

# FROM FORMALISM TO WEAK FORM: THE ARCHITECTURE AND PHILOSOPHY OF PETER EISENMAN

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# From Formalism to Weak Form: The Architecture and Philosophy of Peter Eisenman

Stefano Corbo Universidad Politécnica de Madrid, Escuela Técnica Superior de Arquitectura (ETSAM), Spain

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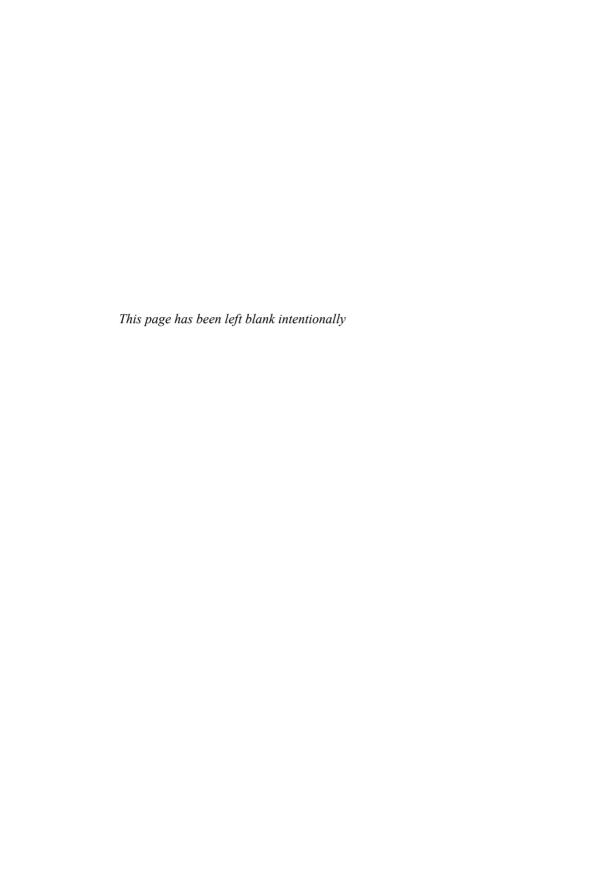
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# **Contents**

List Acki	ix xi	
Intr	roduction	1
1	Basis	9
2	Formal Terrorism	23
3	Archaeology	39
4	Deconstruction	53
5	Arbitrariness	65
6	Process	75
7	Affect	87
8	Oppositions	101
Afterword		123
D./ /		129
Bibliography Index		
		135



### **List of Figures**

#### Cover

Peter Eisenman, Memorial to the Murdered Jews of Europe. *Source*: Stefano Corbo

#### **Frontispiece**

Peter Eisenman Visual Dictionary. Source: Stefano Corbo

#### 1 Basis

- 1.1 Giuseppe Terragni, *Casa del Fascio*, Como. Courtesy of Hagen Stier Architektur + Fotografie. http://hagenstier.polychroma.de/
- 1.2 Giovanni Battista Piranesi, *Pianta di Roma e del Campo Marzio*, 52.4 × 75.9 cm, etching 1762. *Source*: http://it.wikisource.org/wiki/File:Piranesi-16002.jpg

#### 2 Formal Terrorism

- 2.1 Transformational Grammar: Peter Eisenman, *Houses* 1969–75. *Source*: Stefano Corbo
- 2.2 Peter Eisenman, *House II*, Hardwick, Vermont, USA, 1969–70. Courtesy of Ron Zschaler and John Makau

2.3 Peter Eisenman, *House II,* Hardwick, Vermont, USA, 1969–70. Courtesy of Ron Zschaler and John Makau

#### 3 Archaeology

- 3.1 Archaeological layering, Berlin 1981–5. *Source*: Stefano Corbo
- 3.2 Peter Eisenman, *Berlin IBA Housing*, Friedrichstrasse, Berlin, Germany, 1981–5. *Source*: http://commons.wikimedia.org/wiki/File:Berlin,\_Kreuzberg,\_Friedrichstrasse\_43–44,\_Haus\_am\_Checkpoint\_Charlie.jpg
- 3.3a Peter Eisenman, *City of Culture,* Santiago de Compostela, Spain, 1999–2013. Courtesy of Xornal Certo. Xornal Dixital de Barbanza e Noia. www.certo.es
- 3.3b Peter Eisenman, City of Culture, Santiago de Compostela, Spain, 1999–2013. Courtesy of Xornal Certo. Xornal Dixital de Barbanza e Noia. www.certo.es

#### **4 Deconstruction**

- 4.1 Daniel Libeskind, *Jüdisches Museum*, Berlin, 2001. *Source*: Stefano Corbo
- 4.2 Choral Work: A conceptual palimpsest. *Source*: Stefano Corbo

#### **5 Arbitrariness**

5.1 Peter Eisenman's Arbitrariness: Originating agents. *Source*: Stefano Corbo

#### 7 Affect

- 7.1 Peter Eisenman, Memorial to the Murdered Jews of Europe, Berlin, 1999–2005. *Source*: Stefano Corbo
- 7.2 Peter Eisenman, Memorial to the Murdered Jews of Europe, Berlin, 1999–2005. *Source*: Stefano Corbo
- 7.3 Old Jewish Cemetery, Prague. *Source*: Stefano Corbo

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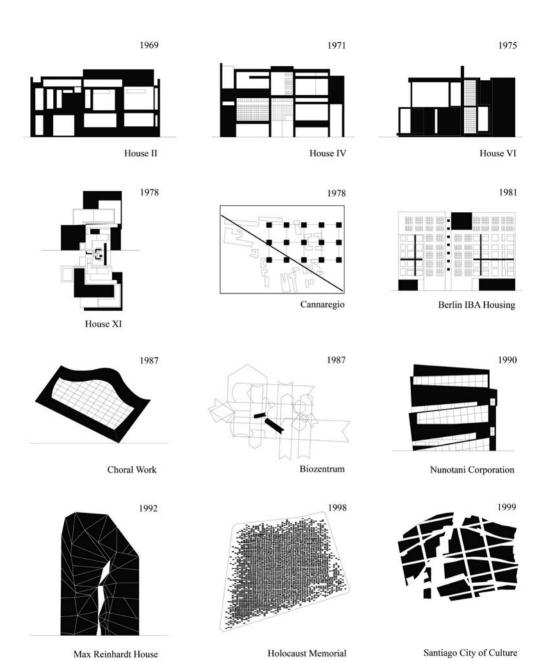
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Peter Eisenman Visual Dictionary. *Source*: Stefano Corbo

#### Introduction

I always follow, in my work, a certain methodology but as times change, you know, to do the same thing you were doing in the Seventies would be boring, number one. Also, I no longer have the same faith in language, linguistics, semiotics; I am working with other ideas now, but still working with a method. I have to have one: I try to distinguish between idea and image. To me images dominate most people's idea of architecture and I'm more interested for example in the kind of thing that Gianni Vattimo was talking about, with weak forms, Ia forma debole, which means that image is not so important but ideas are. What I'm trying to do is to express ideas in my work, so that when people experience the work they say 'why is it like this?' They have to ask questions and these questions lead to other questions.

It is not so much about syntactics or semiotics. I'm much more concerned with how people react in an environment to architectural ideas and how they understand architectural ideas not for meaning but for what I call affect.\(^1\)

Peter Eisenman

In 2012, after many years of research, Peter Eisenman presented his exhibition on Palladio – *Palladio Virtuel* – at Yale University. Here Eisenman replaced Colin Rowe's bi-dimensional formal analysis, based on diagrams, with a volumetric investigation of 20 Palladian villas. Rather than focusing on Wittkower-Rowe's grid, Eisenman identified three basic and common characteristics of the villas: the portico, the circulation system, and the central space. In doing this, he established a kind of volumetric typology that aimed to overcome what Rudolf Wittkower had displayed in his *Architectural Principles in the Age of Humanism* (1949): a generative matrix, or better, an archetype used by Palladio, according to the German art historian, to design his villas. Just by implementing small displacements, Palladio had been able to create different projects starting from the same geometric idea.

After 50 years, *Palladio Virtuel* marked, for Eisenman, the definitive separation from his mentor, Colin Rowe: whereas Rowe, in his analysis, ignored the specificity of site to focus attention on the internal mechanisms that trigger architecture,

Eisenman was convinced that the villas and their surrounding landscapes (both natural and artificial) constituted a spatial unicuum. For this reason the American architect incorporated in his investigations some minor constructions (barns, outhouses, barchesse and so on) that, along with the villas, contributed to defining an articulated ensemble within the Veneto countryside.

By investigating the impact of those constructions on the central space of the villa, Eisenman wanted to affirm (once again) the instability and undecidability of any formal configuration. Since his doctoral thesis, *The Formal Basis of Modern Architecture* (1963), in which he de-composed and analysed, like an anatomist, some of the most relevant modernist architectures in order to unveil their formal structures, Eisenman had been questioning the classical idea of form. Form is no longer the fixed representation of a univocal narrative: form is, for Eisenman, a field of possibilities, in which any hierarchy of meaning among its constitutive elements is totally dissolved. The traditional separation between active/passive, inside/outside, and figure/ground is no longer valid. Form is therefore an ordering action, the systematization of internal dialectical forces and what appears – the manifest form – is the result of the interaction between internal forces and external constraints.

All of the different moments characterizing Eisenman's trajectory imply different phases, different projects, different programmatic manifestos and, above all, an evolving notion of form. To approach the complexity of his discourse means dealing with form in all its declinations: formalism, de-composition, deconstruction, and weak form. Each of them has constituted the mutant epidermis of Eisenman's theoretical corpus, based on philosophical references and provocative statements.

Thanks to his ability to connect with the cultural tendencies of the time, Eisenman has explored different territories: first, structuralism and Chomsky's linguistic theory; successively, Derrida and Delueze's post-structuralism, passing through the influence of Colin Rowe's formalism, and his recent interest in the return to autonomy as theorized by Pier Vittorio Aureli. At the same time Eisenman has always played a central role in influencing and manipulating the American architectural debate, due to his propagandistic activity, first with the IAUS (Institute for Architecture and Urban Studies), and then with the magazine *Oppositions*.

So what does the return to Palladio really mean today?

In *Towards an Understanding of Form in Architecture* (1963), the first article published by the young American architect immediately after the completion of his doctoral thesis, most of the outstanding elements of Eisenman's poetics had already emerged. So, despite its immature character, attention should be paid to this text. It was actually inspired by the interpenetration of distinct influences: the Gestalt theories, so in vogue at the time, the Russian formalists, and Colin Rowe, who met Eisenman in Cambridge in 1961.

His first theoretical works, like his doctoral thesis, did not claim the creation of forms *ex-novo*; on the contrary, they constituted a heterodox interpretation of several architectural texts. In fact, Eisenman was interested in displacing form from its necessary relationships to function, meaning and aesthetics, without at the same time necessarily denying the presence of these conditions.

Architecture, then, was made of latent ideas that survive through the process of design and continue to influence the project even through construction – and the architect's main task was to consist in describing the internal matrix that generates architecture.

The study of the Italian architect Giuseppe Terragni allowed Eisenman to elaborate his own vision of Modernism, and at the same time, to interpret this architecture according to the lens of Chomsky's grammar. His differentiation between a deep and superficial structure would be the main reference for Eisenman's discourse: the American architect in fact distinguished between superficial/sensorial aspects (colour, texture, shape, and so on), and deep aspects (frontality, compression, and disjunction). To cite Rafael Moneo, we may say that Eisenman built a dichotomous version of his architecture, based on the opposition between the mental (the deep structure) and the sensorial (the superficial structure).

In Terragni, Eisenman also discovered that kind of formal exasperation that he had learnt from Paul Rudolph's houses and *Casa del Fascio* represented his critique of the so-called *metaphysics of the presence*, the definition of which clearly derived from Jacques Derrida's *Of Grammatology* (even though this text was not to be published until 1967, four years later than Eisenman's doctoral thesis).

Whereas this phase, defined by Eisenman as the *diagrams of interiority*, was characterized by the desire to find internal rules and mechanisms for the discipline without any contact with the exterior world, at the end of the 1970s pessimism about architecture and the mission of Modernism enveloped Eisenman: he gradually abandoned his interest in internal syntactic processes and replaced geometry, abstraction and self-referentiality with a recourse to external factors. Architecture thus became for Eisenman a tool to reflect upon the instability of history.

With the project for Cannaregio, Venice (1978), the American architect opened up his theoretical discourse to external solicitations proceeding from other territories and borrowed concepts like context, metaphor, history, and memory. So, Cannaregio marked the transition from interiority to exteriority and Eisenman abandoned Chomsky or Slutzky, in order to find a more appropriate language for explaining the times in which he was living (The Cold War). Thinkers such as Derrida, Deleuze, Foucault, and Lacan, became his new sources of inspiration. From his engagement with the philosophy of Jacques Derrida, Eisenman began to look at architecture as a text: a palimpsest open to multiple readings, whose real nature is indeterminate and unstable. At the same time, the shift from interiority to exteriority was not only characterized by a general pessimism about the failure of the modernist mission. Apart from Derrida, whose influence would lead Eisenman to introduce deconstruction into the American debate (he was to organize an exhibition at the Museum of Modern Art in New York, gathering under the name of deconstructivists very different architects, such as Gehry, Koolhaas, Zaha Hadid, Tschumi, and himself of course), the American architect attempted to find an answer to the end of humanism through a new paradigm weak ontology.

At the beginning of the 1980s, the Italian philosopher Gianni Vattimo initiated the term *pensiero debole* (weak thought), in order to justify the shift from the modern to the post-modern. Against a globalizing model based on truth, unity, and totality, Vattimo, along with the philosopher Pier Aldo Rovatti, claimed the necessity for a philosophy that denied any kind of strong, definitive and universal solution:

Rationality must de-potentiate itself, give way. Weak thought is thus certainly a metaphor and, to some extent a paradox ... It points out a path, it indicates a direction of the route; it is a way that forks from the no matter how masked hegemonic rationality from which, nevertheless, we all know a definitive farewell is impossible.<sup>2</sup>

The adjective *weak* was also linked with the idea of truth, at the point in time when it lost all its traditional and reassuring characteristics.

What Vattimo somehow described was the end of history: if Modernism based its own message on unitary narratives (religion and Marxism), post-modernism represented the crisis of such narratives: 'there isn't only one History; there are several images from the past proposed according to different points of view; and thinking that there is a comprehensive and supreme point of view, is a pure illusion.'

Post-modernism expresses the fragmentation of any fixed perspective: the history of thought is not a progressive enlightenment. And, to paraphrase Friedrich Nietzsche, one might say that there are no facts, only interpretations. The nihilist suggestions offered by Vattimo and Jean François Lyotard, along with the textual interpretations of Jacques Derrida, led Eisenman to acknowledge that traditional metaphysical thought had been dissolved; God was dead and rationality just a tranquilizing myth.

The idea of *weak thought* transferred to architecture influenced the theoretical production of the 1980s. In 1987, for example, the Spanish architect Ignasi Solà-Morales tried to describe the crisis of Modernity, by introducing the concept of *weak architecture*. Thanks to the influence of both Michel Foucault and Friedrich Nietzsche, Solà-Morales claimed that aesthetics (for example, architecture, painting, literature) could not be based on a closed model; on the contrary, aesthetics had to consist of different heterogeneous elements.

Weak thought also contaminated other territories, from urbanism to cinematography; Michelangelo Antonioni or Andrei Tarkovsky, for example, constituted real examples of a weak narration, based on the distance between image and narration. Foucault's notion of archaeology became one of the cornerstones of a weak architecture: archaeology implied superposition, discontinuity, folding and unfolding.

Eisenman began to absorb new impulses, and shifted his focus towards different challenges: Venice (*Cannaregio* project, 1978), Paris (*La Villette*, in collaboration with Jacques Derrida, 1987) and more recently Berlin (*Holocaust Memorial*, 2005) represented different steps in the evolution of his idea of form.

At the same time, these projects were also emblematic of unexpected changes and anomalous ambiguities, because Eisenman's biography and architectural career are interdependent: they cannot be separated, and it is difficult to decipher some of his postures without referring to personal anxieties. Moreover, every project contains a different cultural substratum that needs to be brought to light.

To venture into this complex tangle of different phases, projects or essays, implies the risk of becoming trapped in an undiversified accumulation of concepts. For this reason, when describing the heterogeneous articulation of Eisenman's career, it is necessary to find a congruent model for dismantling the propagandistic apparatus built by the architect through the years, and at the same time to offer a clear interpretative framework. Rather than isolating and analysing every element in its autonomy, *From Formalism to Weak Form* has been structured around a series of key-words or concepts that help to define a heterogeneous and interconnected cartography that is detached from any hierarchical configuration. The aim of such organization is twofold: on the one hand, to overcome a close reading of Eisenman's work based on a mere chronological and linear narrative; on the other, to avoid the de-composition of his discourse into several autonomous entities.

This cartography will display not only the interpenetration of the multiple concerns explored by Eisenman over 50 years, but also the contradictions, the anomalies and the ambiguities of his production. Each of the following chapters describes a precise evolutionary line that confronts the problem of form in architecture and permits a definition of Eisenman's personal cosmology:

**Basis** deals with the set of concerns that led Eisenman to develop his interest in autonomy and the revision of modern canons. From the encounter with Colin Rowe, to his trip to Italy, to his disengagement from any social vision, the first chapter attempts to unveil those intellectual vectors that for a long time constituted Eisenman's field of action. The potential of many of these concerns would be exploited through the years while others simply worked as a latent palimpsest, occasionally coming into focus from a blurry past.

**Formal Terrorism** describes Eisenman's propagandistic yearning of the 1970s, characterized by the birth of the IAUS (Institute for Architecture and Urban Studies) and the magazine *Oppositions* (1971). At the same time Eisenman began to translate into practice those formal analyses he had been investigating in the 1960s. Decomposition, transformation and disjunction obsessively characterized not only his studies on Terragni or Palladio, but also his first projects – the *House Series* (1969–78) or, better still, the *Cardboard Architectures*. All Eisenman's efforts were now directed at delineating a didactic model that was detached from any functional, ideological or structural component.

**Archaeology** represents Eisenman's transition from the pursuit of deep structure to the discovery of context. The geometric models employed in the *Houses* to describe their inner logic, were now replaced by Eisenman's preoccupation with

the figure/ground principle. Like an archaeologist, Eisenman brought to light the layers that constituted the city and overlaid them with artificial narratives. Superposition became the operative process in many projects, such as *Cannaregio*, *Berlin IBA* or, more recently, the *City of Culture* in Santiago de Compostela. In the shift from interiority to exteriority, Eisenman found in history one of the ingredients for manifesting his own cosmic pessimism, so that architecture became a multiple text, ambiguous and indeterminate in its nature.

**Deconstruction** deals with the evolution of Eisenman's idea of de-composition. From his studies on Palladio onwards, the American architect investigated the possibility of a heterodox architecture, intended as a critical activity. His interest in Jacques Derrida's *Of Grammatology* (1967) offered him the possibility of experimenting with new languages and developing the idea of a textual architecture. The process of design was now aimed at proposing multiple readings and denying a univocal interpretation of architecture. The collaboration with the French philosopher on a garden at *La Villette*, Paris, proved emblematic of both the potential and the limits of such a position.

**Arbitrariness** is one of the latent guiding lights of Eisenman's entire trajectory, but it was to emerge with all its evidence in the 1990s, when he began to borrow geometric models from other disciplines and to transform them into real architectures.

Projects such as the *Biocentrum* in Frankfurt, or the *Nunotani Corporation Headquarters* demonstrate how the arbitrary character of architecture embodies for Eisenman one of its strategic possibilities. But if at first glance such a posture seems recent, one may observe how, even in his first projects, Eisenman needed an arbitrary impulse to generate his architecture. If in Frankfurt this impulse consisted of a clear transliteration (the DNA chain), in *House II* it was a simple diagonal displacement, or a rotation, an internal gesture that activated a sequence of formal reactions.

**Process** describes the constant effort made by Eisenman to construct a rigorous method. The nine square grid, diagrams of exteriority, layering, and scaling are devices that all demonstrated the centrality of process in his architecture. They could be both analytical/explanatory (as in the case of the first nine square grids) and operative (as in the case of the scaling for the *Romeo and Juliet* project in Verona).

If the *Cardboard Architectures* underlined the equation between process and architecture (because what really mattered was the description of the process itself, and not the final result), through the years Eisenman brought a different perspective on maturity whereby the process served to justify the arbitrariness of a gesture, or the indeterminacy of a formal configuration.

**Affect** investigates the role played by perception in Eisenman's trajectory, trying to focus on one specific project: the *Holocaust Memorial* in Berlin (2005). Here, for the first time, the process of horizontal layering was instrumental not only in rethinking the traditional figure-ground principle, but (mainly) in designing an interior landscape, in which time and individual experience determined the intimate character of the monument.

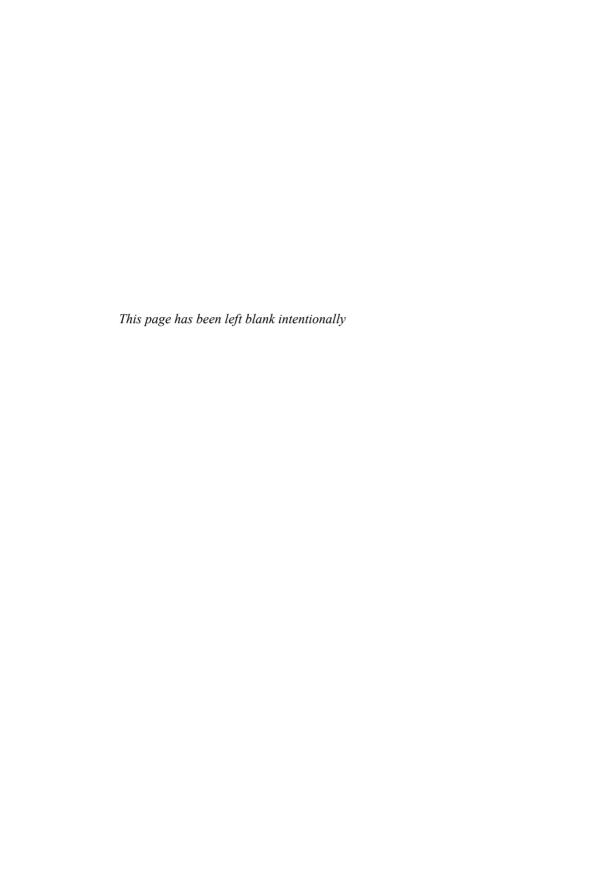
Berlin was an inflection point but, at the same time, the end of a trajectory that had started with the *Houses* and focused on the relationship between subject and object. A new idea of form emerged, in which Eisenman and Derrida's theory of architecture as text paralleled Bergson's idea of time as duration.

**Oppositions** is a series of polemical dialogues between Eisenman and four contemporary architects, the competitors Léon Krier, Frank O. Gehry, Rem Koolhaas, and Toyo Ito. Each conversation is mediated through one specific topic (the diagram, the digital and so on). Such articulation does not aim to reduce Eisenman's entire theoretical corpus to a banal contraposition of analogies and differences; on the contrary, the dialogues are a device for encompassing the complexity of the role played by the American architect in shaping, orienting and manipulating the disciplinary debate. The legacy of Modernism, rather than pessimism about the future, or the use of diagrams in architects' work, will become the battlefield in which to test the consistency of Eisenman's ideas and their resilience.

From Formalism to Weak Form aims to be a conceptual cartography of Eisenman's architecture and philosophy: it articulates the cross-referencing of the different moments here described, the hybridization of the concepts developed by Eisenman over time, and the rise of new concerns. At the end of the process of mapping, there will be neither universal messages to comprehend, nor finite forms to analyse, because as Eisenman wrote, history is not linear: rather, it is characterized by inflection points and discontinuities. This book aims to describe these discontinuities.

#### **ENDNOTES**

- 1 Chiara Visentin, 'Interview with Peter Eisenman', 2004, http://www.chr5.com/investigacion/investiga\_tendencias/DOCU%20-%20INVESTIGACION/PETER\_EISEMANN/entrevista\_a\_eisenman.htm, last accessed 20 February 2014.
- 2 Gianni Vattimo, Pier Aldo Rovatti, *Il Pensiero Debole* (Milano: Feltrinelli, 1983), foreword, http://www.jstor.org/discover/10.2307/488689?uid=3738296&uid=2129&uid=2&uid=70&uid=4&sid=21104441380733, last accessed 21 July 2014.
- 3 Gianni Vattimo, La società trasparente (Milano: Garzanti, 2000): 27.



#### **Basis**

Colin Rowe taught me how to see what was not present in a building. Rowe did not want me to describe what I could actually see. Rather, Rowe wanted me to see what ideas were implied by what was physically present.<sup>1</sup>

Peter Eisenman

Peter Eisenman's first contact with the *Formal Basis* of architecture dates to the summer of 1961, when Professor Colin Rowe led his students on a Grand Tour through Europe. Eisenman, a student based in Cambridge, had the chance to encounter for the first time the work of Giuseppe Terragni in Como, and Andrea Palladio in Vicenza.

Rowe and Eisenman visited the Netherlands, France, Germany and Switzerland. But in Italy, Palladio and Vignola offered Rowe the occasion to focus on the kind of architectural analysis he was developing at that time, clearly influenced by Rudolf Wittkower's approach, and based on proportional systems and diagrammatic schemes.

By applying Wittkower's work to modern architecture, Colin Rowe became one of the most influential teachers of the 1960s, and his formal studies influenced an entire generation of architects. Actually, Rowe's strategy aimed to compare Vignola with the recent American skyscrapers, or Palladio with Le Corbusier, according to a vision of history based on continuity. His analyses were liberated from any consideration about structure, function, or political context: what made these comparisons possible was that Rowe was just interested in formal configurations. Just by superposition, Rowe compared, for example, the plan of Palladio's *Malcontenta* with that of Le Corbusier's *Villa Stein*.

The young Eisenman was interested in this kind of approach, but at the same time felt the necessity of overcoming Rowe's method. In 1961, admiration for Terragni and his geometrical patterns encouraged him to work on a systematic analysis of modern architecture, especially the 1930s Italian avant-garde. Whereas Rowe preferred two-dimensional representations for his research, Eisenman

began to study and de-compose some modernist projects through the use of axonometrics, as they permitted him to describe the articulation of the internal mechanisms that compose architecture. Gradually Eisenman displaced his axonometric representations from the analysis to the design of his first projects. At the same time, for Eisenman the architecture of Terragni was capable of being continuously transformed thanks to many possible displacements: a finite original scheme can produce infinite configurations.

So, Casa del Fascio (and then Le Corbusier's Maison Dom-ino) became for Eisenman a constant reference for his first works. The Como project, in fact, contains in its interior all the latent transformations it could achieve: its apparently classical configuration is totally contaminated by irregularities, incomplete symmetries and inverse correspondences. If traditional architecture could be understood as a sequence of homogeneous elements, the architecture of Terragni represented a turning point, because his work was readable as a series of incoherent fragments that questioned the millenary relationship between object and subject: instead of being a direct and unidirectional reading, the experience of the subject became disorienting, dispersive, and most of all, active. Through decomposition, Eisenman turned architecture inside out, trying to analyse obsessively every piece of the compositive apparatus, in order to discover the deep structure that had generated modernism (even though he had not yet discovered Chomsky's generative grammar). Against any figurative or representative temptation, Eisenman found in geometry an alternative to the image. Like his mentor Colin Rowe, Eisenman still worked in a Cartesian world, an abstract set of coordinates dominated by the idea of the grid. Only in the 1980s would he begin to explore the possibility of non-Euclidean geometries for his projects. Through the exploration of discontinuities and displacements, Eisenman built his own methodology. The fascination for Terragni became his doctoral thesis (1963), and at the same time influenced his first projects, such as the House Series.

In 2003, with the book Giuseppe Terragni: Transformations, Decompositions, Critique, Eisenman updated his studies on the Italian architect, by introducing his idea of architectural text. Once again, Eisenman focused on both Casa del Fascio and Casa Giuliani Frigerio. His analytical descriptions were aimed only partially at describing the processuality of these projects: Eisenman also wanted to shift his investigations from the category of formal to textual. While the formal describes architecture in terms of its internal logic (or deep structure), without any reference to aesthetics, meaning or function, the term textual, derived from Derrida's Of Grammatology, suggests that a text is not a linear narrative, but is discontinuous and multi-directional. Architecture is not formulaic and results from varying and unpredictable forces. Casa Giuliani Frigerio, for example, is now defined as an architecture that is not just the result of a coherent and linear process, begun with a simple geometric scheme; on the contrary, the project is characterized by a kind of process of decomposition that generates instability and asymmetry. So it is not possible to apply to Casa Giuliani Frigerio a unique reading; rather we can only recognize its fragmented and articulated nature.



The influence of Derrida was also present in many articles published between 1970 and 1980. In *Oppositions* n. 15, for example, Eisenman presented his analysis of *Casa del Girasole*, designed by the Italian architect Luigi Moretti. By defining the building as a neo-realist episode, Eisenman seemed to describe his distance from a kind of research he called formal (maybe referring to Colin Rowe), and displayed his interest in a textual analysis in which the traditional dialectics between figure and ground, form and function, or public and private, are not valid anymore. If the formal analysis starts from an internal logic based on the diagram, the textual analysis is based on multiple diagrams and narrations; there is no hierarchy as the text is a set of traces. If formalism was based on the recognizability of structure, in post-modernism the fragment became the basic metric of architecture.

By recognizing such a dichotomy, Eisenman seemed to preannounce a shift in his trajectory; now he was ready to venture into a new dimension: exteriority.

Fascination with Terragni is only the epiphenomenon of a more general preoccupation for modernism and its legacy that both Rowe and Eisenman developed in their studies. From here, directly or indirectly, other common interests were derived: Le Corbusier's *Maison Dom-ino*, Palladio, Nolli and Piranesi. All of them contributed not only to defining Eisenman's relationship with Rowe, but also to the conceptual basis of his entire trajectory. Eisenman inherited from Colin Rowe the indifference towards the ideological Marxist substratum that accompanied modern architecture in its early manifestations, and, as Colin Rowe himself wrote in his introduction to *Five Architects* (1972), the measure of architecture, especially the

1.1 Giuseppe Terragni, Casa del Fascio, Como. Courtesy of Hagen Stier Architektur + Fotografie. http://hagenstier. polychroma.de/

one imported to America from Europe, does not lie in the possibility of prefiguring a better world, but rather, in the achievement of meeting the demands of the flesh, without referring to social or political visions.

For Rowe, and for many American architects, modern architecture was depurated of its social and political content in order to penetrate the American context. Progressively modern architecture and international style became two synonyms (also thanks to Philip Johnson, who may be regarded as one of the authors of such an ideological operation), in the sense that they appeared as a real American product, capable of satisfying and representing the capitalist desire for celebration.

Colin Rowe was convinced that modernism failed in its programme to create a more egalitarian society, turning sometimes into a dangerous and anti-democratic message: that is why in architecture modernism could exist only if liberated from its political preconditions. Before his anti-modernist theories exploded with all their impetus in *Collage City* (1978), Rowe's stance on modernism was quite ambiguous, as his studies on Mies or Le Corbusier have proved. At the same time, because of his effort to rewrite modernism according to the use of history, Rowe has often been considered as a founder of post-modernism in architecture.

If at first Rowe's stance towards the architecture of the modern movement was ambivalent, later he began to feel repulsion for a strategy based on replacing classic models using the metaphor of machine. Separation and abstraction represented the two basic principles of modernity, and technical innovations were its intellectual and material fuel. However, Rowe couldn't share the technological infatuation of Reyner Banham's environmentalism and so he gradually became a strong opponent of modern paradigms but the core of his theoretical discourse, from the outset, was nevertheless the conviction that history is a linear process based on the immanence of latent forms that in a precise moment in time emerge to shape reality.

It is clear that Colin Rowe's mission – connecting the cultural premises of modernism to history – was influenced not only by Wittkower and his formal analysis, but also by Emil Kaufmann. The Austrian historian was, in fact, one of the first to link the origins of modernism to the Enlightenment. For him, the generation of Ledoux and Boullée anticipated the message of modernism and influenced many of the architects of the twentieth century. The keyword for Kaufmann was autonomy. Autonomy described the rationalism and the pure efficiency of modern architecture, and opened up a new, interesting field for exploration, so Rowe, who in 1947 began his studies on the relationship between modernism and mannerism, was very interested in Kaufmann's contributions.

In England, the post-war period coincided with the revival of interest in the so-called new Palladianism, well represented by Rudolf Wittkower's studies on Palladio and Alberti. These studies (especially the book *Architectural Principles in the Age of Humanism*) had a huge impact on a generation of students of architecture. Somehow, for a decade at least (until 1955), Palladianism represented a central influence for modern British architecture: James Stirling, Alan Colquhoun and even Alison and Peter Smithson had to deal with this kind of architectural revival.

If Wittkower's contributions did not imply or suggest any direct connection with modern architecture, Colin Rowe made a further leap forward, by absorbing some of the principles of his maestro, and projecting them onto the present. As described by Anthony Vidler (2012), Colin Rowe basically re-interpreted from Wittkower's studies the idea that all Palladian architectures contained the same generative matrix, based on a clear functional layout. Wittkower detected at least 11 villas that were designed with the same generative plan. They represented a kind of archetype and were variations on a shared originary scheme. In fact, this idea of type, as described by Wittkower in his analysis of Palladio's villas, was partially inspired by Goethe and his concept of an abstract formative principle.

Colin Rowe, as Goethe had done, considered type as an active element, capable of generating modifications and formal transformations. Thanks to Wittkower, Rowe pointed out the importance of geometry and proportion in reading architecture. Both Wittkower and Rowe were convinced that architecture is based on a systematic model or, better still, on a set of schematic principles that can generate different results (an involuntary analogy with Le Corbusier's five points?).

The potential offered by a generative matrix to introduce infinite modifications, starting from a fixed efficient configuration, inspired first Rowe (for his formal analysis), and then Peter Eisenman, whose doctoral thesis was basically permeated by such an interest in *internal displacements*.

In 1947, with *The Mathematics of the Ideal Villa*, Rowe inaugurated a new method based on the comparison, through analogy or difference, of different architectures. Through the study on Palladio, Colin Rowe elaborated his idea of modern Palladianism. For Colin Rowe, modernism could be considered as derived from Palladianism for two reasons: the presence of a leading figure, who condensed in his work their basic principles (Palladio and Le Corbusier), and the production of a key text, or manual, that propagated their message (Le Corbusier's *Towards an Architecture* and Palladio's *Quattro Libri*). Le Corbusier used illustrated books in the same way as Palladio: they constituted a didactic model or an operative device through which to define their own architecture.

For Rowe the next step consisted of comparing two important projects: Palladio's *Villa Malcontenta* and Le Corbusier's *Villa at Garches*. The comparison is possible thanks to the use of geometric and proportional studies, aimed at demonstrating how architecture is based on mathematics. Rowe uses here the term *diagrammatic comparison* in order to unveil the fundamental relationships between *Malcontenta* and *Garches*. Eisenman was to borrow from Rowe (and indirectly from Wittkower) the use of such diagrammatic structure, even though Rowe's diagram differed from Wittkower's: as explained by Guido Zuliani, the diagram in Wittkower is mainly an explanatory instrument to reinforce his textual description; for Rowe however, the diagram reveals the transformations and discontinuities of modernist plans compared to the classic plan. That is why Eisenman was so interested in this kind of formal analysis. Even though, many years later, he would criticize the use of the diagram in Rowe, it was the British architect who allowed him to discover the importance of this instrument in detecting those transformations that the young American student was searching for in Terragni.

The continuity between modernism and mannerism would constitute the framework of Rowe's entire career. In 1950, he published *Mannerism and Modern Architecture*, which appeared as usual in *The Architectural Review*. Here again, Rowe compared Vignola with Mies van der Rohe and Le Corbusier with Michelangelo. His work aimed to demonstrate how mannerism and modernism were each contradistinguished by ambiguities, exaggerations and contradictions. Mannerism and modernism represented a moment of crisis.

At the same time, like many of his generation, Rowe was convinced that the first phase of modern avant-gardes was historically complete, and that his task should be to reconstruct a theoretical discourse starting from the architectural tradition of the Renaissance. Some years later, commenting on the 1959 exhibition on Le Corbusier at the Building Centre, Rowe argued that modern architecture was now an official art. The exhibition demonstrated that the success of any revolution is also its failure. So even Le Corbusier's poetics became, for Rowe, pure mannerism.

Whereas Rowe theorized a geometrical continuity between modernism and classicism, Eisenman borrowed from him the same formal approach (and partly the same instruments, such as the square grid), but his work was aimed at *disengaging* (to paraphrase Tafuri) modern architecture from its humanist tradition. Eisenman read history according to the categories of discontinuities and fragmentation, and from that starting point began to construct his own worldview. He followed Foucault's statement that the purpose of history is not to discover the roots of our identity (in Eisenman's case, the modern roots), but for history to commit itself to its dissipation. Eisenman shared with Rowe the idea that modernism as a universal message had failed, but focused his attention on the disciplinary consequences of that, by looking at modern heroes in order to find the original message of modernity, free from any other kind of contamination. Thus humanism and functionalism became the evident manifestations of a misunderstanding.

To some extent, pessimism fed both Rowe's and Eisenman's investigations: indeed, one may say that Eisenman absorbed from Rowe such a conviction. But whereas Rowe announced the failure of modernism after a historical excursus, Eisenman was convinced that modernism was betrayed by humanism and functionalism. There was no need to search history for the origins of the present. Like Colin Rowe, Eisenman looked at modernism without any social or ideological intention, and even history and context were discarded in favour of an architecture based on internal rules.

Rowe also maintained a neutral position towards Eisenman's first projects and his experience with Five Architects. In the introduction to *Five Architects* (1972), Colin Rowe reiterated his convictions: modern architecture, especially in its American manifestation, lacked the ideological and revolutionary fervour that animated the early avant-garde. Even if he did not say it clearly, the work of the Five Architects seems focused neither on the body of architecture, nor on its ethics, to paraphrase Anthony Vidler.

By underlining the bourgeois character of the Five Architects' work, Rowe indirectly positioned their work away from the authentic spirit of modernism.

Under the effects of a Palladian revival, partially fuelled by Wittkower and Colin Rowe's studies, Eisenman discovered the radical potential of Palladio's architecture: for Eisenman, Palladio's use of perspective was aimed not at representing space, but rather at displaying the inner logic of architecture – its values. On the naturality of a process that tried to imitate reality, Palladio imposed his artificial intentions: in his architecture, image turned into a symbol that needed to be deciphered. If perspective was no longer a mediator between man and nature, even the subject/object relationship was subject to change. Palladio was not interested in the natural conditions of a building, but in alteration determined by perspective.

As his mentor Colin Rowe had done previously, Eisenman began to analyse Palladio's buildings in order to detect their inner structure: in his diagrammatic analysis of *Chiesa del Redentore* (Venice), or *Palazzo Chiericati* we can find the same techniques Eisenman used in his doctoral thesis. By superposing, comparing, de-composing and extracting singular elements, Eisenman set out the core of his interests – the autonomous character of architecture.

Palladio, and the analysis of many Venetian *palazzi*, also offered Eisenman the possibility of introducing the concept of *de-composition*, through which he was to propagandize his change of direction of the 1980s. By studying the Italian buildings, Eisenman distinguished between *pre-composition*, the composite and *extra-composition*. If pre-composition indicates a kind of architecture based on the structure of the orders, and not on an overall composition, and the composite is an architecture generated by the representation of a process, then extra-composition represented, for Eisenman, an anti-classical and heretical approach. Extra-compositional architecture could be the germinal state of his concept of decomposition, as it rejected any idea of composition and did not reveal the formal criteria that regulated it. The formal content of these architectures is difficult to detect and describe, and remains occult. In order to build his theoretical justification of decomposition, Eisenman studied not only Palladio and Scamozzi, but many Venetian buildings, such as the *Palazzo Minelli*, *Surian*, *Foscarini*, and so on.

Eisenman would keep his interest in Palladio active for many years, both in his academic activities as a professor at Yale, and in his professional work. Such fascination with the Italian architect lay not only in the criticality of his work but also in the idea of an absolute architecture, to paraphrase Pier Vittorio Aureli.

So, the collaboration in 2012 between Eisenman and Aureli for an exhibition on *Campo Marzio* was not casual or extemporary, but was rather the natural consequence of their elective affinities, developed over the years and based on common interests and reflections. Even though the two have applied their concerns to different fields of intervention (Aureli focuses attention on the project of the city, Eisenman on architecture), one may say that Aureli shares with Eisenman the same interest in form, and the same fascination with architects such as Palladio and Piranesi.

In *The Possibility of an Absolute Architecture*, Pier Vittorio Aureli reflected on the relationship between architecture and the city by investigating the idea of an absolute architecture in the work of four architects: Palladio, Piranesi, Boullée and Ungers. Aureli attempted to depict the characteristics of an architecture that

is separated by the city and at the same time describes the city as the composition (or accumulation) of different parts. Using the concept of the archipelago, Aureli identified the project of the city in the work of these architects, and offered interesting reflections on the problem of form.

Furthermore, like Eisenman, Aureli saw architectural form as a process, and not as representation.

What distinguishes the two positions is the nature of the *formal*: for Aureli, the formal is relational, as it implies a relationship between the inside and the outside. This means that the formal could be a representation of the political, seen as agonism and confrontation between opposing parts. The formal and political coincide, and the city becomes the ideal battlefield on which to test the resistances or the differences in architecture. In contrast, Eisenman (at least in his early work) conceived of the formal as self-referentiality and self-sufficiency – the expression of an internal logic. By claiming the possibility of an absolute–finite architecture, Aureli expressed the desire to liberate architecture from the capitalist forces that drive society; Eisenman, through autonomy, expressed his pessimism about mankind and humanism.

In their analyses of Palladio's villas Aureli and Eisenman share the same point of view: unlike Rowe and Wittkower, who ignored the site specificity of his projects, Aureli and Eisenman were convinced that the villas and their surrounding landscapes (both natural and artificial) constituted a homogeneous entity, of which the villa is the crucial element.

Colin Rowe extrapolated the architecture of Palladio's villas on the basis of their geo-political context, in order to focus attention on the internal mechanisms that characterize the projects; Aureli, on the contrary, saw the villas as a political project, based on an analysis of the progressive economic decline of Venice, in favour of its restructuration in terms of ruralization. The villas were nothing more than the displacement of the economic power of Venice towards the Veneto countryside.

Eisenman did not venture into this kind of hypothesising, but even his exhibition at Yale University demonstrated the necessity of overcoming Wittkower and Rowe's approach.

If Palladio represented for Eisenman the occasion to test Colin Rowe's models and formal analysis, Le Corbusier's *Maison Dom-ino* offered the possibility of distancing himself for good from his maestro.

In fact, both Colin Rowe and Eisenman considered the *Maison Dom-ino* a turning point for modern architecture. For Rowe, modern architecture was no different from the classical: the *Maison Dom-ino* diagram stood as the symbol for the modern in the way that the column did for the classical. So, modern architecture represented a linear historical evolution.

In other words, continuity was the key.

As we know, Eisenman denied this idea vehemently; for him history was made of fractures. Furthermore, the modernist project had nothing in common with classicism; he did not see any continuity from Palladio to Le Corbusier. For Eisenman, modern architecture meant self-reflection, abstraction and autonomy. Thus Le Corbusier offered an opportunity to reconstruct an artificial narrative:

Eisenman analysed and re-interpreted the *Maison Dom-ino*, by drawing different axonometrics to show his own message. He turned architecture into a process of self-transformation; the *Maison Dom-ino* was thus neither a symbol nor an icon, but an index. Robert Somol and Sarah Whiting wrote of Eisenman's discussion of the *Maison Dom-ino*:

It's the design process itself that is being registered, rather than the material productive and technical system, or specific context. In marking the status of its existence, in its ability to function as a referential sign, the Dom-ino is one of the first modernist and critical gestures in architecture.<sup>2</sup>

Gradually the divergence between mentor and pupil became irrevocable: the article *Aspects of Modernism: Maison Dom-ino and the Self-Referential Sign,* clearly expressed the distance. Here Eisenman began with the axonometric view of the *Maison Dom-ino* to demonstrate how Le Corbusier's model represented a break from traditional Western architecture

For Eisenman the *Maison Dom-ino* was a diagram, a model that preannounced the rise of the so-called free plan; it was the symbol of the democratization of space Modernity aimed to achieve. Furthermore, the *Maison Dom-ino* freed vertical surfaces from any structural function, and allowed a potentially infinite layering of horizontal slabs (and it is curious to observe how, many years later, Toyo Ito would describe his *Sendai Mediatheque* as a 'new *Dom-ino*', because it was based on the accumulation in the vertical dimension of many similar horizontal layers).

What Eisenman found so intriguing in the *Maison Dom-ino* was that Le Corbusier introduced the Cartesian grid to produce an infinite extension of the space. So, the grid was not only an analytical–explanatory device, but it could also work as a generative matrix. To emphasize this interest in the grid, one may say that such differentiation would constitute the operative shift from Eisenman's doctoral thesis in 1963 (published in 2006), still influenced by the studies of Rowe and Wittkower, to the *Houses Series* (1969–78) where, for the first time, Eisenman explored the possibility of a grid as a trigger for architecture. Moreover, Le Corbusier's *Maison Dom-ino* prefigured the five points expressed in *Towards an Architecture*: in that axonometric view one can observe how columns are set back from the façade in order to achieve a free plan and a free façade, the roof becomes a private space, and the horizontal floor slab is no longer tied to the ground, suggesting the idea of a horizontal spatial continuum.

So the *Maison Dom-ino* turned into a didactic model. For Eisenman, who in the first phase of his career refused any professional engagement in order to focus on theory, developing a model and transforming it into an intellectual manifesto could be an interesting task.

Indeed, his *Cardboard Architectures* represented nothing more than this: ideas constitute a model.

Colin Rowe had also transmitted to Eisenman part of his interest in the Nolli/Piranesi opposition, articulated in the constant dialectics between figure and ground. If one takes a look at Piranesi and Nolli's plans, it is easy to understand the origin of many of Eisenman's preoccupations with process and form.

In his projects, from the *Cities of Artificial Excavation* onwards, the American architect would aim to dismantle any differentiation between figure and ground: at the end of the design process, it would no longer be possible to separate the two. Architecture was thus to become a superposition of layers merged one into another, and by questioning figure and ground, Eisenman was also to re-think the form/content relationship.

In 1978, Colin Rowe presented *Collage City*, a critique of modern architecture arrived at the clarification of a dangerous enemy: in his analysis, in fact, Rowe opposed the Marxist desire for a better world, translated into modern architectures, with his liberal and ironic celebration of the fragment as the structuring basis of the city. So, even though Rowe considered any political instrumentalization of architecture deplorable, in *Collage City* ideology was the key to interpreting his own worldview, which was developed through the equation 'socialism = modern architecture', and was counterbalanced by his liberal pragmatism. As described in his book, the objective of the collage approach was the enjoyment of utopian poetics, without the obligation to discover utopian politics. Through the logic of the fragment, which permitted him to extract images and contents, and reuse them, Rowe suggested that it was possible to achieve a reality of change, action and history: a reality that should be poetically necessary.

To some extent, it was the interest in Piranesi that pushed Rowe to present Collage City in 1978. In this book, that even shared some common points with Aldo Rossi's The Architecture of the City (1966), Rowe selected some pre-existing elements (rotundas, squares, buildings and so on), and inserted them into Piranesi's Campo Marzio project. The idea was to affirm the continuity of history, by establishing a linear connection between an originating ground (Campo Marzio), and new, different objects. Furthermore, Rowe aimed to demonstrate how any urban project must be a collage, a set of fragments whose value is infused with history. In this sense, just as Piranesi had in Campo Marzio, the British architect used history to mark an ideological discontinuity with his contemporary culture. If Rowe's collages were based on pre-existing finite forms, then Piranesi invented new buildings or reconstructed Roman ruins. However, history was not the guiding light of Piranesi's urban project, because to detect any univocal origin or narration was, for him, impossible.

In *Collage City,* Rowe's formal liberalism led him to elaborate on a series of remedies for the failure of modern architecture: reconsidering the dense texture of historical cities; returning to the figure/ground hierarchies; using nostalgia-producing instruments; and looking at historic typologies (for example, French hotels). In fact, the concept of the collage as a critique of modern urbanism opened up the possibility of an apology for the fragment, and thus for the rise of post-modernist manifestations.

The Rome of the seventeenth century became for Rowe the ideal context in which to elaborate on his polemical attack on modernism: the collision of different objects (palaces, piazzas, villas and so on) produced conditions of inter-dependence, independence, and multiple interpretability, leading to a heterogeneity that contrasted with modern dogmatism, based on total design and social engineering.

The collage approach was the only way to deal with contemporary cities, as there was no human institution that could be completely hospitable. Open or closed societies were both caricatures. Rowe juxtaposed the pragmatism of his background with the utopian ideals of modern architecture. Furthermore, societies and persons 'assemble themselves according to their own interpretations of absolute reference and traditional value; and, up to a point, collage accommodates both hybrid display and the requirements of self-determination.'<sup>3</sup>

Colin Rowe's *Roma Interrotta* project emerged from *Collage City* and was based on the idea of working on the coexistence of different fragments within a larger framework. But if *Collage City* had its origin in Piranesi's drawings, *Roma Interrotta* represented Colin Rowe's interest in Nolli. Rowe borrowed from the famous Nolli's plan (1748) the separation of the traditional instruments – axes, arcades and monuments – from public space. The city was depicted according to an antimonial separation of built fabric and public space. In Nolli's plan, Rowe saw fragmentation as a compositional instrument. His scheme aimed at a return to 1748 in order to recover what, in his opinion, modernity had erased. By analysing Nolli's plan, Rowe shifted his interest towards public and private, solid and void, mass and space. The quality of the urban space was derived from the balance between figure and ground.

For Eisenman the main difference between Nolli and Piranesi is that Nolli's plan (1748) was the icon of an architectural fundamentalism, based on the scientific and neutral representation of reality, whereas, Piranesi's *Campo Marzio* (1762) was an index of transformation, in the sense that Piranesi used the Rome of the seventeenth century just as a starting point, or a framework, into which to insert his own vision: in fact, he added to the real context many imaginary buildings and ancient constructions from the Roman Empire. *Campo Marzio* could not be a real city: there were no streets, just interstitial spaces among the buildings. Furthermore, there were no clear relationships between figure and ground. The utopian city appeared as an accumulation of fragments. The in between space among the buildings was potentially open to infinite modifications. In this sense, *Campo Marzio* was the opposite of Nolli's plan: it was structured as a palimpsest, based on the superimposition of real and fictional elements.

Campo Marzio was one of the most radical projects for cities ever conceived: whereas Nolli had depicted Rome as a dual articulation of the modern city (with its clear figure/ground relationship), and the ancient city (based on its monuments) Piranesi represented Rome as a series of objects floating in an open field, where ruins were used as the foundations for new buildings. Campo Marzio was a utopian project of a city that lacked any aspect of urbanity (contrary to Nolli's plan with its hierarchies).

What actually drove Piranesi was not nostalgia, but rather his opposition to the modern Rome. Whereas Nolli's plan was in fact, executed in a moment of political stability (in spite of Rome's economic decline), *Campo Marzio* was a project of crisis, in which the modern city was removed and ruins represented a good metaphor. The reconstruction of the ancient monuments was thus aimed at depicting a new vision that was contrary to the scientific approach of Nolli's plan and based, to paraphrase Le Corbusier, on architectural forms against the illusion of the plan.

When describing Rome, the Swiss architect considered it as an example of a city made by the juxtaposition of different volumes and masses in the face of the idea of urban axes, or overall plans.

Eisenman is often associated with Piranesi, as he conceives of the city in terms of fragmentation, alienation and discontinuity; in fact, both Piranesi and Nolli worked with fragments but, whereas in Nolli the fragmentation was reduced to the figure/ground dichotomy, in Piranesi there was no mediation, and his *Campo Marzio* was like a piece of bricolage, into which all his architectural inventions were inserted.

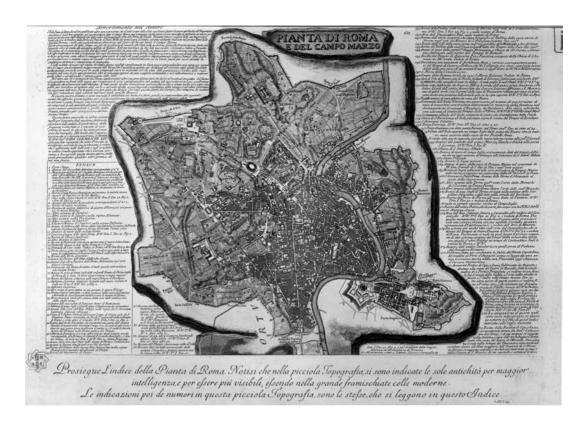
For Manfredo Tafuri, Piranesi aimed to test the city's capacity to absorb these fragments and to provide them with some mediating framework. Architecture could survive the loss of the city with every object manifesting its own autonomy without compromising that of another. To some extent, one may say that Piranesi tested the limits of architecture in the same way that Eisenman attempted to do in his *Houses*. The American architect was looking for those internal codes that can transform architecture, apart from functional and aesthetic predeterminations. So, Eisenman and Piranesi shared the idea that the city is a fragmented palimpsest from which absolute objects emerge.

Nevertheless, by looking at Nolli's plan from another perspective, and overcoming the dual lecture on figure and ground, one may observe how Eisenman was close to Nolli with respect to a fundamental topic, especially in his early work – the autonomy of architecture.

As said before, Nolli's *Nuova Pianta di Roma* (1748) was the first scientific cartography of Rome, derived from the effort to link the urban structure of the city to its economic organization and social control. Rome now appeared in all its dimensions, as not only monuments, but also open spaces, gardens, green areas, and so on were mapped. With respect to differentiation between figure and ground, Pier Vittorio Aureli offers a new interpretation that overcomes the traditional conviction of a separation between private and public spaces. For Aureli, Nolli's plan represented the differences between the figure of architecture and the ground of urban space. In other words, architectural forms were separated by the fabric of the city.

By offering such an interpretation, Aureli was theorizing the rupture of Nolli's plan with tradition, with the Renaissance's equivalence between architecture and the city (see the famous axiom that the city is a large house, and the house a small city).

So, somehow what emerges from the figure/ground differentiation of Nolli's plan is the absoluteness of architecture, its ideological separation from the city. The architectures are finite forms, small fragments within the open territory of the city. If in *Campo Marzio* Eisenman discovered the fragmented and discontinuous character of architecture, in Nolli's *Nuova Pianta di Roma*, the American architect detected its autonomy. For an architect who never considered the external factors proceeding from the city as decisive for his architecture, both Nolli and Piranesi, despite their radical differences, represented anomalous but relevant precedents. What differentiates Aureli's idea of autonomy from Eisenman's, is that for the former, autonomy is justified by history, whereas, for the latter, it is justified by the elaboration of a self-sufficient language.



In 2012, the Venice Architecture Biennale hosted The Piranesi Variations, a project coordinated by Peter Eisenman, with his Yale students. Starting from his beloved Piranesi, and from Campo Marzio, Eisenman invited Jeffrey Kipnis and Pier Vittorio Aureli to elaborate on their own interpretations of the impact Campo Marzio could have on contemporary Rome. The debate centred on the role played by autonomy and absoluteness (to paraphrase Aureli) in architecture, particularly in the relationship between architecture and the city. Fifty years have passed, but for Eisenman the legacy of Piranesi's message is still alive.

1.2 Giovanni Battista Piranesi, Pianta di Roma e del Campo Marzio,  $52.4 \times 75.9$  cm, etching 1762. Source: http:// it.wikisource.org/ wiki/File:Piranesi -16002.jpg

#### **ENDNOTES**

- Peter Eisenman, Ten Canonical Buildings (New York: Rizzoli, 2008): 17. 1
- 2 'For Eisenman, disciplinarity is understood as autonomy (enabling critique, representation, and signification), but not as instrumentality (projection, performativity, and pragmatics). One could say that his definition of disciplinarity is directed against reification rather than toward the possibility of emergence. [...] In the significant production of Eisenman, the critical project is inevitably mediated: in fact, it is perpetually obsessed by, and linked to, reproduction. In his rereading of Le Corbusier's Dom-ino, he adopts the technique of the index. The index emerges as the most opportune mediator in part because it automatically combines materialism

- with signification: in other words, it exists as a physically driven sign, one that is not culturally or visually determined, as are the symbol or icon'. Robert Somol, Sarah Whiting, 'Notes around the Doppler Effect and other Moods of Modernism', in *Perspecta* 33, 2002: 72–7.
- 3 'It is suggested that a collage approach, an approach in which objects are conscripted or seduced from out of their context, is at the present day the only way of dealing with the ultimate problems of, either or both, utopia and tradition; and the provenance of the architectural objects introduced into the social collage need not be of great consequence. It relates to taste and conviction. The objects can be aristocratic or they can be 'folkish', 'academic or popular. Whether they originate in Pergamum or Dahomey, in Detroit or Dubrovnik, whether their implications are of the twentieth or the fifteenth century, is no great matter. Societies and persons assemble themselves according to their own interpretations of absolute reference and traditional value; and, up to a point, collage accommodates both hybrid display and the requirements of self-determination.' Colin Rowe, 'Collage City', in *Architectural Theory since 1968*, ed. Michael Hays (Cambridge: MIT Press, 2000), 106.

#### **Formal Terrorism**

The whole notion of 'cardboard architecture' meant that the materiality of the work was important as an 'antimaterial' statement. Probably the most important work I did in the conceptualist realm was the cardboard architecture houses. Pictures of House II, for instance, were taken without sunlight so you have no shadows, and no reveals or things like that. And in fact one of the pictures we took of House II was in a French magazine that said it was a 'model of House II'.

So I achieved what I wanted to achieve, which was to lessen the difference between the built form and the model. I was always trying to say 'built model' as the conceptual reality of architecture. So when you see these houses and you visit them you realise that they were very didactic and very important exercises — each one had a different thematic — but they were concerned not with meaning in the social sense of the word or the cultural sense, but in the 'architectural meaning.'

Peter Eisenman

In 1969, at MOMA in New York, Kenneth Frampton presented the work of five young architects: Peter Eisenman (1932), Michael Graves (1934), John Hejduk (1929), Richard Meier (1934) and Charles Gwathmey (1938). What seems at first glance to have been a prestigious recognition was actually a clever self-sponsorship operation, as the exhibition was promoted by CASE (Conference of the Architects for the Study of the Environment), an association founded in 1964 by Eisenman himself.

After his doctoral thesis, in fact, Eisenman came back to the USA and started teaching at Princeton University. On his return, some of the reflections developed in the European debate were imported to the States. Eisenman could finally focus on his formal investigations and set up a compelling propaganda campaign.

A few years later, his efforts seem to have been rewarded: the publication of a volume entitled *Five Architects*, finally confirmed the existence of a New York based young generation of architects, tied to a common ground. Eisenman represented the theoretical core of the group, as stated by Manfredo Tafuri (who wrote about

him in an article in *Oppositions* in 1974, and in a text for the catalogue of *Five Architects* in 1976). For Tafuri, 'if Eisenman is the theorist and the formal terrorist, Graves is the illusionist, Meier is a mechanic, Hejduk is a conjurer, and Gwathmey a sophisticated mediator.'<sup>2</sup>

The whole activity of the group was focused upon the comprehension of the syntactical mechanisms that regulate architecture. In their work, abstraction and juxtaposition replaced the notions of construction, function and ideology. To some extent, the Five Architects represented a new vision, lacking any political or ideological reference, but imprisoned within an obsession with language. The modernist slogan that form follows function was rejected by the Five Architects who adopted a nihilist viewpoint, according to which architecture can only self-define itself as a text.

Despite the group's ability to promote their own work, there were many other architects who rejected the equation 'Five Architects = New York architectural scene'; Romaldo Giurgiola, Robert Stern and Alan Greenberg, for example, remarked upon the elitist and closed character of this group. Of course, among the Five Architects there were many differences. John Hejduk's houses, for example, represented a variation-evolution of Le Corbusier's purism, based on the construction of spatial mechanisms and urban compositions through the insertion of *objets à réaction poétique*.

Richard Meier pursued a purist abstraction as a new aspect of figuration. The colour white became the main feature of his houses, in which the functional programme was always the starting point for any design process. Internal connections, ramps, stairs, and glazed boxes were its constitutive elements.

By contrast, Michael Graves' main interest was perception. His houses, which shared certain commonalities with Eisenman's constructions, were composed of a sequence of plans in the form of a collage, in which colour played a central role in defining spaces and hierarchies.

Charles Gwathmey showed, along with Meier, the same interest in Le Corbusier and his modernist principles: his work was always characterized by a rigorous reinterpretation of those canons, even during the diffusion of the first post-modernist buildings. However, at the same time his position became paradigmatic of an entire generation of American modernists; his architecture remained imprisoned within a purist academic formalism, depurated of any revolutionary impetus. Gwathmey, more than any other member of the Five Architects, seemed to be influenced more by Philip Johnson than by Rowe or Wittkower. For Sanford Kwinter, in fact, Johnson was the architect who most influenced the American generation of the 1960s, having imported from Europe the modernist paradigm after reducing it to a domesticated and bourgeois language.

Colin Rowe, in his introduction to *Five Architects* pointed to the group's anomalies in relation to the legacy of Modernism. He did not focus on their specific projects, but seemed more interested in describing the cultural basis for their positions. What we can glean from his text is simply their anti-architectural, or rather, anti-professional stance they considered buildings to be an excuse for drawing, rather than drawings as an excuse for building.

Even though Eisenman's fascination for Terragni is evident, and Hejduk's attention to Cubism and Russian Constructivism has been a guiding light in his career, it is not possible to relate these experiences to the nature of the Modern Movement. For Rowe, the work of the Five Architects began with the awareness that the modernist mission, through its institutionalization, had lost part of its original meaning. In fact, when modern architecture proliferated throughout the world, the power of its social vision began to weaken. Rowe cited, for example, Le Corbusier's *Ville Radieuse* to demonstrate how a city based on social justice, hygienism and purification turned into a standardized set of anonymous constructions. Furthermore, when European modern architecture penetrated American territory, it was introduced as a new approach to building, detached from any revolutionary intention. In other words, it appeared not as the physical manifestation of socialism, but simply as a new formal lexicon. This disinfected condition allowed a total congruence with the forces of American capitalism.

What Eisenman, Hejduk, Meier, Graves and Gwathmey actually shared was the abandonment of any revolutionary myth: rather than envisioning a new society, these architects were conscious that radical social change could not be achieved through any individual contribution. In other words, they did not believe in the possibility of any violent action against the pre-constituted system.

For Colin Rowe, concealed beneath their erudite cosmopolitanism, the Five Architects represented the American bourgeoisie: 'their posture may be polemical but it is not heroic. They are neither Marcusian nor Maoist; and, lacking any transcendental or political faith, their objective is to alleviate the present by the interjection of a quasi-Utopian vein of poetry.'

The official sounding board of Eisenman's activities was certainly the Institute for Architecture and Urban Studies (IAUS), founded in 1967. Considered for a long time as an atypical proponent of the new American wave, on the one hand it worked as a modern *agorà* for theorists, architects and artists: but on the other, it was an anti-academic institution that invited promising architects to conduct their own research there (for example, its guests included Rem Koolhaas and Rafael Moneo who spent some time at IAUS).

In fact, the IAUS was not only involved in defending and promoting the positions of Eisenman and his colleagues; it also had an operative role: the Institute collaborated with the Urban Development Corporation on several residential projects in New York. Moreover, the IAUS was credited with introducing to the American scene some of the European protagonists of the architectural debate, especially the French post-structuralists and the Italian Tendenza.

In 1973, Eisenman, along with Kenneth Frampton and Mario Gandelsonas, founded a magazine: *Oppositions*. While the cultural background of the three was radically different, the magazine aimed to build new models for a theory of architecture. The first issue came out in September 1973, and it represented a new genre of magazine because it was neither an academic publication nor a professional portfolio. If, in its intentions, *Oppositions* was culturally tied to the historical avant-garde, in actual fact the magazine was open to the most varied contributions, from Colin Rowe's formal analysis, to French post-structuralism, to

Frankfurt School critics. It also allowed European architectural culture to penetrate the American scene. The magazine closed in 1983, when Eisenman decided to cease work on it and focus more on his professional activity.

Unlike Italian magazines, such as *Contropiano* or *Controspazio*, *Oppositions* did not deal with politics or ideological positions; *Oppositions* focused attention on theoretical and disciplinary questions, publishing both historical studies and critical analyses. Owing to its global diffusion, American culture was able to engage with European theorists such as Manfredo Tafuri, Aldo Rossi, Jean-Louis Cohen, Francesco Dal Co, and so on.

Whilst Aldo Rossi explored the possibility of turning architecture into a positive science, like botany or geology, Eisenman initially attempted to review the modernist ideal of radical renovation. For him, functionalism was the main cause of the crisis of modernity, because it generated a dramatic misunderstanding. He saw modern architecture and modernism as poles apart. The Modernism Eisenman talked about represented the rupture of humanistic centrality; that is, the exaltation of any autonomous and self-referential moment in aesthetic research.

Although manifested as abstraction and separation, modernism's nature involved the displacement of man away from the centre of his world, whilst also implying a non-humanist view of the relationship between an individual and his or her environment. Abstraction, atonality and atemporality were seen as being simply the exterior characteristics of modernism, but not representative of its essential nature. Paraphrasing Michel Foucault, Eisenman conceived of modernism as a new episteme, because 'deriving from a non-humanistic attitude toward the relationship of an individual to his physical environment, it breaks with the historical past, both with the ways of viewing man as subject and, as we have said, with the ethical positivism of form and function.'4 Architecture as an object was therefore required to resist its own internal rules, and was incapable of acquiring human content, as man ceased to be its originating agent and became merely the final recipient. Objects and buildings were ideas, belonging to the sphere of language.

Functionalism, for Eisenman, was no more than a late phase of humanism, rather than an alternative to it. By contrast, many architects conceived of modernism as a stylistic manifestation of functionalism, and of functionalism as a theoretical proposition in architecture. In proposing a 'form following function' formula, these architects were unable to recognize the difference between modernism and humanism.

Eisenman was convinced that the real essence of Modernism did not lie in the form/function binomial: that was why he feared that such misunderstanding could generate the rise of neo-functionalist positions, aimed at reducing the complexity of the modernist mission to a linear correspondence between form and content, or in the worst case scenario, to a total lack of interest in syntactics. In particular, Eisenman heaped his provocative invective on the so-called English Revisionist Functionalism of Reyner Banham, Archigram and others, because their technological infatuation was an expression of the 'same ethical positivism and aesthetic neutrality of the pre-war polemic.' Eisenman's main challenge became the pursuit of a de-contaminated architecture, free from functional, structural

and physical predeterminations: architecture meant purity. At the same time, to represent architecture not only meant defining the object, but also justifying the process, so Eisenman felt obliged to introduce into his methodology the idea that a project could only be explained through the temporal sequence that had generated it. By using this notion, Eisenman underlined the protagonism of the object in architecture and distanced the architect from the built work. The dichotomy between subject and object was now replaced by process. If, for Aldo Rossi, architecture lived and appeared within the concept of *tipo*, for Eisenman architecture manifested itself in its gestation. The corollary of such a vision is that any built work has no importance: it is irrelevant.

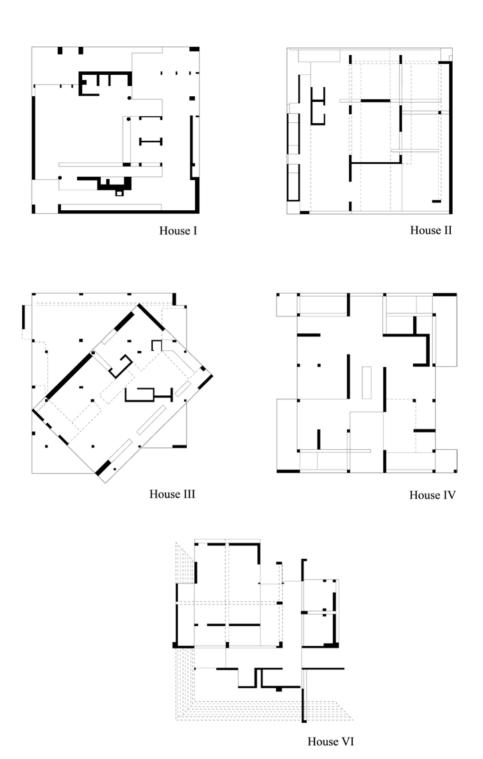
That is why Eisenman was to define his work as *cardboard architecture* as the models produced during the entire process of design were made of paper – and the models narrated the genealogy of the project more than the final result.

For him, the real architecture existed only in the drawings: the real building existed outside the drawings. The difference here is that architecture and building were no longer the same. So Eisenman claimed the hegemony of syntactics in architecture, by focusing more on the internal mechanisms of evolution, transformation and combination, than on the relationships between architecture and society, or architecture and politics.

In Linquistics in Architecture, published in 1973, the Argentinian theorist Mario Gandelsonas compared Eisenman's architectures to the theories developed in the 1960s by Noam Chomsky: 'one of the most relevant aspects of Eisenman's work is to discover the possibility of modifications within the architectural world, as a result of a shift from the semantic to the syntactic'.6 In fact, his first projects offered Eisenman the possibility of exploring the consonance between architecture and Chomsky's language development theory. The architect himself referred to transformative grammar as one of the primary influences on his early work. To be precise, what Eisenman transferred from the linguistic discourse was mainly the distinction between deep structure and superficial structure; that is, the distinction between a perceptive dimension and a conceptual dimension. In linguistics, the superficial structure corresponds to the phonetic or physical component, while the deep structure corresponds to the syntactic component. Many years later, Mario Gandelsonas stressed how, in Eisenman's work, the term formal came to acquire a purely relational connotation; it had no expressive or representative function. For the Argentinian theorist, Eisenman rejected the idea of an architectural sign; sign in architecture made no sense.

The period 1969–78 was characterized by Eisenman's first incursions into the world of formal experimentation. In these years he designed 12 houses: only five of them were built. Nevertheless, we can consider the *House Series* as his first attempt at translating into real constructions the concerns and anxieties that he faced in his theoretical investigations.

Self-referentiality and autonomy were the interpretative categories of the *Houses*: an invisible network connected them to each other, by similitude or difference, through an obsessive sequence of architectural elements and a rigorous internal logic. Despite their homogeneous character, represented by a gradual maturation



2.1 Transformational Grammar: Peter Eisenman, *Houses* 1969–75. *Source*: Stefano Corbo

in Eisenman's projects, the *House Series* can be analysed according to two different cycles: the first cycle, *House I* to *House IV*, included the *Cardboard Architectures* and the experience of Five Architects (with the collective exhibitions and the book *Five Architects*). The second cycle started with *House VI* in 1975 and ended in 1978, when *House X* was rejected by the client, and Eisenman began a radical shift towards other territories.

As described before, the first four *Houses* were to be made of cardboard, not for their immaterial aspect, but in order to point out the conceptual and self-referential substratum that generated them. Such a strategy implied that architecture is just a medium, and that the theoretical substance of the project-text is much more important than the real construction. With these houses Eisenman aimed to distance his architecture from any reference to materiality, use or construction. What the American architect experimented with here, to paraphrase Michael Hays, was a process of defamiliarization from modernist practices, 'to reorient our apprehension of architectural form away from standard perceptual conventions.'<sup>7</sup>

Eisenman began to pay more attention to the instances of the subject, in order to review the traditional subject/object antinomy. In an article published in 1974 and significantly entitled *To Adolf Loos & Bertolt Brecht,* Eisenman described the process of occupying a foreign container by the user. Design was configured as an 'inquiry into one's own latent capacity to understand any man-made space.'<sup>8</sup>

The shift from the first cycle (*Houses I–IV*) to the second (*Houses VI–X*) was represented by the transition towards other interests, permeated by pessimism about the destiny of Modernism, and a sense of exhaustion with habitual linguistic rituals.

House I and House II (the numeration is clearly a conceit used to distance the author, the subject, the client, and the function from any architectural intention) were still tied to Eisenman's fascination with Terragni as, in these, the American applied the same instruments adopted in the analysis of Casa del Fascio and Casa Giuliani Frigerio. What distinguished the two houses were the different mechanisms of stratification that generated them. In Casa del Fascio, the design process moved from the exterior towards the interior. Casa Giuliani Frigerio, by contrast, was based on a process of explosion: its process moved from the interior to the exterior. The final result was a dynamic displacement of the different floors and the volumes that invade the space of the house. In House I Eisenman questioned for the first time the role of the structure as a primary expression. If in any built work there are columns and beams, in House I they did not hold anything up. These converted structural elements became iconic.

If Eisenman borrowed from Terragni the articulation of solid and void elements, and a series of small displacements (rotations, overlays, and so on), then the plan was generated by one of the grids that Wittkower used in his formal analysis of Palladio. Apart from a small kitchen and a bathroom there was no sign of any figurative or functional characterization.

House I was, in a sense, representative of the formal strategy Eisenman went on to develop in his later projects, but it still lacked the kind of propagandistic impetus that usually characterizes a model or conceptual prototype. In other words, House I was not yet a manifesto for Eisenman's programmatic intentions.



2.2 Peter
Eisenman, House II,
Hardwick,
Vermont, USA,
1969–70.
Source: Courtesy of
Ron Zschaler and
John Makau

In House II (1969–70), which recalls the neo-plastic experience of De Stijl, Eisenman employed for the first time the famous nine square grid, emblematic of his diagrams of interiority. These first diagrams, also used in his PhD thesis, were never intended as the beginning of a process, but were only to distinguish Eisenman's idea of the formal from that of Colin Rowe. Nevertheless, the originating agent of the project was an arbitrary gesture, a diagonal displacement that influenced the whole process of design and left its traces on the completed work.

In *House II*, as well as in the following projects of this phase, a single displacement, rotation or disjunction represented the original impulse that generated the architecture so that, from the beginning, Eisenman conceived the germinal agent of his architecture as arbitrary, to paraphrase Rafael Moneo.

In this case the starting point of the process of design was a diagonal displacement of the pillars' grid. Through a series of formal operations, the project became pure abstraction. Such abstraction was only contaminated by functions, as Eisenman's strategy contrasted with the obvious necessity of giving the structure precise functions (kitchen, bathrooms, staircase and so on). So the mental process of abstraction was partially successful. In this sense *House II* expressed the irremediable contrast between architecture, articulated as pure processuality, and the conventional constraints required by professional practice.

All of the programmatic elements remained compressed into interstitial spaces. The *House* needed only to exhibit its instrumental-processual character. At the same time, context, site and construction were ignored. What Eisenman pursued, then, was the recognizability of the internal mechanisms that generated



the architecture of the *House*, in other words, the definition of a language whose discursive elements defined the formal configuration of architecture.

House II was characterized by a radical rigour, a formal purity. It invited the visitor to comprehend the internal rules that governed the composition: the pillars' grid, the dichotomy between figure and ground, void spaces and so on. The process made the rules intelligible. Eisenman was not interested in the result — architecture being just the final moment of the process. He never realized either the plans or the elevation of the House. The drawings could be used to represent architecture, but not as the source or origin of the project. House II was like a model: it did not have details as conventional houses have; rather, it was an ambiguous object that could be a building as well as a model.

House II was structured around a squared plan and a pillars' grid. Gradually the grid moved away, with such movement generating a system of operations constituting different phases of the same process. The final step of the process was to form the shape of the building. The traces of this displacement were translated into the materials of the project. Pillars and walls generated an ambiguous system in which any perceivable distinction between structure and its representation was annulled:

When I built House II with a wall system that could support the house and a column system that could support the house, there is [sic] a sense of redundancy with the two systems. When you have this redundancy, the walls are either structural or signs. Is it possible, as in language, to separate out the sign and the wall to have what could be called 'free floating signifiers'?

2.3 Peter
Eisenman, House II,
Hardwick,
Vermont, USA,
1969–70.
Source: Courtesy of
Ron Zschaler and
John Makau

At the same time, one may also read *House II* as deriving from the interaction of different formal relationships: from this perspective the use of diagrams (even if the nine square grid cannot be considered a real diagram), served to make visible the complexity of such relationships that are not usually immediately perceivable. So, diagrams were explanatory devices describing the multiple internal operations developed by Eisenman – displacements, compression, rotations and so on.

In *House II* Eisenman, through the diagrams, displayed six different scenarios or conditions that can generate architecture. The American architect manifested in this way his interest for those internal rules that produce the construction of form, or in other words, he was interested in deciphering the deep structure of the project. Such an interior world, composed of a complex geometric articulation and the dynamic pressure of its parts, progressively projected its image towards the exterior. Both in the use of the grid, and in the internal displacements that activated the process of form generation, Eisenman seemed to distance himself from the legacy of Rowe and Wittkower's diagrams.

House II was the result of a general process of decomposition, in the same way as those axonometric views of Terragni's projects produced by Eisenman, in which any single element (walls, pillars and so on) seemed to have been isolated in order to be analysed. Through the idea of decomposition (whose origin was derived from his studies on Venetian buildings and the articulation of pre-composition, composite, and extra-composition, as we saw in the previous chapter), Eisenman was persuaded to go beyond the Modern Movement as well as beyond classicism. To some extent we may consider House II as the compendium of all Eisenman's speculations on Terragni: it was a genuine essay on the Italian architect, the transposition of his lesson and legacy to contemporary architecture. At the same time, however, the project presented ambiguous points and contained the seeds of future investigations. This was the case with the nine square grid, articulated by Eisenman as a diagram. In fact, many years later, Eisenman would describe such a grid as a prototype for the idea of diagram, which he started investigating in the 1980s, when he demonstrated his interest in deconstructivism.

House III and House IV (1971) were derived from the same approach as House I and House II: Eisenman denied any idea of environment and architectural experience was totally rejected. The concept of autonomy, he claimed, was not only phenomenological but also literal, linked to the architecture as an object, in its self-referential isolation.

In the case of *House III*, the project was generated by the interpenetration between two cubes with different rotations. Such a process generated different spaces and articulation. Once again, Eisenman focused on the mechanisms of form generation, and the final result echoed certain avant-gardist experiments of the 1920s.

House IV was of the same year, and though an unbuilt project, it represented a complexification of the former formal strategies. Here Eisenman worked with different cubes, trying to achieve an internal explosion. He started from a cube: this cube was bisected, rotated, inverted, elaborated and transformed, as Eisenman

furiously sought the inner logic of his architecture. The *House* can be read as the first purely diagrammatic project. Its series of diagrams were concerned not only with the hierarchy of the integers of construction, but also with their materiality.

With House VI (1975), the second cycle of the House Series began, although the project is in a sense the theoretical prolongation of House II. Here the implosion appeared almost physiologically: the House consisted of a squared space containing the different levels, and an external perimeter that worked as a diaphragm. This diaphragm regulated the perception of the object from the outside, and unveiled its internal mechanisms. For Rafael Moneo Eisenman finally achieved here a clear definition of his formal strategy. By inserting into the project asymmetries, displacements and disjunctions, the American architect built a coherent linguistic discourse through which to manipulate architecture and liberate it from the traditional disciplinary conventions (functions, structure and ornament).

House VI was in fact the result of the application of a few limited rules (displacement, rotation, compression and extension), to a restricted number of elements (volume, vertical layers and the nine square grid). All these operations produced several diagrams, whose relevance replaced the notions of materiality, function, and meaning. So, the main goal of the project became not to design an object, but to establish a transformational programme, free from traditional elements.

The abstraction of the composition was not disrupted by any functional obligations and, thanks to the use of colour, Eisenman was this time able to transform some of these elements (for example, the staircase) into autonomous and isolated objects.

The arbitrary gesture that shaped *House VI* was an L-scheme constituted by the circulation of paths crossing the domestic space. Such a system corroded the square plan: the interior spaces gradually lost their identity and recognizability; their differentiation became blurry. Here one of Eisenman's most commonly used morphemes – particularly in the 1970s – appeared. By approaching Jacques Derrida's thought, Eisenman attempted to free his poetics from the idea of formalism as a return to the Modern Movement's stylistic repertoire; at the same time, he constructed his own discourse by rejecting the definition of architecture as a formal score.

After reading *Of Grammatology* (1967), Eisenman began to conceive of architecture as a text. *House X* (1975) was an unbuilt project, but represented a moment of transition in Eisenman's career, as it marked a separation from the previous houses realized by him in the 1970s and opened up new concerns that the American architect would announce with *House XI* (1978).

The House X project, in fact, attempted to create distance from the formalism and absolute rationalism of the earlier episodes. Even though Eisenman defined this *House* as an example of decomposition (by recalling his studies of the Venetian *palazzo*), we may detect two different aspects in *House X*: on the one hand, his old fascination with Terragni was represented by the internal articulation of its pieces; on the other hand, he began the exploration of the idea of trace as the conceptual basis of future projects.

From Casa del Fascio, Eisenman also borrowed a similar idea of reading: there were frontal readings as well as a series of readings from the corner. This produced a condition in which the subject was required to move around the building in a sequence from front to corner, from side to corner, and from back to corner. The generative matrix of the House was a quadrant derived from the fragmentation of a cube. Every quadrant had its own specific function, and the space in between them was occupied by staircases and technical elements. Eisenman borrowed the distributive organization of Terragni's Danteum, emphasized the role of the four quadrants that constituted House X and projected towards the exterior. Such a process of decomposition had its own origin in ahistorical forms. What Eisenman was interested in, was not a generative process beginning with an a priori mix of the square and the cube as archetypical matrices; rather, he used the grouping of different volumes, with different bases. For the first time, in fact, Eisenman did not use a homogeneous isotropic podium on which to install his objects; rather, he took into account the orographic component of the project (the site's slope), and the different perspectives it could produce. To some extent, House X belonged to the site on which it would be built. Topography represented a destabilizing factor, as it introduced within the composition a heterodox element and forced him to review his methodology critically. Eisenman himself defined House X as a blasphemy against the essence of Western architecture, based on the identification between form and content. That was why this project represented an intermediary step: when Eisenman was able to liberate his architecture from the modernist legacy, his discourse entered a new phase.

Although it was not built, *House X* was the conceptual origin of *House XI*, realized in California in 1978 for the historian and critic Kurt Foster, and it represented the climax of all the investigations produced by Eisenman in the 1970s.

At the same time the *House* propelled Eisenman into another sphere of interest that would culminate in his *Cities of Artificial Excavation*. (*House XI* would also be reproduced in the *Cannaregio* project, Venice, to symbolize the beginning of a new phase). Indeed in *House XI* Eisenman discovered the site as a critical material in his architecture: the project, based on the articulation of two L-shaped cubes (as in *House X)*, was grounded to a real context. If in the former *Houses* Eisenman conceived of the site simply as a horizontal line on which to lay down his architecture, in *House XI* for the first time the site acquired a formal connotation. Eisenman defined *House XI* as a Möbius strip that would be placed half underground and half above ground, the half which was underground becoming the living area and the half above ground containing the void.

In 1978 the cultural milieu in which Eisenman had been working for a decade was already changing. The Five Architects were experiencing hard times: Michael Graves, for example, who had shared with Eisenman some of the same theoretical interests, became, with his Portland project, one of the most outstanding protagonists of post-modernism (Eisenman would dedicate to him an ironic article entitled *The Graves*). In the same years, Frank O. Gehry's architecture started to enjoy a wider media resonance. Eisenman realized that his purist-formal obsessive investigations no longer excited any interest, and that any kind of discourse on abstract and autonomous architecture was probably becoming inconsistent.

His work needed a change of direction. Furthermore, at the end of the 1970s, pessimism about architecture and the failure of Modernism took hold of Eisenman: he gradually abandoned his interest in architectural syntactics to focus his attention on wider reflections about history and the end of humanism.

Consequently, in his discourse, Eisenman replaced geometry, abstraction and self-referentiality with a recourse to external factors that could contaminate architecture and force the architect to deal with them. Architecture for Eisenman was now a tool for reflecting on the instability of history. So, if in the 1970s Eisenman rejected the interpenetration of architecture with the exterior world, at the turn of the decade, he looked at history to pose other kinds of questions.

His passion for Derrida, along with a renewed interest in history, led Eisenman to reinterpret some of his favourite arguments according to a new perspective: some years later, in order to describe his idea of undecidability in architecture, Eisenman cited Luigi Moretti's Casa del Girasole, built in Rome between 1947 and 1950. As an approach, undecidability involves a close reading of architecture, and makes it possible to look at works of the past in order to detect new meanings and changes. Il Girasole was for Eisenman a textual work, as it was an ambiguous project that did not respond to a univocal or dominant view of architecture. Rather, it represented the transition from modernist abstraction to neo-realism, and implied new methods of reading not derived from the lexicon of Modernism.

There were many reasons for considering Casa Il Girasole as an undecidable building: firstly the general abstract composition was contaminated by a literal figured representation. In Italy, both neo-realist cinema and literature operated a critique upon the abstract languages of Futurism and Cubism, the aim of which was to move abstraction towards the real. Moretti belonged to this tradition, and in his architecture worked on the elaboration of a critical modernism, permeated with neo-realism. Moretti's attack on the nature of modernism resided in his conception of space and materiality. Surfaces, in fact, were modelled in order to create a dialogue between volume and flatness, and dismantled the abstract unity of modern architectures. So, the facades became a screen, or a hybrid layer, whereas the internal space was just volume. In this sense Moretti challenged the modernist idea of the envelope, by opposing its version of a contained volume. Its tripartite organization (basement, a middle zone characterized by glass, and an upper zone that worked as a pediment) recalled a classical aediculae, but the central cut in the façade brought to mind its volumetric character. Other minor cuts erased the integrity of the modernist box. In other words, the façade of Casa del Girasole can be read as a series of horizontal layers, whose raison d'être depended on the relationships between its singular elements. The building became a multitextual object, open to various readings.

Even the structure in *Casa del Girasole* acquired a heterodox character. While the modern free plan displayed columns and pillars of the same size and shape, Moretti used different columns: they become figured, changing shape to signal discontinuity or asymmetry. So, against the uniformity of the *square grid* modern space, Moretti proposed a fragmented plan, based on negating the served/servant separation of space.

One of the other features demonstrating the undecidable character of *Casa del Girasole* derived from Moretti's use of materials. He employed a vast repertoire of elements: metal, stone, glass and wood. There was no hierarchy or hegemony of one material over another, so that a univocal reading became impossible. Materials were employed in *Casa del Girasole* to emphasize difference and juxtaposition. Even the use of historical motifs, such as the rustication of its basement, resisted appearing as a nostalgic operation, and was not derived from any structural or decorative intention; rather it was a critical response to the coherence of architecture, to its form-function correspondence. If the traditional rustication obeyed a structural logic, in *Casa del Girasole* the rustication was simply iconic.

The sculptural elements Moretti used in the façade were anarchic and arbitrary: he incorporated heavy stones within the window openings, and questioned the traditional dichotomy between support and decoration. Those stones might now appear as an ironic disposition of elements coming from an undecipherable moment in time, having emerged after an archaeological excavation.

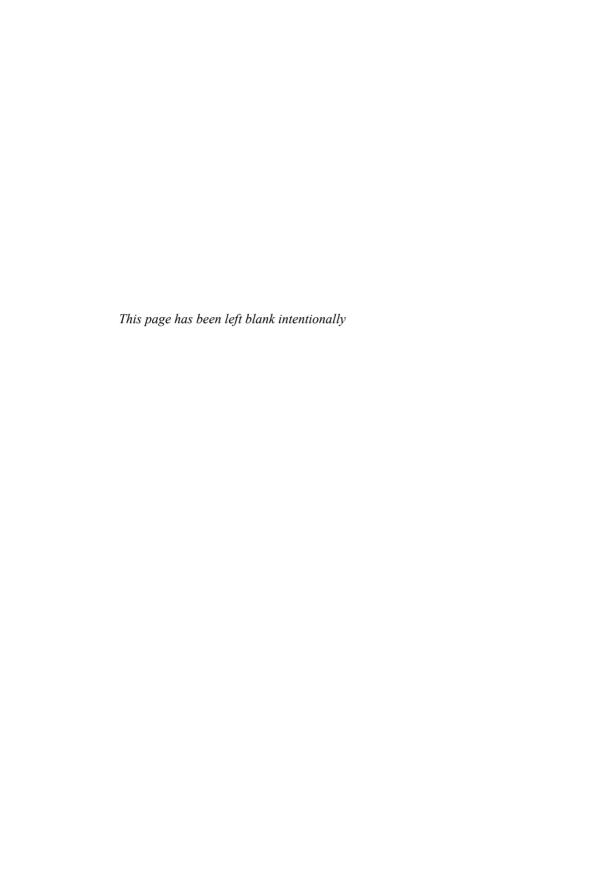
Is this the same archaeological approach that Eisenman was to pursue in his projects of the 1980s?

#### **ENDNOTES**

- Peter Eisenman, 'Interview with Iman Ansari', in *The Architectural Review*, April 2013, http://www.architectural-review.com/view/interviews/interview-peter-eisenman/8646893.article, last accessed 20 February 2014.
- 2 Manfredo Tafuri, 'Les bijoux indiscrets', in *Five Architects* (NY, Roma: Officina Edizioni, 1976): 7–34.
- 3 Colin Rowe, 'Introduction to Five Architects', in Architectural Theory since 1968, ed. Michael Hays (Cambridge: MIT Press, 2000), 84.
- 4 'Abstraction, atonality, and atemporality, however, are merely stylistic manifestations of modernism, not its essential nature. Although this is not the place to elaborate a theory of modernism, or indeed to represent those aspects of such a theory which have already found their way into the literature of the other humanist disciplines, it can simply be said that the symptoms to which one has just pointed suggest a displacement of man away from the center of his world. [...] Modernism, as a sensibility based on the fundamental displacement of man, represents what Michel Foucault would specify as a new episteme. Deriving from a non-humanistic attitude toward the relationship of an individual to his physical environment, it breaks with the historical past, both with the ways of viewing man as subject and, as we have said, with the ethical positivism of form and function.' Peter Eisenman, 'Post-Functionalism', in Architectural Theory Since 1968, ed. Michael Hays (Cambridge: MIT Press, 2000), 238.
- This shift in balance has produced a situation whereby, for the past fifty years, architects have understood design as the product of some oversimplified form-follows-function formula. This situation even persisted during the years immediately following World War II, when one might have expected it would be radically altered. And as late as the end of the 1960s, it was still thought that the polemics and theories of the early Modern Movement could sustain architecture. The major thesis of this attitude was articulated in what could be called the English Revisionist Functionalism of Reyner Banham, Cedric Price, and Archigram. This neo-functionalist attitude, with its

idealization of technology, was invested with the same ethical positivism and aesthetic neutrality of the pre-war polemic.' Peter Eisenman, 'Post-Functionalism', in *Architectural Theory Since* 1968, ed. Michael Hays (Cambridge: MIT Press, 2000), 237.

- 6 Mario Gandelsonas, 'Linguistic in Architecture', in *Casabella* 374 (1973): 17–30.
- 7 'In House I through House VI (1969–75), Eisenman follows the modernist strategies of distancing, defamiliarization, and deployment of an alienation effect (from Bertolt Brecht's Verfremdungseffekt) to reorient our apprehension of architectural form away from standard perceptual conventions. [...] Eisenman situates his work in a line descending from modernist defamiliarization practices, producing in the early house a state of estrangement that corresponds to the absolute divorce of form from all reference to materiality, use, and association'. Michael Hays, Architecture's Desire: Reading the Last Avant-garde (Cambridge: MIT Press, 2010): 55.
- When the owner first enters his house he is an intruder: he must begin to regain possession to occupy a foreign container. In the process of taking possession the owner begins to destroy, albeit in a positive sense, the initial unity and completeness of the architectural structure... By acting in response to a given structure, the owner is now almost working against this pattern. By working to come to terms with this structure, design is not decoration, but rather becomes a process of inquiry into one's own latent capacity to understand any man-made space.' Peter Eisenman, 'To Adolf Loos & Bertolt Brecht', in *Progressive Architecture* 55 (1974): 92.
- 9 Peter Eisenman, 'Interview with Iman Ansari', in *The Architectural Review*, April 2013, http://www.architectural-review.com/view/interviews/interview-petereisenman/8646893.article, last accessed 20 February 2014.



# **Archaeology**

In the Cannaregio project, we witness a shift that begins the cities of artificial excavation and establishes the theme that henceforth characterizes Eisenman's work: the movement from structure to site to text, or, better, from the structuralization of the object, to the textualization of site.

Michael Hays

In order to describe his approach to the History of Ideas, at the beginning of the 1960s the French philosopher Michel Foucault introduced an analytical method to better comprehend any system of thought: archaeology. By denying the traditional tendency to read linear narratives of progress, Foucault aimed with archaeology to unveil those layers of events that traditional history has buried: history was in fact no longer to be conceived of as a monolithic block, or as a positive science, unitary culture or universal message. On the contrary, it was a tangled web of different discourses and multiple differences. The aim of any archaeological method is not to read history in order to discover the truth or the spirit of a given period, because any period in history presents several pasts, several forms of connexion, several hierarchies and several technologies.

If the History of Ideas is conceived of as the continuous sequence of origin, continuity and totalization, archaeology describes a different method: it works with fractures and discontinuities. However, archaeology is neither a sociology, nor an anthropology: any archaeological comparative approach is not aimed at reducing the complexity of the different discourses to unity; rather, it aims to split the differences and recognize the forces that act on reality. The effect it produces is therefore that of a multiplier and not a unifier.

The Spanish philosopher José Luis Pardo emphasizes that the archaeologist differs from the historian on account of his vision of time: time for him is 'spatialized', because anteriority and posteriority derive from the strata of sedimentation. In other words, time is inferred starting from space. To paraphrase Deleuze and Guattari one may say that, from Cannaregio onwards, Eisenman would experience a different notion of time:

This is a stratigraphic time where 'before' and 'after' indicate only an order of superimpositions. Certain paths (movements) take on sense and direction only as the shortcuts or detours of faded paths; a variable curvature can appear only as the transformation of one or more others; a stratum or layer of the plane of immanence will necessarily be above or below in relation to another, and images of thought cannot arise in any order whatever because they involve changes of orientation that can be directly located only on the earlier image.

[...] Philosophical time is thus a grandiose time of coexistence that does not exclude the before and after but superimposes them in a stratigraphic order.<sup>2</sup>

At the turn of the 1980s, Eisenman began to work as an archaeologist by introducing into his work different conceptual and physical strata. He borrowed from Foucault the possibility of operating with discontinuities, fractures and breaks, and turned them into the discursive elements of his new approach. At the same time, Foucault's idea of archaeology offered Eisenman the pretext for working with sedimentation and stratification, in order to build an artificial-arbitrary narrative for his projects.

As described in the previous chapter, at the end of the 1970s a series of events led Eisenman to a general pessimism about architecture and his professional activity: the project for *House X* was rejected by the client; some of his friends, such as Michael Graves, started to venture into post-modernism in a search for new inputs and the activity of the IAUS proceeded slowly, due to financial problems. At that time Eisenman could be considered neither a credible architect (on account of having few built works), nor an authentic researcher (considering his provocative articles). As such, it was time for him to rethink the theoretical foundations of his discourse, and open up to new reflections. Archaeology offered him the chance to overcome this personal and professional impasse and in 1978, with the project for *Cannaregio*, a new phase began, in which past and present merged.

Through my psychoanalysis sessions I realised that what was wrong with my architecture was that it wasn't from the ground, from inside the unconscious, beneath the surface. So the first evidence of this occurs in Cannaregio where for the first time I do a project that is totally in the ground. And it's not only in the ground, it's also urban. But it's also not real.<sup>3</sup>

The Futility of Objects, written in 1984, was an article that worked as a manifesto for this new phase: by recognizing the failure of modern paradigms, Eisenman suggested that 1945 was a turning point for mankind. If the present had traditionally been seen as the bridge between past and future, for Eisenman two opposing poles now characterized the present: memory and immanence, seen as the presence of the end, the end of future. So the future no longer represented continuity and progress, but had instead become a dramatic condition.

One of the most important arguments elaborated by Jacques Derrida in *Of Grammatology*, is that another form of memory is possible: a concept of memory that does not deal with fragments or abstractions, but with the idea of trace. Trace was a concept in which Eisenman had always been interested, as the *Houses* 

demonstrate but now, with the constant reference to Charles Sanders Peirce (who distinguished the icon, the symbol, and the index – the icon has a visual similitude to its object, the symbol establishes a visual convention for the relationship of the symbol to some object, and the index functions as a record or a trace), Eisenman also explored the potential offered by Derrida's philosophy. The process of design was now aimed at letting the canonical relationships between an object and its structure explode, achieving a general complexity.

In the introduction to the English version of *The Architecture of the City* by Aldo Rossi, Eisenman extracted a fragment from Derrida's text *Writing and Difference*, in which the word skeleton appears. For Eisenman the skeleton meant an object identical to its structure: a system that responded only to itself: once ruined, the object became a simulacrum of a process.

Eisenman took up these concepts and tried to apply them both to critical analysis and the architecture project. Even Piranesi's *Campo Marzio* (1742) offered an opportunity to reflect upon trace and memory. By comparing these plans with Nolli's *Pianta di Roma* (1748), Eisenman established a theoretical basis for an urbanism based on memory, instead of nostalgia. In this strategy one may detect what Sanders Peirce defined as index; that is, a superposition of elements that mixes reality and fiction.

If, between 1966 and 1985, Eisenman had been working on the idea of architecture as deep structure, autonomy and interiority, it was only in 1978 that the American architect inaugurated the cycle of the so-called *Cities of Artificial Excavation*. The excavation was to be the methodological pretext for posing new questions: scaling, grafting and superposition. Architecture was articulated according to a process of invention: if the future had no hope, Eisenman would build an artificial past.

The first project of the *Cities of Artificial Excavation* was *Cannaregio*, Venice. Here the historicity of the proposal was evident, in the sense that it reflected the conditions and the Zeitgeist of the time. *Cannaregio* was the first project to use what might be called an external text, as Eisenman wrote in *Diagram Diaries*. The interiority of the *Cardboard Architectures*, represented by the nine square grid and the axonometric drawings, was now replaced by the exteriority of these new projects, generated by the influence of external impulses like site and history. If interiority was no longer stable and pure, Eisenman began to look at the ground, an assumed architectural ground, in order to question its traditional role.

As described by Alejandro Zaera Polo, through the use of the grid of Le Corbusier's hospital in Venice, as well the Mercator Grid in Berlin, Eisenman pursued a different kind of effect: if the artificiality of his early research relied on the focus upon syntactic organization and abstraction of architectural elements, in the *Cities of Artificial Excavation* Eisenman was concerned with the use of patterns or organizing systems that were liberated from any possible content.<sup>4</sup>

In 1978 the Municipality of Venice organized an international workshop in order to secure some proposals for *Cannaregio*, a western quarter characterized by ancient slaughterhouses. In 1962, in order to replace these constructions, the Municipality had planned to build a new hospital, and asked Le Corbusier to present a project.

The *Venice Hospital* was one of his last projects, but it was never built. Years later, within the frame of an international symposium, the Faculty of Architecture of Venice (IUAV), invited Eisenman to present his personal vision for *Cannaregio*, and the American architect worked on the interpenetration of two different sources: on the one hand *House XI*, which represented for him an important field of interest from the theoretical point of view; on the other hand, Le Corbusier's Hospital grid, converted by Eisenman into the conceptual basis of his project.

The American architect compared Cannaregio's urban strategy with Pope Sisto V's Instauratio Urbis. Whilst Domenico Fontana ideated the renovation of Rome through the positioning of a few precise elements (such as obelisks, fountains and so on) that could extend their impact to the whole urban environment, Eisenman's strategy consisted of using the void as the main material for the project and extending Le Corbusier's Hospital grid to the given site. (As we shall see, Eisenman's excavations are comparable to Domenico Fontana's obelisk in their function of generating new spatial relationships between architecture and the city.)

Even though Eisenman had always been concerned with the production of objects, because his horizon is architecture and not the city, and because he never dealt with the urban fabric of the cities in which he operated, Cannaregio seemed to demonstrate the reverse: the city became for Eisenman an occasion for reflecting upon other issues (memory, trace, figure/ground and so on). His projects stand out from the fabric of the city, in order to demonstrate the discontinuous and fragmented character of history.

In Venice, Eisenman presented an urban palimpsest based on the superposition of three different texts. Thanks to the technique of excavation, they represented three different kinds of void.

The first text represented the emptiness of the future, and was based on a double operation: Le Corbusier's *Hospital* project, considered as one of the last heroic episodes of Modernism, was translated to the new site in order to serve as an artificial ground. Then, the real ground was perforated by a series of empty spaces: black holes manifesting the emptiness of rationality.

The surface of the ground was conceptualized as artificial. The pattern defined by Le Corbusier's Hospital grid invaded and informed the whole project area; here 18 squared excavations symbolized the end of Modernity, the failure of any humanistic perspective. But these perforations were also a critical response to the nature of the *Cannaregio* project: Venice was losing its population and therefore did not need housing. The strategy of the Municipality appeared totally insane to Eisenman. The Eisenmanian grid now overlays Venice's urban fabric, and in a sense completes Le Corbusier's project.

Cannaregio became Eisenman's first project in which site became relevant. The Venice Hospital's grid, once inserted in the new context, needed to be adapted to the topographic features of the site. A geometric abstraction faced the irregular fabric of the city – abstraction vs pragmatism. By working on the interpenetration of the two poles, Eisenman stressed how the city had no meaning – drawing was what writing represented for language; that is, a tool to stimulate imagination and envision a critical scenario.

The second text was defined by Eisenman as representing the emptiness of the present, and consisted of a set of objects (his *House XI*) that contained nothing. They were just a simulacrum, solid blocks detached from life. These objects would only leave a trace over the ground: the trace of their definitive separation from life.

So *House XI* was reused by Eisenman to manifest his anxiety about the present, and was presented in three different dimensions. Each scale was nested inside the next largest scale, like a series of Russian dolls. But they were no longer architecture, either in terms of dimension or of denomination. For Eisenman, they could be a house, or a grave or anything else.

The third text was depicted as the emptiness of the past. It was constituted by a diagonal cut that worked at the same time both as a surface and as a topological axis for the objects displayed over the ground. The cut was of course a laceration, as it showed the presence of lower layers that could not be repressed or dissimulated beneath the rationality of an axis.

In using Le Corbusier's Hospital grid for his project, or inserting his *House XI* into a new field of forces, Eisenman was celebrating an impossible future, in which the context needed to be continuously reinvented. *Cannaregio* invites us to rethink the ideological hegemony of form in architecture, as well the acceptance of the geo-morphological conditions of the site. By defining a disjunction between form and content, *Cannaregio* represented an important linguistic turning point for Eisenman: with this project he would dismantle his previous theoretical apparatus in order to question new challenges. The autonomous character of architecture was for the first time contaminated by an artificial narration, in which the context was not a fixed and stable element, but the starting point of a wider process.

Instead of reproducing the existing Venice, or a mimetic city, Eisenman envisioned a fictitious Venice. By discovering the importance of context in his design strategies and through an arbitrary and virtual interpretation of the site, he realized for the first time in his career a conceptual-critical reconstruction. Ignoring the physical constraints imposed by the context, Eisenman felt the necessity of reinventing it: which is why he overlaid within the project different traces proceeding from the present and the past.

To some extent, Eisenman was interested in the evolutionary process of the physical traces left by the previous buildings. It did not matter whether they were real projects or whether they were built or not built, and in this sense there existed certain analogies with his previous interests at the time of the *Cardboard Architectures*; what really mattered in Eisenman's new phase was the idea of trace as a key, the potential of which needed to be unveiled and exploited.

If the notion of excavation comes from Heidegger, it is even clearer how the whole *Cannaregio* project was permeated by Jacques Derrida's philosophy. In Eisenman's theoretical turn, history and memory became the instruments for justifying formal and conceptual decisions. Despite the pessimism of his proposal, in which he depicted a future already written, characterized by pessimism and incertitude, *Cannaregio* represented a turning point in his personal biography, as it introduced for the first time some interpretative clues that are discernible in many of his subsequent projects, although without the same credibility or urgency.

In 1982, Peter Eisenman decided to dedicate most of his time to professional practice: so he abandoned the direction of the IAUS, and ceased work on the magazine *Oppositions*. In the same year, the American architect won the IBA competition to build a housing complex in Friedrichstrasse, Berlin, near the famous Checkpoint Charlie.

As we know, history for Eisenman is not linear, but is constituted by presence and absence, permanence and loss. So, in this sense, Berlin was the ideal place to test his ideas: the presence of the Wall and the fragmentation of the city expressed the crisis of history well; or rather, they expressed the end of history, as conceived by the Enlightenment.

In the description of the project, Eisenman focused on Berlin's condition as a museum-city, with its memory of an interrupted history, in which the past was partially hidden or repressed under the impetus of two respective propagandas (capitalism and communism). In abandoning the mechanisms of his *Cardboard Architectures*, Eisenman could finally act as an archaeologist in order to discover stratified traces in the ground and turn them into visible architectures.

The given site for the new housing program was at the intersection between the Wall and Friedrichstrasse. Eisenman was obliged to operate in the borderland between a glorious past and a dramatic present. The site was next to a three metre high section of the Berlin Wall: so the project walls became a ground of the same height. The entire strategy of intervention was articulated according to a dual goal: on the one hand to describe the peculiarity of the site by making recognizable any specific trace of the past and, on the other, to stress both presence and absence in the process of design. Architecture was to embody the dichotomy between memory and anti-memory, place and non-place. Eisenman sought in Berlin an alternative notion of memory.

There are at least two different clues to a reading of the building in Friedrichstrasse (1982–85). The first is to consider the *Checkpoint Charlie* building as a monument to anti-memory, where memory tries to deny the existence of the Wall in order to recover the past according to a nostalgic and sentimentalist approach. However, Eisenman's notion of anti-memory did not celebrate the past.

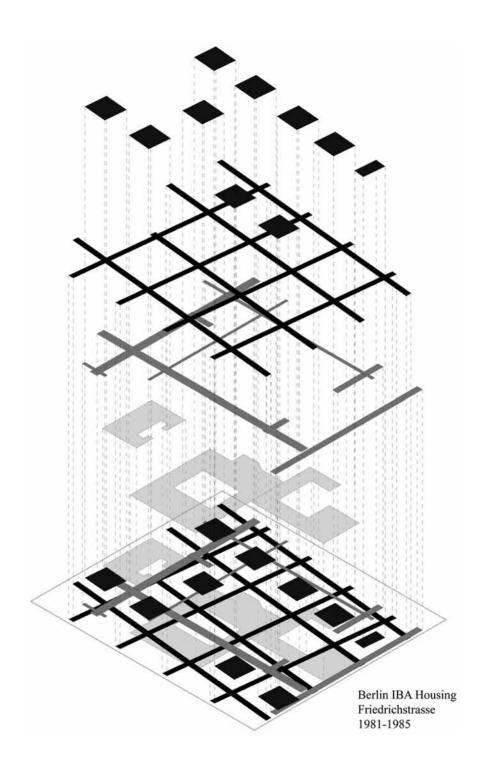
Anti-memory pursued neither progress nor a perfect future.

Anti-memory did not imply historicism or formalism.

Anti-memory did not mean mimetism.

Anti-memory was opposite to but symmetrical with memory, as it worked on the production of a frozen fragment with no past and no future.

The building in Friedrichstrasse represented an evolutionary step from the *Cannaregio* project: instead of an operation of infilling, Eisenman once again worked on the superposition of different layers-texts. In this case, the layers he manipulated were Berlin's eighteenth century urban grid, the twentieth century fabric, and the current one. This first operation of merging was overlaid by another system: the Mercator grid.



3.1 Archaeological layering, Berlin 1981–5. *Source*: Stefano Corbo

As in Cannaregio, the juxtaposition of the different layers was possible thanks to a process of excavation that was both literal and metaphorical. Excavation also expressed a critical approach towards the existing urban fabric, with its rigorous grid: where the present is uninteresting, it is good to find a compelling alternative.

The project engaged a critical and dynamic relationship with the historical city, as the concept of site interacted with other influences (the presence of the Wall, the several urban grids and so on). Whereas, in Cannaregio, the use of *House XI* somehow represented the problematic transition between two different phases, in Berlin Eisenman forgot his personal modernist stylistic apparatus to focus upon the latent potential of history. What remained of his early work was the presence of the square as a generating element and a system of the L-shaped morpheme that Eisenman used in some of his *Houses*. If the footprint of the building was like a fossil recently discovered by an archaeologist, the elevations worked as stratigraphic sections, through which it was possible to decipher the history of the site and its process of sedimentation. By operating a vertical excavation of the building, it would be possible to perceive all of the different layers constituting Berlin.

The other way to look at the *Checkpoint Charlie* building deals with nostalgia. The project for Friedrichstrasse can in fact also be read as a critical response to post-modern interventions in historical cities, based on nostalgia, whose result was a general *museification* of their collective spaces. Against such a tendency, Eisenman rejected the continuity between past and present, in order to present a multi-layered project, in which historical and fictional elements were merged. For Eisenman memory and mimetism constituted an irreparable dichotomy.

For this reason, although the project had to deal with the ruins of some buildings bombed during World War II and with the presence of the Wall, Eisenman did not repair, reuse or restore. Instead, in avoiding nostalgia, he opted for cancelling former hierarchies and created a new palimpsest based on excavation, substitution, and superposition. At the end of the process of design, we may say that Eisenman invented an artificial Berlin, based on the archaeological excavation of the past and on abstract grids that he superimposed on the real site. The hybrid and anomalous character of this operation permitted Eisenman to take into account the history of the city and its dramatic condition (in the 1980s the Wall was in front of the building), while at the same time offering his own interpretation. The abstraction of his geometrical experimentation now found its *raison d'être* in history. Thanks to a process of excavation, all of the grids used by Eisenman were converted into tangible traces: they became corridors, hallways or galleries. The Berlin project liberated all its symbolic power, and by overlying past and present, invited reflection on the profound meaning of memory.

In Friedrichstrasse, then, Eisenman took a leap forward: he made explicit what was still latent in Cannaregio: the grid worked like a diagram, managing the complexity of the project, whilst at the same time supporting all the functions of the building.

The City of Culture, in Santiago de Compostela (1999), is the most recent example of Cities of Artificial Excavation, even though here Eisenman for the first



3.2 Peter
Eisenman, Berlin
IBA Housing,
Friedrichstrasse,
Berlin, Germany,
1981–5.
Source: http://
commons.
wikimedia.org/
wiki/File:Berlin,
\_Kreuzberg,\_
Friedrichstrasse
\_43–44,\_Haus\_
am\_Checkpoint\_
Charlie.jpg

time explicitly worked on materiality and figuration. Eisenman's proposal was derived from an international competition in which he participated along with Rem Koolhaas, Daniel Libeskind, Jean Nouvel, and others. His preoccupation with producing an iconic building, capable of representing the ambitions of local political authorities consumed Eisenman and, as we shall see, obliged him to seek a kind of spectacularization of the formal processes.

On the one hand the project recalled some of his early *Houses* for its process of implosion (in Santiago it would be a giving of the building back to nature); on the other hand, it was just the coherent development of certain concerns already displayed in the 1980s (especially about the figure/ground principle). Analysing this project, Luis Fernández Galiano defined it as a tactile topography, constituted by the different paths Eisenman had been exploring over the years.

To some extent one may say that all his previous formal research converged in Santiago: the syntactic obsession of the 1970s, represented here by the deforming orthogonal grid; the artificial excavations of the 1980s, reproduced, as in Cannaregio, through the displacement of the Santiago medieval urban fabric to the site; and all the investigations of the 1990s concerned with folding, interpreted as a hybrid project, that it was neither a ground nor a figure.

In fact, the *City of Culture* represented the next episode after Cannaregio and Berlin. Here, once again, superposition was the key to understanding the genesis and the evolution of the project. In Santiago de Compostela, through the abstraction of historical symbols (such as the *concha del pelegrino*), Eisenman overlaid different strata: some of them were real and belonged to the history of the city (the medieval grid); others were manipulated by the architect in order to inject them into the plan of the old city and achieve a new genetic profile, to paraphrase Eisenman's words.

Anthony Vidler has focused attention on Eisenman's project in order to stress the limits of such an approach: in Santiago diagrams were downplayed, because they were replaced by a new interest in materiality. For Vidler, Eisenman used materiality not to represent or make manifest part of the process of design, but rather to produce affect, a perceptive reaction in the subject. In this sense Santiago marked the transition from diagram to diagrammatic.

Eisenman's recent interest in representation was articulated according to his definition of *unnatural nature*: through computational processes, it is possible to create something that seems like nature (the building looks like a hilltop), but is ultimately purely artificial. So the aim of the design process became that of imitating a natural process, without representing nature. *Unnatural nature* is not nature but is rather a man-made operation.

The Santiago medieval general plan, the seashell (one of the symbols of the city) and the diagrammatic scheme of the pilgrimage routes into Santiago, were the diagrams used by Eisenman to generate his project. Thanks to the operations of deformation and rotation, the American architect overlaid the city grid onto the other two diagrams, transforming the overall composition into a dynamic body, made of different flows. There was no distinction between figure and ground: the City of Culture was perceived as the artificial result of a telluric movement. Eisenman borrowed the Santiago medieval plan simply to use it as the originating agent of the design process, but, once merged with the other layers, nothing remained of the ancient dichotomy between figure and ground. If, at the beginning, the difference between building and streets was distinguishable, at the end of the process one could not separate public from private, exterior from interior, and so on. At the same time, any clear separation between the architecture and its context was negated. Boundaries became blurry. With this project, Eisenman attempted to question all the millenary dichotomies internal to architecture, and presented a different perspective with regard to the relationship between architecture and city.

The pilgrimage routes helped to deform the original Cartesian grid. Like the unfolding of a geological site, the *City of Culture* appeared in its plastic and dramatic evidence. It worked as a monolithic block fractured by different routes. The project was actually crossed by five green corridors, reminiscent of the five streets of the ancient city, as well as of their traditional characterization in the form of *rueiros*.

## Presenting his own project, Eisenman argued that:

The City of Culture, by expressing the implosion of our traditional millenary culture, seeks a new form of urbanism: buildings are literally carved in the ground, therefore architecture and topography merge. In a post-semiotic sense, in which the exigency of separating the sign and the signified has been forgotten, the City of Culture in Santiago proposes the process of genetic codification as the tactile answer to such new logic.<sup>5</sup>

By using the definition of topographic architecture, Eisenman aimed to reject the opposition between figure and ground, and review the traditional dichotomy between tectonics and stereotomics, to paraphrase Gottfried Semper: in fact the building distorted and modelled by different agents, was both stereotomic and tectonic. Its configuration was camouflaged within the granitic landscape of Galicia, and such fusion of ground and figure allowed the definition of a peculiar configuration at the border between geological erosion and archaeological excavation.

Instead of considering the project as the fragmented sum of several independent buildings, Eisenman worked on a new form of urbanism, based on the interpenetration of architecture and topography. The single constructions derived from such a process were in three pairs: the *Museum of Galician History* and *Center of New Technologies*; the *Theatre* and the *Administrative Centre*; the *Library* and the *Hemeroteque*.

In the *City of Culture*, Eisenman also paid homage to his friend John Hejduk (New York, 1929–2000): in fact, he included in the project two botanical towers designed by his colleague and destined for a park in Belvis. These towers had never been built and Eisenman asked the Santiago Municipality to insert them into the site of the *City of Culture*. Hejduk's towers, consisting of steel skeletons clad with different materials (one in glass, the other in granite), were to work as an information point and a reception. After almost 15 years, the *City of Culture* remains partially closed to the public.

Despite such promising premises, the *City of Culture* project revealed Eisenman's superficiality. If it is true that this project contained the same theoretical basis as *Cannaregio* and *Checkpoint Charlie*, and that, as stated by Fernández Galiano, the project was a condensation of Eisenman's entire theoretical and conceptual repertoire, one cannot deny that what Eisenman proposed here was a formalist pastiche, based on banal allusions and facile metaphors (the pilgrimage routes, the seashell and so on). In Santiago the process of layering was not sufficient to enable the rethinking of the figure/ground principle: Eisenman needed to take inspiration from geology, and transform the whole project into a sort of fossil, partially interred, that had been just brought to light.

So, the difference between this project and the *Cities of Artificial Excavation* of the 1980s is that in the later work, Eisenman contaminated his concerns about figure and ground with a more recent interest in complex geometries and folded and warped surfaces. In other words, the process of layering was matched with a quasi-figurative preoccupation, which led Eisenman to work on the materiality of the building. Rather than achieving a kind of 'Bilbao effect' (which was probably



3.3a Peter
Eisenman, City of
Culture, Santiago
de Compostela,
Spain, 1999–2013.
Courtesy of
Xornal Certo.
Xornal Dixital de
Barbanza e Noia.
www.certo.es

the real objective of the Galician politicians), what emerged in Santiago after the process of design was an example of Land Art: a sort of *Grande Cretto* after Alberto Burri's work in Gibellina, Italy, a topographic monument fragmented by pedestrian streets and other traces derived from previous superpositions.

The *City of Culture* in Santiago was, to paraphrase Stan Allen, a landform building: the conceptual rigidity of a process of layering was abandoned in favour of an interpenetration with expressive-metaphoric elements (the *concha*, for example, or the final idea of the fossil). In this case the superposition of different patterns, concepts and gestures was redundant, and only generated confusion and incommunicability. Unfortunately, the arbitrary character of certain design decisions, together with an underestimate of the social and economic costs of the operation, would be common elements in many of Eisenman's later works.

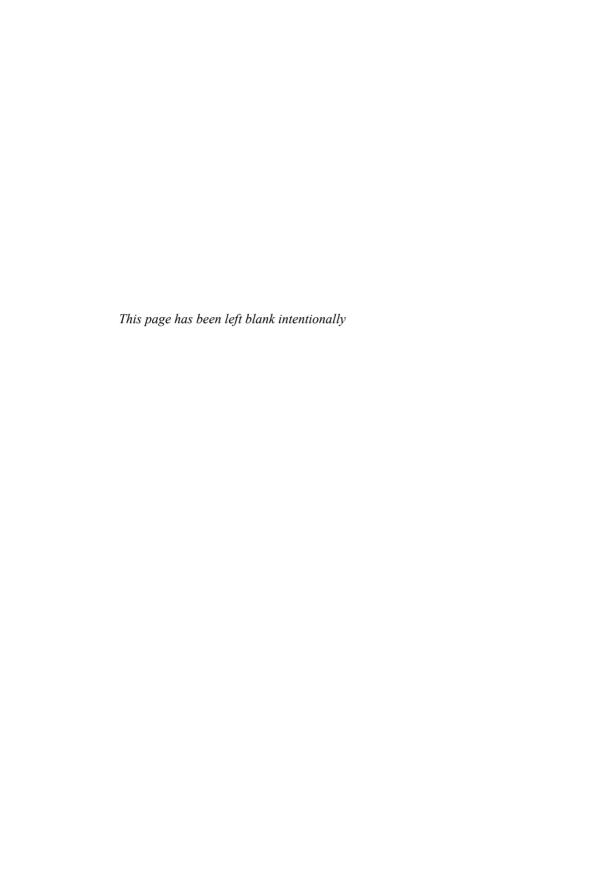
### **ENDNOTES**

- 1 Michael Hays, Architecture's Desire. Reading the Last Avant-garde (Cambridge: MIT Press, 2010): 59.
- 2 Gilles Deleuze and Felix Guattari, ¿ Qué es la filosofía? (Barcelona: Anagrama, 2003): 58–59.



- 3 Peter Eisenman, 'Interview with Iman Ansari', in *The Architectural Review*, 2013. http://www.architectural-review.com/view/interviews/interview-peter-eisenman/8646893. article, last accessed 20 February 2014.
- 4 'The grid of Le Corbusier's Venice Hospital, the Mercator Grid, and other concrete but paradigmatic fields became constitutive parts of an improbable palimpsest an artificial excavation from which the projects were generated. If the artificiality of his early research relied largely on the abstraction of the architectural elements in their most reduced state, their disconnection from associate contents, and the focus on their syntactic organization, in this following phase, Eisenman addresses the problem of using concrete organisations or entities that have been systematically depleted from[sic] any content. His proposal of the graft as a technique of inorganic composition, and the associated transformations of the graft, such as juxtaposition, scaling, displacement and rotation, become again the instrument to hollow these organizations out of their associated contents'. Alejandro Zaera Polo, 'Interview with Peter Eisenman', in El Croquis 83, 1997: 54–5.
- 5 Peter Eisenman, Contropiede (Milano: Skira, 2005): 164.

3.3b Peter
Eisenman, City of
Culture, Santiago
de Compostela,
Spain, 1999–2013.
Courtesy of
Xornal Certo.
Xornal Dixital de
Barbanza e Noia.
www.certo.es



## **Deconstruction**

Deconstruction itself resembles an architectural metaphor...It is not simply the technique of an architect who knows how to de-construct what has been constructed, but a probing that touches upon the technique itself, upon the authority of the architectural metaphor and thereby constitutes its own architectural rhetoric...One could say that there is nothing more architectural than deconstruction, but also nothing less architectural.<sup>1</sup>

Jacques Derrida

In December 1976, the American artist Gordon Matta-Clark was invited to join a collective exhibition at the Institute for Architecture and Urban Studies (IAUS), entitled *Ideas as Model*.

The title of the exhibition was, in a sense, emblematic of the works displayed there and of the cultural climate of the event.

Matta-Clark, an artist at that time detached from the New York architectural establishment, opted for provocative action: before the official opening, he borrowed a compressed air gun from his friend Dennis Oppenheim and shot at the windows of the exhibition space, in order to take some photographs of the performance and then exhibit them along with other, similar pictures. Controversially, many of these pictures proceeded from buildings whose designers had been invited to join the exhibition: Richard Meier, Giovanni Pasanella, Prentice and Chan Ohlhausen. The director of the Institute, Peter Eisenman, ordered the replacement of the glass as quickly as possible in order to permit the exhibition's vernissage, and deplored Matta-Clark's action by comparing it with the Nazi *Kristallnacht*.

Despite sharing a background with the artists featured in the exhibition (Matta-Clark studied architecture at Cornell University) his provocative performance was intended to focus attention on the urban renewal projects in the South Bronx. His was a polemical attack on the architectural establishment, represented by the IAUS. He was inviting Eisenman, the Five Architects, and other colleagues to shift their attention away from obsessive self-referential discussions focused on

architecture to look at the social problems affecting New York at the time. Indeed, it is true that, at the beginning of their activity the IAUS had been involved in several urban projects (in Brooklyn, for example), but subsequently elements in the association had gradually preferred to avoid social engagement in favour of more academic and theoretical concerns. Thus the dissonance between Matta-Clark and Eisenman was not only generational, but also based on a critique of the latter's disengagement from reality.

Many years later, at the time of his deconstructionist infatuation Richard Serra was to say: 'Peter Eisenman has become a defender of Gordon Matta's stories; so all that Eisenman supported now is actually usurped, which is the reason why I see Eisenman as someone who takes advantage when the work is useful and the fact is that Gordon Matta was for one decade precursor of all these deconstructionists.'<sup>2</sup>

The origin of Eisenman's interest in deconstruction certainly did not lie in Matta-Clark's work, but their controversial relationship can go some way towards explaining how, for Eisenman, deconstruction came to occupy a central role in the definition of his theoretical corpus. It was in fact the interpenetration of two different agents that led the American architect to explore other territories at the beginning of the 1980s; on the one hand, he discovered the potential offered by Jacques Derrida's Of Grammatology (1968) to articulate his architecture as a multiple text; on the other hand, thanks to such influence, deconstruction would constitute the last step of a process of investigation that had begun with the analysis of many Venetian palazzos, and which was characterized by his idea of decomposition.

Eisenman would also employ decomposition in various projects, such as *Cannaregio* and *Berlin IBA*, but only in Verona, for the *Romeo and Juliet* project, could one say that Eisenman's pursuit of a deconstructivist stance was achieved.

These efforts, though controversial and ambiguous, achieved mainstream credibility with the 1988 *Deconstructivist Architecture* exhibition at MOMA where, for the first time, the work of a new wave of architects, interested in transposing deconstruction onto architecture, was presented. Apart from Eisenman, several distinguished figures participated in the event – Frank O. Gehry, Rem Koolhaas, Zaha Hadid, Bernard Tshumi and so on.

The central notions of deconstruction, as described by Heidegger, and then by Derrida, became the operative field of these architects: some of them simply conceived of deconstruction as an architectural metaphor; others realized quite early that structure, ground, ornament and so on could not produce architecture, but only facile analogies, or, at best, reproductions.

For Mark Wigley the relationship between architecture and philosophy is something more profound that goes beyond a simple transliteration: philosophy draws an architecture, presents a certain theory or understanding. Philosophy represents itself as architecture, it translates itself as architecture.

For Derrida, the term 'deconstruction' was a translation of two of Heidegger's terms: *Destruktion*, meaning not a destruction, but more precisely a destructuring that dismantles the structural layers in the system; and *Abbau*, meaning to take apart an edifice in order to see how it is constituted or deconstituted. In order to



display his idea of deconstruction, Derrida used an architectural figure: *the Tower of Babel*. It constituted the symbol of translatability, because the language of philosophy is not univocal; but the tower was also a symbol of deconstruction, due to its unfinished condition. Deconstruction defined the inability of philosophy to fix a stable ground, a complete structure: 'the Tower of Babel does not merely figure the irreducible multiplicity of tongues; it exhibits an incompletion, the impossibility of finishing, of totalizing, of saturating, of completing something on the order of edification, architectural construction, system and architectonics.'<sup>3</sup>

Was deconstruction for Eisenman the remedy for instability and incertitude?

To paraphrase Jeffrey Kipnis, we could link Eisenman's interest in deconstruction to three principles: the first is that the meaning of any work is undecidable; the second is that in as much as architects aspire to the meaningful, conventional ways of working, whether radical or conservative, they always seek to repress undecidability; and the last is that it is both possible and desirable to work in such a way as to respect undecidability, that is, to produce a work which is neither meaningful nor meaningless. For Eisenman, deconstruction was neither radical nor conservative (that was not what really interested him). It was not about destroying, but about renovating and re-writing. Eisenman aimed to resist any possible meaning in architecture, but without proposing any new order.

4.1 Daniel Libeskind, *Jüdisches Museum,* Berlin, 2001. *Source*: Stefano Corbo

So, if deconstruction means instability, architecture is the ideal field of experimentation because, contrary to other disciplinary fields — economics, politics, aesthetics and so on — it represents stability.

On several occasions Jacques Derrida stressed how architecture was the most effective way of testing deconstruction, as the latter was not a method of reading a text or analysing a concept; rather deconstruction deals with institutions and sociopolitical structures. To some extent architecture works in the same way: it requires long processes and constant negotiations. Derrida was interested in architecture because it resisted the project of deconstruction: for him architecture will always have a meaning. He questioned the hegemony of metaphysics in philosophy, but seemed convinced that it would remain in architecture.

Through Derrida's metaphysics of the presence, Eisenman tried to overcome the question of representation in architecture: there was to be no originary signified, no transcendental signified. Figure thus becomes the manifestation of absence through presence. So Eisenman's new challenge became that of working on this paradox and turning it into real architecture. In his vision, the architect had to seek new methods capable of hosting the organization of a textual reading. Deconstruction also offered Eisenman the possibility of finally rethinking the figure/ground principle that he had faced both in his investigations on Piranesi and Nolli, and in projects such as the *Cities of Artificial Excavation*. By dismantling any traditional approach based on the distinction and clarification internal to any system, Eisenman now felt free to manipulate figure and ground in order to achieve an alternative to the dialectics between form and content: in other words, as argued in *Diagram Diaries*, he could now produce figuration without conscious motivation.

Eisenman obsessively attempted to dismantle the aesthetic and representative components of architecture because, in his opinion, they represented an obstacle to comprehending architecture's real status. That was why instability was considered capable of helping to re-orient architecture along unexpected lines. As in some of his former projects, the concepts of presence/absence, or the process of scaling, underlined the effort to produce an alternative notion of meaning in architecture. For this reason deconstruction fascinated Eisenman as it allowed him once again to question his erratic trajectory. Through deconstruction, Eisenman tried to undermine the formal basis of architecture, by finding an exit strategy in another territory: philosophy and for this reason, in *Why Peter Eisenman Writes Such Good Books*, Derrida acknowledged that Eisenman's theoretical reflections were intended to open a space in which two kinds of writing would coexist: the verbal and the architectural.<sup>5</sup>

Furthermore, Derrida, commenting upon his collaboration with the architect, stressed another interesting point that is useful in comprehending Eisenman's instrumental use of deconstruction: it dealt with the role of anthropocentrism in architecture. If Modernism considered function as the generative element of architecture, for Eisenman function was just a superficial manifestation of a deeper stimulus: the manifestation of an idea.

Peter Eisenman ventured into a new decade with two radical projects: *Romeo and Juliet* (Verona, 1985) and *La Villette* (Paris, 1987). Once again, these two projects represented a paradigm shift in his biography.

The mid-1980s were characterized by the winning of competitions (IBA Berlin Housing, for example), but also by desperate efforts to keep his practice operative. It was in fact about to fold, and Eisenman began to use any possible stratagem to secure new jobs.

In a further departure from his *Cardboard Architectures*, Eisenman followed the path inaugurated with the *Cities of Artificial Excavation*, in which architecture was an intellectual process of superposition. After reading Derrida, he saw that architecture could only exist in relation to the reader, who became the real protagonist of any design process.

The *Romeo and Juliet* project for Verona represented, for Eisenman, the definitive transition from de-composition (as described in *The Futility of Objects*) to de-construction and opened up the conceptual possibility of his later collaboration with Jacques Derrida at *La Villette*. Invited by Aldo Rossi to the 1986 Venice Biennale, Eisenman presented: *Moving Arrows, Eros and Other Errors: Romeo and Juliet*. This was the first project to use an outside literary or scientific text, other than site histories or mathematical figures.

As in Berlin for the *Checkpoint Charlie* building, the project aimed to unveil the history of the site in order to re-construct an artificial narration, constituted from architectonic metaphors.

The site was characterized by the ruins of what are called the *Romeo and Juliet castles*, visible from the highway between Verona and Vicenza. The story of the two young lovers offered Eisenman the possibility of building his personal interpretation. As already depicted in Santiago, the originating idea for the project in Verona was also banal and superficial: Eisenman discovered a 1530s tale by Luigi da Porto, which mentioned the story of Romeo and Juliet. In this novel, the author referred to two castles separated by the Venetian city of Montecchio, where the two protagonists lived (some years later, Matteo Bandello and then William Shakespeare would set the same story in Verona).

So there were three different versions of the same story, while Romeo and Juliet were the only consistent characters in each version, what happens to them varies. Eisenman borrowed the various versions of this narrative and transferred them to his project. The context in which he was to locate his architecture was composed of different layers with their different dimensions and in comparing his project with the different versions of Romeo and Juliet, Eisenman decided to present three different cities – three stories with different dimensional characteristics. The three compositions were then overlaid on each other, producing a new object in which the three texts still preserved their own identity and formal autonomy.

While previous projects had initially been infused with architectural significance (grids, axes and so on), in Verona Eisenman attempted to overcome these embodiments and produce a new effect. He wanted to make each recognizable in order to avoid the possibility that one might become dominant over the others.

So, the act of superposition did not imply the transformation of physical context; on the contrary, the layers appeared as in a stratigraphic archaeological plan.

Through the scaling, Eisenman aimed to demonstrate that topography, buildings and the city could lose sense, but that each of the projects presented preserved its identity and characterization. Here the anthropocentric obsession that dominated his early research (the pursuit of humanism in architecture) was totally inverted. Topography, buildings, city – everything – merged within the general project. The reader now had to detect the meaning of every text and comprehend the overall image. The more the project was open to history and context, the better one could read the extreme arbitrariness of the entire design strategy. Using external texts, detached from any immanent significance, Eisenman could realize artificial constructs.

In Verona, Eisenman relativized the meaning of his architecture in favour of the infinite possible readings that any visitor could have of the project. He was arguing for the possibility of interpreting architecture as a set of multiple texts. The American architect compared reality with fiction, past with present and history with memory. The result was an unstable configuration, open to different interpretations. The site was perceived as an urban palimpsest containing any meaning possible. Memory became just one of the possible interpretative keys, and the idea of trace which characterized the *Cities of Artificial Excavation* (Cannaregio, Berlin and Santiago), was abandoned by Eisenman in favour of new concerns.

In 1986 Bernard Tschumi invited Peter Eisenman and Jacques Derrida to collaborate on a project for one of the gardens along the *promenade cinématique* at the Parc de la Villette in Paris. Tschumi himself convinced Derrida to accept the invitation of Eisenman, who was excited about sharing and exchanging ideas with the French philosopher.

As discussed before, Derrida was quite interested in translating his reflections to architecture: so he finally met Eisenman in New York in 1985 for the first time. At that point, the philosopher was writing a text about the concept of *khora* in *Timaeus*, where Plato faces the question of space and its articulation. In Greek, *khora* means place, but also population, and in Plato's *Timaeus* it has a complex meaning derived from the interpenetration of the two definitions. Derrida asked Eisenman to read his text on this concept and develop a personal interpretation. So, Plato became the pretext for beginning a collaboration, first with a sketch made by Eisenman about the idea of *khora* in Plato and, from there, on other questions emerged, and the discussion also embraced the project for *La Villette – Choral Work*.

On the plane back from New York, Derrida wrote Eisenman a letter containing a design and its interpretation. Thinking of one of the most enigmatic and complex passages in Plato's *Timaeus*, 'I wanted the figure of a sieve to be inscribed on, in, and within the *Choral Work* itself, as the memory of a synecdoche or errant metonomy. <sup>6</sup>

Inspired by Plato, Derrida's sketch represented a lyre and a sieve. By relating *khora* as a space to *khora* as a sieve, Derrida shared with Eisenman the idea that their architectural project would include infinite meanings: 'The truth of *Choral Work*, the truth which lyre and layer says and does and gives is not a truth: it is not presentable, representable, totalizable; it never shows itself. It gives rise to no revelation of presence.'<sup>7</sup>



4.2 Choral Work: A conceptual palimpsest. *Source*: Stefano Corbo

For this reason, *Choral Work* was conceived as a multi-textual palimpsest, based on the superposition of several different layers: Tschumi's project of *La Villette*, Eisenman's *Cannaregio* grid, Plato's text, the ancient Parisian and Venetian slaughterhouses and some of the *Cardboard Architectures*. Superposition at different scales was made to determine what kind of overlaps, disjunctions, arbitrary figures and ultimately new meanings could be produced. Tschumi's diagrammatic plan was overlaid on an updated version of the *Cannaregio* grid that retained the same dimensions as the Venetian project and the same diagonal cut. This axis, aligned to Tschumi's diagonal, was used as the generator of new operations and the rotation of the houses was similar to Tschumi's *Folies* and to the objects inserted in the earlier *Cannaregio* project. The relationship between Eisenman's *Cannaregio* project and Tschumi's *La Villette* was developed according to a fictional narrative that began with a formal analogy (the comparison between the two grids). Presence, absence and time converged in this project.

As described by Jeffrey Kipnis, in *Cannaregio*, even the use of colour was metaphorical: if gold symbolized Giordano Bruno's alchemies, red was the colour of his blood. After *Cannaregio*, Eisenman would use his golden patterns again: in *Romeo and Juliet*, or in the *Long Beach Museum*. It can be considered as being on a par with one of his other specific signatures: the grid. By inserting in his project either the grid or the golden areas, Eisenman stressed not only the authorship of the work, but also the relevance of the theoretical premises behind it. In intellectualizing any design decision, Eisenman highlighted his own main goal: to reject architecture's anthropometric nature.

As in *Cannaregio*, the houses of *Choral Work* expressed three different conditions: some were partially interred to symbolize the past; the houses that lay at the level of the ground, represented the present; and the houses that were developed above ground indicated the potential offered by the future. The cosmic pessimism of *Cannaregio* was here replaced by a timid hope with regard to what would come next. Contrary to the *Romeo and Juliet* project in Verona, where every layer was clearly distinguishable, all of the elements employed at *La Villette* were condensed within a general organization in which past, present and future were totally merged. The site of *Choral Work* was inclined so that it could be perceived as a sort of archaeological museum.

Thanks to Tschumi and Eisenman's project, *La Villette* was connected to the topography and the historical roots of Paris: they included the traces and the reconstruction of the ancient urban walls, as well as the slaughterhouses that existed on the site before Tschumi's intervention. By cross-fertilizing Derrida's metaphysics of presence with Plato's idea of *khora*, the project turned into a reflection on time and representation in architecture. Through metaphorical and metonymic displacements, it worked with analogical transpositions, trying to review critically the traditional concepts of space, scale and time.

It is interesting to follow each phase of the Eisenman-Derrida collaboration, because each moment is characterized by a constant negotiation on singular topics: the title of the project, its formal configuration and the consonance with Derrida's *khora* text. What emerges is the desire, especially on Derrida's part, to underline the dual authorship of the project: an authorship that also deals with

formal-architectural decisions. For example, commenting on discussions of the title of the project, Derrida seemed able to overcome Eisenman's anxiety regarding protagonism: in order to choose an adequate title for their work, the French philosopher pointed out that it was not simply about assigning a name, but rather about a new gesture, a supplementary element that could design a signature, a plural signature, written in concert. For Derrida, the title should, first of all, be strong and subsuming; then it should also be part of the work and participate in the body of architecture; and finally, the title was to suggest a relationship to the 'aléa of meeting of such a kind that no semantic order could stop the play.\*

But in the end, it was Eisenman who chose the title: Choral Work.

Nevertheless, in a conversation between Derrida and Eisenman held in Trento, Italy in 1985, both Eisenman's and Derrida's ideas seemed to converge on the same themes: form, programme, scaling and choreography.

At first sight one can assert that the presence of Derrida in *Choral Work* represented a real paradigm shift in Eisenman's career. But simply in focusing attention on the Parisian process of design, it seemed clear that the project was not so different from *Romeo and Juliet*, or the *Long Beach Museum*. Thanks to the influence of Derrida, Eisenman had already begun his own move away from the past some years earlier, and the garden in *La Villette* was just an affirmation of his new attitude. The operative contribution of the French philosopher is irrelevant when compared with Eisenman's methodological exuberance.

During their encounters, Jacques Derrida tried to participate in every phase of the project, but as we can see from the transcripts of their conversations, Eisenman ignored his suggestions. So, gradually, Derrida gave up his ideas: that the project should be neither labyrinthine, nor emotional, nor historical; that it should be simple, and should affect users without leaving a stable trace; that it should work with analogies that represented water, fire and so on; and mainly, that the project should avoid any kind of totalization and self-referentiality.

During an interview in 1988, Derrida admitted to controversies and frictions; he had been invited by Eisenman to provide an architectural contribution, not just a philosophical text, so he insisted that Choral Work should have been conceived of as a concert, in which the music had to play a crucial role. That is why Derrida imagined the project as a lyre: a lyre that to some extent resembled a screen (because in Plato's Timaeus there is a screen). Eisenman seemed to accept the idea of music, but then proposed another formal materialization: a golden object (gold is also the colour of Cannaregio) obliquely positioned. It was neither horizontal nor vertical but was a solid frame, more similar once again to a grid than to a lyre. So, even though Derrida had offered his personal architectural interpretation of khora, Eisenman rejected any possible incursion into his own territory; one might even say that Eisenman was perhaps only interested in having Derrida's formal endorsement of the project, nothing more. In fact, the architect seems to have received Derrida's recommendations, but then re-interpreted them radically: by traducing, transposing, transforming and deforming the texts, Eisenman re-wrote Derrida's contribution in terms of architectural structure. So the La Villette project turned into a garden with no vegetation, only water and stone.

Commenting upon the discussions with Derrida, Eisenman himself said:

He wants architecture to stand still and be what he assumes it appropriately should be in order that philosophy can be free to move and speculate. In other words, he wants architecture to be real, to be grounded, to be solid, not to move around – that is what Jacques wants. And so when I made the first crack at the project we were doing together – a public garden in Paris – he said things to me that filled me with horror: 'How can it be a garden without plants?'

'Where are the trees?'

'Where are the benches for people to sit on?'

This is what philosophers want, they want to know where the benches are. The minute architecture begins to move away from its traditional role as the symbolization of customary use, that is when philosophy starts to shake. Such movement starts to question its philosophical underpinnings and starts to move it around and suggests that what is under philosophy may be architecture and something that isn't so nice.

In other words, perhaps, it's not so solid, not so firm, not so well constructed.9

What was Derrida's real contribution at *La Villette*? Derrida's strategy was clear: he aimed to extract from *Timaeus* a strong image able to serve as a guide for discussion about process. He tried to intervene on practical questions and suggested his ideas about architecture and method to Eisenman. He even criticized Eisenman for the notion of scaling that, in his opinion, represented a sort of totalization. For the French philosopher, indeed, such a concept was totalizing because it was structured according to a closed narration, based on genesis, continuity and an end. It did not allow different readings or interpretations.

From his point of view, Eisenman argued that his process was actually based on different criteria, as he was not interested in the aesthetic and representative limitations offered by the history of architecture. In his adherence to Michel Foucault's thought, Eisenman believed that such an approach coincided with the history of architecture seen as totalization. Foucault, and even Lacan (through the legacy of Freud), described a more complex condition, in which man plays a dramatic and isolated role; so far, architecture had not been able to represent such a condition. For this reason, Eisenman claimed that it was time for architecture to describe such complexity, and find a new formula.

Despite Eisenman's argumentation, Derrida's critique of the concept of scaling had the merit of focusing the problem: as Jeffrey Kipnis has asserted, scaling was for Eisenman the tool with which to replace a kind of totality that was the traditional-modern project with another kind of totality, his own personal design process, based on superposition and rotation.

So, in the end, it seems that Derrida disowned paternity of the project and, in later public meetings, he would always describe *Choral Work* as the result of Eisenman's egotistical aspirations: the original inspiration for the project was Eisenman's

reading of Plato; it was Eisenman who imagined the project as a superposition of layers, a multiplicity of memories, in which one could not distinguish which image was the most relevant; it was Eisenman who chose the specific layers to be used (the *Cannaregio* grid, Tschumi's Parisian *Folies*, the old Parisian slaughterhouses and so on); and it was Eisenman who conceived of *Choral Work* as a stratified palimpsest, with no centre and no univocal origin.

Apart from the complexity of the project, and from the nature of this joint work, one may suppose that the *La Villette* project represented a frustrated opportunity for Eisenman. He had the chance to introduce new factors and new reflections into his career, but the project became an astute exercise in self-positioning within the architectural debate. On the one hand, by including Derrida in his considerations, Eisenman was able to freeze and consolidate his cultural hegemony within the architectural scene, built over the years, particularly with the *Cities of Artificial Excavation*; on the other hand, he was able to make his position stronger, and avoid really questioning his own work. To paraphrase Jeffrey Kipnis, one might say that Derrida was merely a victim of Eisenman's words.

#### **FNDNOTES**

- 1 Jacques Derrida, 'Architecture Where the Desire May Live', in *Domus* 671 (1986): 18.
- 2 Rafael Sierra, 'Interview with Richard Serra, Bilbao', El Mundo del País Vasco, 1999.
- 3 Jacques Derrida, 'Des Tours de Babel,' trans. Joseph F. Graham, in *Difference in Translation*, ed. Joseph F. Graham (Ithaca: Cornell University Press, 1985): 165.
- 4 'What sounds interesting to me about deconstruction, is that it is not just a way to read a text or analyse a concept, rather it deals with institutions, with socio-political structures. All of the architects are people that get in touch with real economic and political institutions. So it's necessary for their projects to pass through a long process, consisting in a negotiation with those taking decisions. To some extent, I realized that architecture represents the most difficult and effective way to test deconstruction'.

  Jacques Derrida, 'Interview with Hélène Viale', in *Diagonal 73* (1988), 37–9.
- 5 'Nor did I then understand why Eisenman is a writer which, far from distancing him from architecture and making him one of those "theoreticians", on the contrary opens a space in which two writings, the verbal and the architectural are inscribed, the one within the other, outside the traditional hierarchies. That is to say, what Eisenman writes "with words" is not limited to a so-called theoretical reflection on the architectural object, which attempts to define what this object has been or what it ought to be! Jacques Derrida, Why Peter Eisenman Writes Such Good Books (Tokyo: A+U, Architecture and Urbanism, 1988): 115.
- 6 Jacques Derrida, *Why Peter Eisenman Writes Such Good Books* (Tokyo: A+U, Architecture and Urbanism, 1988): 119.
- 7 Jacques Derrida, *Why Peter Eisenman Writes Such Good Books* (Tokyo: A+U, Architecture and Urbanism, 1988): 119.
- 8 'After he had translated, or rather transferred and transformed certain motifs appropriated by himself and for himself from my Chora text in a first architectural project, a limitless palimpsest, with scaling, quarry, and labyrinth, I insisted, and

Eisenman fully agreed, on the need to give our common work a title, and an inventive title at that, one which did not have as its sole function the gathering of collective meaning, the production of those effects of legitimizing identification which one expects from titles in general. On the other hand, precisely because what we were making was not a garden, it was necessary to give it a name, and with this naming make a new gesture, a supplementary element of the project itself, something other than a simple reference. [...] Three conditions seemed to be required:

- That this title would be as strong, as subsuming, and as economical of the work as
  possible.
- That this title, while designating the work from outside, should also be part of the
  work, imprinting it from within with an indispensable motion, so that the letters of
  the name would participate in the very body of architecture.
- That the verbal structure should maintain such a relationship to the aléa of meeting of such a kind that no semantic order could stop the play.

[...] Choral Work, this was the title invented by Eisenman. This title is more than a title. It also designs a signature, a plural signature, written by both of us in concert.' Jacques Derrida, 'A Letter to Peter Eisenman', in Assemblage 12 (1990): 9.

9 Peter Eisenman, Conference in Chicago, USA, 1987.

# **Arbitrariness**

A Corinthian virgin, of marriageable age, fell a victim to a violent disorder. After her interment, her nurse, collecting in a basket those articles to which she had shewn a partiality when alive, carried them to her tomb, and placed a tile on the basket for the longer preservation of its contents. The basket was accidentally placed on the root of an acanthus plant, which, pressed by the weight, shot forth, towards spring, its stems and large foliage, and in the course of its growth reached the angles of the tile, and thus formed volutes at the extremities.

Callimachus, who, for his great ingenuity and taste was called by the Athenians Catatechnos, happening at this time to pass by the tomb, observed the basket, and the delicacy of the foliage which surrounded it. Pleased with the form and novelty of the combination, he constructed from the hint thus afforded, columns of this species in the country about Corinth, and arranged its proportions, determining their proper measures by perfect rules.<sup>1</sup>

Vitruvius

In his *lectio magistralis* at Academia de Bellas Artes de San Fernando in Madrid (2005), Rafael Moneo introduced the theme of arbitrariness in architecture by citing Vitruvius's legend of the birth of the Corinthian capital.

As Vitruvius proved, any arbitrary gesture can generate a form and then an architecture. Throughout the centuries, however, the efforts of architects and artists have been focused on justifying this original sin and building around form a theoretical corpus made of references, sophisticated citations or incursions into other territories.

In his historical excursus, Moneo aimed to demonstrate how many architects (from Gaudì to Mies van der Rohe, to Le Corbusier) dealt with the mystery of arbitrariness. Le Corbusier, for example, attacked arbitrariness with his famous five points for a new architecture; in his view architecture needed also to be a positive science, with form justified by function. So it was not necessary to borrow models from the past, or to develop imagination: form followed function.

By contrast, John Hejduk focused his attention on the arbitrary generation of forms: he first experimented with the nine square grid as the generative matrix of his architectures; then, during his stay at Cooper Union University as professor, Hejduk invited students to transform a Juan Gris painting into an architectural project. For him programs and uses could have any possible form, and any kind of form could be architecturized. Like his New York colleagues, in this way Hejduk questioned the orthodoxy of the form/function principle, by proposing another vision in which the essence of architecture resided in form: or, rather, the invention of form.

Even though Eisenman does not belong to the category of those architects who conceive of their work as a process of mimesis, or imitation of nature, at the turn of 1990s he began to explore the potential of arbitrariness in architecture. In fact, what Eisenman experimented with in these projects was the contamination of two different fields: on the one hand, his interest in the Deleuzian processes of folding; on the other hand, the use of geometric models proceeding from other disciplines (the DNA chain, or the Möbius strip).

The manipulation of existing models permitted Eisenman to venture into the labyrinth of arbitrariness, referring neither to an internal, deep structure (diagrams of interiority, *House Series*), nor to an artificial context (diagrams of exteriority, *Cities of Artificial Excavation*). The *Biocentrum* at Goethe University in Frankfurt (1986), the *Nunotani Corporation Building* in Tokyo (1990) or the *Max Reinhardt House* (1992) all represented this strategy, and were also the first projects imagined, designed and developed with new information technologies. Eisenman began using the computer to challenge the traditional limits offered by Euclidean geometry, and pushed his reflections beyond conventional dialectics of form and content.

The possibility of computer aided design (Eisenman was one of the first to employ in his office an experimental piece of software called FORM Z) also generated in the American architect a kind of performance anxiety: whereas many of the projects of the 1990s were characterized by a gradual clarification of the formal mechanisms ideated by Eisenman, it is also true that the use of computers obliged him to expose the nature of certain decisions and explicitly admit the arbitrariness of his method, rather than concealing or gradually unveiling it throughout the idea of the process, as he had done in the past. Only computers, in fact, could manage the complexity and the radicalism of the proposals that Eisenman presented to his clients.

However despite the shift introduced by information technologies, on closer examination, one might say that Peter Eisenman has always considered the arbitrariness of architecture as an obligatory condition, particularly for those who pursue an architecture liberated from any social or political input. So, while it was only in the 1990s (when he would openly borrow de-contextualized models from external territories and transform them into architecture) that this tendency acquired a crucial role in Eisenman's output, one may detect the symptoms of such a stance even in his early work. *House II* (1969–70), for example, was generated by an original impulse: a diagonal displacement that provoked other mutual reactions and influenced the final result. And in his subsequent *Cardboard Architectures* projects, it was always a rotation, a disjunction or another movement that generated his architecture.

House II
DISPLACEMENT

ROTATION

LE CORBUSIER'S VENICE HOSPITAL

Berlin IBA Housing
MERCATOR GRID

Frankfurt Biozentrum
PROTEIN

Max Reinhardt House
MÖBIUS STRIP

So, despite the rigorous application of analytic models and the radical intention to describe the internal rules that constituted the formal origin of his projects, Eisenman was conscious that what made *House II* possible was an arbitrary gesture, disconnected from any external stimulation or reference.

At first glance, Eisenman's *Cities of Artificial Excavation* seemed to represent a moment of discontinuity in his reflections on the arbitrary. And of course, it is undeniable that they were an inflection point in his career, the transition from the so-called diagrams of interiority to the diagrams of exteriority. The necessity of overlaying different narratives and of articulating architecture as a text, pushed Eisenman to identify in context and in history the fuel for his new projects.

Le Corbusier's *Hospital* grid in Venice, the *Mercator* grid in Berlin, or the *concha* as a symbol of the pilgrims in Santiago, were actually arbitrary choices, even if they contributed to introducing a new perspective, according to which architecture was undecidable. If in the *Houses* the arbitrary came from inside, in the *Cities of Artificial Excavation* it came from contact with reality, and it was not possible to control it.

5.1 Peter Eisenman's Arbitrariness: Originating agents. *Source*: Stefano Corbo

So, if Eisenman's output in the 1990s seemed extravagant and naïve for the haphazardness of its theoretical premises, at the same time one can also consider this new phase as the clear manifestation of previous latent episodes whose full potential had never been explored.

The *Biocentrum* at Goethe University, in Frankfurt (1986–87) was emblematic both of Eisenman's imaginative power in designing complex geometries and also the weakness of such an approach. The building was, in fact, an example of how any haphazard pursuit of an external reference can turn into pure arbitrariness.

The project was aimed at integrating a new research centre within the existing constructions of Goethe University. To achieve that, Eisenman based the process of design on a facile analogy with biology, borrowing the DNA chain and transforming it into architecture. The process of design was structured around the three phases through which the collagen protein is produced: replication, transcription, and translation.

As Eisenman himself wrote, the forms developed from the way in which scientists describe DNA chains, not literally the double-helix diagram, but rather the forms of scientific indices. The DNA chain for protein, which is composed of two toothlike forms, also constituted for Eisenman a kind of diagram, conceived of as a real, generative device. The American architect considered this diagram a deviation from the Romeo and Juliet project, where he employed a different textual strategy: while, in Verona, texts were immanent in the content and context of the given site, they were not immanent to the program of architecture. On the other hand, in the Biocentrum texts were both immanent to the functions of the building and also produced a geometry detached from any functional requirement.<sup>2</sup> In other words, Eisenman attempted to deny the arbitrary origin of the project, but his argument was not entirely convincing. In fact, his response to the functional and organizational requirements of the project was no more than the application of a facile metaphor. DNA represented the model of a sequence with infinite possibilities of modification and flexibility, so, if the Research Centre needed to be flexible, responsive, sustainable and open to future change, why not use such a biological metaphor?

Instead of opting for an autonomous-abstract building, the reference to the DNA chain allowed Eisenman to work with small fragments in order to integrate new construction into the existing building. For this reason, the *Biocentrum* was imagined as adjacent to the Chemistry Department, in order to support the interaction between the two departments. So, even in its dimensions, distance and scale, the new building attempted to converse with existing constructions. At the end of the design process, it would not be possible to recognize the Chemistry Department as the originating agent of the new project but, on the contrary, every fragment would have the same dignity, as belonging to one whole institution. The university's future growth would be assured by the mutual interaction between existing and new fragments.

Eisenman overlaid on all the faculties a functional grid-matrix, constituted by a heterogeneous network of connections and the *Biocentrum's* overall image was ambiguous: the programme was not composed of different isolated functions,

but every finite form was merged into a complex organization. Furthermore, any distinction between ornament and structure was negated, and all of the elements in the programme were combined according to a strategy that was at the same time conceptual and formal.

The analogy between biological and architectural processes forced Eisenman to radicalize his intentions and, philologically transpose to his discipline the process of protein production: so, if biologists described the construction of proteins by using four geometric figures, with four different colours and combined them with each other, Eisenman transferred such an articulation to his project. In the description of DNA chains, every form in the chain is always differentiated; the chain structure is created by a repetition of difference, so the specific forms of the building were then extruded out of these chains. They were given different colours. The result was a symbolic architecture based on the biological sequence of replication, transcription and translation.

In applying these phases, even the existing buildings would serve as active elements of an evolutionary process which implied integration and coexistence. So, at the end of the process of design, the *Biocentrum* could symbolize a kind of chain of polypeptides: every fragment favoured the interaction between university and context and, above all, all the fragments were connected by an infrastructure composed of two parallel axes.

In a research centre, laboratories would of course play a central role. Imagined as a neutral environment, governed by science, they were placed within a central gallery that worked as a public space or foyer, capable of generating interaction between the several departments composing Goethe University. Beside the central gallery, other public spaces were connected with the private activities of the Institute, and constituted a complex circulation system. Eisenman conceived of the central gallery of the new campus as an in-between space designed to allow possible modifications in the future. After almost 15 years since his *Houses*, there appeared again Eisenman's famous signature: the L-shaped morpheme. In this case, it was an underground axis working as the matrix of the university's future development. At the same time, it was used as an expressive element, useful for integrating the project within the residential and industrial urban fabric.

One of the main goals of the project was to control every aspect of the building's possibility of expansion. Due to its interrelated character, every future modification would also affect the overall configuration, as every department, every function and every space was completely interconnected within the general framework.

So, Eisenman's efforts to define an open system had partially failed, because the complexity of the process, even its literality, hindered his ability to respond completely to the requirements of the program, which were directed towards sustainability in terms of cost and flexibility. Once again, Eisenman preferred the radicalism of his methodology to the pragmatism of the profession.

In Frankfurt, symbolism was simply an obstacle: obsessed by the desire to transform the cellular chains used by biologists into a real architectural form, Eisenman forgot to focus attention on the functional and programmatic aspects of architecture.

The analogy between biology and architecture turned into ambiguity, as the project was just the literal transposition of a strong image (the structure of DNA) from one disciplinary field to another.

In comparison with his former theoretical efforts to build a solid and coherent discourse (despite some physiological contradictions), in Frankfurt the insignificance and superficiality of such a proposal was alarming.

If in Frankfurt Eisenman was constantly tempted by biological-architectural analogies, his project for the *Nunotani Corporation Headquarters* in Tokyo (1992) was an even more worrying episode. In this case, indeed, the boundaries between the polemical and provocative character of the proposal, and its futility were completely blurred. Although it was not one of his most relevant proposals, the Tokyo project depicted the rise of a new approach that characterized his work in the 1990s.

The President of the Nunotani Corporation asked Eisenman to design a new building for his offices. The brief was quite well-defined: it included offices, multimedia spaces, libraries, bars and restaurants, some lounge areas and specific CAAD working areas. The site was located at the point of collision between two geological plates, the Western and the Oceanic. This peculiar condition provided Eisenman with a pretext for transforming his project into a gigantic artificial telluric displacement:

The friction caused by the subterranean displacement of these two plates has generated Japan, and keeps determining an intense seismic activity. The superficial currents propagating in Tokyo's urban area influence the Nunotani building.

The project is configured as a metaphoric expression of the telluric currents generated by the superposition of the two plates.

Beside such analogy, the project represents an effort to rethink the symbolism of the office tower typology, whose tradition is based on two metaphoric connotations: the first metaphor of anthropocentrism, is the human vertebral column; the second is the phallocentric power.<sup>3</sup>

For Eisenman, the vertical building had two different characterizations: it could represent a metaphor of anthropocentrism (the human skeleton); but at the same time, it had always been a symbol of power and dominance.

Eisenman wanted to question this ambivalent connotation, and, as a result of the use of allegory, designed a de-structured building: that is, a building without skeleton, constituted of different compressed plates. The final image suggested that an earthquake had affected the building, as it seemed crumpled. By rejecting any anthropocentric vision of architecture, Eisenman presented a building constituted of compressed plates, displaced from their original positions.

The *Nunotani Headquarters* project aimed to be an intellectual provocation, but turned into a *capriccio*, characterized by an epidermal surface that should have simulated a telluric fracture. So architecture was here reduced to a treatment of the skin of the building, whilst the plan followed all of the stereotypes of an office

building. Very soon, the building was brutally transformed into a warehouse. Then, after the bankruptcy of the Nunotani Corporation, the property was occupied by Osaka District Court, and was later put up for sale. Finally, in 2003, a new company bought the building and converted it into a residence for old people.

As in Frankfurt, Eisenman borrowed concepts and suggestions from other disciplines; but, in contrast with his former projects, we find here neither the interest in context that the American architect had investigated in his *Cities of Artificial Excavation*, nor his authentic fascination with deconstructivism.

Here, for the first time, Eisenman explicitly admitted the arbitrariness of his architecture. This time, his ability to manipulate forms and vectors was employed to justify the immediacy and the banality of such a metaphor.

In the years 1990–94, Eisenman developed a proposal for *Rebstock Park*, a residential area in Frankfurt. The project was anomalous for several reasons. First of all, it was one of the few urban projects developed by the American architect in his career. We can find an antecedent to this proposal in the first activities of the IAUS (some research focused on low rise, high density housing), and in the *Fox Hill* plan for Staten Island, on which Eisenman had collaborated with Arthur Baker.

The second anomalous aspect of the Frankfurt project was that its originating agent was not a biological or geological model imported into architecture, but rather it relied partly on history. In fact, the planimetric configuration of *Rebstock Park* was derived from the legacy of German *Siedlungen*. Eisenman still looked at the avant-garde as a possible inspiration for his projects, but at the same time the acceleration towards arbitrariness had an even greater impact than in his former architectures.

Deleuze's theories had now become the conceptual pretext shaping his architecture: the basic rational configuration was deformed through the operation of folding and the Deleuzian metaphor became a real construction.

In a surrealistic amalgam, Eisenman was able to start from a homage to German Modernism and merge into it his interest in Deleuze, as well for the *Mercator* grid.

In contrast to other arbitrary projects of the 1990s, *Rebstock Park* represented a sophisticated example of the cultural substratum with which Eisenman had been accustomed to define his projects. At the same time, however, *Rebstock Park* confirmed how Eisenman, since his *Cardboard Architectures*, had developed and fostered a great ability to manipulate and articulate elementary volumes. In the projects of the 1980s and 1990s, such a capacity was still evident, even when formal configurations became more complex and interpenetrated, but it played a secondary role in favour of a celebration of the arbitrary character of architecture.

In the same years, Eisenman worked on another project whose conceptual fuel was an external reference: the *Max Reinhardt House* (1992). This unbuilt proposal was located in the centre of Berlin, next to one of the most epic episodes of Modernity: Mies van der Rohe's skyscraper in Friedrichstrasse (1919–21). Both projects aimed at representing the Zeitgeist and altering Berlin's urban form: but whereas Mies's building aimed to be a model, a prototype for the future, Eisenman's *Max Reinhardt House* was a singular and unrepeatable building, dramatically in tension with its own configuration. Here Eisenman took advantage of the

commercial and celebratory intentions behind the commitment to build (made by one of Reinhardt's sons) to conceive of his own monument for Berlin. In conditions of this kind, the arbitrariness of any formal configuration became the only possible option for satisfying the representative aspirations of the client.

The programme of the project was heterogeneous: it required hotels, restaurants, a theatre, offices and archives, but, contrary to any modernist principle, there was no correspondence between form and function.

The yearning for representation (according to his famous claim that 'every city needs an Eiffel Tower'), distracted Eisenman from the internal organization of the building, and pushed him to focus only on the interior/exterior relationship. In this case, form was against function.

As with other former projects of the 1990s, Eisenman abandoned Euclidean geometry to explore new territories: the *Max Reinhardt House* was the result of a curious cross-fertilization: the geometric interpretation of the Möbius strip with the intellectual curiosity for Deleuze's concept of fold.

In its folded and articulated silhouette, the building offered new perceptual and sensorial experiences, but at the same time constituted a unicuum, as Eisenman investigated here for the first time the manipulation of a conventional typology: the tower. He started from a simple Möbius strip, generated digitally by joining a set of lines or axes, and twisting uniformly according to a circular or elliptical path. The next step consisted in moulding the silhouette of the tower, trying to get a visual continuity that the tower partially achieved.

Eisenman's interpretation of the Möbius strip enmeshed the program in a schizophrenic accumulation of divergent functions. The Möbius strip has inspired many architects throughout the years, from Ben Van Berkel to Zaha Hadid, to Stephen Perrella: its architectural translation permits the redefinition of the relationship between form and function in terms of continuity, dynamism and plasticity. By twisting the Möbius strip it was also possible to modify the nature of its surface, which can be a wall, ceiling or floor.

As Eisenman demonstrated in this project, the inside could become outside and vice versa. The process of folding was to some extent consistent with Eisenman's concerns about instability and criticality, as it de-composed the architectural object and provided new meanings. Such reinterpretation of the interior/exterior relationship allowed multiple readings that determined an infinite process: the *Max Reinhardt House* was a text, indeterminate and ambiguous in its dramatic condition.

From another perspective, we may define this project as a natural evolution from Eisenman's experiments of the 1970s on concave and convex spaces, or, as asserted by Moneo, this could be a project about volume, and how any spatial experience is generated through volume.

Actually, despite analogies with a former approach, the *Max Reinhardt House* offered a certain continuity with its contemporary projects: here again, the conceptual origin of the tower was a banal metaphor that was then transformed into a real construction. The arbitrariness of such a decision is always evident, although Eisenman, thanks to the infinite load of transformation imposed on the

Möbius strip, had delivered an exaggerated version in the final result. The sculptural value of the building is analogous to some of Frank Gehry's investigations but, for many critics, it has also served as an indirect reference for Rem Koolhaas's *CCTV Tower* in Beijing (2002–12).

In a conversation with Rem Koolhaas held at AA (Architectural Association) in London, it was Eisenman himself who compared his *Max Reinhardt House* to Koolhaas's *CCTV Tower* in Beijing. Actually, the two projects constitute a reinterpretation of the same geometric model, but whereas Koolhaas's project was based on the interpenetration of horizontal and vertical vectors (even if it is a highrise building), Eisenman's project questioned the millenary dichotomy between inside and outside.

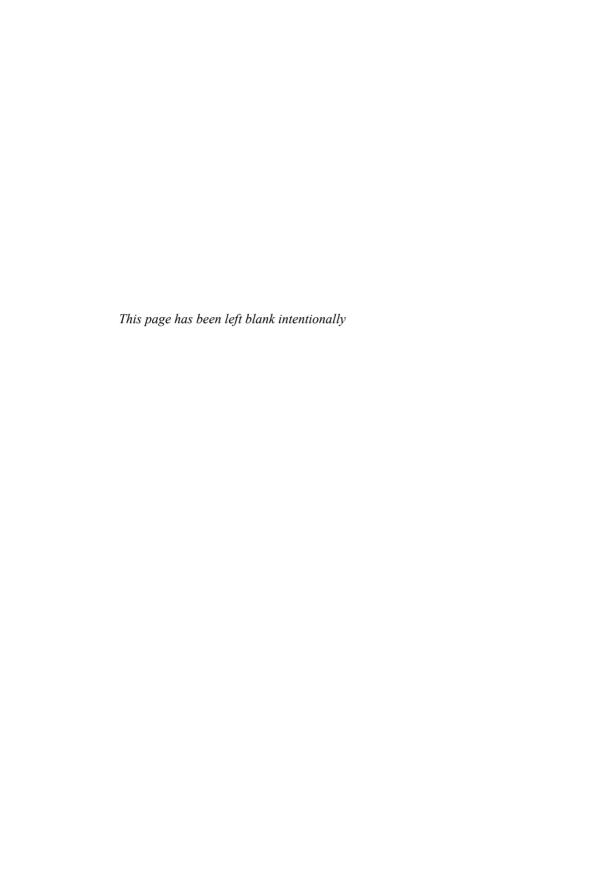
If his first goal was to design a non-phallic tower, Eisenman once again borrowed models and patterns from other fields in order to shape his architecture. In this case the Möbius strip, constantly turned on itself, redefining the relationship between interior and exterior. The folded surfaces of the tower produced multiple perceptual experiences: Eisenman proposed in Berlin a collapsed landmark.

Through examination of the different models Eisenman investigated throughout the years, it might be possible to define a sort of conceptual cosmology. The DNA chain, the Möbius strip, as well as the *Mercator* grid or Deleuze's fold – each of them demonstrates how Eisenman's curiosity led him to venture into the most varied fields, from biology to philosophy.

If the Cities of Artificial Excavation represented a significant shift in Eisenman's career, because for the first time he could replace the description of the internal mechanisms that generate architecture with the pursuit of external references (basically, site and history), then the 1990s' output displayed his interest in geometric models proceeding from science (geology and biology, for example). In doing this, Eisenman had gradually transformed his architecture into a theoretical-operative pastiche. Only in the mid-1990s would he be able to overcome this phase of arbitrariness in order to discover new territories for exploration.

#### **ENDNOTES**

- 1 Vitruvius, *Ten Books on Architecture*, Book IV, Chapter I (Cambridge: Cambridge University Press, 2001).
- 2 'The diagrams for the Frankfurt Biocentrum (1985) are a deviation from the Romeo and Juliet project, using a different textual strategy. While the Romeo and Juliet texts were immanent to the content and context of the given site, they were not immanent to the program of architecture. When the diagram comes from outside, there is a shift from a formal index to a written one. In the Biocentrum, however, the texts were not totally random, in that they were both immanent to the functions of the particular building and also, it was known that they would produce a geometry that could not be recognized as originating in function.' Peter Eisenman, *Diagram Diaries* (London: Thames & Hudson, 1999): 188–9.
- 3 Peter Eisenman, Project Description (1992).



### **Process**

A diagram is not a thing in itself, but a description of potential relationships among elements, not only an abstract model of the way things behave in the world but a map of possible worlds.

Unlike classical theories based on imitation, diagrams do not map or represent already existing objects or systems but anticipate new organizations and specify yet to be realized relationships.

The diagram is not simply a reduction from an existing order. Its abstraction is instrumental, not an end in itself. Content is not embedded or embodied but outlined and multiplied. Simplified and highly graphic, diagrams support multiple interpretations. Diagrams are not schemas, types, formal paradigms, or other regulating devices, but simply place-holders, instructions for action, or contingent descriptions of possible configurations.\(^1\)

Stan Allen

As discussed in the previous chapters, the theoretical and professional trajectory of Peter Eisenman has always been characterized by the analytical necessity of describing any moment of the design process, both to stress the formal mechanisms that regulate his projects, and, more recently, to make manifest the textual character of architecture.

The main instrument that allowed Eisenman to base his own reflections on process has certainly been the diagram. If process has become, in fact, the central core of his work, it is because, over the years, process and diagram ended up coinciding. One may say that for the American architect process and diagram are almost synonymous, even though the concept of the diagram in itself came to acquire, in Eisenman's discourse, different definitions and characterizations. Nevertheless, the diagramming process has been a retrospective act for the American architect, because all of his diagrams have been both theoretical and ideological, expressive of an ideology about theory.

But before describing the nature and articulation of the concept of the diagram in Eisenman's career, it is necessary first to delineate a kind of methodological

framework in order to comprehend how, at the beginning of the 1970s, the notion of the diagram penetrated the field of architecture, and how it influenced not only theoretical discourse but also architectural production. Therefore, it will be useful to venture into the heterogeneity of the contributions proceeding from both architects and philosophers, and of the different interpretations that have characterized the disciplinary debate for many years.

The idea of the diagram has actually generated confusion and ambiguity, mainly for its application in the field of architecture, so that it is not possible to evaluate the results of this work of translation without considering its philosophical matrix and theoretical references. One may identify Charles Sanders Peirce (1839–1914) as one of the first to develop investigations into the nature and the role of the diagram. Indeed in his *Theory of Signs*, he asserted that thought was essentially based on a series of signs that expressed the knowledge of something. Every sign raises an idea in the mind, and refers to a specific object, but the relationship between sign and object can vary. It is for this reason that Sanders Peirce distinguished three different kinds of sign: icon, index, and symbol.

The icon has a visual similitude to its object; icons are similar representations (for example, photographs are icons). A sign most resembles its object. Most icons are likenesses.

On the other hand, the index is not similar to its corresponding object; it only indicates the presence of the object. An index works as a record or trace. (The influence of such a definition on Eisenman is evident, especially in his first *Houses* and in some of the *Cities of Artificial Excavation*.) For Peirce a barometer that measures temperature, or a weathervane that indicates the direction of the wind are examples of an index.

The symbol, as Eisenman was to write in *Diagram Diaries*, is a non-declarative sign: it establishes a visual convention for the relationship of the symbol to some object.

For Sanders Peirce the diagram was neither an index nor a symbol, but a particular genre of icon, and he described three different icons: the hypo-icons, that are similar to their objects (painting, for example); the images, that work through some form of parallelism; and lastly, the diagram, that describes the internal and external relationships with its object in an abstract and reduced way. So, for Peirce, the utility of the diagram lay in its capacity to reduce details and allow our minds to focus attention only on essential concerns.

If Peirce's contribution represented one of the first efforts to define clearly the nature of the diagram, one has to acknowledge that for architects most of the fascination with the diagram has its origin in the reflections of Gilles Deleuze who, in his works, re-used and reinterpreted Michel Foucault's notion of the dispositive.

In fact, owing to his investigations of Foucault, Deleuze prefigured a genuine theory of diagrams: by identifying, as Foucault did, the cartographic character of the diagram, Deleuze unveiled its nature, which is to specify the relationships between visible and invisible, and matter and information. For Deleuze, the diagram was a cartography, an abstract machine denying the formal differentiation between content and expression. If Foucault invoked this concept to describe the genealogy of power in modern society, Deleuze conducted a reinterpretation of the thought of several philosophers including Kant, Bergson and Nietzsche.

In the diagram, nothing was ontological. Its own development could be destabilizing: 'Foucault gives it its most precise name: it is a diagram, that is to say a functioning, abstracted from any obstacle or friction and which must be detached from any specific use. The diagram is no longer an auditory visual archive but a map, a cartography that is coexistensive with the whole social field. It is an abstract machine.'<sup>2</sup>

In *Diagram Diaries*, Peter Eisenman directly cited Deleuze and his theories about the notion of diagram:

Oedipal anxieties are today proposing a new theory of the diagram based partly on Gilles Deleuze's interpretation of Foucault's recasting of the diagram as a series of machinic forces. In their polemic, the diagram has become a keyword in the interpretation of the new. This question challenges both the traditional geometric bases of the diagram and the sedimented history of architecture, and in so doing they question any relation of the diagram to architecture's anteriority or interiority.<sup>3</sup>

Moreover, Eisenman insists on the differentiation between diagram and structure, used by Deleuze:

The classical architectural idea of a diagram exhibits a belief in structure as something that is hierarchical, static, and has a point of origin. Deleuze says that a diagram is a supple set of relationships between forces. It forms unstable physical systems that are in a perpetual disequilibrium. Deleuze says that diagrams that deal with distribution, serialization, and formalization are all structural mechanisms in that they lead to structure and a belief in structuring as an underlying principle of organization. If a structure is seen as a vertical or hierarchical ordering of its constituent parts, the diagram must be conceived both horizontally and vertically, both as a structure, and something which resists structuring. [...] In this sense, diagrams are those forces which appear in every relation from one point to another, as superimposed maps.

[...] Diagrams for Deleuze must have a non-structuring or informal dimension. It is no longer an auditory or visual archive, but a map, a cartography that is coextensive with the whole social field. It is an abstract machine. This abstract machine is defined by its functioning in unformed matter, as a series of processes that are neither mechanical nor organic. The diagram then is both form and matter, the visible and the articulable. Diagrams, then, form visible matter and formalize articulable functions.<sup>4</sup>

It is evident that the common ground between Deleuze's notion of diagram and Eisenman's reflections is represented by the philosophy of Michel Foucault, one of the thinkers who influenced the American architect most, especially in his transition from the *Cardboard Architectures* to the *Cities of Artificial Excavation*. As discussed in the previous chapters, with the project for Cannaregio Eisenman began to explore the possibility of opening up his architecture to external vectors, one of which was Foucault's notion of archaeology.

At the same time, Foucault's most relevant contribution to the architectural debate dealt with the notion of the dispositive; although the French philosopher had never clearly defined such a concept, Deleuze, in one of his last lectures, tried to explain the importance of this term in philosophy. For him any dispositive was a multiplicity composed of many distinct processes and different flows. There were no hierarchies in a dispositive: on the contrary, it worked as an open field of forces, a body without organs. A dispositive is pure exteriority. We belong to the dispositives, and act within them. Furthermore, what characterizes a dispositive is its evolutionary character. It dealt with its own internal capacity to transform continuously into a future dispositive. So, in every dispositive we have to separate what we are from what we are becoming.

Despite their legacy, it is clear that today most architects, when using diagrams, are not referring either to Foucault's *Panopticon*, or to the striated space described by Deleuze and Guattari in *A Thousand Plateaus*. In recent years, many architects have tried to import into their projects terms and instruments proceeding from various disciplines (first philosophy, then biology or geology) in order to create a personal repertoire.

Diagrams belong to such a tendency; and they have played an important role in the discipline of architecture for two main reasons: on the one hand, architecture has increasingly assumed the appearance of an open process, of which the diagram is both the conceptual engine and the generative. On the other hand, in Foucault's philosophical corpus, the diagram presents an architectural and mechanicistic dimension that is very clear from the beginning.

So, owing to multiple inspirations and references, the use of diagrams in architecture has been diverse. The spectrum ranges from a 'programmatic interest to include non-architectural data in the design process, to a fascination for the diagram as form, free of meaning.'5

Traditionally, the diagram was an initial geometric scheme. It represented a topological organization that awaited a subsequent corresponding architectonic translation. In the 1970s and 1980s, architecture began to use diagrams as models of analysis and reading, although they lacked tectonic or material connotation. Then, as explained by Federico Soriano, architecture shifted its focus away from traditional representative means and was no longer about objects. The processes of production demanded flexibility and architecture wanted to be an open system, in which conception, development and construction converged, thus blurring traditional boundaries.

Different disciplines have exerted their influence and these respond to different stimuli (such as social, political and ecological inputs). As such, diagrams are now required to manage great complexity, whilst permitting a precise but open control of the design process. By working on abstraction, diagrams replace metaphor and analogy.

For Soriano a diagram today is architecture. It cannot be considered as a simple scheme or a preparatory drawing to be converted into a specific language. The diagram is space, the material of construction. The diagram represents the marrow of form and content; it is a node of information that works through time. It is not

imaginary, but specific and concrete, even though it tends towards abstraction: the diagram works like an algorithm, complex and complicated at the same time. Soriano is convinced that, unlike other instruments (ideograms, maps, drawings and so on), the diagram is the representation of a process. It operates from an accumulation of information, and it is this controlled juxtaposition of data that has interested architects in recent decades.<sup>6</sup>

Borrowing the distinction between iconology and iconography, Soriano has distinguished two separate fields: *diagram-ology* and *diagram-ography*. *Diagram-ology* is representative, conceptual, proto-functional and a-significant. It is related to flows, density, external vectors and so on. It is open to different interpretations.

*Diagram-ography* is an intermediary technique: it is communicative and productive. It is neither structure nor reduction, but it is about abstraction, and can be used to generate or produce new concepts.

In contrast to Soriano, Sanford Kwinter has not offered a definitive and univocal definition of the diagram; its double character (explanatory and generative) is clear, and both functions in a diagram are necessary. Only the joint action of the two together can assure the validity of a diagram as an architectural instrument, because they can sustain the mobility of thought and action at the same time.

Diagrams must be conceived as songs as well as hammers, because after all, 'truth is a function of will, not fact.' <sup>7</sup>

So, what Kwinter suggested is not to consider the diagram as the essential instrument of every design process; rather, it would be interesting to adapt and transfer the diagram's depurated nature even to traditional documents (drawings, graphs and so on), to depurate plans and sections, to turn constructive details into details-diagrams so that the goal of the diagram becomes that of replacing the physical description of an object with the descriptive process of its execution. The diagram constitutes a form of visual thinking: a thought-image.

Whereas Soriano and Kwinter depicted the role of the diagram mainly from a theoretical point of view; that is to say, from the perspective of those who do not exploit the operative consequences of their investigations, the Dutch architect Ben Van Berkel, with his agency UNStudio, has often employed the diagram in his professional career, converting it into one of the guiding lights of his work. Both in his writings and in his projects, Van Berkel seemed to share with Deleuze the same conceptual premises concerning the diagram: in fact, he acknowledged the influence of Foucault and Deleuze in his personal reflections. The diagram was for Van Berkel an alternative instrument for discovering unexpected relationships or connections within the process of design. If a traditional sketch developed from a preconceived idea or intuition, the diagram in his work was a kind of conceptual map that allowed for the raising of questions and insights.<sup>8</sup> Diagrams became for Van Berkel a kind of mediator, an external object between the object and the subject that permits the renovation of the existing typologies and their adaptation to our contemporary condition.

The essence of the diagrammatic technique for UNStudio was the fact that it introduced into work qualities that were latent, or disconnected from an ideal or an ideology. In his texts, Van Berkel detected three stages in the diagram: selection,

application and operation. A diagram is an assemblage of solidified situations and tactics. The *Panopticon*, for example, is the expression of a number of cultural and political circumstances culminating in a distinctive manifestation of control. It conveys the spatial organization of a specific form of state discipline. It incorporates several levels of significance and cannot be reduced to a singular reading: like all diagrams, the *Panopticon* is manifold. By citing the eighteenth century prison, Van Berkel suggested the idea that architecture itself could be diagrammatical; the diagram is not simply the process that leads to architecture's formal definition.

In this sense, Toyo Ito seems to agree with Van Berkel: writing about the work of SANAA, he considered that, in Kazuyo Sejima's architecture, the complexities of the design processes were handled with brevity:

She arranges the functional conditions which the building is expected to hold, in a final diagram of the space; then she immediately converts that scheme into reality.

[...] Even the details of structure are little more than an arrangement utilized as part of the diagram itself. Materials and colours remain mere symbols used in the superficial and lineal composition of the diagram.<sup>9</sup>

Lars Spuybroek shares with Van Berkel the idea that the diagram is a map, but questions its operative nature: in fact, even though the diagram is a very clearly linked network of relationships, it is completely indeterminate in its formal expression. It can be conceived of as an engine that works in a process of continuous formation. By working like a medium, the diagram first reproduces complex factors and then transforms them into abstract representations. It is both a map and a trajectory, but its effectiveness as an operative machine is not evident.

In his investigations of complex systems, Raoul Bunschoten has instead stressed the instrumental role of the diagram within the design process, both in architecture and in urbanism. For him, diagrams enable us to extract little data and few mechanisms from complex environments. Such a reductive approach serves not only to control the amount of information that characterizes an architectural project, but at the same time permits multiple interpretations of the project to open up.

Bunschoten is convinced that the diagram can be both the result of an operation of distillation from an external source, and also an autonomous entity. Its power lies not only in its openness to modification, but also in the fact that the diagram can be disengaged from its source and become a drawn object itself, an object with a specific organization. That is why a diagram can affect the real world: once detached from its source, the diagram can seek another source or enhance an organizational system already in existence.<sup>10</sup>

The use of diagrams has provoked enthusiastic reactions in the world of architecture, but, when applied a-critically, it has also failed to represent new concerns. If in the beginning the diagram was a simple representational convention, it gradually began to be considered as the most simple and efficacious instrument through which to reduce or expand the complexity of reality. To paraphrase Pier

Vittorio Aureli, one may say that the obsessive infatuation with the diagram became what the Italian architect has called the *metaphysics of the diagram*.

Sometimes the ambiguity or confusion, between Deleuze's notion of the diagram, originally intended as an abstract machine, and the later interpretations made by architects and theorists, has produced contradictions or simply literal transpositions. In fact, the condition described by a diagram is always unstable, transitory and mutable. A diagram deals with flows and, to paraphrase Deleuze again, is pure exteriority, body without organs. The diagram deconstructs the real in order to re-create a future scenario.

Whereas the rise of the interest in the diagram coincided with the decade following World War II, when optimism and faith in science reached their climax, today the diagram can only express the impossibility for architecture of facing its own destiny, or, as Aureli says, what diagrams represent is a hopeless future; in this sense one may say that the diagram represents the real essence of nihilism, the idea that every new theory can only create *ex-novo* the same representations of the world.

Compared with the conceptual framework we have just described, the use of diagrams throughout Eisenman's entire biography has always been problematic. If it is true that Eisenman himself tried to categorize his abstract schemes according to two different phases (diagrams of interiority vs diagrams of exteriority), then there are many ambiguous aspects in such a strategy, especially if we focus attention on his early works.

In his *Diagram Diaries*, Eisenman first defined the diagram as a series of surfaces that receive information from something that as yet does not exist; that is, a potential object. Given specific external conditions, a diagram can give the proportions of boundaries, significance and site. Diagrams are also capable of retaining multiple series of traces. Such traces interact with other traces proceeding from the interior and from former configurations, in order to compose a superposition of different layers. For Eisenman, without the superposition of these traces, it was not possible to generate any architectural object.

The process of superposition configures a means through which it is possible to analyse a project according to different keys and interpretations: program, context or meaning. Eisenman's conviction was that within the project, as well as in the diagram, we can overcome the literality of architecture and fill the project with infinite permanent and impermanent traces. (Was Eisenman referring here to the same literality he used in many of his projects: the Goethe University *Biocentrum*, or the *Nunotani Corporation*, for instance?) So it seems that the diagram was, for Eisenman, only a generative-operative device: all his early formal investigations were dissimulated in his enthusiasm for the so-called diagrams of exteriority. But the diagram for him was mainly a tool within a critical strategy: an instrument to provide an object with a theoretical body.

Actually, the transition from interiority to exteriority also implied a radical shift in the role played by the diagram in Eisenman's trajectory. In fact, if one looks at his entire production, it is possible to observe that Eisenman has always defined the diagram in two ways: as an explanatory-analytical device and, mainly, as a

generative device. In his early works, influenced by Rudolf Wittkower's use of the nine-square grid, and then by Colin Rowe's formal studies on Palladio and Le Corbusier, Eisenman conceived of the diagram as a device capable of describing the traditional instruments of representation (sketches, plans and sections) in a different way, or rather, capable of unveiling invisible structures or unexpected connections.

The use of diagrams first appeared in his doctoral thesis in 1963 (*The Formal Basis of Modern Architecture*, published in 2006). They did not express the beginning of a process but were simply intended to distinguish his idea of the formal from other contemporary interpretations. Actually, they represented a kind of critical response to the investigations of Wittkower and Colin Rowe. Eisenman wrote that while they relied on an analysis of the formal as an *a priori* condition, his diagrams already embraced the germs of the conceptual, the critical, and so on whereas Rowe and Wittkower were involved in what could be called the articulation of formal principles in architecture. As already stated, their work actually represented one of the strongest influences on Eisenman's early work, and even his first projects, such as *Houses I–IV*, recalled certain geometric models used by Colin Rowe.

Nevertheless, Eisenman was more interested in a re-reading of the formal: 'In this context, function, traditional aesthetics, social concerns, and metaphors of machines were for me always pallid justifications for a do-what-you-want-expressionism.'<sup>11</sup> Therefore, his doctoral thesis and his first articles on Terragni, represented an attempt to distance the notion of form from its necessary relationships with function, meaning and aesthetics. The diagram works to weaken the object/subject relationship. At the same time Eisenman began to study Le Corbusier's work, and realized that in the *Modulor* or in his *Five Points*, the diagram constituted a latent element that suddenly appeared on many different scales, repeated in small houses and in urban plans.

In the same way, in his early work the diagram was an occult instrument that provoked all those internal displacements. As Eisenman himself wrote, the diagram began to separate form from function, form from content and the architect from the process. To preserve the traces of the process and to record the formal evolution of his architecture was one of the aims of Eisenman's diagrammatic investigations. So, although not necessarily iconic, the diagram has always implied spatial and material consequences, one of its main characteristics being the description of an intermediary condition between presence, image, and idea. Eisenman has referred to Piranesi's *Campo Marzio* as an example of such a diagrammatic approach: for him, *Campo Marzio* represented a field of exteriority based on different layers and times.

With the project for Cannaregio (1978), Eisenman began to use the diagram as a generative tool: in this case, it did not represent a retrospective operation, but acted as an intermediary in the process of the generation of form. Eisenman asserted that, thanks to an operation of superposition of different layers, it would be possible to determine what kind of disjunctions, arbitrary figures, and ultimately new meanings the project could produce. In the transition between interiority and exteriority, Eisenman discovered the importance of the external constraints for the

project. These external agents come from outside architecture: they can be the given site, the programme, or history. And, as Eisenman writes, they can take the form of an invisible template, which allows existing imprints to appear in other guises, both blurring and revealing what already exists.

According to the chronological characterization described by Eisenman, one should consider the *Berlin IBA Housing* as the first project to deal explicitly with diagrams. Following on from the Cannaregio project, it concerned the idea of a fictional ground. Whereas the *Cardboard Architectures* were characterized by geometric models aimed at unveiling the deep structures of architecture, with *Cannaregio* an alternative methodology became operative: the introduction of multiple external texts with no direct significance.

So, has Eisenman's use of diagram been linear in the way that he has described it? Or is this a sophisticated intellectual strategy aimed at justifying, after the event, all the decisions and the projects of the 1970s?

Rafael Moneo questions the innocence in Eisenman's use of the diagram over the years: for the Spanish architect, the diagram is not a crucial theme in the interpretation of either Eisenman's first projects (the *Houses*), or his later productions. The so-called nine square grid, used by Eisenman in his *House Series*, was simply a neutral structure, employed to justify *a posteriori* the idea of a process but not constituting a generator of form.

First of all, the geometric schemes used by the American architect in his early productions were not a generative device: for Moneo, what Eisenman calls diagram is only a descriptive instrument useful for explaining his formal strategies. Eisenman adopted formal strategies, but he did not use diagrams in his work, because his main goal was to preserve the traces of the process after the project was finished, or rather, to record the formal evolution of his architecture. So, paradoxically, the use of diagram in Eisenman is as explanatory as it is for those authors, such as Colin Rowe and Rudolf Wittkower, whom he criticized for their obsession with form.

What appears evident, particularly in the *Houses*, is that any generative process of form was based on the manipulation of a simple grid composed of pillars, in order to transform it into something different. There were no external constraints or factors: the nine square grid was no more than the most efficacious answer to Eisenman's desire for interiority. The goal was to realize an abstract object, where the void was solidified and the functions not defined. Self-referentiality was the ultimate essence of architecture.

So, from this perspective, one may say that the so-called nine square grid was neither an analytical-explanatory device, nor generative. It was just the starting point of a complex process that Eisenman employed to manage certain operations (the internal displacements); in other words it was a formal pretext in describing the final result.

Anthony Vidler, in analysing some of the diagrams Eisenman used for his first investigations, questioned the real character of the diagram. For him all the analytical deconstructions of Terragni's *Casa del Fascio* did not represent diagrams; they were just complex explanations. Terragni himself was a diagram

for Eisenman, as *Maison Dom-ino* was a diagram for Le Corbusier (because all the later projects represented evolutionary elaborations of that diagram). In Terragni, diagrams meant a map – cartography signifying formal relationships. Moneo even questioned the idea that diagrams characterized Eisenman's later productions: for the Spanish architect, the interpretative key of Eisenman's projects from the 1980s and 1990s was deconstruction. So the *Cities of Artificial Excavation* would represent for him just an interlocutory phase between de-composition and de-construction. By introducing the difference between diagrams of interiority and diagrams of exteriority, Eisenman was institutionalizing the importance of process in his work, but for Moneo it is clear that the diagram was not an originating matrix or the origin of his project.

As described above, the transition from interiority to exteriority implied not only the replacement of certain formal instruments (from the grid and the cubes to the site and the text), but also a paradigm shift, based on a Messianic message about the end of history, and on the reintroduction of history itself within the projects as an artificial multi-textual narrative.

At first glance, the *ex-post* character of the distinction that Eisenman makes in *Diagram Diaries*, seems to be a sophisticated operation aimed at justifying the rise of new interests and anxieties, but one cannot deny that at the beginning of the 1980s Eisenman began to venture into a new sphere of possibilities, which denied some of his previous experiences.

It is difficult to know whether such a change of direction was derived from personal-biographic influences, or from deep theoretical reflection, but to distinguish between them would be a pointless operation as, in Eisenman, biography and professional trajectory are completely merged.

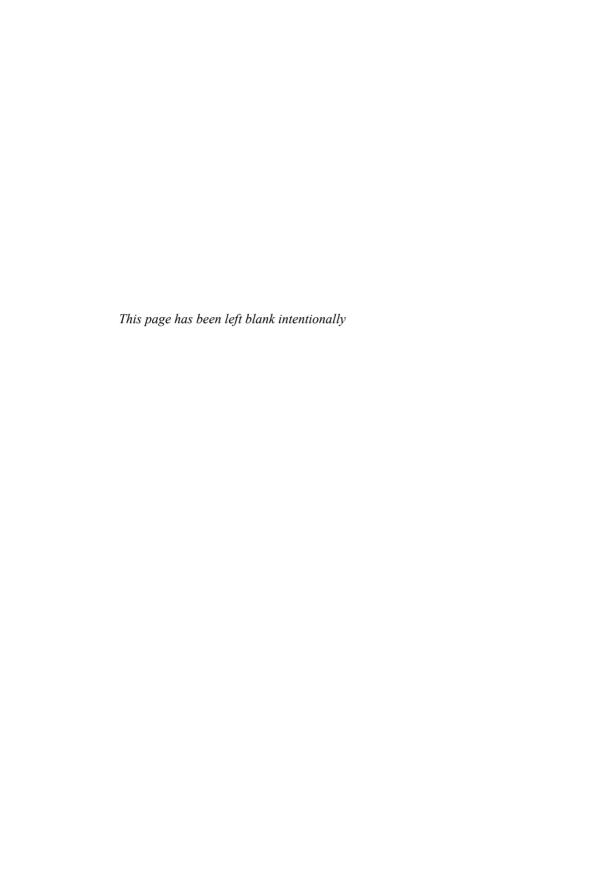
So, seen from this perspective, *Diagram Diaries*, rather than being a reflection on the use of the diagram in his projects, represented for Eisenman the pursuit of a foundational element, capable of being reproduced in different ways. And after all, the diagram is just one of the many possibilities explored by Eisenman in order to answer the same persistent question: how can architecture face the problem of presence?

## **ENDNOTES**

- 1 Stan Allen, 'Diagram', in ANY 23 (1998): 16.
- 2 Gilles Deleuze, Foucault (Minneapolis: University of Minnesota Press, 1986/1988): 34.
- 3 Peter Eisenman, Diagram Diaries (London: Thames & Hudson, 1999): 29.
- 4 Peter Eisenman, Diagram Diaries (London: Thames & Hudson, 1999): 29.
- 5 Like Bijlsma, Wouter Deen, Udo Garritzmann, OASE 48 (1998).
- 6 'A diagram today is architecture. It is not a scheme, a simplification, nor a preparatory drawing to be translated into a language or specific discipline. It is directly space, form, and the material of construction. The diagram is a direct voice, [a] synthetic world, without language, metaphor, or structures of profound thoughts. It is the marrow of form

and content, a node of information. The diagram always works through time. It defines form through procedures or actions. Not imaginary, the diagram is specific and concrete. Like an algorithmic graph, it is complex and complicated. It tends towards abstraction, for direct performance between thought and making, causing the time of conception to coincide with the moment of construction. Unlike other instruments of representation (ideograms, maps, drawings, and so on), the diagram is the representation of a process; it works from an accumulation of information – the more information, the better. It is precisely this controlled juxtaposition that interested all architects.' Federico Soriano, 'Diagramas,' in Fisuras de la cultura contempóranea 12 (2002): 6–7.

- 7 'As to the question of whether the diagram is scientific and explanatory or literary and illocutionary (provoking acts not based on verifiable truth functions) I would hope that no one would ever be allowed to furnish a single or definitive answer. Clearly both functions are necessary, for each is necessary to protect us from the excesses of the other, and only the joint action of both together, in turn and oscillation, can assure us of the mobility of thought and action to sustain our own political apparatus in the face of a very fluid and pliable enemy. The diagram gives us the power to program historical becoming, as well as to hack the programs currently in place. Diagrams must be conceived as songs as well as hammers. Truth after all, is a function of will, not fact.' Sanford Kwinter, 'The Hammer and the song,' in OASE 48 (1998): 43.
- The idea behind the way that we use the diagram is a little bit taken from the thinking around someone like Deleuze or Foucault that talk or write about the diagram. What we discovered by using a found diagram, or let's say maybe even producing your own diagrams, is that it often allows you to take a certain distance towards the way that you sketch. Because if you sketch, then you have already a preconceived idea of the image of an architecture. But the diagram gives you a possible instrument for unexpected insights. That is the most interesting thing about the diagram for us. You have to distinguish how other architects are using the diagram because I am not the only one [...] The difference is that they use the diagram often as an informational guideline, but we use the diagram as a map.' Dimitris Gourdoukis, Interview with Ben Van Berkel, Washington, 2006.
- 9 Toyo Ito, 'Arquitectura Diagrama', in El Croquis SANAA 99 (2000): 330.
- 10 'A diagram is produced by distilling information and choosing a technique of drawing this distilled information. Likewise, the altered diagram only affects the real world if linked to a tool that can respond to the diagram and change the world. But the power of the diagram lies not only in its openness to alteration, suggesting changes to its sources; it can also be disengaged from its source, and become a drawn object itself, an object with a specific organization. This object exists in another space, on another plane, than its source. Once in this other space, it can be shifted through this space. Once free it can go in search of another source that needs attention. The diagram could be engaged with this other source to fashion in its image, or to enhance an organizational pattern already existing in the source which happens to be matched by the diagram but is not recognized or operational. Raoul Bunschoten, Chora, Urban Flotsam (Rotterdam: 010 Publishers, 2001): 84.
- 11 Peter Eisenman, Diagram Diaries (London: Thames & Hudson, 1999): 49.



# **Affect**

In this sense, diagrams are those forces which appear in every relation from one point to another as superimposed maps. The distinction between Deleuze's idea of superimposition and my use of the term superposition is critical in this context.

Superimposition refers to a vertical layering differentiating between ground and figure. Superposition refers to a coextensive, horizontal layering where there is no stable ground or origin, where ground and figure fluctuate between one another.<sup>1</sup>

Peter Eisenman

By distinguishing between superposition and superimposition, Eisenman acknowledges once again the influence of Gilles Deleuze in his work: and in this case, the reference to the French philosopher serves to question the figure-ground principle.

If one looks at some of his projects, in fact, like *Cannaregio* or the *City of Culture* in Santiago de Compostela, it is easy to observe how they are influenced by this dialectical principle. As discussed in the previous chapter, thanks to Deleuze, Foucault and other thinkers, Eisenman has constantly explored the possibility of transferring certain philosophical concepts to his own architecture, and of rethinking the traditional instruments of the architectural discipline.

Such an operation always implies great risks, as two different attitudes are discernible. The first consists in automatically transposing concepts and ideas (the Deleuzian concept of fold, for example) within formal processes, or even into predetermined forms; one may define it as a passive and a-critical appropriation of notions proceeding from other disciplines. By contrast, the second strategy consists in dialectically confronting Deleuze's contributions by considering potentialities and limits; in other words, it would be an active interpretative process that aims to position architecture within a wider interdisciplinary context, and to provide critical responses to the complexity of contemporaneity. Therefore, by investigating the concepts that Eisenman borrowed from Deleuze, it will be possible to question the influence, or rather, the effectiveness of a Deleuzian method in architecture. Furthermore, by focusing attention on just one built project (the *Holocaust* 

*Memorial* in Berlin), we shall see how Eisenman transferred these concepts to architecture and whether a series of concerns, developed in the 1980s, remain valid in his poetics, or have totally vanished.

So, in order to comprehend better the connections between Deleuze and Eisenman, it is first necessary to explore the concepts of figure and ground in Francis Bacon's painting, according to the interpretation given by Deleuze in his *Logic of Sensation*. For Gilles Deleuze, figure is a primary concept in understanding Bacon's notion of diagram. On many occasions, when describing the essence of his painting, the French philosopher defined the figure as something coming out of the diagram: it is not figurative, but we can call it figure. Or rather, a non-figurative figure, as it does not resemble anything.<sup>2</sup>

In *Francis Bacon: Logic of Sensation*, following his philosophical programme based on difference, Deleuze proposed an approach to art – especially painting – neither as figuration, nor as representation; rather, art is a figure, or, in Deleuzian terms, a body. His main efforts were addressed at freeing figure from the figurative. For Deleuze painting has no model to represent, or stories to tell. On the contrary, the artist or the painter is responsible for assembling a figure based on sensations. Sensations mean flux: flows moving in unpredictable and unexpected directions. So the artist's main task consists of making visible these invisible forces.

At the same time, figure is a *body without organs*. A body without organs is opposed to the traditional and hierarchical organization of the organs that we normally call an organism. A body without organs is made of thresholds and levels. It is an intense and intensive field, crossed by different flows according to the variations in their amplitude. With his definition of *body without organs*, Deleuze aimed to point out the existence of certain provisional organizations of reality that deal with our senses, our body and our language. For him, structuralism, psychoanalysis, Marxism and even religious and metaphysical theories are not sufficient to comprehend how a body acts and what forces it is comprised of.

So, Deleuze's concerns about figure and body suggest his own vision of philosophy: that philosophy must fabricate concepts.

At the same time, in his reflections on figure, Deleuze revealed the influence of the French philosopher Jean François Lyotard, who in *Discourse, Figure* first distinguished between image-figure, form-figure, and matrix-figure.

The concept of matrix-figure, described as an invisible force capable of emerging within the domain of visibility in terms of pure differences, grasped the attention of many thinkers, such as Deleuze and Guattari, who rejected structuralism and were looking for a compelling alternative. By focusing his attention on the discourse-figure relationship, Deleuze questioned the nature of art itself: if the figurative has become too stable or too visible, then it is time to rethink art and its role as a critical function.

Eisenman's incursions into the world of philosophy suggest more than a renewed interest in the figure/ground principle. In fact, by investigating this dichotomy, new issues arose, one of which certainly dealt with the meaning of any architectural work, or rather, with the stratification of meanings and signs.



7.1 Peter Eisenman, Memorial to the Murdered Jews of Europe, Berlin, 1999–2005. *Source*: Stefano Corbo



7.2 Peter Eisenman, Memorial to the Murdered Jews of Europe, Berlin, 1999–2005. Source: Stefano Corbo

A very clear example was that of a poster made by an Italian political party in order to mark Holocaust Remembrance Day: a photograph portraying Eisenman's *Memorial* in Berlin was superimposed upon a Jewish star to emphasize the nature of the monument. In a conversation in 2006 with Rem Koolhaas, Eisenman himself commented:

The final image I would include in this opening presentation is one that my office received just yesterday: a poster of a new political party in Italy celebrating the Day of Memory, the day that Auschwitz was liberated. What is interesting to me about the poster is that they felt obliged to superimpose the Jewish star over the field of our projects in Berlin.

Apparently they think no one would be able to read the field without the Jewish star. For me that was significant – I kept saying to myself, why did they have to do that? And I realized that was precisely the point of our project: we forced them to superimpose the Jewish star over the field.

These are the issues that concern me.3



So, viewed from this perspective, the *Holocaust Memorial* seems nothing more than a further attack by Eisenman on the so-called *metaphysics of presence*, the idea that all presence is not only presence, but the representation or the sign of presence.

7.3 Old Jewish Cemetery, Prague. Source: Stefano Corbo

Contrary to what the American architect argued, one may describe the *Holocaust Memorial* in terms of sense, rather than of meaning. If meaning is based on different elements like sign, icon and index, in Berlin an alternative idea arises: something we can call *affect*. The poster of the Italian political party (*La Rosa nel Pugno*) shows a superimposed articulation of different texts: an icon (the Star of David) is superimposed upon a texture-pattern (the *Memorial's* grid constituted by the pillars), and another icon, the symbol of the Socialist party. To some extent, such an artificial palimpsest is comparable to the Jewish cemetery in Prague, where we find a similar accumulation of texts and symbols.

In commenting on the poster, Eisenman demonstrated an ongoing connection with his old interests: on the one hand, Sanders Peirce and his concerns about a theory of signs and on the other, Chomsky's differentiation between deep and superficial structure. Time had passed, however and, with the Berlin *Memorial*, Eisenman explored a new design strategy that dealt with affect: the way visitors could feel and experience his monument. Thus, the *Holocaust Memorial* represented something different from his *Cities of Artificial Excavation*, the figure/ground principle offered Eisenman the possibility of developing what he called *radical passivity*.

The role played by the subject in his architecture now became crucial. The subject was not to be merely passive; architecture was somehow to make him a participant in the space of the project, with his sensations, affections and perceptions.

So, the figure/ground principle, as theorized by Deleuze, became an occasion for detecting in Eisenman's work a new shift, connecting him to the most recent reflections on aesthetics and formal configuration.

What Eisenman experimented with in Berlin did not correspond to the modernist concept of form, based on its mutual connection with function; on the contrary, the *Memorial's* interpenetration between figure and ground implied a notion of form that already contained the potential and the characteristics of a possible change. Its open and unstable configuration was associated with the role played in this work by time as an individual dimension. The way time and architecture interacted described an unstable system, in which the individual contributions were overlaid onto the topography of the site and the pillars grid.

In Berlin 2,711 concrete steles lie between two floating grids. What is the relationship between the *Memorial's* grids and the steles? Is the figure/ground dichotomy preserved? What kind of formal strategy did Eisenman experiment with in Berlin?

In order to answer these questions, it is first necessary to refer to Eisenman's favourite field: philosophy.

In the second half of the twentieth century, philosophical aesthetics experienced a radical change, thanks to the rediscovery of the body, the rehabilitation of the senses, and the new phenomenological studies developed by thinkers such as Heinrich Barth, Ludwig Klages, Edmund Husserl and Hermann Schmitz. The nucleus of this shift consisted in a return of the discipline to its origins – aesthetics as a doctrine of sensible knowledge, aesthetics as *aisthesis* from the Greek word meaning 'perception'.

The Italian philosopher Mario Perniola analysed the twentieth century from the point of view of all the contributions in the field of aesthetics and argued that it was possible to detect four clear conceptual areas, defined around the notions of life, form, knowledge, and action. Life and form represented a development of Kant's philosophical apparatus and of his *Critique of Judgement*, while knowledge and action came from Hegel's *Aesthetics*.

Besides the four traditional fields illustrated before, Perniola introduced a new field, in order to describe what happened in the second half of the twentieth century. This was what he called the aesthetics of feeling (estetica del sentire). This conceptual area did not have its origin in the two traditional blocks that characterized philosophical thought until the twentieth century; rather, what Perniola described was the scope of a philosophy that attempted to re-direct the meaning and purpose of aesthetics towards its origins: aesthetics of feeling, aesthetics of affectivity and sensibility. Instead of a reconciliation between the tools offered by the thought of Kant and Hegel, aesthetics of feeling propose to emphasize the opposition; Perniola focused attention on feeling as an autonomous philosophical tradition, defined according to the notion of difference.

Among the protagonists of this new approach to aesthetics, Perniola quoted Freud, Heidegger, Wittgenstein, Benjamin, Bataille, Klossowski, Blanchot and many others – Jacques Lacan, for instance, who transferred these topics into the study of sexuality; Derrida, who for the first time was to introduce the category of *disgust* and Gilles Deleuze and Felix Guattari, whose *Capitalism and Schizophrenia* represented the summation of all these contributions. Alongside these contributions, one should not forget the French philosopher Maurice Merleau-Ponty, whose phenomenological approach influenced the work of many artists and architects in later years, as it restored the centrality of the body in the construction of the spatial and temporal world in which we live: 'My body is the fabric into which all objects are woven, and it is, at least in relation to the perceived world, the general instrument of my "comprehension".

According to Merleau-Ponty, the human body is an expressive space, which contributes to the significance of personal actions. The body is also the origin of expressive movement and is a medium for perception of the world. Bodily experience gives perception a meaning beyond that established simply by thought.

In 1975, when in his essay *Architecture and Disjunction* Bernard Tschumi tried to outline a theory of space in architecture that was based essentially on two epistemological invariants (the Pyramid and the Labyrinth), he could not foresee that after more than 35 years, albeit in very different and renewed domains, debate and architectural production would still have to face these two weighty interpretative categories, apparently opposed but actually deeply complementary. In his article, first published in *Studio International*, the Swiss architect turned his attention to what he called the paradox of space:

I would like to focus attention on the present paradox of space and on the nature of its terms, trying to indicate how one might go beyond this self-contradiction, even if the answer should prove intolerable. I begin by recalling the historical context of this paradox. I will examine first those trends that consider architecture as a thing of the mind, as a dematerialized or conceptual discipline, with its linguistic or morphological variations (the Pyramid); second, empirical research that concentrates on the senses, on the experience of space as well as on the relationship between space and praxis (the Labyrinth).<sup>5</sup>

Many years later only a few weak traces remain of the instrumental dichotomy, typical of the twentieth century avant-garde, between language rationality and sensory experience, structure and chaos, purity and ornament, reason and intuition. What had for decades characterized the territory of architecture, especially in its desperate attempt to escape from the post-modernism of the 1980s, was the almost obligatory recourse to contributions from other domains and, more generally, to the interpenetration of disciplines and techniques from related fields. Slowly, that provoked a significant and paradigmatic shift in the way that architectural production was understood, allowing for a perspective that was less connected to space in itself (as in a sense Tschumi had advocated in his distinction between the Pyramid and Labyrinth), than with the development of scientific and philosophical thought.

So the transition from semiotics or hermeneutics, to *aisthesis*, conceived of as perception, produced the gradual de-materialization of the notion of form (and of many other terms related with it, such as design, composition and programme) in contemporary design strategies.

Eisenman's *Holocaust Memorial* somehow expressed this condition well, in addition to dramatically displaying Tschumi's separation. In Berlin there was no apparent differentiation between the conceptual dimension of architecture and its intimate, individual characterization.

Throughout his professional and theoretical trajectory, Eisenman had continuously investigated the concept of form: from the *House Series* and the *Cardboard Architectures*, to the *Cities of Artificial Excavation*, Eisenman had questioned its status and its representational, symbolic and functional connotations. Finally, at the turn of the century, he seemed to discover a new field of possibilities: weak form. In other words, Eisenman was now more concerned about how people react in an architectural environment, not to meaning but to what he calls affect:

So I'm looking for those conditions in architecture which are like the music in film, which are secondary. This is very different from linguistics because I'm looking now within architecture to find out how architecture communicates at a less than primary level, at a more somatic, a perceptive way. You know, environments have an effect, like this room: we look at the room and maybe it says nothing. We can use it, it still functions, we can sit, we can talk, we can see out.<sup>6</sup>

In an effort to relate architecture to time, Eisenman manifested his interest in the philosophy of Henri Bergson: first of all, because what he designed in Berlin was an interior landscape, where the Bergsonian difference between homogeneous time and time as duration appeared dramatically; second, because the meaning of the project, or rather, the sense of the project, was impregnated with the affect/percept dualism, which Deleuze described after re-interpreting some of Bergson's work.

In What is Philosophy? Deleuze and Guattari argue that any work of art is a block of sensations, a compound of percepts and affects:

Percepts are no longer perceptions; they are independent of the state of those who experience them. Affects are no longer feelings or affections; they go beyond the strength of those who undergo them.

Sensations, perceptions and affects are beings whose validity lies in themselves and exceeds any lived. They could be said to exist in the absence of man, because man, as he is caught in stone, on the canvas, or by words, is himself a compound of percepts and affects.  $^{7}$ 

So for Deleuze any work of art is a being of sensation and nothing else, as it exists in itself. We paint, write or compose with sensations. But at the same time sensations can be painted, sculpted or written. The process is so complex that it is hard to say where sensations begin and where they end: the preparation of the canvas or the paintbrush also forms part of sensation.

The spatial effects that Eisenman achieved in Berlin (which he defines as an internal vortex of space) do not depend on the nature of the connections between real and virtual layers: they interact but at the same time are merged into an anomalous landscape. What distinguishes this project from his other textual architectures is time, defined according to Bergson's differentiation between homogeneous time and time as duration.

According to Bergson, homogeneous time is the time we measure – a practical concept, an agreement to celebrate scientific progress; by contrast, real duration is our interior time – something that occurs and evolves constantly. This is the reason why it cannot be measurable or classifiable and is always composed of different rhythms.

For the architecture of the Modern Movement, narrative was one of the constitutive elements of its essence: Le Corbusier's *architectural promenade*, for instance, guided the subject through a predetermined path in order to provoke in him a set of emotional and psychological reactions, contained in the physical boundaries of the designed space: in a closed system, the user reaches point B from point A through a sequence of controlled spaces and areas. It is a linear trajectory that leaves no possibility for the emergence of unexpected events. Years later, in a very different theoretical context, Alvaro Siza's architecture suggested the same idea: the iconic, autonomous and self-celebrative character of many of his works was accompanied by the idea of narration as the unique interpretative element of the architect's work.

By contrast, a visit to the Berlin *Memorial* is an individual and intimate experience. The project is not ruled by internal syntactic codes, but rather is fed by the interaction between visitor and time.

A traditional monument is interpreted for its symbolic and educational character and it is not readable through time, as it is seen and comprehended simultaneously. In Berlin, the duration of any individual experience has no logical explanation. Memory is not nostalgia for commemorating the past; on the contrary, memory is something present, alive. The Berlin *Memorial* took on the distinction between its own time and the time of experience and turned such separation into an interior landscape, in which memory is not contemplation, but an active factor in the re-reading of history.

Diagrams in Eisenman's process of design have been aimed at mapping a series of ground inventions (as in Cannaregio, in Verona or in Friedrichstrasse), through a process of superposition. Superposition is different from Deleuze's idea of superimposition, because there is no originating ground: figure and ground are interchangeable. So, Eisenman considered his project in Berlin to be the evolution of his idea of autonomy, as he replaced interaction with superposition. In his opinion, instead of superposing different layers, the *Memorial* was based on the interaction between them.

If some analogies with his first autonomous projects are clear, especially in the formal evolution of the project, it is in the effect that the *Memorial* produces that it differs completely from Eisenman's self-referential architecture. The undulating surface of the *Memorial* is derived from the superposition of different patterns — the grid constituted by 2,700 concrete steles, the topographic grid of the site, and

the urban fabric of Berlin. The result of such an operation is a heterogeneous force field, characterized by spatial compression, increase or reduction of visibility, and different gradients of density.

The starting point of the project was a rigid grid constituted by concrete pillars (2,700 steles of 95 centimetres in width and 2,375 metres in length, and a variable height of up to 4 metres). The intersection of the pillars grid and the site determines the different levels constituting the monument, and at the same time brings about the formation of various in-between spaces that deform from inside the apparently stable order of the *Memorial*. Such interstitial spaces are capable of generating in the visitor an articulated and individual experience. If from the outside the *Memorial* seems to follow a unitary pattern, based on a certain rhythmic continuity, in the interior any idea of stability and rationality disappears.

Underneath the prismatic steles, an 800 m<sup>2</sup> subterranean exhibition room, designed by the architect Dagmar Von Wilcken, explains that such a field of undulating steles is dedicated to memory of the Holocaust. Between the topography and the steles a perceptive and conceptual dystonia is created. In the *Holocaust Memorial* there is no univocal narration: on the contrary, time is composed of all the individual experiences (affects and percepts), that it is able to produce in the visitor.

Initially ideated with Richard Serra, the *Holocaust Memorial* is clearly influenced by a certain conceptualism and minimalism, stemming from the 1980s. By borrowing the processual mechanisms of art, Eisenman transformed his architecture into a dispersed gigantic sculpture, or installation, whose diagrammatic nature served to manage the fragmentation of space produced by the superposition of different grids. Such a process of *artisticization* of architecture represented a novelty in Eisenman's production, and connected him with contemporary production. At the same time, one cannot deny analogies (not only formal, but also symbolic), with another Berlin project – the *Garden of Exile* realized in the interior of the Jewish Museum by Daniel Libeskind. Despite their different scales, the *Garden* consists of a series of concrete columns that develop a maze-like space similar to the one realized by Eisenman next to the Brandenburg Gate.

In his effort to shift architecture towards its own conceptual limits, Peter Eisenman designed in Berlin what was, for the Spanish theorist Josep María Montaner, his most relevant work:

The project implied several aspects: to commemorate Jewish victims of the Holocaust, to express horror about the genocide, and to turn architecture into pure silence.

In this anti-monument, the only possible form of memory is due to the individual experience of wandering through the grid's interstices.

In Berlin Peter Eisenman ratifies the negation of an order that seems to exist but that is perceived as collapsed, destroyed, and suffering. He ultimately expresses the instability inherent in the whole system, which within its intrinsic order always involves a potential chaos, a germ of disorder.<sup>8</sup>

Sanford Kwinter shares with Montaner the same analytical approach. The *Memorial* is that kind of successful monument that extracts information from a landscape, rather than introduces more into it. Furthermore, it represents a conceptual and topographic caesura with the urban continuum. The interior landscape of the *Memorial* wants to appear as a city from which life has been removed, where there are no trees and no grass. It is the result of a process of moral desertification. The layers used by Eisenman to achieve this unstable monument are charged with symbolism: the grid, for example, represents the end of history, 'a system of rationality pushed too far, a rationality gone out of control, become monstrous.'9 So for Kwinter the *Holocaust Memorial* is like an historical machine based on fluid and indeterminate movements that course freely through a grid.

The *Holocaust Memorial*, in its constant dichotomy between an apparent order and a potential implosion, could also be read by paraphrasing what Deleuze and Guattari write in *A Thousand Plateaus* about the concepts of smooth and striated space. <sup>10</sup> When Deleuze uses the term space, he is referring to a physical space, a way of inhabiting, and a way of being. In this sense, the smooth space is not a codified and open space: it is the space in-between, the trajectory between two points that permits free and voluntary displacements. By contrast, the striated space is a closed entity, already structured and characterized. So, if one could apply such definitions to Eisenman's *Memorial*, we might say that every single layer or grid constituting the project was a striated space because, taken individually, they apparently define stable and closed configurations. However, the overall composition, resulting from the superposition of the layers, is a smooth space, because it works as an open field of forces, whose formalization is unstable and blurring.

Pierre Boulez shared with Eisenman an interest in such conceptual differentiation: in fact, he first developed in his music a complex set of correlations between smooth and striated spaces, by working on the distinction between directional and dimensional spaces. The smooth space is a *nomos*, whereas the striated space has a *logos*. The striated space is characterized by the sequence of distinct closed forms, organized according to horizontal melodic lines and vertical harmonic planes; the smooth space is characterized by continuous variation, an open development of form, the fusion of harmony and melody. These two kinds of space are articulated in Boulez's compositions according to different processes of alternation, superposition, and communication.

Returning to the *Holocaust Memorial*, one may say that in Berlin another notion of form arose: the process of horizontal layering was not static, but held in its interior the virtual representation of the future. The act of overlaying different levels did not crystallize into a closed or well-defined form. On the contrary, its physical and conceptual boundaries became ambiguous and open to multiple interpretations. Even though they are not explicitly included in the Berlin project, both Le Corbusier's *Hospital* grid for Venice and the *Mercator* grid, constituted an inspiration for the *Memorial*. And despite the use of his previous methods and processes, Eisenman achieved in Berlin a different result. If his *Cities of Artificial Excavation* were basically characterized by the effort to build a fictional context, an artificial history, in Berlin Eisenman pursued a realistic and pragmatic strategy

– to adapt his project to the topographic conditions of the site, and to work with it dialectically. There was no need to propose a re-invented history in Berlin. The *Holocaust Memorial* is about memory.

Throughout his extensive career, Eisenman has always questioned the traditional instruments of architecture, in order to build his own discourse that is distinct from hegemonic orders (first the Modern Movement, then postfunctionalism and so on).

In this sense the *Holocaust Memorial* confirmed Eisenman's critical approach: even though doing so could generate ambiguities, contradictions or provocative gestures, the American architect felt the necessity of questioning conventional systems based on structure, construction, programme and so on.

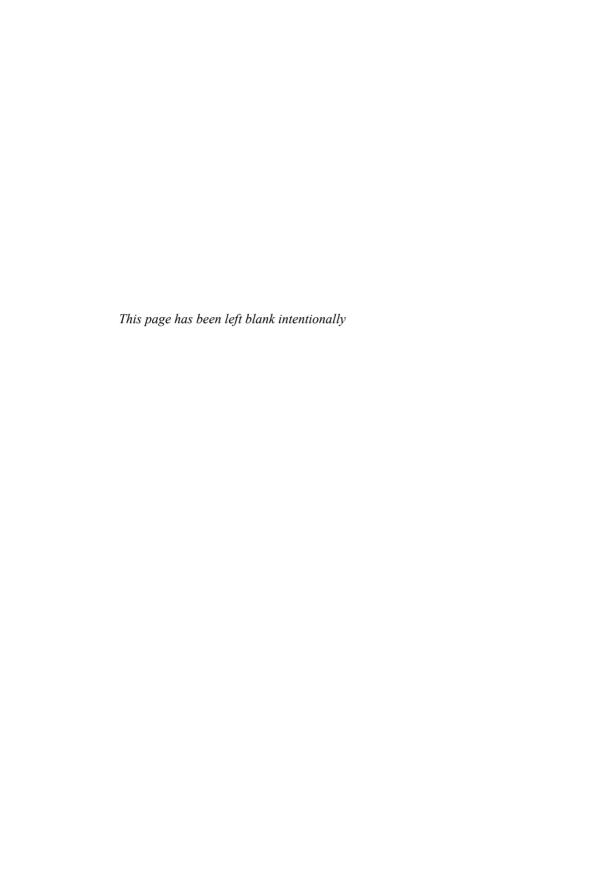
So, when distinguishing between superposition and superimposition, Eisenman is actually proposing an alternative version of the notion of superimposition. If, in his early works, Eisenman utilized superposition to go beyond the ground, in later works he tried to go over the ground. By superposing, Eisenman questions the framework of the whole design process and such continuous criticality generates unstable work. Eisenman uses diagrams as an instrument of destabilization. Referring to Tschumi, he argues:

The act of superimposition represents Derrida's in-between or denial of hierarchy. One of the most important shifts in ideology to be recognised here is the way that the position of the architect himself is also questioned. The role of the creator is an implicit part of the systemic hierarchies that Tschumi is trying to disrupt. By devaluing his own position within the system Tschumi makes the traditional understanding of his presence tenuous.<sup>11</sup>

## **ENDNOTES**

- 1 Peter Eisenman, Diagram Diaries (London: Thames & Hudson, 1999): 29.
- 'Man with Dog of 1953 incorporates the three fundamental elements of Bacon's painting (Figure, Ground, and Contour) but within a scrambled whole where the Figure is nothing but a shadow; the puddle, an uncertain contour; and the sidewalk, a darkened surface. This is indeed the essential point: there is certainly a succession of periods, but there are also coexistent aspects that accord with the three simultaneous elements of painting, which are perpetually present. The armature or material structure, the positioned Figure, and the contour as the limit of the two these will continue to constitute the highly precise system. It is within this system that the operations of brushing, the phenomena of blurriness, the effects of elongation and fading are produced, and which are all the stronger in that they constitute a movement within this whole that is itself precise.' Gilles Deleuze, Francis Bacon: The Logic of Sensation (London: Continuum, 2003): 30.
- 3 Peter Eisenman and Rem Koolhaas, *Architecture words: Supercritical*, ed. Brett Steele (London: AA Pubblications, 2010): 11.
- 4 Maurice Merleau-Ponty, Phenomenology of Perception (London: Routledge, 2002): 173.

- 5 Bernard Tschumi 'The Architectural Paradox', in Studio International, September-October 1975; revised in Tschumi, Architecture and Disjunction (Cambridge: MIT Press,1994): 28.
- 6 Chiara Visentin, 'Interview with Peter Eisenman', 2004, http://www.chr5.com/investigacion/investiga\_tendencias/DOCU%20-%20INVESTIGACION/PETER\_EISEMANN/entrevista\_a\_eisenman.htm, last accessed 20 February 2014.
- 7 Gilles Deleuze and Félix Guattari, Che cos'é la filosofia? (Torino: Einaudi, 2002): 164.
- 8 Josep Maria Montaner, *Sistemas arquitectónicos contempóraneos* (Barcelona: Gustavo Gili, 2009): 151–2.
- 9 Sanford Kwinter, Far From Equilibrium (New York/Barcelona: Actar, 1998): 167.
- 'Smooth space and striated space nomad space and sedentary space the space in 10 which the war machine develops and the space instituted by the State apparatus – are not of the same nature. No sooner do we note a simple opposition between the two kinds of space than we must indicate a much more complex difference by virtue of which the successive terms of the oppositions fail to coincide entirely. And no sooner have we done that than we must remind ourselves that the two spaces in fact exist only in mixture: smooth space is constantly being translated, transversed into a striated space; striated space is constantly being reversed, returned to a smooth space. In the first case, one organizes even the desert; in the second, the desert gains and grows; and the two can happen simultaneously. But the de facto mixes do not preclude a de jure, or abstract, distinction between the two spaces. That there is such a distinction is what accounts for the fact that the two spaces do not communicate with each other in the same way: it is the *de jure* distinction that determines the forms assumed by a given de facto mix and the direction or meaning of the mix (is a smooth space captured, enveloped by a striated space, or does a striated space dissolve into a smooth space, allow a smooth space to develop?). This raises a number of simultaneous questions: the simple oppositions between the two spaces; the complex differences; the de facto mixes, and the passages from one to another; the principles of the mixture, which are not at all symmetrical, sometimes causing a passage from the smooth to the striated, sometimes from the striated to the smooth, according to entirely different movements. We must therefore envision a certain number of models, which would be like various aspects of the two spaces and the relations between them.' Gilles Deleuze and Félix Guattari, A Thousand Plateaus: Capitalism and Schizophrenia, Trans. and Foreword by Brian Massumi (Minneapolis: University of Minnesota Press, 1987): 474.
- 11 Peter Eisenman, Diagram Diaries (London: Thames & Hudson, 1999): 30.



# **Oppositions**

# PETER EISENMAN VS LÉON KRIER

## **Deconstruction vs Reconstruction**

The title of my talk, 'The Arcadian, The Utopian, and Junkspace', reflects an idea that operating in architecture today there are not two but at least three differing ideologies with respect to the city. One is the Arcadian, represented here by Léon Krier. This worldview implies a return to some notion of a lost paradise, of a simpler, more accessible time.

[...] The utopian, which I represent at this conference, reflects a continuing desire for an unattainable better future. This idea of social progress fuelled modernism's program of community. Clearly, modernism, and with it the radical political ideology of the left, failed not only intellectually and socially but also architecturally. Nevertheless, the impetus for change is still present, although today the question must be, in what context???

[...] The third ideology, not represented at this conference, can be characterized by Rem Koolhaas's so-called junkspace. Like George Bataille's attack on architecture, it is not so much an ideology as it is a facile critique of the detritus of modernism and the modernist utopia. It denies not only Krier's Arcadian dream but also just about every other kind of project, including those of Koolhaas's very corporate clients, who regard his chic criticism of a bored elite as just another bit of fun.

Junkspace is like a nihilism fulfilled, where place has become so detached from dwelling that we find ourselves, as Massimo Cacciari said, in an absurd labyrinth.

[...] One of the major differences between the three ideologies is the status of the negative. In the Arcadian project, the negative is hardly a factor. In the utopian project, it plays an animating role, while in junkspace it has become nihilistic.<sup>1</sup>

Peter Eisenman

In the famous 1989 article My ideology is Better than Yours, published in Architectural Design, Peter Eisenman emphasized his distance from the reactionary-conservative approach of his friend, the Luxemburg architect Léon Krier, Both Eisenman and Krier played a central role in the disciplinary debate of the 1970s and 1980s, when their antithetical positions could be summarized as a simple dichotomy: deconstruction vs reconstruction.

More recently, at a Yale University conference, Eisenman attempted to define a kind of genealogy of the different ideologies operating today and, once again, cited Krier to stress the uniqueness of his discourse.

Actually, in spite of their different personal biographies, the radicalism of both Eisenman's and Krier's positions allows us to detect points of contact, or rather, to analyse a series of key words characterizing their careers. One of them certainly deals with Modernity and the legacy of its architecture. In this sense, the influence of Colin Rowe, and in part of James Stirling, is evident in their reflections on the transition from modernity to post-modernity. Whilst Eisenman collaborated with Rowe in Cambridge during his doctoral studies, Krier met the English architect at Cornell in the mid 1970s, after leaving the office of James Stirling. To some extent one may say that Eisenman and Krier acquired from Rowe's discourse their hostility towards Modernism. Both acknowledge the crisis of its Messianic message of renovation but, whereas Eisenman considers Modernism as a social-political critique that is still valid, Krier has described twentieth century life as a vulgar debauch, or delirium.

The opposition of Eisenman and Krier can be likened to the difference between the effort to return to the abstract formalism of the 1920s avant-garde and an architecture that looks at the classical tradition. Anthony Vidler summarizes this opposition as a contest between a posthumanist modernism (Eisenman) and a retrohumanist post-modernism (Krier).

Although Léon Krier belongs to another generation, both Krier and Eisenman reject the cultural terrain generated by the so-called radical architecture of the 1960s and 1970s. Their architecture has nothing in common with enthusiasms for technology, systems theory, pop culture, cybernetics and so on. Whereas Krier shares with Superstudio or Koolhaas an interest in the relationships between city and architecture, Eisenman defines as post-functionalist the positions expressed by Archigram, Cedric Price and others, as they reduced architecture to the fulfilling of mere functional requirements.

Eisenman's main mission has been to modify syntactics in order to build a better future; Krier claims the necessity of a utopian return to the past as a reaction to late-capitalism. His architectural message thus aimed at the reconstruction of the pre-industrial city. That is why he has intervened in the city with the instruments of traditional pre-modern urbanism, Cartesian grids, typologies, boulevards, focal points and monumental buildings. Krier is deeply convinced that Modernism has not produced an architecture that can be compared, in terms of quality, with the classical tradition. Even the best works of Le Corbusier, Terragni or Mies fail to reach what Krier has called formal perfection, which is only identifiable in classicism.

But Krier's resistance was not only directed against modern architecture; it was also directed at the modern condition and architecture's collaboration in society's process of self-destruction. In his opinion an architect cannot build a new world but he can imagine it. In this sense, although from opposite perspectives, Eisenman's and Krier's approaches converge on one point: the two architects (see Eisenman's Cardboard Architectures) consider architecture to be an intellectual-theoretical activity. They are not interested in building. Construction is just one of the possible scenarios offered by architecture, but it is not its logical conclusion, hence Krier's famous statement: 'I do not build. I do not build because I am an Architect.'

Both Eisenman's and Krier's discourses are derived from a negative strategy, to paraphrase Sarah Whiting. Krier thinks that nothing can be done within the existing processes of capitalism. The only possible option is looking to the past and resisting capitalism's technocracy. On the other hand, Eisenman's theoretical approach aims to find the limits of architectural language by manipulating, transforming and modifying its elements. His message differs from that of Modernism because subject and object emerge at the end of the process of manipulation; while the modernist project was meant to form a particular subject, Eisenman is more interested in working on subjectivity. His process of estrangement was quickly replaced by engagement, as his Cities of Artificial Excavation and other later projects have demonstrated.

Nevertheless, in their pessimism about Modernism, Eisenman and Krier define the nature of history in two different ways: Krier regards history as a universal message, in which classical forms are the best forms. He does not conceive of the history of urbanism as the expression of a culture, or of a determined Zeitgeist. By contrast, Eisenman does not consider that the past shapes the present and predicts the future. In his view, history is not linear at all. In line with poststructuralist theories, he considers history to be based on fractures, discontinuities and inflection points.

Classicism is the representation of an idea of purity borrowed from nature. Today we cannot use such an approach to describe the complex relationships that characterize our condition. At the same time, we cannot use classical canons of representation because they are simply historicist replications, with no meaning. Eisenman's anti-humanism deals with a kind of lost centre rhetoric: the Vitruvian man no longer stands in the centre of a perfect humanist space; such a heroic figure has disappeared. Against this position, Krier rebuilds a classical humanism, starting from the idea of stability and continuity with the past.

As a Jew, Eisenman does not feel himself to be part of the classical world; to return the world to the way it was before modernity would thus make no sense whereas Krier thinks that classical architecture reached a zenith, a formal perfection that needs no improvement, innovation or modification.

Even though construction is not their main aspiration, Krier and Eisenman have been intensely active professionally. However, the operative fields to which their theoretical preoccupations have been translated are radically different; whereas, in the 1970s, Eisenman was concerned with architecture intended as an autonomous object, constituted by the unveiling of internal formal mechanisms, Krier has only been able to apply his anti-modernist theories to urban projects. Eisenman searched for the essence of architecture in his *Houses*, whilst Krier aimed to reproduce in late twentieth century society a new Arcadia.

Of course, many of Krier's projects remained unbuilt, and thus positioned him alongside those visionary architects who spent most of their careers envisioning ideal cities; such as Ledoux, Piranesi and Boullée. In his proposals Krier imagined a classicized fantasy, an acropolis populated with social equality, making no distinction between patrons and slaves.

But between 1986 and 1988 Krier was finally able to see one of his visionary projects, *Atlantis*, on the island of Tenerife in the Canary Islands, realized. Commissioned by a German couple as a visionary meeting place for thinkers and artists, and inspired in part by Camillo Sitte's theories and other mythological Arcadian references, the project aimed to reconstruct the social harmony and the formal proportions of a pre-industrial community.

Whereas Krier's urban models are all based on the return to a pre-industrial city, Eisenman is interested in the indeterminacy and in the fragmented complexity of the city, not in its coherent and unitary image.<sup>2</sup> Krier's projects are deeply influenced by Plato's conception of ideas: ideas for him have no past and no future; they are ever present. Consequently, architecture and the city are one set of ideas, but with this limited set one can fabricate an infinite number of buildings. If Eisenman is not interested in the city as the ideal field for the application of his reflections, Krier has always worked on a coherent and unitary urban vision, acting as a planner and not just as a designer.

Moreover, both Eisenman and Krier share the same interest in the diagram. If, as we have seen, Eisenman's use of diagrams was both explanatory and generative, Krier reproduced diagrammatically the structures and patterns of the traditional classical city, as he was not interested in contemporaneity at all. As such, the classicism reproduced by Krier in every project is just a fictitious or artificial reality, a kind of scenography, like Eisenman's *Cities of Artificial Excavation* or the Berlin *Holocaust Memorial*.

Nevertheless, despite certain analogies, Krier has tried to replace the future with an idealized vision of the past: for him, history is based on continuity and linearity. The present contains latent and permanent traces from the past that just need to be brought to light. That is the main task for the architect, the past always offers more interesting possibilities than the present. Questioning the aesthetic of fragment and the historical pastiche theorized by architects such as Robert Venturi and Lucien Kroll, Krier has adopted a different strategy, aimed at reconstructing the contemporary city according to a romantic and reactionary perspective: his models are Ruskin and Morris' anti-capitalist models, or Schinkel's neo-classicism.

In fact, Krier has replaced the instruments that he criticized (fragment and pastiche) with a provocative position on the present, but the radicalism of his discourse generates ambiguity in relation to means, meanings and goals. There are so many contradictory aspects in his work that it is not clear whether Krier's anti-industrial resistance is focused on aesthetics or society, and at the same time his revisionism with regard to Albert Speer's work is difficult to comprehend.

(When asked to design some shopping malls, Krier re-used a few of Speer's plans and inserted them into his project.) He characterized his interest in Speer not as an apology for Nazism but as an expression of his view that many modernist projects are as totalitarian and criminal as Speer's, for example Hilberseimer's project for Friedrichstrasse (depicted by Krier as an architectural gulag). Furthermore, the scale and gigantism of Speer's work are comparable for Krier to that of any contemporary regime: the Plan Voisin, in Brazil, and even the metabolist utopias are similar to the Nazi urban project for Berlin. The truly reprehensible aspect of Nazi architecture was its technological modernism, its faith in progress and expansion. In this sense, the desire for paradox and provocation, and a certain polemical spirit connects Krier's and Eisenman's biographies.

Describing Eisenman's urban scheme for Berlin (1991–3), or Gherv's Guagenheim Museum in Bilbao, Krier pointed out the use of metaphors in contemporary architecture: rock formations, icebergs and so on. Everything can be turned into architecture, but for Krier, traditional architecture was an entirely man-made object. It did not imitate natural forms, but was based on an inventory of types (doors, windows, roof) that had no direct precedents.

Opposing such ideas, Eisenman did not believe in continuity or in universal narrations. He was interested in the contemporary city not as a product of history, but as the layering of different traces and fractures introduced by man through the centuries. The city was for him the best example of discontinuity. It needed to be deciphered as a series of texts.

As discussed before, both Krier and Eisenman considered classical architecture to be the highest expression of concepts like order, unity and stability. Krier saw fragmentation as a pathology; Eisenman conceived of fragmentation as alienation from contemporaneity. In the end, one may assert that Eisenman and Krier have represented two different positions based on the same feeling – nostalgia for something architecture had never had. Eisenman missed the real avant-gardist spirit of Modernism; Krier missed the pre-industrial city, a utopian Arcadia with classical forms.

# PETER EISENMAN VS FRANK O. GEHRY

# **Digital Infatuation vs Analogic-Digital**

Gehry's Lewis Building is a pivotal project in that it raises the question of the transgression of architectural precedents: it falls between the conscious and the unconscious, between the analogic and the digital, and as such is different from Gehry's other projects.

The Lewis Building engages the combination of the analogic and the digital, and in particular how the digital may impact the notion of section in architecture.

The traditional or analogic section is produced from the plan and extends vertically to a roof. Digital modelling provides the possibility of an extension of space that is no longer necessarily Cartesian, yet is different from Koolhaas's Agadir section or Libeskind's erosion of the x-axis at the Jewish Museum.

Gehry's building marks a shift in conceptualizing the diagram as an analogic device and in differentiating between analogic and digital processes. It's a cusp project between the past as present and the present as future, and broaches the underlying paradigm shift that occurs in questioning the precedence of the unity of the classical part-to-whole relationship.<sup>3</sup>

Peter Eisenman

Through the years, Frank O. Gehry has been constructing his personal repertoire, consisting of figurative elements that can be easily translated into real constructions, thanks to the use of computers. So, even in his later productions, he has focused attention on the moment of invention of form: the moment at which any capriccio or arbitrary gesture can be transformed into architecture.

In the late 1980s, Eisenman started to venture into the labyrinth of new information technologies, and the computer seems to have offered him the possibility of developing complex geometric models without the need for any reference to site, history or context to justify the design process. For this reason, Eisenman was very interested in that kind of hybridization of techniques practised by Gehry in his projects, because, through their evolution, it was possible to describe his entire career.

Gehry's early interest in modernist principles was soon disavowed in his investigation of new, industrial, ready-made materials that allowed him the possibility of manipulating surfaces and volumes. In this sense, the renovation of his own house in Santa Monica (1977-8) was emblematic of Gehry's ability to intervene on an existing Cartesian organization and introduce new provocative elements, detached from any visual and geometric continuity with the past. From this project on, Gehry began to explore the expressive potential of anomalous materials, in order to overcome both historicism and American modernism.

For example, the Lewis Building for the Weatherhead School of Management at Case Western Reserve, realized in Cleveland in 2002, was an outstanding project because it was emblematic of Gehry's analogic-digital method, and at the same time it questioned the unity of the classical part-to-whole relationship. Although it is not one of Gehry's most famous works, Peter Eisenman detected in the Lewis Building an important paradigm shift within his discourse: in Cleveland, for the first time, Gehry dealt with sections according to a renovated strategy in which, thanks to new information technologies, it was possible to model and generate a section as an autonomous and independent process. So Gehry did not concern himself with the correspondence between plan and section, but was able to isolate one element of the design process (the section), and work on it exclusively. By focusing attention only on the section, it was possible to control the entire evolutionary process of design.

In his infatuation with the digital, Eisenman shared with Gehry the same preoccupations for control and operativity. What distinguishes Gehry from Eisenman, however, is that Gehry has always occupied a unique and hybrid position, in which use of the digital is constantly matched by personal and manual expression. In his work, every digital process is contaminated by a traditional approach to architecture. So Gehry's diagrams, for example, derived from analogic processes, and even his architecture was deeply influenced by such artistic plastic contributions. By contrast, Eisenman's interest in the digital was more recent and extemporary than Gehry's. His position regarding computers was quite ambiguous: if at first he did not seem very interested in new technologies, in the late 1980s he experimented with the use of pioneering software (FORM Z), and admitted that there was no way forward but to open up his design process to the use of information technology. Twenty years later, Eisenman criticized the use of computers in architecture, as, in his opinion, they have played a crucial role in trivializing reflections on architecture and the design process.

Architecture now relies on one of most insidious forms of passivity: the computer.4 The idea of passivity also encompasses the relationship between object and subject, between the architectural palimpsest and the user. Whereas Eisenman focused his attention on the interaction between architecture and user (as seen in his recent projects like the Holocaust Memorial in Berlin), Gehry had a different approach: his projects were spectacular buildings, intended to structure and influence the way visitors could experience spaces or a simple interior view. Eisenman compared Gehry with Bernini, in the sense that both produce a passive spectator, forced to follow the architect and his spatial effects. The Guggenheim Museum, for example, aims to create scenographic views of Bilbao. By contrast, Eisenman felt himself closer to Borromini, as the former's spaces were intended to surround the spectator with a multiple experience, and offered no predetermined clues. The Holocaust Memorial was an a-hierarchic extensive space, an accumulator of different flows. Whereas Gehry's buildings were centrifugal compositions, based on the development of rational axes, Eisenman's later productions aimed to deal with force fields, characterized by visible and invisible layers.

In the 1980s Eisenman began to investigate the first computer-aided tools in order to transform architecture's status quo. The new electronic paradigm defined reality in terms of media and simulation and, for Eisenman, mainly questioned the role of vision and its hegemony in traditional architecture (in a sense, he had already faced such concerns during his doctoral thesis with his formal studies on Terragni). Moreover, the comprehension of an architectural space was no longer dependent only on its planimetric representation.

So, Eisenman was one of the first architects to use in his work FORM Z, a piece of software developed by Professor Christos Yessios in his doctoral thesis (Syntactic Structure and Procedures for Computable Site Planning). At that time Yessios was collaborating with Eisenman and his work was aimed at applying Noam Chomsky's generative grammar to the development of a language based on automatic generation processes. Such investigations were applied first to the Biocentrum at Goethe University, in Frankfurt (1986–7). Here the main challenge was to interpret the DNA process in terms of geometry. Eisenman abandoned Euclidean geometry in favour of fractal geometry, or rather, in favour of a folding architecture.

In 1993 Gilles Deleuze's essay on Leibniz (The Fold: Leibniz and the Baroque) was published for the first time in English and its influence began to spread to the American architectural debate; in the same year, Greg Lynn published his Folding in Architecture, expressing his opposition to deconstructivism and his interest in continuity and differentiation. For Lynn, folding in architecture meant flexibility and dynamic relationships as opposed to static traditional architecture. In this sense, thanks to the use of information technologies based on differential calculus, it was possible to explore new formal territories; to paraphrase Lynn, one might say that form shifted from a polygonal linearity towards a continuous curvilinearity.

Once again, Eisenman was forced to update his architecture in the face of new challenges, so, folding became one of the formal strategies he adopted, particularly in the 1990s, for the revision of the figure/ground principle. If tectonics never represented one of Eisenman's main interests, the process of differentiation introduced by the transposition of Leibniz's formula, had pushed him to break away from traditional conventions (both spatial and formal).

In contrast, Gehry's attitude was much clearer: his evolutionary design process started with sketching, and he was able to transfer a sketch into a model and then into the final building. Models were used by Gehry to investigate scale and relationships between architecture and the given site, but there was an almost direct correspondence between the first sketches and the built work. So, paradoxically, computer-aided systems were just an additional tool in turning Gehry's suggestions into reality, but they supposedly neither interfered with nor influenced the project's final configuration.

Looking closely at the Lewis Building, one may argue that the building is the concretization of an a priori idea, which was then extruded vertically and eroded in its surfaces. Its plan was traditional, like one of Schinkel's plans, but in its functional organization and its classical proportions, there were innovative factors. In Ten Canonical Buildings, Eisenman compared the Lewis Building with Friedrich Schinkel's Altes Museum, as the latter's classical plan consists of a rectilinear composition with a central void; Gehry adopted a similar configuration but, thanks to the use of computers, all his efforts were addressed at modulating the vertical extrusion of the building. Its plan had a U-shaped organization and an ABCBA rhythm, like the prototypes designed by Schinkel for his neo-classical palazzos. Furthermore, both Schinkel's Altes Museum and Gehry's Lewis Building were symmetrical and had a bipartite organization.

What distinguished the Lewis Building from Gehry's former projects was the nature of its section. The section became the starting and generative point of the project as, thanks to the use of the software, its orthogonal initial configuration was gradually modified to produce the final image of the building. The final section was the result of a dialogue between form and content, ground and figure, erosion and stability. At the end of the process of design, the plan had become a marginal element of the composition so that the whole design process was controlled through the section. Whereas the traditional section is generated from the plan and extends vertically to the roof, Gehry's sections were not necessarily Cartesian but, after a process of erosion and warping, a new condition emerged: the section no longer represented a vertical extension of space (as described in Le Corbusier's Maison Dom-ino), but rather, a modulation of space in which new forces acted. The building evolved according to different generative lines that eroded the original orthogonal configuration.

Despite their plastic and dynamic exteriority, Gehry's buildings were always organized according to Cartesian axes, so, when seen from the interior, the overall composition was static, controlled within a rational system. Even in Bilbao, for example, a dichotomy was created between the folded surfaces of the exterior and the functionalist lavout of the interior, Gehry's architecture needed axiality to maintain the separation between interior and exterior. So, in many of Gehry's experiments, it is possible to detect a permanent tension between an initial orthogonal organization and the biomorphic-figural surfaces displayed by digital modelling. Gehry was able to feed the dialectics between these two different poles during the whole process, even though their intersection was the ideal testing ground for the adequacy of his hybrid method, a method originally founded on an intuitive-expressionist moment that then served as a basis for the subsequent digital development of form. Both Eisenman and Gehry used superposition as a design strategy for their projects but whereas Eisenman's superposition aimed to dissolve any distinction between figure and ground, Gehry overlaid individual objects in order to achieve plastic-sculptural effects.

Returning to the hybrid character of Gehry's discourse, the Lewis Building expressed the cross-contamination of analogic and digital techniques whilst, at the same time, demonstrating how the digital could radically affect any classical idea of architecture. Contrary to Koolhaas, Libeskind and even Le Corbusier, Gehry questioned the legacy of Modernism, beginning with the section. Section is a kind of modulation of space in the vertical: that is why it is continuously deformed during its extrusion. Computer-aided technologies allowed Gehry to control such deformation during the design process, without compromising the planimetric configuration.

As even Eisenman has said, the Lewis Building, in its ambiguity, represented a heterodox episode when compared with other strategies. In Gehry's work there was no clear differentiation between analogic and digital processes. Whilst Greg Lynn declared his passion for computers, and Koolhaas and Libeskind conceived of their work according to analogic coordinates (at least in their former projects), Gehry worked on hybridization.

Even though his design decisions were capable of development only through digital support, Gehry's ideas about the digital were different, not only from Eisenman's, but also from Lynn's. Indeed, the Californian architect indeed operated on the borderland between personal expression of the artistic kind, and respect for rigorous digital applications. Sketches, models and CAAD drawings had the same importance in his work. What distinguished them was simply their sequential position in the process.

One of the turning points of Gehry's career was the so-called Fish, a sculpture building realized in Barcelona in 1989. The project consisted of a  $54 \times 34$  metre structure, clad with a complex surface. To manage such complexity during the design process, one of the architects who worked with Gehry at the time, James Glymph, decided to resort to information technologies and called a specialist, Rick Smith, who was an expert in CATIA, the software developed in the 1980s by the company Dassault Systems. Unlike most architectural computer-aided systems, which were based on Euclidean geometries – that is, using x, y and z coordinates – CATIA worked with differential and integral calculus, and defined possible configurations through mathematical equations.

The *Fish* was the first architectural project built according to a digital model. In Barcelona, Gehry began the process of architectural destabilization that he continued to develop over the years. Following the appearance of CATIA in his daily work, Gehry did not change his approach to architecture: the software has transposed the dialectics between sketches and models into a digital dimension, and any project derives from the tension between these two poles. For Gehry, the digital has been an instrument, not a generative device. It has transcribed data, but not invented forms. Indeed, one must admit that the introduction of digital instruments into his work has allowed Gehry to push architecture beyond any imaginable limit, so CATIA has influenced not only the way that Gehry builds his projects today, but also the way he thinks and sketches. In hindsight, one can see that Gehry's methodology has changed over the years and in 2004 his office even adopted new architectural software – the Digital Project.

In contrast to Gehry's profound engagement with the digital, Eisenman's digital infatuation is a recent discovery, and has been articulated according to the formal arbitrariness of several of his projects (the *Biocentrum* in Frankfurt or the *Nunotani Corporation Building*). Whilst, in some cases, the digital can be an important instrument for generating complex forms (as in Santiago de Compostela or in Pompeii), in other cases the computer has turned into a dangerous war machine, producing architectural *capriccios* (although Eisenman has always been able later to justify his projects with a sophisticated cultural substratum).

Today the first digital revolution in architecture, based on an interest in the virtual, the flexible and the open and defined as essential parameters of our condition, has vanished, and has gradually been transformed into a puerile curiosity about complex forms. If, thanks to digital technologies, architectural culture in the 1990s assumed the necessity of interdisciplinarity and hybridization, architecture now seems wholly to renounce their centrality in order to focus on the obsessive exploitation of algorithms and mathematical functions.

## PETER EISENMAN VS REM KOOLHAAS

## **Autonomy vs Realism**

Rem, your problem is that you don't know anything about form.<sup>5</sup>

Peter Eisenman

As observed by Pier Vittorio Aureli, post-modernism has transformed realism and autonomy into two antithetical categories: autonomy implies radical opposition to the contemporary condition (both social and aesthetic), whereas realism seems to represent an a-critical acceptance. This dichotomy has been well represented in the discourse of two protagonists in the architectural debate of the 1960s, Reyner Banham and Manfredo Tafuri.

Banham, in fact, always considered architecture to be the direct product of the techno-natural environment. Since the publication of his essays A Home is not a House (1965) and then Architecture of the Well-Tempered Environment (1969), he had theorized the consistent presence of the environment as an anti-monumental and anti-architectural entity, based on flows of heat, water and electricity. In his view, as environment was external to architecture, the architect's task became that of activating a dialogue with the conditions in which humans act and live.

On the other hand, Tafuri and other Marxist thinkers theorized about the refusal to integrate architecture into capitalist means of production, as disengagement from any model that would convert architecture into a tool for propaganda and economic development represented the only means of its survival. So, the technological enthusiasm described by Banham became for Tafuri one of the symptoms of the anti-humanist drift represented by capitalism.

In rejecting any external reference, architecture needed to be self-sufficient and self-referential. Although post-modernism cancelled those rigid classifications (avant-garde vs reactionary, abstractionism vs environmentalism and so on) on which the Modern Movement articulated its own mission, it is evident that in recent years the opposition between these two different sensibilities has become topical again and still influences contemporary production. Within this framework, Eisenman and Koolhaas have represented these two antithetical positions: autonomy vs realism.

As we know, autonomy only characterized the first phase of Eisenman's work, when, after his doctoral thesis, the American architect began to explore the potential offered by Chomsky's generative grammar and Sanders Peirce's theory of signs. Eisenman, or rather the young Eisenman, shared with Tafuri the mission of autonomy, but it was devoid of any ideological or political meaning. For Eisenman autonomy meant finding the syntactic mechanisms that regulated architecture. In the House Series, there was no other challenge or message to comprehend.

The return to Terragni in 2003 seemed to suggest that Eisenman's interest in abstraction and self-referentiality was still a guiding light of his discourse. So, from this perspective, the phase of exteriority (Cities of Artificial Excavation, La Villette, and other deconstructivist episodes) could be read as merely an extemporary interlude. Of course we know that Eisenman's biography is much more complex than a linear chronological classification and that one can deal with his thought only by starting from his ambiguities and his contradictions. In order to compare his position with Koolhaas's realism, however, we are forced to use a clear dialectical pole, and reduce his heterogeneous production to autonomy.

By contrast, in defining Rem Koolhaas's position as representative of a certain type of realism, we aim to highlight the pragmatic and cynical character of his approach. If his pragmatism has been derived from his cultural and social background, then his cynicism consisted in his conscious adherence to global neo-liberal doctrines. In architecture and urbanism this meant adapting his strategy to the society in which he operated in a Machiavellian fashion, trying to take advantage of those black holes that neo-capitalism has produced in many emerging countries, where relations of power between economy and politics have been totally upset. The in-fieri character of many of these structures represented for Koolhaas the ideal field in which to test his architecture. His urban studies (see the volume on the Pearl River Delta in China, *The Great Leap Forward*, 2002) are always based on disenchanted acceptance of the *status quo*, and aim to govern the complexity of such phenomena without intervening critically. The apparent radicalism of his projects sometimes manifests a conservative and nihilistic nature. Often, cynicism turns into irony, a constantly provocative attitude based on a tendency towards kitsch (see, for example, *Casa da Musica*'s interiors, realized with traditional Portuguese *azulejos*).

From the beginning of his theoretical activity, that is, since *Delirious New York*, Koolhaas has announced the death of the traditional instruments of architecture. From an anti-architectural perspective, he has invited architects to focus attention on wider topics, trying to capture the potentialities offered by globalization:

As architects we are intellectuals, but we are operating strictly within architecture. If I'm completely honest, I would say that what we've tried to become, in our office, is not architectural intellectuals, but rather public intellectuals, in other words intellectuals who are able to contribute in domains beyond architecture.

[...] By analysing the political and other components of each project, we see if there is a cumulative effect to what we're trying to do, building up an intelligence that is not just a knowledge about architecture, but increasingly, a knowledge about the world.<sup>6</sup>

Contemporary cities became the natural field for the application of these theories: Rem Koolhaas's Junkspace was the attempt to read urban spaces according to a different perspective: the distinction between beauty and the ugliness loses power and sense.

The built product of modernization is not modern but Junkspace. Junkspace is what remains after modernization has run its course or, more precisely, what coagulates while modernization is in progress. [...] Junkspace is the sum total of our current achievement; we have built more than all previous generations together, but somehow we do not register on the same scale. We do not leave pyramids. According to a new gospel of ugliness, there is already more Junkspace under construction in the twenty-first century than survived from the twentieth.<sup>7</sup>

The conflict between autonomy and realism also implied a different scale of intervention; whereas for Koolhaas globalization was a great opportunity for all cultures to interact with and influence each other, Eisenman looked at architecture microscopically, trying to free his output from (evident) social and political constraints. If realism meant engaging personally, Eisenman chose to take refuge in his ivory tower.

Context was one of the other interpretative keys to the opposition between Eisenman and Koolhaas. It was not defined as a passive-mimetic reproduction of the environment, but as a critical series of vectors that must be faced. For example, both Eisenman's and Koolhaas's projects for the *I.I.T. Student Center* demonstrated

how they were able to interact dialectically with the site, in this case Mies van der Rohe's Campus. Neither was subservient but instead they offered two opposed readings of Mies's poetics: Eisenman used a grid, Koolhaas used the city as a pretext. Eisenman replaced Mies's iconicity with a sculpture; Koolhaas realized an urban fragment, capable of reproducing in the campus all the complexity of contemporary cities. Eisenman and Koolhaas were convinced that the discipline of architecture evolves according to inflection points and discontinuities, but for Eisenman Modernity was such a turning point, whereas for Koolhaas that position was occupied by the metropolis.

So, if Eisenman has adopted a critical position with regard to the real, searching in Terragni's project for a way to revise modern syntactic paradigms, Koolhaas has accepted the heterogeneity of contemporaneity without opposing its processes - one may say that, despite the evident antinomy that characterizes Eisenman's and Koolhaas's work, they share a similar worldview. For example, both Eisenman and Koolhaas launched their careers through writing and not through building. The Formal Basis of Modern Architecture (1963) and Delirious New York (1978) represented their respective didactic models, functioning as operative manuals for their workplaces, although the Formal Basis was unpublished for 40 years, whereas Delirious New York immediately became a manifesto. If Eisenman's thesis was a traditional academic text, Koolhaas's writing style had already overturned traditional canons: his text was close to anti-academic hybrid models (on the border between an essay and an article for a magazine).

In the first phase of his work, Eisenman looked at his doctoral thesis as a didactic model to be exported and applied to his later projects: the codification of a series of rules-instruments, capable of generating further processes. In a way, The Formal Basis was supposed to be for Eisenman what Maison Dom-ino or Citrohan House represented for Le Corbusier, or even what the analysis of the New York Athletic Club in *Delirious New York* was for Koolhaas. The spatial relationships described by the Dutch architect in his book were, in fact, the basis of many of his subsequent projects, such as the La Villette project, in which he transformed the vertical complexity of the athletic club into a horizontal functional strip.

Due to its pedagogical nature, Eisenman and Koolhaas shared a critical interest in Le Corbusier's Maison Dom-ino: whereas the American architect centred his concerns on the diagrammatic character of the model, Koolhaas questioned its infinite reproducibility.

In some of the projects of the 1990s, OMA (Koolhas' Office for Metropolitan Architecture) often included a critique of the Maison Dom-ino section; in the Jussieu Libraries (1992–3), for example, the accumulation of horizontal slabs that characterizes the project is interrupted by shifts, ramps, and various kinds of discontinuities. Koolhaas modulated the section through a series of disturbances: it cannot be read as a horizontal continuum. By stacking different horizontal layers with no functional relationships, Koolhaas profoundly called into question one of the traditional compositional mechanisms of modern architecture: the Architectural Promenade. In OMA's buildings, floors are just superimposed, not articulated. So, Le Corbusier is a point of reference not only for Eisenman, but also for Koolhaas: if one looks at the latter's *Fukuoka* housing project, and its roofscape, one cannot deny the influence of Le Corbusier's *Venice Hospital*, in which any cell is designed starting from the section.

To some extent *Maison Dom-ino* also testifies to the distance between Koolhaas and Eisenman, and this distance concerns the idea of form. If form is for Koolhaas one of the possible and available tools with which to develop his own discourse, it is, for Eisenman, the ideological core of all his activity. Whereas Eisenman is devoted to investigating form in its possible definitions, Koolhaas uses form to discuss and question the traditional instruments of architecture.

Both men have produced critical architectures, as they continuously aimed to dismantle disciplinary conventions, but while one considered form a goal in itself, the other saw it as a means.

Furthermore, Koolhaas uses form to de-institutionalize the authority of the building that it has to represent. In order to achieve this, he needs to disestablish his buildings from the ground (see the *Seattle Central Library*, or *Porto Casa da Musica*); on the contrary, Eisenman discovered ground at the end of the 1970s, as it represented the prompt for building his own artificial narrations.

Robert Somol has written that what separates the two is that Eisenman sees architecture as a mathematical problem, whereas Koolhaas sees it as a statistical problem. That is why their work is now based on the connections between technology and geometry (Eisenman), or on a social-statistical data landscape (Koolhaas). Somol, along with Sarah Whiting, has also stressed how the idea of disciplinarity is defined by Eisenman and Koolhaas according to two different perspectives: for Eisenman it means process, as in the case of his reading of the *Maison Dom-ino*; for Koolhaas, disciplinarity means force and effect, as in the analysis of New York's *Downtown Athletic Club*.<sup>8</sup> For both of them, however, the development of their own discourses has only been able to proceed through the use of a precise instrument: the diagram.

For Koolhaas the diagram is no longer only a device that triggers architecture: it is mainly an analytic instrument for looking at the world. OMA and its research department, AMO, therefore use the diagram as part of an investigative process, not necessarily aimed at construction. Thanks to the diagram, AMO can conduct its research on economy, society and culture, but the diagram is not a creative device for building. Whereas, commenting upon Koolhaas's early work, Eisenman considers the diagram as a crucial topic:

Much of Rem Koolhaas's earliest work explores the diagram as a symbolic form: for example, the New York Athletic Club becomes symbolic of a discontinuous formal diagram. However, much of his recent work, such as the Seattle Public Library or the Casa da Musica in Porto, privileges the idea of an iconic diagram in that the realized forma of the building has a visual similitude to its diagram of functions.

[...]With his first book, Delirious New York, Koolhaas presents a radical conception of an architecture using the New York Athletic Club as a model. It is not a traditional diagram of function, but is rather a diagram symbolic of the dismantling of the traditional physical contiquity of part-to-whole

relationships. Koolhaas suggests that the presence of the elevator denies the need for contiguous functional relationships in a skyscraper.

Such a diagram, one that presents what can be called contiquous discontinuity, also appears in Koolhaas's entry for the 1982 Parc de La Villette competition in Paris. One of Koolhaas's most diagrammatic projects, the park is depicted as a series of horizontal programmatic strips. These functions do not require any spatial relationships. In envisioning the ground plane as a series of strips, Koolhaas's La Villette proposal breaks with a figure/ground urbanism to propose a montage of programmatic lateral bands linked by the strong vertical of a proposed promenade (a clear echo of the New York Athletic Club's discrete programmatic layers linked by the elevator).9

So Eisenman's and Koolhaas's diagrams are profoundly different: whereas in Koolhaas the diagram is an icon (see the Seattle Library), for Eisenman the diagram is an index. In the Galician City of Culture project, for example, the superposition of the different layers (a Cartesian grid, Santiago's medieval plan and other symbolic patterns) produces a final result that has no visual similitude to the starting point of the process.

2003 was the year of the first retrospective exhibition on Koolhaas and OMA, held in Berlin at Mies's Neue Nationalgalerie. But 2003 was also the year of Eisenman's essay on Terragni (Giuseppe Terragni: Transformations, Decompositions, Critique), marking the return to his old passion.

To some extent both the Berlin exhibition and the book on Terragni set a seal on the two men's participation in the debate of the last 30 years.

In recent years, both Eisenman and Koolhaas have proved their ability to change and adapt their output in the name of a certain intellectual radicalism, but whereas Eisenman considers the change to be the essence of autonomy in architecture, for Koolhaas change has meant providing the right answers to reality. By positioning their concerns on the border between theory and practice, their contributions are at once individual and individualistic, because they are disconnected from any collective or public tension.

Eisenman continues to look at architecture as a failed project in the realization of Modernism while Koolhaas considers that it died after modern urbanization, and so a new form of architecture emerges that is connected to much wider questions. Despite their different points of view, Eisenman and Koolhaas both depict a hopeless future, where we have only two options: either cynically to take advantage of the death of architecture by justifying everything on the grounds that all that is real is rational, or to return to the modernist heroes, in order to rethink the role of architecture in our societies. When such positions have been translated into architectural models, the results have proved quite contradictory, regardless of whether one was aiming to renovate Modernism and the other to govern globalization or whether one studied Terragni's models while the other researched Singapore's urban development. Irony (Koolhaas) and pessimism (Eisenman) have converged in a shared scenario: nihilism.

#### PETER FISENMAN VS TOYO ITO

# Nine Square Grid vs Diagram

An abstract machine in itself is not physical or corporeal, any more than it is semiotic; it is diagrammatic (it knows nothing of the distinctions between the artificial and the natural either). It operates by matter, not by substance; by function, not by form... The abstract machine is pure Matter-Function – a diagram independent of the forms and substances, expressions and contents it will distribute. 10

Gilles Deleuze

In order to describe the transition from diagrams of interiority to diagrams of exteriority, Peter Eisenman has questioned from the beginning the use of the so-called nine square grid, an analytic-explanatory instrument used by Rudolf Wittkower in order to interpret Palladio's villas.

In the 1960s, such a grid was also very present in the production of many American architects, so, Eisenman, when preparing his doctoral thesis in 1963 was forced to deal with this tendency; that was why he first analysed Wittkower's and Colin Rowe's formal studies in order to find a persuasive answer to his concerns. In fact, for Eisenman, what Wittkower used in his texts were not diagrams, for they explained Palladio's buildings, but not the process behind them; thus, they revealed formal or functional characteristics, not methodology. Moreover, both Palladio and Serlio worked according to implicit and explicit diagrams. Wittkower's formal studies were only able to detect the explicit matrix of the projects, but not their deep structures. For this reason, Eisenman gradually attempted to find an alternative to this type of formal analysis.

In his early work, especially in the *House Series*, Eisenman offered his own interpretation of the nine square grid: if Colin Rowe's and Wittkower's grids were only analytic devices, Eisenman's grid aimed to be a generative instrument. Starting with a simple pillar grid, he tried to modify it according to a series of internal and self-referential rules based on manipulation and rotation. Following these artificial operations, the project would conserve only latent traces of the original configuration. So, the nine square grid in Eisenman's interpretation was still an ambiguous or interlocutory instrument. It was at the same time explanatory because it was a neutral structure that served, as Rafael Moneo has written, to justify certain decisions in hindsight, but it was also partly generative, as Eisenman used it as the starting point for the whole design process. It was in modifying and manipulating the grid that Eisenman achieved abstraction in his *Houses*.

Eisenman's nine square grid was therefore on the border between analysis and operativity. In his early works, the diagram was not a graphic reduction or ideogram, but it was not to indicate a structure either so Eisenman used it to turn structure (the pillars grid) into abstraction. Even if we consider the diagram as an element of negotiation between space and time, we must admit that Eisenman's nine square grid did not belong to such a category. So, when in *Diagram Diaries* (20 years after the *Houses*), the American architect introduced the definition of diagrams of

interiority to explain his early work, we can be sure that the nine square grid was a kind of *a posteriori* explanation and not a real formal strategy.

In contrast, Toyo Ito conceived of the diagram, both in his projects and in his studies, as the crystallization of concepts, ideas and desires; through the abstraction of his linguistic components, the diagram for Ito has been an operative device because, through it, he could manage the entire design process, and control every phase. The diagram was a structural platform for future representations. Whereas Eisenman has focused his diagrammatic attention on form, Ito has focused on process even if, sometimes, diagrams and built architecture coincided at the end of the process. Moreover, Toyo Ito has used the diagram as a synthetic instrument; it has had the function of reducing the data complexity of the project and providing interpretative clues.

Describing an exhibition held at MOMA in New York City (1990), called Diagramming of Microchips, the Japanese architect offered his reflection on diagrammatic images of the integrated circuits used in computers. In order to describe the power of images in the era of microelectronics, Toyo Ito wrote:

The exhibition at MOMA seemed truly innovative too because the photographs of microchips were used to make the aesthetics of the era of microelectronics visible in images. It succeeded in giving form, for the first time in a decisive manner, to the image of a new aesthetics that is replacing the dominant machine-age aesthetics of the twentieth century.

[...] The myth that the best form is the one that most closely matches function dominated the world of design throughout the twentieth century. *In the case of electronic objects, there is no causal relationship between* function and form. Even in objects that generate images or sounds, form doesn't follow function.

The enormous memory and calculation capacities of the computer conjure up no formal image. All that appears before our eyes are the data to be entered and the results to be obtained.11

Eisenman and Ito shared their scepticism about the legacy of Modernism, as the form-function principle is not valid in explaining the contemporary world. Whereas Eisenman has attempted, like an archaeologist, to isolate the different layers that constitute and generate architecture, Ito has aimed to turn architecture into a phenomenological landscape, in which the data-invisible layer is totally overlaid on the physical layer. Diagrams serve to manage such interpenetration:

The blown-up diagram of a microchip looks like an aerial photograph of a city, processed on the computer. If transformed by means of an effector, the photograph of an urban area can become an abstract diagram that shows only the empty outline of the buildings and the works of civil engineering, filled with luminous and coloured points.

A symbolic value attaches to the fact that as soon as the substance of urban space is eliminated another city emerges: the city as microchip.

In that moment the city is not just diagrammatically analogous to the microchip, but even begins to display similar characteristics, which can be summed up by three terms: fluidity, multiplicity of layers, phenomenality.<sup>12</sup>

Eisenman's interests have been obsessively centred on architecture as an autonomous model; Ito has looked at the contemporary city as the ideal field to test the alliance between man and nature.

However, for Ito urban space is also the superposition of different invisible and visible flows, so to make architecture in such environments it is necessary to place it within this muddle of relationships, or rather within various flows. Only by dealing with this series of cross-currents will we be able to remove the opposition between natural and artificial.

Peter Eisenman, on the contrary, has rejected any kind of phenomenological approach: since his radical distinction between the mental and sensory, he has always underlined the conceptual reality of architecture. Rather than focusing on the experience of the subject (and consequently working on colours, materials, textures, light and so on), Eisenman invented the notion of Cardboard Architecture to lessen the difference between the built form and the model. Ideas are models.

In one of his essays from the 1980s, Toyo Ito described for the first time the atmosphere that surrounds occidental cities: if attention to climatic parameters still did not form part of Ito's design apparatus, one has nevertheless to acknowledge the simultaneous existence of an atmospheric approach in many of his opinions, mostly with regard to the contemporary condition. So, according to the Japanese architect, to detect the atmospheric character of our cities means to define a peculiar protective film. Considered as a consequence, even metaphorical, of a consumerist society, the film implies new challenges for architecture, whose role becomes making this film visible, and relating it to the actions and needs of users. Architecture for Ito must become a phenomenological device, a membrane that makes the flow of air visible, that shows human performances.

Although it acts as a kind of dispositive, we cannot compare this new architecture to the modernist machine of the twentieth century, because it is more like an open system, without any morphological expression, and with multiple meanings, just like a bar code.

In some of his projects, Toyo Ito proposes his own idea of urban space: the city as a superposition of diagrams. In Shanghai, for example, Ito worked on the superposition of different heterogeneous levels: communication and transportation systems, green areas and vertical buildings according to various typologies (dwellings, hotels, offices). Every layer needed to be transparent and porous, in order to guarantee the interpolation of data. So, by offering a metaphor of cities and microchips, Toyo Ito revealed his own definition of the concept of diagram: even though it is not a generative instrument, the diagram simultaneously assists work on fluidity, multiplicity and phenomenality. Fluidity deals with visible and invisible flows (from circulation systems to communication); multiplicity deals with the interpenetration of the several layers constituting a project (connections, figure/ ground relationship); and phenomenality deals with experience and atmosphere – to paraphrase Paul Virilio, this is the so-called aesthetics of disappearance.

Toyo Ito also focused attention on the ways in which other architects worked with diagrams: in the case of SANAA (a Japanese architectural office, founded by Kazuyo Sejima and Ryue Nishizawa), he defined their approach as diagram architecture, pointing out the correspondence between diagram and plan in their projects. For Kazuvo Sejima, a building is the equal of the diagram she used to illustrate its internal configuration. In such a case, diagram was something that started from inside and was not separable as an entity from its contents.

Whereas many architects were not able to convert a diagram into a real building, for Ito, SANAA could summarize in a simple diagram the multiplicity of conditions required by architecture (both functional and spatial). Thus, SANAA renounced the idea of reading architecture in terms of only three dimensions and started with a functional diagram that was to be immediately transformed into reality. What we traditionally define as design does not exist in SANAA's work. Design is also related to the first spatial diagrams.

In architecture, Toyo Ito distinguished two contradictory phenomena: on the one hand, it had traditionally been conceived of as static because it tended to eternity whilst, on the other, it must be responsive, capable of adapting its characteristics to the fluidity of people and their necessities. Thus, at the same time, it can incorporate existing and already formed signs, but it can also follow a constant evolutionary process, in which even meanings continually change.

Rather than resolving such contradiction, Toyo Ito thought that architecture must work on these two conditions, trying to overlay on the physical layer a flexible, transparent and expandable network. Architecture thus became the concretization of a dispositive capable of producing phenomena, to paraphrase his own words: it had to detect an enormous quantity of invisible data, and turn it into physical spaces and a new kind of landscape.

So, it is clear that Eisenman's and Ito's processes of diagramming produce different results but both share an interest in form, particularly if we look at Ito's output in 1970.

Rather than using the term 'form', Toyo Ito preferred the concept of morpheme, as it indicated a 'tool for articulating a field detached from functional and rational meanings, no more than suspended units of form unaccompanied by any kind of emotion.'13 For Ito, composition became a matter of arranging morphemes and, by integrating and assembling some of these, it would be possible to discover new and infinite patterns or structures to provide dynamism and rhythm. Through the identification of such morphemes, Toyo Ito suggested the possibility of the city as a general urban semiotic.

The analytical impetus that characterized Eisenman's or Richard Meier's investigations, which aimed to de-compose certain modernist buildings in order to extract their inner formal structure, is a subject of interest to Toyo Ito. For the Japanese architect, in spite of the different categorization of their work, what the American architects in fact did in the 1970s was to deal with morphemes. Ito considered the morpheme as a form abstracted from the natural and urban scenes and contained in our own memories.

The most paradigmatic example of Toyo Ito's design approach was the *Sendai Mediatheque*: here all the drawings, sketches and schemes show how the Japanese architect conceived of the diagram as a device that responded to a double objective: in some cases it was an analytic and reflective instrument, but at the same time it was operative – an instrument for reducing data to a clear synthesis.

The many drawings developed during the construction process of the *Mediatheque*, expressed this tendency to control the evolution of the project mainly through diagram. Toyo Ito has himself admitted:

These five years, as each floor has continued to evolve, we've drawn an incredible number of floor plans. All of them are quite abstract, square-framed diagrams on which the activities for each floor are indicated only in brief symbolic notation. They almost look like gameboards where the markings show a game in play.<sup>14</sup>

The Sendai Mediatheque was intended to be the critical response to the traditional public facilities based on spatial typologies that have existed since the nineteenth century. Toyo Ito attempted to overcome the autonomy and centrality of these architectures, in order to propose an interactive platform whose main characteristics were functional undifferentiation and citizen participation. In this sense, the Sendai Mediatheque works as a public space in which the traditional boundaries between interior (architecture) and exterior (the city) are completely blurred.

As described by Toyo Ito himself, The Sendai Mediatheque was essentially based on three goals: rather than the traditional model of fixed services, the new building was envisaged as favouring user participation and socialization. Instead of an autonomous building, the Mediatheque was to work as an open network, open to urban dynamics. Finally, the programme of activities was imagined as a self-generating platform into which any new content could be incorporated.

Ito conceived of the Mediatheque as the contemporary evolution of Le Corbusier's Maison Dom-ino: a potentially infinite superposition of different public spaces that would be independent of specific functions. The ground floor was totally open to the public and was invaded by vegetation, but each level had its own characteristics. The floors were connected by several steel tubes, whose form was inspired by keyakis (native trees). Permeability between interior and exterior was the key. As expressly stated by Ito, thanks to advanced structural and technological means, the building represented a transparent and flexible rationality. Seven floors were supported by 13 tubular structures. There were no structural walls, just interactive and responsive surfaces. The tubes hosted duct spaces, pipe spaces and vertical connections. The spaces contained between two slabs were homogeneous and permitted the development of different activities. The Mediatheque aimed to eliminate any spatial hierarchy by avoiding the prescriptiveness of precise functions within precise spaces. Ito rejected such traditional conventions. In order to enable an interactive model, Ito also denied the modernist distinction between served areas and service areas, and introduced in Sendai the interpenetration of the two spaces. So, whereas for Eisenman the Maison Dom-ino was a manifesto or didactic model, for Ito it represented an operative diagram, capable of producing active modifications in architecture.

Even though the Sendai Mediatheque cannot be considered a diagrammatic building, as its formal configuration was not derived from a diagram or generative matrix, it is clear that the diagram played a central role in the definition of Toyo Ito's programmatic and structural strategies. One may say that the Mediatheque demonstrated how the diagram could be both an analytic and an operative device. In fact, Toyo Ito used it as a tool to reduce a vast amount of data to a few schematic representations (programmatic articulation, flows migrations and so on); but at the same time, the use of the diagram was present during the process of design, and permitted the clarification of certain interlocutory ambiguities, justified certain decisions, and suggested new possibilities.

Ito demonstrated in Sendai that architecture is not about forms or language, but is itself a process through which to seek an alliance with nature in order to create environmental phenomena. His interior spaces are like a garden of sensations, and every building has its own atmosphere.

Both Eisenman and Toyo Ito considered processuality to be a central theme in architecture and diagrams could help to manage the complex volume of data derived from such processes. What Ito proposed in the Mediatheque was neverending process: the building could be constantly modified, manipulated and updated to new technologies. It was an open platform, in which the public played a central role in defining spaces and activities. For this reason, it was necessary to use one or more instruments capable of managing and controlling such processuality, and for Toyo Ito, diagrams were the instruments for depicting a codex of rules that applied to the building. The result was a fuzzy or blurred architecture, a kind of architecture free from physical, programmatic and perceptive barriers.

### **ENDNOTES**

- 1 Peter Eisenman and Léon Krier, Eisenman vs. Krier: Two Ideologies, A Conference at the Yale School of Architecture, ed. Cynthia Davidson (New York: Monacelli Press, 2004): 135-6.
- 2 'Paradoxically what can be mistaken for expressions of violence and grief often turn out to have the contrary effect. Deconstructivism's practice of breaking up large building programs into a multiplicity of smaller fragments makes its buildings more approachable than the bland, scaleless, faceless bulks of routine modernism. The latter's mind-killing uniformity and semantic emptiness, the literal embodiments of a totalitarianism that destroys individuality, family, society, are turned here into picturesque ruins. They were not ruins of architecture but ruins of modernism.' Léon Krier, 'Coming to Terms with Janus', in Eisenman vs. Krier: Two Ideologies, ed. Cynthia Davidson (New York: Monacelli Press, 2004): 146.
- 3 Peter Eisenman, Ten Canonical Buildings (New York: Rizzoli, 2008): 263-4.
- 'Architecture today relies on one of passivity's most insidious forms the computer. 4 Architects used to draw volumes, using shading and selecting a perspective. In learning how to draw one began to understand not only what it was like to draw like Palladio or Le Corbusier but also the extent of the differences in their work. A wall section of Palladio felt different to the hand than one of Le Corbusier's. It is important to understand such differences because they convey ideas. One learned to make a plan. Now, with a

computer, one does not have to draw. By clicking a mouse from point to point, one can connect dots that make plans, one can change colours, materials and light. Photoshop is a fantastic tool for those who do not have to think. The problem is as follows. "So what?" my students say, "Why draw Palladio? How will it help me get a job?" The implication is this: "If it's not going to help me get a job, I don't want to do it." In this sense, architecture does not matter. In a liberal capital society, getting a job matters, and my students are in school precisely for this reason. Yet education does not help you get a job. In fact, the better you are at Photoshop the more attractive you are to an office, the better you will work in that office. If I ask a student to make a diagram or a plan that shows the ideas of a building, they cannot do it. They are so used to connecting dots on a computer that they cannot produce an idea of a building in a plan or a diagram. This is certain to affect not only their future, but the future of our profession.' Peter Eisenman, Conference at RIAS, May 2008, Edinburgh, Scotland.

- 5 Peter Eisenman, Supercritical, edited by Brett Steele (London: AA Publications, 2009): 8.
- 6 Peter Eisenman and Rem Koolhaas Supercritical, edited by Brett Steele (London: AA Publications, 2009): 13.
- 7 Rem Koolhaas, Junkspace (Roma: Quodlibet, 2006): 24.
- 8 [...] From the mid-70s architectural discourse, one can discern two orientations toward disciplinarity: that is, disciplinarity as autonomy and process, as in the case of Eisenman's reading of the Dom-ino; and disciplinarity as force and effect, as in Koolhaas's staging of the Downtown Athletic Club. Moreover, these two examples begin to differentiate the critical project in architecture, with its connection to the indexical, from the projective, which proceeds through the diagram. The diagram is a tool of the virtual to the same degree that the index is the trace of the real. Rather than relying upon the oppositional strategy of critical dialectics, the project employs something similar to the Doppler Effect – the perceived change in the frequency of a wave that occurs when the source and receiver of the wave have a relative velocity. The Doppler focuses upon the effects and exchanges of architecture's inherent multiplicities: material, program, writing, atmosphere, form, technologies, and so on. [...] The Doppler shifts the understanding of disciplinarity as autonomy to disciplinarity as performance or practice. In the former, knowledge and form are based on shared norms, principles, and traditions. In the latter, a more Foucaultian notion of disciplinarity is advanced in which the discipline is not a fixed datum or entity, but rather an active organism or discursive practice, unplanned and ungovernable.' Robert Somol and Sarah Whiting, 'Notes around the Doppler Effect and other Moods of Modernism', in Perspecta 33 (2002): 196.
- 9 Peter Eisenman, Ten Canonical Buildings (New York: Rizzoli, 2008): 202–3.
- Gilles Deleuze and Felix Guattari, A Thousand Plateaus: Capitalism and Schizophrenia (Minneapolis: University of Minnesota Press, 2004): 156.
- 11 Toyo Ito, Tarzans in the Media Forest (London: AA Publications, 2011): 104–5.
- 12 Toyo Ito, Tarzans in the Media Forest (London: AA Publications, 2011): 105.
- 13 Toto Ito, Tarzans in the Media Forest (London: AA Publications, 2001): 36.
- 14 Toyo Ito, Sendai Mediatheque (Barcelona: Actar, 2003): 17.

# **Afterword**

## 1963-2013 OPEN THEORY

By replacing the origins, the presence and the author by arbitrariness, absence and machinic behaviour, Eisenman has found the recipe for a non-conservative resistance, critical within the Zeitgeist. He has become the first truly machinic architect, not in the productivist sense, but in the purely ideological. Eisenman's machine of absolute resistance is aimed at disengaging the traditional coupling between power and control to retain a critical control of the project without becoming a pure instrument of the Zeitgeist. His statement: 'I have always been interested in control, not in power' is very revealing as a way of understanding his projects.'

Alejandro Zaera Polo

As discussed in the previous chapters, to venture into Eisenman's theoretical and professional biography is always a complex task: many have been the inflection points, the discontinuities, the adherence to different and opposite models that have characterized his trajectory.

One of the first conclusions that one can draw is that there are many and different Eisenmans: there is the European formalist Eisenman, as depicted by Manfredo Tafuri; the deconstructivist Eisenman, friend of Jacques Derrida; and the mystic-cabalistic Eisenman, described by Renato Rizzi. At the same time many have been the interpretations of his work and his contribution to the architectural debate.

For the Italian architect Franco Purini, for example, one can distinguish at least five phases in Eisenman's career: the first goes from *House I* to *Cannaregio* (1978) and can be viewed as the transition from autonomy to the discovery of context; the second phase includes *Berlin IBA Housing*, *Romeo and Juliet* and the *Wexner Center* in Columbus and is characterized by the use of time as an architectural material; the third phase includes his output of the late 1980s up to the *Max Reinhardt House* (1992) and is based on the use of computers and an interest in biology (see the *Biocentrum* in Frankfurt, or the *Nunotani Corporation Building*); at the beginning of the 1990s Eisenman seemed more concerned with the performative aspects of his

architecture, so his fourth phase is characterized by the extreme heterogeneity of his projects, where the syntactic codes are always different, and by the constant dialogue between exoskeleton and endoskeleton (see the *Jubilee Church* in Rome, 2000); in the last and current phase, according to Purini, Eisenman is more interested in construction than in theory, and in some projects, such as the *City of Culture* in Santiago or the *Berlin Holocaust Memorial*, he separates form from its structural support, and the shell from any tectonic connotation.

One of the most naïve, but at the same time intriguing, interpretations of his career connects Eisenman's architectural and theoretical production with his Jewish roots. For Renato Rizzi and, to some extent, Sanford Kwinter, Eisenman's architecture was the exact transposition of Judaism, intended as contemplation of the pure and profound meaning of form. So, all his works constitute a coherent figurative metaphor of the Jewish mystic tradition: the *House Series (I–X)* is just a propaedeutic preparatory phase, or rather, an intermediary zone of both union and separation, between the Absolute and earthly life, as depicted in the symbology of Sephiroth (the ten fundamental attributes of God). Rizzi considers *House X* as the conclusive episode of a series, but at the same time a kind of great unknown, as it opens up a new path to explore.

Sanford Kwinter, in his analysis of the *Holocaust Memorial*, also refers to the importance of Eisenman's Jewish roots for the project. The central role played by time in the *Holocaust Memorial* (1997–2005), for example, has been interpreted by Kwinter as the importance that time has for Jewish thinkers. It derives from an aspect of the Jewish deity seen as the God of time, and not as the God of space. For this reason, the concept of the Sabbath is crucial in the Jewish way of life. The continuity of time can also imply the corruption of forms or their ruin. So the Jewish cult of ruins feeds the *Memorial*, just as it does Jerusalem's Wailing Wall, or Prague's cemetery.

From Formalism to Weak Form has, in its structuring, rejected both chronological and linear characterizations, aiming instead to interpret Eisenman's trajectory according to key words, or categories, in order to have, at the end of the process, a complex and interconnected cartography. Consequently, rather than reducing the complexity of Eisenman's discourse to a few homogeneous phases, this book has focused on those concepts, often proceeding from other disciplinary fields (archaeology, biology and so on), that expressed anomalies, heterodoxies or discontinuities in his production.

In clarifying the divergences that have driven this investigation, one must admit that all of these possible and distinct interpretations possess the merit of shifting architectural criticism away from marginality, and making it truly operative, to paraphrase Manfredo Tafuri. Paradoxically, both Eisenman's theoretical contributions and the various interpretations given to his work have merged into a propagandistic-hagiographic body that Eisenman himself has cleverly manipulated and oriented according to his wishes.

By analysing Eisenman's entire career it is possible to reach a further conclusion: his biography certifies the separation of architecture from its historical and political context. His investigations on the evolution of language have induced him

obsessively to seek determined rules of functioning, by freeing architecture from its functional and aesthetic aspects. For Eisenman, architecture can emerge only when it is independent of its historical context, and only when we can conceive of it as a sequence of artificial fictitious practices. In other words, we can define all of Eisenman's efforts to compose and decompose architecture as a constant process of alienation from the conventional systems (site, structure, programme). Eisenman's work is a critical manifesto for the traditional boundaries of architecture.

Even though in the course of 50 years Eisenman produced no fundamental essay (none that is comparable, for example, with Aldo Rossi's *Architecture of the City*, or Venturi's *Complexity and Contradictions*), his theoretical activity has deeply influenced the architectural debate, both in Europe and in America. The concepts of implosion, present in *House II*, explosion (*House X*), and artificial excavation in his urban projects (Venice, Berlin and Santiago) and the textual architecture at *La Villette*, or the biological models in the Frankfurt *Biocentrum* have all become fields of debate and dialogue.

The third crucial key to Eisenman's poetics deals with pessimism. If, in his early work, Eisenman theorized the failure of Modernism as a result of functionalism and humanism, throughout the years he brought a different perspective to maturity: today, for Eisenman, the core of architecture is neither the Renaissance man, nor the de-centred mannerist; the core is neither functionalist objectivity, nor technological revolution. His architecture has become a mysterious object, expressing a constant instability: any apparent rational configuration holds in its interior a latent potential for its modification that is far from any kind of equilibrium.

In his architecture, Eisenman depicts the dichotomy between modern architecture (intended as the evolution of the humanism of the Renaissance), and Modernism (intended as separation of man and ideas and therefore abstraction, autonomy, and so on). Such differentiation appears as a provocative and contrived operation for a number of reasons: first of all modernity is such an indefinite and wide category that it is not possible to contain it inside a closed contextualization; secondly, it is quite likely that Eisenman refers to Modernism as the separation between man and ideas only in order to express his scepticism about the architectures of some of his colleagues (remember his attacks on Archigram or Cedric Price who were accused of representing post-functionalist positions as a result of their interest in technology).

But despite his interest in Modernity, and the formal basis of its architecture, Eisenman recognizes that history is not linear and continuous, but is rather made of inflection points and breaks. His trajectory clearly expresses such complexity: in fact, in 50 years he has associated his early work with Chomsky's generative grammar, his *Cardboard Architectures* with Foucault, his *Cities of Artificial Excavation* with psychoanalysis and his textual architecture to Derrida's philosophy.

At the same time, self-referentiality has also constituted an important interpretative clue: the *House Series*, for example, can be considered an isolated sequence of interconnected episodes, each internally linked to the others by analogy or difference, whose common denominator lies in their abstract and autonomous character. So Eisenman's *Houses* can appear from the exterior as an

arbitrary and discontinuous attempt to explore new codes, but actually it is only from their internal structure and their inner logic that one can read the coherence of such proposals.

Whereas, as already described, his early production appeared disengaged from functional or structural concerns, in the 1980s and 1990s Eisenman also began to look at architecture in terms of pillars, doors, staircases and so on. In other words, his former resistance to the conventional instruments of architecture turned into a deep interest in materiality and materialization, which Eisenman was able to manage thanks to new information technologies. Once again, though, his use of technology revealed the same critical approach towards conventions, as his new processes were aimed at underlining the contradictions between tectonics and construction.

Alejandro Zaera Polo stresses the heterodox character of Eisenman's speculations, even if his position within the current architectural scene is of course hegemonic:

When compared to the alternatives in contemporary practice to which he is opposed, such as those from Rem Koolhaas, Jean Nouvel, and Herzoa & de Meuron – characterized by producing truly pliant viable alternatives for contemporary architectural practice, by accepting that architecture is necessarily predetermined by external factors – one may say that Koolhaas and Nouvel will reduce the weight of architecture by turning architecture into an infrastructure for something else and Herzog & de Meuron by reducing architecture to a minimal interference. Within this picture Eisenman's claim of the interiority of architecture implies a necessary resistance to external forces, without resorting to the pliant strategies that seem to be a central aspect of the Zeitgeist. Eisenman is exploring the fold without conceding anything, as before he was exploring language without saying anything. This is where the specificity and consistency of Eisenman's work has to be found, beyond the specific proposal of spatial organizations, or in the achievement of effects.

It is his capacity to operate as a turbulence within the dominant flow that makes his position one of the relevant alternatives within contemporary architectural practice.2

Eisenman's impatience with conventions turns into the production of weak structures defined as a field of architectural possibilities. The interest in instable and open architecture acts as a reaction to his phases of both interiority and exteriority. The pursuit of a deep structure in his works, the discovery of context through artificial excavations, even the arbitrary use of models proceeding from other disciplines, such as biology, all represented Eisenman's effort to comprehend and detect the Zeitgeist.

In Berlin a new idea of form emerged, and it dealt with a more intimate and personal experience. Time and space helped to produce an interconnected interior landscape, where the concept of use, instead of programme, implied the idea of perception, movement and experience.

Despite such discontinuous evolution, we could conclude our reflections by returning to Eisenman's doctoral thesis, realized in 1963 and recently published as The Formal Basis of Modern Architecture. With hindsight, it can be considered as an effort to distance his perspective from that of Colin Rowe, and to develop a theory of form that began with the Modern Movement by defining an independent and critical methodology. Eisenman partially achieved this, as we have seen, in the use of the nine square grid (no longer an analytic device, but not yet a generative instrument).

Nevertheless, Eisenman's ambition was to describe the concept of form in all of its articulations: he was certainly influenced by Kant regarding the importance of the cognitive processes that come before judgment, but also by Johann Friedrich Herbart's aesthetics, based on elemental relationships (levels, colours, tonalities), which helped him to comprehend the distinction between form and other signs. Furthermore, Eisenman's interest in the autonomy of form, intended as a pure act, came from Russian formalism, which also induced him to work on a process of simplification characterized by genetic elements – volumes, surfaces, and so on.

Throughout the years, Eisenman has shifted his focus away from formalism in order to find new external vectors and stimuli for his architecture. His pessimism about the failure of modernity has encouraged him to extend his reflections to an artificial context. The transition from interiority to exteriority, as described in his *Diagram Diaries*, also implied the shift from the abstract and autonomous integrity of any architectural object to its complete fragmentation. Fragmentation is therefore a metaphor for discontinuity, the awareness that history proceeds according to fractures and that any universal message is utopic. Consequently, architecture can only be read as a superposition of different texts.

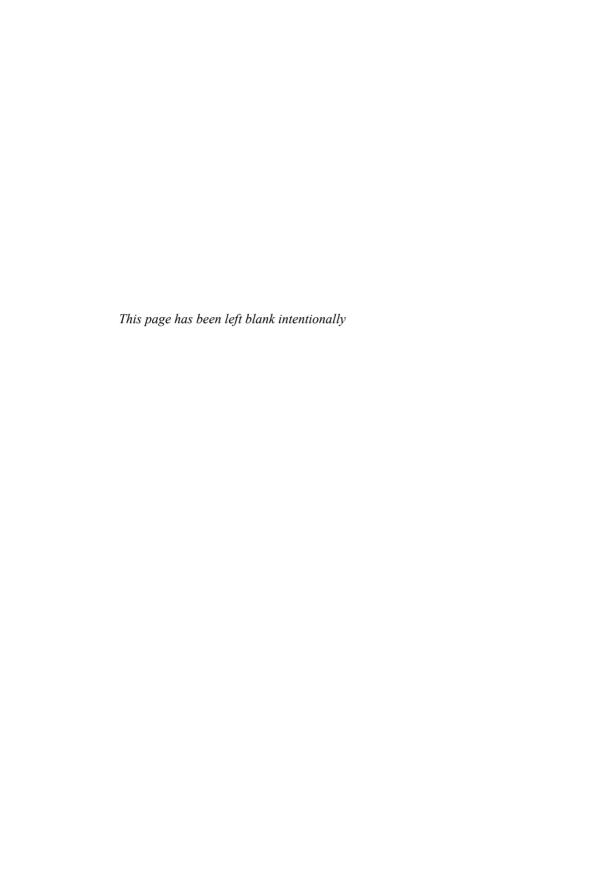
Now, at 80 years old, one may say that what Eisenman has built is an open theory, based on a flexible and always adaptable methodology. In this sense, both his doctoral thesis and the 2003 book on Terragni (*Giuseppe Terragni: Transformations, Decompositions, Critiques*), respond to the same need: to apply open criteria in reading modernity.

Approaching Eisenman's work according to a merely chronological excursus is impossible as well as inadequate. The only way in which to deal with the complexity of Eisenman's theoretical and professional production is to borrow techniques and methods from archaeology, to uncover the different layers of texts that constitute his work and try to comprehend their interpenetrated nature. Any critical intention or engagement is thus reduced to an operation of unveiling and only by extracting such layers, will we be able to depict the cartographic nature of Eisenman's discourse, in both its controversial and its accepted elements.

Interiority, exteriority, artificial excavations, arbitrariness – all of these terms only make sense if considered within the logic of a conceptual map, a rhizomatic structure with no hierarchies and no univocal directions.

# **ENDNOTES**

- 1 Alejandro Zaera Polo, 'Interview with Peter Eisenman', in El Croquis 83 (1997: 52.
- 2 Alejandro Zaera Polo, 'Interview with Peter Eisenman', in El Croquis 83 (1997): 63.



# **Bibliography**

Allen, Stan. 'Diagram', in ANY 23, 1998: 16.

Allen, Stan. Landform Building. Zurich: Lars Muller Publishers, 2011.

Aureli, Pier Vittorio. The Possibility of an Absolute Architecture. Cambridge: MIT Press, 2011.

Aureli, Pier Vittorio, Mastrigli, Gabriele. 'Oltre il Diagramma: Iconografia, Disciplina, Architettura'. *Contropiede*. Milano: Skira, 2005: 111–23.

Aureli, Pier Vittorio, Mastrigli, Gabriele. *Post-modern Oppositions*. Arch'it files, 2004. http://architettura.it/files/20040128/, last accessed 21 July 2014.

Banham, Reyner. 'A Home is not a House'. Art in America Number Two, April, 1965: 109–18.

Banham, Reyner. *Architecture of the Well-Tempered Environment*. Chicago: University of Chicago Press, 1969.

Bijlsma, Like. Deen, Wouter, Garritzmann, Udo. 'Diagrams'. OASE 48, 1998: 1–3.

Bunschoten, Raoul. Chora, Urban Flotsam. Rotterdam: 010 Publishers, 2001.

Capra, Fritjof. La trama de la vida. Barcelona: Anagrama, 2009.

Ciorra, Pippo. Peter Eisenman. Opere e progetti. Milano: Electa, 1995.

Ciorra, Pippo. 'Richard Meier e Peter Eisenman. Talento e idee'. *Casabella*, 640–641, 1997: 106–11.

Corbera, Dario. ¿ Construir... o deconstruir? Textos sobre Matta Clark. Salamanca: Ediciones Universidad de Salamanca, 2000.

Davidson, Cynthia. Eisenman vs. Krier: Two Ideologies. New York: Monacelli Press, 2004.

De Landa, Manuel. A Thousand Years of Nonlinear History. New York: Zone Books, 1997.

Deleuze, Gilles. Foucault. University of Minnesota Press, 1986/88.

Deleuze, Gilles. Cos'è un dispositivo. Napoli: Editorial Cronopio, 1998.

Deleuze, Gilles. El Anti-Edipo. Barcelona: Editorial Paidos Iberica, 1998.

Deleuze, Gilles. The Fold: Leibniz and the Baroque. London: Continuum, 2001.

Deleuze, Gilles. The Logic of Sensation. London: Continuum, 2003: 30.

Deleuze, Gilles. Kant y el tiempo. Buenos Aires: Editorial Cactus, 2008.

Deleuze, Gilles. Pintura-El concepto de diagrama. Buenos Aires: Editorial Cactus, 2008.

Deleuze Gilles, Guattari, Félix, A Thousand Plateaus: Capitalism and Schizophrenia, trans. and Foreword by Brian Massumi. Minneapolis: University of Minnesota Press, 1987.

Deleuze, Gilles, Guattari, Félix. *Mil Mesetas. Capitalismo y Esquizofrenia*. Valencia: Pre-Textos, 1994.

Deleuze, Gilles, Guattari, Felix. What is Philosophy?. New York: Columbia University Press, 1996.

Deleuze, Gilles, Guattari, Félix. Che cos'é la filosofia?, Torino: Einaudi, 2002.

Derrida, Jacques. Writing and Difference. London and Henley: Routledge & Kegan Paul Ltd, 1978.

Derrida, Jacques. 'Des Tours de Babel,' trans. Joseph F. Graham. *Difference in Translation*, ed. Joseph F. Graham, Ithaca: Cornell University Press, 1985.

Derrida, Jacques. 'Architecture Where the Desire May Live', in Domus 671, 1986: 18.

Derrida, Jacques. Why Peter Eisenman Writes Such Good Books. Tokyo: A+U, Architecture and Urbanism. 1988.

Derrida, Jacques. 'A letter to Peter Eisenman'. Assemblage 12, 1990: 6–13.

Derrida, Jacques. La scrittura e la differenza. Torino: Einaudi, 1997.

Derrida, Jacques. Of Grammatology. Baltimore and London: Johns Hopkins University Press, 1997.

Diagramas, Fisuras de la cultura contempóranea 12, 2002: 4–7, 146–63.

Eisenman Architects. 'Nunotani Headquartes Building'. GA Document 37, 1993.

Eisenman, Peter. 'Towards an Understanding of Form in Architecture'. *Architectural Design* 33, 1963: 457–8.

Eisenman, Peter. 'Dall'oggetto alla relazionalità: la Casa del Fascio di Terragni'. *Casabella* 344, 1970: 38–41.

Eisenman Peter, 'Cardboard architecture: castelli di carte'. Casabella 386, 1974: 17-31.

Eisenman, Peter. 'House III: To Adolph Loos and Bertolt Brecht'. *Progressive Architecture* 55, 1974: 92.

Eisenman, Peter. 'The Grave of Modernism'. Oppositions 12, 1978: 36–41.

Eisenman, Peter. 'Aspects of Modernism: The Maison Dom-ino and the Self-Referential Sign', *Oppositions* 15–16, 1979: 118–28.

Eisenman, Peter. 'Three texts for Venice'. Domus 611, November 1980: 9–11.

Eisenman, Peter *Transformations, Decompositions, and Critiques: House X.* New York: Rizzoli, 1982.

Eisenman, Peter. 'La ciudad de la excavación artificial' trans. Rafael Moneo. *Architecturas/bis* 42, 1983: 21–3.

Eisenman, Peter. 'The Futility of Objects: Decomposition and Processes of Differentiation (Difference)'. *Harvard Architecture Review* 3, Winter 1984: 64–82.

Eisenman, Peter. 'Nunotani Corporation Building: project description', 1992 (Peter Eisenman. Opere e Progetti. Milano: Electa, 1997).

- Eisenman, Peter. 'L'architettura post-critica'. Casabella 644, 1997: 1.
- Eisenman, Peter. 'Peter Eisenman 1990–1997'. El Croquis 83, 1997: 21–34.
- Eisenman, Peter. Diagram Diaries. London: Thames & Hudson, 1999.
- Eisenman, Peter. Giuseppe Terragni: Transformations, Decompositions, Critique. New York: Monacelli Press, 2003.
- Eisenman, Peter. Contropiede. Milano: Skira Edizioni, 2005.
- Eisenman, Peter, Holocaust Memorial Berlin. Zurich: Lars Muller, 2005.
- Eisenman, Peter. Una analisi critica: Luigi Moretti, in *Oppositions* 15, Cambridge Mass.: MIT press, in Eisenman Peter. *Contropiede*, Skira: Milano, 2005.
- Eisenman, Peter. *The Formal Basis of Modern Architecture*. Zurich: Lars Muller Publishers, 2006.
- Eisenman, Peter. Written into the Void: Selected Writings 1990–2004. London: Yale University Press. 2007.
- Eisenman, Peter. Monografia. Milano: Electa, 2008.
- Eisenman, Peter. Ten Canonical Buildings. New York: Rizzoli, 2008.
- Eisenman, Peter 'Interview with Iman Ansari', in *The Architectural Review*, April 2013, http://www.architectural-review.com/view/interviews/interview-peter-eisenman/8646893.article, last accessed 20 February 2014.
- Eisenman, Peter, Koolhaas, Rem. *Architecture Words: Supercritical*, ed. Brett Steele, London: AA Publications, 2010.
- Eisenman, Peter, Krier, Léon. 'Peter Eisenman vs. Léon Krier: My ideology is better than yours.' *Architectural Design* 59, 1989: 6–18.
- Eisenman, Peter, Krier, Léon. Eisenman vs. Krier: Two Ideologies, A Conference at the Yale School of Architecture, ed. Cynthia Davidson, New York: Monacelli Press, 2004: 135–6.
- Fernández Galiano, Luis. 'Laberintos del orden: el Memorial del Holocausto en Berlín'. *Arquitectura Viva* 62, 1998: 76–7.
- Fernández Galiano, Luis. 'Topografía táctil: Peter Eisenman en Santiago de Compostela.' Arquitectura Viva 67, 1999: 64–5.
- Foucault, Michel. *L'archeologia del sapere. Una metodologia per la storia della cultura.* Milano: Rizzoli, 1999.
- Foucault, Michel. Eterotopia. Milano: Mimesis Edizioni, 2010.
- Frampton, Kenneth. 'Five Architects'. Lotus 9, February 1975:146-61, 231-4.
- Gandelsonas, Mario. 'On reading Architecture'. Progressive Architecture 53, 1972: 68–88.
- Gandelsonas Mario. 'Linguistics in Architecture'. Casabella 374, 1973: 17-30.
- Garofalo, Francesco. 'La Chiesa per Roma 2000'. Casabella, 1997: 640-64.
- Garofalo, Luca. Eisenman Digitale: uno studio dell'era elettronica. Torino: Testo & Immagine, 1999.
- Gourdoukis, Dimitris. Interview with Ben Van Berkel, Washington, 2006. http://the-t-machine.blogspot.it/2008/05/by-dimitris-gourdoukis-unstudio-has.html, last accessed 19 July 2014.

Hays, Michael. Architecture Theory since 1968. Cambridge: MIT Press, 2000.

Hays, Michael. Architecture's Desire. Reading the Last Avant-garde. Cambridge: MIT Press, 2010.

Ito, Toyo. 'Arquitectura Diagrama', in El Croquis – SANAA 99, 2000: 330.

Ito, Toyo. Escritos. Murcia: Colleción de Arquitectura, Cajamurcia, 2000.

Ito, Toyo. Sendai Mediatheque. Barcelona: Actar, 2003.

Ito, Toyo. Tarzans in the Media Forest. London: AA Publications, 2011.

Kipnis, Jeffrey. 'Twisting the Separatrix'. Assemblage 14, 1991: 31–61.

Kipnis, Jeffrey. 'The Ohio State University Center for the Visual Arts and the Architecture of Modifications'. *Casabella*, 1994: 498–9.

Koolhaas, Rem. Delirious New York. New York: The Monacelli Press, 1994.

Koolhaas, Rem. *The Great Leap Forward/Harvard Design School Project on the City*. Cologne: Taschen. 2002.

Koolhaas, Rem. 'Junkspace'. Content. Cologne: Taschen, 2006: 13–24.

Krier, Léon 'Coming to Terms with Janus', in *Eisenman vs. Krier: Two Ideologies*, ed. Cynthia Davidson, New York: Monacelli Press, 2004.

Kwinter, Sanford. 'The Hammer and the song', in OASE 48, 1998: 43.

Kwinter, Sanford. Far from Equilibrium: Essay on Technology and Design Culture. New York/ Barcelona: Actar. 2008.

Kwinter, Sanford. Requiem: For the city at the End of the Millennium. Barcelona: Actar, 2010.

Le Corbusier. Toward an Architecture. London: Frances Lincoln, 2008.

Lynn, Greg. Folding in Architecture, revised edition. London: Wiley, 2004.

Lyotard, Jean François. La condizione post-moderna. Milano: Feltrinelli, 1997.

Lyotard, Jean François. Discourse, Figure. Minneapolis: University of Minnesota Press, 2011.

Merleau-Ponty, Maurice. Phenomenology of Perception. London: Routledge, 2002.

Moneo, Rafael. 'Unexpected coincidences.' Wexner Center for the Visual Arts, The Ohio State University. New York: Rizzoli, 1989.

Moneo, Rafael. *Inquietudine teorica e strategia progettuale nell'opera di otto architetti contemporanei*. Milano: Electa, 2005.

Montaner, Josep Maria. Sistemas arquitectónicos contempóraneos. Barcelona: Gustavo Gili, 2009.

Nolli, Giambatttista. *Nuova Pianta di Roma* (1748). http://cluster3.lib.berkeley.edu/EART/maps/nolli.html, last accessed 19 July 2014.

Palladio, Andrea. I Quattro Libri dell'Architettura. Milano: Hoepli, 1990.

Peirce, Charles Sanders. Selected Writings. New York: Dover Publications, 1966.

Perniola, Mario. L'Estetica del Novecento. Bologna: Il Mulino, 1997.

Purini, Franco. 'A proposito degli scritti di Peter Eisenman: ed infine un classico'. *Casabella*, 1987: 541.

Rizzi, Renato. Eisenman: progetto per il Parco La Villette, Parigi. Domus 68, 1987: 1–3.

Rizzi, Renato. Peter Eisenman. La fine del classico. Venezia: Cluva Editrice, 1987.

Rizzi, Renato. Mistico nulla: l'opera di Peter Eisenman. Milano: Federico Motta, 1996.

Rizzi, Renato. 'I pungiglioni del pensiero'. Area 70, 2003: 32-41.

Rossi, Aldo. L'Architettura della Città. Padova: Marsilio, 1966.

Rowe, Colin, 'Mannerism and Modern Architecture', in The Architectural Review, May 1950: 292.

Rowe, Colin. Introduction to Five Architects. New York: Wittenborn, 1972.

Rowe, Colin. 'The Mathematics of the Ideal Villa'. *The Mathematics of the Ideal Villa, and Other Essays*. Cambridge, Mass: MIT Press, 1976.

Rowe, Colin. 'Collage City', in *Architectural Theory since 1968*, ed. Michael Hays. Cambridge: MIT Press, 2000.

Rykwert, Peter. 'The Institute for Architecture and Urban Studies'. Casabella, 1971: 359-60.

Saggio, Antonino. Peter Eisenman, Trivellazioni nel Futuro. Torino: Testo & Immagine, 1995.

Sierra, Rafael. 'Richard Serra/Escultor: "Creo que he logrado eclipsar el Guggenheim de Gehry" (interview). El Mundo del País Vasco, 26 March 1999. Also in El Mundo, 26 March 1999.

Solà-Morales, Ignasi. *Diferencias. Topografías de la Arquitectura Contemporánea*. Barcelona: Gustavo Gili, 1987.

Solà-Morales, Ignasi. *Diferencias. Topografías de la Arquitectura Contemporánea*. Barcelona: Gustavo Gili, 2003.

Somol, Robert. 'Peter Eisenman: Wexner Center for the Visual Arts, Columbus, Ohio.' *Domus* 712, 1990: 38–47.

Somol, Robert, Whiting, Sarah. 'Notes around the Doppler Effect and other Moods of Modernism', in *Perspecta* 33, 2002: 72–7.

Soriano, Federico. 'Diagramas', in *Fisuras de la cultura contempóranea* 12, 2002: 6–7.

Steele, Brett. Supercritical. London: AA Publications, 2009.

Tafuri, Manfredo. 'L'Architecture dans le Boudoir'. Oppositions 3, 1974: 37–62.

Tafuri, Manfredo. 'Les bijoux indiscrets.' In Five Architects N.Y. VII Mostra di Architettura organizzata dall'Istituto di Analisi Architettonica della Facoltà di Architettura di Napoli, ed. Manfredo Tafuri. Rome: Officina Edizioni, 1976: 7–34.

Tafuri, Manfredo. Five Architects. Rome: Roma, 1981.

Tschumi, Bernard. 'The Architectural Paradox', in *Studio International*, September-October 1975; revised in Tschumi, *Architecture and Disjunction*, Cambridge: MIT Press, 1994: 28.

Vattimo, Gianni. Rovatti, Pier Aldo. Il Pensiero Debole. Milano: Feltrinelli, 1983.

Vattimo, Gianni. La società trasparente. Milano: Garzanti, 2000.

Viale, Hélène. Le philosophe et les architectes' (interview with Jacques Derrida). *Diagonal*, 73, Ministère de l'Equipement et du Logement, Paris, 1988: 37–9.

Vidler, Anthony. 'Momas and magmas'. Lotus International 95, 1997: 24–6.

Vidler, Anthony. Storie dell'Immediato Presente. Rovereto: Zandonai, 2012.

Visentin, Chiara, 'Interview with Peter Eisenman', 2004, http://www.chr5.com/investigacion/investiga\_tendencias/DOCU%20- %20INVESTIGACION/PETER\_EISENMAN/entrevista\_a\_eisenman.htm, last accessed 20 February 2014.

- Vitruvius, *Ten Books on Architecture*, Book IV, Chapter I. Cambridge: Cambridge University Press, 2001.
- Wittkower, Rudolph. *Architectural Principles in the Age of Humanism*. W. W. Norton & Company: New York City, 1971.
- Yessios, Christos Ioannis, *Syntactic Structure and Procedures for Computable Site Planning*. PhD Dissertation, Carnegie Mellon University: Pittsburgh. 1973.
- Zaera-Polo, Alejandro. 'Interview with Peter Eisenman', in El Croquis 83, Madrid, 1997: 54–5.

# Index

Page numbers in <b>bold</b> refer to figures	Cacciari, Massimo, 101 Callimachus, 65
Alberti, Leon Battista, 12	Cambridge, 2, 9, 22, 36, 37, 50, 73, 99, 102
Allen, Stan, 50, 75, 84	Campo Marzio, 15, 18–21, 41, 82
Ansari, Iman, 36, 37, 51	Cannaregio, 3, 4, 6, 34, 39–43, 44, 46, 48,
Antonioni, Michelangelo, 4	49, 54, 58, 60, 61, 63, <b>67</b> , 77, 82–3, 87,
Archigram, 26, 36, 102, 125	95, 123
Architectural Association (AA), 73	Cardboard Architectures, 5, 6, 17, 23, 27,
Aureli, Pier Vittorio, 2, 15–16, 20–21, 81, 110	29, 41, 43, 44, 57, 60, 66, 71, 77, 83,
	94, 103, 118, 125
Bacon, Francis, 88, 98	Casa da Musica, 112, 114
Baker, Arthur, 71	Casa del Fascio, 3, 10, <b>11</b> , 29, 34, 83
Bandello, Matteo, 57	Casa del Girasole, 11, 35–6
Banham, Reyner, 12, 26, 36, 110–111	Casa Giuliani Frigerio, 10, 29
Barth, Heinrich, 92	CCTV Tower, 73
Bataille, Georges, 93, 101	Chiesa del Redentore, 15
Benjamin, Walter, 93	Chomsky, Noam, 2, 3, 10, 27, 91, 107, 111,
Bergson, Henri, 7, 76, 94–5	125
Berkel, Ben van, 72, 79–80, 85	Choral Work, 58–63, <b>59</b> , 64
Berlin, 4, 6, 7, 41, 44–6, <b>45</b> , <b>47</b> , 48, 54,	Cities of Artificial Excavation, 18, 34, 39,
<b>55</b> , 57, 58, <b>67</b> , 71, 72, 73, 83, 87–98,	41–50, 51, 56, 57, 58, 63, 66, 67, 71,
<b>89</b> , <b>90</b> , 104, 105, 107, 115, 123, 124,	73, 76, 77, 84, 91, 94, 97, 103, 104,
125, 126	111, 125
Bernini, Gian Lorenzo, 107	City of Culture of Galicia, 6, 46–50, <b>50</b> , <b>51</b> ,
Bijlsma, Like, 84	87, 115, 124
Blanchot, Maurice, 93	Cohen, Jean-Louis, 26
Borromini, Francesco, 107	Collage City, 12, 18–9, 22
Boulez, Pierre, 97	Colquhoun, Alan, 12
Boullée, Étienne-Louis, 12, 15, 104	Como, 9, 10–11, <b>11</b>
Brecht, Bertolt, 29, 37	Conference of the Architects for the
Bruno, Giordano, 60	Study of the Environment (C.A.S.E.),
Bunschoten, Raoul, 80, 85	23
Buonarroti, Michelangelo, 14	Constructivism, 25
Burri, Alberto, 50	Contropiano, 26

Controspazio, 26 Cooper Union University, 66 Cornell University, 53, 63, 102 Cubism, 25, 35

Dal Co, Francesco, 26
Danteum, 34
Davidson, Cynthia, 121
Deconstructivism, 32, 71, 107, 121
Deen, Wouter, 84
Deleuze, Gilles, 3, 39, 50, 71, 72, 73, 76–8, 79, 81, 84, 85, 87–8, 92, 93, 94, 95–7, 98, 99, 107, 116, 122
Delirious New York, 112–14
Derrida, Jacques, 2, 3, 4, 6, 7, 10–11, 33, 35, 40–41, 43, 53, 54–63, 64, 93, 98, 123, 125
Diagram Diaries, 41, 56, 73, 76, 77, 81, 84, 85, 98, 99, 116, 127
Downtown Athletic Club, 114, 122

Fernández Galiano, Luis, 47, 49
Five Architects, 11, 14, 23–25, 29, 34, 36, 53
Fontana, Domenico, 42
Foster, Kurt, 34
Foucault, Michel, 3, 4, 14, 26, 36, 39–40, 62, 76–8, 79, 84, 85, 87, 122, 125
Frampton, Kenneth, 23, 25
Frankfurt, 6, 66, **67,** 68–70, 71, 73, 107, 110, 123, 125
Frankfurt School, 26
Freud, Sigmund, 62, 93

Gandelsonas, Mario, 25, 27, 37 Garritzmann, Udo, 84 Gaudí, Antoni, 65 Gehry, Frank O., 3, 7, 34, 54, 73, 105-110 Giurgiola, Romaldo, 24 Glymph, James, 109 Goethe University-Biocentrum, 6, 66, 68-70, 73, 81, 107, 110, 123, 125 Goethe, Johann Wolfgang von, 13 Gourdoukis, Dimitris, 85 Graves, Michael, 23-5, 34, 40 Greenberg, Alan, 24 Gris, Juan, 66 Guattari, Félix, 39, 50, 78, 88, 93, 94, 97, 99, 122 Guggenheim Museum, 105, 107 Gwathmey, Charles, 23–5

Hadid, Zaha, 3, 54, 72 Hardwick, 30, 31 Hays, Michael, 22, 29, 36, 37, 39, 50 Hegel, Georg Wilhelm Friedrich, 92 Heidegger, Martin, 43, 54, 93 Hejduk, John, 23-25, 49, 66 Herbart, Johann Friedrich, 127 Herzog, Jacques, 126 Hilberseimer, Ludwig, 105 House I, 28, 29, 32, 37, 123 House II, 6, 23, 28, 29-32, 30, 31, 33, 66, **67**, 125 House III. 28, 32, 67 House IV, 28, 29, 32 House VI, 28, 29, 33, 37 House X, 29, 33-4, 40, 124, 125 House XI, 33, 34, 42, 43, 46 Husserl, Edmund, 92

IBA Berlin Housing, 6, 44–6, **45**, **47**, 54, 57, **67**, 83, 123

Il Vignola (Jacopo Barozzi), 9, 14

Illinois Institute of Technology (I.I.T.), 112

Institute for Architecture and Urban Studies (IAUS), 2, 5, 25, 40, 44, 53–4, 71

Istituto Universitario di Architettura di Venezia (IUAV), 42

Ito, Toyo, 7, 17, 80, 85, 116–21, 122

Jerusalem's Wailing Wall, 124 Jewish Museum, **55**, 96, 105 Johnson, Philip, 12, 24 Jubilee Church, 124 Jussieu Libraries, 113

Kant, Immanuel, 76, 92, 127
Kaufmann, Emil, 12
Kipnis, Jeffrey, 21, 55, 60, 62, 63
Klages, Ludwig, 92
Klossowski, Pierre, 93
Koolhaas, Rem, 3, 7, 25, 47, 54, 73, 90, 98, 101, 102, 105, 109, 110–115, 122, 126
Krier, Léon, 7, 101–105, 121
Kroll, Lucien, 104
Kwinter, Sanford, 24, 79, 85, 97, 99, 124

Lacan, Jacques, 3, 62, 93

La Villette, 4, 6, 57, 58–63, **59**, 111, 113, 115, 125

Le Corbusier, 9, 10, 11, 12 13–4, 16–7, 19, 21, 24, 25, 41–3, 51, 65, **67**, 82, 84, 95, 97, 102, 108, 109, 113–14, 120, 121

Ledoux, Claude-Nicolas, 12, 104
Leibniz, Gottfried Wilhelm von, 107, 108
Lewis Building for the Weatherhead School
of Management, 105–110
Libeskind, Daniel, 47, **55**, 96, 105, 109
London, 73, 84, 85, 98, 99, 122
Long Beach Museum, 60, 61
Loos, Adolf, 29, 37
Lynn, Greg, 107–109
Lyotard, Jean François, 4, 88

Madrid, 65 Maison Dom-ino, 10, 11, 16-7, 21, 84, 108, 113-14, 120, 122 Makau, John, 30, 31 Matta-Clark, Gordon, 53-4 Max Reinhardt House, 66, **67**, 71–3, 123 Meier, Richard, 23–5, 53, 119 Merleau-Ponty, Maurice, 93, 98 Memorial to the Murdered Jews of Europe. 4, 6, 87-98, 89, 90, 104, 107, 124 Meuron, Pierre de, 126 Mies van der Rohe, Ludwig, 12, 14, 65, 71, 102, 113, 115 Moneo, Rafael, 3, 25, 30, 33, 65-6, 72, 83-4, 116 Montaner, Josep María, 96, 97, 99 Moretti, Luigi, 11, 35-6 Morris, William, 104 Moving Arrows, Eros and Other Errors. Romeo and Juliet, 6, 54, 57-8, 60, 61, 68, 73, 123,

New York, 3, 21, 23–5, 49, 53, 54, 58, 66, 99, 112, 113–15, 117, 121, 122

Nietzsche, Friedrich, 4, 76

Nishizawa, Ryue, 119

Nolli, Giovanni Battista, 11, 17, 19–21, 41, 56

Nouvel, Jean, 47, 126

Nunotani Corporation Headquarters, 6, 66, 70–71, 81, 110, 123

Museum of Modern Arts (MoMA), 23, 54,

Old Jewish Cemetery, **91**, 124 Oppenheim, Dennis, 53 *Oppositions*, 2, 5, 11, 24, 25–6, 44

Palazzo Chiericati, 15 Palazzo Foscarini, 15 Palazzo Minelli, 15

117

Palazzo Surian, 15 Palladio Virtuel, 1 Palladio, Andrea, 1-2, 5, 6, 9, 11, 12-13, 15-16, 29, 82, 116, 121, 122 Panopticon, 78, 80 Pardo, José Luis, 39 Paris, 4, 6, 57, 58–63, **59**, 115 Pasanella, Giovanni, 53 Peirce, Charles Sanders, 41, 76, 91, 111 Perniola, Mario, 92-3 Perrella, Stephen, 72 Piranesi, Giovanni Battista, 11, 15, 17–21, **21**, 41, 56, 82, 104 Plato, 58, 60-1, 63, 104 Porto, Luigi da, 57 Porto, 114 Prague, 91, 124 Prentice and Chan, Ohlhausen, 53 Price, Cedric, 36, 102, 125 Princeton University, 23 Purini, Franco, 123-24

Rebstock Park, 71
Rizzi, Renato, 123–24
Roma Interrotta, 19
Rome, 18–21, **21**, 35, 42, 124
Rossi, Aldo, 18, 26, 27, 41, 57, 125
Rovatti, Pier Aldo, 4, 7
Rowe, Colin, 1–2, 5, 9–19, 22, 24–5, 30, 32, 36, 82–3, 102, 116, 127
Rudolph, Paul, 3
Ruskin, John, 104

SANAA, 80, 85, 119 Santiago de Compostela, 6, 46-50, 50, **51**, 57, 58, 67, 87, 110, 115, 124, 125 Schinkel, Karl Friedrich, 104, 108 Schmitz, Hermann, 92 Seattle Central Library, 114, 115 Sejima, Kazuyo, 80, 119 Semper, Gottfried, 49 Serlio, Sebastiano, 116 Serra, Richard, 54, 63, 96 Shakespeare, William, 57 Sisto V (Pope), 42 Sitte, Camillo, 104 Siza, Alvaro, 95 Slutzky, Naum, 3 Smith, Rick, 109 Smithson, Alison, 12 Smithson, Peter, 12

Solà-Morales, Ignasi de, 4

Somol, Robert, 17, 21, 114, 122 Soriano, Federico, 78–9, 85 Speer, Albert, 104–105 Spuybroek, Lars, 80 Steele, Brett, 98, 122 Stern, Robert, 24 Stier, Hagen, **11** Stirling, James, 12, 102 Superstudio, 102

Tafuri, Manfredo, 14, 20, 23–4, 26, 36, 110–11, 123, 124

Tarkovsky, Andrei, 4

Tendenza, 25

Terragni, Giuseppe, 3, 5, 9–11, **11**, 13, 25, 29, 32, 33–4, 82, 83, 84, 102, 107, 111, 113, 115, 127 *The Piranesi Variations*, 21

Trento, 61

Tschumi, Bernard, 3, 58, 60, 63, 93–4, 98, 99

Ungers, Oswald Mathias, 15

Vattimo, Gianni, 1, 4, 7 Veneto, 2, 16 Venice, 3, 4, 15, 16, 21, 34, 41–3, 51, 57, 67, 97, 114, 125 Venice Hospital, 41–2, 43, 51, **67**, 97, 114 Venturi, Robert, 104, 125 Vermont, **30**, **31** Verona, 6, 54, 57–8, 60, 68, 95 Viale, Hélène, 63 Vicenza, 9, 57 Vidler, Anthony, 13, 14, 48, 83, 102 Villa Malcontenta, 9, 13 Villa Stein, 9 Ville Radieuse, 25 Virilio, Paul, 118 Visentin, Chiara, 7, 99 Vitruvius, 65, 73

Wexner Center for the Visual Arts, 123
Whiting, Sarah, 17, 21, 103, 114, 122
Wigley, Mark, 54
Wilcken, Dagmar von, 96
Wittgenstein, Ludwig, 93
Wittkower, Rudolf, 1, 9, 12–3, 15, 16, 17, 24, 29, 32, 82, 83, 116

Xornal Certo, 50, 51

Yale University, 1, 15, 16, 21, 102, 121 Yessios, Christos, 107

Zaera Polo, Alejandro, 41, 51, 123, 126, 127 Zschaler, Ron, **30**, **31** Zuliani, Guido, 13