Metropolitan conflict

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Prologue

Metropolitan Conflict explores an architectural strategy that aims to reveal and foster a diversity of conflicts in the metropolis. This project is non-utopian. Never does it try to be desirable. Nor does it pretend to 'improve' the city. It is neither comfortable nor efficient. There is problem-solving, and there is problem-finding, discovery rather than clarity. *Metropolitan Conflict* criticizes the current state of art by providing an alternative architectural strategy that embraces, facilitates, reveals and provokes conflict. It is an architectural project that makes you reflect upon the differences of our coexistence. And, above all, the project makes you confront consciously the conflicts between different structures in the built environment you live in.

Instead of falling in the same routine of asking: What was the city? Or what ought the city to be? I deliberately ask much more fundamental questions for the architectural discipline that are often overlooked: How is the city? From whom is the city? By whom is the city? Since when is the city? For what purpose is the city? What structures, layers, projects, histories, powers, tensions between those powers, ideologies, architectures, memories, and what spaces makes the metropolis as it currently is? In the here and now. I consider therefore the project as a very personal exercise for expertise. And although I am fully aware we could never give precise and definite answers to these questions, since these things are so much interrelated, the project indirectly provides extra knowledge to proceed further.

Within the process I became profoundly fascinated by the intellectual legacy of 18th century Italian architect Giovanni Battista Piranesi. This fascination includes Pi-

ranesi's own oeuvre, and that of four architects that are highly influenced by his etchings and texts that reflect upon architecture, society and the city. These four architects are Peter Eisenmann, Rem Koolhaas, Pier Vittorio Aureli, and Aldo Rossi. Why are these architects, known for their provocative theories, imposing spaces and often labyrinthine architectural models, inspired by Piranesi's work? Why are they fascinated by the, so to say, "dark brain" of Piranesi? How did they interpret him in the realization of their built and unbuilt projects as well as their written theories? And above all, what can we learn from this understanding regarding contemporary architectural practice? Throughout the evolution of this project, I use the transactions between these architects as stepping stones for eventually providing an own stance in the formation of a project.

The thesis has been divided into two parts. The first part is theoretical. It is a written analysis of metropolitan conflict. The first chapter of the written part will provide an introduction of conflict in the metropolis, as opposed to a harmonious, dogma and consensus driven view of the city, in which we will discover the productivity of conflict. The second chapter is concerned with an analytical comparison of eighth architectural projects, divided on several scales, S, M, L,.. (small, medium and large, as well as an historical analysis of the ancient pnyx and agora), in which we compare projects that are formally 'conflict' driven in contrast to projects that are formally 'consensus' driven. This provides a basic understanding for the main issues addressed in the third chapter. Herein, I begin by laying out a theoretical introduction of Giovanni Battista Piranesi, who forms the link towards the largest scale which will be examined in this chapter: XL, the metropolis. This chapter includes intellectual theories and projects of four modern architects: Pier Vittorio Aureli, Rem Koolhaas, Peter Eisenman and Aldo Rossi. I aim to show that the ongoing architectural dis-

cussion in which they take part is fundamental for contemporary challenges.

The second part is the project. Here I test the writings in an architectural strategy that takes part in the city of London. I take position myself. It is necessary to stress that these two parts, the theoretical part and the project are developed simultaneously and are therefore strongly interrelated.

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Peter Lindbergh

Introduction
A Project of Crisis

"History is always a project of crisis" (Tafuri, 1978, p. 3). This is the daring and controversial statement that architectural theorist Manfredo Tafuri highlights in his book *The Sphere and the Labyrinth*. In the pages that follow, I will argue that conflict, crisis and confrontation have the potential to be a productive and necessary discourse, as opposed to a comfortable dogmatic and harmonious world-view. This becomes an essential understanding that works as underlaying basis for the production of this thesis. To comprehend this statement we must take a step back from Tafuri and show the other side of the coin.

Dogmatic harmony

A dogmatic understanding of a world without conflict, without confrontation and without crisis, is a major problem in Western societies. Chantal Mouffe maintains (although she strongly disagree with this) that a majority of liberal Western people, including philosophers, scientists, politicians and economists, is in the consideration that we almost have reached a final stage of political-economic development. This progress is linear in an upward direction and will finally lead toward a stage in humanity in which all desires are satisfied. It is this assertive post-political vision that the 'free world', whatever 'free' might mean, has triumphed over all other ideologies and forms of civilizations. We will finally reach a harmonious world without enemies (Mouffe, On the Political, 2005, p. 1). In this understanding, predicted by Fukuyama right after the fall of the Berlin Wall, politics will be governed by technological and economical calculation. We will enter an era that is limited to numbers, percentages and statistical data (Berlin, 1969, p. 166). Consequently, absolute knowledge is required. Only then, we will come

to a final point of arrival which explains everything. And only then, we will reach absolute truth.

This perspective is also present in modern architecture and urbanism, which seems currently to be governed by the authority of economy as substitute for politics. Numbers and statistics of flows, movement and capital decide the formal evolution of the city. The built environment in the city should provide the necessary 'smoothness' for maximum economic trade, performances and production. Examples of this are the overabundance of imposed orders in the form of borders, boundaries and thresholds that are meant to order and structure as efficient as possible life in the city. We can see them everywhere: fences, walls, sidewalks, rows of trees, benches etcetera.

Moreover, contemporary architecture seems to be stripped of any historical, cultural or political meaning. The homogenization of architecture and urbanism is visible in all parts of the world (Aureli, 2011). The architect can at most play with the material and composition of the façade, but the typology, the organizational layout, the distance from core to façade, the dimension of the rooms, is all restricted by laws and regulations. Contemporary architecture is unambiguous and as clear as possible, leaving nothing open for interpretation. There is no hidden meaning, no expression of something, no ambiguity and nothing to decipher. What you see is what you get. Everything seems the same, defined by architectural and urbanistic form that is ruled by data (Ungers, 1998, p. 11). As Koolhaas writes ironically and critically on contemporary urbanization:

> *We were making sand castles. Now we swim in the sea that swept them away. (Koolhaas, 1995, p. 969)*

The city is no longer an assemblage of heterogeneous architectural artifacts, rather it is dominated by the totalizing and integrative 'smooth space' of urbanization, in

Amsterdam Schiphol - photograph by author

which life and work ought to be efficient, safe, sustainable and comfortable. That is the goal. This inherently implies a complete avoidance of conflict, transgression and confrontation. At all costs. Even if that means exclusion of those that are unwanted (Aureli, 2011). Even if that means a loss of freedom. And even if that means a loss of privacy.

This seemingly positive and harmonic world-view in which conflict has no place and is systematically denied, has three problematic indirect consequences. Rather than denying, I suggest to acknowledge the presence of conflict, since I believe it is much more productive. I believe this for three particular reasons that are pointed out in the following arguments.

1. Transforming antagonism into agonism.

2. Accelerating scientific progress.

3. Fostering unexpected opportunities.

I: Transforming antagonism into agonism

Chantal Mouffe demonstrated in her book *On the Political* that there is currently an 'incapacity to think in a political way'. In her perspective, many, mostly liberals, fail to fully grasp the pluralistic nature of the world and consequently fail to understand the conflicts that entail them. They envision a world in which we live in a harmonious and non-conflictive system (Mouffe, 2005, p. 804). Mouffe critically outlines their post-political perspective in which partisan conflict is a thing of the past. Consensus can be obtained through dialogue. She is profoundly sceptical on this 'world-without-enemies' perspective and perceives an alarming danger that relies in this (Mouffe, On the Political, 2005, p. 1).

She distinguishes 'the political' from 'politics'. With 'the political' she means the dimension of antagonism that is intrinsically linked to all networks in which different (groups of) people interact. Antagonism is a dimension in

which we see 'the other' as enemy. More precisely, an enemy that is endangering our own existence. The only way out seems to be by destroying this particular enemy. By 'politics', Mouffe understands the ensemble of practices, discourses and institutions that seek to establish a certain order and thus organize human coexistence (Mouffe, On the Political, 2005, p. 9). In other words, through politics, we can channel antagonism in agonism. Agonism is a second type of conflictual relation she envisions. The origin of the word comes from the ancient Greeks meaning "struggle", "fight", "contest" or "trial". As opposed to antagonism, agonism is a dimension in which we recognize the legitimacy of each other's arguments. Consequently, we see each other not as enemies anymore, but as adversaries (Mouffe, 2005, p. 805).

Liberal politicians and theorists tend to neglect the antagonistic dimensions in society because they believe it would threaten the realization of consensus, which they see as final aim of democracy. They do not realize that an agonistic confrontation is the very condition for coexistence, and that this can only be established after acknowledging the antagonist dimension (Mouffe, 2005, p. 10). In other words, only by accepting conflict, we can find the channels to transform it into coexistence in which we accept differences. Coexistence will always be a real confrontation. We also have to acknowledge the contingent character of hegemonic powers that regulate underlaying processes in society and which are visible in the physical structures of the metropolis. We must never forget that the present conditions is always an outcome of a processes, run by hegemonic practices, which are fundamentally never neutral or impartial (Mouffe, 2005, p. 805). This view is supported by Koolhaas, who argues that:

> *There is no neutral surface, no neutral discourse, no neutral theme, no neutral form (Koolhaas, 1995, p. 962).*

When the channels through which antagonism becomes

agonism are not available; not in democratic institutions, not in the media or not in architectural- and urban spaces, those conflicts tend to stay on an antagonist mode. Parts of society that stays in this mode, while facing different hegemonies, no longer understand their conflict with the other as adversarial, but rather as highly antagonistic, with hatred and fights as irresolvable consequences in a divided society (Aureli, 2011, p. 28). Therefore, Mouffe stresses the critical need for these channels:

> *The task for democratic theorists and politicians should be to envisage the creation of a vibrant 'agonistic' public sphere of contestation where different hegemonic political projects can be confronted (Mouffe, On the Political, 2005, p. 3).*

The contemporary city, in all its smoothness, efficient layouts, comfortable places, homogeneity, falls systematically short in providing these spaces. Important to understand is that, this view of Mouffe, differs radically from views defended by theorists such as Habermas. Where Habermas envisions a political public sphere that aims to channel conflict into one rational and universal consensus, Mouffe stresses the impossibility of this. She radically diminishes the idea of a final reconciliation and discards the idea of an orientation towards consensus. Rather she emphasizes to foster a multiplicity of agonistic public spaces (Mouffe, 2005, p. 806). We are thus not seeking for an architecture of a single ideology or hegemonic power, rather we are attempting the opposite and aim for an architecture that allows a plurality of political positions.

II: Accelerating scientific progress

In 1886, Nietzsche published as one of the first philosopher a paper in which he described the tendency to reach for absolute knowledge and a final truth. Following Nietzsche this dogmatic comprehension is the kiss of death

for all science and human existence. In his major study in *Beyond Good and Evil* he writes:

> It might be a basis characteristic of existence that those who reach absolute knowledge of it face their own annihilation.

And in *Aurora*:

> Wherever primitive mankind set up a word they believed that they had made a discovery. How different the truth is! They had touched upon a problem, and by supposing they had solved it, they had created an obstacle to its solution. Today, with every new bit of knowledge, one has to stumble over words that are petrified and hard as stones, and one will sooner break a leg than a word.

Here Nietzsche elaborated on an extremely objectionable inclination. The only way to gain knowledge in history seems to restrict the range of possibilities until a single point of view is established. Without possible discussion. Science has triumphed as there is one correct picture of the world left, at the expense of everything else (Feyerabend, 1968, p. 275). Some theories are for the sake of coherence made unbreakable, and metaphorically called 'stones' by Nietzsche. This makes, according to Nietzsche, a dead history (Biraghi, 2013, p. 3). A history that can never further develop, never create new knowledge, and is never open to alternative readings. Here, science stops (Feyerabend, 1968, p. 282). Coming back to Tafuri, the search for an universal truth, for fullness, fur absolute coherence is always accompanied by placing a mask on the face of history (Tafuri, 1978, p. 7). This mask must hide all traces that are inconsistent with the given theory, otherwise it would be in danger.

Similarly to Nietzsche, Tafuri stresses that we must avoid all notions of linear causality in historical analysis and

stop striving for an absolute truth (Tafuri, 1978, p. 4).
On the contrary, Tafuri conceives history as a labyrin-
thine path that is 'fraught with dangers' and insecurities
(Tafuri, 1978, p. 1). He demonstrates this in the begin-
ning of his book *The Sphere and the Labyrinth* by quoting
Ginzburg and Adriano Prosperi:

> *There comes a moment (though not always)*
> *in research when all the pieces begin to*
> *fall into place, as in a jig-saw puzzle. But*
> *unlike the jigsaw puzzle, where all the*
> *pieces are near at hand and only one fig-*
> *ure can be assembled (and thus the correct-*
> *ness of each move be determined immedi-*
> *ately), in research only some of the pieces*
> *are available, and theoretically more than*
> *one figure can be made from them (Tafuri,*
> *1978, p. 1).*

These studies indicate a plural understanding of histori-
cal analysis which is open for interpretation, dependent
on the reshuffling of the pieces in the 'jig-saw' puzzle. We
have to accept every analysis as being provisional. Every
historical analysis is accompanied with struggles against
its own instruments, against its own ideology and its own
repressions. There will always be incompleteness. This
becomes evident if Tafuri outlines a critical role for dis-
tance, which is for him fundamental for historical analy-
sis. With distance he means factual, temporal and mental
distance between subject and object of analysis. Reliable
historical analysis incorporate by necessity a sense of un-
certainty. It requires doubt. Following Mouffe, who sup-
ports this attitude of doubt, this ambivalence shows the
way to a new modernity. One that is no longer based on
certainty, as in the what she calls 'old' modernity, but
on the acknowledgment of uncertainty. It must present
itself, in Tafuri's vocabulary, as "an unsafe building" (Ta-
furi, 1978, p. 12). In the same vein Biraghi argues that:

> *A capacity for dialogue, the act of doubt-*

ing, the acceptance of contradictions, the insertions of distance, these are just some of the tools the historian must arm himself with in order to try and confront the difficult enterprise of constructing his role. (Biraghi, 2013, p. 24)

Today's metropolis can be seen as an assemblage of people, interpersonal networks, organizations, structures such as buildings, streets and other infrastructural means (DeLanda, 2006, p. 6). They are created after decision making by two main actors in the urban environment: the institutions and the markets (DeLanda, 1997, pp. 30-35). DeLanda stresses that these assemblages are constructed through very specific historic processes. By an articulation of those structures, that represent traces of these historic processes, we can form an open source urbanism in which structures from a diversity of decision making processes are confronted. This confrontation accelerates knowledge which on its turn can lead to an entrance of political consciousness. According to Aureli, knowledge is a basic ingredient for acting in a political manner:

The sphere of the political is the sphere in which a part, a group of individuals, acquires knowledge of itself. The political is an attitude (to act in relationship to something), it consists of knowledge (knowing who, and what, to counter pose) and indicates a task (to transform conflict into coexistence without exaggerating, or denying, the reason for the conflict itself.) (Aureli, 2011, p. 29)

III: Fostering unexpected opportunities

In 1978, Tafuri defined history as being a 'production'. History cannot be reduced to merely reconstruction, but must also present itself as an analytical 'construction'. A construction of meanings, of traces and of events. Con-

sequently, history is both determined and determining. "Determined by its own tradition, by the objects that analyses, by the methods that it adopts; it determines its own transformation and those of the reality it deconstructs (Tafuri, 1978, p. 3)." It is therefore ever-changing and indeterminate (Biraghi, 2013, p. 2).

The only possible way for constructing history is by the act of destruction, separation and disintegration. It is, in Tafuri's words, only possible by "destroying, step by step, the linearity and the autonomies of that history: there will remain only traces, fluctuating sings, unhealed rifts (Tafuri, 1978, p. 8)". This is the destruction of the Nietzschean stones, the stones that are piled up as a fortress, secured by the guards of absolute knowledge. These stones can be reshuffled and reassembled. Just as in the jigsaw puzzle we saw before. Herein lies the crux for an alternative history, which can contain alternative clues for a new beginning. A new road. Perhaps a dangerous road with death ends, but which at least explores new ways. We must create parallel series of many independent stories. We must recognize where they exist, how they exist, what their interdependencies are, and more important, what their inherent conflicts are (Biraghi, 2013, p. 12).

By necessity, historic analysis must put itself into crisis. This is nothing new. In fact, the Chinese are already for centuries aware of this relation between crisis and opportunity. The character they use for 'crisis' — wei ji — is composed of the characters for 'danger' and 'opportunity'(Capra, 1982, p. 7). It is only in a state of non-equilibrium that multiple options becomes available. Also Koolhaas notes that crisis can have some positive aspects:

> *You know very well that at the high point of a crisis we always work by impulse, just the opposite of foresight, doing the most unexpected an widest sort of things. Reason is only good to mummify reality in mo-*

ments of calm or analyse its future storms,
never to resolve a crisis of the moment.
(Koolhaas, 1995, p. 280)

Evolution in a state of crisis becomes an ongoing and open adventure. It continually creates its own purpose. Its destination: inherently unpredictable (Capra, 1982, p. 313).

Conclusion

We have seen that the revealing and fostering of conflict within the city is essential and can translate into a productive discourse. As much as history must comprise itself with plurality of subject and knowledge, as Nietzsche envisioned it, architecture in itself must also be understood as a non-unitary discourse. As with history, architecture's ideology act in a highly labyrinthian and pluralistic way (Tafuri, 1978, p. 5). And exactly this plural form in architecture, this unresolved dialectic is the activator for a continuous evolving architectural discourse.

The construction of a physical space must thus be seen as a battlefield, where different parts can coexist. Those battles are essentially not subject to a totalizing hegemony. Rather the battlefield is a "plural historical space", or in Tafuri's words, the space of conflicts. Here, real conflicts, real powers and real traces are confronting each other. And exactly at the intersection of these traces, history, and also the city, becomes a project of crisis. The crisis of the architectural object, of ideology, of critique, and of different hegemonies (Biraghi, 2013, p. 15).

Physical model of agora

S, M, L, …
Consensus or Conflict?

Before explaining theoretical projects considering the city as a whole, it is necessary to provide a basic understanding of architectural form on smaller scales regarding two opposites: conflict and consensus. In this chapter I aim to introduce a series of formal architectural comparisons on several scales. Starting with the agora and the pnyx, both fundamental political places in the ancient city of Athens, we continue by comparing small scale objects (S), medium scale architectures (M) and large scale complexes (L). Although built and designed in different time periods, contexts and scales, we can find a number of striking similarities between the formal analysis of those projects that can be understood as a result of comparable instruments and methods used by the architects.

Ancient Athens

Agora

Historically, the ancient agora of Athens is a project that is often imitated by romantic architects that yearn back to past times. In my opinion this is often done in a non-productive manner. Pier Vittorio Aureli defines the search for the contemporary agora as "a pathetic endeavor that only manifests the weakness of our political understanding of the city." (Aureli, 2011, p. 32) Although extensive research has been carried out on the agora, most approaches are merely programmatic or social, which has led to this 'pathetic endeavor' of a programmatic reconstruction of the contemporary agora. Such studies have failed to address the formal principles and strategies used in the agora. Only by analyzing the interrelationships between these aspects, the agora has full potential
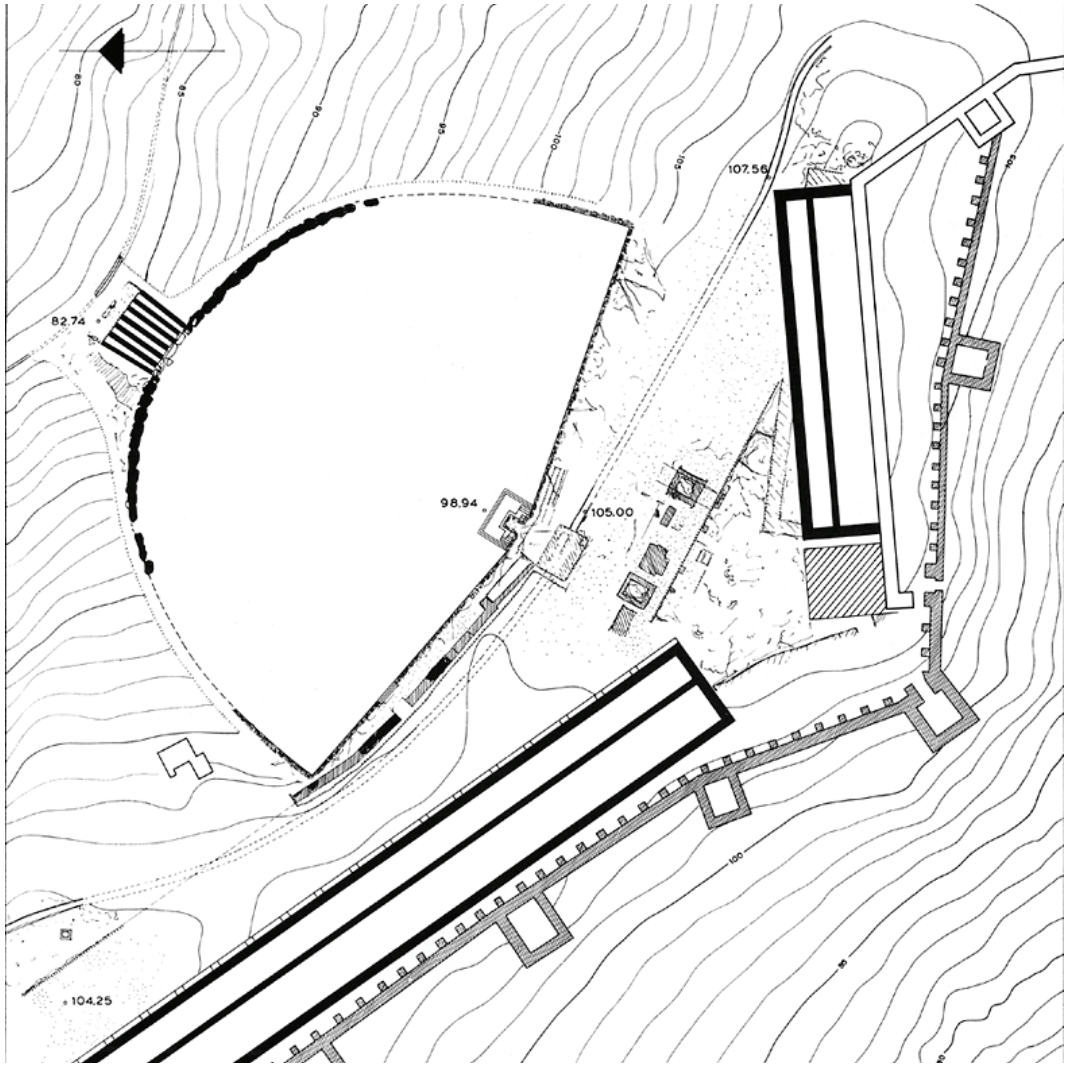
Greek pnyx
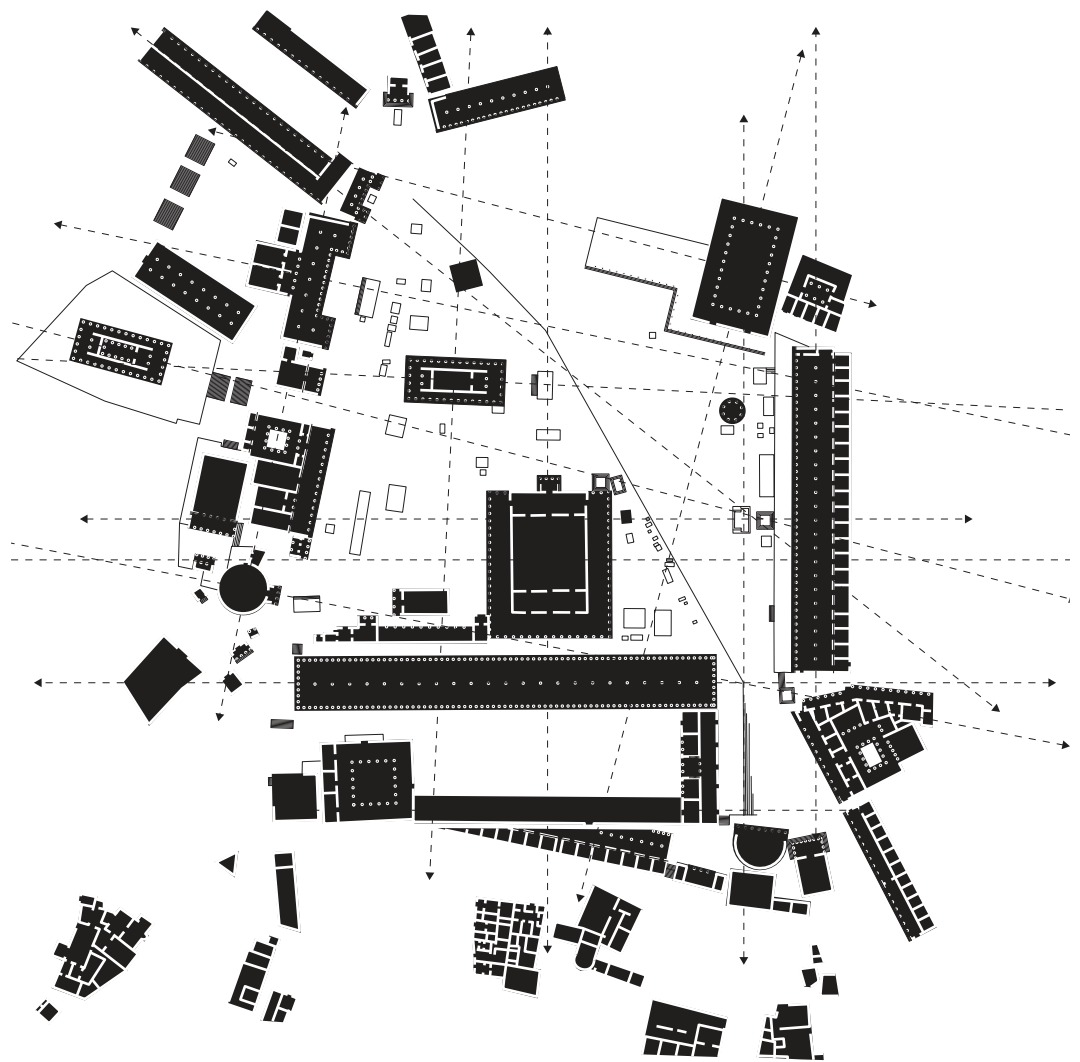
Formal analysis of Greek agora - drawing by author

to become a functional formal metaphor that presents contemporary interests (Wartofsky, 1968, p. 271).

It is widely understood that the agora was the central located market place in the heart of what Aristotle defined as the polis. For centuries, craftsman made and sold goods to the citizens here. The agora was the very physical embodiment of political, commercial and religious existence of Greek civilization. Where the agora started as a place for merely religious activities, it quickly evolved into a space for large public gatherings and meetings of the assembly (Hoskyns, 2014, p. 24).

The agora in Athens is built throughout time, which has resulted in an agglomeration of built forms with varying uses that create a dynamic order of simultaneous events. The stoa's, temples, basilica, administration offices, military assemblies, altars, bema's (public speaking platforms), library, law court, bathhouse and civic offices are placed on the territory in a dynamic order to establish a similarly dynamic social, economic and political life. Philosophising, buying, crafting, selling, speeching, walking and observing took place simultaneously. A vast amount of knowledge was produced. Manuel DeLanda provides a likely explanation for this by writing on the strength of 'weak links' within assemblages. Here, he argues, information tends to flow easier from person to person and can even come from outside the network (DeLanda, 2006, p. 34). As indicated by DeLanda:

> *Local markets were the place where townspeople met, made deals, quarrelled, perhaps came to blows... All news, political or otherwise, was passed on in the market. In other words, market-places were the place where people linked weakly to one another had an opportunity to pass novel information. (DeLanda, 2006, p. 36)*

The physical objects frame the field in between, not by

completely enclosing the territory (as in other examples of agora's), but rather by a dynamically and strategically placing of objects along its perimeter according to visual orders (Sennett, The Spaces of Democracy, 1998, p. 20).

Now, we have to introduce one of the most essential formal element in the agora: the plinths. The plinth is a key factor for reorganizing connections between the private in the formal static constructions and the public in the informal dynamic field. When standing on the plinth one can look over the field and retreat him or herself from the chaotic movements and events. One is estranged from this disorder, yet confronts it. One observes the interplay as an outsider, yet still takes part in it. The plinths are articulated by steps and columns, in all cases directed towards the 'interior' field of the agora. Their characteristics soften the borders and are therefore a much more subtle architectural device then the rigidness of the solid wall. The borders become ambiguous. Precisely for this reason, these transition zones become places where people can encounter one another, where different groups interact and where consequently the possibility for conflict arises (Sennet, 2017, p. 8).

We can elaborate on this principles by turning to Kleinherenbrink, who writes in *Territory and Riternello* that every 'milieu', as he defines it, has three aspects. The first aspect he describes is an 'exterior' which is formed by components in the direct environment of a certain milieu. The second aspect is the 'interior' milieu that concerns internal components and regulatory principles. And the third aspect is a milieu of the 'limit'. Or in other words, the transition zone, in which the 'exterior' milieu flows into the 'interior' milieu and the other way around. This is the place where internal and external functions interact and consequently construct a place in which information can (Kleinherenbrink, 2015, p. 213). These transitional zones had very important functions in the agora and were articulated with columns and walls.

Pnyx

Similar to the agora, the pnyx was a political place in the ancient Greek city state in which the citizens hold public orations, made decisions and voted. However, unlike the dynamic quality of the agora, the assembly of the pnyx was characterized by order and consensus. In turbulent times during periods of Greek democracy, this order was highly desired (Sennett, The Spaces of Democracy, 1998, p. 17). In the pnyx, the spectators had seats in the lower staged platform which embodied the formal shape of half a bowl. The orator was standing higher, on a platform called a 'bema', located in the centre. The bema was embedded in the hill and consisted of a platform with three steps on all sites, and then another higher platform reachable by three other steps. The citizens were forced to look up. Through this principle, the orator possesses the power to speak loud and clear to the people. Contrary to the agora, the eye of the observer is directed to be fixed on a single scene. Therefore the communication is less fragmentary and discontinuous than in the agora (Sennett, The Spaces of Democracy, 1998, p. 20). The pnyx is one of the first formal methodologies for reaching consensus and order in democracy. It must therefore not be seen as a coincidence that the contemporary parliament building of the European Union is in the form of a perfect circle, wherein the orator stands in the centre. The European Union has its very foundations in reaching consensus among several parties and the form of the internal space for decision making has significant influence (Hoskyns, 2005, p. 802).

Preliminary conclusion

The pnyx and the agora differ thus not only in their physical attributes, but also in the way in which they perform. Consequently we can draw a very clear organizational comparison on both strategies. If we consider the pnyx as a centre-focused, formal, ordered and stable structure with well-defined spatial boundaries in which decisions

can be made, we can confidently speak regarding the agora as a multi-focused, informal, dynamic, unstable structure that is open for change and consists of ambiguous boundaries in which information can flow. Instead of one formal element, the agora fragments and proliferates. In the next paragraphs, I present a similar methodological and systematic manner in order to subtract essential formal principles.

S

King Arthur

According to myth: King Arthur congregated with his knightly members to ensure the peace of the divided and turbulent kingdom. He deliberately chose a circular table. A table with no heads, nor sides. There are no absolute privileged positions. All participants around the table are equal, in their relation to one another, as well as in their relation to King Arthur. King Arthur strategically aimed to avoid disagreement, conflicts and fights among his barons. He perfectly knew that none of them would accept a lower place than the others. A consensus was almost unavoidable (Anon., 2018).

Ines table

How different is the Inès table (?), designed in 1993 by architect Enric Miralles. A play with Spanish words for 'uns-table' suggests its dynamic instability. The instability stems from the technical flexibility, the openness for multiple configurations and its ability for continuous reconfiguration. Sixteen different configurations are possible. Each one of the four panels is able to operate independently and is supported by a leg that is able to pivot out of the way to allow the table to transform. The multitude of different configurations allows the complexity and multidimensionality of life taking part on and around the table (Vimeo, 2018). Moreover, the geometrical form
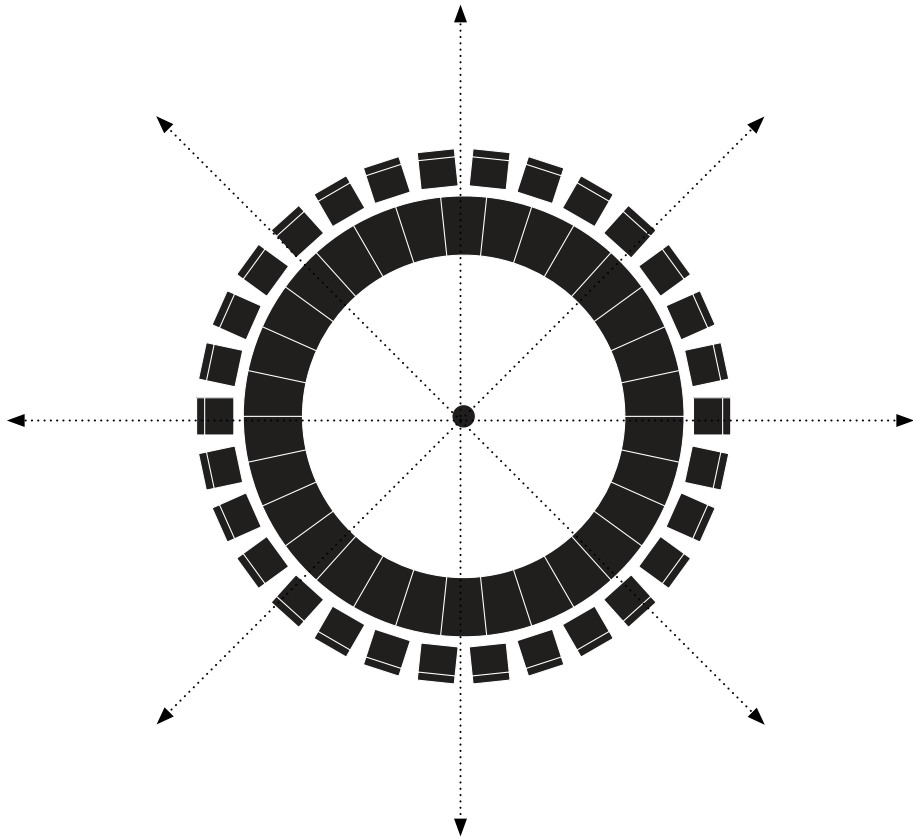
Formal analysis of King Arthur's table - drawing by author
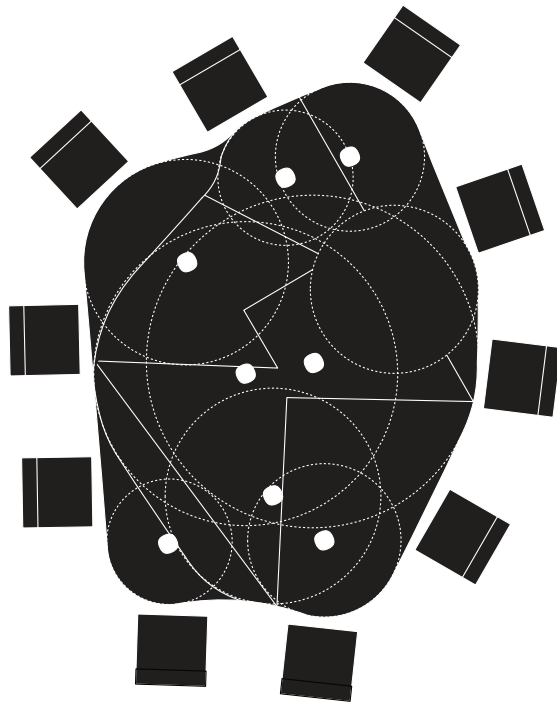
Formal analysis of Ines table - drawing by author

of the table is carefully found by Enric Miralles by pro-
liferating the centre points. If the circular table of King
Arthur is as single focused as possible, Enric Miralles
fragmented the table, proliferated its one centre into
nine centres, scaled the surrounding circles and created
a form by overlapping them. The table acknowledges now,
simply by its form, a variety of different positions, and as
result provides the possibility for conflict.

M

Palais Garnier

Palais Garnier is built from 1861 to 1875 in Paris by the
French architect Charles Garnier. The architectural form
and its decorations are highly eclectic in style, which
means Garnier derived many ideas and styles from his-
torical movements. The architecture includes elements of
the Baroque, Classism and Renaissance. The formal, static
symmetrical appearance of the façade is leaving absolute-
ly no space without ornamentation (Wikipedia, 2018).

In the Garnier Opera in Paris the static symmetry in both
the façade and the floorplan is so inappropriately violent
that it almost seems like Charles Garnier designed just
half of the building and let the mirror do the rest of
the work. Great dimensioned corridors, stairwells and
alcoves allow for the movement of a great number of vis-
itors and were created according to the formal rules of
a platonic ideal (Sennett, The Fall of Public Man, 1974,
p. 78).

The auditorium itself manifests itself by the attention of
unobstructed sightlines from any position in the audience
and the seemingly equal positioning of the seats. This was
compared to other 18th centuries theatres a significant
difference. However, as I would argue, equality among
the spectators is only pretended, it is never reached.
There is a fundamental difference to seats in the front

and in the back, as well to seats along the central axis and along the periphery.

As 18th century theatres in the metropolis of London and Paris are characterized as a dynamic interplay between spectators and actors which is enriched with a high level of spontaneity, this theatre manifests itself as a comfortable place where spectators sit down and watch. Its subtext is to be silent (Jovanov, 2014, p. 5). The spectator becomes a mere observer. "There were no more shouts from the back of the hall, no more people eating food while they stood watching the play. Silence in the audience seemed to diminish the enjoyment of going to a play" (Sennett, The Fall of Public Man, 1974, p. 74). Comfort had, not for the first, neither for the last time in history won over conflict.
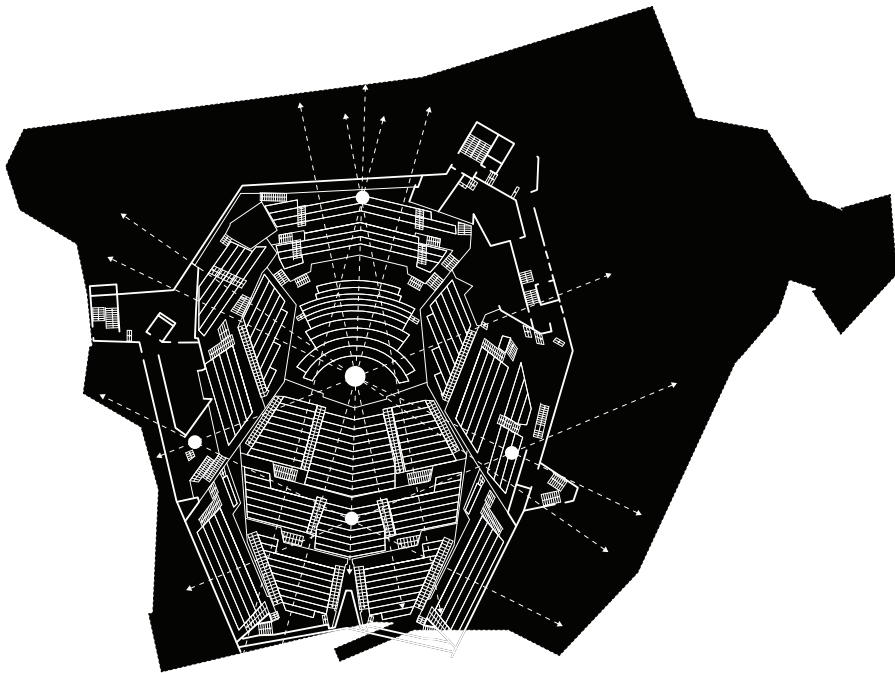
Philharmonic

The organization system of the Philharmonic in Berlin, designed by architect Hans Scharoun, is fundamentally different from the static and ordered principles of Palais Garnier in several aspects. The foyer that stretches itself out on the first two levels is much more informal, dynamic and open for many different events. Boundaries between spaces in the foyer are, as with the agora, often achieved by simply a few steps or a row of columns, resulting in openness and ambiguity.

Contrary to Palais Garnier, within the walls of the Philharmonic's auditorium the laws of equality are systematically ignored. Rather than the traditional linear performance spaces of most operas, Philharmonic's concert hall intends to provide a variety of different views and perspectives. Scharoun achieves this result through two crucial strategies.

The first strategy concerns the spectator stage surrounding the main stage, which Scharoun has done as one of the first modern architects, resulting in an expression of intimacy between artists and spectators (Jovanov, 2014,
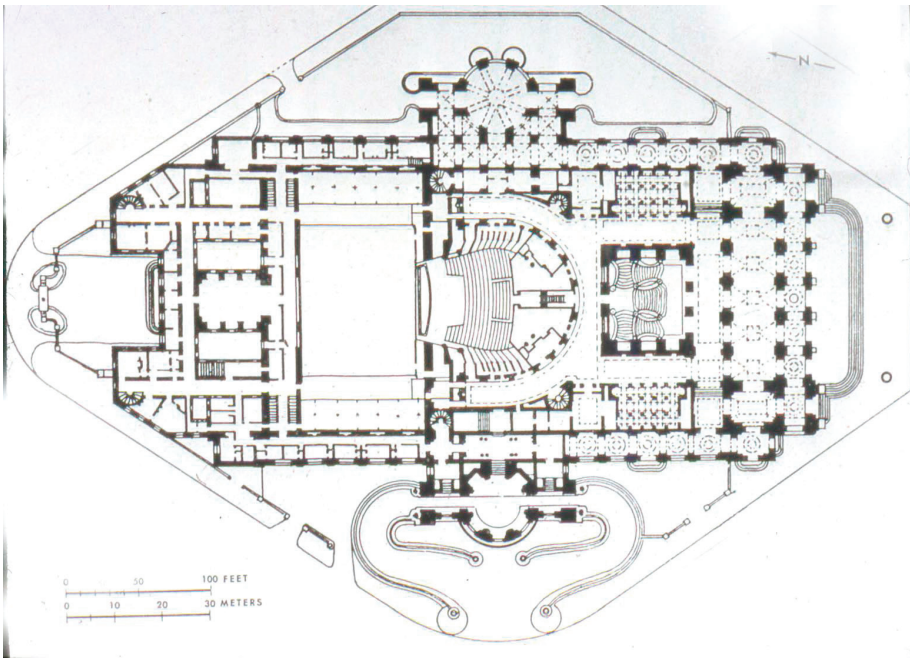
Palais Garnier

Formal analysis of Philharmonic in Berlin - drawing by author

p. 6). The second strategy displays similarity to the agora and the Inès Table. Through a methodology of manipulation of one singular spectator's stage into smaller, fragmented, rotated, scaled and proliferated stages that are assembled very carefully around the mainstage, Scharoun accomplishes a multi-focality that acknowledges differences. The resulting vineyard-like valley becomes rather a social experiment.

L

Pruitt-Igoe

Another reflection that we can make on a project that acts as social experiment is the building complex of Pruitt-Igoe. Research on Pruitt-Igoe has often led to the popular exposition of the 'end and failure of modern architecture' since its demolition in 1971. I believe this is a reductive and simplistic view and I suggest to provide a short comprehensive study that would include a comparable project. Only then can we understand the methods used by the architects which provide us with valuable knowledge. A man on the radio is advertising the dwelling complex as follows:

> *"New buildings with spacious ground… they can live, live with indoor plumbing, electric lights, fresh plastered walls and the rest of the conveniences that are expected in the 20st century. In these projects, children can play in safety on the wide lawns, not in the alleys and vacant blocks." (The Pruitt-Igoe Myth, 2011)*

This was the promise of utopian modernism; from Le Corbusier's Plan Voisin to the Smithson's Golden Lane project, from Amsterdam Bijlmer to Berlin-Marzahn and from Pruitt Igoe in St. Louis to contemporary developments all across the world. And in the first years, indeed people

Formal analysis of Pruitt Igoe - drawing by author

loved the place. Former citizens shared in a documentary their best memories in life that were experienced during their time in Pruitt-Igoe. 'It was a safe place'. 'You knew people'. 'You were never alone'. 'There was life everywhere'. 'Friendships and bonds were made'. 'It was clean'. 'Everybody had an own bed'. 'Elevators were working'. 'We had schools, libraries and parks for kids to play'. The American dream was finally realized. At least, for some time (The Pruitt-Igoe Myth, 2011).

Soon, the Pruitt-Igoe estate declined rapidly. Technical, social and economic problems reinforced each other into a vicious circle. The maintenance in the complex stopped. Urine in the elevators, broken glass all over, increased crime and violence and flooding's from broken waterpipes were rule rather than the exception. It felt like a prison environment. Where it started in the 50's as a dream to unite white Americans with African Americans, it became a tool for segregation and isolation. White Americans moved out and African Americans had financially no other option than to stay. At a certain moment, the situation became so critical that even police agents didn't dare to enter the site (The Pruitt-Igoe Myth, 2011).

Pruitt-Igoe represents the physical signs and language of modernism: identical housing slabs, embedded in a park for pedestrians, still in its infancy, with an elaborate system of carparking. The form of the identical slabs is devoid of any individualistic feature, guaranteeing that it will perform in the most rational way. Each slab (140m x 18m) is repeated on 12 floors. There are two exceptions, the ground floor (where four apartments are sacrificed for a pedestrian crossing underneath), and the in-between floors (where the same four apartments give place for the gallery level). The left part of the slab is identical to the right part. This results in a total number of five different apartment types in the entire 70 acres projects. Everybody is treated as equal. Not only the floorplan pretends

this equality, also the homogenous façade is an expression of this. The façade is constituted by almost scientific precision. It is the abstracted whitewash of the façade.

The slabs were situated in a pedestrian orientated park surrounded by roads and carparking. The transition from the pedestrian open park into the interior of the building block is rigid. A clear hard boundary draws the distinction between private and public in Pruitt-Igoe. With the same scientific precision, amenities in the park are placed with the necessary over-determination, prescription and separation of function. There are no 'accidents' whatsoever to find in the entire project.

Paradoxically, this avoidance of accidents and the pretended equality does not always lead to a harmonious coexistence. Sometimes the avoidance of conflict turns into a much more disastrous conflict. These are the painful lessons of several modernist projects under which Pruitt-Igoe. According to Moshe Safdie:

And exactly this constant lack of tension, this insistence on an absolutely continuous and non-contradictory reading is at the heart of Modern architectures failure to produce habitable urbanism (Safdie, 2008, p. 15).

Habitat 67

In Habitat '67, Moshe Safdie has confronted another particular question in the same vein as Enric Miralles and Hans Scharoun. By metaphorically taking a single building block of Pruitt-Igoe Safdie proliferated the block into fragmented, much smaller, similar sized pods that are rotated, mirrored and copied in varying configurations. The result is striking. First, a vast number of different dwelling configurations are established by the confrontation between the similar sized pods, denying a pretended equality among dwellers and instead celebrating their different positions. Second, by the rotating and moving pods, terraces appeared in-between the pods. These terraces were precisely the territories for self-ex-
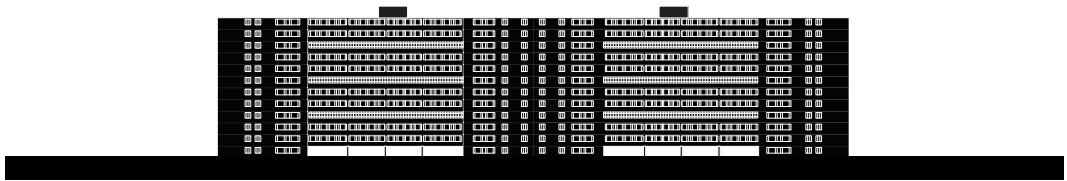
Formal analysis of Pruitt Igoe - drawing by author
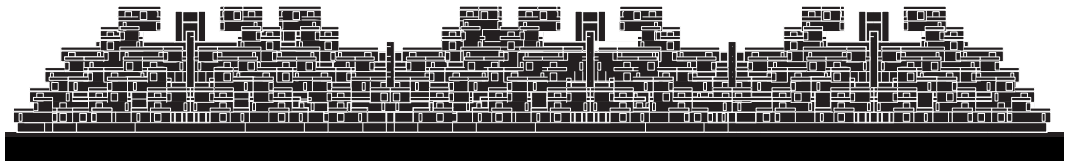
Formal analysis of Habitat 67 - drawing by author

pression. Here, individual occupancy of the exterior terraces like awnings, draperies, potted plants and deck furnishing, entrusted with vines would gave the building extra character by becoming a sort of bourgeois favela. Unfortunately, you could say, Habitat became an icon, an architectural landmark and even a monument since March 2009. Therefore the exterior of the building is a designated heritage site. 'One does not mess with a work of art' is the attitude. It is Habitat's tragedy (Safdie, 2008, p. 16).

Although the project as a whole was seemingly complicated, the stacked pods themselves were relatively simple and aesthetically neutral of nature. Besides the similarity in dimension, they were designed with simple window openings, plain surfaces and plentiful similar terraces. The pods were strategically used as a tool rather than an end. Safdie accepted the process of construction as a fundamentally architectural technique. During construction, the crane was positioned in the centre of the three agglomerations and the crane's rotation determines the configuration of the pods. The three positions in which the crane is positioned along an imaginary linear axes makes the roof plan of the entire project identical to a sinusoids. Through his manipulations in Habitat, Safdie fully realizes the potential of construction for the support and production of his disordered, fragmented and seemingly unstable spaces.

Conclusion

This analytical study has set out the differences between architectural forms that aim for consensus and present itself as an ordered whole and architectural forms that used similar series of strategies and methodologies of proliferation to transform this whole into fragmented parts, striving for an acknowledgement of differences and creating the possibility for conflict and confrontation.

To date, a number of authors have considered the effects

of fragmentation in extensive literature, under whom is Manfredo Tafuri. He highlights in The *Sphere and the Labyrinth* a disintegration of historical analysis:

> *Wherever this synthesis is presented as a completed whole, it is necessary to introduce a disintegration, a fragmentation, a dissemination of its constitutive units. It will then be necessary to submit these dis-integrated components to a separate analysis. (Tafuri, 1978, p. 14).*

Let us now consider a direct relationship between Tafuri's theory on the history as a product of crisis and his claim for a disintegration and fragmentation of historical analysis and the formal fragmentation found in the strategies of the analysed projects. At this point, it is necessary to introduce the figure that has played a central role for this thesis: Giovanni Battista Piranesi. The literature on Piranesi has highlighted several theories under which among other that of fragmentation of spaces in relation to fragmentation of historical analysis.

O BAR... PIRANESI
...ENET ARCHITECTUS
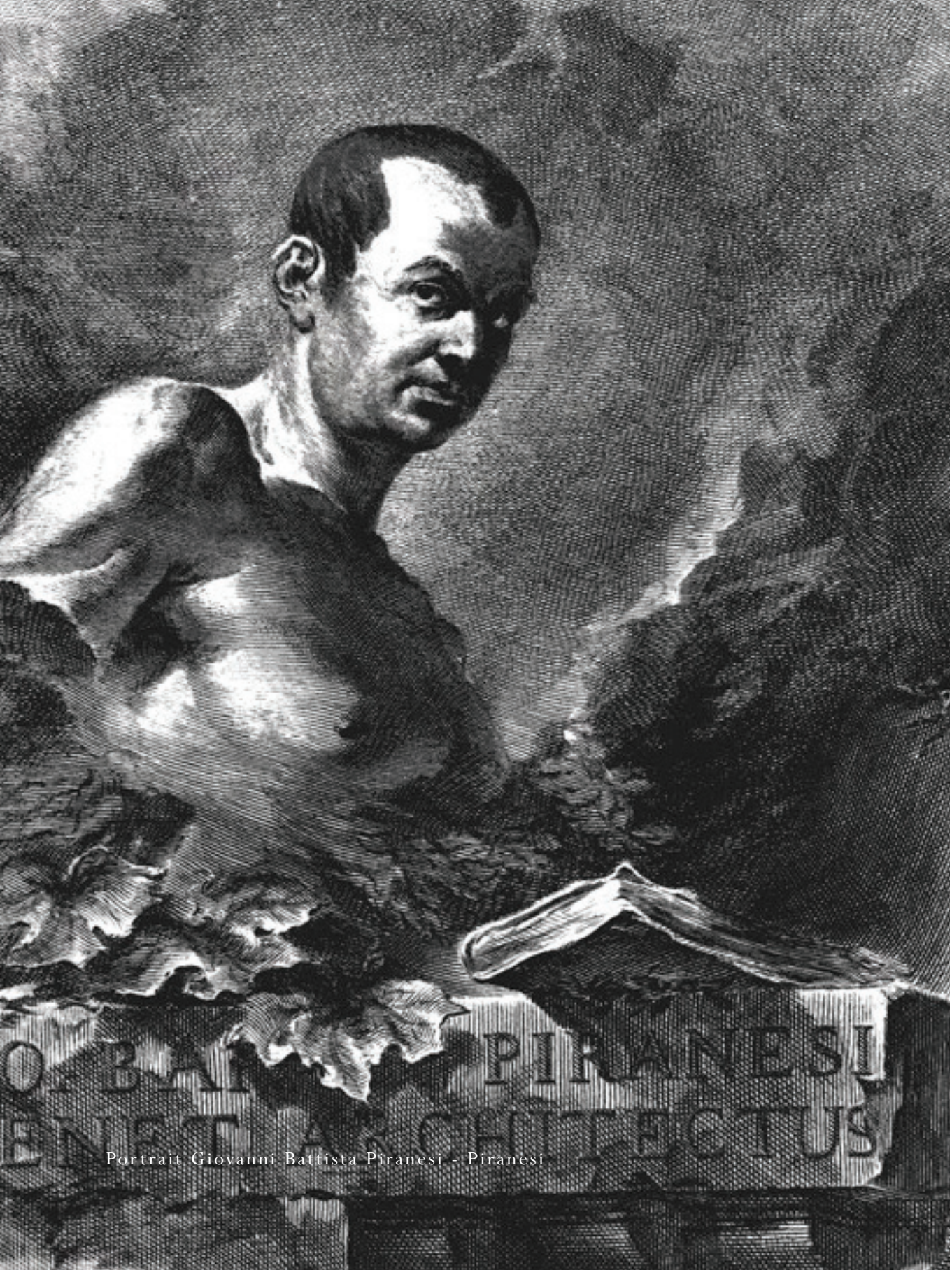
Portrait Giovanni Battista Piranesi - Piranesi

Giovanni Battista Piranesi
And the Sublime

Giovanni Battista Piranesi was born in Mogliano in 1720, a city near Venice. He lived there before he moved to Rome in 1747. Piranesi was an architect, etcher, antiquarian, designer and the first known interior decorator (Marciari, 2018). He tried to establish an architectural career, but he failed. For a long time he was chasing commissions from the pope to build projects, which he barely got. Except one. The only project Piranesi actually designed was the *Santa Maria del Priorato* (Marciari, 2018). Instead of practicing as an architect, he produced throughout his life around 1000 etchings which concerned the city and its architecture. Three of his main series were: *Vedute di Roma*, *Antichita Romane* (including *Campo Marzio*) and the *Carceri d'Invenzione* (Roncato, 2007, p. 4).

Countermovement

The construct of Piranesi who exposed and encounters Enlightenment ideology was articulated by Tafuri in the first chapter of *The Sphere and the Labyrinth* which was called *"The Wicked Architect": G. B. Piranesi, Heterotopia, and the Voyage* (Biraghi, 2013, p. 32). Piranesi questions the ability of the Enlightenment to imagine a world beyond simple scientific facts. DeLanda has showed us that a movement, which can be considered as an interrelated network of people, thoughts and other constructions, 'typically breeds a countermovement, both of which should be considered component part of the overall assemblage (DeLanda, 2006, p. 59).' Piranesi's countermovement, in which he was obviously not alone, defended the advantages that were threatened by the Enlightenment. He was concerned with a city that would be governed by merely scientific measuring methods and overall plans that responded to these incontrovertible 'facts'. A significant

study on Piranesi suggests that he countered this perspective by proposing a reconstruction of a culture and a city which is based on literature, stories and memories. Often, these sources were rejected by proponents of the Enlightenment by defining them simply as myths or legends (Aureli, 2011, p. 104).

However, Piranesi never rejected scientific precision. He raised awareness of a more complex understanding that can rely both on rational Enlightenment thought as well as on irrational imagination. Early in his life, Piranesi worked for his namesake Giovanni Battista Nolli on the *Nuova Pianti di Roma* which is till this day still one of the most dominant illustrations in the field of cartography (Aureli, 2011, p. 92). Here, Nolli represents the city within a figure-ground relationship in the urban framework based on his scientific measurement methods. Piranesi both embraced and discarded this scientific precision which he learnt from his master. In contrast to Nolli's scientific precision, Piranesi often manipulated objects by rotation, scaling, fragmentation, mirroring and cloning. His oeuvre, from the *Carceri* to the *Antichita* and from the *Vedute* to the *Campo Marzio*, is frequently based on a schizophrenic mixture of topographical precision and his own imagination. Biraghi found that Piranesi was fully aware of the fruitfulness of this approach.

> *Piranesi's discovery of contradiction as a pretext for salvation leads to his discovery that the irrational and rational must stop being mutually exclusive (Biraghi, 2013, p. 33).*

Piranesi's etchings of the city are therefore still adaptable by conjectures, assertions and decisions rather than merely scientific facts (Aureli, 2011, p. 139). Piranesi saw the role of imagination, arising as an hypothesis within art and architecture, as an irreplaceable method for scientific progress (Tafuri, 1978, p. 8). This dialectic exercise between rational and imagination is inherent in

Carceri plate VII - Giovanni Battista Piranesi

Piranesi's creativity and resulted in the continuous development of ideas, concepts, spaces, elements, and forms.

Fragmentation

The Piranesian articulation of fragmentation, proliferation and disintegration is fully apparent in the *Carceri* (1749-1761). Many existing accounts on Piranesi fail to resolve the contradiction between the *Carceri* and the rest of his work. A more comprehensive study is provided by Tafuri, who studied the similarities between the series. Throughout all of his work, Piranesi presents spaces that pretend to have a centrality, but never achieve one. Similarly as in the proliferation of differentiated and articulated spaces that are theoretically endlessly expandable in the *Collegio*, *Campo Marzio* and his perspective etchings, he constantly breaks with centrality in the *Carceri*. The dominating strategy seems 'the randomness of the episodes, the lawless intertwining of superstructures and the undermining of the laws of perspective'. Consequently, all the series provide us with a potential liberation of form. The approach used by Piranesi is similar to that used by the architects in the previous chapter: a proliferation of a whole that is broken down into fragmented parts which are distorted, disarranged, rotated and multiplied (Tafuri, 1978, p. 31). In 2006, Andreas Huyssen performed a study on ruins in which he incorporated the *Carceri*. He formulates it as following:

> *Instead of viewing limited spaces from a fixed-observer perspective and from a safe distance, the spectator is drawn into a proliferating labyrinth of staircases, bridges, and passageways that seem to lead into infinite depths left, right and centre. It is as if the spectator's gaze is imprisoned by the represented space, lured in and captures because no firm point of view can be had as the eye wanders around in this labyrinth. (Huyssen, 2006)*

The *Carceri* will prove itself as a challenge for your visual system. The disintegration of spaces induces the spectator to reconnect the fragmented parts into a jigsaw puzzle which will indefinitely prove itself unsolvable.

Violation of constraints

In the series of the imaginary prisons *(Carceri)* we are stuck in a labyrinth full of horror, torture, mystery, darkness and immensity without any exit. This absolute intensity of 'uncomfortable' feelings' experienced in the *Carceri*, Roncato describes, comes from two visible actions: first, an opening towards infinity, and second, the violation of constraints (Roncato, 2007, p. 13). The violation of constraints manifests itself in intertwined superstructures imposed elusively far above our heads, a lowered perspective angle from which the space is represented in order to provide an uneasy feeling of instability (Ipek & Sengel, 2007, p. 22), the quick transitions from light to darkness, and the as previously stated act of fragmentation (Roncato, 2007, p. 13).

Sublime

The *Carceri* was a product of its time. During this period, the philosophy of the sublime has seen rapid development. The etchings of the *Carceri* appears to be closely linked to two of Piranesi's contemporary philosophers who have laid the foundations of the philosophy of the sublime: Edmund Burke (1729-1797) and Immanuel Kant (1724-1804). Both philosophers demonstrate the sublime in contrast to the beautiful. The most simple way to understand is to say that the day is beautiful and the night is sublime. Edmund Burke wrote in 1757 *A Philosophical Inquiry into the Origin of Our Ideas of the Sublime and Beautiful* in which he defined the sublime as:

> *Whatever is fitted in any sort to excite the ideas of pain and danger, that is to say, whatever is in any sort terrible, or is conversant about terrible objects, or op-*

> *erates in a manner analogous to terror,*
> *is a source of the sublime, that is, it is*
> *productive of the strongest emotion which*
> *the mind is capable of feeling. (Shurkus,*
> *2013, p. 14)*

The sublime, as shown in these elaborated studies, is essentially an emotional mix of pleasure and pain. For Burke, it is important to remember that the sublime is inherently connected to the idea of power:

> *I know of nothing which is sublime which*
> *is not connected to the sense of power*
> *(Nesbitt, 1995, p. 178).*

This understanding is directly channelled by Piranesi who confronts within the *Carceri* the spectator with the absolute powers of the universe, which is, in Piranesi's view not a 'natural' universe as found in multiple other paintings of the sublime, but rather a 'mechanical' universe. The individual is here in direct confrontation with the pure powers of the artificial and mechanical world. In order to stress this power, Piranesi makes use of strategies to enhance the impression, and in doing that, he plays with a great contrast between light and darkness. As the theory of Burke implies:

> *Mere light is too common a thing to make*
> *a strong impression on the mind, and with-*
> *out a strong impression nothing can be*
> *sublime. A quick transition from light to*
> *darkness, or from darkness to light, has yet*
> *a greater effect. But darkness is more pro-*
> *ductive of sublime ideas than light - (In-*
> *quiry, 67-68).*

Seven years after Burke, Immanuel Kant wrote a similar, but on many points also contradicting account on the sublime: *Observations on the feeling of the Beautiful and Sublime*. Here, Kant agrees upon Burke that the sublime is "Formless, boundless, chaotic in nature of might and mag-

View of Ponte Salario, Piranesi

nitude", "a violation of form in nature and must always be great" and that the infinite is an effective source (Ipek & Sengel, 2007, p. 27). However, contrary to Burke, Kant believes in a unified and prefigured subject. According to him, this subjectivity should always be protected to all exterior forces of the universe. It is unchangeable and stable (Shurkus, 2013, p. 19).

Deleuze

As opposed to Kant's philosophy, Burke and Deleuze came up with a much more convincing comprehension. Deleuze thought that Kant's believe in a prefigured subject was at most mythological. The most powerful implication of the sublime – as Deleuze believed – lies in the understanding of our own subjectivity as being relational towards the environment. Fundamental hereby was, for Deleuze, the question: "how can a subject disintegrate, and not yet cease to exist?" (Shurkus, 2013, p. 20) Therefore, it is in a continuous state of change. This continuous transformation requires struggle, overcoming obstacles and direct participation with the surroundings. (Shurkus, 2013, p. 20). This overcoming, is by Shurkus described as following:

> *When the imagination accepts the invitation or imposition of the world and the threatened subject steps forward, embracing the potential for a transformative experience, the subjectivity that emerges through this experience cannot be the same as that which initially entered into it (Shurkus, 2013, p. 20).*

We can be quite sure that Piranesi would have been more convinced by Deleuze's philosophy of a disintegrated, transformable and participated subject, than by Kant's protectionism towards a unified and stable subject. This confidence can be underpinned by two other series of Piranesi: the *Antichita* and the *Vedute*. In *Le Antichita Romane*
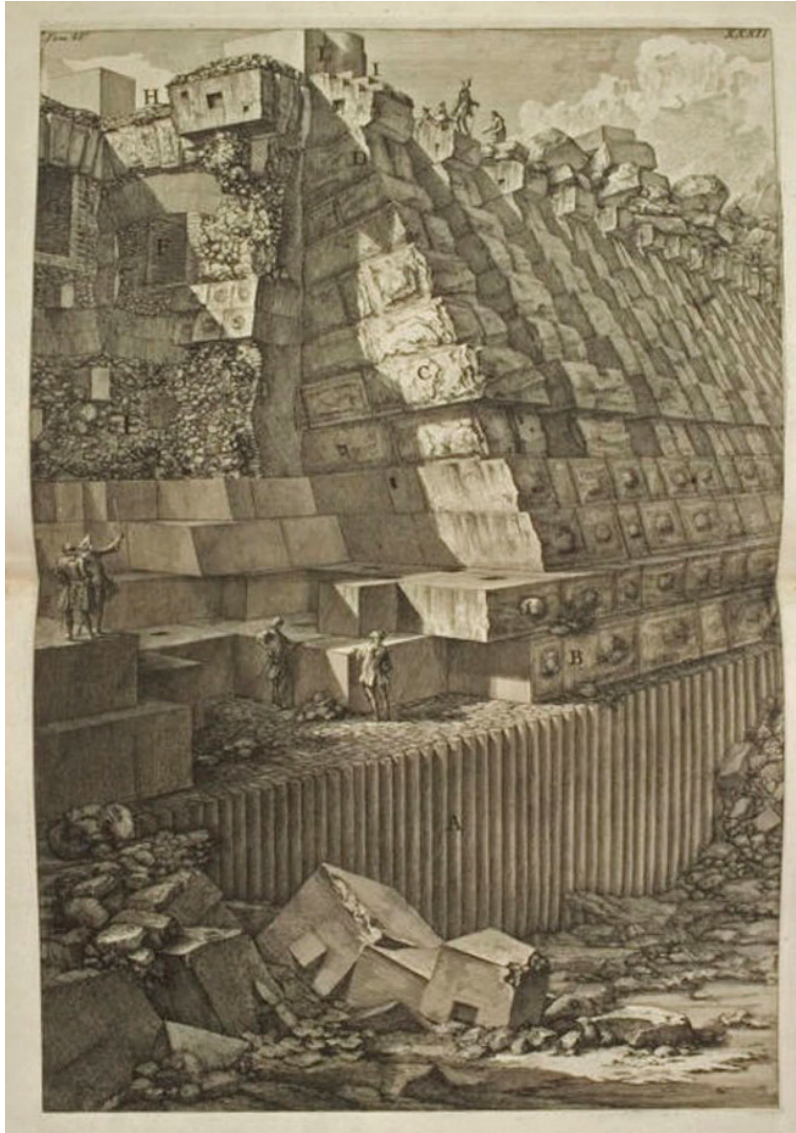
View in le Antichita, Piranesi

(1756), Piranesi went on discovery throughout Rome and made a catalogue of functional attributes of Roman architecture, such as city walls, bridges, tombs, aqueducts, and foundations (Figacci, 2000). Similarly to the *Carceri*, Piranesi violated constraints of perspective, which is often lowered, and scaling of the highlighted elements, in a way they obstruct the view and again, neglect a sense of centrality. The city here, appears not as an ordered whole, but rather as a deserted field which is punctuated by gigantic solid structures. In the following chapter, I describe the implication of this series on his main project: the *Campo Marzio.*

Self-preservation

The subjects that are drawn by Piranesi in the Antichita, appear to be unstable figures that are often drawn as "worn-out toilers" that are in continuous interaction with its site (Ipek & Sengel, 2007, p. 23). They are in this sense not different to the figures we find in the *Carceri* series. The figures are striving for mere self-preservation which is accompanied by very present hard physical effort. The field in which they appear is often obstructed by elements characterized by steepness and greatness. This methodological way of drawing, does not correspond to the stable figure of Immanuel Kant (represented in for example The Wanderer above the the Sea of Fog in which the main character stands stable on a safe distance watching over the universe). Rather the etchings of Piranesi appear to be closely linked to the philosophies of Deleuze and Burke. Burke identified self-preservation, in the face of danger and pain, as the primary instinct, and therefore as an essential part of the sublime (Ipek & Sengel, 2007, p. 23).

Uncanny

Having defined the sublime, let us now turn to the uncanny, which would link the previous chapter with the next. The uncanny which is described by Sigmund Freud as "a

rediscovery of something familiar which has been previously repressed; it is the uneasy feeling of the presence of an absence." (Nesbitt, 1995, p. 180) Both the uncanny of Freud and the sublime share a number of key features. For examples regarding Kant's analysis of the sublime as being a 'negative presentation' of the 'unpresentable' (Shurkus, 2013, p. 16).

> *The postmodern would be that which, in the modern world, puts forward the unpresentable in presentation itself....not in order to enjoy them but in order to impart a stronger sense of the unpresentable (Shurkus, 2013, p. 16).*

Current challenges

Piranesi draws us in his etchings into a direct confrontation with the unpresentable absolute powers of the universe, represented in the *Carceri* as the menace of technology, and at the same time with the rediscovery of repressed unpresentable foundations in the *Antichita*. In a world which is today even more dominated by technology and in which those powers are not presented, the urgency of our survival struggle against technology is more necessary than ever before. Therefore, this study to this part of Piranesi's work brought in relation to philosophies of Freud, Deleuze, Burke and Kant, is fundamental for contemporary challenges. By drawing on this very concept, Koolhaas examines these current challenges we face:

> *I have an instinct that what the 21st century has to offer is this post-human architecture. This is a new sublime. A landscape totally dictated by function, data and engineering. The scale alters, the human becomes almost irrelevant. The paraphernalia of human habitation can be reduced. We are in a moment of transition now, in a*

*half-human, half-machine architecture. Is
this a post-city? If we articulate it prop-
erly it could be insanely beautiful.*

L'espace Piranesian

Koolhaas' understanding of the sublime is visible in OMA's
proposal for the first phase of Euralille in 1994 (Kool-
haas, 1995, p. 1156). The only architectural intervention
OMA made in this project – OMA was master planner and
invited other architects to collaborate – was situated at
the point of greatest infrastructural density. Instead of
addition, they subtracted. The absence of building here
reveals all of the surrounding infrastructural forces: the
highway, railway, parking and metro. People and vehicles
move in all directions. For OMA it was the perfect 'de-
lirious metropolitan moment' (Koolhaas, 1995, p. 1156).
They ironically named it: "Espace Piranesien."

And indeed, when we look inside the void that is creat-
ed, we cannot avoid any resemblances with the series of
the *Carceri*. Just as in the *Carceri* the structures one can
see are structures of movements: ladders, stairs, bridges,
ramps and elevators. Just as in the *Carceri* there is a quick
transition between light and dark. Instead of giving cer-
tainty and clarity, instead of ensuring passengers to move
efficiently, this space provides a labyrinthine journey of
immense sizes which creates a sense of terror. Of the
sublime.

L'espace Piranesien, OMA

Campo Marzio, Piranesi

...XL
A Field of Forces
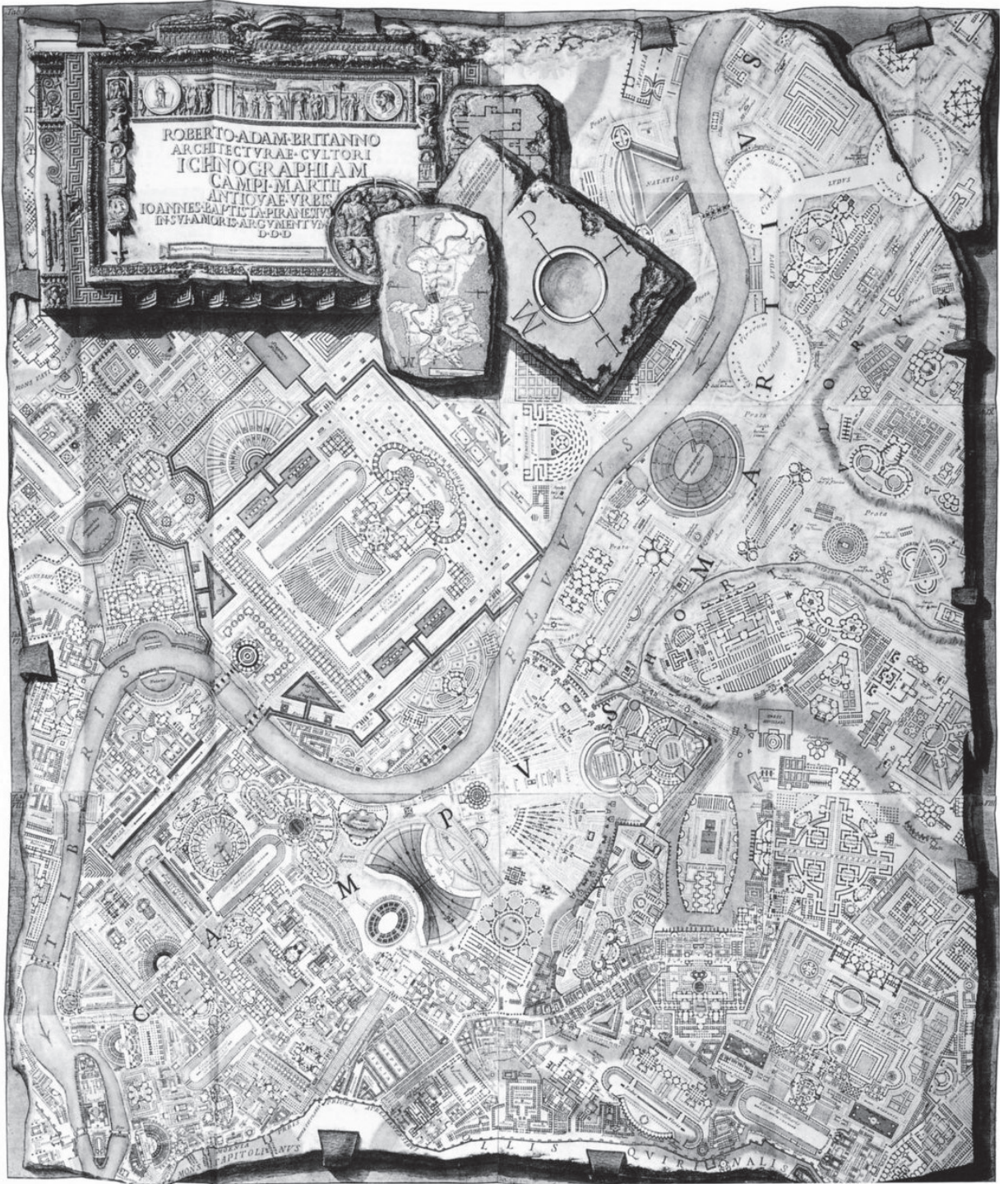
In this chapter I aim to provide a reflection upon a group of architects that has attended an ongoing architectural debate. Starting with the *Campo Marzio* of Giovanni Battista Piranesi in the 18th century, I will enrich this discussions with positions of contemporary architects such as Peter Eisenman, Aldo Rossi, Rem Koolhaas and Pier Vittorio Aureli. In the following pages I will explore in detail their stances as well as the interactive relations between them. Through the study of a series of both similar and different conjectures, strategies and methods, I am confident this will provide a knowledgeable basis for taking my own stance in this ongoing discussion.

Campo Marzio

Introduction

Piranesi's plate of the *Campo Marzio* (The Field of Mars) in 1762 was a radical idea of how to restructure a new Rome from the relics of medieval Rome, classical Rome, baroque Rome into a new modernity. The plate, according to Eisenman, was an imposition to change the social structure of Rome. The form of the projected city, invents a new social structure that evolves out of architectural form. Not the other way around (Eisenman, 2012). The fundamental ideas in the *Campo Marzio* are not merely invented and formulated by Piranesi himself. Rather it must be seen as a continuous intellectual interaction between many architects, philosophers and other intellectuals in the history of architecture (Eisenman, 2012). Several found maps have revealed that already in the fourteenth and fifteenth century the fundamental theoretical basis for a city perceived as archipelago was cre-

ated. Plates of Antonio Bordino, Fabio Calvo, Leonardo Buffalini and Pirro Ligorio represented Rome as a desert, devoid of any urban fabric and punctuated by a few singular architectural monuments. The unique map by Nolli, combining Buffalini's interpretation of Rome and his own, was a great inspiration for Piranesi (Aureli, 2011, p. 115).

Site

A large and growing body of literature has investigated the *Campo Marzio*. Stanley Allen has analysed the Campo following an solely normative pattern in which he includes a consideration of site, context and program (Allen, 1989, p. 72). The site plays a fundamental role in Piranesi's project. The site incorporates the entire area between the Tiber, the Campidoglio, the Quirinale and the Pincio (Tafuri, 1978, p. 34). Allen's historical analysis has revealed that the *Campo Marzio* has first been the location for 'training of youth and military exercise' and later the site was opened for uses regarding pleasure and spectacle (Allen, 1989, p. 75). Thus, following Allen, the site is characterized by 'otherness':

> *It becomes the locus of all that is excluded from the city proper: the armouries and military exercise yards; the stadia and gymnasia; the amphitheatres and circuses; the gardens and pleasure fountains; the crypts and tombs. The conventional institutions of the imperial city are absent (Allen, 1989, p. 75).*

Therefore the site was used by many monumental build structures. The public buildings, the crypts and the tombs had very different typical formal languages.

Scenographia

On this particular site, Piranesi envisioned the destruction of modern Rome in order for its reconstruction. This is best visible in the *Scenographia*, which can be read

as the prologue of the more well-known *Ichnographia*. On this plate we see in the background an overview of the site from a bird's-eye perspective, in which the modern city is completely dissolved. All the urban fabric with its dwellings, piazza's, streets, sidewalks are eliminated. The only element that represents flow and movement is the river. A desert with a few selected monuments of the ancient Roman empire is that what remains. These monuments are depicted themselves in ruins. Piranesi is here, thus, concerned with the passage of history, especially with the antiquities found from the Roman era. The ruins of these monuments are seen as precondition and foundation for the reconstruction of a new modernity, represented in the *Ichnographia* (Allen, 1989, p. 75) (Aureli, 2011, p. 92). On the foreground of the *Scenographia* we see traces and fragments of monuments in the form of stones. Each fragment could represent an entire monument, and consequently it seems ready to be moved into this deserted background. From one single stone, Piranesi seems to communicate, he could construct entire structures (Allen, 1989, p. 97).

Destruction, restoration and reconstruction

The result of such a continuous 'reconstruction' is represented in the Ichnographia, characterized by Tafuri as "a formless heap of fragments colliding one against the other (Tafuri, 1978, p. 34)." The representation of the monuments in ruins clarifies their structure into their most primary forms, and therefore its related history with traces of its past transformations or uses (Allen, 1989, p. 76).

The found ruins on *Campo Marzio* in the *Ichnographia* are accompanied by other displaced, transformed, mutated scaled and rotated ruins of former constructions that were located somewhere else before. By placing these structures, Piranesi didn't limit himself to merely monuments. He also placed aqueducts, sewers, tombs and other facilitating structures (Kalas, 2011, p. 541). Togeth-

er, in a restored state of the ancient city, they form the foundations for a new unpredictable city. Here, Piranesi used the ruins as the conceptual guides for reconstruction. Ruins are no longer unused and dysfunctional remnants of a past. Instead, the ruins are used as clues for reconstruction (Allen, 1989, p. 75). And thus, concludes Aureli, is the ideological illustration condensed with three very conflicting actions: destruction, restoration and reconstruction (Aureli, 2011, p. 85). Destruction of modern Rome, restoration of the ancient form of Rome and reconstruction of a new Rome. The message Piranesi seems to communicate with this is that in order to save the city, we may have to destroy it first. He turns the city into a state of crisis.

The message regarding destruction is made more explicit in one of Piranesi's rhetorical schizophrenic conversations in the *Parerre*:

> *Let us now observe the inside and outside walls of the building. Now I ask you, what holds up the roof of the building? If the wall is supporting it, then there is no need for the architrave; if the columns or the pilasters are holding it up, then what exactly is the function of the wall? Please choose, Protopiro, what do you want me to knock down, the walls or the pilasters? You do not answer? Well, then, I will destroy everything. Cast it aside. Please note, then, buildings without walls, columns, pilasters, friezes, or cornices; without vaults; without roofs; space, empty space; bare countryside; tabula rasa. (Allen, 1989, p. 87)*

Reassembling Nietzschean Stones

The deconstructive and reconstructive actions of Piranesi, we might link to the historical theory of Tafuri on

which we reflected in the introductory chapter. Because, isn't this the very physical translation of the displacement of the 'Nietzschean stones' and reassembling them in order to form something new? In Tafuri's case forming a new history, in Piranesi's case forming a new city, which we essentially can consider as the same (Tafuri, 1978, p. 8). Here, Piranesi suggests that the parts contain more than a simple presence. They implicitly carry traces of where they have come from and where they are going to (van Kessel, 2012, p. 7):

> The "speaking ruins" both collapse and accentuate historical distance. They provide the only possible access to the past; at the same time, they are the sign of its absence and the measure of its incomprehensibility (Allen, 1989, p. 97)

These memories are embedded in all parts of Rome, its aqueducts, its monuments and its tombs. It was Nietzsche who perceived a historical phenomenon as dead to someone that claimed to completely resolved his or her analysis. In contrast to this dead Nietzschean history, Piranesi creates a history that is constructed with attention to hidden, almost erased traces (Biraghi, 2013, p. 3). Biraghi writes:

> On the contrary, the historical project is made up of little unpretentious truths which have been discovered by means of rigorous method. And therefore is easily exposed to the risks associated with what Tafuri calls the "shocks, accidents, points of weakness or resistance that history itself presents." (Biraghi, 2013, p. 4)

Deleuze: actual and virtual

In light of this, we turn to Deleuze and Bergson, who distinguishes the 'actual' and the 'virtual'. This distinction will provide a better understanding of memories

embedded in the physical structures of the city. Following Deleuze, to whom we own the virtual and the actual as a concept, the virtual is pure potential and the actual is actualised potential. The virtual is still real. Its memories, which are the present's mode of access to the past, are the very conditions of perception. The past is a condition for the present. The present thus, contains also the past. This understanding of virtualities in the present implies that we can rethink the formal conditions of the city based on the coexistence of the actual and the virtual (Grosz, 2001, p. 126). Piranesi's *Campo Marzio* is a perfect example of this theory.

Confrontation

These formal fragmented parts are confronting each other in endless juxtapositions. They are formally clashing and influencing each other in multiple ways. Therefore they create tensioned relationships with one another (Balmond, 2002, p. 116). Through these relationships, the whole is not just the sum of its parts. The process of decay and reconstruction of the parts creates continuously new formal juxtaposed conditions in the city. This dynamic model becomes an uncontrollable and ever unresolved dialectic (Tafuri, 1978, p. 14). A proliferation of new tensions, new meanings, new forms and new relationships emerge from these dynamics. This aspect of the *Campo Marzio* of Piranesi perfectly rhymes with Freud's idea of a city that is fundamentally subject to 'amnesia and displacement.' (Allen, 1989, p. 77)

There is no direct visible overall logic. No urban plan. "The ideals of totality and universality", as Tafuri calls them, are completely rejected (Biraghi, 2013, p. 33). Now, the city is simply governed by the negotiation and confrontation between individual formal parts. Through this, a whole is produced in a bottom-up manner. Governed by relationships and juxtaposition of buildings with buildings and with the surrounding geography. The instalment of the city (instauration urbis) is conceptual-

ized as an infinite jig saw puzzle, which could never be resolved. Every new fragment on site creates new and unexpected relationships with its surroundings and could encourage alternative reconstructions (Aureli, 2011, p. 94). The arbitrariness of relationships between fragments suggests that permutations are endless (Allen, 1989, p. 97). It is, as Tafuri describes: "the triumph of the fragment."

Field of potentials

This confrontation between several disintegrated fragments that contains memories from the past sparks the imagination of the reader, was Piranesi's consideration. The project counters hereby the restrictions imposed by scientific and rational thought (Kalas, 2011, p. 538). The blank 'field' in between the artefacts, normally inhabited by the now destructed urban fabric, is essential. Potentials for reconstructions are here not absorbed by infrastructural or other spatial overall orders. This desert of nothingness alludes the possibility for a reimagined and reinvented Rome based on a few fixed finite parts (Aureli, 2011, p. 98). This view is channelled by Koolhaas, who writes:

> *Where there is nothing, everything is possible. Where there is architecture, nothing (else) is possible. (Koolhaas, 1995, p. 199)*

I deliberately call this space a 'field'. As Eisenman defines the 'field' as a plane of events with a particular history, Stanley Allen has defined a 'field' as a messy, unpredictable plane of events. In Piranesi's case, we can argue confidentially that it is both; a messy unpredictable plane of events with a particular history, in which actualities and virtualities coexist. Field conditions are essentially not governed by an overall scheme, rather it is a bottom-up condition defined by intricate relationships (van Kessel, 2012, p. 10).

Analysis *A Field of Diagrams*, Peter Eisenman

A Field of Diagrams, Peter Eisenman
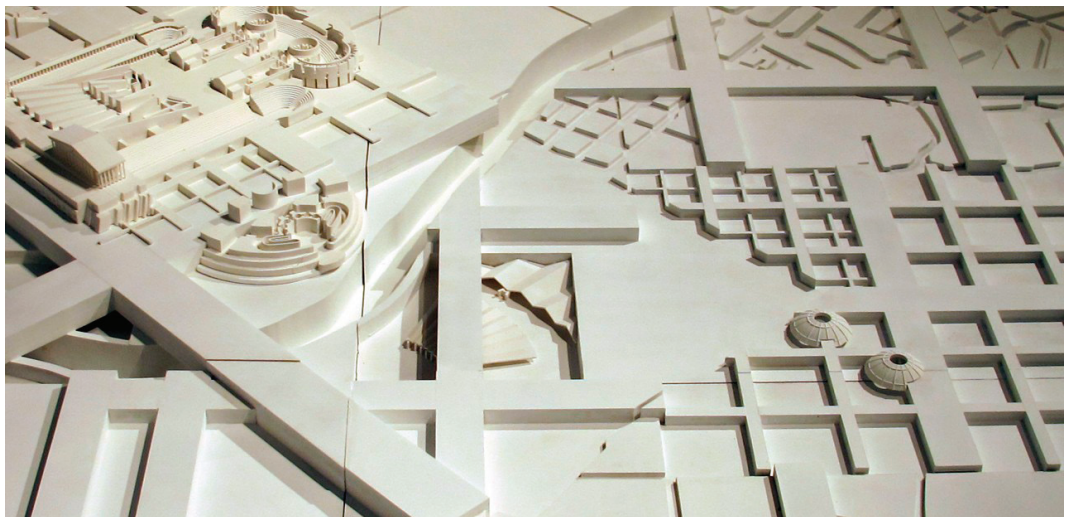
Eisenman: A Field of Diagrams

Introduction

During the Venice Biennale in the summer of 2012, Peter Eisenman was curator of 'The Piranesi Variations'. For this exhibition he invited two other architectural offices to give their interpretation on the *Campo Marzio*; first Dogma, who articulated in 'A Field of Walls' the fundamental use of the wall in the *Campo Marzio*, and second, Kipnis Architecture and Planning, who envisioned in 'A Field of Dreams' a contemporary three dimensional formal folding proposition (Eisenman, 2012). Eisenman's own office gave their own interpretation in *A Field of Diagrams*. His interpretation is highly philosophical and theoretical. Eisenman describes the project and particularly its process as 'an exercise in expertise' (van Kessel, 2012, p. 6).

Layered virtualities

In the exhibition, Eisenman transforms the *Campo Marzio* into a palimpsest of intricate and overlapping layers that represent different structures. The structural elements of the *Campo Marzio* are precisely analysed, abstracted and reused for the reconstruction of this project. The Tiber river is placed in the exact same location, the hinge of the Mausoleum is articulated by a rotation of the grid and elements are endlessly rotated, scaled, mirrored and cloned, in a similar way as done by Piranesi. These structures that are superimposed on top of one another can be read as physical manifestations consisting different layers of meaning, coming from the virtualities of those structures. As Eisenman, who is well known with the philosophies of the actual and virtual of Derrida and Deleuze, states in Moving Arrows, Eros and other Errors: an object is never just the object you see. It contains traces, visible or invisible, that the object has a history and for that matter also a future (van Kessel, 2012, p. 10). The

objects present virtualities from the past. Both, Piranesi and Eisenman juxtapose different architectures from different times in a manner that the actual and the virtual coexist.

Grid

The model of *A Field of Diagrams* characterizes itself by a superimposition of white contrasting scaled grids on top of each other. Eisenman makes use of his three agents of "scaling": first, the discontinuity of the objects, which implies objects containing historical traces; second, recursivity, which is a serial division of self-same forms; and third, self-similarity, which is analogical comparison of formal structures by a juxtaposition of "significance" (van Kessel, 2012, p. 7). The grid is for Eisenman an essential element, partly as a result of an obsession with its self-similar nature. Eisenman does not use the grid to unify or integrate; rather as a dividing and organizing instrument. In a later stage in this chapter, we will continue in depth on the way the grid can act in this way.

Juxtaposed layers

Although the layers of different structures overlap, one can still perceive a continuation of the individual structures due to the physical jump of layers within the model of *A Field of Diagrams*. By changing the focus of the eye, new layers and patterns can emerge from a combination of those layers. The layers seem to interact with each other (van Kessel, 2012, p. 12). The different structures as well as narratives within the layers results in a perceptual labyrinth from which there is fundamentally no exit. There is no solution or final outcome. These combinations of superimposed and juxtaposed structures can catalyse the imagination and the multiplicity of interpretations of the readers. Each layer and each combination of layers can provide a start for a new beginning (van Kessel, 2012, p. 6).

Through the rotation, scaling and multiplied transforma-

tions of the overlapping grids, Eisenman established re-
markably a destabilizing of the stable grid. According to
Van Kessel, the wish for instability in Eisenman's design
is explained by the overarching name of the exhibition:
'A field'. Stanley Allen describes the field as "a space
of propagation", a messy unpredictable plane of events
in which bottom-up phenomena can arise from multiple
interpretations. The juxtaposition of the layers make ev-
ident that there are a multiplicity of interpretations. The
human brain of the reader requires a capability of incred-
ible complexities both for understanding and imagina-
tion. Here, mystery is a necessity. And Eisenman's *Field
of Diagrams* offers it eagerly.

Freud

His six panels that elaborate with his models are accom-
panied by quotes of architects and philosophers. Eisen-
man does not bring up Freud without reason. It is the
same quote Eisenman brings up at the very start of the
introductory chapter of *The Architecture of the City* writ-
ten by Italian architect and theorist Aldo Rossi, which we
will discuss in depth later. Freud is profoundly interest-
ed in the founding of Rome, its transformations during
several periods and its traces that rely in ruins that are
both actual and virtual. He is simply worried about the
destruction or annihilation of these memory-traces. In
Civilization and Its Discontents he writes:

> *Now let us, by a flight of the imagination,
> make the fantastic supposition that Rome
> is not a human habitation but a psychi-
> cal entity with a similarly long and co-
> pious past - an entity, that is to say, in
> which nothing which has once come into
> existence will have passed away and all
> the earlier phases of development continue
> to exist alongside the latest one (Freud,
> 1929, p. 4).*
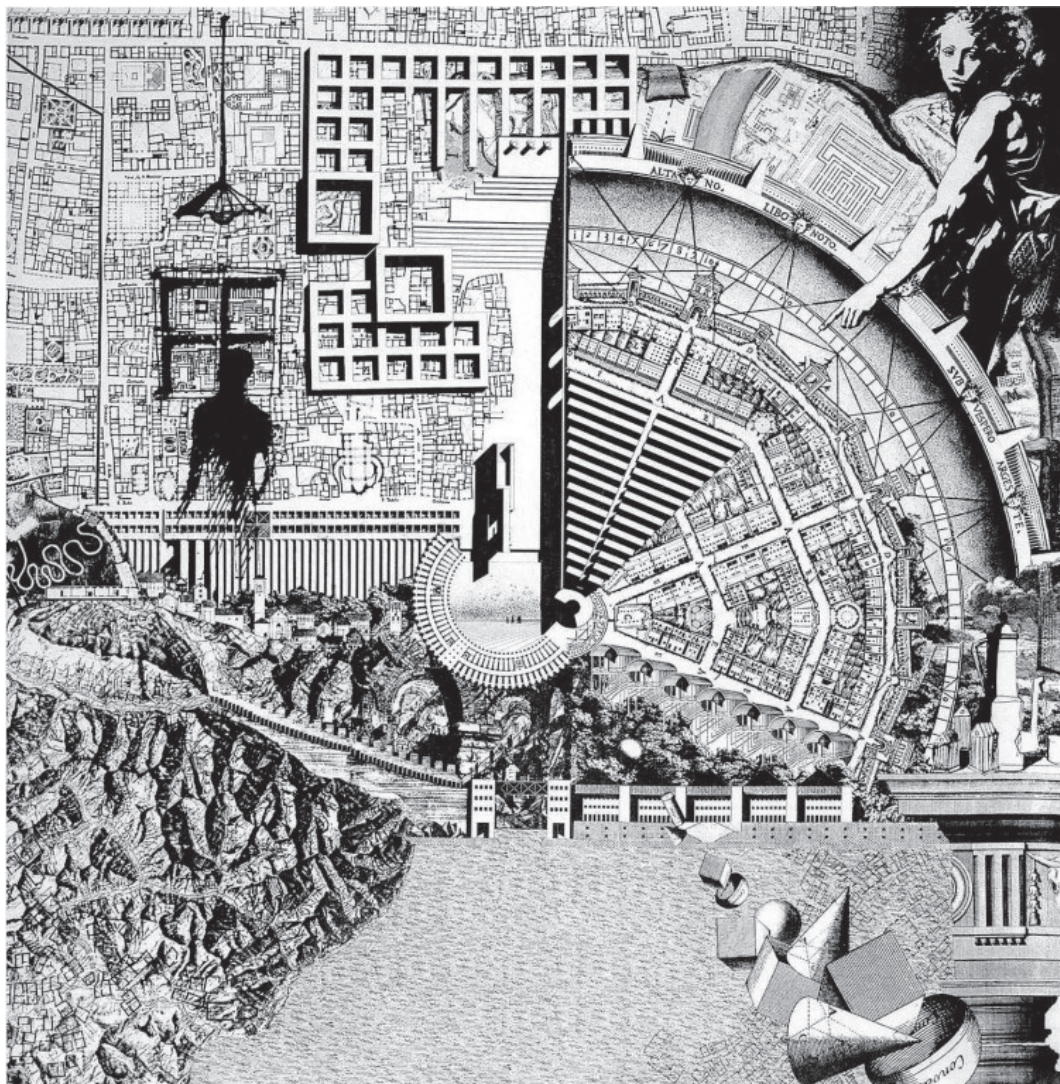
Città Analoga, Aldo Rossi

And if we read further, we find Freud writing:

> *And the observer would need merely to shift the focus of his eyes, perhaps, or change his position, in order to call up a view of either the one or the other. There is clearly no object in spinning this fantasy further; it leads to inconceivable, or even to absurdities. If we try to represent historical sequence in spatial terms, it can only be done by juxtaposition in space (Freud, 1929, p. 5).*

There exists an undeniable strong connection between the work of Piranesi who imagined a reconstruction of Rome based on the ruins found in multiple time periods, the writings of Freud who draws relationships between the virtualities of the city and of human beings and of Eisenman who reifies and materializes these virtualities in his interpretation of *Campo Marzio* based on new narratives and city structures.

Rossi

Introduction

In the same vein as Piranesi's *Campo Marzio*, Aldo Rossi's *The Architecture of the City* is a polemic reaction on the city of modern urban planning. In this book, in which Rossi remarkably does not refer to his own architectural projects, he systematically criticizes the technocratic approach of his contemporaries that fundamentally bypass the idea of the city as historic structural entity. In the introductory chapter of *The Architecture of the City*, Eisenman notes in *The Texts of Analogy* that Rossi's architecture of the city can be defined in a twofold ways: first, as the ultimate source of information within the city, and second, as an autonomous structure. Eisenman highlights here a critical point of understanding: the data

is for Rossi not gathered in a reductive way as done by advocates of the Modern Movement, but rather by an acknowledgement of complex interrelations of data which is gathered from fields such as urban geography, economics, politics, and, most importantly for Rossi, history (Rossi, 1884, p. 4).

Rossi raises awareness that this history relies in the material condition of the city. For him, history is not a nostalgic obsession, something to return to. Rather he envisions history similarly to Eisenman's approach; it appears to him as a metaphorical 'skeleton' whose condition communicates a measure of time. This 'skeleton', as Rossi enjoys calling it, contains accidental traces, scars, fractures and traumas from its past (Rossi, 1884, p. 4). He writes himself:

One can say that the city itself is the collective memory of its people, and like memory it is associated with objects and places. The city is the locus of the collective memory. This relationship between the locus and the citizenry then becomes the city's predominant image, both of architecture and of landscape, and as certain artefacts become part of its memory, new ones emerge.

Koolhaas: The City of Captive Globe

One of the most well-known theoretical architectural projects in modern architecture is the *City of the Captive Globe*, a drawing which is created by Rem Koolhaas, Zoe Zenghelis and Madelon Vriesendorp. As explained in the introduction, there is a strong intellectual relation we can draw between this project and Piranesi's *Campo Marzio*. The drawing is created in 1974 and is published by Koolhaas in his first book *Delirious New York* in 1978 for which it was the underlaying theoretical basis (Koolhaas, Delirious New York, 1978, p. 294).
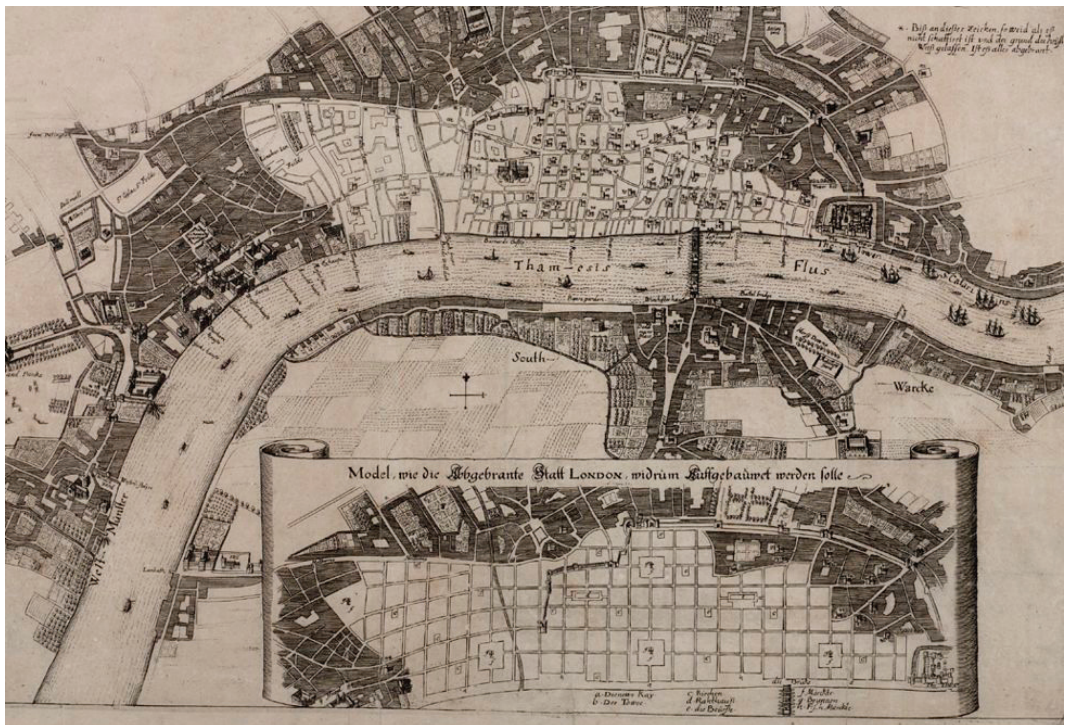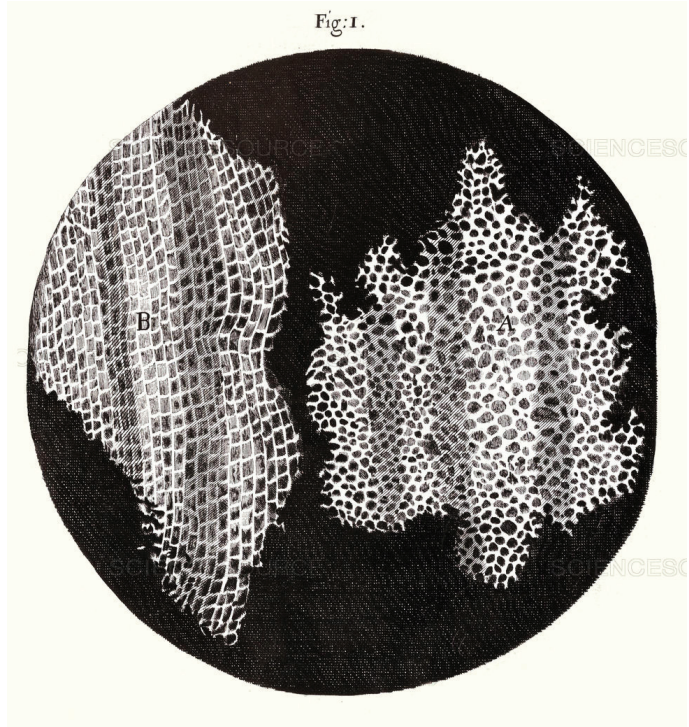
Grid

The drawing presents a grid, which strongly reminds us of the Manhattan grid. Although around twenty blocks are represented, the framing of the drawing suggest a continuous infinity, similarly to the suggested infinity of the site in the *Campo Marzio*. An essential note has to be made here: this grid is not constructed for a totalizing urbanization. Instead, the grid describes a dialectical field of formally, programmatically and ideological competing architectural structures that can coexist and be organized within the dimensions of the grid (Aureli, 2011, p. 220). *The City of the Captive Globe* is defined by Koolhaas as archipelago, in which the unity of the whole is celebrated by the differences between the parts. However, Koolhaas stresses that the whole is more than just the sum of its parts (Koolhaas, Delirious New York, 1978, p. 294). The grid is, in Koolhaas words, 'a conceptual speculation'. It defines a new balance between control and de-control. Control in the horizontal dimension, a loss of control in the third- and vertical dimension (Koolhaas, 1978, p. 20).

Hooke

A significant number of studies have postulated a convergence between the physical characteristics of the rational grid and paradoxically its organic internal dynamic. Already 2600 BC, major cities were built with blocks divided by a grid of straight streets. In order to better understand the urban dynamics in such seemingly rational and reductive conditions we now have to turn to experimental evidence found by natural philosopher and architect Robert Hooke. Precisely a year before the Great Fire of London, Robert Hooke published his book Micrographia. He was inspired by the use of microscopes for scientific exploration in which he illustrated two sections of a small piece of cork. The results are astonishing. The horizontal section represents cells which follow a very organic pattern, while the vertical section reveals

Hook's grid proposal for reconstruction of London

a well-ordered grid-like arrangement (Hooke, 1665, p. 113). Hooke had found that this ordered plant structure allows for a dynamic internal reconfiguration. Each individual cell is not finished, instead, by a constant interaction with the environment the cell continuously reconfigures itself. The stability of this self-organizing system relies in the maintenance of the overall structure in spite of ongoing transformations and replacements of its components (Capra, 1982, p. 292).

Many proponents of an organic worldview, under whom Fritjof Capra, have challenged the Cartesian-Newtonian principles such as the Cartesian grid by stating that those strategies are too reductive, not capable of self-organized transformations and have great emphasis on control. Therefore they simply disregarded the grid. Research into the cell structure of the cork allowed Hooke to think beyond this simplistic perspective, and a year after publication, he got the change to propose a plan for the reconstruction of London after the Great Fire. A new plan of London had to lay foundation for a rational and profitable city. Hooke proposed a pure grid system, consisting blocks of 100m x 100m, that worked as enabler for further developments (Guardian, 2016). The grid gives birth to new urban fabric. And exactly as in the cork, these developments are along one section bound to the rigid limits of the grid, but along the other vertical section, free to do whatever they desire. The final form is not important. The continuous tension between the cells, just as in the cork, manifest in continuing reconfigurations. Where many fails to explain the meaning of the grid in organic terms, they simply disregard it as an homogeneous, top down, simplistic city model. Nothing is less true.

Incubator of knowledge

In the *City of the Captive Globe*, within the limitations of the blocks created by the grid, each architectural structure is placed on a granite base. Each entity distinguish

itself from the ground. We can find some familiar architectures: Le Corbusier's Plan Voisin, Malevich Architecton and Raymond Hoods RCA building. All of them has the right, within the two dimensional limits of the grid, to expand endlessly into the sky (Koolhaas, Delirious New York, 1978, p. 294). Their value lies not in their finite state, but in their continuous struggle, their effort, their competition, and their endeavour (de Graaf, 2017, p. 460). In other words, each one of the constructions consists relations of exteriority, just as assemblages as defined by Deleuze. These exteriorities imply that parts of a particular construction, an idea, a theory or a structure, can be detached and plugged into another construction in which it interact differently. In this way, new constructions (read theories) can emerge, and others can die (DeLanda, 2006, p. 10).

In this way the individual blocks are accelerations for the birth of new theories and their inflictions on the world.' They are therefore an architectural representation of Feyerabend's theory: the buildings are a proliferation of alternative ideas that are fundamentally inconsistent with one another (Feyerabend, 1968, p. 277). They are essentially in conflict with one another. Together, the constructions form an incubator of a plural understanding of knowledge the world (Koolhaas, Delirious New York, 1978, p. 294). According to Feyerabend we should start to criticize the current state of art by generating a proliferation of alternative theories. The more foolish and absurd these hypothetical project the better. In Feyerabend's words, we should become childish again, dream again, and mystify the world again (Feyerabend, 1968, p. 275). Foolish and absurd ideas that are inconsistent with the criticized theory are productive to the extend they shine different light on certain phenomena. This may lead to the discovery of new ideas, new architectural forms and new theories. (Feyerabend, 1968, p. 278)
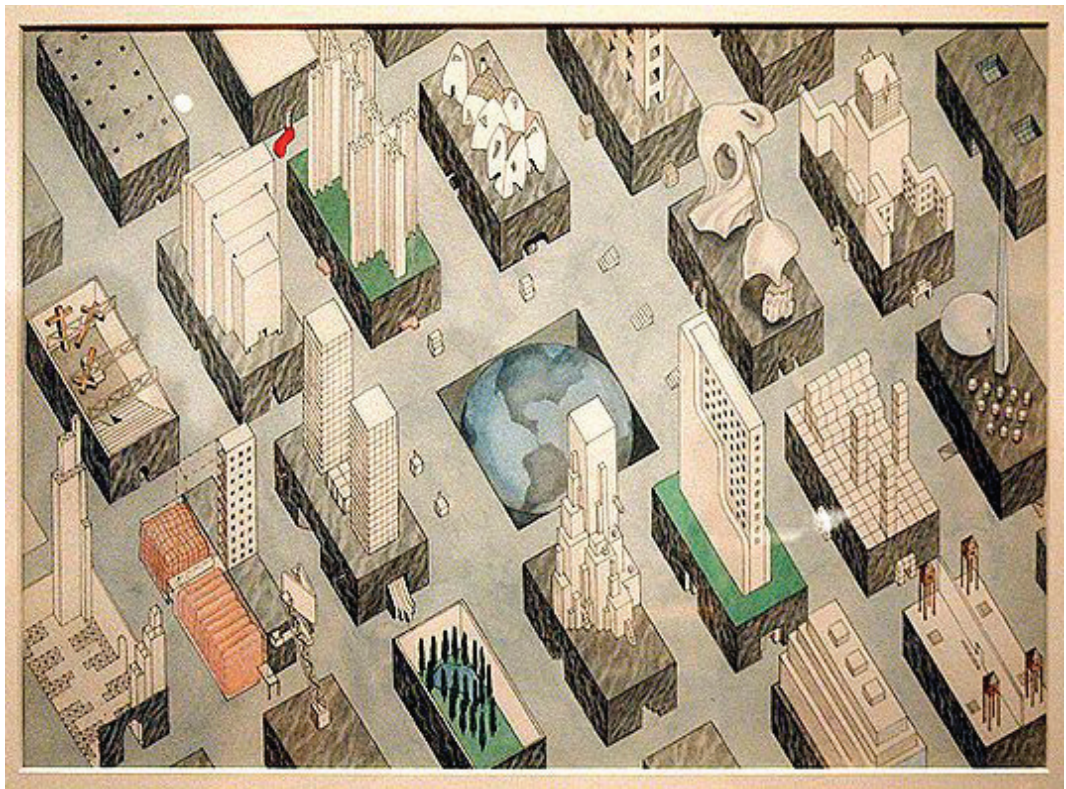
The City of the Captive Globe, Rem Koolhaas and Madelon Vriesendorp

Agree to disagree

Coexistence between the different constructions make each individual idea, theory or ideological form relative. None can rule over the other. To requote Karl Schroeder: "You can compete, and you can win, but you can never win once-and-for-all." This project characterizes early OMA designs: it reifies the tension between the forces of the metropolis. In the firms early projects, the illusion of an improvement of the city is replaced by an architecture that reveals the forces that makes the metropolis that might otherwise remain ungraspable (Aureli, 2011, p. 222). 'In *The City of the Captive Globe*, architecture has agreed to disagree.' (de Graaf, 2017, p. 460).

Change

These tensions generate potentials (Aureli, 2011, p. 220). Since the essence of the metropolis is change and the accommodation of change, here change can be rapid and continuous (Koolhaas, Delirious New York, 1978, p. 294). The system as a whole is in a constant form of complex instability. However, *The City of the Captive Glove* celebrates instability. Exactly in a state of non-equilibrium, in which systems always have to work, new changes and possibilities are offered (Koolhaas, Delirious New York, 1978, p. 294)

Aureli: A Simple Heart

Introduction

As Piranesi proposed a reconstruction built upon the ruins of ancient Roman structures, and as Price with his *Potteries Thinkbelt* project, on which *A Simple Heart* based its proposal, built the groundwork for the post-Fordist city (in which 'immaterial' production such as ideas, images, affects and social exchange are leading) upon the relics of the Fordist city (which is based on the manufacturing

of material goods), Dogma proposes with *A Simple Heart* to build 'the new city on the ruins of the post-Fordist city (Pier Vittorio & Martino, 2013, p. 117). These ruined structures of stations, metro lines, shops and office blocks becomes in *A Simple Heart* the very foundation for new universities that act as a city within the city.

Dogma

The project was a thesis. Rather an architectural theory than aimed to be realistically realizable. The Brussel based office which is led by Martino Tattara and Pier Vittorio Aureli are characterized by their synthesis with a variety of social, cultural and political themes in order to reflect upon with architectural form (Gerrewey, 2015, p. 27). The mega scaled uncompromising rectilinear objects that are superimposed in the urban tissues are characteristic for their work. By doing this, they often not only emphasize the identity of the ecological landscape or urban areas but also uncover aspects of the surrounding. In other words, with their projects, they reveal differences. Here, Dogma shares Koolhaas' vision of the architect as cultural producer and as an "author who offers autonomous, or at least polemical, intellectual statements and who combines history, theory and criticism by means of words and images that analyse or reveal current conditions while expressing them architecturally (Gerrewey, 2015, p. 41)."

Site

The several sites of *A Simple Heart* are located in the heart of the post-Fordist world, the northern and at the same time densest region in Europe, stretching from London to Frankfurt. Imitated from Price's *Pottery Thinkbelt*, who imagined a university that was no longer concentrated in one place, but distributed along a railway network, the project proposes a tactic to use the existing railway network that links the regions and forms for Dogma the basis for a series of concentrated university units, located in

cities as Rotterdam, Delft, Antwerp and Brussels (Aureli, 2013). The benefit of more than one project relies in the fact that it is not conceived as a single project, reacting to a single site. Rather it is conceived as a strategy.

Form

With the project, they aim to criticize the modern city, which is urbanized and results in overall integrative plans. This is strongly in contrast to what they admire a city to be, which is formed by the juxtaposition of singular architectural forms (Pier Vittorio & Martino, 2013, p. 113). It is for this reason that they propose the most simple, non-directional, singular, concentrative and normative archetype: a squared room. The dimension of this squared room is completely in the spirit of Koolhaas' Bigness. The greatness of the project ought to compete with the city. This archetype addresses the possibility of singularity and of being finite and autonomous within the sea of urbanisation. This is, according to Brett Steel, a fundamental task: to return the architectural discourse to the dimension of the city. Aureli stresses the simple architectural archetype, such as the room, as something that goes beyond the invention of an architect, but simply can only be found, appropriated and manipulated. Exactly by concentration on the square, Dogma refuse to be subject to the mechanisms of capitalism and its urbanism. Also they refuse to attend the competition of the iconic buildings and their pretended differences and exceptionality (Teerds, 2013, p. 4). The placing of the form is strategically in between the urban centre and the periphery in a way the project becomes an intermediate condition which is subject to a form of tension. Typology becomes almost an obsession for Dogma. And with typology I do not mean a programmatic identity, rather a formal organization of a building.

Inhabitable wall

An inhabitable wall of 20 stories is in each city carefully

superimposed in the urban fabric. It encloses an area of 800 x 800 metres. The drawings of the project reveal how the big superimposition provides both clarity and boundaries. The inhabitable wall is used by students and researchers that all have a single room. According to Aureli, this monastery condition and the focus on individuality is the pre-condition for a maximize communal life within the common area. The common is meaningless when there is no place left for the individual. This extreme condition is, following Aureli, 'the entrance to political consciousness.' Here, in the communal area, the productive side of knowledge and social exchange becomes as explicit as possible (Pier Vittorio & Martino, 2013, p. 115).

Internal dynamic

The squared room acts as a metaphorical boxing ring, leaving the rest of the university unplanned and open for developments based on confrontation. The 'post-Fordist' relics are open for multiple readings, dependent on their appropriation. They could be used, transformed, reused and destroyed by the inhabitant. The internal dynamics are nonetheless site-specific and dependent on which urban sites are framed (Teerds, 2013, p. 4). The space in between is covered by a transparent roof supported by a 10 x 10 metre hypostyle like grid and transformed into a continuous interior in which activities can be organized (Pier Vittorio & Martino, 2013, p. 113).

Conclusion

With their very simple archetypes Dogma challenges contemporary planning methods. Their work warns us and asks us to reconsider our options. 'What would it mean if architects produced not beautiful singular objects and exceptional places but rather urban environments in which singularity is no longer the norm? What can replace singularity? The opposite of a singular object is a replacement of the totality. As Elia Zenghelis describes it: you cut open the body of the city and replace its vital
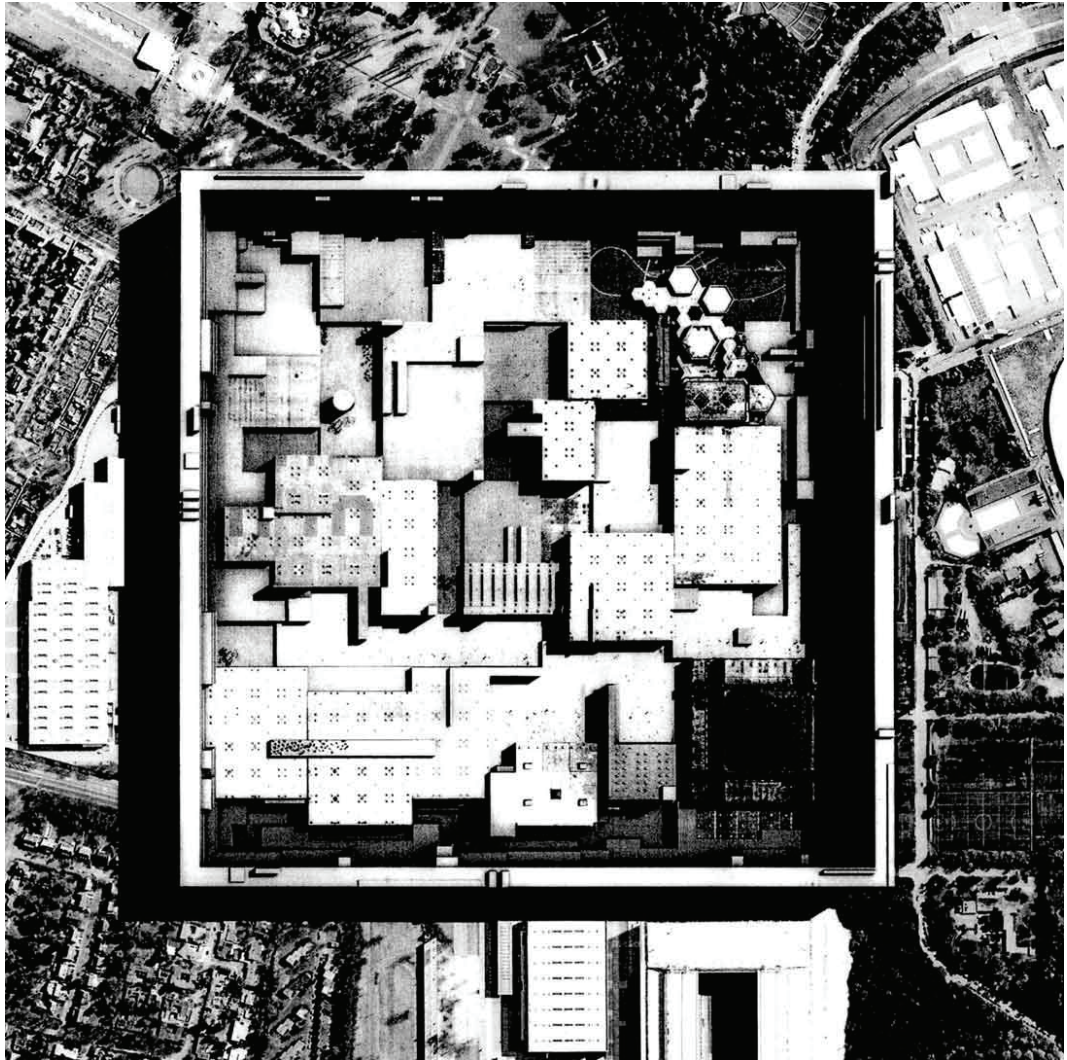
A Simple Heart, Dogma

organs (Gerrewey, 2015, p. 32). Their controversial work can count on many criticism, mainly directed towards their totalitarian approach and their 'creating an illusion of an all-solving architectural answer to our urban problems (Doucet, 2007).' I would argue that Dogma does not pretend to have found an all solving solution. Their project can only work as an incubator for a new form of life. It merely frames possibilities. The organization of the inner space is not the affair of Dogma.

Reflection

By understanding the work of the architectures of Piranesi, Rossi, Eisenman, Aureli and Koolhaas as a series of hypothetical theories that aim to confront a particular question I am in the possibility to take an own hypothetical stance. I deliberately use the word 'hypothetical', since I am fully aware of the endlessness of this discussion and the danger that relies in providing a final and conclusive statement.

Never does it pretend to be the only solution to the stated problem, never does it pretend to be the best solution. It is just 'an' option. An option to trigger the ongoing debate that is described. As Tafuri writes:

> *The utopianism of Enlightenment architecture is made clear by a lucid acceptance of this new role: architecture is made clear by a lucid acceptance of this new role: architecture now tends to formulate hypotheses, rather than offer solutions. And no one will ever claim that a hypothesis must be completely realized (Tafuri, 1978, p. 8).*

Collage: A field of conflict

Project
An empty floor

The city is in a state of continuous conflict. London is a city that is built throughout many years, formed in the Roman era as Londinium. The buildings of London are thus built throughout many different time periods, by different people and institutions, that had fundamentally different ideas and ideologies. Many of these histories and ideas are visible in the build environment. These structures can form a starting point for the reconstruction of the new city.
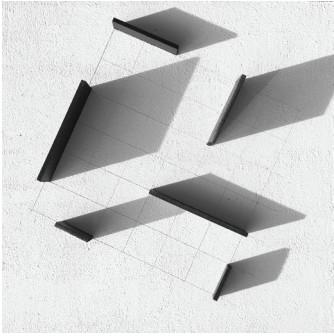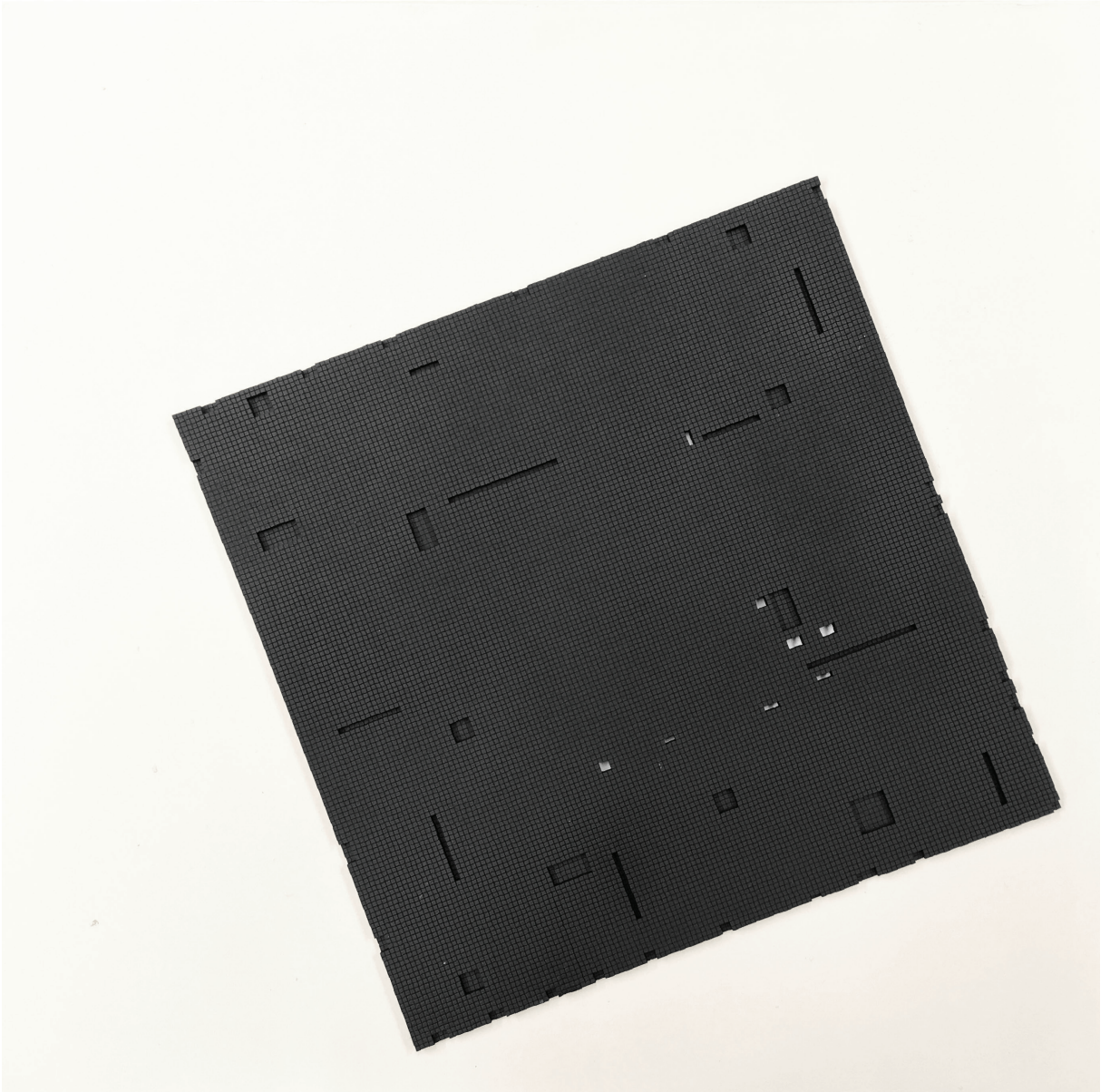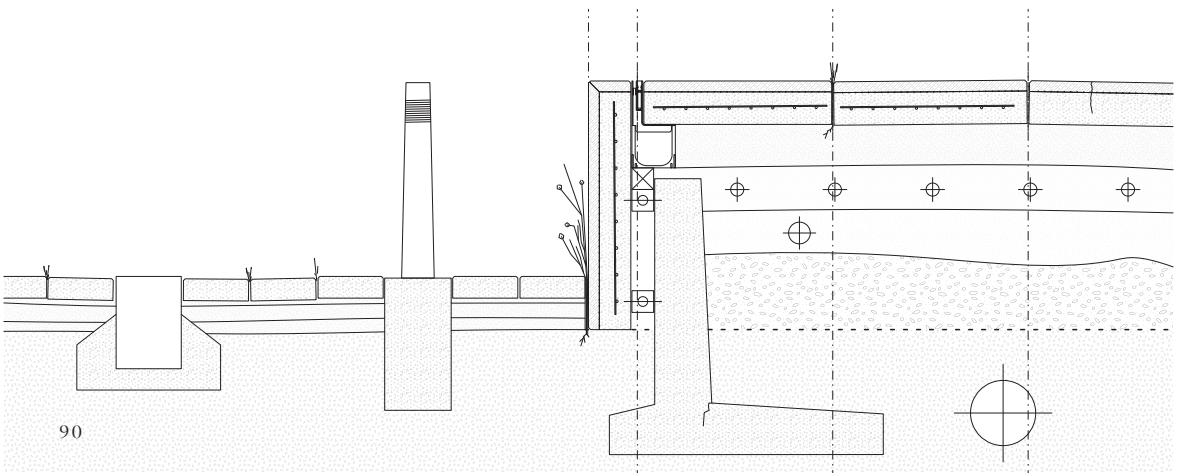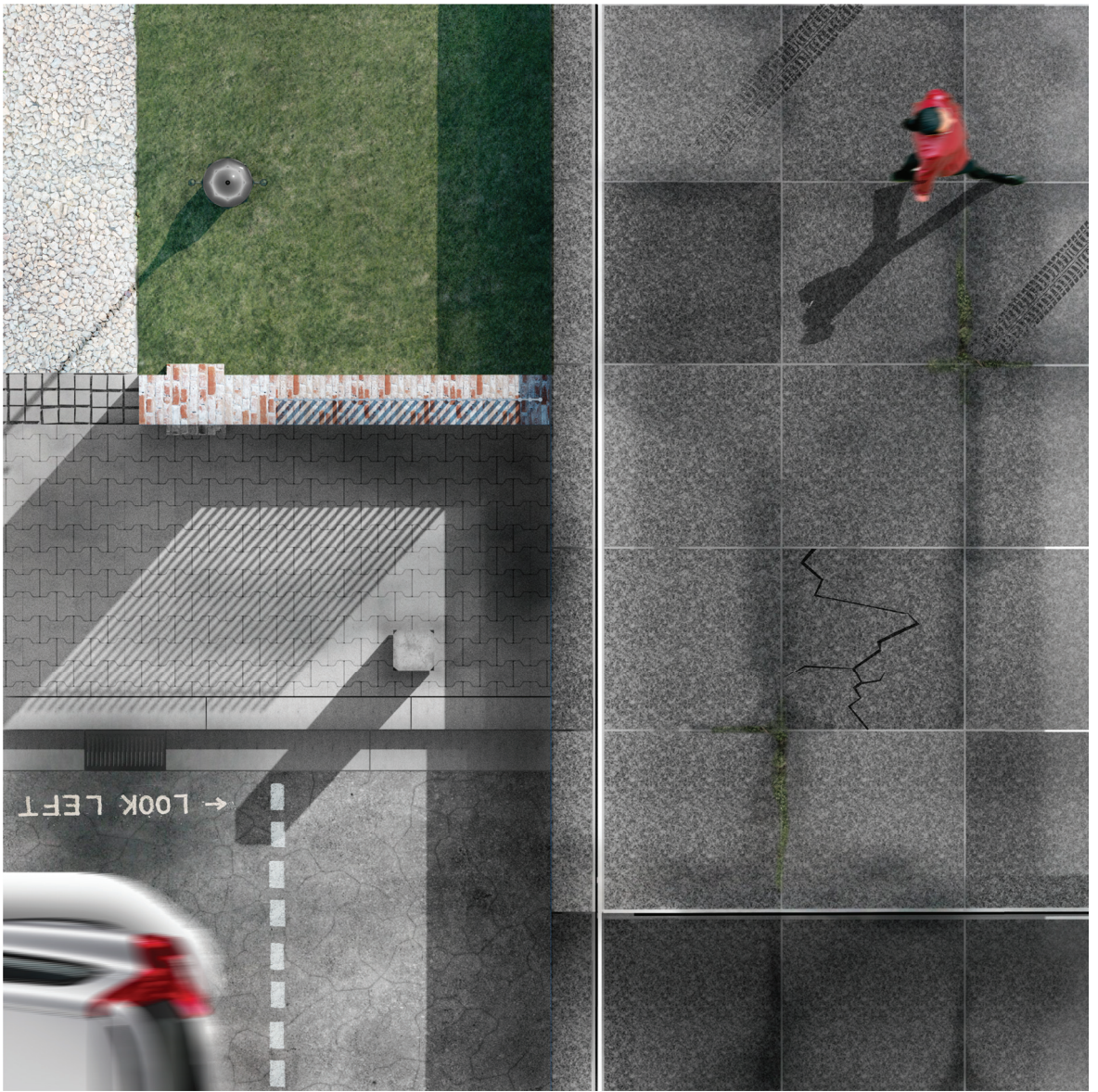
London
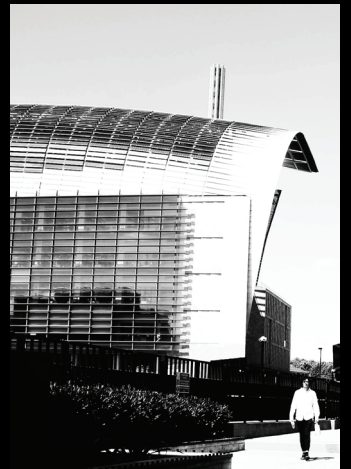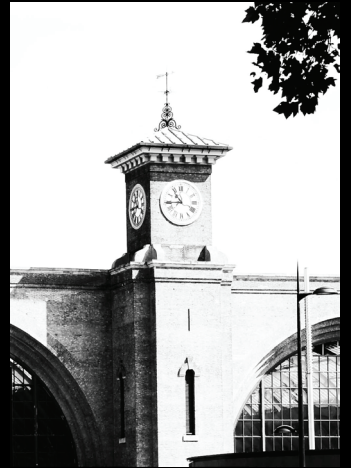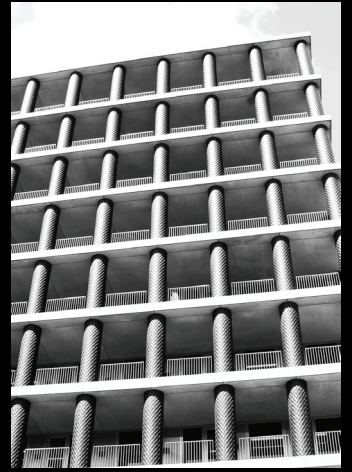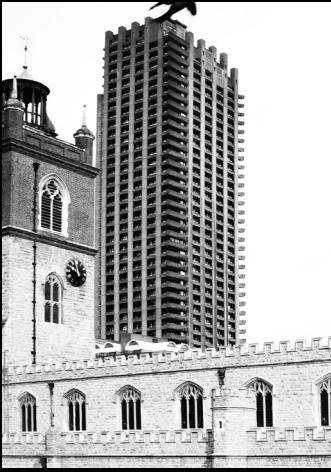
Four frames in London

The project is a strategy. The strategy is tested in four areas in London in which different buildings and city parts are framed. By grouping them, the relationship between them becomes evident.
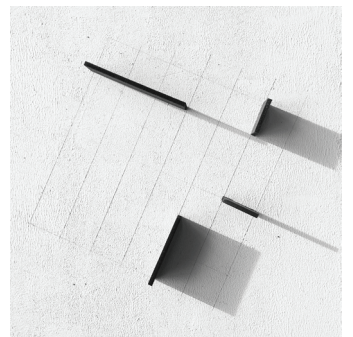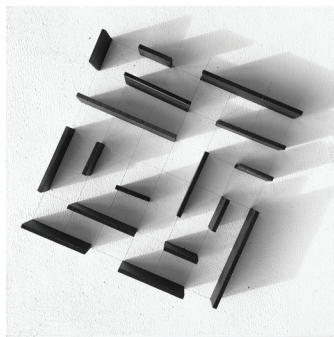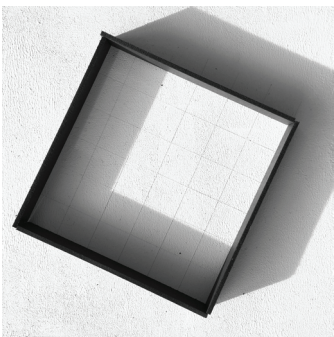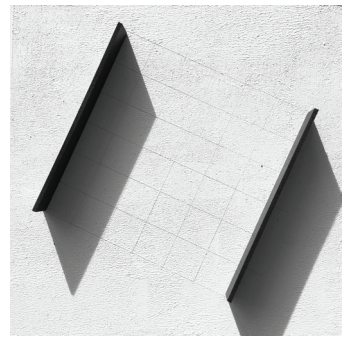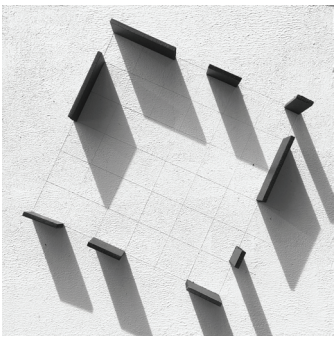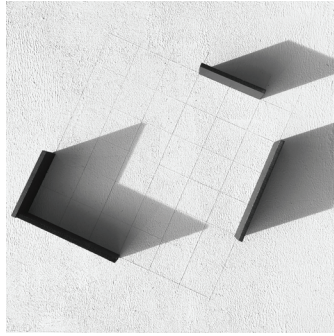
Model study: framing with walls

Model study: framing with floor

LOOK LEFT →

Order vs. Chaos

The floor frames the different city parts. Also the floor covers all imposed orders in the build environment through which these differences goes unnoticed. On the smooth surface of the floor the relationships and thus the potential for conflict between the entities on its surface could flourish.

The floor is black. It avoids any external references. It absorbs light to the maximum and creates the greatest possible contrast with the objects and subjects on its surface.

Its material is granite. A solid stone, to give the floor an appearance of a stable, permanent foundation on which unstable, temporal activities and developments can take place.
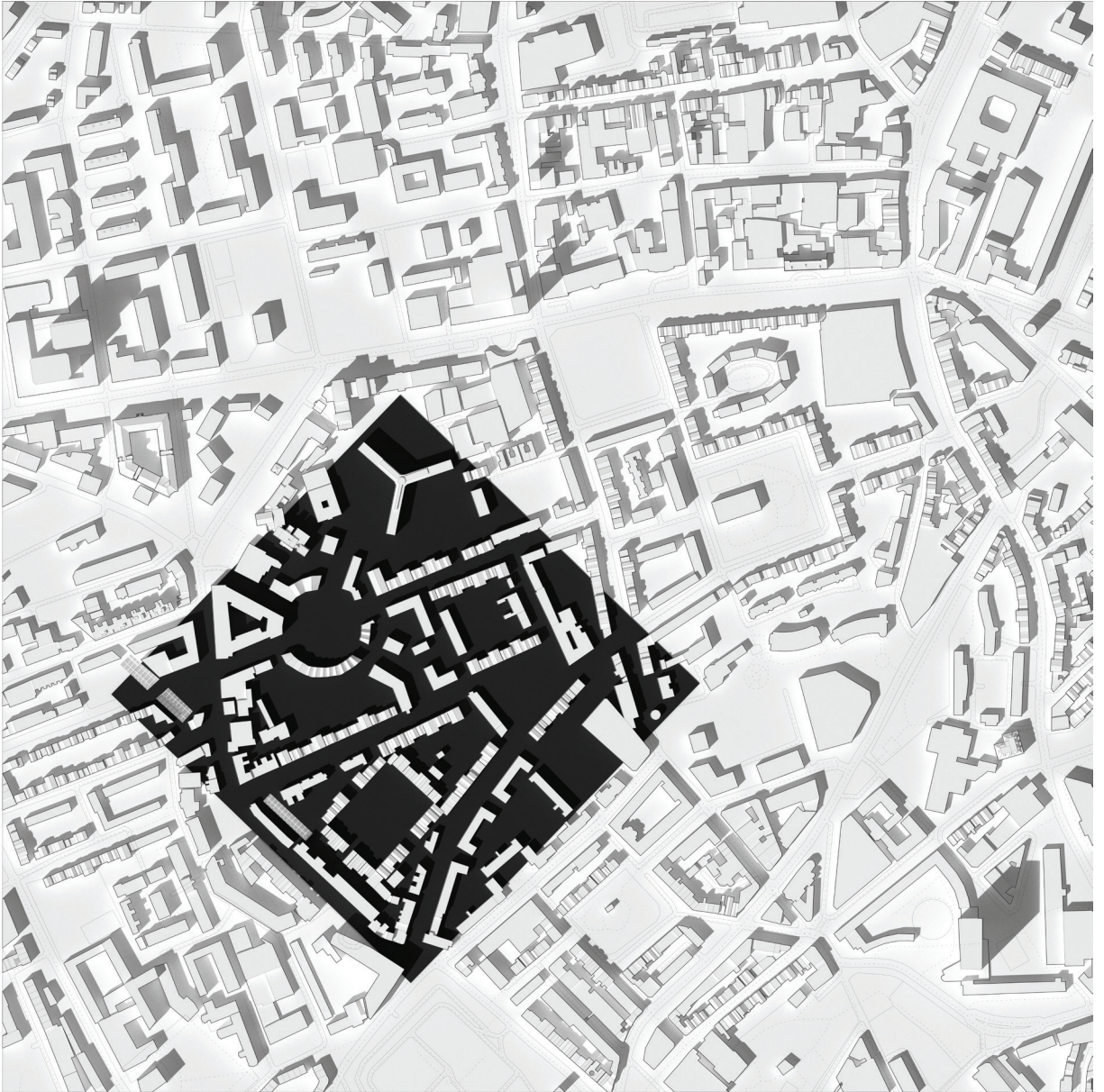
The stones are placed in a generic grid, which create a seemingly infinite plane that can be seen as an enabling frame on which these activities can enfold.

Kings Cross

Kings Cross

Percy Circus

Percy Circus

Barbican

Barbican

City

City

A floor of differences

Traffic principle

Water principle

225   900   900

PREFAB ELEMENT (900 x 900 mm)
- Burned / brushed black granite (50mm)
- Reinforced concrete (150mm)

Gutter

LED

50

50

150

200

Prefab LED + Gutter Line

Sand bed 3

Reinforcement

Glue

Seal

Steel profile

Electricity

Water

Sand bed 2

200

Infiltration tube (distance between tubes: 5000)

Sand bed 1

200

Existing pavements package

Steel profile

Rubble granulate of
recycled existing pavement

Var.

900

Var.

Existing sewer network

Prefab Concrete Retaining Wall
(According to specifications
constructor)

01: Edge (1:20)

01 : Edge

900 900 900 900

Existing pavements package

Burned / brushed black Granite (200x200mm)

PREFAB ELEMENT (900 x 900 mm)
- Burned / brushed black Granite (50mm)
- Reinforced concrete (150mm)

Gutter

LED

Glue

Var

20

200

200

50

15050

70

Prefab LED + Gutter Line

200

200

Sand bed 1

02: Access point (1:20)

02: Access point

900 | Var.

PREFAB ELEMENT (900 x 900 mm)
- Burned / brushed black Granite (50mm)
- Reinforced concrete (150mm)

Existing building facade package

Existing building floor package

Glue

Gutter

LED

50

150

200

50

Sand bed 3

Prefab LED + Gutter Line

200

200

Glass fiber

Gas

Sand bed 2

200

Infiltration tube (distance between tubes: 5000)

Sand bed 1

Var.

Rubble granulate of recycled existing pavement

Existing sewer network

03 : Building (1:20)

03: Building

04: Cut (1:20)

900   900   900   900

Prefab Concrete Profile
(According to specifications constructor)

PREFAB ELEMENT (900 x 900 mm)
- Burned / brushed black Granite (50mm)
- Reinforced concrete (150mm)

Rolled steel profile (HE600B)
According to specifications constructor

Burned / brushed black Granite (100mm)

Glue   Gutter   LED

Steel profile

Sand bed 3   Prefab LED + Gutter Line

200

Burned / brushed black Granite (30mm)

Existing wall package

50
150
200
500

100
110
600
30 60

04: Cut

900   900   900   900

PREFAB ELEMENT (900 x 900 mm)
- Burned / brushed black Granite (50mm)
- Reinforced concrete (150mm)

New level

Stainless steel prefab staircase

Gutter

LED

50

150

50

200

Electricity

Sand bed 2

x

200

y

HE100A

Sand bed 1

200

Old level

x

100
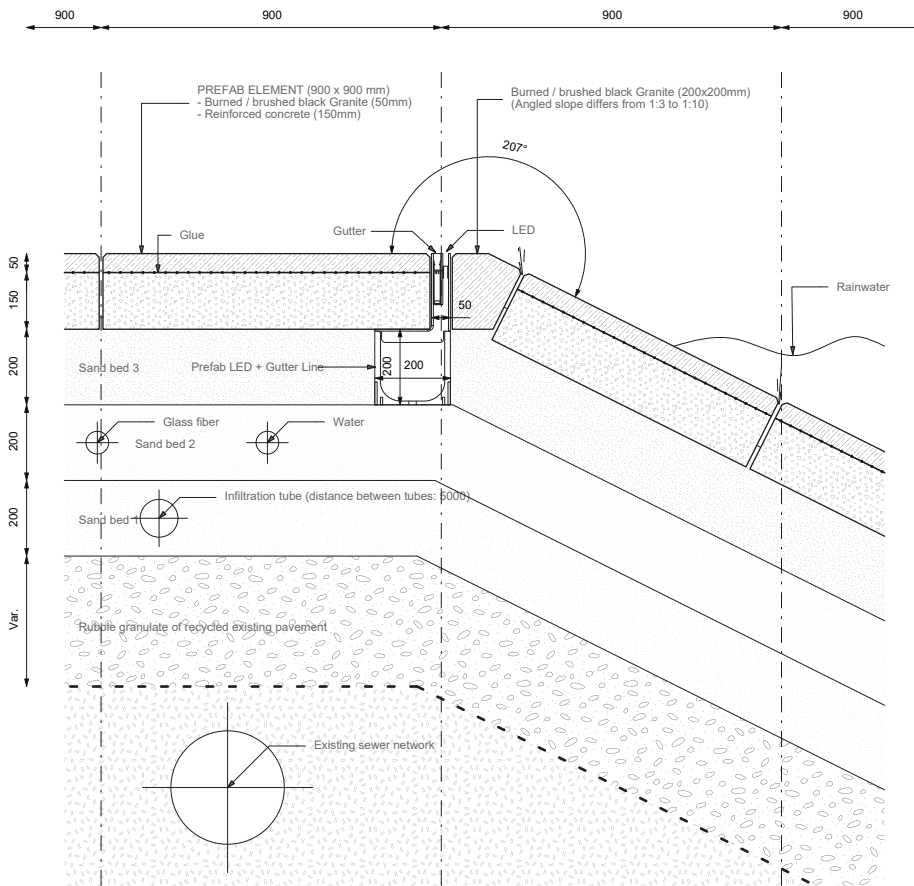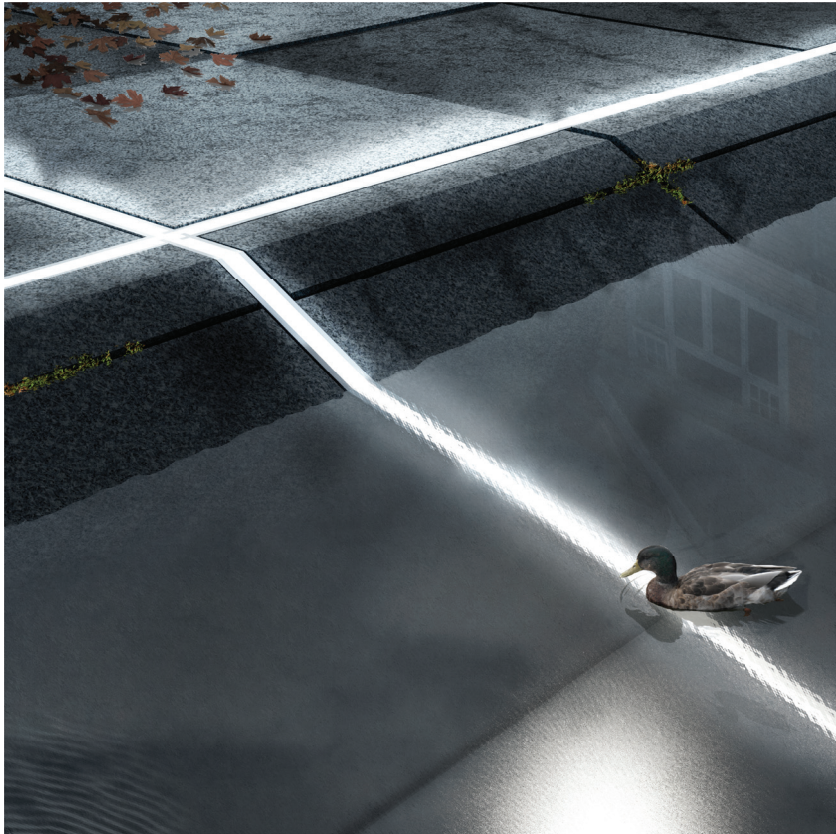
y

100

1384

05: Underground accessibility (1:20)

05: Underground accessibility

900   900   900   900

PREFAB ELEMENT (900 x 900 mm)
- Burned / brushed black Granite (50mm)
- Reinforced concrete (150mm)

Burned / brushed black Granite (200x200mm)
(Angled slope differs from 1:3 to 1:10)

207°

Glue

Gutter

LED

50

Rainwater

150

50

200

Sand bed 3

Prefab LED + Gutter Line

200

Glass fiber

Water

Sand bed 2

200

Infiltration tube (distance between tubes: 5000)

Sand bed 1

Var.

Rubble granulate of recycled existing pavement
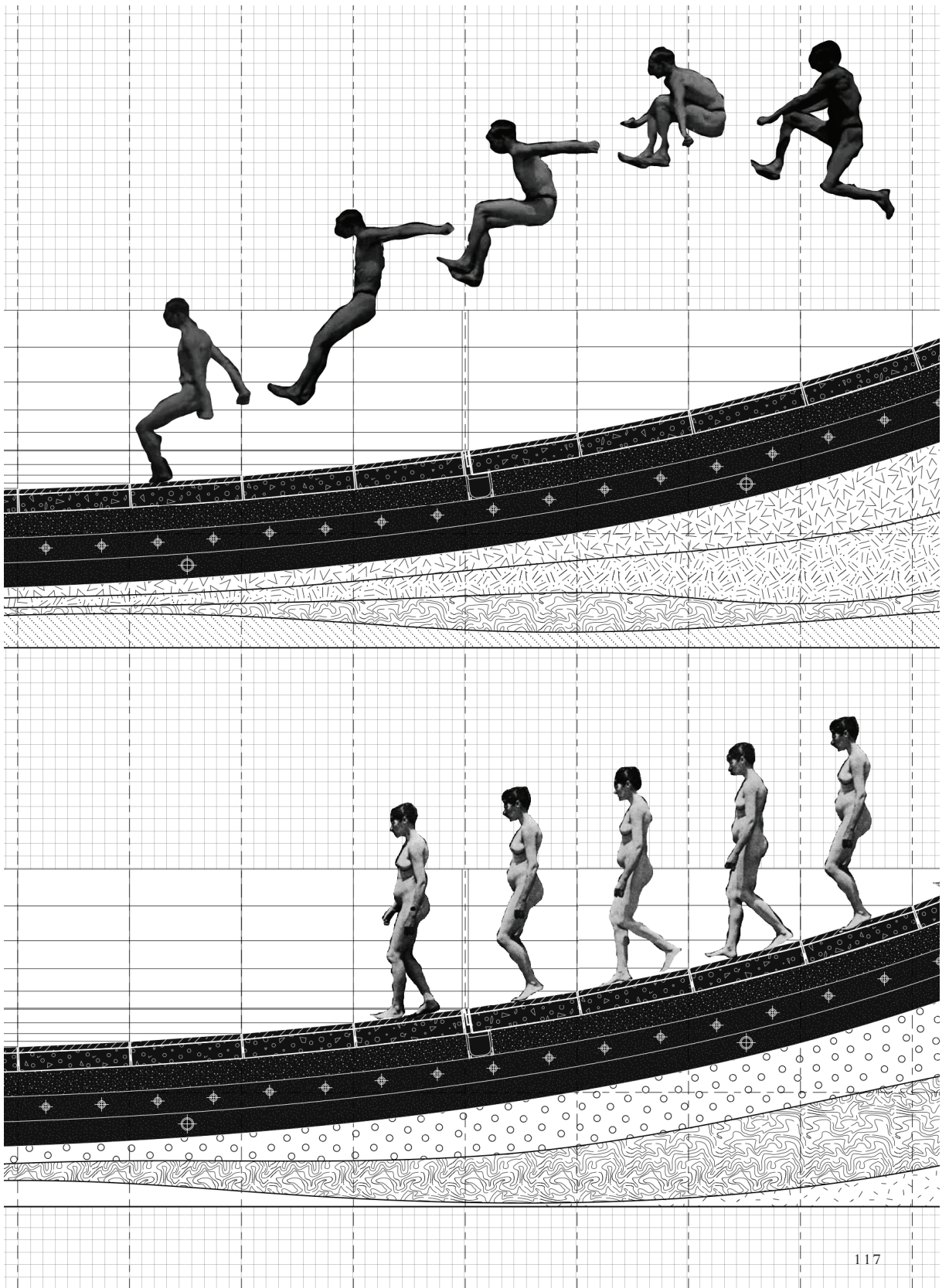
Existing sewer network

06: Fold (1:20)

06: Fold

Motion

Motion 1:50

Q1: Current condition

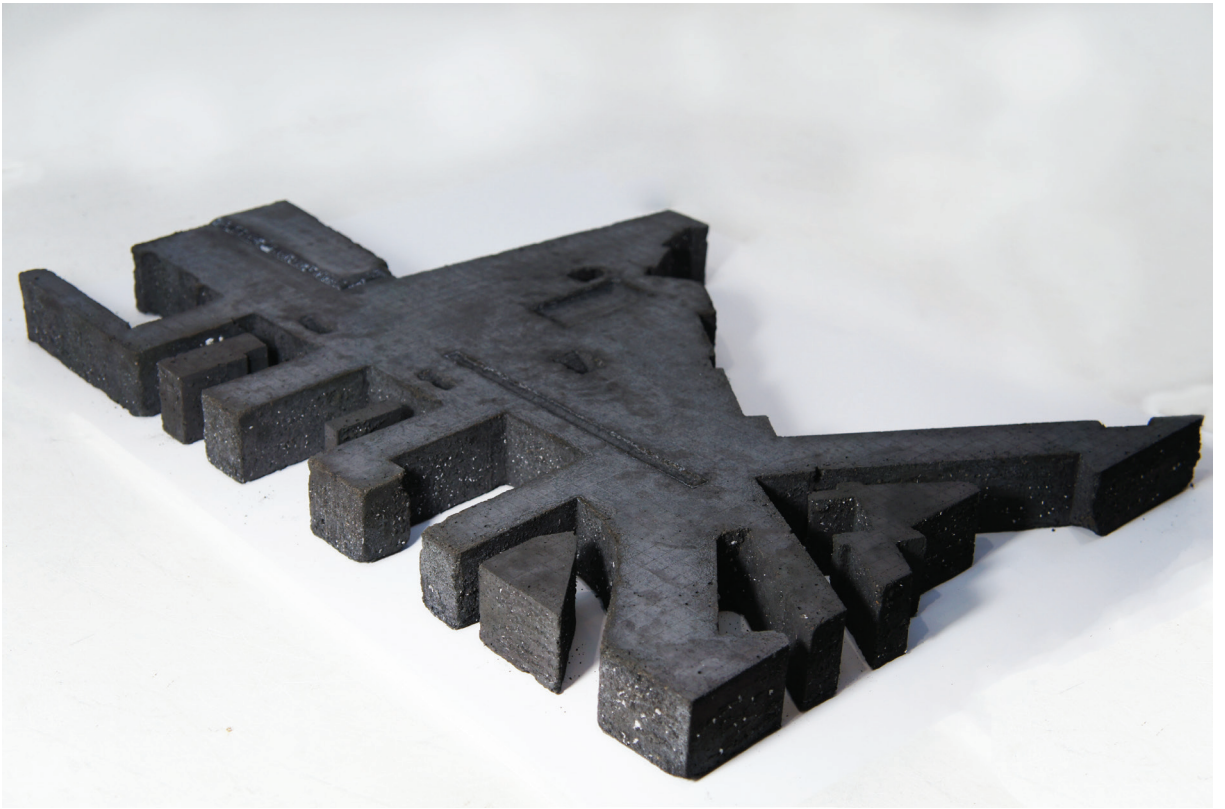*Q4: Permanent developments*

Q2: Empty floor

Q3: Temporal developments

Four stages of potential

An empty floor is not empty,

It is full life,

full of overlapping orders,

people with different perspectives

and as many events as it can held,

On an empty floor,

life can enfold itself in the way it would naturally do,

according to very complex orders,

that are fundamentally uncontrollable and unpredict-
able,

An empty floor is full of potential conflict.
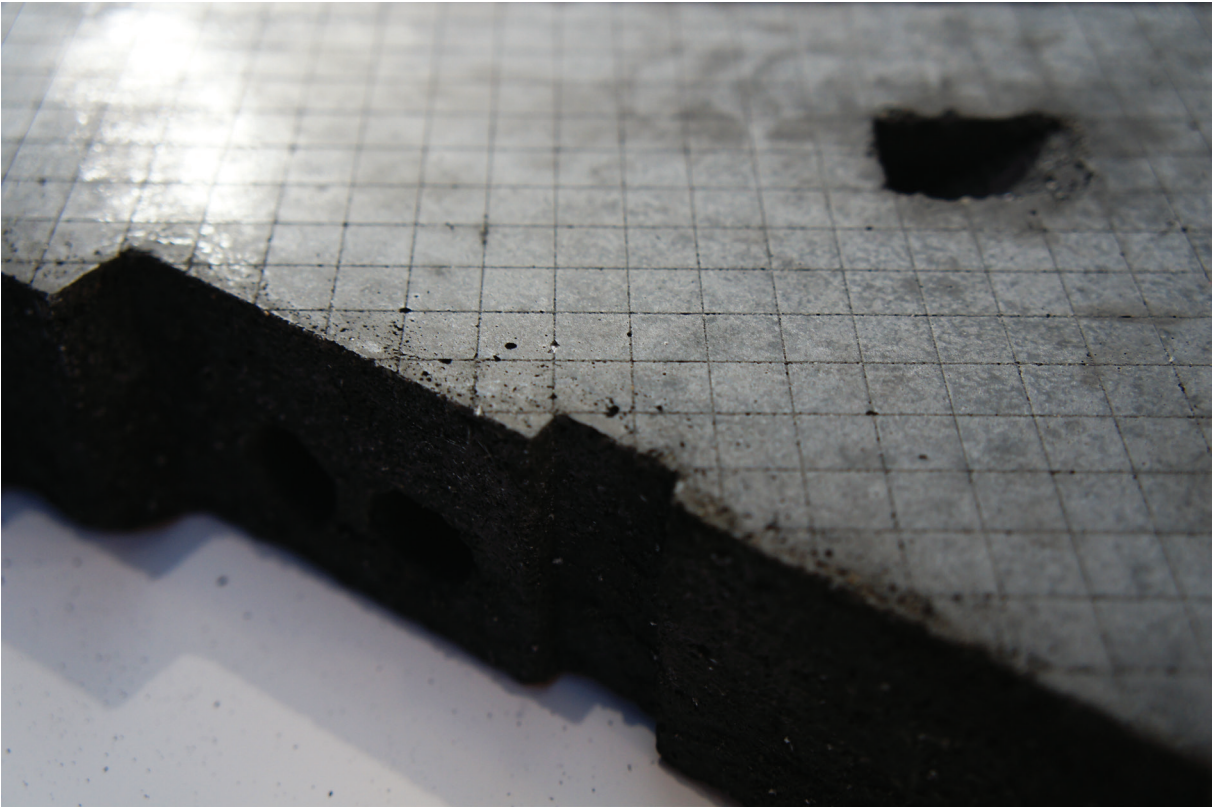
Reflection

An observation: In the beginning of 2017 I felt frustrations through the passiveness of individuals in public life. Everyone seems to be in their own world, staring downwards towards the screens of their phones, walking in prescriptive ways from their home to their work. Public life is in firm decline.

I started to become fascinated by conflict, chaos and confrontation. Unexpected, adventurous and challenging situations seemed to please me. Do I have a dark mind? It stuck. I wanted to do a project on this. How can architecture intervene in a way that it modifies and defend these fascinations?

A question: How can architecture reveal or foster a diversity of conflicts in the metropolis?

Hypothesis 1: A contemporary agora would stimulate the possibility for conflict.

The program is something many scholars refer to considering the Greek agora. The diversity of functions, the simultaneity of events, the openness of the place, it created this dynamic, politically loaded public space. I analyzed the formal aspects of the place, in comparison to other selected projects on multiple scales. I came to the inevitable conclusion there is much more than merely programmatic diversion to these places. The fragmentation, decentralization and proliferation of spaces in contrast to centralization, homogeneity and formality tend to acknowledge differences.

Hypothesis 2: A maze is a conflict generator.

A maze is the essential proliferation of architectural form. Its collection of stairways, hallways, voids and bridges are providing so much visual confusing stimuli visitors
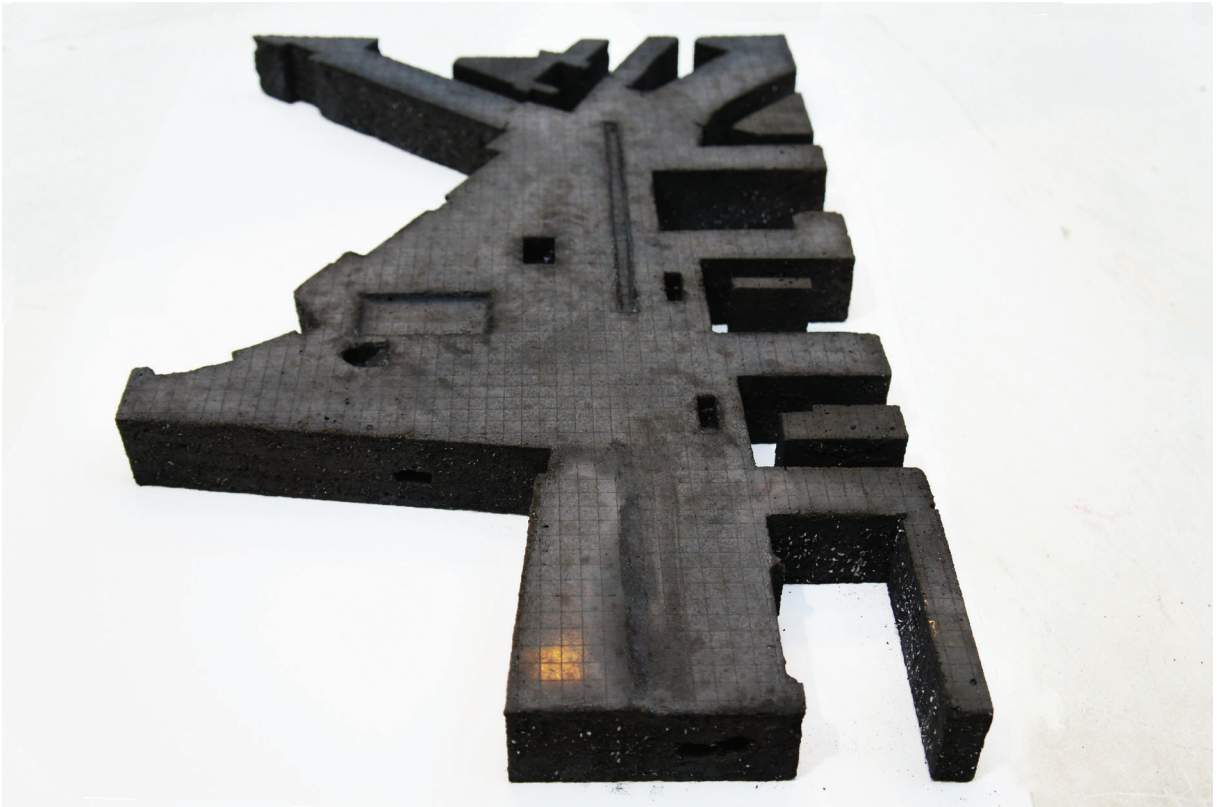
easily lose their way. Imagine a Piranesian Carceri like structure in modern day London. The highest emotional feelings would arise inside the ones that dare to enter. But would it stimulate conflict? I was not sure.

Another way of looking at a maze: Jorge Luis Borges has written a story called Two Kings and their Two Labyrinths. The Babylon king invites the Arab king in his man made labyrinth, full of confusing and proliferated hallways and stairways. The Arab king dares to enter and eventually comes out. He invites on his turn the other king to his own labyrinth, the Arabian desert. Unlike the man made labyrinth, the natural desert has no reference points whatsoever. The confusion here does not come from too much stimuli, it actually arises from a lack of stimuli. The Babylon king also dares to enter. He dies from hunger and thirst.

A thought: What conflict am I looking for? This question struck me for months. I couldn't find the answer to this. Later I discovered it is the question that was fundamentally wrong. How can you possibly define conflict? More important: Who defines conflict? Considering all complexities and interrelationships between people, animals, the environment and material objects, defining conflict is an insoluble problem. Trying to do it tends to the believe to be omniscient. Above all, even if we suppose I am omniscient and capable of defining conflict, what do I do with this knowledge? Change conflict? Manipulate it? That would tend to dictatorial behavior. The opposite of what I am striving for. What would then be the point of this project? To control the uncontrollable? Perhaps that is the best description for this point.

A new study: In the *Campo Marzio*, Piranesi made conflict evident in the build environment. The complete nothingness of the deserted space in which the monumental objects are placed is a fundamental understanding for the theoretical framework. No boundaries, no urban attributes, no distractions to find. The nothingness di-

rects attention to the multiplicity of monuments that are juxtaposed towards one another. The monuments that are from different era's, build by different institutions are therefore representing very different ideas and ideologies. Here, conflict between build structures becomes evident.

Hypothesis 3: The overabundance of stimuli distract us from the real conflicts.

A fear of nothingness. I experience it all the time. Although, I get used to it, slowly. It seems to be a disease of our time. Everything need to be filled. Everything needs to be added. Is proliferation always an addition? Or can proliferation also means a subtraction? To reveal and foster conflict, does the project need to compete with all these overabundance of stimuli? Or can it withdraw itself from this competition? Was the Arabian desert of one king not far more effective as labyrinth than the manmade labyrinth of the other king?

Where there is nothing, everything is possible.

Hypothesis 4: A floor can reveal and foster conflict.

Through Piranesi, I have joined a fundamental architectural ongoing debate. Koolhaas, Aureli, Rossi and Eisenmann gave their own interpretation in this theoretical framework with respectively the projects *The City of the Captive Globe, A Simple Heart, The Architecture of the City* and *A Field of Diagrams.*

I have studied these projects. Eventually I gave my own interpretation to it. Where Koolhaas elaborates on the grid as a system of differences, Aureli on the squared frame as 'room' for potential, Rossi on the artefacts of the city and Eisenman on the different layers in time and space, I particularize the floor of the *Campo Marzio.*

Who has every fully looked into the floor of Piranesi's *Campo Marzio*? As a matter of fact many scholars. However, which architects has fully elaborated on this floor?

As far as I'm concerned none. And this was a strange but powerful observation, considering the importance that the floor has.

A closer look to the plates, especially the Antichita and the Vedute, reveal that Piranesi imagined the deserted space in between as an undersigned emptiness that is left to change. Can we design this in between?

Imagine a gigantic black floor in several areas of London. These gigantic black floors frames an area, unites differences in the build environment of London, mutes down overabundances of stimuli and eliminate all imposed orders that regulates public life. That is the project. It is a theoretical project and attends the architectural debate. It is a project meant to provoke, to trigger a discussion and to foster conflict.

Another thought: Must I be moral? Must I be ethical? I believe moralism has firmly withhold me for a long time to liberate myself. It has withhold me to be radical and to go to the roots of the problem. Once liberated from moralism, I asked myself: Can I sacrifice efficiency? Can I look away for the quest of sustainability? Comfort? Safety? Maybe I need to be utterly immoral.

To counter this issue, we need to ask ourselves how moral it is to sacrifice democracy in privatized open spaces in the city. Yes those places are perhaps safe, efficient, comfortable and when lucky sustainable as well. But do they not violate our privacy? Do they not exclude unwanted people? Do they not prohibit protests? We seem extremely passive in surrendering to the undermining of democracy.

And further: This thesis is not an exact science. Rather it is a personal journey. Endless discussions with my mentors together with individual investigations have led me to explore new architectural and personal roads, beliefs and perspectives.

This project manifests itself not only by the search for

an architecture or city that reveals and fosters conflict in the built environment. It has also proven itself to be a very personal generator of conflict. A conflict with and within myself. Conflict between my ratio and my imagination, my reason and my emotion, my objectivity and my subjectivity. Sometimes, during the process, I got confronted with my own rational, while I am looking for imaginative routes. I came to the realization that in order to explore new ways, I sometimes have to leave my developed structuralized rational working methods.

This thesis brought to me the understanding that, re-quoting Koolhaas, 'sometimes it is more rational to be irrational than to be rational.' And it exactly the tension between these opposites in which I am interested. The conflict itself. Not in the extremes, but the forces that transcend them. The very movement, back- and forward. It is this conflict that has challenged me. And it is this conflict that always will be challenging me for the rest of my life.

A word of thanks: It is within this light that I have to thank all of my tutors. I am grateful for their support, their knowledge and their attitude towards me.

I would like to express my gratitude to Jorge Meija Hernandez. In the many meetings I learned many inspiring lessons for architecture as well as for life itself. These lessons gave me the possibility to explore new ways that I would never think of in the first place.

I also want to thank Stavros Kousoulas, for his enthusiasm towards the project, which resulted in energetic discussions and his philosophical theories in order to understand the relationship between a subject and the built environment, which was absolutely crucial for this project.

I am also grateful towards Hans Teerds, who helped me setting up this project in the preliminary phase. His knowledge on theorist such as Hannah Arendts and Rich-

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Also I want to thank Jan van der Voort for the collaboration. The elaboration on the technique and construction of the floor was of great importance.

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