

“The Legacy of the Whites”
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Taking on the legacy of “The Whites” is a daunting task. To speak of them as a whole gives credence to the idea that they were a group, when in fact the association of Peter Eisenman, Michael Graves, Charles Gwathmey, John Hejduk, and Richard Meier for the publication of Five Architects was, by their own account, as much a publicity device as an offering of a position. Moreover, the issue of “legacy” implies that the influence has passed on to another generation, when in fact at least one of its members, Eisenman, is still a leading figure in that new generation. At what point do we consider the baton passed on? Likewise, if one could agree that there was a legacy, it would seem that it comes unevenly from the Five, indeed, comes from the surrounding rhetoric not even originating with the Five. What work, what writings, and what institutional codification can rightfully be drawn on? And lastly, shedding fresh formal light on the work seems not only impossible at this point, but unappealing. The formal characteristics of this work have been examined and reexamined, and performing this activity again acquiesces to their aesthetic strategy too easily. **(figs. 1, 2, 3, 4, and 5)**

But having said this, it is too intriguing to not think through this work historically and not admit there is a legacy to be had. The sense that the discourse would be radically different if the Five had not self-identified and polarized an oppositional group – the Grays – is simply too strong. So it is with certain caveats that one proceeds: namely, that the polemic surrounding the work, both generated by the Five and by others, is as much a source of the legacy as the work itself; and that two of the figures, Eisenman and Hejduk, contribute to this legacy more than the others. be
The reach of Eisenman’s Institute for Architecture and Urban Studies and the influence of

Hejduk's Deanship at Cooper Union is particularly strong. The actual architecture of all five is, in other words, less a source of the discussion than its evidence.¹

To read both critics and apologists for the Whites, the most that could be said for their shared vision was an enduring interest in Le Corbusier. Various evaluations are then based on whether or not the continuation of this legacy was considered good or not for architecture. The "Grays" – those architects loosely gathered around Robert A.M. Stern who promoted an architecture less abstract, remote and intellectual - certainly felt that this was not positive. The sins of the Whites were the sins of modernism, with the added guilt that they contaminated America with an imported problem. Colin Rowe, Kenneth Frampton and Arthur Drexler, on the other hand, all of whom wrote critical pieces in Five Architects, felt that there was poetry still to be had in the forms of Le Corbusier and Mies van der Rohe, and supported this ongoing research into the language of modernism.

Insisting that the most compelling position of the Whites was their devotion to Corb, though, doesn't identify the nature of their legacy; it would be indistinguishable from that of modernism in general. Nor could it be said that the insistence on this abiding appreciation of modernism in the face of pro-American, pro-vernacular forces itself constitutes the legacy. This would simultaneously assign them too much power - the ongoing interest in modern masters in a post-modern discourse extends to realms beyond the reach of the Whites (witness the Dutch and Rem Koolhaas)² - and too little imagination – the stylistic interest in modernism was not their main concern. I would suggest instead that the legacy lies precisely in what distinguishes the Whites

¹A major test of what could legitimately be said about the Five as a group was whether a description or analysis applied both to Hejduk and Eisenman, less because these are the strongest polemical figures but because they are also the most different: Eisenman completely rational, deterministic, and "objective"; Hejduk entirely poetic, elusive and "subjective". Meier and Gwathmey are more background than foreground not because they don't theorize the work but because the work has proved resistant to further speculation. Graves drops away because of his switch, after the publication of Five Architects, to a post-modern vocabulary; his legacy leads elsewhere.

from Corb; namely, their elevation of form from the condition of design to that of epistemology. What was at stake was the claim that form was a type of knowledge, indeed, an essential type of knowledge. The true legacy of the Whites is not the formal vocabulary of datums, frontalities, rotations, solids, voids, layering, skin, grid, figure-ground, etc, but the fact that we think these operations have systemic intellectual import at all.³

Corb, we should remember, while precise and articulate in his formal operations, never identified form in and of itself as the ends of architecture. **(fig. 6)** While he does, unlike Mies, admit that form is a significant consideration of architectural design, it is not because form itself is of interest but because it is the means to emotional, not intellectual, fulfillment. “The Architect, by his arrangement of forms, realizes an order which is a pure creation of his spirit; by forms and shapes he affects our senses to an acute degree and provokes plastic emotions.”⁴ One would never find him, or any of the original modern architects, arguing, as Hejduk does, about the essential merit of the diamond over the square⁵, or the necessity of revealing deep form in the environment, as Eisenman does. Nor, to take the issue even farther, was Corb interested in proving that he did not “author” his own works, as the above quote indicates; whereas, for Eisenman, the logical extension of seeing architectural form as an analogue to intellectual form was and is letting the structure of thought build itself with no subjective intervention. **(fig. 7)**

² Although Rem did teach at the IAUS

³ The linking of form to knowledge was not a new idea. It is a variation of the neo-Kantian formalism of the late nineteenth century thinkers such as Conrad Feidler and Adolf Hildebrand. It also is linked, as we will see, to the perceptual psychologists such as Arnheim and later phenomenologists like Merleau-Ponty. What is new is the particular link being made to architectural modernism in the name of this epistemology.

⁴ Quoted from “Towards a New Architecture,” in Programs and Manifestoes on 20th Century Architecture, Ulrich Conrads, MIT Press, Cambridge MA 1964, p. 59.

⁵ For that matter, Van Doesburg, the leader of the DeStijl movement, which gave us the square/diamond controversy, dismisses form-for-form-sake soundly. “(T)he idea of art as illusion unconnected to real life has to disappear. The word ‘art’ no longer means anything to us.” Ibid. p. 67.

While it is a simple statement to say that the Whites elevated form making to an epistemological status, there are many issues tangled up with it, issues that lead directly to a seeming moral authority regarding our obligation toward form and which, in this moral directive, became complex and problematic. There is the question of authorship and originality - if form is part of the structure of thought, am I not just an agent of that structure? There is also the role of history and the zeitgeist - is the structure of thinking historically determined and if so am I not merely an agent of the zeitgeist? As well, the issue of the relationship between percept(ion) and concept(ion) comes up - if architecture is a form of thought, how does visual perception interface with that mental construct?; of the autonomy of architecture as a discipline and its affinity to painting and sculpture - if architecture is a form of visual thinking, is it quantifiably different from painting and sculpture?; and finally, there is the odd role of function - if architecture is a product of thinking, how can it also be a product of use?

Complicating matters was the attachment of these epistemologically related questions to modernism. Not only was the knowledge claim an attempt to grasp the heart of modernism by locating “form” and “formalism” at the center of its discourse, but to attach epistemology to a historical condition. This latter fact itself tangled the rhetoric enormously, for on the one hand it brought with it the old problem of simultaneously being timeless and “of the time” and on the other, in referencing work that was already thirty years old, wasn’t even of its time.

The answer to these difficult and highly self-conscious questions characterizes the unique polemic of the Whites and infuses the work with the urgency that keeps the debate of form alive today. The bold attempt to address these stark issues makes us tolerant of, if not fascinated by, positions that are often highly problematic. The analysis of these issues is as much then an inquiry into our fascination with this position as it is into the position itself; an examination of our tolerance of extreme formalism as much as its justification.

To understand the formulation of this formalist epistemology, it is important to examine the ideological context that helps explain precisely how different from Corb and Europe in the twenties were the set of questions facing the Whites. The association of Colin Rowe, Robert Slutzky, and John Hejduk from 1954-6 at the University of Texas, Austin, School of Architecture (the “Texas Rangers”) and later Eisenman’s work with Rowe in England and Italy formed the initial core of shared intellectual aspiration, indeed, formed the basis for highly particular positions regarding history, form, perception, and modernism.⁶

In this regard, one should begin with Colin Rowe. Having arrived in Austin in January of 1954 after receiving a Fulbright to study town planning at Yale with Henry-Russell Hitchcock, Rowe brought to Texas the legacy of the Warburg Institute and his work there with Rudolf Wittkower from 1945 to 1947. Aby Warburg, the founder of the Institute, promoted the idea that it was the historian’s duty “to penetrate beyond the description of style” to examine not how culture determined style but how it formed the backdrop against which the individual would make artistic choices. It was an anti-zeitgeist position.⁷ Wittkower, at age 32, joined the Institute’s faculty and in 1949 published Architectural Principles in the Age of Humanism. In this, his focus was less anti-zeitgeist than it was “proof” that the Renaissance was not just an aesthetic style but an overriding intellectual, religious, and scientific program. The architecture was “read” by Wittkower as a symbol for this larger enterprise to which he brought optical and Gestalt psychological concepts to bear. Form, in other words, was assumed by Wittkower to have symbolic meaning, and the historian’s task was to hermeneutically pull it out and reveal it.

⁶ I am indebted to Alexander Caragone’s The Texas Rangers: Notes from and Architectural Underground, (MIT Press, Cambridge, 1995) for his sympathetic, astute and careful analysis of the “Texas Ranger” years at Austin and later its protagonists’ dispersal in architectural academia. The true legacy of the Whites is probably most accurately charted in his six-page graft in this volume, pp338-42, depicting the “Texas Rangers” academic family tree.

⁷ The anti-zeitgeist, anti-teleology position was popular at this time with intellectuals such as E. M. Gombrich and Karl Popper. It was a reaction to the Hegelian underpinnings to Nazi rhetoric.

Rowe adopted both the anti-zeitgeist principles of Warburg and Wittkower's Gestalt-based techniques of "reading" the form of architecture symbolically. But where Wittkower would have been spared even thinking about modern architecture given England's late and unpolemical embrace of it, Rowe was thrust directly into this context, one which, given modernism's a-historicism, was difficult territory for the architectural historian. And his "Mathematics of the Ideal Villa," published in 1947 in Architectural Review, did what the proper Warburgian could and would never have done: compare Palladio's Villa Malcontenta with Corb's Villa Garches. He thus implied that form is not a symbol of a particular culture, but something that transcends the specifics of culture and provides the basis for a universal reading of architecture. **(fig. 8)**

While this might seem to be good news for form, it nevertheless implied a significant reevaluation of modernism. In applying Renaissance principles to the analysis of modern architecture, Rowe criticized the current rhetoric of the "Spirit of the Age." When this anti-zeitgeist polemic was applied to modernism, it deflated the key idea upon which modernism rested. It allowed Rowe to declare that modernism was not unique in its formal typologies and had no claims to the spirit of the age. With regard to the architect, Rowe re-emphasized the Warburgian idea that, once the notion of the zeitgeist is dismissed, architects must admit that they are consciously designing a piece of architecture, not just letting the age flow through them. He insisted on the responsibility toward design that must be embraced by the designer.

Rowe also brought to Austin a particular disdain for Walter Gropius. Gropius, as architect and educator, was anti-history; for him, according to Rowe, designing was about imagination with an overlay of "objectivity". While Rowe allowed that the individual and not the zeitgeist designed buildings, pedagogically that individual should understand history and the principles it yielded. Thus, while Harvard concentrated on originality and talent, Rowe and the Texas faculty emphasized precedent, observation and synthesis. And, unlike other schools embracing

modernism in America, Le Corbusier and Mies replaced Gropius as the paradigmatic figure(s) of modernism at Austin.

Robert Slutzky, who joined the faculty in the fall of 1954, contributed another set of concerns. Having done his thesis on the relationship between twentieth-century art and the Gestaltists Kohler, Koffka, and Arnheim, Slutzky, a painter, was not trained as an architect. But his interest in “reading” the spatial effect of the surface formed the basis for his interest in architecture and constituted the intellectual link to Rowe. **(fig. 9)** The Arnheimian lesson championed by Slutzky was the idea that depth on the painted canvas was only successfully achieved when the canvas’s two-dimensional surface was emphasized. Frontality – the viewers parallel and layered position vis-a-vis that surface – was understood to be the dominant visual ordering system and “space” was understood to operate most profoundly in a dialectic relationship to the two-dimensional surface. Strong separations between foreground figure and background field, while obtaining a depth effect, did so by severing the surface too blatantly and were seen to yield a weak, incomplete, and trivial spatial reading. Depth created through color, texture, shape, and position on the single surface were understood to achieve a more difficult, complex and ultimately more complete sense of space. **(fig. 10)** Slutzky applied this principle to his own commitment to Cubism and neo-plasticism and found there the essential manifold of spatial perception. With regard to architecture, the various facades and planes of a building were asked to perform a similar demonstration.

It was then the combined anti-Gropius urge from Rowe and the Gestalt thrust from Slutzky and Rowe that yielded the two “Transparency: Literal and Phenomenal” articles that were written in 1955-6 in Austin but did not appear until 1963 and 1971, respectively, in Perspectas 8 and

13/14.⁸ In the first of these articles, Rowe and Slutzky promote a notion of transparency that is optical/phenomenal, not literal. Using Gyorgy Kepes' notion of implied transparency (and here Kepes is reiterating the same concern for frontal, two-dimensional space) in which the shared portion of two seemingly overlapping figures allows for "a simultaneous perception of different spatial locations,"⁹ the two authors argue that Gropius's architecture, as demonstrated in the Bauhaus, fails to achieve anything more than the literal transparency offered by glass. The fact that the camera shooting the Bauhaus's images is positioned diagonally and not frontally to the building is proof of Gropius's failure to understand the lessons provided by Cubism. In contrast, Corb, himself a painter, fully grasped the spatial potential of phenomenal transparency, as indicated by Garches and his unbuilt League of Nations. **(fig. 11)**

In the second of these articles, the authors extend the argument to other buildings and other formal properties as well as to other pre-modern examples. They suggest that certain buildings - the United Nations building and Pietro Belluschi's Equitable Life Insurance building in Portland, Oregon - are examples of literal transparency because the gridded facades are spatially and structurally unambiguous; **(fig. 12)** others - Corb's Algiers skyscraper building and I.M. Pie's Mile High Center in Denver - are examples of phenomenal transparency because the gridded facades fluctuate in their foreground/background reversals. **(fig. 13)** At the same time, Renaissance facades are analyzed to reveal similar ambiguous and fluctuating readings of pattern hierarchy and flatness and recession. This discussion in turn leads to a comparative analysis between Michelangelo's San Lorenzo façade and Mondrian's "Victory Boogie Woogie," and culminates in Gestaltian diagrams and pronouncements that explain and prove the interest in figure/ground reversals. It becomes clear that phenomenal transparency is less about transparency per se than about the degree to which a flat surface/façade can sustain multiple readings of pattern and

⁸ Both essays were submitted to Architectural Review but were turned down, supposedly, Joan Ockman suggests in her Architecture Culture 1943-68, Rizzoli, New York, 1993 (p.205), because of their anti-Gropius bias.

layering. Visual complexity is the goal. At the same time, the anti-zeitgeist, historical and typological urge is pushed via the Renaissance-Modernism cross-referencing.

These articles should be understood, as well, as critical responses to Sigfried Gideon's Space, Time and Architecture, which chronicled a historical development of the notion of space that supposedly culminated with the modern movement, exemplified by Gropius's use of hovering planes and the interpenetration of space. The "Transparency" articles are, then, a poignant critique of Gropius as well as a decimation of a notion of history that was linear, Hegelian, and culminating in a triumphant modern present. It also was a plea to prove that concern for phenomenal transparency and the forms that achieved them were not merely a stylistic preference. The existence of these forms in both pre-modern and modern buildings is an indication of "a basis in a common vision," an "archetypal response," and the inclusion of Gestalt principles is used as proof of a perceptual fact and hence a formal necessity.¹⁰ While Rowe later in his introduction to Five Architects would himself give up this insistence and suggest that modernism was just a style albeit a particularly fascinating one, at this point, the "true", epistemological claim is present and will exert significant influence on the Five.

The last pedagogical import shaping the Whites came with Peter Eisenman, who was not at Texas but was a post-graduate student of Rowe's at Cambridge during Rowe's self-imposed exile from the United States from 1959 to 1962. Eisenman was a graduate of Cornell's School of Architecture, where Rowe taught after leaving Austin, but before and after Eisenman's time. Rowe and Eisenman spent two summers traveling together in Italy, analyzing the same Renaissance buildings that had been featured in the second "Transparency" article, as well as

⁹ Kepes in "Transparency: Literal and Phenomenal," reprinted in Rowe's Mathematics of the Ideal Villa, MIT Press, Cambridge 1976, p. 160

¹⁰ There are some very interesting defenses of the truth of Gestalt psychology against a supposed critique that Gestalt psychology's claims are merely commensurate with fashionable modernity, defenses which appeal to something surprisingly close to Eisenman's/Chomsky's deep structure. See pg. 224 in Ockman, op.cit.

other more modern buildings. (This is when Eisenman discovered Terragni.) But Eisenman's own contribution to the pedagogy was his interest, developed during his graduate work, in Noam Chomsky, the structuralist linguist. Chomsky believed that the reason that children can generate sentences they have never experienced is the result of their innate ability to understand the deep structure of language; our minds, he said, are wired linguistically. Unlike other classical structuralists who focused on language itself and who, for the most part, emphasized the cultural production of language, Chomsky emphasized this universal, structural, linguistic capacity of the linguistic subject. The "deep structure" that Chomsky described - a base system of rules concerned with underlying relations, with an abstract order - was distinguished from the "surface" structure, which is related to the actual physical phonetic form that language takes.

Eisenman imported this directly into his work, such that one cannot really describe his interest in linguistics as an influence; it was the work. **(fig. 14)** But behind his direct use of this material were assumptions that allowed the application of a linguistic model to architecture in general. One certainly is that architecture itself is a language of sorts, one that is analogous enough to the spoken/written language to be governed by similar principles and which is read in a similar fashion.¹¹ Another is that an analytic device can be made a generative device, that one could design with a tool meant to analyze language. Another is that what is generated, in this case architecture, will be a demonstration of principles. It doesn't just exist, it educates. And a fourth is that there is a match between the structuring principles in our brains and the exterior world. It is these assumptions as much as the overt Chomskian ideas that form the basis of an architectural epistemology and allowed an overlap with Arnheimian perceptual psychology and an affinity with Rowe and Slutzky. The world, both positions said, is organized like this. And given that no one knew what deep structure looked like, it could conveniently, in Eisenman's hands,

¹¹ This was not Eisenman's idea alone. The popularity of structural linguistics at this time was pervasive and language was seen by many to govern or form the model of all aspects of human production. The marriage between structuralism and formalism was evident in many fields, from literature and painting to cultural studies and psychoanalysis.

take on precisely the same formal characteristics as those produced by Cubism and neo-plasticism, and promoted, supposedly, by Gestalt psychology.

Clearly there are significant formal biases projected here, biases that will mark the work of the Whites; frontal/rotational; solid/void; layering/recession; figure/ground; grid/dissolution of the grid; virtual/actual solids and voids; whole and partial platonic figures; regulating lines, datums, and golden proportions. What seemed God-given – since it came from history and the avant-garde, from psychology and linguistics – was clearly a fabricated lexicon justifying an ongoing interest in the certain 1920's painterly operations that were linked to Corb primarily via his work as a painter and his interested in Purism. In this, the grid dominated and, as both field and figure, provided the framework for operations that placed planes, solids, and voids and allowed for the transformation of the grid itself. The elements that were distributed constituted a kit of parts that pre-existed any formal operation and the operations themselves followed their own logic once the rules of the formal game were set in motion. The final product was less the goal than the nature of the process that got you there.

But these biases nevertheless formed an amazingly strong methodological and pedagogical framework, one that not only competed with Harvard but with the Beaux-Arts tradition that dominated the schools of America. And the dissemination of this pedagogy was, given its tiny source at Austin, both vast and powerful. Hejduk, joining the Austin faculty in 1954 with Slutzky, absorbed the lessons of both Rowe and Slutzky and played a major role in translating these ideas into an architectural pedagogy. Bernhard Hoesli, the principle motivator behind reconstituting the nature of teaching at Austin, acted as a catalyst for its codification and larger institutional presence. **(fig. 15)** The dissemination of the pedagogy was unleashed when these teachers were fired from Austin and went to other institutions: Hejduk, Rowe and Slutzky to Cornell; Eisenman to Princeton; Eisenman and Rowe to the IAUS; Hejduk to Harvard and Yale; and

eventually Hejduk, Slutzky and Eisenman to Cooper Union. Hoesli took this pedagogy back to Europe and the ETH in Switzerland.¹²

What was disseminated, besides the forms, was this: knowledge, architecturally manifest, must look a certain way; it must look like the brain – visual and/or conceptual - is organized. As Eisenman, in formulating his early “cardboard” houses, writes: “The purpose of this procedure was to provide an awareness of the formal information latent in any environment that previously was unavailable to the individual.”¹³ And the forms, “abstract and universal,” are those “inherent” in “the internal structure of form itself.” As he says describing House II, “It may be in the nature of architecture to present the relationship between what is actual in the environment and some form of deep structure. It may be a fundamental act in the making of architecture and beyond a mere formalism to take certain regularities which exist in a deep structure and present them systematically so that the user is aware of them.”¹⁴ Or, as Hejduk writes, in his 1975 analysis of Corb’s Visual Arts Center at Harvard, “The very profundity of this piece of visual metaphysics brings into question all that went before;... the proposed ideas cannot be ignored; they can be viewed squarely and understood. The questions and arguments become inexhaustible; they are like the major thesis – the thesis of simultaneity... The human body, its auxiliary senses, and the capability of cerebral workings cause architecture to be involved in the movement and dynamics of space.”¹⁵

Thus it is that many of the questions regarding aesthetics and history that introduced this piece get “answered” by following the logic of this epistemology. Certainly the Corbusian bias becomes

¹² This is only a partial description, for the students of these gentlemen became teachers and themselves spread out to these and other institutions. Again, see Caragonne op.cit for the full lineage.

¹³ Five Architects, p. 15

¹⁴ Ibid., p.27.

¹⁵ John Hejduk, “Out of Time and Into Space,” A + U, May 1975

something more than just an indication of an ongoing affinity with modernism. The disregard for function becomes inevitable, for form – transcendent, following its own Gestalt/Chomskian logic – must pursue its own course regardless of program. It is Eisenman who takes the lead in the dismissal of function, stating in his piece in Five Architects that “cardboard” architecture is so named precisely in order to undermine normative, functional associations. And his editorial introduction to Oppositions 6, in the fall of 1976, entitled “Post-Functionalism,” dismisses functionalism as an outdated, humanist preoccupation, one that is merely cultural, not universal.

Likewise, the admitted disregard for social concerns is both cause and effect of this formal agenda: cause, because the Five wouldn’t have arrived at this formalism without the failure of the original modernist agenda, as Rowe points out in his introduction to Five Architects, but effect as well, for now the formal concerns and their direct link to knowledge can be seen as something more fundamental to human make up than incidental social context. Arthur Drexler, in his “Preface” to Five Architects, doesn’t make such a sweeping intellectual claim for the Five, but he does praise them for their dismissal of social concern: “That architecture is the least likely instrument with which to accomplish the revolution has not yet been noticed by the younger Europeans, and in America is a fact like a convenient stone wall against which architectural journalism can bang heads. An alternative to political romance is to be an architect.”¹⁶

Perception and conception, old adversaries in artistic and architectural practices, are seen in this epistemology to be two aspects of the same form of knowledge, a visual knowledge that supposed a fundamental correspondence between the structure of our mind and the visual landscape before us. Given that the architect/artist’s obligation was to demonstrate perceptual principles, the actual vicissitudes of subjective seeing were eliminated by the Whites. While one characterization of the difference between the Whites and the Grays is the supposed privileging

¹⁶ Five Architects, Wittenborn and Company, New York, 1972, p. 1

of perception by the latter, conception by the former, the Whites in fact have usurped perception to their own end and made it a conceptual tool. **(fig. 16)**

The concern for a language unique and essential to architecture – a concern for its disciplinary autonomy - in the face of the fundamental interest in painting is, in their hands, anything but contradictory, for seemingly the struggle of the cubists and neo-plasticists was essentially a spatial struggle and architecture, having lost its functional and social directive, was primarily a perceptual phenomenon. Thus, Graves, Hejduk, and Meier all begin their architectural search with the study of painting. Both painting and architecture, in other words, shared the fundamental concern for organizing the visual world in a spatially complex, profound and multivalent manner. But all are clear that architecture still is the primary concern, that architecture needs to discover its own essential principles within these perceptual laws. As Hejduk says, “The painter starts with the real world and works toward abstraction.... But architecture takes two lines. The architect starts with the abstract world and...works toward the real world. The significant architect is the one who, when finished with the work, is as close to that original abstraction as he could possibly be.”¹⁷ The unacknowledged contradictions come in more strongly when the Five give hints that architecture is not just a separate language but the most significant one. This is when they suddenly embrace the functional aspect of architecture to prove its superiority over painting. Thus both Hejduk and Eisenman can suggest that the use of architecture is what puts it into more serious play than other art forms.

Likewise, the importing of linguistics into language becomes equally “logical” to a search for architectural autonomy. Seemingly transparent as a medium, language could be imported to architecture as a requirement for establishing epistemological structure while not itself imposing its own disciplinary form. Or, to think it through another way, language’s seeming universality as a logic made it a meta –system, not an outside discipline. Eisenman’s unwavering desire to distill

architecture to its own essential language, its own deep form, its own “interiority,”¹⁸ is ironically linked to his equally unwavering desire to search beyond architecture for the answer for architectural autonomy.

Authorship and originality are also fortuitously resolved with the directive to obey archetypal paradigms. With design understood as an act of interpretation, one could be both selfless and creative; whoever grasps the paradigm most completely and exposes it most plastically serves both masters. Hence, there was no conflict in using the forms of architects who had worked thirty years earlier. That work itself was nothing other than a reinterpretation of enduring archetypal forms, forms that were first revealed (not discovered) in all of their intensity by the architects of the Renaissance. Hejduk’s trajectory from early geometric work to recent anthropomorphic work is consistent on this score, for throughout, the work has had its own personality; the poetry of the work is precisely its faith in its factness, ignorant of the will of the author. Eisenman, pushing anonymity to the extreme, insists, both with his early houses and his most current work, that the buildings are authored without him. Implicit in the early idea that cardboard architecture is merely the marking of deep formal operations, not the will of his hand, this position is explicit by House VI, when he claims that the design is merely a palimpsest of its own coming into being. Again, the epistemology allows for the ironic condition that the most “avant-garde” and self-celebratory position of someone like Eisenman is the one that claims to be the most anonymous.

Unacknowledged in this is the distance Eisenman’s position has traveled from Rowe’s. As stated earlier, Rowe’s Warburgian position was that, in the absence of the zeitgeist, the choices made individually were the essential cultural acts; good and bad design was a personal responsibility. Eisenman sees himself as merely the agent of intellectual structures. **(fig. 17)**

¹⁷ “Second Wall House,” *Progressive Architecture*, June 1974, vol. 55

¹⁸ The lectures that Eisenman gave at Cooper Union were essentially a tracing of this “interiority” back to Bramante. In this, he implicitly argues with Rowe, who attributed it to Palladio.

While inconsistencies are evident in these attitudes, the issue of history and with it the fate of “modernism” remains the most untidy, at least for Eisenman who confronts this issue head on. Rowe makes the Five’s historical fate the central focus of his introductory essay, and in doing so, writes modernism’s epitaph. In describing modernism’s own internal inconsistencies and its self-deluded and ultimately failed aim at social reform, he sees the Five as falling into the general pool of alternative successive modernism, like new Brutalism and neo-classicism, that understood the ridiculousness of the old rhetoric. In being able to hold onto only the “physique” and not the “morale” of modernism, the most that these architects can claim is that in the twenties, “great revolutions of thought occurred and that then profound visual discoveries resulted, that these are still unexplained, and that rather than assume intrinsic change to be the prerogative of every generation,.. certain changes are so enormous as to improve a directive which cannot be resolved in any individual life span.”¹⁹

This negative evaluation of the historical value of modernism and the Five clearly can’t be intellectually shared by the participants; nevertheless, Rowe grasps the essential problem in a way that stymies Eisenman, whose dogged effort to distance himself from previous eras and participate in an avant-garde is both his most marked disagreement with Rowe and his most awkward intellectual position. Ignoring the timeless/of the time/ahead of the time dilemma in his early cardboard houses, Eisenman comes out, in his “Post-Functionalism” essay in Oppositions 6 of 1976, with the Foucauldian idea of epistemic ruptures – dramatic changes in history that have entailed entirely different thought structures – which allows him to attach himself to an epistemological position but one that is current and culturally responsive. In this article, he says that modernism constituted an unrecognized rupture, one that disengages us from the humanism of previous eras and which makes it impossible for us to deploy the same strategies as the Renaissance. It is a move that allows him to distance himself from the increasingly conservative Rowe at the same time that it allows him to claim a place in avant-garde practice. The difficulty

¹⁹ op.cit. p.7

with this position is not only that the notion of rupture remains wholly unexplained, but that the moments of “rupture” become convenient, characterized differently by Eisenman as time passes and styles change. While identified with the 20’s and modernism in this essay (when his work was “modern”), it is later identified with World War II and Hiroshima in “The Futility of Objects” in 1984 (when his work was chaotic and fragmented)²⁰ and is currently identified with the change from a machine-based to an electronically-based society (when his work is “smooth” and computer-generated).²¹

The legacy that this epistemological formalism gives us, then, is less related to the forms themselves (although, as we will see, there are formal relationships) than they are with the current interpretation of the same epistemological urge; it is the adherence to the knowledge claims and, with it, the moral urgency to design in a certain way that continues.

The epistemological urge takes on various conceptual formulations since clearly, along with the change in attitude toward modernism altogether, came the breakup of any singular architectural language and/or position. But the claim for the universality that gives clear formal directive, that insists that the forms must look a certain way, is the same. So is the reliance on forms of thought exterior to architecture, be they philosophical or scientific, as well as the essential a-functional and a-social position that tends to come with such extreme formalism.²²

One case of this is the phenomenological strain of someone like Daniel Libeskind (who studied under John Hejduk at Cooper Union and drew the diagrams of San Lorenzo included in the

²⁰ “The Futility of Objects: Decomposition and the Processes of Difference,” in Autonomous Architecture: Harvard Architectural Review, vol 3, winter 1984.

²¹ Stated on April 18, 2000, at Cooper Union lecture.

²² This a-social position is one that Cooper Union and with it Libeskind, has struggled with. Likewise, Bernard Cache, who is being put in this category, is attempting to attach himself to a social position by connecting his form-making to a social system of production. Hence, the “a-social” claim here is somewhat unfair. Nevertheless, the assignation is meant to signal the fact that the first commitment is to thought, and only secondarily linked to a cultural or social position.

second “Transparency” article), whose formalist knowledge claims are extremely similar to that of the Five, particularly in the combination of Hejduk-like metaphysical poetry and Eisenman-like conceptual logic. In Libeskind’s hands, this becomes a hermeneutic search for “the real world”. **(fig. 18)** Thus, in the introduction to Libeskind’s new book, radix-matrix, Kurt Forster can write, “In this case, the idea... has to do with concepts... (that) sound the distance that exists between themselves and what stands physically before us.... There are hardly any buildings, with the exception of the Carceri d’Ivencione by Piranesi, which bear this double burden of representing both actual buildings and mental structures and therefore have to submit to being measured by both standards. (emphasis mine)”²³ The claim that architecture is a physical manifestation of the structure of our mind is remarkably close to Eisenman’s. While Libeskind doesn’t go into the problematic of history or authorship that comes with this position nor give a prescribed image of what this mindset looks like, the consistency of his architectural language, despite differences in location, program, or concept, is an indication that he still has a sense of what this mind set looks like. The language of this achitectural scaffolding – the emphasis on unrelated linear elements, the overall emphasis on line over plane, plane over mass; the disparagement of the rectilinear in any spatial element – while similar in essence to the Five, fortuitously also looks like other current avant-garde work. **(fig. 19)**

The blob architecture of someone like Greg Lynn (who worked for Peter Eisenman after being his pupil at Princeton) manifests a different form of epistemological lock, one that is more conscious of its historical lineage and more prescriptive about its formal musts. **(fig. 20.)** As Ole Bouman writes in the introductory essay in Lynn’s Folds, Bodies, and Blobs: Collected Essays, “Only by recognizing the disciplinary autonomy of architecture can Lynn contribute to its modernization. And that is precisely what he has in mind.... His line of reasoning is anti-subjectivism. His

²³ radix-matrix: Architecture and Writings, Prestel-Verlag, Munich, 1997, p.7.

architecture is no formalistic whim, but a logical step in a post-humanistic architectural theory.”²⁴ Here one sees the Eisenmanesque interest in disciplinary autonomy and pre-subjective logic. And while trying to avoid the pitfalls of other, earlier geometric formulations with claims to transcendence, wholeness, and closed forms, his search for an “anexact,” amorfal,” and “amoral” system of form replaces ones set of ultimate formal directives with another. “The challenge to architecture, once geometry and the body enter into anew alliance, is to write – in form – a monument that is irreducible to any ideal geometric type.”²⁵ The “monument” that he wants to write is one that “can represent a complex relationship irreducible either to the contradictions of the many or the holistic unity of the one.”²⁶ Lynn sees himself in a dialectical relationship with Wittkower and Rowe in moving past humanist architecture discovering a language for post-humanist culture, **(fig. 21)** and sees his architecture as overturning the Renaissance-Modernism thesis-antithesis with his own transcendent synthesis. Like Eisenman (who is never mentioned in Lynn’s history but is clearly the pivotal figure linking him to Rowe and Wittkower), Lynn’s history is Hegelian – the arrival of post-humanist (folded) culture is inevitable – and avant-gardist – only he can leap ahead of time and pull us out of our stupor.

Because, unlike Libeskind, the “biological’ methods are direct, prescriptive and sequentially clear, they rely on the same transformative methods that Eisenman relied on, “combinational exchanges between multiple, complex and intricate systems that interact and evolve over time,... teratological processes where order and identity emerge from differential variation and mutation.”²⁷ This emphasis on transformational processes links Lynn in turn to both the use of the diagram and the anonymous, authorless creation. **(fig. 22)** Diagram for Lynn “should not be understood as instrumental ideas.... Instead, diagrams should be understood as conceptual

²⁴ Ole Bouman, “Amor(f)al Architecture or Architectural Multiples in the Post-Humanist Age,” Folds, Bodies and Blobs: Collected Essays, Greg Lynn, p. 8-9.

²⁵ Ibid. p. 12

²⁶ Ibid., “blob tectonics, or why tectonics is square and topology is groovy,” p. 183.

²⁷ Ibid., “encore... bruxelles installation,” p. 15

techniques that come before any particular technology.”²⁸ And, as he says about authoring design, “This recent (folded) work may be described as being pliant; in a state of being plied by forces beyond control. (emphasis mine)”²⁹ Here, the fact that the computer both aids in depicting the anexact operations and sets them to analogical formulas only helps to assure that an “author” is not actually required.

One can also see the influence of the epistemological approach in the work of Bernard Cache who, alone among these three examples, has no known direct attachment to the Five.³⁰ His work on the classification of images as well as his interest in the computer as a means for regulating and prediction the architectural image puts his theoretical work in the same territory prepared by the Five, although Cache is much more knowing and sophisticated about the aesthetic, historical, and social implications of his work.

In Cache’s epistemology, all images are classified into three types: inflection, vector, and frame. These are reworkings, respectively, of the circle, the triangle and the square, the original figures of form-making. **(fig. 23)** “Inflection, vector and frame would constitute an alphabet whose rules are never determined but are always determinable, as they are always present in the images that have been elaborated through the ages...”³¹ Here he gives us the formal framework for analyzing all historical forms and, much like Eisenman’s “deep structure,” wants to prove not only its universal timeless applicability, but its potential as a generative design tool. “The question then will be to see to what extent our elements might allow us not only to read the works of the past but to understand those of the present, and, we hope, to prepare us for those of the

²⁸ Ibid., “forms of expression: the proto-functional potential of diagrams in architectural design,” p. 223.

²⁹ Ibid., “the folded, the pliant, and the supple,” p. 117

³⁰ Although his work has appeared in ANY magazine and he was a speaker at the Anymore symposium of June 1999 organized by Eisenman and Cynthia Davidson.

³¹ Earth Moves, MIT Press, Cambridge, MA 1995, p. 2

future....(M)ight we not find in it something today that could afford us the bases of a new constructivism?”³²

Beyond this faith in the generative possibility of an analytic tool, or, perhaps, justifying it, is the ultimate reliance on numerical predictability, especially that provided for the by the computer. Continuing with the above quote, “Moreover, do numerical technologies not give us the tools to realize once again Leibniz’s program: ‘Everything can be calculated?’”

And here, too, is the concern for linking thought with images, perception with the world outside us. The above quote continues: “Finally, we can give the image its widest meaning, designating thereby anything that presents itself to the mind, whether it be real or not! In this way, we press from visible objects to visibility itself.... Our brain is not the seat of a neural cinema that reproduces the world; rather our perceptions are inscribed on the surface of things.”³³ And negotiating the link between concept and precept, between inside the mind and outside is the diagram, which is conceived of by Cache as the quintessential visual description of how images operate in the world. **(fig. 24)**

I have emphasized the underlying conceptual/epistemological connection that binds the work of these (and implicitly others) contemporary architects to that of the Five and tried to avoid delineating any direct formal connection. Yet it is almost impossible not to draw formal analogies, both because the images published here beg to be compared and because it suggests that the adoption of an epistemological framework that pre-exists architecture can’t help but produce certain organizational similarities. I will conclude then with a list of these correspondences, both as a way of ending and as a way of suggesting that despite the fact that these contemporary

³² Ibid., pp. 2-3.

³³ Ibid, p. 3

works position themselves in the “new”, the work as well as the polemic demonstrates how problematic this notion of the “new” is as long as its parameter’s are formal.

The main point of comparison is the idea that there is an organizational “scaffold” that will distribute the forms of the architecture. This is a scaffolding that, it is being suggested, corresponds to the architects’ mental one; it is their diagram of how the mind organizes material. This scaffolding for the Whites was the implied grid that located the datums, the regulating lines, the location of frontal or rotational planes, the point of recession or layering. For the current architecture, the scaffolding is a sort of a priori plane/surface. The “scaffolding” in both cases is seen as having, internal to its own logic, operations that will determine the distribution of forms, thereby sparing the architect of any subjective, willful or arbitrary moves.

While the current work emphasizes the plane/surface as the primary conceptual device – it is the surface that Libeskind “writes” on; the surface that Lynn folds, the surface that the computer turns into a topography for Cache – it nevertheless becomes associated with the grid. **(fig. 25)** In some cases, the grid is the remnant of the mathematical, numerically derived formulas/algorithms generating the planar configuration. They form the context from which the planes are morphed. In other cases, the grid is the structural component holding the planes up or the element that continues the effects of folding through the interior, occupiable space. A cruder way of describing this would be say that the grids of modernism got twisted by deconstruction and then smoothed by Deleuzian folding and that this transmutation is both diachronic – it describes changes that happened over a fifteen year period – and synchronic – it is embedded in the logic of the forms as they are currently constituted.

Moreover, the seemingly new interest in surface can be understood as nothing other than the more recent version of the Arnheimian concern, most strongly articulated by Slutzky, for privileging the two-dimensional surface. For the Whites, the grid, the volumes, the layering, the

voids were efforts to achieve a “phenomenal transparency” that depended on the two-dimensional surface. While the planes that the Whites deployed were not the structural scaffolding, they were the phenomenal datum onto which 3-dimensional space collapsed. **(fig. 26)** Thus one can read the more recent surface work as a final victory for that painterly two-dimensional surface, now freed from the no longer dominant grid/volume context. And while these planes lose their frontal relationship to the viewer, so important to the White’s, one can still claim that the aim of the planar distribution in the current work is the dialectical intertwining, if not collapsing, of three-dimensional and two-dimensional space.

There is, as well, a shared attitude about space. While space was understood to be the essential new discovery of modern architecture and the Whites were continuing this legacy in their built work, the epistemological and formal scaffolding is one that ultimately dictates how to distributes solids (columns, beams, walls); the space between is residual. This is not to say that the work was or is a-spatial, for the complex organizations of physical matter did yield complex spatial interiors. It’s just that the spaces were never conceived of “positively” and rarely thought of as inhabited. This same condition exists with the current work. While enormously complex and interesting spaces result from the current topological, morphed, and inscribed procedures, the conception of space is residual to the physical matter shaping it; indeed, as with the Five, the spatial drama is almost a direct result of the disjunction between considerations of space and its actual, almost incidental occupation. **(fig. 27)**

Lastly, the ultimate visual and spatial goal is the same: complexity and ambiguity. If the plea made in the two “Transparency” articles is ultimately for (phenomenal) multiple readings of space over (literal) singular readings of space, the goal of the current work is exactly the same: “multiplicitous”, non-static, fluctuating, indeterminate, heterogeneous. It always was and still is the desire to keep the eye “smart”, excited, moving, questioning. In both cases, the desire, given

the link between mind and vision, concept and percept, is to have eye and mind equally challenged, equally knowledgeable.

It could be that what is here described as the legacy of the Whites – both the urge for epistemological justification and the forms which match it - is not their doing alone; that the similarities that are here described between the generations is less a cause-effect relationship than the fact that they both share in what Rowe described in his introduction to Five Architects as the fallout of modernism's failed social and historical vision. In his cynical and prescient evaluation of the impossibility of finding a stable position from which to operate once the naïve blush of modernism has faded, he writes:

For with this failure, it... become(s) apparent that theory itself was never so much a literal directive for the making of buildings as it was an elaborately indirect mechanism for the suppression of feelings of guilt: guilt about high culture – felt to be unreal, guilt about art – the most extreme anxiety to disavow the role of private judgment in any analytical or synthetic enterprise. In the end what is understood as the theory of modern architecture reduces itself to little more than a constellation of escapist myths which are all active in endeavoring to relieve the architect of responsibility for his choices and which all alike combine to persuade him that his decisions are not so much his own as they are, somehow, immanent in scientific, or historical, or social process.

In this description, both the Whites and the current hyper-formalism could be said to flounder in the vacuum left by modernism's "morale" failure. This may well be the case. But whether one thinks the Whites stimulated this turn of events or were merely its victim is less interesting than our evaluation of the dilemma. On the one hand, it can be viewed cynically and tragically, as Rowe does³⁴ or as a die-hard modernist might. On the other, it can be viewed less judgmentally and with greater curiosity, for we can't blame the Whites or the current avant-garde for thrusting their vision upon us; we all have been more than receptive. Despite the clear illogic of many of these "masks of guilt", work like this indicates our drive for determining the aesthetic dimension of our psyche and through this culture. Kant struggled with it, Heidegger struggled with it, Freud

³⁴ It is never clear whether Rowe is saddened by the impossibility of architecture's social agenda the way that Tafuri might be or simply saddened by its attempt to be social (as opposed to merely historically referential). The first is a radical interpretation, the second a highly conservative one

struggled with it, Adorno struggled with, Marcuse struggled with it, Lacan struggled with it, Tafuri struggled with it. It's an unresolved question and it is not inappropriate that we are still struggling with it.

Illustrations

Note: The location of the images vis-à-vis the text is not precise; the location of the figs. in the text is a general indication of where they should be placed. Hence, do not include the “fig. #” that is in the text now in the final version; it’s there for layout purposes only. Also, the following list indicates where you can find images. The captions should just identify the architect and the project (and the date?), which will be clear from the references I’m giving you here. I’ve only specified a particular wording of a caption if it won’t be clear from what I’ve asked you to scan.

- Fig. 1: Eisenman, House II, 1969, p. 37 Five Architects
- Fig. 2: Graves, Benaceraff House Addition, 1969, p. 59 Five Architects
- Fig. 3: Gwathmey, Gwathmey Residence and Studio, 1966, Five Architects
- Fig. 4: Hejduk, One-Half House 1966, p. 106 Five Architects
- Fig. 5: Meier, Smith House, 1965, p. 117 Five Architects
- Fig. 6: Le Corbusier, Villa Savoye, 1929-31, fig. 208 p. 121 Modern Architecture/I Tafuri and Dal Co (photo)
- Fig 7: Ibid., fig. 206, p.120
- Fig 8: Rowe, “Mathematics...” In Mathematics, p. 5, fig 1 (Malcontenta and Garches)
- Fig. 9: Arnheim, from Art and Visual Perception in Caragone, The Texas Rangers, p. 163, fig. 42
- Fig. 10: Laszlo Moholy-Nagy, La Sarraz, plate 63, p. 179, “Transparency I” in Rowe’s Mathematics..
- Fig 11: Gropius, Bauhaus, 1925-6, plate 65, p. 180. Ibid.
- Fig 12: Belluschi’s Equitable Life Insurance, in Ockman’s Architecture Culture 1943-68, fig 2 pg. 208
- Fig 13: Corb’s Algiers Block, Ibid., fig. 1, p. 208
- Fig 14: Eisenman, diagrams for House II, p 32-3 Five Architects (as many as can fit, at least 4)
- Fig 15: Hoesli sketches, Caragone, op cit., fig. 101, p290
- Fig. 16: Hejduk 9-sq project, Caragone op. Cit. Fig 60, p. 125 (at least top 2)
- Fig: 17: Eisenman House VI in Progressive Architecture June ’77 vol 58 p 63? (lower right interior image)
- Fig 18: Libeskind, “City Edge: in radix-matrix p. 21 (lower large model image)
- Fig 19: Libeskind, “Victoria-Albert Museum” Ibid., p. 91 (model)
- Fig. 20: Lynn, Folds, Blobs..., “encore-bruxelles” p. 29, fig. 78

- Fig. 21: Lynn, "Multiplicitous and Inorganic bodies," in Assemblage 19 (probably in Folds, Blobs... too), p. 35, figs 10-13 (all four top diagrams, without his captions) my caption should read," Lynn: graphs of potential geometric morphing"
- Fig 22: Ibid., pp. 38-9, figs. 27-34 (all top 8 images without his captions) my caption should read, "Lynn: diagrams of transforamtional/regenerational potential of flatworms based on cuts and grafts"
- Fig 23: Cache, Earth Moves, p. 13 (4 diagrams) my cption should read, "Cache: topological diagrams"
- Fig 24: Cache, from "Objectile" website, Semper pavillion diagram <http://www.objectile.co/archilab/archilae.htm>; or, Cache, Earth Moves, p. 57, "Cache: writing desk and arm chair made of plywood"
- Fig 25: Garofalo, Lynn, McInturf, Korean Presbyterian Church of NY,. p.21, Assemblage 38 (lower 2 computer models)
- Fig. 26: Cache, Lim House from "Objectile Website [http:// www.objectile.com/lim/lime.htm](http://www.objectile.com/lim/lime.htm)
- Fig. 27: Libeskind, Radix-matrix, "Victoria and Albert Museum," p. 87 (perspective)