti critici e polemici*, ed. Alfonso Gatto (Milan: Rosa and Ballo, 1947) 210-211; Hans Sedlmayr, *Verlust der Mitte -- Die bildende Kunst des 19. Und 20. Jahrhunderts als Symptom und Symbol der Zeit* (Otto Müller Verlag: Salzburg, 1948), translated by Brian Battershaw as *Art in Crisis. The Lost Centre* (London: Hollis and Carter, 1957). For a general review of Kaufmann's reception, and a comparison with that of Sigfried Giedion, see the excellent thesis by Detlef Mertens, "Transparencies Yet to Come: Sigfried Giedion and the Prehistory of Architectural Modernity," diss., Princeton University, 1996, 170-180.

xiii Allan Braham, *The Architecture of the French Enlightenment* (Berkeley: University of California Press, 1980) 7; David Watkin, *The Rise of Architectural History* (Chicago: University of Chicago Press, 1980) 180.

xiv Christopher S. Wood, ed. *The Vienna School Reader. Politics and Art Historical Method in the 1930s* (New York: Zone Books, 2000) 69.

xv Schapiro, "The New Viennese School," and Walter Benjamin, *Das Passagen-Werk*, ed. Rolf Tiedemann, *Gesammelte Schriften*, Vol. 5 (1982). Translated Howard Eiland, Kevin McLaughlin as *The Arcades Project* (Cambridge, Mass.: Harvard University Press, 1999).

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- xvi Kaufmann, *Three Revolutionary Architects, Boullée, Ledoux, and Lequeu* in *Transactions of the American Philosophical Society* Vol. 42, Part 3 (October, 1952) 431-564.
- xvii Kaufmann, *Architecture in the Age of Reason. Baroque and Post-Baroque in England, Italy, and France* (Cambridge, Mass.: Harvard University Press, 1955).
- xviii Hubert Damisch, "Ledoux avec Kant," Preface to the French translation of Emil Kaufmann, *De Ledoux à Le Corbusier. Origine et développement de l'architecture moderne* (Paris: L'Equerre, 1981) 11-21.
- xix See Franz Schulze, *Philip Johnson. Life and Work* (New York: Knopf, 1994) 157-8; 194-6; 216.
- xx Aldo Rossi, "Emil Kaufmann e l'architettura dell'Illuminismo," *Casabella continuità*, 222 (1958), reprinted in *Scritti scelti sull'architettura e la città, 1956-1972*, ed. Rosaldo Bonicalzi (CLUP: Milan, 1975) 62-71; Kaufmann's influence is seen also in Rossi's "Introduzione a Boullée," [1967] in: *Scritti scelti* 346-364 and in "L'architettura dell'Illuminismo," [1973] in: *Scritti scelti* 454-473.
- xxi Emil Kaufmann, "Die Architecturtheorie der Französischen Klassik und der Klassizismus," *Repertorium für Kunstwissenschaft* 44 (1924) 197-237. Kaufmann elaborated his account of "Neoclassicism" in the review article "Klassizismus als tendenz und als epoche," *Kritische Berichte zur Kunstgeschichtlichen Literatur* (1933) 201-214, which considered concepts of "klassizismus" from Alois Riegl, August Schmarsow, Paul Zucker, Paul Frankl, A.E. Brinckmann, Sigfried Giedion, Wilhelm Pinder, and Wolfgang Herrmann.
- xxii Georges Teyssot, "Neoclassic and 'Autonomous' Architecture." Teyssot concisely analyzes the debates over this stylistic and periodic ascription, noting Sigfried Giedion's 1922

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thesis *Spätbarocker und romantischer Klassizismus* the terms “Late Baroque Neoclassicism” and “Romantic Neoclassicism,” which took off directly from Riegl’s own attempt to revise the characterization of another neglected period, that of the *Spätromische*.

xxiii Kaufmann, *Der Kunst der Stadt Baden* (Osterreichischer Bundesverlag:Vienna, 1925).

xxiv Kaufmann, “C.N.Ledoux,” *Künstlerlexikon Thieme Becker* 22 (1928) 536-537;

“Architektonische Entwürfe aus der zeit der französichen Revolution,” *Zeitschrift für bildende Kunst* 62 (1929-30) 38-46; “Die Wandlungen der Bildform bei Ferdinand Georg Waldmueller,” *Zeitschrift für bildende Kunst* 64 (1930-31) 209-216.

xxv Emil Kaufmann, “Architektonische Entwürfe aus der zeit der französichen Revolution,” *Zeitschrift für bildende Kunst* 62 (1929-30) 45.

xxvi Emil Kaufmann, “C.N. Ledoux under der klassizistische Kirchenbau,” *Kirchenkunst*, 3 (1931) 62.

xxvii Kaufmann, "Kirchenbau" 62.

xxviii Emil Kaufmann, “Die Stadt des Architekten Ledoux. Zur Erkenntnis der Autonomen Architektur,” *Kunstwissenschaftliche Forschungen* 2 (Berlin,1933) 131-160.

xxix Kaufmann, “Die Stadt" 133.

xxx Kaufmann, "Die Stadt" 138.

xxxi Kaufmann, "Die Stadt" 142.

xxxii Claude-Nicolas Ledoux, *L'Architecture considérée sous le rapport de l'art, des moeurs et de la législation* (Paris: chez l'auteur, 1804) 185; 115.

xxxiii Kaufmann does not provide a note to this source until the publication of his *Three Revolutionary Architects*.

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- xxxiv Kaufmann, "Die Stadt" 146.
- xxxv Ledoux, *L'Architecture* 234.
- xxxvi Kaufmann, "Die Stadt" 152-3.
- xxxvii Kaufmann, "Die Stadt," 153 cited in: Teysnot, "Neoclassic and 'Autonomous' Architecture" 28.
- xxxviii Kaufmann, *Von Ledoux* 3.
- xxxix Paul Klopfer, *Von Palladio bis Schinkel. Eine charakteristik der Baukunst des Klassizismus* (Eszlingen: Paul Neff, 1911). Klopfer who wrote a handbook to architectural styles (*Die Baustile* (Leipzig: E.U.Seemann, 1912), several studies of the German private house [(*Die Deutsche Bürgerwohnung* (Freiburg: Paul Waetzel, 1905), *Die Gestaltung des Wohnhauses* (Stuttgart: Konrad Wittwer, 1912), *Das Deutsche Bauern-und Bürgerhaus* (Leipzig: Alfred Kröner, 1915), and *Wie baue ich mein Haus und wie beschaffe ich mir eine gediegene Wohnungseinrichtung?* (Stuttgart: Wilhelm Meyer-Ilschen, s.d.), was Director of the Grand Duke's building union and trade school in Weimar. In a coincidental reversed symmetry to Kaufmann's *Von Ledoux bis Le Corbusier*, Klopfer's book is almost entirely taken up with tracing the development from the Baroque to Neo-Classicism, and mentions Palladio only at the very beginning.
- xl Kaufmann, *Von Ledoux* 5-6.
- xli Kaufmann, *Von Ledoux* 12.
- xlii Kaufmann, *Von Ledoux* 12; Kaufmann cites Ledoux, *L'Architecture* 30.
- xliii Central to Kaufmann's analysis of Ledoux was the treatise the Ledoux had published two years before his death, the magisterial first volume of a planned five volume work,

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*L'Architecture considérée sous le rapport de l'art, des moeurs et de la législation*. This work, with its 416 folio pages of text and 125 engraved plates of Ledoux's built and ideal projects, constituted the main evidence for what was, in the 1920s known of Ledoux; indeed, despite subsequent discoveries of original drawings for specific projects, and archival verification of the dates of certain commissions, *L'Architecture*, with all its amphibolic excesses and architectural hubris still remains central to any interpretation of Ledoux. The two central post-Kaufmann studies of Ledoux remain, Michel Gallet, *Claude-Nicolas Ledoux, 1736-1806* (Paris: Picard, 1985) and Anthony Vidler, *Claude-Nicolas Ledoux. Architecture and Social Reform at the End of the Ancien Regime* (Cambridge, Mass: MIT Press, 1989).

xliv Kaufmann, *Von Ledoux* 16-17

xliv Kaufmann, *Von Ledoux* 19.

xlvi Kaufmann, *Von Ledoux* 19.

xlvii Kaufmann, *Von Ledoux* 20.

xlviii Kaufmann, *Von Ledoux* 30.

xlix Kaufmann, *Von Ledoux* 32.

l Kaufmann, *Von Ledoux* 34.

li Kaufmann, *Von Ledoux* 43; Kaufmann cites Ledoux, *L'Architecture* 90.

lii Kaufmann is here quoting F. Gundolf on Schlegel's "Lucinde:" "an important witness to a historical tendency: the first expression of the profound demand for an autonomy of sensual pleasures" in "the series of philosophical petitions in favor of the independence of the strengths and instincts of human nature, a series which is opened with Kant's affirmation of the autonomy of morals," *Von Ledoux* 36.

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- liii Hannes Meyer, “La realidad Soviética: los arquitectos,” *Arquitectura* 9 (1942); in English in *Task Magazine* 3 (1942). Reprinted in Hannes Meyer, *Scritti 1921-1942. Architettura o rivoluzione*, ed. Francesco Dal Co (Padua: Marsilio, 1969) 214-215.
- liv Theodor W. Adorno, *Kant’s ‘Critique of Pure Reason’*, ed. Rolf Tiedemann. Trans Rodney Livingstone (Stanford: Stanford University Press, 2001) 54-55.
- lv Ernst Cassirer, “Das Problem Jean-Jacques Rousseau,” *Archiv für Geschichte der Philosophie* 41 (1932) 177-213; 479-513. The intertwined histories of Kaufmann and Cassirer were again to intersect with the publication much later of the English edition of Cassirer’s *Philosophy of the Enlightenment*, and Kaufmann’s posthumously published *Architecture in the Age of Reason* (1955).
- lvi Kaufmann, *Von Ledoux* 61.
- lvii Kaufmann, “Die Stadt” 41.
- lviii Ledoux, *L’Architecture* 65; 91; 135: “Le sentiment apprécié d’un plan est à l’abri de toute domination. Il émane du sujet, il doit adapter à la nature des lieux et des besoins,” [65]; “Tout détail est inutile, je dis plus, nuisible, quand il devise les surfaces par des additions mesquines ou mensongères.” [91]; “Toutes les formes que l’on décrit d’un seul trait de compas sont avouées par le goût. Le cercle, le carré, voilà les lettres alphabétiques que les auteurs emploient dans la texture des meilleurs ouvrages.” [135]
- lix Kaufmann, *Von Ledoux* 42.
- lxi Kaufmann, *Von Ledoux* 48.
- lxii Kaufmann, *Von Ledoux* 61.
- lxiii Kaufmann, *Von Ledoux*, citing Richard J. Neutra, *Wie baut Amerika?* (1927) 62.

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- lxiv Kaufmann, *Von Ledoux* 62.
- lxv Kaufmann, *Von Ledoux* 63.
- lxvi Schapiro, "The New Viennese School " 258-267.
- lxvii Schapiro, "The New Viennese School " 265.
- lxviii Schapiro, "The New Viennese School " 265.
- lxix Wood, *The Vienna School Reader* 25.
- lxx Sedlmayr, *Art in Crisis* 117.
- lxxi Sedlmayr, *Art in Crisis* 4.
- lxxii Sedlmayr, *Art in Crisis* 107.
- lxxiii Sedlmayr, *Art in Crisis* 101.
- lxxiv Sedlmayr, *Art in Crisis* 256.
- lxxv Paranoia seems to have been the common disease of both Sedlmayr and Kaufmann. Sedlmayr concludes his study of the loss of center in sullen resentment that *his* formulation of Kaufmann's Ledoux had not been received as authoritative: "Whoever upholds the doctrine of "the lost center" can be certain from the outset to perceive the consequences of doing so personally. He will have against him not only those people who reject what is new because it is unaccustomed, but also those who only propagate what is new because it is "contemporary," "modern," and therefore interesting" "worshippers of the past and futurists" united against him." *Art in Crisis* Kaufmann's footnotes in *Architecture in the Age of Reason* are no less bitter: "Hans Sedlmayr, *Verlust der Mitte* (Salzburg, 1948), p. 98. Having myself pointed out the extraordinary significance of the revolutionary designs and interpreted them as symptoms of their period (*Von Ledoux*, pp. 11, 25, etc.), I certainly do not underrate what Sedlmayr terms *kritische Formen*. However the large number of original and yet "normal" inventions reveals that

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the complex period with all its excitement was sound enough to bring about a true regeneration of architecture. In the Epilogue to his book, Sedlmayr points out that my rediscovery of Ledoux became the starting point of his investigation into the formative forces of our era. Though he does not fully agree with my interpretation, he nonetheless adopts most of my concepts and observations, especially those of the new decentralization in composition ... the abolition of the old aesthetic canons ... the increasing hostility to decoration ..., the new “mobility” of furniture ..., the altered relationship between structure and environment ..., the ideal of equality in architecture ..,the triumph of elementary geometry ..., the parallel phenomena in the graphic arts, particularly the fashion of the silhouette ..., the end of the Baroque anthropomorphisms and the new attitude towards matter ..., the coming up of new architectural tasks ..., the new sense of commodiousness ..., the presentation of new forms long before new materials fitting them were found ....., the continuity of the development after 1800 .., the struggle of antagonistic tendencies in the nineteenth century .., the appearance of a new structural order behind the masks of the various styles ..., and the typically nineteenth-century thought that perfect solutions of the past should be the standards for all the future.” *Architecture in the Age of Reason*, Note 439, 266. A few years earlier he was no less nervous in reviewing the book by Marcel Raval and J.-Ch. Moreux, *Claude-Nicolas Ledoux* (Paris: 1945), where he summarizes his “serious charge of plagiarism” in a long note: *Art Bulletin* 30-4 (1948) 289. Kaufmann was no less charitable to Helen Rosenau who had written on Lequeu and Boullée following up the leads provided by the Viennese scholar.

lxxvi Kaufmann, "Claude-Nicolas Ledoux, Inaugurator of a New Architectural System," *The Journal of the American Society of Architectural Historians* 3-3 (July, 1943) 13.

lxxvii Kaufmann, "Claude-Nicolas Ledoux, Inaugurator" 13.

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- lxxviii Kaufmann, "Claude-Nicolas Ledoux, Inaugurator" 17-18.
- lxxix Kaufmann, "Claude-Nicolas Ledoux, Inaugurator" 18.
- lxxx Kaufmann, "Nils G. Wollin:'Desprez en Suède'," review article in: *Art Bulletin* 28 (1946) 283.
- lxxxix Kaufmann, "Nils G. Wollin:'Desprez en Suède'" 284.
- lxxxii Kaufmann, *Architecture in the Age of Reason. Baroque and Post-Baroque in England, Italy, and France* (Cambridge: Harvard University Press, 1955) x.
- lxxxiii Philip Johnson, "House at New Canaan, Connecticut," *Architectural Review*, 108-645, (Sept. 1950) 152-159.
- lxxxiv Kaufmann, "Claude-Nicolas Ledoux, Inaugurator"12-20. Published together with John Coolidge's call for " The New History of Architecture," *Journal of the American Society of Architectural Historians* 3-3 (July, 1943) 3-11, Kaufmann's text was both a summary of his ground-breaking work on Ledoux, and a methodological polemic on behalf of his personal interpretation of the concept of "system" developed in the Vienna School. and applied to architecture so clearly in the "abstract" work of the late eighteenth century.
- lxxxv Kaufmann, "Claude-Nicolas Ledoux, Inaugurator" 12.
- lxxxvi Kaufmann, "Claude-Nicolas Ledoux, Inaugurator" 18.
- lxxxvii Philip Johnson, "House at New Canaan, Connecticut" 152-159.
- lxxxviii If Kaufmann gave credit due to Ledoux for its exploration, and Johnson and Rossi elaborated the premise, it is perhaps only Le Corbusier who remains unexamined as the neo-Kantian architect par excellence. In the spirit of "From Ledoux to Le Corbusier," it is my hope soon to complete research on the latter in terms that construe his aesthetic politics within the neo-

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Kantian revival of the first quarter of the 20th century between Victor Basch, Elie Faure, and Henri Focillon.

<sup>lxxxix</sup> This chapter was originally developed in response to an invitation to speak on the relations between Peter Eisenman and Leon Krier at Yale University School of Architecture in November 2002. A much shorter version was published as "Colin Rowe," in *Eisenman/Krier: Two Ideologies. A Conference at the Yale School of Architecture*, ed. Cynthia Davidson (New York: The Monicelli Press, 2004) 52-61.

<sup>xc</sup> Alexander Caragone, cover text to Colin Rowe, *As I Was Saying. Recollections and Miscellaneous Essays*, Vol. 1: "Pre-Texas, Cambridge," ed., Alexander Caragone (Cambridge, Mass.: MIT Press, 1996).

<sup>xcii</sup> Rudolf Wittkower, "Inigo Jones, Architect and Man of Letters," *RIBA Journal* 60 (1953); reprinted in Wittkower, *Palladio and English Palladianism* (London: Thames and Hudson, 1974) 60.

<sup>xciii</sup> Colin F. Rowe, "The Theoretical Drawings of Inigo Jones: Their Sources and Scope," MA Thesis in the History of Art, University of London, November, 1947. This thesis is also referred to by Margaret Whinney, "Inigo Jones: A Revaluation," *The Journal of the Royal Institute of British Architects* 59-8 (June 1952) 288: "it has recently been shown that Jones meant to do more than instruct by example alone, for a careful example by Mr Colin Rowe, of the great number of drawings not related to executed buildings has revealed that a treatise on architecture was in preparation though the book may never have been written. [Note 6. I am very grateful to Mr. Rowe for permission to refer to his unpublished thesis, *The Theoretical Drawings of Inigo Jones, their sources, and scope*. University of London, 1947.]"

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xciii Wittkower, "Inigo Jones" 60: "As was customary in Italy, the first book of Inigo's treatise would have dealt with the system of the orders. A fair number of meticulously executed drawings of the orders by the hand of John Webb are extant and among them is the Ionic order which is very similar to the order Inigo has used about twenty years before in the Banqueting House."

xciv Rowe, "The Theoretical Drawings" 2.

xcv Rowe, "The Mathematics of the Ideal Villa: Palladio and Le Corbusier Compared," *The Architectural Review* 101-603 (March 1947) 101-104; "Mannerism and Modern Architecture," *The Architectural Review* 107-641 (May 1950) 289-300.

xcvi Rowe, "The Theoretical Drawings," 17.

xcvii Rowe, "The Theoretical Drawings," 17.

xcviii Rowe, "The Theoretical Drawings," 18.

xcix Rowe, "The Theoretical Drawings," 64-65.

c Rowe, "The Theoretical Drawings," 27.

ci Rowe, "The Theoretical Drawings," 27.

cii Rowe, "The Theoretical Drawings," 45.

ciii Reyner Banham, "The New Brutalism," *Architectural Review* 118 (December 1955) 354-361.

civ Banham, "The New Brutalism" 358-361.

cv In retrospect Banham summarized the mood of this period: "What this generation sought was historical justification for its own attitudes, and it sought them in two main areas of history - the traditions of Modern Architecture itself, and the far longer traditions of classicism. ... Their degree of sophistication about the history of Modern Architecture was remarkable by world

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standards at the time; their sophistication about classicism was remarkable for its peculiar interests rather than its extent. Most of this generation had passed through some form of run-down Beaux-Arts training ... all had had their interest in classicism confirmed by their readings in Le Corbusier, but all came under the influence of the brilliant revival of Palladian studies in England in the late Forties, either directly through Rudolf Wittkower and his book "Architectural Principles in the Age of Humanism", or through the teaching of his outstanding pupil, Colin Rowe. Like many others among them Colin Rowe believed that there was a direct architectural relevance between the classical past and the work of twentieth-century masters. ... Some where in this amalgamation of ancient and modern exemplars of architectural order, there was thought to lie the one real and true architecture implied in the title of Le Corbusier's first book "Vers une architecture," the image of a convincing and coherent architecture that their elders had lost, and their teachers could no longer find." Reyner Banham, *The New Brutalism* (London: The Architectural Press, 1966)14-15. In the same passage, Banham mentions John Voelcker and Ruth Olitsky's characterization as members of this so-called "New Formalism" in *Architectural Design* (Oct 1954) and summarizes the movement: "In the British view, the importance of that tradition ['Classical'] lay in its abstract intellectual disciplines (proportion, symmetry) and habits of mind (clarity, rationalism) far more than matters of detailed style. ... the Palladianism was restricted [in Voelcker's plans for electrical engineering stations] to an abstract planning diagram, and did not involve even room-shapes, let alone the detailing of the elevations." Banham, *The New Brutalism* 15.

<sup>cvi</sup> Wittkower, *Architectural Principles in the Age of Humanism* (London: Warburg Institute, 1949). The text was made up of previously published articles in the *Journal of the Warburg and Courtauld Institutes*: "Alberti's Approach to Antiquity in Architecture," *Journal of the Warburg*

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and *Courtauld Institutes* 4 (1940-41) 1-18; "Principles of Palladio's Architecture Part I," *Journal of the Warburg and Courtauld Institutes* 7 (1944) 102-122, and "Part II," *Journal of the Warburg and Courtauld Institutes* 8 (1945) 68-106. As noted by Alina A. Payne, Wittkower added Chapter 1, "The Centrally Planned Church in the Renaissance," and a section on Palladio's optical and psychological concepts for later publication in the book: Payne, "Rudolf Wittkower and Architectural Principles in the Age of Modernism," *Journal of the Society of Architectural Historians*, no. 53 (September 1994): 322-342.

<sup>cvii</sup> Wittkower, "Principles of Palladio's Architecture" II 103. For a full discussion of Wittkower's analytical method in the context of modernist art theory see Payne, "Rudolf Wittkower" and for an account of the reception of *Architectural Principles*, see Henry Millon, "Rudolph Wittkower, *Architectural Principles in the Age of Humanism*: Its influence on the Development and Interpretation of Modern Architecture," *Journal of the Society of Architectural Historian* 31 (1972) 83-91.

<sup>cviii</sup> Payne, "Rudolf Wittkower" 325.

<sup>cix</sup> Wittkower, "Principles of Palladio's Architecture" I 108-109, citing Palladio, *Quattro libri*, I, chapter 20 p.48.

<sup>cx</sup> Wittkower, "Principles of Palladio's Architecture" I 109.

<sup>cxii</sup> Wittkower, "Principles of Palladio's Architecture" I 109-110.

<sup>cxiii</sup> Wittkower, "Principles of Palladio's Architecture" I 111.

<sup>cxiiii</sup> Wittkower, "Principles of Palladio's Architecture" I 111.

<sup>cxv</sup> Wittkower, "Principles of Palladio's Architecture" I 111.

<sup>cxvi</sup> Wittkower, "Principles of Palladio's Architecture," II 103.

<sup>cxvii</sup> Wittkower, *Architectural Principles* 135.

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- cxvii Rowe, *As I Was Saying* I 47.
- cxviii Rowe, "Mathematics" 103-104.
- cxix Rowe, "Mathematics" 101
- cxx Rowe, "Mathematics" 104, Illustration "Harmonic decompositions of the  $\phi$  rectangle," taken from Matila Ghyka, *The Geometry of Art and Life* (London: Sheed and Ward, 1946) 132.
- cxxi Editors' note, *Architectural Review* 101-603 (March 1947), Contents Page.
- cxixii J.M. Richards, Nikolaus Pevsner, Osbert Lancaster, H. de C. Hastings, Editorial, *The Architectural Review* 101-601 (January 1947) 36.
- cxixiii J.M. Richards et al., Editorial 22-23. For a detailed study of this period of the *Architectural Review's* policies toward planning and popular culture, see the excellent thesis by Erdem Erten, "Shaping "The Second Half Century": *The Architectural Review*, 1947-1971," diss. Massachusetts Institute of Technology, 2004.
- cxixiv J.M. Richards et al., Editorial 23.
- cxixv J.M. Richards et al., Editorial 36.
- cxixvi J.M. Richards et al., Editorial 36.
- cxixvii Eliot was, of course, a central reference for both Rowe and to Greenberg; for the one he represented a position dedicated to the essential roots of talent in tradition and a champion of the virtues and values of the ambiguous and the difficult; for the other an opponent worthy of his most lucid and extended essay from the 1950s, "The Plight of Our Culture," yet an opponent whose "Definition of Culture," however elitist and conservative tested Greenberg's own definition of modern cultural production as opposed to "kitsch" to its limits.
- cxixviii Rowe, *As I was Saying* I 137.

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<sup>cxxxix</sup> Rowe, "Mannerism" 299.

<sup>cxxx</sup> Editors comment, *The Architectural Review* 107-641 (May 1950) contents page. Pevsner understandably wishes to point to his own publications on Mannerism and refers to his article, "Double Profile. A Reconsideration of the Elizabethan Style as seen at Wollaton," *Architectural Review* 107-639 (March 1950) 147-153, where he develops the themes "Mannerism and Mediaevalism," and "Mannerism and the Elizabethans." The phrase opening with "Is convinced" is pure Rowe, however, and suggests that he wrote the copy for this summary.

<sup>cxxxi</sup> Anthony Blunt, "Mannerism in Architecture," *The Journal of the Royal Institute of British Architects* Ser.3 56-5 (March 1949)195-200.

<sup>cxxxii</sup> Blunt, "Mannerism" 197.

<sup>cxxxiii</sup> With so much of his material drawn from Wittkower, it is not surprising that in the discussion following the lecture, and after a comment from Wittkower himself in the audience, he confesses: "I think I ought to reveal what an embarrassment it has been to find Dr. Wittkower here, because after all he invented, or as he puts it, discovered Mannerism! Therefore it has been extremely embarrassing to speak in front of such an expert on the subject." ("Mannerism" 200)

<sup>cxxxiv</sup> Blunt, "Mannerism" 198-199.

<sup>cxxxv</sup> Blunt, "Mannerism" 199.

<sup>cxxxvi</sup> Among the responses to Blunt's talk, Wittkower, generously enough in the circumstances, tried to allay the questions of sceptics who might see "Mannerism" as simply degeneration; John Summerson protested the characterization of Soane as a Mannerist, and Peter Smithson wondered whether those with Academic training who then inverted the system, nevertheless retained something of their original academicism. This last remark, anticipating Banham's

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tracing of the academic origins of modernism ten years later, also seems to prefigure Rowe's sense of the academic nature of Mannerism in Le Corbusier.

cxxxvii Nikolaus Pevsner, "The Architecture of Mannerism," in Geoffrey Grigson, ed., *The Mint. A Miscellany of Literature, Art and Criticism* (London: Routledge and Sons Ltd., 1946) 116.

cxxxviii Pevsner, "The Architecture of Mannerism" 117.

cxxxix Pevsner cites Dvorak, Friedlander, Panofksy, and of course himself, writing between 1920 and 1926, and in architecture, Panofsky, Gombrich, Coolidge, and Wittkower between 1930 and 1943.

cxl Pevsner, "The Architecture of Mannerism," 120-132.

cxli Pevsner, "The Architecture of Mannerism," 135.

cxlii Pevsner, "The Architecture of Mannerism," 126.

cxliii Pevsner, "The Architecture of Mannerism," 125.

cxliv Wittkower, "Michelangelo's Biblioteca Laurenziana," *Art Bulletin* 16 (1934), republished in Wittkower, *Idea And Image. Studies in the Italian Renaissance* (London: Thames and Hudson, 1978) 10-71.

cxlv Margaret Wittkower, Foreword to Wittkower, *Idea and Image* 8. The lost ms. is listed in "The Writings of Rudolf Wittkower," Douglas Fraser, Howard Hibberd, Milton J. Lewine, eds., *Essays in the History of Architecture Presented to Rudolf Wittkower* (London: Phaidon Press, 1967) 378, as " 'Das Problem der Bewegung innerhalb der manieristischen Architektur,' *Festschrift für Walter Friedländer zum 60. Geburtstag am 10.3.1933* (unpublished typescript), pp. 192 ff."

cxlvi Wittkower, *Idea and Image* 60-61.

cxlvii Wittkower, *Idea and Image* 63.

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- cxlviii Wittkower, *Idea and Image* 65.
- cxlix Wittkower, *Idea and Image* 66.
- cl Wittkower, *Idea and Image* 67.
- cli Rowe, "Mannerism" 295.
- clii Rowe, "Mannerism" 295.
- cliii Rowe, "Mannerism" 296.
- cliv Rowe, "Mannerism" 296.
- clv Rowe, "Mannerism" 299.
- clvi Rowe, "Mannerism" 290.
- clvii Rowe, *As I was Saying* I 136.
- clviii Rowe, "Mathematics" 104.
- clix Rowe, "Mathematics" 104.
- clx Colin Rowe, Introduction, *Five Architects: Eisenman, Graves, Gwathmey, Hejduk, Meier*, ed. Arthur Drexler (New York: Oxford University Press, 1972) 5.
- clxi See Rowe, "James Stirling: A Highly Personal and Highly Disjointed Memoir," in: *James Stirling: Buildings and Projects*, ed. Peter Arnell and Ted Bickford (New York: Rizzoli, 1984).
- clxii James Stirling, *Writings on Architecture*, edited by Robert Maxwell (London: Skira International Corporation, 1998) 29.
- clxiii Stirling, *Writings*.
- clxiv Conserved in the collection of the Canadian Institute for Architecture, Montreal, it was evidently a fetish object for its author, the descriptive book with model photographs set in a red-cloth covered box.

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- clxv James Stirling, "Thesis for the Liverpool School of Architecture," 1.
- clxvi Stirling, *Writings on Architecture* 30.
- clxvii This was a comparison also belatedly admitted by Rowe in his reprinting of "The Mathematics of the Ideal Villa" in 1974
- clxxiii Nikolaus Pevsner, "C20 Picturesque," *The Architectural Review* 115-688 (April, 1954) 227-229. In tracing Pevsner's relationship with *Architectural Review* I have been helped by the dissertation of Erdem Erten, "Shaping "The Second Half Century": *The Architectural Review* 1947-1971." The first part of the thesis is devoted to the Townscape program developed by the editors under Hubert de Cronin Hastings, J.M. Richards, and Nikolaus Pevsner; the second half charts the positions of *The Architectural Review* with respect to the "humanization" of modern architecture.
- clxix Pevsner, "C20 Picturesque" 228.
- clxx Pevsner, "C20 Picturesque" 229.
- clxxi Alan Colquhoun, Letter to the Editors, *The Architectural Review* 116-691 (July 1954) 2.
- clxxii Colquhoun, Letter 2.
- clxxiii Peter F. R. Donner [pseudonym for Nikolaus Pevsner], "Criticism," *The Architectural Review* 90 (August 1941) 69.
- clxxiv Donner, "Criticism" (August 1941) 68.
- clxxv Donner, "Criticism" (August 1941) 70.
- clxxvi Donner, "Criticism," *The Architectural Review* (October, 1941) 124-126.
- clxxvii Donner, "Criticism" (October 1941) 124.

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- clxxviii Donner, "Criticism" (October 1941) 125.
- clxxix Donner, "Criticism" (October 1941) 125.
- clxxx Reyner Banham, "Futurism and Modern Architecture," *The Journal of the Royal Institute of British Architects* 64-4 (February 1957) 133.
- clxxxix Banham, "Futurism" 129.
- clxxxix Banham, "Futurism" 135.
- clxxxiii Pevsner, "Modern Architecture and the Historian or the Return of Historicism," *The Journal of the Royal Institute of British Architects* 68-6 (April 1961) 237.
- clxxxiv Pevsner, "Modern Architecture and the Historian" 230-260. The published talk had been given at the RIBA on the 10 January the same year.
- clxxxv Pevsner, "Modern Architecture and the Historian" 230.
- clxxxvi Pevsner, "Modern Architecture and the Historian" 234.
- clxxxvii Pevsner, "Modern Architecture and the Historian" 234.
- clxxxviii Pevsner, "Modern Architecture and the Historian" 230.
- clxxxix These issues were, three years later, to be developed at the AIA-ACSA Teacher Seminar on "The History, Theory and Criticism of Architecture, held at Cranbrook in 1964: Marcus Whiffen, ed., *The History, Theory and Criticism of Architecture* (Cambridge: MIT Press, 1965). This seminar had the dubious but catalyzing honor of being hosted by a dyspeptic and conservative Peter Collins, who made it clear what he meant by architectural "history." Simply stated, it began with the Greeks and ended, for the sake of objectivity, at 1950. It emphatically did *not* include any structures built by peoples "without" a history, whether in ancient Assyria, or modern Asia; "I myself virtually ignore Chinese, Japanese, and Indian architecture," he stated blithely, dismissing the products of these regions as "exoticisms." He went on to castigate what

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he called Vincent Scully's technique of teaching by the emotions, and criticism based on fashion, or "current notions of being avant-garde." (Whiffen, ed. *The History, Theory and Criticism of Architecture* 5-7) He was followed by a roster of speakers who more or less took issues with all of these statements, but whose positions were considered with regard to the overall question of whether history was or was not a good thing in the design studio. Bruno Zevi, newly appointed to the Chair of Architectural History at the reformed University School of Architecture in Rome, following the student sit-ins of the previous year, struck out passionately in favor of "history as a method of teaching architecture," speaking of the techniques of abstraction, of spatial analysis, of model-making and quasi-laboratory "research" that would take teaching history out of the realm of the styles and put it into the service of contemporary design as an instrument of linguistic freedom. (Bruno Zevi, "History as a Method of Teaching Architecture," *The History, Theory and Criticism of Architecture* 11-21) Reyner Banham, on the other hand, was equally outspoken, accusing Colin Rowe of holding on to an academic/Beaux Arts idea of theory, and claiming that the entire category "theory of architecture" had become "vacuous, empty of formal content and devices." He traced this to the "absence of those particular reasons which cause buildings to be created and cause buildings to be the precise way they are." Those reasons were, for Banham, as for John Summerson earlier, summed up in the general word "program." This could be seen as the last-ditch appeal of an old-guard modernist, as was that of Pevsner, if were not for Banham's example. This took the form of an elaboration of a quotation from Suzanne Langer: "a virtual environment, the creative space of architecture, is a symbol of functional existence. This does not mean, however, that signs of important activities, hooks for implements, convenient benches, well-planned doors, play any part in its significance. In that thought's assumption lies the error of functionalism. Symbolic expression is something miles removed from provident planning or

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good arrangement." Now for Banham, as we know, symbolic expression -- especially in "pop" environments -- was an integral part of what he understood as architecture. He took Langer to be referring to a kind of "Shaker" or "Norwegian" environment, and he outlined the plan of a Norwegian farm house, which contained both ritual and functional elements. He especially stressed a tree-branch that served as hanger for the cooking pot over the hearth; an "element of random geometry" that intruded into the otherwise rigorously geometrical interior. He concluded by a "confession" with respect to the Saarinen TWA Terminal at Idlewild/Kennedy Air Port, New York; a building that had seemed to him on first sight as a "grotesque" "piece of formalism," through experience and use had emerged as far superior to the endless corridors of O'Hare International, Chicago; thence to a final acceptance of Le Corbusier's Ronchamp. (Reyner Banham, "Convenient Benches and Handy Hooks. Functional Considerations in the Criticism of the Art of Architecture," *The History, Theory and Criticism of Architecture* 91-105.)

<sup>exc</sup> Pevsner, "Modern Architecture and the Historian," 238.

<sup>exc</sup><sub>i</sub> Banham, "The History of the Immediate Future," *The Journal of the Royal Institute of British Architects* 68-7 (May 1961) 252-260. The published talk was delivered at the RIBA, 7 February the same year.

<sup>exc</sup><sub>ii</sub> Banham, "The History of the Immediate Future," 252.

<sup>exc</sup><sub>iii</sub> Banham, "The History of the Immediate Future," 255.

<sup>exc</sup><sub>iv</sub> Banham, "The History of the Immediate Future," 257.

<sup>exc</sup><sub>v</sub> Banham, "The History of the Immediate Future," 257.

<sup>exc</sup><sub>vi</sub> A preliminary version of the section was published as "Toward a Theory of the Architectural Program," *October* 106 (Fall 2003) 59-74.

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- cxcvii Reyner Banham, "Architecture after 1960," *The Architectural Review* 127-755 (January 1960) 9.
- cxcviii John Summerson, "The Case for a Theory of Modern Architecture," *Journal of the Royal Institute of British Architects* 64-8 (June 1957) 307-10.
- cxcix Summerson, "The Case for a Theory of Modern Architecture" 230.
- cc Summerson, "The Case for a Theory of Modern Architecture" 232.
- cci Summerson, "The Case for a Theory of Modern Architecture" 232.
- ccii Summerson, "The Case for a Theory of Modern Architecture" 233.
- cciii Summerson, "The Case for a Theory of Modern Architecture" 233.
- cciv Summerson, "The Case for a Theory of Modern Architecture" 235.
- ccv Summerson, "The Case for a Theory of Modern Architecture" 235.
- ccvi Banham, "Architecture after 1960," *The Architectural Review* 77-755 (January 1960) 9.
- ccvii The series, "Architecture after 1960," included: Reyner Banham, "Architecture after 1960," *The Architectural Review* 77-755 (January 1960); Reyner Banham, "Stocktaking," (February, 1960); A.C. Brothers, M.E. Drummond, R. Llewelyn-Davies, "The Science Side. Weapons System, Computers, Human Sciences," (March, 1960) 188-190; Symposium, "The Future of Universal Man," with Anthony Cox (Senior Partner in Architects' Co-Partnership), Gordon Graham (Partner in a "lively provincial office"), Lawrence Alloway (Critic and Programme director ICA); Reyner Banham, ed., "History Under Revision," with "Questionnaire, Masterpieces of the Modern Movement," and Reyner Banham, "History and Psychiatry," (May 1960) 253-260; "Replies," *Architectural Review* (June 1960) 381-388, with J.M. Richards, Nikolaus Pevsner, Hugh Casson, H. de C. Hastings, and side bar notes by Banham.

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- ccviii Reyner Banham, "School at Hunstanton," *The Architectural Review* vol. CXVI, 693 (August 1954): 153.
- ccix A.C. Brothers, M.E. Drummond, R. Llewelyn-Davies, "The Science Side. Weapons System, Computers, Human Sciences," *The Architectural Review* (March, 1960) 188-190.
- ccx Reyner Banham, "Stocktaking," *The Architectural Review* (February 1960) 93.
- ccxi A.C. Brothers, et al., "The Science Side" 188-190
- ccxii A.C. Brothers, et al., "The Science Side" 183.
- ccxiii A.C. Brothers, et al., "The Science Side" 185-186.
- ccxiv A.C. Brothers, et al., "The Science Side" 188.
- ccxv A.C. Brothers, et al., "The Science Side" 188.
- ccxvi Llewellyn Davies had written: "a very large part of the psychophysiological relationship between man and environment is likely to fall to the mathematician, not – as heretofore – the mystic."
- ccxvii "Replies," 383.
- ccxviii "Replies," 386-387.
- ccxix Banham, "A clip-on architecture," *Architectural Design* 35-11(November 1965) 534-535.
- ccxx Banham, "A clip-on architecture" 535.
- ccxxi Banham, "A clip-on architecture" 535.
- ccxxii Banham, "A Comment from Peter Reyner Banham," in Peter Cook, ed., *Archigram* (Basel: Birkhauser, 1972) 5.
- ccxxiii Banham, "The New Brutalism" 358.
- ccxxiv Banham, "The New Brutalism" 358.
- ccxxv Banham, "The New Brutalism" 361.

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- ccxxvi Banham, "The New Brutalism" 361.
- ccxxvii Banham, "The New Brutalism" 361.
- ccxxviii Banham, *A Critic Writes. Essays by Reyner Banham*, Selected by Mary Banham, Paul Barker, Sutherland Lyall, and Cedric Price (Berkeley: University of California Press, 1996) 382-83.
- ccxxix Reyner Banham, "This is Tomorrow Exhibit," *Architectural Review* 120-716, (September, 1956) 188.
- ccxxx Warren Chalk, "Touch Not," in Peter Cook, ed., *Archigram* [1972] (New York: Princeton Architectural Press, 1999) 138.
- ccxxxi David Greene, "Gardener's notebook," in Peter Cook, ed., *Archigram*[1972] (New York: Princeton Architectural Press, 1999) 110.
- ccxxxii As Tafuri noted, they were in fact soon to come together literally in public presentation: "Their designs conquered a market that had remained closed to the products of neoliberalism; their desecrations, justified by appeals to Duchamp, finally gained international recognition at an exhibition organized by Emilio Ambasz at the Museum of Modern Art in 1972: 'Italy. The New Domestic Landscape.' Tafuri, *History of Italian Architecture, 1944-1985*, trans. Jessica Levine (Cambridge: MIT Press, 1989) 99.
- ccxxxiii A version of this section served as the Introduction to the reprint of Reyner Banham, *Los Angeles. The Architecture of the Four Ecologies* (Berkeley: University of California Press, 2000) xvii-xxxiii.

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- ccxxxiv Blaise Cendrars, *Hollywood: Mecca of the Movies* (Berkeley: University of California Press, 1995)17. Translation of *Hollywood, La Mecque du Cinéma* (Paris: Grasset, 1936).
- ccxxxv Roger Jellinek, *The New York Times*, Saturday July 10, 1971. The best recent discussion of LA literature, for and against, is William Alexander McClung's *Landscapes of Desire. Anglo Mythologies of Los Angeles* (Berkeley: University of California Press, 2000).
- ccxxxvi Thomas S. Hines, Review of Reyner Banham, *Los Angeles. The Architecture of Four Ecologies* (London: Allen Lane, 1971) in: *Journal of the Society of Architectural Historians*, 31- 1 (March 1972) 75-77.
- ccxxxvii Francis Carney, "Schlockology," Review of *Los Angeles: The Architecture of Four Ecologies* by Reyner Banham, *The New York Review of Books*, June 1, 1972.
- ccxxxviii Reyner Banham, *Los Angeles. The Architecture of Four Ecologies* (London: Penguin Books, 1971) 236.
- ccxxxix Peter Plagens, "The Ecology of Evil," *Art Forum* 115 (December, 1972) 67-76. Mike Davis, *City of Quartz. Excavating the Future in Los Angeles* (London: Verso, 1990)74.
- ccxl Mike Davis, *Ecology of Fear: Los Angeles and the Imagination of Disaster* (New York: Metropolitan Books, 1988).
- ccxli Banham, *Los Angeles* 21.
- ccxlii David Gebhard and Robert Winter, *A Guide to Architecture in Southern California* (Los Angeles, 1965).
- ccxlili Reyner Banham, "Encounter with Sunset Boulevard," *The Listener* 80 (22 August 1968) 235-236; "Roadscape with Rusting Rails," (29 August, 1968) 267-268; "Beverly Hills, Too, Is a

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Ghetto” (5 September 1968) 296-298; “The Art of Doing Your Thing” (12 September 1968) 330-331.

ccxliv Banham, “Roadscape with Rusting Rails” 268.

ccxlv Banham, “Beverly Hills, Too, Is a Ghetto” 296.

ccxlvii Banham, “Beverly Hills, Too, Is a Ghetto” 298.

ccxlviii Banham, “The Art of Doing Your Thing” 331.

ccxlviii Banham, “LA: The Structure Behind the Scene,” *Architectural Design* 41 (April, 1971) 227-230.

ccxlix Banham, *Los Angeles* 21.

ccl Banham, *Los Angeles* 22-23.

ccli The consideration of architecture as “trad” or “non-trad” was drawn by Banham in his critique of Sir Basil Spence’s rebuilt Coventry Cathedral, in “Coventry Cathedral -- Strictly ‘Trad, Dad’,” *New Statesman*, 113 (May 25, 1962) 768-769. The argument over tradition was taken up by Stanford Anderson in a lecture of 1963 at the Architectural Association, London. See Stanford Anderson, “Architecture and Tradition that isn’t ‘Trad, Dad’,” in Whiffen, ed., *The History, Theory and Criticism of Architecture* 71-90.

cclii For an account of this exhibition and the Pop movement in general, see *Modern Dreams: The Rise and Fall of Pop*, exhibition catalog (London: The Institute of Contemporary Art, 1988).

ccliii Banham, *Theory and Design in the First Machine Age* (London: Architectural Press, 1960).

ccliv Banham, *Theory and Design* 220.

cclv Banham, *Theory and Design* 222-23.

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cclvi Banham, *Theory and Design* 304.

cclvii Anton Wagner, *Los Angeles. Werden, Leben und Gestalt de Zweimillionstadt in Südkalifornien* (Leipzig: Bibliographisches Institut, 1935). A manuscript translation of this work by Gavriel O. Rosenfeld, entitled *Los Angeles: The Development, Life, and Form of the Southern Californian Metropolis* was commissioned by the Getty Research Institute in the History of Art and the Humanities, Los Angeles, 1997. Wagner had been guided in his search for a topic by his advisor at the University of Leipzig, the urban geographer O. Schneider (who had himself published a work on “Traces of Spanish Colonization in the American Landscape” [*Spuren Spanischer Kolonischin in US-Amerikanischen Landschaften*, Berlin, 1928]).

cclviii Wagner, *Los Angeles* 1.

cclix Wagner, *Los Angeles* 7.

cclx Wagner, *Los Angeles* 6.

cclxi Wagner, *Los Angeles* 207.

cclxii Wagner, *Los Angeles* 166.

cclxiii Wagner, *Los Angeles* 168.

cclxiv Wagner, *Los Angeles* 169.

cclxv Wagner, *Los Angeles* 172.

cclxvi Wagner, *Los Angeles* 207.

cclxvii Banham, “LA: The Structure Behind the Scene” 227.

cclxviii Banham, *Scenes in America Deserta* (Salt Lake City : Gibbs M. Smith, Inc., 1982).

cclxix A first version of this chapter was published as “Disenchanted Histories: The Legacies of Manfredo Tafuri,” *ANY* 25/26 (New York, 2000) 29-36.

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- cclxx José Rafael Moneo, "The 'Ricerca' as legacy," *Casabella* 619-620 (January-February, 1995) 133.
- cclxxi Vittorio Gregotti, ed., "The Historical Project of Manfredo Tafuri," *Casabella* 619-620.
- cclxxii Manfredo Tafuri, *The Sphere and the Labyrinth. Avant-gardes and Architecture from Piranesi to the 1970s* (Cambridge, Mass.: MIT Press, 1987) 5.
- cclxxiii Siegfried Kracauer, *History: The Last Things Before the Last*, ed. Paul Oskar Kristeller (New York: Oxford University Press, 1969); 2d ed. (Princeton: Markus Wiener, 1995) 105;123.
- cclxxiv Kracauer, *History* 126.
- cclxxv Friedrich Nietzsche, *Untimely Meditations*, Translated by R.J. Hollingdale (Cambridge: Cambridge University Press, 1983) 76.
- cclxxvi Manfredo Tafuri, "Foreword to *Ricerca del Rinascimento*," trans. Daniel Sherer, in Tafuri, "A Search for Paradigms: Project, Truth, Artifice," *Assemblage* 28 (December 1995) 47-49.
- cclxxvii Manfredo Tafuri, "Toward a Critique of Architectural Ideology," in K. Michael Hays, ed., *Architecture Theory since 1968* (Cambridge, Mass.: MIT Press, 1998) 6. This is a translation by Stephen Sartarelli of Tafuri, "Per una critica dell'ideologia architettonica," *Contropiano* 1 (January-April 1969).
- cclxxviii "Per una critica dell'ideologia architettonica," *Contropiano* 1 (January-April 1969), cited in *Casabella* 59 p. 31. This phrasing did not change in the book, *Progetto e Utopia* (Bari: Laterza, 1973).

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- cclxxxix Tafuri, "Toward a Critique of Architectural Ideology" 27. See also Tafuri, *Architecture and Utopia. Design and Capitalist Development* (Cambridge, Mass.: MIT Press, 1976) 131. Here and in *Theories and History* "angoscia" is translated as "anguish" intimating a more "romantic" and individualistic emotionalism than Tafuri's "anxiety" which is deliberately related to the Marxist concept of alienation, and to Freud's construction of "anxiety" as a modern neurosis.
- cclxxx Tafuri, "Foreword" to *Ricerca del Rinascimento*," 47 , my translation.
- cclxxxix Tafuri, "A Search for Paradigms" 48.
- cclxxxii Tafuri, "A Search for Paradigms" 48
- cclxxxiii Tafuri, "A Search for Paradigms" 49.
- cclxxxiv Tafuri, "A Search for Paradigms" 49.
- cclxxxv Tafuri, *Theories and History of Architecture* ed. Dennis Sharp, trans. Giorgio Verrecchia (London: Granada and Co., 1980) 7-8.
- cclxxxvi Tafuri, *Venice and the Renaissance* (Cambridge, Mass.: MIT Press, 1989), x.
- cclxxxvii Alberto Asor Rosa, "'Critique of Ideology and Historical Practice,'" *Casabella* 619-620, 33.
- cclxxxviii Tafuri, "A Search for Paradigms" 48.
- cclxxxix Max Weber, cited in Lawrence A. Scaff, *Fleeing the Iron Cage. Culture, Politics, and Modernity in the Thought of Max Weber* (Berkeley: University of California Press, 1989) 224.
- ccxc Tafuri, *Theories and History*, 156.

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ccxcī Max Weber, “Science as a Vocation,” in Peter Lassman and Irving Velody, eds., *Max Weber’s ‘Science as a Vocation* (London: Unwin Hyman, 1989),30.

ccxcīī Tafuri, Entretien avec Françoise Véry, *Architecture, Mouvement, Continuité*, 39 (June 1976), 37.

ccxcīīī Asor Rosa, *Casabella* 59 (Jan-Feb. 1995) 33. He notes, “the work of Tafuri in the *Contropiano* period produced with the sense of “total disenchantment” [*un totale disincanto, una estranità ancora piu totale*] an estrangement still more total regarding the mechanism of values and connivance [*omertà*] that are the bases of any humanistic discipline academically *intesa*.”Ibid.

ccxcv The themes of this chapter are a development of questions opened up in my *Warped Space: Art, Architecture, and Anxiety in Modern Culture* (Cambridge, Mass.: MIT Press, 2000). A version of this chapter was published as “Diagrams of Diagrams: Architectural Abstraction and Modern Representation,” *Representations* 72 (Fall 2000).

ccxcvi See Greg Lynn, *Animate Form* (New York: Princeton Architectural Press, 1999).

ccxcvīī See MVRDV, *Metacity/Datatown* (Rotterdam: 010 Publishers, 1999).

ccxcvīīī I am referring to recent projects by Rem Koolhaas (The House at Bordeaux, 1999; the entry for the competition for the French National Library, 1989), and by Zaha Hadid .

ccxcix I am, of course, using Frank Gehry’s recently completed Guggenheim Museum, Bilbao, Spain as the basis of this pastiche.

ccc For a useful summary of this revived sensibility for the diagram, see the collection of essays edited by Ben van Berkel and Caroline Bos in *ANY* 23 (1998).

ccci Rem Koolhaas,*S,M,L,XL. Small, Medium, Large, Extra Large* (New York: The Monicelli Press, 1994).

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- cccii Toyo Ito, "Diagram Architecture," *El Croquis* 77 (1996) 18-24.
- ccciii Toyo Ito, "Diagram Architecture" 18.
- ccciv See, for example, Pier Luigi Nicolini, "The Tao of Sejima," *Lotus* 96. Nicolini takes issue with Ito's interpretation of Sejima's translucent and transparent "membranes" as a reflection of the high-speed media metropolis, and proposes instead an alternative reading – that of deceleration and slow-down. This, he argues, might represent a shift from "a sociological, or mimetic, phase, related to the world of information processing, to a scientific, philosophical or mystical phase."
- cccv Peter Eisenman, *Diagram Diaries* (New York: Universe Publishing, 1999).
- cccvii R.E. Somol, "Dummy Text, or the Diagrammatic Basis of Contemporary Architecture," in Peter Eisenman, *Diagram Diaries* (New York: Universe Publishing, 1999) 24.
- cccvi I have sketched the historical background of this technological revolution in architecture in "Technologies of Space/Spaces of Technology," *Journal of the Society of Architectural Historians*, Special Issue "Architectural History, 1999/2000" 58-3 (September 1999) 482-486.
- cccvi A useful review of these diverse tendencies is to be found in Peter Zellner, *Hybrid Spaces: New Forms in Digital Architecture* (New York: Rizzoli, 1999).
- cccix Walter Benjamin, "Rigorous Study of Art On the First Volume of the *Kunstwissenschaftliche Forschungen*," translated by Thomas Y Levin, *October* 47 (Winter 1988) 89. This is a translation of Walter Benjamin, "Strenge Kunstwissenschaft. Zum ersten Bande des *Kunstwissenschaftliche Forschungen*," *Franfurter Zeitung*, July 30, 1933, appearing under Benjamin's pseudonym Detlef Holz; republished in Benjamin, *Gesammelte Schriften*, vol. 3, (Frankfurt am Main: Surhkamp Verlag, 1982) 363-374.
- cccix Robin Evans, *Translations from Drawing to Building and Other Essays* (London: Architectural Association Publications, 1997) 156 The original article, "Translations from Drawing to Building," *AA Files* 12 (Summer 1986) 3-18, introduced a subject that was to be

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developed brilliant detail in his posthumously published *Projective Cast: Architecture and its Three Geometries* (Cambridge, Mass.: MIT Press, 1995).

cccxi Indeed it is significant that the only large-scale exhibition dedicated solely to the architectural drawing mounted by a major museum in recent years was the decidedly ambiguous installation of 19<sup>th</sup> century drawings from the Ecole des Beaux Arts at the Museum of Modern Art, New York Here, the obvious target was modernism itself, the “International Style” imported by its first architectural curator Philip Johnson together with Henry-Russell Hitchcock in 1932. Obviously appealing to a public said to be tired of minimalism and abstraction in architecture, and a profession preoccupied with “meaning,” “signification,” and the communicative power of architecture to a broader public, this show of ideal projects had, save in its last-minute presentation of Charles Garnier’s Paris Opéra, little to do with actual building. For a critical review of this exhibition with regards to the tradition of the Museum of Modern Art, see William Ellis, ed., “Forum: The Beaux-Arts Exhibition,” in *Oppositions* 8 (Spring 1977) 160-175.

cccxii See Victor Hugo, “Guerre aux démolisseurs!” (1825-32), *Littérature et philosophie mêlées* in *Oeuvres complètes: Critique*, ed. Pierre Reynaud (Paris: Roger Laffont, 1985)187; Henri Lefebvre, *The Production of Space*, translated by Donald Nicholson-Smith (Oxford: Basil Blackwell, 1991), Chapter 4, “From Absolute Space to Abstract Space.”

cccxiii Henri Lefebvre, *The Production of Space* 361.

cccxiv Henri Focillon, *The Life of Forms in Art*, translated by Charles Beecher Hogan and George Kubler (New York: Zone Books, 1992) 33.

ccc xv See Werner Szambien, *Jean-Nicolas-Louis Durand, 1760-1834. De l’imitation à la norme* (Paris: Picard, 1984).

cccxvi J.-N.-L. Durand, *Précis des Leçons d’Architecture données à l’Ecole Royale Polytechnique*, Vol. I (Paris: Chez l’auteur, à l’Ecole Royale Polytechnique, [1805]1819) 34.

ccc xvii Durand, *Précis des Leçons* 32.

ccc xviii Durand, *Précis des Leçons* 32.

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cccxi Auguste Choisy, *Histoire de l'architecture*, 2 vols.(Paris:Gauthier-Villars, 1899); Le Corbusier republished many of his axonometrics that displayed in one projection the space and structure of the buildings represented in the journal *l'Esprit Nouveau* between 1920 and 1921, and again in *Vers une architecture* (Paris: Editions G. Crès, 1923).

cccxx Le Corbusier, *Vers une architecture* 35.

cccxxi Le Corbusier, *Sur les 4 Routes* (Paris: Gallimard, 1941), cited in Jacques Lucan, ed, *Le Corbusier: une encyclopédie* (Paris: Centre Georges Pompidou/CCI, 1987)118-119 [my translation]. The English translation by Dorothy Todd, Le Corbusier, *The Four Routes*, London: Dennis Dobson Ltd., 1947) 147-148, fails to render the clarity of Le Corbusier's argument.

cccxxii See Albert Frey, *In Search of a Living Architecture* (New York: Architectural Book Publishing Company, 1939). Here Frey, under the heading "Diagrams" simplifies and systematizes Le Corbusier's sketches of formal and spatial principles while developing them with respect to American landscape and climate.

cccxxiii See Paul Frankl, *Principles of Architectural History. The Four Phases of Architectural Style, 1420-1900* ed. and trans. James F. O'Gorman (Cambridge, Mass.: MIT Press, 1968) and A.E. Brinckmann, *Plastik und Raum. Als Grundformen Künstlerischer Gestaltung* (Munich: Piper Verlag, 1924).

cccxxiv Wittkower, *Architectural Principles*.

cccxxv See Banham, "The New Brutalism" 355-61.

cccxxvi Summerson, "Architecture, Painting and Le Corbusier," in *Heavenly Mansions and other Essays on Architecture* [1948] (New York: Norton, 1963) 177-194.

cccxxvii Colin Rowe, "Mathematics"101-4.

cccxxviii Rem Koolhaas, *S,M,L,XL* (New York: The Monacelli Press, 1995 ) 50-53.

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- cccxxix Koolhaas, *S,M,L,XL* 335-336
- cccxxx Koolhaas, *S,M,L,XL* 346.
- cccxxxi Koolhaas, *S,M,L,XL* 347.
- cccxxxii Koolhaas, *S,M,L,XL* 348.
- cccxxxiii Koolhaas, *S,M,L,XL* 340.
- cccxxxiv Koolhaas, *S,M,L,XL* 339.
- cccxxxvi Rem Koolhaas, "The New World," *Wired* (June 2003).117.
- cccxxxvii Koolhaas, *Wired* 117.
- cccxxxviii Koolhaas, *Wired* 137.
- cccxxxix See, Antoine-Augustin Cournot, *Traité de l'enchainement des idées fondamentales dans les sciences et dans l'histoire*, 2 vols. (Paris: Hachette, 1861). For a clear description of Cournot's historical theories, see Raphaël Lévêque, *L'Élément historique" dans la connaissance humaine d'après Cournot* (Paris: Les Belles Lettres, 1938). Lévêque was, with Raymond Ruyer (who had written his dissertation on Cournot, *L'Humanité de l'avenir d'après Cournot* (Paris: Félix Alcan, 1930)), one of many "neo-vitalists" before the Second World War, whose work influenced Arnold Gehlen, and Hendrick de Man after 1945.
- cccxl Hendrick de Man, unpublished manuscript, "The Age of Doom," [1950], published in Peter Dodge, *A Documentary Study of Hendrick de Man, Socialist Critic of Marxism* (Princeton: Princeton University Press, 1979) 345.
- cccxli Gianni Vattimo, *End of Modernity: Nihilism and Hermeneutics in Postmodern Culture* (Baltimore: Johns Hopkins University Press, 1991) 7-8.
- cccxlii Vattimo, *End of Modernity* 11.

