

Postmodern Paradigms

Linguistic Theory, Phenomenology, Contemporary Sublime, Complexity Sciences

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1 Introduction

New Paradigm in the Postmodern Paths

2 Linguistic Theories

Semiotic, Semiology, Structuralism, Post-structuralism

3 Phenomenology

Subject, Experience, *Lebenswelt*

4 Contemporary Sublime

Disorientation, Fragmentation, Alteration

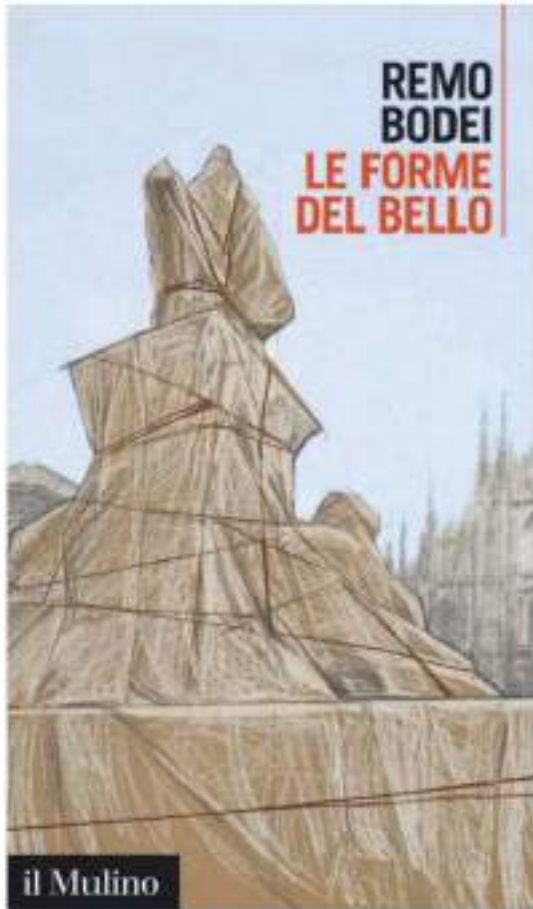
5 Complexity Sciences

System Evolution, Crisis and Instability

6 Q&A

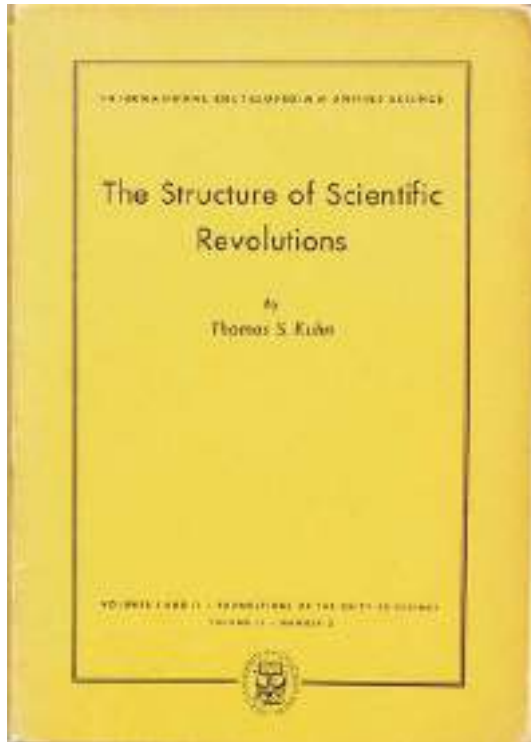


The beginning of the end of modernity is marked by the extinction of the unitary nature of history and its monopolistic point of view: in the transition to post-modernism, there is no longer a single universally valid and accepted point of view, but, on the contrary, there is a veritable explosion of perspectives, conceptions and ideas that make it impossible to think of history as a linear course of events flowing together. This proliferation of worldviews stems from the role of the mass media and generalised communication, to which Vattimo gives great credit for having made society no longer transparent and crystalline, but, on the contrary, immeasurably more chaotic and impenetrable to a centre, to a single point of view. Nietzsche's assertion – in *Thus Spoke Zarathustra* – “now that God is dead, we want many gods to live”, is realised in postmodern society, in which “radio, television, newspapers have become elements of a general explosion and multiplication of Weltanschauungen, of worldviews”: no longer a single worldview, but an explosion of images. It was the mass media that allowed the dissolution of central points of view, of what - to borrow Lyotard's words - we might call “the great narratives”: it follows that precisely the apparent chaos of postmodern society - which, far from being a “transparent” society, i.e. monolithically aware of itself, is rather a “world of plural cultures”, i.e. a “babelic” and “bewildered” society in which different languages, races, ways of life intersect - constitutes the best premise for a form of emancipation based on the ideals of pluralism and tolerance, i.e. a model of humanity more open to dialogue and difference. A growing number of sub-cultures, which had previously always been silenced and condemned as ‘different’ and therefore ‘non-existent’, are speaking out. In this perspective, the position of Adorno and the other members of the Frankfurt School, who tended to see the mass media as a terrible instrument of flattening and imposition of a unitary dominion, is unacceptable. The proliferation of ‘images of the world’ brings with it the paradoxical consequence that the idea of a world, of a unitary given reality, becomes less and less conceivable, so that the Nietzschean prophecy of the real world that in the end becomes a fable seems to come true: there is no longer a given reality, but there are a myriad of realities or, rather, of different points of view, of different interpretations that make society incredibly Babelic, generating a widespread effect of disorientation and confusion: “an ideal of emancipation is coming to the fore that has at its base, rather, oscillation, plurality, and ultimately the erosion of the ‘principle of reality’ itself”. “What I intend to argue is: a) that in the emergence of a postmodern society a decisive role is played by the mass media; b) that they characterise this society not as a more *transparent*, more self-aware, more *enlightened* society, but as a more complex, even chaotic society; and finally c) that it is precisely in this relative ‘chaos’ that our hopes for emancipation lie”.



Certainly, if the manifestations of beauty were to lose their uncanny nature, if they were to be deprived of their explosive and irreducible symbolic core, if they were to be reduced to tranquilisers, to objects of futile entertainment, to mere supports of utilitarian value or to purely decoative functions, they would end up being irremediably degraded.

(Remo Bodei, *The Shapes of Beauty*, 2007)



Thomas Kuhn defines the concept of a scientific ‘paradigm’ as a ‘constellation of conclusions - concepts, values, techniques, etc.’ - shared by a scientific community and used by the community to define legitimate problems and solutions.

(Thomas Kuhn, *The Structure of Scientific Revolution*, 1962)

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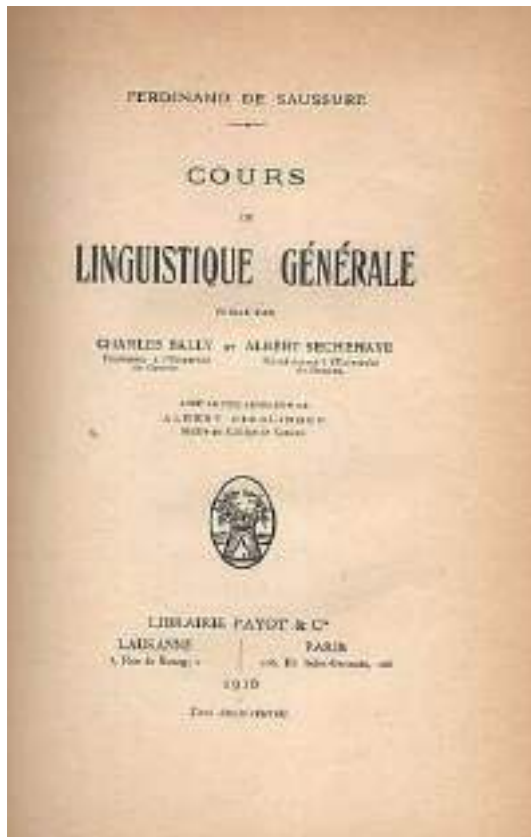
System Evolution, Crisis and Instability

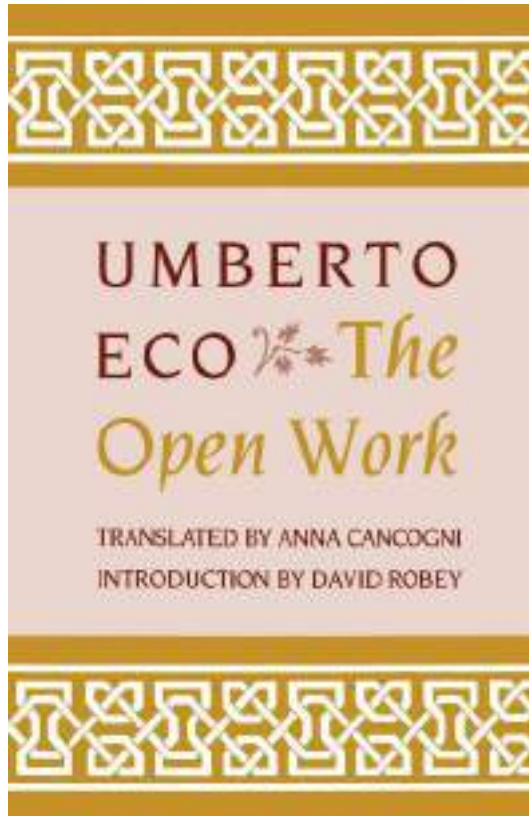
6 Q&A

Ferdinand de Saussure, 1916

“The founder of modern linguistics, Ferdinand de Saussure inaugurated semiology, structuralism, and deconstruction and made possible the work of Jacques Derrida, Roland Barthes, Michel Foucault, and Jacques Lacan, thus enabling the development of French feminism, gender studies, New Historicism, and postcolonialism. Based on Saussure's lectures, *Course in General Linguistics* traces the rise and fall of the historical linguistics in which Saussure was trained, the synchronic or structural linguistics with which he replaced it, and the new look of diachronic linguistics that followed this change. Most important, Saussure presents the principles of a new linguistic science that includes the invention of semiology, or the theory of the “signifier,” the “signified,” and the “sign” that they combine to produce.”

(source: Columbia University Press)





Umberto Eco, *The Absent Structure*, 1968

In 1973, Umberto Eco published an English translation of the chapters on architecture from his book “The Absent Structure” (1968). His version, which combined the judgements of Morris with those of Saussure, saw architecture as a system of communication whose forms were composed of denotation (function) and connotation (ideology), read provisionally through the lens of technical, syntactic and semantic codes. Yet, Eco was at the same time interested in advancing semiotics into the realm of mass culture or design architecture.

There have been many attempts to apply semiology to architecture considered as a language. Renato De Fusco has proposed a semiological theory in which the structure-involucre is posited as the signifier and the internal space as the meaning of architecture, unlike Eco who, like G. K. Koenig, identifies meaning with function "recognising in the architectural sign the presence of a signifier whose meaning is the function it makes possible".

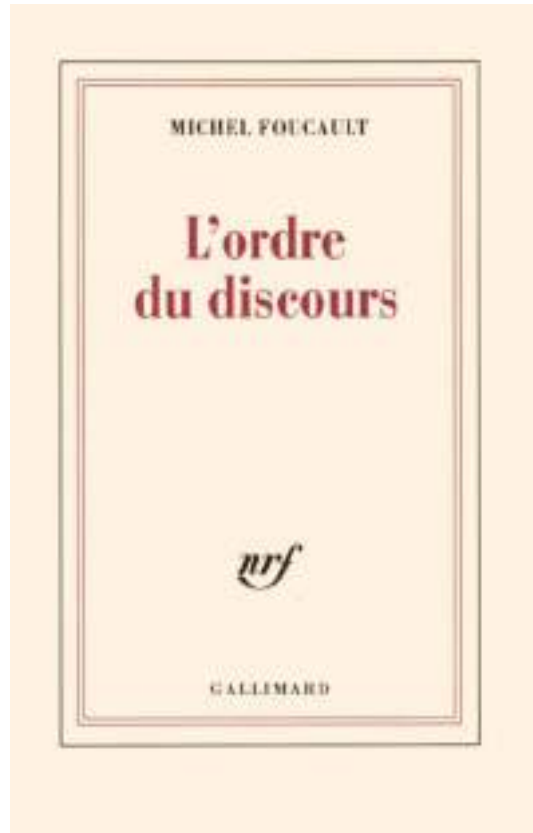






Roland Barthes, *The Pleasure of Text*, 1973

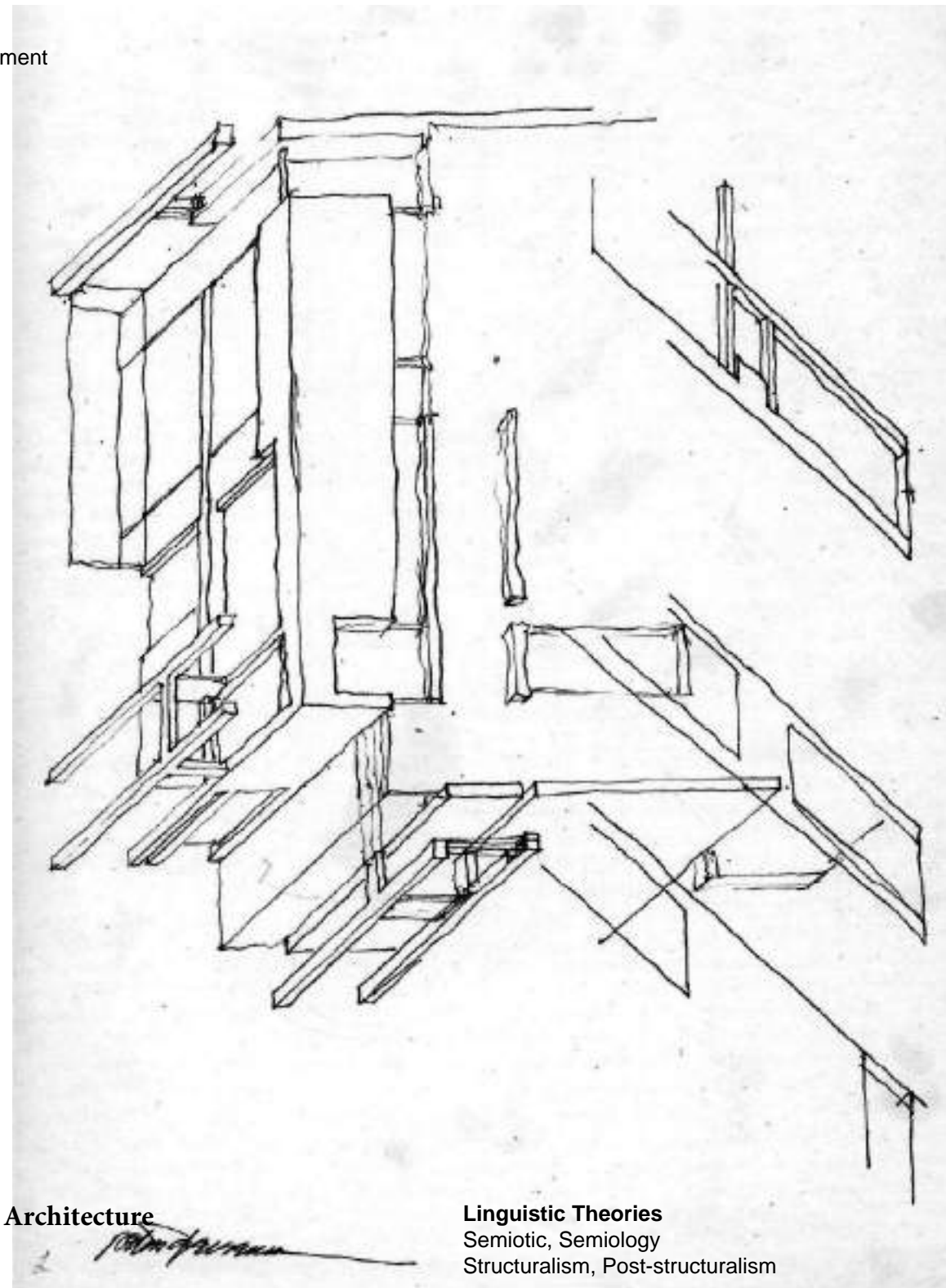
The first condition is the liberation of the work from its ideological aspect, as a product endowed with a logical and moral unity; the work is no longer an object entirely determined by its author, because the reader's fruition continues the author's generative activity in an endless process. This does not mean that the text dissolves in communication, on the contrary, the text becomes intransitive, atypical: Barthes compares it to a fabric, because it extends its approach everywhere; in other words, nothing escapes the text, in the sense that the text remains autonomous from the speaker and the writer and the listener, from the writer and the reader.



Michel Foucault, *L'ordre du discours*, 1971,

translated in 1972 as "The discourse on language" aims to show the order - never simple and univocal, but always differentiated and mobile - that presides over the production of discourse, the objects it arouses, and the subjective positions involved in it. It is addressed to the study of the function of discourse and not to its structure considered per se, nor to the identification of the sense that would be hidden in the discourse. Above all, however, it aims to free the possibility of discourse from all the instances of control that orient and regulate it according to the criterion of the will to truth, excluding those discourses that in some way can disrupt the established order, destabilise the instances of power that organise it at a distance. For this reason, discourse analysis does not only deal with texts that are considered canonical, whose object is explicitly thematised by an author and acquired in the sphere of recognised knowledge, but also and above all with legal documents, case directories, statistical tables, institutional regulations, in other words the anonymous but effective discourse in which it is possible to recognise the bundle of complex and differentiated relations that links the possibility of discourse to instances of power.

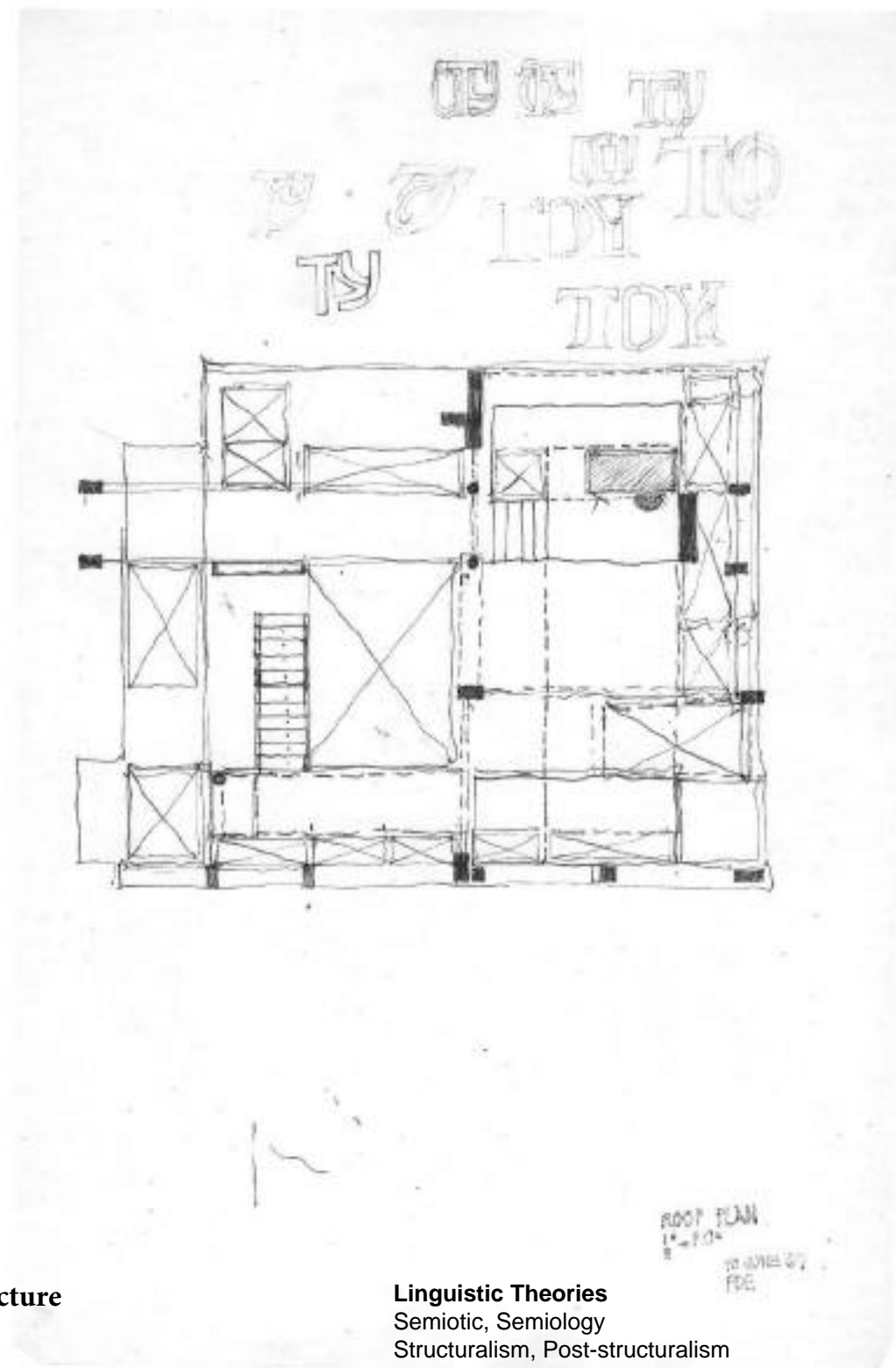
Peter Eisenman



Lecture in Theory and History of Architecture

Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism

House I
Princeton, New Jersey (1967-68)



House I
Princeton, New Jersey (1967-68)

Lecture in Theory and History of Architecture

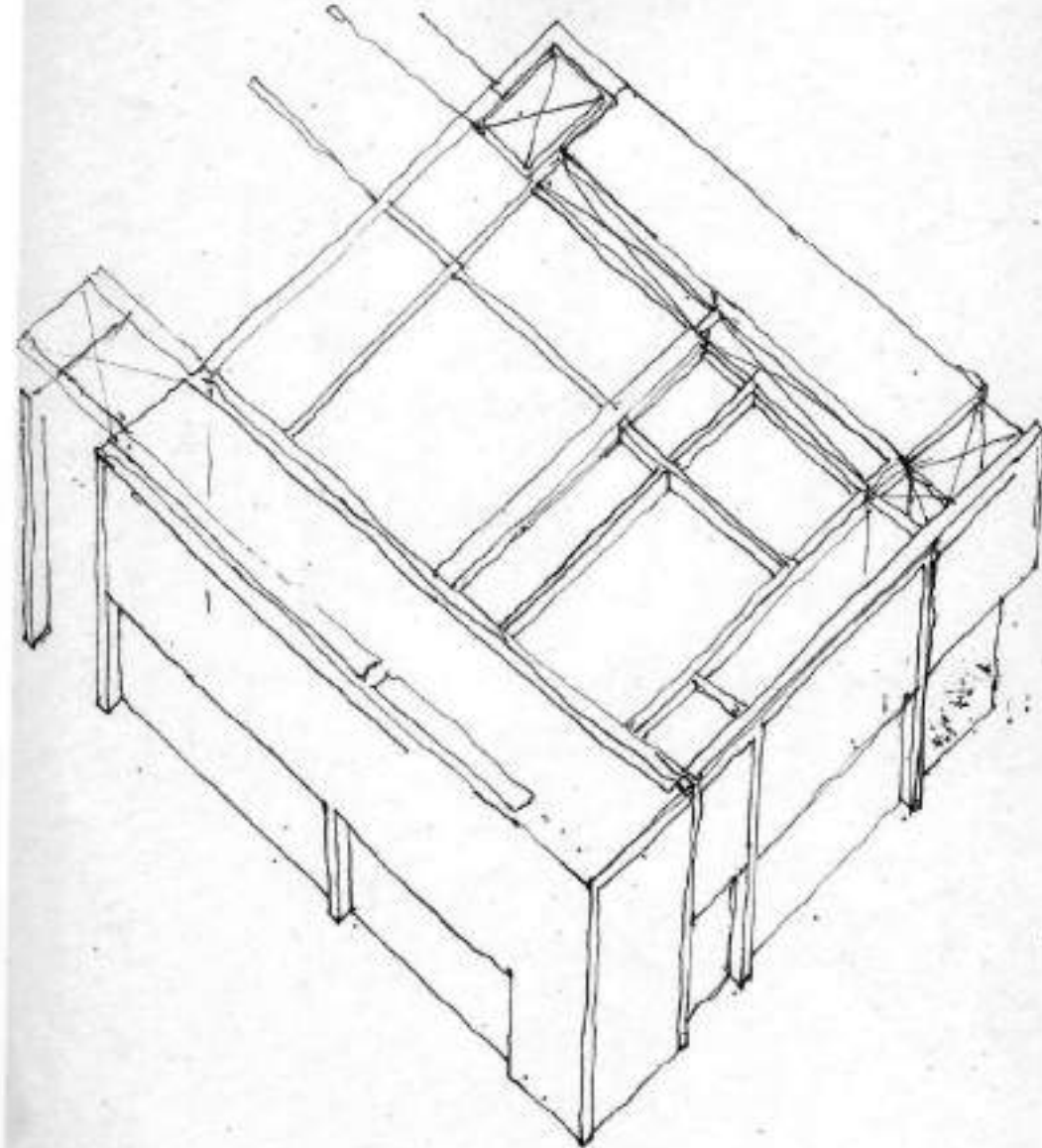
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House I
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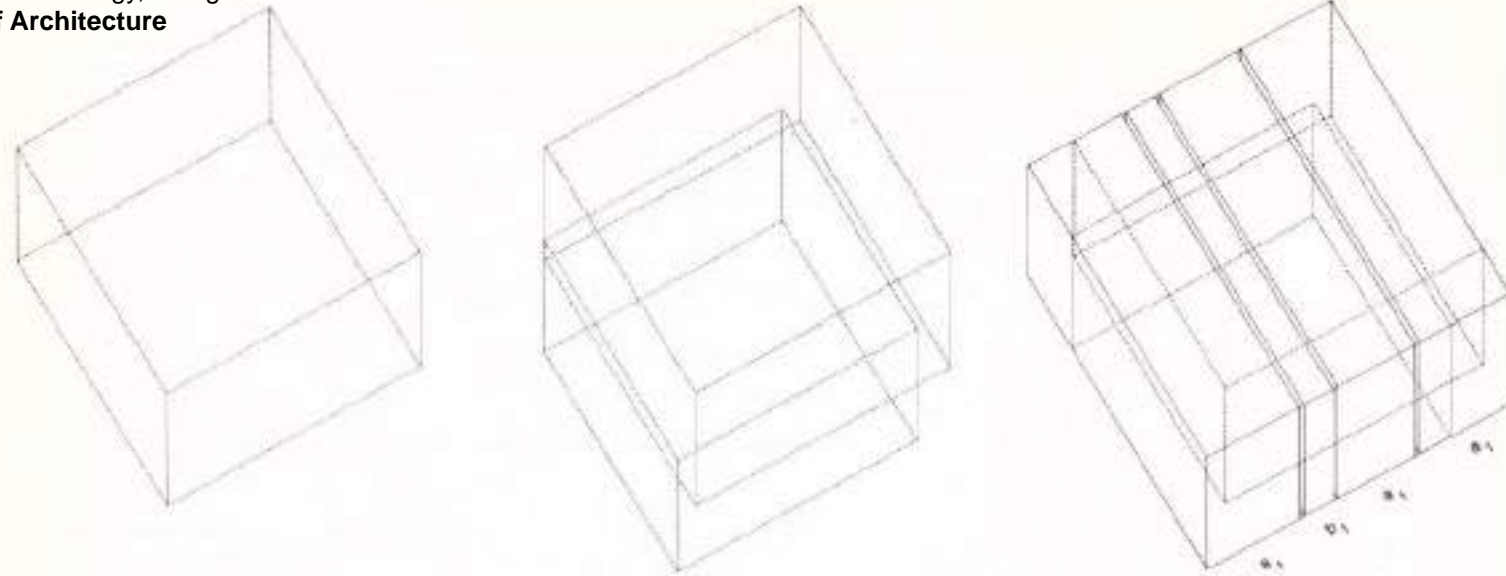
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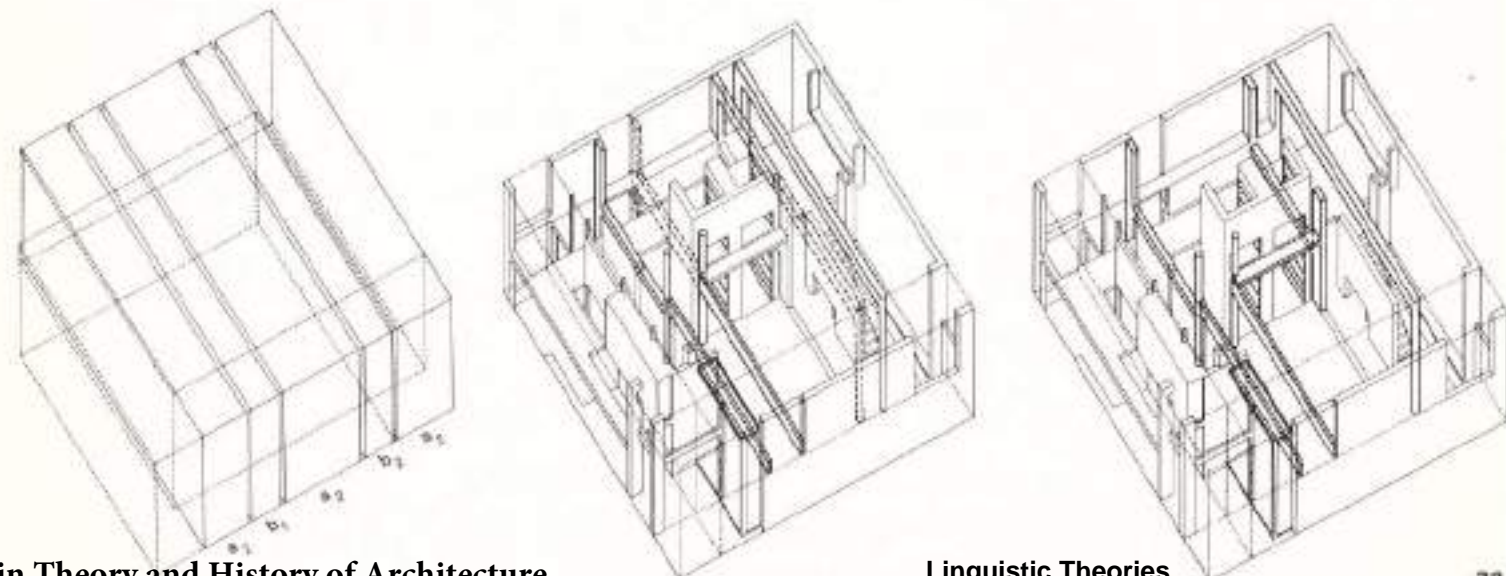
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Princeton, New Jersey (1967-68)

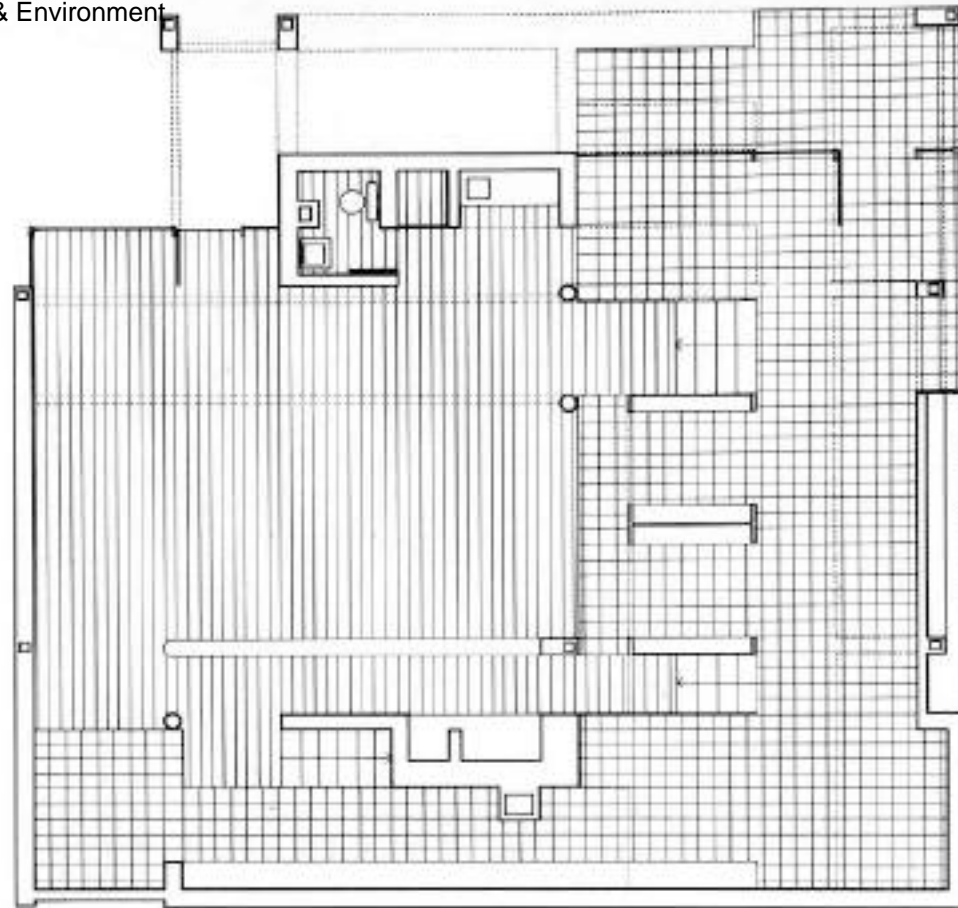
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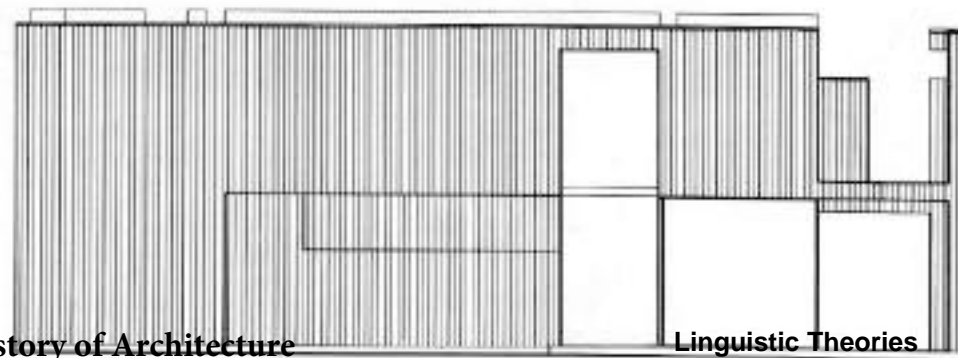
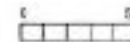


House I (Padiglione Barenholtz), Princeton, New Jersey, 1967-68. Diagramma del processo compositivo: dal prisma ideale all'assonometria definitiva.





House I: pianta del piano inferiore e prospetto occidentale.



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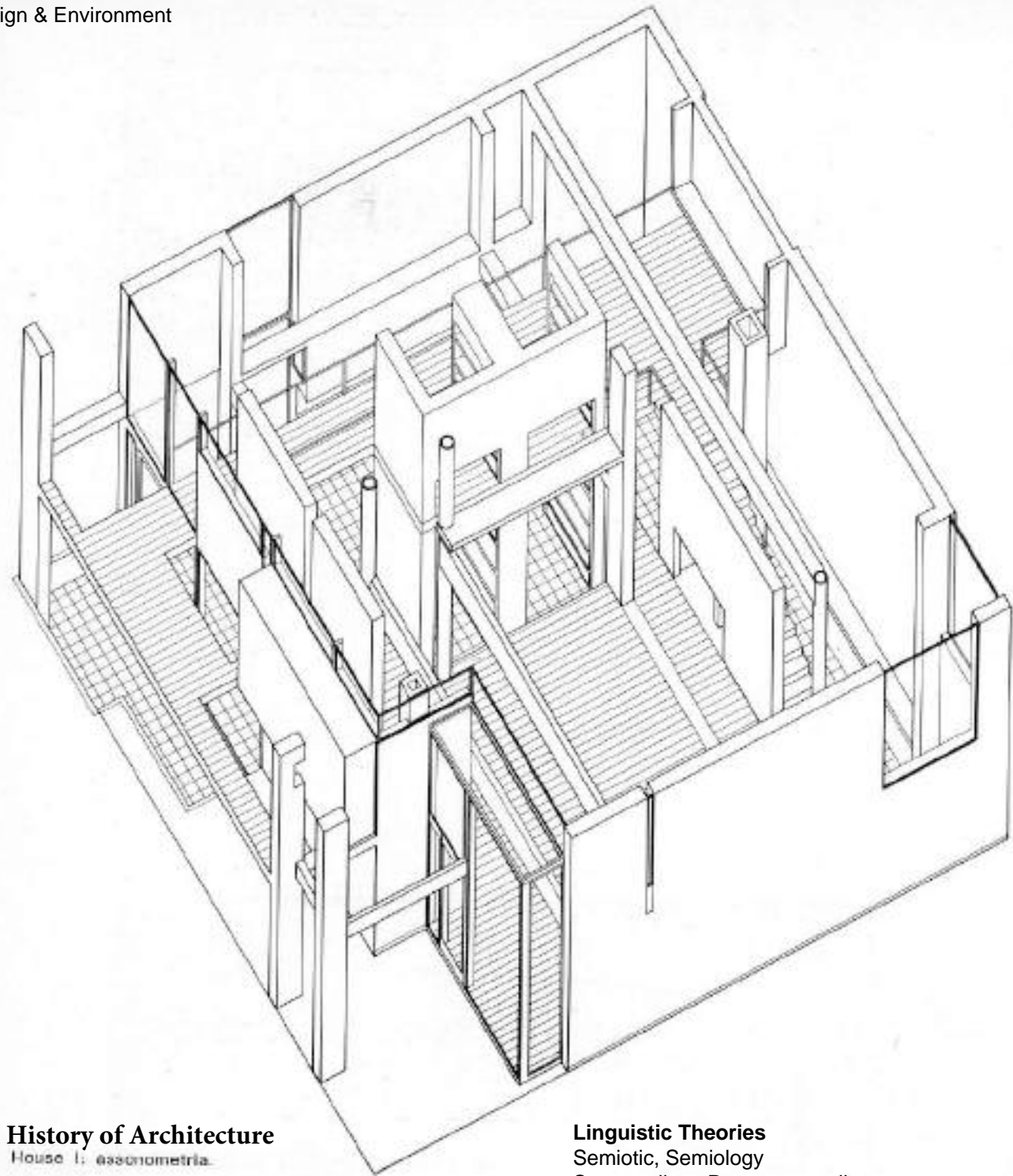
Linguistic Theories

Semiotic, Semiology

Structuralism, Post-structuralism

House I

Princeton, New Jersey (1967-68)



House I: axonometria

Lecture in Theory and History of Architecture

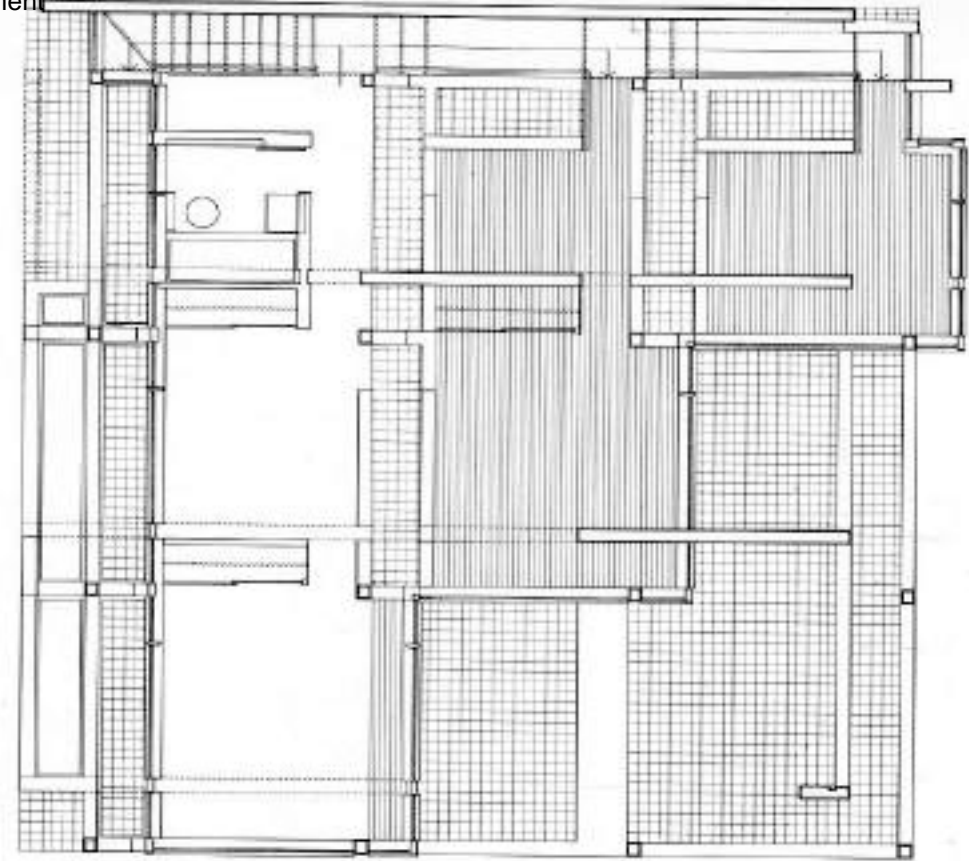
Linguistic Theories

Semiotic, Semiology

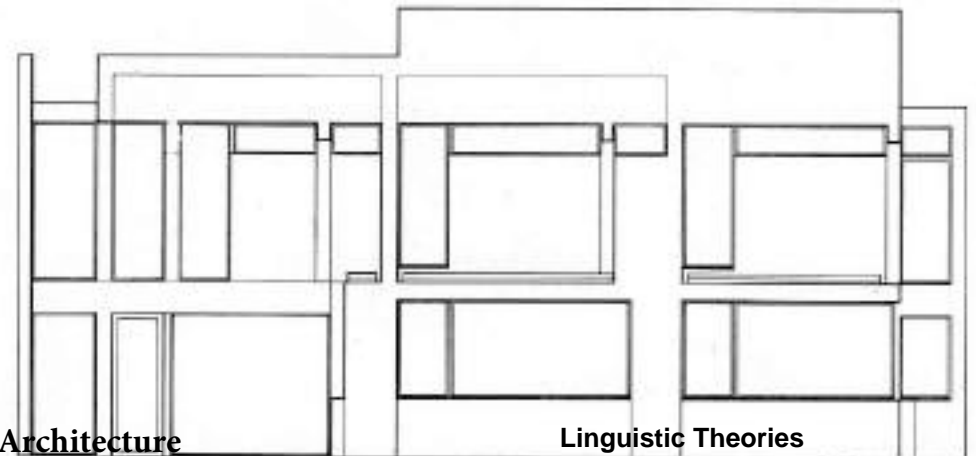
Structuralism, Post-structuralism

House I

Princeton, New Jersey (1967-68)



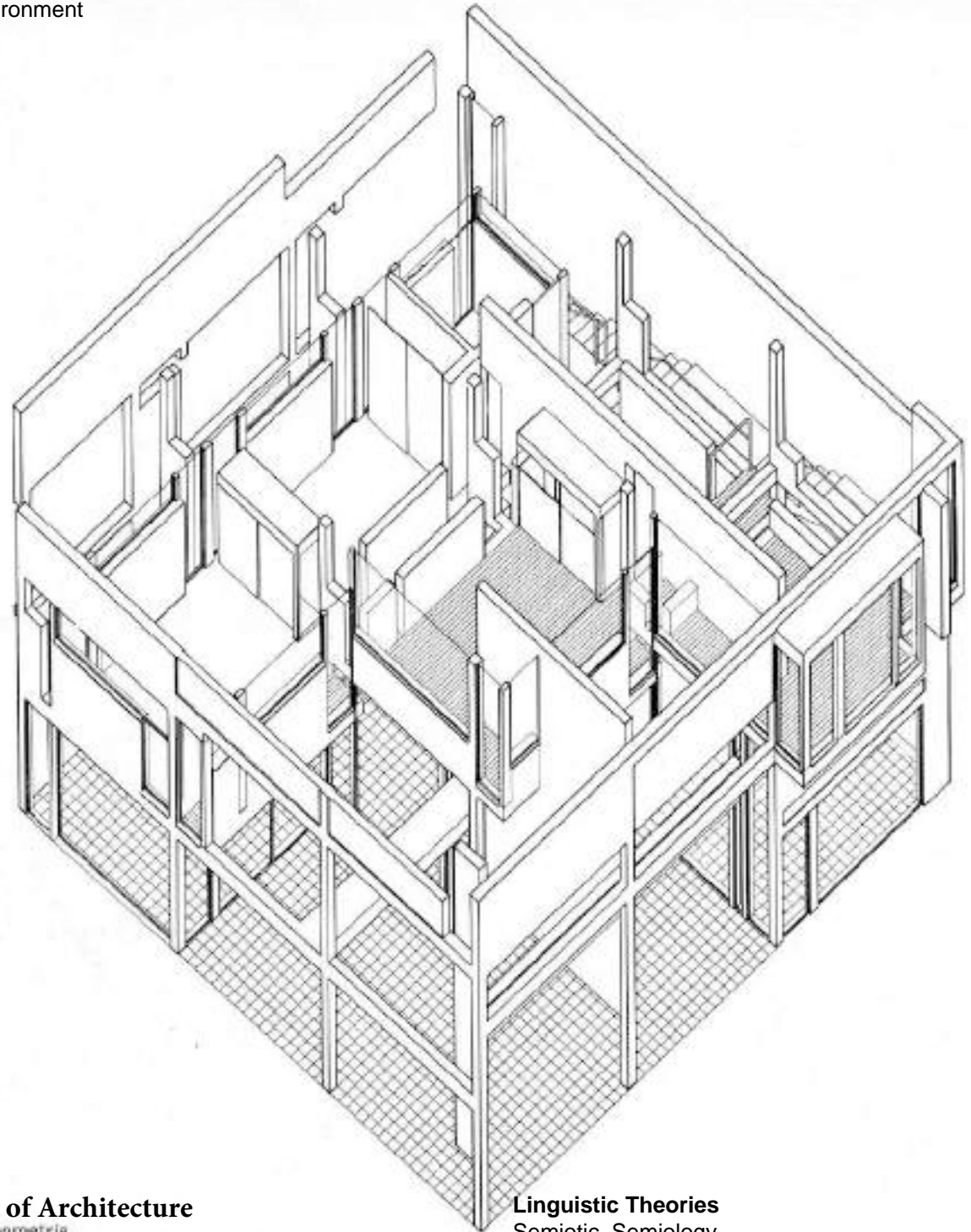
House II (Casa Falk), Hardwick, Vermont, 1969-70. Plan-
ta del piano superiore e prospetto occidentale.



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Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism

House II
Hardwick, Vermont (1969-70)



Lecture in Theory and History of Architecture

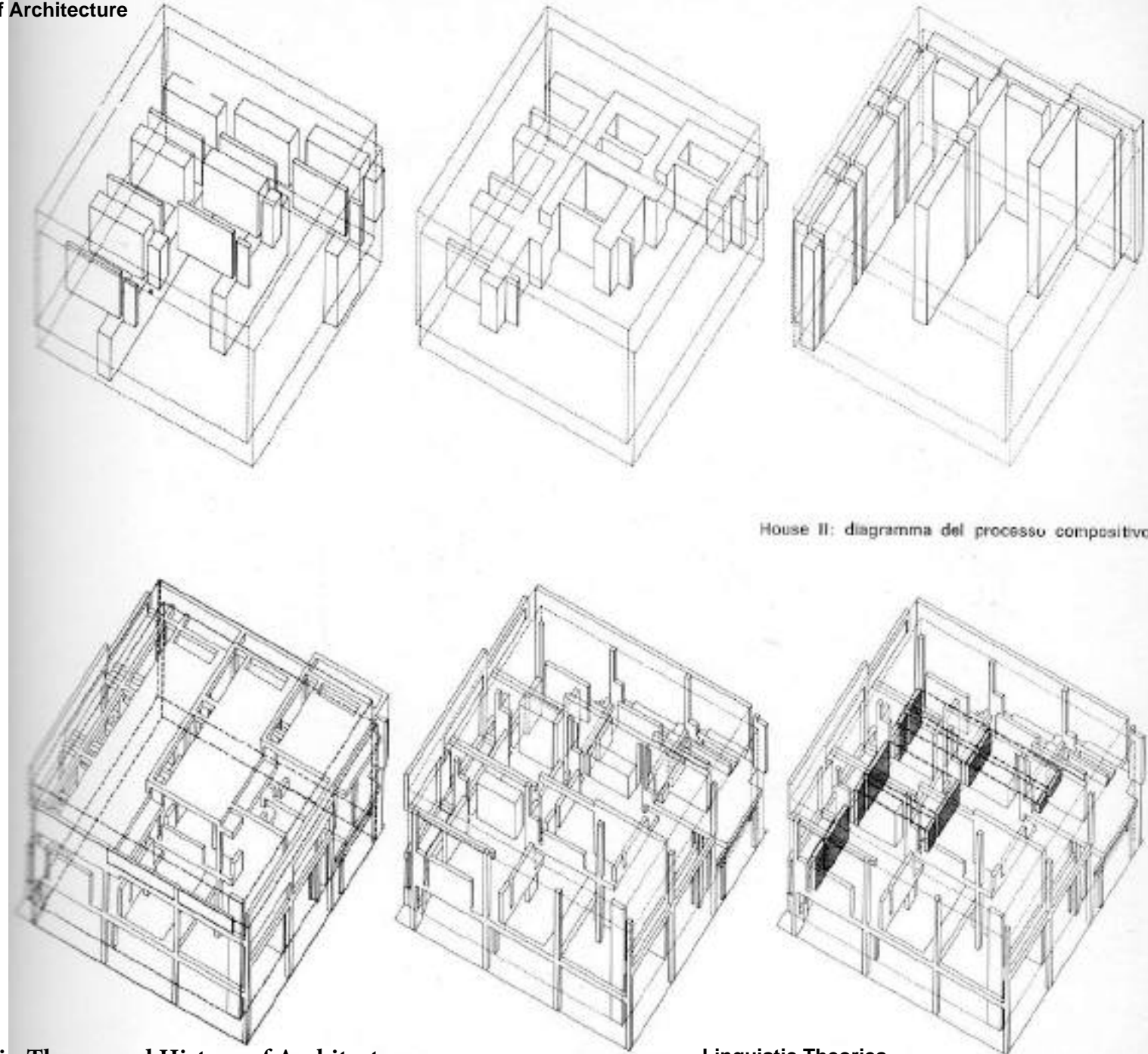
House II: axonometria.

Linguistic Theories

Semiotic, Semiology
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House II

Hardwick, Vermont (1969-70)

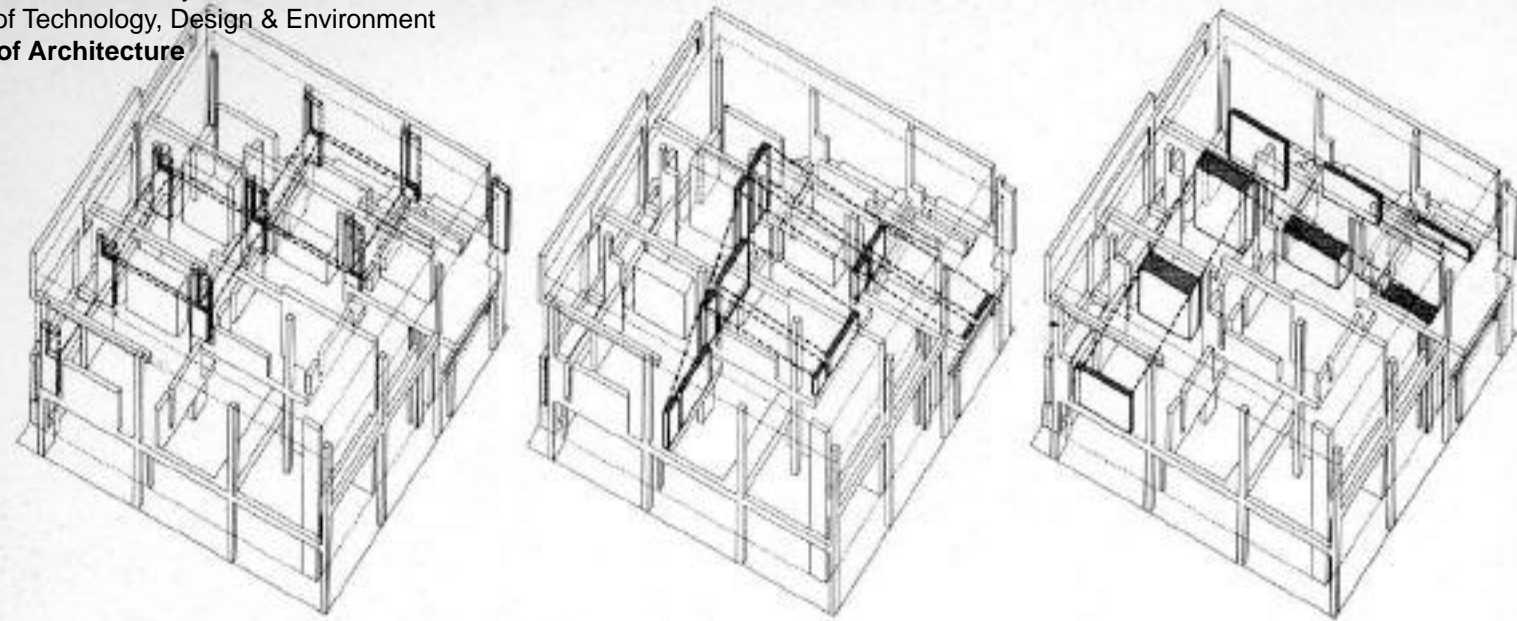


House II: diagramma del processo compositivo

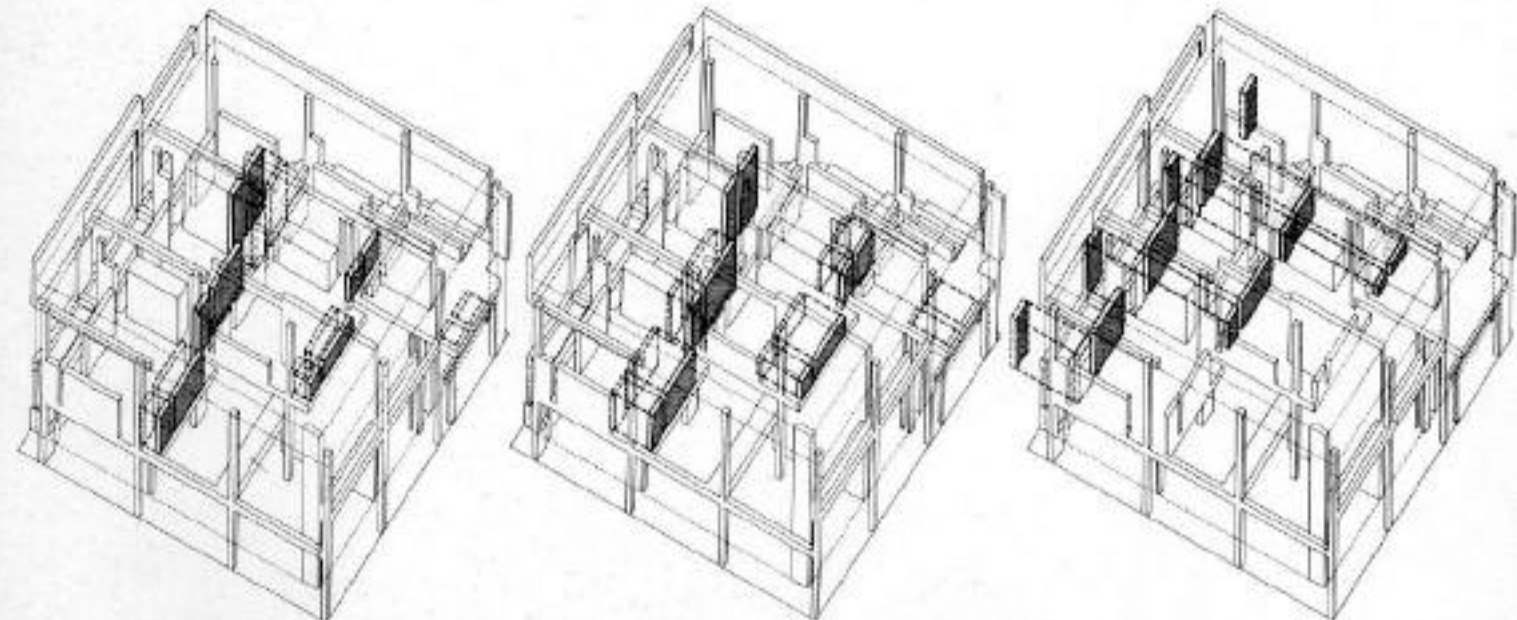
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Semiotic, Semiology
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House II
Hardwick, Vermont (1969-70)



House II: diagramma del processo compositivo.



House II: realizzazione. ▷

House II: 60, 100, 120, 140, 160, 180, 200, 220, 240, 260, 280, 300, 320, 340, 360, 380, 400, 420, 440, 460, 480, 500, 520, 540, 560, 580, 600, 620, 640, 660, 680, 700, 720, 740, 760, 780, 800, 820, 840, 860, 880, 900, 920, 940, 960, 980, 1000. Diagramma del processo compositivo. ▷

Lecture in Theory and History of Architecture

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Hardwick, Vermont (1969-70)

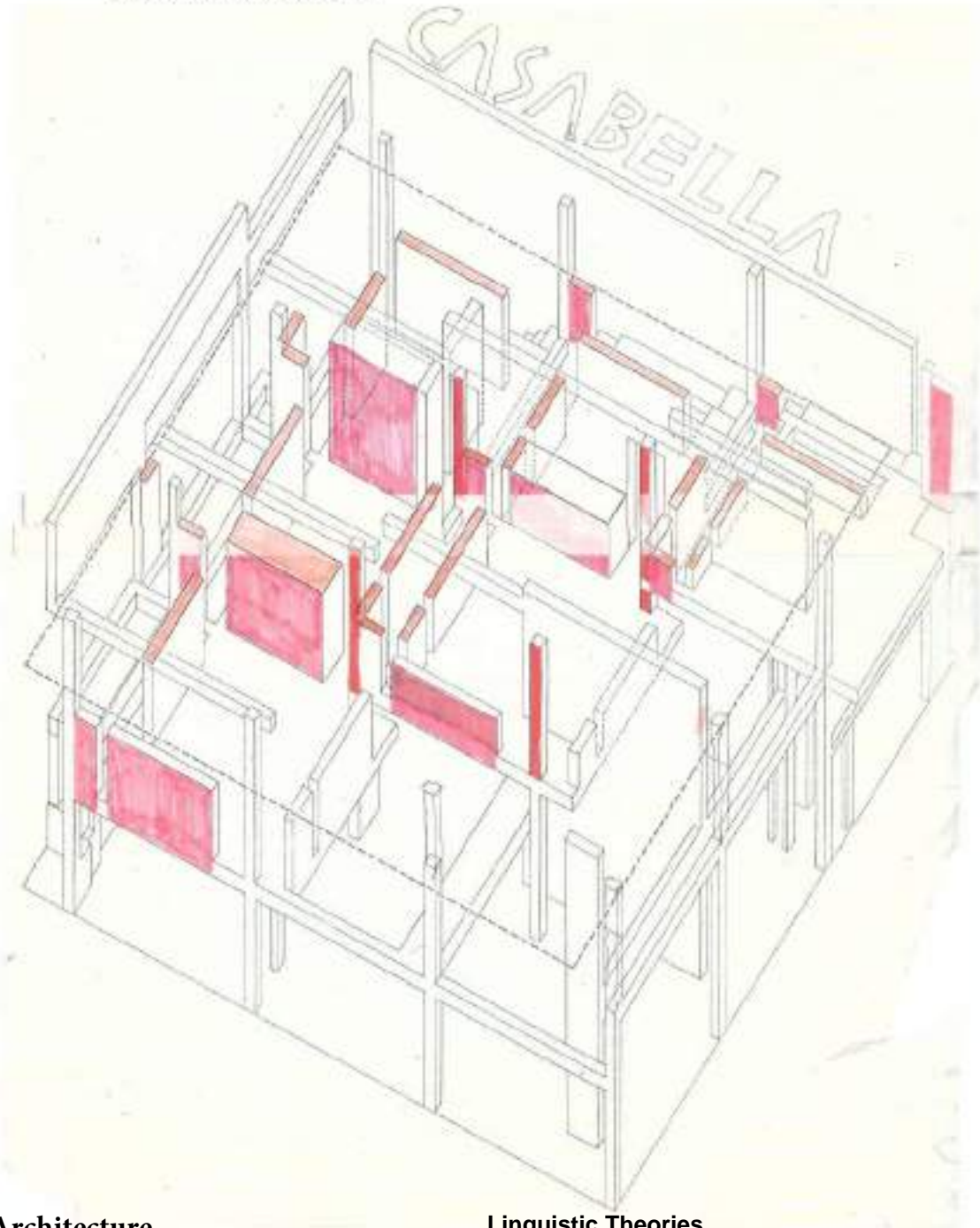
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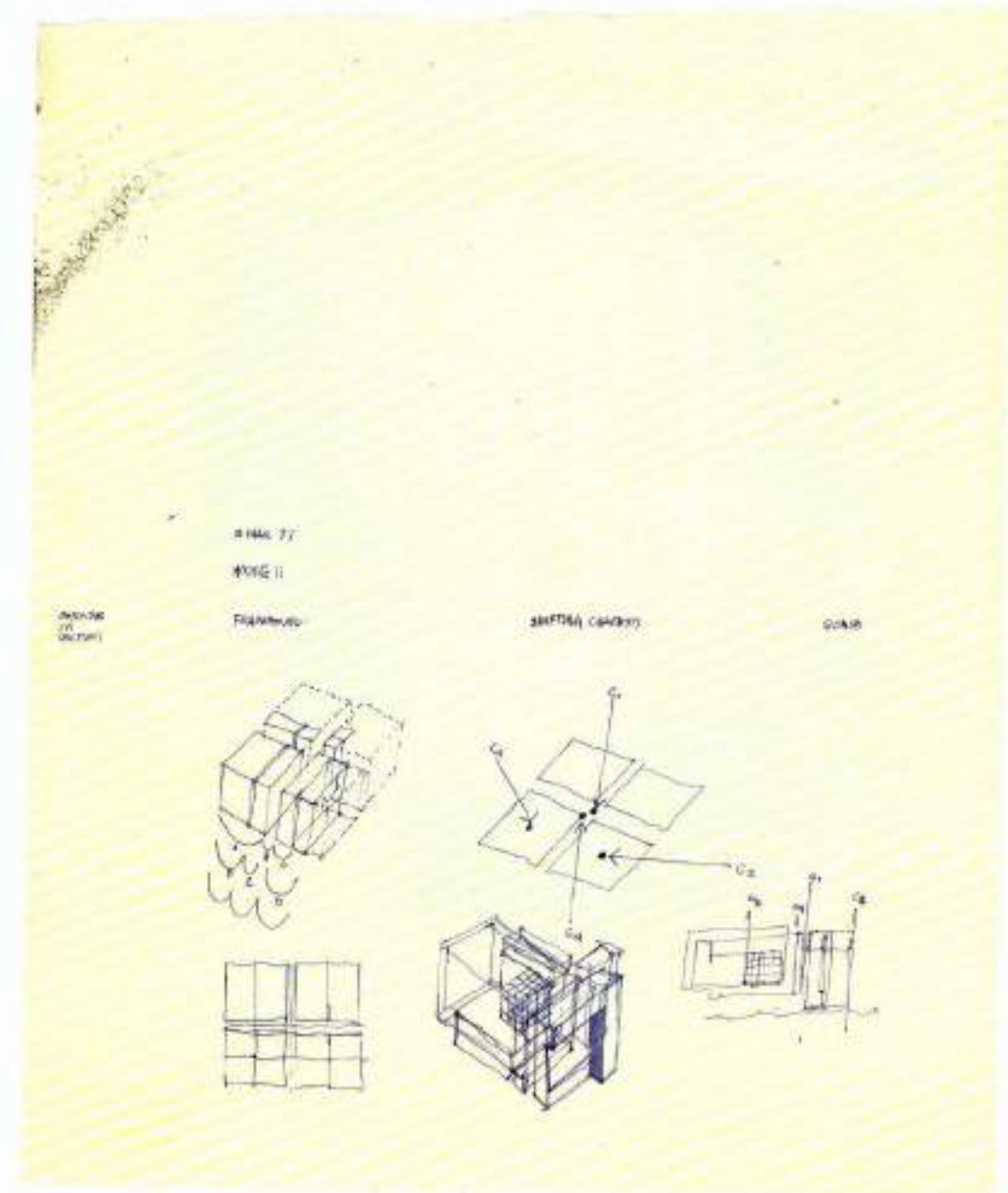


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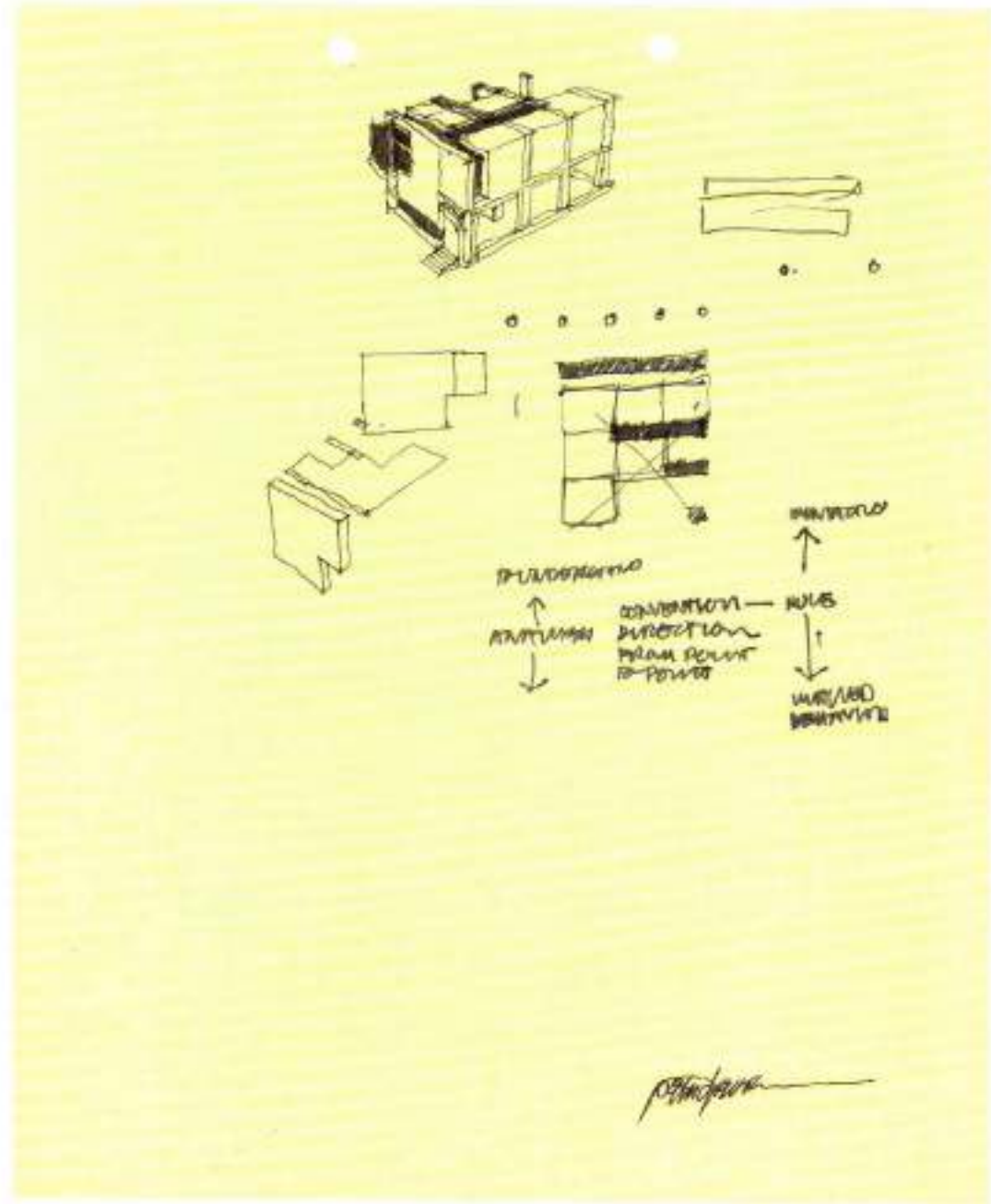
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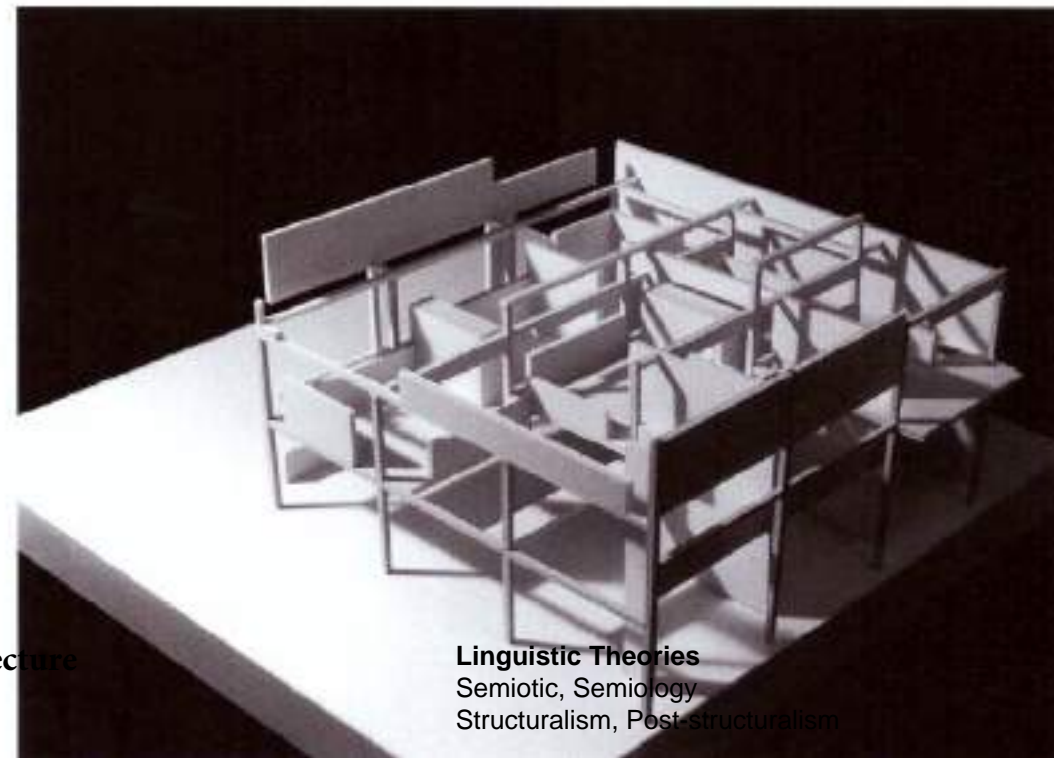
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Semiotic, Semiology
Structuralism, Post-structuralism





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Hardwick, Vermont (1969-70)

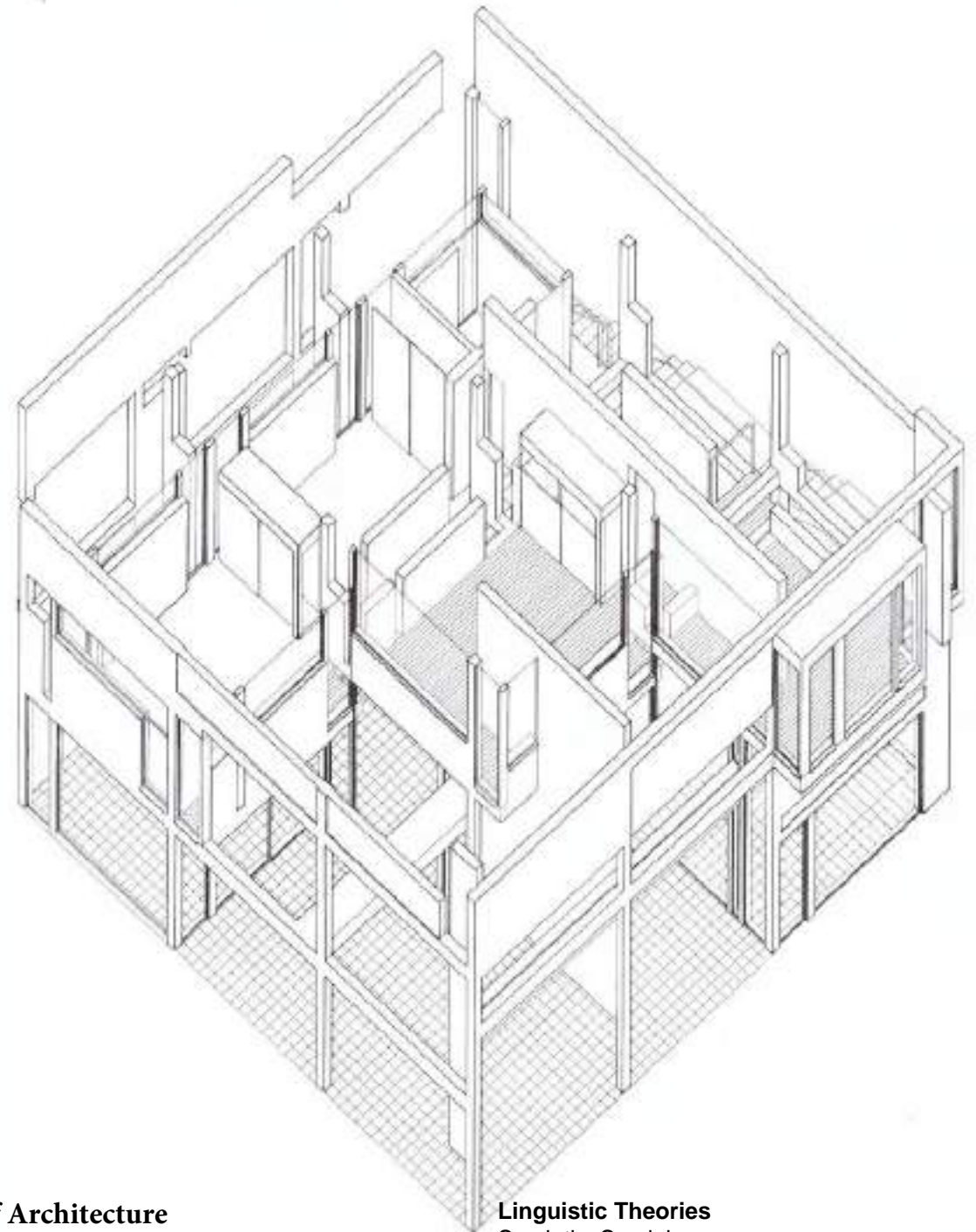




House II
Hardwick, Vermont (1969-70)

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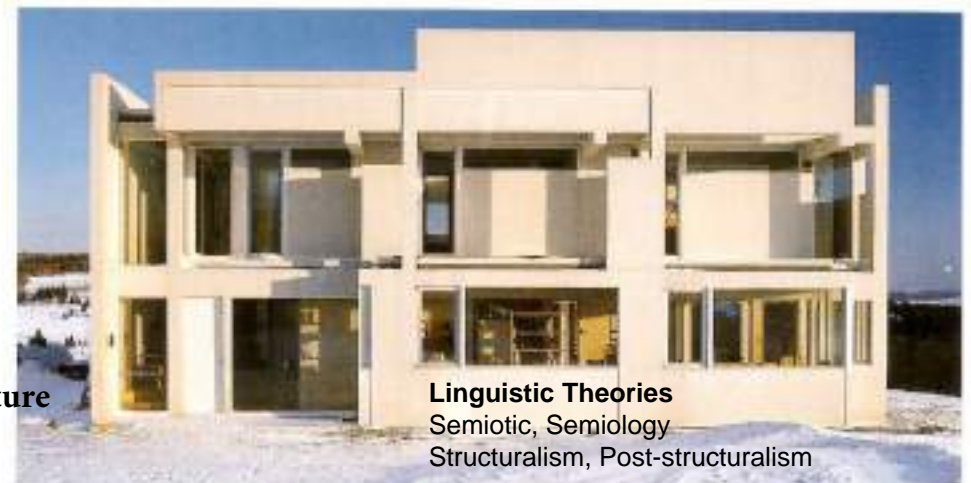


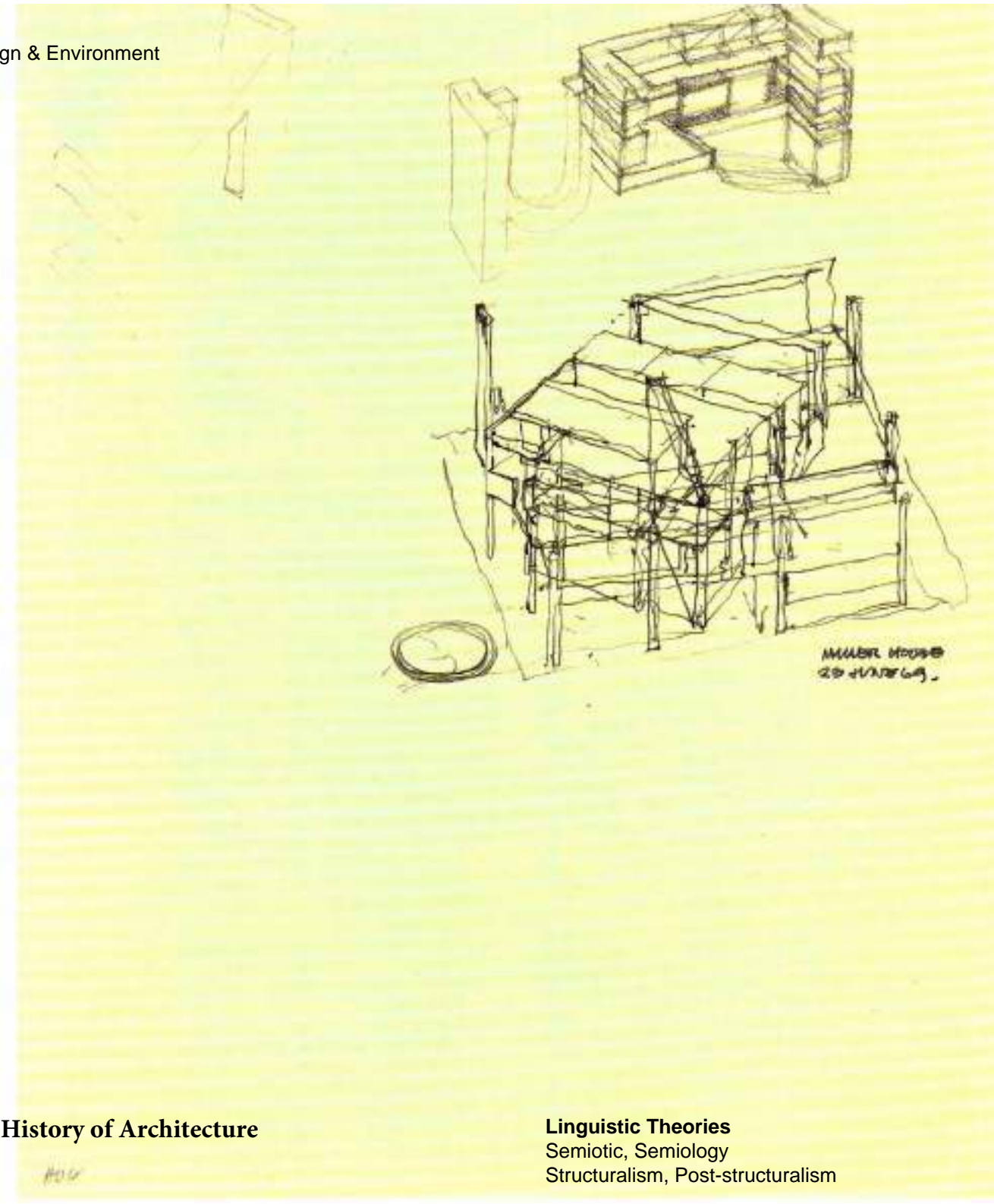
House II
1969-1970
Hardwick, Vermont

House II is situated on a 100-acre hilltop with broad panoramic views extending for twenty miles in three directions. The design attempts to simulate the presence of trees, which are nonexistent on the barren site, through the use of a sequence of columns and walls. The columns and walls frame the view and provide a transition from the extroverted life of summer to the introverted security of the winter fireplace.

Each of the two support systems — one of columns, the other of walls — is more than sufficient to meet the structural requirements of the house, which forces new readings. Either each system is supporting the house in part, or the two systems are completely supporting the house independently, or one system is only a sign of support. In this redundancy, an architectural sign is created: each system's function is to signify its own lack of function.

House II sheds its scale specificity by employing conventions of the architectural model in the actual object. The house looks like and is constructed like a model. Built of plywood, veneer, and paint, it lacks traditional details associated with conventional houses. Viewed without the external, scale-specific referent, House II becomes an ambiguous object that could be a building or a model.

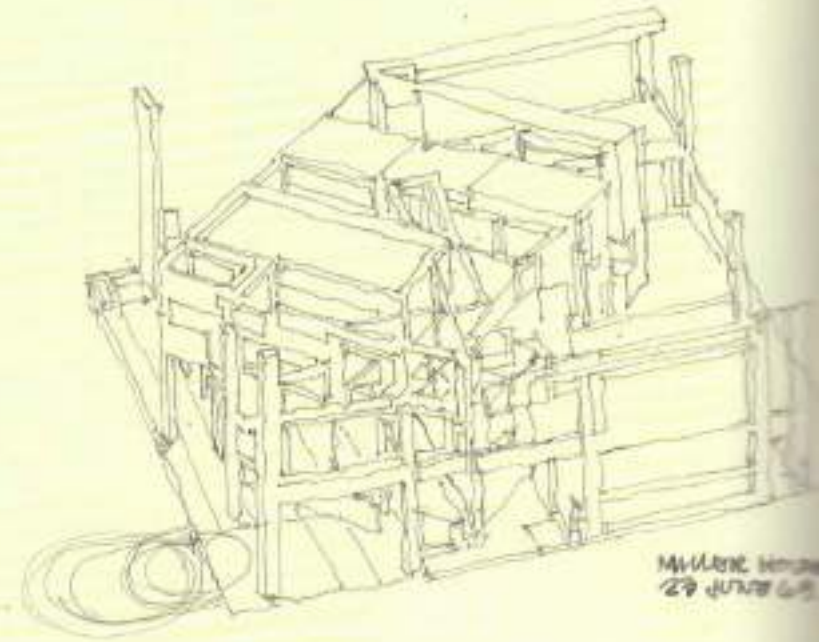




House III
Lakeville, Connecticut (1971)

Lecture in Theory and History of Architecture

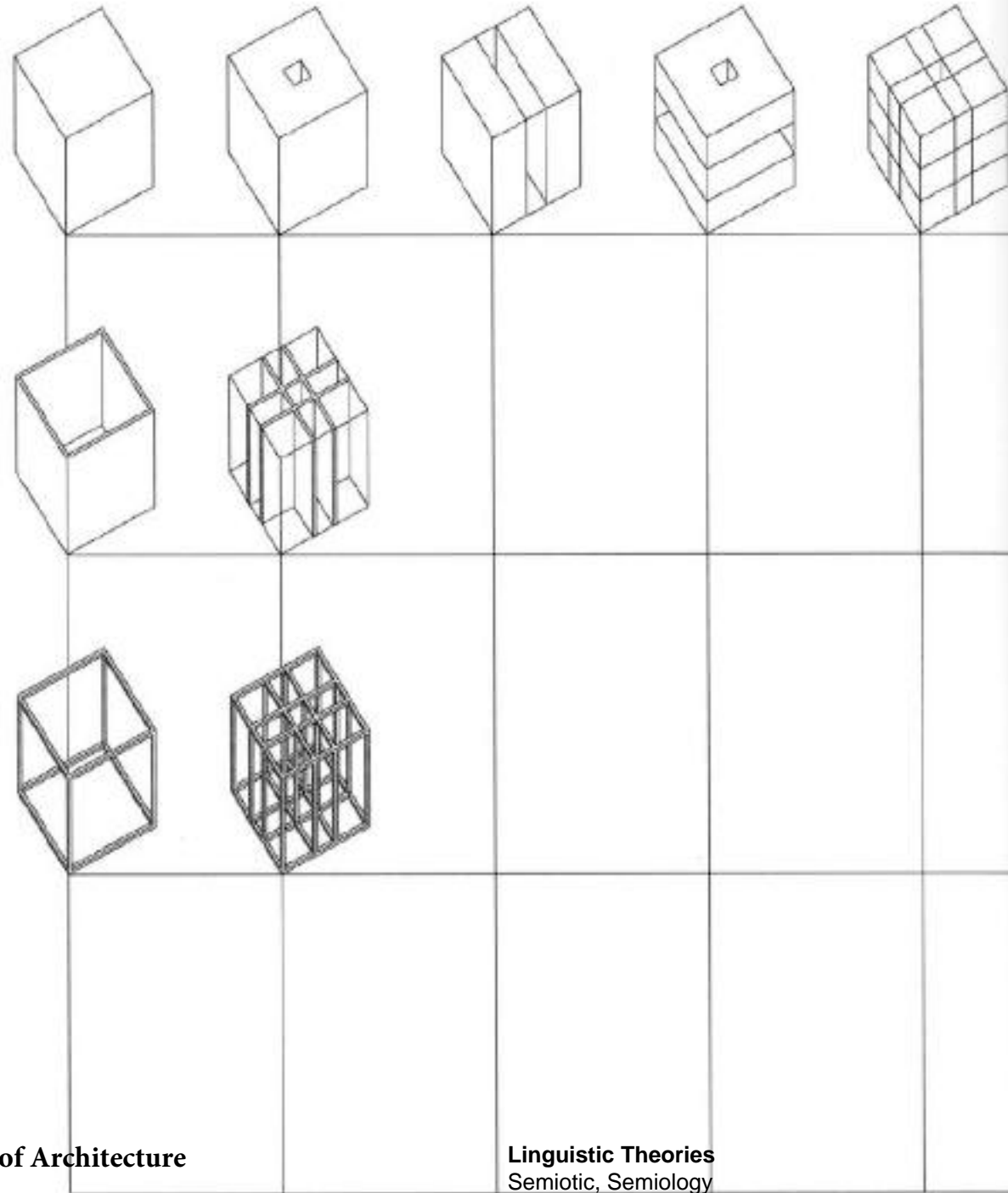
Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism



House III
Lakeville, Connecticut (1971)

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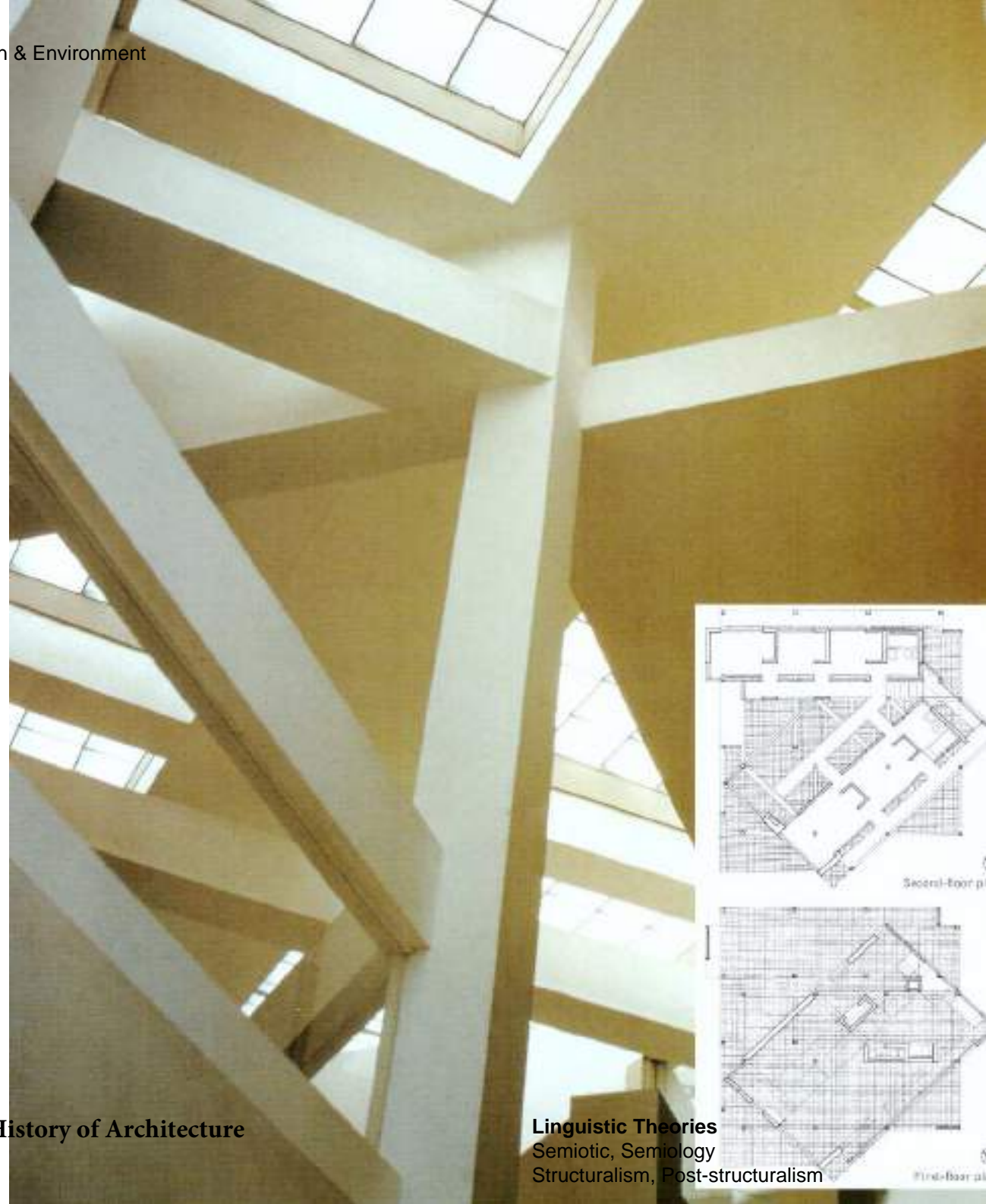
Linguistic Theories
Semiotic, Semiology
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Lecture in Theory and History of Architecture

Linguistic Theories
Semiotic, Semiology
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House III
Lakeville, Connecticut (1971)



Lecture in Theory and History of Architecture

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Semiotic, Semiology
Structuralism, Post-structuralism

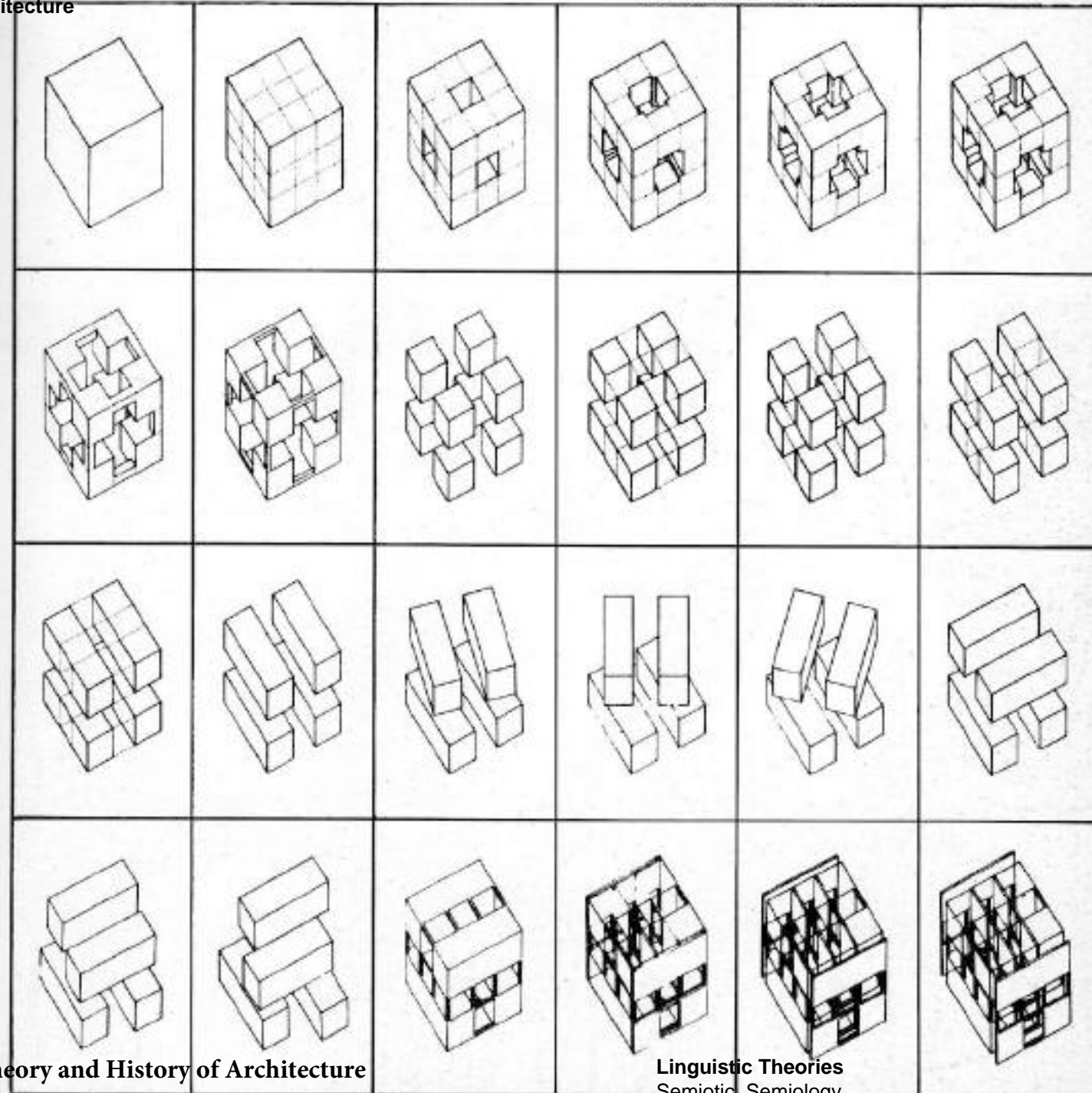
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Semiotic, Semiology
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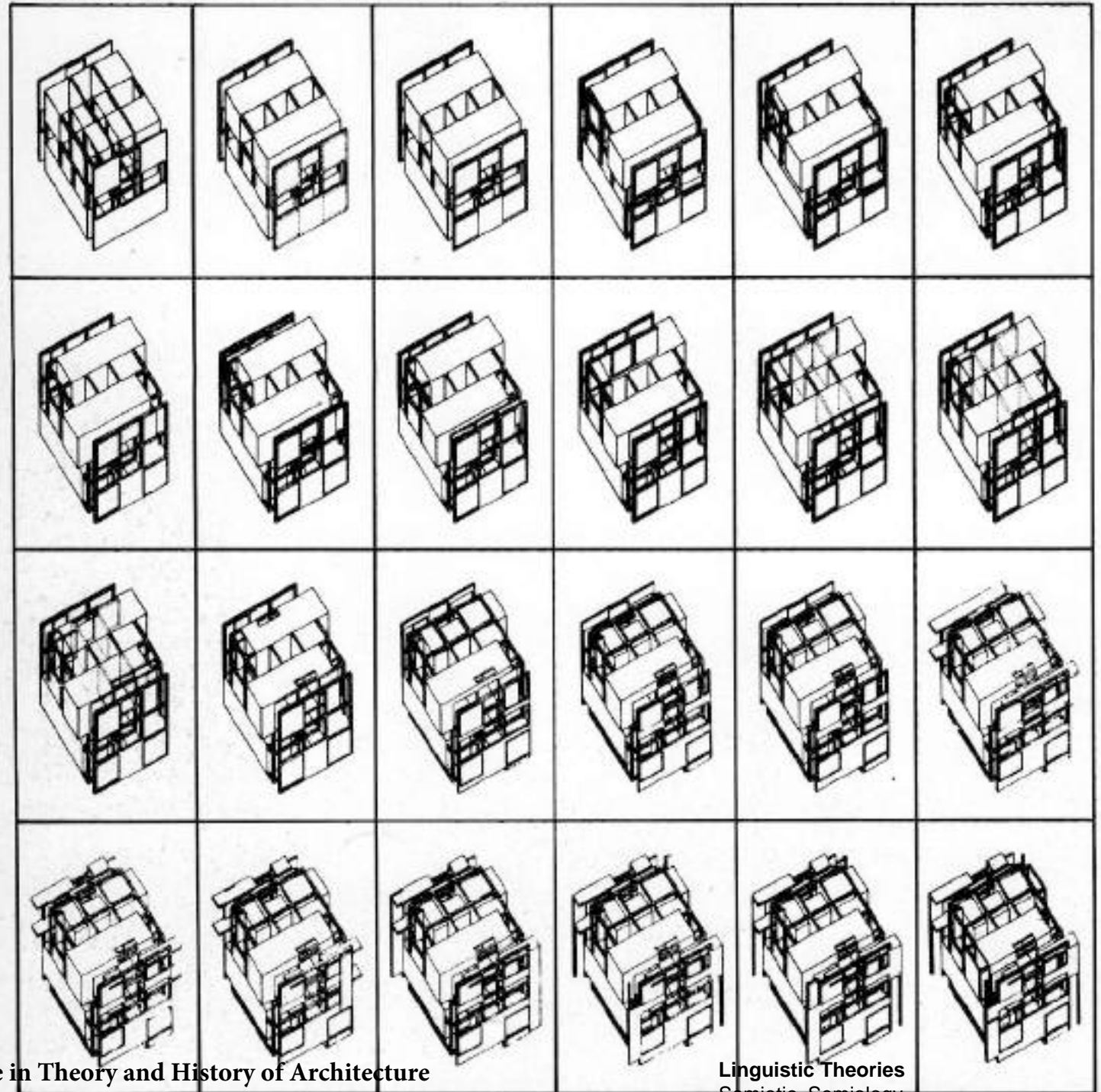


Lecture in Theory and History of Architecture

Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism

House IV
Falls Village, Connecticut (1971)

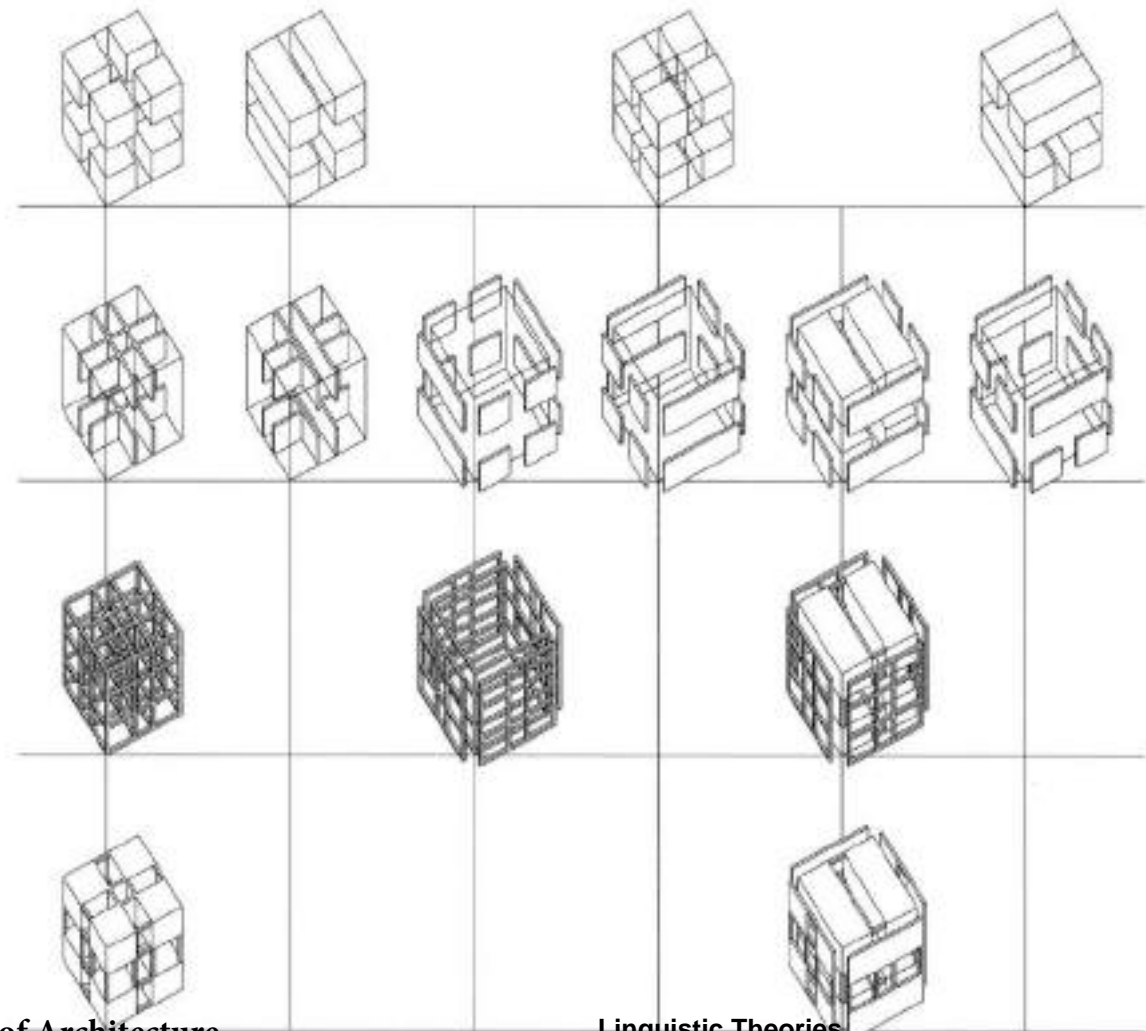
House IV: diagramma del processo compositivo.



Lecture in Theory and History of Architecture

Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism

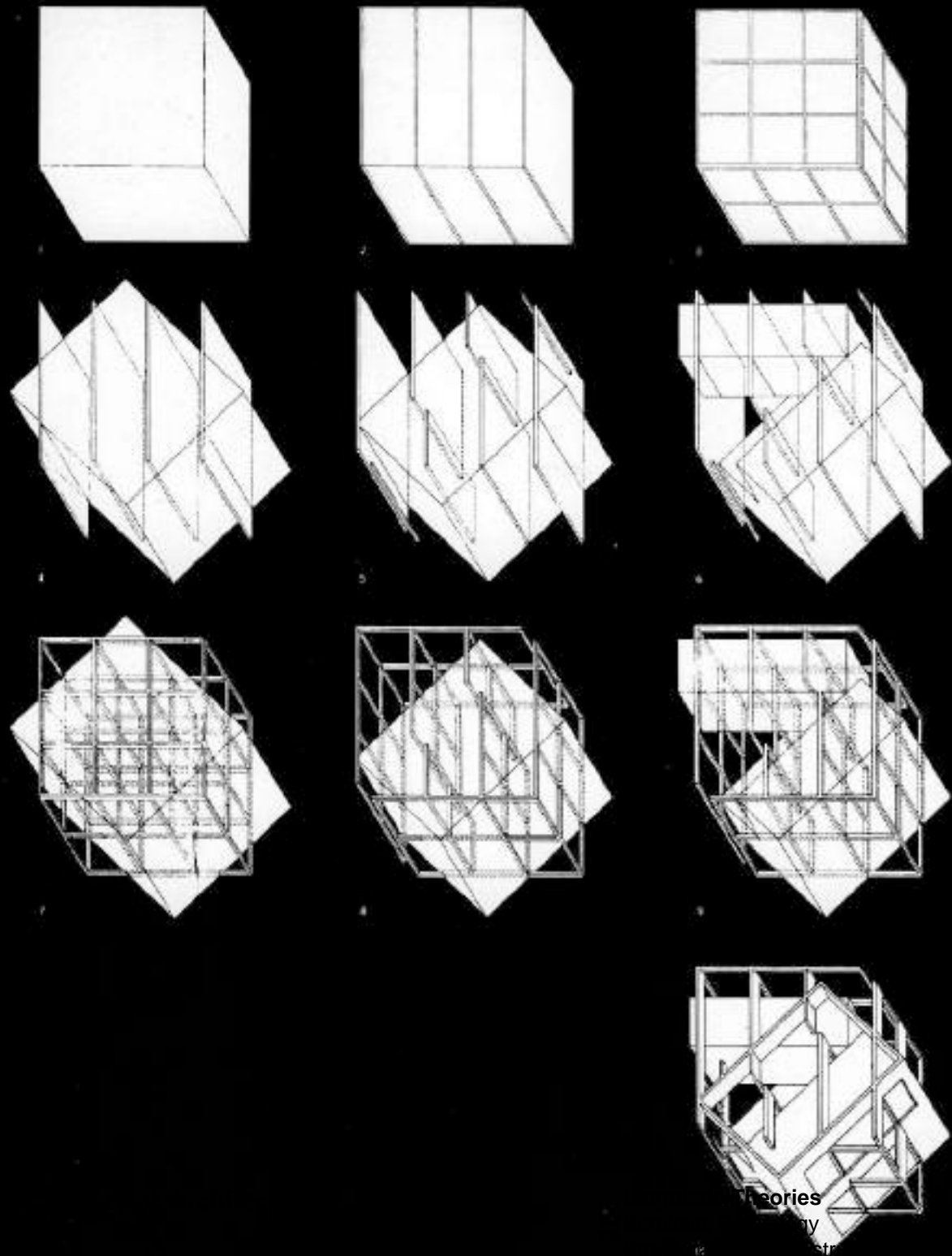
House IV
Falls Village, Connecticut (1971)



Lecture in Theory and History of Architecture

Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism

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Falls Village, Connecticut (1971)



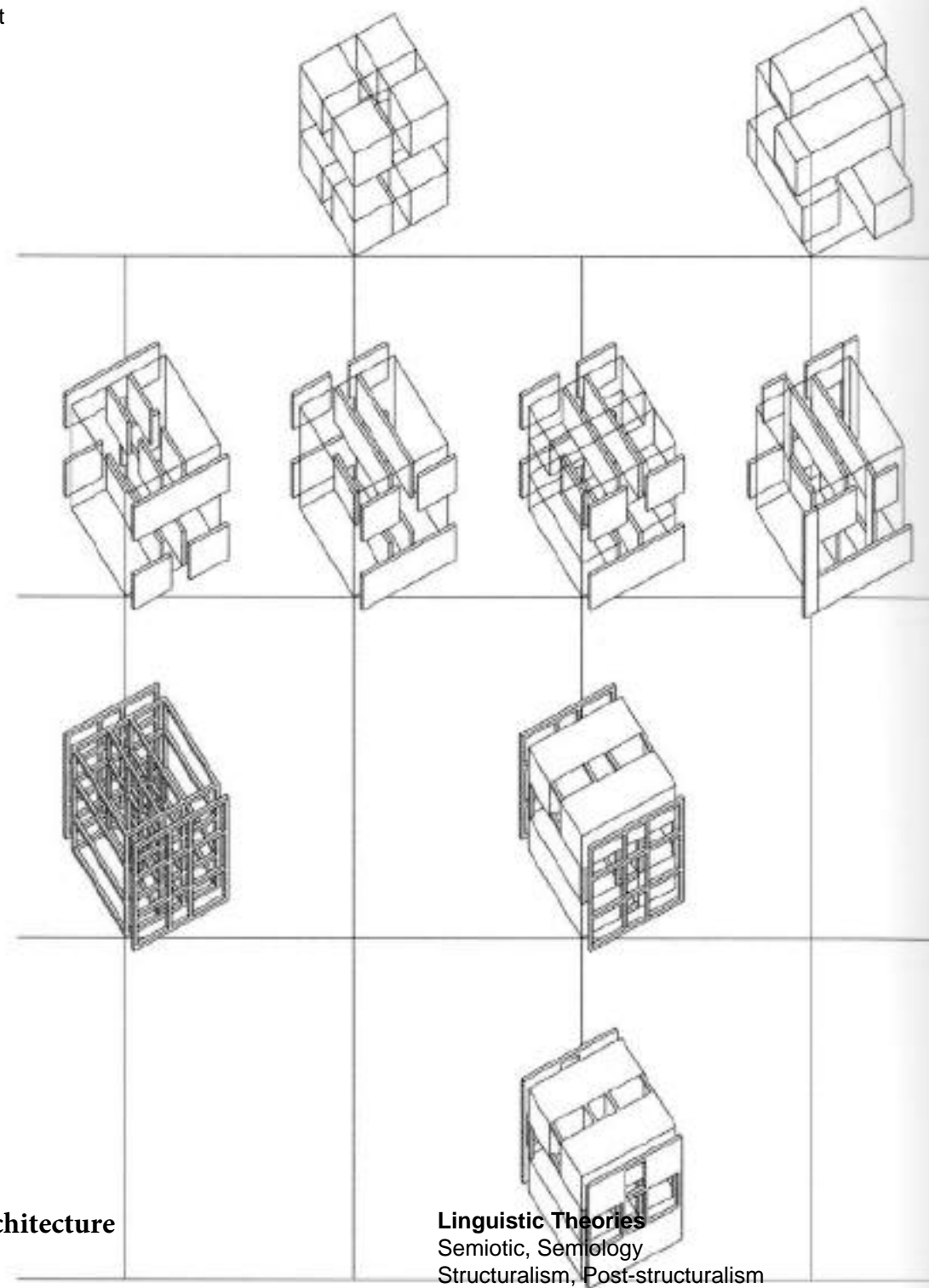
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House IV
Falls Village, Connecticut (1971)

Theories

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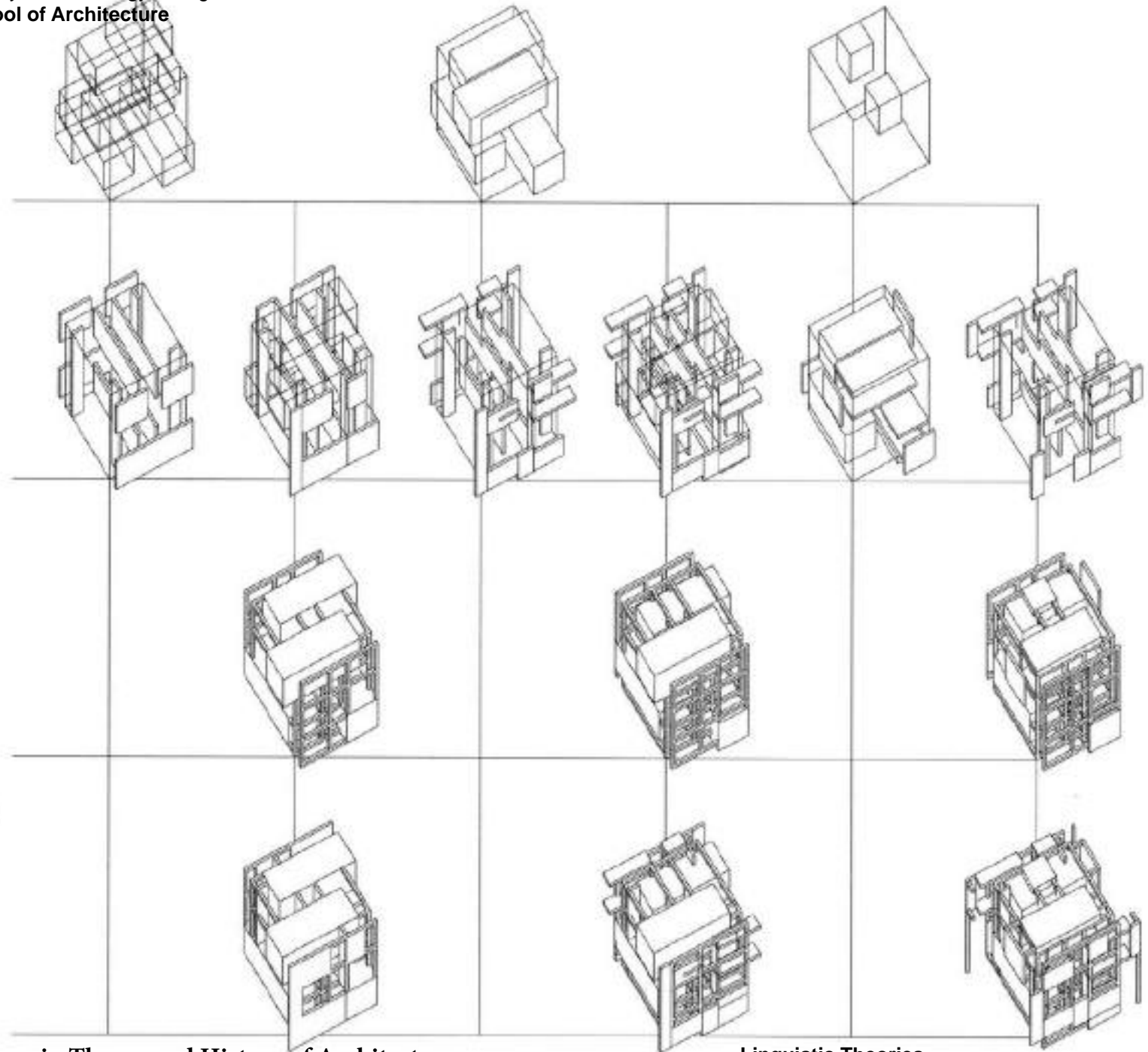
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House IV
Falls Village, Connecticut (1971)

Lecture in Theory and History of Architecture

Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism



Lecture in Theory and History of Architecture

Diagrams for House IV, redrawn by Alex Maymone

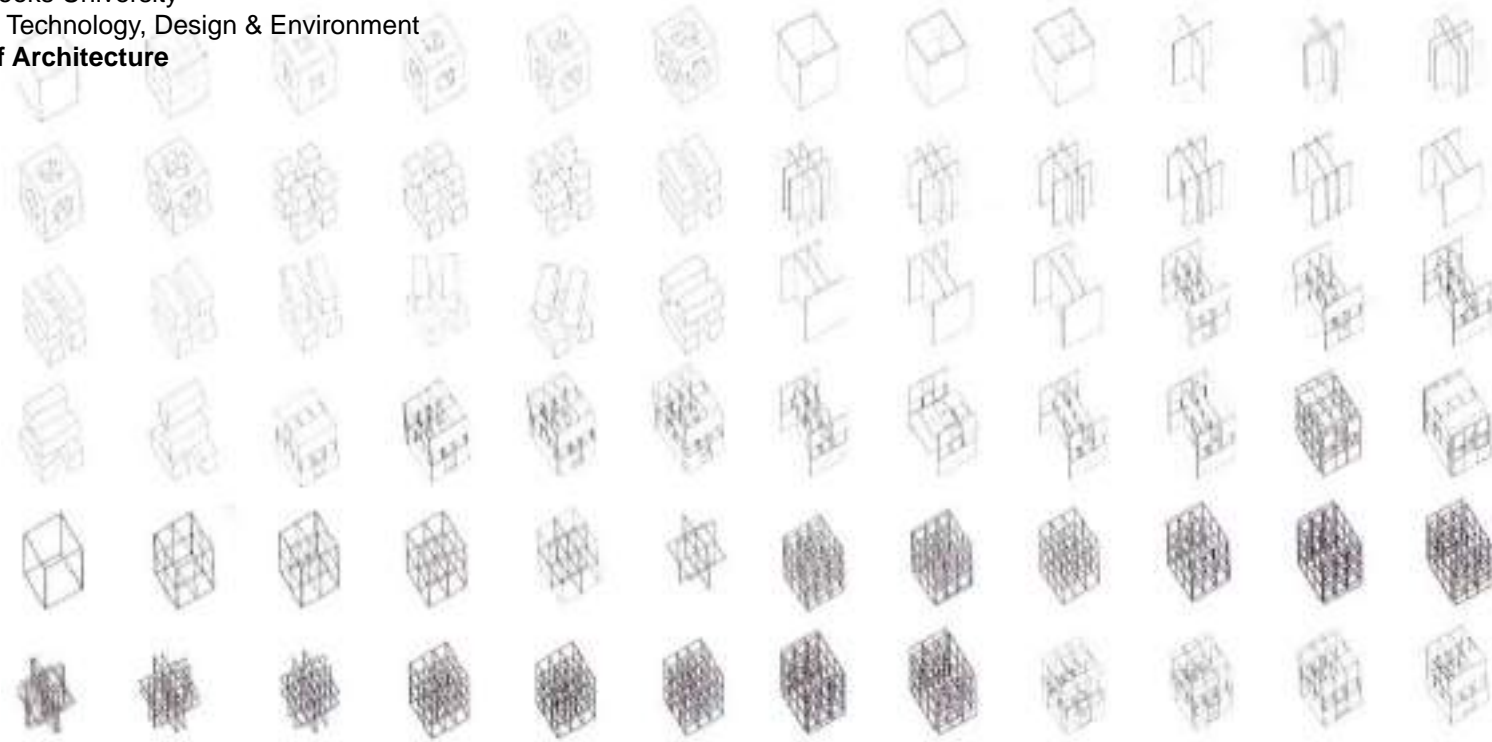
Linguistic Theories

Semiotic, Semiology

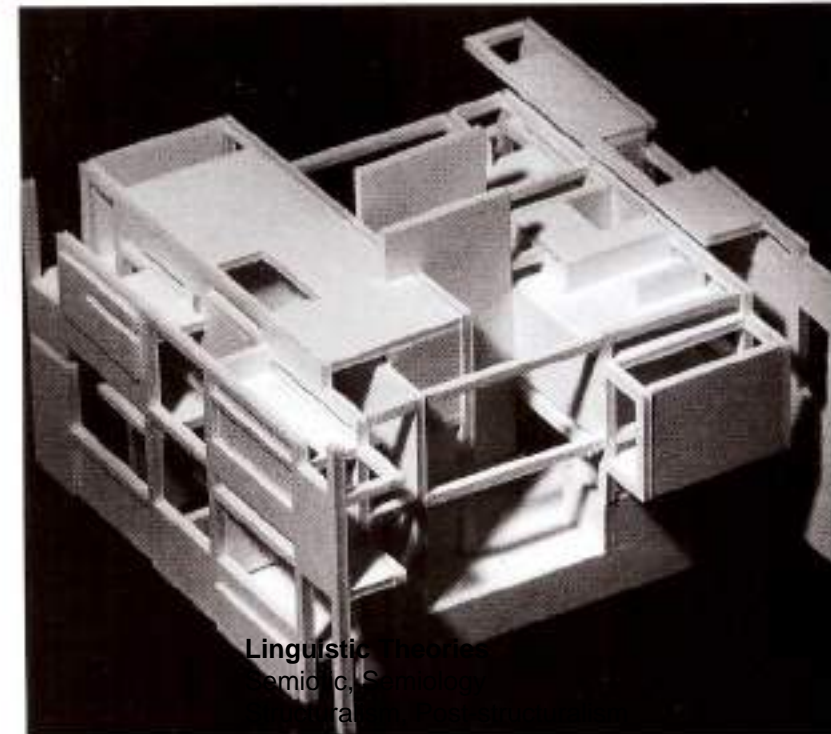
Structuralism, Post-structuralism

House IV

Falls Village, Connecticut (1971)



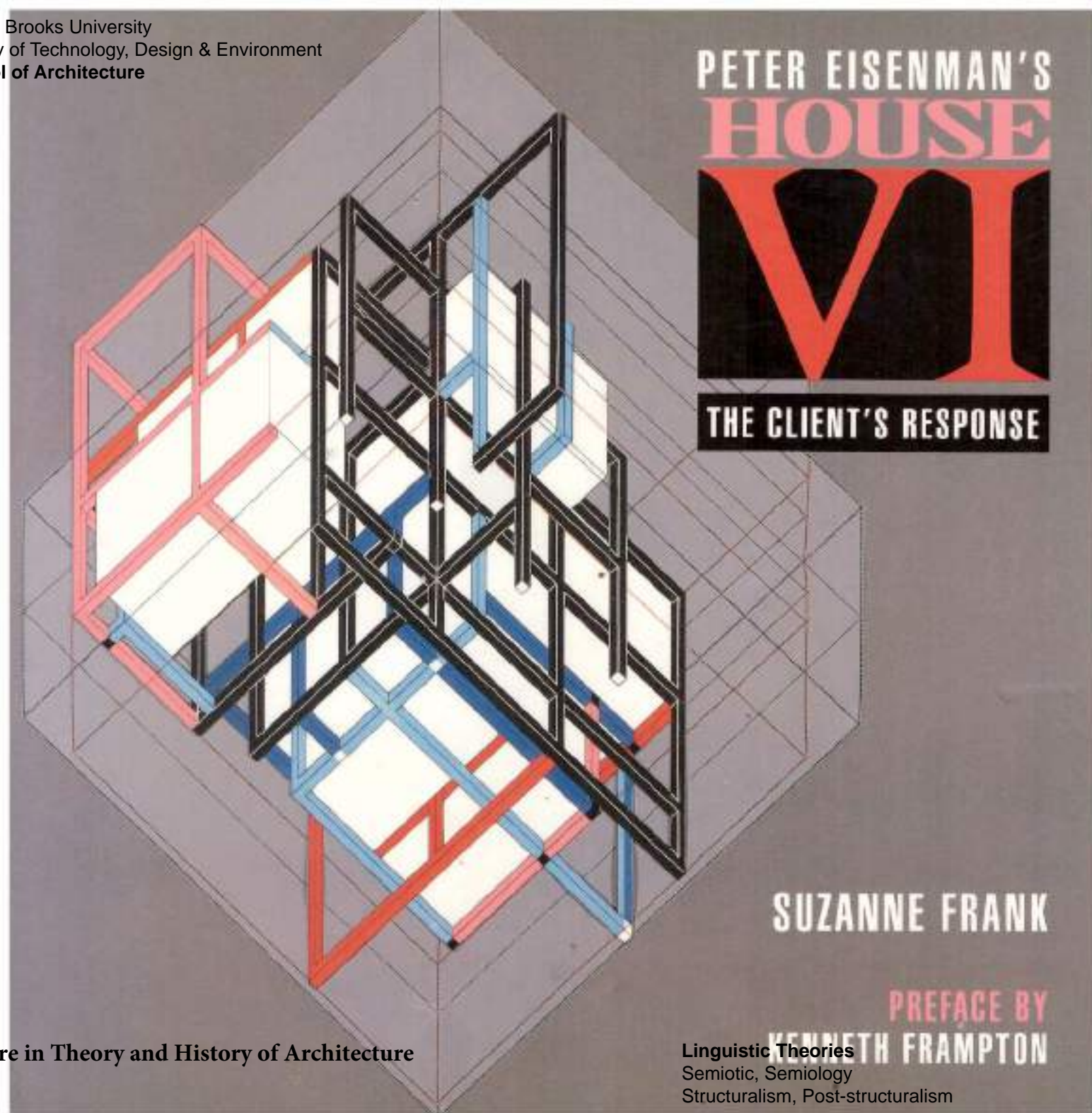
Above: Axonometric diagrams of volumes and planes in House IV.
Right: Study model, Opposite: Axonometric perspective.



Lecture in Theory and History of Architecture

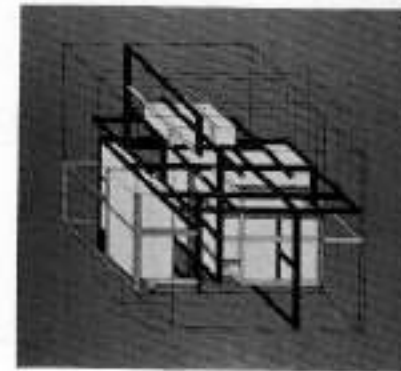
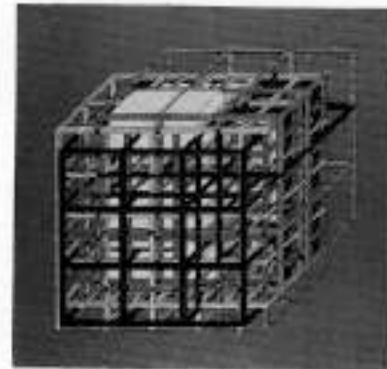
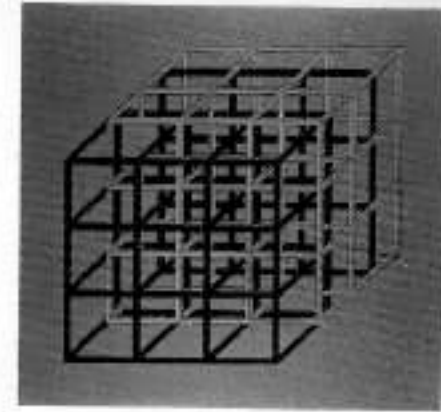
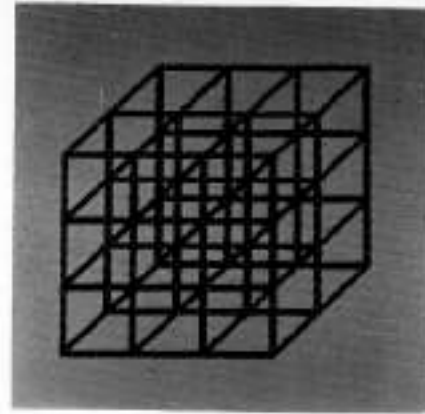
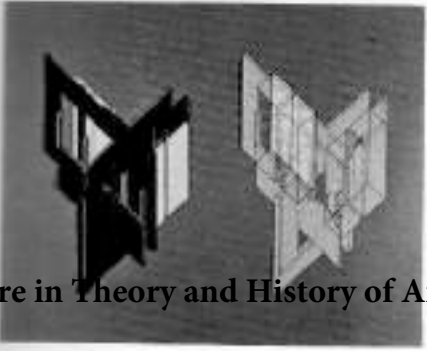
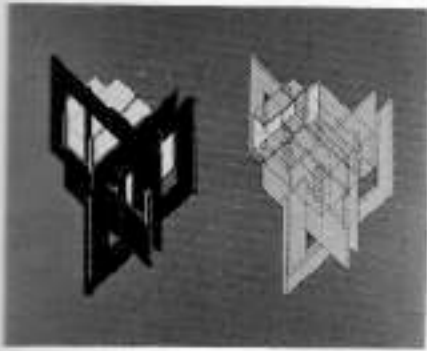
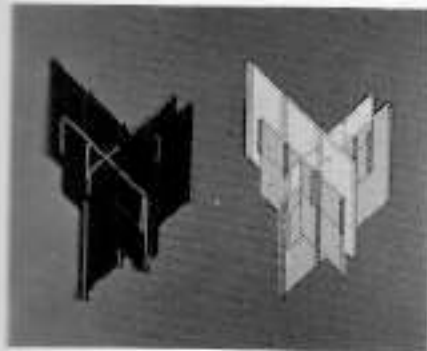
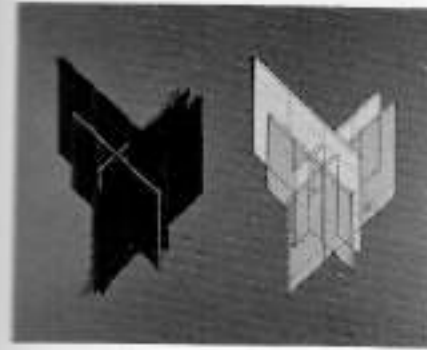
House IV
Falls Village, Connecticut (1971)

Linguistic theory
Semiotic, Symbolic
Cultural, Ideological



Lecture in Theory and History of Architecture

Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism



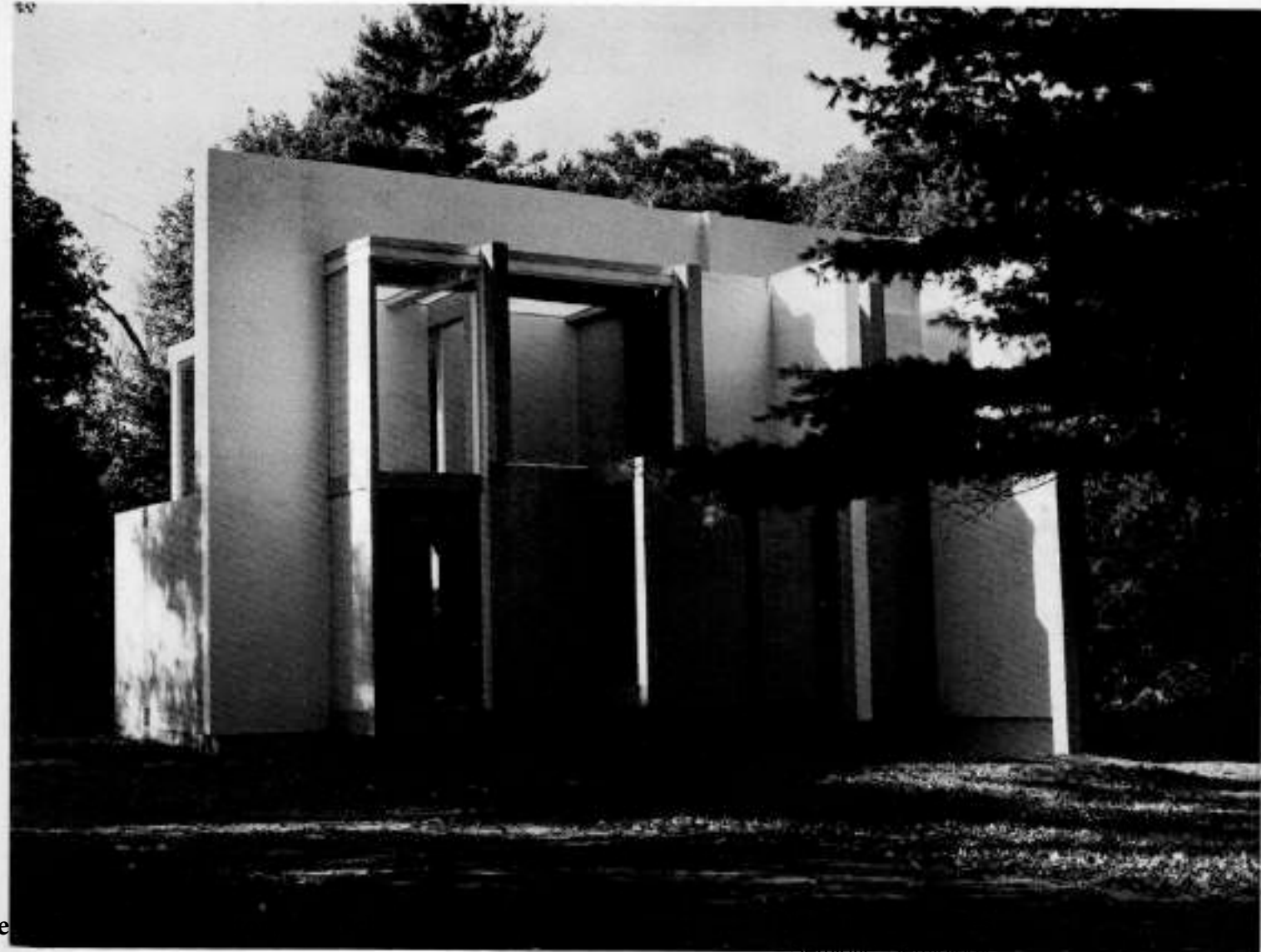
Lecture in Theory and History of Architecture

Linguistic Theories

Semiotics, Semiology, Structuralism, Post-structuralism
House VI, Cornwall, Connecticut, 1972-75.
Diagrams of the project.

House VI
Cornwall, Connecticut (1972-75)

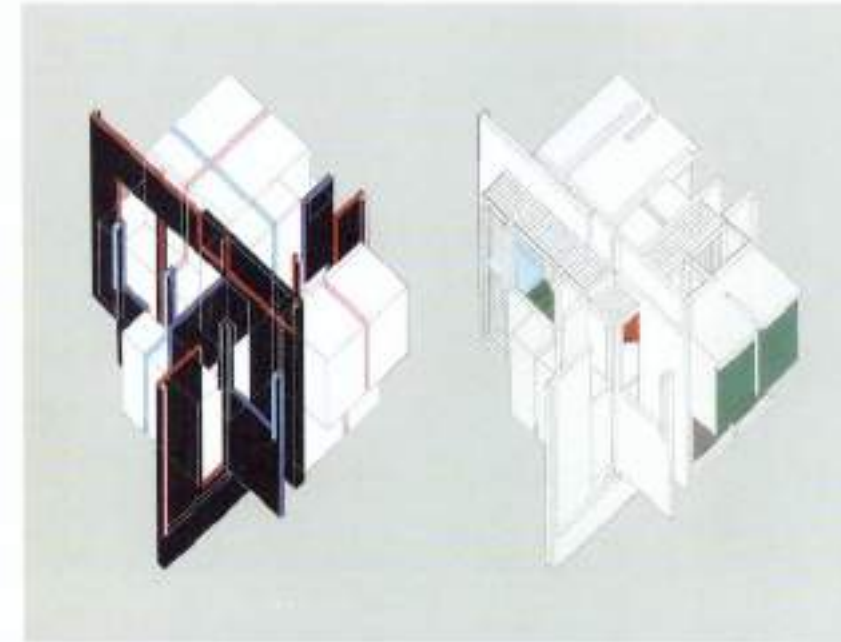
House VI.

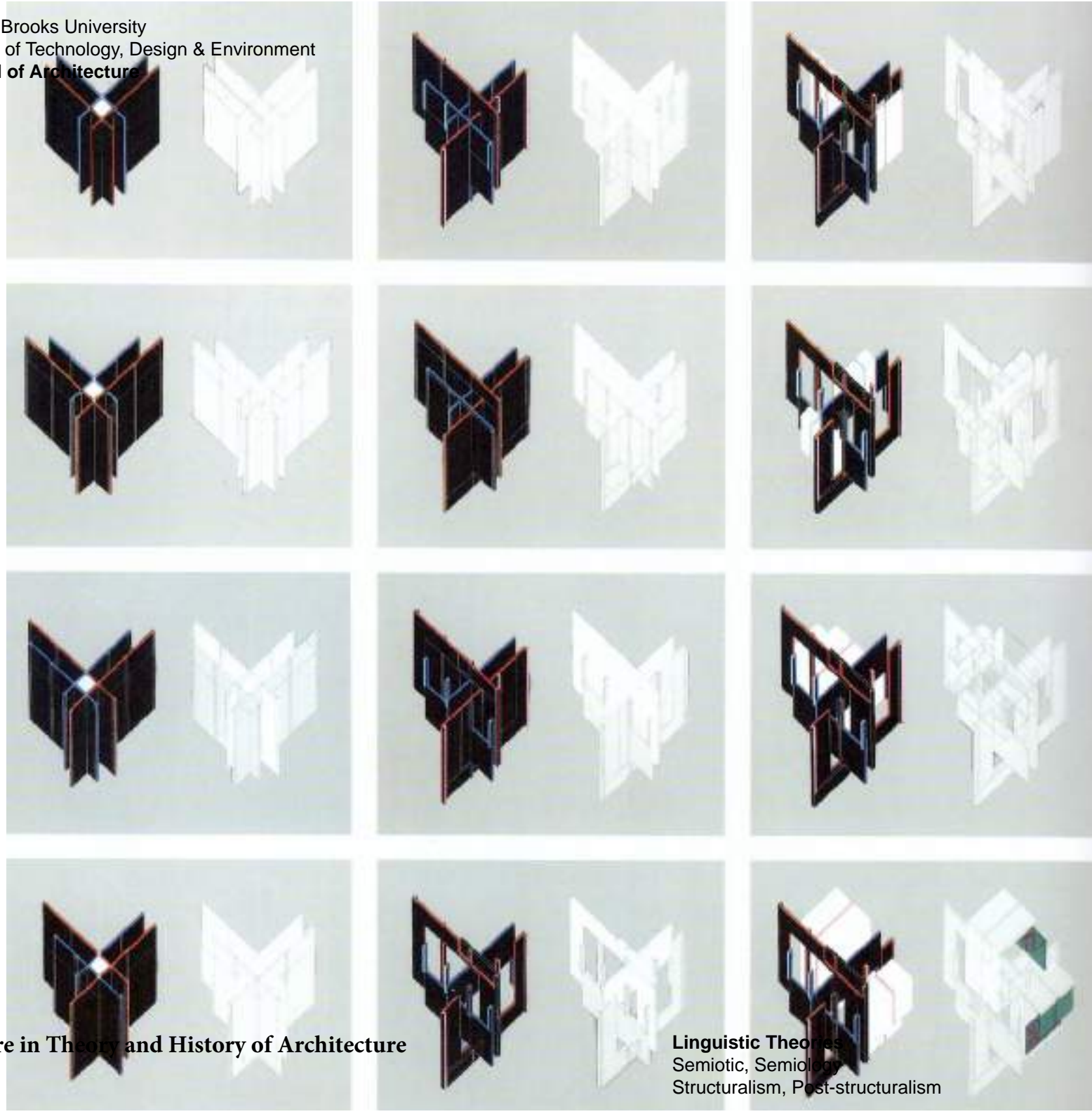


Lecture

House VI
Cornwall, Connecticut (1972-75)

Semiotic, Semiology
Structuralism, Post-structuralism

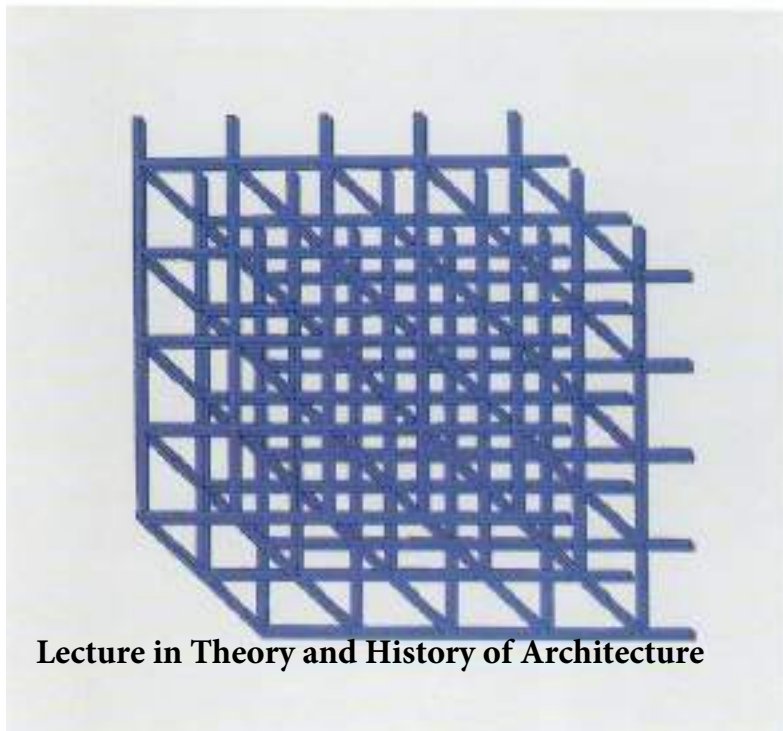
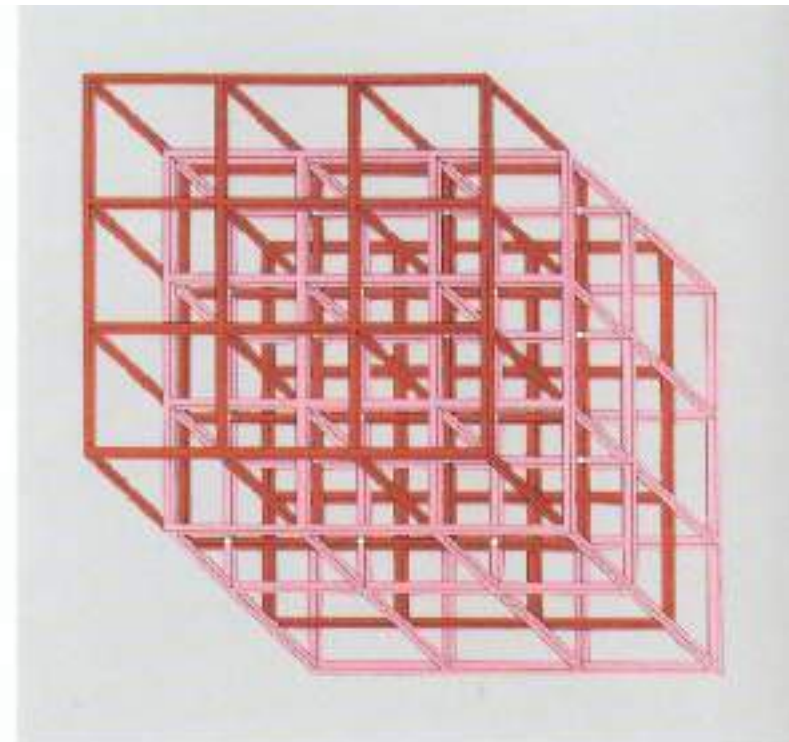
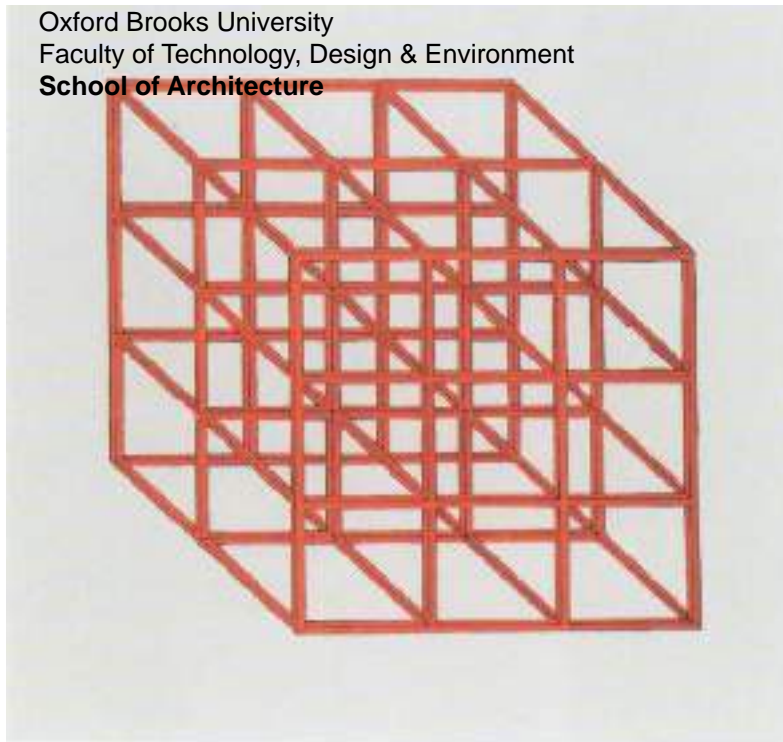




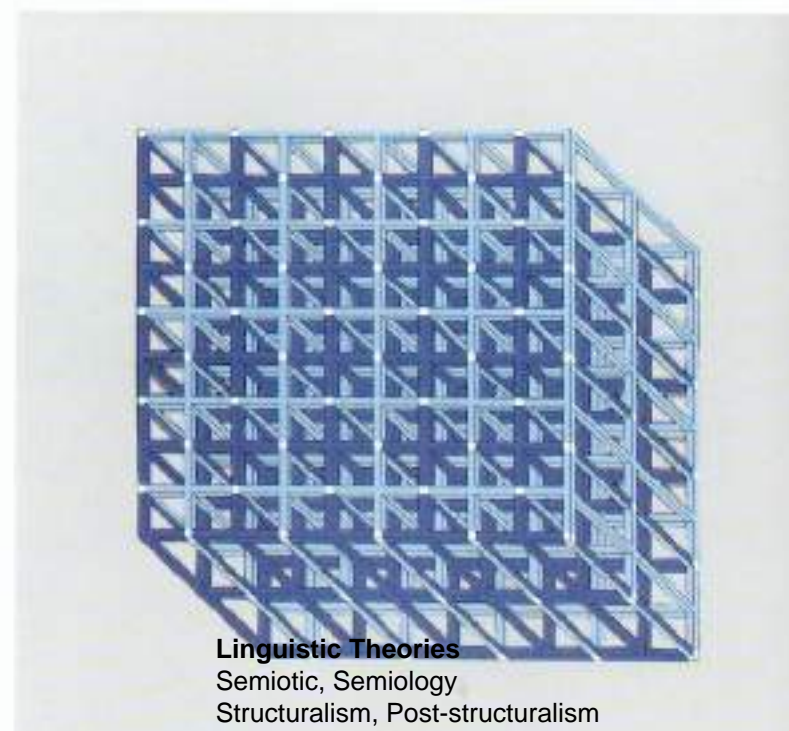
Lecture in Theory and History of Architecture

Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism

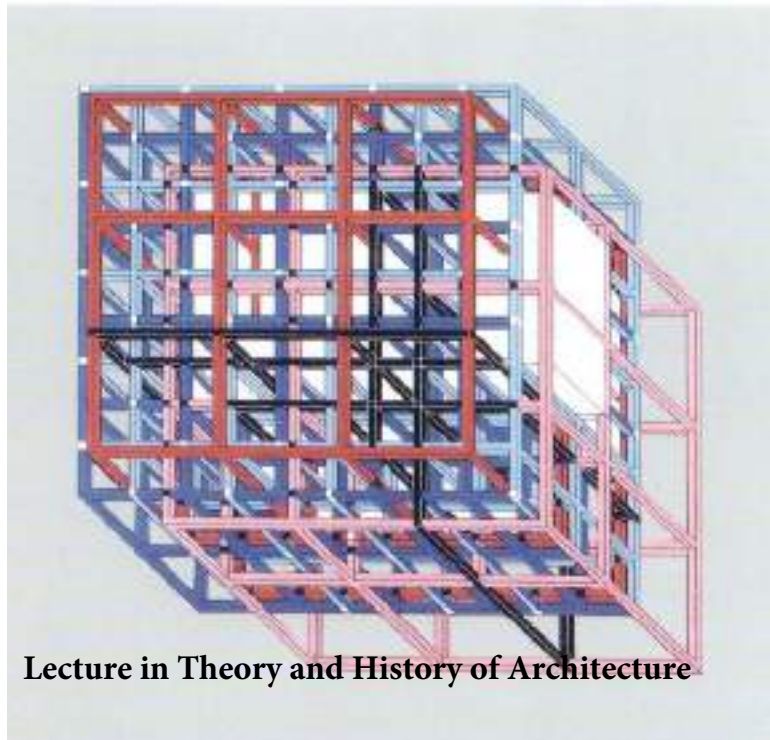
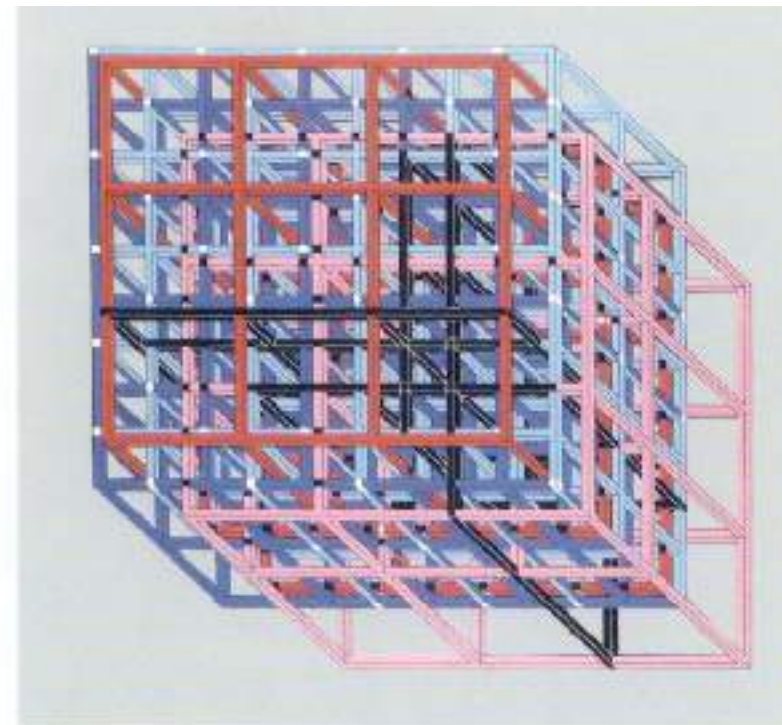
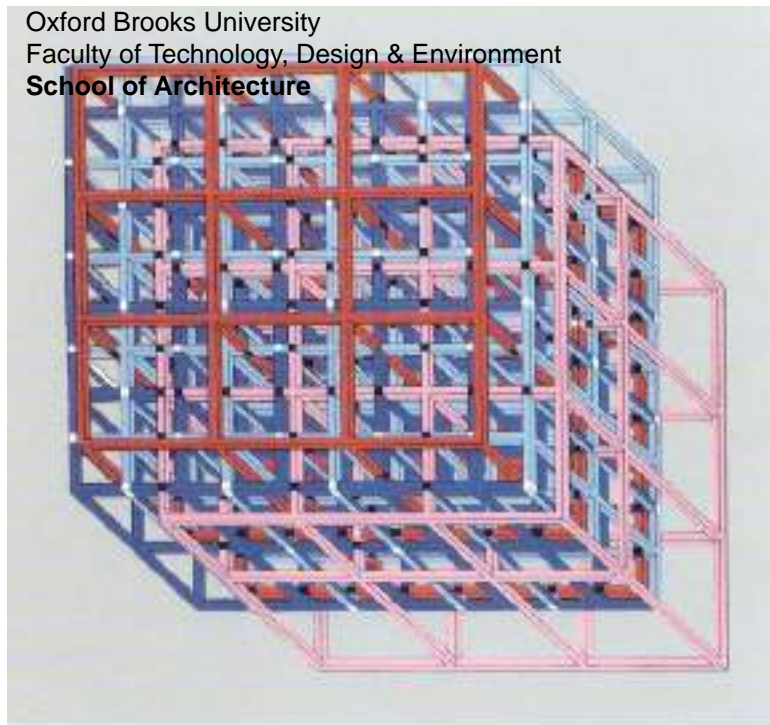
House VI
Cornwall, Connecticut (1972-75)



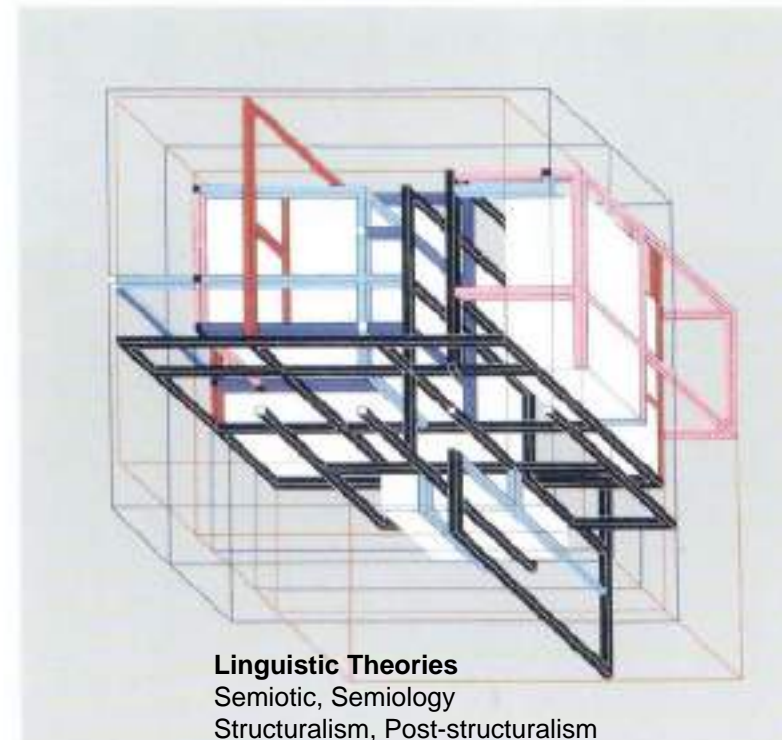
Lecture in Theory and History of Architecture



Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism



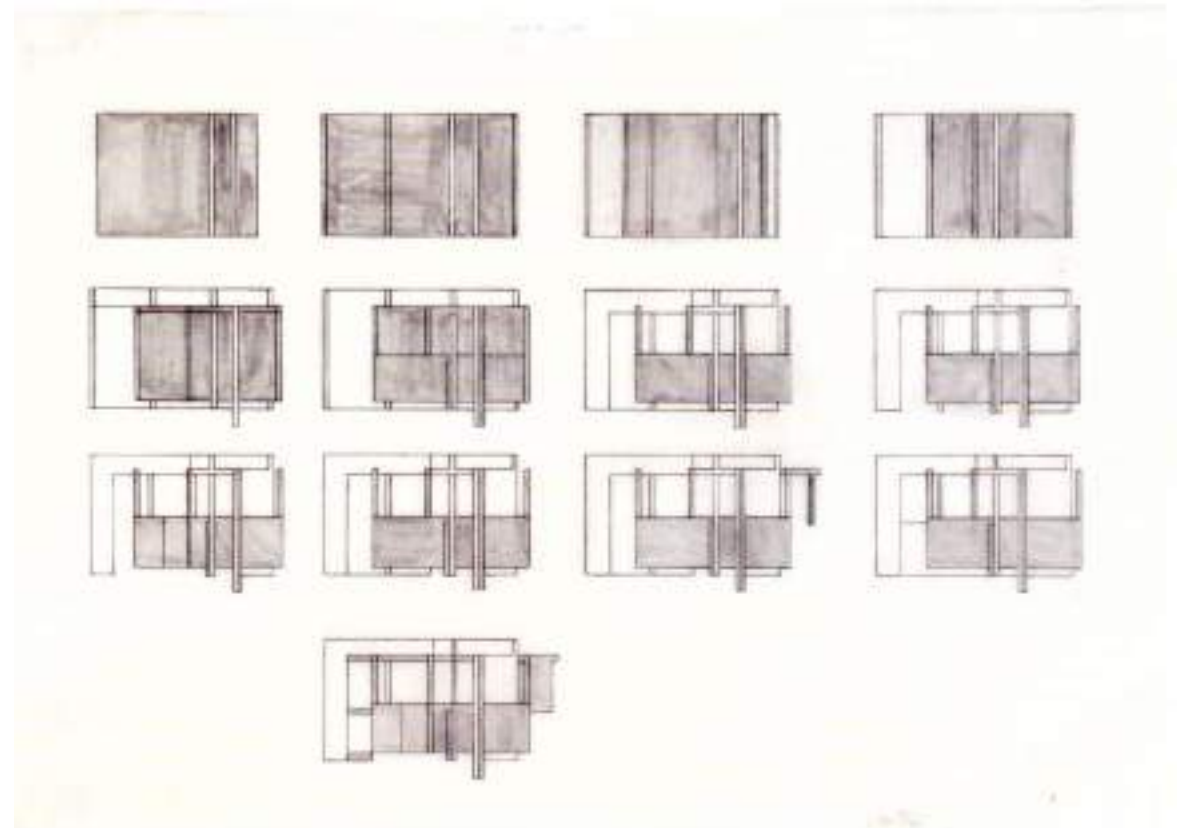
Lecture in Theory and History of Architecture

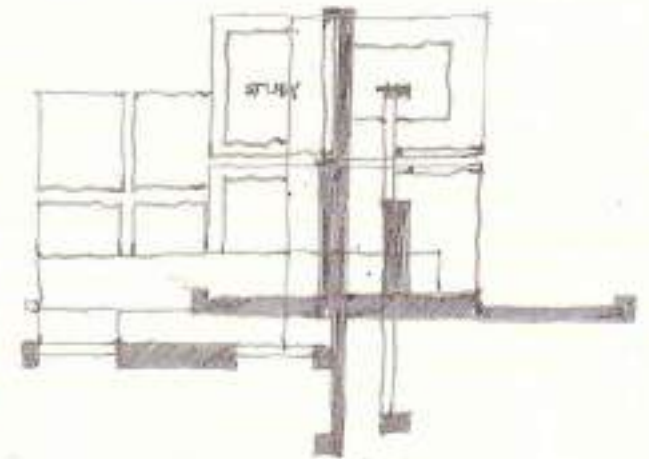
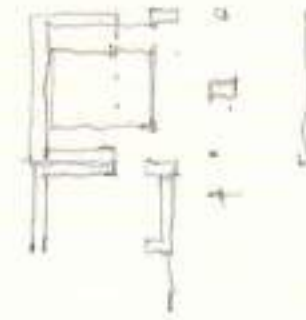


Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism

HOUSE IV WAS A RETURN TO SOMETHING MORE SYSTEMATIC.
THE HOUSE WAS DEVELOPED FROM A SET OF MODELS AND
DIAGRAMS WHICH WERE A RECORD OF THE ACTUAL
PROCESS OF TRANSFORMATION.

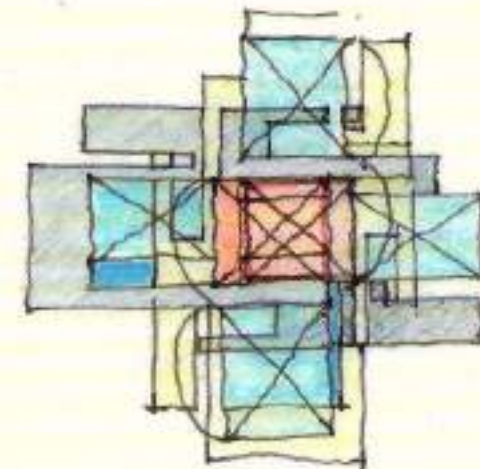
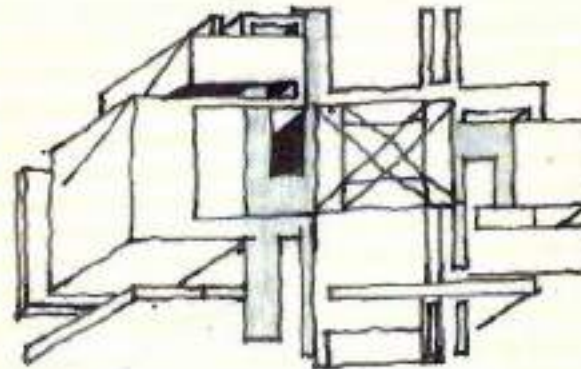
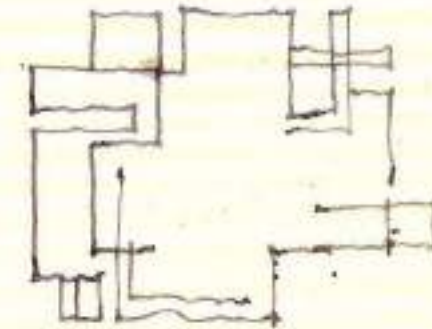
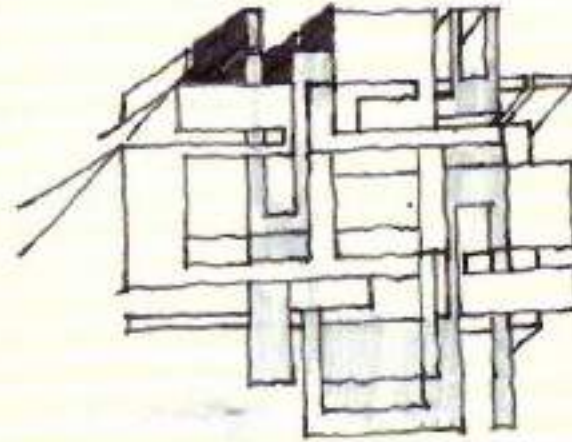
SEQUENCE FROM HOUSE II HOUSE IV HOUSE VI
IS FROM 1 OUTSIDE SURFACES; TO TWO WALLS AND TWO OUTSIDES;
4
TO FOUR WALLS





House VI
21 AUG 75

Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism



Lecture in Theory and History of Architecture

Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism

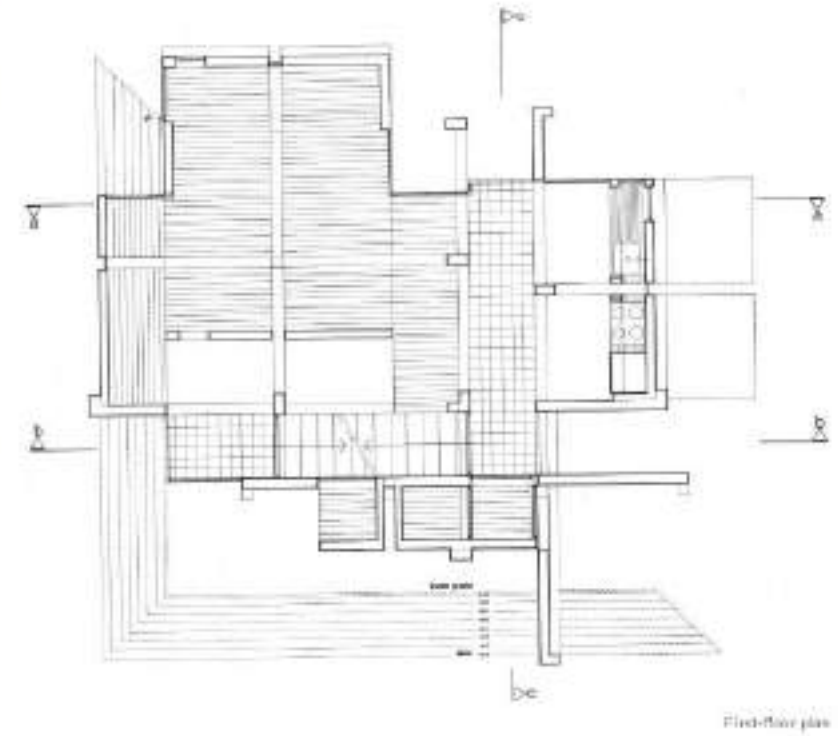
House VI
Cornwall, Connecticut (1972-75)



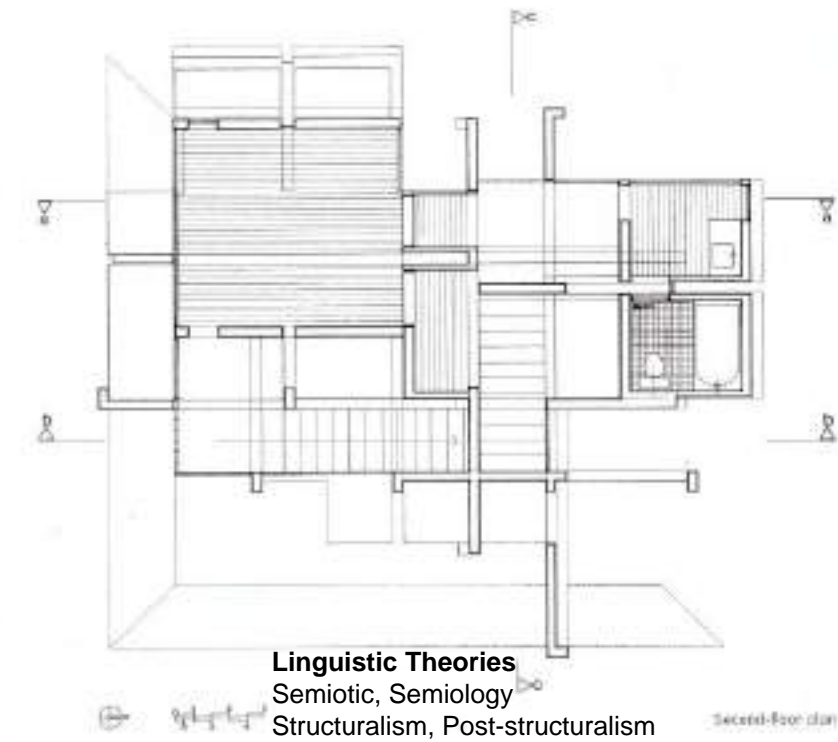
Lecture in Theory and History of Architecture

Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism

House VI
Cornwall, Connecticut (1972)



First-floor plan

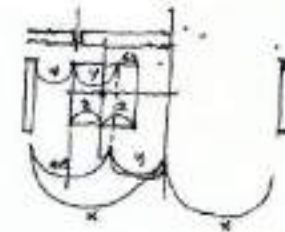
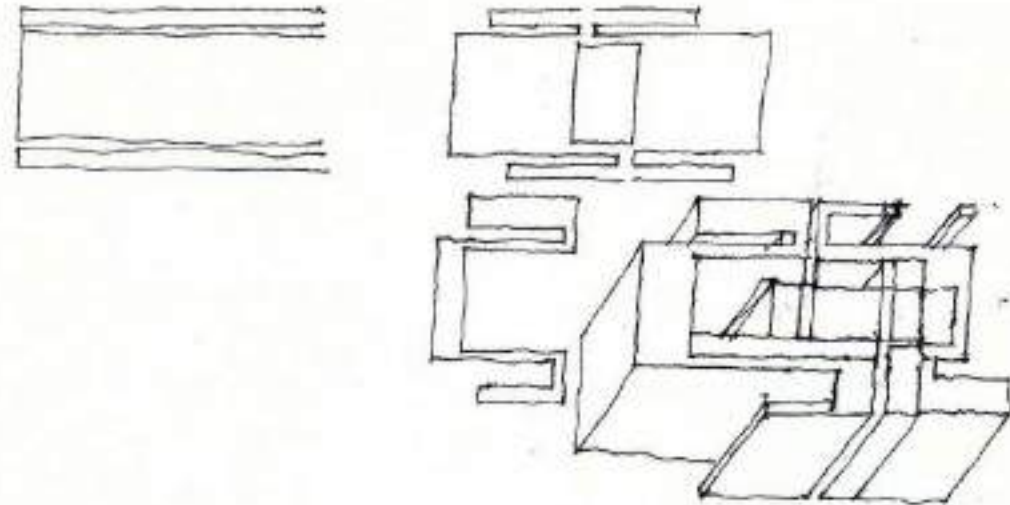


Second-floor plan

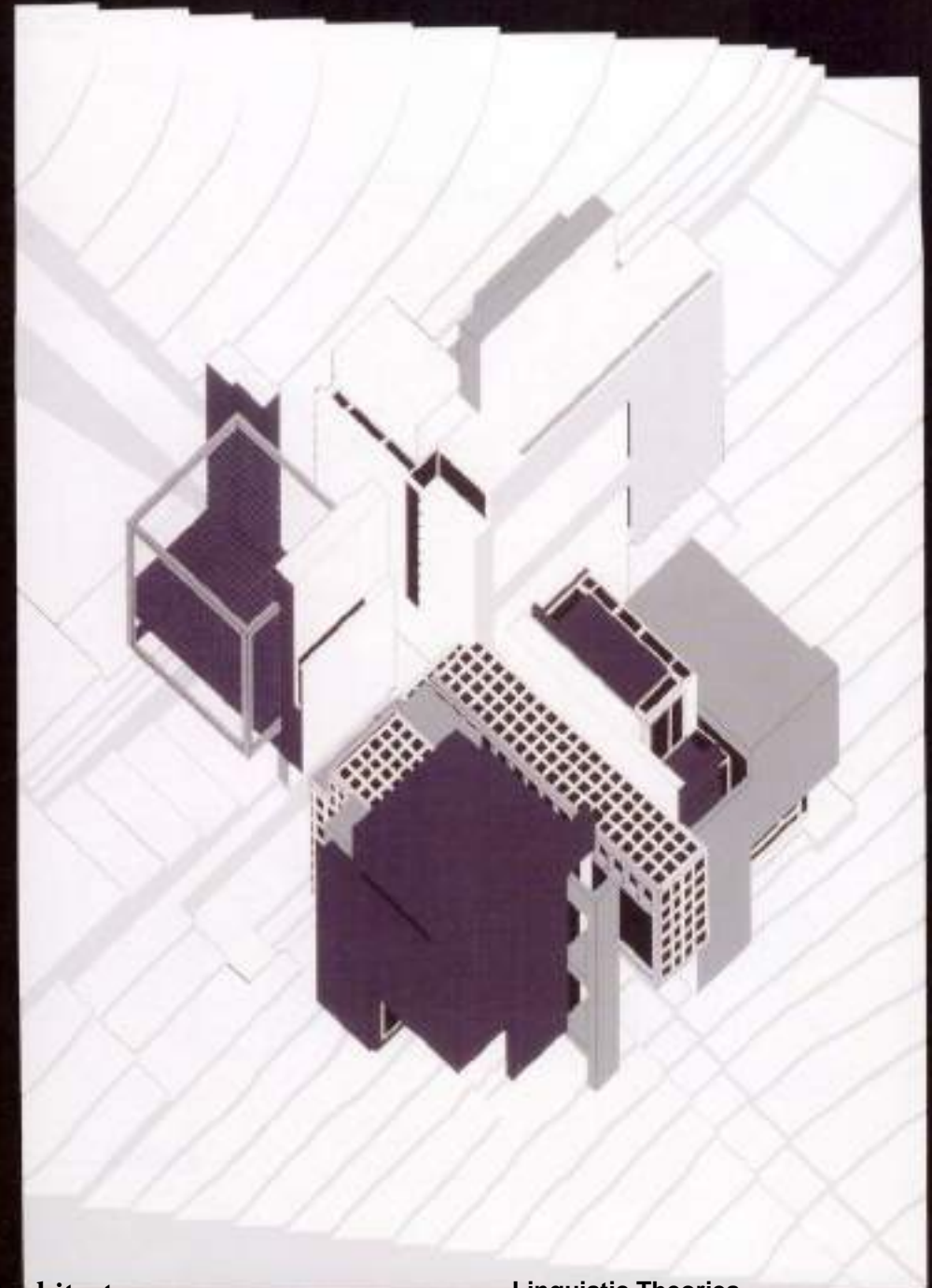
Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism

Lecture in Theory and History of Architecture

House VI
Cornwall, Connecticut (1972-75)



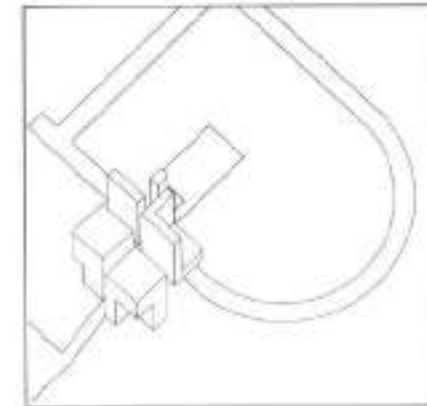
CONCEPTUAL DEVELOPMENT AT CENTER



House VIII
(1974)

Lecture in Theory and History of Architecture

Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism



HOUSE X: THE DIALECTIC

Transformation/Decomposition

The form begins in a fundamental duality:

Transformation from a simple cube or four simple cubes to a more complex state.

Decomposition from a complex entity to a more simplified state.

The resultant form can be read as both the product of each process separately and both processes together. It is a dialectic.

The marks of the form manifest the dialectic that produced them in architectonic oppositions:

Surface impregnated with volume.

Solid incised and punctured with void (thus void reading as solid).

Covalent planes causing datums to fluctuate.

Symmetry oscillating with asymmetry.

Right side up to upside down

etc.

There is no priority of readings. There is no "narrative" sequence. There is no sense of completeness. There is no rhetoric.

Traditional registration is therefore impossible.

The content of the form manifests the dialectic that produced it in mandalic oppositions:

Collective/Individual

Conscious/Unconscious

And in the following mandalic forms:

A 4:1 mandala—

The house has a conceptual center through which all routes pass to the four living units.

A spiral—

The car spirals from the collective (city) to the individual (house). The individual spirals out to the collective.

A pinwheel—

Three cubic units and one extended rectangular unit step up (down) and out from a center.

A center/edge relation—

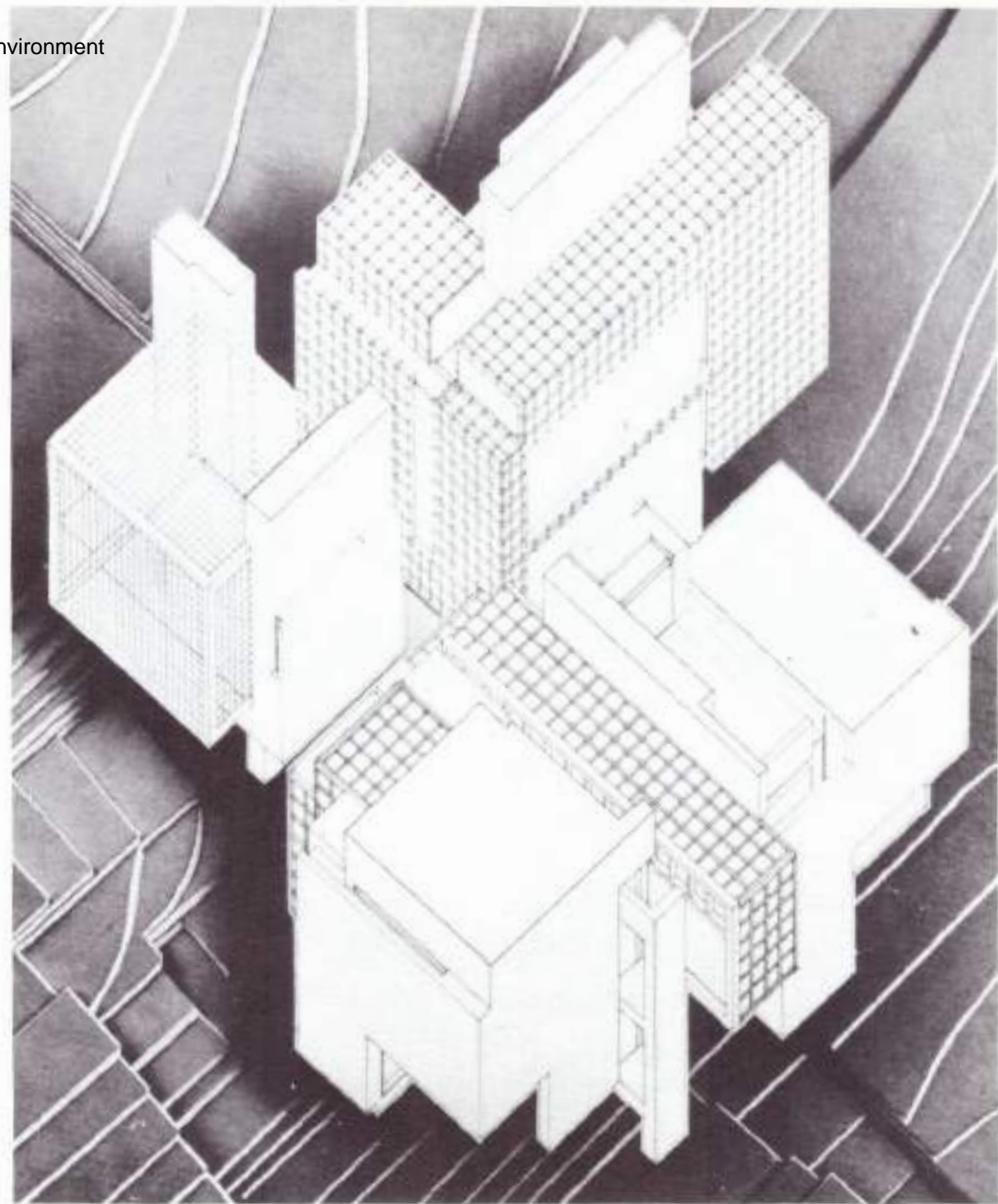
The edge (barrier) of the house (container) is defined ambiguously by the notational and conceptual discontinuity between the 3:4 relation of the four volumetric units and the 2:4 relation of the interior faces to the exterior faces of the units.

Four intermediate places of transition—

Natural planting surrounds and leads to the center of the house.

A center—

The center of the house is at once a route, an intersection, and a place of no function. It is a symbolic place.



Lecture in Theory and History of Architecture

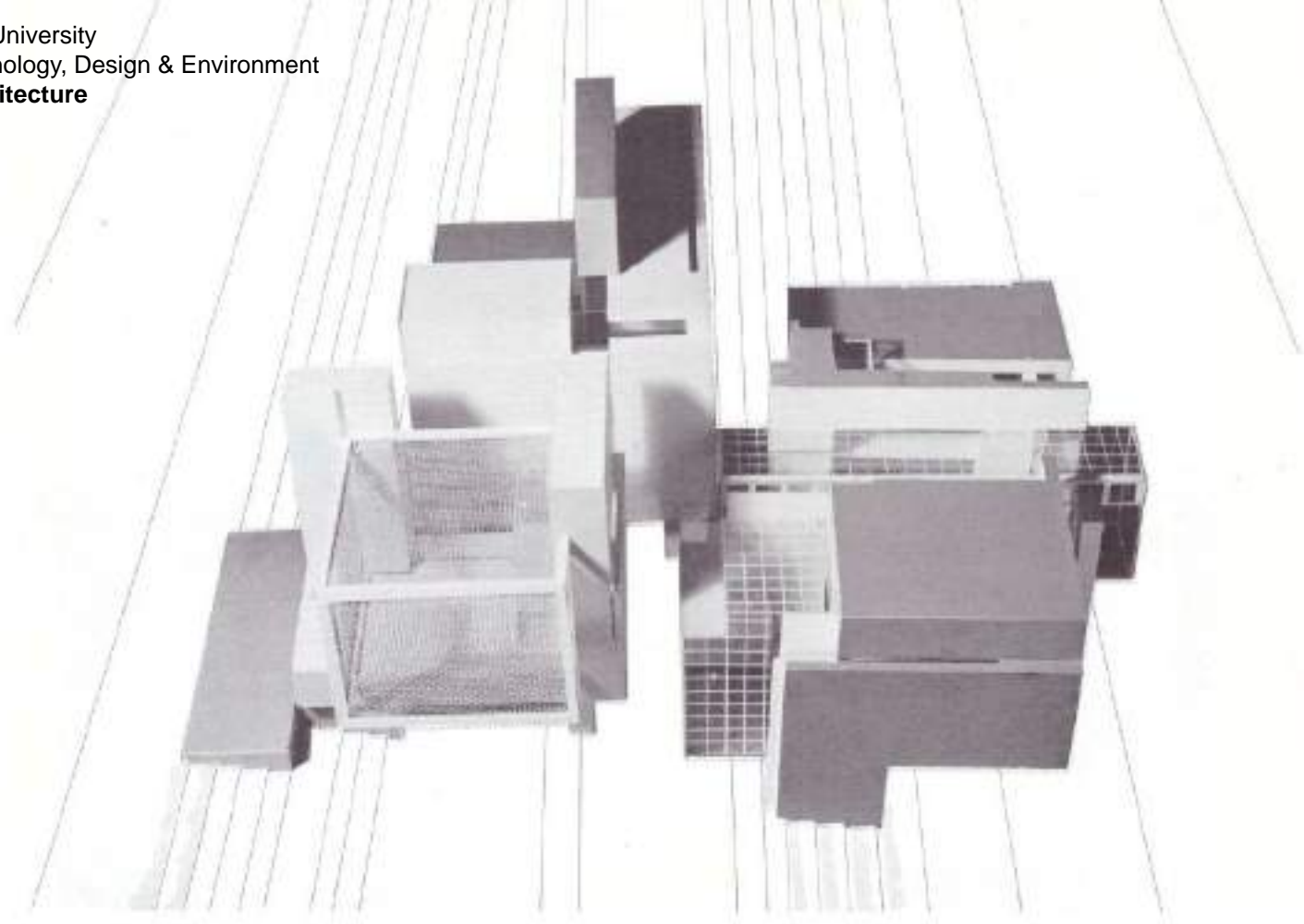
Peter Eisenman *House X* 1976

Linguistic Theories

Semiotic, Semiology
Structuralism, Post-structuralism

House X

Bloomfield Hills, Michigan (1975)

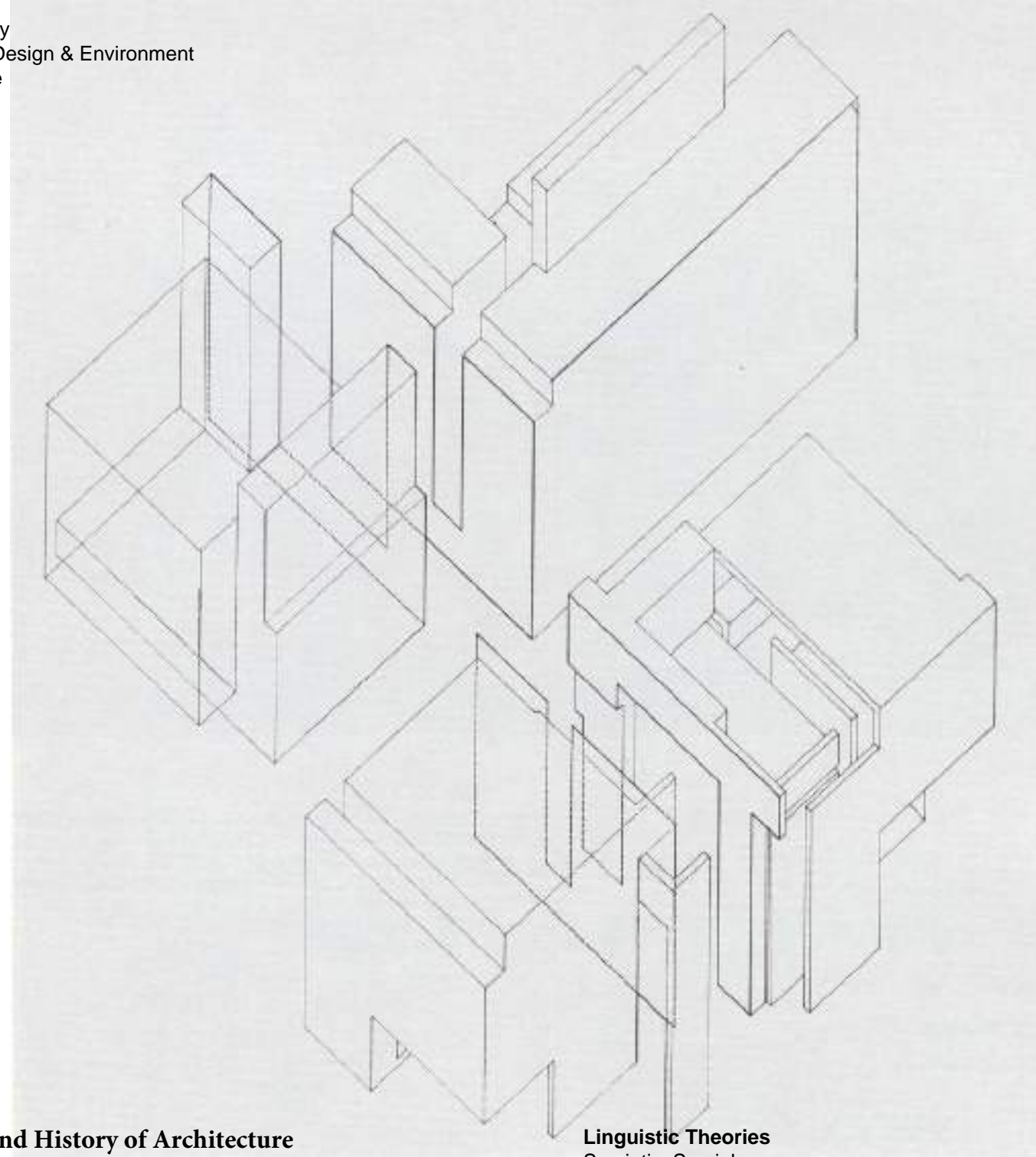


House X
Bloomfield Hills, Michigan (1975)

Lecture in Theory and History of Architecture

Peter Eisenman *House X* 1976

Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism



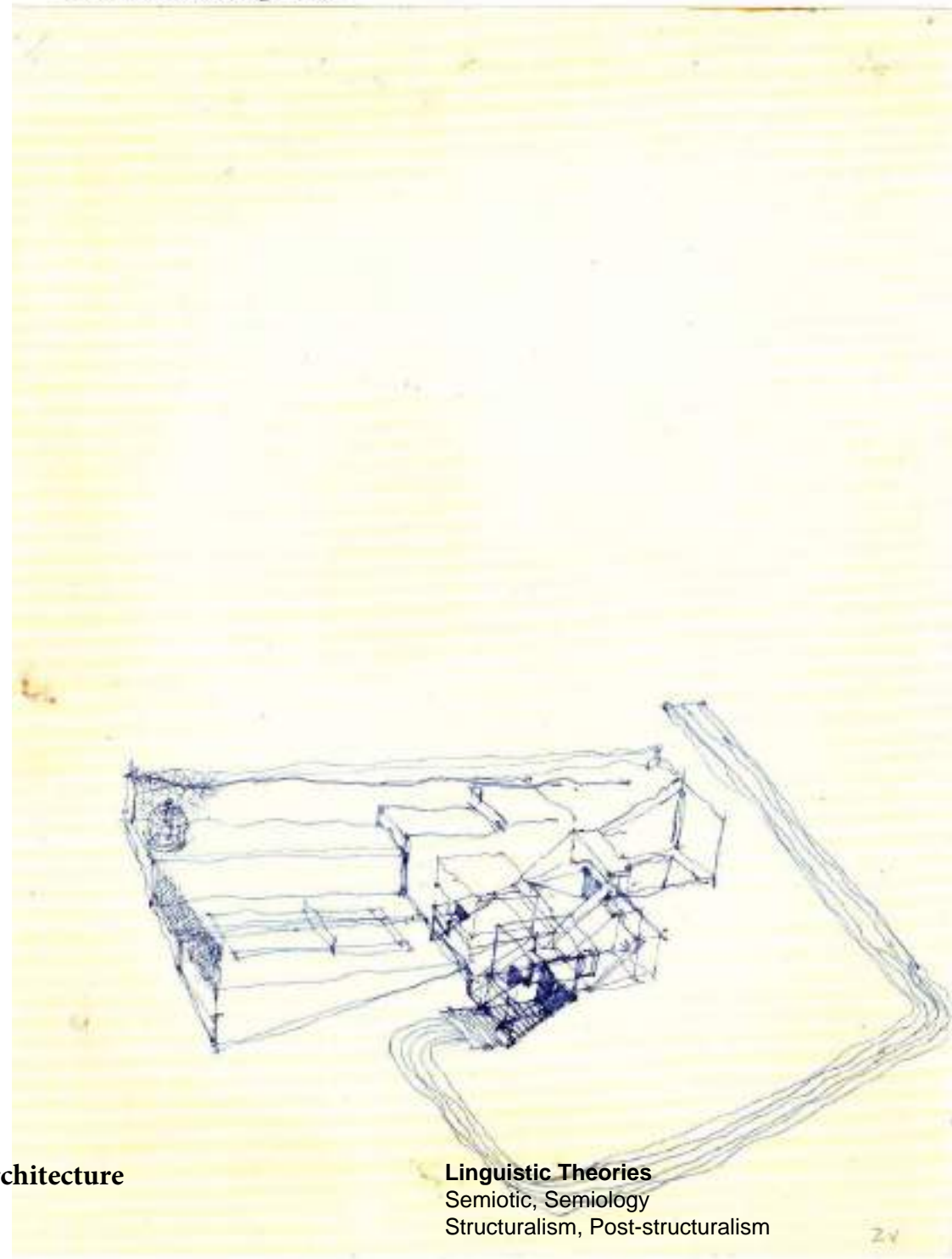
Lecture in Theory and History of Architecture

Peter Eisenman *House X* 1976

Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism

House X
Bloomfield Hills, Michigan (1975)

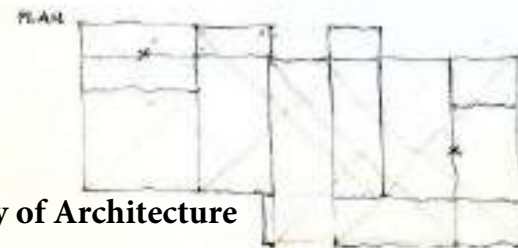
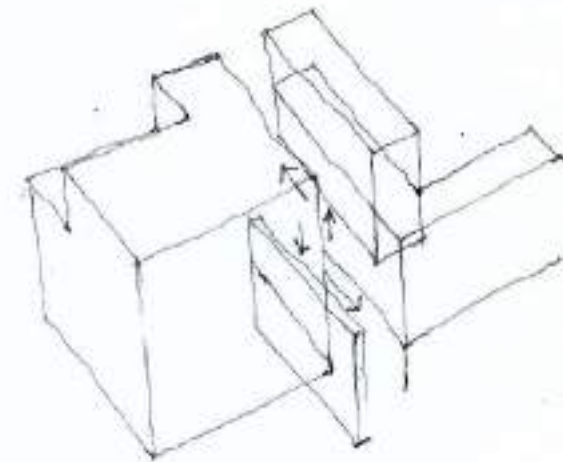
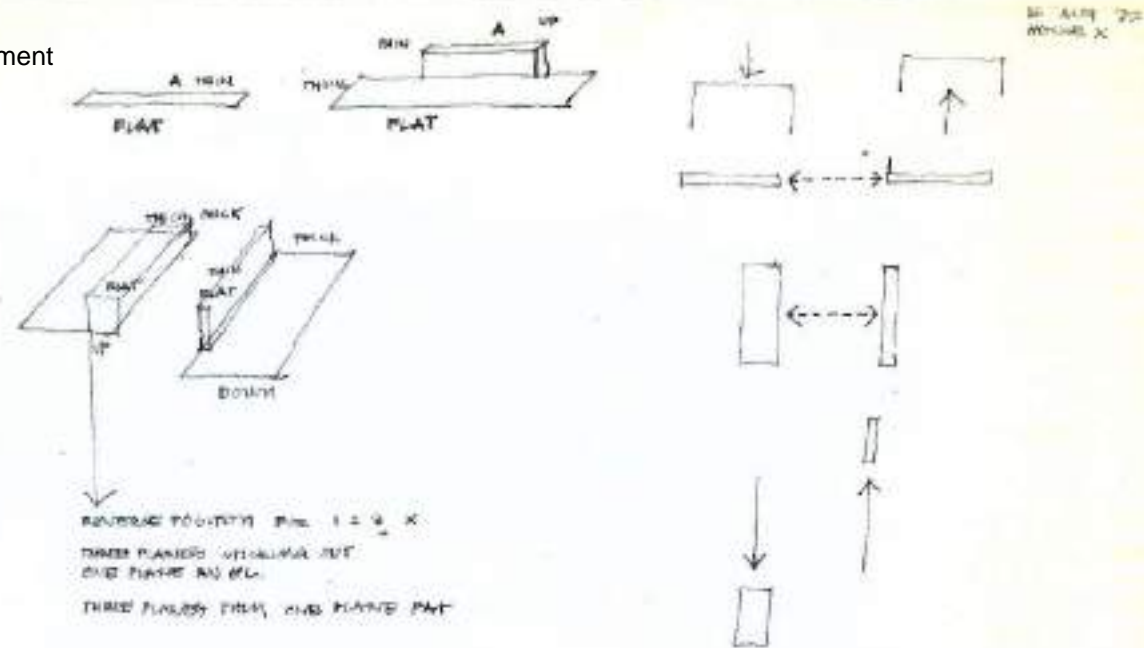
House X
Bloomfield Hills, Michigan, 1975



House X
Bloomfield Hills, Michigan (1975)

Lecture in Theory and History of Architecture

Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism



PLAN

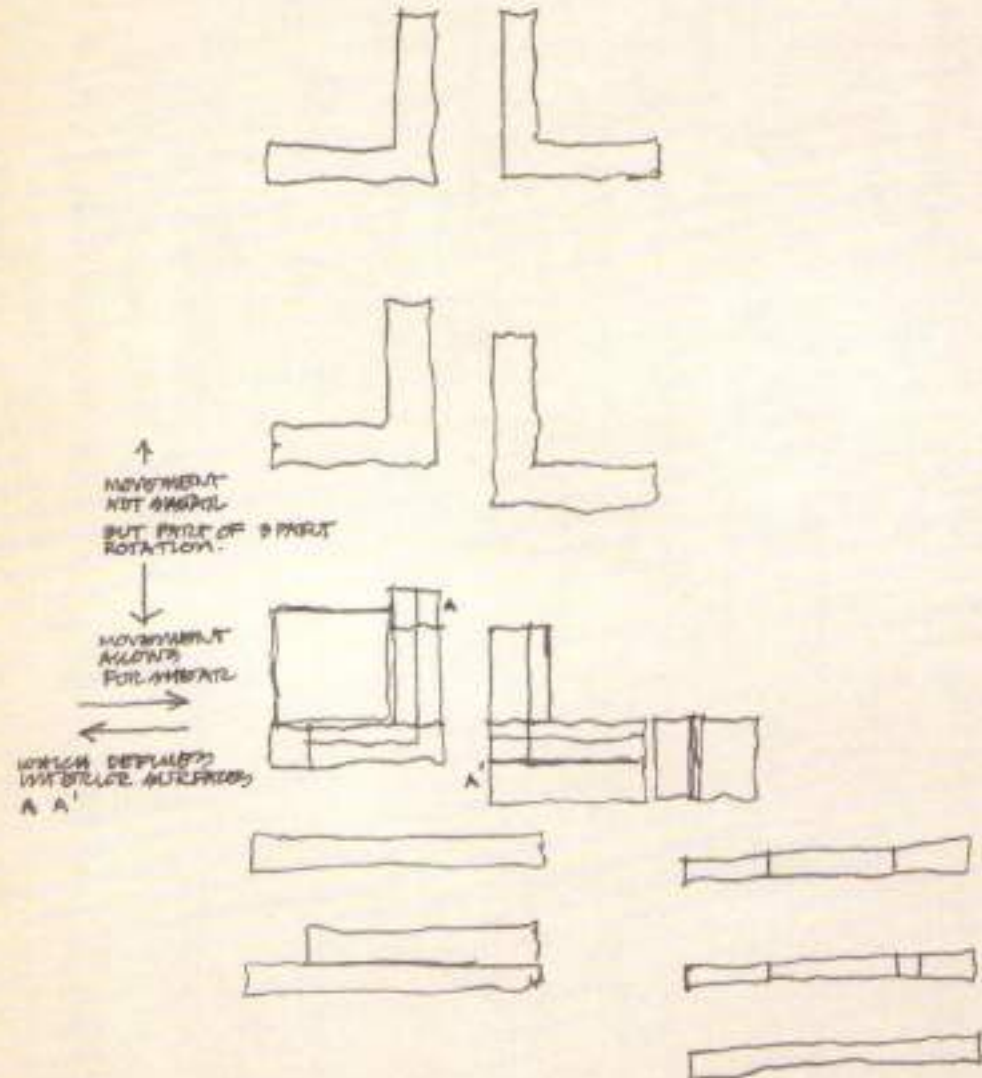
SECTION

Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism

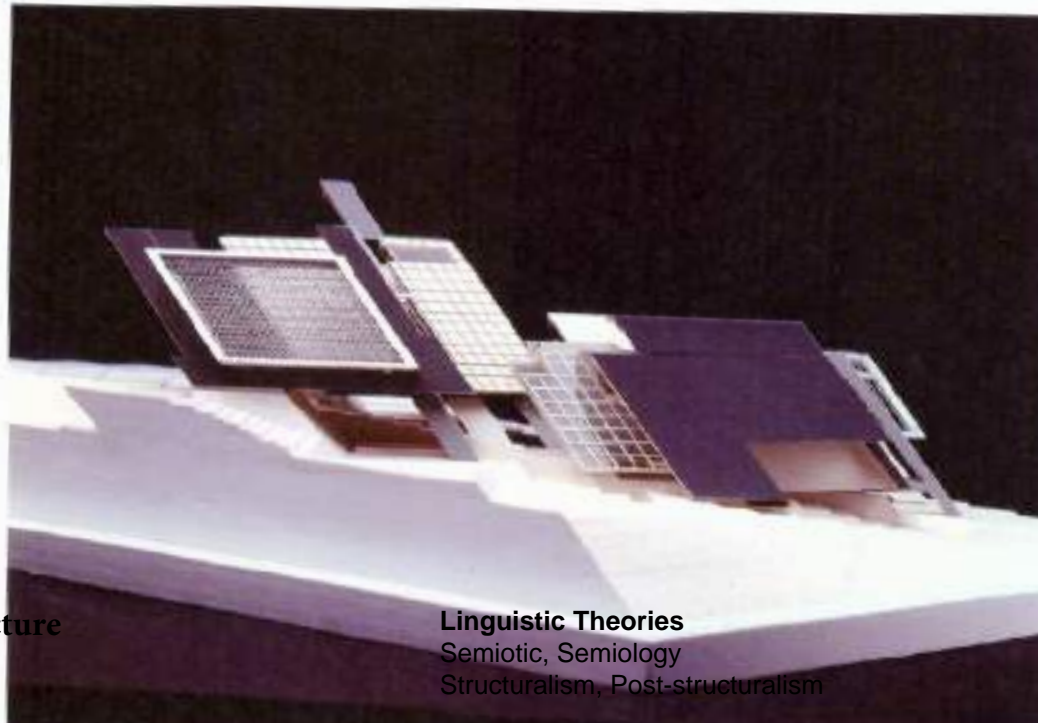
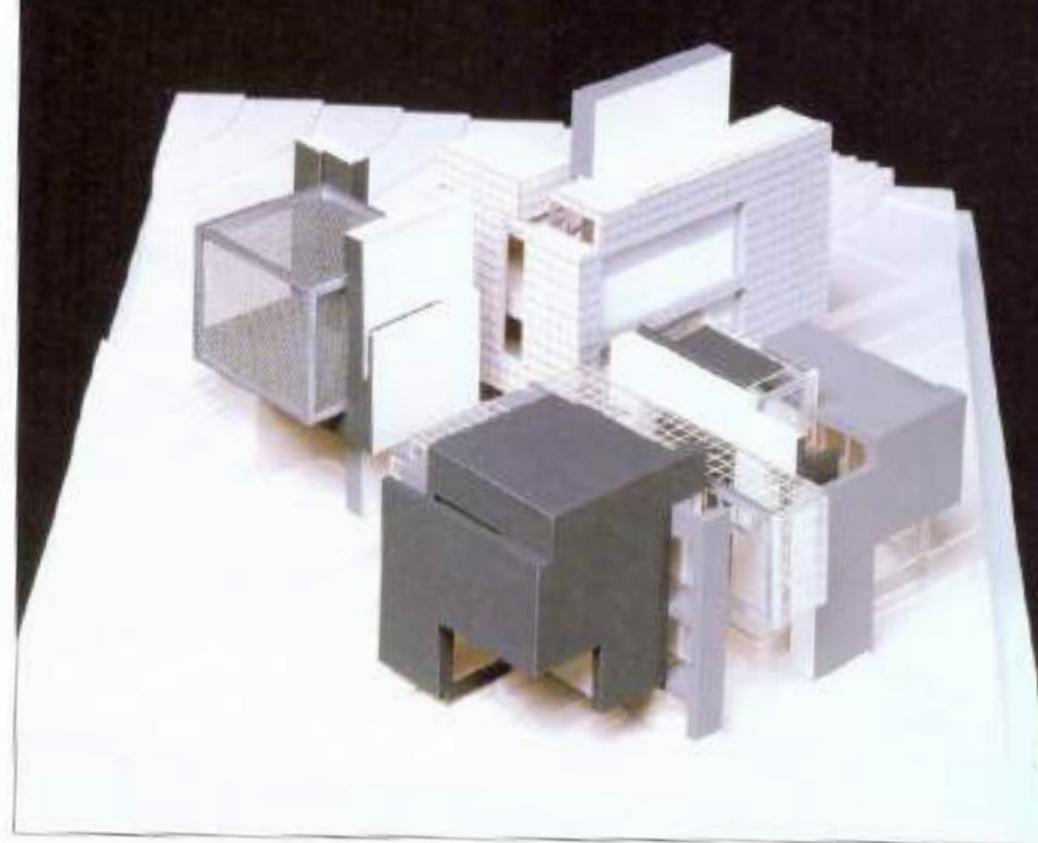
Lecture in Theory and History of Architecture

House X
Bloomfield Hills, Michigan (1975)

TOP PLANNING
30 DEC 75



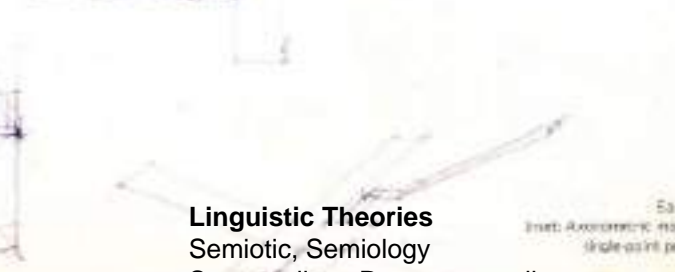
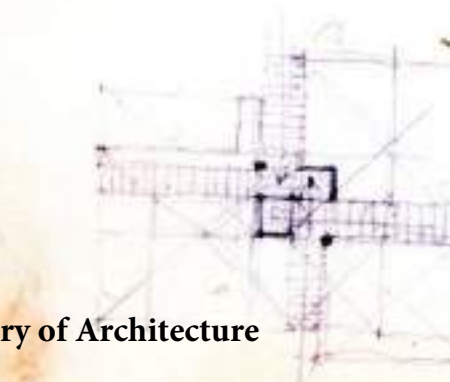
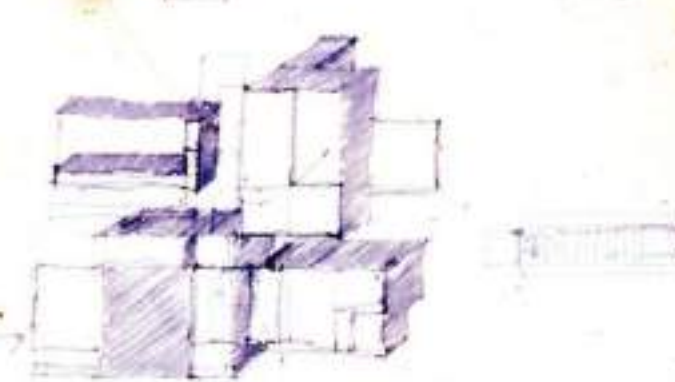
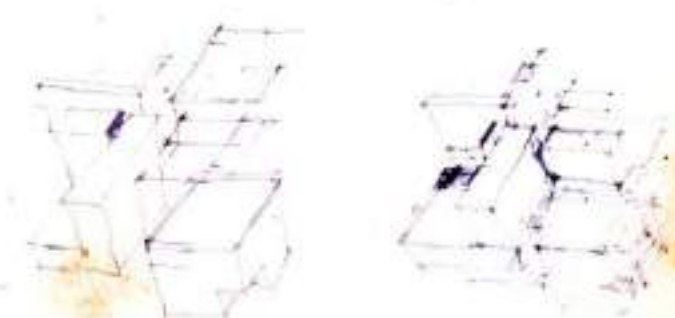
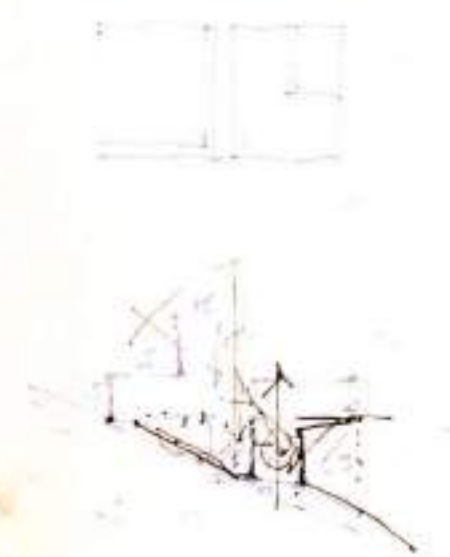
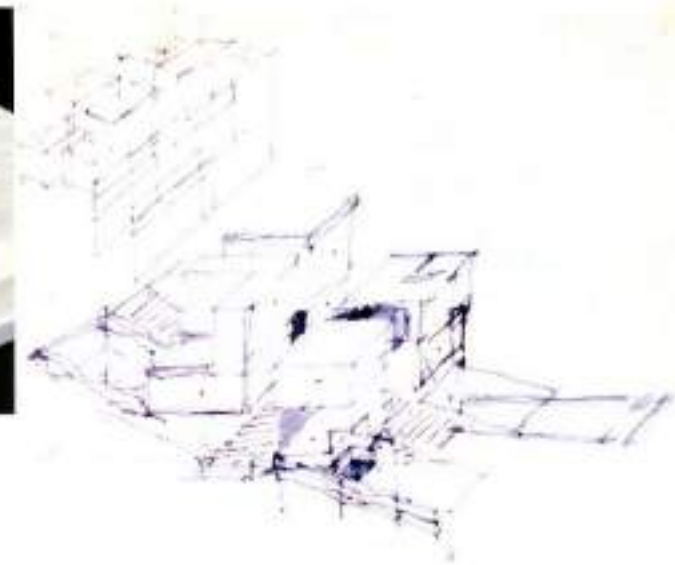
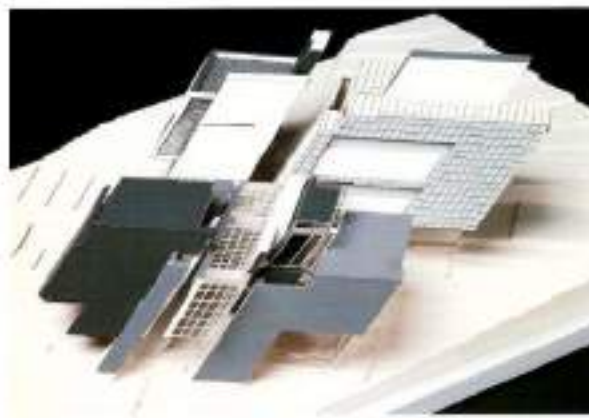
House X
Bloomfield Hills, Michigan (1975)



House X
Bloomfield Hills, Michigan (1975)

Lecture in Theory and History of Architecture

Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism

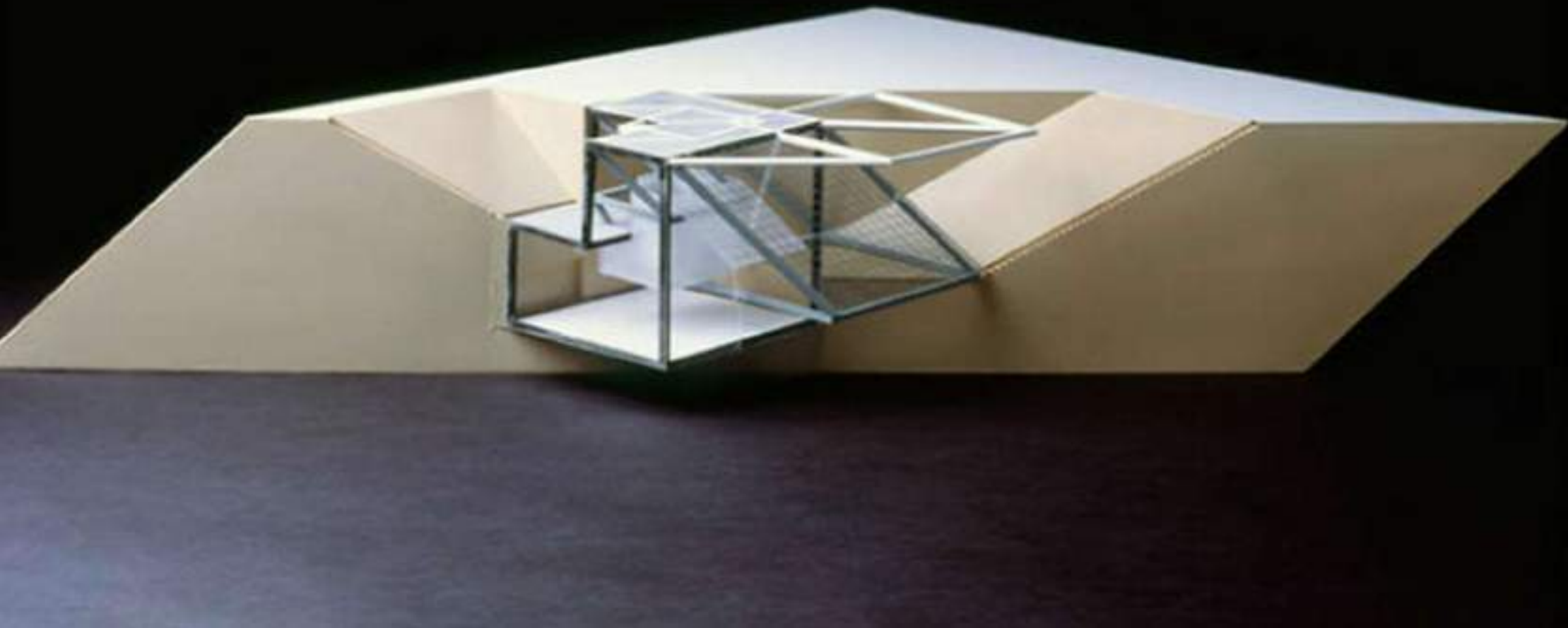


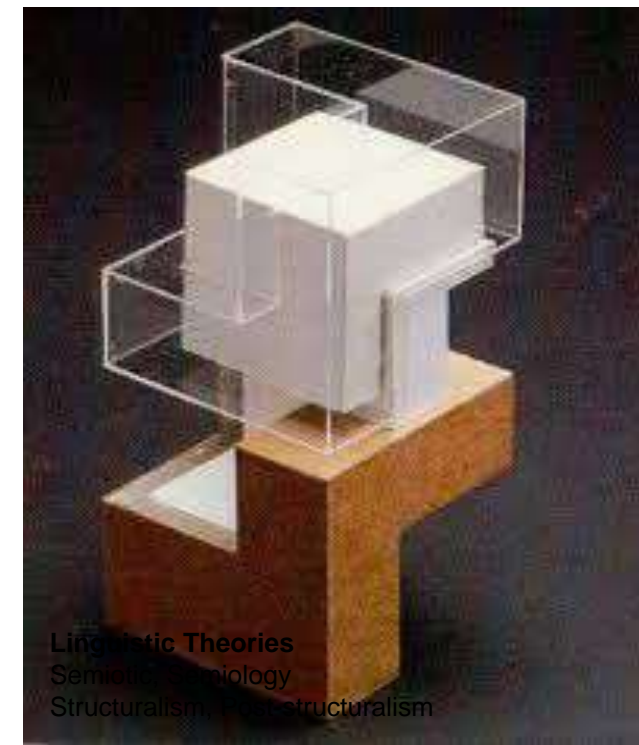
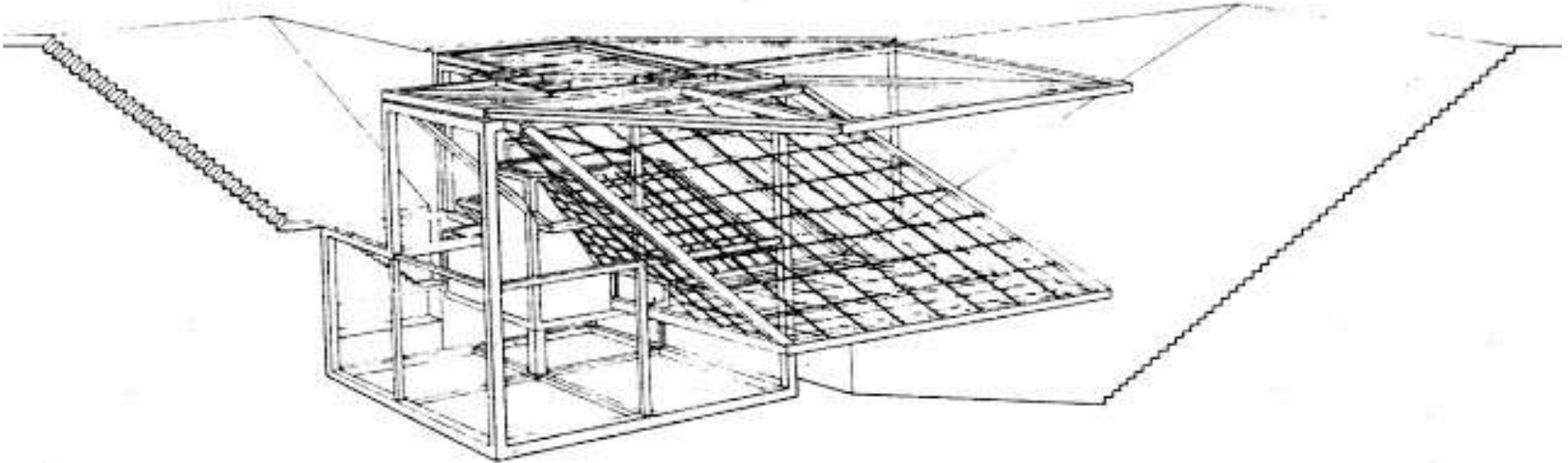
Early sketch
Inset: Axonometric model cut at
single-point perspective

Lecture in Theory and History of Architecture

Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism

House X
Bloomfield Hills, Michigan (1975)

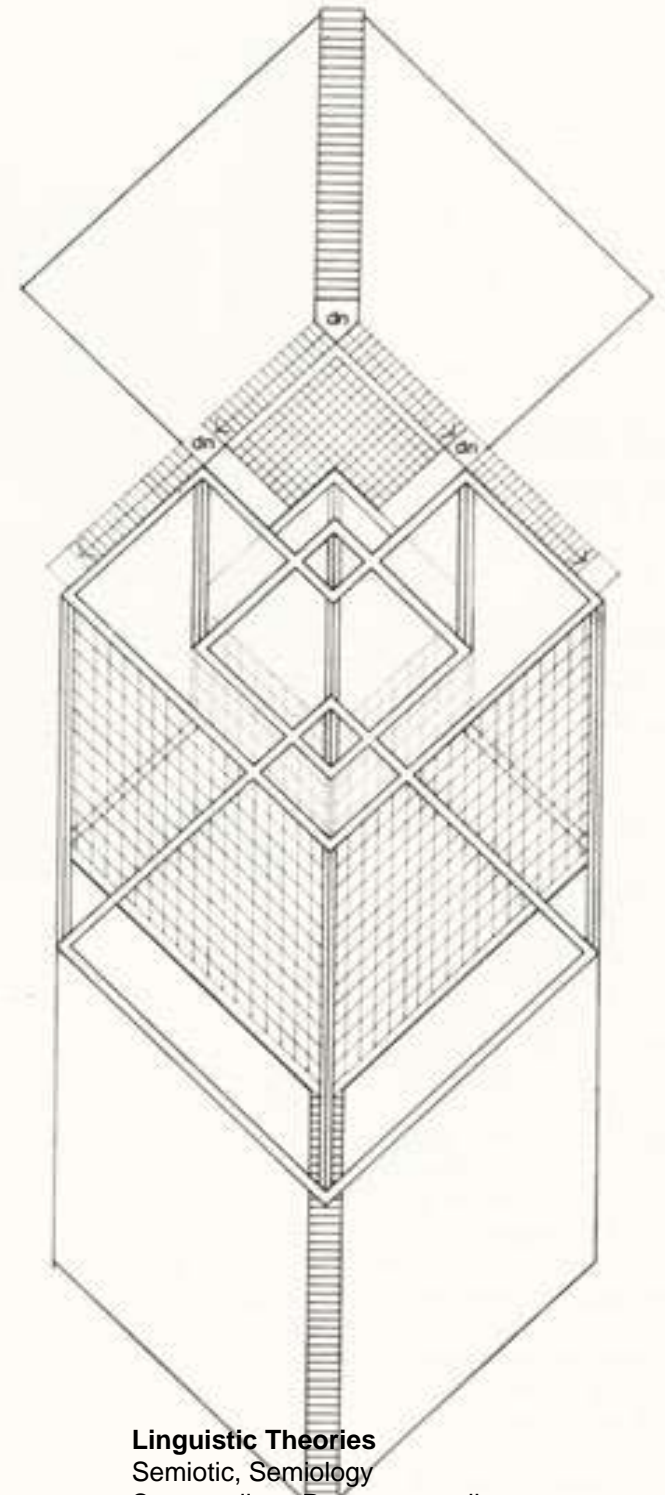


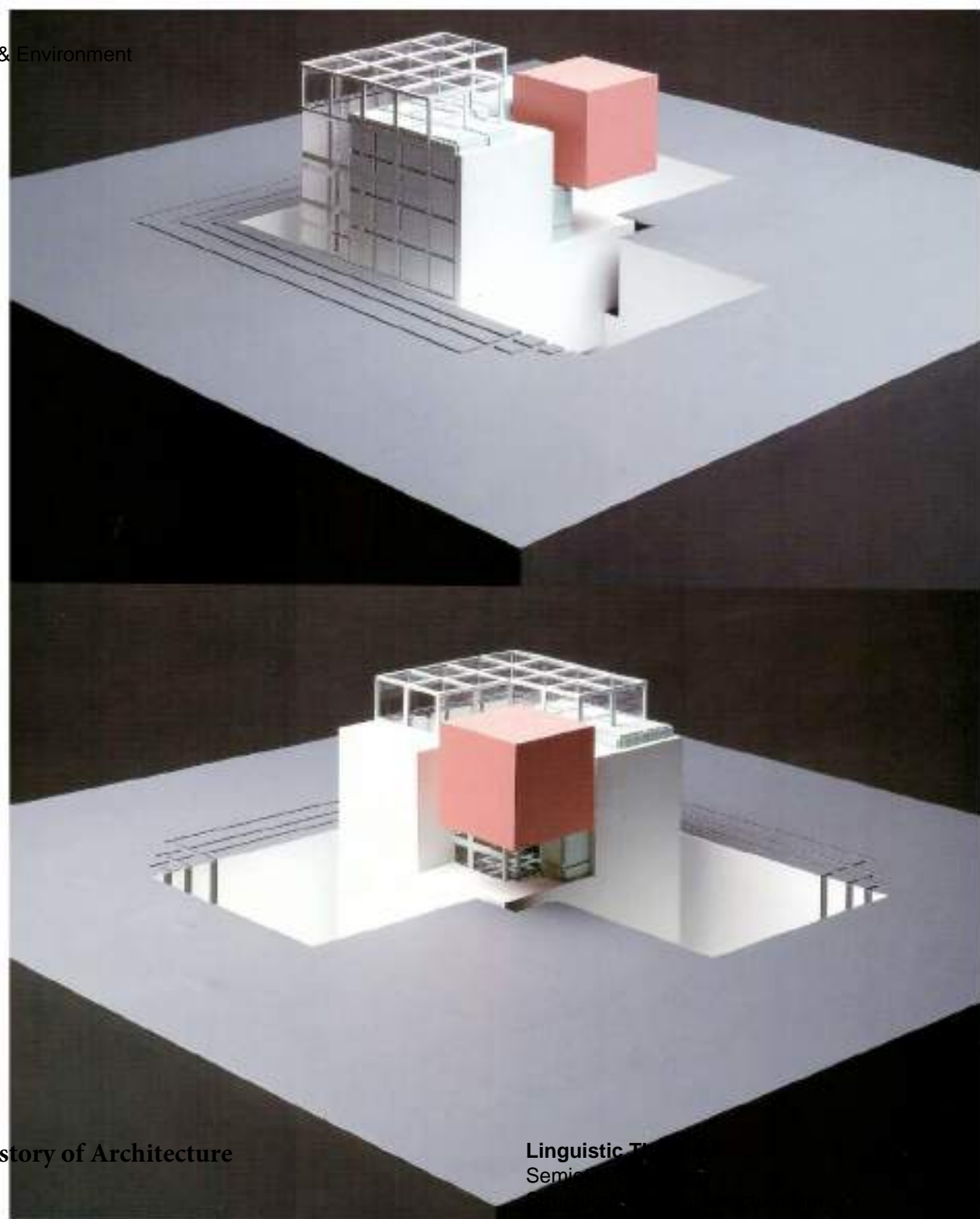


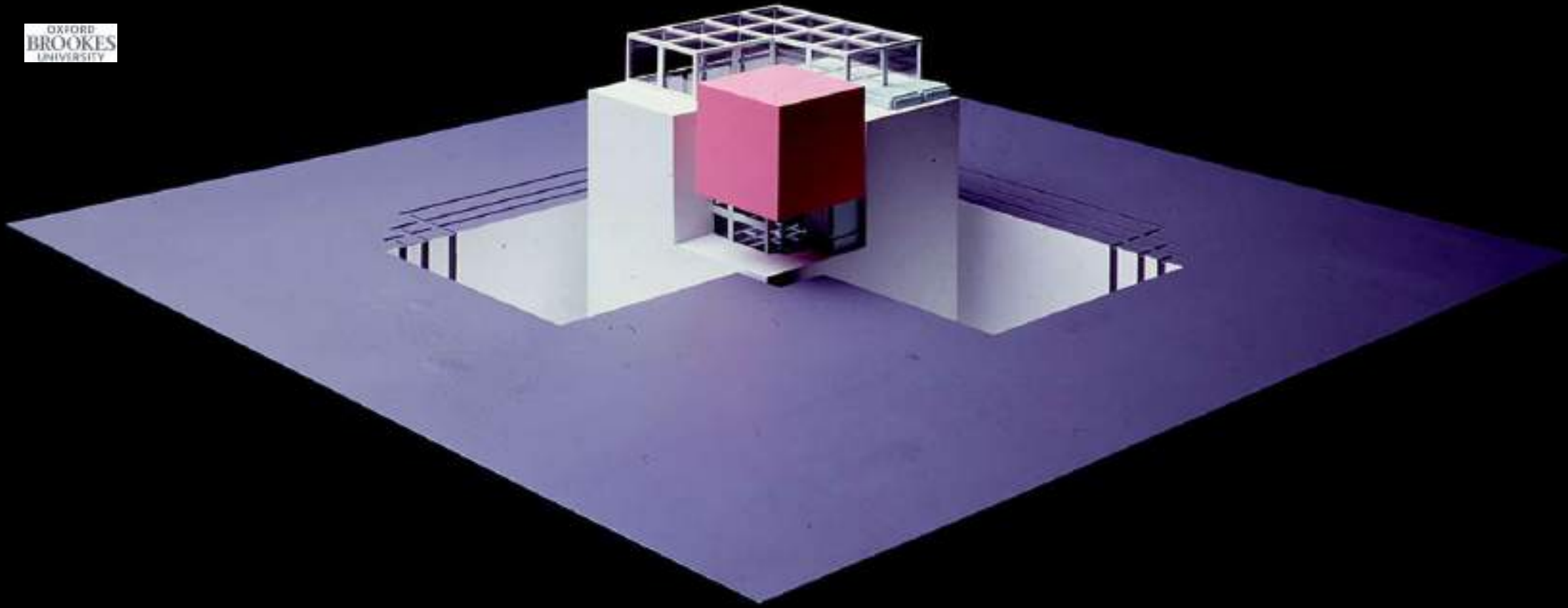
Lecture in Theory and History of Architecture

El Even Odd
(1981)

Linguistic Theories
Semiotics, Sociology
Structuralism, Post-structuralism



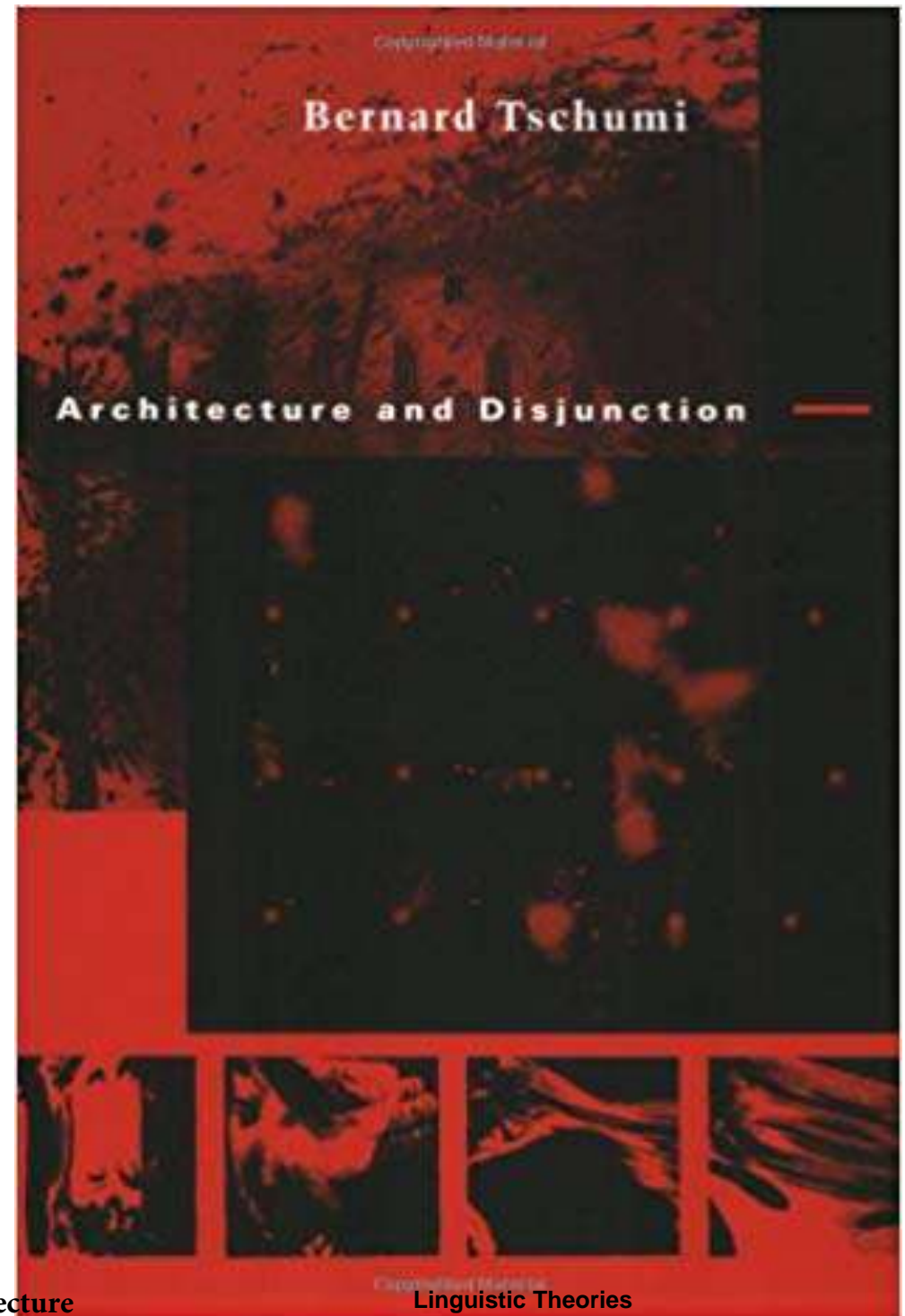








Bernard Tschumi



Lecture in Theory and History of Architecture

Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism



Collected fragments from Tschumi's Archive



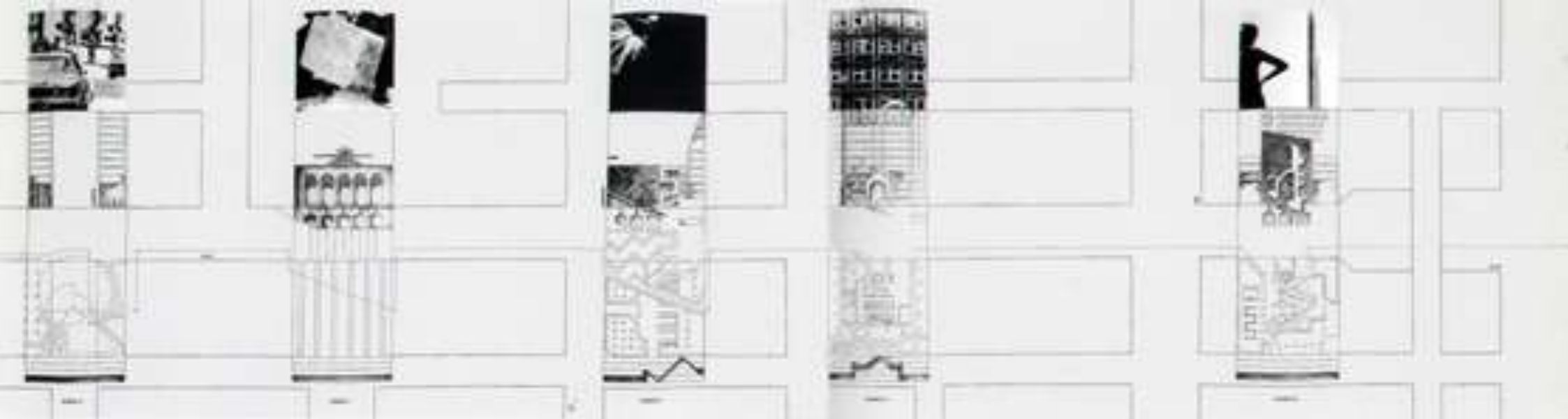
1967

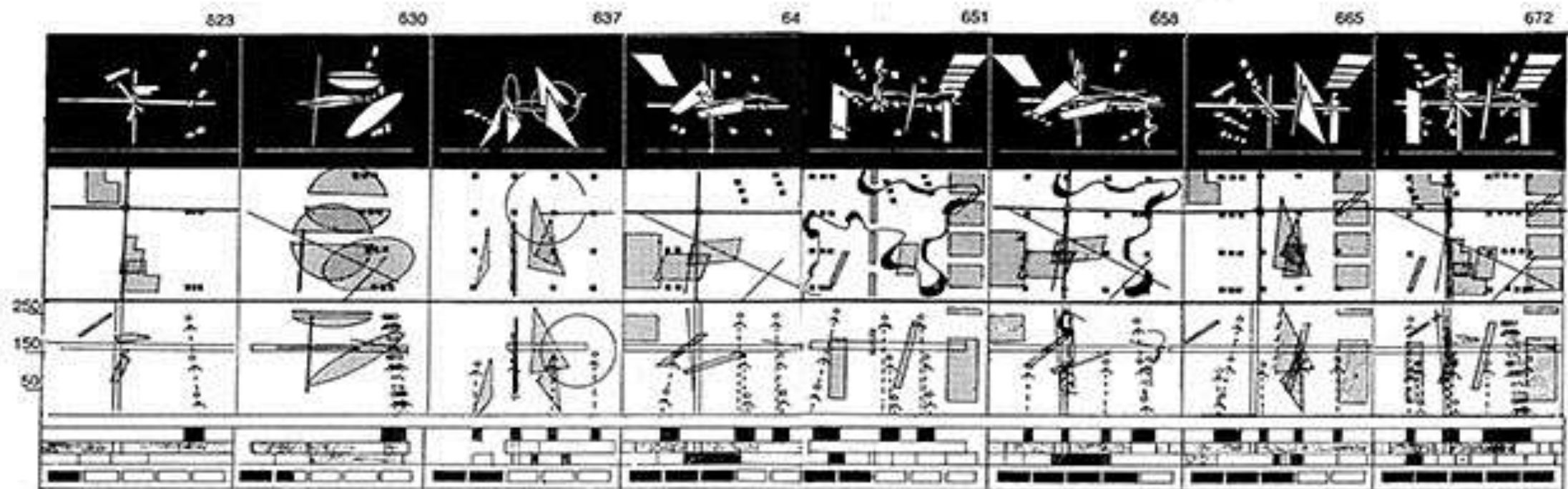
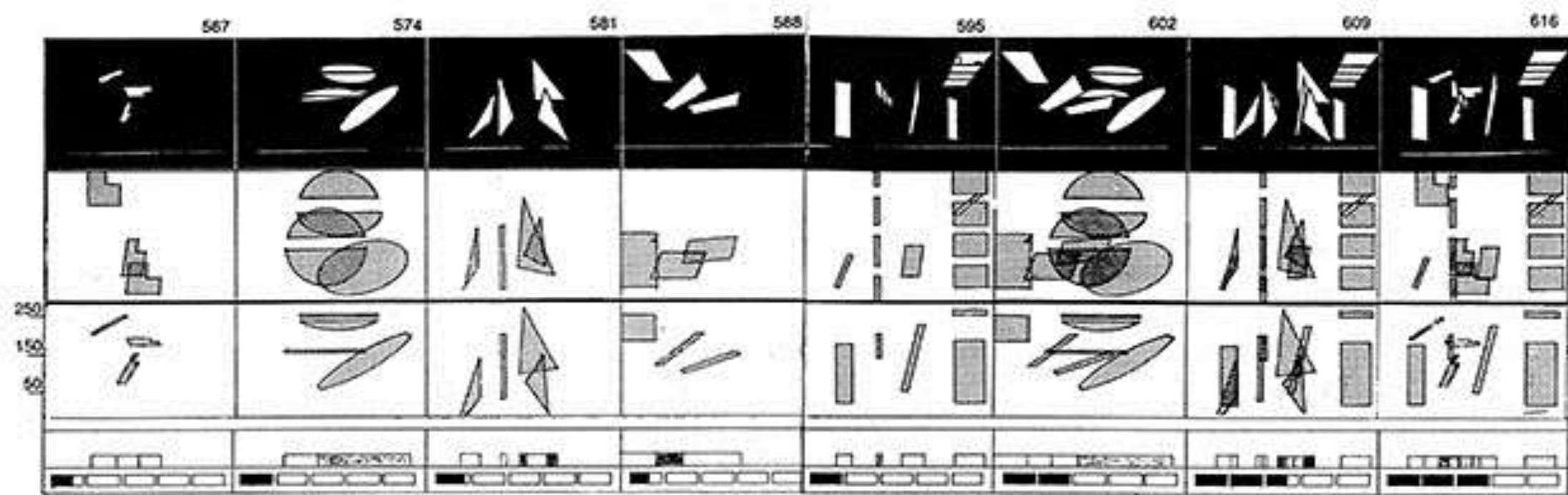


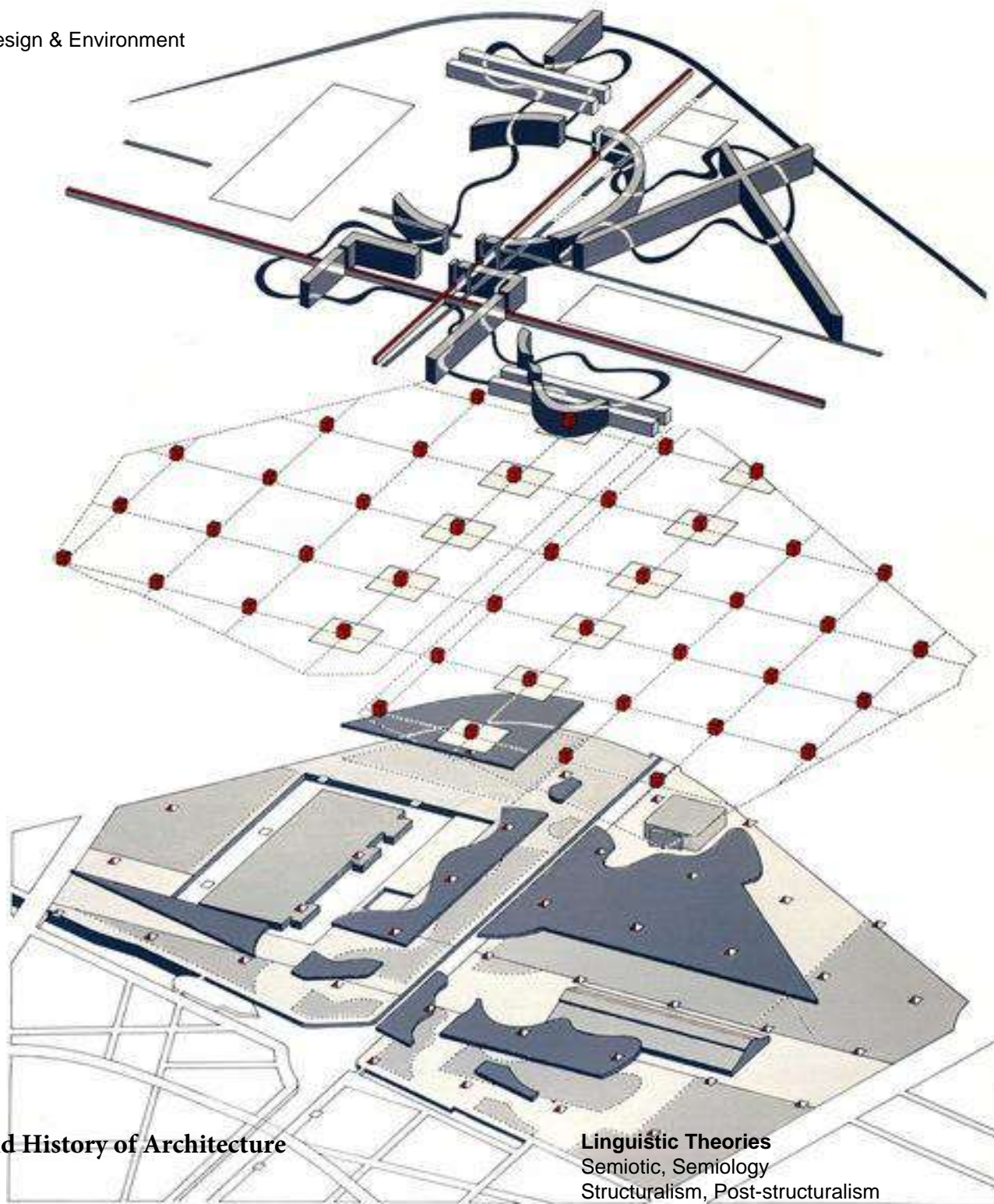
Lecture in Theory and History of Architecture

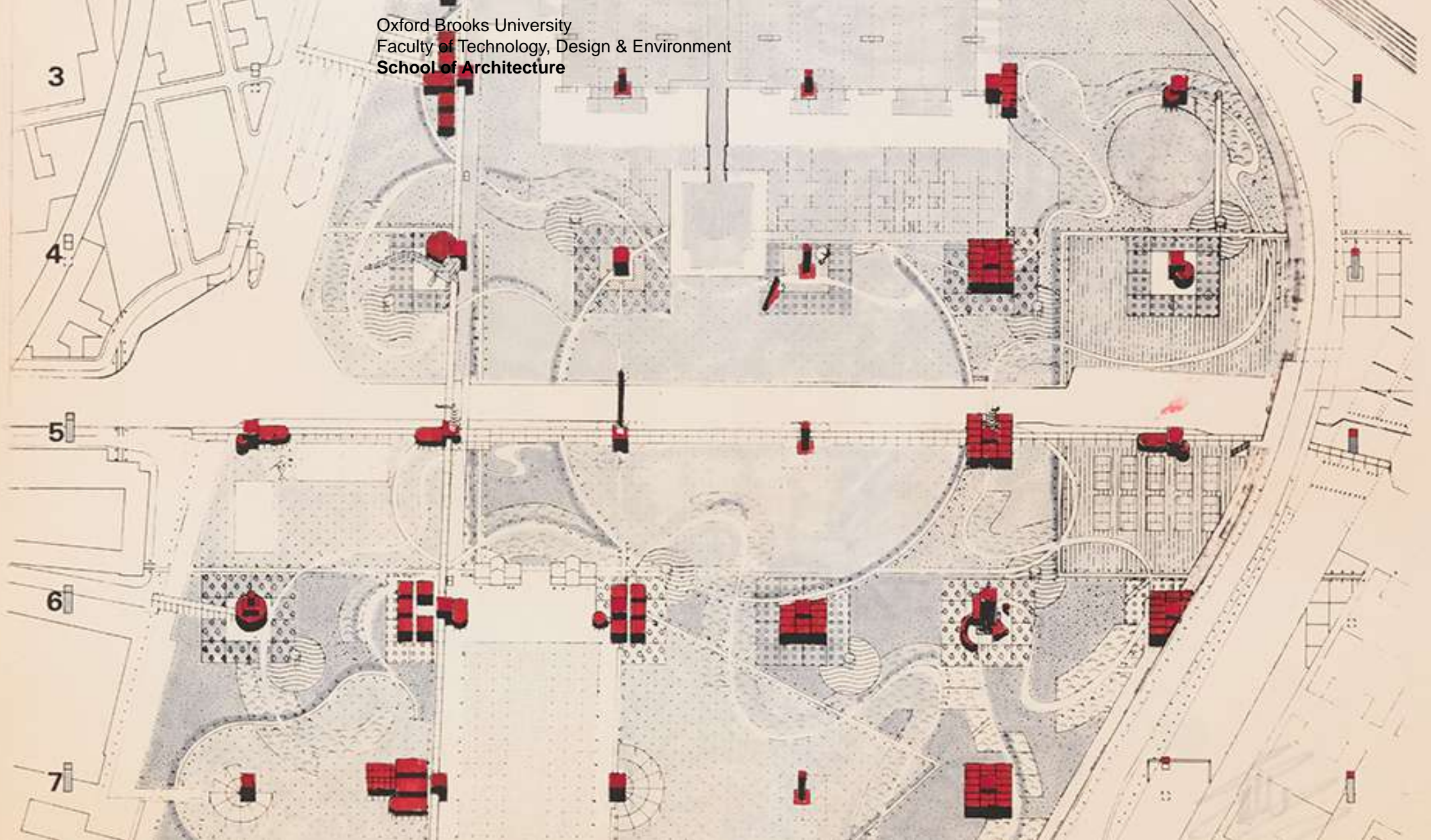


Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism











Parc de La Villette
Paris 1982

Lecture in Theory and History of Architecture

Linguistic Theories
Semiotic, Semiology
Structuralism, Post-structuralism

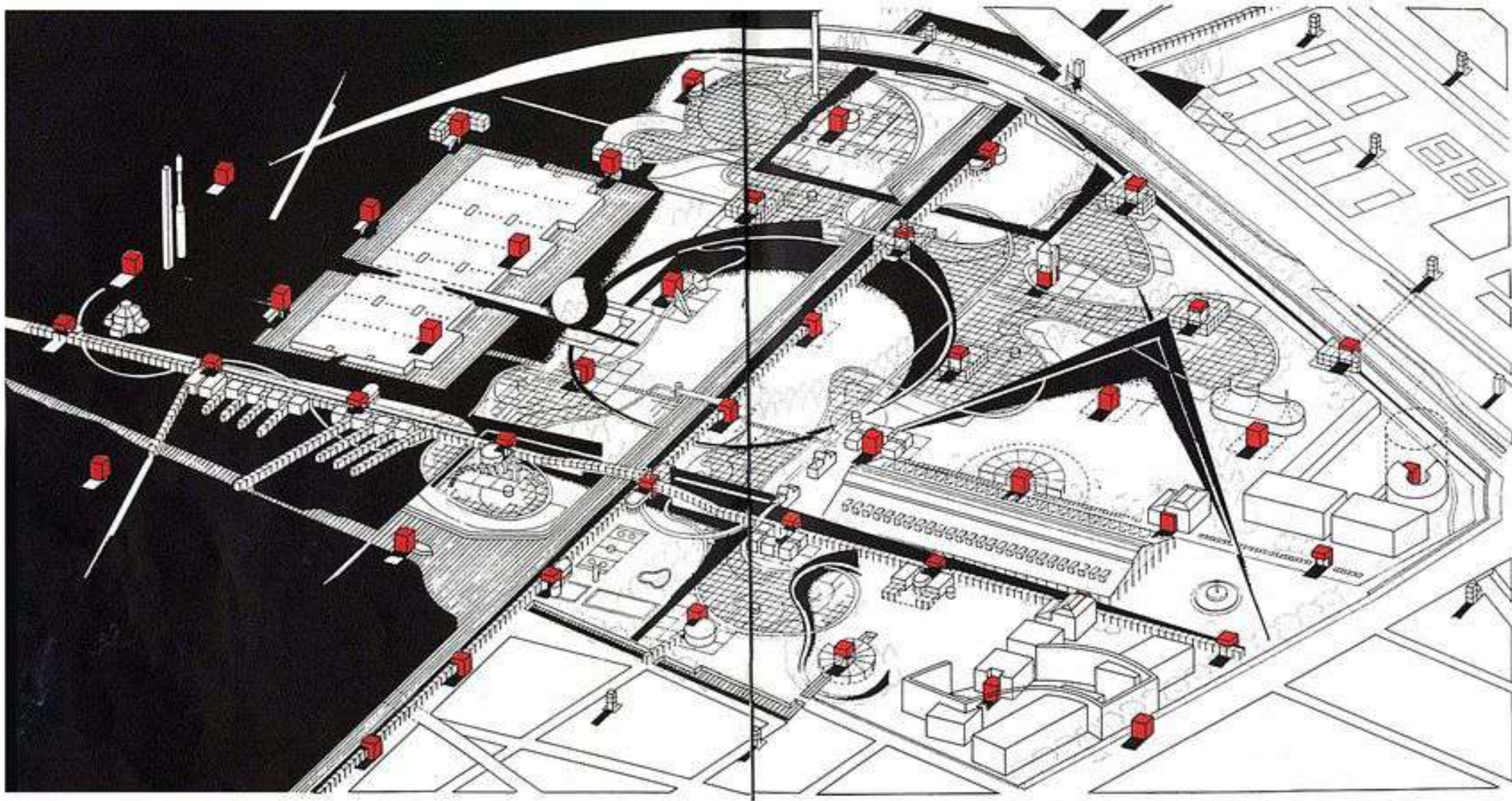




Parc de La Villette
Paris 1982

Lecture in Theory and History of Architecture

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P O I N T S L I N E S S U R F A C E S

Points point-like activities
Lines linear activities
Surfaces surface activities

1 Introduction

New Paradigm in the Postmodern Paths

2 Linguistic Theories

Semiotic, Semiology, Structuralism, Post-structuralism

3 Phenomenology

Subject, Experience, *Lebenswelt*

4 Contemporary Sublime

Disorientation, Fragmentation, Alteration

5 Complexity Sciences

System Evolution, Crisis and Instability

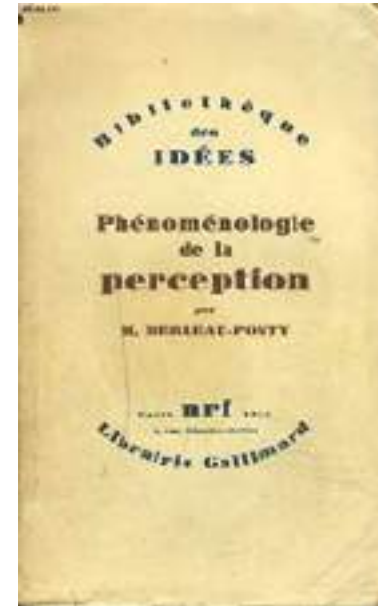
6 Q&A



1900/01



1927



1945



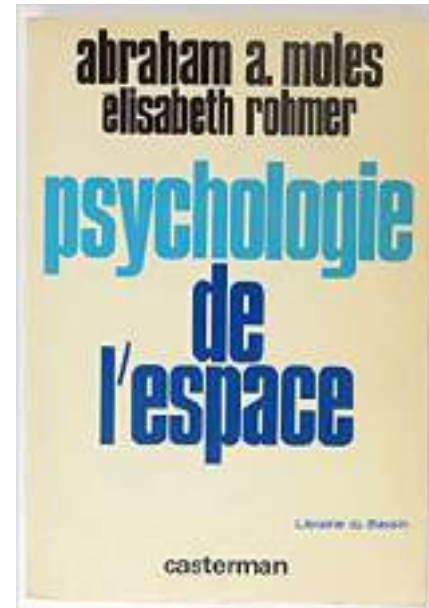
1983/85



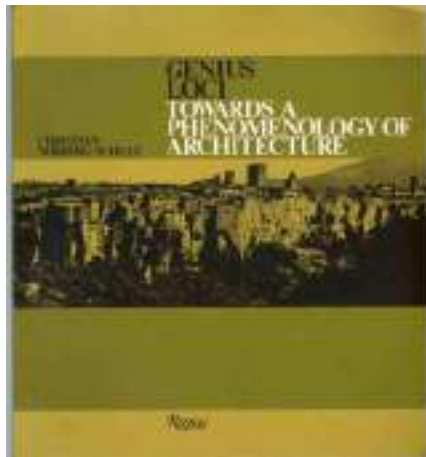
1954 [1951]



1957



1972



1975



1983

Postmodern Paradigms

Towards a Critical Regionalism: Six Points for an Architecture of Resistance

KENNETH FRAMPTON

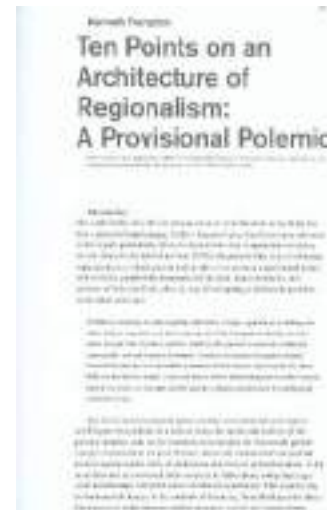
The placelessness of modern architecture, which is imposed on the landscape, is not only of aesthetic concern, which might be regarded as a matter of taste, but also of political concern, for it is a sign of the loss of the sense of place. The loss of place is the loss of the sense of the human condition. The architect's task is to create a sense of place, to create a sense of the human condition. This is the task of the architect, and it is a task that is not only of aesthetic concern, but also of political concern. The architect's task is to create a sense of place, to create a sense of the human condition. This is the task of the architect, and it is a task that is not only of aesthetic concern, but also of political concern.

1983



2007

Lecture in Theory and History of Architecture
Andrea Canclini



1987



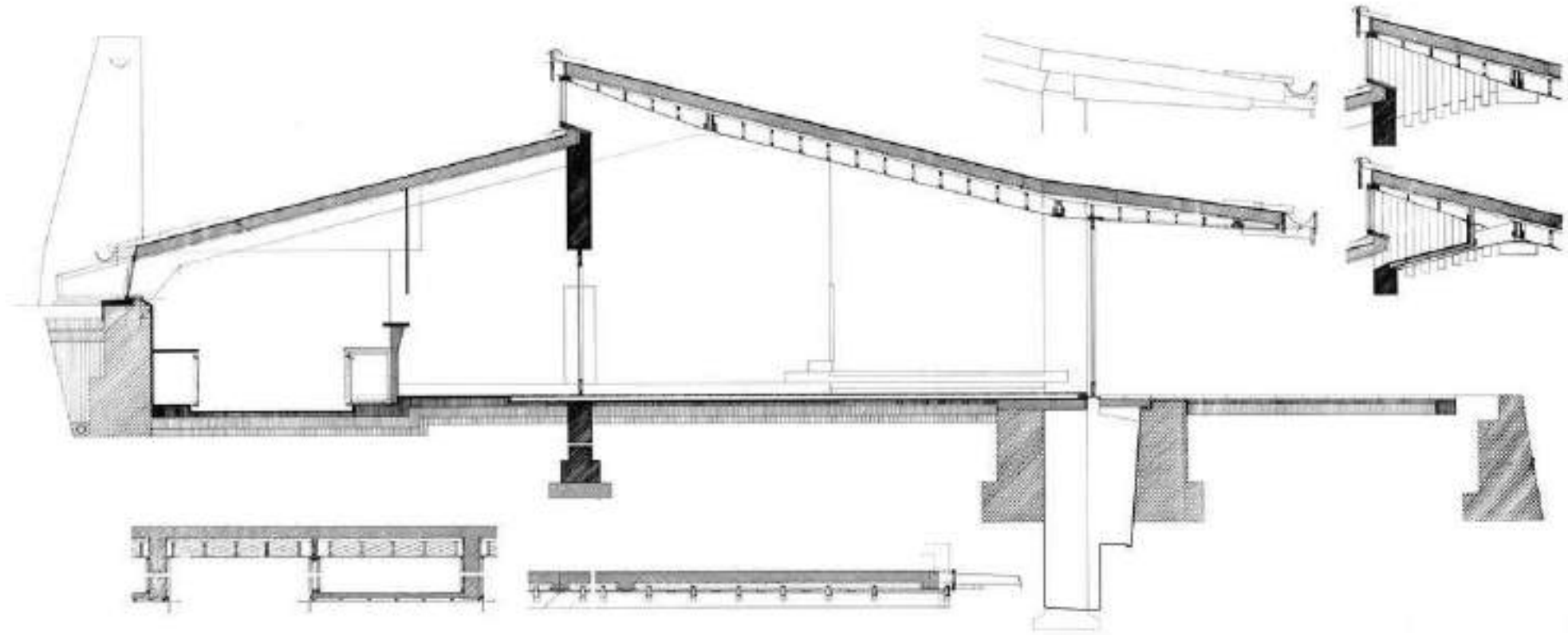
2005

Phenomenology
Subject, Experience, *Lebenswelt*

16

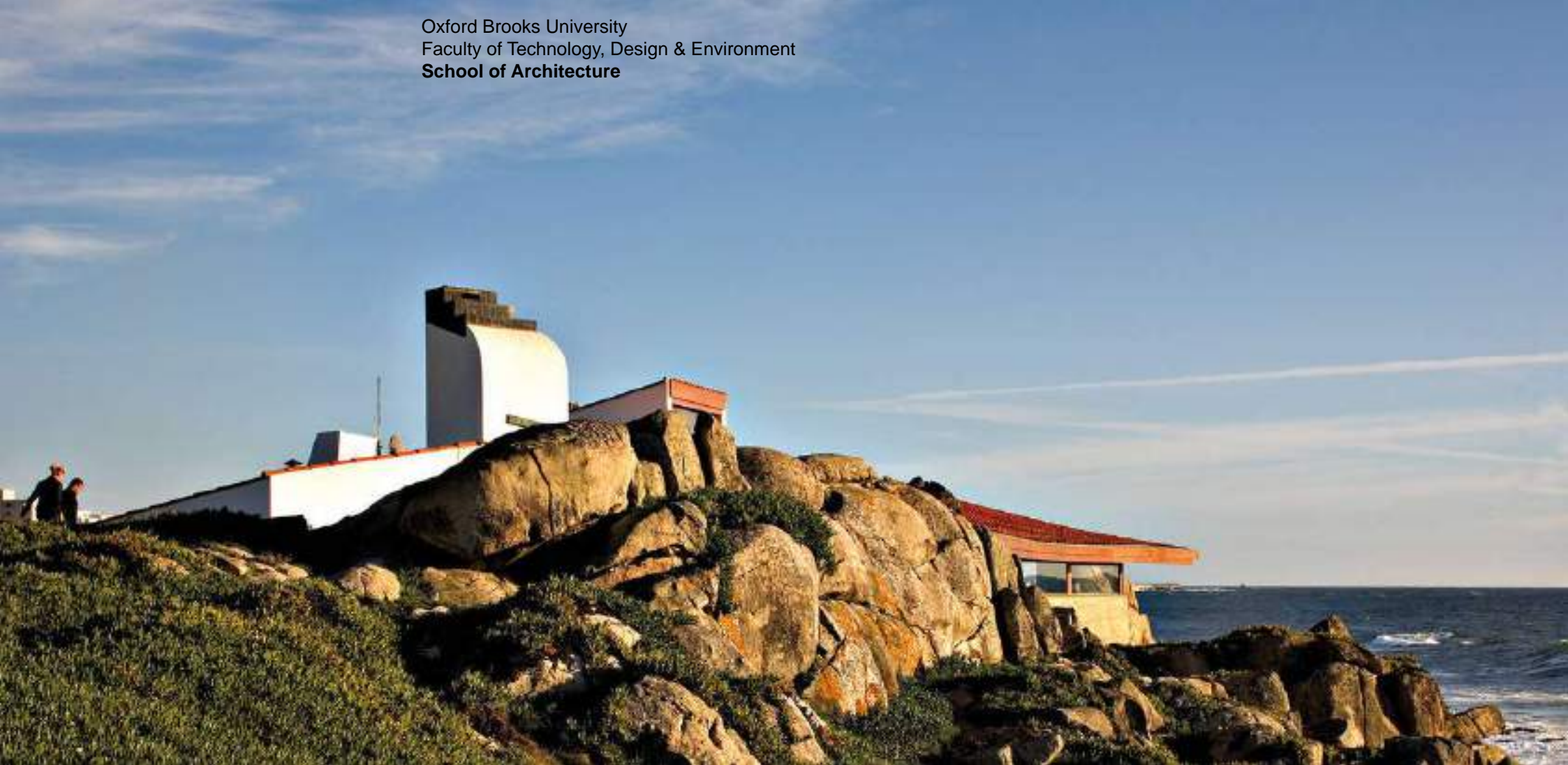
Álvaro Siza

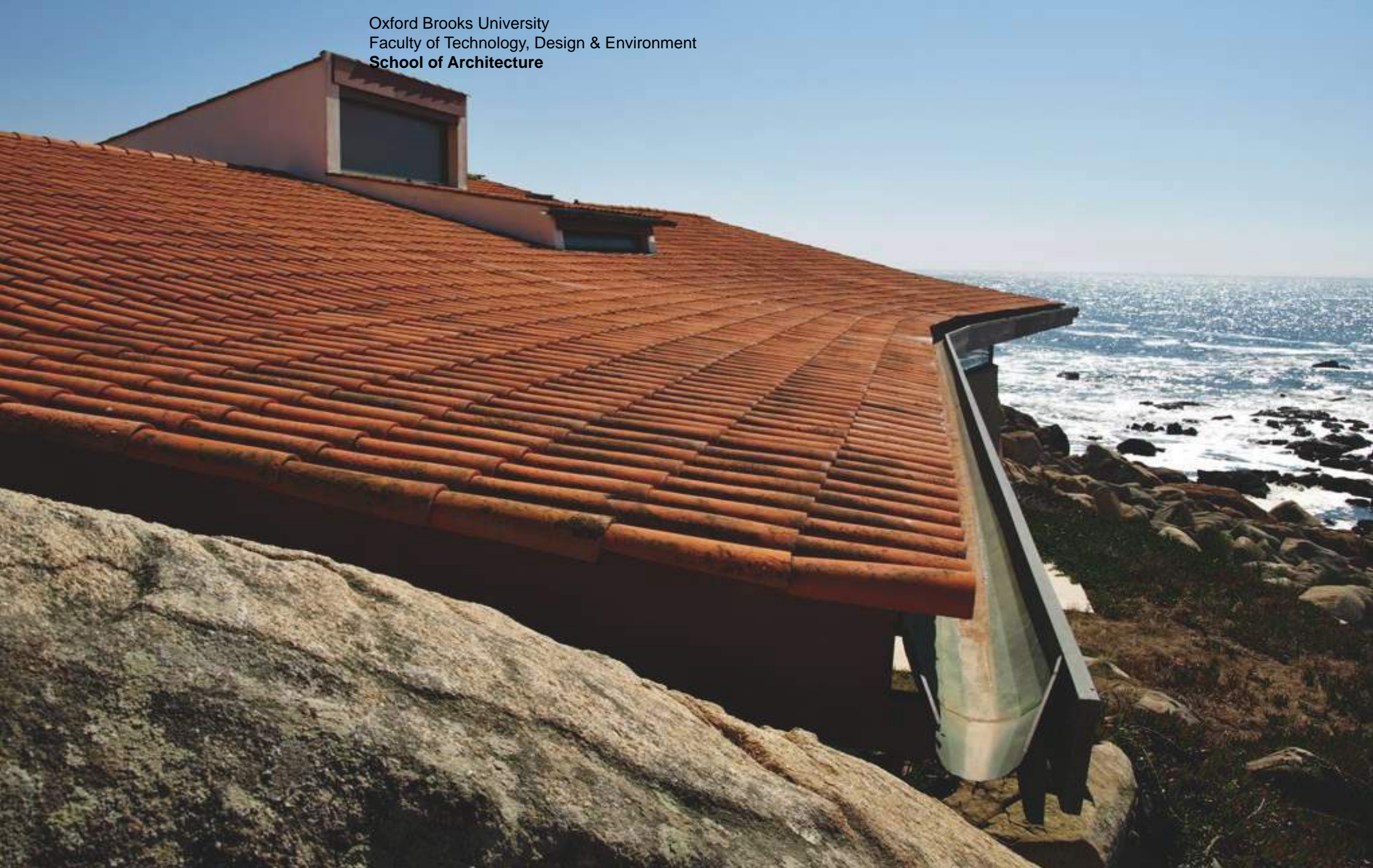










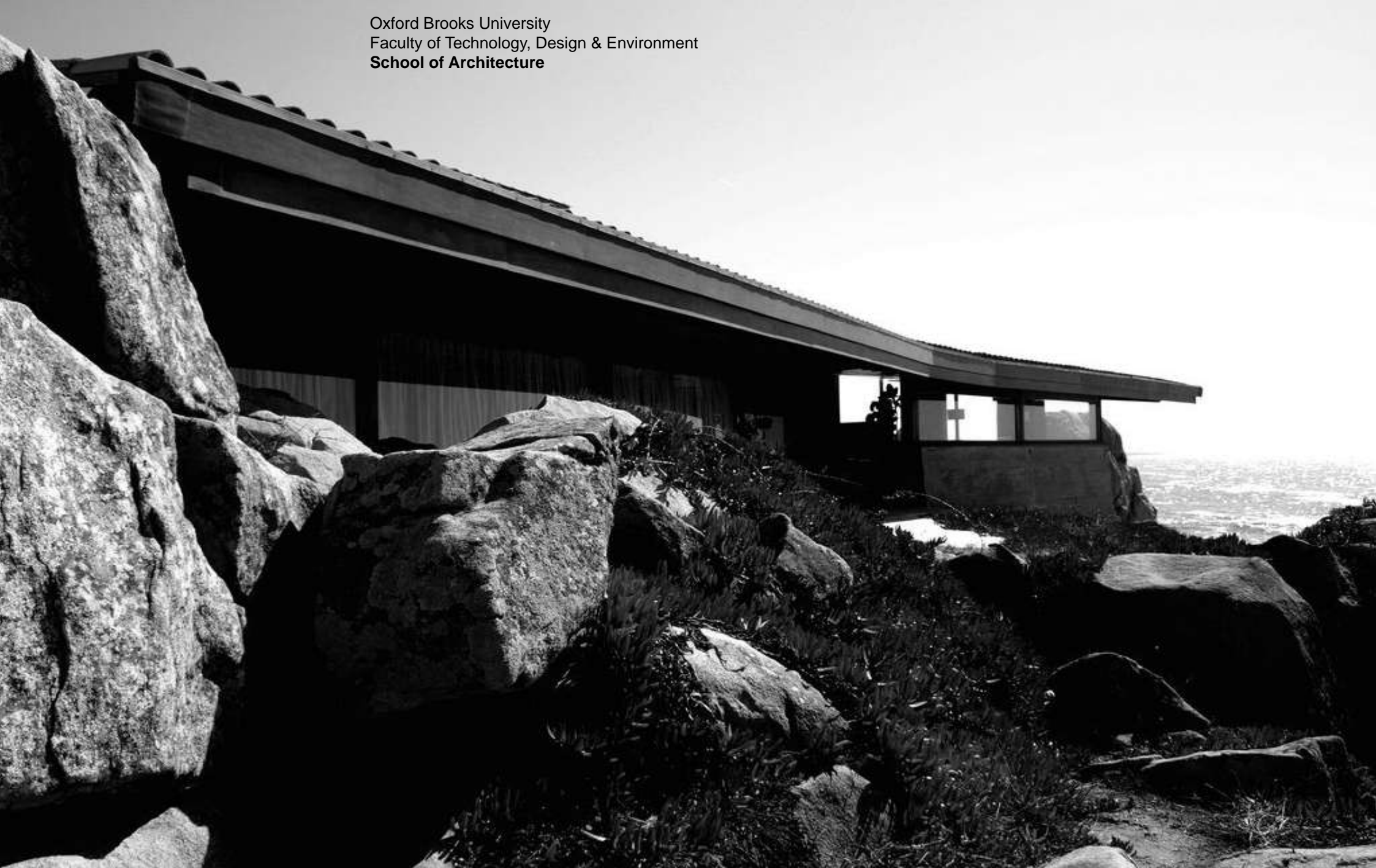




Boa Nova Restaurant
Leça de Palmeira (1958-63)

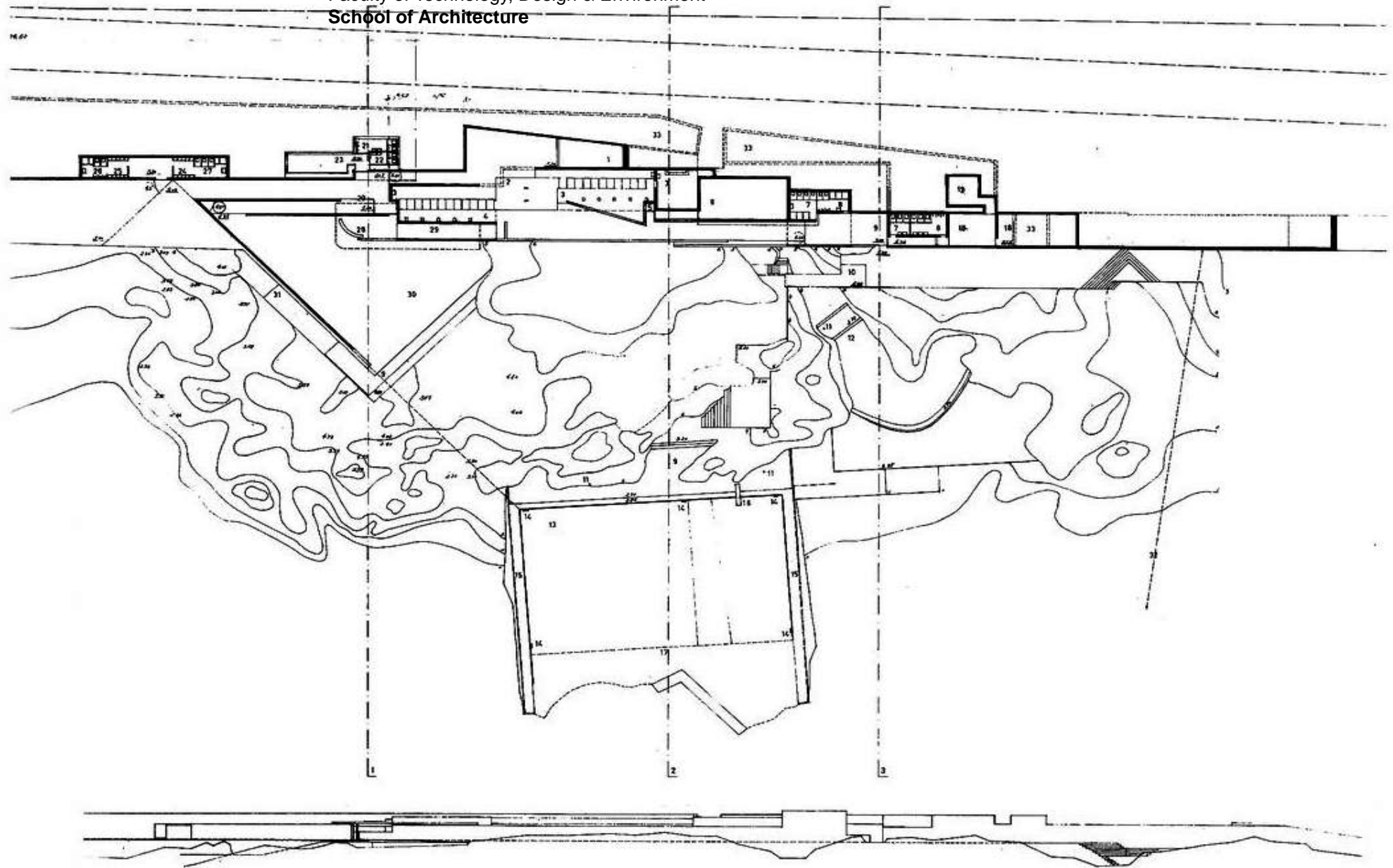
Lecture in Theory and History of Architecture

Phenomenology
Subject, Experience, *Lebenswelt*











Piscina das Marés
Leça de Palmeira (1961-66)

Lecture in Theory and History of Architecture

Phenomenology
Subject, Experience, *Lebenswelt*





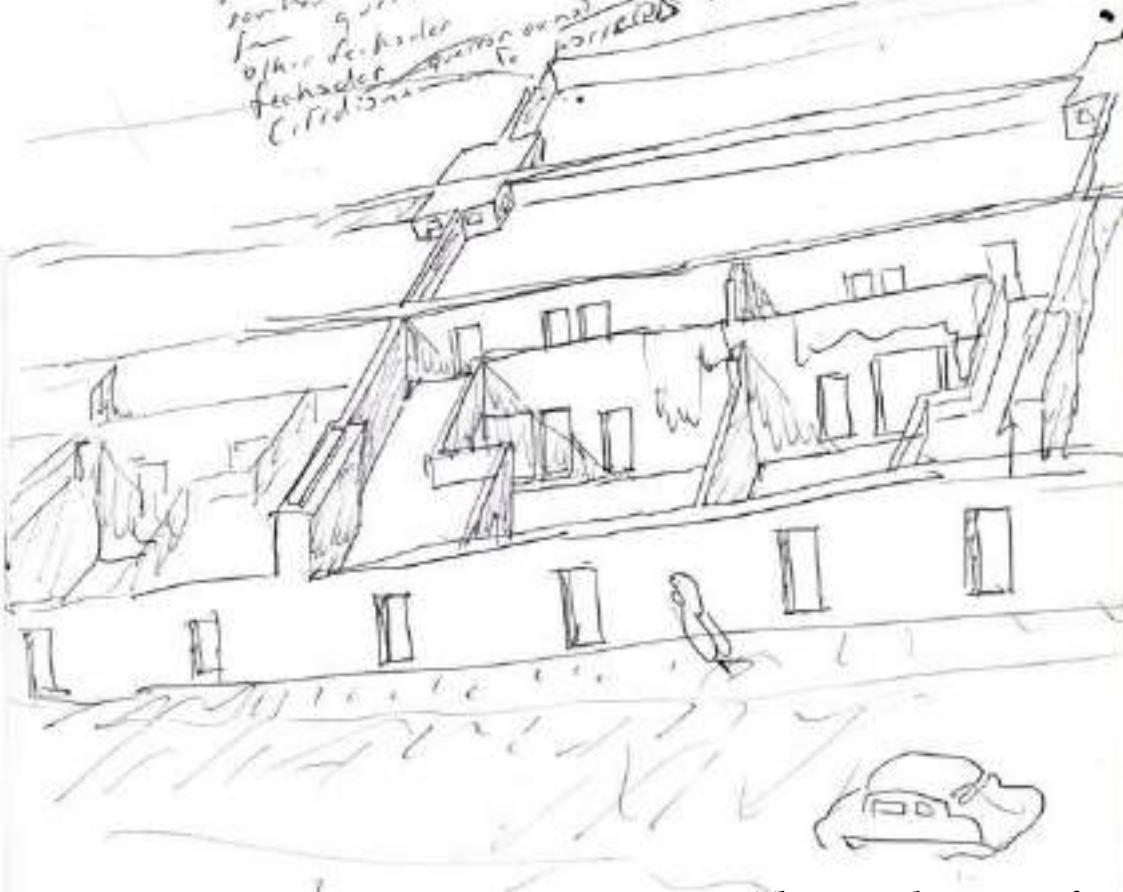
Early Sketches for Malagueira Blocks
Évora (1977-97)

Lecture in Theory and History of Architecture



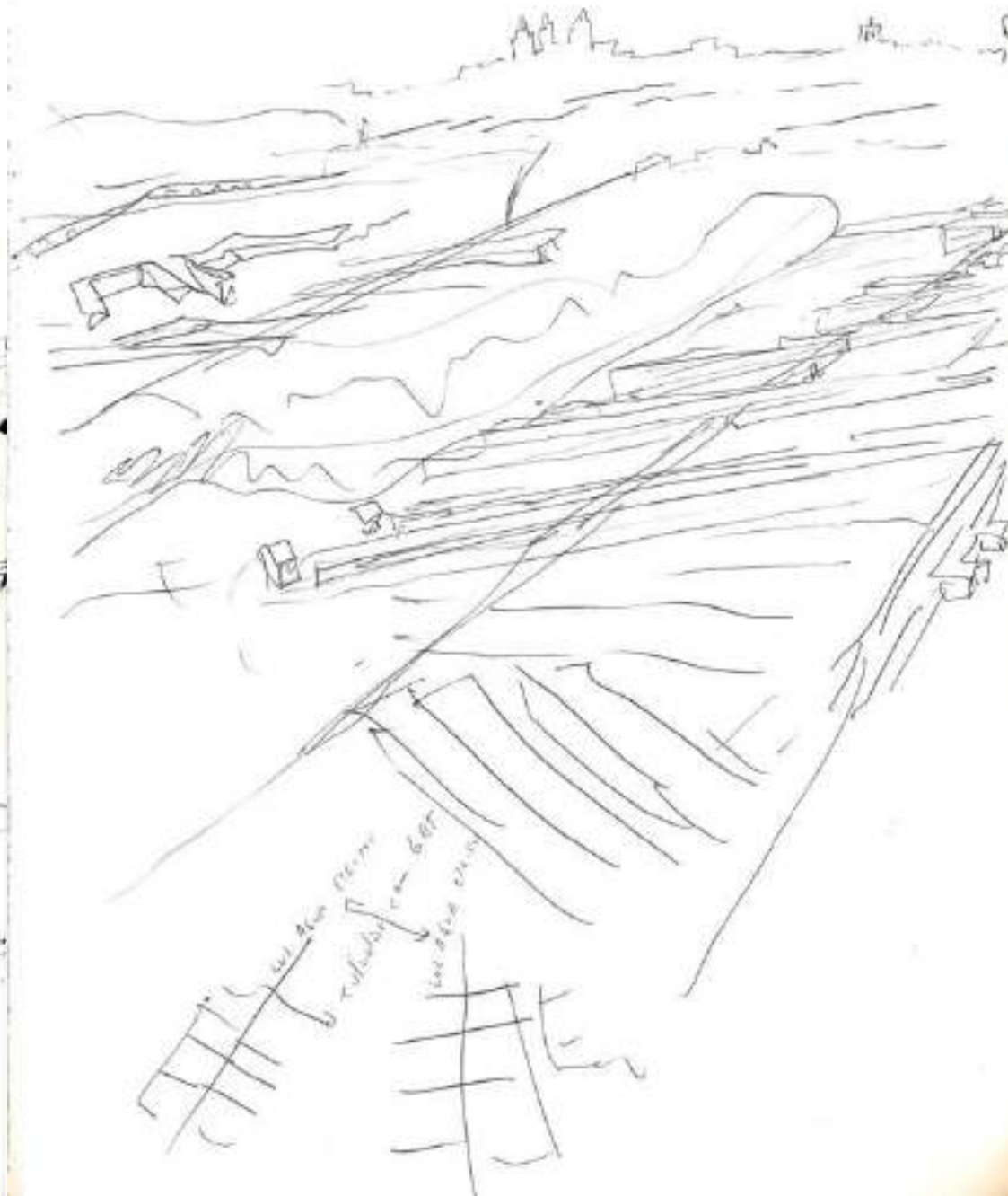
Phenomenology Subject, Experience, Lebenswelt

Oxford Brookes University
Faculty of Technology, Design &
School of Architecture



Early Sketches for Malagueira Blocks Évora (1977-97)

Lecture in Theory and History of Architecture



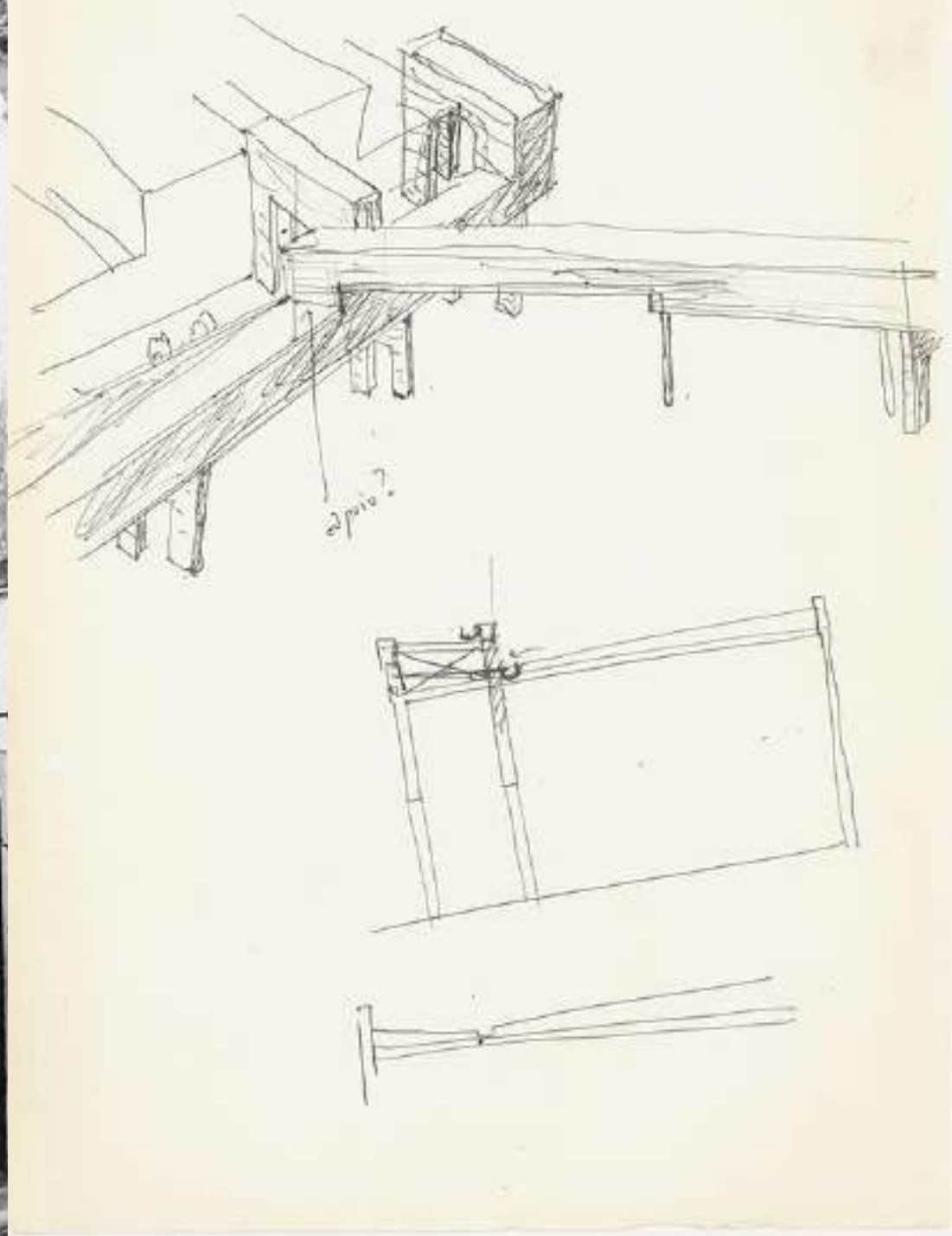
Phenomenology

Subject, Experience, *Lebenswelt*

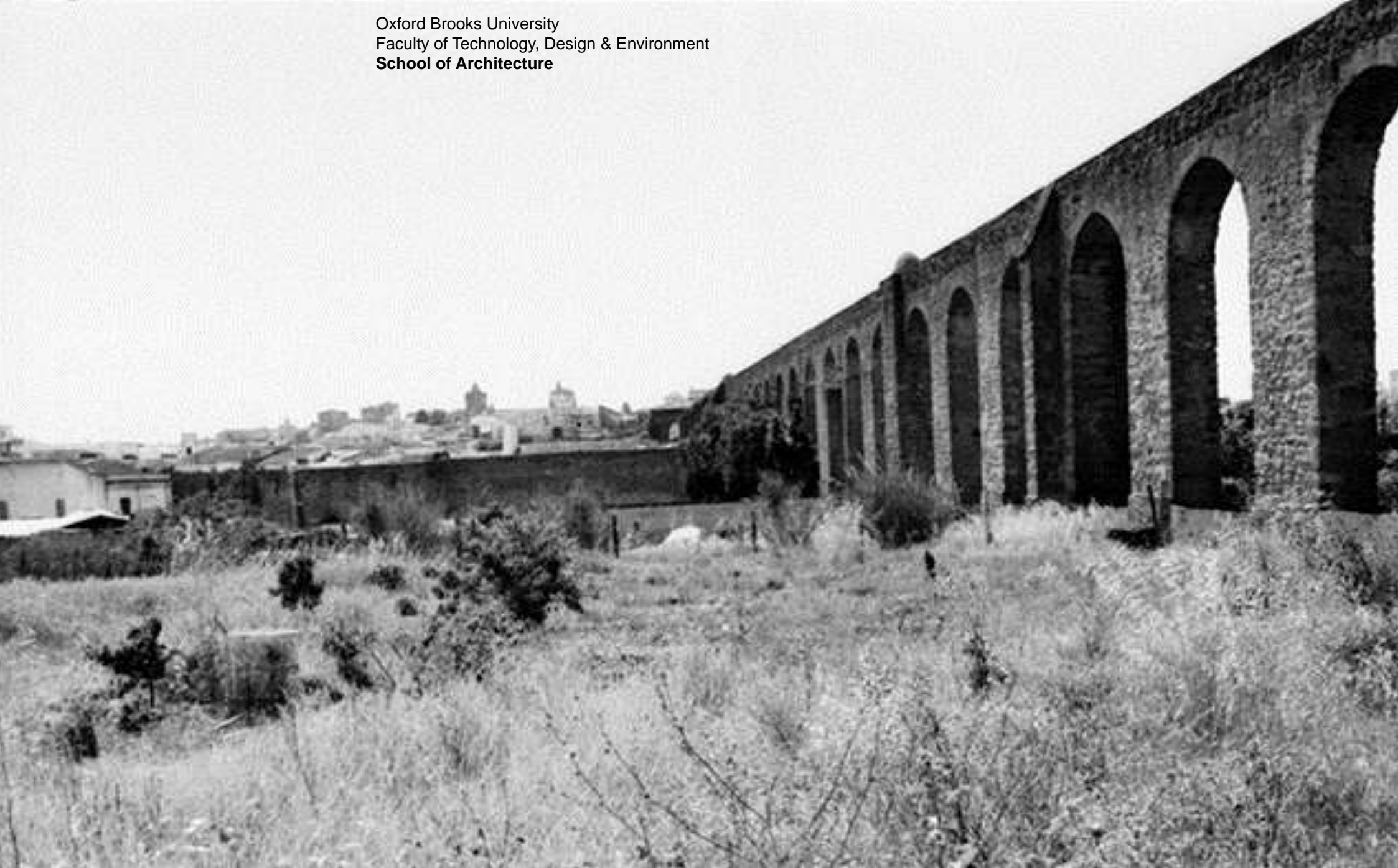


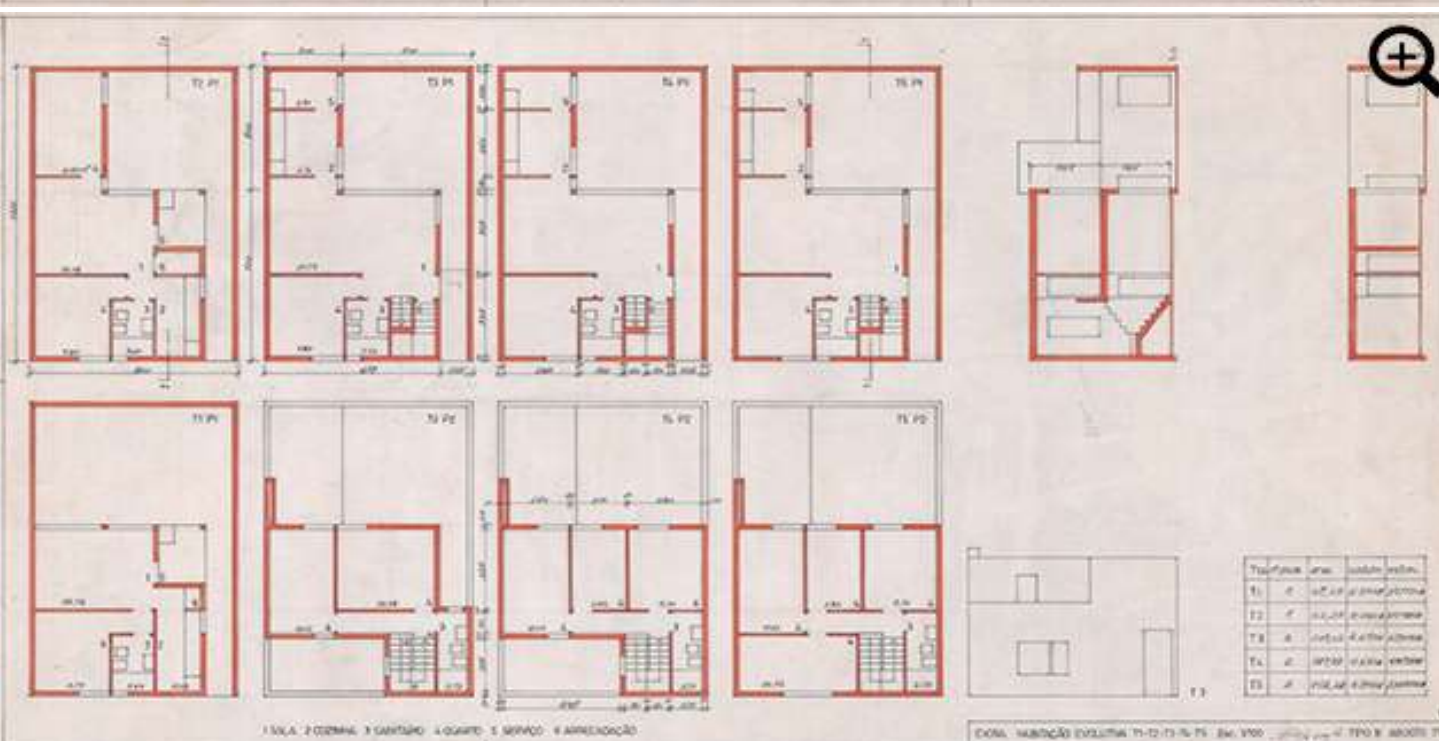
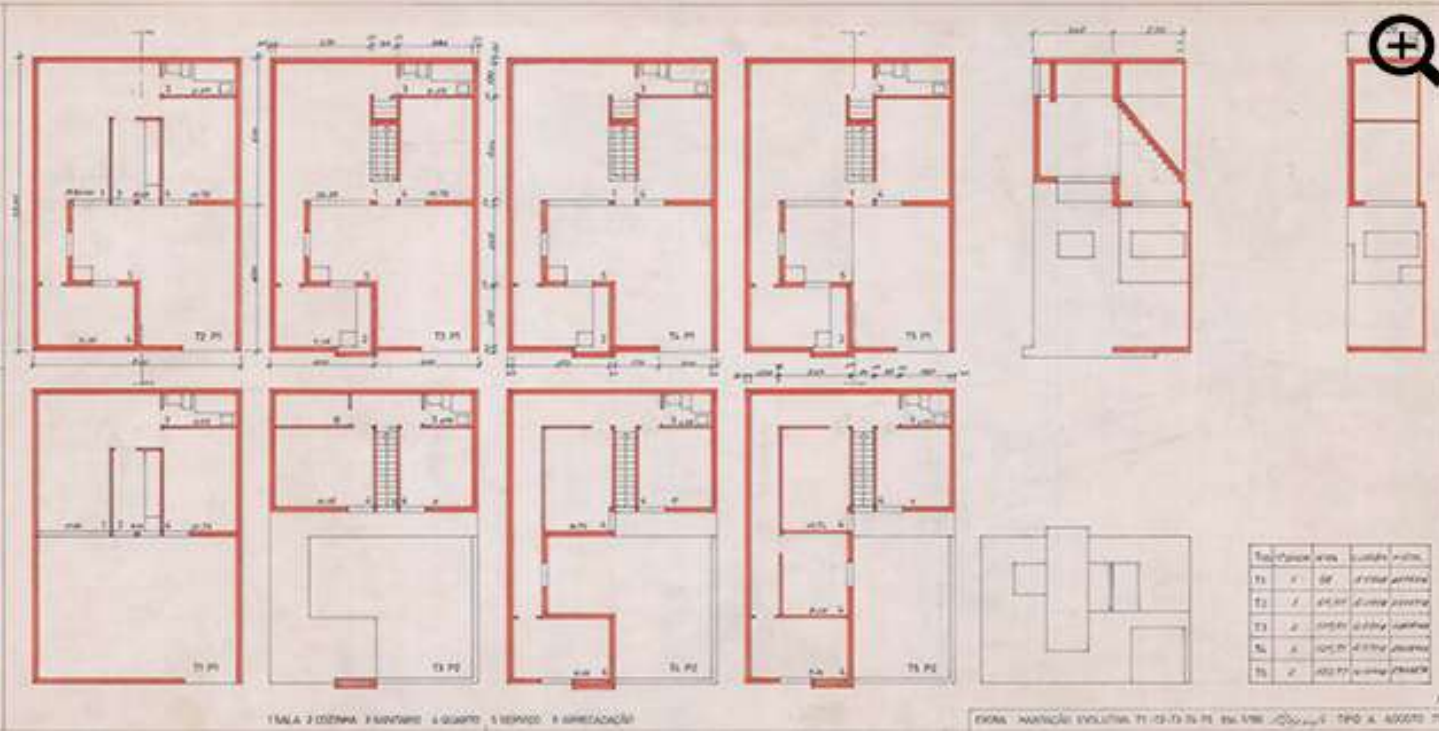
Malagueira Blocks, The Aqueduct
Évora (1977-97)

Lecture in Theory and History of Architecture



Phenomenology Subject, Experience, *Lebenswelt*





Malagueira Blocks, A and B Typology
Évora (1977-97)

Lecture in Theory and History of Architecture

Phenomenology
Subject, Experience, *Lebenswelt*













Carlos Ramos Pavilion
(1985-86)

Lecture in Theory and History of Architecture

Phenomenology
Subject, Experience, *Lebenswelt*





Library at University of Aveiro
Aveiro (1988-95)

Lecture in Theory and History of Architecture

Phenomenology
Subject, Experience, *Lebenswelt*



Gallego Contemporary Art Center
Santiago di Compostela (1988-93)

Phenomenology
Subject, Experience, *Lebenswelt*



Church Santa Maria Marco de Canavezes
(1990-96)

Phenomenology
Subject, Experience, *Lebenswelt*



Church Santa Maria Marco de Canavezes
(1990-96)

Phenomenology
Subject, Experience, *Lebenswelt*



Serralves Foundation Museum of Contemporary Art
Porto (1991-99)

Phenomenology
Subject, Experience, *Lebenswelt*









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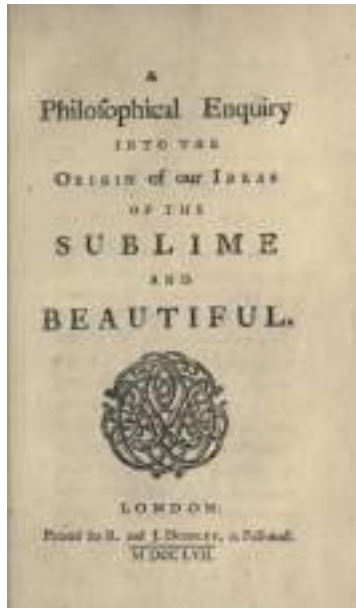
4 Contemporary Sublime

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System Evolution, Crisis and Instability

6 Q&A



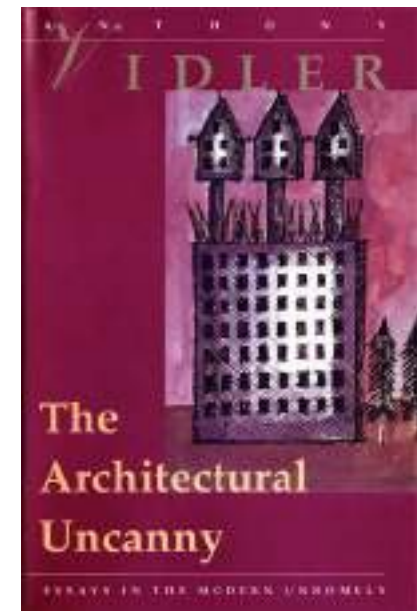
1757



1790

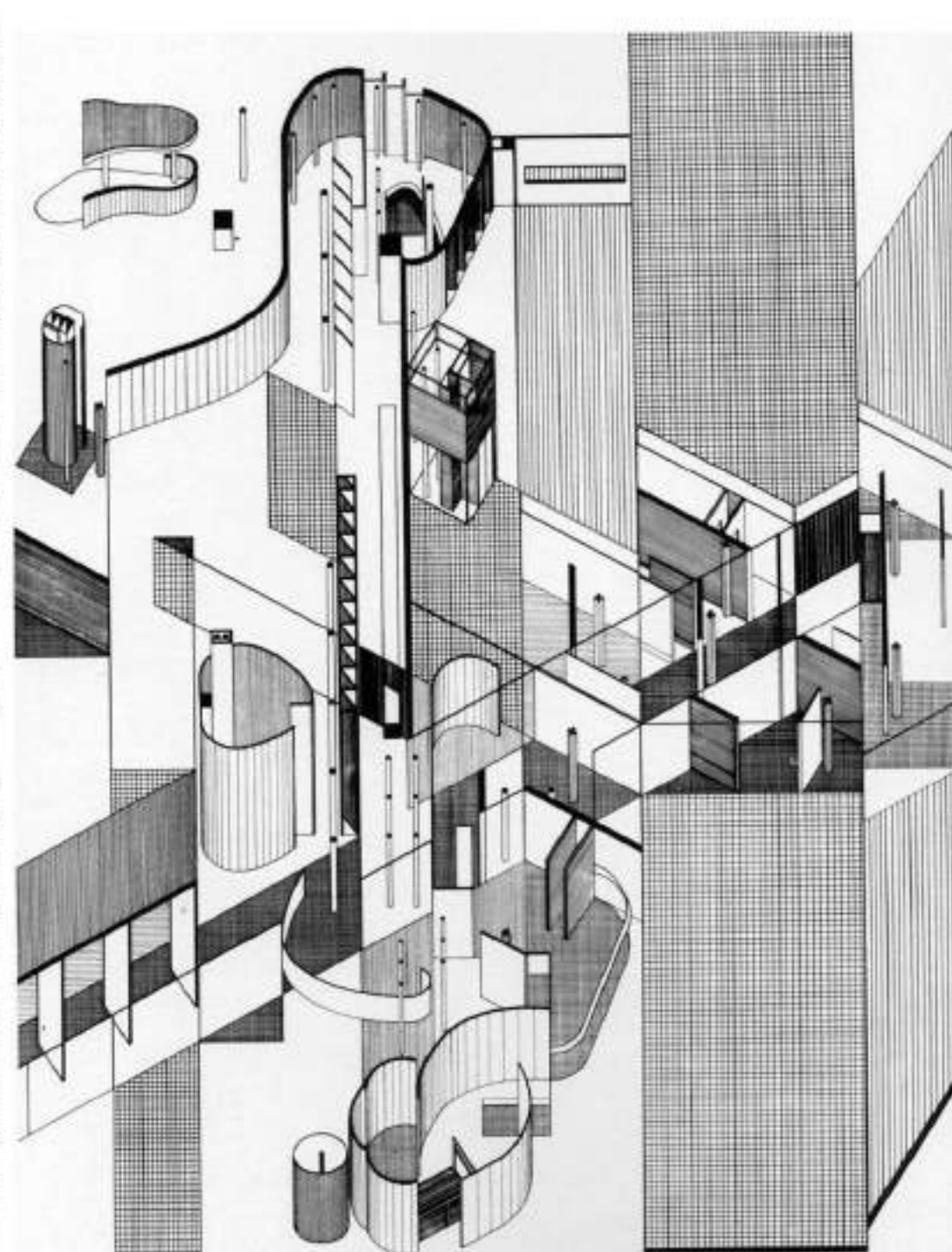
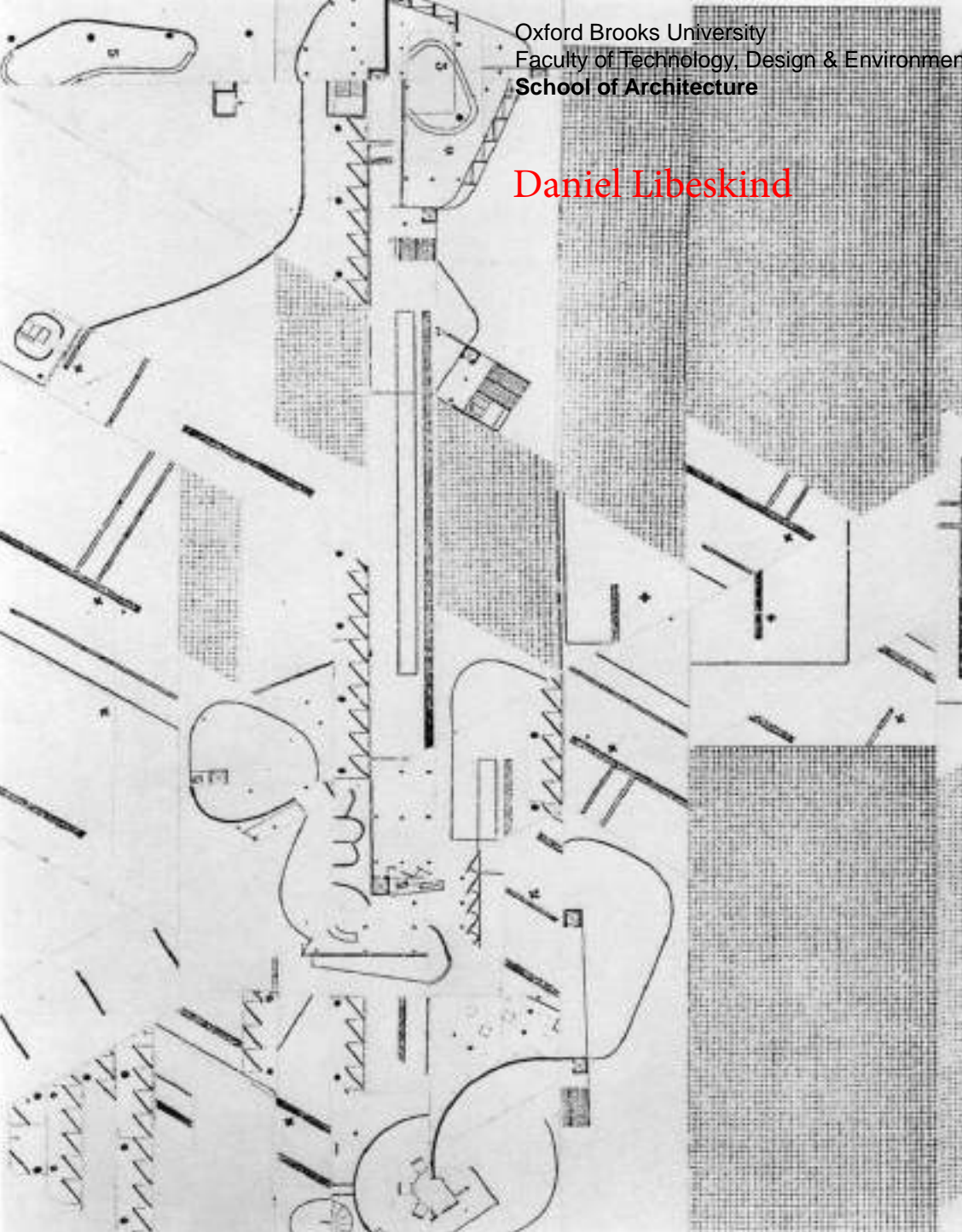


1907



1992

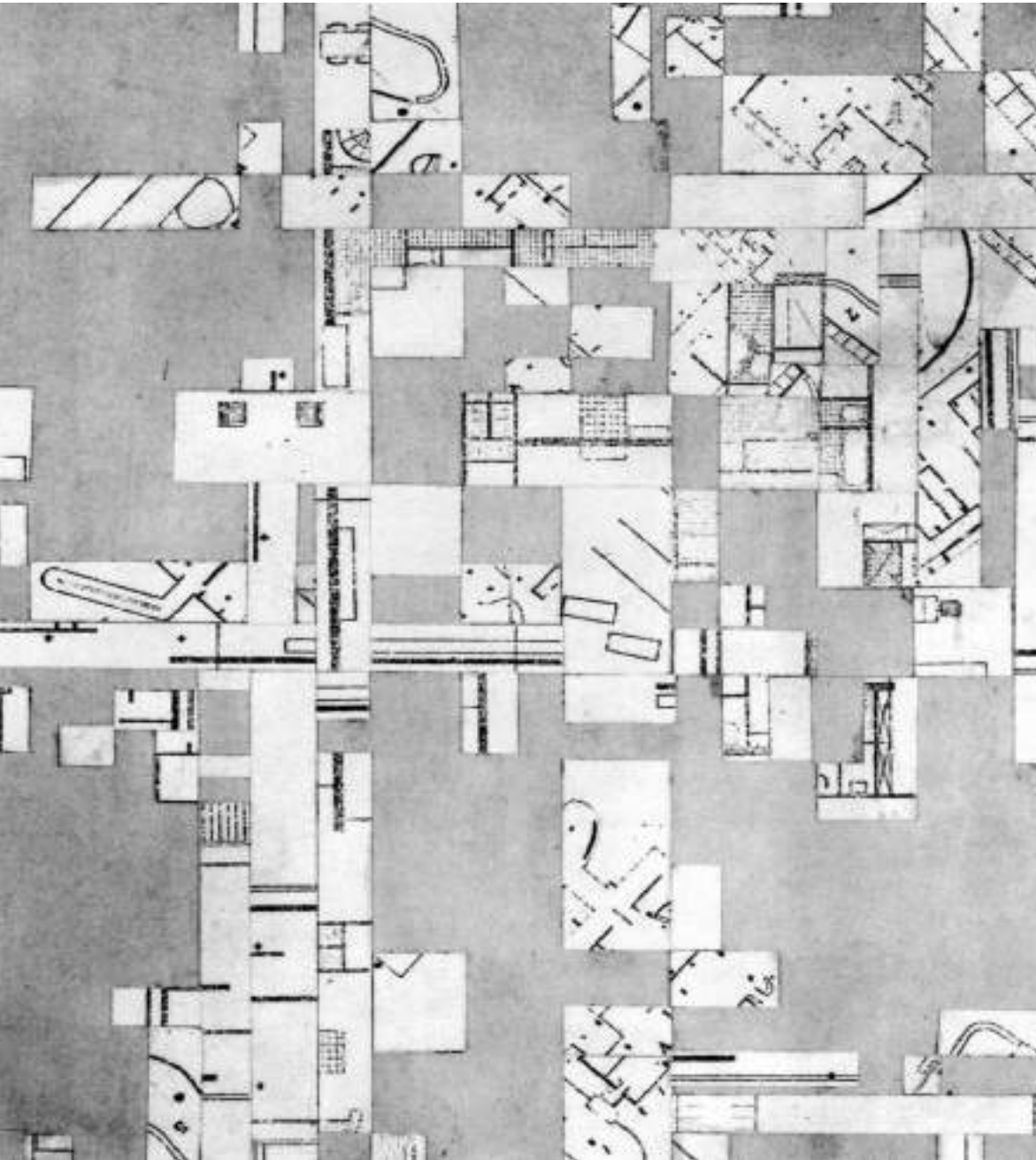
Daniel Libeskind



Daniel Libeskind, "Collage"
Starting from 1978

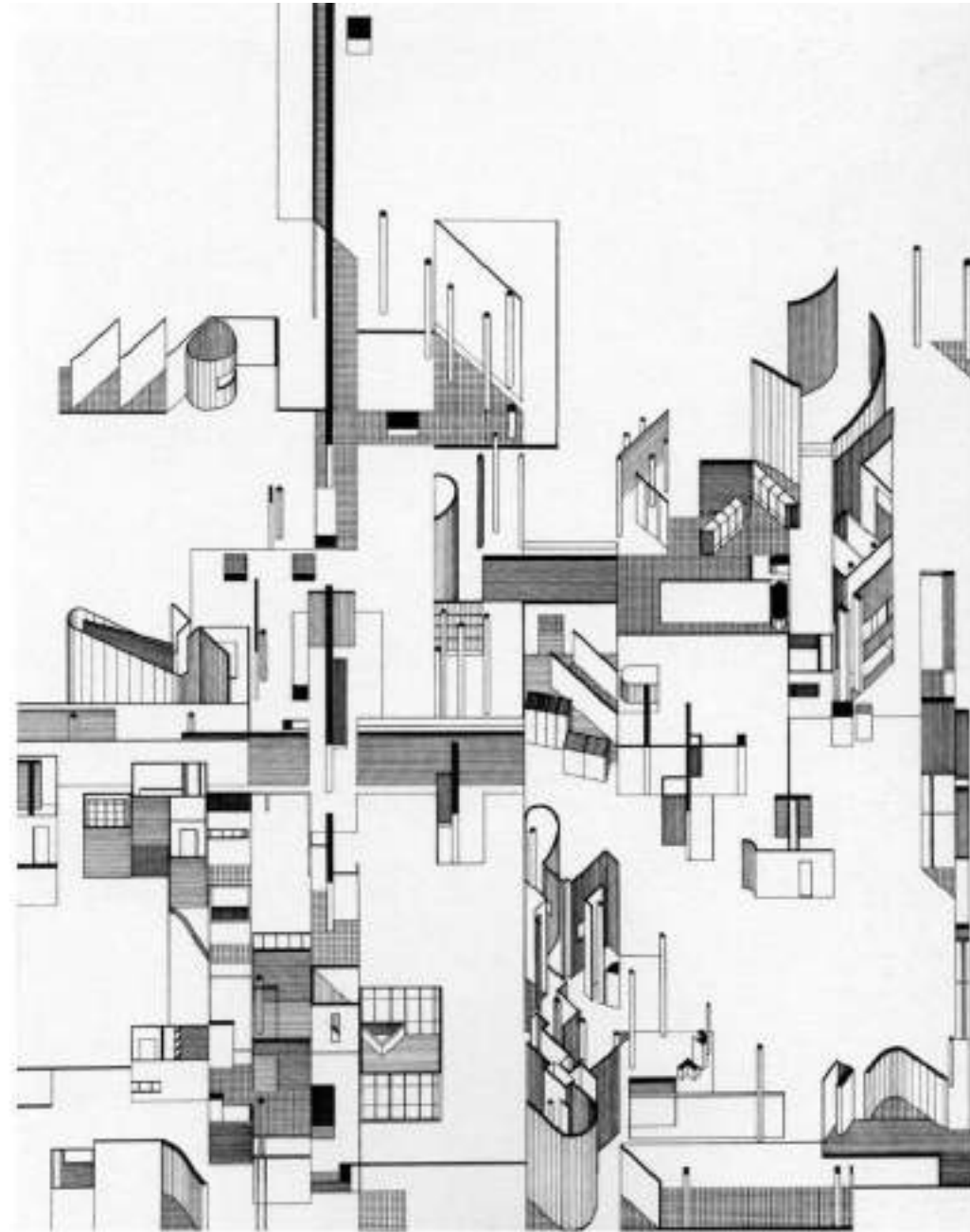
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Contemporary Sublime
Disorientation, Fragmentation, Alteration

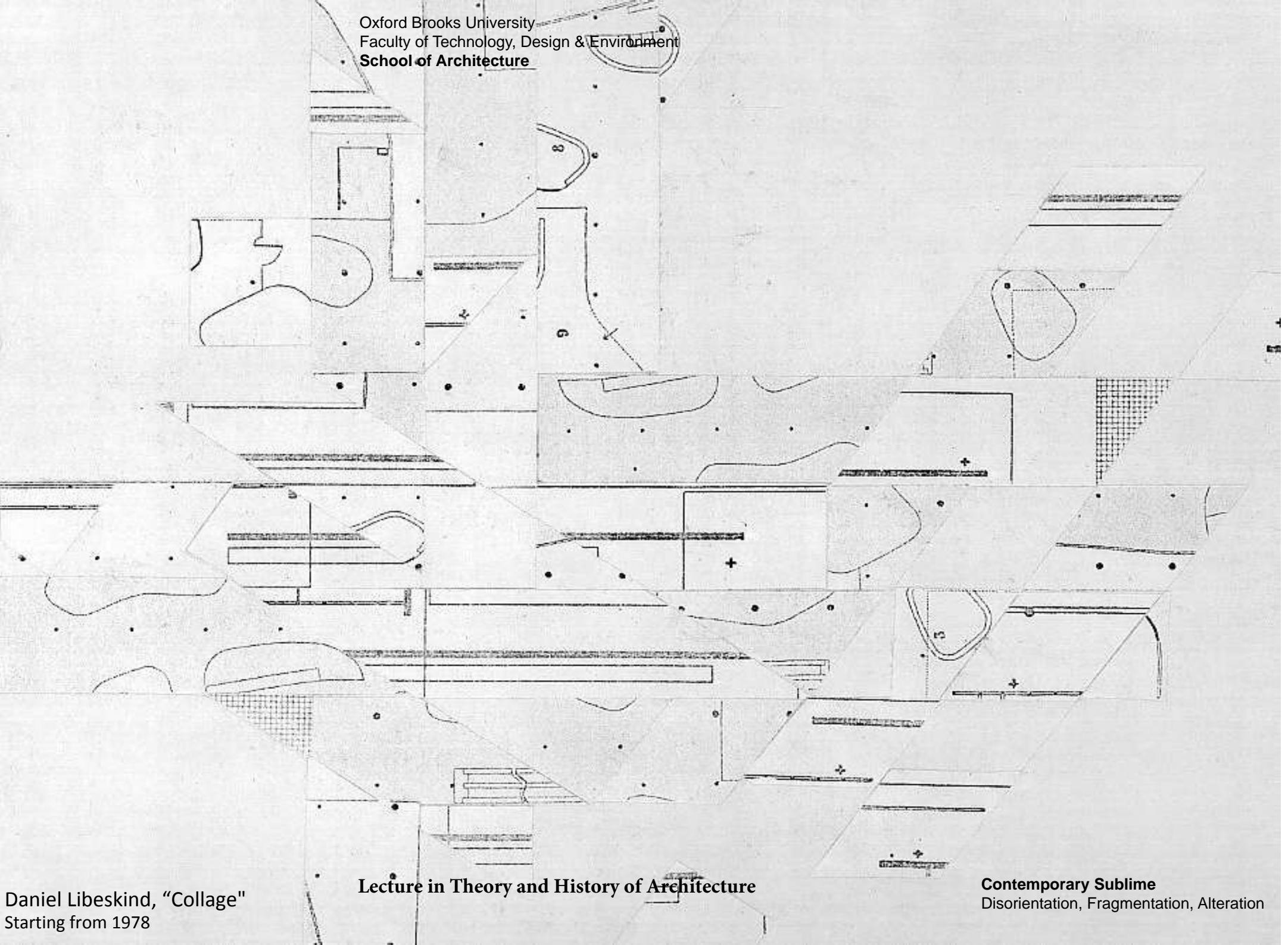


Daniel Libeskind, "Collage"
Starting from 1978

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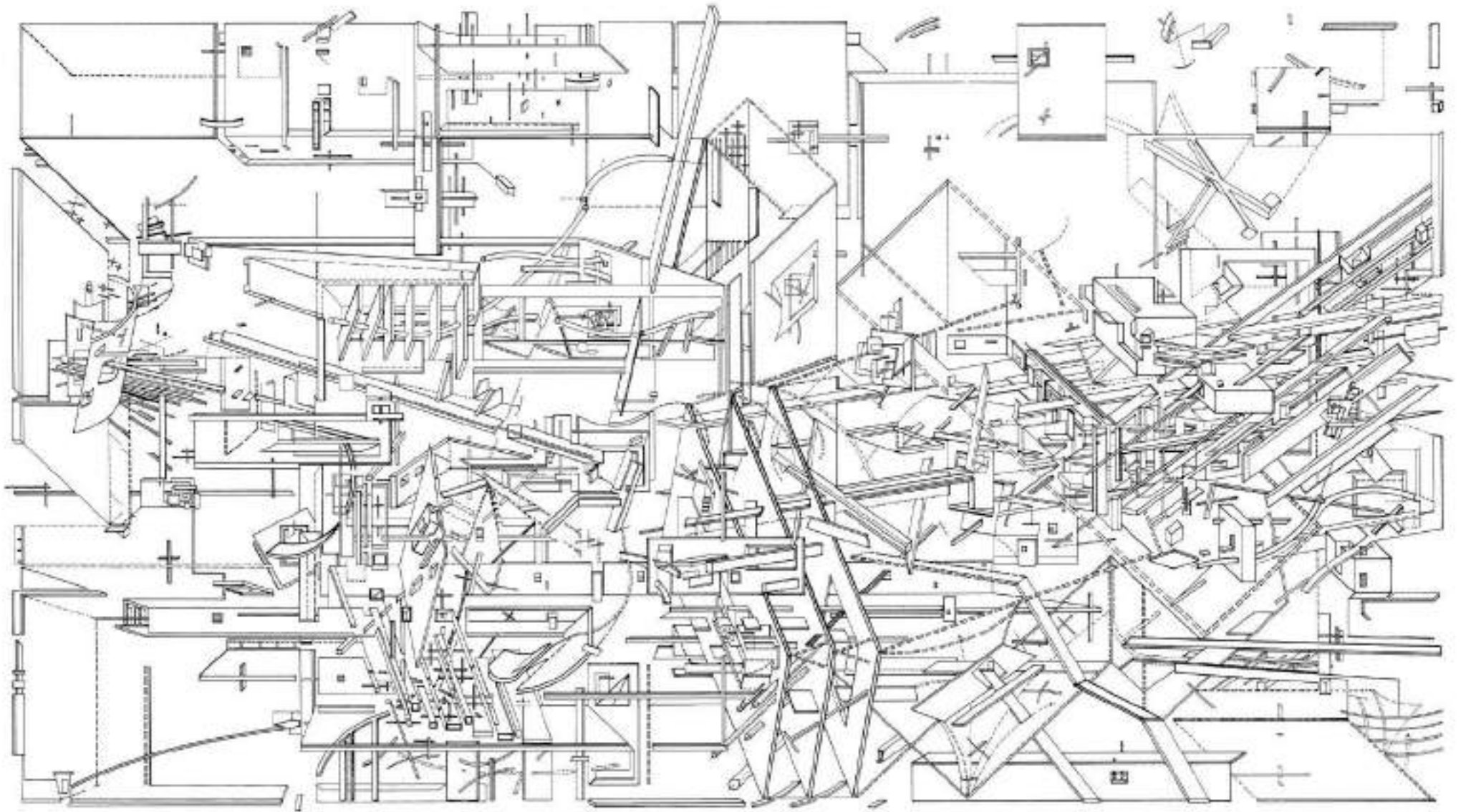
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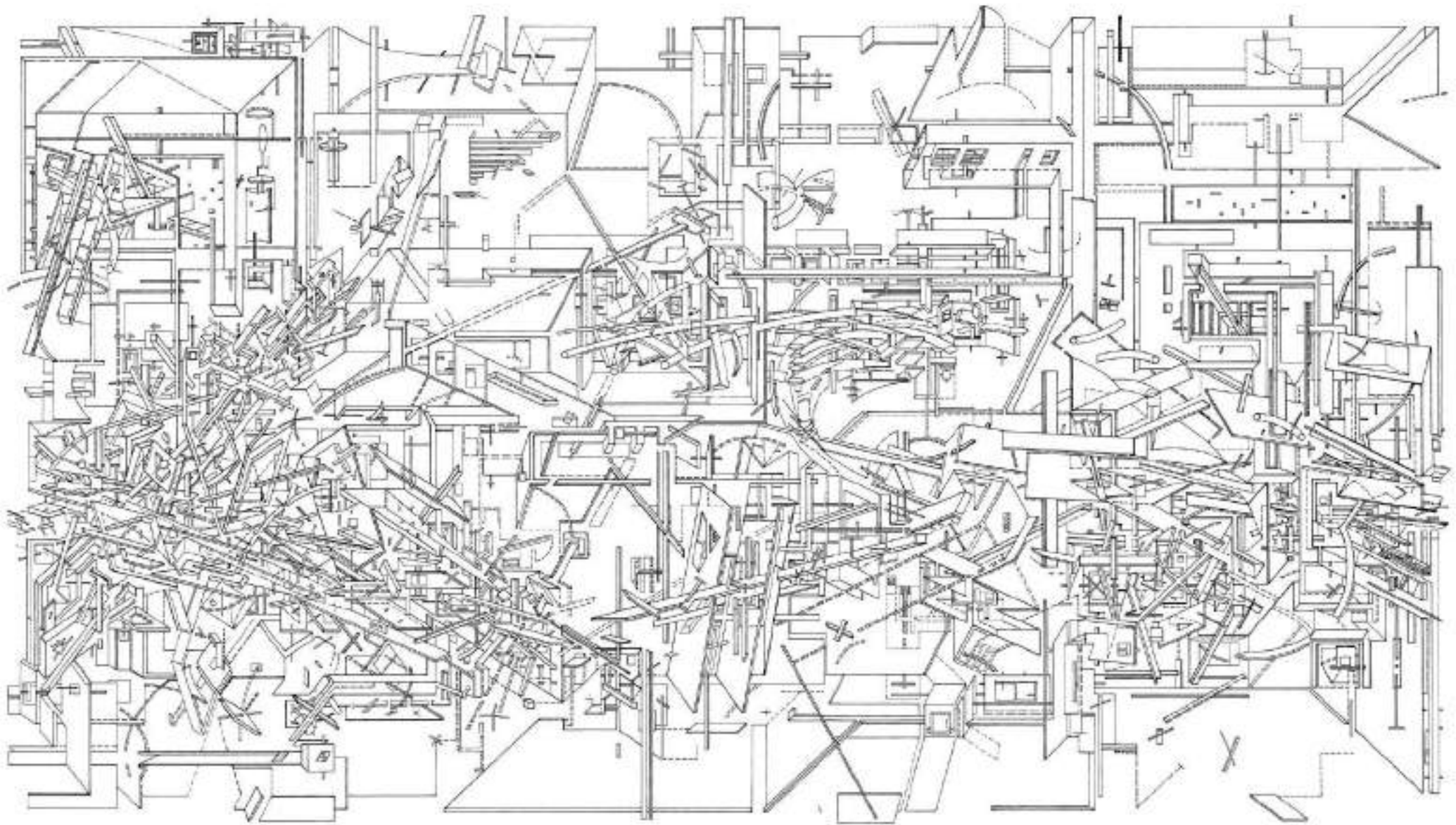
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Daniel Libeskind, "Micromegas"
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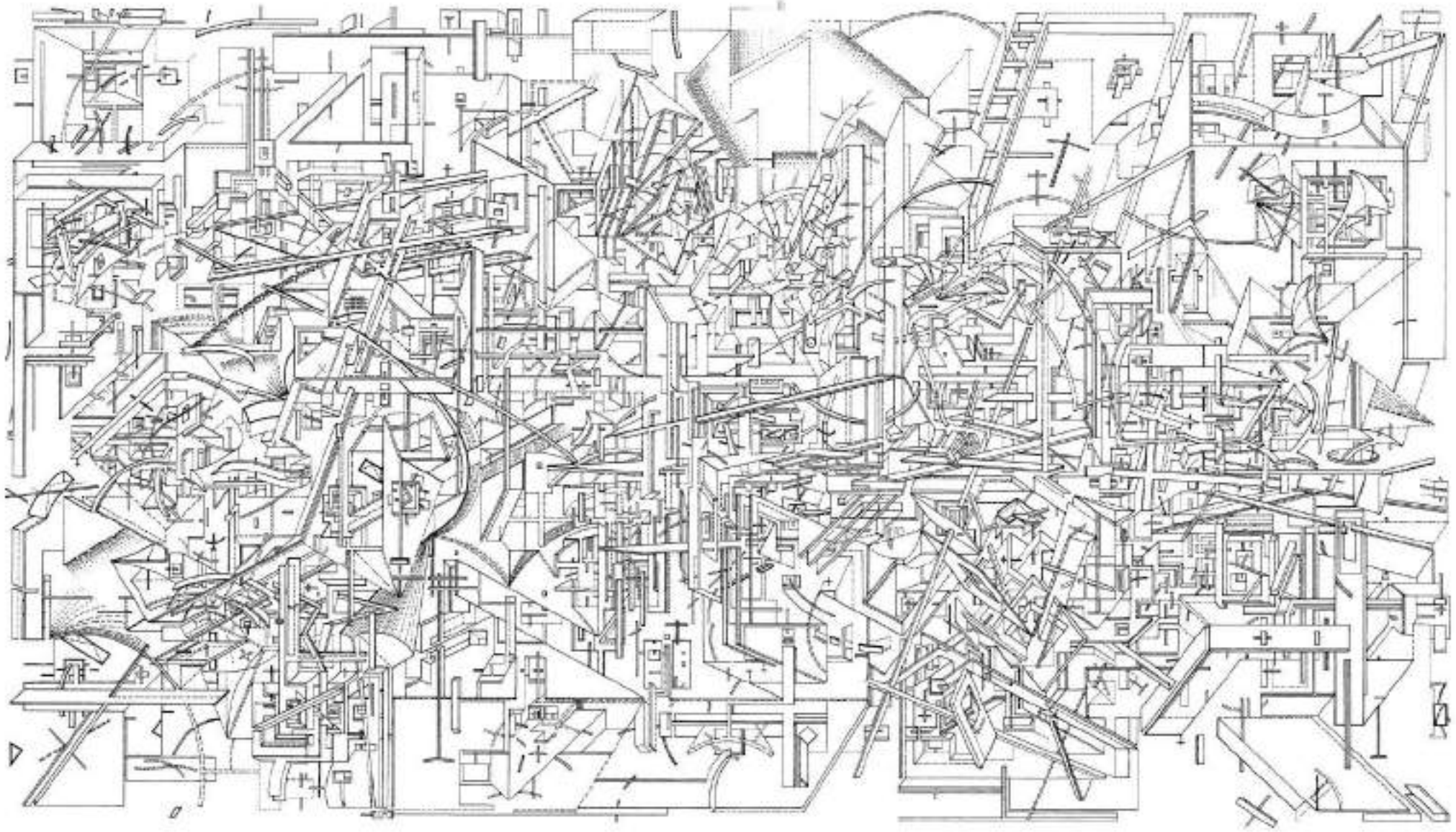
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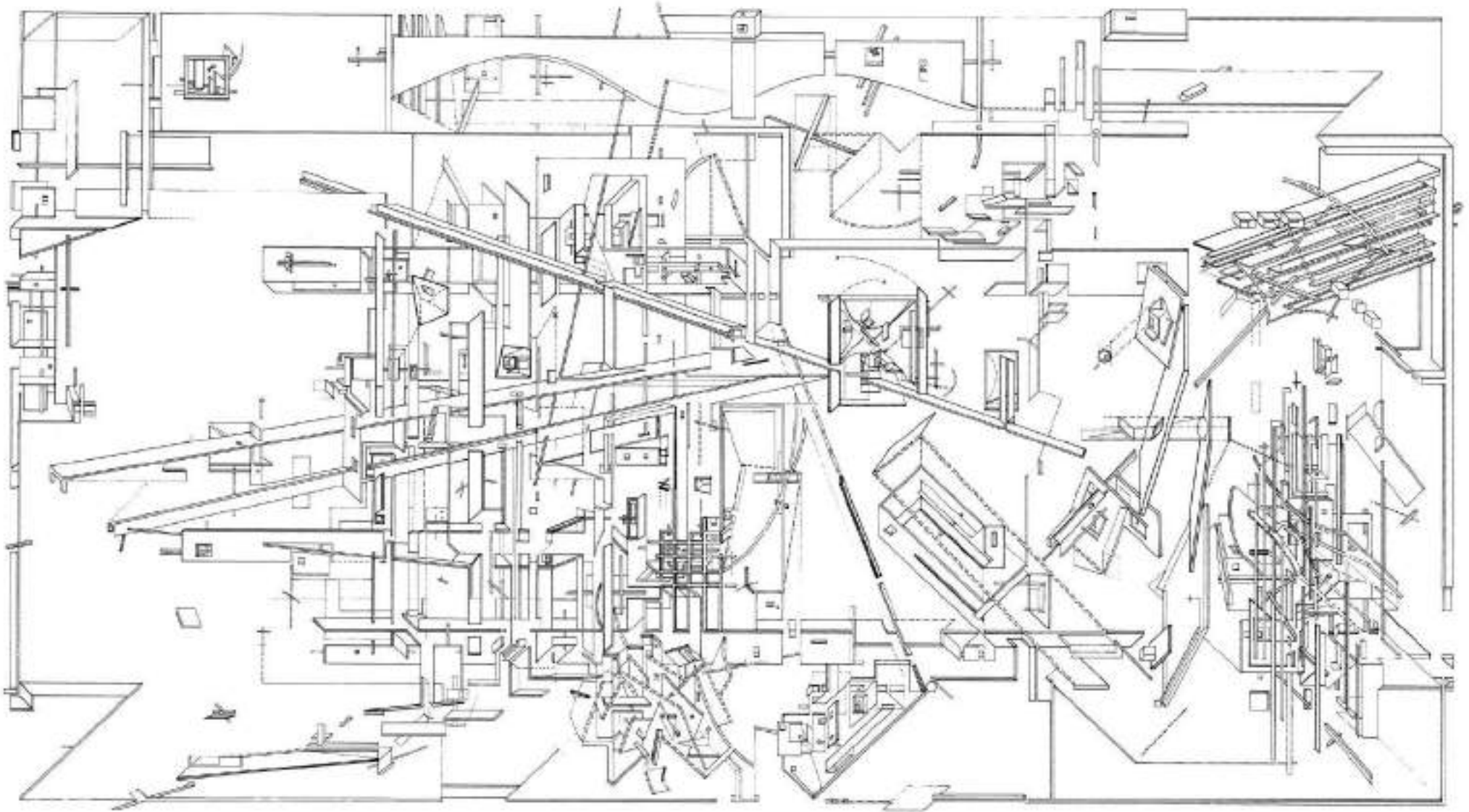
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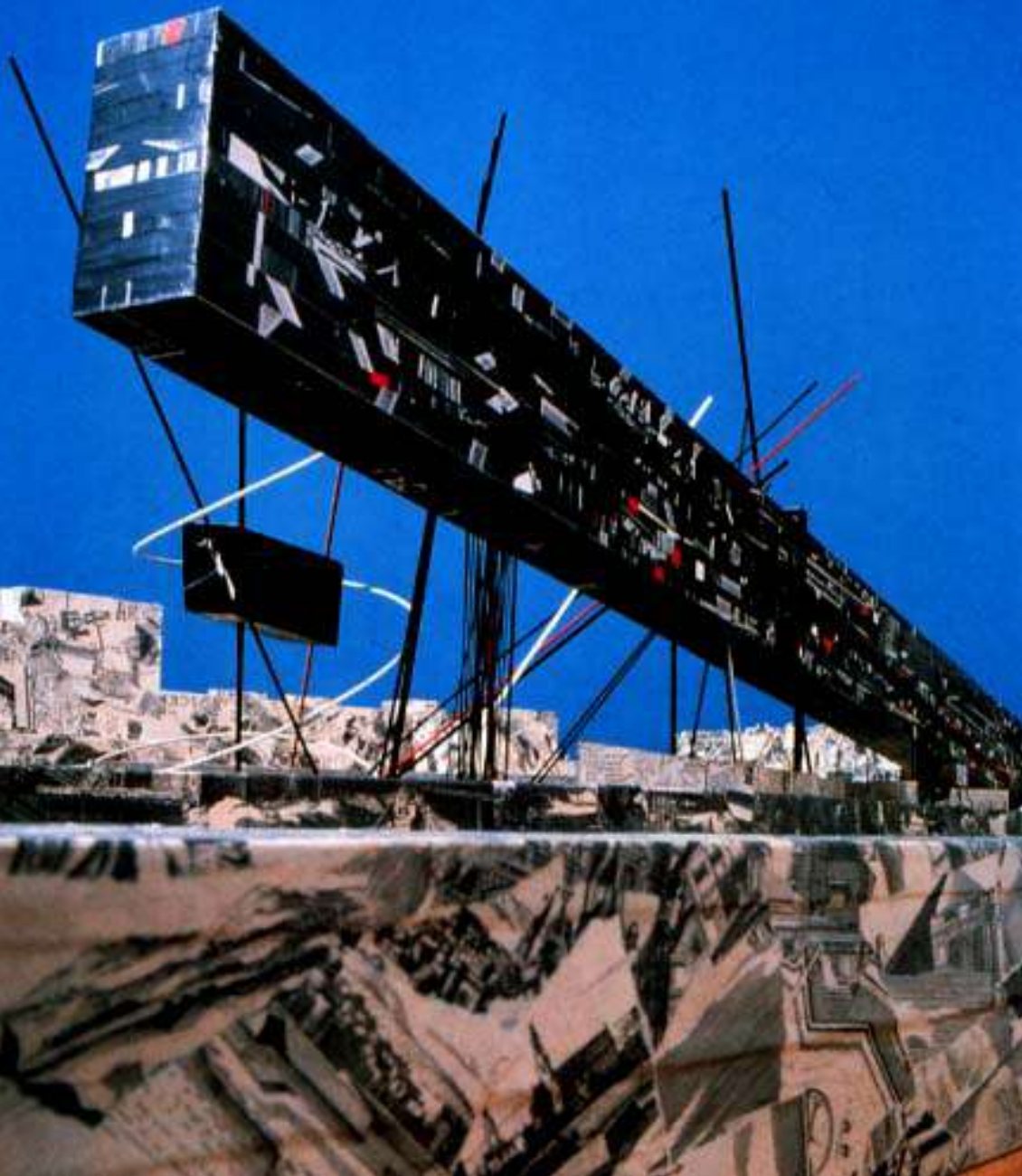


Line of Fire Installation
Geneva, 1987 - Milan, 1988

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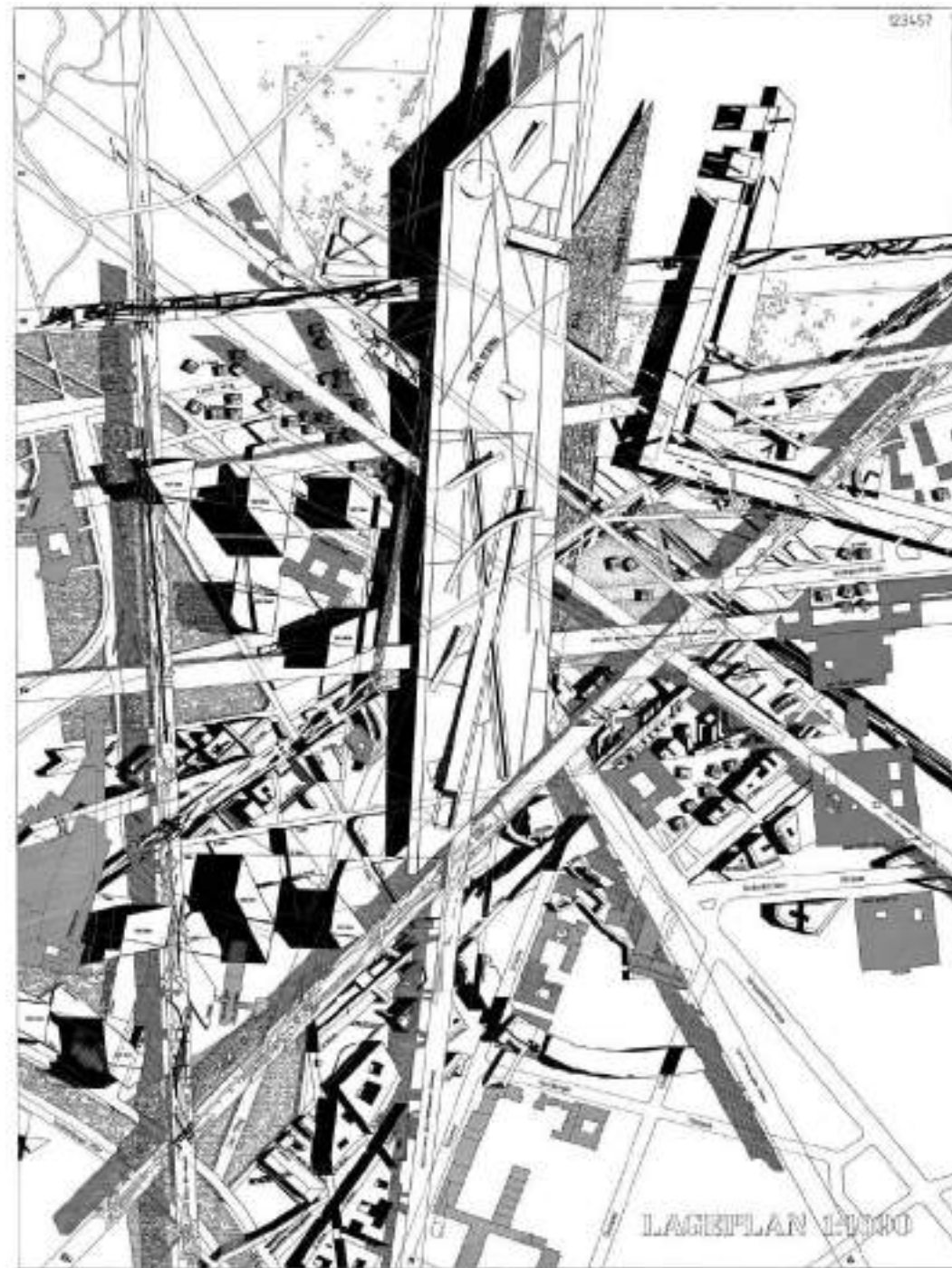


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City Edge
Berlin, 1987

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Out of Line
Potsdamer Platz, Berlin, 1991

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Jewish Museum [Title of the project: Between the Lines]
Berlin, 1989/99

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Jewish Museum
Berlin, 1989/99

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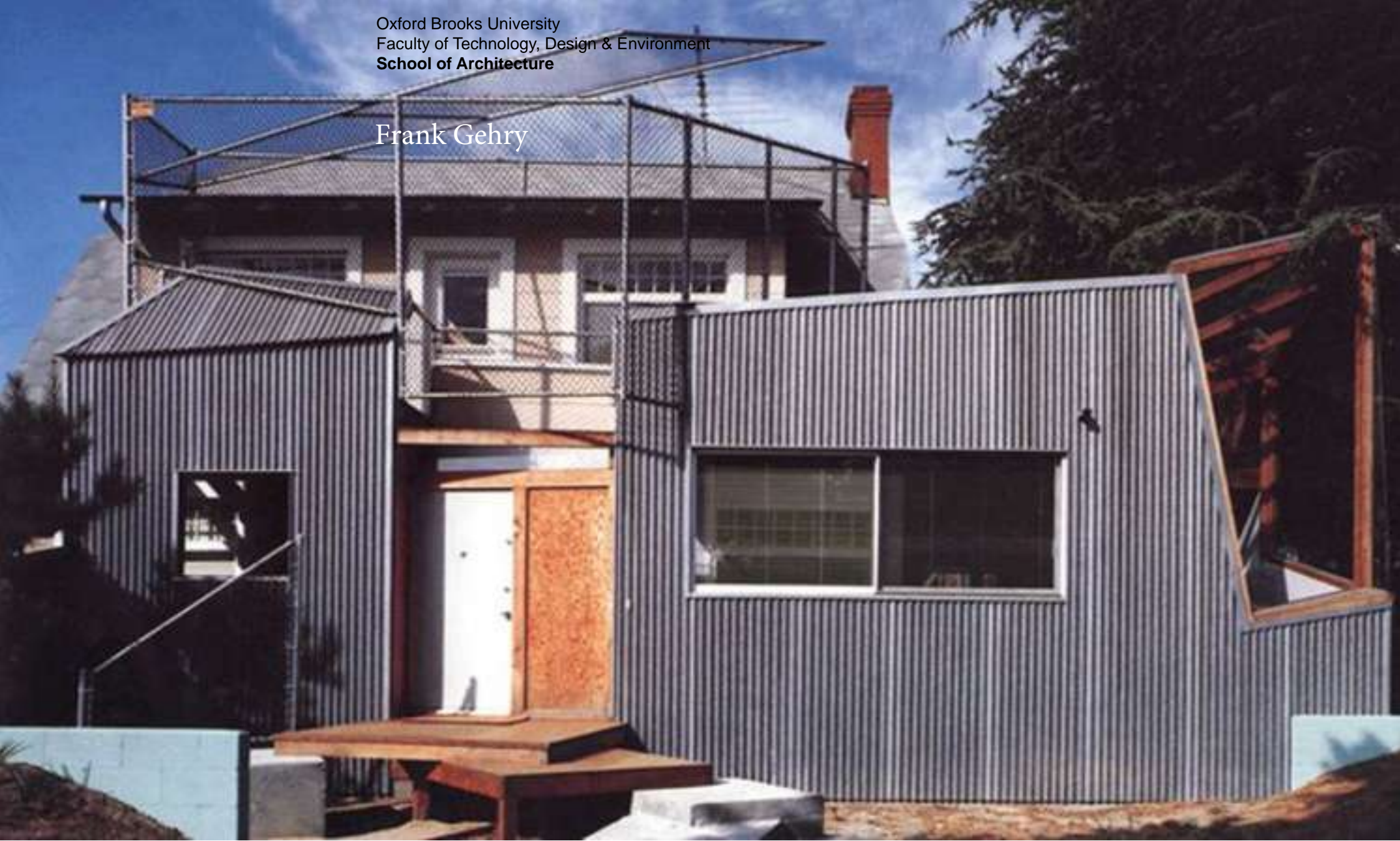
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Frank Gehry



Gehry House
Santa Monica 1977/78, 1991/94

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Gehry House
Santa Monica 1977/78, 1991/94

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Gehry House
Santa Monica 1977/78, 1991/94

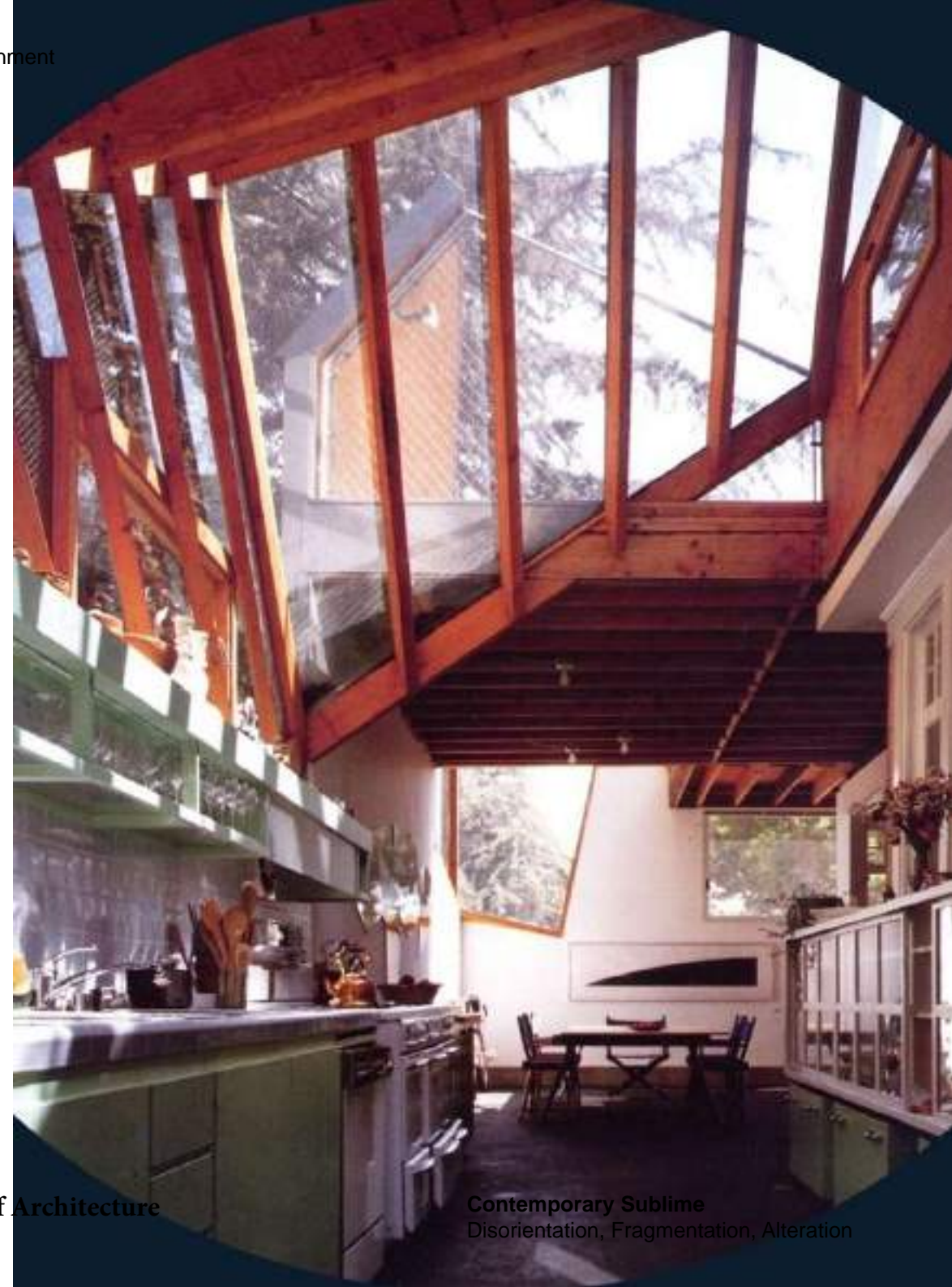
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Gehry House
Santa Monica 1977/78, 1991/94

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Contemporary Sublime
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Gehry House
Santa Monica 1977/78, 1991/94

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American Center
Paris, 1988/94

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Chiat/Day/Mojo Office
Venice, 1975, 1989/9

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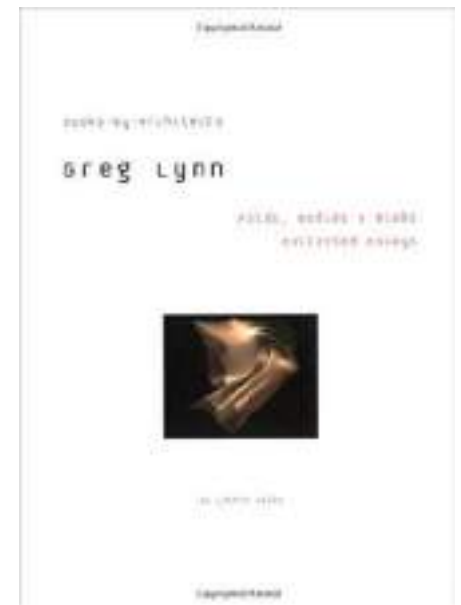
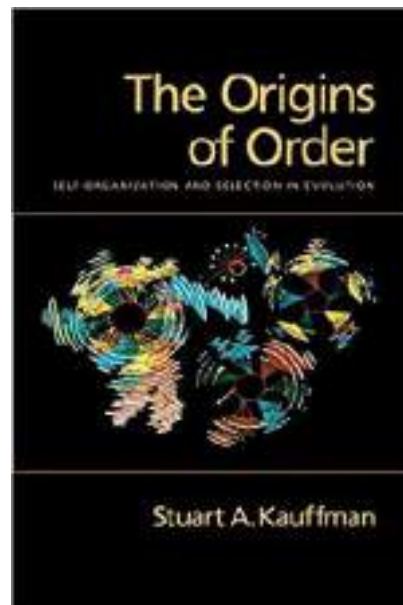
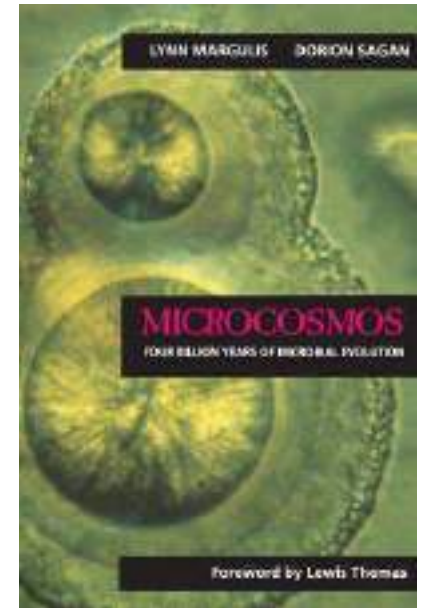
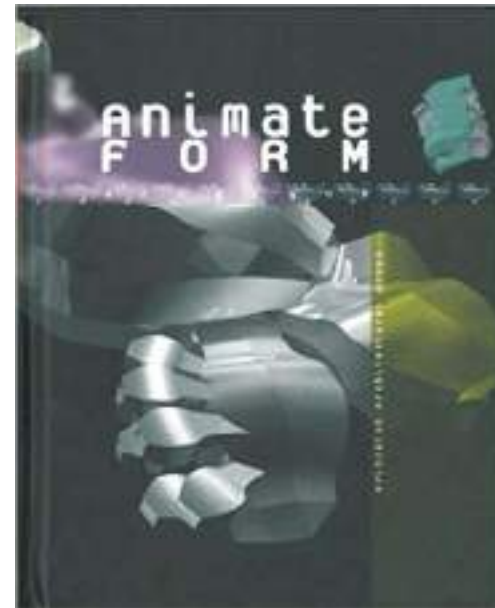
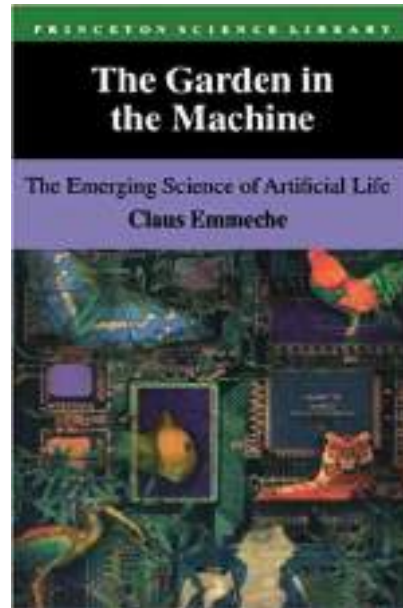
Disney Center Concert Hall
Los Angeles, 1987/1999

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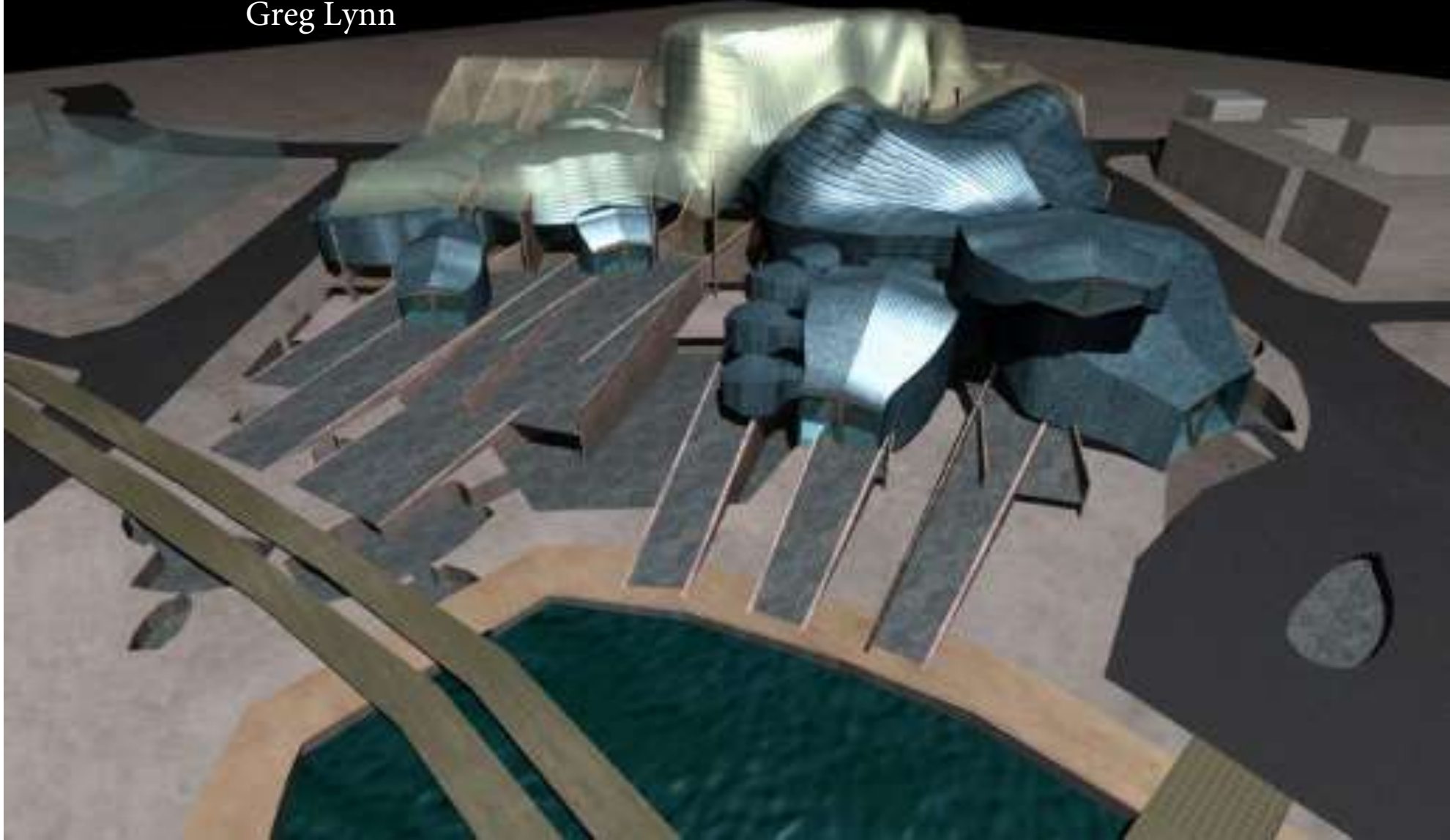




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Greg Lynn

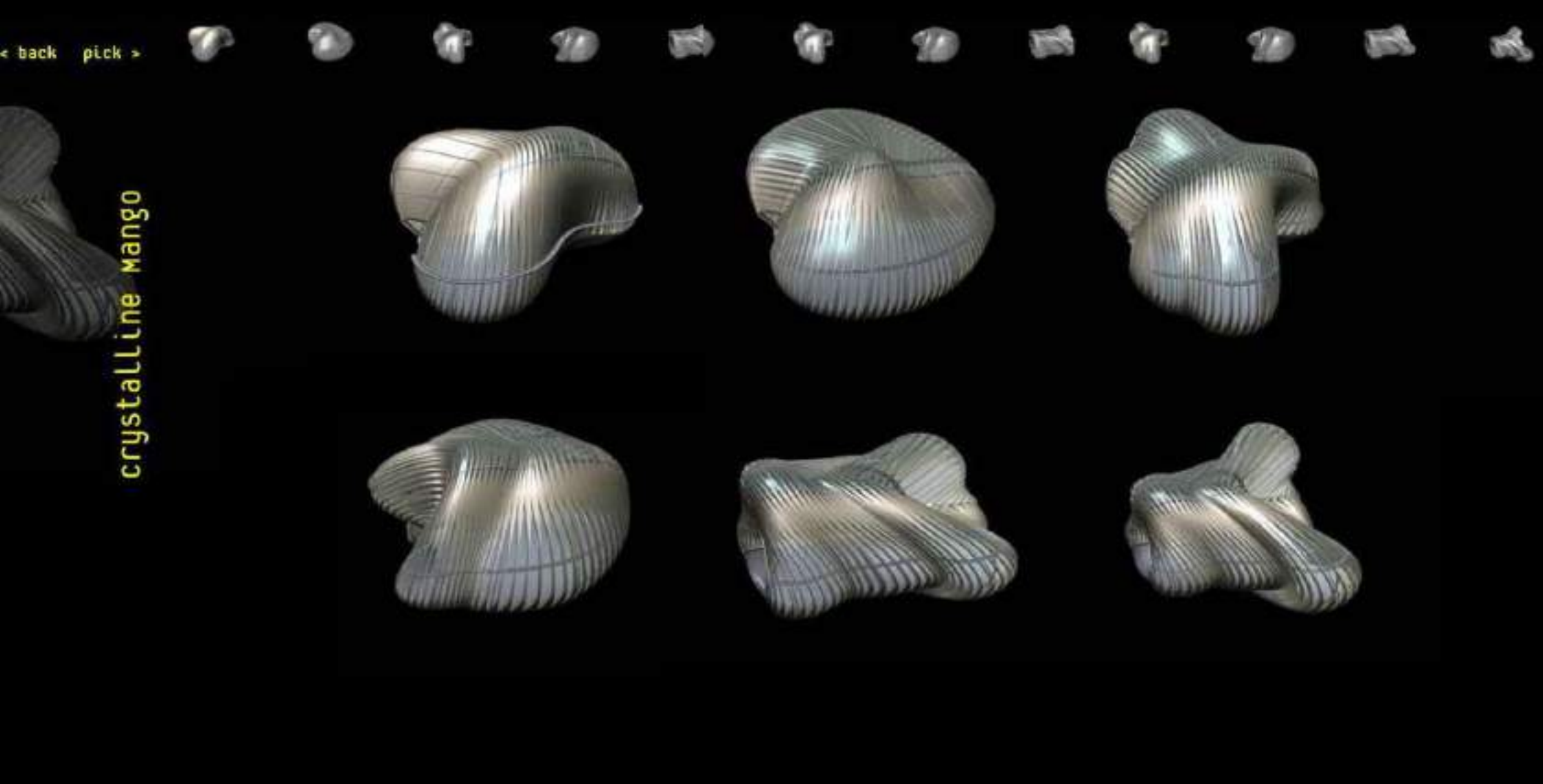


Cardiff Opera House
Cardiff, 1994

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The Predator
in collaboration with Fabian Marcaccio at Wexner CVA, 1999

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New Paradigm in the Postmodern Paths

2 Linguistic Theories

Semiotic, Semiology, Structuralism, Post-structuralism

3 Phenomenology

Subject, Experience, *Lebenswelt*

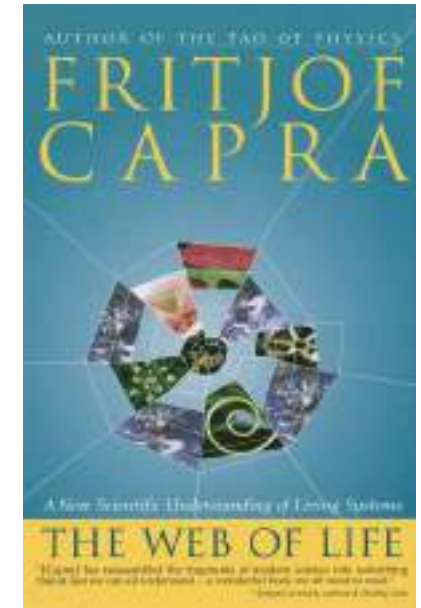
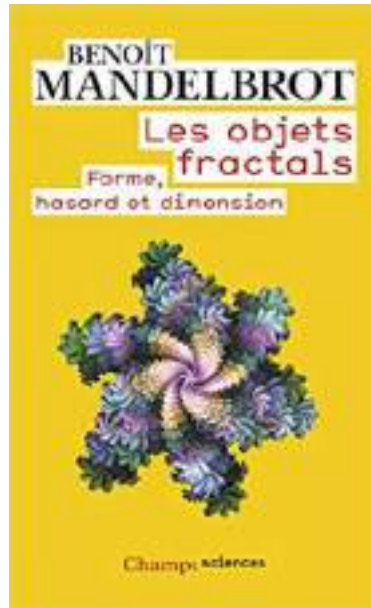
4 Contemporary Sublime

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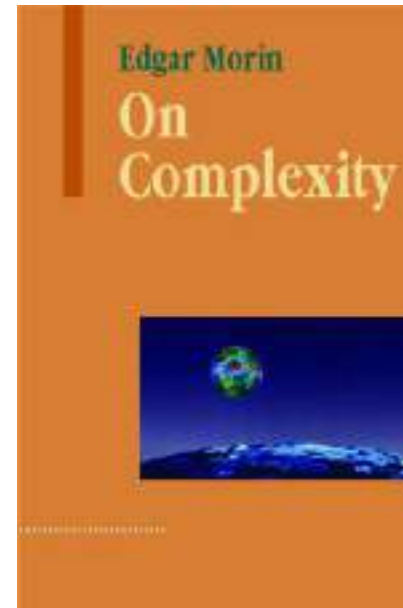
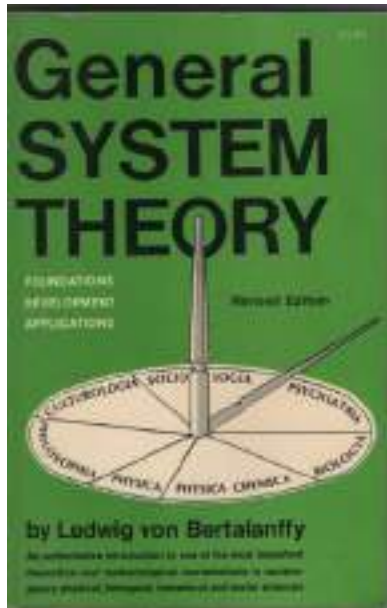
5 Complexity Sciences

System Evolution, Crisis and Instability

6 Q&A



Capra, in “The web of life”, recalling the dramatic changes in the way of thinking that involved physics at the beginning of the 20th century - with Einstein’s theory of relativity and quantum mechanics - being a supporter of ‘deep ecology’, as the experience of connection with the whole web of life, summarises some of the most important developments that, in the different disciplinary fields, have allowed the emergence of the paradigm of complexity, starting from organismic biology, ecology and the psychology of form: general systems theory (Ludwig von Bertalanffy), cybernetics and information theory (Norbert Wiener, Claude Shannon, John von Neumann); molecular biology, Ilya Prigogine’s dissipative structures, a first in-depth description of self-organising systems; the mathematics of complexity with Edward Lorenz’s deterministic chaos and fracto-geometry with Benoit Mandelbrot’s ‘self-similarity property’, up to more recent developments in the cognitive and life sciences that identify cognition with the whole process of life, including the ‘autopoiesis’ theory of Humberto Maturana and Francisco Varela.



Antichaos and Adaptation

Biological evolution may have been shaped by more than just natural selection. Computer models suggest that certain complex systems tend toward self-organization

by Stuart A. Kauffman

Mathematical discoveries are inviting changes in biologists' thinking about the origins of order in evolution. All living things are highly ordered systems; they have intricate structures that are maintained and even duplicated through a precise ballet of chemical and behavioral activities. Since Darwin, biologists have seen natural selection as virtually the sole source of order and complexity.

But Darwin could not have suspected the existence of self-organization, a recently discovered, innate property of some complex systems. It is possible that biological order reflects in part a spontaneous order on which selection has acted. Selection has modified, but was not compelled to invent, the native coherence of ontogeny, or biological development. Indeed, the capacity to evolve and adapt may itself be an

The studies supporting these conclusions remain tentative and incomplete. Nevertheless, on the basis of mathematical models for biological systems that exhibit self-organization, one can make predictions that are consistent with the observed properties of organisms. We may have begun to understand evolution as the marriage of selection and self-organization.

STUART A. KAUFFMAN has been thinking about self-organization in living things since 1965. After studying at Dornthorn College and at the University of Colorado, he went on to receive his medical degree from the University of California, San Francisco, in 1968. Since then, he has held positions at the Massachusetts Institute of Technology, the University of Chicago, and the National Cancer Institute. Kauffman is currently professor of Biochemistry and biophysics at the University of Pennsylvania School of Medicine and external professor at the Santa Fe Institute in New Mexico. In 1987 he received a John D. and Catherine T. MacArthur Fellowship.

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can be a force in evolution, a brief overview of complex systems is necessary. During the past two decades, there has been an explosion of interest in such systems throughout the natural and social sciences. The efforts are still so new that there is not yet even a generally accepted, comprehensive definition. Many of the people who study them, my many colleagues at the Santa Fe Institute in New Mexico, have made substantial progress.

Biology is filled with complex systems: the thousands of genes regulating one another within a cell; the network of cells and molecules

tion of complexity.

Yet certain properties of complex systems are becoming clearer. One phenomenon that in some cases has already caught the popular imagination is the randomizing force of deterministic "chaos." Because of chaos, dynamic, nonlinear systems that are orderly at first may become completely disorganized over time. Initial conditions that are very much alike may have markedly different outcomes. Chaos in the weather is exemplified by the so-called butterfly effect: the idea that a butterfly flapping its wings in Brazil can lead to a tornado in Texas.

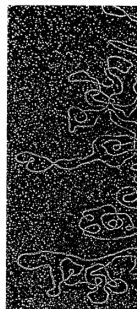
Another property of complex systems is the way they mediate the immune response; the billions of neurons in the neural networks underlying behavior and learning; the ecosystem whose replete with coexisting species. Of these, the self-regulating network of a genome (the complete set of genes in an organism)

Chaos, fascinating as it is, is only part of the behavior of complex systems. There is also a counterintuitive phenomenon that might be called antichaos: some very disordered systems spontaneously "crystallize" into a high degree of order. Antichaos, I believe, plays an important part in biological development and evolution.

The discovery of antichaos in bio-

begin more than 20 years ago with my efforts to understand mathematically how the fertilizing egg differentiates into multitudinous cell types. Since then, mathematicians, computer scientists and solid state physicists, among

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Andrea Canclini

Complexity Sciences

System Evolution, Crisis and Instability

UN Studio







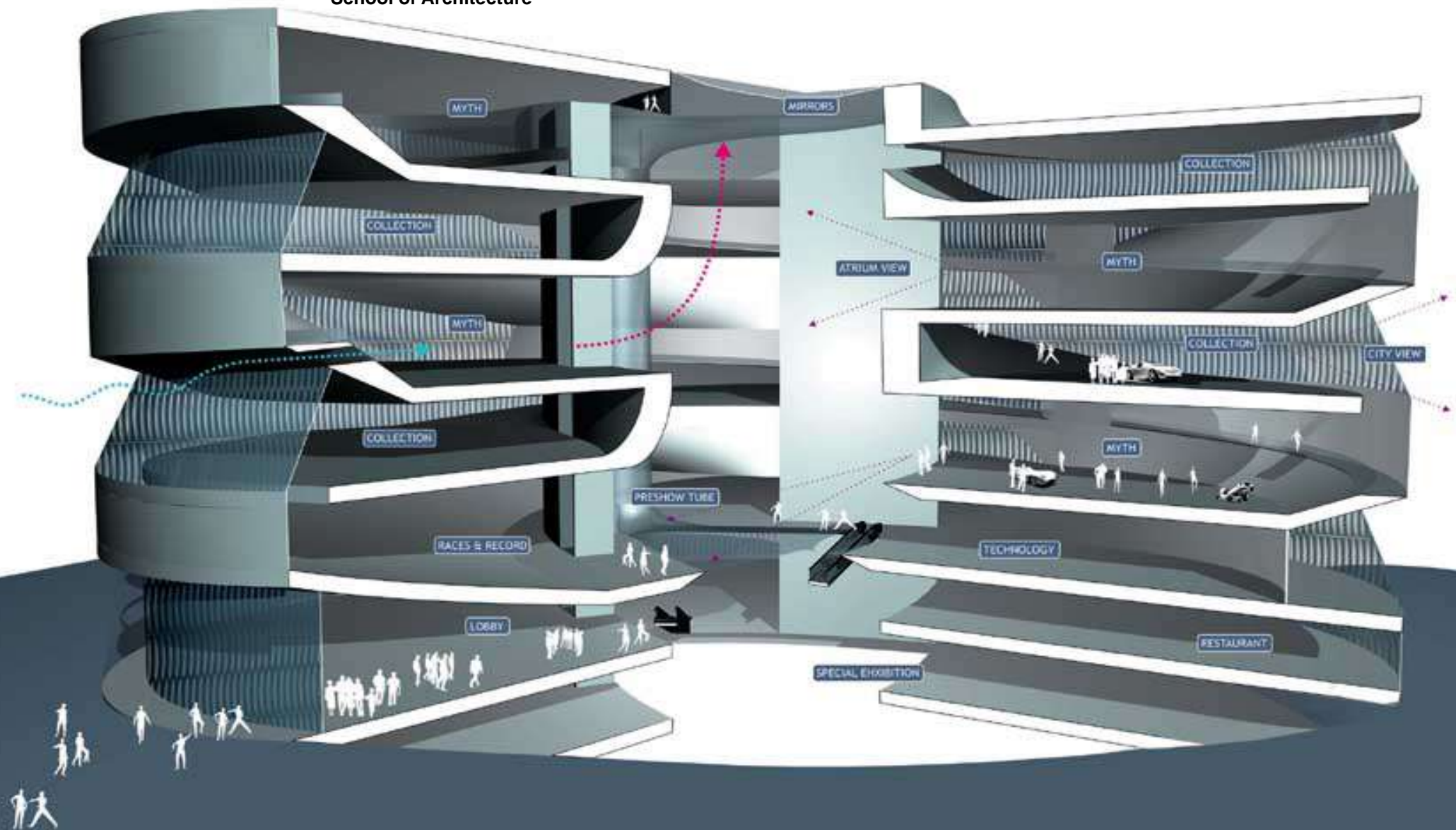


















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