



Bernard Kormoss

Peter Eisenman

Theories and Practices

/faculteit bouwkunde

122

Peter Eisenman: Theories and Practices



to Sophie, Gil and Philippe

ISBN 978-90-386-1085-6

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the permission of the author.

Nur:	648 (bouwkunst, architectuur)
Book lay-out:	Bernard Kormoss
Impression:	Faculteit Bouwkunde,
	Technische Universiteit Eindhoven
	Bouwstenen no. 122
Cover:	A.W.M.V.Gennip, Graphic Studio, Faculty of Architecture, T.U.E.
	Bernard Kormoss (cover illustration), with pictures from the work of Peter
	Eisenman (cf. illustration credits)
	Backgroundpicture: Peter Eisenman, Berlin Holocaust Memorial,
	(cf. illustration credits).
Pictures:	Cf. illustration credits.
Tables:	Cf. illustration credits.

Peter Eisenman: Theories and Practices

PROEFSCHRIFT

ter verkrijging van de graad van doctor aan de Technische Universiteit Eindhoven, op gezag van de Rector Magnificus, prof.dr.ir. C.J. van Duijn, voor een commissie aangewezen door het College voor Promoties in het openbaar te verdedigen op woensdag 12 september 2007 om 16.00 uur

door

Bernard Joseph Etienne Kormoss

geboren te Brugge, België

Dit proefschrift is goedgekeurd door de promotoren:

prof.dr.ir. G.A.C. van Zeijl en prof.dr. A.D. Graafland

Copromotor: dr.ir. J.G. Wallis de Vries

introduction	7
1. the primacy of form (1963)	15
2. beyond form: conceptual architecture (1967-1973)	25
3. post-functionalism vs. post/modernism	35
4. decomposition (1975-1983)	37
5. artificial excavation (1979-1986)	41
6. architecture as text	45
7. scientific models and processes	50
8. folding	54
9. the interstitial	61
10. the diagram as space of writing	63
notes	79
conclusion	97
summary	113
about the author	119
acknowledgements	120
illustration credits	121
bibliography	125

Introduction

"A theory is exactly like a box of tools...It must be useful. It must function."

"Theory does not express, translate, or serve to apply practice: it is practice."

G. Deleuze

research topic

Within the spectrum of contemporary architecture, the work of the New York based architect Peter Eisenman (Newark, USA, 1932 -) is outstanding and exceptional. As one of the most innovative architects and theorists of the last decades, Eisenman has had a considerable impact in the field of architectural design and theory and has contributed to many architectural debates, mainly through his architectural experiments, critical writings and active academic and public involvement. Through his activities as director of the Institute for Architecture and Urban Studies (1967-83), as editor of its journal 'Oppositions' (1973-1984), and later as instigator of the Any-conferences (1991-2000), he contributed in an important way to the architectural debate of the last decades.

Like other architects of his generation (Aldo Rossi, Robert Venturi, John Hejduk, and later, Rem Koolhaas), Eisenman succeeded to combine an active architectural practice with an intensive theoretical reflection, which he began with his doctoral thesis in the early sixties. Since then, Eisenman has never stopped to be intensively involved in both the making and writing of architecture. To take into account this intimate interaction between theory and praxis, the main focus of this research is on the theories and practices of Eisenman's work, and more particularly on his architectural and theoretical production between 1963 and 2000.

research framework

This research has been undertaken within the general framework of the "ABC of Density," a research project on long-lasting architectural and urban strategies initiated and led by Prof. G.A.C. van Zeijl (T.U.E.). The research is thus not only focusing on short-lasting events ('événements de courte durée'), but also on long-lasting strategies (or 'structures de longue durée'), so that the work and thinking of Peter Eisenman can be situated

within the broader context of architectural, historical, cultural and intellectual milieux. In the work of Peter Eisenman, this distinction between shortlasting events and long-lasting strategies can be related to the problem of the interiority and anteriority of architecture, and to the distinction between processes and strategies.

research object/objectives and methodological frame

The main objective of this research, is to make a vertical and critical analysis of the architectural and theoretical work of Peter Eisenman, starting from an in depth analysis of his writings and projects. The work is based on a fairly comprehensive and representative selection of Eisenman's oeuvre, based on a critical selection of texts and projects, written and developed in the period from 1963, the year of his doctoral thesis, to 2000.

Although our analytical scope is mainly oriented towards an internal and close reading of his work, we have also tried to situate the development of Eisenman's architectural and theoretical investigations within the larger historical, theoretical and critical framework of the architectural discipline, namely by examining and confronting the close interaction between his own architectural and theoretical constructions and the many disciplinary and cross-disciplinary references. In terms of interpretation, our main concern is to propose a factual, objective and pragmatic frame of interpretation, which stays as close as possible to the terminology of the author, without any interference of external frames of interpretation. In order to optimize this objective analytical frame, we have been trying to focus on changes and continuities, constants and variables, theories and practices. The intention is not to make a linear description of a succession of facts and data, but to focus on the multilayered, multiple and transformative aspects of the processes of thoughts and to consider the act of theorizing as a continuous work-inprogress, with its own moments of crisis, shifts, bifurcations and loops.

Our intention is thus not only to engage in a recapitulative reflection on the major themes and concepts of Eisenman's work and to highlight the most critical themes, writings and projects, but also to reflect upon the underlying motivations, assets and construction of Eisenman's discourse and to outline the main lines of development, transformation and disrupture. The main objective is to frame the most critical moments and lines of thought of the 'Project Eisenman' and to shed a light on the theoretical underpinnings and working methods, i.e. the 'modus operandi' of Eisenman's discursive apparatus. Our attention primarily focuses on the question of the critical relationship between theory and praxis, i.e. between the discursive dimension of the written oeuvre and the pragmatic dimension of the architectural production. The main point of interest is to reflect on the respective role of theory (writings) and praxis (projects) in the overall oeuvre of Peter Eisenman, and to analyze how these poles are related to and interacting with each other: what is the role of theory for the development of architectural design, and vice versa, how is the architectural production influencing and embodying the theoretical production of architectural thoughts. We further reflect on the underlying methodological framework of Eisenman's theory-at-work, or, in other words, on the inner mechanics of the architectural and theoretical production. This has been done by examining the reception of internal and external references (e.g. inputs from architecture, arts, linguistics, philosophy, science etc.), the link with contemporary frames of thought (such as structuralism and post-structuralism) and by situating the major lines of thought in a broader historical and cultural perspective.

historical context

Before analysing Eisenman's theoretical and architectural work, it is useful to first situate his work within the historical/contemporary context and to outline some of his most important achievements, as an architect, educator, theorist and public actor.

After his studies at Cornell University (Bachelor of Architecture) and Columbia University (Master of Architecture) in the late fifties, Eisenman received a PhD degree from the University of Cambridge (Cambridge, U.K., 1963), for his thesis on 'The Formal Basis of Modern Architecture.' In his doctorate, Eisenman developed an alternative theory of Modern Architecture, based on the reception of the formalist tradition of R. Wittkower and C. Rowe, his mentor at the time. Although his thesis never gained the public recognition that it deserves, because it has not been officially published until recently (Lars Müller Publishers, 2006), it can certainly be compared with a series of contemporary publications-such as C. Alexander's 'Notes on the Synthesis of Form' (1964), A. Rossi's book on 'The Architecture of the City' (1966), R. Venturi's 'Complexity and Contradiction in Architecture' (1966) and C. Norberg-Schulz's 'Intentions in Architecture' (1965). All these publications, including Eisenman's thesis, have in common that they are challenging and questioning the orthodoxy of the Modern Movement, namely by formulating, in their own manner, an architectural alternative for the waning principles of modernism and functionalism. Eisenman's critique of modern functionalism is particular, in that it emphasises the importance of architectural form (as opposed to function, technique or structure), thereby reversing the well-known modernist adagio of 'form follows function.'

Back in the United States, Eisenman started teaching at Princeton University, and got involved in the creation of the 'Institute for

Architecture and Urban Studies' (IAUS, 1967-85), an international thinkthank for architectural criticism based in New York, which he directed for more than 16 years (1967-1983). Together with the 'Architectural Association' (AA, London, founded in 1847) and the Italian 'Institute of Architectural History '(an independent institute founded by M. Tafuri at the University of Venice (IUAV) in 1962), the IAUS was one of the keyplayers in the institutionalization and internationalization of architectural theory in the seventies. Besides its program of lectures, conferences and exhibitions, the IAUS was also publishing a newsletter ('Skyline'), two magazines ('Oppositions' and 'October') and a book series ('Oppositions books'). Till today, the journal 'Oppositions' (1973-1984) is recognized as one of the most influential journals on architectural critique, theory and history of its time, and it has inspired many architectural magazines such as 'Assemblage' (USA) and 'Archis' (NL). The IAUS created an international and pluralist platform for architectural debate and contributed to the introduction of European and American architects and theorists to an international public. Many European theorists (like M. Gandelsonas, K. Frampton, K. Foster, A. Vidler, M. Tafuri, F. Dal Co, G. Ciucci, A. Colquhoun et al.) or architects (like A. Rossi, R. Koolhaas, B. Tschumi, L. an R. Krier, R. Moneo et al.) were introduced to an American audience, and some of them (like K. Frampton, M. Gandelsonas, A. Vidler or A. Colquhoun) pursued their academic career in the United States. Particular to the 'philosophy' of the journal 'Oppositions', is its oppositional and pluralistic attitude, which is reflected by the conflicting character of its multi-headed editorial board, and its, now famous, contradictory editorials. As a result of this pluralistic intake, the columns of 'Oppositions' have been the favourite platform for the oppositional debates between the Grays and Whites, the modernists and the post-modernists or history vs. theory. Through its close relationship with the 'School of Venice' (M. Tafuri, F. Dal Co, G. Teyssot, A. Rossi etc.) and other representatives of the European intelligentsia, the IAUS has not only contributed to the mediatization of the work of European theorists and architects, but, more generally, to open the field of architectural theory to European frames of thought like French Structuralism, Linguistics or Philosophy. Many of the leading theorists and architects in American and European universities today, have, in one way or another, been affiliated with the IAUS (from the former editorialists K. Foster, K. Frampton or A. Vidler to the younger generation of J. Ockman or M. Mc Leod).

Through his activities as a director of the IAUS and as co-editor of the 'Oppositions' and 'Oppositions Books' series, Eisenman has not only been a key figure in the development of the IAUS, but he has also personally benefited from the multicultural intellectual milieu, which had a strong influence on his own theoretical and architectural work (especially in relation to his reception of European linguistic, structuralist and philosophical references, and, more generally, through his affiliation with M. Tafuri, who Eisenman considers as his second mentor).

Besides his activities at the Institute, Eisenman also managed to pursue his career as an experimental architect of 'cardboard houses', which, on an international level, was boosted by the publication of 'Five Architects' (New York, Museum of Modern Art, 1972), a publication that presented the abstract and modern work of 'The New York Five' (Peter Eisenman, Michael Graves, Charles Gwathmey, John Hejduk and Richard Meier). Due to his involvement in the Institute, Eisenman only managed to design a series of small-scale experimental houses, some of which were effectively built (House I, House II, House III, House VI), while others remained at the stage of project (House IV, House VIII, House X, House 11a, House El Even Odd, Fin d'Ou T Hou S). Unfortunately, Eisenman did not succeed to build his masterwork House X, since the client dropped out after more than 15 preparatory designs. Most of these house-projects were conceived as autonomous self-referential objects and were designed without any consideration of the site. The Cannaregio project (Venice, 1978), which is the first project of a larger scale with real site and urban contingencies, pushed Eisenman to come up with a different design approach, called 'artificial excavation.' From a historical point of view, one can note that this project is the result of a selective competition which was organized as a reaction against the upcoming conservative tendency (later coined as post-modernism), already prefigured by the controversial exhibitions on 'Rational Architecture' (Milan Triennale, 1973) and 'The Architecture of the Beaux-Arts' (MoMA, 1975).

In 1980, Eisenman decided to fully concentrate on his architectural production, by establishing his professional practice (Eisenman Robertson Architects). Consequently, he quitted his position as director of the IAUS in 1983, leaving the Institute in a state of confusion. The Institute was closed in 1985, and, till today, no serious academic research has been done on the historical importance of the IAUS, partly because the archives are still not open to the public. From the eighties onwards, Eisenman primarily concentrated his architectural activities on the participation in international competitions, beginning with the I.B.A. competition (Berlin, 1983) and the Wexner Center Competition (Ohio, 1983). The latter will lead to the acquisition of his first major building commissions, namely the social housing for the I.B.A. (1981-1985) and the Wexner Center for the Visual Arts and Fine Arts Library' (Ohio, USA, 1983-1989). The Wexner Center has become a symbol of the architectural movement of 'Deconstruction,' in which Eisenman played a crucial role, and has confirmed his international status. Although Eisenman didn't manage to build much of his projects, one can also mention the building of the Greater Columbus Convention Center in Columbus (Ohio, USA, 1989-1993), two office buildings in Japan [the Koizumi Sangyo Office Building (Tokyo, 1988-1990) and the Nunotani Office

Building (Tokyo, 1990-1992)] and the Aronoff Center for Design and Art (1988-1996). His most recent buildings are the Holocaust Memorial in Berlin (1998-2005), the Cultural Centre for Santiago de Compostella (Spain, 1999-, still under construction), and the TSA/Cardinals Multipurpose Stadium (Arizona, 1997-, still under construction). The Memorial has become a national, yet controversial symbol of how Germany has tried to come to grips with its past.

Besides his professional activity as a practicing architect, Eisenman has continued to pursue, during his entire career, an intensive academic involvement (at Princeton University, Yale University, Cambridge University, Cooper Union Institute, Ohio State University et al.). As an internationally recognized architect, he is regularly participating in international exhibitions (f.i. at the International Architectural Biennale in Venice in 1985 and 1991), exhibiting his work at musea and galleries worldwide and he has also been rewarded at various occasions (a.o. Stone Lion at the Third International Architectural Biennale in Venice (1985), Pratt Institute Doctor of Fine Arts (1997), and more recently the Golden Lion for his career at the Venice International Architectural Biennale in Venice in 2004). Besides his academic and public commitments. Eisenman is also actively involved in the mediatization of his own architectural and theoretical work, primarily through the publication of books and monographs on his architectural production (cf. bibliography).

He has also been the instigator and éminence grise of the Any-Conferences (1991-2000), a series of international annual multi-disciplinary conferences which were alternatively organized in different world cities (Tokyo, Rotterdam, Paris, New York etc.) and which were heavily mediatized, mainly through the publication of the proceedings of the conferences (cf. bibliography) and through the publication of the bimonthly magazine 'Any.' The Any-Project is also a private initiative, like the former institute IAUS, but, contrary to the former which was directed by a board of architects, the Any-Project is run by a private corporation (Any Corporation) which is directed by Eisenman's wife, C. Davidson, and located within the office of 'Eisenman Architects' (New York). Although the Any-Project is conceived as an international and cross-disciplinary platform (including architects, theorists, writers and philosophers etc.), its scope is much less pluralistic and diversified than the former IAUS conferences and symposia, since the activities and choices are entirely controlled by the Any Corporation.

analytical scope

We begin our analysis by presenting an overview of the most critical moments of Eisenman's architectural and theoretical work, and by highlighting the most critical themes and concepts of Eisenman's writings and projects. We address the problem of the praxis-theory relationships by confronting, for each moment, the design related issues (of the architectural production/analysis) with the more theoretical and discursive issues (of the theoretical production.) The idea, behind this overview of critical moments, is not to make a linear and historical description of the different successive 'periods' of Eisenman's work, but, on the contrary, to show how the multiple thematic lines of Eisenman's apparatus are constantly interacting and intersecting with each other, as if they were caught in a constant movement of overlap, slipping, feed backs and bifurcations.1 Our intention is thus to propose a general frame of reference in which the different lines of investigation of the Eisenman Project are again reintegrated, in an attempt to reassemble the different pieces of the jig-saw puzzle.²

Our investigation begins, inevitably, with Eisenman's first major theoretical statement, which he formulated in his PhD on 'The Formal Basis of Modern Architecture.' (Cambridge, 1963) For anyone who would like to catch the fundamentals of Eisenman's Project, the PhD is a hard to ignore evidence because it already contains the seeds of most of his later architectural and theoretical concerns and orientations.

In his PhD, Eisenman proposes an alternative theory of Modern Architecture which, as the title suggests, is derived from a formal rather than functional—reading of modern architecture. Eisenman develops a complex and comprehensive 'theory of architectural form' whose rationale is entirely derived from the primacy of form. His intention is to make a rational and logical examination of the formal basis of modern architecture, to understand its formal principles and fundamentals, and to provide a critical, yet 'open-ended' theory or language for the interpretation of these fundamentals, which wouldn't be uncombed with historical, iconographical, perceptual or functional considerations.³ The intention is thus not to propose a repertoire of 'modern' forms or an operational tool for design purposes, nor to write a classical treaty or modernist pamphlet, but, on the contrary, to propose a 'formal language' that would be able to "communicate the formal essence of any architecture", regardless of any style.⁴

For Eisenman this 'formal language' evolves from an inherent formal order, which derives from the properties of form itself, and from the development of 'formal systems,' which order the vocabulary of form within the design process.⁵ For Eisenman, "architecture is in essence the giving of form," and, therefore, form should prevail over other architectural elements (like content, function, structure or technics): only form is able to clarify and order the total environment of architecture. In his theory of form, Eisenman makes a distinction between the conceptual level of 'generic form' and the perceptual level of 'specific form.' Specific form, i.e. the actual physical configuration, derives from the absolute rational basis of generic form. In the design process, the transition between both levels is assumed by 'formal systems': they organize, on a conceptual and perceptual level, the formal distortions between the generic and the specific form, according to systematic and syntactical laws. A formal system is considered as an ordering framework for the deployment of the syntax and grammar of the formal vocabulary.

In his thesis, Eisenman further illustrates how these 'formal systems' can be used in the design process—and how they can be used with infi-

nite variations and complexities—by analyzing the work of four contemporary architects: Le Corbusier, Aalto, Wright and Terragni.

As we can see by now, Eisenman's theoretical ambitions are actually exceeding the limited scope of modern architecture alone. With his thesis, Eisenman wants to develop a comprehensive and generalized 'theory of architectural form' which is entirely based on formal considerations. He reacts, not only against any historical interpretation of the theoretical basis of architecture—which, in the case of the modern movement, has led to a misinterpretation of such theoretical concepts as 'rationalism' and 'functionalism' (cf. R. Banham and W. Gropius)—but also against any ideological, humanist or iconographic interpretation of architecture.⁶

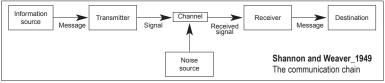
Colin Rowe In order to understand the formal orientation of Eisenman's thesis, we have to go back to the early sixties, when Eisenman went to Cambridge (UK) to work on his PhD. During his two years in Cambridge, where he spent his time between teaching activities and doctoral research, Eisenman had the opportunity to get into touch with the formalist tradition of the Warburg Institute, namely through his frequent contacts with Colin Rowe, who was also involved in teaching.7 Although Rowe was not Eisenman's official promoter, he can nevertheless be considered as his main mentor at that time. They even went twice on an architectural tour through Europe, mainly to visit the work of Dutch Modernists, the Italian Rationalists and Palladio. As Wittkower's only pupil, Rowe was fully embedded in the formalist art historical tradition of the Warburg Institute (R. Wittkower, E. Panofsky and E.H. Gombrich)-a tradition that can further be traced back to the 19th C. formalist and aesthetic tradition of A. Riegl, H. Wölfflin and C. Fiedler.⁸ Through his writings and his active academic involvement (both in Britain and in the United States), Rowe contributed to familiarize a wider and younger audience of architects and critics with the formal preoccupations of the European classical and modernist tradition, especially through the pivotal figures of Palladio and Le Corbusier.9

> The question now is to evaluate Eisenman's reception of Rowe's legacy and, more generally, of the formalist tradition. In his PhD, Eisenman clearly demarks himself from the formalist tradition of the Warburg Institute, and, to a lesser extent, from the exponents of the *Gestalt Psychology*, because they are too much focusing on iconographic, symbolic and perceptual issues.¹⁰ However, Eisenman is much less explicit about Rowe, whose influence and mentoring is, after all, much more pervasive and multiple, not only in relation to strict formal and architectural references, but also on a deeper philosophical level. Indeed, Rowe has had a critical impact on Eisenman's form-analytical attitude, his architectural preferences (namely for Palladio, Le Corbusier and G. Terragni) and, on a deeper level, his predilection for a conceptual, dialectical and ambiguous reading of form.¹¹



C. Rowe_1976 The Mathematics of the Ideal Villa and Other Essays

But at the same time, Eisenman clearly demarks himself from the legacy of Rowe, in the sense that he attempts to rationalize and to systematize Rowe's formal attitude. Eisenman's originality is precisely to combine Rowe's formal approach, with a rational, systematic and linguistic approach. In order to develop a rational, logical, yet open-ended 'theory of form,' Eisenman introduces a systematic linguistic rationale, which is based on the reception of two linguistic variants: a traditional linguistic variant-which derives from the reception of authors like B. Zevi, C. Argan, L. Moretti or J. Summerson¹²—and a more scientific and logical variant, which is vaguely inspired by the Gestalt Psychology (cf. K Koffka) and the sciences of communication (cf. Shannon and Weaver's communication model of 1949).13 The former is based on the common understanding of language as a system of vocabulary, grammar and syntax; the latter implies a rational and logical clarification of the information towards the receiver, in the sense of a hierarchical ordering of information. The linguistic rationale is used to explain how a 'formal system' can be considered as an ordering framework for the deployment of the syntax and grammar of a formal vocabulary. The logical rationale is used to support the hierarchical and systematic order of the formal theory.14



Cf. Noth, Winfried, Handbook of Semiotics. Bloomington and Indianapolis: Indiana University Press, 1995, p. 175. Cf. Shannon, Claude Weaver, Warren. 1949. The Interational Theory of Communication. Urbana: Univ. of Illinois Press, p.7.

Eisenman's reception of the form-analytical tradition of Rowe/Wittkower is thus altered by the addition of two external frames of reference—a linguistic one and a rational/logical one—which are incorporated in order to provide a systematic and rational frame for Eisenman's theoretical statement. Yet, in the general context of Eisenman's thesis, these external references are still secondary in relation to the concept of form, which remains the cornerstone of Eisenman's 'theory of architectural form.' Indeed, Eisenman's 'theory of form' is primarily derived from a conceptual and dialectical reading of form, which is considered as the absolute rational basis for any architectural design: all the 'specific forms' are derived, ordered and developed from the absolute rational basis of a 'generic form,' which is considered as a transcendental and neo-platonic entity, with its own inherent properties, syntactical laws and formal systems.

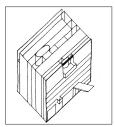
In short, Eisenman's 'theory of form' seems to drive on the dialectics between the conceptual level of the 'generic form' and the perceptual level of the 'specific form.' Yet, after a meticulous and critical reading of Eisenman's thesis, one has the impression that the introduction of a systematic and linguistic rationale within the context of Rowe's '*belles* *lettres*' formalism has engendered a certain tension between the several theoretical perspectives at stake. At the core of the problem is the unresolved conflict between a strong rational and logical systematic approach on the one hand, and a weaker, ambiguous and dynamic form of dialectics—which certainly derives from Rowe's predilection for ambiguous and double readings—on the other. This conflict of interest is most tangible in the accompanying formal analyses (especially those of Le Corbusier and Terragni), which are often based on a dynamic, dialectical and ambiguous reading process. One could even say that their ambiguous and dynamic character are deconstructing the rational and systematic underpinnings of Eisenman's theoretical construction: it is as if the linear and hierarchical construction of Eisenman's theory of architectural form becomes upset and undermined from within, by the weak dynamics of ambiguities, overlaps, distortions and double readings which are so characteristic for his formal analyses.

Eisenman's rational and linguistic interpretation of C. Rowe's formalism was clearly motivated by the intention to systematize and theorize Rowe's formal heritage. But at the same time he intends to come up with an open-ended and dynamic methodology and to avoid all forms of excessive normalization and codification. And, at the end, the impression is that Eisenman could not find a proper theoretical platform in which he could fully integrate these opposing theoretical tendencies in a single and consistent theoretical framework.¹⁵ Nevertheless, it is clear that the PhD helped to shape the conditions of Eisenman's later formal and theoretical work, by creating a sort of pool of reference, from which many themes, concepts, strategies and processes could be distilled.

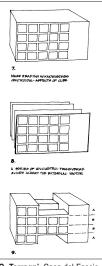
impactOn the one hand, the PhD has had a strong influence on Eisenman's
future theoretical production. Like the PhD, it is always hesitating
between a strong systematic/scientific approach and a weaker, less sys-
tematic, say linguistic, approach. In his later work, Eisenman will attempt
to overcome the limitations of his early hierarchical, dialectical and neo-
platonic theoretical model, by opening it to other theoretical perspec-
tives—like structuralism (in the seventies) and post-structuralism (in the
eighties and nineties), by further elaborating his early intuition for lan-
guage and syntax, and by tackling the problem of the dialectics as such.
But, at the same time, he will still continue to experiment with new sci-
entific models—like the chaos theory or the theory of dynamic sys-
tems—which, by their non-linear and paradoxical format, are more suit-
ed to deal with changes, dynamics and uncertainties.

On the other hand, the PhD has also had a critical impact on the strict level of the architectural production, not only in terms of architectural preferences (Le Corbusier and Terragni especially), but also on the development of architectural strategies and processes. Even if the PhD was initially not intended as an operational design tool, Eisenman has been able to develop, through his analysis of classical and modern masters, his own form-analytical reading and writing techniques, which will be of great help for his later architectural development. From all the architects that Eisenman has analyzed in his PhD, the figures of Le Corbusier and Terragni are the most emblematic ones: Le Corbusier, because he stood as model for most of Eisenman's form-analytical work, and Terragni, because he can be considered as the architectural embodiment (or mirror) of Eisenman's own formal and theoretical concerns to come. It is clear, though, that Eisenman's analysis of Terragni, could never have been achieved, without the reception of Colin Rowe's formal interpretation of Le Corbusier, which can be considered as the starting point of his own formal analysis.¹⁶ However, Eisenman's own interpretation of Terragni's work should also be considered as a first attempt to transform and to re-appropriate, or even to overcome the initial frame of reading that has been partially conditioned by Rowe's interpretation of Le Corbusier. In this respect, one should not only consider Eisenman's analysis of Terragni's Casa del Fascio as the culmination point of all his formal analyses or as the architectural embodiment of his formal theory as such, but also as a prototype for later architectural experiments to come. In fact, the Casa del Fascio shows the real dynamic, dialectical and ambiguous potential of Eisenman's formal systematic approach-and this, in a much more convincing way than the theoretical part of Eisenman's thesis. In a sense, the Casa already prefigures Eisenman's own architectural experiments with the early houses, not so much because of its generic cubic format-which is the perfect embodiment of the 'generic form'-but rather because of the ambiguous, conflicting and dynamic character of its processes, which, as Eisenman later suggests, can be associated with the typical processes of transformation of the early houses.17

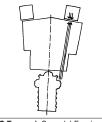
Another striking feature of the formal analyses is the fact that they are usually conceived as a succession of dynamic diagrams, which are annotated with a series of little arrows indicating the movement of the vector lines. Through these diagrams, which derive from his reading of the 'four compositions' of Le Corbusier, Eisenman wants to explain how the 'specific forms' of the building are derived from a 'generic form,' by visualizing the several steps of distortions which are resulting from the development of the 'formal systems' and from the grammatical interpretation of the internal and external syntactical conditions. All the formal deformations and distortions, which are so characteristic for Eisenman's dynamic interpretation of buildings, are resulting from the syntactical interrelationship between the internal dynamics of the building and the external dynamics of the site.18 As we all know, these dynamic and cinematic series of diagrams, are to become one of Eisenman's most recognizable signatures. Yet, what is particular to these early diagrams, is the fact that they are resulting from the interaction between internal and external dynamic vectors, a characteristic



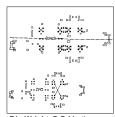
Le Corbusier_Villa Stein diagram by Peter Eisenman



G. Terragni_Casa del Fascio diagrams by P. Eisenman



G.Terragni_Casa del Fascio site-building diagram diagram by P. Eisenman



F.L. Wright_D.D.Martin House_diagrams by P. Eisenman

that we will find back in the projects of the eighties and nineties, while, with his early house, the diagrams are only derived from the internal dynamics of the object itself.

These few examples give a rough idea of the relevance of Eisenman's early formal analyses for his later architectural production, and, more generally, show how the PhD created the conditions of Eisenman's later theoretical and architectural work.¹⁹ Yet, if one considers the relationship between theory (i.e. the theoretical model) and practice (i.e. the pragmatic analyses), one can but conclude that there is a certain discrepancy or tension between the strong systematic, rational and dialectical approach of the theoretical model and the more ambiguous, dynamic and conflicting nature of the actual formal analyses. In spite of Eisenman's intention to consider theory as a 'continuously applicable and open-ended methodology,' it still looks as if he has not succeeded to integrate the two corroborating tendencies—the linear systematic rationale and the linguistic rationale—in one single comprehensive and generalized 'theory of form.'

contemporary books To conclude, we would like to make a final comment on the particular intellectual environment of the sixties, by confronting Eisenman's thesis with similar architectural publications of the mid-sixties. Since Eisenman's PhD was not published until recently, its reception was restricted to a limited audience of academics and connaisseurs.20 Consequently, his 'theory of form' never got the same public attention as the slightly later publications of e.g. A. Rossi ('Architettura dela Città,' 1966), R. Venturi ('Complexity and Contradiction in Architecture,' 1966) or C. Alexander ('Notes on the Synthesis of Form,' 1964.) All these publications, including Eisenman's own thesis, have in common that they are challenging and questioning the orthodoxy of the Modern Movement: they all attempt to formulate, in their own manner, an architectural alternative for the waning principles of modernism and functionalism. Rossi's and Venturi's books became huge international successes and were very influential in breaking the stronghold of the functionalist thought.

Aldo Rossi With 'The Architecture of the City,' Rossi writes a treatise on the complexity of the urban and architectural condition of the city, as a reaction against the 'naïve functionalism' of the modernist city. The city is considered as a man-made artifact of human culture and as the repository of collective memory. Rossi refers to the important role of singular places (*locus*) and permanent urban elements (natural elements of man-made monuments) within the process of urbanization. Rossi's investigation is structuralist, in the sense that it makes the city legible as a repetition of irreducible archetypal elements which are operating according to 'fixed laws of timeless typology:' Rossi compares the functioning of these permanent urban elements with the linguistic structures of de Saussure. He insists on the value of architectural morphology and urban typology as the rational basis for a design process. While Eisenman and Rossi are both looking for a rational basis for a design process-formal systems on the one hand and typological laws on the other-and reacting against functionalist orthodoxy, their attitudes and objectives are nevertheless different: Rossi makes a historical, typological and morphological investigation into the role of architecture in the urban fabric, while Eisenman makes an a-historical, systematic and formal analysis of modern architecture. Rossi refers to the symbolic role of urban elements and artifacts in the history of the city, while Eisenman attempts to eschew any symbolic, historical and iconographic values. In 1982, Eisenman will personally contribute to the English publication of Rossi's book, which he will edit, translate and introduce: as can be deduced from his introduction to the book. Eisenman is specially interested in Rossi's analogous interpretation of history/memory, time and place-concepts which he later will integrate and reformulate in his own writings.21

Robert Venturi, with his publication 'Complexity and Contradiction in Architecture,' also makes associations with the history of architecture, vet his approach is much more eclectic and ambiguous than Rossi's rational approach. As the title of his publication suggests, Venturi is more interested in the complexities, contradictions and ambiguities of architecture and in the numerous levels of interpretation and meaning. He likes to make visual associations and juxtapositions between works that are taken out of context, and promotes the use of binary oppositions (like hybrid/pure, literal/symbolic, explicit/implicit), in an attempt to achieve a 'difficult unity of inclusion' (of 'both/and'.) Venturi's 'gentle manifesto' can be considered as an anti-modern manifesto for historicist eclecticism, and, in this respect, it contributed, more than any other publication, to the rise of postmodern architecture in the eighties. Despite their similar interest for ambiguities/oppositions, Gestalt Psychology and linguistic models, Eisenman and Venturi have a radically different, even opposing, attitude towards architecture. Venturi's publication is clearly conceived as an anti-modern, eclectic and historicist manifesto: he is concerned with questions of meaning and communication and his conception of oppositions and contradictions fundamentally relies on the "difficult obligation toward the difficult whole."22 Curiously, Venturi once said that he regretted that he had not titled the book 'Complexity and Contradiction in Architectural Form.²³ But, above all, Venturi's book prefigures the historicist tendency of postmodern architecture. Eisenman's analysis, on the other hand, is not concerned with guestions of history, meaning or communication, but with the analysis of architectural form: his stance is not anti-modern, but anti-functionalist and his approach hovers between rational systematic and ambiguous dialectics. Eisenman's thesis, contrary to Venturi's inclusive theory, is conceived as an open-ended methodology: he doesn't look for the 'difficult unity through inclusion' of



A. Rossi_1966 The Architecture of the City (cover)

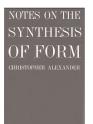
Robert Venturi



R. Venturi_1966 Complexity and Contradiction in Architecture (cover)

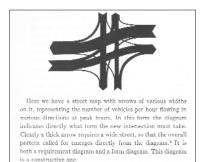
oppositions—or, in other words, to make a synthesis of the dialectical oppositions. Later, Eisenman will attempt to overcome the dialectical underpinnings of his own theoretical attitude, first by assuming co-existence of non-corroborating oppositions (76/1), later by deconstructing the dialectical oppositions (84/1).

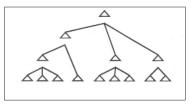
Christopher Alexander Contrary to Rossi's and Venturi's publications, which were only published after his thesis, Alexander's 'Notes on the Synthesis of Form' already circulated in a manuscript form at the time of Eisenman's stay at Cambridge. Eisenman had the opportunity to read a copy of the manuscript, and, according to him, "the text so infuriated me, that I was moved to do a PhD thesis myself...It (...) was an attempt to dialectically refute the arguments made in his book." The guestion arises what infuriated Eisenman so much? Alexander, who was trained in architecture, mathematics and physics, sought to develop a rational and logical methodology of design that could be used as a generative system in the built environment. He reacts against the non-rigorous approach of modern architectural design methods which, according to him, fail to generate forms that are adapted to the context of human needs and demands. Alexander believes that it is possible to create new concepts and forms out of the structure of the problem itself: in other words, "there is a deep and important underlying structural correspondence between the pattern of a problem and the process of designing a physical form which answers that problem." The problem is first defined as a 'set of requirements' (e.g. functional and technical constraints etc.), which correspond to the subsystems of the adaptive process. By treating each of these subsystems as a separate sub-problem, the designer can translate the new concepts into form. The problem is decomposed into less complex subsystems, by using a mathematical algorithm of decomposition. These 'components' are then transformed in a set of hierarchical stem or tree diagrams, which, when put together, provide a hierarchical solution for the whole.²⁴ In Alexander's rational method, the architectural analysis derives from the application of mathematical models, set and problem-solving theory and computer diagrams.25



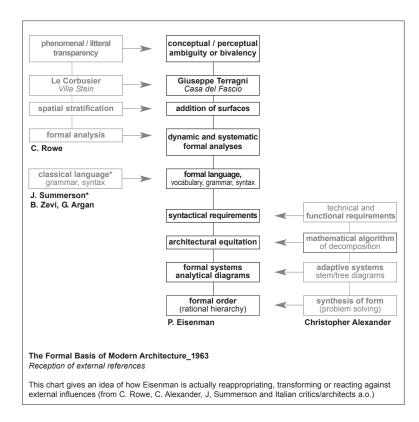
C. Alexander_1964 Notes on the Synthesis of Form (cover) After this short introduction, one can now better understand why Eisenman is upset by Alexander's model, and, more generally, what motivated him to present his own 'theory of form' as a rational, logical, hierarchical and systematic (yet open-ended) methodology. In his thesis, Eisenman directly replicates to Alexander's terminology by using his own set of 'rational' notions—such as formal order, formal systems (instead of hierarchical stem and tree diagrams), 'syntactical' requirements (instead of functional requirements), architectural equation, clarity of information etc. It is clear that they have a completely different understanding of form. Alexander's synthesis of form is the result of a problem solving approach which is based on a mathematical, contextual, functional and systematic model. Form has to meet the require-

ments, demands and needs of use and has to be adapted to the context. When the adaptive process is brought to a good end, when all the 'misfit variables' are stabilized, and when all the constraints, requirements and demands are finally met, the form will be well-adapted to its context, correct and non-arbitrary: the question of form is stated as a solution to a problem, which is defined by the context.²⁶ Eisenman's understanding of form is much less rational, logical and scientific: it derives from a dialectical, ambiguous and dynamic understanding of form. Eisenman's reaction against Alexander is all the more understandable, if one considers his prior experience at Gropius' office (The Architects Collaborative, Cambridge, USA, 1959), which he left with a deep sense of disappointment for any kind of 'form follows function' approach. This explains why he is so sceptical about Alexander's approach, which, with a quasi scientific and mathematical rigor, attempts to optimize the adaptation of forms to the actual demands of use and context. However, Eisenman is not only bothered by Alexander's functionalist and contextual approach, but also by his holistic philosophical attitude. For Alexander, a correctly solved problem can lead to a beautiful and harmonious synthesis of form. In a later debate at Harvard University in 1982-which confronted their 'Contrasting Concepts of Harmony in Architecture'-it will become clear how much Alexander's cosmology of harmony is different from Eisenman's own cosmology of difference.27





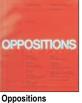
C. Alexander, Notes on the Synthesis of Form, 1964 1. diagram 2. stem diagram



When Eisenman returned to the United States, he started teaching at Princeton and got involved in the creation of the Institute for Architectural and Urban Studies (IAUS, New York, 1967-1985), which he directed for more than 15 years (1967-1983). The creation of the IAUS accelerated the break with Rowe's intellectual environment and cleared the way for new theoretical and formal challenges. The Institute, and its twin-magazines 'Oppositions' and 'October', created an exciting international platform for disciplinary, cultural and theoretical cross-overs, and the intellectual proximity of people like R. Krauss, M. Gandelsonas or K. Frampton a.o., gave Eisenman the opportunity to extend his earlier interests for conceptual, formal and linguistic issues with new references from Conceptual Art, Linguistics and Structuralism. Meanwhile, Eisenman started to work on his own architectural projects and first building commissions-the so-called 'early houses'-while still pursuing his earlier research activities. All these elements combined, lead him to reconsider his earlier theoretical statements, and to reformulate his new insights in a new theoretical framework, which he called 'Conceptual Architecture' or 'Cardboard Architecture.' Contrary to his PhD, Eisenman doesn't develop his new theory in one comprehensive publication, but through a series of successive articles, in which he constantly modulates and refines his earlier statements. This makes it more difficult to come up with a uniform and generalized definition of Conceptual Architecture, but, at the same time, these successive reformulations (or linguistic transformations) are also typical of Eisenman's own way of dealing with theory as a work-in-progress.²⁸

Eisenman develops his new theoretical insights by integrating new references from the Anglo-Saxon tradition of linguistics (N. Chomsky, C. Morris), from the then upcoming movement of 'Conceptual Art' (S. LeWitt, R. Morris a.o.),²⁹ and from the rereading of Dutch and Russian Avant-Garde (P. Mondriaan, M. Malevich.)³⁰ As a result of these new inputs, Eisenman's theoretical perspective shifts from a formal, dialectical and systematic approach, towards a conceptual, linguistic and structuralist approach. The question of form still remains important, but the attention has now shifted from a systematic and dialectical understanding of 'form' towards a structuralist and conceptual understanding of the 'formal structure' (or 'deep structure'), i.e. the underlying conceptual deep level of formal relationships and universals.

Eisenman still makes a difference between a conceptual and a perceptual formal level, but this distinction is now reformulated with Chomsky's notions of 'deep structure' and 'surface structure.' Eisenman wants to shift the focus from the perceptual and sensual aspect of objects ('sur-

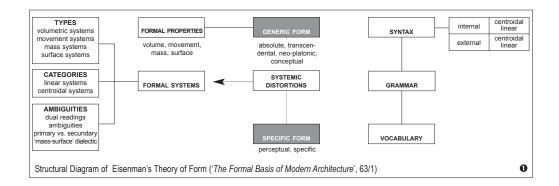


Oppositions cover face structure') towards the conceptual, syntactical and universal aspect of objects, i.e. the implied deep level of formal relationships ('deep structure'). By transforming an object into a series of relationships ('the shift from object to relationships'), the formal structure of an object becomes intelligible. The concept of 'deep structure' (or 'formal structure') refers to the implied, conceptual and syntactical level of formal universals or regularities: these universal formal relationships are usually conceived as binary oppositions or ambiguities (like horizontalvertical, solid-void, planar-volumetric, frontal-oblique, subtractive-additive etc.) 'Surface structure' refers to the perceptual, pragmatic, semantic and aesthetic level of the architectural object. The translation of formal universals ('deep structure') into specific form ('surface structure') is made by a process of transformation (or 'transformational method'), which mediates the transformational operations and produces new information or meaning. In a transformation, a limited set of rules (like shift, rotation, compression and extension) are applied to a limited set of elements (like volumes, surfaces and grids).³¹ Through this process of transformation, it is possible to make an inquiry of form and structure and to reveal the hidden architectural intention or meaning by neutralizing content, meaning and function.

Contrary to his earlier 'theory of form,' which is only conceived as an analytical theory, Eisenman's new theory of 'Conceptual or Cardboard Architecture' is explicitly conceived as an analytical and generative 'theory of design:' it cannot only be understood as a purely conceptual, theoretical and analytical framework ('Conceptual Architecture'), but also as a generative model of design, or as a specific application of the theory to actual buildings ('Cardboard Architecture'). Eisenman's analyses of Terragni's work (70/1, 71/1) or Conceptual Art (71/2) are typical examples of the analytical component of Conceptual Architecture: the application of the design theory is to be found in the Cardboard Architecture of his 'early houses (72/1, 72/2).

structural similarity

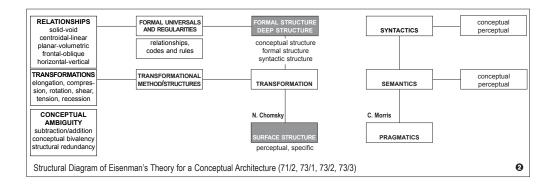
While Eisenman is integrating new linguistic and conceptual references in his conceptual framework, he is still implicitly referring to his earlier



form-theoretical model, which is used as an underlying template for the grafting of those new inputs. In the figures below, which confront the underlying structure of both theories, one can indeed discover that, behind the obvious differences in formulation and focus, the argumentation is following similar patterns of construction.

For instance, the PhD (*fig.* ①) is conceived as a dialectical and systematic model: the formal development is triggered by the dialectics between the 'generic form', which is conceived as an absolute formal reference with its own intrinsic properties, and the 'specific form,' which is the actual configuration. The transition between both levels is organized through the development of different types and categories of 'formal systems,' which organize the formal distortions between the 'generic' and 'specific' forms, according to syntactical and grammatical rules.

The new model of Conceptual Architecture (fig. 2), on the other hand, is conceived as a dialectical and structural model: the transition between the conceptual 'deep' level ('deep structure') and the perceptual 'surface' level ('surface structure) is not mediated through the development of 'formal systems,' but through a transformational process which consists of transformations and conceptual ambiguities. The 'deep' level structure is not conceived as an absolute transcendental reference, but as a set of universal formal relationships, which can be made understandable through the process of transformation and through markings. Instead of the initial linguistic component (vocabulary-grammar-syntax), there is a much more complex linguistic model which is derived from the linguistic model of C. Morris (pragmaticssemantics-syntactics), which parallels the earlier linguistic distinction between 'deep and surface structure'. We see that for each series of items of the first figure **0**, there are a series of corresponding counteritems in the second figure 2. The main theoretical difference between the first and the second model is that the conceptual level is not anymore identified with an absolute transcendental entity (the 'generic form' of the ideal neo-platonic cube) but with a series of universal relationships or structures (which are conceived as binary oppositions or ambiguities). This shift can be considered as a paradigmatic shift from



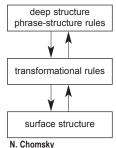
a neo-kantian/neo-platonic model towards a structuralist model, based on dialectical binary oppositions. The other difference is that the linguistic component is much more elaborated and important within the whole theoretical construction. There is a shift from a primary formal and secondary linguistic model, towards a primary linguistic and secondary formal model. Yet, what is surprising is that the underlying structural matrix is still based on a dialectical model which intends to make explicit and understandable the underlying hidden meaning, a common feature to all structuralist models that will later be criticized by the post-structuralists.(cf. *infra*)

Let us now consider how Eisenman is specifically dealing with these new conceptual and linguistic inputs from Conceptual Art and linguistic structuralism, and how he manages to reappropriate these references in order to adapt them to the specificity of architecture. One can easily imagine what seduced him in the first place in both models, in the sense that they allowed him to further develop his earlier interests for conceptual, linguistic and systematic issues, and so, to further distinguish himself, not only from the formalist and intellectual mentoring of C. Rowe, but also from the upcoming tendency to use semiotic and linguistic models in architecture.

- linguistic references If one looks at Eisenman's new linguistic references, it is striking to note that he is not referring to the European tradition of 'semiology' and linguistics-like many of his fellow architects (M. Gandelsonas, G. Beard and C. Jencks et al.)-but, instead, to the Anglo-Saxon tradition of 'semiotics' and linguistics (of C. Peirce, C. Morris, and later, N. Chomsky.) ³² One can understand why Eisenman is attracted by the more pragmatic and logical approach of the American models of semiotics, if one considers his earlier attempts to combine a traditional linguistic approach (language as vocabulary, grammar and syntax) with a behaviorist model of communication. By combining references from C. Morris' pragmatic model of semiotics (especially his distinction between pragmatics, semiotics and semantics) and from Chomsky's earlier lin-(especially his 'Syntactic quistic theory Structures' and 'Transformational Grammar'), Eisenman managed to pursue his earlier investigations on syntax and communication.
- *N. Chomsky* Eisenman's reception of Chomsky is much more pervasive and critical than his reception of Morris, not only because of its structuralist and transformational approach, but also because of its specific linguistic terminology, which will be a source of inspiration for many of Eisenman's new architectural notions (such as 'deep structure' and 'surface structure', transformational structures/method, universals, markings or conceptual ambiguity.)³³ For Eisenman, the investigation of formal universals and deep structure, and the intentional transformation of these 'deep structures' into 'surface structures' are a characteristic feature of Conceptual Architecture, as opposed to Conceptual Art which is more

concerned with sign systems and coding devices.34

On the other hand, Morris' pragmatic semiotic model will be useful to support his views on the pragmatic, semiotic and syntactic dimension of architecture (71/2). By including the necessary pragmatic and functional aspect of architecture, Eisenman attempts to support his own definition of 'Conceptual Architecture' and to counter Sol LeWitt's explicit allegation that architecture cannot be considered as Conceptual Art, because "architecture...must be utilitarian or else fail completely."³⁵ This is also the reason why Eisenman is making a further distinction between the 'perceptual' and 'conceptual' level of Conceptual Architecture, whereas Conceptual Art explicitly excludes any form of perceptual, emotive or subjective sensation in relation to the physicality of the object.³⁶ It is thus striking to note how Eisenman is actually adapting and reappropriating all those new linguistic references in order to justify his own architectural interpretation of Conceptual Art.





It is further interesting to note how Eisenman is successively reformulating and adjusting his statements, with a series of linguistic transformations.(cf. *figure below*) Where he first associates 'deep structure' with the conceptual and syntactical level and 'surface structure' with the perceptual and semantic level' (70/1,) he will later reformulate his argument by denoting a semantic and syntactic aspect for both the conceptual and perceptual aspect (70/2, 71/2). As a result of this doubling, he will later speak about 'dual deep structure' instead of 'deep structure' (73/1, 73/3). ³⁷

deep structure (relationships)	conceptual	syntactic level	syntactic semantic	dual
surface structure (object)	perceptual	semantic level	syntactic semantic	deep structure
		70/1	70/2, 71/2	73/1, 73/3

Let us now consider Eisenman's interest for Conceptual Art and how he managed to reply with his own architectural alternative. If one considers Eisenman's earlier concern with formal systems, dynamic and conceptual readings or generic forms like the cube, one can understand why he showed such a great interest for the approach of Conceptual Art, and, more specifically, for their concern with conceptual ideas, objects, structures, processes and coding devices. As an architect, Eisenman is not so much interested in the linguistic variant of conceptualism (like the Art Language group), but rather in the conceptual paintings or the three dimensional art of artists like K. Noland, D. Judd, Sol LeWitt or R. Morris (71/2). From all the protagonists of Conceptual Art, Sol LeWitt and R. Morris had the greatest impact on Eisenman's theoretical and architectural work: Sol LeWitt's influence is more related to

Conceptual Art

Eisenman's early conceptual work—which can be associated with LeWitt's work on modular cubes and serial structures³⁸—while Morris' influence is more related to Eisenman's later work (on the el-shapes, folds and figure-figure relationships).³⁹ It is thus not surprising that one can find many references to the work and writings of both artists—albeit not always explicitly—in Eisenman's writings on Conceptual Architecture.⁴⁰ Yet, Eisenman was to face many problems in his attempt to define an architectural variant to Conceptual Art, not the least because LeWitt and Morris are both explicitly excluding architecture from their own vision on conceptual art (LeWitt) or sculpture (Morris).⁴¹

Sol LeWitt



R. Morris_1965 L-Beams

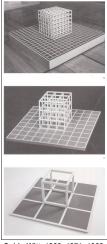


Sol LeWitt_1966 modular cube

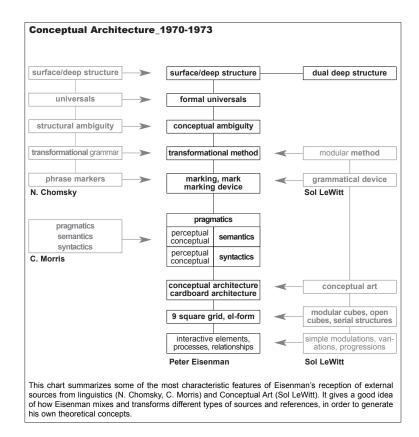
In order to better understand Eisenman's argument, it might be useful to confront his definition of Conceptual Architecture with LeWitt's initial definition of Conceptual Art. For LeWitt, "conceptual art is made to engage the mind of the viewer rather than his eye or emotions": it should avoid any kind of perceptual, emotive or subjective sensation about the physicality of objects, (like color, surface, textures or shape), which are contrary to the basic idea of conception.42 "In Conceptual Art the idea or concept is the most important aspect of the work (...) the idea becomes a machine that makes art." 43 Yet, Conceptual Art is not necessarily theoretical or logical, but intuitive and purposeless: the ideas are simple and discovered by intuition. For instance, "when an artist uses a multiple modular method, he usually chooses a simple and readily available form. The form itself is of very limited importance; it becomes the grammar for the total work."44 Thus, for Lewitt, Conceptual Art is about simple ideas, simple forms (like the cube) and simple arrangements (like modulations, progressions, repetition or variations).

Despite its similar concern for conceptual ideas, forms and processes, Eisenman's vision of Conceptual Architecture is sensibly different from LeWitt's definition of Conceptual Art. This is mainly due to the primary physical, perceptual, utilitarian and pragmatic nature of architecture, which Eisenman has to take into consideration in order to come up with a credible architectural alternative to Conceptual Art. Therefore, he comes up with a more complex theoretical model, which is not so much based on the contradiction between perception and conception, but on the distinction between 'surface and deep structure' on the one hand, and between pragmatics, semiotics and syntactics on the other (cf. supra). Instead of the initial simple distinction between perceptual and conceptual, Eisenman is now proposing a much more complex equation, which is based on the distinction between a semantic and syntactic aspect of the perceptual level on the one hand, and a semantic and syntactic aspect of the conceptual level on the other. In fact, Eisenman is countering LeWitt's proposal, by presenting a model which is based on the transition between the perceptual level (i.e. the pragmatic and semantic 'surface' level) and the conceptual level (i.e. the syntactic 'deep' level), rather than on the opposition between perception and conception. For Eisenman, "the task for a conceptual architecture" is to investigate the nature of "formal universals which are inherent in any form of formal construct (...) These deep structures, when used intentionally in an architecture...might give to functional requirements a primary conceptual aspect ...(and) engender more precise and complex meanings through the manipulation of form. This would require some form of transformational method—where the universals of the conceptual structure are transformed by some device to a surface structure and thus capable of receiving meaning."⁴⁵

There are thus some substantial differences between LeWitt's definition of Conceptual Art and Eisenman's definition of Conceptual Architecture. While LeWitt is concerned with simple ideas, forms and modulations, rather than with the perception of the subject, Eisenman wants to create a shift from perception to conception and make an 'intentional use of deep structure' in order to engender more complex meanings.46 While LeWitt's Conceptual Art is not illustrative of other theories, Eisenman's Conceptual Architecture is specifically associated with other linguistic models (like Chomsky's 'Transformational Grammar'), which inspires Eisenman's own 'transformational method'. Unlike LeWitt's 'modular method,' which is based on the simple progression or modulation of simple forms (like cubes and grids), Eisenman's 'transformational method' is based on the sequential transformation of a set of elements (like cubes, surfaces and grids) and processes (like doublings, shifts, rotations, shear etc.) that are dialectically played against each other, so as to create a series of conceptual ambiguities (like e.g. between subtraction and addition, compression and extension, walland column system etc.). These series of complex dialectical and sequential transformational processes are simultaneously performed on different elements (like cubes, planes, columns and grids).⁴⁷ Finally, for Eisenman, these transformations aren't simple or intuitive 'grammatical devices', but intentional, syntactical and structural 'marking' devices, which, through the use of visual indications (e.g. inflections, colors, materials etc.) are revealing the implicit conceptual meaning of these transformations. 48



Sol LeWitt_1968, 1971, 1969 modulor cubes/bases



cardboard architecture

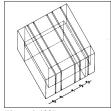
In order to further underline the difference between Conceptual Architecture and Conceptual Art, Eisenman also speaks about Cardboard Architecture-or 'Houses of Card'-because his early houses are conceived as abstract cardboard models or mega-structures, without any specific size, scale, location or meaning: by considering his houses as life-size models, Eisenman wants to focus the attention on the conceptual and formal structure of the house, rather than on its traditional functional, aesthetic or symbolic meaning (as shelter or center of dwelling), and question the very idea of 'houseness.' His Houses of Cards are conceived as autonomous and abstract mental frameworks, which are driven by their own internal dynamics and dialectics. It is interesting to note that, when facing the reality of architectural production-i.e. the application of theory-Eisenman is precisely radicalizing the conceptual dimension of his earlier formal and theoretical investigations, by making abstraction of such phenomenal contingencies as time, place, ground or site. Where Eisenman's earlier analyses of Le Corbusier or Terragni are based on the dialectics between the internal dynamics of the building and the external dynamics of the site, his 'Houses of Cards' are only focusing on the internal dynamics and dialectics of form. Where his earlier 'theory of form' managed to keep a

certain balance between perceptual and conceptual considerations, Eisenman's Conceptual Architecture has now shifted towards pure conceptuality.

Now, if one looks at the actual production of the Cardboard Architecture, one can see that the process of transformation is steadily becoming more complex and dialectical with time, and that Eisenman is more and more demarking himself from his earlier architectural models. It is clear that, from all the earlier formal analyses, Terragni's Casa del Fascio has had the most critical impact on Eisenman's series of early houses, not only because of the typical cubic format of the houses (which recalls the ideal generic cube of the Casa), but also because of the typical use of dialectical processes (like, for instance, the combination of additive and subtractive processes, which recalls the ambiguous play between the addition of surfaces and the subtraction of mass in the Casa). In a sense, one could say that, with his early houses, Eisenman is attempting to further abstract and radicalize his earlier model of the Casa del Fascio: by focusing on the internal dynamics of the building-rather than on the dynamics between building and site-Eisenman is trying to push his experiment to a further level of conceptual abstraction, complexity and polarization. Of course, in the beginning, Eisenman's experiments are still very much in the spirit of his earlier formal investigations. For instance, in House I, Eisenman is questioning the classical notational system, by superposing two different grid systems (an ABABA grid vs. a ABAA) upon each other. These notational systems are clearly referring to his earlier analyses of Terragni or Palladio. In his following houses though, Eisenman will gradually abandon these early references and experiment with new elements-like the 'nine-square' grid (House II to House VI) or the 'spatial grid'(House IV, House VI)-and processes-like shifts (House II), rotations (House III), sequences (House IV, House VI) or inversions (House VI). Eisenman is not only increasing the level of complexity of the formal transformations as such, but also the level of theorization and conceptualization, namely by upsetting the traditional relationships between the object (i.e the house as object of dwelling) and the perceiving/conceiving subject (in casu the inhabitant or the designer). In House II, for instance, Eisenman creates a structural redundancy by superposing two different structural systems (a wall-system and a column-grid system) upon each other: by doubling the structural system, he creates a conceptual bivalency which makes one of both systems redundant. Or in House III, he intentionally emphasizes the physical presence of the formal structure, by rotating the different structures in relation to each other. By upsetting the traditional structural arrangement, Eisenman intends to 'alienate' the traditional perception of the subject. In the following houses, the pace of sequences is further increased and polarized. In House IV, for instance, Eisenman is playing on the dialectics between three different spatial sequences (of cubes, planes and grids), which are visualized as



G. Terragni_Casa del Fascio_building-site dynamic



House I_1967 ABABA grid



House II_1969 front view



House II_1969 structural redundancy



House III_1969-1971 axonometry



House IV_1971 model



House VI_1972-1975 color codes, inverted staircases



House VI_1972-1975 front view

a series of film stills. With House VI, finally, the series of Houses of Cards are brought to a point of culmination: the design process is still developed through a series of transformational processes, yet, the sequential linearity of the process of transformation begins to be seriously eroded by the increasing emphasis on the internal oppositions and inversions. Eisenman intends to further detach the conceptual structure from the physical experience, by playing on a series of formal and conceptual inversions. Through a series of spatial inversions-like e.g. the topological inversion of the cubes, the inversion of internal volumes and facades, or the inversion of frontal and rear planes-Eisenman wants to upset and inverse a series of archetypical relationships (such as the relationship between center and periphery, horizontal/vertical, inside/outside, frontal/oblique, top/bottom, solid/void or the relationships between Euclidian and topological space). In order to trigger a mental reordering (from the perceptual experience to the conceptual structure), Eisenman is working on the oppositions (in terms of size, location, shape or color) between the different juxtaposed elements: he uses, for instance, specific color marks in order to visualize the inversion between inside and outside (white vs. grey columns) or between upside and downside (green vs. red staircases).

By emphasizing the oppositions and inversions of his transformation processes. Eisenman is also pushing the limits of his own transformational model to a critical point of saturation and reversal: instead of simply transforming the relationships between conception and perception, Eisenman wants to create an inversion of the traditional correspondence between perception and conception. But, by fundamentally questioning the sequential linearity of his transformation processes, and by dismantling the very idea of the original ideal cube, Eisenman is also undermining some of the most fundamental formal features of his Cardboard Architecture. Eisenman's argument though goes further, since, by inversing these archetypical relationships, he is also inversing some of the most known canons of the Modern Movement, like the houses of De Stijl or Le Corbusier. Moreover, Eisenman does not only doubt about the relevance of his formal strategies, but also about the use of theoretical models like structuralism and linguistics, since, in his last article on Conceptual Architecture (73/3), he specifically warns against the explicit use of linguistic, semiological and communicational models in architecture. In a defensive mode Eisenman argues that, till now, he was only interested in the syntactical aspect of form, rather than in the semantic aspect of meaning.49

We just have seen how Eisenman is beginning to reconsider the fundamentals of his earlier formal and theoretical statements, and, with the changing architectural context of the mid-seventies, he will be further motivated to explore new formal and theoretical territories. In the aftermath of the debate on the decline of orthodox modernism, it looks as if the debate on the American architectural scene is more and more getting polarized between opposing tendencies, like the rationalists and realists, the Grays and Whites or the moderns and the postmoderns.⁵⁰ Of course, the rivalries are mainly played out through the means of publications, exhibitions, conferences or academic debates: for instance, after the publication of 'Five Architects' (1972), which presented the work of the New York Five (P. Eisenman, M. Graves, C, Gwathmey, J. Hejduk and R. Meier), R. Stern replied with 'Five on Five' (1973). Another example of this polarization is the 1975 A+U issue on the 'Grays and Whites' (A+U, 1975), which was jointly co-edited by R. Stern and P. Eisenman.⁵¹ On a more international level, one can refer to the conference on 'Rational Architecture' (Milan Triennale, 1973) and the controversial Exhibition on 'The Architecture of the Beaux-Arts' at the Moma (Moma, 1975).

This changing climate also had a repercussion on the activities of the New York based 'Institute for Architecture and Urban Studies' (IAUS), which had just started with the publication of its own magazine *Oppositions* (1973-1984): indeed, through the years, *Oppositions* published many editorials, forums and articles which were in one way or another related to the question of modernism and postmodernism. Through its international panel of editors and contributors—mainly from Europe (England and Italy)⁵²—and its close relationships with the 'School of Venice,' *Oppositions* developed into an international forum of discussion, mainly on European architecture, theory and history, and introduced many architects and writers (like M. Tafuri, F. Dal Co, A. Rossi, Foucault or Barthes a.o.) to American audiences.

As co-editor of Oppositions, Eisenman also regularly contributed with a series of editorials and articles, mainly on the work or writings of other architects—like the Smithsons (73/4), J. Stirling (74/2), P. Johnson (77/2), M. Graves (78/2), J. Hejduk (80/3), or Le Corbusier (80/1). He also wrote some articles on the work and writings of A. Rossi, mainly by editing the English translation of his publication "The Architecture of the City" (82/1). In his articles, Eisenman usually makes a formal analysis of two works, or two series of works, which he approaches in a very dialectical and oppositional manner. But, what strikes the most is the fact that these formal or theoretical analyses are always referring back to the question of modernism or to the work of modernist architects (like



Five Architects_1972 (title page)



J.Hejduk_1966 House 10 (Five Architects)



C. Gwathmey_1966 Gwathmey Residence (Five Architects)

Le Corbusier): for instance, the work of J. Stirling is considered as a reversal of modernist canons, while the early work of M. Graves's or J. Hejduk's are associated with the typical modernist processes of abstraction or reduction. It is clear that, in the case of M. Graves (78/2) and P. Johnson (77/2), the question of the debate between modernism and postmodernism becomes even more relevant, since both architects have been actively involved with postmodernism. Often, Eisenman is referring to modernism as an intrinsic, self-referential and linguistic architectural condition, which is concerned with the internal language of architectural elements (i.e. the intrinsic architectural quality of columns, beams or planes, like their horizontality or verticality or their object-hood).⁵³

Yet, the most pronounced statements on (post)modernism are made in Eisenman's famous editorial on 'Post-Functionalism' (76/1), which is also his first explicit theoretical statement since 'Conceptual Architecture'. In this editorial, which replicates to Gandelsonas' earlier editorial on 'neo-functionalism,' Eisenman proposes a third, theoretical alternative to modernism and postmodernism, which he labels postfunctionalism. Post-Functionalism recognizes modernism as a sensibility that is "based on the fundamental displacement of man (and) represents what Foucault would specify as a new 'episteme.'"54 For Eisenman, modernism should not be based on the dialectics between form and function, but a truly modern dialectic of co-existence between two non-corroborating and opposing formal tendencies. In one case, architectural form could be considered as a process of geometric transformation, in the other as a process of fragmentation, multiplicity and decomposition. Eisenman remains rather vague on the specific architectural implications of his dialectic of co-existence, but it is clear that he is referring to the oppositions in his own work, which, at that time, is shifting from simple sequential transformations (in his early Houses), towards more complex processes of disjunction, fragmentation and decomposition (namely with House VIII and House X).

Eisenman's editorial on 'Post-Functionalism' is a clear example of his new theoretical interests for broader cultural and philosophical themes (like modernism, or European structuralism), which are mainly a result of the changing architectural/theoretical context of the mid-seventies and the new opportunities created by *Oppositions*. Of course, the editorial should be more considered as a theoretical, or even ideological statement, rather than as a truly developed theory (like his earlier theories), but, in a sense, it already indicates that Eisenman becomes less interested in developing a fully comprehensive and generalized theory of design. While Post-Functionalism gives a clear indication of future formal and theoretical concerns (with processes of decomposition e.g.), it is still somehow caught between two seats, or tendencies, which it desperately attempts to bridge and to reintegrate: by suggesting that



M. Graves_1969 Benacerraf House Addition (Five Architects)



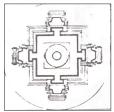
J. Stirling_1959 Leicester University Building

the dialectics of oppositions are grounded within the inner dialectics of 'architectural form' itself, Eisenman indicates that he still considers form as a the ultimate origin (or synthesis) for his dialectical concerns, thereby clinging to earlier beliefs and certainties.

Decomposition (1975-1983)

It is clear that Eisenman's new formal and theoretical insights are not only triggered by the changing cultural, intellectual and architectural climate of the mid-seventies, but also resulting from the continuous reassessment of his own formal investigations and experiments. We have seen that, with House VI, Eisenman started to wonder about the theoretical (i.e. dialectical) implications of his earlier processes of transformation. By introducing a series of inversions and reversals, Eisenman does not only question the dialectical and sequential linearity of his earlier transformation processes, but also the original format of the initial cube, as a total whole, which he attempts to destruct by inversing the relationships between the frontal facades and the internal volumes. With his next series of projects, Eisenman will even go further and will begin to work with processes of disjunction, fragmentation and decomposition (House VIII, House X, House 11a etc.), rather than with simple inversions or reversals. At the same time, he is also experimenting with other formal alternatives, like the 'mandala form' (House VIII) or the 'EI-Form' (House X, Xouse 11a e.a.), which, contrary to the ideal cube, are representative of these oppositions, fragmentations and decompositions. In House HVIII (1973), for instance, Eisenman makes a specific association with the figure of the Mandala, which, through its different forms and meanings-like the Spiral Mandala or the Mantra Mandala-becomes representative of a series of geometric and conceptual oppositions, and, by way of association, with Eisenman's own concern with architectural and conceptual oppositions.55 Yet, while Eisenman is trying to deal with the fragmented and disjuncted condition of architecture, he still envisages an architecture that can symbolically reintegrate these fragmented oppositions into a new configuration, which indicates that he is still trapped within the logic of dialectics.56

But the real point of rupture comes with Eisenman's next project, House X (1975), which will become emblematic for a whole new series of projects, which are usually associated with decomposition and el-forms (House X, House 11a, House El Even Odd, Fin d'Ou T Hou S).⁵⁷ With House X, Eisenman introduces a new formal strategy, decomposition, which is deliberately conceived as an unstable, non-linear and non-sequential process of design. With this process of decomposition, Eisenman intends to make a decisive break with the sequential linearity



4

mandala of Durigatiparisodha (cf. Five Easy Pieces, p. 117)



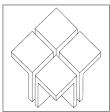
House VIII_1973 model



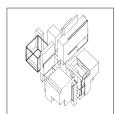
Sol LeWitt_1966 serial project_ABCD 9



Sol LeWitt_1991 wall drawing # 689



House X_1975 quadrants



House X_1975 diagram

of traditional design processes, which are so typical for classical compositions or modernist transformations. Eisenman associates his process of decomposition with the scientific processes of heuristic approximation, because it is also conceived as an open process of scientific discovery. In House X, for instance, the design process is conceived as a succession of alternating configurations-the configurations are alternatively logically consistent or inconsistent with previous configurationswhich makes it virtually impossible to predict its formal origin or end result. But one could also compare House X with some of Sol LeWitt's early Serial Projects (like his Serial Project#1, 1966), which are showing similar patterns of disposition and alternation (like, for instance the juxtaposition of quadrants, or the diagonal alternation of solid-void cubes).58 According to Eisenman, decomposition could be considered as an architectural analogue of Derrida's concept of deconstruction, because they are both resulting from a process of taking apart and reordering. Since decomposition is conceived as a reversal (or a negative) of classical modes of composition, it is a typical example of what Eisenman would later refer to as 'not-classical architecture.' (84/1)⁵⁹ (cf. infra)

Another important feature of House X is the introduction of the 'el-form', a tri-dimensional figure which results from these processes of decomposition and approximation, and which embodies the decomposition of the ideal platonic cube.⁶⁰ The el-form is the prototype of an instable, fragmented and incomplete form-in-motion, as opposed to the total and complete form of the platonic cube. In fact, the el-form is the result of different opposing processes, and, therefore it can be read in different manners. The most obvious reading is that of an eroded cube (which results from the subtraction between a bigger and smaller cube). But it can also be conceived as an assemblage of extruded el-planes, or as a topological space which is moving between two incomplete origins, namely the point and the cube. The el-form is thus constantly hovering between a series of opposing conditions (like volume/plane, point/cube, object/process, solid/void or drawing/model etc.), which it only can approximate. By playing on the manifold and multiple character of the el-form—as plane, volume, diagram or grid—and by playing on the different sizes, shapes and materiality of the el-form, Eisenman manages to combine in the single format of the el-form a series of operations which were previously performed by different distinct elements (such as the cube, the planes or the grids). In this sense, one could say that Eisenman is now trying to interiorize and to integrate the different oppositions and dialectics within the very figure of the el-form: instead of playing on the dialectical oppositions between different series of elements (like the cube, planes and grids in the early houses), he is now working on the internal and self-referential dialectics of the el-form itself. With House X, Eisenman also began to experiment with new projection and representation techniques, namely by representing his final presentation model as a distorted model (or 'axonometric model'). By projecting the model along a diagonal plane of projection of 45 degrees, Eisenman makes a distorted representation of his model, so that it looks like a flattened axonometric drawing or a distorted physical model, depending on one's viewpoint.

With House X (1975), Eisenman initiated a series of formal innovations and experiments which, in many respects, are radically breaking with earlier formal investigations, not only in relation to his earlier processes of transformation-which he attempts to deconstruct with the process of decomposition-but also in relation to the formal ideal of the platonic cube-which he attempts to fragment with the figure of the 'el-form'. In the following years (late seventies, early eighties), Eisenman will continue, with his later houses (House 11a, House El Even Odd, Fin d'Ou T Hou S), to further explore the possibilities of those new formal investigations-like decomposition, el-forms or axonometric modelsand push them to a higher level of abstraction, complexity and self-referentiality. The figure of the el-form becomes even more prominently present, since Eisenman starts to replicate the el-form in different sizes, shapes and materiality (namely solid-void configurations): these are then nested within or overlapping with each other. In House11a (1978), for instance, three couples of solid-void el-forms are nested into each other, like a series of Russian dolls. In fact, the house is conceived as a continuous topological surface (or Möbius Strip) which is twisted within itself. In another example, the Fin d'Ou Thou S (1983), the design is based on the overlap of three scaled couples of el-forms and el-grids. Particular to this house is the fact that the overlaps are regulated by a matrix of arbitrary rules (which derive from the combination of two couples of parameters, namely 'solid-void' and 'absence-presence'). By regulating and systematizing the alternations of overlaps, Eisenman pushes the logic of approximation and decomposition to its utter limits and starts to experiment with processes of serialization, which he will further develop in the mid/late-eighties. In our final example, House El Even Odd (1980), we can see that Eisenman is further elaborating on the principle of the 'axonometric model,' by using the technique of axonometric projection as a deliberate technique of modification. First the model is projected on a diagonal plane at 45 degrees, then the result is again projected on a horizontal plane. The resulting 'representational model' represents three states of representation: the objectmodel, the axonometric drawing and the plan.

Another interesting development is the fact that the projects are more and more anchored within the ground. While House X is still hanging on the diagonal slope of the site, House 11a is already placed half-above ground, half-underground in the molds of the site. The following projects, House El Even Odd and Fin d'Ou T Hou S are already completely underground. With the Fin d'Ou T Hou S, the project is even exceeding the physical envelop of the house and invading the ground surface



House X_1975 model



House X_1975 axonometric model



House 11 A_1978 embedded el-forms



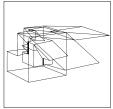
House 11 A_1978 embedded ell-forms

of the nearby site, which is marked with traces of overlapping ground-grids. $^{\mbox{\tiny 61}}$

With the process of decomposition and the figure of the 'el-form,' Eisenman attempts to overcome the limitations of the traditional design. He does so by radically questioning the sequential linearity of its processes and the holistic origins of its object, and by fragmenting and internalizing the dialectical oppositions. Yet, one could wonder if Eisenman really succeeds to overcome the dialectical underpinnings of his earlier formal models. In fact, the process of decomposition attempts to break with the principle of sequential linearity, by playing on the dialectics between successive binary configurations which are opposed to each other. But one could argue that this actually reinforces the idea of dialectical oppositions. As to the 'el-form,' one could say that, despite its attempt to fragment the ideal format of the platonic cube, it is still starting from the very idea of the cube, which it tries to reverse, negate or fragment. The el-form may prelude and initiate the very destruction of the self-referential cube, but it doesn't radically eradicate the very idea of the cube, which is still used as a negative reference of origin. With this series of projects, Eisenman attempts to overcome the limitation of his earlier projects and strategies, by pushing his investigations on the internal dynamics and dialectics of architecture to its limits. Yet, by focusing on the inner logic of architectural processes, Eisenman is also making abstraction of other, more phenomenal considerations, like the physical reality of the site and ground.



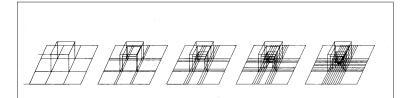
House El Even Odd_1980 representational model



House El Even Odd_1980 diagram



Fin d'Ou T Hou S_1983 model



Sol LeWitt_1968_Cubes with Hidden Cubes

Parallel to these series of house projects, Eisenman also got involved in a series of bigger public projects—on invitation or within the context of competitions. In these projects he is more directly confronted with the specific requirements of the context, the site and the city. Within the context of those new architectural opportunities, Eisenman starts to experiment with a series of new formal strategies, which are usually associated with the notion of 'artificial excavation,' and he begins to reflect on the theoretical implications of those new formal strategies. Of course, many of those new formal and theoretical considerations are colored by the particular architectural climate of the late seventies and early eighties, which is characterized by a heated debate on the question of how to deal with the urban, historical and modernist context.

In this new series of projects, the design process is not anymore derived from a reflection on the internal dynamics of architectural processes and elements—like in the earlier processes of transformation and decomposition—but from a reflection on the external considerations (like the site, the context or the city) which are used as an artificial and arbitrary motivation for the design process.

In a nutshell, one could say that this strategy of 'artificial excavation' is based on the superposition, scaling and grafting of artificial figures. The idea behind this strategy is that the design process is derived from an analogous and textual reading of the project and the site, which is conceived as a deeply scored palimpsest with different textual layers. The architectural forms are not anymore derived from the transformation or decomposition of an ideal form like the cube or the el-form, but resulting from the superposition and scaling of artificial figures which are derived from the architectural, urban, archeological or topographic texture of the project. The artificial figures are first abstracted from their initial context, in the form of elements (like buildings, urban blocs, city walls, rivers etc.), grids (f.i. site and city grids) or maps (city or regional maps). These figures are then copied and scaled in different sizes, shapes and materiality, superposed upon or subtracted from each other and then imprinted or extruded on the surface of the site. Usually the figures are first projected as two-dimensional figures on the surface of the site, and then extruded or imprinted. It however also happens that tri-dimensional figures are literally replicated from the site or grafted from other architectural projects.

Many of these new techniques were introduced in the Cannaregio Project (1978), which is the first project to deal with the specific context of the site, which is conceived as a conceptual datum on its own.⁶² The site is treated as a topological skin or surface that can be stretched and

concept



Cannaregio_1978 model

projects



Cannaregio_1978 Le Corbusier's Venice Hospital



IBA Berlin_1983-85 frontview



Wexner Center_1983-89 armory tower



Romeo and Juliet_1985 scaling of castles

imprinted, with multiple textual layers which are referring to the memory of the past, the present and the future.⁶³ The different textual layers are obtained by marking the ground with a series of grid-imprints, which are derived from external grid patterns (like Le Corbusier's plan for a Hospital in Venice) or by the impact of different el-forms on the ground. In these imprinted molds, Eisenman drops a series of variations on House 11A, in different scales and combinations, which are placed half underground, half above ground. The Cannaregio project is the first project which is derived from an analogous and textual reading of the site and which is designed by processing external artificial figures (like Le Corbusier's project or Eisenman's own project for House 11A). Yet, the resulting imprints are still remaining within the abstract vocabulary of the earlier cubes and el-forms, which means that the real potential of artificial figures and processes are only evocated in principle, rather than formulated as a distinct formal strategy on its own.

This happens in his next competition entry for a social housing project (I.B.A. Berlin, 1981-85), which Eisenman describes as a 'City of artificial excavation'. In this project, he uses the universal Mercator grid as an artificial tool of excavation, superposition and substitution.⁶⁴ The novelty in this project is that Eisenman begins to work with imprints and extrusions of grids, which are scaled and superposed upon each other: yet, the building volumes are still derived from the abstract figures of the el-shapes.

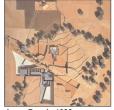
With the Wexner Center (1983-89), a winning entry for a museum competition in Columbus (Ohio), Eisenman starts from the superposition of different grids and maps (from the campus, the city and the state of Ohio) which are misaligned in relation to each other. The building, which is squeezed between two existing buildings, is characterized by its giant white scaffolding structure, a corridor which accommodates the new art facilities, and by the prominent presence of the rebuilt Armory, which is artificially de/reconstructed with fragments of the former 19th C. Armory. Thanks to these emblematic attributes, the building will later become one of the famous icons of Deconstructivism (London, 1988). Yet, the real strategic potential of the 'artificial excavation' will only be demonstrated with the following series of projects-the Romeo and Juliet project (Verona, 1985), the Via Flaminia project (Rome, 1986), the Long Beach University Art Museum (1986) and the project for the park of La Villette (1986)-when the artificial figures are not only derived from the abstract form of geometric figures (like grids and maps), but also from the figurative shape of architectural, urban and geographic elements (like buildings, rivers or street fragments). In these projects, the fictional and textual dimension is much more explicit than in the previous projects, so much that, in the case of the Romeo and Juliet project for instance, Eisenman is actually conceiving his project as a fictional text in which different fictional elements (like Romeo's castle or Juliet's house) are transposed in the historical site of Verona, in

analogy with three different versions of the Romeo and Juliet story.⁶⁵ The architectural program of the Long Beach project (1986) is also based on a similar fictional invention, which simulates three different moments of the history of the building (in 1849, 1949 and 2049).

With this new strategy of 'artificial excavation', Eisenman introduces a series of innovations, which will have a crucial impact on the further development of his work. First of all, it proposes an alternative formal strategy in which both the site and the building are conceptualized and formalized, which offers the possibility to play on the dynamic relationships between site and building. The site is now conceptualized as a topological surface (or 'palimpsest') with multiple layers which can be formalized in a similar way as the building project. It can be submitted to a similar kind of formal processes, such as imprints, extrusions, superposition, scaling etc. This creates a situation in which it becomes difficult to distinguish the figure (of the building) from the ground (of the site). Instead of the traditional opposition between figure and ground, there is now a situation of fluctuation between figures which Eisenman describes as a figure-figure relationship (Romeo and Juliet, 86/1). The second important innovation is the fact that the basic volume is not anymore defined according to the inner formal logic of an ideal 'form'-like the cube or the el-form-but according to an artificial and arbitrary 'figure.' This shift from ideal form to artificial figure is crucial for the further development of Eisenman's work, because it allows him to break with the ideal and transcendental origins of the cube, and, more fundamentally, because it eradicates the problem of the ideal form at its very (metaphysical) origins. The figures are now conceived as fictional and rhetorical figures with arbitrary and artificial origins. One of the advantages of this break with the cubic format is the fact that it opens the way for the use of less compelling forms, like blocks and bars, which will become the dominant basic formats in the late eighties and nineties. One disadvantage of the artificial figure though-and of the process of 'artificial excavation' in general-is that the processes of extrusion or imprint are actually reinforcing the figurative and narrative character of the figures and grafts, even if this narrative aspect is meant to be counteracted by the redundant and self-similar character of the superposed/scaled figures. This could explain, why, in the late eighties and nineties, the artificial figures are not anymore extruded or imprinted, but used as flat diagrams that are projected, folded or animated. Another difficulty of the artificial figure is that its irregular and complex forms are not always easy to use within the regular conditions of architectural design, and that it can hardly be used as a generic design module, which, again, explains the use of more pragmatic volumes like blocks and bars in the nineties.

A final innovation is related to the external and textual character of the processes of superposition, scaling and grafting. The design process is

assessment



Long Beach_1986 model



La Villette_1986 model

not anymore derived from a rationality that is internal to the architectural forms and processes, but based on an analogous and textual reading of external factors—like the site, the urban context, the concept or the history of the project.

By extending the scope of parameters of architectural design to other variables, like the site or the city, Eisenman is now able to deal with more pragmatic and contextual design requirements as well, but, above all, it gives him an opportunity to escape from the solipsistic development of earlier formal strategies, which are too much entangled within the internal discourse of formal abstraction.

theoretical relevance On a deeper, more theoretical level, Eisenman is now also confronted whith a series of new theoretical issues and challenges, which are resulting from the analogous and textual reading of the new urban, historical, temporal and spatial context, and, especially, from the dislocating character of the strategy of 'artificial excavation.' The idea behind this whole strategy of 'artificial excavation,' is that figures are first disconnected from their original historical, temporal and spatial context, and then reassembled in an entirely new (artificial and fictional) configuration, which is obtained by replicating, scaling and superposing these figures upon each other. Because the processes of superposition and scaling are based on the repetition of self-similar and analogous figures, Eisenman is able to create a condition of 'self-similarity' and 'recursivity', which dislocates the figures from their original condition (in terms of scale, representation, meaning, time, place and space).66 The figures are now read as fictional and rhetorical figures, without any specific or original scale, form or meaning and without any specificity of place, time and space.

> The superposition of figures from different historical, temporal and spatial background thus has a serious impact on the historical, spatial and temporal perception of architecture, the site or the city.

> By making an analogous and textual reading of site and city—rather than a literal, contextual or historical one—Eisenman is able to redefine these very notions. The site is conceived as a fictional text of invention or as a deeply scored palimpsest with multiple textual layers from different times and places. In the 'City of Artificial Excavation', there are traces of previous memories and anti-memories, presences and absences: therefore, the city can be read as a city of memory, immanence and absence.⁶⁷ More generally, one could say that the process of 'artificial excavation' has an impact on the conception of such abstract concepts as place, time and history, which are now disconnected from the specific condition of the here and now, and considered in a more fluctuating, discontinuous and multiple manner. This brings Eisenman to consider time as a timeless condition, history as a discontinuous process made of presences and absences, or place as another 'place between' or '*atopia*.'

In fact, Eisenman starts to speak about the place, time and history of the city, in his writings on the work of A. Rossi (82/1), in which he particularly focused on Rossi's analogous interpretation of the city, its history, time and place. It is probable that Rossi's conception of the Analogous City (*'Città Analoga'*)—and, with him, the whole theoretical discourse of the 'School of Venice'—have had a critical influence on Eisenman's own strategy of 'artificial excavation', and, more particularly, on his analogous reading of the urban, temporal and historical dimension of architecture.⁶⁸ On the other hand, Eisenman's Artificial Excavation can also be considered as a conceptual reply to the upcoming Post-Modern Architecture.⁶⁹

Architecture as text

Another important theoretical implication of the strategy of 'artificial excavation,' is that it is based on a textual reading of architecture. As such, this textual approach is not entirely new, since it can be situated in the continuity of earlier linguistic and syntactic investigations in the sixties and early seventies. Yet, contrary to Eisenman's earlier references to Chomsky's structuralist and linguistic model, this new textual approach is representative of a fundamental shift towards post-structuralism, since it is basically derived from the reception of French poststructuralist authors, like M. Foucault, J. Derrida, or, to a lesser extent R. Barthes and J. Baudrillard. Since Eisenman gradually discovered the work of these authors, and steadily improved his understanding of the underlying theoretical implications of post-structuralism for architecture, it is not easy to determine when this shift actually occurred. But one can reasonably assume that his writing on 'The End of the Classical, the End of the Beginning, the End of the End' (84/1) is the first theoretical text in which the philosophical potential of Foucault's and Derrida's writings is fully explored in relation to architecture.70

In this seminal text, his first theoretical statement since Post-Functionalism (76/1), Eisenman focuses on the epistemological conditions that have led to the crisis of modern architecture, and, more generally, of the architectural discourse as such. For Eisenman, modern architecture has, despite its stylistic and ideological rupture, not been able to radically break with the classical epistemic model of Renaissance architecture, because it still perpetuates the classical fictions of representation, reason and history. Since the Renaissance, architecture is remaining in a continuous mode of knowledge, that of the classical *episteme*. In order to escape from this classical epistemic model, Eisenman comes up with a different ('not-classical') approach towards architecture, in which architecture is not anymore defined in relation to external values, origins or ideals (like representation, reason, history), but in relation to its intrinsic textual condition as difference. In his proposal for a 'not-classical architecture,' Eisenman conceives architecture as a text of difference, i.e. as a textual condition of writing, difference, fiction and dissimulation. This means that the objects are read as a system of relationships and traces rather than as an object. For Eisenman this 'architecture of difference' heralds the 'end of the classical', as it permits to unveil the fictions of representation, reason and history so characteristic for classical architecture. A 'not-classical architecture' therefore considers architecture as an independent discourse free from external values such as representation and meaning, reason and truth, history and time. It is timeless (without origins and ends), non-representational and arbitrary.(84/1)

The article on 'The End of the Classical' is more conceived as a general theoretical statement on the discursive condition of architecture, than as a specific design theory as such. Although there are no specific references to any architectural project in particular, there are some general references to architectural processes, such as decomposition and graft (which is here described as an artificial motivation for a process of modification), and, therefore, one could deduce that Eisenman's concept of 'not-classical architecture' could be associated with his own projects of decomposition and 'artificial excavation.'

The article on 'The End of the Classical' is crucial, because it fundamentally questions the rational and representational foundations of the classical model of discourse. In fact, Eisenman starts here from the theoretical premises of his earlier editorial on Post-Functionalism, in which he already stated that modern (functionalist) architecture has not really assimilated the cultural and epistemic shift towards modernism, as opposed to other artistic disciplines. In this article, though, Eisenman is making a much freer interpretation of Foucault's concept of episteme, since he is actually transposing Foucault's notion of the classical episteme (which occurred in the Classical Age, 17th Century) to the classical architecture of the Renaissance.⁷¹ On the other hand, Eisenman is much more influenced by Derrida, when he is actually formulating his counter-proposal for a 'not-classical architecture', which he closely associates with Derrida's notions of text, writing, difference and deconstruction (among many others). The article is thus somehow caught between Foucault's (structuralist) argument on discourse, which influenced Eisenman's epistemic diagnosis of 'classical architecture', and Derrida's (post-structuralist) argument on textuality, which influenced his concept of a 'not-classical', textual architecture.

In the following years, Eisenman will have the opportunity to further elaborate some of the themes outlined in this article, especially Derrida's concepts of text (and writing), which will become one of the main theoretical concepts of the late eighties. Contrary to Eisenman's



M. Foucault_The Order of Things_1973 "The *episteme* is not a form of knowledge or type of rationality...: it is the totality of relations that can be discovered, for a certain pereiod, between the sciences when one analyzes them at the level of discursive regularities."

Derrida's concepts of text and writing

earlier syntactical references, which have a clear structuralist and linguistic connotation, the notions of text and writing are symptomatic of a deeper philosophical and post-structuralist engagement, which mainly derives from Eisenman's reception of Derrida's early writings.

In order to fully understand the implications of Derrida's influence, it is perhaps useful to go back to some of his most known concepts (like writing, text, difference, absence, dislocation or deconstruction). Derrida considers writing as a constant process of deferral and differing (différance). In writing, as opposed to speech, the meaning of words is not immediately present (as for a spoken word), but constantly deferred: signs and texts are constantly bearing traces of other signs and texts. Therefore, a text is a place of the effaced trace: it is a play between presence and absence. It is constructed as a tissue or texture, with elements and traces from other texts. In the 'signified-signifier' relationship, the signified is originally and essentially 'trace': it is always already in the position of the signifier. Derrida's theory of writing is conceived as an indefinitely multiplied structure, which is driven by an indefinite process of supplementarity and differentiation ('différance').72 Derrida states that the systematic subjection of writing under speaking is symptomatic for the Western metaphysical tradition, which is based on the 'metaphysics of presence': the problem of being has always been considered in terms of presence (the presence of speech, meaning, thought, truth, reason etc.), rather than in terms of absence and difference. As presence is already marked by absence and difference, the metaphysics of presence has to be deconstructed and dislocated. Deconstruction is not a form or critique, method or theory, but a way of dislocating the metaphysical and dialectical underpinnings of such concepts as identity, essence, being, truth or presence, which are usually conceived as binary oppositions. The work of deconstruction is based on a 'double movement' (or writing), which involves both the inversion of the classical hierarchical relationship and the emergence of a new, vet already present, concept.

From all those themes, the concept of text is, in Eisenman's own writings, perhaps the most emblematic of all, because it embodies many of those other philosophical principles (like difference, absence, dislocation, otherness, between etc.) that are so characteristic of Eisenman's new philosophical approach. When Eisenman defines architecture as a dislocating and textual condition of absence, difference and immanence, it is clear that he is referring to Derrida's own terminology. Even so, when he is stating that one of the goals of an 'architecture as text' is to dislocate architecture from its dialectical and metaphysical condition, i.e. from the 'metaphysics of presence and being'.⁷³ Yet, Eisenman's reception of Derrida is always tempered and motivated by a deeper concern for architecture's singularity. Contrary to philosophy or language, architecture has a real physical presence or 'objecthood' (i.e. architecture as bricks and mortar, shelter or structure) which can-



J. Derrida_1974 Of Grammatology



J. Derrida_1978 Writing and Difference

Eisenman's concept of text not be outstripped. Therefore, Derrida's deconstruction cannot be directly applied to the field of architecture, because, in architecture, presence is necessarily physical-whereas Derrida's presence is specifically related to the metaphysical condition of being. In fact, Eisenman is modifying Derrida's interpretation of the presence-absence relationship, in order to make it comply with the specific (physical) condition of architecture. Derrida is actually reversing the traditional metaphysical relationship between presence and absence, by stating that presence (of being) is already marked by absence and difference. In a similar way, Eisenman is arguing that the presence (of architecture) is already contained by absence and difference, but in this case, the term presence is loaded with a specific physical connotation that is typical to architecture. In architecture, the textual logic of absence and difference is thus already contained within its presence and repressed by architecture's own 'metaphysics of presence'. Yet, it is precisely this textual condition of 'absence in presence' which enables us to dislocate the metaphysical dialectics of architectural conventions. For Eisenman, architecture can thus be considered as a paradoxical condition of presence and absence, object and sign, physic and metaphysic. The paradox is that architecture has to dislocate what it locates.74 Architecture tends to be overwhelmed by its own 'metaphysics of presence', because, by its mere physicality, it tends to focus on issues of presence, construction, shelter, use etc. Therefore it should constantly criticize and dislocate this 'metaphysics of presence.'

In order to clearly differentiate his own interpretation of architecture's textuality, Eisenman uses other notions like 'absence within presence', presentness, otherness or betweenness, which are referring to architecture's paradoxical 'between' condition. For instance, Eisenman defines architecture as a three-term system of absence-presentnesspresence, as a way to overcome Derrida's two-term system of absence and presence. The third term of presentness refers to architecture's excessive condition of 'presence of absence.'75 In other texts, Eisenman is specifically describing architecture's textuality as a condition of betweeness, otherness or secondarity.76 Especially the notion of between, which Eisenman uses in various linguistic combinations (like text between, place between or between condition), is representative of Eisenman's intention to overcome the traditional dialectical oppositions, because it doesn't choose for one or the other term of the usual binary pairs, but radically assumes the simultaneous multiplicity of both terms. In that sense the 'between' is basically a textual condition of instability and uncertainty. At the same time, the notion of between is also used in a more architectural or formal way, in the sense that it also refers to a condition in which two weak images are blurred or superposed.⁷⁷ In the nineties, Eisenman will make a similar use of the notions of excess, 'interstitial' and 'blurring.'

Derrida's influence thus, has been critical for the development of an 'architecture as text', and, more generally, for the entire philosophical enterprise undertaken during the eighties and nineties, which shifted from the strong vertical and dialectical systematic of structuralism towards the weaker horizontal and paradoxical systematic of poststructuralism. One of the main differences between the structuralist and the post-structuralist approach is that the former starts from the assumption that the 'deep structure' of architecture can be made understandable by the use of a formal process of transformation, while, in the latter, architecture is not anymore defined in relation to a deeper essence or being, but with the more elusive and paradoxical terms of difference, absence, otherness or betweeness. This horizontal and paradoxical dimension is not only perceptible in the way Eisenman is developing his architectural projects-namely by superposing different textual layers on top of each other, or by nesting different elements within each other (cf. 'artificial excavation')-but also in the way Eisenman is (de)constructing his theoretical arguments. His multiple variations and reinterpretations of textuality are literally layered and superposed on top of each other, or implied within each other, rather than being hierarchically organized in dialectical and binary oppositions.

Even if Eisenman came up with a personal and architectural (mis)reading of Derrida's terminology—namely by modulating, twisting or combining it with a variety of other concepts (like e.g. fiction, palimpsest, otherness or between)—, it is clear that he has been deeply marked by Derrida's post-structuralist approach, not only in relation to specific philosophical themes (like text, writing, difference etc.), but, more systematically, by his fundamental critique of Western metaphysics and dialectics and by the dislocating and paradoxical dimension of his deconstructionist approach.⁷⁶

post-structuralist turn

If one looks back to the architectural production of the late seventies/mideighties, one could say that Eisenman was actually pursuing two specific lines of architectural investigations at the same time. On the one hand, he was pursuing his formal investigations on the internal and self-referential aspect of architectural processes and elements, namely with his projects of decomposition (1975-1983), while, on the other hand, he was engaging in a new architectural direction by investigating the external, textual and artificial potential of architectural processes and elements, namely with his projects of the 'artificial excavation' (1979-1986). While both lines of investigation are somehow overlapping in time, they are not really actively interacting with each other from an architectural point of view. One could even say that, for his house projects (like the House 11a, House El Even Odd or Fin d'Ou T Hou S), Eisenman was tempted to rely on his processes of decomposition, while, for the bigger projects, he relied on the processes of 'artificial excavation'. While both design options have their own advantages and disadvantages, they are nevertheless restricted by their own figurative and geometric limitations: the projects of decomposition are limited by the cubic format of the el-form, while the projects of 'artificial excavation' are restricted by the figurative and narrative character of the artificial figures and by the geometric limitations of the typical imprints and extrusions.

In the second half of the eighties though, Eisenman finds a better way to make these internal and external investigations interact more smoothly with each other, namely by channelling his interest for external and artificial constructions towards the processes themselves rather than towards the figures. He does so by associating his design processes with scientific processes, rather than with fictional narratives, and by opening his palette of basic formal elements (or volumes) to other types of elements, such as blocks, boxes or bars, which are less constraining than the previous el-forms or extruded figures. One could thus say that the internal formal and geometric investigations are further developed in relation to these basic volumes and elements, while the external and artificial approach is applied to the processes themselves. While Eisenman is actually dropping the technique of extrusion of volumes from artificial figures-which is so typical of the 'artificial excavation'-he never fully abandons the concept of the artificial figure, since it will actually lead to the concept of the diagram and become one of the main formal elements of his later design processes. As we already noted, the concept of the artificial figure was crucial in that it enabled Eisenman to definitely break with the myth of the original or essential architectural form of the platonic cube-whereas the el-form only partially succeeded to decompose the concept of the cube in a negative way. Eisenman will

theory

nevertheless continue to use the figures of the el-shape or the cube, but these figures are now completely stripped of their original formal aura and used as regular basic volumes among others.⁷⁹

One of the main characteristics of these scientifically oriented projects is indeed that their processes are often replicating scientific processes which in one way or another can be associated with the concept, function or location of the project in question.⁸⁰ In a formal sense, this implies that these scientific processes are used as an artificial way to rationalize or mechanize typical formal processes, like processes of copying (e.g. linear and parallel serialization), movement (e.g. tilting and oscillation), modification or combination (e.g. oscillation and overlap). Typical for these scientifically oriented projects, is the fact that the elements and processes are beginning to be serialized and that the processes of movement and modification are beginning to be organized along the vertical Zaxis, namely by tilting or oscillating volumes in relation to the Z-axis, whereas the projects of the 'artificial excavation' are only involving extrusions/imprints in a strictly perpendicular way. At the same time, Eisenman is experimenting with other (more scientific) types of geometry-like fractal geometry or Boolean geometry, or his own 'box geometry'-with the intention to fully explore their formal and geometric possibilities and to challenge the orthogonal coordinates of the classical Cartesian geometry.81 Another typical feature is the fact that the formal interactions between the successive volumes are derived from the oscillating interaction of mutual imprints and traces upon each other.⁸² Of course, the upcoming of sophisticated computer CAD techniques has been crucial for the development of more complex formal and spatial operations, such as those used in the Aronoff Center for Design and Art (1988-96).

Despite the fact that these projects are not supported by a strong theoretical statement underpinning their scientific foundation, their typical scientific orientation can be sufficiently deduced from Eisenman's descriptions. Among the main form-theoretical issues that are raised in the various writings are also the themes of 'space between' (or architecture between)—which is often referring to the interstitial space that is created by the mutual interaction between traces and imprints—and that of the impact of 'media' on architecture—an issue that is often related to the upcoming Media Age and the paradigm of electronic production.

In terms of architectural production, one can say that the transition from the earlier strategy of 'artificial excavation' towards the new series of scientifically oriented projects is made in a smooth, rather than in a disruptive way. The first project to actually use scientific references is the Biocentrum (1987). Its basic forms and processes are directly derived from the scientific codes and processes of DNA. Even if the project is still a transitional one, in the sense that its volumes are still generated



Biocentrum_1987 replication of DNA strand

projects



Carnegie Mellon_1988 model



Carnegie Mellon_1988 serialized cubes



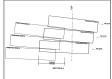
Aronoff Center_1988-1996 front view



Aronoff Center_1988-1996 box geometry and traces



Aronoff Center_1988-1996 serialized / squeezed boxes

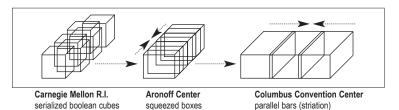


Aronoff Center_1988-1996 overlap section, torque

by extruding the artificial figures of a DNA strand, it nevertheless indicates the future trend of scientific processes and striated volumes. In later projects though, it becomes clear that Eisenman's real intention is to start from rather basic architectural elements (like cubes, blocks, boxes, bars or even el-shapes) and to develop the various architectural design processes in analogy with scientific processes, which are derived from an analogous reading.

The most representative of this new scientific idiom are certainly the projects of the Carnegie Mellon Research Institute (1988) and, especially, the Aronoff Center for Design and Art (1988), which is the most complex and emblematic of all. These projects are not only motivated by a strong scientific statement—the Carnegie Mellon Institute is referring to the mathematical model of Boolean geometry and the Aronoff Center to dynamic processes in the field of mathematics and physics—but they are also characteristic of Eisenman's new concern for the serialization of elements (i.e. cubes or boxes) and processes. In the Carnegie Mellon Research Institute, the design is mainly based on the superposition of different series of Boolean cubes, which are successively aligned as a series of beads on a string.

The Aronoff Center for Design and Art (1988-96) is also based on the serialization of volumes, but, in this case the series are not conceived as a linear succession of separate pairs of cubes, but as a succession of boxes that are overlapping each other on the extremities. In comparison with the Carnegie Mellon Institute, the boxes are, so to speak, squeezed upon each other, so that they create the impression of continuous movement of curved line segments (or 'phase shifts') or bended bars. If one considers that Eisenman will start to make a frequent use of bars in the next year (Columbus Convention Center), one can say that this serialization of volumes has enabled him to finally make the transition from the cubic format of the cube and the el-form (which dominated the seventies) to the rectilinear format of the bar (which will become one of the main basic formal elements of the nineties). This transition from the cube to the bar is thus made in a series of successive steps. First, the volumes are created by serializing the cubes (Carnegie Mellon Research Institute) and boxes (Aronoff Center) in a linear manner; then, this linear succession of boxes are squeezed upon each other (Aronoff Center); and, finally, the volumes are created by using a succession of bars which are now serialized in a parallel way (striation, Columbus Convention Center).



PETER EISENMAN: THEORIES AND PRACTICES

Another characteristic feature of the Aronoff Center project is that the body of scientific processes is much more elaborated and complex, both in a formal, theoretical and computational sense. All the formal processes (e.g. overlap, torque, twist, shift etc.) are labelled and serialized in analogy with specific scientific processes in the field of physics and mathematics which are all dealing with transitional phases, probabilities and indeterminations. They are even labelled under the common notion of 'box geometry', in reference to the functional boxes that are used as basic volumetric units.⁸³ The scientific orientation is further stressed by the extensive and explicit use of computer graphics (CAD), which is not only helpful for the realization of complex formal operations, but also for the computational processing or serialization of the formal processes as such.

With the Aronoff Center project, the scientific idiom is thus pushed to a climax, and becomes emblematic for a whole series of projects that are specifically referring to scientific processes (like the Biocentrum, Carnegie Mellon Institute, Aronoff Center, Groningen Music Pavilion, Columbus Convention Center). The scientific idiom is perhaps not specific for this period of time, since Eisenman's work has always been, more or less explicitly, inspired by scientific research (from his PhD onwards up to his most recent projects and writings). Neither can it be generalized to all the projects of this period. For instance, the Guardiola House (1988), the Koizumi Office Building (1988) or the Nunotani Office Building (1990) are, by their characteristic use of el-shapes, perhaps more reminiscent of earlier design strategies and less scientifically oriented. Yet their design approach, which is based on the oscillation of overlapping and tilted elshapes, is certainly closer to the specific formal and geometric research of this period. Anyhow, at no other time of Eisenman's work, has the scientific idiom been so manifestly formalized and theorized as now, perhaps, because it also coincides with a period of time in which the mediated and computational reality of the upcoming information age is becoming more and more manifest. Both the Columbus Convention Center (1989-93)-whose design is referring to fiber optics, railyards and highway ribbons-and the Groningen Music-Video Pavilion (1990), which refers to video scans, are typical examples of this tendency to refer to the specific manifestations of the information age. The design of the Columbus Convention Center though is particular since it is based on the bending of overlapping and striated ribbons, which clearly announces the future design tendencies of the nineties, mainly based on the folding of surfaces and the striation of bars.

In the nineties, Eisenman will continue to make frequent and explicit references to various scientific disciplines and subjects—especially in those fields that are specifically dealing with fluctuating, unstable or dynamic processes (like chaos theory, bio-genetics or other theories of complexity). Yet, at this stage, these scientific references are perhaps less representative of a predominant scientific orientation, and more



Aronoff Center_ 1988-1996 front view



Columbus Convention Center 1989-1993_ parallel bars



Guardiola House_1988 embedded el-forms



Koizumi Building_1988-90 nested el-shapes



Nonutani Building_1990-92 overlapping, tilted el-plates



Groningen Music-Video Pavilion 1990_ view of built project

representative of a deeper architectural and theoretical shift, which can be understood as a shift from Derrida's textual post-structuralism (in the eighties) towards Deleuze's more pragmatic and dynamic discourse.⁸⁴ At this point, the scientific process is, so to speak, reduced to the figure of a 'scientific diagram' (e.g. the diagram of a wave), which is then used as one of the formal layers of the process of folding or morphing (earlymid nineties) or as a virtual engine for an animated series of diagrams (late nineties).⁸⁵

Folding

In the early nineties, Eisenman is able to underpin his latest scientific interests within a deeper theoretical and philosophical framework, which is mainly based on the reception of G. Deleuze's work, especially in relation to his notion of the fold. In a sense, this new philosophical orientation also reflects the increasing popularity of Deleuze's work in the early nineties among various architectural and academic circles in the United States. Perhaps, Deleuze's popularity can be explained by his special affinity with the world of art, architecture and science, and by the more recent English translations of his work, but, most evidently, because his work deals with the specific dynamic, spatio-temporal, topological and scientific concerns of the new architectural and computational strategies of the nineties.86 Especially the notion of the fold is appealing to American architects and theorists (like Eisenman, G. Lynn or J. Kipnis),⁸⁷ not only because of its specific topological and extensive character, but also because the image of the fold is particularly spatial and architectural in its evocation. Before tackling the specific question of Deleuze's reception-in an architectural, philosophical and discursive perspective-let us first focus on the architectural and theoretical developments of Eisenman's work in the early-mid nineties, and their particular affinities with Deleuze's work.

projectsAmong the architectural production of the early nineties, the Rebstock
Master Plan (1990) is certainly one of the most emblematic projects,
since it is the first to be specifically associated with and modeled on the
concept of the fold. Although Eisenman only associated the notion of
the fold with a limited series of projects—besides the Rebstock Master
Plan, also the Alteka Office Building, the Emory Center for the Arts or
the Max Reinhardt Haus—the process of folding is one of the most rep-
resentative, or elaborated, design strategies of the early-mid nineties,
especially since it initiated and triggered a series of theoretical and crit-
ical elaborations on other deleuzian themes (like e.g. the affect, smooth
space, singularity, event *et al.*). In a strictly formal, or architectural,
sense, one would be tempted to associate the process of folding with

the folding of surfaces or elements, and with the typical manifold, pliant and multifaceted triangulations that are so distinctive for the projects of the early-mid nineties. Yet, on a closer look, one has to recognize that this definition is too reductive and limited, and that it barely covers all the other formal aspects that are actually involved in these projects, in terms of processes (superposition, projection, folding and morphing), elements (grids, diagrams, volumes, meshed surfaces or Nurb curves) and relationships (figure-figure relationships). To be more accurate, one should mention that, in most cases, the design results from a series of successive processes (from the type of 'copy, move, modification and combination') and that these processes are operating on a series of elements, which result from the superposition of grids (abstract grids or site grids) and diagrams (usually scientific diagrams like waves) on the one hand, and the repetition of volumes (like bars, blocks, el-forms or cubes etc.) on the other. First, the grids and diagrams are superposed, scaled and projected upon each other and the volumes are multiplied according to a certain pattern-e.g. by striating the bars (Emory Center for the Arts, Tours Center), doubling the blocks (Haus Immendorff, 1993), extending the existing block or perimeter structure of the site (Rebstock Master Plan, Nordliches Derendorf Master Plan), or by following a rotating sequence (Max Reinhardt Haus, 1992). Then, the combination of elements (surfaces and volumes) are processed by a series of modification processes, which are usually based on the folding, the projection or the morphing of elements and associated with scientific processes.

In the case of the Rebstock Master Plan (1990), one could have the impression that the design process is actually relying on the folding of surfaces, as could be deduced from the folded and pliant character of the accompanying series of diagrams. But, in reality the folding process is, like J. Kipnis pointed out, more of a 'representational illusion,' since the design process is actually based on the projection of points, rather than on the folding of surfaces. In fact the illusion of folding is created by projecting and connecting a series of points of an abstract grid outline with a series of corresponding points of the site outline, which gives the impression of a folded diagram.88 The fold is thus rather conceived as 'a tri-dimensional plan of projection' than as the result of a proper folding process, and, in that sense, it might be reminiscent of earlier representational experiments-like e.g. the 'axonometric and representational models of House X and House EI Even Odd.⁸⁹ In the case of the Nordliches Derendorf Master Plan (1992), the design process looks guite similar to that of the Rebstock Master Plan, in that both master plans are starting from the extension of existing perimeter blocks or Siedlung units. Yet, in the case of the N. Derendorf Master Plan, the folding process is resulting from the superposition and intersection of two scientific patterns (the intersection of a radar and radio pattern), which are projected on the site, whereas, in the Rebstock scheme, the



Haus Immendorff_1993 model



Rebstock Master Plan_1990 folded plan



Rebstock Master Plan_1990 master plan

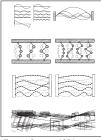


Nordliches Derendorf_1992 scientific diagram_intersection of radar and radio pattern

process is starting from the superposition/projection of two abstract grids on the site grid-outline.



Emory Center for the Arts_ 1991_model



Emory Center_1991 diagram (musical waves)



Alteka Office _1991 folding of el-forms



Max Reinhardt Haus_1992 model

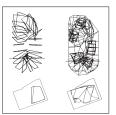
In other examples, like the Emory Center of the Arts, the Alteka Office Building or the Max Reinhardt Haus, the folding process is not starting from an existing urban pattern (like the perimeter blocks), but from a combination of abstract basic elements, like bars, el-shapes or cubes/surfaces which are superimposed on the surface of the site. In the Emory Center for the Arts (1991), for instance, the process of folding is starting from an initial *parti* that is based on the striation of four parallel bars that are grafted on the rectangular volume of an existing parking building. In this case, the actual folding process is triggered by the superposition of scientific diagrams (namely the overlay of musical waves and parabolic harmonics) on the actual site grid of the building: these parabolic harmonics are activating a series of topographic lines on the campus, which, when projected on striated bars, are creating a series of tri-dimensional folds. In the Alteka Office Building (1991), on the other hand, the design process starts from a combination of elshaped forms, which are first projected in plan and section, and then infolded and unfolded in analogy with the section of a fold in R. Thom's fold catastrophe theory. In the case of the Max Reinhardt Haus (1992), the volumetric composition starts from a succession of cubes and planes (i.e. the basic formal elements), which are following a triple rotation pattern, that is inspired by the scientific process of crystalline mutation. The volumetric envelope of the skyscraper is formed by a folded membrane, which gives the building its typical prismatic and fragmentary character.

In other cases, like the Tours Center (1994), the Klingelhöfer Triangle (1995) or the Vienna Monument (1996), the process of modification is based on a particular process of multi-projection that is known as morphing. In the case of the Tours Center, the morphing starts from the plan and sections of two adjacent building volumes (combined with a double process of striation), while, in the Klingelhöfer Triangle, the morphing is operating between two mechanical diagrams (of watch and chips mechanisms) that are superposed upon each other. In the Vienna Monument, the morphing process starts from the connection of two site maps with another site diagram that is located above the two others.

From all those examples, one can conclude that the process of folding doesn't follow a single or uniform design pattern, but that it should rather be conceived as a combination of processes, in which a series of basic elements (grids, diagrams and volumes) are successively superposed, scaled, projected and folded: the actual folding process is only one of the many processes, but certainly the most distinctive and characteristic one, with its typical prismatic and multi-faceted surfaces. In this sense, the process of folding is not an entirely new architectural strategy, since it

builds on a series of formal processes that have been used in earlier formal strategies-like f.i. the superposition and scaling of grids, diagrams and volumes, which are so typical of the 'artificial excavation' processes, or the use of scientific references (processes and diagrams), which were already used in earlier 'scientific' projects. There are also other indications that are pointing to the fact that, in a strictly formal and architectural sense, the process of folding can be situated in the continuity of earlier architectural, theoretical and scientific investigations (with topological and fractal geometry, curved lines, in-between spaces, differential processes, figure-figure relationships etc.) For instance, Eisenman's interest for topological geometry and surfaces can indeed be retraced to earlier experiments with topological diagonals and topological surfaces (like, f.i. the topological diagonal of House VI and the el-form, or the topological surface of Cannaregio, or the Möbius strip of House 11A).⁹⁰ We also already know that the concept of figure-figure relationships, was already associated with the process of scaling, and, more generally, with the projects of the 'artificial excavation.' In more recent projects, like the Aronoff Center or the Columbus Convention Center, the architectural similarity with the concept of the fold is even more pronounced. For instance, in the Aronoff Center, the curved line segments are clearly conceived as infinitely variable curves—like those Koch curves that Deleuze mentions in his 'Fold'-whereas, in the Columbus Convention Center, the weak forms of the web of ribbons are already anticipating the later folding and bending of surfaces and volumes.⁹¹ All these examples show that the fold/folding cannot just be reduced to the simple process of folding (i.e. as an architectural analogue to the Japanese origami art of folding paper), and that it cannot be dissociated from earlier architectural and theoretical investigations, which, in many ways, paved the way for (and conditioned) its current development.

Now that we have situated the process of folding within the context of Eisenman's architectural production, it is perhaps time to focus on the more theoretical and strategic dimension of the concepts of fold/folding, which one can recover from a series of writings that Eisenman wrote in the early nineties (cf. 91/3, 91/4, 92/1, 92/2, 92/3, 93/1). As usual, Eisenman doesn't come up with a single or straight definition of the concept of fold, but rather with a series of successive descriptions—some more architectural, others more theoretical associations and connotations. It is clear that the concept of the fold cannot be reduced to a strictly formal or architectural process, and that it should be rather conceived as a multilayered strategic concept with multiple levels of implications and ramifications—not only in the field of architecture and urbanism, but also in the broader field of philosophy, cultural theory or media.



Max Reinhardt Haus_1992 diagram of rotating cubes



Tours Center_1994 morphing of volumes

theory

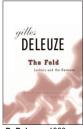


D. Deleuze_1980 Thousand Plateaus

Deleuze's fold



G. Deleuze_1986 Foucault (cover)

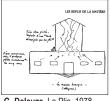


D. Deleuze_1988 The Fold (cover)

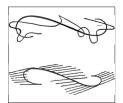
In his argumentation, Eisenman does not only make references to the work of Deleuze (cf. the fold, the affect, singularity, 'smooth space' etc.), but also to the work of other writers (like J.-F. Lyotard, R. Thom, M. Blanchot or W. Benjamin), and to earlier theoretical statements.⁹² But, since Deleuze is the main theoretical reference, it is worthwhile to confront Deleuze's conception of the fold with Eisenman's architectural and theoretical interpretation. Eisenman's references to Deleuze's fold are mainly drawn from his publication on the 'The Fold,' but, in his later writings, Eisenman is also referring to other Deleuzian concepts (like the manifold, the affect or the 'smooth space') which, in Deleuze's writings, are not explicitly associated with the fold. Of course, Eisenman is mainly interested in those characteristics that are complementary and useful to his own architectural interpretation, and, therefore, it is not surprising that he is mainly referring to Deleuze's publication on 'The Fold', since it contains many useful artistic, scientific and philosophical references (to Leibniz, B. Cache, R. Thom or B. Mandelbrot a.o.).⁹³ Eisenman indeed follows Deleuze's aforementioned passages when he describes the fold as 'the smallest element of matter' (Leibniz), as an in-between figure or as an 'object-event' that is moved by a continuous temporal modulation and variation. In his descriptions, Eisenman also specifically refers to several of Deleuze's scientific and artistic references, like B. Cache's fold or infliction, R. Thom's catastrophe fold or Leibniz' definition of the fold as the 'smallest element of matter.' Yet, as one could expect, Deleuze's conception of the fold is much more complex and elaborated than those scientific and artistic references, which are only mentioned as occasional references for a much more elaborated philosophical argument-which is not only developed throughout the chapters of 'The Fold' (1988), but also in his other publications on 'Foucault' (1986) and 'Thousand Plateaus' (1980).⁹⁴ In fact, Deleuze's first references to the 'manifold' (multiple in French) can be found in his 'Thousand Plateaus,' where he compares his notion of 'smooth space' (as opposed to 'striated space') with the mathematical model of Riemann's 'manifold' (or Riemann space), which stands as model for a non-metric, heterogeneous, amorphous and non-homogeneous space.95 In his book on 'Foucault' (1986), Deleuze is extensively referring to the fold, namely in his last chapter on the 'Foldings, or the Inside of Thought,' in which he focuses on questions of subjectivity, ontology and epistemology.96 The main guestion is that of subjectivity, which Deleuze relates to Foucault's concept of the fold. For Foucault, the relationship between the subject (the I) and the other "resembles exactly the invagination of a tissue in embryology, or the act of doubling in sewing: twist, fold, stop, and so on."97 Subjectivity can be understood as a topology of different folds (the fold of the body, the fold of forces, the fold of knowledge and the fold of the 'outside itself, or the ultimate'). For Deleuze, the human subject can only be understood under the condition of the fold, and through the filters of knowledge, power and affect: the fold is something creased between things stated or said, visible or seen. The fold is not only a figure of subjectivation, but also the very fabric of ontology, in the sense that being can be conceived as a fold or doubling of an inner and outer surface (doublure in French). The inside and outside, or the past and present, are two sides of a single surface. According to Deleuze's 'Foucault', the inside is a fold or doubling of the outside, a contortion of the exterior surface.⁹⁸ Deleuze makes his most pronounced statements on the fold in his following publication on 'The Fold' (1988), in which the concept of the fold is used as a metaphor for his philosophical interpretation of Leibniz and the Baroque, and, more broadly, for Deleuze's typical (immanent and inclusive) manner of dealing with guestions of subjectivity, ontology and epistemology. In this publication, the question of the subjectivity is even more prominently present, as can already be deduced from the first opening chapters, which are focusing on the relationship between matter and soul.99 Illustrative for this approach, is the famous passage (in Ch 1.) on the allegory of the two-floored Baroque House, which unfolds the enfolded relationships between matter (lower floor) and soul (upper floor).¹⁰⁰ In these passages, the figure of the fold is used as an allegory for the way in which matter and soul are operating and relating to each other (i.e. folded upon themselves and in relation to each other), or, in other words, how the inside and the outside are folded into each other. In other chapters, the concept of the fold is also associated with other philosophical problems of subjectivity (like those relating to reason, individuality, event or perception).

It is clear that, for Deleuze, the issue of the fold is more than a mere spatial or temporal feature, and that it should be rather considered as an emblematic figure of his own philosophy of immanence and inclusion. The figure of the fold, among many other concepts (like the middle, difference in itself, the outside, the exterior etc.) fits perfectly in Deleuze's ambition to conceive a philosophy, which—in terms of ontology, metaphysics, subjectivity and epistemology—is entirely based on immanence. Deleuze's philosophy of immanence is thought in terms of relations 'in' something, as opposed to relations 'to' something (philosophy of transcendence). It starts from the outside to the inside in a fold 'of' the exterior.

Although Eisenman retains some of the theoretical characteristics of Deleuze's fold—the fold as singular, extensive, temporal, topological or between condition a.o.—he is less interested in the deeper philosophical implications of the fold (namely in terms of subjectivity, ontology and immanence), and, in this sense, one could say that the fold is certainly less emblematic for Eisenman's way of thinking than for that of Deleuze. For Eisenman, the fold is first of all the embodiment of an architectural condition, process or strategy, with its typical geometrical/topological, formal/figural, spatial/temporal or urban/typo-logical connotations. For instance, the fold is conceived as a tri-dimensional plan of projection or as a topological surface or membrane for the



G. Deleuze_Le Plis_1978 La Maison du Baroque



G. Deleuze_The Fold_1978 diagrams of the fold

Eisenman's fold

mapping of nomadic relationships. It is an in-between figure which blurs the traditional dialectical distinctions between figure and ground, plan and section, vertical and horizontal, inside and out, object and sign etc.¹⁰¹ On a spatial and temporal level, Eisenman partially follows Deleuze in that he defines the fold as a singular, variable, unstable and multiple temporal condition (i.e. the fold as object-event or as temporal modulation), and as a 'smooth' spatial and topological condition. But, here again, Eisenman's interpretation differs from Deleuze's, in that he associates Deleuze's notions of 'smooth space' and 'striated space' with the spatial conditions of, respectively, the matrix and the grid. For Eisenman, the fold belongs to the 'smooth space' of the matrix-i.e. a condition which is no longer bound by traditional spatial or temporal coordinates, whereas the grid is typical of the 'striated' space of the Cartesian geometry.¹⁰² On a more urban level, the fold can also be considered as a complex model to reframe existing urban models and typologies and explain abrupt urban changes.¹⁰³ In his interpretation of the fold, Eisenman also refers to the question of the subjectivity, but, here again, he is making a very personal interpretation of some of Deleuze's concepts (like the affect or the body), which he loosely associates with the current condition of the media. For Eisenman, media has transformed our affective ability of sensation, perception and vision, and therefore, he envisions the fold as a way to overcome the loss of affect and sensation, which is inevitable in these times of media and information. In this sense, the fold could be considered as a typical figure of the media-age, i.e. as a form of weak media.¹⁰⁴

From all those examples, one can conclude that Deleuze's fold is only a starting point for Eisenman's own architectural interpretation of the fold, in the sense that he modulates Deleuze's terminology by combining different references from different publications, authors and disciplines. Yet, it is clear that these new references to the work of Deleuze, are only the first symptoms of the growing influence of Deleuze's writings on Eisenman's theoretical writings in the nineties, as can be deduced from his numerous references to other Deleuzian concepts (like e.g. immanence, diagram, repetition and difference, becoming, figural/virtual, exteriority, interstice etc.) Even, if, at this point, it is still not very clear how Deleuzian Eisenman really is, one can already see that Eisenman's reception of Deleuze is rather selective, ambivalent and mixed. As we'll see later, this ambivalent reception will only increase with the years, in the sense that Eisenman will constantly hesitate between a Deleuzian and Derridian approach, by mixing and combining themes from both writers, (cf. infra).

The Interstitial

In the following years (1994-96), Eisenman will continue to further develop and experiment with those folding techniques, even if, in a strict theoretical sense, he would prefer to refer to other spatial and theoretical qualities (like the 'interstitial,' 'figural' or 'virtual' or 'spacing' and 'blurring'), rather than to the concept of folding.

First of all, Eisenman starts to experiment with a new CAD technique of projection called 'morphing' which enables to make a seamless projection between two different figures. In fact, this morphing technique is only a technical variation of the folding technique, and, like in the preceding projects, it fits into a larger web of formal processes, which are in all points similar to the previous strategy of folding. In 1994 and 1995, Eisenman tried to experiment with this morphing technique in different combinations and settings. In the case of the Tours Center (1994), the morphing starts from the plan and sections of two adjacent building volumes (combined with a double process of striation), while, in the case of the Klingelhöfer Triangle (1995), the morphing is operating between two mechanical diagrams (of a watch and a computer-chip mechanism) that are superposed upon each other. In the Vienna Monument (1996), the morphing process starts from the connection of two site maps with another site diagram that is located above the two others.

After these first experiments Eisenman returned to the usual folding techniques, taking advantage of the new CAD possibilities to create more complex and more prismatic triangulations. In this series of projectswhich include the Church for the Year 2000 (1996), the United Nations Library (1996), the BFL Software Headquarters (1996), or even the I.I.T. Student Center (1997)-, it is clear that the design processes are still derived from a similar combination of processes, like, for instance, the superposition and folding of diagrams (scientific and site diagrams) or the striation and folding of bars: but, in these cases, the original series of striated bars are much less recognizable, as a result of the increased number of prismatic surfaces, sharp edged corners and triangulations. This time, it looks as if the multi-edged volumes are really emerging from the ground upwards, escaping from the spines and folds of the triangulated surfaces: this extreme edginess gives the building a sort of interstitial figural condition (or 'figure-figure' condition) in which the contours of the interior/exterior and figure/ground are totally blurred and dissipated: the building is neither figure nor ground (Church for the Year 2000).

Another characteristic feature, is that most projects of this period (1996-1997) are starting from a similar spatial configuration, in which two, or more, series of striated bars are regrouped and folded, which emphasizes the interstitial space that is left between them. This is not only true projects



Tours Center_ 1994 morphing of buildings



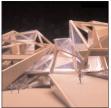
Church of the Year 2000 1996_the interstitial



Church of the Year 2000 1996_site model

for the Church of the Year 2000, the United Nations Library, the BFL Software Headquarters or the IIT Student Center, but also for the later projects (1998-1999), even if those are based on other diagrammatic processes (cf. *infra*).¹⁰⁵ This also explains why so much emphasis is put on the processes of the interstitial and its derivatives (e.g. interstitial space, interstitial figure, trope of the interstitial, process of the interstitial etc.).¹⁰⁶

theory



United Nations Library_1996 model

For Eisenman, the interstitial is a rhetorical condition of excess, subversion, undecidability and blurring, which, in a general sense, allows escaping from the normalized (or dialectical) conditions of time, space, representation/figuration, object-subject relationship etc. Much like the earlier notions of 'between' and 'excess', the condition of the interstitial is defined as a 'zone of undecidability,' i.e. as a condition of 'neither-nor' or 'and-and' that lies 'between' or 'outside' (excess) the traditional dialectics (f.i. presence within absence, between form and space, figure and ground, solid and void etc.). In a more restrained formal and spatial sense, Eisenman speaks about the 'interstitial space', the 'interstitial figure' and the 'trope of the interstitial', which he defines as a figural and dynamic of 'figure-figure' (i.e. neither figure nor ground). In his last writing on 'The Processes of the Interstitial' (98/2), Eisenman clearly attempts to situate his own understanding of the 'trope of the interstitial' within a larger historical background, by referring to the earlier work of Renaissance Architects like Alberti, Brunelleschi or Bramante, a historical linkage that he will further modulate and develop in his next article on the 'diagrams of Anteriority' (99/1).107

Although Eisenman's interpretation of the 'interstitial' could be initially associated with the Deleuzian themes of the interstice and the middle, one can clearly see that he is actually modulating and transforming these initial Deleuzian references by associating them with other notions (like the notion of the rhetorical figure or the trope), and by increasing the philosophical references to the work of J. Derrida. After his writings on the fold, which were predominantly referring to the work of Deleuze, Eisenman is indeed more and more referring to the work of Derrida, and, in the continuity of his earlier emphasis on Derrida's textuality in the late eighties, Eisenman is now again focusing on the written and textual condition of architecture, which he associates with Derrida's notions of writing, trace and excess, or, more specifically, with Derrida's notion of 'spacing.'108 For Eisenman, this condition of writing or 'spacing' (literally the 'writing of space') is a repressed and subversive form of representation that is already present in architecture's interiority. It has this subversive quality of opening up, from within, the traditional language of representation and presence, and to cut architecture from its previous 'modes of legitimation,' figuration or 'forming.' Spacing is this other dimension of 'space between' that fluctuates between many times, places and scales.¹⁰⁹ Eisenman's insistence on the rhetoric and tropic condition of the interstitial, should also be considered in a similar perspective—i.e. as a variation on the theme of writing and text—especially since the art of rhetoric is also associated with semiotics and semiology.

In those years, Eisenman is also frequently writing about the issues of media and information, and about the possibilities of architecture to remain critical within the context of this new '*Zeitgeist*,' an issue he already tackled before, and which he will further develop in his writings in the late nineties. As we will see in our next section on the diagram, Eisenman once again argues that architecture's critical faculty mainly derives from its inherent textual, dislocating and differential nature, which enables it to dislocate and transgress architecture from within.

The diagram as space of writing

In the late nineties, the process of writing and spacing will be assigned a proper 'space of writing' through the diagram. Initially the issue of the diagram was heralded by the younger generation of architects and critics (like G. Lynn, R. Somol, A. Zaera-Polo and B. Van Berkel), who saw in the diagram a way to theorize their own computational design experiments with 'motion techniques' and diagrams. As we have seen, Eisenman was in the beginning rather reluctant to follow the upcoming trend of the diagram, which he tried to counter with his own concept of the trope, but, in the face of so much enthusiasm, he finally saw an excellent opportunity to re-theorize a concept that, notwithstanding its essential analytical and operative relevance since the early sixties onwards, still remained under-theorized in his work.¹¹⁰ Rather than exploring the diagrammatic path suggested by Foucault and Deleuzeand followed by the younger protagonists of the diagram-Eisenman actually prefers to reformulate the issue of the diagram within the continuity of his own architectural and theoretical work, namely by emphasizing the historical importance of diagrams in his own work (and in the history of architecture) and by focusing on the written, critical, interior, anterior and exterior condition of the diagram.¹¹¹

He does that in a series of articles written in 1998 and 1999, all bundled in the publication 'Diagram Diaries'.¹¹² In these series of articles, Eisenman is making, on the one hand, some general statements on the theoretical condition of the diagram, i.e. the diagram as a written and critical condition of the interiority and anteriority of architecture. These statements are in major part formulated in his first (98/1) and last article (99/4), and mentioned throughout the other articles (99/1, 99/2, 99/3). On the other hand, Eisenman is also making a detailed analysis of the historical antecedents and the architectural exponents of the dia-



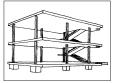
10

P.Eisenman_Diagram Diaries, Universe, 1999 (cover)

gram, which he describes in relation to three types of diagrams: the 'diagrams of anteriority' (99/1), the 'diagrams of interiority' (99/2) and the 'diagrams of exteriority' (99/3). For the sake of clarity, we will start our argument with a first introduction on the historical and architectural manifestations of the different types of diagrams, so that we can conclude with a general reflection on the deeper theoretical, critical and interpretative implications of the diagram.

10.1The architectural and historical relevance of the diagram:
the diagrams of anteriority, interiority and exteriority.

diagrams of anteriority



Le Corbusier_Maison Domino horizontal absolute relative to a vertical grid (diagram by P. Eisenman, 63/1)

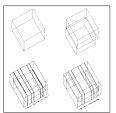
The first type of diagrams ('diagrams of anteriority', 99/1), relates to what Eisenman defines as the anteriority of architecture, that is the accumulated knowledge of all previous architectures. For Eisenman, the anteriority of architecture can be conceived as the a-priori history of architecture's interiority, or as an architectural translation of Foucault's notions of archive and archeology.¹¹³ With these diagrams of anteriority, Eisenman clearly suggests that the issue of the diagram can be retraced within the historical tradition of architecture, starting from the Renaissance (with Alberti, Brunelleschi, Palladio) to the Modern times (Durand, Beaux-Arts) and Modernism (Bauhaus).¹¹⁴ Although the references to the Renaissance architects are rather related to the issue of anteriority (or other theoretical issues like exteriority and presentness) than to the issue of the diagram, the later references to the type (Durand), the parti (Beaux-Arts) or the bubble diagram (Bauhaus) are clearly referring to the antecedents (or anteriority) of the diagram itself. For Eisenman, these diagrams of anteriority have a rhetorical character, since anteriority can be conceived as the "accumulation of the tropes and rhetoric used at different periods of time to give meaning to architecture's discourse:" these tropes are unstable and in constant evolution, since they are evolving with the historical conditions and the current Zeitgeist. But, at the same time, these diagrams are the critical tools of a critical architecture, which is not only depending on, but also transgressing and displacing these historical and present conditions (of Zeitgeist).115

diagrams of interiority The second type of 'diagrams of interiority' are examining and explaining the singular relationships between the specific building and architectural interiority, which Eisenman defines as a unique relationship between form and content, instrumentality and iconicity, function and meaning, and sign and signified.¹¹⁶ In fact, these 'diagrams of interiority' are internally motivated by the architectural object itself, i.e. they are derived from elements or forms (like the cube or its counter-part, the elform), processes, relationships and strategies that are internal to architecture's interiority. Eisenman further makes a specific distinction

between his earlier formal and explicative diagrams of interiority, which are based on architectural and historical models (in his PhD), and the generative and transformational diagrams of interiority, which were used as generative design devices in his earlier and later houses. In this review of his use of diagrams in his earlier work (99/2), Eisenman starts from earlier formal descriptions and theoretical statements, which he reviews and re-edits within the perspective of the diagrams of interiority.

Particular to Eisenman's revision, is that he focuses on the unstable, uncertain and critical gualities of these diagrams of interiority and on the excessive, blurring, oscillating or confusing character of the architectural readings, hierarchies or perceptions etc. For instance, he clearly indicates that his use of diagrams already originates with the PhD, by emphasizing the specific nature of his formal and explicative diagrams, which, according to him, are reflecting the critical, conceptual and unstable nature of architecture's interiority, as opposed to R. Wittkower's or C. Rowe's more abstract and stable diagrams. When Eisenman is talking about his use of generative diagrams in his early houses, he indeed recognizes the linguistic, syntactical, rational and linear character of those transformational diagrams, but, at the same time, he is clearly making a revision of one of his most famous theoretical statements on 'deep structure', which he now reinterprets as an interior condition of absence, difference and otherness.¹¹⁷ In his description of the early houses (Houses I to IV), Eisenman is further referring to the excessive, blurring, indexical or non-linear character of those transformational diagrams,¹¹⁸ and, in his description of his later houses (House VI, House X, House El Even Odd or Fin d'Ou T Hou S), he is also emphasizing the unstable, fluctuating or indexical character of his later diagrams of interiority.¹¹⁹

In the late seventies, Eisenman initiated a third type of diagrams, the 'diagrams of exteriority', which served to develop a series of designs based on motivations that are external to the architectural object itself. These diagrams are derived from external arbitrary or random texts, which are introduced in order to overcome the internal motivation and to create alternative figural conditions.¹²⁰ According to Eisenman, these new diagrams of exteriority are shifting their focus from the formal and syntactical relationships (seventies), to textual relationships (eighties) and affective relationships (early nineties), in order to ultimately behave as a sort of virtual engine within the whole process of design (late nineties). Again, he is emphasizing the critical and theoretical dimension of those diagrams, which he describes as the tactic of a critical strategy or critical practice, i.e. as an indirect form of camouflage, displacement and mediation, rather than as an ideological and political activity in se.121 In his article, Eisenman further makes a review of some of his most important projects from the late seventies to the late



House I_1967 diagrams of interiority



House IV_1971 diagrams of interiority



House 11a_1978 embedded el-forms

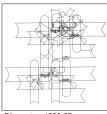
diagrams of exteriority

nineties—starting from the project of Cannaregio, and the subsequent projects of 'artificial excavation' till the latest projects of the period of foldings (namely the projects of the Church of the Year 2000 and the Library of the United Nations).¹²²

In those descriptions, Eisenman not only focuses on the evolution of the

external diagrams, but also on their specific importance within the particular architectural strategies of those consecutive periods, passing in review (and revising) some of the most characteristic processes (from scaling, superposition, extrusion and imprints to folding, morphing and grafts), relationships (space between, interstitial space, blurring) and linguistic components (text and traces). Besides the critical, textual and figural condition of those diagrams, Eisenman is emphasizing the interstitial (or between), smooth and blurring character of his diagrams of exteriority, especially in his later projects.123 Of course, the most important issues are related to the nature and evolution of those external diagrams, which evolve from the superposition and scaling of textual elements (like site elements, grids and other fictional and narrative inventions) to the folding, grafting and morphing of more arbitrary diagrams (e.g. scientific diagrams): as a result of the increased use of CAD processes, these later diagrams are more oriented on the figural, smooth, interstitial and blurred condition of exteriority.

Although, Eisenman is sporadically mentioning the latest stage of his diagram of exteriority, namely those diagrams that are developed as a 'virtual engine,' he is not specifically reviewing these latest series of projects (e.g. the Virtual House or the I.I.T. Student Center et al.). This is a remarkable 'omission', if one considers that the whole issue of the diagram was initially introduced as a way to theorize this specific use of motion techniques.¹²⁴ Indeed, with the use of new computational techniques, it now becomes possible to conceive the diagram as a fully animated process, based on the processing of all sort of data (such as form, site, function, structure etc.) and computational 'motion techniques'. This makes it possible to envision the diagram as a 'virtual engine' which acts within the object to be processed, rather than upon it, by transforming the physical reality.¹²⁵ Contrary to the younger generation of diagram adepts, the question is, for Eisenman, not so much to come to a fully operative 'machinic' organism in which all architectural parameters are fully integrated and smoothened as a well oiled engine. Rather, what matters most is that the diagram would set up a virtual condition in which the relationships between object and site, figure and ground, subject and object, reality and representation, space and time are totally blurred. The use of computational diagrams allows to set up a three-dimensional virtual spatio-temporal framework, in which the multiple times and spaces of the object, surface, site and grids are all working upon each other, not in a holistic, organic or 'machinic' manner, but rather in a discontinuous, not-homogeneous and non-linear manner. The diagram acts as a space



Biocenter_1986-87 diagram of exteriority_ science dna strand



Emory Center_1991 diagram of exteriority (site)_ science_harmonic waves



Carnegie Mellon R.I._1987-89 diagram of exteriority_ mathematics_boolean cube

of indexical writing in which anterior, interior and exterior traces and marks are both generated and retained, in an ever undecided play of resistances, deviations and differentiation.¹²⁶

The first project in which the diagram is actually conceived as a 'virtual engine', is the Virtual House (1997), which is designed with the help of the newest CAD motion techniques. The design starts from the memory of the spatial concept of House IV, which is abstracted into nine cubes. These nine cubes create a potential field of internal relationships and interconnections, which is expressed as a field of vectors with interrelated movements. The Virtual House is conceived as a 'virtual multiplicity', which results from the diagrammatic interaction of two moving virtual cubes.¹²⁷ In the following I.I.T. Student Center (1997), the spatial concept of the former Virtual House is again recycled as a virtual footprint for the 'figuring of the ground', which gives the building the appearance of a hybrid landscape object with a warped, wrinkled and undulating surface.¹²⁸

In other projects, like the Staten Island Institute of Arts and Science (1997) or the IFCCA Prize Competition entry (1999), the attention is more focused on the hybridization of types and programs, which actually reinforces the usual focus on the blurring, figural and interstitial relationships. Whereas the Staten Island project is starting from the striation, torsion and twisting of bars, the IFCCA project is mainly designed by warping the topography of the ground through a complex and unpredictable series of oscillation processes (+/-). This allows to create a virtual condition in which the real space is oscillating between figure and ground, building and site, smooth and striated space.¹²⁹

In the Bruges Concert Hall (1998) and the Santiago Cultural Center (1999-present), one can see another implementation of the 'virtual engine' diagram. This diagrammatic engine directly derives from the processing of topographic and geographic maps of the site, which, once superposed upon each other and clinched into a virtual wire-frame matrix, are virtually animated through computational motion techniques. Through their specific use of maps and topography, these new techniques might be reminiscent of the earlier processes of 'artificial excavation', which were also based on the superposition and scaling of similar maps: but, whereas the arbitrary forms of the 'artificial figures, which reinforced their figurative appeal, the forms of those new diagrammatic projects are based on motion techniques of virtual animation, which, once put into motion, cannot be predicted or formalized, thereby eschewing the traps of figuration.¹³⁰

The Holocaust Memorial (1998-2005) also starts from the superposition of surfaces on the topography of the site (in this case a double grid-sys-

projects



Virtual House_1997 diagrams of exteriority



IFCCA_1999 front view



Staten Island_1999 front view (rendering)



Bruges Concert Hall_1998 rendering



Berlin Holocaust Memorial 1997-2005_birds view



Santiago Cultural Center 1999- _model



Musee de l'Homme_1999 model (roofs)

10.2

tem of more than 2700 concrete pillars), but this time, the slippage of surfaces creates a "perceptual and conceptual divergence between the ground topography and the top plane of the pillars", which produces a zone of instability and indeterminacy. The idea is that the disposition of the pillars is determined by the slippage of the two undulating grids. The slippage destabilizes the initial rational grid system and creates an agitated field of multi-axial pillars, which creates an omnidirectional place of loss, and hence, a sense of spatial and temporal disjunction.¹³¹

In the competition entry for the Musée de l'Homme in Paris (1999), finally, the design is less determined by the historical or topographical context of the site, but by the existing asymmetrical settings of the two neighboring building envelops, which is determining for the asymmetrical striation of pulsation or the warped surfaces. Like most of the latest 'diagrammed' projects (like the I.I.T. Student Center, the Bruges Concert Hall, the IFCCA project, the Berlin Holocaust Memorial or the Santiago Art Center), the design processes of the Museum are essentially focusing on the processing and warping of surfaces, which is achieved by animating the underlying spatial grid through computational motion techniques. At this point, it is not possible anymore to distinguish and recognize the initial formal elements (such as the 3D grid, formal diagrams, bars etc.). Even if these elements were still relatively present at the beginning of the design process (especially in the working models and the initial mass models), their physical presence has been dissolved and transformed in a series of virtual traces on the path of the diagram. It is as if the diagram sets into motion a series of energetic processes which act directly on all the co-ordinates of a threedimensional virtual field.

The theoretical relevance of the diagram: the diagram as theoretical concept, or 'critical tool'

As we have seen, the recent emergence of the issue of the diagram on the architectural scene gave Eisenman the opportunity to recognize, within the perspective of his own architectural and theoretical production, the importance of what would become one of his most characteristic signatures up till today, the diagram. Till now, we have mainly focused on the historical and architectural manifestations of the diagram, that is on the architectural and formal relevance of the diagram as analytical or generative 'design tool'—both in relation to Eisenman's own architectural production and its historical relevance in relation to the 'anteriority' of architecture.

Let's now consider the second, more theoretical, critical and interpretative implications of the diagram, i.e. the diagram as conceptual strategy or 'critical tool,' and shed a light on the underlying theoretical constructs-like interiority, anteriority, repetition of difference or critical architecture-which convey to the diagram all its theoretical and critical credibility. In our previous paragraph, we already discovered some of the basic theoretical characteristics of the diagram, which we could identify, in a few words, as a critical manifestation of the interiority and anteriority of architecture, and as a basically written and textual condition, characteristics which will be further developed in this theoretical consideration. At the same time, we will further evaluate how Eisenman's theoretical interpretation of the diagram, which basically relies on a Derridean interpretation of Deleuze's diagram, relates to (and differs from) the common Deleuzian interpretation proposed by the younger generation of architects and critics, and hence, from Deleuze's own interpretation of Foucault's initial concept of the diagram. Ultimately, this will also lead us to an evaluation of the respective influence of two of the most known protagonists of French Post-Structuralism, Derrida and Deleuze, on Eisenman's theoretical work.

Let's begin with Eisenman's own theoretical definitions of the diagram, which we mainly distill from his first and last writings on the diagram (98/1, 99/4). As the title of his first article on the "Diagram: An Original Scene of Writing" (98/1) already suggests, Eisenman's theoretical understanding of the diagram is mainly a textual and written condition, which he compares with Derrida's interpretation of Freud's Mystic Writing Pad.¹³² In this article, the diagram is conceived as a double-sided writing pad consisting of three superposed layers, which allows an infinite interaction of traces and marks. It is a space of indexical writing where traces are both regenerated and retained. The traces which are left on the bottom surface of the mystic writing pad are unarticulated written indexes which exist before any iconic perception. They stimulate the perception of potential relationships emerging from repressed figures, but they are not generative or motivated in se. The diagram is thus an already written condition which exists before architecture's interiority and anteriority. This written condition (or writing) can be described as an already present, unarticulated, but repressed form (or memory) of representation. The diagram is supposed to open up the repressed form of appearance, representation and presence, and hence, to open up the repressed conditions of interiority and anteriority. Eisenman stipulates three different conditions, which, according to him, are already motivating (and repressing) the original condition of interiority: 1. the metaphysics of presence; 2. the already motivated condition of the sign, and 3. the desire of the subject for ground, place and authoring.¹³³ According to him, the diagram is not generative or transformative by itself, but, since it is already contained within the interiority/anteriority of architecture, it has the capacity to open up these three conditions, by enabling three alternative conditions, namely: 1. the repetition of difference (or singularity); 2. the becoming unmotivated of the sign condition; and 3. the mediation between the authoring subject and the object.

diagram as mystic writing pad

resistant agent In his second article on the 'Diagram and the Becoming Unmotivated of the Sign' (99/4), which actually elaborates the previous arguments, Eisenman further analyses how the diagram can actually unmotivate or reverse this 'already motivated sign' condition of architecture's 'interiority' and "free the repressed indexical writing." The diagram then acts as a resistant agent who can reverse, or 'unmotivate', the motivated process of design in relation to the metaphysics of presence, the motivation of the sign-signifier and the subject-object relationships, and the desire for ground and place.¹³⁴ However, the already motivated condition of architecture (e.g. site, program, function, meaning) will never be completely reversed and negated (since architecture must structure, enclose and shelter), and, therefore, the diagram can only blur and transform the external conditions of site, program and history. In this second article, Eisenman is, again referring to the work of Derrida, especially when he states that the diagram, as writing or trace of absence, can overcome the question of original speech and metaphysics of presence.

critical strategy One of the most important theoretical claims of Eisenman's diagram is that it can be considered as a critical manifestation of architecture's interiority and anteriority, or, as he once mentioned, as a tactic of a critical strategy (i.e. a critical practice or critical architecture).¹³⁵ Crucial in this argument, is the fact that the diagram is specifically associated with the issues of criticality and interiority, which, ultimately, are supporting Eisenman's entire theoretical thesis. Although, Eisenman has, in the past, always been rather circumspect, or even ambivalent, about the critical (or even 'post-critical') condition of architecture, he nevertheless always supported the idea that architecture should question, displace or even transgress its own 'modes of legitimatization' or embodiment-not only in relation to the functional, iconic, symbolic or representative dimension of architecture, but also in relation to the ever changing socioeco-political and cultural conditions of the current spirit of time (or Zeitgeist), which are ultimately conditioning our modes of perception and values.¹³⁶ For Eisenman, the question of criticality ultimately relies on architecture's own capacity to continually question its own discursive modes, especially in relation to the fundamental questions of its own metaphysics, representation and subjectivity-which are the three basic conditions of interiority we just mentioned. Ultimately, this condition of criticality, this capacity to resist to or to remain unabsorbed by our own motivations and desires, is inherent in the very interiority of the architectural discourse, which Eisenman describes as an unstable and rhetorical condition and associates with the notions of singularity, 'repetition of difference' or presentness.

repetition of difference While the notions of singularity and presentness are actually borrowed from his earlier writings of the late eighties and subsequently redefined, Eisenman comes up with a new concept, 'repetition of difference,'

which emulates (and transforms) Deleuze's famous philosophy of 'repetition and difference' and reformulates Eisenman's earlier concepts of difference and otherness. Eisenman associates 'repetition' with the acknowledgment of the historical conditions of anteriority, and 'difference' with the actual capacity of changing these historical conditions, which gives to the combined concept of 'repetition of difference'-as opposed to the 'repetition of the same'-this singularity of being always in the present but different from its manifestations of the past.¹³⁷ In fact, with this new construction of 'repetition of difference,' Eisenman does not only intend to acknowledge the historical conditions of the past, but also the current conditions of the Zeitgeist, (i.e. the normalizing condition of the present), which he now attempts to counteract with his notion of presentness (i.e. a condition of criticality that resists these normalizing conditions).¹³⁸ Thus, with these notions of 'repetition of difference', singularity and presentness, Eisenman attempts to both recognize the normalizing impact of the historical conditions of the past and the current conditions of Zeitgeist, while claiming, at the same time, the possibility of a critical alternative based on the already given interiority of difference and change.

Evaluation of the interpretive framework

Now that we have outlined the architectural and theoretical argumentation behind Eisenman's interpretation of the diagram, time has come to make a critical assessment of his theoretical assertions and to evaluate the relevance of his interpretational matrix, not only in relation to the initial diagram proposal, but also in relation to a deeper philosophical and theoretical frame of reference.

Let us first consider how Eisenman responded to the initial diagram proposal, which was initially (around 1997 and 1998) put forward by the younger protagonists of computational architects and critics as a way to theorize their own use of 'computational motion techniques' and diagrams. As we already mentioned, Eisenman initially attempted to counteract with a series of notions-like the 'trope of the interstitial', the 'figural', the 'interstitial figure,' the 'interstitial processes' or 'spacing'which all revolve around the central notion of the figural 'trope' (or rhetorical figure) of the interstitial. He attempted to promote them as a counter-argument to the diagram.¹³⁹ In his writings on the tropes and processes of the interstitial (97/2, 97/4, 98/2), Eisenman is not specifically referring to the notion of the diagram, but it is clear that he is indirectly responding to the upcoming Deleuzian interpretation of the diagram, namely when he is responding to Zaera-Polo's reading of Deleuze's 'machinic process,' which Eisenman reinterprets as a condition of self-similar repetition (97/2), or when he is referring to the historical antecedents of his 'trope of the interstitial' (98/2).140



ANY 23_1998 Diagram Works



P.Eisenman_1999 Diagram Diaries, Universe

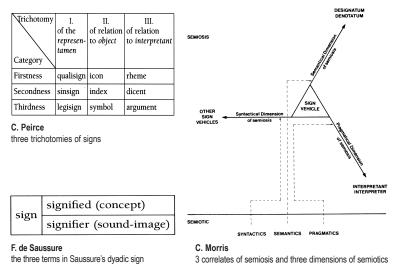
reception

After these first attempts of refutation, Eisenman finally decides to embrace the notion of the diagram and to support its promotion by dedicating a whole issue of the Any-magazine (Any 23: Diagram Work) to the diagram, with B. van Berkel and C. Bos, one of the early promoters of the diagram, as guest-editors.¹⁴¹ As we have seen, Eisenman interprets, in his own contribution to the magazine, the diagram as 'An Original Scene of Writing' (98/1), in association to Derrida's reading of Freud's 'Writing Pad'. By publishing, in the following year, a series of articles in his 'Diagram Diaries', Eisenman further develops his own interpretation of the diagram, by situating it in the light of his own architectural and theoretical work, and in the historical perspective of the architectural tradition, a new architectural and historical perspective which finally contributes to exhaust and alienate the whole issue of the diagram and to unravel the initial theoretical motivations of the promoters of the computational diagrammatics. In all those writings, Eisenman's main argument, against the initial diagram proposal, is that the diagram should be conceived as a critical and resistant manifestation of architecture's interiority and anteriority and that it is basically an already written or indexical condition of traces. For Eisenman, the diagram is a critical manifestation of architecture's 'interiority' and 'anteriority',¹⁴² and not only an operative "machinic environment of matter, flows and forces," or a purely operative machinic process, as R. Somol and A. Zaera-Polo are describing it. The diagram is not generative, transformative or operational by itself, but it is an already written condition which enables to open up the interiority and anteriority of architecture.¹⁴³ Eisenman's main argument against Somol's argumentationwhich is also valid for the position of the computational diagrammatics in general-is that Somol's diagram is not operational on the level of architecture's 'interiority' and 'anteriority', and, hence, that it misses this essential critical potential (against the normalizing conditions of history and Zeitgeist) of his own interpretation of the diagram, which basically derives from its a priori written and indexical (or Derridean) condition.144

This, inevitably, brings us to our second point, in which we'll focus on the underlying philosophical and theoretical underpinnings of Eisenman's alternative diagrammatic model. Basically, one could state that Eisenman is trying to counteract the common Deleuzian interpretation of the diagram, first, by resituating the issue of the diagram within the perspective of his own architectural, historiographic and theoretical work, and, secondly, by transforming and reinterpreting its initial Deleuzian terminology, which he interprets from an alternative philosophical and semiological perspective, based on the work of J. Derrida (the diagram as writing pad), G. Deleuze (repetition of difference), and, to a lesser extent, C. Peirce (index vs. icon) and F. de Saussure (the motivation of sign). It is clear though that Eisenman's main argument is basically formulated in the form of a philosophical debate between Derrida's textual and written approach and Deleuze's operative and pragmatic approach, while the references to semiotics and linguistics are rather used as secondary and additional sources of reference (namely in relation to the issue of representation and signification).

Despite the secondary character of these semiotic references, which Eisenman uses to modulate, and consolidate, his primary concern for the written and indexical condition of the diagram, it is certainly worthwhile to pay some attention to the underlying interpretative frame of Eisenman's semiotic and linguistic references, which, in fact, are echoing several of his earlier statements on the difference between architecture and language.¹⁴⁵ What is new in this interpretation, is that Eisenman is now specifically referring, albeit not always explicitly, to the fathers of the French tradition of semiology (F. de Saussure) and the Anglo-Saxon tradition of semiotics (C. Peirce). From de Saussure, Eisenman borrows, and reverses, the concept of the sign, which, in de Saussure's semiology is considered as an unmotivated and arbitrary sign. Contrary to a linguistic sign or word, which is based on an unmotivated or arbitrary convention, the architectural object has a double motivation: an internal indexical motivation and an external iconic motivation. Although the diagram can never completely negate or reverse the 'already motivated condition' of an architectural object (which is motivated by its site, program, structure, function or meaning), Eisenman states that the diagram can be used as an agent of resistance and unmotivation, so that the internal 'indexical' motivation of the architectural object (the object as object) can be separated from the external motivations (i.e. from function, meaning, 'iconic' sign condition etc.)146 What is particular to Eisenman's interpretation, besides the reversal of de Saussure's dyadic interpretation of the unmotivated sign, is that he is actually associating this dyadic sign condition with the notions of index and icons (or 'indexical sign' and 'iconic sign'), which he borrows from C. Peirce, the father of the Anglo-Saxon tradition of semiotics. But, whereas Peirce's initial sign condition is conceived as a triadic relationship between icon, index and symbol, Eisenman is transforming it in a binary opposition between the 'indexical' and 'iconic sign condition, which he superimposes on the previously reversed dyadic sign condition of de Saussure. In this sense, Eisenman is actually mixing up the theoretical underpinnings of two distinct (and incompatible) schools of semiotics, the French school of semiology which is based on de Saussure's dyadic distinction, and the Anglo-Saxon school of semiotics, which is based on Peirce's triadic model of the sign. This is all the more remarkable, if one considers that de Saussure's dyadic model has often been criticized for its omission of the 'object referent', as opposed to Peirce's triadic model in which the signobject relationship is identified as a specific class with the three separate categories (icon, index and symbol).147 Although one could assume that Peirce's triadic model, and especially his consideration of the 'object referent', could be useful, when dealing with the specific object condition of the architectural sign, Eisenman has never fully explored this possibility,

with the exception of his early writings in the seventies, where he referred to C. Morris' distinction between pragmatics, semantics and semiotics.¹⁴⁸ This can be explained by the fact that, from the late seventies onwards, Eisenman has turned his back to the Anglo-Saxon semiotic tradition, by adhering to the upcoming French structuralist and post-structuralist tradition, which, as we all know, has its roots within the Saussurian (dyadic) tradition of semiology (cf. *illustration*).¹⁴⁹



Cf. Noth, Winfried, Handbook of Semiotics. Bloomington and Indianapolis: Indiana University Press, 1995, pp. 45, 60, 50.

Derrida vs.Deleuze This brings us to our next argument, in which we will further situate Eisenman's position in relation to two of the main protagonists of French post-structuralism, Deleuze and Derrida.

> At this point of our argumentation, it might be useful to first reflect on the affinities and divergences between Deleuze's and Derrida's philosophical position, a confrontation that might help us to understand Eisenman's own ambivalent reading of both authors in the nineties.

> Usually Deleuze and Derrida are considered to belong to the same post-structuralist generation of philosophers who developed, in reaction to French existentialism and structuralism, a philosophy of difference. Both recognized indeed to work on similar themes (like difference, repetition, multiplicity etc.) and to share a similar philosophical background—they are both critical of French existentialism and structuralism—and a similar interest for a philosophy of difference. Yet, despite these evident affinities, there are also many differences between their respective philosophical positions, not only in terms of philosophical allegiances and orientations, but also in terms of style or political involvement, and, even more important, in relation to their respective reception and translation in the Anglo-Saxon world.¹⁵⁰ In terms of orientation, one could say that Derrida's position is much closer to

Heidegger's philosophical orientation (in terms of ontology, metaphysics and epistemology) and more oriented towards transcendence, while Deleuze's position is closer to Nietzsche and more oriented towards the philosophical tradition of immanence and univocity (cf. Spinoza, Leibniz or Nietzsche).151 Contrary to Derrida, who, in a Heideggerian manner, has the ambition to overcome or to deconstruct the metaphysics by working on the limits or the margins of the philosophical discourse, Deleuze doesn't attempt to overcome metaphysics, but fully assumes his role of 'pure metaphysician' and conceives philosophy as the site for the invention of concepts. Deleuze makes no general pronouncements about the nature of Western metaphysics, but, instead, works from within the metaphysics. While Derrida is attempting to undo the metaphysics, Deleuze is, so to speak, "doing metaphysics". One could thus say, with D. W. Smith, that Derrida follows the trajectory of the tradition of transcendence (in the sense of overcoming and going beyond metaphysics), while Deleuze is following the trajectory of immanence.152

In fact, both philosophers are following different trajectories in the field of ontology and metaphysics. This is particularly true if one confronts their respective understanding of ontological difference, i.e. '*différance*' (for J. Derrida) and 'repetition and difference' (for G. Deleuze).

For Derrida, '*différance*' is that which marks "the disappearance of an originary presence": that which exceeds metaphysics and or transcends ontology. Derrida is seeking a difference 'beyond Being and beings', a difference still more unsought than the ontological difference between Being and beings, a difference that, "ceaselessly differing from and deferring (itself), would trace (itself) by itself."¹⁵³ For Derrida, the concepts of difference, trace, texts, writing and supplement are all traces of this formal structure of transcendence. *Différance* is 'neither this nor that': it is neither a concept nor even a name...it is written completely otherwise. "*Différance* is that what is never present as such: it is absolutely other, discernible only through its trace whose movement is infinitely deferred, infinitely differing from itself."¹⁵⁴

While Derrida is making a transcendental interpretation of difference, Deleuze is, in 'Difference and Repetition' (1968), proposing an immanent interpretation of the ontological difference. He provides an "immanent analysis of the ontological difference in which the different is related to the different through difference itself: ontology is constituted immanently by a principle of difference."¹⁵⁵ While Derrida conceives thought as *différance*, deferral or detour, Deleuze thinks of difference as an active, affirmative and effective force which makes difference, i.e. as an active and empirical force of difference in-and-of-itself.¹⁵⁶ Repetition is thought of as the positive power (*puissance*) of transformation, as a productive power of differentiation. Repetition is produced via differdifférance (Derrida)

repetition and difference (Deleuze) ence. Like Nietzsche's concept of the 'eternal return', this process of repetition is a self-sustainable process, with no ends or beginnings. For Deleuze, difference is not a difference-from-the-same, but a particularity or 'singularity' of each individual thing, moment or conception: such difference is internal to a thing or event and implicit in its being (difference-in-itself). Therefore one has to focus on the singular and unique circumstances of its production and on the continual production (or becoming) of events and affects (i.e. the change or variation that occurs when bodies come into contact). Many of Deleuze's other notions (like the between, the interstitial, the middle, the outside or the fold) are a direct result of his particular philosophy of immanence, which, for Deleuze, is not related 'to' anything else, but conceived as a pure outside. In fact, Deleuze conceives the outside as a moving matter animated by movements, folds and foldings that make up the inside: the inside is a fold or doubling of the outside, a contortion of the exterior outside. One could even say, with E. Grosz, that Deleuze is actually trying to evacuate the inside by forcing it to confront the outside, by allowing it to spin off and to mutate into a new system, so that it can endlessly deflect and become.¹⁵⁷ For Deleuze, thought starts in the middle and is best captured in between, i.e. at the intersection of series, events or processes which share a common *milieu*. Derrida, on the other hand, would rather focus on the margins, the borders, the blanks or the omissions, and bring the outside, the expelled or the repressed into the inside, by showing the constitutive traces that it must leave.¹⁵⁸

Now that we have briefly outlined these two different trajectories of immanence (Deleuze) and transcendence (Derrida), one could wonder how Eisenman's interpretation of the diagram can be positioned in relation to these two antagonistic poles. On the one hand, Eisenman proposes a Derridean alternative to the common Deleuzian interpretation of the diagram, since he clearly defines his diagram as an analogue of Freud's 'Mystic Writing Pad,' i.e. as an original scene of writing. On the other hand, he is clearly referring to Deleuze's philosophy of immanence, as it comes to define the critical capacity of the diagram's 'interiority' as 'repetition of difference.' In view of the apparent differences and incompatibilities between Deleuze's immanent approach and Derrida's more transcendental approach, one might ask oneself if Eisenman is actually not compromising his own theoretical argumentation by mixing up two different philosophical frameworks, which, beneath the apparent similarities, are actually the manifestation of a different philosophical attitude and worldview. The problem is even accentuated by Eisenman's persistence to further elaborate his argumentation with other rhetoric constructions and combinations-like the superposition of two incompatible semiotic traditions, which was previously evoked.

More fundamentally, this also brings into question the critical relevance of the philosophical models of discourse analysis, like that of Foucault and Derrida, which are often criticized for their inability to come up with effective and pragmatic philosophical proposals: especially Derrida's deconstruction, which can be linked to the philosophical tradition of negative interpretation, is often criticized on this point. In this respect, one can't but admit that a great deal of Deleuze's immanent pragmatism is actually counteracted or annihilated by Derrida's ontological transcendentalism, in the prevailing reception of his work in the United States. Even if it is understandable that Eisenman is referring back to the work of Derrida and to older theoretical and rhetorical concerns, Eisenman missed an opportunity to further develop the question of theoretical pragmatism, certainly after years of (mixed) Deleuzianism.

Notes

1. On feed-backs and bifurcations, cf. De Landa, Manuel. A Thousand Years of Nonlinear History. New York: Swerve Editions, 1997.

2. I refer here to the image of the 'jig-saw puzzles,' which M. Tafuri mentions in his introduction to the 'The Sphere and the Labyrinth.' Cf. Tafuri, Manfredo. *The Sphere and the Labyrinth*. Cambridge, London: The MIT Press, 1990, p. 1. According to Tafuri, "there comes a moment (though not always) in research when all the pieces begin to fall into place, as in a jig-saw puzzle. But unlike the jig-saw puzzle, where all the pieces are near at hand and only one figure can be assembled..., in research only some of the pieces are available, and theoretically more than one figure can be made from them..."
3. For Eisenman, "theory should not be considered as a set piece, a healthy wrapped package, but rather as a continuously applicable and open-ended methodology." Cf. 63/1, p. 353.

4.Cf. 63/1, p. 19.

5. On formal language, cf. 63/1, p 21. On formal systems, cf. 63/1, pp. 85-87 and following ('Chapter Three. Development of formal systems'.) On the primacy of form in architecture, cf. p. 33, and more generally 'Chapter One. Form in relation to architure.') 6. Cf. 63/1, pp. 11-15 (and more generally, the introduction). Cf. pp. 343-353 (and, more generally, Chapter Five.) Eisenman refers, among others, to R. Banham (focus on change), J. Summerson, E.Panofsky and the Warburg Institute (the use of iconography), De Stijl (the universality of the new), the Bauhaus and W. Gropius ('machine romantism') and F. Lloyd Wright ('The Architecture of Democracy'). He also reacts against Christopher Alexander's rigorously scientific and axiomatic approach (cf. infra). 7. From 1946 to 1947, Colin Rowe studied at the Warburg Institute in London, under the supervision of Rudolph Wittkower. In the mid-fifties (1954-55) he acted, together with Bernard Hoesli, as one of the inspiring forces behind the educational experiences of the 'Texas Rangers' (Austin, Texas). He left Austin for Cambridge University (England), and around 1963, he returned to the United States to teach at Cornell University, where he further refined his particular ground-figure approach to urban analysis. Eisenman and Rowe met in Cambridge (1961-2), where both were involved in teaching.

8. The German tradition of aesthetic formalism can be considered as a moment at the turn of the century when the disciplines of aesthetics and art history—untill then purely philosophical and historical disciplines grounded on Kantian and Hegelian foundations—tended to develop an autonomous and objective formal language inspired by the emerging social sciences like psychology and physiology. Several generations of scholars—as different as H. Wölfflin, A. Riegl, C. Fiedler, R. Vischer, A. Hildebrand emerged from this tradition. Both Wölfflin's "art history without names" and, to a lesser extent, Riegl's search for universal formal laws are still much indebted to the nineteenth-century art-'historicism'. Rowe, through his affiliation with the Warburg Institute, is closer to Aby Warburg's *Kulturwissenschaft*, which inspired a generation of scholars like E. H. Gombrich, R, Wittkower or E. Panofsky.

9. According to Joan Ockman, the publication of Colin Rowe's '*Mathematics of the Ideal Villa*' (1947), Rudolph Wittkower's '*Architectural Principles in the Age of Humanism*' (1949), and Le Corbusier's '*Modulor*' (1950) contributed to the reintroduction of the "ideas of classical proportion into modernism," such as the British tendency towards New Palladianism. Many of Britain's theoretical writings in the late fifties—by J. Stirling, P. and A. Smithson or A. Colquhoun a.o.—were developed from this renewed interest for Le Corbusier. Cf. Ockman, Joan. *Architecture Culture 1943-1968. A Documentary Anthology.* New York: Rizzoli, 1993, p. 341 *et al.* Rowe formed, with B. Hoesli and J. Hejduk the famous team of the 'Texas Rangers' (at the University of Texas School of Architecture in Austin, USA, 1951-1957).

10. Cf. 63/1, pp. 15, 37-41. Eisenman mentions, among others, the writings of H. Focillon ('*The Life of Form in Art*,' 1942), E. Panowsky ('*Meaning in the Visual Arts*,' 1955) and E. Gombrich ('The Visual image in Neo-Platonic Thought,' *Journal of the Warburg and Courtauld Institutes*, 1948).

11. C.Rowe's influence on the work of Eisenman is multiple and pervasive. Rowe influenced Eisenman in several areas, namely in his formal analyses (e.g. ambiguous formal reading, ground-figure relationship etc.), his artistic and architectural references (e.g. references to *Gestalt Psychology*, Wittkower's formalism, Italian Renaissance and Modern Architecture, Le Corbusier etc.) or in his historical and philosophical references (e.g. the issues of classical/modern, *Zeitgeist*, conceptual/perceptual etc.). Many themes of Eisenman's later work are developed in reaction to Rowe's references. Only to mention a few: Rowe's concept of 'figure-ground' relationships will initiate such concepts as figure-figure, between, interstitial and blurring; '*Zeitgeist*' will be transformed in 'double *Zeitgeist*'; or Rowe's references to the 'conceptual' will initiate Eisenman's interest for conceptual architecture, immanence and interiority. Eisenman already began to react against (and to transform) Rowe's ideas in his PhD, when he introduced new linguistics and systematic references. The decisive break with C. Rowe will occur around 1968, with the creation of the 'Institute for Architecture and Urban Studies' (IAUS, New York, 1967-1985).

12. Cf. 63/1, pp. 13, 22, 85, 89 a.o. Cf. G. Argan, G. Moretti, B. Zevi (for the use of linguistic terms like 'philological,' 'grammar' and 'syntax'). Italian architectural critics, like R. Bonelli or C. Argan have long used linguistic terms (such as 'philological, 'grammar' and 'syntax') in relation to the buildings they analyze, but Argan has been the only one to use them in a systematic way. (cf. 63/1, p. 89, footnote 4). Eisenman quotes John Summerson's lecture to the R.I.B.A. (May 27th, 1957), on the development of a theory of architecture, but doesn't specifically mention his broadcast talks for the BBC, on the 'classical language of architecture' (cf. 63/1, p. 13). In these series, which were broadcasted in 1963, John Summerson speaks about the 'Grammar of Antiquity', 'the Sixteenth-Century Linguistics' and the 'Rhetoric of the Baroque.' Cf. Summerson, John. *The Classical Language of Architecture*. London: Thames and Hudson Ltd., 1980.

13. Cf. 63/1, p. 25, where Eisenman says: "The essence of any creative act is the communication of an original idea from its author, through a means of expression to a receiver. The means of expression must be such as to transmit the original intention as clearly and fully as possible to the receiving mind. This need for clarity and comprehensibility, so much stressed by the *Gestalt Psychologists*, is critical to the development of any means of communication." Although Eisenman only quotes Kurt Koffka's '*Principles of Gestalt Psychology*'(New York, 1935, p. 642), one could also refer to the 'communication model' of Shannon & Weaver (1949). This model, which represents a communication system in the linear form of a communication chain, emphasizes the technical process and excludes the semantic and pragmatic aspects of communication. In this chain, the information flow is channelled from the transmitter to the receiver, who gets the message. Cf. Nöth, Winfried. *Handbook of Semiotics*. Bloomington and Indianapolis: Indiana University Press, 1995, p. 175.

14. In theory, formal systems are derived from the four basic properties of the 'generic form': volume, movement, mass and surface. The specific implementation of these formal systems, depends from the syntactical requirements of the inner- and outer environment (i.e. the centroïdal or linear dynamics coming from internal and external forces) and the grammatical development of the formal vocabulary (which depends on the interpretation of the architect). The systematic implementation of generic form in the perceptual environment of the specific form is thus basically defined in terms of architectural language, which is referring to the common understanding of vocabulary, grammar and syntax. Formal order is achieved by the 'architectural equation' of form, content, function, structure, technics, in decreased order of hierarchical importance. Cf. 63/1, pp. 57-83 (Chapter 2. The properties of generic architectural form) and pp. 85-137 (Chapter 3. Development of formal systems).

15. The gradual reception of post-structural thinkers like Derrida (in the early eighties) or Deleuze (in the nineties) will create a much more efficient theoretical platform to cope with these intrinsic oppositions, (cf. *infra*).

16. C. Rowe's formal interpretation of Le Corbusier, especially his reading of the *Villa Stein* at Garches (as an example of spatial stratification), stood as model for Eisenman's own interpretation of volumetric 'addition' (i.e. the reading of a building as an addition of successive surfaces), as opposed to volumetric 'subtraction' (i.e. the reading of a building as a mass/volume that is cut away). In his analysis of the *Villa Stein*, Colin Rowe speaks about the "vertical layerlike stratification of the interior space of the building, of a succession of laterally extended spaces traveling one behind the other." For Rowe, this spatial stratification can be compared with the 'phenomenal transparency', or the flattened figure-ground relationships of some cubist paintings. Cf. C. Rowe, "Transparency: Literal and Phenomenal." In Rowe, Colin. *The Mathematics of the Ideal Villa and Other Essays*. Cambridge, Massachusetts: The MIT Press, 1995, pp 160-183.

17. The entire analysis of the *Casa del Fascio*, is based on the dialectics between two conflicting spatial processes: on the one hand, the *Casa* can be considered as a cube that is hollowed out (i.e. as a subtraction of mass), and on the other, as a succession of volumetric planes or surfaces (i.e. as an addition of surfaces). The early houses can also be considered as a combination of volumetric subtraction and as a succession of surfaces (i.e. as 'Houses of Cards'). In his 2003 publication on Terragni, Eisenman associates the *Casa del Fascio* with the processes of transformation, as opposed to the *Casa Giuliani-Frigerio*, which is associated with the processes of decomposition.

18. The syntax provides a set of rules that are clarifying the internal conditions of the building and the external conditions of its environment, and resolving the interrelationships between them. Eisenman distinguishes, in both cases, two types of 'syntactical requirements': a centroïdal syntax (based on the acknowledgement of a center) and a linear syntax (which expresses a linear progression along an axis). Both the internal and external conditions can thus be either centroïdal or linear.

19. Of course, one can find a lot more indications to later theoretical and architectural issues, but this is not the place to discuss them. On a general level, the PhD has had a critical impact in terms of methodology (e.g. the use of syntax, the systematic formal

approach or the dialectical distinction between the conceptual and perceptual level), reading and writing techniques (e.g. the ambivalent, dual, dialectical and dynamic reading) or in the choice of architects (e.g. the mixture of modernist architects like Le Corbusier. G. Terragni and Mies van der Rohe and classical architects like Palladio). On a more specific architectural level, one can think about the use of specific elements (like cubes, surfaces, grids and diagrams) and relationships (like the 'figure-ground' and 'horizontal-vertical' relationships). One can also refer to specific architectural processes, like overlays and superpositions, ambiguous dialectics (e.g. 'mass-surface' dialectics) or dynamic processes (like shifts, tensioning, extrusion). Finally, one can also refer to the use of specific linguistic and systematic/scientific processes.

20. Cf. Eisenman, Peter. *The Formal Basis of Modern Architecture*. Baden: Lars Müller Publishers, 2006.

21. Cf. Rossi, Aldo. *L'architettura della Città*. Padua: Marsilio, 1966. The English version was edited and introduced by Eisenman in the Oppositions Books series, in 1982. Cf. Rossi, Aldo. *The Architecture of the City.* Cambridge, London: MIT Press, Oppositions Books, 1982. For Eisenman's introduction, cf. 82/1 ('The House of Memory: the Texts of Analogy).

22. Cf. Venturi, Robert. *Complexity and Contradiction in Architecture*. New York: Museum of Modern Art, 1966, p. 88.

23. Cf. Ockman, Joan, Architecture Culture 1943-1968. A Documentary Anthology. New York: Rizzoli, Columbia Books of Architecture, 1993, p.389.

24. Not much later, Alexander discovered that his stem and tree diagrams could not account for accidents or overlap, so, he proposed instead to use a semilattice diagram. Later, he would rather focus on the use of patterns in design solutions—namely by developing a Pattern Language—and on participative design processes.

25. Cf. Alexander, Christopher. *Notes on the Synthesis of Form*. Cambridge (Mass.): Harvard University Press, 1964. See also Alexander, Christopher. "A City is not a tree." In *Architectural Forum*, April 1965, pp. 58-62 and May 1965, pp. 58-61. Cf. C. Alexander, S. Ishikawa & M. Silverstein, *A Pattern Language*. Oxford: Oxford University Press, 1977.

26. Cf. C. Alexander, *Notes on the Synthesis of Form.* Cambridge (Mass.): Harvard University Press, 1964, p. 15. "The form is the solution to the problem; the context defines the problem."

27. Cf. Eisenman, Peter and Alexander, Christopher. "Contrasting Concepts of Harmony in Architecture." *Lotus International* no. 40 (1983), pp. 60-68. This legendary debate between Peter Eisenman and Christopher Alexander took place at the Graduate School of Design, Harvard University, on November 17th 1982. During this legendary debate, Alexander and Eisenman had the opportunity to debate about their respective views on architecture, or, as the title of the debate suggests, about their 'Contrasting Concepts of Harmony in Architecture.' As the debate went on, it became clear that their disagreement basically resulted from a different view of the world order or cosmology. Alexander, who just had presented his new publication on 'The Nature of Order,' depicts this nature of order, as an order that is "fundamentally ... produced by centers or wholes which are reinforcing each other and creating each other." He believes that "the architects are entrusted with the creation of ... harmony in the world," and that harmony is "a product not only of yourself, but of the surroundings:" according to him, certain structures (of sameness and wholeness) need to be in there to produce that harmony."

For him, "the games of the Structuralists, and the games of the Post Modernists are ...nothing but intellectualisms which have little to do with the core of architecture." Eisenman replicates with an alternative view of the word or cosmology, which derives from the reading of (post-)structuralist authors like M. Foucault, R. Barthes and J. Derrida: this cosmology of difference is not concerned with harmony, unity or wholeness, but with the fragmented, dislocated, alienated and disharmonic condition of the world. Therefore, he is not concerned with a 'typology of sameness and wholeness,' but in a 'typology of differences,' in the 'space between structures' and in the 'contamination of the wholeness.' He prefers an architecture that faces the disharmony and anxiety of the present world, rather than "an architecture that puts its head in the sand and goes back to neoclassicism."

28. First Eisenman introduces, in his analysis of Terragni, two linguistic components: N. Chomsky's notions of 'deep structure' and 'surface structure', and C. Morris' notions of 'pragmatics, semantics and syntactics' '[cf. 70/1 ('From Object to Relationship: Terragni's Casa del Fascio.') and 71/2 ('Notes on Conceptual Architecture: Towards a Definition.')]. In 71/1 ('From Object to Relationship II; Casa Giuliani Frigerio '), he introduces the notions of conceptual abstraction, transformational method and formal universals. In his article 'Notes on Conceptual Architecture: Towards a Definition' (71/2), Eisenman introduces and defines the notion of Conceptual Architecture, by comparing it with Conceptual Art. In 72/1 and 72/2 ('Cardboard Architecture: House I and House II'), the notion of Cardboard Architecture is introduced, in relation to the Houses I and II. In 73/1 ('Cardboard Architecture'), Eisenman gives his most comprehensive and structured definition of Cardboard Architecture, by describing its four main characteristics: historical analysis, Conceptual Architecture (the 'theory of design'), syntactic structures and Cardboard Architecture (the application of the theory to the buildings). Finally, in 73/3 ('Notes on Conceptual Architecture IIA'), Eisenman points to the limitations of the use of linguistic, semiological and communication models in architecture: in his own theoretical model, the focus is on form and syntactics, rather than on meaning.

29. In his article 'Notes on Conceptual Architecture: Towards a Definition' (71/2), Eisenman analyses the work of conceptual artists (like D. Judd, J. Johns, S. LeWitt, R. Morris and K. Noland, or even M. Duchamps) and confronts them with the work of classical and modern architects (like Palladio, Le Corbusier, G. Terragni, R. Venturi.) Eisenman's interpretation of Conceptual Art is influenced by R. Krauss, who is, still today, the editor of the magazine 'October.'

30. In his article on G. Terragni's *Casa Giuliani-Frigerio* (71/1), Eisenman refers to the 'conceptual' abstractions of P. Mondriaan and K. Malevich, which he opposes to the 'perceptual' collages of J. Gris and F. Leger. By associating the work of G. Terragni with the work of P. Mondriaan and K. Malevich, Eisenman clearly reacts against C. Rowe and R. Slutzky, who made an association between Le Corbusier and Cubism (i.e F. Leger, J. Gris, P. Picasso and G. Braque.) Cf. C.Rowe, R. Slutzky, 'Transparency: Literal and Phenomenal,' *Perspecta*, 1963.

31. Eisenman first uses the terms 'transformational method' and 'transformational structures (71/1, 71/2): later, he prefers to use the notions of ' transformation' or 'process of transformation' (72/1, 73/1).

32. Cf. M. Gandelsonas, a fellow of the IAUS., who introduced questions of semiology and European structuralism. See also, P. Eisenman's 'Notes on Conceptual Architecture IIA' (1973): Eisenman reacts here on the use of linguistic, semiological and

communications models in architecture. Eisenman focuses on the relationship between form and syntactics, rather than on meaning. (Cf. C. Jencks, G. Baird's *Meaning in Architecture*, 1970). The Anglo-Saxon tradition of semiotics, which is founded by C. Peirce (and later developed by C. Morris *et al.*) is based on a triadic structure. The European tradition of semiology, which is founded by de Saussure, is fundamentally based on the dualistic distinction between signifier and signified.

33. Many of Eisenman's new architectural concepts (such as 'deep structure' and 'surface structure', transformational structures/method, universals, markings or conceptual ambiguity) are partly borrowed and adapted from Chomky's own terminology (besides 'deep structure' and 'surface structure', 'transformational grammar', 'universals', 'phrase markers', or 'structural ambiguity'.) Cf. N. Chomsky, *Syntactic Structures* (1957), Aspects of the Theory of Syntax (1965), Cartesian Linguistics (1966), Language and Mind (1968).

34. Cf. 71/2, pp. 23-24. "The task for a conceptual architecture as opposed to conceptual art would be not so much to find such a sign system or a coding device, where each form in a particular context has an agreed-upon meaning, but rather, it would seem more reasonable to investigate the nature of what has been called formal universals which are inherent in any form or formal construct. These universals might act in specific cases in such a way to provide references which are understood in the mind, i.e., conceptually, and which take on significance (i.e., in a syntactic as opposed to semantic sense) by virtue of their existence, and their capacity to be described and differentiated from other like structures. These deep structures, when used intentionally in an architecture-for example, in the form of spatial sequences - might give to functional requirements a primary conceptual aspect and further, a potential for new meaning admittedly, in the present state of such investigations, of a very low order without the presence of an actual code. A more difficult task would be to find a way of giving these conceptual structures the capacity to engender more precise and complex meanings merely through the manipulation of form and space. This would require some form of transformational method – where the universals of the conceptual structure are transformed by some device to a surface structure and thus capable of receiving meaning. Whether it is possible to develop such transformational methods and at the same time to reduce both the existing semantic and cultural context of any architecture to produce a structure for a new sign system, seems to be a central problem for a conceptual architecture."

35. Cf. LeWitt, Sol. "Paragraphs on Conceptual Art." In Zevi, Adachiara, ed. Sol LeWitt. Critical Texts. Rome: I Libri di A.E.I.U.O., Incontri Internazionali d'Arte, Editrice Inonia, 1994, p.81.

36. For Sol LeWitt, "Art that is meant for the sensation of the eye would be called perceptual rather than conceptual...Since the function of conception and perception are contradictory (one pre-, the other post fact) the artist would mitigate his ideas by applying subjective judgment." And further, he says that "Three-dimensional art of any kind is a physical fact. This physicality is its most obvious and expressive content. Conceptual art is made to engage the mind of the viewer rather than his eye or emotions. The physicality of a three-dimensional object then becomes a contradiction to its non-emotive intent. Color, surface, texture, and shape only emphasize the physical aspects of the work. Anything that calls attention to and interests the viewer in this physicality is a deterrent to our understanding of the idea and is used as an expressive device." Cf. LeWitt, Sol. 'Paragraphs on Conceptual Art,' o.c., ibidem.

37. Cf. 70/1 (syntactical and conceptual level of deep structure vs. semantic and perceptual level of surface structure). Cf. 70/2 (conceptual-semantic and conceptual syntactic). Cf. 71/2 (perceptual semantics and syntactics; conceptual semantics and syntactics). Cf. 73/1, 73/3 (dual deep structure). In his early linguistic theory, Chomsky will broaden his vision of 'deep structure,' which was first only concerned with 'syntactic structures,' in order to include the semantical level of meaning.

38. Sol LeWitt's concern with 'modular cubes,' 'open cubes,' 'wall grids,' 'nine-square grids' or primary colors have had a considerable impact on Eisenman's interest for solid/void grid-and-cube structures, sequential series and primary colors. In his 'Notes on Conceptual Architecture: Towards a Definition'(71/2), Eisenman only mentions some of Sol LeWitt's works, like his 'modular cube' or his 'Serial Project ABCD 9' (1966). The 'modular cube' was inspirational for Eisenman's own use of nine-square grid structures (like in the Houses IV and VI). LeWitt's 'Serial Project ABCD 9' and the related 'Serial Project #1 (ABCD), both of 1966, are particularly interesting in that they are working on the successive modulation and scaling of solid and void cubes on a grid ground pattern: they can be seen as a source of inspiration for Eisenman's later concern with scaling and solid-void relationships. For instance, one can make a comparison between the 'Serial Project ABCD 9,' whose modulation is based on the inversed pairing of solidand-void cubes, and House X, in which four quadrants are decomposed in a series of non-linear pairings of solid-void el-forms. But there are many more examples that can come to mind, like his 'Cubes with Hidden Cubes' of 1968 (which can be compared with Fin d'Ou T Hou S), his larger 'open cubes' or structures (which reminds of Eisenman's scaffolding in the Wexner Center) and even his 'Incomplete Open Cubes' of 1974 (which can be related to Eisenman's 'el-form'). One can even compare Eisenman's first article on 'Notes on Conceptual Architecture: Towards a Definition'(70/2), which consisted only of four pages of footnotes with Sol LeWitt's paper art of 1972, where he drew a series of blue, green and red lines on a printed page ("From the World "Art": Blue Lines to Four Corners, Green Lines to Four Sides, and Red Lines Between the Words "Art" on the Printed Page, 1972). Where Eisenman dropped the text and kept the footnotes, Sol LeWitt is keeping the text and drawing lines on the printed text.

39. For instance, R. Morris' installation with L-beams (New York, 1966) was a source of inspiration for his el-form, while Morris' installations with felt-surface (Untitled, 1967, at the Guggenheim Museum of New York) were inspirational for Eisenman's own concept of the fold. Eisenman's interpretation of conceptual art (71/2) was also inspired by R. Morris' series of four articles on 'Notes on Sculpture,' which were all published in the magazine October in 1966. In this series of articles Morris speaks about the difference between objects, structures and sculpture (cf. part 3), about the object-space relationships (namely the effect, in terms of size and proportion, of large objects in small spaces), about the object-subject relationships and about the figure-ground relationships. Morris speaks about typical formal and spatial relationships like flatness, compression, extension or the relation to the edge. Like Sol LeWitt, Morris is also reacting against the depictive illusionism of Cubism and referring instead to the Dutch and Russian Avant-Garde (P. Mondriaan, K. Malevich). Many of those references and concepts can be found in Eisenman's own 'Notes on Conceptual Architecture' (71/2), whose title explicitly refers to Morris' own 'Notes on Sculpture.' By exhibiting large sculptures and structures in a small room, Morris wants to question the relationships of size, placement and proportion between the objects and the walls or corners of the room. He wants to remove the object from the figurative perception and create a shift from the traditional figurative figure-ground perception to a visual field. This particular problematic of the figure-ground relationship will become crucial in Eisenman's later work of the eighties, namely when he speaks about the dislocation of the figure-ground relationship and about 'figure-figure' relationships.

40. For instance, in his article on Conceptual Art, 'Notes on Conceptual Architecture: Towards a Definition' (71/2), Eisenman makes an explicit reference to the writings of R. Morris and Sol LeWitt. Besides the explicit reference of the title, which echoes R. Morris' own 'Notes on Sculpture' (*October*, 1966), one can find many references to Sol LeWitt's 'Paragraphs on Conceptual Art,' (*Artforum*, 1967) which is generally regarded as the first 'official' statement on Conceptual Art.

41. For Sol LeWitt, "Architecture and three-dimensional art are of completely opposite nature. The former is concerned with making an area with a specific function. Architecture, whether it is a work of art or not, must be utilitarian or else fail completely. Art is not utilitarian. When three-dimensional art starts to take on some of the characteristics, such as forming utilitarian areas, it weakens its function as art." Cf. LeWitt, Sol. 'Paragraphs on Conceptual Art,' *ibid*.

42. According to Sol LeWitt, "Art that is meant for the sensation of the eye primarily would be called perceptual rather than conceptual. This would include most optical, kinetic, light, and color art. Cf. also, footnote 36. Since the functions of conception and perception are contradictory (one pre-, the other postfact) the artist would mitigate his idea by applying subjective judgment to it." ..."Three-dimensional art of any kind is a physical fact. This physicality is its most obvious and expressive content. Conceptual art is made to engage the mind of the viewer rather than his eye or emotions. The physicality of a three-dimensional object then becomes a contradiction to its non-emotive intent. Color, surface, texture, and shape only emphasize the physical aspects of the work." Cf. LeWitt, Sol. 'Paragraphs on Conceptual Art,' *ibid*.

43. "In conceptual art the idea or concept is the most important aspect of the work. When an artist uses a conceptual form of art, it means that all of the planning and decisions are made beforehand and the execution is a perfunctory affair. The idea becomes a machine that makes the art. This kind of art is not theoretical or illustrative of theories: it is intuitive, it is involved with all types of mental processes and it is purposeless." Cf. LeWitt, Sol, *ibid*.

44. Cf. LeWitt, Sol, ibid.

45. Cf. 71/2, pp. 23-24.

46. According to LeWitt, "it doesn't really matter if the viewer understands the concept of the artist by seeing the art." Cf. LeWitt, Sol, *ibid*.

47. In House II, for instance, Eisenman plays on the dialectics between two different structural systems, a wall-system and a column-grid system, which are superposed upon each other. By creating this structural redundancy, Eisenman wants to create an ambiguous and excessive condition of meaning, which plays on the conceptual bivalency between two mental constructs. In another example, House IV, Eisenman is playing on the dialectics between three different spatial sequences (of cubes, planes and grids), which are interfering and interacting with each other. In House VI, finally, these oppositions are put to a climax: the inversion of spatial relationships (center/periphery, inside/outside, frontal/oblique, top/bottom etc.) is obtained by inversing a set of cubes,

planes, grids and staircases, which are marked in a different color.

48. Usually, these marks can be deduced from the relationships or inflections between elements (e.g. juxtaposition, shift, erasure, missing column) or from the use of different colors (e.g. grey vs. white, red and green) or materiality (e.g. solid or void, transparent, wire-frame structure).

49. Cf. 73/3.

50. Cf. Hays, K. Michael. Architecture Theory since 1968. Cambridge, Mass.: The MIT Press, 1998, p. 240.

51. After the publication on the 'Five Architects' (New York, Museum for Modern Art, 1972) which presented the work of five New York architects (P. Eisenman, M. Graves, C. Gwathmey, J. Hejduk and R. Meier), R. Stern published a polemical response in the *Architectural Forum*, labeled 'Five on Five' (*Architectural Forum*, May 1973). P. Eisenman and R. Stern co-edited a special *A+U* issue on "White and Gray: Eleven Modern American Architects" (A+U, April 1975). R. Stern presented the Grays, while P. Eisenman presented the Whites.

52. The co-editors of *Oppositions* are P. Eisenman, M. Gandelsonas, A. Vidler, K. Foster and K. Frampton.

53. For instance, in his article 'Aspects of Modernism: Maison Dom-ino and the self-referential sign' (80/1), Eisenman speaks about the intrinsic architectural qualities of slabs/planes (as horizontal data), beams (beamness), walls (wallness) or planes (planeness), which are considered as mute self-referential signs.

54. Cf. 76/1.

55. Cf. 78/1. According to Eisenman, the formal oppositions within the figure of the Mandala form (like, for instance, the opposition between circle and square, symmetry and asymmetry, center and edge etc.), are also the expression of deeper conceptual and cultural oppositions (like, for instance, the opposition between conscious and the unconscious, the individual and the collective etc.).

56. Cf. 78/1.

57. Unfortunately, House X will never be constructed, but, Eisenman will dedicate an entire publication on House X, in which he makes an elaborate description of its formal and theoretical implications. Cf. 80/7 (*'Transformations, Decompositions and Critiques: House X.'*)

58. LeWitt's 'Serial Project ABCD 9' and the related 'Serial Project #1 (ABCD)', both of 1966, are working on the successive modulation and scaling of solid and void cubes on a grid ground pattern: they can be seen as a source of inspiration for Eisenman's later concern with scaling and solid–void relationships. For instance, one can make a comparison between the 'Serial Project ABCD 9,' whose modulation is based on the inversed pairing of solid-and-void cubes, and House X, in which four quadrants are decomposed in a series of non-linear pairings of solid-void el-forms.

59. On decomposition, cf. 80/7. On not-classical architecture, cf. 84/1.

60. According to Eisenman (cf. private conversation), the concept of the el-form was inspired by an installation of the conceptual artist R. Morris, but, it can also be associated with one of Sol Lewitt's versions of the 'incomplete open cube.'

61. In a sense, the design of Fin d'Ou T Hou S could be compared with one of Sol LeWitt's installations (namely his 'Cubes with Hidden Cubes' of 1968), which shows some similar features (like the nesting of different scaled volumes, or the relationship between the scaled volumes and the ground-grids which are marked into the ground.

62. The Cannaregio project is the result of a limited contest (organized by the City of Venice and the University of Venice (IAUV) in 1978), which included the participation of architects that were close to the 'School of Venice' (namely the Institute of Architectural History with M. Tafuri and F. Dal Co a.o.) and the Institute for Architecture and Urban Studies (like J. Hejduk, R. Moneo, R. Abraham or P. Eisenman). The contest was organized as a reaction against the upcoming tendency to make a contextual and historical interpretation of architectural and urban context. The outcome and panel of this contest singularly contrasts with the *Roma Interrotta* Competition of 1978 which invited 12 architects (with, among others, C. Rowe, A. Rossi, L. and R. Krier, P. Portoghesi. M. Graves) to work on the Nolli plan of Rome.

63. Cf. 80/6.

64. The Mercator Grid is first used as a tool of excavation which uncovers the archeological memory of the site (i.e. the historical walls of Berlin) and then as an artificial tool of superposition and substitution, which is obtained by extruding the figure of the Mercator Grid so that it creates a second set of artificial walls. Cf. 83/1.

65 Cf. 85/2. In the *Romeo and Juliet* project, for instance, fictional elements (such as Romeo's Castle and Juliet's house and tomb) are scaled and superposed on the historical site of Romeo's and Juliet's Castles. The fictional elements are reproduced at three different scales, in analogy with the three existing versions of the story of Romeo and Juliet.

66. On 'self-similarity' and 'recursivity', cf. 85/2, 86/1.

67. Cf. 83/1, 85/1.

68. Eisenman's contacts with the 'School of Venice' at the end of the seventies, were critical for the new formal approach engaged with the Cannaregio Project in 1979. In the framework of his theoretical involvement at the IAUS, Eisenman wrote two articles on Aldo Rossi's work, which involved a great deal of analysis of Rossi's urban, architectural and historical research strategies, such as the analogous method of 'Analogous City', history and memory. It is probable that these Venetian influences were crucial for the development of an analogous and conceptual reading of the site as a superposition of text, i.e. as a palimpsest which contains both traces of memory and immanence.

69. Whereas post-modernist architects (like M. Graves, R. Stern, J. Stirling etc.) are making a humoristic and disproportional representation of classical and historical architectural elements (like columns, cornices, capitals, entablures, arcades, tympanum, window frames and portals etc.), Eisenman is starting from the scaling and superposition of artificial elements from the site (like grids, city grids/walls, geographical elements, narrative elements etc.).

70. One of the main differences between Eisenman's structuralist and the post-structuralist approach is that the former starts from the assumption that the 'deep structure' of architecture can be made understandable by the use of a formal process of transformation, while, in the latter approach, architecture is rather defined with the more elusive terms of difference and absence.

71. Cf. Foucault, Michel. The Order of Things: An Archeology of the Human Sciences. New York: Vintage/Random House, 1973. In this publication, M. Foucault introduces the notion of *episteme*, which he later describes as: "the total set of relations that unite, at a given period, the discursive practices that give rise to epistemological figures, sciences, and possibly formalized systems...The *episteme* is not a form of knowledge

(connaissance) or type of rationality...: it is the totality of relations that can be discovered, for a given period, between the sciences when one analyses them at the level of discursive regularities." Foucault associates the *episteme* with three historical epochs: the Renaissance (15th C.), the Classical Age (17th C,) and Modernity (19th C.) The basic organizing principle of the Renaissance episteme is resemblance: the episteme of the Classical age turns on the relation of representation and mathesis; the episteme of Modernity is characterized as the Age of Man, when man becomes a subject and object of his own knowledge. Eisenman transposes the classical *episteme* to the Renaissance period, and, especially to the Renaissance architecture, which introduced representation and perspective into architecture. (M. Tafuri also coined the classical *episteme* with the Renaissance Period, but emphasized instead the idea of crisis.) Eisenman plays thus on the semantic ambiguity of the notion of classical, which has a different meaning in architecture (15th C. classical architecture) than in history (Classical Age). Compare with, 99/1 (diagrams of anteriority).

72. Cf. Derrida, Jacques. *Of Grammatology*. Baltimore and London: The John Hopkins University Press, 1974, pp. *Ivii* and 73, 163.

73. Cf. 86/2, 87/2.

74. On the 'paradox of disclocation', cf. 87/2, 88/3.

75. Cf. 90/1. 'Presentness' is defined as an excessive condition between sign and being: it is neither absence, nor presence, neither form nor function, neither sign nor reality. Eisenman's notion of presentness though, is different from M. Fried's similar notion.

76. Cf. 88/1, 88/3 ,88/5.

77. Cf. 88/1, 88/5.

78. Derrida's 'post-structural' approach, which in a sense continues the Saussurian linguistic project initiated by structuralism, tends to undermine the typical Hegelian dialectics of the structuralist approach.

79. For instance, in the Carnegie Mellon Research Institute, and later in the Max Reinhardt Haus, the cubes are used as basic elements, whereas the el-shapes are used in the Guardiola House, the Koizumi Sangyo Office Building and the Nunotani Office Building.

80. For instance, the scientific processes can be inspired by the concept or function of the project, like in the Center for biotechnology in Frankfurt (Biocentrum), which is inspired by the DNA processes, the Carnegie Mellon Research Institute, which is inspired by mathematical research on Boolean operations, or the Groningen Music-Video Pavilion, which is associated with the scanning processes of video's. Other projects are rather inspired by the location of the project, like the Nunotani Office Building, whose processes are derived from the earth quake movements that are so typical for Japan or the Columbus Convention Center, whose processes are associated with the railways and highway ribbons of its location.

81. Cf. Biocentrum (fractal geometry), Carnegie Mellon Research Institute (Boolean geometry), Aronoff Center for the Arts (box geometry). The so-called 'box geometry' (which is an invention of Eisenman) involves a series of processes that can be associated with dynamic processes in mathematics and physics (like 'exponential overlap', 'asymptotic tilt or shift', 'exponential torque' and 'phase shifting').

82. Cf. Guardiola House, Carnegie Mellon Research Institute, Koizumi Office Building, Banyoles Olympic Hotel, Groningen Music-Video Pavilion. A typical example is the

Guardiola House, which starts from the consecutive series of oscillations of el-shapes through a series of mutual imprints and traces, or the Carnegie Mellon Research Institute, in which the series of successive solid-void cubes are leaving imprints and traces upon each other.

83. All the processes (e.g. overlap, torque, twist, shifts, rotations) are serialized in analogy with scientific processes in the field of physics (turbulence, phase transition) and mathematics (algorithms, asymptotes, exponentials).

84. The scientific references are now more used for the realization of diagrams. Generally, these scientific references are related to the fields of physics, chemistry (suspension, crystalline mutation), biology and mathematics (topology, Boolean operations), especially these new cross border fields such as chaos theory (fractal, Möbius), bio-genetics (DNA processes, genetic coding and mapping) or theories of complexity (turbulence, phase transition, dynamic systems, implosive systems).

85. To give an idea of these scientific diagrams, one can refer to the following projects: Rebstock Master Plan (catastrophe fold), Emory Center for the Arts (musical waves of harmonics), Max Reinhardt Haus (mutations of crystals, Möbius ring), Nordliches Derendorf Master Plan (radio and radar waves), Haus Immendorff (water soliton waves), Klingelhofer Triangle (watch mechanism and computer chips), Church for the Year 2000 (molecular diagram of liquid crystal), United Nations Library (brain waves).

86. The relative late reception of Deleuze's work in the Anglo-Saxon world can partly be explained by the fact that most of his work has not been translated in English before the late eighties. While his recent work with Guattari has been relatively quickly translated in English, his older works, like 'Repetition and Difference', have only been translated in the nineties. In comparison, J. Derrida's works have been translated from the mid-seventies onwards.

87. Cf. the special issue of *Architectural Design* on 'Folding in Architecture' (AD, 1993), with contributions by Jeffrey Kipnis, Greg Lynn and Peter Eisenman *et al.* See also the more general publication Di Cristina, Giuseppa, ed. *Architecture and Science*. London: Wiley-Academy, 2001.

88. As G. Kipnis pointed out, Eisenman projects the grids of the extended site and the parti on the figures formed by the boundaries of the sites, which creates the representational illusion that those two organizations have been folded. The drawing, which is neither axonometric nor perspectival or folded, is then massed as the project, which "transforms the modern architectural space into a visual space that hovers between the axonometric and perspectival space with multiple vanishing points." Cf. G. Kipnis, "Towards a New Architecture," in G. Di Cristina, *Architecture and Science, o.c.*, p. 23. 89. On 'tri-dimensional plan of projection', cf. 91/3.

90. For instance, in House VI, and later with the el-form (House X), Eisenman experimented with the diagonal topological axis; in the Cannaregio project, the site is considered as a rubber-like topological surface which is folded on the diagonal (topological diagonal), and, with House 11A, the house is conceived as a topological surface or *Möbius* strip.

91. On Deleuze's reference to the Koch curves, cf. Deleuze, Gilles. *Le Pli, Leibniz et le Baroque*. Paris: Les Editions de Minuit, 1988, p. 23.

92. Among the various references, Eisenman refers to the work of J.-F. Lyotard (matrix), R. Krauss (grid, matrix), M. Blanchot (gaze), W. Benjamin (the work of art in the Age of mechanical reproduction), R. Thom (catastrophe fold), K. Karatani (thisness).

 In his first chapter Deleuze refers, a.o., to Leibniz' concepts of the Baroque, the fold and monadology. He starts his second chapter with references to P. Klee's point-fold,
 Cache's inflections and transformation, R. Thom's Morphology, Koch's curves and
 Mandelbrot's fractals. Cf. Deleuze, Gilles. *Le Pli, o.c.*, Chapter one and two.

94. G. Deleuze speaks about the fold in his publications on 'Foucault' and 'Le Pli' (The Fold), which were respectively published in 1986 and 1988 (French publication). Previously, G. Deleuze and F. Guattari referred, in their joint publication *A Thousand Plateaus* (G. Deleuze, F. Guattari, 1980), to the notions of the manifold, the Riemann space and 'smooth space', which could be considered as the forerunners of Deleuze's later notion of the fold.

95. Cf. Deleuze, Gilles and Guattari, Félix. *A Thousand Plateaus, Capitalism and Schizophrenia.* Minneapolis: University of Minnesota Press, 1987, p. 485 *et al.* "In short...Riemannian space is pure patchwork. It has connections, or tactile relations. It has rhythmic values not found elsewhere, even though they can be translated into a metric space. Heterogeneous, in continuous variation, it is a smooth space, insofar as smooth space is amorphous and not homogeneous."

For Deleuze and Guattari, the mathematical model of the smooth is defined by the topology of Riemann's differential or smooth manifolds. As Riemann's space, their notion of 'smooth space' is topological, heterogeneous, multi-mapped and multi-connected. One can define the 'manifold' as "a kind of patchwork of (local) spaces, each of which can be mapped by a (flat) Euclidian, or Cartesian, coordinate map, without allowing for a global Euclidian structure of a single coordinate system for the whole, except in the limited case of a Euclidian homogeneous space itself. That is, every point has a small neighborhood that can be traced as Euclidean, while the manifold as a whole cannot."

96. Cf. Deleuze, Gilles. *Foucault*. Minneapolis: The University of Minnesota Press, 1988. The original text is published in French. Cf. Deleuze, Gilles. *Foucault*. Paris: Les Editions de Minuit, 1986.

97. Cf. Foucault, Michel. The Archaeology of Knowledge, and The Discourse on Language. New York: Pantheon Books, 1972, p. 105.

98. Cf. Grosz, Elisabeth. *The Architecture of the Outside*. Cambridge, Massachusetts, London, England: The MIT Press, 2001, p. 67 *et al*.

99. Cf. 'Les replis de la matière' (Chapter 1) and the 'Les plis dans l'âme' (Chapter 2). Cf. Deleuze, Gilles. *Le Pli, o.c.*, pp. 5-37.

100. The lower floor, the regime of matter, is in and of the world (i.e. with many windows on/in the world) and folded in the manner of an origami; the upper floor (soul) is closed on itself, without windows or openings and contains the innate folds of the soul. Between both floors, there is a fold. The upper chamber paradoxically contains the Whole of the world within itself. Cf. Deleuze, Gilles. *Le Pli, o.c.* See also, Parr, Adrian, ed. *The Deleuze Dictionary*. Edinburgh: Edinburgh University Press, 2005, pp. 102-104. 101. Cf. 91/3, 92/2, 92/3, 93/1.

102. Cf. 92/2. Here, Eisenman loosely refers to J.-F. Lyotard's and R. Krauss' interpretation of the matrix. See also Hal Foster's 'Vision and Visuality', where R. Krauss narrates how Lyotard sees the matrix at work in one of Freud's cases. Cf. Foster, Hal, ed. *Vision and Visuality.* Dia Art Foundation: Discussion in Contemporary Culture, No. 2. (October, 1988). New York: New Press, 1998.

103. On the urban dimension of the fold, cf. 91/3, 91/4 .

104. On the issue of media, cf. 91/3, 91/4, 92/1, 92/3.

105. Cf. Virtual House, the Staten Island Institute, the Bruges Concert Hall, Santiago Cultural Center and the *Musée du Quai Branly*.

106. On the issues of the interstitial, interstitial space and interstitial figures, cf. 97/2, 97/4, 98/2.

107. Cf. 98/2, 99/1. One can assume that, in his last article on "The processes of the Interstitial" (98/2), Eisenman intended to use the notion of the 'trope' as a counter-argument in the upcoming debate on the 'diagram,' certainly if one considers that this article was initially presented as a paper at the *Any Conference* in Rotterdam, where the topic of the 'diagram' was debated.

108. On the issue of spacing, cf. 95/2, 95/3, 96/1, 97/2, 97/3, 98/1.

109 On the issues of spacing and writing, cf. 95/2, 95/3, 97/2, 97/3, 97/4, 98/1.

110. Cf. 98/2, which was presented at the *Anyhow Conference* in Rotterdam (1998). Cf. also footnote 107. In his contribution to the conference, J. Rajchman proposed a 'new pragmatism' which he calls a 'pragmatism of diagram and diagnosis'.

111. Cf. Eisenman, Peter. 'Processes of the Interstitial: Notes on Zaera-Polo's Idea of the Machinic,' *El-Croquis*: Peter Eisenman 1990-1997, No.83 (1997), pp. 68-79. In this article, Eisenman responds to Zaera-Polo's assumption (in another article published in the same magazine) that his design strategy would be based on a machinic design process. Cf. also, Eisenman, Peter. 'Diagram: An Original Scene of Writing.' *Any*, No. 23 (1998): pp. 28-29. Here, Eisenman reacts to R.E. Somol's definition of a machinic diagram, as a "machinic environment of matter, flows and forces." A. Zaera-Polo and R.E. Somol refer to Deleuze's concept of the 'machinic.' R.E. Somol's definition of the diagram refers to Deleuze's interpretation of Foucault's diagram in G. Deleuze's book on '*Foucault*.'

112. Cf. 98/1, 99/1, 99/2, 99/3, 99/4. Cf. Eisenman, Peter. Diagram Diaries. London: Thames & Hudson, 1999. The publication also includes an introduction by R.E. Somol-to which Eisenman partly reacts in his own writings-and an earlier writing on the "Diagram: An Original Scene of Writing" (98/1), which was previously published in the magazine Any, No. 23, entirely dedicated to the question of the diagram. Cf. Eisenman, Peter. "Diagram: An Original Scene of Writing." Any, No. 23 (1998): pp. 28-29. This issue of the Any was edited by C. Davidson and guest-edited by B. van Berkel and C. Bos, and contains, among others, contributions from S. Allen, B. van Berkel & C. Bos, R.E. Somol, G. Lynn and S. Kwinter, who were among those who actually launched the issue of the diagram in the first place. In a sense, this issue of the Any officially launched and promoted (but also exhausted) the whole notion of the diagram. 113. Cf. 98/1. According to Eisenman, Foucault's 'archive' could be described as a historical record of history, and 'archeology', as the scientific study of archival material. Anteriority and interiority can also be considered as written traces or incisions and as sums of repressions. For Eisenman, "anteriority is the accumulation of the tropes and rhetoric used at different periods in time to give meaning to architecture's discourse." 114. Cf. 99/1. For each of these periods and architects, Eisenman comes up with a particular achievement of architecture's anteriority. For instance Alberti is credited as the first architect to introduce anteriority and representation, while Brunelleschi introduced exteriority (i.e perspective). Palladio is the first to introduce a new idea of representation (presentness) which is based on the fusion (and transgression) of anterior and vernacular elements. These descriptions of the earlier stage of the diagrams of anteriority (in the Renaissance), further develop Eisenman's earlier description of the birth of the trope of the interstitial, which he described in his previous article on "the Processes of the Interstitial' (98/2). Although these references to the Renaissance Architecture are not really referring to a particular type of diagram, they clearly relate to the tradition of historical tropes and critical architecture, contrary to Eisenman's other references to the type (Durand), the parti (*Beaux-Arts*) and the bubble diagram (*Bauhaus*), which are clearly referring to the anteriority of the diagram.

115. Cf. 99/1. In this text, Eisenman is also clearly referring to the tradition of critical design, since he considers the diagram as a means to open up the anteriority and interiority of architecture: in this perspective, it can be useful to refer to his earlier writings (especially 'Forming the Postcritical', 96/2), where he refers to the historical tradition of critical architecture (with references to Piranesi, Schinkel, Ledoux and Le Corbusier). 116. Cf. 99/2.

110. CI. 99/2.

117. Cf. 99/2.

118. Cf. 99/2. For instance, the diagrams of House I, are resulting from a process of marking the absence of presence. The diagrams of House II are expressing an indexical condition of excess, those of House III are blurring hierarchical readings and perceptions, and those of House IV are redefined as indexical signs of presentness/absence, and as traces of a non-linear and non-hierarchical process.

119. Cf. 99/2. In his House X, the diagram of decomposition is described as a manifold condition of unformed and complex matter, which diffuses a fluctuating and oscillating reading. The 3D model of House EI Even Odd produces a confusion of an axonometric and stereometric perception, and the Fin d'Ou T Hou S reads as an indexical writing.

120. Cf. 99/3.

121. Cf. 99/3.

122. Cf. 99/3 (Cannaregio, House 11a, IBA Social Housing, Wexner Center, Romeo and Juliet Project, Biocentrum, Long Beach University Art Museum, La Villette, Guardiola House, Rebstock Master Plan, Tours Art Center, Church for the Year 2000, United Nations Library).

123. Cf. Guardiola House (space between), Tours Art Center (between figure), Church for the Year 2000 (blurring, interstitial space), United Nations Library (blurring, interstitial space). Strangely, Eisenman doesn't mention here one of his most famous projects, the Aronoff Center for the Arts.

124. In the following projects, the diagram is considered as a 'virtual engine': the Virtual House, the Bruges Concert Hall, the Staten Island Institute of Arts and Science, the I.I.T. Center, the Berlin Memorial, the Santiago Cultural Center or, to a lesser degree, the Paris Museum. Most of these projects, are designed with a specific CAD 3-D program, like Maya (which was first used in the Virtual House) or 3D Studio Max (first used in the Bruges Concert Hall).

125. Cf. 99/3.

126. On the issue of the 'diagram as Writing Pad', cf. 98/1.

127. The design starts from the diagrammatic interaction of two moving cubes, whose movements are synchronized and interacting through the mediation of the latest CAD motion techniques of the *Maya* software (from *Alias* Company). On the Virtual House, cf. Noever, Peter, ed. *Peter Eisenman: Barfuss auf Weissen Gluhenden Mauern. Barefoot on White-Hot Walls.* Vienna: MAK Wien, 2004, pp. 92-95. Cf. also, Rocker,

Ingeborg. "The Virtual: the unform in architecture." Any No. 20 (1997), pp. 22-23.

128. On the I.I.T. Student Center, cf. Davidson, Cynthia. *Tracing Eisenman. Peter Eisenman: Complete Works*. London: Thames & Huson Ltd., 2006. p. 260.

129. On the Staten Island Institute of Arts and Science, cf. Davidson, Cynthia. *Tracing Eisenman. Peter Eisenman: Complete Works.* New York: Rizzoli International Publications, Inc., 2006. pp. 264-269. On the IFCCA Prize Competition For the Design of Cities, cf. Davidson, Cynthia. *Tracing Eisenman. Peter Eisenman: Complete Works.* New York: Rizzoli International Publications, Inc., 2006. pp. 298-303.

130. The diagrams of the Bruges Concert Hall are actually based on a computer animation of a series of hydrological and hydrographic maps of the coast line, which, once superposed upon each other, are put into motion. In the Santiago Cultural Center, the diagrams are based on the superposition of three types of maps (the plan of the medieval city, the 'pilgrimage route' and the city symbol of the shell.

131. On the Berlin Holocaust Memorial, cf. Eisenman, Peter. Noever, Peter, ed. *Peter Eisenman: Barfuss auf Weissen Gluhenden Mauern. Barefoot on White-Hot Walls.* Vienna: MAK Wien, 2004, pp. 156-159. Cf. also, Davidson, Cynthia. *Tracing Eisenman. Peter Eisenman: Complete Works.* New York: Rizzoli International Publications, Inc., 2006. pp. 290-297.

On the Musée du Quai Branly (Musée de l'Homme), cf. o.c., pp. 304-307.

132. Cf. Eisenman, Peter. "Diagram: An Original Scene of Writing." *Any* No. 23 (1998), pp. 28-29.(98/1) According to Derrida's 'Writing and Difference' (Chicago: The University of the Chicago Press, 1978), Freud's Mystic Writing Pad consists of three layers: an outer surface on which the original writing takes place, a middle layer on which the writing is transcribed and an underlying tablet of impressionable material. When the upper surface is written on and then lifted up, the middle layer is cleared from all traces, but traces of the original writing remain on the bottom tablet. For Eisenman, the diagram is analogous to Freud's three-layered Mystic Writing Pad where traces written on the upper layer remain on the bottom layer.

133. On the conditions of the diagram, cf. 98/1, 99/4.

134. On 'the diagram and the becoming unmotivated of the sign', cf. 99/4.

135. On the diagram as the expression of a critical practice, cf. 99/3.

136. On the issue of critical architecture, cf. 95/1, 96/2, 97/1, 99/1.

137. On 'repetition of difference, cf. 98/1, 99/1.

138. On 'presentness', cf. 99/1.

139. Cf. 97/2, 97/4 and especially 98/2, which was presented at the *Anyhow* conference in Rotterdam in 1998.

140. On the issue of the 'machinic', cf. 97/2. On the 'processes of the interstitial', cf. 98/2.

141. The *Any* magazine is published six times a year by the *Anyone Corporation,* who also organized the series of 11 *Any*-conferences (1991-2000). The magazine is edited by Eisenman's wife, C. Davidson, and the editorial board is located within the office of Eisenman Architects. For this special issue on the diagram, C. Davidson invited as guest-editors one of the most diligent promoters of the diagram, B. van Berkel and C. Bos, who run the office UN Studio of Rotterdam (Netherlands). Cf. also, footnote 112. 142. In 99/1 ('Diagrams of Anteriority') architecture's 'anteriority' is defined as "the accumulated history and knowledge of all previous architectures, i. e. the tropes and rhetoric used at different periods of time to give meaning to architecture's discourse." In 99/2

('Diagrams of Interiority') Eisenman defines architecture's singular interiority as "the unique relationship between its instrumentality and its iconicity, between architecture's function and its meaning, and...between its sign and its signified." In 98/1 ('Diagram: An Original Scene of Writing'), anteriority and interiority are defined as architectural translations of Foucault's archive and archeology in which traces are written as incisions on parchment.

143. Cf. 98/1, 97/2.

144. As we have seen, Eisenman extensively develops this argument in most of his writings on the diagram (especially 98/1, 99/1 and 99/4). Cf. *supra, sub* pp. 70-71).

145. On the difference between architecture and language, cf. 63/1, 71/1, 71/2, 86/4, 87/1, 87/2, 88/1, 90/1 a.o. The main difference between architecture and language is due to the fact that architecture relies on the necessary presence and objecthood of its object, as opposed to language.

146. On 'the diagram and the becoming unmotivated of the sign', cf. 99/4.

147. Charles Peirce, the founder of the American School of Semiotics, elaborated, contrary to de Saussure's dyadic of signifier- signified relationship, a triadic model of the sign, based on the dynamic relationship between 'sign' (representamen), 'object' and 'interpretant'. For all three elements of the sign triad, Pierce identifies three formal aspects: 'firstness' (mere casual possibility), secondness (brutal fact) and thirdness (general law). The 'object' can be qualified as 'icon' (firstness), 'index (secondness) or 'symbol' (thirdness): an object can be perceived as an icon (the object relates to its object in some resemblance with it, e.g. a photograph), an index (the sign related to its object in terms of causation, e.g. a medical symptom), or a symbol (the sign relates to its object by means of convention, e.g. a word). Cf. Nöth, Winfried. *Handbook of Semiotics*. Bloomington and Indianapolis: Indiana University Press, 1995, p. 45. Eisenman's differentiation between indexical and iconic signs, and indexical and iconic writing, relies more on a dyadic contrast between a writing that refers to its own internal sign condition (indexical writing) and a writing that refers to something external (iconic writing). Cf. 95/2 (M Emory Games).

148. Cf. 71/1, 71/2.

149. Pictures from: Nöth, Winfried. *Handbook of Semiotics*. Bloomington and Indianapolis: Indiana University Press, 1995. [Fig. S.3. The three terms in de Saussure's dyadic sign model (p. 60).][Fig. Mo. 2. Three correlates of semiosis and three dimensions of semiotics according to Morris (1939: 417, redrawn (p50)]; [Fig. P2 Peirce's three trichotomies of signs (p45)].

150. See, on this matter: Patton, Paul and Protevi, John, ed. *Between Deleuze & Derrida*. London, New York: Continuum, 2003. It is clear that the late reception and translation of Deleuze's work in the Anglo-Saxon world, has contributed to his late recognition in the nineties, whereas Derrida's work has been translated from the late seventies onwards.

151. Cf. Smith, Daniel W. "Deleuze and Derrida, Immanence and Transcendence: Two Directions in Recent French Thought," In Patton, Paul and Protevi, John, ed. *Between Deleuze & Derrida*. London, New York: Continuum, 2003, pp. 46-66. In terms of philosophical allegiances and orientations, one can recognize, in the work of J. Derrida the importance of Hegel, Husserl and Heidegger, while, in the work of Deleuze other philosophers like Spinoza, Bergson, Nietzsche or Foucault. According to D. W. Smith, Derrida is more within the philosophical tradition of transcendence and 'negative theol-

ogy' (like Heidegger), while Deleuze is closer to the philosophical tradition of immanence and univocity (cf. Duns Scotus, Spinoza, Leibniz and Nietzsche).

152. Cf. Smith, Daniel W. "Deleuze and Derrida, Immanence and Transcendence: Two Directions in Recent French Thought," In Patton, Paul and Protevi, John, ed. *Between Deleuze & Derrida*. London, New York: Continuum, 2003, pp. 46-66. Our argumentation mainly follows the interpretation of D. W. Smith, and hence of the American reception of Derrida, which can be subject of further debate and discussion.

153. Cf. Smith, Daniel W., o.c., pp. 48-50 *et al.* According to D.W. Smith, "Deleuze attempts to develop an immanent ontology, while Derrida's deconstruction necessarily operates on the basis of a formal structure of transcendence." (*Ibid.* p. 48)

154. Cf. Smith, Daniel W., o.c., pp. 50-51.

155. Ibid.

156. Cf. Grosz, Elisabeth. *The Architecture of the Outside*. Cambridge, Massachusetts, London: The MIT Press 2001. p 61.

157. Cf. Grosz, Elisabeth, o.c., p 71.

158. Ibid.

CONCLUSION

This research on the work of Peter Eisenman has been motivated by several questions and objectives. Besides a basic overview of the major themes and concepts of Eisenman's architectural and theoretical work, this research has made a vertical reading of the 'Project Eisenman' and shed a light on the methodological underpinnings of Eisenman's discursive apparatus. Hereby special attention has been paid to the relationship between praxis and theory, the reception of internal and external inputs, and the broader influence of mental frameworks.

At this point, time has come to investigate which conclusions can be drawn with regard to our initial research objectives.

Change and Continuity

A first general observation that one can make, is that Eisenman's work can be defined in terms of change and continuity. On the one hand, his work is caught in a continuous movement of changes and transformations, so that it can be kept actualized and 'on the edge'. On the other hand however, his work is also constantly reworked, reassessed and reevaluated in relation to earlier interests and themes, so that the continuity and consistency of the work can be secured. When one considers the overall development of his work, one can see that Eisenman is constantly reworking and refining his architectural and theoretical investigations: he is continuously rereading and rewriting his earlier statements and assertions, by injecting new insights, thoughts, inputs or references or by adjusting and reformulating his earlier assertions in relation to these new incentives and references. There is thus a constant interaction between the reception of new references and the adaptation of old references, between change and continuity, difference and repetition.

This interaction between change and continuity is resulting from the reception and processing of various inputs and references. These inputs can result from the reception of internal references (i.e. sources of information that are internal to Eisenman's work, or resulting from the recycling or adaptation of his own work) or from the reception of external references (which are resulting from the processing of new sources of information external to the work of Eisenman). They can also result from the reception of disciplinary references (which are internal to the discipline of architecture) or from the reception of extra-disciplinary references (which are transcending the limits of the architectural discipline).

1

In the field of architecture, these inputs are both related to issues of architectural production (or design issues) and issues of theoretical production (i.e. theoretical issues related to the history, critique and theory of architecture). As we will see in our third point, this interaction between the practice of architectural design and its theoretical counterpoint is one of the most characteristic traits of Eisenman's signature. At the same time Eisenman's work is also characterized by a constant interaction between these disciplinary references and extra-disciplinary references, which are resulting from the analysis and exploration of other disciplinary territories, in the field of art, linguistics, philosophy, science, cultural studies etc.

This interactive reception of internal and external, disciplinary and extradisciplinary references can be considered as one of the critical factors in Eisenman's exploration of new design territories and theoretical fields. By making cross-disciplinary associations and analogies with concepts and themes from different disciplines, Eisenman succeeded not only to develop new architectural and theoretical tools and concepts, but also to create a general frame of reference in relation to which his architectural reflection can be pondered. By progressively broadening his scope of interests—from architecture, to arts, linguistics, philosophy and science a.o.—Eisenman succeeded to further develop and articulate his architectural and theoretical reflection, and to situate it within a broader discursive and cultural context. It is this continuous interaction between internal and external, disciplinary and extra-disciplinary, practical and theoretical inputs that are the basis of Eisenman's investigative and explorative attitude, and ultimately defining his characteristic signature.

processing of inputs One should highlight Eisenman's particular manner of processing these inputs and references, which is characterized by its reticular, combinatory and multilayered nature. The actual processing of information is obtained by combining, superposing and layering different inputs and references with each other, in order to create new lines of investigation, or modify and update earlier ones. This continuous web of intersections and interactions of references creates a constant movement of overlaps, slippings, feedbacks and bifurcations, generating a sense of indetermination, complexity, multiplicity and ambiguity. Through this constant action of writing and rewriting, construction and deconstruction, it is not always easy to grasp the fundamental underpinnings of Eisenman's theoretical and architectural assertions, which, by their ever changing, multiple, ambiguous or even conflicting nature, are always drifting and disseminated by the multiple perspectives, theories and practices at work. In this sense, Eisenman's project can hardly be comprehended as a single or general theory, but should rather be considered as an ongoing work-in-progress.

In terms of changes, one can make a distinction between structural changes (i.e. bifurcations) and surface changes. The structural changes are actually implying a critical bifurcation in terms of attitude, and perspective (such as f.i. the evolution from a neo-platonic, to a structuralist and post-structuralist perspective) or a strategic bifurcation in terms of architectural/theoretical strategies (f.i the evolution from formal theory, to conceptual architecture, to artificial excavation etc.). If you consider the diachronic development of these strategies, one can indeed observe that, on the long span, these strategic changes have induced several critical changes of perspectives, in such a way even that many of the initial architectural and theoretical assertions have been drastically transformed, supplemented or even reversed. Since each of these strategic changes are usually corresponding with a change of references and inputs-each strategy having its own specific set of themes, concepts and references-, one would indeed also be tempted to consider these strategic changes as a succession of different architectural 'periods.' Yet, from our research, we have been able to observe that, besides some deeper structural changes of the longue durée, most changes are actually only inducing some rhetorical or surface changes, in that they are actually based on adaptations, reformulations or combinations of earlier themes and concepts. As we will see in our following point, most of these surface changes can be situated in the continuity of earlier thematic lines of investigation, so that we can actually speak about thematic 'constants and variables'.

To conclude, one could state that the most critical structural changes are actually related to the reception of contemporary frames of thought, which shifted from neo-platonism, via structuralism to post-structuralism. As we have seen, Eisenman's work is characterized by an irreducible tension between normative and narrative strategies, between the 'strong systematics' of rational and scientific models and the 'weak' systematics' of textual and linguistic strategies (cf. infra). In the beginning, this ambivalence leads to irresolvable oppositions and inconsistencies: neither the neo-Kantian dialectics (in the sixties), nor the linguistic structuralism of the early seventies (N. Chomsky) are able to cope with these theoretical difficulties. By adopting the paradoxical logic of post-structuralist thinkers like J. Derrida (eighties) and G. Deleuze (nineties), Eisenman finally finds a way to overcome the limitations of traditional dialectics and to justify the fundamental ambiguities of his own discourse. The shift from structuralism to post-structuralism introduced a conceptual break (from vertical to horizontal systematic) which is clearly perceptible in the structure of his architectural and theoretical work.

structural/surface changes

structural changes

As we have argued before, it is almost impossible to synthesize Eisenman's work into a comprehensive and conclusive general theory, considering the different practices, theories and attitudes that are continuously (re)activated in his work. Therefore, it appeared to us that the best way to approach Eisenman's work is to highlight the main themes and concepts that are running through his architectural and theoretical work and to pinpoint the different points of interest, problems and questions related to his work.

A first general conclusion that can be drawn from our research, is the fact that it is possible to make a distinction between the strict architectural or design related issues, and the more theoretical issues. By making this differentiation, we get a clear picture of his general fields of interest, both in terms of design issues and theoretical issues. Striking are his cross-disciplinary interests for the linguistic and philosophical dimension of architecture. One can make the general observation that Eisenman's critical investigation and exploration is more focused on certain aspects of the architectural discipline-i.e. the intrinsic formal, linguistic, philosophical, historical and theoretical aspect of architecture-while other disciplinary aspects are partially or completely neglected or even negated-especially issues related to the programmatic, constructive or urban aspect of architecture. For instance, one could say that Eisenman is intrinsically not interested in urban issues as such, even if he has been designing several urban master plans and occasionally been writing about the theoretical dimension of the city. In order to deal with the urban aspect of architecture, Eisenman has further conceptualized the palette of his architectural design toolsbeginning with the techniques of 'artificial excavation' and later with the folds and diagrams-without actually applying the techniques of a proper urban investigation. Even more preponderant is Eisenman's apprehension of programmatic, functional or, to a lesser extent, constructive issues, which is a direct result of his dedication to formal and conceptual issues. Despite his later interest for hybrid programs or formless structures, Eisenman has never fully questioned the formal and spatial underpinnings of his early formalist involvement and his fundamental aversion of the 'form follows function' adage.

A second conclusion that can be drawn from our research is that one can outline some thematic constants (or generic lines of investigation) and variables (specific lines of investigations). In general, one can say that the variables are generated by the continuous (re)processing of different inputs and references (f. i. internal/external, disciplinary/extra-disciplinary, visual/textual inputs etc.) and by different modes of reception (f.i. linguistic/designed, interactive/reactive, analogous/ transformational, structural/surface modes of reception etc.). If one looks to the relationship between praxis and theory in the work of Peter Eisenman, one can not only conclude that there is a very close interaction or even confusion between his theoretical and architectural production (cf. point 3.1,), but also that there are actually several theories and practices at work at the same time (cf. point 3.2.).

Theory and Practice

First of all, one can state that this interaction between theory and praxis is actually reflected by Eisenman's own paralleled practice of text writing and project design or, in our own research, by the double focus on Eisenman's writings and projects. Eisenman belongs indeed to this generation of architects for whom the making and writing of architecture are inseparably intertwined and embedded within each other. One cannot understand Eisenman's architectural production without considering its deeper theoretical implications from which it derives and within which it is embedded. And vice versa, it is quite impossible to fully grasp the extent of Eisenman's theoretical apparatus, without considering the pragmatic dimension of the architectural projects which are the actual manifestation of his architectural thought. There is thus a very close relationship between Eisenman's theoretical production (writings) and his architectural production (design practice).

If one looks to the specific role of the writings and projects, one would be tempted to assume that most of the theoretical investigation is performed through the writings and most of the architectural experimentation through the actual design of projects. Yet, this is not entirely true, since the writings are also playing a crucial role in the investigation and deployment of architectural work (such as the analysis of projects or design strategies), while the actual design activity performed through the projects should also be considered as a kind of theoretical investigation on its own.

If one reflects on the role and scope of the writings, one should not only point to their intrinsic analytical, reflective and critical role but also to their explorative and investigative role, both in relation to actual design practices or theories in general. On the one hand, the writings can be considered as a critical tool of analysis and diagnosis of the specific and general conditions of architecture. Through his writings, Eisenman is not only making a critical reflection on architecture as such (i.e. in relation to the history, critique and theory of architecture) but also on the broad cultural, philosophical and societal developments that are constantly reframing the 3.1.

conditions of the architectural activity itself. In the field of architecture, Eisenman's writings are related to the history of architecture (from Renaissance, Baroque to Modern Architecture), the critique of architecture (critique of contemporary architects and theorists) and to the theory of architecture (reflection on architectural theories and development of his own theories). These investigations into the specific conditions of the architectural field enable Eisenman to constantly reassess his own architectural and theoretical work, and to situate his own work within the broader context of the history of architecture. Furthermore, these architectural reflections are always paralleled by an extensive extra-disciplinary reflection (in such various fields as arts, philosophy, linguistics, science, cultural studies etc.), which allow Eisenman to come up with new themes and lines of investigation, to further deepen and argue his theoretical reflection and to detect, diagnose and react towards existing and upcoming tendencies and sensibilities.

On the other hand, the writings have also become an integral and complementary part of the architectural design as such, in that they provide the necessary textual guidelines for the understanding of the architectural and theoretical motivations at work in his projects. In a sense, one could say that the writings have become-besides the usual drawings, models and diagrams-one of the main means of articulation of the architectural project, since they provide the complementary textual information that is crucial for the conceptual understanding of the project. As the writings became more and more synchronized with the actual architectural production of projects, one can indeed observe that the writings evolved from an analytical perspective of post-theorizationi.e. a post-facto theorizing of the practice-towards a more operative perspective of synchronic theorization and pragmatization: theory and praxis became interactive in a continuous movement of cross-fertilization and intensification. We can thus conclude that the writings are not only the locus of analysis and diagnosis of the theoretical conditions of architecture (i.e. a means of theoretical production), but that they have become increasingly important as an operative tool of the architectural practice or production.

practice

If one considers Eisenman's architectural production as such (i.e. his actual design practice), one can observe that it is not only the result of a strictly architectural (or design oriented) investigation—namely with formal, spatial or geometric issues—but also the outcome of a theoretical, critical and conceptual investigation. It would be wrong to consider that this theoretical dimension of the architectural production is only related to general architectural and theoretical considerations (as developed through his writings), since the actual practice of architectural design should be considered as an analytical and theoretical research tool in its own right. In this respect, we are not only referring to the analytical architectural investigation that is developed through the formal analysis of architectural work, but also to the operative and generative architectural experimentation that is performed through and within the design of architectural projects. In both cases (i.e. the analytical investigation and the operative experimentation) we can point out to the importance of the diagram, which, as an analytical and generative design device, is playing a crucial role in the articulation and development of a genuine architectural research activity. In this sense, one could say that the intrinsic theoretical dimension of the architectural production or practice is actually performed and articulated by the diagrams, in a similar way as the writings are actually articulating the general theoretical production. One could thus say that both the diagrams and writings—each according to their respective textual and visual singularity—are formulating the theoretical and critical project of Eisenman's work: all together, they should be considered as the driving critical tools of the Project Eisenman.

As we have observed, the relationship between praxis and theory is primarily articulated by the constant interaction of architectural and theoretical production, i.e. by the continuous interweaving of making and writing architecture. In fact, this interaction between architectural and theoretical production is so intimately intertwined in Eisenman's work that one might even speak about a real confusion or blurring of praxis and theory, in the sense that it becomes very hard to clearly distinct one from the other. One could thus say that praxis and theory are just two different faces –or two different means of articulation—of one and the same architectural project.

This confusion between praxis and theory is intensified by the fact that Eisenman is identifying the actual praxis of his architectural production with the textual process of writing, which, normally, is the main medium for theorizing architecture. This brings him to define his architecture as an intrinsic textual or rhetorical activity of writing, i.e. as an 'architecture of writing.' At the same time, one could also state that the theoretical production of his writings is actually constructed in a very similar way as the architectural production: if one carefully analyses the syntactical meta-structure of Eisenman's theoretical apparatus, one can discover that many concepts, arguments or lines of thought are articulated in a very architectural manner: there is an evident structural similarity between the actual tools and means of theoretical production and those of the architectural production. This meta-structural similarity between theory and praxis becomes particularly evident when one analyzes Eisenman's reception of architectural and theoretical references (inputs) which, in his writings, are processed and manipulated in a similar way as his architectural and design processes: in his theoretical and architectural production, Eisenman is indeed using similar formal and rhetorical techniques like transformations, reversals, superpositions, doublings, repetitions, inclusions etc. In this sense, one could thus say that his theoretical production is conceived as an architectural activity as such, while, at the same time,

theory = practice

his architectural production is conceived as a textual activity of writing. If Eisenman is labeling his own architecture as the 'writing of architecture', one could, in a similar manner, speak, in relation to his theoretical production, about the 'architectonics of writing.'

3.2. Theories and Practices

diachronic view

In Eisenman's work, there is not only a strong interaction between praxis and theory, but there are actually different practices and theories at work at the same time, both in a synchronic and diachronic manner. If one considers the diachronic development of Eisenman's work, one can indeed observe that his work is characterized by a succession of different architectural practices and theories, each with their own characteristic set of architectural and theoretical themes, parameters and references. Most of the time, each of the successive architectural strategies are backed-up by their own theoretical frame of reference. For instance, the first formal analyses are motivated by a theory of form, the early houses by a theory of Conceptual Architecture, the later houses by a theory of decomposition, while the projects of the artificial excavation are paralleled with textuality and deconstruction, and the latest computational projects with the Deleuzian themes of folds and diagrams. Yet, upon a closer look, we have been able to discover, that, beneath the appearance of successive "periods" of practices and theories, and besides the real moments of bifurcations, there are many overlaps, frictions and disjunctions between the successive lines of investigations: this is due to the fact that the new lines of investigations are actually combined and superposed with older lines of investigations, which still remain (re)active on a deeper level. For instance, we can refer to the structural similarity between Eisenman's theory of Conceptual Architecture and his previous theory of form in the sixties/seventies, or to the chronological overlapping of two distinct architectural strategies (decomposition and 'artificial excavation') in the late seventies-early eighties.

synchronic view On the other hand, if one considers the synchronic development of Eisenman's work, one can also see that, for each actual 'period' of his work, there are equally different practices and theories at work, in the sense that there are many points of friction and disjunction between an actual practice and its complementary theory, or, intrinsically, within a particular practice or theory. For instance, in his theoretical statements on post-functionalism and not-classical architecture, there is a clear disjunction between the actual theoretical statement and the architectural practices, to which these statements are referring. In his editorial on post-functionalism, Eisenman is trying to reconcile two distinct architectural strategies (or 'non-corroborating tendencies'), namely his earlier process of transformation, typical of the conceptual architecture of his

early houses, and the more actual process of decomposition, characteristic of his experiments with the el-form. In a similar manner, Eisenman's next theoretical statement on not-classical architecture, is trying to bridge two distinct architectural strategies, namely the strategy of decomposition and 'artificial excavation.'

But one can also observe that, within the frame of one particular practice or theory, there are often frictions and overlaps between the different components of his architectural/theoretical assertions (in terms of references, attitudes, themes etc.). Among the many examples, one can refer to the opposition between formal ambiguity and scientific rationalism (in his PhD), between Foucault's archeological approach and Derrida's deconstruction (cf. not-classical), between Derrida's transcendental and Deleuze's more pragmatic post-structuralism or between the dyadic logic of European semiology (cf. de Saussure) and the triadic logic of Anglo-Saxon semiotics (cf. Peirce a.o.) etc. These inaccuracies and frictions, which are a direct result of Eisenman's typical combinatory method of assimilation and reception of inputs, are less problematic in a strict architectural (or design related) sense, but they can become more problematic from a theoretical point of view, since it can weaken or annihilate the strength of a theoretical argumentation. "It is typical of Peter Eisenman to accompany the research that goes into any one of his projects with an intense and sophisticated theoretical activity that seems to be put forth with the express purpose of confounding his critics. Often these critics, in their reading of the results of his research, get entwined in the net set out beforehand by the author. For Eisenman, the written word's function is to fill in the blanks, the programmed absences that constitute the materials of his architecture. In spreading a theoretical blanket around his formal laboratory, Eisenman demonstrates a desire to reduce as much as possible the system of ambiguities that he himself had prearranged through the distilled networks of relations: his main concern is that of not leaving his signs to stand alone, of ensuring a controlled and one-way decodification of these signs, of preventing secondary languages from penetrating the text and charging it with irrelevant meanings."

Manfredo Tafuri

In this final point, we would like to formulate some critical remarks on the premises of our critical reading frame and on the historical, architectural and theoretical importance of the work of Peter Eisenman. Therefore we further clarify our analytical stance by taking some critical distance from our analytical matrix, in order to avoid, as Tafuri suggests in our introductory quote, to 'get entwined in the net that has been set out by the author...with the express purpose of confounding his critics.'

internal vs. external critique Since our research has been starting from the premises of an internal critique of Eisenman's work, based on a close reading of his writings and projects, questions may arise about the effectiveness of an internal critical approach, as opposed to an external critical approach. In our analytical approach, we deliberately chose to start from an objective, pragmatic and thematic analysis of Eisenman's discourse, and to concentrate on the underlying meta-structural aspects of his architectural and theoretical discourse. We did so by decorticating the exact content and definition of his theoretical arguments and assumptions, by separating the strict theoretical and rhetorical argumentation from the architectural and design related issues and by analysing and comparing the transformative interpretation of his internal and external referential frame. In our analytical interpretation, we deliberately chose to rely and to refer to Eisenman's own terminology, with the firm intention to actually explain what he is really saying, and to strip down the 'theoretical blanket' that

cf. M. Tafuri, "Peter Eisenman: The Meditations of Icarus", in Eisenman, Peter. *Houses of Cards*. New York: Oxford University Press, 1987, p167. he is spreading around his formal and theoretical laboratory, to paraphrase Tafuri. As we have demonstrated, through our detailed and systematic analyses, we have been able to outline the major discursive lines of investigation and to make a distinction between the structural and surface changes, the thematic constants and variables and the different and conflicting theories and practices at work. By actually taking Eisenman on his word, by stripping down the bare content of his arguments and comparing them with earlier and similar ones, we came to the conclusion that there are many overlaps, inconsistencies and reformulations, both in relation to the development of theoretical and architectural production, but that, despite this 'intense and sophisticated theoretical activity,' there is an evident consistency in controlling and explaining the rhetorics of his theoretical and architectural assumptions.

In other words, Eisenman has continually succeeded to react to the various theoretical and architectural inputs of the time and to update his own discourse to new tendencies, by interpreting, transforming and combining these new inputs, and by consequently adapting and reformulating his own assertions. For instance, in terms of theoretical production, Eisenman reacted, in the sixties, toward Rowe's formalism, by systematizing it through a pseudo-linguistic and scientific lens; in the early seventies, he reacted to the French linguistic and structuralist models by mixing his earlier formal references with those from the Anglo-Saxon linguistics and Conceptual Arts. Later he managed to respond to the influences of the 'School of Venice' by misinterpreting and reversing Foucault's assertions, and by making a creative interpretation of Derrida; and in the nineties, he managed to react to the wave of Deleuzianism by making a Derridian reading of the diagram. Also in terms of architectural production, Eisenman managed to make his own singular interpretation of the abstract white-modern movement revival (instigated by C. Rowe and J. Hejduk), by referring to the rationalist architecture of Terragni, instead of Le Corbusier. His strategy of 'Conceptual Architecture' can also be read as a reactive reinterpretation of Conceptual Art, and his strategy of 'artificial excavation' as a conceptual answer to the then upcoming conservative tendencies of post-modernism. In the nineties, he managed to respond to the upcoming generation of the computational diagrammatics, by integrating their digital motion techniques and by revisiting (and theorizing) his own diagrammatic work.

The ambiguity of Eisenman's theoretical work is that it always hovers between the objectivity of an academic and socio-cultural analysis (especially in relation to his general and analytical writings) and the subjectivity of the 'politics of rhetorics' (mostly, in relation to his writings on his own architectural production). The benefit of an internal close reading, as opposed to an external critique, is that it precisely enables to decorticate and to unravel the internal mechanics of this rhetoric. The politics of rhetorics

problem with Eisenman's discourse is that it has a rhetorical propensity to absorb and to recuperate any form of external critique. In our case, it would indeed have been problematic to start from a structuralist (f.i. Foucault) or post-structuralist (f.i. Derrida, Deleuze) reading frame, since these referential frames of thought have already been contaminated by Eisenman's politics of rhetorics. Another external reading frame could have been to start from a socio-historical critique, following in the footsteps of Tafuri's historical and ideological critique; yet, in this case, we would have to reframe our research object in order to integrate the institutional and ideological aspects of the architectural practice, which would require to have access to the archives of the various private and public parties involved, including the archives of the IAUS, which are still not open to the public. Nevertheless, considering the current academic interest for the historical period of the sixties and seventies, it would have been interesting to analyze in particular the institutional and academic impact of the New York-Venice Axis-i.e. the institutional link between the IAUS (New York) and the 'Institute of Architectural History' (Venice) in the seventies-on the development of the disciplines of history and theory of architecture.

critical relevance At this point, we would also like to formulate some critical remarks on the historical, architectural and theoretical importance of the work of Peter Eisenman, although this question exceeds the actual frame of our research object. Considering the multiple facets of Eisenman's personality and professional career, it might be useful to start from a differentiated reflection in relation to his various commitments as an architect, theorist, analyst, educator and public/political actor.

As a theorist (in the broad sense) and as a public actor, one can say that Eisenman has considerably contributed to the development and institutionalization of the discipline of theory of architecture in the United States, both through his intensive production of theoretical writings, as well as through his active involvement in the field of educational and communicational systems. Through his personal involvement as director of the IAUS and co-editor of the journal 'Oppositions,' Eisenman has contributed to create an international and public platform for architectural debate, which has been critical for the development of the discipline of architectural theory and critique, both in the United States (where many former colleagues and students are still active in the academic world) and Europe (namely, by the close connections between the IAUS and the 'School of Venice'). Eisenman's personal involvement in the organization of the Any-Conferences, in the nineties, can be seen as a (partial and interested) continuation of his earlier commitment to the international scene of architectural critique, although the scope of the Any-Project is much more selective and opinionated, and less pluralistic in its orientation than the IAUS (cf. introduction). Throughout his career

as a public actor on the architectural scene, Eisenman has also personally participated in the mediatization and making of several architectural 'tendencies' (namely through his involvement in the publications and exhibitions on the 'New York Five', 'Deconstruction', or more recently the 'Diagram') and to the formation and promotion of generations of architects and theorists (namely via communicational and professional networks, through his constant academic involvement in universities in the United States and in Europe, and through his intensive publication activity).

Of course, Eisenman is also known for his intensive theoretical activity, as writer of multiple articles, books and monographs. Without any doubt, his dissertation on 'The Formal Basis of Modern Architecture' can be considered as one of his major theoretical (and analytical) achievements, in that it actually provided an architectural methodological interpretation of Rowe's formalist tradition. Eisenman has also personally contributed to many of the historical and actual architectural debates (e.g. on the relation between classicism/modernism/post-modernism, on the question of the architectural language (from linguistics, via semiotics to media) etc.), contributed to open up the architectural debate towards a more multi-disciplinary debate (namely by opening it up to linguistic, philosophical, scientific disciplines or critical theory) and tried, like his mentors Rowe and Tafuri, to build a bridge between the architectural tradition and the critical architectural avant-garde. Considering the actual professionalization and individualization of the discipline of architectural theory, as an academic discipline of its own (with its own scientific paradigms and parameters), one might wonder whether this combination of theoretical and architectural production is still scientifically and academically viable today, and whether this theoretical involvement of architects is beneficial (or damaging?) to the further development of the discipline of architectural theory. It is clear, however, that, today, the architectural practice has managed to strengthen its grips on the international media. as well as on the academic world. One could even say that on several occasions, academia has been bypassed by the innovative pace of architectural initiatives and publications.

Finally, we would like to conclude our reflections by addressing the question of the critical contribution of Eisenman's architectural work, bearing in mind that his architectural legacy should not necessarily be evaluated in relation to the actual volume of the architectural production (as in the case of Piranesi, or, more recently J. Hejduk). Although Eisenman has not built many projects, several of his realizations have acquired an iconic status. House VI, together with J. Hejduk's Wall House, is recognized as one of the most outstanding realizations of the New York Five. The Wexner Center for the Visual Arts became an icon of the Deconstruction Movement and the Aronoff Center for Design and Art represented the United States at the Fifth Architectural Biennale of Venice in 1991, (with F. Gehry's Walt Disney Concert). More recently, the Berlin Holocaust Memorial has become a symbol of Germany's will to come to grips with its past. Most of his built projects were honoured with international awards. Other designs, which remained at an experimental stage of project, are still being recognized for their visionary appeal. House X can certainly be regarded as one his masterpieces. The Cannaregio Project in Venice, with its process of superposition, influenced a.o. B. Tschumi's project for the Parc de la Villette (1982). The Rebstock Master Plan has been one of the first projects that experimented with folding processes. And, more recently, one can also refer to the Max Reinhardt Haus and the Church for the year 2000, which are subverting the traditional typology of the skyscraper and the church.

Through its critical, theoretical, experimental and cross-disciplinary inclinations, Eisenman's work has always been working on the limits of the architectural discipline, discourse and practice. Yet, by 'spreading a theoretical blanket around his formal laboratory,' Eisenman has, paradoxically, diverted the attention away, rather than focusing on his architectural contributions. As a result, the latter are often perceived as mere formal and conceptual experiments. In his PhD, Eisenman indeed developed his basic architectural vision based on the primacy of form, and, despite the many transfigurations of his architectural parcours, he never fully denied his initial inclination for formal and spatial processes. Even today, Eisenman is still more interested in the formal, spatial, theoretical and textual aspects of architecture, than in the constructive, structural, urban, programmatic or other technical aspects. They have always remained secondary in his architectural work. For this reason, one could argue that Eisenman's work is perhaps lacking the multi-dimensional quality of some other contemporary architects, like R. Koolhaas, who, besides his similar interest for theoretical, form-spatial and rhetorical aspects of architecture, also manages to fully integrate and problematize the structural, technical, material, urban and programmatic aspects of architecture, which are often pushed to the critical limit of experimentation. Even in the more narrow scope of formal and spatial experimentation, one could argue that the architecture of F. Gehry is more performing in terms of meeting with the economical, commercial, structural, technical and manufacturing requirements of the building industry, which enabled him to create the famous Bilbao-effect.

Nevertheless, if one considers the strict architectural value of Eisenman's various experiments with architectural processes and strategies—like his experiments with transformational, artificial, folding or diagrammatic processes, his focus on interstitial relationships or his particular palette of architectural elements (like diagrams, grids, cube/elshapes and artificial figures)—one has to concede that many of these experiments are becoming more and more significant in the actual spectrum of the architectural design practice, which has been boosted by the digital performances of the CAD techniques.

Since the achievements of the digital revolution have paved the way for excessive formal manipulations (especially in the United States), the issue of architectural formalism has become less esoteric and more acceptable, especially for the younger generation of computational architects, who can find in the work of Eisenman an inspiration and justification for their own computational and formal experiments. In this sense, Eisenman could today be recognized as one of the mentors of this younger generation of architects (like G. Lynn, UN Studio, FOA, K. Chu, S. Allen etc.) who are primarily experimenting with computational design and motion techniques, while others (like the 'OMA-Reference' generation of Neutelings, MVRDV or .NL), have more affinities with the pragmatic, data-related and 'dirty realistic' approach of Koolhaas.

The big difference between the younger generation and Eisenman though, is that Eisenman clearly profiles himself as an outspoken 'critical architect', who firmly believes in the critical potential of the architectural discourse and practice, which, according him, is not only capable of making an internal critique of the 'interiority' and 'anteriority' of architecture, but also of the external (broad cultural and societal) conditions (i.e. the *Zeitgeist*) in which it is embedded.

The question however remains to what extent architecture can really be regarded as a 'critical' condition '*in se*', since the condition of the critical is a purely subjective matter, which utterly depends on the subjective judgment (or perception) of the authoring architect (who conceives it), the dweller or viewer (who perceives it) or the professional community of critics and theorists (who comments on it). And this is also one of the main paradoxes, and weaknesses, of Eisenman's critical attitude which, ultimately, also justifies his extensive theoretical production: one can only understand, or follow, Eisenman's critical architecture, by reading or decoding its textual or rhetorical content, which ultimately depends on the subjective and critical intention of its author. Can architecture really be critical without the critical voice(s) of its author?

SUMMARY

research object and objectives

This research is undertaken within the general framework of the "ABC of Density," a research project on long-lasting architectural and urban strategies initiated and led by Prof. G.A.C. van Zeijl (T.U.E.). Within this academic framework, we have made a critical analysis of the architectural and theoretical work of Peter Eisenman. The New York based architect Peter Eisenman (1934 -), is one of the most important and innovative American architects of the last decades. As an architect, educator and theorist, he has been a key player in the field of architecture and architectural theory for almost four decades.

The main objective of this research, has been to make a vertical and critical analysis of the architectural and theoretical work of Peter Eisenman, starting from an in depth analysis of his writings and projects. The analysis is based on a fairly comprehensive and representative selection of Eisenman's oeuvre, starting from a critical selection of texts and projects, written and developed in the period from 1963, the year of the doctoral thesis, to 2000. The research is mainly based on an internal and close reading of his work, starting from a factual, objective and pragmatic frame of interpretation.

Our objective has been to frame the most critical moments and lines of thought of the 'Project Eisenman' and to shed a light on the theoretical underpinnings and working methods, i.e. the 'modus operandi' of Eisenman's discursive apparatus. Our main point of interest was to reflect on the respective role of theory (writings) and praxis (projects) in the overall oeuvre of Peter Eisenman. We also reflected on the methodological underpinnings of his architectural and theoretical production, namely by examining the reception of internal and external references, the link with contemporary frames of thought and by situating the work in a broader historical and cultural perspective. In our analysis, we made an overview of the most critical moments of Eisenman's architectural and theoretical work, by highlighting the most critical themes and concepts of his writings and projects. The problem of the praxis-theory relationships has been addressed by confronting, for each moment, the design related issues (of the architectural production/analysis) with the more theoretical and discursive issues (of the theoretical production.) The idea, behind this overview of critical moments, is to show how the multiple thematic lines of Eisenman's apparatus are constantly interacting and intersecting with each other, as if they were caught in a constant movement of overlap, slipping, feed-backs and bifurcations.

We have selected 10 critical moments in the work of Peter Eisenman, starting from his first major theoretical statement, his PhD on 'The Formal Basis of Modern Architecture' (1963) up to his last theoretical writings on the issue of the diagram, as bundled in his publication 'Diagram Diaries' (1999).

These critical moments are the following ones.

- 1. the primacy of form (1963)
- 2. beyond form: conceptual architecture (1967-1973)
- 3. post-functionalism vs. (post)modernism (1976)
- 4. decomposition (1975-1983)
- 5. artificial excavation (1978-1986)
- 6. architecture as text
- 7. scientific models and processes (1987-1990)
- 8. folding (1990-1995)
- 9. the interstitial (1995-1999)
- 10. the diagram as space of writing (late nineties)

For each moment, we have made a critical and comparative analysis of the theoretical production (writings) and architectural production (projects), in order to address the question of the praxis-theory relationship. We first highlighted the major critical themes of each moment, by situating the lines of investigation within the continuity of the 'Eisenman project'. We also focused on the methodological aspects of Eisenman's discourse, namely by analyzing the transformative and constructive patterns of his argumentation, examining his reception (and interpretation/transformation) of internal and external references and situating his theoretical and architectural proposals within the perspective of broader architectural, cultural and philosophical frames of thought. From this research on the architectural and theoretical work of Peter Eisenman, several conclusions can be drawn.

change and continuity

A first conclusion, is that Eisenman's work can be defined in terms of change and continuity. On the one hand, his work is caught in a continuous movement of changes and transformations, so that it can be kept actualized and 'on the edge'. On the other hand however, his work is also constantly reworked, reassessed and re-evaluated in relation to earlier interests and themes, so that the continuity and consistency of the work can be secured. It is this continuous interaction between internal and external, disciplinary and extra-disciplinary, practical and theoretical inputs that are the basis of Eisenman's investigative and exploring attitude, and ultimately defining his characteristic signature. In terms of changes, one can make a distinction between structural

changes (i.e. critical and strategic bifurcations in the perspective of long-lasting strategies) and surface changes (i.e. short-term and rhetorical changes, that are based on the adaptation, reformulation or recombination of earlier themes and concepts).

The most critical structural changes are related to the reception of contemporary frames of thought, which shifted from neo-platonism, via structuralism to post-structuralism. Another complementary characteristic, is the irreducible tension between normative and narrative strategies, between the 'strong systematics' of rational and scientific models and the 'weak' systematics' of textual and linguistic strategies. In the beginning, this ambivalence led to irresolvable oppositions and inconsistencies, which could not be resolved by the neo-Kantian dialectics (in the sixties), nor by the linguistic structuralism of the early seventies (N. Chomsky). By adopting the paradoxical logic of post-structuralist thinkers like J. Derrida (eighties) and G. Deleuze (nineties), Eisenman finally finds a way to overcome the limitations of traditional dialectics and to justify the fundamental ambiguities of his own discourse. The shift from structuralism to post-structuralism introduced a conceptual break (from vertical to horizontal systematic) which is clearly perceptible in the structure of his architectural and theoretical work.

Most surface changes are developed in the continuity of earlier thematic lines of investigation, so that we can actually speak about thematic 'constants and variables,' which brings us to our second conclusion. 3

3.2 constants and variables

It is almost impossible to synthesize Eisenman's work into a comprehensive and conclusive general theory, considering the different practices, theories and attitudes that are continuously (re)activated in his work. Nevertheless it remains possible to pinpoint different points of interest, problems and questions in his architectural and theoretical work and to outline some thematic constants and variables.

In general, one can say that the variables are generated by the continuous (re)processing of different inputs and references (f. i. internal/external, disciplinary/extra-disciplinary, visual/textual inputs etc.) and by different modes of reception (f.i. linguistic/designed, interactive/reactive, analogous/ transformational, structural/surface modes of reception etc.).

3.3 theories and practices

If one looks at the relationship between praxis and theory in the work of Peter Eisenman, one can not only conclude that there is a very close interaction or even confusion between his theoretical and architectural production, but also that there are actually several theories and practices at work at the same time.

This interaction between theory and praxis is reflected by Eisenman's own paralleled practice of text writing and project design, that is by the double practice of architectural and theoretical production. This interaction between architectural and theoretical production is so intimately intertwined that there is a real confusion or blurring between praxis and theory. This confusion between praxis and theory is intensified by the fact that Eisenman is identifying the actual praxis of his architectural production with a textual process of writing (usually, a typical means of a theoretical production) and by the fact that he is using, in his theoretical and architectural production, similar formal and rhetorical techniques (like transformations, reversals, superpositions, doublings, repetitions, inclusions etc.) In this sense, one could thus say that his theoretical production is actually conceived as an architectural activity as such, while, at the same time, his architectural production is actually conceived as a textual activity of writing.

One can also discover in Eisenman's work different practices and theories at work, both in a diachronic and synchronic manner. In a diachronic manner, Eisenman's work is characterized by a succession of different architectural practices and theories, each which their own characteristic set of architectural and theoretical themes, parameters and references, each backed up by their own theoretical frame of reference. Yet, beneath the appearance of successive "periods" of practices and theories, and besides the real moments of bifurcations, there are many overlaps, frictions and disjunctions between the successive lines of investigations. This is due to the fact that new lines of investigations are actually combined and superposed with older lines of investigations, which still remain (re)active on a deeper level. If one considers the synchronic development of Eisenman's work, one can also see that, for each actual "period" of his work, there are equally different practices and theories at work, in the sense that there are many points of friction and disjunction between the different components of his architectural/theoretical assertions. These inaccuracies and frictions, which are a direct result of Eisenman's typical combinatory method of assimilation and reception of inputs, are less problematic in a strict architectural sense, but they can become very problematic from a theoretical point of view.

politics and rhetorics

Since our research has been starting from the premises of an internal critique of Eisenman's work, based on a close reading of his writings and projects, questions may arise about the effectiveness of an internal critical approach, as opposed to an external critical approach. Therefore we further explicit our analytical stance by taking some critical distance from our analytical matrix. We also formulated some critical remarks on the historical, architectural and theoretical importance of the work of Peter Eisenman, by situating his work within the historical and actual context of the actual architectural debate.

ABOUT THE AUTHOR

Bernard Kormoss (1962, Bruges (B)) is a Belgian architect and theorist, based in Maastricht (NL). Besides a degree in Architecture (I.S.A. Saint-Luc, Liège, 1996), he also holds degrees in Law (K.U.L., Leuven (B), 1985) and in European Studies (College of Europe, Bruges (B), 1988).

As a lawyer, he has been working at the European Cultural Foundation (Brussels, 1988-1991), where he has been doing research on the cultural relationships in the European Union. He successively worked as an expert of the "Media Venture" project, a pilot project of the "Media 92" Program of the Commission of the European Union (Luxemburg and Brussels, 1990-1991).

After a short career as a lawyer, he decided, at age 29, to study architecture at the I.S.A. Saint-Luc in Liège (B) (1991-1996), were he graduated in 1996. During the period 1997-98, he joined the office of Peter Eisenman (Eisenman Architects, New York), where he participated in several projects and worked on a book of reference on the theoretical and architectural work of Peter Eisenman. He was also a teaching assistant of Peter Eisenman at Princeton University (Princeton (USA), 1998), the E.T.H. (Zürich (CH), 1999-2000) and the Technical University Eindhoven (T.U.E., Eindhoven (NL), 2000).

From November 2002 to January 2005, he worked as a doctoral student at the Technical University Eindhoven, where he further developed his research on the work of Peter Eisenman at the department Theory and History of the Faculty of Architecture (Bouwkunde). The supervisors of his doctoral thesis "Peter Eisenman: Theories and Practices" are Prof. Dr.ir. G.A.C. van Zeijl (primary supervisor, Technical University of Eindhoven), Dr.ir. J.G. Wallis de Vries (co-supervisor, Technical University of Eindhoven) and Prof.dr. A.D. Graafland (secondary supervisor, Delft School of Design, Technical University of Delft).

He has also been teaching theory, critique and architectural design at several architectural institutions, namely at the Technical University Eindhoven (2002-2004), the Academie van Bouwkunst of Amsterdam (2000-2002), the Academie van Bouwkunst of Maastricht (in 2000, and in 2006-2007) and at the Sint-Lucas Hogeschool voor Architectuur of Brussels and Ghent (2007). He also participated in the organization of several conferences of the NeTHCa group (Network for Theory, History and Criticism of Architecture, Belgium), in 2001 ("Tourism Revisited"), 2003 ("Critical Tools) and 2005 ("Unthinkable Doctorate"). He is the author of several papers on the work of Peter Eisenman and has been frequently lecturing about his work in Netherlands and Belgium.

ACKNOWLEDGEMENTS

This research was undertaken within the general framework of the "ABC of Density," a research project on long-lasting architectural and urban strategies initiated and led by Prof. G.A.C. van Zeijl at the department Theory and History of the Faculty of Architecture at the Technical University of Eindhoven (T.U.E.), (November 2002 to January 2005).

First of all, I would like to thank Prof. Dr.ir. G.A.C. van Zeijl (primary supervisor, Technical University of Eindhoven, NL) and Dr.ir. J.G. Wallis de Vries (co-supervisor, Technical University of Eindhoven, NL) for their kind advice and support. I would also like to thank Prof.dr. A.D. Graafland (secondary supervisor, Technical University of Delft, NL), Prof. ir. J. Westra (dean of the faculty of Architecture, T.U.E.), Prof. dr. H. Heynen (Katholieke Universiteit Leuven, B), Prof. dr. D. Vandenburgh (U.C.L. Université Catholique de Louvain-la-Neuve, B), prof. dr. B. Colenbrander (T.U.E., NL), dr.ir. J. Bosman (T.U.E., NL) and dr. arch. T. Avermaete (Associate professor, Delft University of Technology, NL) for their comments.

I would also like to thank Mr. Peter Eisenman and 'Eisenman Architects' (New York, U.S.A.) for their support.

Finally, I would like to thank all those who supported me during all these difficult years, especially my wife Sophie and my son Gil, who were a constant source of inspiration and motivaton. A special thank to all the members of my family and my friends. A big hug also to Philippe and Isolde, Olivier and Caroline.

ILLUSTRATION CREDITS

The pictures related to the work of Peter Eisenman are taken from the following publications (in order of appearance).

Pictures in Chapter 1 (on pp. 19, 20).

Cf. Eisenman, Peter. *The Formal Basis of Modern Architecture*. Dissertation for the Degree of Doctor of Philosophy, University of Cambridge. Baden: Lars Müller Publishers, 2006, p. 108 (Le Corbusier, *Villa Stein*, drawing by P. Eisenman, on p. 19), p. 296 (G. Terragni, *Casa del Fascio*, drawings by P. Eisenman, on p. 19), p. 292 (G. Terragni, *Casa del Fascio*, drawing by P. Eisenman, on p. 19), p. 196 (F. L. Wright, D.D. Martin House, drawing by P. Eisenman, on p. 20).

Pictures in Chapter 2 (on pp. 33, 34).

Cf. Eisenman, Peter. *The Formal Basis of Modern Architecture*. Dissertation for the Degree of Doctor of Philosophy, University of Cambridge. Baden: Lars Müller Publishers, 2006, p. 292 (Terragni, Casa del Fascio, drawing by P. Eisenman, on p. 33).

Cf. Eisenman, Peter. *Diagram Diaries*. New York: Universe Publishing, 1999, p. 62 (House I, on p. 33), p. 218 (House II, on p. 33), p. 66. (House II, on p. 33).

Cf. Eisenman, Peter. *Houses of Cards.* Oxford: Oxford University Press, 1987, p. 129 (House III, on p.34).

Cf. Dobney, Stephen, ed. *Eisenman Architects: Selected and Current Works.* Mulgrave, Victoria (Australia): The Images Publishing Group Pty Ltd, 1995, p. 34 (House IV, on p. 34), p. 42 (House VI, on p. 34), p. 39 (House VI, on p. 34).

Pictures in Chapter 4 (on pp. 37, 38, 39, 40).

Cf. Eisenman, Peter. Raggi, Franco, Ed. *Five Easy Pieces, Dialectical Fragments Toward the Reintegration of Suburbia, Europa/America*. Architettura urbane alternative suburbane. Venice: Edizioni La Biennale di Venezia, 1978, p. 117 (picture of mandala, on p. 37), p. 118. (House VIII, on p. 37).

Cf. Dobney, Stephen, ed. *Eisenman Architects: Selected and Current Works.* Mulgrave, Victoria (Australia): The Images Publishing Group Pty Ltd, 1995, p. 44 (House X, model, on p. 39).

Cf. Eisenman, Peter. *Diagram Diaries*. New York: Universe Publishing, 1999, p. 72 (House X, quadrants and diagram model, on p. 38), p. 220 (axonometric model of House X on p. 39), p. 74 and p. 220 (House 11a, on p. 39), pp. 222 and 194 (House El Even Odd, on p. 40), p. 222 (Fin d'Ou T Hou S, on p. 40).

Pictures in Chapter 5 (on pp. 41, 42, 43).

Cf. Dobney, Stephen, ed. *Eisenman Architects: Selected and Current Works*. Mulgrave, Victoria (Australia): The Images Publishing Group Pty Ltd, 1995, p. 52 (Cannaregio, model, on p. 41), p. 51 (Cannaregio, model with Le Corbusier's Venice Hospital, on p. 42), p. 63 (I.B.A. Berlin, on p. 42), p. 114 (Wexner Center, on p. 42), p. 85 (Verona, Romeo and Juliet, on p. 42), p. 105 (Long Beach, on p. 43). Cf. *El Croquis*, no. 83, 1997 (Peter Eisenman 1990-1997), p. 12 (La Villette, on p. 43).

Pictures in Chapter 7, (on pp. 51, 52, 53).

Cf. Eisenman, Peter. *Diagram Diaries*. New York: Universe Publishing, 1999, p. 224 (Biocentrum, on p. 51), p. 226 (Carnegie Mellon, on p. 53), p. 86 (Aronoff Center, diagram of serialized boxes, on p. 52), p. 226 (Koizumi Sangyo Office Building, on p. 53). Cf. Ciorra, Pippo, ed. *Peter Eisenman: opere e progretti*. Serie Documenti di Architettura, no. 71, Milan: Electa, 1993, p. 123 (Guardiola House, on p. 53). Cf. *El Croquis*, no. 83, 1997 (Peter Eisenman 1990-1997), p. 51 (Carnegie Mellon Research Institute, model, on p. 52), p. 67 (Aronoff Center, model, on p. 52), p. 81 (Columbus Convention Center, on p. 52), p. 65 (Aronoff Center, front view, on p. 53). Cf. Davidson, Cynthia, ed. *Eleven Authors in Search of a Building*. New York: The Monacelli Press, 1996, pp. 54, 55 (Aronoff Center, diagrams of 'box geometry' and 'overlap section'), on p. 52).

Cf. Dobney, Stephen, ed. *Eisenman Architects: Selected and Current Works.* Mulgrave, Victoria (Australia): The Images Publishing Group Pty Ltd, 1995, p. 182 (Nunotani Headquarters Building, on p.53), p. 176 (Groningen Music-Video Pavilion, on p. 54).

Pictures in Chapter 8 (on pp. 55, 56, 57).

Cf. *El Croquis,* no. 83, 1997 (Peter Eisenman 1990-1997), p. 91 (Rebstock Master Plan, model, on p. 55).

Cf. Eisenman, Peter. *Diagram Diaries*. New York: Universe Publishing, 1999, p. 232 (Haus Immendorff, model, on p. 55), p. 56 (Rebstock Master Plan, diagram, on p. 55), p. 207 (Nordiches Derendorf Master Plan, diagram, on p. 55), p. 230 (Emory Center for the Arts, model, on p. 56), p. 206 (Emory Center for the Arts, diagram, on p. 56), p. 232 (Max Reinhardt Haus, model, on p. 56), p. 197 (Max Reinhardt Haus, diagrams, on p. 57). Cf. Ciorra, Pippo, ed. *Peter Eisenman: opere e progretti*. Serie Documenti di Architettura, no. 71, Milan: Electa, 1993, p. 182 (Alteka Office, on p. 56).

Cf. Eisenman, Peter. *Blurred Zones.Investigations of the interstitial, Eisenman Architects 1988-1998.* New York: The Monacelli Press, 2003, p. 223 (Tours Center, on p. 57)

Pictures in Chapter 9 (on pp. 61, 62).

Cf. *El Croquis,* no. 83, 1997 (Peter Eisenman 1990-1997), p. 143 (Tours Center, on p. 61), p. 157 (Church of the Year 2000, model, on p. 61), p. 155 (Church of the Year 2000, site model, on p. 61).

Cf. Eisenman, Peter. *Blurred Zones. Investigations of the interstitial, Eisenman Architects 1988-1998.* New York: The Monacelli Press, 2003, p. 300 (United Nations Library, on p.62)

Pictures in Chapter 10 (on pp. 64, 65, 66, 67, 68)

Cf. Eisenman, Peter. *The Formal Basis of Modern Architecture*. Dissertation for the Degree of Doctor of Philosophy, University of Cambridge. Baden: Lars Müller Publishers, 2006, p. 108 (diagram of Maison Domino by P. Eisenman, on p. 64).

Cf. Eisenman, Peter. *Diagram Diaries*. New York: Universe Publishing, 1999, p. 62 (diagrams of House I, on p. 65), p. 64 (diagrams of House IV, on p. 65), p. 74 (diagrams of House 11a, on p. 65), p. 204 (diagram of Biocenter, on p. 66), p. 206 (diagram of Emory Center, on p.66), p. 196 (model of Carnegie Mellon Center, on p. 66), p. 236 (Virtual House, on p. 67), p. 236 (Staten Island Museum, on p. 67).

Cf. Arena, no. 74, 2004, p. 117 (IFCCA project, rendering).

Cf. Il Projetto, no. 6, 1999, p. 13 (Bruges Concerthall, on p. 67).

Cf. Eisenman, Peter. Cassara, Silvio (Ed.). *Feints*, Milano: Skira Editore S.p.A., 2006, p. 161 (Berlin Holocaust Memorial, on p. 68).

Cf. Eisenman, Peter. Noever, Peter (Ed.) *Peter Eisenman: Barfuss auf Weissen Gluhenden Mauern. Barefoot on White-Hot Walls.* Vienna: MAK Wien, 2004, p. 147 (Santiago Cultural Center, on p. 68), p. 153 (*Musée de l'Homme*, Paris, on p. 68).

Cf. Eisenman, Peter. *Diagram Diaries*. New York: Universe Publishing, 1999, cover page (picture of cover page, on pp. 63, 72).

Cf. ANY Magazine, no. 23, 1998, cover page (picture of cover page, on p. 72).

Pictures (on the cover)

Front illustration (cubus):

House II (Cf. Eisenman, Peter. *Diagram Diaries*. New York: Universe Publishing, 1999, p. 63).

House IV (Cf. Dobney, Stephen, ed. *Eisenman Architects: Selected and Current Works.* Mulgrave, Victoria (Australia): The Images Publishing Group Pty Ltd, 1995, p.34).

House VI (Cf. Dobney, Stephen, ed. *Eisenman Architects: Selected and Current Works.* Mulgrave, Victoria (Australia): The Images Publishing Group Pty Ltd, 1995, p.39).

House X (Cf. Eisenman, Peter. *Diagram Diaries*. New York: Universe Publishing, 1999, p. 220).

Cannaregio, Venice (Cf. Bédart, Jean-François, ed. *Cities of Artificial Excavation: The Work of Peter Eisenman, 1978-1988.* New York: Rizzoli International, Ltd., and Montréal, Centre Canadien d'Architecture, 1994, pp. 51 (site) and 55 (sectional model of el-structure)).

House El Even Odd (Cf. Eisenman, Peter. *Diagram Diaries*. New York: Universe Publishing, 1999, p. 222).

Wexner Center for the Visual Arts and Fine Arts Library (Cf. Dobney, Stephen, ed. *Eisenman Architects: Selected and Current Works.* Mulgrave, Victoria (Australia): The Images Publishing Group Pty Ltd, 1995, p.114).

Romeo and Juliet, Verona (Cf. Dobney, Stephen, ed. *Eisenman Architects: Selected and Current Works*. Mulgrave, Victoria (Australia): The Images Publishing Group Pty Ltd, 1995, p. 85).

Long Beach University Art Museum (Cf. Dobney, Stephen, ed. *Eisenman Architects: Selected and Current Works*. Mulgrave, Victoria (Australia): The Images Publishing Group Pty Ltd, 1995, p.105).

La Villette (Cf. *El Croquis,* no. 83, 1997 (Peter Eisenman 1990-1997), p. 12).

Biocentrum (Cf. Eisenman, Peter. *Diagram Diaries*. New York: Universe Publishing, 1999, p. 224).

Carnegie Mellon Research Institute (Cf. Eisenman, Peter. *Diagram Diaries*. New York: Universe Publishing, 1999, p. 196).

Guardiola House (Cf. Ciorra, Pippo, ed. *Peter Eisenman: opere e progretti*. Serie Documenti di Architettura, no. 71, Milan: Electa, 1993, p. 123).

Aronoff Center for Design and Art (Cf. *El Croquis,* no. 83, 1997 (Peter Eisenman 1990-1997), p. 65).

Koizumi Sangyo Office Building (Cf. Eisenman, Peter. *Diagram Diaries*. New York: Universe Publishing, 1999, p. 226).

Columbus Convention Center (Cf. *El Croquis,* no. 83, 1997 (Peter Eisenman 1990-1997), p. 81).

Rebstock Master Plan (Cf. Eisenman, Peter. *Diagram Diaries*. New York: Universe Publishing, 1999, p. 56).

Emory Center for the Arts (Cf. Eisenman, Peter. *Diagram Diaries*. New York: Universe Publishing, 1999, p. 230).

Max Reinhardt Haus (Cf. Eisenman, Peter. *Diagram Diaries*. New York: Universe Publishing, 1999, p. 232).

Church for the Year 2000 (Cf. *El Croquis,* no. 83, 1997 (Peter Eisenman 1990-1997), p. 157).

Virtual House (Cf. Eisenman, Peter. *Diagram Diaries*. New York: Universe Publishing, 1999, p. 236).

Staten Island Institute of Arts and Science (Cf. Eisenman, Peter. *Diagram Diaries*. New York: Universe Publishing, 1999, p.67).

Bruges Concert Hall (Cf. Il Projetto, no. 6, 1999, p. 13).

Berlin Holocaust Memorial (Cf. Eisenman, Peter. Cassara, Silvio (Ed.). *Feints*, Milano: Skira Editore S.p.A., 2006, p. 161).

Santiago Cultural Center (Cf. Eisenman, Peter. Noever, Peter (Ed.) *Peter Eisenman: Barfuss auf Weissen Gluhenden Mauern. Barefoot on White-Hot Walls.* Vienna: MAK Wien, 2004, p. 147).

Musée du Quai Branly, Paris (Cf. Eisenman, Peter. Noever, Peter (Ed.) *Peter Eisenman: Barfuss auf Weissen Gluhenden Mauern. Barefoot on White-Hot Walls*. Vienna: MAK Wien, 2004, p. 153).

Background picture:

Berlin, Holocaust Memorial (Cf. Eisenman, Peter. Cassara, Silvio (Ed.). *Feints*, Milano: Skira Editore S.p.A., 2006, p. 158.)

Tables

All tables (on pp. 24, 26, 27, 29, 32, 52) by B. Kormoss.

BIBLIOGRAPHY

primary sources : Peter Eisenman

Eisenman, Peter. *The Formal Basis of Modern Architecture*. Dissertation for the Degree of Doctor of Philosophy, University of Cambridge. Baden: Lars Müller Publishers, 2006. (Reprint of the original manuscript.) [63/1]

Eisenman, Peter. "Towards an Understanding of Form in Architecture." In Eisenman, Peter. Rakatansky, Marc (Series Editor.) *Eisenman: Inside Out. Selected Writings 1963-1988.* New Haven: Yale University Press, 2004, pp. 2-9. (Reprint of Eisenman, Peter. "Towards an Understanding of Form in Architecture." *Architectural Design.* London (October 1963): 457-8.) [63/2]

Eisenman, Peter. "From Object to Relationship: The Casa del Fascio." "Dall'oggetto alla Relazionalita: la Casa del Fascio di Terragni." *Casabella* no. 344, Milan: (January 1970): 38-41. [70/1]

Eisenman, Peter. "Notes on Conceptual Architecture: Towards a Definition." Special Double Issue of *Design Quarterly* no. 78-79, Minneapolis (1970): 1-5 . [70/2]

Eisenman, Peter. "From Object to Relationship II: Giuseppe Terragni." *Perspecta* 13-14, *The Yale Architectural Journal*, MIT Press, Cambridge (1971): 36-75. [71/1]

Eisenman, Peter. "Notes on Conceptual Architecture: Towards a Definition." In Eisenman, Peter. Rakatansky, Marc (Series Editor.) *Eisenman: Inside Out. Selected Writings 1963-1988.* New Haven: Yale University Press, 2004, pp. 10-25. (Reprint of Eisenman, Peter. "Notes on Conceptual Architecture: Towards a Definition." *Casabella* no. 359-360, Milan (November/ December 1971): 48-58.) [71/2]

Eisenman, Peter. "Cardboard Architecture : House I." In Eisenman, Peter. *Five Architects: Eisenman, Graves, Gwathmey, Hejduck, Meier.* New York: Oxford University Press Incorporated, 1975, pp 15-23. (Originally published in Eisenman, Peter. *Five Architects: Eisenman, Graves, Gwathmey, Hejduk, Meier.* New York: Wittenborn & Company,1972, pp. 15-23.) [72/1]

Eisenman, Peter. "Cardboard Architecture : House II." In Eisenman, Peter. *Five Architects: Eisenman, Graves, Gwathmey, Hejduck, Meier.* New York: Oxford University Press Incorporated, 1975, pp 24-37. (Originally published in Eisenman, Peter. *Five Architects: Eisenman, Graves, Gwathmey, Hejduk, Meier.* New York: Wittenborn & Company, 1972, pp. 24-37.) [72/2]

Eisenman, Peter. "Cardboard Architecture." "Castelli di Carte: Due Opere di Peter

Eisenman." Casabella no. 374, Milan (February 1973): 17-31. [73/1]

Eisenman, Peter. "Conceptual Architecture: from the perception of form to its hidden meaning." "Architettura Concettuale: Dal Livello Percettivo della Forma ai Suoi Significati Nascosti." *Casabella* no. 386, Milan (February 1974): 25-7. [73/2]

Eisenman, Peter. "Notes on Conceptual Architecture II A." *Environmental Design Research Association* II, Stroudsburg, Pennsylvania (1973): 319-22 and *On Site* no. 4, New York (1973): 41-44. [73/3]

Eisenman, Peter. "From Golden Lane to Robin Hood Gardens; or If You Follow the Yellow Brick Road It May Not Lead to Golders Green." In Eisenman, Peter. Rakatansky, Marc (Series Editor.) *Eisenman: Inside Out. Selected Writings 1963-1988.* New Haven: Yale University Press, 2004, pp. 40-56. (Reprint of Eisenman, Peter. "From Golden Lane to Robin Hood Gardens; or If You Follow the Yellow Brick Road It May Not Lead to Golders Green." *Oppositions* 1, Cambridge (September 1973): 27-56.) [73/4]

Eisenman, Peter. "House III: To Adolph Loos and Bertolt Brecht." *Progressive Architecture*, Stanford, Connecticut (May 1974): 92. [74/1]

Eisenman, Peter. "Real and English: Destruction of the Box I." In Eisenman, Peter. Rakatansky, Marc (Series Editor.) *Eisenman: Inside Out. Selected Writings 1963-1988.* New Haven: Yale University Press, 2004, pp. 57-82.

(Reprint of Eisenman, Peter. "Real and English: Destruction of the Box I." *Oppositions* 4, Cambridge (May 1974): 5-34.) [74/2]

Eisenman, Peter. "PostFunctionalism." In Eisenman, Peter. Rakatansky, Marc (Series Editor.) *Eisenman: Inside Out. Selected Writings 1963-1988.* New Haven: Yale University Press, 2004, pp. 83-87.

(Reprint of Eisenman, Peter. "PostFunctionalism." *Oppositions* 6, Cambridge (Fall, 1976): i-iii (Editorial).) [76/1]

Eisenman, Peter. "House VI." *Progressive Architecture,* Stanford, Connecticut (June 1977): 57-59. [77/1]

Eisenman, Peter. "Behind the Mirror: On the Writings of Philip Johnson." In Eisenman, Peter. Rakatansky, Marc (Series Editor.) *Eisenman: Inside Out. Selected Writings 1963-1988.* New Haven: Yale University Press, 2004, pp. 88-105. (Reprint of Eisenman, Peter. "Behind the Mirror: On the Writings of Philip Johnson." *Oppositions* 10, Cambridge (Fall 1977): 1-13.) [77/2]

Eisenman, Peter. "Five Easy Pieces. Dialectical Fragments Toward the Reintegration of Suburbia." *Europa/America, Architettura urbane alternative suburbane*. Raggi, Franco (ed.). Venezia: Edizioni La Biennale di Venezia, 1978, pp. 112-119. [78/1]

Eisenman, Peter. "The Graves of Modernism." In Eisenman, Peter. Rakatansky, Marc

(Series Editor.) *Eisenman: Inside Out. Selected Writings 1963-1988.* New Haven: Yale University Press, 2004, pp. 106-110.

(Reprint of Eisenman, Peter. "The Graves of Modernism." *Oppositions* 12, Cambridge (Spring 1978): 36-41.) [78/2]

Eisenman, Peter. "Aspects of Modernism: Maison Dom-ino and the Self-Referential Sign." In Eisenman, Peter. Rakatansky, Marc (Series Editor.) *Eisenman: Inside Out. Selected Writings 1963-1988.* New Haven: Yale University Press, 2004, pp. 111-120. (Reprint of Eisenman, Peter. "Aspects of Modernism: Maison Dom-ino and the Self-Referential Sign." *Oppositions* 15/16, Cambridge (Winter/Spring 1980): 119-128.) [80/1]

Eisenman, Peter. "House El Even Odd." *Architecture and Urbanism* no. 123, Tokyo (December 1980): 96-98. [80/2]

Eisenman, Peter. "In My Father's House are Many Mansions." In Eisenman, Peter. Rakatansky, Marc (Series Editor.) *Eisenman: Inside Out. Selected Writings 1963-1988.* New Haven: Yale University Press, 2004, pp. 121-132. (Reprint of Eisenman, Peter. "In My Father's House are Many Mansions." *IAUS Catalogue* 12, *John Hejduk: Seven Houses.* New York: Rizzoli International (1980): 8-20.) [80/3]

Eisenman, Peter. "Sandboxes: House 11a." Special Issue of *Architecture and Urbanism* no. 112, Tokyo (January 1980): 221-224. [80/4]

Eisenman, Peter. "Second Reading." Oppositions (1980). [80/5]

Eisenman, Peter. "Three Texts for Venice." In Bédart, Jean-François, ed. *Cities of Artificial Excavation: The Work of Peter Eisenman, 1978-1988.* New York: Rizzoli International, Ltd., and Montréal, Centre Canadien d'Architecture, 1994, pp. 47-50. (Reprint of Eisenman, Peter. "Three Texts for Venice." *Domus* no. 611, Milan (November 1980): 9-11.) [80/6]

Eisenman, Peter. "Transformations, Decompositions and Critiques: House X." In Eisenman, Peter. *House X.* New York: Rizzoli International Publications, Inc., 1982, pp. 34-160.

(Reprint of Eisenman, Peter. "Transformations, Decompositions and Critiques: House X." Special Issue of *Architecture and Urbanism* no. 112, Tokyo (January 1980): 141-51.) [80/7]

Eisenman, Peter. House X. New York: Rizzoli International Publications, Inc., 1982.

Eisenman, Peter. "The Houses of Memory: The Texts of Analogy." In Eisenman, Peter. Rakatansky, Marc (Series Editor.) *Eisenman: Inside Out. Selected Writings 1963-1988.* New Haven: Yale University Press, 2004, pp. 133-142.

(Reprint of Eisenman, Peter. "The Houses of Memory: The Texts of Analogy." In Rossi, Aldo. *The Architecture of the City.* Cambridge: MIT Press, 1982, pp. 3-12.) [82/1]

Eisenman, Peter. "The Representations of Doubt: At the Sign of the Sign." In Eisenman, Peter. Rakatansky, Marc (Series Editor.) *Eisenman: Inside Out. Selected Writings 1963-1988.* New Haven: Yale University Press, 2004, pp. 143-151. (Reprint of Eisenman, Peter. "The Representations of Doubt: At the Sign of the Sign." "Le Rappresentazioni del Dubbio: Nel Segno del Segno."*Rassegna* 9, Milan (March 1982) 69-74.) [82/2]

Eisenman, Peter. "Contrasting Concepts of Harmony in Architecture: Debate Between Christopher Alexander and Peter Eisenman." "Contrasti sul Concetto de Armonia in Architettura: Aibattitotra Christopher Alexander e Peter Eisenman." *Lotus International* no. 40 (1983): 60-68.

Eisenman, Peter. "The City of Artificial Excavation." In Bédart, Jean-François, ed. *Cities of Artificial Excavation: The Work of Peter Eisenman, 1978-1988.* New York: Rizzoli International, Ltd., and Montréal, Centre Canadien d'Architecture, 1994, pp. 73-80. (Reprint of Eisenman, Peter. "The City of Artificial Excavation." *Architectural Design* London: no. 12 (January, 1983): 91-93.) [83/1]

Eisenman, Peter. "Representations of the Limit: Writing a 'Not Architecture." In Benjamin, Andrew, ed., *Re:Working Eisenman*. London: Academy Editions / Ernst & Sohn, 1993, pp. 34-36.

(Reprint of Eisenman, Peter. "Representations of the Limit: Writing a 'Not Architecture." In Libeskind, Daniel. *Chamberworks: Architectural Meditations on Themes from Heraclitus*. London: Architectural Association Folio, 1983, pp. 6-8.) [83/2]

Eisenman, Peter. "The End of the Classical: the End of the Beginning, the End of the End." In Eisenman, Peter. Rakatansky, Marc (Series Editor.) *Eisenman: Inside Out. Selected Writings 1963-1988.* New Haven: Yale University Press, 2004, pp. 152-168. (Reprint of Eisenman, Peter. "The End of the Classical: the End of the Beginning, the End of the End." *Perspecta* 21, The Yale Architectural Journal Cambridge (Summer 1984): 154-172.) [84/1]

Eisenman, Peter. "The Futility of Objects: Decomposition and the Processes of Difference." In Eisenman, Peter. Rakatansky, Marc (Series Editor.) *Eisenman: Inside Out. Selected Writings 1963-1988.* New Haven: Yale University Press, 2004, pp. 169-188.

(Reprint of Eisenman, Peter. "The Futility of Objects: Decomposition and the Processes of Difference." *Harvard Architecture Review* 3, Cambridge (Winter 1984): 65-82.) [84/2]

Eisenman, Peter. "Fin D'ou T Hou S." *Folio IV*, London: The Architectural Association, 1985 (with Jeff Kipnis and Nina Hofer).

Eisenman, Peter. "The City as Memory and Immanence." *Zone* 1, New York (Fall 1985): 440-1. [85/1]

Eisenman, Peter. "Moving Arrows, Eros, and Other Errors: An Architecture of Absence." III Architectural Biennale, Venice (1985) (original text to accompany exhibition panels).

Republished in, AA Files, Site Unscene, (Summer 1986): 76-84. [85/2]

Eisenman, Peter. "The Beginning, the End, and the Beginning Again: Some Notes on an Idea of Scaling." in *SD*, Special Issue on Peter Eisenman, Tokyo (March 1986): 6-7. Eisenman, Peter. "L'inizio, la fine e poi di nuovo l'inizio-alcune osservazioni sull'idea di scaling." In Belli, Gabriella and Rella, Franco (Ed.) *La Citta e le Forme.* Milan: Mazzotta, 1986, pp. 93-98. [86/1]

Eisenman, Peter. "miMISes READING: does not mean A THING." In Eisenman, Peter. Rakatansky, Marc (Series Editor.) *Eisenman: Inside Out. Selected Writings 1963-1988.* New Haven: Yale University Press, 2004, pp. 189-201.

(Reprint of Eisenman, Peter. "miMISes READING: does not mean A THING." In *Mies Reconsidered: His Career, Legacy, and Disciples*. Art Institute of Chicago, New York: Rizzoli Publications (1986): 86-98.) [86/2]

Eisenman, Peter. "The Museum Rediscovered. (Long Beach: University Art Museum of the California State University of Long Beach, 1986." In Bédart, Jean-François, ed. *Cities of Artificial Excavation: The Work of Peter Eisenman, 1978-1988.* New York: Rizzoli International, Ltd., and Montréal, Centre Canadien d'Architecture, 1994, pp. 131-132.

(Cf. also, Eisenman, Peter. "University Campus, Long Beach, California."*Lotus International* (1986): 128-135.)

Eisenman, Peter. "Architecture and the Problem of the Rhetorical Figure." In Eisenman, Peter. Rakatansky, Marc (Series Editor.) *Eisenman: Inside Out. Selected Writings 1963-1988.* New Haven: Yale University Press, 2004, pp. 202-207. (Reprint of Eisenman, Peter. "Architecture and the Problem of the Rhetorical Figure." *Architecture and Urbanism* Special Feature: Eisenman/ Robertson Architects, no. 202, Tokyo (July, 1987): pp 17-22.) [87/1]

Eisenman, Peter. "Misreading Peter Eisenman." In Eisenman, Peter. *Houses of Cards*. New York: Oxford University Press, 1987, pp. 167-186. [87/2]

Eisenman, Peter. "TEXt AS Zero Or: the Destruction of Narrative." In Benjamin, Andrew, ed., *Re:Working Eisenman*. London: Academy Editions / Ernst & Sohn, 1993, pp. 41-43.

(Reprint of Eisenman, Peter. "TEXt AS Zero Or: the Destruction of Narrative." In Lerup, Lars. *Planned Assaults*. Cambridge: Centre Canadien d'Architecture/MIT Press, 1987, pp. 93-98.) [87/3]

Eisenman, Peter. "Architecture as a Second Language: The Texts of Between." In Eisenman, Peter. Rakatansky, Marc (Series Editor.) *Eisenman: Inside Out. Selected Writings 1963-1988.* New Haven: Yale University Press, 2004, pp. 226-233. (Reprint of Eisenman, Peter. "Architecture as a Second Language: The Texts of Between." *Threshold*, Journal of the School of Architecture, University of Illinois at Chicago, Vol. IV, Illinois: Spring 1988, pp. 71-75.) [88/1]

Eisenman, Peter. "Architecture and the Crisis of Reality." In Benjamin, Andrew, ed., *Re:Working Eisenman*. London: Academy Editions / Ernst & Sohn, 1993, pp. 37-39. (Cf. also, Eisenman, Peter. "The Authenticity of Difference: Architecture and the Crisis of Reality." *Center*, A Journal for Architecture in America, University of Texas at Austin, 4, Rizzoli, New York (1988): 50-57.) [88/2]

Eisenman, Peter. "Blue Line Text." In Eisenman, Peter. Rakatansky, Marc (Series Editor.) *Eisenman: Inside Out. Selected Writings 1963-1988.* New Haven: Yale University Press, 2004, pp. 234-237.

(Reprint of Eisenman, Peter. "Blue Line Text." *Architectural Design* 58, no.7-8 (1988): 6-9.) [88/3]

Eisenman, Peter. "CHORA L WORKS." In Bédart, Jean-François, ed. *Cities of Artificial Excavation: The Work of Peter Eisenman, 1978-1988.* New York: Rizzoli International, Ltd., and Montréal, Centre Canadien d'Architecture, 1994, pp. 187-188. [88/4]

Eisenman, Peter. "En Terror Firma: in Trails of Grotextes." In Nesbitt, Kate, ed. *Theorizing a New Agenda for Architecture: An Anthology of Architectural Theory 1965-1995.* New York: Princeton Architectural Press, 1996, pp. 566-570. (Reprint of Eisenman, Peter. "En Terror Firma: in Trails of Grotextes." *Fifth Column* 7, no.1 (1988): 24-27, and *Pratt Journal of Architecture* 2: 111-121.) [88/5]

Eisenman, Peter. "Eisenman Architects." *Architecture and Urbanism* no.1 (220) (Jan 1989): 9-52.

Eisenman, Peter. "Peter Eisenman." El Croquis 8, no.41 (Dec 1989): 4-126.

Eisenman, Peter. "Post/El Cards: A Reply to Jacques Derrida." In Benjamin, Andrew, ed., *Re:Working Eisenman*. London: Academy Editions / Ernst & Sohn, 1993, pp. 68-71.

(Reprint of Eisenman, Peter. "Post/El Cards: A Reply to Jacques Derrida." *Assemblage* no. 12, Cambridge (August 1990): 14-17.) [90/1]

Eisenman, Peter. "The Author's Affect: Passion and the Moment of Architecture." In Davidson, Cynthia, ed. *Anyone*. New York: Rizzoli, 1991, pp. 200-211. [91/1]

Eisenman, Peter. "Strong Form, Weak Form." In Benjamin, Andrew, ed., *Re:Working Eisenman*. London: Academy Editions / Ernst & Sohn, 1993, pp. 51-53. (Cf. also, Eisenman, Peter. "Strong Form, Weak Form." *Architecture in Transition: Between Deconstruction and New Modernism.* Munich: Prestel, 1991, pp. 33-45.) [91/2]

Eisenman, Peter. "Unfolding Events: Frankfurt Rebstock and the Possibility of a New Urbanism." In Benjamin, Andrew, ed., *Re:Working Eisenman*. London: Academy Editions / Ernst & Sohn, 1993, pp. 59-61.

(Reprint of Eisenman, Peter. "Unfolding Events: Frankfurt Rebstock and the Possibility of a New Urbanism." In Eisenman, Peter. *Unfolding Frankfurt*. Berlin: Ernst & Sohn,

1991, pp. 8-17. [91/3]

Eisenman, Peter. "Viel/Faltig/Field/Feld." (Frankfort Rebstock Competition.) *Architecture and Urbanism* (Sept 1991): 16-55. [91/4]

Eisenman, Peter. "The Affects of Singularity." *Architectural Design* (Nov/Dec, 1992): 51. [92/1]

Eisenman, Peter. "K Nowhere to Fold." In Davidson, Cynthia, ed. *Anywhere*. New York: Rizzoli, 1992. [92/2]

Eisenman, Peter. "Lighting Writing." In Davidson, Cynthia, ed. *Anywhere*. New York: Rizzoli, 1992, p. 270.

Eisenman, Peter. "Vision's Unfolding: Architecture in the Age of Electronic Media." In Nesbitt, Kate, ed. *Theorizing a New Agenda for Architecture: An Anthology of Architectural Theory 1965-1995.* New York: Princeton Architectural Press, 1996, pp. 556-561.

(Cf. also Eisenman, Peter. "Vision's Unfolding: Architecture in the Age of Electronic Media." *Domus* 734 (Jan, 1992): 17-24.) [92/3]

Eisenman, Peter. "Folding in Time: The Singularity of Rebstock." In Lynn, Greg, ed. *Folding in Architecture*. Architectural Design Profile no. 102, London: Academy Group Ltd., Architectural Design, 1993, pp. 22-25. [93/1]

Eisenman, Peter. "A— Way From/To Architecture." In Davidson, Cynthia. *Anyway*. New York: Rizzoli International, 1994.

Eisenman, Peter. "Not the Last Word: The Intellectual Sheik." Any no.7-8 (1994): 66-69. [94/1]

Eisenman, Peter. "Critical Architecture in a Geopolitical World, in Architecture beyond Architecture." In Davidson, Cynthia/ Seragelpin, I., ed. *The Aga Khan Award for Architecture*. London: Academy Editions, 1995, pp. 78-81. [95/1]

Eisenman, Peter. "Eisenman (and company) Respond." *Progressive Architecture* no. 2 (Feb 1995): 88-91.

Eisenman, Peter. "M Emory Games." In Eisenman, Peter, ed. *M Emory Games: Emory Center for the Arts.* New York: Rizzoli, 1995, pp. 58-59. [95/2]

Eisenman, Peter. "Presentness and the Being-Only-Once of Architecture." In Haverkamp, Anselm, ed. *Deconstruction is/in America*. New York: New York University Press, 1995, pp. 134-148. [95/3]

Eisenman, Peter. "Architecture in a Mediated Environment." In Middleton, Robin, ed. *The Idea of the City*. London: Architectural Association, 1996, pp. 56-63. [96/1]

Eisenman, Peter. "Eleven Points on Knowledge and Wisdom." In Davidson, Cynthia, ed. *Anywise*. Cambridge, Massachusetts: MIT Press, 1996, pp. 48-55.

Eisenman, Peter. "Forming the Postcritical." "L'Architettura Post-Critica." *Casabella* 61, no. 644 (April 1997): 1. (Italian and English, Reprint of "Forming the Postcritical," 1996). [96/2]

Eisenman, Peter. "Autonomy and the Avant-garde: the Necessity of an Architectural Avant-garde in America." In Somol, Robert E. and Monfried, Andrea M., eds. *Autonomy and Ideology: Positioning an Avant-Garde in America*. New York: Monacelli Press, 1997, pp. 68-79. [97/1]

Eisenman, Peter. "Processes of the Interstitial: Notes on Zaera-Polo's Idea of the Machinic." *El Croquis*: Peter Eisenman 1990-1997 83, (1997): 21-35. [97/2]

Eisenman, Peter. "Separate Tricks." In Kipnis, Jeffrey, ed. *CHORA L WORKS*. New York: Monacelli Press, 1997, pp. 132-36. [97/3]

Eisenman, Peter. "Zones of Undecidability: The Interstitial Figure." In Davidson, Cynthia, ed. *Anybody*. New York: Anyone Corporation and MIT Press, 1997, pp. 240-247. [97/4]

Eisenman, Peter. "CHORA L WORKS." Eisenman, Peter and Derrida, Jacques. Kipnis, Jeffrey and Leeser, Thomas (editors.) *CHORA L WORKS.Jacques Derrida and Peter Eisenman.* New York: The Monacelli Press, 1997.

Eisenman, Peter. "Peter Eisenman: 1990-1997." El Croquis, no. 83.

Eisenman, Peter. "Diagram: An Original Scene of Writing." *Any* no. 23 (1998): 28-29. [98/1]

Eisenman, Peter. "Zones of Undecidability: The Processes of the Interstitial." In Davidson, Cynthia, ed. *Anyhow*. New York: Anyone Corporation and MIT Press, 1998, pp. 28-35. [98/2]

Eisenman, Peter. "Diagrams of Anteriority." In Eisenman, Peter. *Diagram Diaries*. New York: Universe Publishing, 1999, pp. 36-43. [99/1]

Eisenman, Peter. "Diagrams of Interiority." In Eisenman, Peter. *Diagram Diaries*. New York: Universe Publishing, 1999, pp. 44-93. [99/2]

Eisenman, Peter. "Diagrams of Exteriority." In Eisenman, Peter. *Diagram Diaries*. New York: Universe Publishing, 1999, pp. 164-209. [99/3]

Eisenman, Peter. "The Diagram and the Becoming Unmotivated of the Sign." In Eisenman, Peter. *Diagram Diaries*. New York: Universe Publishing, 1999, pp. 210-215. [99/4]

Eisenman, Peter. "Time Warps: The Monument." In Davidson, Cynthia, ed. *Anytime*. New York: MIT Press, 1999, pp. 250-257. [99/5]

Eisenman, Peter. "The Specter of the Spectacle: Ghosts of the Real." In Davidson, Cynthia, ed. *Anymore*. Cambridge, Massachusetts: Anyone Corporation and MIT Press, 2000, pp. 174-180. [00/1]

Eisenman, Peter. "The Wicked Critic." Any nos. 25/26 (2000): 66-70. [00/2]

Eisenman, Peter. *Blurred Zones. Investigations of the Interstitial.* Eisenman Architects 1988-1998. New York: The Monacelli Press, Inc., 2003.

Eisenman, Peter. "Terragni and the Idea of a Critical Text." In Eisenman, Peter. *Giuseppe Terragni: Transformations, Decompositions, Critiques.* New York: The Monacelli Press, Inc., 2003, pp. 295-301.

Eisenman, Peter. *Giuseppe Terragni: Transformations, Decompositions, Critiques.* New York: The Monacelli Press, Inc., 2003.

Eisenman, Peter. Mark Rakatansky (Series Editor). *Eisenman: Inside Out. Selected Writings 1963-1988.* New Haven: Yale University Press, 2004.

Eisenman, Peter. Noever, Peter, ed. *Peter Eisenman: Barfuss auf Weissen Gluhenden Mauern. Barefoot on White-Hot Walls.* Vienna: MAK Wien, 2004.

Eisenman, Peter. Cassara, Silvio (Ed.). Feints, Milano: Skira Editore S.p.A., 2006.

Alberro, Alexander and Stimson, Blake, ed. *Conceptual Art: a critical anthology.* Cambridge, Massachusetts: The MIT Press, 1999.

Alexander, Christopher. *Notes on the Synthesis of Form.* Cambridge, Massachusetts: Harvard University Press, 1964.

Alexander, Christopher, Eisenman, Peter. "Contrasting Concepts of Harmony in Architecture: Debate between Christopher Alexander and Peter Eisenman." *Lotus International* no. 40 (1983): 60-68.

Balfour, Alan. "Documents of a Creative Process." In Bédart, Jean-François, ed. *Cities of Artificial Excavation: The Work of Peter Eisenman, 1978-1988.* New York: Rizzoli International, Ltd., and Montréal, Centre Canadien d'Architecture, 1994.

Barry, Donna. "Connecting the Dots: The Dimensions of a Wireframe." In Davidson, Cynthia, ed. *Eleven Authors in Search of a Building.* New York: The Monacelli Press, 1996, pp. 48-59.

Baudrillard, Jean. "The Beaubourg-effect: Implosion and Deterrence." In Leach, Neil. *Rethinking Architecture.* London: Routledge, London, 1997, pp. 210-218.

Bédart, Jean-François, ed. *Cities of Artificial Excavation: The Work of Peter Eisenman, 1978-1988.* New York: Rizzoli International, Ltd., and Montréal, Centre Canadien d'Architecture, 1994. (A catalogue for the exhibition of the same name at the Centre Canadien d'Architecture, May 2 - June 19, 1994.) (Introduction by Jean-François Bédard)

Benjamin, Andrew, ed., *Re:Working Eisenman*. London: Academy Editions / Ernst & Sohn, 1993.

Benjamin, Walter. "The Work of Art in the Age of Mechanical Reproduction." In Benjamin, Walter. *Illuminations. Essays and Reflections*. New Yok: Schocken Books, 1969, pp. 217-251. (Edited and with an Introduction by Hannah Arendt.)

Benjamin, Walter. *The Arcades Project.* Cambridge, Massachusetts: The Belknap Press of Harvard University Press. 1999. (Translated by Howard Eiland and Kevin McLaughlin. Prepared on the basis of the German volume edited by Rolf Tiedemann.)

Buchanan, Ian and Lambert, Gregg, eds. *Deleuze and Space*. Edinburgh: Edinburgh University Press, 2005.

Cacciari, Massimo. Architecture and Nihilism: On the Philosophy of Modern Architecture. New Haven: Yale University Press, 1993.

Caragonne, Alexander. *The Texas Rangers, Notes From An Architectural Underground.* Cambridge, Massachusetts: The MIT Press, 1995.

Chandler, Daniel. Semiotics: The Basics. London: Routledge, 2002.

Chomsky, Noam. *Aspects of the Theory of Syntax.* Cambridge, Massachusetts: The MIT Press, 1965.

Chomsky, Noam. Syntactic Structures. The Hague: Mouton & Co, 1965.

Cobley, Paul and Jansz, Litza. Introducing Semiotics. London: Icon Books, 1999.

Collins, Jeff, Mayblin, Bill. Introducing Derrida. Cambridge: Icon Books, 1997.

Ciorra, Pippo, ed. *Peter Eisenman: opere e progretti*. Serie Documenti di Architettura, No. 71, Milan: Electa, 1993.

Culler, Jonathan. *On Deconstruction: Theory and Criticism after Structuralism.* Ithaca, New York: Cornell University Press, 1982.

Davidson, Cynthia, ed. Anyone. New York: Rizzoli, 1991.

Davidson, Cynthia, ed. Anyway. New York: Rizzoli International, 1994.

Davidson, Cynthia, ed. *Eleven Authors in Search of a Building.* New York: The Monacelli Press, 1996.

Davidson, Cynthia, ed. Anybody. Cambridge, Massachusetts: The MIT Press, 1997.

Davidson, Cynthia, ed. Anyhow. Cambridge, Massachusetts: The MIT Press, 1998.

Davidson, Cynthia, ed. Anymore. Cambridge, Massachusetts: The MIT Press, 2000.

Davidson, Cynthia, ed. Anything. Cambridge, Massachusetts: The MIT Press, 2001.

Davidson, Cynthia, ed. *Tracing Eisenman. Peter Eisenman: Complete Works.* New York: Rizzoli International Publications, Inc., 2006.

De Landa, Manuel. *A Thousand Years of Non-linear History*. New York: Swerve Editions, 1997.

Deleuze, Gilles, Guattari, Félix. *A Thousand Plateaus, Capitalism and Schizophrenia.* Minneapolis: University of Minnesota Press, 1987. (Translated by Brian Massumi.)

Deleuze, Gilles. Le Pli, Leibniz et le Baroque. Paris: Les Editions de Minuit, 1988.

Deleuze, Gilles. Foucault. Minneapolis: The University of Minnesota Press, 1988.

Deleuze, Gilles. *Difference and Repetition.* New York: The Columbia University Press, 1994. (Translated by Paul Patton.)

Deleuze, Gilles. *Bergsonism.* New York: Zone Books, 1988. (Translated by Hugh Tomlinson and Barbara Habberjam.)

Derrida, Jacques. *Of Grammatology.* Baltimore: The Johns Hopkins University Press, 1974. (Translated by Gayatri Chakravorty Spivak.)

Derrida, Jacques. *Writing and Difference.* Chicago: The University of Chicago Press, 1978. (Translated, with an Introduction and Additional Notes, by Alan Bass.)

Derrida, Jacques. "Point de Folie - maintenant." In Leach, Neil. *Rethinking Architecture.* London: Routledge, 1997, pp. 324-336.

Derrida, Jacques. "A Letter to Peter Eisenman." In Benjamin, Andrew, ed., *Re:Working Eisenman.* London: Academy Editions / Ernst & Sohn, 1993, pp. 62-67.

Derrida, Jacques. "Why Peter Eisenman writes such good books." In Leach, Neil. *Rethinking Architecture.* London: Routledge, London, 1997, pp. 336-346.

Dobney, Stephen, ed. *Eisenman Architects: Selected and Current Works.* Mulgrave, Victoria (Australia): The Images Publishing Group Pty Ltd, 1995.

Dosse, François. *Histoire du Structuralisme. I.Le Champs du signe, 1945-1966.* Paris: Editions de la Découverte,1992.

Dosse, François. *Histoire du Structuralisme. II.Le Champs du cygne, 1967 à nos jours.* Paris: Editions de la Découverte,1992.

Dreyfus, Herbert L. and Rabinow, Paul. *Michel Foucault. Beyond Structuralism and Hermeneutics.* Chicago: The University of Chicago Press, 1982.

Evans, Robin. "Not to be Used for Wrapping Purposes: A Review of the Exhibition of Peter Eisenman's Fin d'Ou U Hou S." In Evans, Robin. *Translations from Drawings to Building and Other Essays*. Cambridge, Massachussetts: The PIT Press, 1997, pp. 119-151.

Foucault, Michel. The Order of Things. New York: Vintage/Random House, 1973.

Foucault, Michel. *The Archeology of Knowledge, and The Discourse on Language.* New York: Pantheon Books, 1972.

Gandelsonas, Mario. "From Structure to Subject: the Formation of an Architectural Language." In Eisenman, Peter. *House X.* New York: Rizzoli International Publications, Inc., 1982, pp. 7-31.

Gandelsonas, Mario. "Neo-Functionalism." In Hays, K. Michael. Oppositions Reader.

New York: Princeton Architectural Press, 1998, pp. 7-8.

Graafland, Arie, ed. *Recente Projecten, Peter Eisenman, Recent Projects.* Nijmegen: SUN, 1989.

Grosz, Elizabeth. *The Architecture from the Outside: Essays on Virtual and Real Space.* Cambridge, Massachusetts: The MIT Press, 2001.

Hardt, Michael. *Gilles Deleuze. An Apprenticeship in Philosophy.* Minneapolis: University of Minnesota Press, 1993.

Horrocks, Chris and Jevtic, Zoran. Introducing Foucault. Cambridge: Icon Books, 1999.

Hays, K. Michael, ed. Architecture Theory since 1968. Cambridge, Massachusetts: The MIT Press, 1998.

Hays, K. Michael. Oppositions Reader, New York: Princeton Architectural Press, 1998.

Holly, Michael Ann. *Panofsky and the Foundations of Art History.* Ithaca and London: Cornell University Press, 1984.

Hofer, Nina. "Fin d'Ou T Hou S." In Eisenman, Peter. *Fin D'ou T Hou S.* Folio IV, London: The Architectural Association, 1985 (with Jeff Kipnis and Nina Hofer).

Jencks, Charles, Baird, Georges. *Meaning in Architecture*. London: Academy Editions, 1970.

Jencks, Charles and Kropf, Karl, ed. *Theories and Manifestoes of Contemporary Architecture.* West Sussex, England: Academy Editions, 1997.

Kamuf, Peggy, ed. A Derrida Reader. *Between the blinds*. New York: Columbia University Press, 1991.

Kipnis, Jeffrey. "Architecture Unbound" In Eisenman, Peter. *Fin D'ou T Hou S.* Folio IV, London: The Architectural Association, 1985.

Kipnis, Jeffrey. "Towards a New Architecture." In Di Cristina, Giuseppa, ed. *Architecture and Science*. London: Wiley-Academy, 2001m, pp. 17-25.

Kipnis, Jeffrey. "P-Tr's Progress." In *El Croquis*: Peter Eisenman 1990-1997, 83, Madrid: 1997, pp. 50-63 (Spanish and English).

Kormoss, Bernard. "Control alt-shift: or how to reset diagrammatic time." In Davidson, Cynthia, ed. *Anyhow*. Cambridge, Massachusetts: The MIT Press. New York, 1998, pp. 268-269.

Kormoss, Bernard. "Intensity versus Density." In Heynen, Hilde and Vanderburgh, David, eds. *Inside Density.* International Colloquium on Architecture and Cities #1. Brussels: La Lettre Volée/The NeTHCA Colloquia Series #1, 1999, pp. 123-132.

Krauss, Rosalind E. *The Originality of the Avant-Garde and Other Modernist Myths.* Cambridge, Massachusetts: The MIT Press, 1986.

Krauss, Rosalind. "Death of a Hermeneutic Phantom: Materialization of the Sign in the work of Peter Eisenman." In Eisenman, Peter. *Houses of Cards.* New York: Oxford University Press, 1987.

Krauss, Rosalind E. *The Optical Unconscious.* Cambridge, Massachusetts: The MIT Press/An October Books, 1994.

Krauss, Rosalind, Bois, Yves-Alain. L'informe: Mode d'emploi. Paris: Centre Georges Pompidou, 1996.

Leach, Neil. Rethinking Architecture. London: Routledge, London, 1997.

LeWitt, Sol. "Paragraphs on Conceptual Art." In Zevi, Adachiara, ed. *Sol LeWitt. Critical Texts.* Rome: I Libri di A.E.I.U.O. Incontri Internalzionali d'Arte, 1994, pp. 78-82.

LeWitt, Sol. "Sentences on Conceptual Art." In Zevi, Adachiara, ed. *Sol Lewitt. Critical Texts*. Rome: I Libri di A.E.I.U.O. Incontri Internalzionali d'Arte, 1994, pp. 88-90.

LeWitt, Sol. "Excerpts from a Correspondence, 1981-1983." In Zevi, Adachiara, ed. *Sol LeWitt. Critical Texts.* Rome: I Libri di A.E.I.U.O. Incontri Internazionali d'Arte, 1994, pp. 102-119.

LeWitt, Sol. Garrels, Gary, ed. *Sol Le Witt: A Retrospective.* San Francisco: San Francisco Museum of Modern Art, 2000. (Catalogue of the exhibition Sol LeWitt: A Retrospective, organized by Gary Garrels at the San Francisco Museum of Modern Art.) (Edited and with an introduction by Gary Garrels.)

LeWitt. Sol. Baume, Nicholas. *Sol LeWitt: Incomplete Open Cubes.* Cambridge, Massachusetts: The MIT Press, 2001. (Published by the Wadsworth Atheneum Museum of Art in conjunction with the exhibition: Sol LeWitt: Incomplete Open Cubes. Organized by the Wadsworth Atheneum Museum of Art. Exhibition curator, Nicolas Baume.)

Lucy, Niall. A Derrida Dictionary. Oxford: Blackwell Publishing, 2004.

Lynn, Gregg, ed. Folding in Architecture. London: Architectural Design, 1993.

Lyons, John. *Chomsky.* London: Fontana Press, An Imprint of Harper's Collins Publishers, 1970.

Marra, Felix. Theatre of the mind: an interpretation of Colin Rowe's writing on architec-

ture, 1945-1990. London: The Bartlett, University College London, 1994. (Dissertation for The Bartlett Institute)

Mengue, Philippe. Gilles Deleuze ou le système du multiple. Paris : Editions Kimé, 1994.

Morris, Robert. *Continuous Project. Altered Daily. The Writings of Robert Morris.* Cambridge, Massachusetts: The MIT Press, London, 1993.

Nesbitt, Kate, ed. *Theorizing a New Agenda for Architecture: An Anthology of Architectural Theory* 1965-1995. New York: Princeton Architectural Press, 1996.

Noever, Peter, ed. Eisenman, Peter. *Peter Eisenman: Barfuss auf Weissen Gluhenden Mauern. Barefoot on White-Hot Walls.* Vienna: MAK Wien, 2004.

Nöth, Winfried. *Handbook of Semiotics*. Bloomington and Indianapolis: Indiana University Press, 1995.

Ockman, Joan. *Architecture Culture 1943-1968. A Documentary Anthology.* New York: Colombia Books of Architecture/Rizzoli International Publications, 1993.

Panofsky, Erwin. *Meaning in the Visual Arts.* Chicago: The University of Chicago Press, 1955.

Panofsky, Erwin. Perspective as Symbolic Form. New York: Zone Books, 1997.

Papadakis, Andreas with Catherine Cooke and Andrew Benjamin. *Deconstruction.* (*Omnibus Volume*) London: Academy Editions, 1989.

Parr, Adrian, ed. *The Deleuze Dictionary.* Edinburgh: Edinburgh University Press Ltd, 2005.

Patton, Paul and Protevi, John, ed. *Between Deleuze and Derrida.* London, New York: Continuum, 2003. (Introduction by Paul Patton and John Protevi.)

Plotnitsky, Arkady. "Algebras, Geometries and Topologies of the Fold; Deleuze, Derrida and Quasi-Mathematical Thinking (with Leibniz and Mallarmé)." In Patton, Paul and Protevi, John, ed. *Between Deleuze and Derrida.* London, New York: Continuum, 2003, pp. 98-119.

Rose, Barbara, "ABC Art," in Battcock, Gregory (ed.) *Minimal Art: A Critical Anthology.* New York: E.P. Dutton and Co., 1968.

Rossi, Aldo. *The Architecture of the City.* Cambridge, Massachusetts: The MIT Press/Oppositions Books, 1989.

Rowe, Colin. *The Mathematics of the Ideal Villa and Other Essays.* Cambridge, Massachusetts: The MIT Press, 1995.

Rowe, Colin. *As I Was Saying. Recollections and Miscellaneous Essays.* Cambridge, Massachusetts: The MIT Press, 1996. (Edited by Alexander Caragonne.)

Rowe, Colin and Slutzky, Robert. "Transparency: Literal and Phenomenal." In Rowe, Collin. *The Mathematics of the Ideal Villa and Other Essays.* Cambridge, Massachusetts: The MIT Press, 1995, pp. 160-183.

Smith, Daniel W. "Deleuze and Derrida, Immanence and Transcendence: Two Directions in Recent French Thought." In Patton, Paul and Protevi, John, ed. *Between Deleuze and Derrida*. London, New York: Continuum, 2003, pp. 46-66.

Smith, Neil. Chomsky, Ideas and Ideals. Cambridge: Cambridge University Press, 1999.

Somol, Robert E. and Monfried, Andrea M., eds. *Autonomy and Ideology: Positioning an Avant-Garde in America.* New York: Monacelli Press, 1997.

Somol, Robert E. "Dummy Text. Or the Diagrammatic Basis of Contemporary Architecture." In Eisenman, Peter. *Peter Eisenman: Diagram Diaries.* London: Thames & Hudson, 1999, pp. 7-25.

Stivale, Charles J., ed. *Gilles Deleuze, Key Concepts.* Chesham, Bucks: Acumen Publishing Ltd, 2005.

Summerson, John. *The Classical Language of Architecture.* London: Thames and Hudson Ltd., 1980.

Tafuri, Manfredo. *The Sphere and the Labyrinth.* Cambridge, Massachusetts: The MIT Press, 1984.

Tafuri, Manfredo. *Theories and History of Architecture.* London: Granada, 1980. (Reprint of Tafuri, Manfredo. *Teoria e storia dell'architettura*. Bari, Laterza, 1968).

Tafuri, Manfredo. "Peter Eisenman: The Meditations of Icarus." In Eisenman, Peter. *Houses of Cards.* New York: Oxford University Press, 1987, pp. 167-187.

Venturi, Robert. *Complexity and Contradiction in Architecture.* New York: The Museum of Modern Art, 1966.

Wilson, Andrew. "Sol LeWitt Interviewed." In Zevi, Adachiara., ed. Sol LeWitt. Critical Texts. Rome: I Libri di A.E.I.U.O. Incontri Internazionali d'Arte, 1994, pp. 122-129.

Wittkower, Rudolph. *Architectural Principles in the Age of Humanism.* London: Academy Editions: 1988.

Wolheim, Richard. "Minimal Art." In Battcock, Gregory, ed. *Minimal Art: A Critical Anthology.* New York: E. P. Dutton and Co, 1968.

Zaera-Polo, Alejandro. "The making of the machine: powerless control as a critical strategy." In Davidson, Cynthia, ed. *Eleven Authors in Search of a Building.* New York: The Monacelli Press, 1996. (pp. 28-37)

Zaera-Polo, Alejandro. "Eisenman's Machine of Infinite Resistance." In *El Croquis*: Peter Eisenman 1990-1997, 83, Madrid: 1997, pp. 50-63 (Spanish and English).

Zevi, Adachiara., ed. Sol LeWitt. Critical Texts. Rome: I Libri di A.E.I.U.O. Incontri Internazionali d'Arte, 1994. BOUWSTENEN is een publikatiereeks van de Faculteit Bouwkunde, Technische Universiteit Eindhoven. Zij presenteert resultaten van onderzoek en andere aktiviteiten op het vakgebied der Bouwkunde, uitgevoerd in het kader van deze Faculteit.

BOUWSTENEN zijn verkrijgbaar bij:

Publikatiewinkel 'Legenda' Gebouw Vertigo Faculteit Bouwkunde Technische Universiteit Eindhoven Postbus 513 5600 MB Eindhoven

of telefonisch te bestellen: 040 - 2472383 040 - 2475832

Kernredaktie MTOZ

BOUWSTENEN is een publikatiereeks van de Faculteit Bouwkunde, Technische Universiteit Eindhoven. Zij presenteert resultaten van onderzoek en andere aktiviteiten op het vakgebied der Bouwkunde, uitgevoerd in het kader van deze Faculteit.

BOUWSTENEN zijn verkrijgbaar bij:

Publikatiewinkel 'Legenda' Gebouw Vertigo Faculteit Bouwkunde Technische Universiteit Eindhoven Postbus 513 5600 MB Eindhoven

of telefonisch te bestellen: 040 - 2472383 040 - 2475832

Kernredaktie MTOZ Reeds verschenen in de serie BOUWSTENEN

nr 1

Elan, a computermodel for building energy design, theory and validation M.H. de Wit H.H. Driessen R.M.M. van der Velden

nr 2

Kwaliteit, keuzevrijheid en kosten Evaluatie van experiment Klarendal, Arnhem drs J. Smeets C. le Nobel, arch. HBO

M. Broos, J. Frenken, A. v.d. Sanden

nr 3

Crooswijk van 'bijzonder' naar 'gewoon' drs V. Smit ir K. Noort

nr 4 Staal in d

Staal in de woningbouw ir E.J.F. Delsing

nr 5

Mathematical theory of stressed skin action in profiled sheeting with various edge conditions ir A.W.A.M.J. v.d. Bogaard

nr 6

Hoe berekenbaar en betrouwbaar is de coëfficiënt k in <u>x</u> - ko en <u>x</u> - ks? ir K.B. Lub drs A.J. Bosch

nr 7

Het typologisch gereedschap Een verkennende studie omtrent typologie en omtrent de aanpak typologisch onderzoek J.H. Luiten arch. HBO

nr 8

Informatievoorziening en beheerprocessen ir A. Nauta / drs J. Smeets (red.) Prof. H. Fassbinder (projectleider) ir A. Proveniers, drs J.v.d. Moosdijk

nr 9

Strukturering en verwerking van tijdgegevens voor de uitvoering van bouwwerken ir W.F. Schaefer ir P.A. Erkelens

nr 10

Stedebouw en de vorming van een speciale wetenschap K. Doevendans

nr 11 Informatica en ondersteuning van ruimtelijke besluitvorming dr G.G. van der Meulen

nr 12

Staal in de woningbouw, korrosie-bescherming van de begane grondvloer ir E.J.F. Delsing

nr 13

Een thermisch model voor de berekening van staalplaatbetonvloeren onder brandomstandigheden ir A.F. Hamerlinck

nr 14

De wijkgedachte in Nederland Gemeenschapsstreven in een stedebouwkundige context dr ir K. Doevendans dr R. Stolzenburg

nr 15

Diaphragm effect of trapezoidally profiled steel sheets. Experimental research into the influence of force application ir A.W.A.M.W. v.d. Bogaard

nr 16

Versterken met spuit-ferrocement. Het mechanische gedrag van met spuit-ferrocement versterkte gewapende betonbalken ir K.B. Lub ir M.C.G. van Wanroy nr 17 De tractaten van Jean Nicolas Louis Durand ir G. van Zeyl

nr 18

Wonen onder een plat dak. Drie opstellen over enkele vooronder-stellingen van de stedebouw dr ir K. Doevendans

nr 19

Supporting decision making processes A graphical and interactive analysis of multivariate data drs W. Adams

nr 20

Self-help building productivity A method for improving house building by low-income groups applied to Kenya 1990-2000 ir P. A. Erkelens

nr 21

De verdeling van woningen: een kwestie van onderhandelen drs V. Smit

nr 22

Flexibiliteit en kosten in het ontwerpproces Een besluitvormingondersteunend model ir M. Prins

nr 23

Spontane nederzettingen begeleid Voorwaarden en criteria in Sri Lanka ir P.H. Thung

nr 24

Fundamentals of the design of bamboo structures O. Arce-Villalobos

nr 25

Concepten van de bouwkunde Prof. dr ir M.F.Th. Bax (red.) dr ir H.M.G.J. Trum (red.)

nr 26 Meaning of the site Xiaodong Li

nr 27 Het woonmilieu op begrip gebracht Jaap Ketelaar

nr 28 Urban environment in developing countries editors: dr ir Peter A. Erkelens dr George G. van der Meulen

nr 29

Stategische plannen voor de stad Onderzoek en planning in drie steden Prof. dr H. Fassbinder (red.) ir H. Rikhof (red.)

nr 30

Stedebouwkunde en stadsbestuur ir Piet Beekman

nr 31

De architectuur van Djenné Een onderzoek naar de historische stad P.C.M. Maas

nr 32 Conjoint experiments and retail planning Harmen Oppewal

nr 33

Strukturformen Indonesischer Bautechnik Entwicklung methodischer Grundlagen für eine 'konstruktive pattern language' in Indonesien Heinz Frick

nr 34

Styles of architectural designing Empirical research on working styles and personality dispositions Anton P.M. van Bakel

nr 35

Conjoint choice models for urban tourism planning and marketing Benedict Dellaert

nr 36 Stedelijke Planvorming als co-produktie Prof. dr H. Fassbinder (red.) nr 37 Design Research in the Netherlands editors: Prof. dr R.M.Oxman, Prof. dr ir. M.F.Th. Bax, Ir H.H. Achten

nr 38 Communication in the Building Industry Bauke de Vries

nr 39 Optimaal dimensioneren van gelaste plaatliggers

nr 40 Huisvesting en overwinning van armoede dr.ir. P.H. Thung en dr.ir. P. Beekman (red.)

nr 41 Urban Habitat: The environment of tomorrow George G. van der Meulen, Peter A. Erkelens

nr 42 A typology of joints John C.M. Olie

nr 43 Modeling constraints-based choices for leisure mobility planning Marcus P. Stemerding

nr 44 Activity-based travel demand modeling D. Ettema

nr 45 Wind-induced pressure fluctuations on building facades Chris Geurts

nr 46 Generic Representations Henri Achten

nr 47 Johann Santini Aichel Dirk De Meyer nr 48 Concrete behaviour in multiaxial compression Erik van Geel

nr 49 Modelling site selection Frank Witlox

nr 50 Ecolemma model Ferdinand Beetstra

nr 51 Conjoint approaches to developing activity-based models Donggen Wang

nr 52 On the effectiveness of ventilation Ad Roos

nr 53 Conjoint modeling approaches for residential group preverences Eric Molin

nr 54 Modelling architectural design information by features Jos van Leeuwen

nr 55 A spatial decision support system for the planning of retail and service facilities Theo Arentze

nr 56 Integrated lighting system assistant Ellie de Groot

nr 57 Ontwerpend leren, leren ontwerpen dr.ir. J.T. Boekholt

nr 58 Temporal aspects of theme park choice behavoir Astrid Kemperman

nr 59 Ontwerp van een geïndustrialiseerde funderingswijze Faas Moonen nr 60 Merlin: A decision support system for outdoor leisure planning Manon van Middelkoop

nr 61 The aura of modernity Jos Bosman (nog niet gepubliceerd)

nr 62 Urban Form and Activity-Travel Patterns Daniëlle Snellen

nr 63 Design Research in the Netherlands 2000 Henri Achten

nr 64 Computer Aided Dimensional Control in Building Construction Rui Wu

nr 65

Beyond Sustainable Building

editors: Peter A. Erkelens Sander de Jonge August A.M. van Vliet co-editor: Ruth J.G. Verhagen

nr 66

Das globalrecyclingfähige Haus Hans Löfflad

nr 67 Cool Schools For Hot Suburbs René J. Dierkx

nr 68 A Bamboo Building Design Decision Support Tool Fitri Mardjono

nr 69 Driving rain on building envelopes Fabien van Mook

nr 70 Heating Monumental Churches Henk Schellen

nr 71 Van Woningverhuurder naar Aanbieder van Woongenot Patrick Dogge nr 72 Moisture transfer properties of coated gypsum Emile Goossens

nr 73 Plybamboo Wall-panels for Housing Guillermo E. González-Beltrán

nr 74

The Future Site-Proceedings Ger Maas Frans van Gassel

nr 75 Radon transport in Autoclaved Aerated Concrete Michel van der Pal

nr 76

The Reliability and Validity of Interactive Virtual Reality Computer Experiments Amy Tan

nr 77

Measuring Housing Preferences Using Virtual Reality And Belief Networks Maciej A. Orzechowski

nr 78

Computational Representations of Words and Associations in Architectural Design Nicole Segers

nr 79

Measuring and Predicting Adaptationin Multidimensional Activity-Travel Patterns Chang-Hyeon Joh

nr 80 Strategic Briefing Fayez Al Hassan (nog niet gepubliceerd)

nr 81 Well Being in Hospitals Simona Di Cicco

nr 82 Solares Bauen Implementierungs- und Umsetzungsaspekte in der Hochschulausbildung in Österreich Gerhard Schuster nr 83 Supporting Strategic Design of workplace Environments with Case-Based Reasoning Shauna Mallory-Hill

nr 84

ACCEL: a Tool for Supporting Concept Generation in the Early Design Phase Maxim Ivashkov

nr 85 Brick-mortar interaction in masonry under compression Ad Vermeltfoort

nr 86 Zelfredzaam Wonen Guus van Vliet

nr 87 Een ensemble met grootstedelijke allure Jos Bosman/Hans Schippers

nr 88 On the Computation of Well-Structured Graphic Representations in Architectural Design Henri Achten

nr 89 De Evolutie van een West-Afrikaanse Vernaculaire Architectuur Wolf Schijns

nr 90 ROMBO tactiek Christoph Maria Ravesloot

nr 91 External coupling between building energy simulation and computational fluid dynamics Ery Djunaedy

nr 92 Design Research in the Netherlands 2005 Editors: Henri Achten Kees Dorst Pieter Jan Stappers Bauke de Vries nr 93 Ein Modell zur baulichen Transformation Jalil H.Saber Zaimian

nr 94 Human Lighting Demands Healthy Lighting in an Office Environment Myriam Aries

nr 95

A Spatial Decision Support System for the Provision and Monitoring of Urban Greenspace Claudia Pelizaro

nr 96 Leren Creëren Adri Proveniers

nr 97 Simlandscape Rob de Waard

nr 98 Design Team Communication Ad den Otter

nr 99 Juri Czabanowski

nr 100 Hambase Martin de Wit

nr 101 Sound Transmission through Pipe Systems and into Building Structures Susanne Bron - van der Jagt

nr 102 Het Bouwkundig Contrapunt Jan Francis Boelen

nr 103 A Framework for a Multi-Agent Planning Support System Dick Saarloos

nr 104 Bracing Steel Frames with Calcium Silicate Element Walls Bright Mweene Ng'andu nr 105 Naar een nieuwe houtskeletbouw F.N.G. De Medts

nr 106 Anatomy of Dwelling Enno Wiersma (nog niet gepubliceerd)

nr 107 Healing Architecture Ewa Mosiniak (nog niet gepubliceerd)

nr 108 Geborgenheid drs T.E.L. van Pinxteren (nog niet gepubliceerd)

nr 109 Modelling Strategic Behaviour in Anticipation of Congestion Qi Han

nr 110 Reflecties op het Woondomein Fred Sanders

nr 111 On Assessment of Wind Comfort by Sand Erosion Gabor Dezso

nr 112 Bench Heating in Monumental Churches Dionne Limpens-Neilen

nr 113 RE. Architecture Anna Pereira Roders

nr 114 Toward Applicable Green Architecture Usama El Fiky

nr 115 Knowledge Representation Under Inherent Uncertainty in a Multi-Agent System for Land Use Planning Liying Ma

nr 116 Integrated Heat Air and Moisture Modeling and Simulation Jos van Schijndel nr 117 Concrete behaviour in multiaxial compression J.P.W. Bongers

nr 118 The Image of the Urban Landscape Ana Moya Pellitero

nr 119 The Self-Organizing City in Vietnam Stephanie Geertman

nr 120 A Multi-Agent Planning Support System for Assessing Externalities of Urban Form Scenarios Rachel Katoshevski-Cavari

nr 121 Den Schulbau neu denken, fühlen und wollen Urs Christian Maurer-Dietrich (nog niet gepubliceerd)

Peter Eisenman: Theories and Practices

Within the spectrum of contemporary architecture, the work of the New York based architect Peter Eisenman (Newark, USA, 1932 -) is outstanding and exceptional. As one of the most innovative architects and theorists of the last decades, Eisenman has had a considerable impact in the field of architectural design and theory and has contributed to many architectural debates, mainly through his architectural experiments, critical writings and active academic and public involvement.

This study makes a vertical and critical analysis of the architectural and theoretical work of Peter Eisenman. The main objective is to frame the most critical moments and lines of thought of the 'Project Eisenman' and to shed a light on the theoretical underpinnings and working methods, i.e. the 'modus operandi' of Eisenman's discursive apparatus. The main point of interest is to reflect on the respective role of theory (writings) and praxis (projects) in the overall oeuvre of Peter Eisenman, and to analyze how these poles are related and interacting with each other. The study further reflects on the underlying methodological framework of Eisenman's theory-at-work, or, in other words, on the inner mechanics of the architectural and theoretical production. This has been done by examining the reception of internal and external references (f.i. inputs from architecture, arts, linguistics, philosophy, science etc.), the link with contemporary frames of thought (such as structuralism and post-structuralism) and by situating the major lines of thought in a broader historical and cultural perspective.

TU/e

technische universiteit eindhoven

/ faculteit bouwkunde