

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

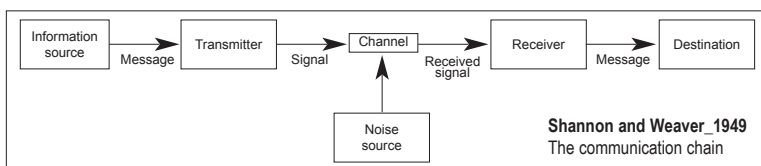
In order to understand the formal orientation of Eisenman's thesis, we have to go back to the early sixties, when Eisenman went to Cambridge (UK) to work on his PhD. During his two years in Cambridge, where he spent his time between teaching activities and doctoral research, Eisenman had the opportunity 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



C. Rowe, 1976
The Mathematics of the Ideal
Villa and Other Essays

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

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.

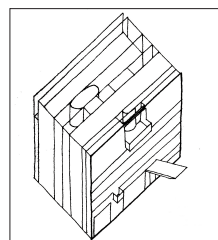
impact

On 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 systematic, 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 perspectives—like structuralism (in the seventies) and post-structuralism (in the eighties and nineties), by further elaborating his early intuition for language 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 scientific models—like the chaos theory or the theory of dynamic systems—which, by their non-linear and paradoxical format, are more suited to deal with changes, dynamics and uncertainties.

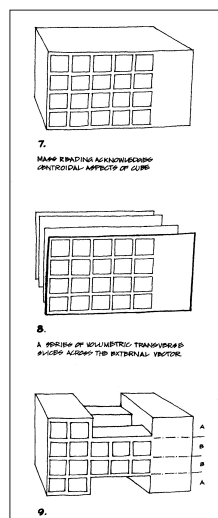
On the other hand, the PhD has also had a critical impact on the strict level of the architectural production, not only in terms of architectural preferences (Le Corbusier and Terragni especially), but also on the development of architectural strategies and processes. Even if the PhD was initially not 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 pre-figures 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

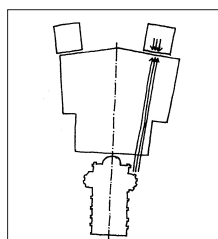
Another striking feature of the formal analyses is the fact that they are usually conceived as a succession of dynamic diagrams, which are annotated with a series of little arrows indicating the movement of the vector lines. Through these diagrams, which derive from his reading of the 'four compositions' 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



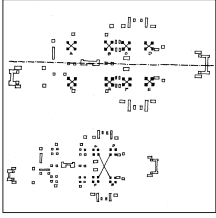
Le Corbusier_Villa Stein
diagram by Peter Eisenman



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.'

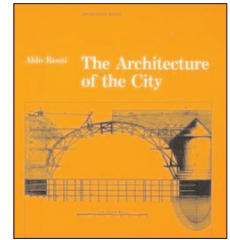
contemporary books

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 connoisseurs.²⁰ Consequently, his 'theory of form' never got the same public attention as the slightly later publications of e.g. A. Rossi ('*Architettura della 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

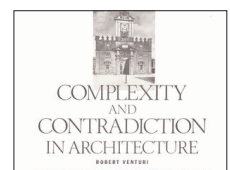
of de Saussure. He insists on the value of architectural morphology and urban typology as the rational basis for a design process. While Eisenman and Rossi are both looking for a rational basis for a design process—formal systems on the one hand and typological laws on the other—and reacting against 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



A. Rossi, 1966
The Architecture of the City
(cover)

Robert Venturi, with his publication '*Complexity and Contradiction in Architecture*,' also makes associations with the history of architecture, yet 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 questions 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

Robert Venturi



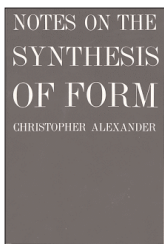
R. Venturi, 1966
Complexity and Contradiction
in Architecture (cover)

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

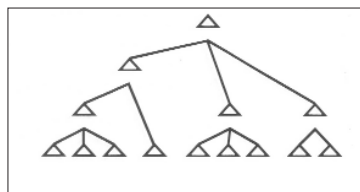
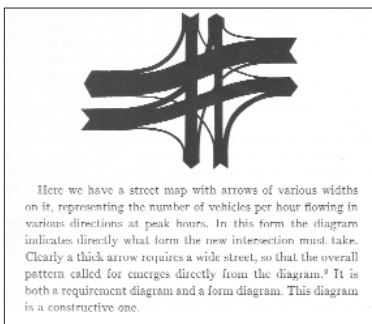
Contrary to Rossi's and Venturi's publications, which were only published after his thesis, Alexander's 'Notes on the Synthesis of Form' already circulated in a manuscript form at the time of Eisenman's stay at Cambridge. Eisenman had the opportunity to read a copy of the manuscript, and, according to 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 question 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

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-

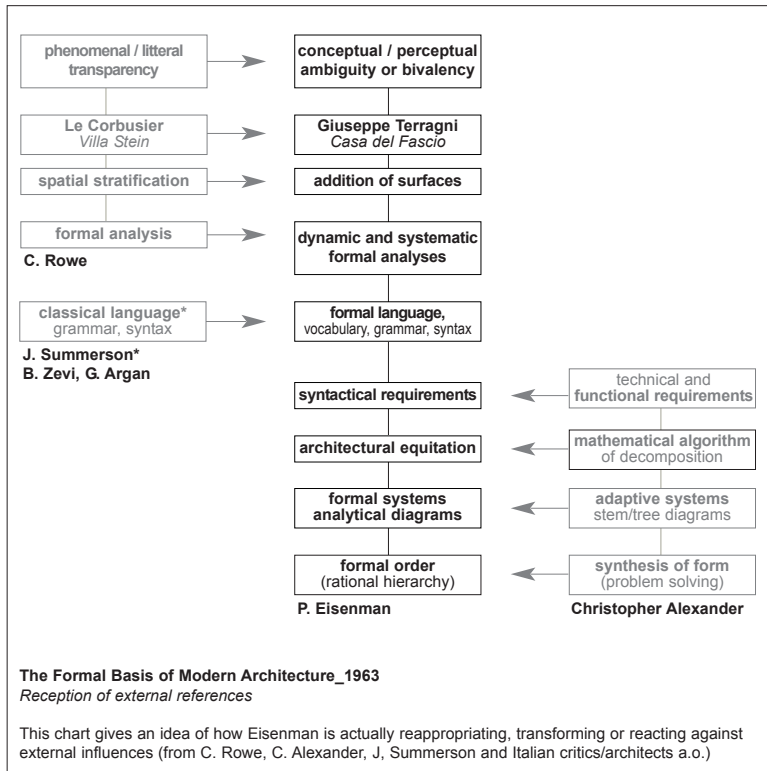


C. Alexander_1964
Notes on the Synthesis of Form
(cover)

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



Oppositions
cover

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.

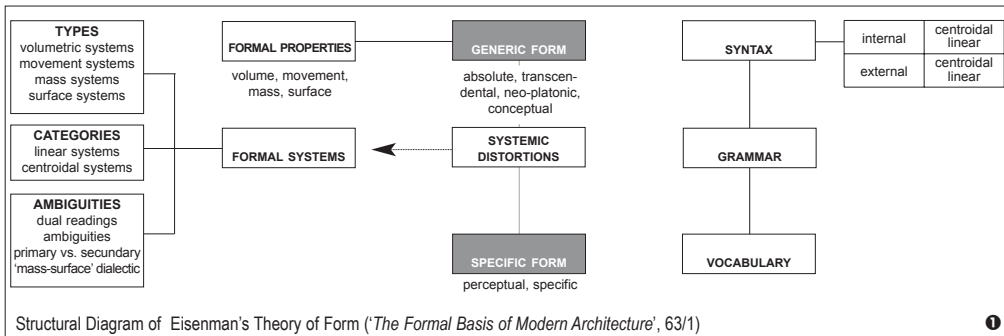
Eisenman still makes a difference between a conceptual and a perceptual formal level, but this distinction is now reformulated with Chomsky's notions of 'deep structure' and 'surface structure.' Eisenman wants to shift the focus from the perceptual and sensual aspect of objects ('sur-

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 horizontal-vertical, 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

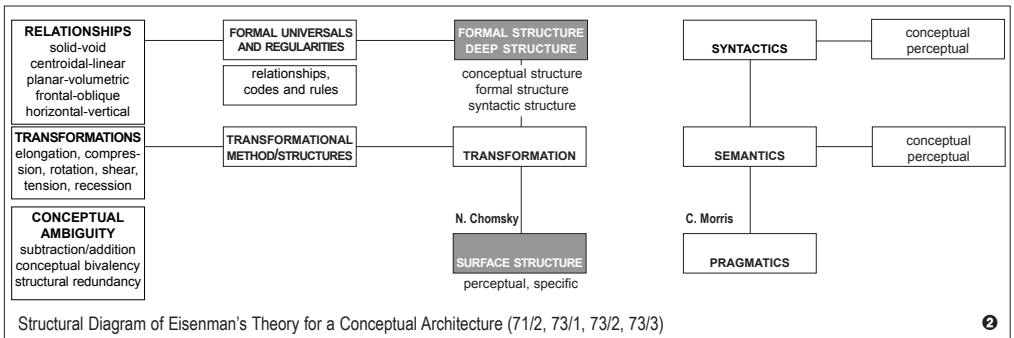
While Eisenman is integrating new linguistic and conceptual references in his conceptual framework, he is still implicitly referring to his earlier



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. ❶) 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. ❷), 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 (pragmatics-semantics-syntactics), which parallels the earlier linguistic distinction between ‘deep and surface structure’. We see that for each series of items of the first figure ❶, there are a series of corresponding counter-items in the second figure ❷. 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

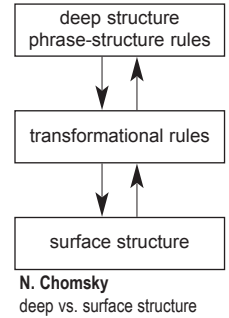
If one looks at Eisenman's new linguistic references, it is striking to note that he is not referring to the European tradition of 'semiology' and linguistics—like many of his fellow architects (M. Gandelsonas, G. Beard and C. Jencks *et al.*)—but, instead, to the Anglo-Saxon tradition of 'semiotics' 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 linguistic theory (especially his 'Syntactic 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 deep structure
surface structure (object)	perceptual	semantic level	syntactic semantic	
		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

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).



R. Morris_1965
L-Beams

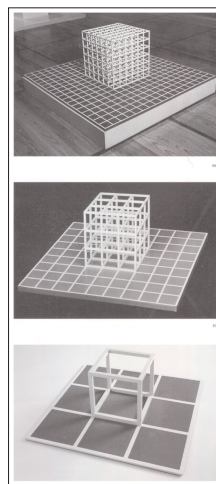
Despite its similar concern for conceptual ideas, forms and processes, Eisenman's vision of Conceptual Architecture is sensibly different from LeWitt's definition of Conceptual Art. This is mainly due to the primary physical, perceptual, utilitarian and pragmatic nature of architecture, which Eisenman 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 con-



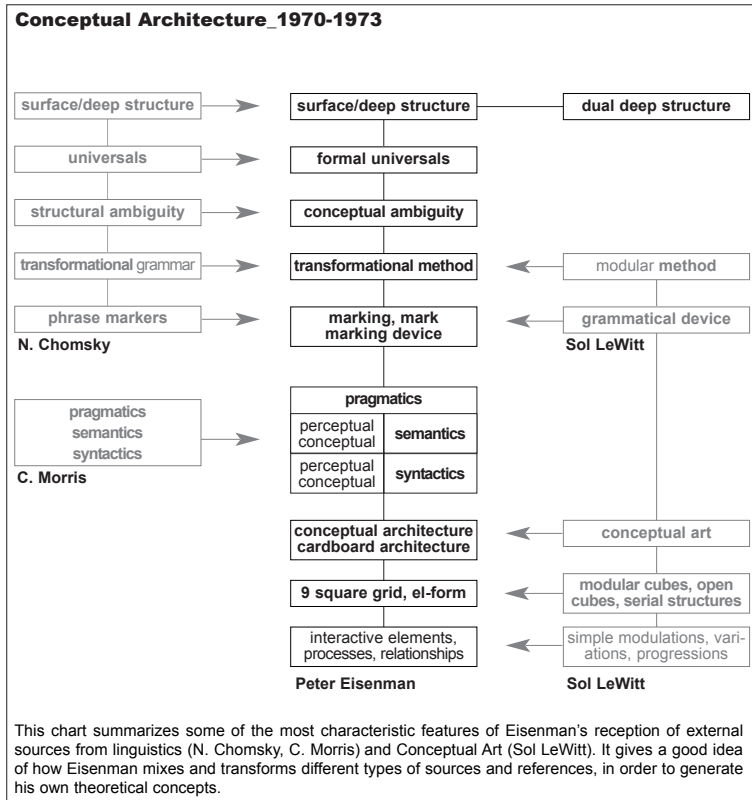
Sol LeWitt_1966
modular cube

ception. 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, wall-and 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
modular cubes/bases

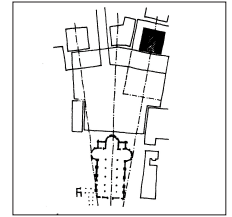


cardboard architecture

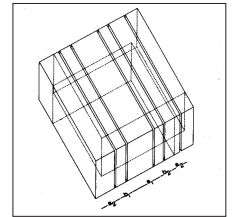
In order to further underline the difference between Conceptual Architecture and Conceptual Art, Eisenman also speaks about Cardboard Architecture—or 'Houses of Card'—because his early houses are conceived as abstract cardboard models or mega-structures, without any specific size, scale, location or 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



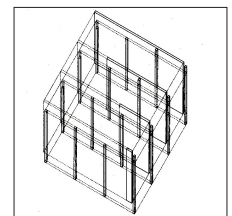
G. Terragni *Casa del Fascio*_building-site dynamic



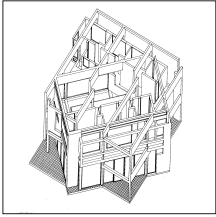
House I_1967
ABABA grid



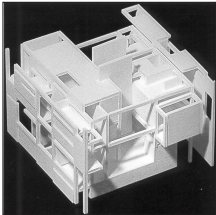
House II_1969
front view



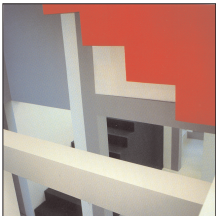
House II_1969
structural redundancy



House III_1969-1971
axonometry



House IV_1971
model



House VI_1972-1975
color codes, inverted staircases



House VI_1972-1975
front view

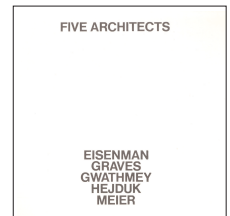
a series of film stills. With House VI, finally, the series of Houses of Cards are brought to a point of culmination: the design process is still developed through a series of transformational processes, yet, the sequential linearity of the process of transformation begins to be seriously eroded by the 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 inverting these archetypical relationships, he is also inverting 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

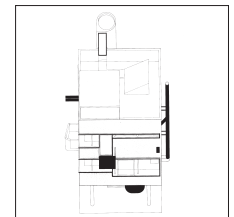
We just have seen how Eisenman is beginning to reconsider the fundamentals of his earlier formal and theoretical statements, and, with the changing architectural context of the mid-seventies, he will be further motivated to explore new formal and theoretical territories. In the aftermath of the debate 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.

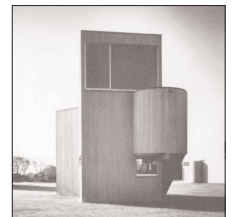
As co-editor of *Oppositions*, Eisenman also regularly contributed with a series of editorials and articles, mainly on the work or writings of other architects—like the Smithsons (73/4), J. Stirling (74/2), P. Johnson (77/2), M. Graves (78/2), J. Hejduk (80/3), or Le Corbusier (80/1). He also wrote some 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)

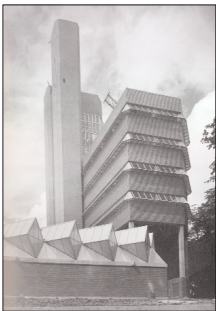


C. Gwathmey_1966
Gwathmey Residence
(Five Architects)

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 objecthood).⁵³



M. Graves_1969
Benacerraf House Addition
(Five Architects)



J. Stirling_1959
Leicester University Building

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 post-functionalism. 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).

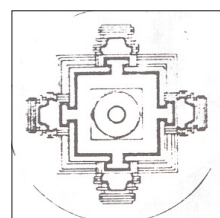
Eisenman's editorial on 'Post-Functionalism' is a clear example of his new theoretical interests for broader cultural and philosophical themes (like modernism, or European structuralism), which are mainly a result of the changing architectural/theoretical context of the mid-seventies and the new opportunities 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

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.

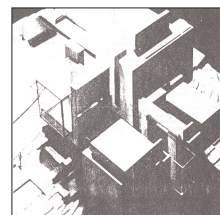
Decomposition (1975-1983)

4

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 inverting 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 'El-Form' (House X, House 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

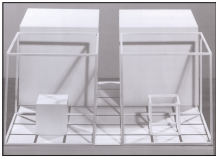


mandala of Durigatiparisodha
(cf. *Five Easy Pieces*, p. 117)

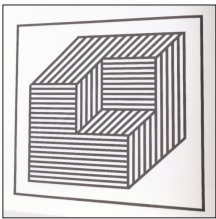


House VIII_1973
model

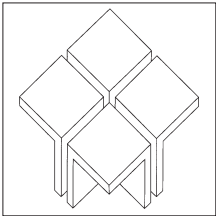
But the real point of rupture comes with Eisenman's next project, House X (1975), which will become emblematic for a whole new series of projects, which are usually associated with decomposition and el-forms (House X, House 11a, House El Even Odd, Fin d'Ou T Hou S).⁵⁷ With House X, Eisenman introduces 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



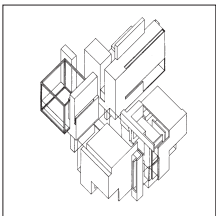
Sol LeWitt_1966
serial project_ABCD 9



Sol LeWitt_1991
wall drawing # 689



House X_1975
quadrants



House X_1975
diagram

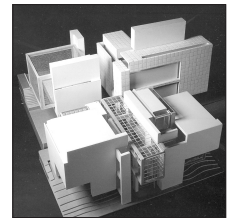
of traditional design processes, which are so typical for classical compositions or modernist transformations. Eisenman associates his process of decomposition with the scientific processes of heuristic approximation, because it is also conceived as an open process of scientific discovery. In House X, for instance, the design process is conceived as a succession of alternating configurations—the configurations are alternatively logically consistent or inconsistent with previous configurations—which 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 pro-

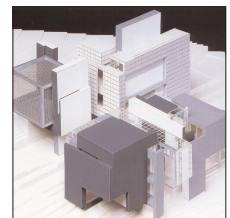
jecting the model along a diagonal plane of projection of 45 degrees, Eisenman makes a distorted representation of his model, so that it looks like a flattened axonometric drawing or a distorted physical model, depending on one's viewpoint.

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 models—and 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 House 11a (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 object-model, the axonometric drawing and the plan.

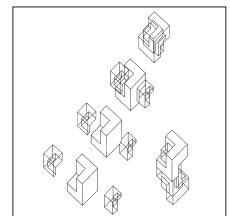
Another interesting development is the fact that the projects are more and more anchored within the ground. While House X is still hanging on the diagonal slope of the site, House 11a is already placed half-above ground, half-underground in the molds of the site. The following projects, House El Even 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



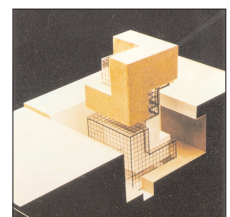
House X_1975
model



House X_1975
axonometric model



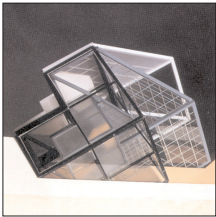
House 11 A_1978
embedded el-forms



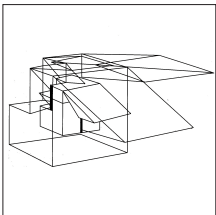
House 11 A_1978
embedded el-forms

of the nearby site, which is marked with traces of overlapping ground-grids.⁶¹

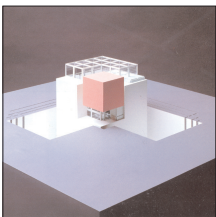
With the process of decomposition and the figure of the 'el-form,' Eisenman attempts to overcome the limitations of the traditional design. He does so by radically questioning the sequential linearity of its processes and the holistic origins of its object, and by fragmenting and internalizing the dialectical 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.



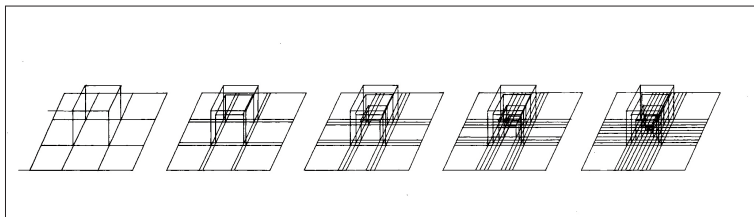
House El Even Odd_1980
representational model



House El Even Odd_1980
diagram



Fin d'Ou T Hou S_1983
model



Sol LeWitt_1968_Cubes with Hidden Cubes