Fabrications : Bodybuildings, San Francisco Museum of Modern Art, Full scale, Wexner Center for the Arts, Columbus, The tectonic garden, Museum of Modern Art, New York

With essays by Aaron Betsky ... [et al.]

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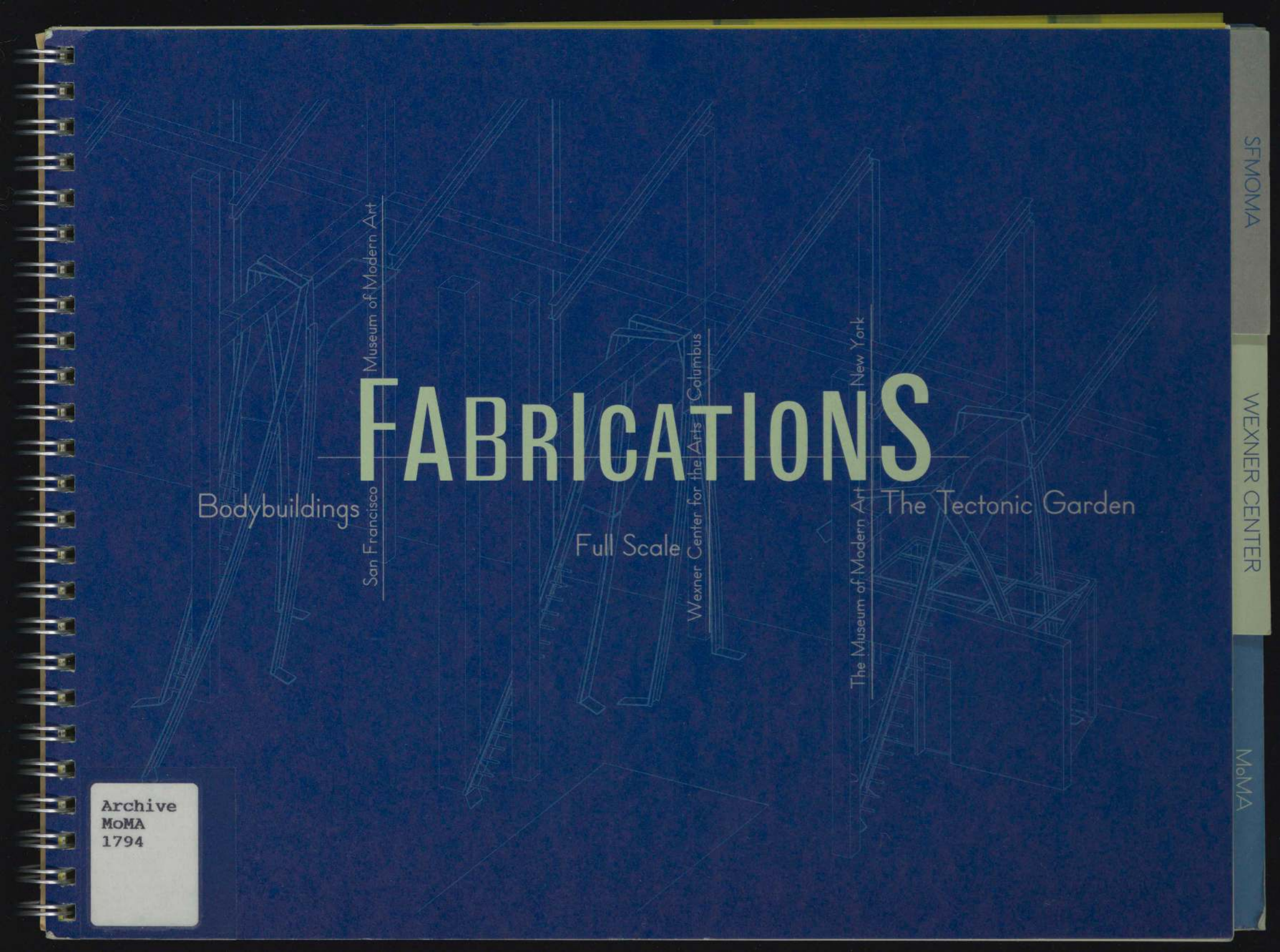

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Bodybuildings — San Francisco Museum of Modern Art

Full Scale — Wexner Center for the Arts, Columbus

The Tectonic Garden — The Museum of Modern Art, New York

WITH ESSAYS BY AARON BETSKY, PAT MORTON, TERENCE RILEY, AND MARK ROBBINS

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Fabrications is published in conjunction with an exhibition of the same name organized and presented simultaneously by The Museum of Modern Art, New York; San Francisco Museum of Modern Art; and Wexner Center for the Arts, The Ohio State University, Columbus.

This publication is made possible by the Contemporary Exhibition Fund of The Museum of Modern Art, New York, established with gifts from Lily Auchincloss, Agnes Gund and Daniel Shapiro, and Jo Carole and Ronald S. Lauder. Additional support is provided by the Graham Foundation for Advanced Studies in the Fine Arts.

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29 January–28 April 1998

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San Francisco Museum of Modern Art
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Edited by Karen Jacobson
Design and Production by Lorraine Wild, Amanda Washburn, Ninotchka Regets

Cover: Eric Owen Moss, "Dancing Bleachers" sketch for *Fabrications* installation, Wexner Center, 1997

Contents

Foreword and Acknowledments

The word *fabricate* is variously defined as to make or create, to construct by combining or assembling various parts, or to make up for the purpose of deception. The title of this exhibition, *Fabrications*, deliberately connotes something of each of these meanings. The exhibition's intent is to offer an appraisal of contemporary architectural practice by highlighting the unique physical properties of the art form—the material, spatial, and tectonic qualities that are its defining attributes. Departing from the customary reliance upon models, plans, drawings, and photographs to tell the story of architecture, the exhibition presents full-scale, site-specific installations, taking its premise (as well as its name) from the generative force of built form itself.

This is a somewhat unusual format for the presentation of architecture in museums, but one that we hope will effectively and powerfully illuminate the place of architecture and design within contemporary cultural expression. Architecture may well begin with theory, ideas, drawings, and models, but its ultimate iteration is the making of our physical environment. The installations in the show, designed by twelve different architectural teams, strive to find the art within that effort: to reflect that manner of building that makes us aware of our place and that opens our eyes to things that usually escape our notice. This is architecture rooted in a specific experience of space, in material, and in an understanding of physical forces.

Despite its appearance at multiple venues, *Fabrications* is not a traveling exhibition. It is a collaborative presentation taking place simultaneously at three different institutions, each of which has a longtime commitment to architecture and design programs. The starting point for the three organizing curators was the commissioning of new work that visitors could experience at full scale. Given the considerable spatial and financial requirements of such an endeavor, however, they decided to pursue a quasi-virtual approach: each institution would feature four full-scale projects centered around a specific theme, while the other eight would be captured on video and in the single catalogue that serves all three venues.

By "experiencing" all twelve constructed spaces in three different sites, the visitor to a single venue can perceive the ways in which architecture responds to other institutional and physical frameworks—how the requirements of a particular place shape the design. The sharply contrasting situations offered by the three venues create a complex set of relationships, not only among the twelve pieces but also between each installation and its broader context, including other artworks on view in adjacent galleries and even the contrasting architecture of the respective museum buildings. These constructed "fabrications" are thus meant to reveal the inherent and essential characteristics of architecture as physical manifestation, bringing tactile, material, and structural components to the fore. *Fabrications* does not so much ignore theory as tether it to tangible construct.

The complicated organization of the exhibition has been much like a collage, made up of independent fragments forming a whole that gains strength from its various elements. Naturally, we hope that visitors will have a chance to fully engage the complete project by visiting all three venues. Short of this, we trust that this catalogue—with an introduction by architect, historian, and theorist Pat Morton; essays by the three curators; and illustrations of the work of the participating architects—gives coherence to the undertaking, together with the video overviews documenting the installations that appear at each museum.

We are deeply indebted to the three curators who brought *Fabrications* to fruition: Mark Robbins, curator of architecture at the Wexner Center for the Arts, The Ohio State University, Columbus; Terence Riley, chief curator in the Department of Architecture at The Museum of Modern Art, New York; and Aaron Betsky, curator of architecture and design at the San Francisco Museum of Modern Art. Their vital partnership has been the primary and essential force behind realizing this ambitious project.

Fabrications required the creativity, intelligence, good humor, and commitment of twelve exceptional architectural teams: Hodgetts + Fung Design Associates; Kennedy & Violich Architecture; KUTH/RANIERI; Mockbee/Coker Architects; Eric Owen Moss Architects; Munkenbeck + Marshall Architects; Office dA; Patkau Architects; Rob Wellington Quigley, FAIA; Stanley Saitowitz Office; Smith-Miller + Hawkinson Architects; and TEN Arquitectos with Guy Nordenson. We thank the architects for their energy, dedication, and enthusiastic spirit of collaboration throughout the many phases of this project. Numerous individuals and organizations assisted the architect teams in planning and building the *Fabrications* installations, and we have recognized them on a separate page at the end of this publication.

This volume was produced by the San Francisco Museum of Modern Art under the direction of Kara Kirk, SFMOMA director of publications and graphic design, and Alexandra Chappell, SFMOMA publications assistant. Lorraine Wild brought her exceptional skills to bear on its design; she was assisted by Amanda Washburn and Ninotchka Regets. Karen Jacobson served as the publication's most capable editor.

Numerous staff members at the three participating institutions contributed their time and talents to the realization of *Fabrications*. At the Wexner Center for the Arts, we thank David Bamber, exhibition designer; Ann Bremner, editor; Jill Davis, exhibitions coordinator; Chris Jones, senior graphic designer; Kathleen Kopp, associate registrar; Patrick McCusker, associate director for public affairs; Gretchen Metzelaars, director of administration; Krista Morelli, grants manager; Sarah Rogers, director of exhibitions; and Patricia Trumps, director of education. Special thanks go to William A. Prince, curatorial assistant, for his dedicated work on every phase of this project.

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We are extremely grateful to the donors whose generous sponsorship made this publication possible: the Contemporary Exhibition Fund of The Museum of Modern Art, New York, established with gifts from Lily Auchincloss, Agnes Gund and Daniel Shapiro, and Jo Carole and Ronald S. Lauder. Additional support was provided by the Graham Foundation for Advanced Studies in the Fine Arts.

The Wexner Center for the Arts presentation—*Fabrications: Full Scale*—was made possible by the Pizzuti Family Foundation and the Fund for Architecture and Design Programs, created through the leadership of The Limited, Inc. Real Estate Division. Additional support was provided by the Ohio Arts Council and the Wexner Center Foundation. Promotional support was provided by WBNS-TV.

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The San Francisco Museum of Modern Art presentation—*Fabrications: Bodybuildings*—was made possible in part by Grants for the Arts/San Francisco Hotel Tax Fund and the SFMOMA Museum Fund.

We would also like to acknowledge our collaborators at the Museu d'Art Contemporani de Barcelona (MACBA), particularly Xavier Costa, curator of architecture, for making *Fabrications* an international venture. MACBA has commissioned four European architectural teams to create site-specific constructions in the

Plaça dels Angels, a public square facing the museum: Iñaki Abalos and Juan Herreros of Abalos & Herreros, Madrid; Winy Mass, Jacob van Rijs, and Nathalie de Vries of MVRDV, Rotterdam; Florian Riegler and Roger Riewe of Riegler Riewe Architects, Graz, Austria; and Vicente Guallart of Vicente Guallart Arquitecto, Barcelona. Video documentation of this project, which occurs simultaneously with the U.S. presentation, is included in the exhibition.

Fabrications provides a new model for museum exhibitions engaged with the issues of our time. The increasing convergence of social, economic, cultural, and technological worlds has resulted in the emergence of hybrids of all kinds. *Fabrications* is only one experiment among many, but we hope that it will inspire other innovative attempts to bridge artistic, geographic, and institutional boundaries.

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Director
Wexner Center for the Arts,
Columbus

Glenn D. Lowry
Director
The Museum of Modern Art,
New York

Lori Fogarty
Deputy Director, Curatorial Affairs
San Francisco Museum
of Modern Art

Preface

The exhibition of architecture within galleries and museums has, with notable exceptions, generally been accomplished through the presentation of models, drawings, and photographs: analogues for the real thing. In order to elude this limitation (after all, one wouldn't be satisfied with being shown a snapshot of a painting), the twelve teams of architects in *Fabrications* were asked to build at full scale within the museum. The curatorial intention was to make architecture that could be experienced directly, without translation into miniature or two dimensions. *Fabrications* is on view simultaneously in New York, San Francisco, and Columbus, with four commissioned architectural projects at each venue.

The concept for the exhibition grew out of a desire for a collaborative project. Given the logistics of producing and moving pieces at the scale of buildings, we decided early on to commission different architectural installations for each site but to link the shows through the overarching theme of fabrication, with its dual meaning of both construction and the production of artifice. The geographically remote venues would then be connected by a virtual link.

The idea behind *Fabrications* was to bring architecture to the center, to make the processes of architecture manifest, to make visible the tectonic and, perhaps, social and economic forces that contribute to its production. The exhibition may be seen as a modern variation on the Beaux-Arts halls in which nineteenth-century students once contemplated plaster columns and cast façades as part of their study of architecture. The works in *Fabrications*, however, are not reproductions of preexisting buildings, nor are they historical fragments. They are new pieces built for view in a gallery space and with a didactic focus on both the actual production and the conceptual underpinnings of architecture.

Designed by some of our most innovative architects, these pieces reflect a diversity of concerns in contemporary practice, communicated through the language of architecture. Designers were encouraged to engage the viewer directly in some physical relation to the built work. Although the objects they produced may have affinities with sculpture, the designers used this exercise to explore space, inhabitation, and the material properties of architecture.

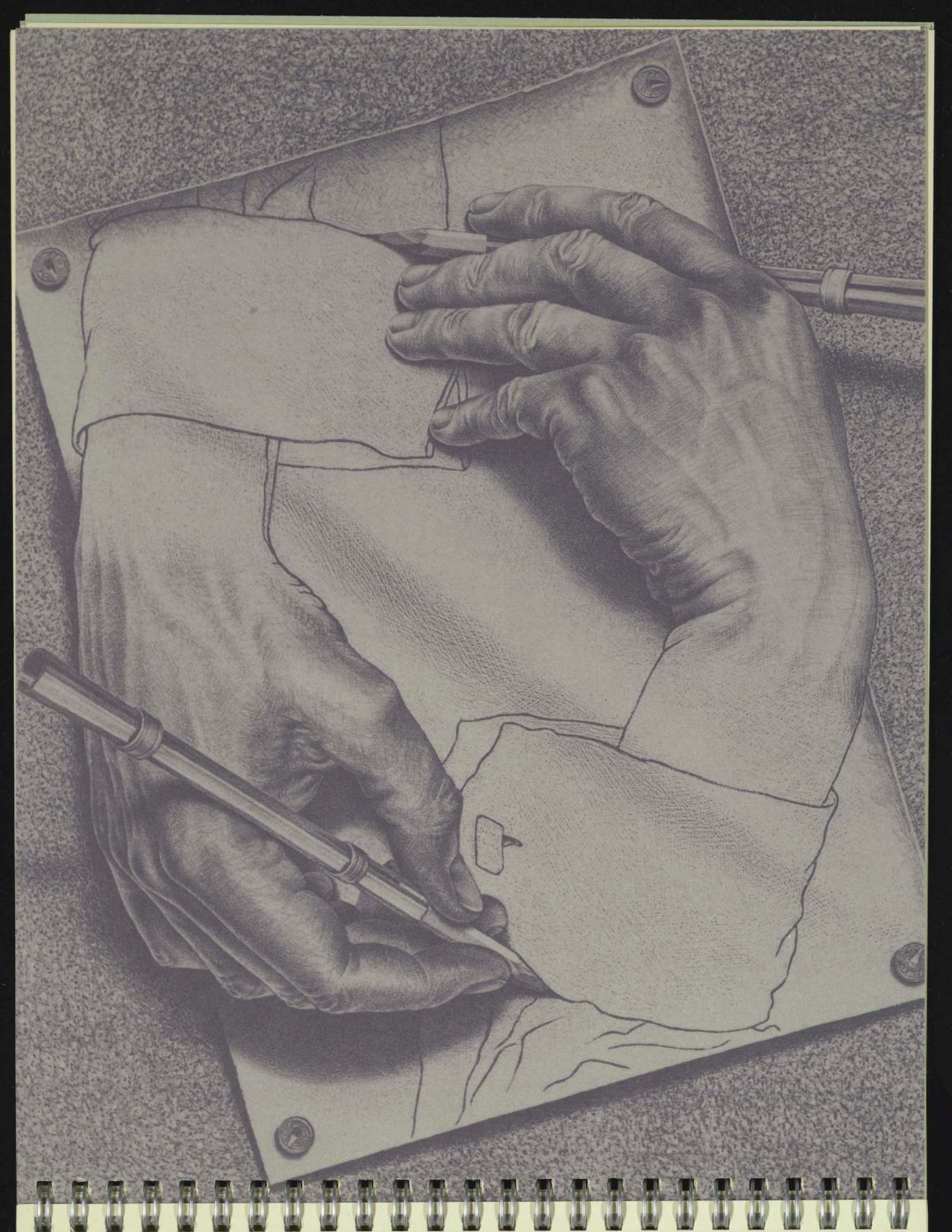
The architect-designers were selected to showcase emerging and more established forces in the design field. Following a strategy similar to that of the modernist shows presented at New York's Museum of Modern Art in the 1930s or of *Arts and Architecture* magazine's Case Study House program (1945–66), we identified a group of architects who we believe are likely to influence future thinking about architectural practice and form. The selection of the architects was a collaborative effort on the part of the three curators, although each monitored and coordinated four specific projects.

A mix of curatorial approaches was considered in the framing of the entire project and within each institution in order to ensure that we addressed a cross-section of issues. In the final presentation there is a diverse aggregation of work. Certain projects emphasize materials, such as masonry, steel, ice, or fabric. Others develop an assembly or construction prototype or explore the impact of current and future technologies on building or the use of off-the-shelf materials. To varying degrees, all explore architectural production and, with more or less specificity, the relationship between building and the body. The pieces respond at different levels to the particularities of site—both the individual galleries in which they are installed and the museum environs. The exhibition as a whole might be thought of as a sort of exquisite corpse made up of divergent forms joined by a common structure. The outcome is still a body, but one in which unexpected and provocative links are the rule.

Mark Robbins
Wexner Center for the Arts,
Columbus

Terence Riley
The Museum of Modern Art,
New York

Aaron Betsky
San Francisco Museum
of Modern Art



M. C. Escher, Drawing Hands, 1948
Courtesy of Cordon Art, Baarn, the Netherlands

The perceiving mind is an incarnated body.
MAURICE MERLEAU-PONTY[1]

The Two Halves of the Orange

Pat Morton

FABRICATIONS ADDRESSES ISSUES OF ARCHITECTURE'S MATERIALITY, the corporeal experience of architecture, and tectonics (the relation of construction to decoration), through "full-scale" architectural works. The term *full-scale* implies that these pieces are not "real" architecture, but are museum models, fragments that stand in for something that exists or will exist elsewhere in a more complete form. In fact, these works stand alone as full-fledged architecture, with developed site and constructional strategies that can be experienced by the spectator in real time and space. The spatial and constructional aspects of architecture form a locus of *Fabrications*, particularly as they relate to tectonics, the museum as site, and the human body.

Contemporary architectural practice embraces multiple theories regarding tectonics, including two significant schools of thought that Deborah Fausch has characterized as the "architecture of making" and the "architecture of pure form." The first school valorizes materiality and craft in architecture, while the second bases itself in formal method. These apparently opposed theories of architectural tectonics, according to Fausch, are exemplified by Mario Botta, in the "making" faction, and Peter Eisenman, on the "pure form" side.[2] These two poles of discourse address the split formulated in the nineteenth century by the German theorist Karl Bötticher, who posited a distinction between structure and ornament in architecture, between what bears load and what expresses meaning, which he extended into an opposition between ontology and representation.[3] As Fausch demonstrates, the terms and presuppositions of each apparently antithetical position are based on the problem of architecture as representation, a shared inheritance from nineteenth-century tectonic theory, and both equally insist on presence as an essential element of architecture.

The key concepts of tectonics and presence, the "real" or material aspect of architecture, are raised by the very sites of *Fabrications*. Botta, champion of a tectonics of making, designed the San Francisco Museum of Modern Art, while Eisenman's Wexner Center represents a tectonics of pure form. The Museum of Modern Art in New York presents another context: the human-made nature of the Abby Aldrich Rockefeller Sculpture Garden, a different type of constructed space. The installations therefore interrogate the problematic of postmodern tectonics, the seeming opposition between materiality and the free play of form, in direct dialogue with these museum sites. The San Francisco teams, employing a rotating design method, have created installations that dismantle and appropriate particular physical elements of Botta's museum in order to represent four states of the body. Eisenman's strong, intrusive forms provide the foil for site-specific pieces that confront the tangible space and construction of the Wexner Center and generate new presences within it. In New York the neo-Miesian tectonics of Philip Johnson's East Wing curtain wall and the history of the sculpture garden provide literal and virtual contexts for works exploring the tectonics

1 Maurice Merleau-Ponty, *The Primacy of Perception* (Evanston, Ill.: Northwestern University Press, 1963), 3. I would like to thank Amelia Jones for introducing me to Merleau-Ponty's phenomenological theory of the chiasm.

2 Deborah Fausch, "The Oppositions of Postmodern Tectonics," *ANY*, no. 14 (1996): 49, 57.

3 Mitchell Schwarzer, "Ontology and Representation in Karl Bötticher's Theory of Tectonics," *Journal of the Society of Architectural Historians* 52 (September 1993): 273.

of transparency and mass, permanence and ephemerality. Providing an alternative to dumb building and paper architecture, seemingly the only options for the last twenty years, the *Fabrications* architects pursue a simultaneously critical and tangible tectonics. Rather than espousing a tectonics of ontological truth or autonomous form, the works at all three sites initiate a critical conversation with their contexts, which investigates representation and architecture's objecthood.

The installations also grapple with the human body's relation to the body of architecture and to architecture as a body. Architecture as a material presence interacts with its inhabitants and users in a complex, reciprocal association. *Fabrications* elucidates problems regarding the ontological status of architecture vis-à-vis the incarnated human subject and the material world and raises critical questions concerning their interrelation. Is this relation purely a connection between an animate subject and an inanimate object? Is this a coercive relation, one in which architecture (and the architect) dominates the body or the body enforces its imperatives on architecture?

The works of the French phenomenologist Maurice Merleau-Ponty provide a framework in which to comprehend the embodied mind in and of the world. In contradistinction to the classic mind-body split of Kantian metaphysics, Merleau-Ponty theorized an inextricable link between the mind and the body and between the incarnated subject and the world of matter. This bond connects the toucher and the touched, the seer and the seen, within an order of reciprocity.

> Between the exploration and what it will teach me, between my movements and what I touch, there must exist some relationship by principle, some kinship, according to which they are... the initiation to and the opening upon a tactile world. This can happen only if my hand, while it is felt from within, is also accessible from without, itself tangible for my other hand, for example, if it takes its place among the things it touches.... Through this crisscrossing [chiasm] within it of the touching and the tangible, its own movements incorporate themselves into the universe they interrogate, are recorded on the same map as it; the two systems are applied upon one another, as the two halves of an orange.[4]

Our actions and experiences as corporeal beings generate knowledge of the world, alter the world, and implicate us in the world as part of an intertwined system. The reciprocal relation between the body and the world, as Merleau-Ponty indicates, is characterized by their intertwining, the crisscrossing of touching and being touched.

The body is both the mediator between the mind and the world of things and a thing itself: "Is my body a thing, is it an idea? It is neither, being the measurant of the things." The body is a fabric "into which all things are woven, and it is, at least in relation to the perceived world, the general instrument of my 'comprehension.'" There is, according to Merleau-Ponty, a pact between the body and things, such that one "lends" ones body to things and receives, in turn, a world in which to exist as an incarnated

4
Maurice Merleau-Ponty, "The Chiasm—the Intertwining," in *The Visible and the Invisible*, ed. Claude Lefort, trans. Alphonso Lingis (Evanston, Ill.: Northwestern University Press, 1968), 133.

being.[5] This "loan" creates a "close-bound system" of the touched and the touching, the visible and the seeing, through the interaction and interdependence of the body and things. The mutual relationship between the hand that touches and is touched, between the body as a thing and the perceived world, forms the moment of chiasm, or intertwining.

Emmanuel Lévinas, philosopher of the ethical, extended Merleau-Ponty's theory of the body,[6] positing embodiment as the necessary condition for an ethical relation between the self and the other. For Lévinas, the body's corporeality overcomes the imperialism of the ego: "The body is neither an obstacle opposed to the soul, nor a tomb that imprisons it, but that by which the self is susceptibility itself. Incarnation is... to be exposed to sickness, suffering, death, is to be exposed to compassion, and, as a self, to the gift that costs."[7] The self is saved from pure solitude and egoism by being incarnated and susceptible to suffering and pain. In Lévinas's account the self cannot be detached and sufficient in the experience of physical pain and, therefore, becomes a compassionate being by reason of its corporeality. While in moral pain, one can preserve an attitude of dignity and compunction, and consequently already be free; physical suffering in all its degrees entails the impossibility of detaching oneself from the instant of existence.[8] The physical, corporeal existence of the subject, and its accompanying experiences, removes the subject from pure self-absorption into the everyday world.

ARCHITECTURE AS PART OF THE EVERYDAY WORLD is a set of things with a particular cultural status and a complex relationship to the human body. The relation of the subject to architecture is both tactile and visual, formed by the chiasm of touching and being touched, seeing and being seen. The experience of architecture as space and object, according to Merleau-Ponty, brings the body into a privileged position in perception: "Our body is not in space like things; it inhabits or haunts space. It applies itself to space like a hand to an instrument, and when we wish to move about we do not move the body as we move an object. We transport it without instruments... since it is ours and because, through it, we have access to space." Movement and the chiasm produce a simultaneous comprehension of architecture, space, and the body. The body is the instrument for accessing the spatial and tangible world and the animating force within space. Elizabeth Grosz notes that Merleau-Ponty understands space as a relationship between a series of objectively located points and a central perspective, which "has no other location than that given by the body." For Lévinas, incarnation, or "being-in-one's-skin," gives us a dynamic and ethical mode of being in the world, one that allows us to conceive our relation to the world. In a parallel construction, Donna Haraway takes up the feminist slogan "our bodies, ourselves" as an indicator of the degree to which our bodies are maps of power and identity, the means by which we understand ourselves in the world.[9]

5 Ibid., 152; Maurice Merleau-Ponty, *The Phenomenology of Perception*, trans. Colin Smith (London: Routledge and Paul, 1962), 235; idem, "The Chiasm—the Intertwining," 146.

6 "As Merleau-Ponty in particular has shown, the I that constitutes the world comes up against a sphere in which it is by its own flesh implicated; it is implicated in what it otherwise would have constituted and so is implicated in the world. But it is present in the world as it is present in its own body, an intimate incarnation which no longer purely and simply displays the exteriority of an object" (Emmanuel Lévinas, "Ethics as First Philosophy," trans. Seán Hand and Michael Temple, in *The Lévinas Reader*, ed. Seán Hand [Oxford and Cambridge, Mass.: Blackwell, 1989], 79).

7 Emmanuel Lévinas, "Substitution," trans. Alphonso Lingis, in ibid., 111, 121 n. 11.

8 Emmanuel Lévinas, "Time and the Other," trans. Richard A. Cohen, in ibid., 39.

9 Merleau-Ponty, *Primacy of Perception*, 5; Elizabeth Grosz, *Volatile Bodies: Toward a Corporeal Feminism* (Bloomington and Indianapolis: Indiana University Press, 1994), 90; Lévinas, "Substitution," 104; Donna Haraway, "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century," in *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), 180.

Architecture is like an instrument to the hand, a part of the chiasm, a place of the intertwining between the embodied subject and the world. As Walter Benjamin noted in "The Work of Art in the Age of Mechanical Reproduction," architecture is perceived through visual and tactile means of apprehension, through use and habit, rather than the intellectualization of contemplation.[10] In an earlier work, "One Way Street," Benjamin had already evoked a distinction between the initial auratic perception of architecture and our subsequent experience of it. "What makes the very first glimpse of a village, a town, in the landscape so incomparable and irretrievable is the rigorous connection between foreground and distance. Habit has not yet done its work. As soon as we find our bearings, the landscape vanishes at a stroke like the façade of a house as we enter it.... Once we begin to find our way about, that earliest picture can never be restored."[11] The "distracted state" of habit, through which architecture is grasped, eliminates auratic distancing and demythifies reality, according to Benjamin, by breaking down the distant view of things. In their stead a familiar and tactile perception takes place, the comprehension of the everyday and the material.

The experience of *Fabrications* is not habitual or "everyday" because of its site, the museum. Within the museum environment, architecture often participates in the culture of images and sponsors a distanced mode of its apprehension. It participates in the "imperialism of the ego" insofar as the architect's intentions are privileged by architectural discourse and its effects are attributed exclusively to the architect's agency. Freezing the instant of architecture to its moment of (alleged) conception or into auratic objects excludes the complex psychic and corporeal interaction between architectural object and perceiving subject. Architecture evades the status of a pure image to the degree that it engages the embodied spectator, by virtue of the chiasm.

The works in *Fabrications* do not fit Benjamin's conception of art as a static entity inasmuch as they blur the boundaries between "art" and "architecture" as separate practices. They consist of an architecture that produces and is produced by the body and its relationship to architectural tectonics, not through the domineering relationship between an ego and inert matter, nor through the determinism of program and form. In the "look, but don't touch" environment of the museum, *Fabrications* transgresses artistic aura and evades the artwork's temporal fossilization by presenting "full-scale" works that interact with the spectators' bodies, while differentiating themselves from their contexts.

The works in *Fabrications* appeal to the chiasmatic relation of the spectator to the architectural object by means of their own bodily presence. The fabrications inhabit and haunt the museum space, producing new spatial configurations and multiplying the intertwining of human and architectural bodies. The confrontation between the museum's architecture, yet another body, and the new fabrications spawns new intertwining. As inventions, lies, and manufactured things, these fabrications tell no heroic tales, but articulate the everyday interstices of the chiasm.

10
Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," in *Illuminations*, trans. Harry Zohn (New York: Shocken Books, 1969).

11
Walter Benjamin, "One Way Street," in *One Way Street and Other Writings*, trans. Edmund Jephcott and Kingsley Shorter (London: New Left Books, 1979), 78.

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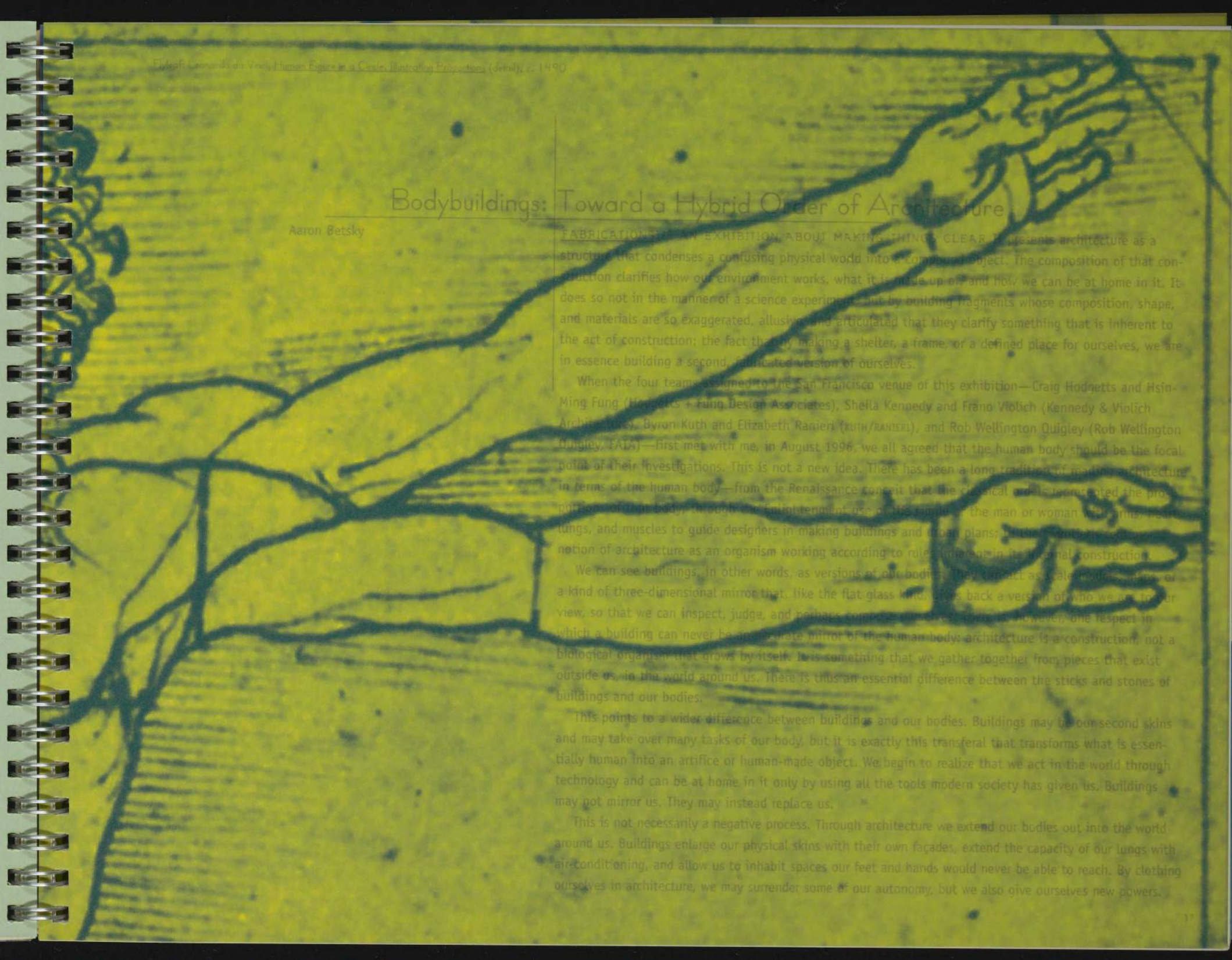


Erhard Ratdolt, Man in Circle, Illustrating Proportions (detail), c. 1490

Bodybuildings: Toward a Hybrid Order of Architecture

Aaron Betsky

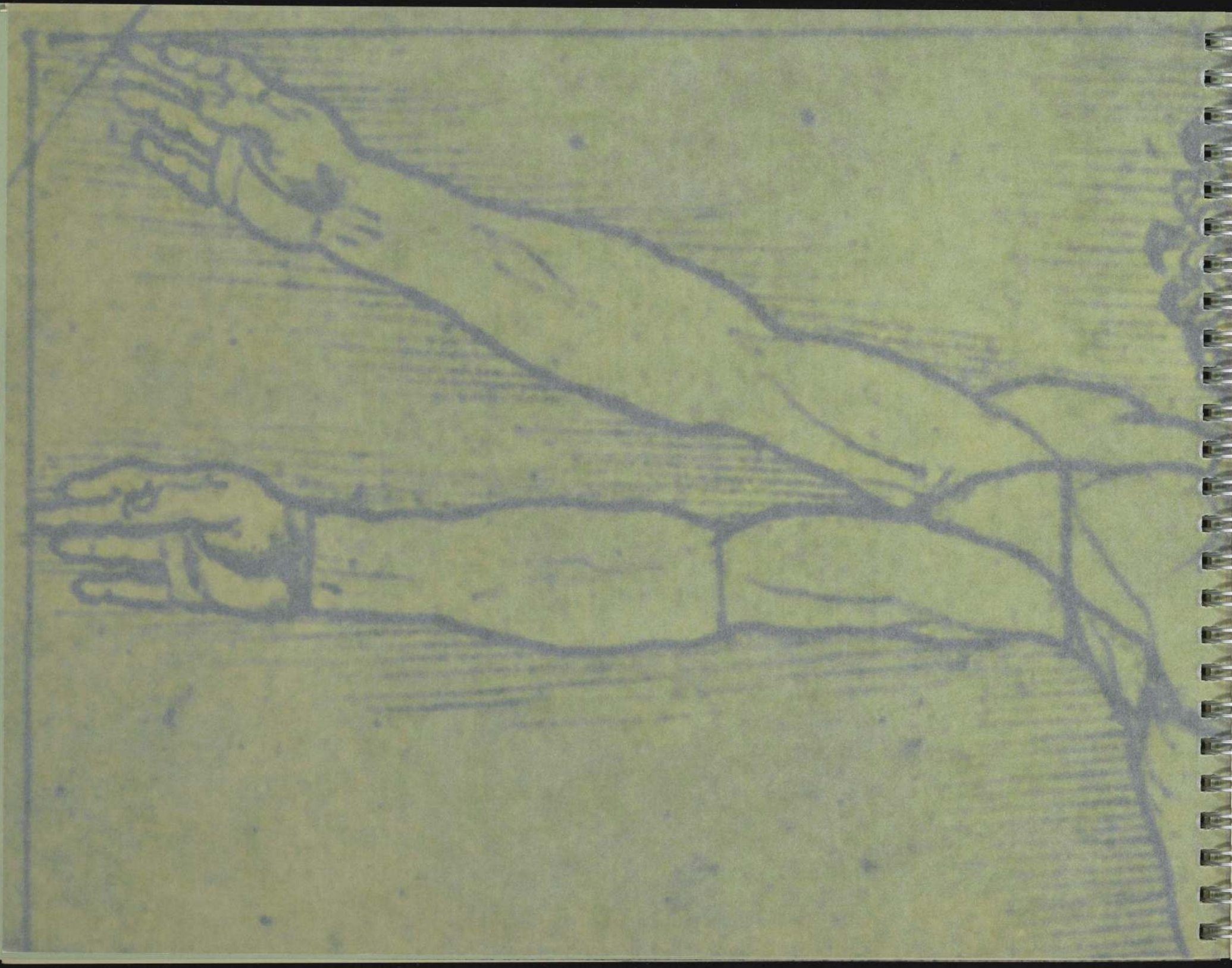
FABRICATIONS: AN EXHIBITION ABOUT MAKING THINGS CLEAR. Fabricate architecture as a structure that condenses a confusing physical world into a compressed object. The composition of that construction clarifies how our environment works, what it is made up of, and how we can be at home in it. It does so not in the manner of a science experiment, but by building fragments whose composition, shape, and materials are so exaggerated, allusive, and articulated that they clarify something that is inherent to the act of construction: the fact that by making a shelter, a frame, or a defined place for ourselves, we are in essence building a second, fabricated version of ourselves.

When the four teams assigned to the San Francisco venue of this exhibition—Craig Hodgetts and Hsin-Ming Fung (Hodgetts + Fung Design Associates), Sheila Kennedy and Franc Violich (Kennedy & Violich Architecture), Byron Kuth and Elizabeth Ranieri (KUTH/RANIERI), and Rob Wellington Quigley (Rob Wellington Quigley, FAIA)—first met with me, in August 1996, we all agreed that the human body should be the focal point of their investigations. This is not a new idea. There has been a long tradition of making architecture in terms of the human body—from the Renaissance concept that the classical order incorporated the proportions of the body, through the commitment of the Arts and Crafts movement to the man or woman building with hands, lungs, and muscles to guide designers in making buildings and urban plans, to the modernist notion of architecture as an organism working according to rules that govern human functional construction.

We can see buildings, in other words, as versions of our bodies. They can act as [illegible] or a kind of three-dimensional mirror that, like the flat glass kind, throws back a version of who we are for our view, so that we can inspect, judge, and perhaps correct ourselves. However, one respect in which a building can never be an accurate mirror of the human body: architecture is a construction, not a biological organism that grows by itself. It is something that we gather together from pieces that exist outside us, in the world around us. There is thus an essential difference between the sticks and stones of buildings and our bodies.

This points to a wider difference between buildings and our bodies. Buildings may become second skins and may take over many tasks of our body, but it is exactly this transferal that transforms what is essentially human into an artifice or human-made object. We begin to realize that we act in the world through technology and can be at home in it only by using all the tools modern society has given us. Buildings may not mirror us. They may instead replace us.

This is not necessarily a negative process. Through architecture we extend our bodies out into the world around us. Buildings enlarge our physical skins with their own façades, extend the capacity of our lungs with air conditioning, and allow us to inhabit spaces our feet and hands would never be able to reach. By clothing ourselves in architecture, we may surrender some of our autonomy, but we also give ourselves new powers.



Flyleaf: Leonardo da Vinci, Human Figure in a Circle, Illustrating Proportions (detail), c. 1490

Bodybuildings: Toward a Hybrid Order of Architecture

Aaron Betsky

FABRICATIONS IS AN EXHIBITION ABOUT MAKING THINGS CLEAR. It presents architecture as a structure that condenses a confusing physical world into a compound object. The composition of that construction clarifies how our environment works, what it is made up of, and how we can be at home in it. It does so not in the manner of a science experiment, but by building fragments whose composition, shape, and materials are so exaggerated, allusive, and articulated that they clarify something that is inherent to the act of construction: the fact that by making a shelter, a frame, or a defined place for ourselves, we are in essence building a second, fabricated version of ourselves.

When the four teams assigned to the San Francisco venue of this exhibition—Craig Hodgetts and Hsin-Ming Fung (Hodgetts + Fung Design Associates), Sheila Kennedy and Frano Violich (Kennedy & Violich Architecture), Byron Kuth and Elizabeth Ranieri (KUTH/RANIERI), and Rob Wellington Quigley (Rob Wellington Quigley, FAIA)—first met with me, in August 1996, we all agreed that the human body should be the focal point of their investigations. This is not a new idea. There has been a long tradition of reading architecture in terms of the human body—from the Renaissance conceit that the classical orders represented the proportions of that body; through the Enlightenment use of the simile of the man or woman with arms, heart, lungs, and muscles to guide designers in making buildings and urban plans; to the twentieth-century notion of architecture as an organism working according to rules inherent in its internal construction.

We can see buildings, in other words, as versions of our bodies. They can act as scale models, maps, or a kind of three-dimensional mirror that, like the flat glass kind, gives back a version of who we are to our view, so that we can inspect, judge, and perhaps compose ourselves. There is, however, one respect in which a building can never be an accurate mirror of the human body: architecture is a construction, not a biological organism that grows by itself. It is something that we gather together from pieces that exist outside us, in the world around us. There is thus an essential difference between the sticks and stones of buildings and our bodies.

This points to a wider difference between buildings and our bodies. Buildings may be our second skins and may take over many tasks of our body, but it is exactly this transferal that transforms what is essentially human into an artifice or human-made object. We begin to realize that we act in the world through technology and can be at home in it only by using all the tools modern society has given us. Buildings may not mirror us. They may instead replace us.

This is not necessarily a negative process. Through architecture we extend our bodies out into the world around us. Buildings enlarge our physical skins with their own façades, extend the capacity of our lungs with air-conditioning, and allow us to inhabit spaces our feet and hands would never be able to reach. By clothing ourselves in architecture, we may surrender some of our autonomy, but we also give ourselves new powers.

If buildings can be constructed versions of us, both as mirrors of our bodies and extensions or replacements of those corporeal selves, they can make us more aware, by contrast, of the stuff of which we are made. By seeing both the similarities and the differences between our buildings and our bodies, we can define what makes us human.

Most of the time, however, the mirror of architecture is rather dark. We find ourselves looking at white walls and dropped ceilings. The seams between pieces hide under layers of paint. The systems that make a building work—the plumbing, air-conditioning, electrical wires—lurk even farther behind the walls we see. That is because most buildings are not constructed to be mirrors. They are designed and built and used for specific tasks, and they try not to trouble us with weightier issues.

The task of the architect in this exhibition is to mirror our bodies not by default—by designing a building intended for a particular use, like a home or an office building—but intentionally. The architect has to articulate the components of building so that we can see how they are made, how they fit together, and how they assemble into a human-made version of the body. That architectural body has to be stripped down, buffed up, taken apart, and put back together again to create a static picture of the process of assembly, whose final result (a building) usually conceals the act of construction. The result of such an act of revealing would be not so much to build something that functions as a background construction, but rather to question the nature of our body, its relationship to building, and the hybrid conditions that could result from mirroring one in the other.

To achieve this, the designers participating in *Fabrications* chose to concentrate on four states of the body. One of the states they selected was the somatic body, or the body as a physical, organic entity. This is an organism that has many interconnected and highly specialized parts, all of which are melded together into a single entity. The somatic body moves and breathes through the fusion of pieces into a whole that does many things at the same time. It is only when an act of violence, whether sudden and invasive or resulting from the entropy of old age, reveals the innards of the somatic body that we become aware of its nature. The somatic body can be decorated with tattoos or earrings, or it can uncover itself in ways that are so revealing that to some they may seem pornographic or scatological, but its innards are a final taboo, since virtually the only way to see them and engage them is to do damage to the body.

The somatic body of the museum, by analogy, is also hidden. The museum presents white walls and skylights. Behind these smooth surfaces are not only the usual systems that let the building stand up and allow us to move through it, such as steel beams and elevators, but also an unusually dense set of climate and security controls that maintain the evenness of the environment. The museum goes further than most buildings in hiding its somatic nature so that it can pretend to be nothing more than a neutral frame for

the objects it houses. Any architecture that would seek to reveal its body would have to engage in a form of violence by breaking the protective skin that covers the innards of the building to reveal things that not only were never meant to be seen but that also, in many cases, function only when they are covered up and protected.

Another bodily state that the group selected was that of rest. When the body is at rest, it comes to a certain awareness of itself as a single entity in a context. It withdraws into contemplation. By not moving or acting, the body at rest can measure itself, can watch the light move across the room, or can find shelter under the defining forms of a structure. Like the place that attracts a cat looking for a spot to lie in a room, an architecture seeking to represent the body at rest must make that body comfortable and in control of its surroundings, smoothing out the complexities of the world into a simple form.

The museum, like almost any building, is always at rest. Not only does it stand still, however, but it also stands for a certain amount of static force within the city. While stores, office buildings, and homes are torn down or renovated as needs change, museums have traditionally been in the class of buildings we call monumental, which is to say that they remind us of and house certain fixed values. A monumental building such as a museum serves as a reference point through which a culture tries to define its central values. The museum withdraws from the world around it. It is a place of contemplation which looks in on itself. Instead of the motion of production or consumption, the museum presents a static field in which we can see motion as something implied, stated, or desired within images that are constrained by their materiality.

In contrast to the body at rest, the human body in motion engages the world by testing the bounds of that physical context with the properties of its corporeal tools. It cantilevers itself out beyond the plane on which it stands and beyond what it knows, reaches for the bounds and limits of its space, and continually constructs. The body in motion is highly unstable. It is always moving and, as such, always changing. Yet the same body in motion develops recurring rhythms, related to the internal logic of its organism, which it expresses through the repetition of actions, through the pathways it finds, and, eventually, through the normalization of its actions into language and laws. The architecture of the body in motion finds movement inherent in stable structures and stability inherent in the movement of the body.

The museum is, as noted above, never in motion, but it does contain hidden movements. The regulation of traffic, air flow, electricity, and telephony keep the museum static. There are rhythms to the museum, but they are hardly visible. It is the myth of stasis that makes the museum into such an ideal place—a container of ideals, in fact—one that removes itself, and us with it, from everyday life. Yet the museum can achieve this nearly utopian stance only by repressing its own rhythms.

The body in equipoise, finally, is the modern body. It is a body that is both at rest and in motion at the same time. It is posed and poised. It is the dancer *en pointe*, the human being squaring the circle, the urban person who drinks in the sights and sounds of the city and manages to reflect them in a singular stillness. The body in equipoise, a phrase coined by the architectural historian Sigfried Giedion, is a body that is aware of its surroundings and acts in them and is thus always collaging together itself and the world into a changing composition. The body in equipoise merges the body and the building into the active, and yet static, architecture of the self.

The museum is the unstable frame for such a collage. Since the assembly of art objects theoretically continues beyond its walls, embracing daily life while condensing it within their forms and images, the museum must be porous. Yet its walls must define that moment when what we think of as quotidian is transformed into what we think of as art. Modern art is always changing its definitions and its methods of expression. The museum has to continually rebalance itself to provide the proper frame for the moving target of contemporary expression. In its poised state it poses the question of what is art by the very frame it builds.

There is thus a highly unstable relation among these four states of the body and the museum that contains them. The mirroring of the body is always incomplete. Sometimes it is the surface of the glass that is at stake in this act; other times, the frame. In yet other cases we concentrate on the images reflected on the glass in the frame. In all cases the body defines itself as essentially organic against the constraints of the museum. It is then up to the architects to use this distinction to posit their forms in such a way as to make their mirroring abilities work to create true fabrications of ourselves through architecture.

To accomplish this goal, the architects and I chose a working method of serial collaboration: each team would start with one of the four states of the body and create an object that would represent or engage that state. After a period of six weeks the team handed off the object to one of the others and then received the designs of yet another team. This rotation took place four times, so that each team had the chance to work on each aspect of the body at least once and to then go back and refine its own initial proposal. As a result, none of the four objects had a single authorship. Each was a collage that exhibited the marks of the initial and final maker, so that the process itself brought up the issue of the hybrid body as an intersection between a body that acts in the world through architecture and an architecture that composes itself into a complex body.

The first designs almost all posed the states of the body by means of contrast. Equipoise, in the hands of Hodgetts and Fung, became a drawbridge that challenged the body to achieve such a pose. The body

in motion proposed by Kennedy and Violich was one that was almost invisible: it was the pulses of air-conditioning moving through the ducts, which became visible only when a shroud was hung in front of the registers. The somatic body proposed by Kuth and Ranieri had to be excavated from behind the white walls and posed in front of it as fragments of a possible (re)construction. Only Quigley's small retiring booths or confessionals, representing the body in repose, heightened the inherent nature of the museum, though by denying the public nature of its space in the moments of privacy they provided.

Over the past year these designs have evolved into complex organisms. They have taken on a life of their own, and it may be difficult for a viewer to recognize any state of the body in each of the four objects. This is not surprising. The body is, after all, always a body of flesh and blood, in motion, at rest, and posed at the same time or in short succession. Instead of isolating aspects of the body, these constructions highlight different aspects of how it appears. They are fabrications of and about how the body works. Their very arbitrariness makes it evident that we cannot construct such fictions without abstracting the infinite complexity of our bodies.

These strange hybrids between buildings and bodies remain works of architecture. They are constructions of and about the body which are themselves a kind of body, but an assembled one. They are fabrications even more so because they tell us stories not only about ourselves but also about how we act in and use the world around us through references to functions that are useless and perhaps even absurd. We do not need to see how air-conditioning works or enter a drawbridge to cross a gallery. We do so only as a way of learning something that usually does not come to our attention. This architecture collectively reveals hidden truths about itself, about the building in which it finds itself, and about our own bodies. It is nothing but a fabrication.

Bodybuildings

San Francisco Museum of Modern Art

WEXNER CENTER FOR THE ARTS, COLUMBUS

THE MUSEUM OF MODERN ART, NEW YORK

Hodgetts + Fung Design Associates

Kennedy & Violich Architecture

KUTH/RANIERI

MOCKBEE/COKER ARCHITECTS

ERIC OWEN MOSS ARCHITECTS

MUNKENBECK + MARSHALL ARCHITECTS

OFFICE dA

PATKAU ARCHITECTS

Rob Wellington Quigley, FAIA

STANLEY SAITOWITZ OFFICE

SMITH-MILLER + HAWKINSON ARCHITECTS

TEN ARQUITECTOS WITH GUY NORDENSON

WEXNER CENTER

MoMA

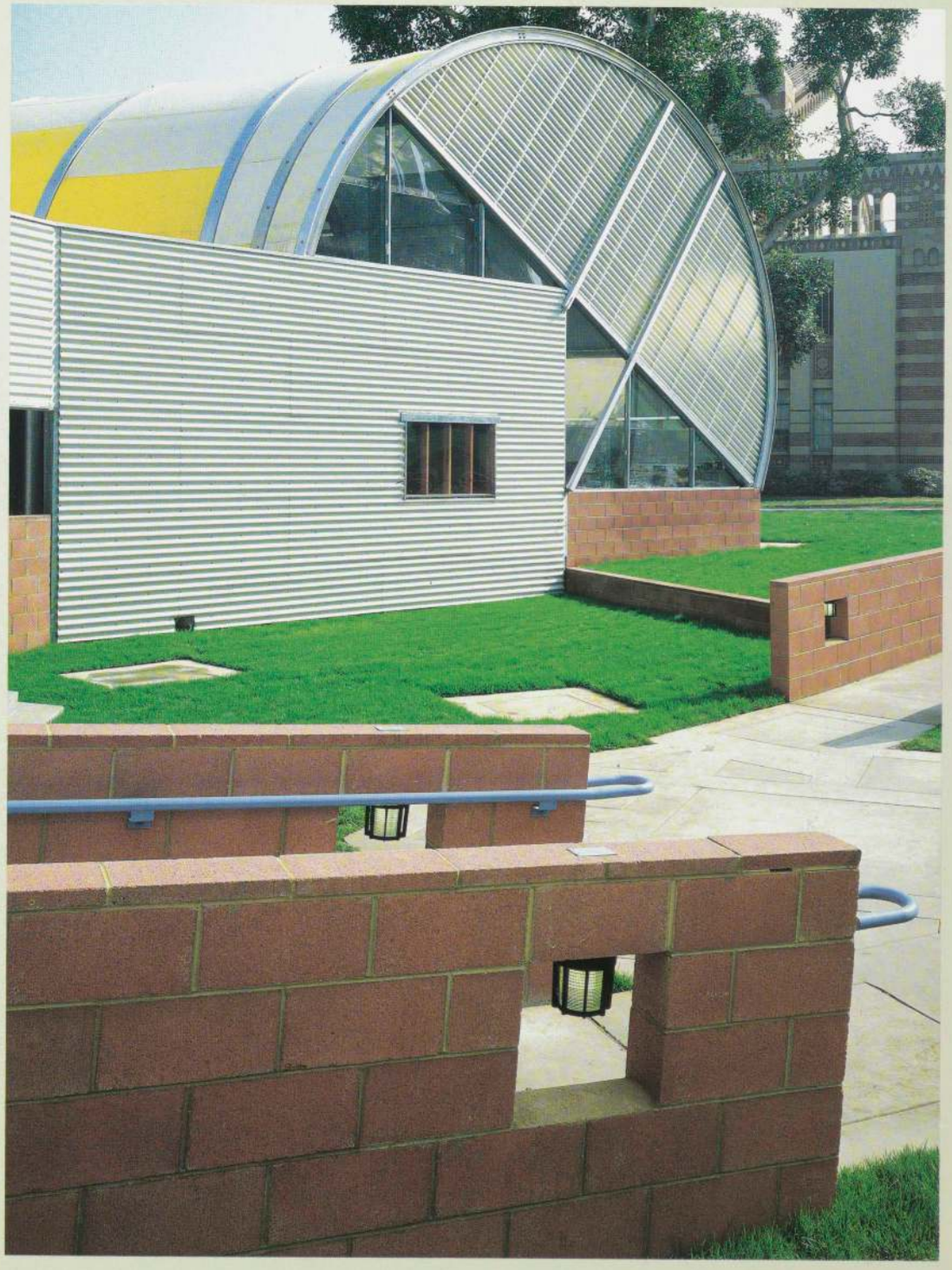
Craig Hodgetts and Hsin-Ming Fung

HODGETTS + FUNG DESIGN ASSOCIATES

Craig Hodgetts, creative director of Hodgetts + Fung Design Associates in Santa Monica, California, is an internationally recognized architect and urban scenarist best known for his imaginative adaptation of architectural form to the challenges of cultural change, urban evolution, and developing technology. His master plans and urban designs include adaptive reuse, exhibition installations, entertainment venues, and industrial products. Hodgetts complemented his bachelor's degree in fine arts from Oberlin College with study in automotive design at General Motors Institute. He received his master's degree in architecture with honors from the Yale University School of Art and Architecture in 1966. Between 1969 and 1984 he received three First Design Awards from *Progressive Architecture* magazine for his collaborative works with Robert Mangurian at the firm Studio Works.

In addition to his work at Hodgetts + Fung, Hodgetts is a full professor at the School of Architecture and Urban Planning of the University of California, Los Angeles. His academic affiliations have also included faculty appointments at Ohio State University School of the Arts and Architecture, Yale University School of Architecture, and the Graduate School of Architecture of the University of California, San Diego. Hodgetts has written many articles on the arts, architecture, and entertainment and is frequently invited to lecture on topics ranging from urban design to film.

Hsin-Ming Fung, director of design at Hodgetts + Fung, emphasizes creativity and high production standards in the development of innovative experimental projects. She believes in the vitality of urban forms as the generator of human occasion. In 1977 Fung received a bachelor of arts degree in behavioral sciences from California State University,



Towell (Temporary Powell) Library,
University of California, Los Angeles, 1992, interior (opposite) and exterior (left)
(currently dismantled; to be reinstalled on the campus
of California State Polytechnic University, Pomona)

Dominguez Hills, and in 1980 she completed a master's degree in architecture at the University of California, Los Angeles. She is currently an associate professor at California State Polytechnic University and has also been a faculty member at Ohio State University School of the Arts and Architecture and Yale University School of Architecture.

Fung's work has been exhibited at the Los Angeles Museum of Science and Industry, the Museum of Fine Arts in Buenos Aires, the Museum of Contemporary Art in Los Angeles, and the San Francisco Museum of Modern Art. She is president of the board of the Los Angeles Forum for Architecture and Urban Design and is also a board member of the Architecture and Design Council of the Museum of Contemporary Art, Los Angeles. In 1991 Fung won a National Endowment for the Arts Rome Prize Advanced Fellowship in Design Art.

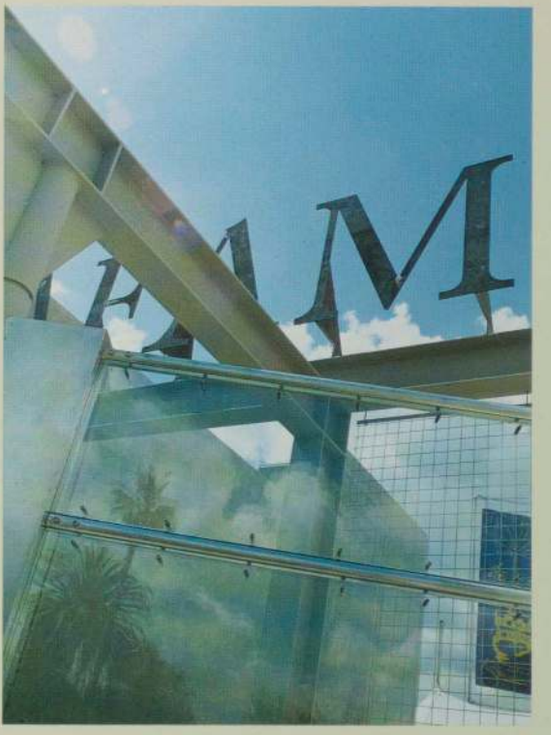
Hodgetts and Fung have built a varied architectural practice that ranges from the design of sets for electronic trade shows and commercials to the architecture of cultural institutions. They are interested in "raiding the parts bin" to find appropriate tools and building fragments, which

they then use to put buildings together in a manner that represents a hybrid between the composition of a classical temple and the manufacture of a car. As they conceive it, their task is not so much to construct monuments that are meant to last for the ages as to make the scaffolding on which we play out the scenes of everyday life.

Together, Hodgetts and Fung have created designs for theme parks, entertainment venues, exhibitions, film productions and special effects, museums, retail prototypes, office spaces, and affordable housing. They received the architecture award from the American Academy of Arts and Letters in 1994 and the Chrysler Award for Innovation in Design in 1996. Their award-winning projects include the temporary "Towell" Library at UCLA, a fifty-acre master plan for the Los Angeles Arts Park, and the historic renovation and adaptive reuse design for American Cinematheque's Egyptian Theater in Hollywood.

The Hemdale Film Corporation, Los Angeles, 1989

Left: Click & Flick Agency, Hollywood, 1990
Below: Craft and Folk Art Museum (CAFAM), Los Angeles, 1995



Interim Bridges Project, Boston, 1992–93
Night view of prototype in parking lot under highway I-93

Sheila Kennedy and Frano Violich

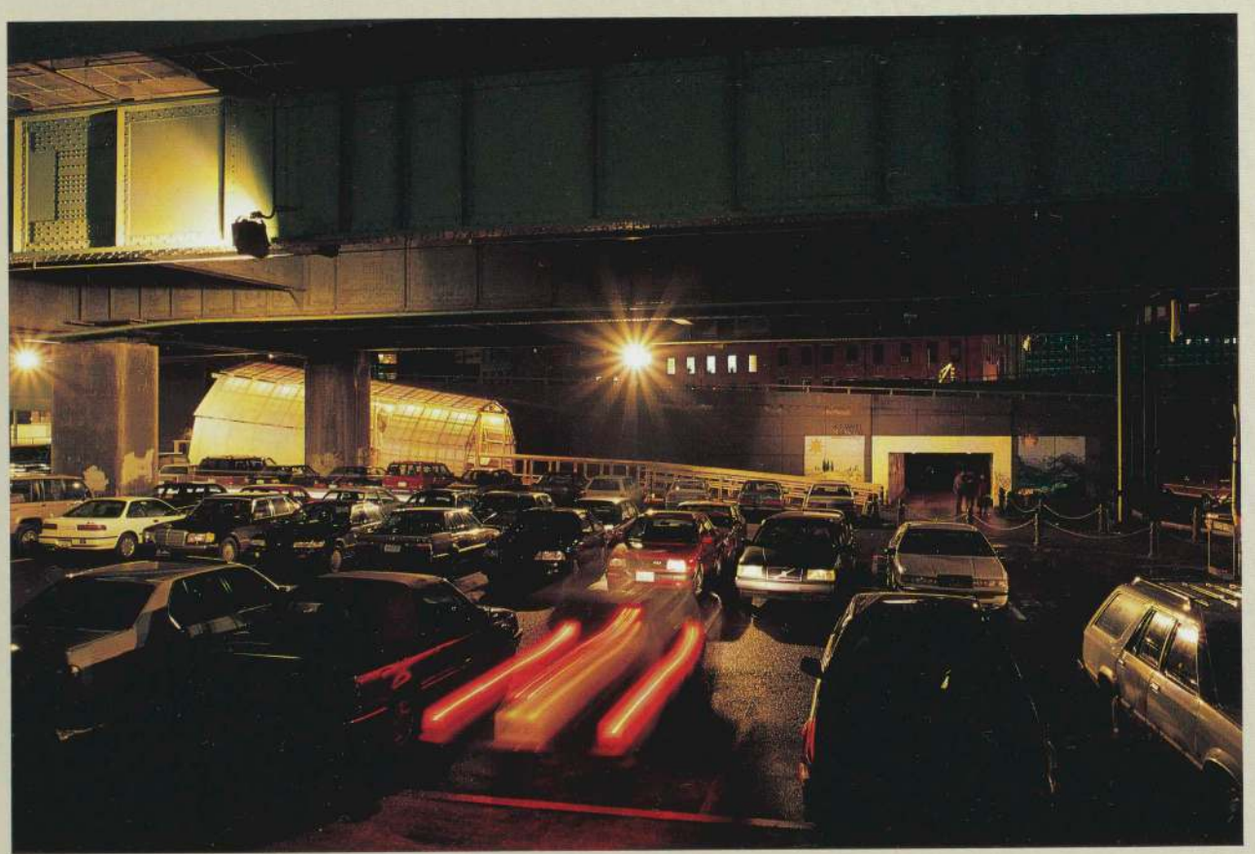
KENNEDY & VIOLICH ARCHITECTURE

Sheila Kennedy received a joint bachelor's degree from the College of Letters and the Department of Art at Wesleyan University in Middletown, Connecticut. She studied at the Ecole Normale Supérieure des Beaux-Arts in Paris and received her master's degree in architecture from the Harvard University Graduate School of Design.

Kennedy is a recipient of numerous grants and awards, including a Skidmore, Owings & Merrill Foundation Traveling Fellowship to study the development of eighteenth- and nineteenth-century industrial architecture, three research grants on infrastructure from Harvard University, a Design Arts Award from the National Endowment for the Arts, an award for Design Excellence from the American Society of Illumination Engineers, and an Edison Award for Innovative Work in Design from the General Electric Company.

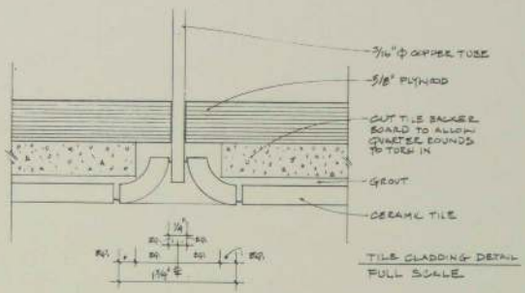
Frano Violich studied art with Tony Delap at the University of California, Irvine, then attended the University of California, Berkeley, where he earned a bachelor's degree in architecture from the College of Environmental Design. He received his master's of architecture degree from the Harvard University Graduate School of Design and was awarded the Julia Appleton Traveling Fellowship Prize to study contemporary and traditional construction methods in Japan. Violich's research work has received a Design Arts Award from the National Endowment for the Arts and an *I.D.* magazine design distinction award. In 1994 he was awarded a U.S./Mexico artist's residency from the National Endowment for the Arts and the Instituto Nacional de Bellas Artes in Mexico.

In 1988 Kennedy and Violich founded an alternative professional practice that explores new possibilities for contemporary public architecture and urbanism. Their work addresses how postindustrial materials, construction systems, and infrastructure may be used in new ways



Public Bathrooms Project, Boston, 1994
Women's room (view looking south to sinks paired with existing floor urinals [left]) and construction detail of tile chase wall (below)

to investigate the visible and invisible connections that link people, artifacts, and spaces in American culture. Kennedy and Violich's practice combines the direct logic of the tool belt with theoretical concerns that have developed from their teaching and research. In projects involving freeways, plumbing fixtures, accumulations of stacked products, and computer data networks, they have engaged in an archaeology of the present that looks at what lies beneath the smooth finishes of the cities and rooms we inhabit. Kennedy and Violich find ways of creating moments of strangeness and beauty by deforming and misusing ordinary materials, a

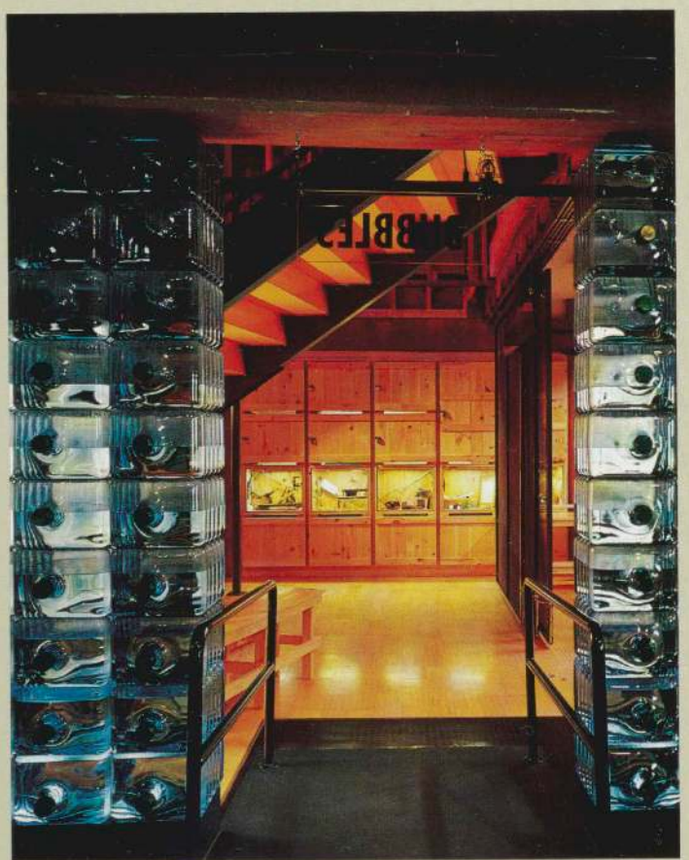


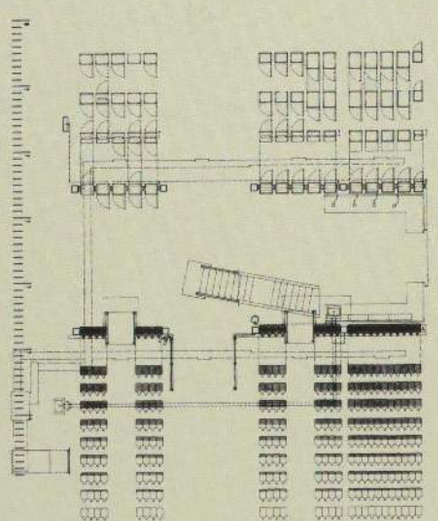
Science Playground, The Children's Museum, Boston, 1992
Detail of bottle wall (left) and diagram of infrastructure, stacking crates, and bottles (right)

process that results in the invention of new uses, forms, and aesthetics for "standard" materials. In the last three years their practice has expanded from small-scale interventions to larger commissions for museums, schools, and public planning authorities. The architects draw upon the design research of their past work to rethink the programmatic assumptions and architectural configurations of their larger institutional projects.

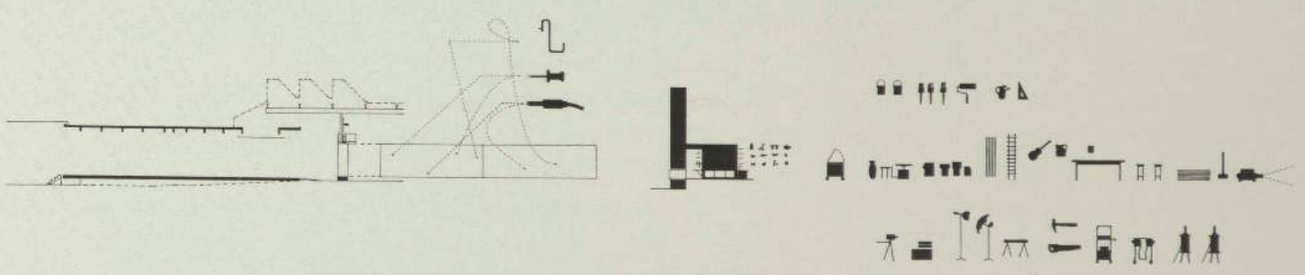
Kennedy and Violich have received national recognition for their research and built work in design, including grants from the National Endowment for the Arts, the New England Foundation for the Arts, and the LEF Foundation. Their Interim Bridges Project, Temporary Museum of the City, and the Public Bathrooms Project at the Boston Center for the Arts have won National AIA Honor Awards, and their design work has received an Interdisciplinary Award from *Progressive Architecture*. Selected recent projects by the architects appear in *581 Architects in the World*, published by the Tokyo Gallery Ma; in *Stud*, the first volume of an architectural pathologies series on gender published by the Princeton Architectural Press; and in *Research in Architecture*, published by Rizzoli. Kennedy and Violich have exhibited their work in galleries and museums in the United States and Latin America, and their work has been published in *A + U* (Japan), *Domus* (Italy), *Architecture*, *Art in America*, the *New York Times*, the *Wall Street Journal*, and *ANY* magazine.

In addition to their collaborative work, Kennedy is an associate professor of architecture at the Harvard University Graduate School of Design, and Violich is currently conducting a series of studio explorations on the infrastructure of manufacturing with industries, city officials, and universities in Mexico.





Elementary School, Canton, Ohio, 1996
Diagram of performative walls, core, and equipment in the art room (above) and interior (below)



Byron Kuth and Elizabeth Ranieri

KUTH/RANIERI

Byron Kuth earned a dual bachelor's degree in architecture and fine arts from the Rhode Island School of Design. Based in New England for ten years, he designed residential, commercial, and institutional buildings. He has also taught at the California College of Arts and Crafts.

Elizabeth Ranieri also graduated from the Rhode Island School of Design with bachelor's degrees in architecture and fine art and is an adjunct professor at the California College of Arts and Crafts. She has designed commercial, institutional, and single- and multi-unit residential buildings as well as urban spaces.

With the establishment of KUTH/RANIERI in San Francisco in 1990, the partners expanded their fields of expertise to include interior, furniture, custom systems, and exhibition design. KUTH/RANIERI specializes, however, in residential and commercial work. The firm's designs reflect the theoretical and practical expertise of its principals. Kuth and Ranieri are both practicing teachers as well as architects whose work is informed by an academic discourse touching on politics, psychology, and pop culture.

Kuth and Ranieri bring to this project an interest in the social and formal properties of materials. This interest stems from their training at the Rhode Island School of Design and their own notion that there are typologies or basic organizational and communicative principles inherent in form. Architecture for them becomes an act of assembly that derives its critical stance from how these basic shapes and meanings are recombined. They are, in other words, interested less in how things are made or where they derive from than in the presence of objects as material beings that have an inherent resonance with our bodies, our homes, and our cities.

KUTH/RANIERI's awards have included the American Institute of Architects' National Honor Award for

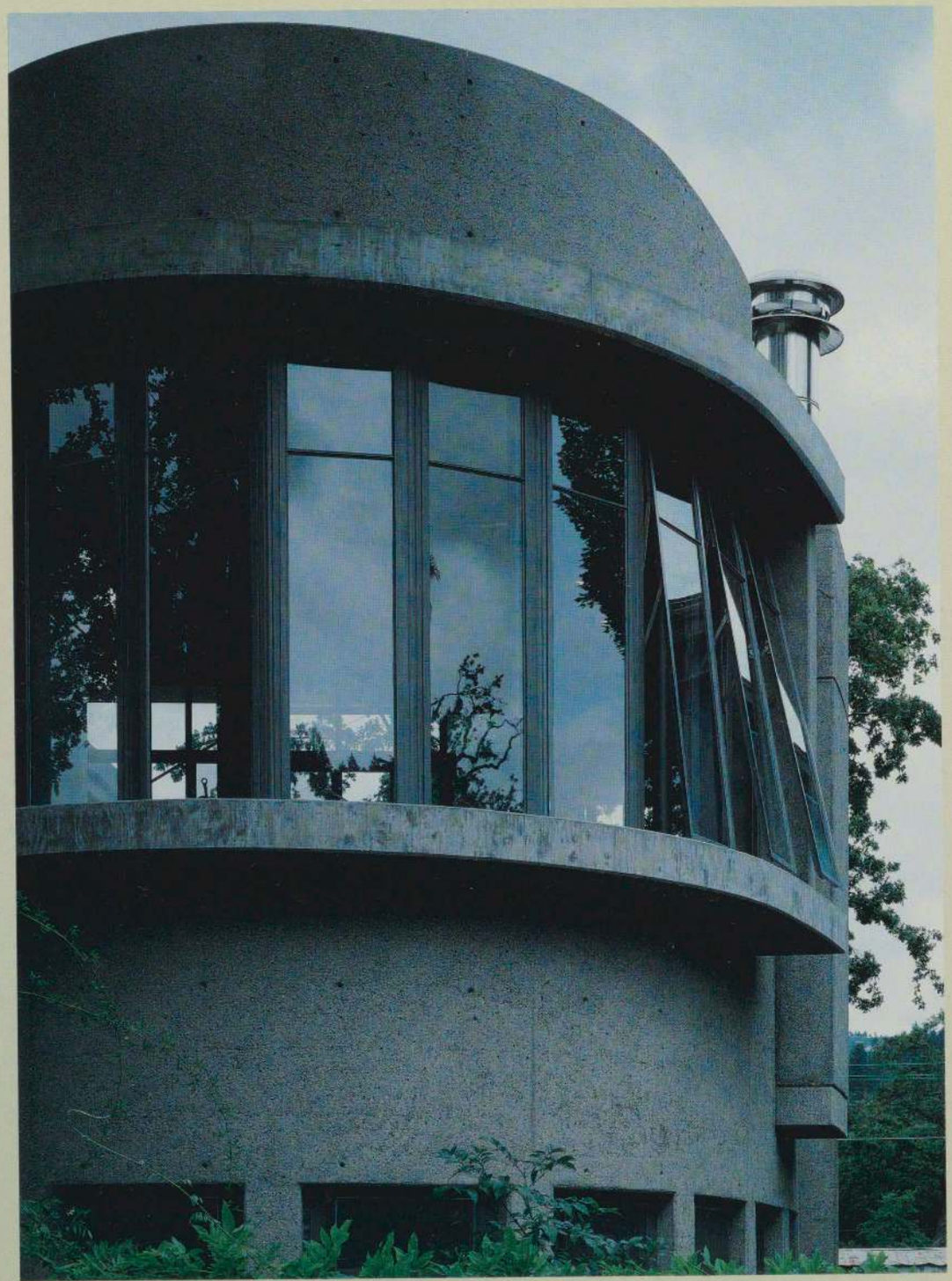
LEF Foundation, St. Helena, California, 1994
Vault, designed with Jim Jennings (opposite) and gallery (below)

Renovation, State Honor Award for Interiors, and Regional Honor Award for Interiors; the Architectural League of New York's Young Architects Award; and *I.D.* magazine's Best of Category for Environments.

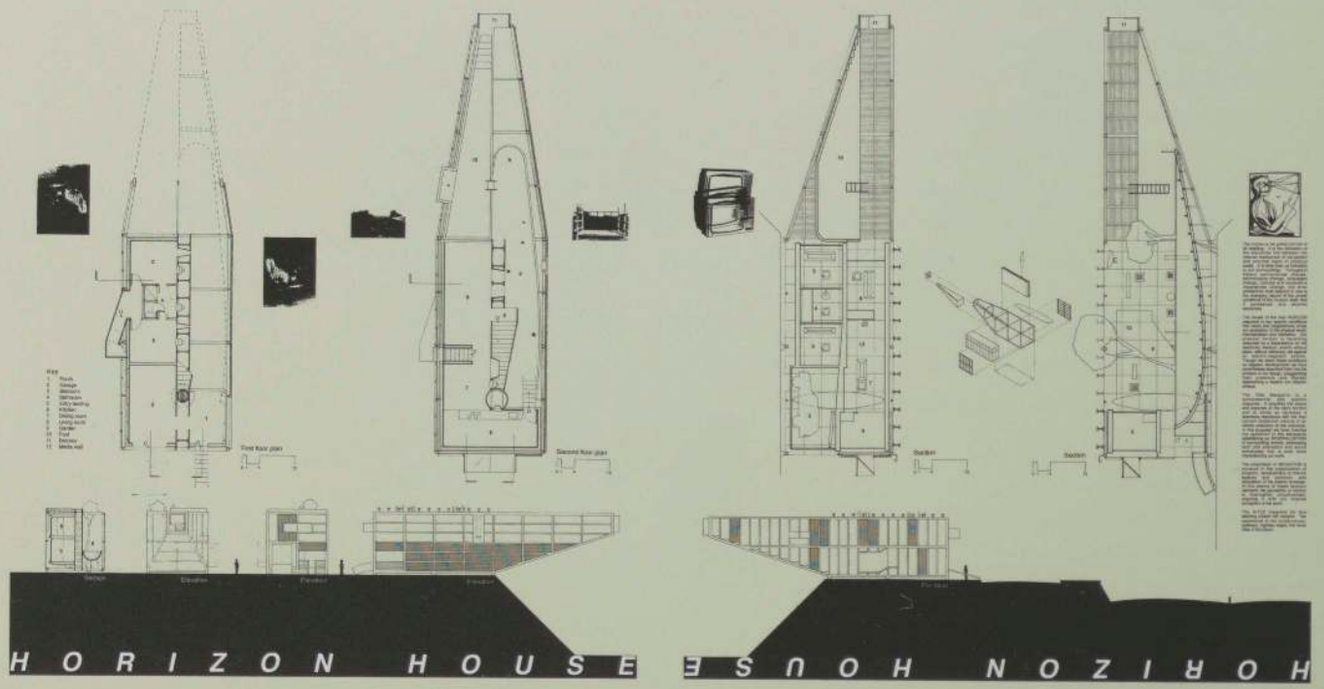
KUTH/RANIERI's designs have been displayed in commercial and university galleries in New York City, Boston, San Francisco, and Houston. Exhibitions featuring their projects have included *Sex Sells* (co-organized by the University of California, Berkeley Art Museum and Pacific Film Archive and the Rena Branston Gallery, San Francisco, 1995), *Young Architects Forum* (Architectural League of New York, 1994), *New Country: Rural Homes in California's Wine Region* (Limn Gallery, San Francisco, 1994), *City Room Garden* (co-organized by the Colleges of Architecture at Texas A&M University and the University of Houston, 1993), *Architecture Represented/Furniture Realized* (The Clocktower, San Francisco, 1992), and *3 x 3 plus 9* (co-organized by the Architectural Foundation and 2AES, 1991). Works from their recent projects—*E-Box* (1994), *Horizon House* (1994), and *Industrial Fetish* (1995)—were recently acquired by the San Francisco Museum of Modern Art.

Numerous publications in the United States and abroad have featured KUTH/RANIERI's designs, including *Interiors* magazine, *Metropolitan Home*, the *Los Angeles Times Magazine*, *Modern Living*, *Landscape Architecture*, *I.D. Annual Design Review*, *Domus*, *Architektur Innenarchitektur Technischer Ausbau*, *Zyzzyva 27*, *L'ARCA*, *Casas*, *San Francisco Interiors*, and *The New American House*.

Private residence, St. Helena, California, 1994
designed with Jim Jennings
Entry to master suite (left) and concrete tower (right)



Horizon House, 1994, model and plan
Submission for "The House for the New Millennium" design competition
Collection of the San Francisco Museum of Modern Art



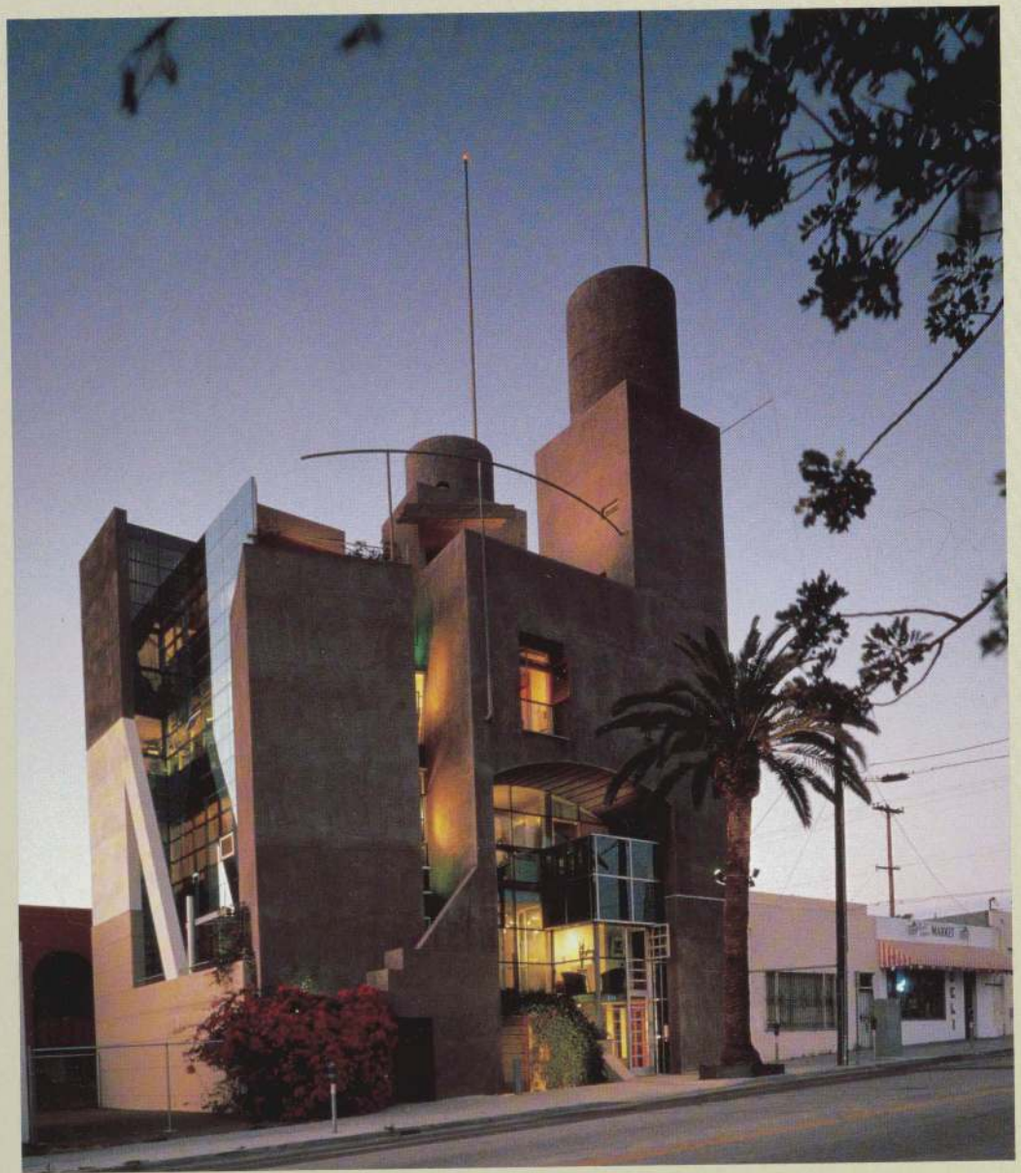
Below: Beaumont Building, San Diego, 1988
Opposite: Solana Beach Mixed Use and Transit Station, Solana Beach, California, 1995

ROB WELLINGTON QUIGLEY, FAIA

Rob Wellington Quigley, FAIA, was founded in San Diego in 1978 by its sole principal, Rob Quigley. A native of California, Quigley graduated from the University of Utah in 1969 with a bachelor's degree in architecture. He then served as a Peace Corps architect in Chile for two years. Quigley has earned more than fifty awards for design excellence from the American Institute of Architects. He was named a fellow of the American Institute of Architects in 1991 and received the Firm Award from the American Institute of Architects California Council in 1995.

Quigley believes in designing buildings that a construction worker accustomed to building tract homes can put up without too much difficulty. Strongly influenced by South American building practices, which are both ad hoc and viscerally present, he has developed an architecture of wood stud construction, poured-in-place concrete, and stucco that provides moments of logic in a world of rapidly sprawling development. The architect, who also believes in working closely with clients in a collaborative process, uses his simple vocabulary to erect forms that are slightly larger than life, with angles and shapes that peel away from the ordinary, and that compose themselves in a manner that invites both light and users to enter.

In 1982 Quigley was one of twelve architects chosen by the La Jolla Museum of Contemporary Art to represent the "cutting edge" of California design. In 1984 *Esquire* magazine featured him as one of the "best of the new generation" of men and

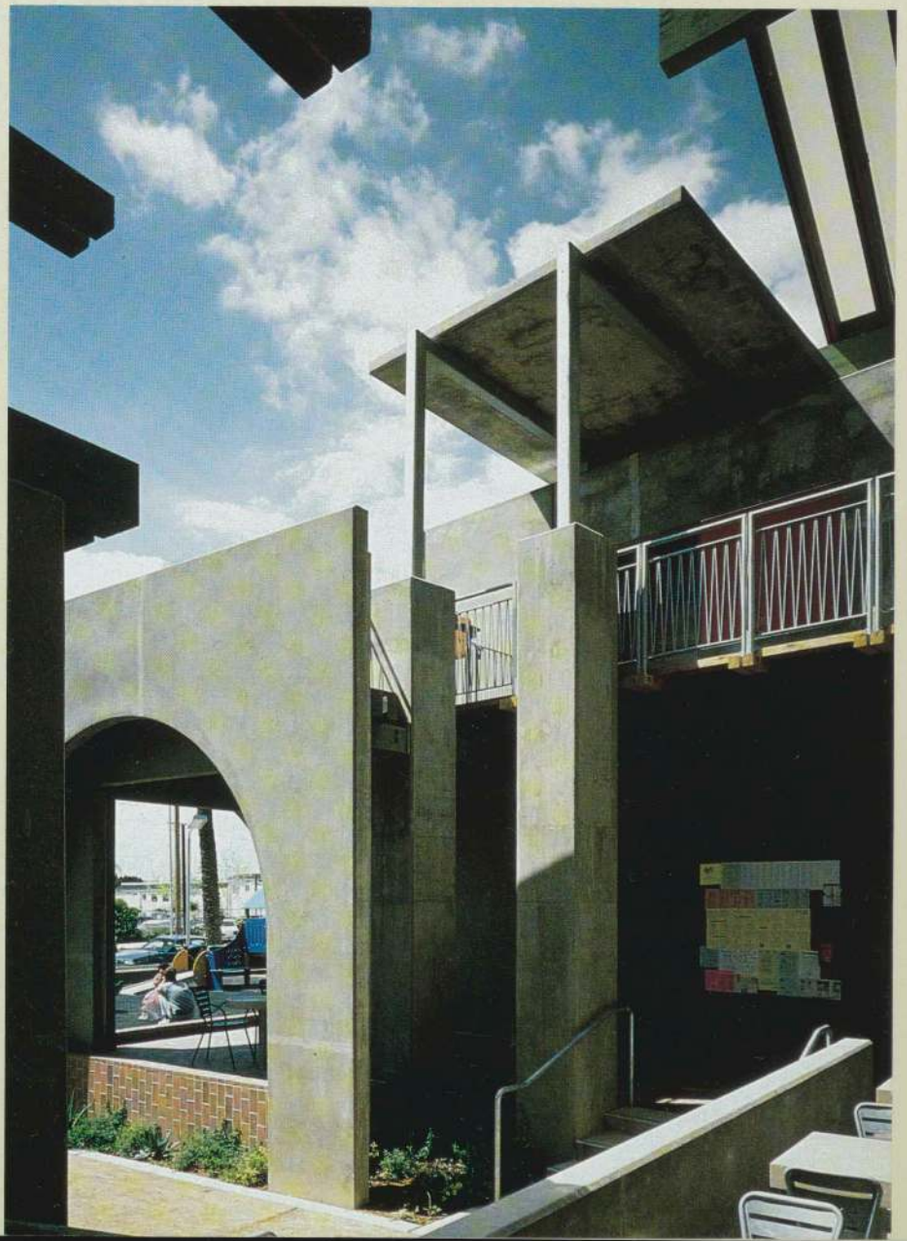


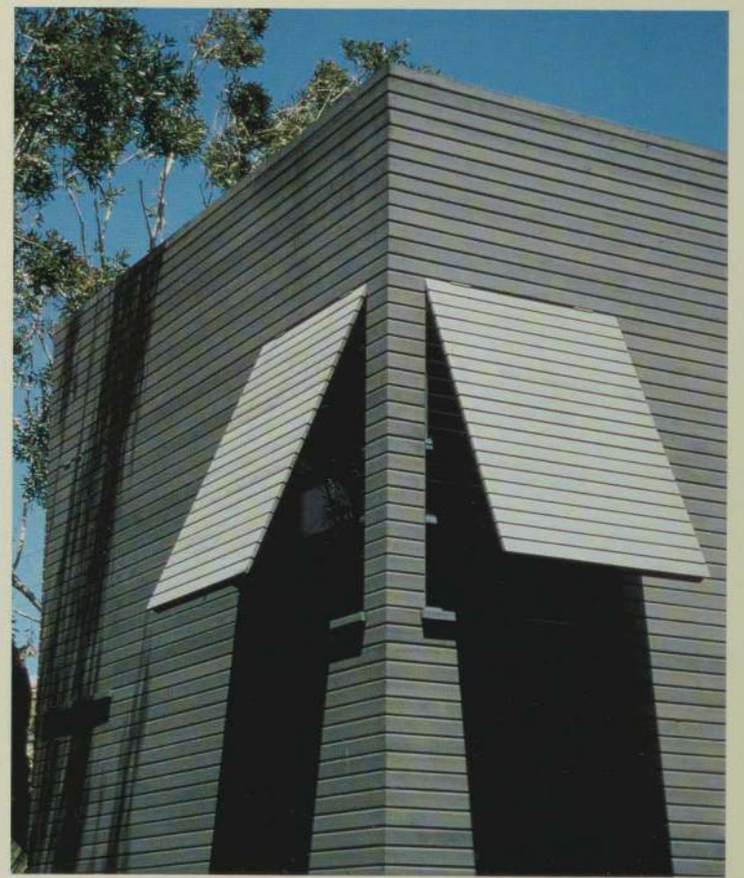
women under forty who are "changing America." The Architectural League of New York selected him for inclusion in its 1986 exhibition *Forty under Forty*, described as "an American profile of the next generation: people predicted to be influential forces in design." His work is regularly featured in local, national, and international publications, including a monograph published by Rizzoli in June 1996. Quigley has lectured in the United States and abroad and has juried numerous honor award programs. He is currently an adjunct professor at the University of California, Berkeley, and the University of California, San Diego.

Quigley's firm's diverse experience includes civic buildings, low-cost housing, custom residences, multifamily housing, and urban design. Current work focuses on community participation as a design method. It also includes projects such as the San Diego New Main Library. Quigley's landmark Baltic Inn is credited with starting the national trend in new single-room-occupancy hotels. His Island Inn, another single-room-occupancy hotel, received a national American Institute of Architects Honor Award and was selected by *Time* magazine as one of the "ten best designs of 1992."

Left: Linda Vista Library, San Diego, 1987
Right: Sherman Heights Community Center/Centro Comunal de Sherman Heights, San Diego, 1994

Left: Sherman Heights Community Center/Centro Communal de Sherman Heights, San Diego, 1994
Right: Beach house, Southern California, 1993

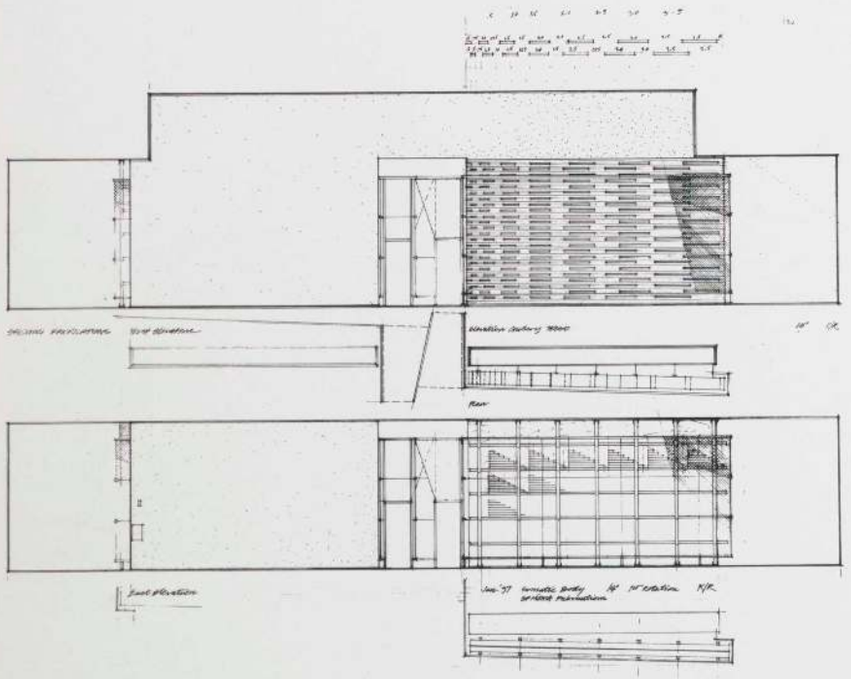




SOMATIC

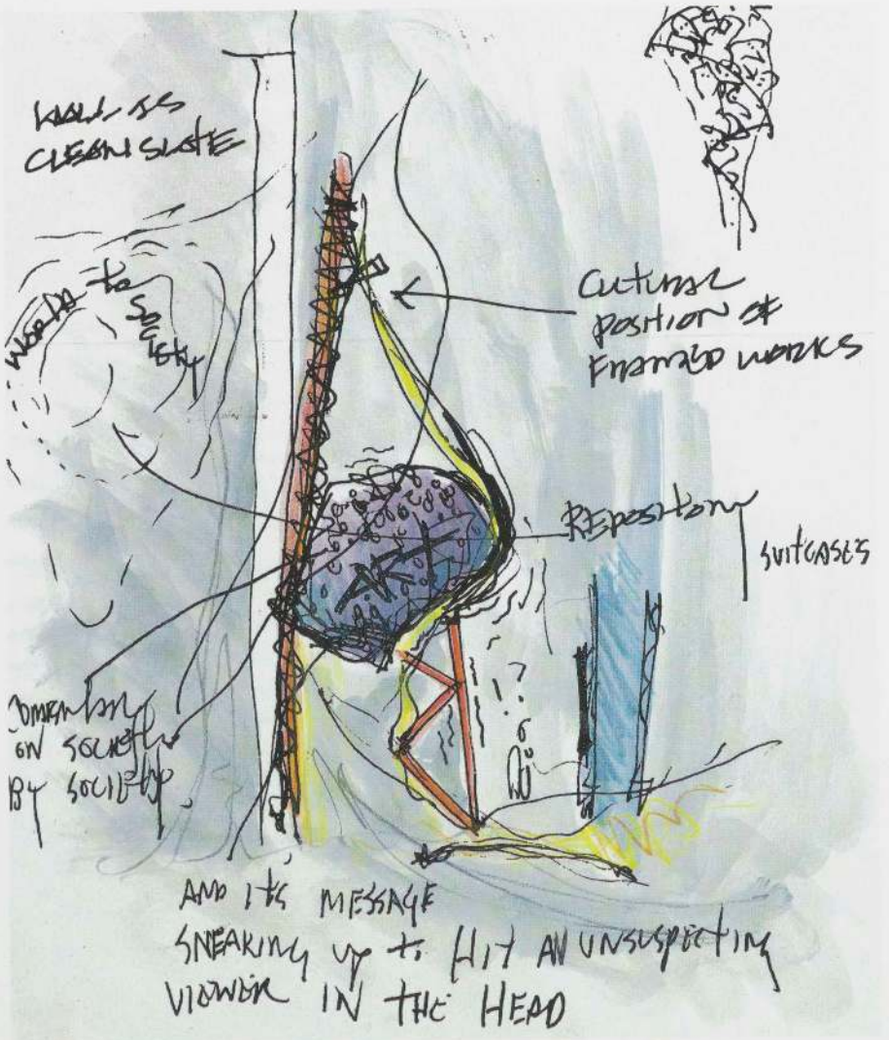
Phase I: KUTH/RANIERI

In this fabrication ordinary building systems are rearranged, blurring the traditional boundaries between the skin, the structure, and the artifacts such constructions usually contain. Kuth and Ranieri accomplished this by stripping away and elaborating the "skin" of the wall at the entrance to the gallery and then replacing it with a rewoven tapestry of building material.



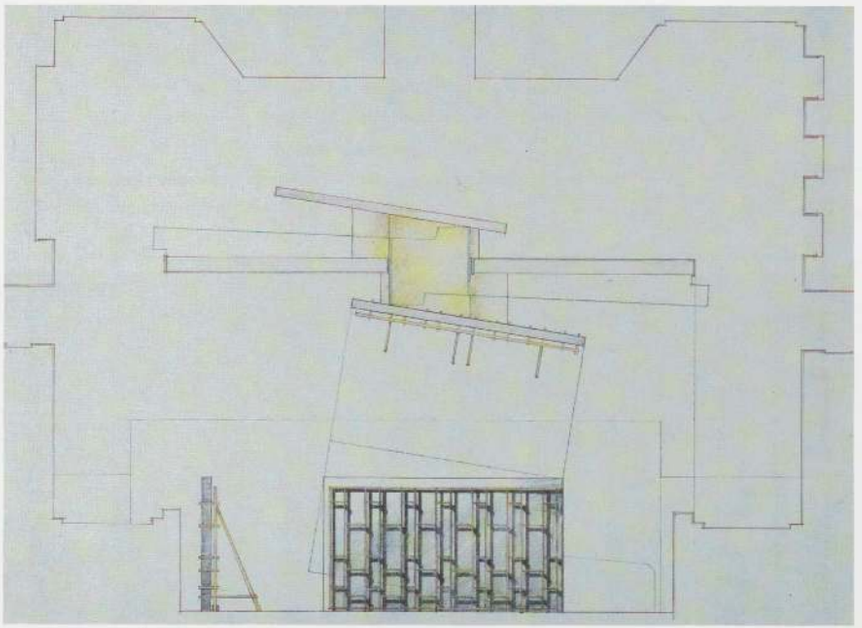
Phase II: Rob Wellington Quigley, FAIA

Quigley concentrated the intervention by proposing that a hidden object, representing "art" or a "swelling cyst of knowledge," be placed between the new and the old skins, causing a deformation of the wall.



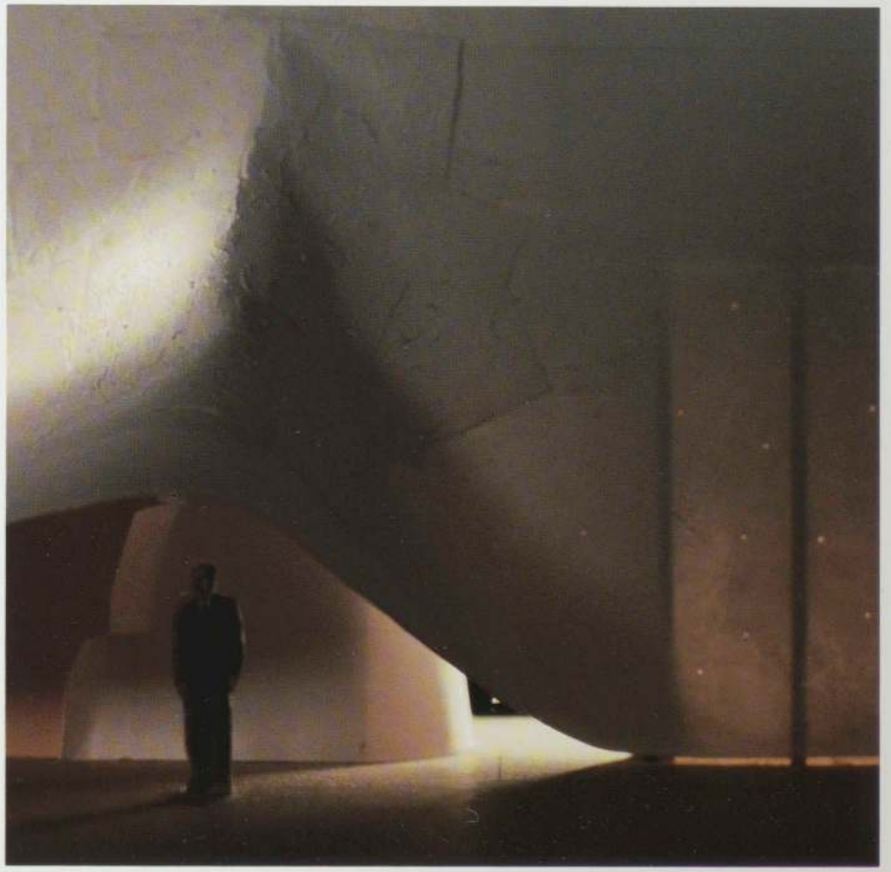
Phase III: Hodgetts + Fung Design Associates

Hodgetts and Fung turned the skin into two angled walls jutting out from the original museum division and then placed the debris produced by this construction and reconstruction at the entry passage. Thus, the viewer would have to negotiate through the accumulated effects of construction before entering the space.



Phase IV: Kennedy & Violich Architecture

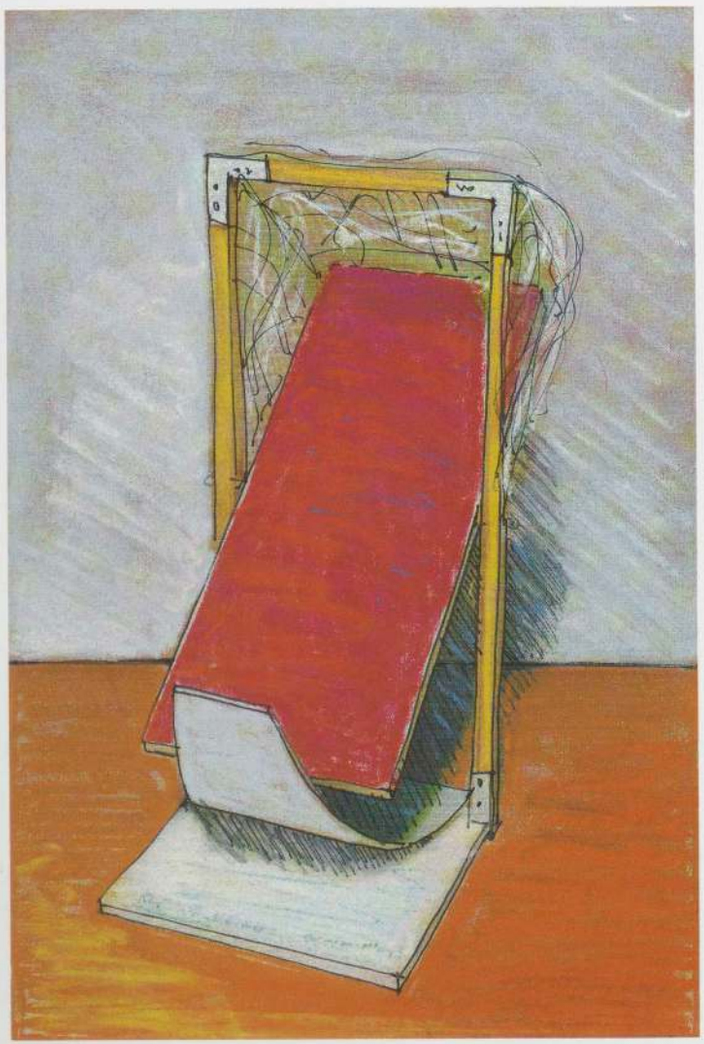
Kennedy and Violich emphasized the skinlike nature of the white gallery walls by turning drywall, which is usually the polite backdrop for art, into a sensuous sculptural material. By "misusing" conventional techniques of construction, they transformed the seamlessness of the drywall cladding and turned this ordinary material into a tactile, inhabitable skin that exhibits all the elements of its making, from the water used to mix the plaster to the scoring necessary to put on its finishing coats.



REPOSE

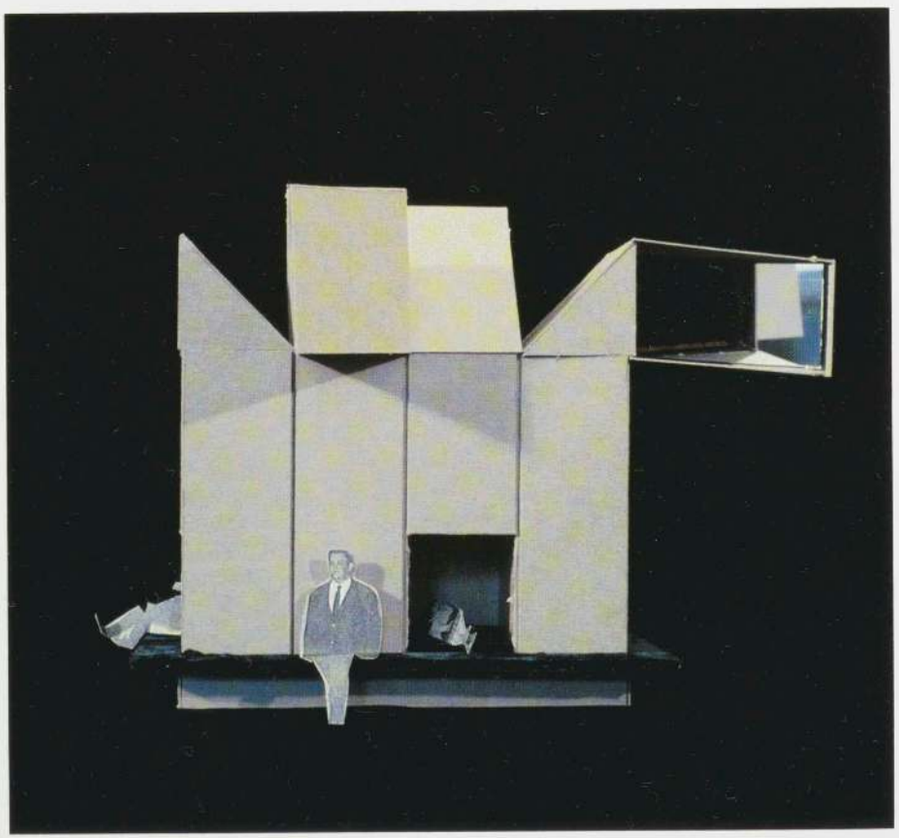
Phase I: Rob Wellington Quigley, FAIA

Quigley envisioned the environment of the gallery as a resting place at the end of what is usually a mostly visual journey through the museum. He proposed a series of highly tactile elements that invite repose, reflection, and a direct relationship with physical material, placed in the gallery in the manner of small beds or confessional booths.



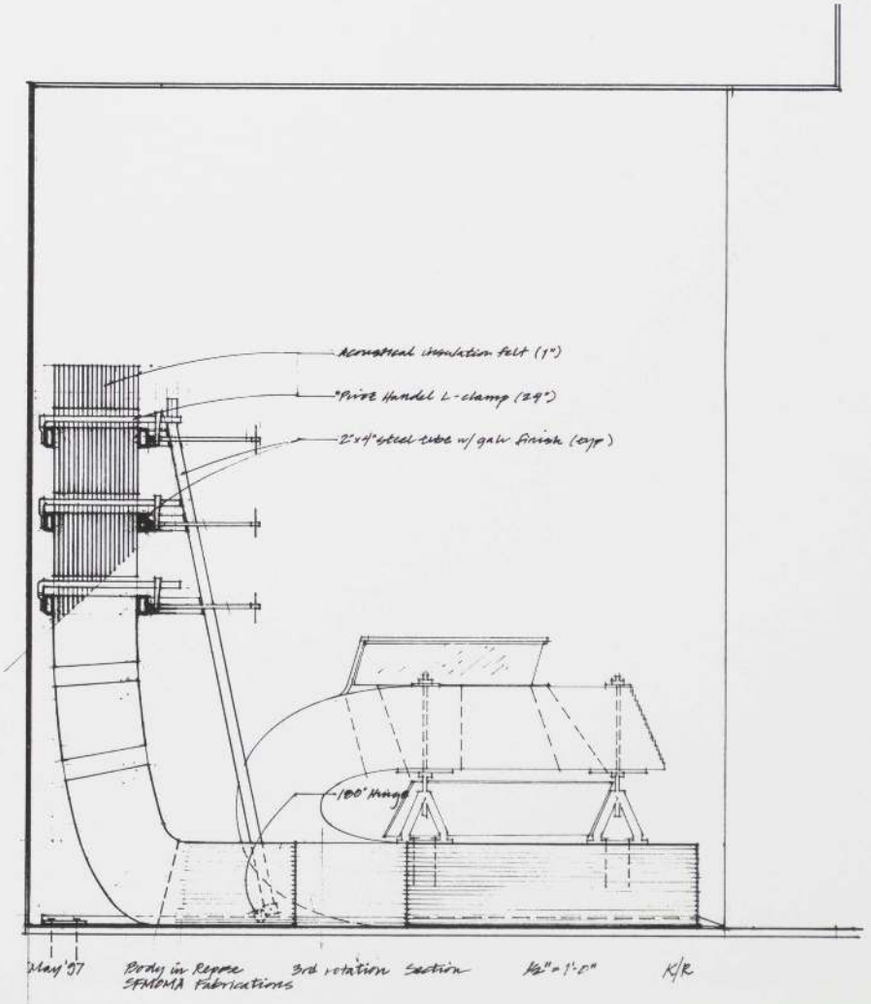
Phase II: Kennedy & Violich Architecture

Here the objects of rest became concentrated into a museum bench covered with a sensuous velvet fabric. At the edges of the gallery space, museum visitors recline on these benches and view the exhibition through periscopes.



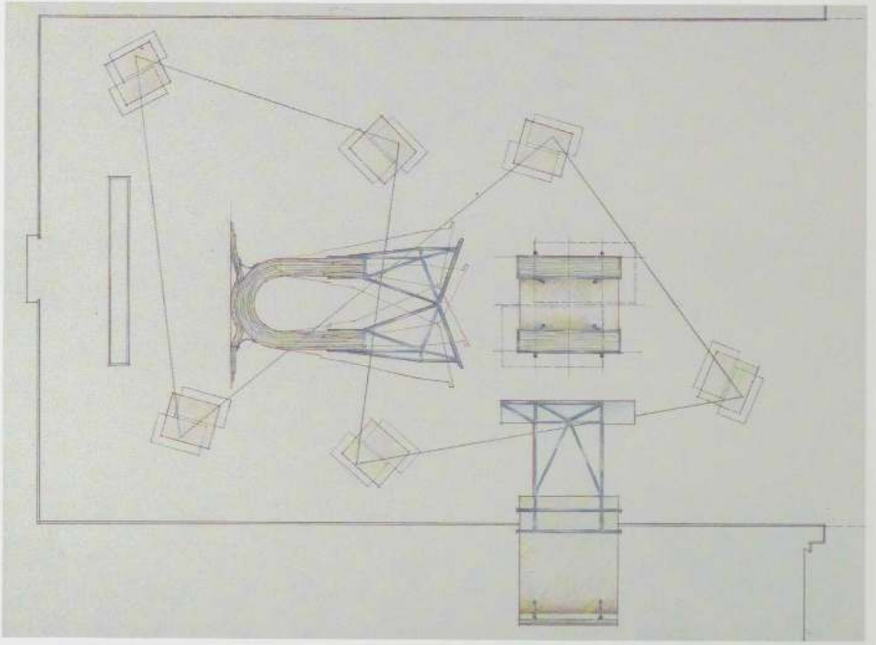
Phase III: KUTH/RANIERI

Kuth and Ranieri extracted the lining and abandoned the object. They proposed a felt monolith that would lean against the wall and curve down to the floor. In this manner it would portray conditions of both restraint (as if it were holding up the walls) and repose.



Phase IV: Hodgetts + Fung Design Associates

In this phase the felt object broke apart into separate "rocking units," which Hodgetts and Fung deployed around the gallery. Each unit consists of a laminated felt "U" shape held together with mattress buttons and topped with a steel frame holding mirrors. A visitor would enter the unit from the side and recline, looking up at the mirrors, which are angled to reflect the activity within adjacent units.



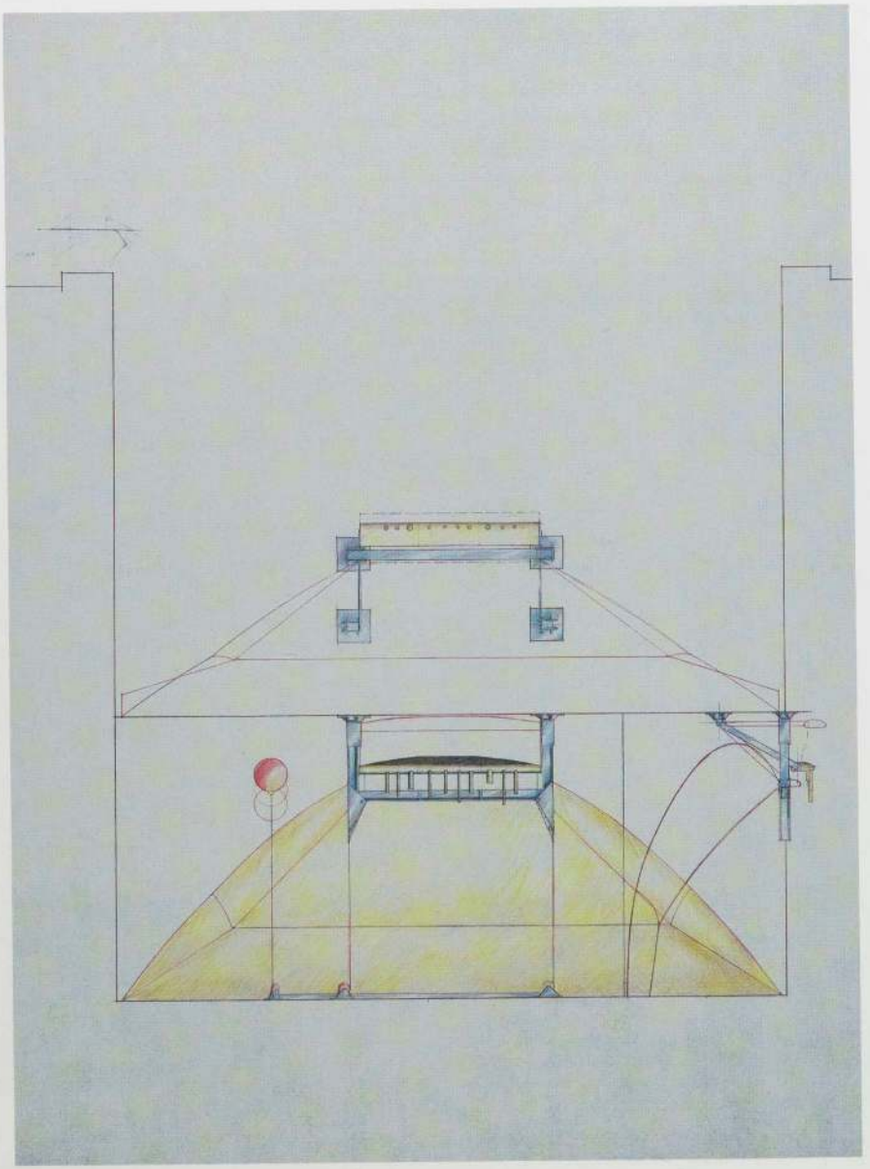
ACTION

Phase I: Kennedy & Violich Architecture

Instead of concentrating on the more obvious aspects of the body in motion, Kennedy and Violich chose to demonstrate the movement inherent in the body itself by focusing on the internal air currents that regulate the controlled environment of the gallery. They proposed to reveal the museum's unseen voids, where air moves into the building space as it would into a body cavity.

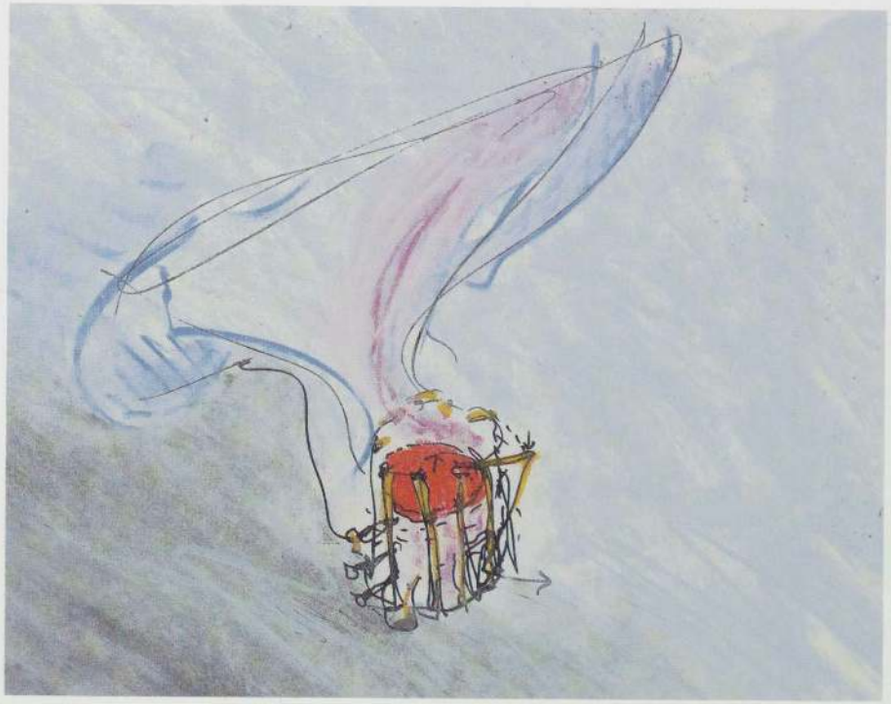
Phase II: Hodgetts + Fung Design Associates

Hodgetts and Fung transformed this space into a lung that acts as a large pressure equalizer. Air-conditioning systems "breathe" air on a cycle. As air fills the lung, its flexible skin expands until a mouth at its base opens to relieve the accumulated pressure. A set of flutes at this opening makes the release of pressure audible.



Phase III: Rob Wellington Quigley, FAIA

In this revision the lung takes on a more free-form appearance. As it bulges with air, a lid or counterweight moves upward to reveal the flutes. Quigley divided the lung into eight segments, which allows it to move in a more expressive manner and also acknowledges the divisions of the octave.

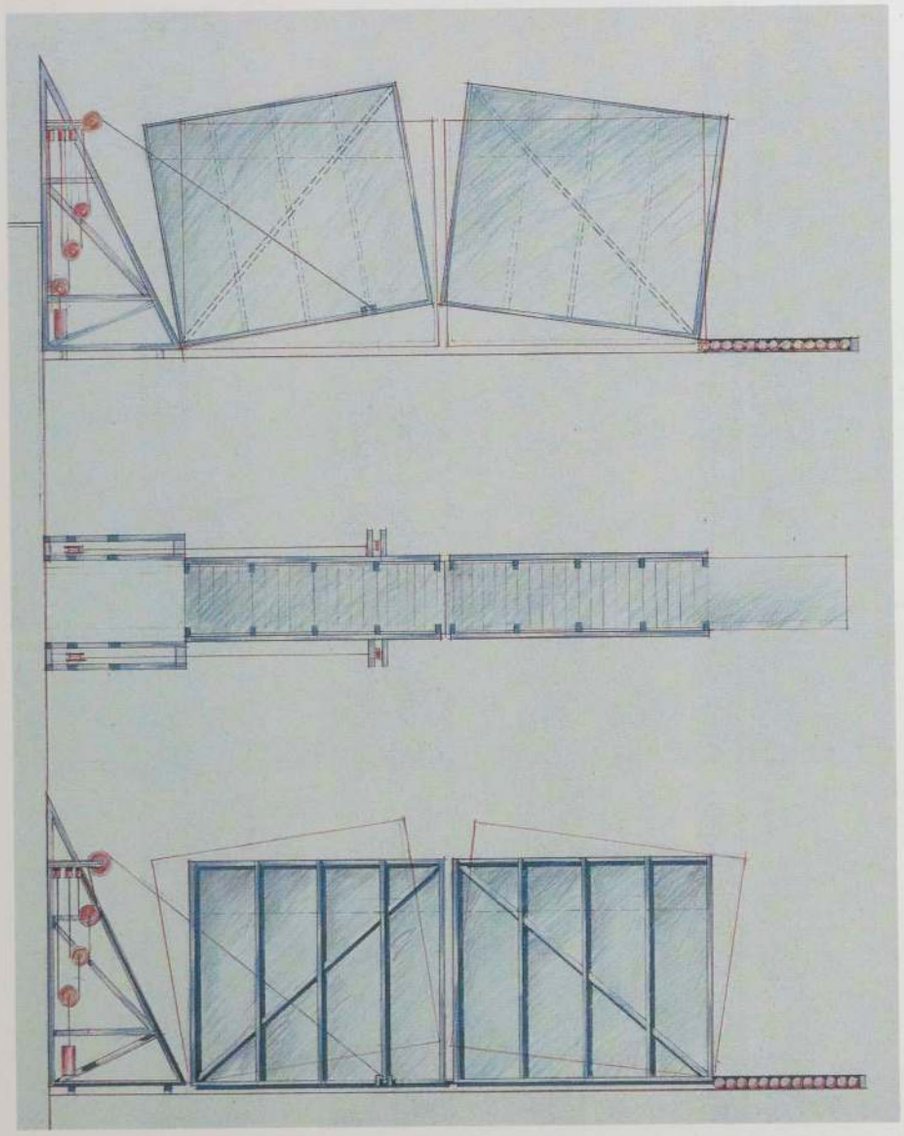


Phase IV: KUTH/RANIERI

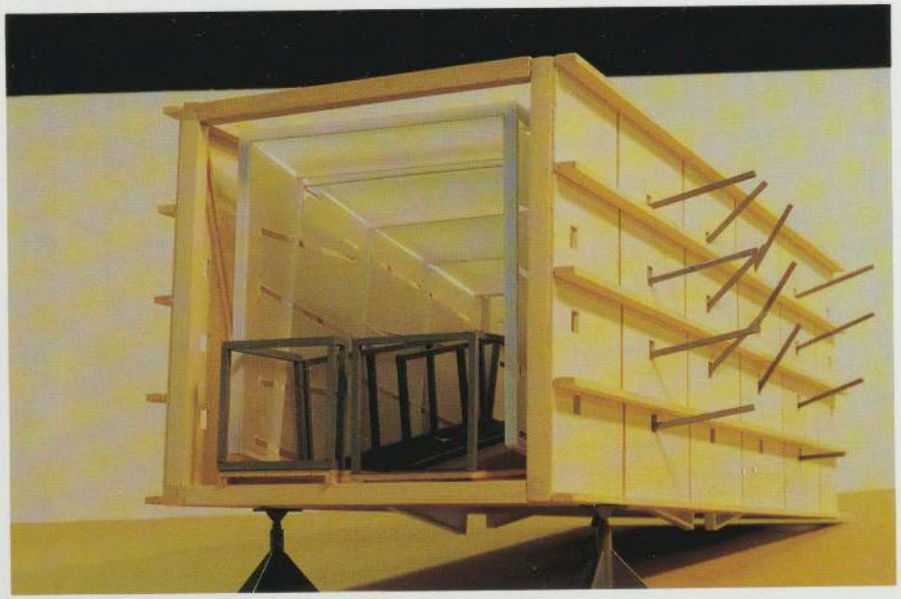
Kuth and Ranieri brought the movement of light into the operation of the lung by adding a mechanism that opens and closes the skylight directly over the lung. This darkening occurs in a contrapuntal rhythm to the opening and closing of the lung itself.

EQUIPOISE

Phase I: Hodgetts + Fung Design Associates
This design of a combination drawbridge and seesaw sought to invert the usual relation between architecture and the subject it contains. Rather than presenting an inert piece of construction that accommodates the body, this design suggests that architecture can depend for its equilibrium, its shape, and its configuration on the presence of the human figure.

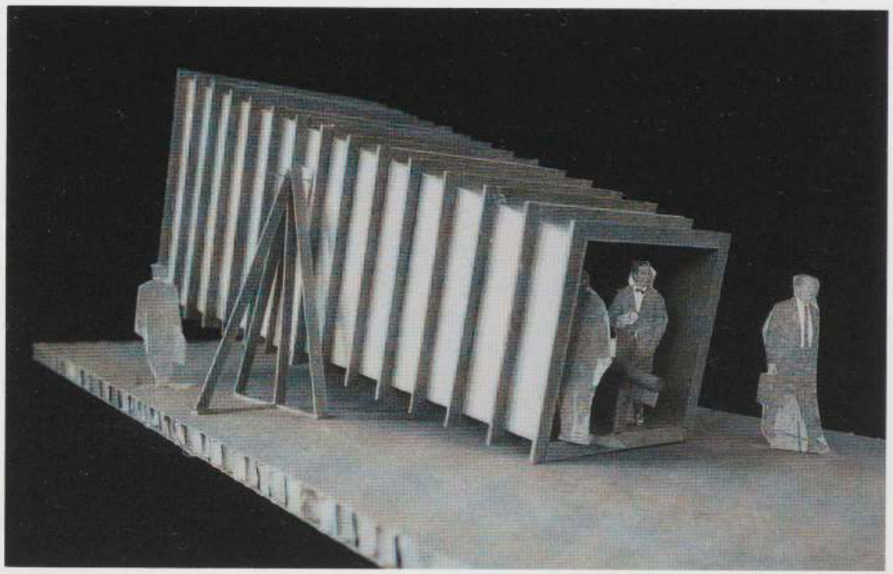


Phase II: KUTH/RANIERI
Here mobile interior walls are played off the stiff span of the container. When visitors enter the object, their weight applies force to the walls through a connection to the ramp and the vertical surfaces, pulling the walls into an erect position. Exterior counterweights move concurrently, disclosing the mobile nature of the interior.



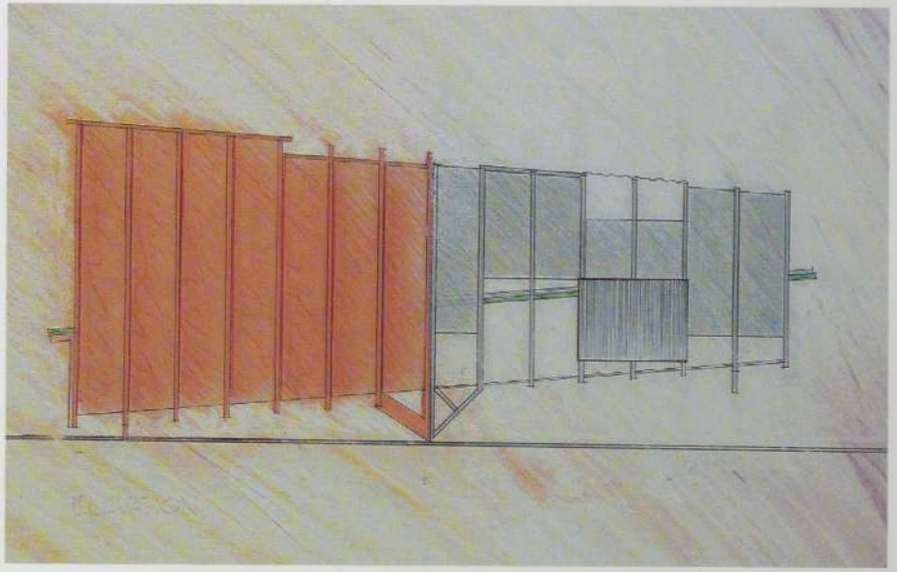
Phase III: Kennedy & Violich Architecture

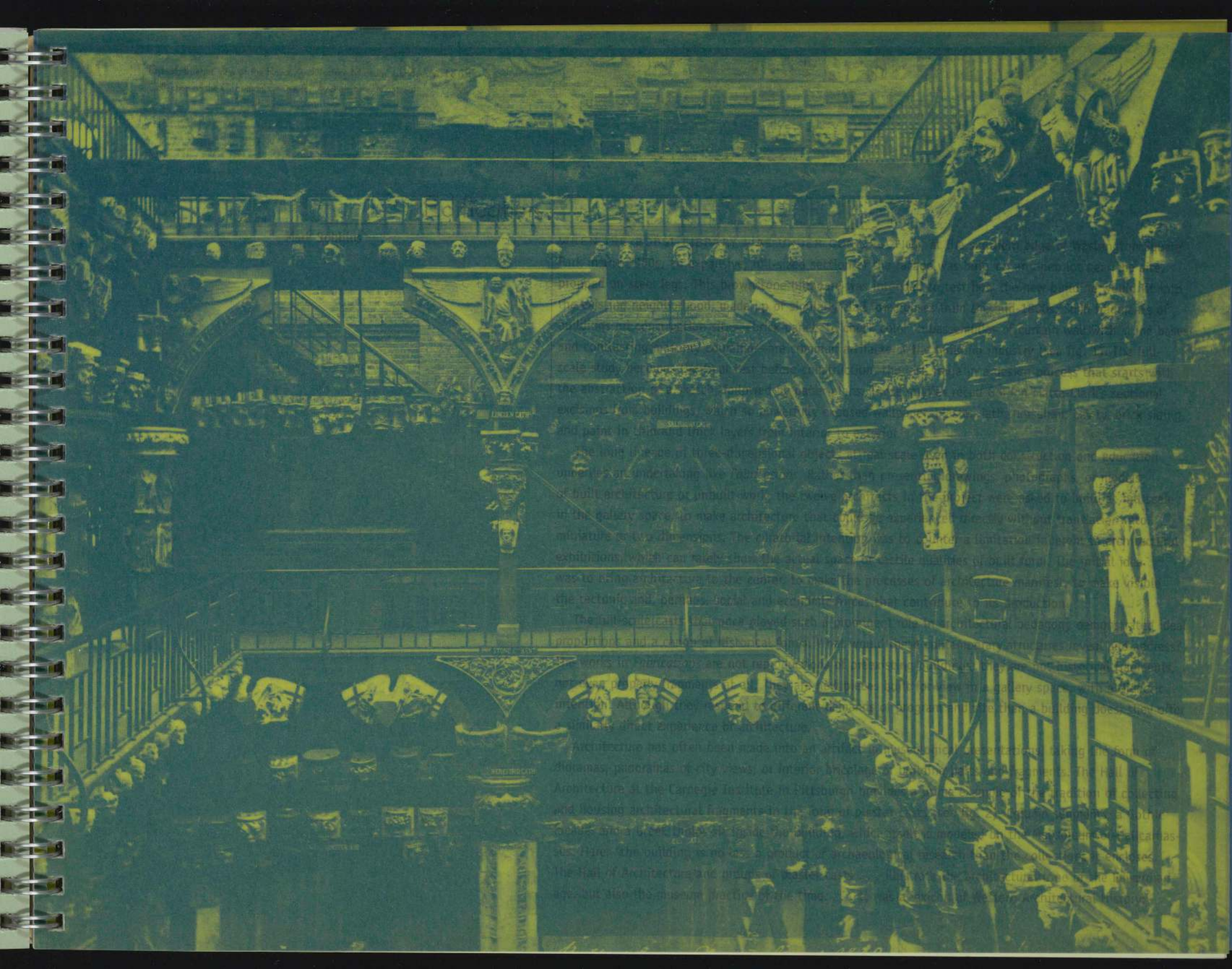
This object is simultaneously in and out of equipoise. When it is at rest and nobody is inside, the object appears to be out of balance. When visitors enter the structure's interior space, they bring the object into equipoise by searching for and finding the centroid fulcrum established by their own collective weight and a carpenter's level built into a handrail.



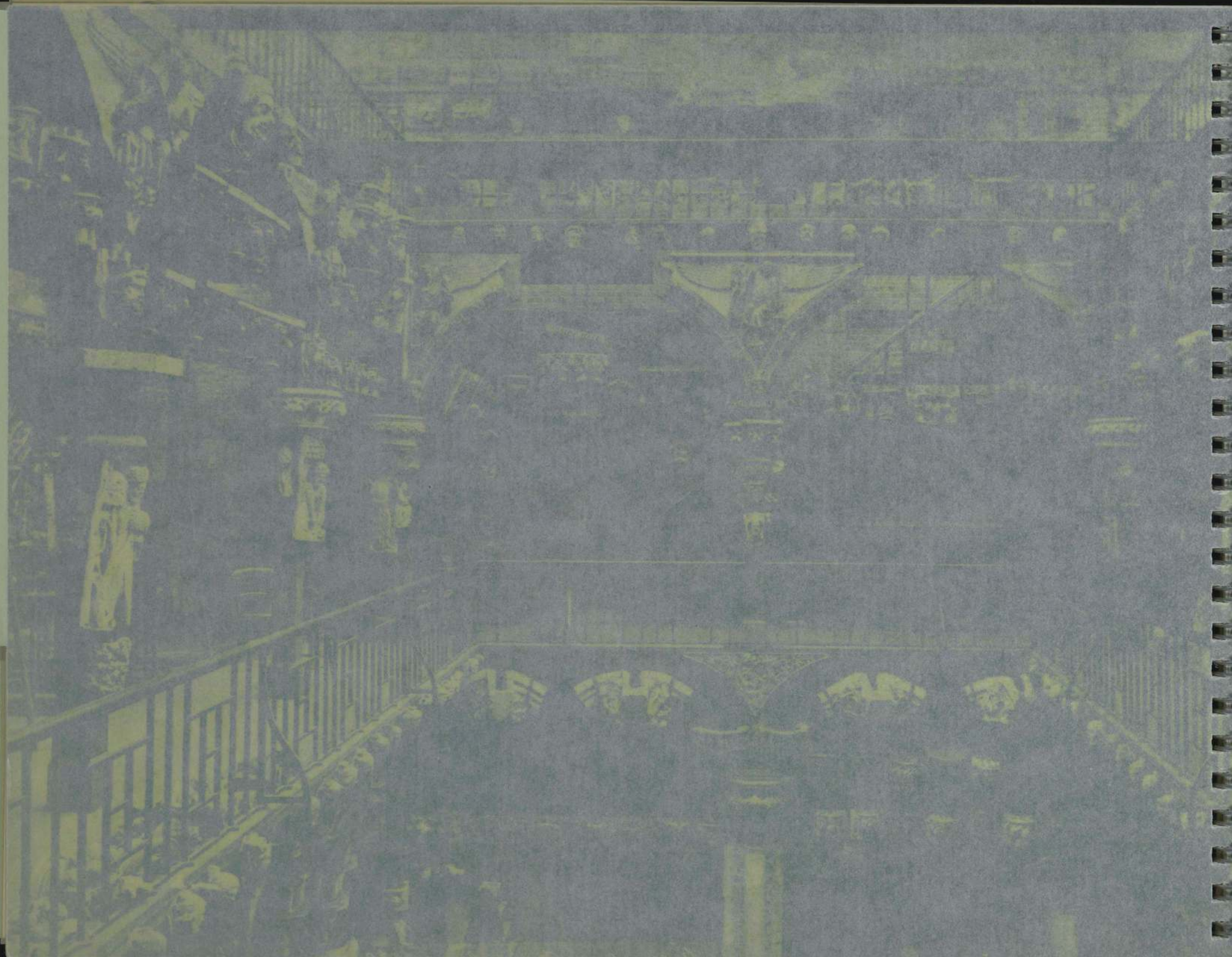
Phase IV: Rob Wellington Quigley, FAIA

Quigley engaged the materiality of the equipoise object by creating a relationship between two different materials. The wood and steel elements in this design both exhibit their structural qualities and methods of connection and react in a different manner to the visitor's presence. The object brings back the original seesaw motion of the Phase I design.





MoMA



Flyleaf: Interior view of the Royal Architecture Museum, London, c. 1869
Collection of the Canadian Centre for Architecture, Montréal

Edification

Mark Robbins

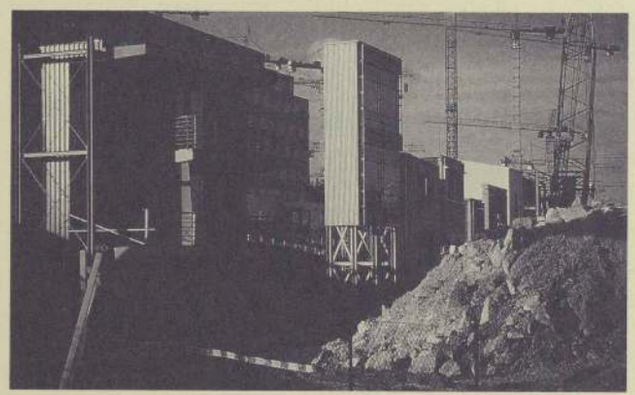
WHEN THE BOBST LIBRARY WAS UNDER CONSTRUCTION at the southern edge of Washington Square Park in the 1960s, an expansive, full-sized section of the façade was built on an open lot near the site, propped on steel legs. This brownstone billboard was intended to test how the new building would fit into the existing neighborhood, made up of similarly clad row houses from the mid-1800s. Such fragments of buildings on construction sites—brick panels to check color, subassemblies of curtain wall with stone bases and contrasting masonry coursing—are common artifacts of the building industry (see fig. 1). The full-scale study becomes the final test before construction, the last stage in a design process that starts with the abstraction of a sketch, followed by paper plans. These studies recall Gordon Matta-Clark's sectional excisions from buildings, which so powerfully exposed wallpaper, plaster, lath, horsehair, cavity, brick siding, and paint in thin and thick layers from interior to exterior.

The long lineage of three-dimensional objects at real scale used in both construction and education underlies an undertaking like *Fabrications*. Rather than presenting drawings, photographs, or models of built architecture or unbuilt work, the twelve architects in the project were asked to build at full scale in the gallery space, to make architecture that could be experienced directly without translation into miniature or two dimensions. The curatorial intention was to counter a limitation inherent in architectural exhibitions, which can rarely show the actual space or tactile qualities of built form. The initial idea was to bring architecture to the center, to make the processes of architecture manifest, to make visible the tectonic and, perhaps, social and economic forces that contribute to its production.

The full-scale casts that once played such a prominent role in architectural pedagogy demonstrated ideal proportions and a canon of historical forms. What would these contemporary structures reveal and address? The works in *Fabrications* are not reproductions of preexisting buildings; they are not historical fragments, not even properly fragments at all. They are new pieces built for view in a gallery space, with a didactic intention. Although they respond to different demands of program and site than a building does, they offer a similarly direct experience of architecture.

Architecture has often been made into an artifact in museological presentations, taking the form of dioramas, panoramas of city views, or interior bricolage of building parts and fragments. The Hall of Architecture at the Carnegie Institute in Pittsburgh provides a prime example of the tradition of collecting and housing architectural fragments in the form of plaster casts (see fig. 2). Column segments, a Gothic façade, and a Greek tholos sit inside the building, which itself is modeled on the Mausoleum of Halicarnassus. Here, "the building is no less a product of archaeological research than the collections it encloses. The Hall of Architecture and groups of plaster casts . . . illustrate the architectural tone of the Edwardian age, but also the museum practice of the time. . . . It was a lexicon of Western Architectural History:

Figure 1: Building test panels, Berlin, 1997



Everyman's Bible . . . in plaster."[1] The impossible adjacencies of the Hall of Architecture are echoed in the revivalist architecture of the surrounding city, where the miniature Beauvais of the Heinz Chapel sits across from the classical Carnegie Institute and the Gothic tower of the Cathedral of Learning in a grouping that transforms the cultural center of Pittsburgh into an elevating outdoor museum.

Ensembles of relocated historical buildings and collections of miniature or full-scale re-creations occur in varied contexts. Philip Johnson's estate houses a collection of structures that mark the architect's evolution, not only reflecting his own work over the past forty years but also offering a synopsis of the trends of the modernist era. The tepid urban representations of Disney theme parks and hotels conflate different environments; the more aggressive collage of the new "New York, New York" hotel complex simulates that city's landmarks in Las Vegas. Places like Sturbridge Village or Williamsburg carry the simulation further to include ersatz town life. In other examples architecture has been cannibalized to form synthetic historical constructions such as the composite medieval Cloisters in New York and William Randolph Hearst's San Simeon castle in California. Aligned through possession, presentation, or reinhabitation, historical fragments—especially ones of European lineage—became a means of insinuating political or cultural identity into a structure. The fragments, valued for their authenticity, serve as amulets and emblems of the continuity of power.

Reflecting this encompassing faith in the importance of the "real" model—or at least the "authentic" reproduction—historical fragments and casts fulfilled a direct pedagogical purpose in schools of architecture

1
James D. Van Trump, "The Tomb, the Temple, and the Casts," *Carnegie Magazine* 32 (May 1958): 167.

through the first decades of the twentieth century. Students would learn by drawing these objects, which had a substantial physical presence, even though their context, and often their materials, had been changed. Studying casts of architectural elements (or, for art students, classical sculpture) assembled in an academic setting was a substitute for—or a prologue to—the grand tour. But such models could convey neither the interior space of the originals, nor, given the monolithic nature of plaster, the structural system of joints and connections. The pedagogic exercise became focused primarily on surface modeling, light and texture in a painterly field, which may explain the ornamental exuberance of Beaux-Arts academic work on both sides of the Atlantic, encrusted with statuary and allegorical bas-reliefs. This practice reinforced an academic architectural canon, a vocabulary open to some manipulation but essentially confined to repetition.

Other approaches to learning about the physical world and design were in development in the late nineteenth and early twentieth centuries, modes of education that involved a changed regard for the historical model. The Froebel system, with its famed blocks, was particularly influential in this regard and became legendary for its impact on architects such as Frank Lloyd Wright and artists such as Piet Mondrian, as well as on musicians and philosophers. The cylindrical and square blocks use geometric patterns to teach about order and form and to represent principles of organization. In essence, the Froebel system introduced a modernist approach to education, which stressed process and individual discovery over knowledge about precedents. Teaching from fragments and casts, by contrast, was part of a premodern mode of education based on historical models, not a response to site or programmatic analysis.

Modernism in architecture and art stressed invention, through an attempt to formulate abstract principles. New forms were to be derived from pragmatic needs, using the essential elements of space, form, and light wedded to new materials and construction methods. The participants in the Wexner Center component of *Fabrications* reveal a spectrum of modern approaches to architectural production. These designers—Samuel Mockbee and Coleman Coker (Mockbee/Coker Architects), Eric Owen Moss (Eric Owen Moss Architects), John and Patricia Patkau (Patkau Architects), and Stanley Saitowitz (Stanley Saitowitz Office)—stress the particularities of program and site (taken in the broadest sense to include materials, climate, economics, and topography) as generators for their work. They draw from varied sources what is necessary to make their work serve beyond programmatic utility.

A specific framework for the Wexner Center's presentation of *Fabrications* did not exist in advance, although the selection of this group of architects, all noted for their built work, had already delimited some common ground. Over the eighteen-month planning period, several meetings and conversations took place with the architects, both as a group and individually. The early discussions centered on the curatorial charge of working within a gallery space and making an architecture about itself.[2] The architects

2
Quotations from the participating architects come from conversations with the author during the planning phase of *Fabrications*.

expressed a general reluctance to work on projects without function and a desire to use some elements of their projects after the exhibition, not wanting to waste materials and effort.

For these architects the program ordinarily provides the impetus for design: ideas come from the immediate needs of the program, which also brings with it material concerns. The exhibition context gave them a chance to produce work from an overall idea, rather than to have it theorized after the fact. As the title suggests, *Fabrications* is about the process of making, but it is also about the ways people interact with architecture, about relations to the body, and about the physical and sensual experience of architecture.

Within the four-thousand-plus square feet of the gallery at the Wexner Center, the four architects negotiated their use of the space. In another reversal of standard practice, they were not assigned sites as in a master plan. Some gravitated to the edges; others approached the space in horizontal and vertical sections. Their projects function as objects and spatial envelopes, each yielding space and shaping spaces between the pieces. Although locations were agreed upon and each architect was informed of the project designs of the others, unexpected spatial and material relationships developed.

Each took a different approach to the gallery and the expressive potential of architectural form, creating an ensemble that spans figurative and abstract strategies and encompasses much of the modern material palette of wood, metal, and glass. Approaches to site and function also varied: Moss's project is directly site-specific, the Patkaus' open to more general applications. Each architect or team developed individual concepts of function, sometimes in response to perceived needs within the exhibition or the Wexner Center space (Saitowitz) and other times in response to ongoing interests in their work (Mockbee/Coker). Although all four projects were produced with the same budget, the economics of production also varied: Mockbee/Coker used students as interns; Moss worked with an interested fabricator who gave him a deal on the steel and fabrication; Saitowitz arranged to have the acrylic material donated. In an era with few architectural patrons, one realizes the often overwhelming expense of architectural work, how the costs of materials and labor are prime limiting factors for architects whose practice depends on building.

ERIC OWEN MOSS'S INSTALLATION APROACHES SPACE as a sculptural, three-dimensional entity, "defined above, below, or through." He used the decidedly non-neutral space of the Wexner Center gallery and responded to the formal properties of the orthogonal grid. His pieces drape in sinuous steel sections, with an apparent limpness that is counterintuitive, suggesting melted or failing structures. This treatment works against the rigidity of the steel, as Gian Lorenzo Bernini's fluttering stone curtains defy the crystalline structure of marble and alabaster.

Figure 2: Hall of Architecture, Carnegie Institute, Pittsburgh, c. 1940
Collection of the Heinz Architecture Center

The project began as a series of sketches reflecting an interest in viewpoint and the spectator. The first of these outlined bleachers in the air with a radius curve and a single focal point. This gesture recalled at a diminished scale Moss's project for Havana, where he proposed lining one of the oldest plazas in the city with a perimeter of bleachers set against the amphitheater of building façades. In the Wexner Center sketch the bleachers are elevated and intersect with the open modernist volumes of a gallery. The concentric circles of an arena play off the overlap of grids within the building, and the single focus asserted by the geometry of the circle provides a center within the linear structure. In subsequent drawings the bleachers were fragmented and cut into four-foot strips, and three different vantage points were created, originating from the same center. A series of steps and/or seats (each level is simultaneously either or both) leads the eye to platforms seven feet below the beams. The plate-steel stairs, which to Moss appear to be "walking away or dancing," co-opt the space in the loft of the high gallery. He invites viewers to change their vantage point and insinuate themselves into this "void," offering another perspective on the other projects of *Fabrications* and on the space itself. His intent was clearly to "take on the building"—not just the gallery floor but also the space above—through a series of tactile elements. He heightens our awareness of gravity by seeming to deny it, creating a baroque insertion that reads against the structure and symbolism of the Wexner Center's grid.

John and Patricia Patkau's project is a small, self-contained "cottage" that can be built for about $15,000 and transported to any site. The architects are based in the Pacific Northwest, and the intended clients for the cottage might be young workers who live in that area and might not be able to afford land that is both desirable and serviced by utilities. The freedom from connection to services opens up the option of placing the cottage in dramatic wilderness sites. Each unit sleeps two in an elevated loft and is equipped with a kitchen and a bath with composting toilet and shower. Electricity is to be self-generated by a photovoltaic collector supported by a lightweight frame, and water is collected from rain runoff and distributed through the unit. The cottage could be installed on flat ground or, with levelers, on rocky terrain. In the gallery the cottage is mounted on railroad ties, with water provided by a recirculating pump.

At first review the Patkaus' project might appear to represent a departure from their usual approach, which emphasizes the analysis of site and surrounding culture. But John has also said that the firm is "ideologically not committed to the particular," nor is it "against the general," but instead it seeks "a mix of both." He asserts that the architects didn't want the Wexner Center project to be site-specific: "a mood box" in the gallery, architecture reduced to an atmospheric set piece. They wanted their project to have a life beyond the exhibition, and so they envisioned a kind of prototype housing unit based on their interest in natural and technological systems.

For the Patkaus this proposal does not necessitate the use of space-age materials; sheets of plywood or other renewable, manufactured materials are ideal. The project could be related to many previous examples of architects and builders working with prefab, minimal approaches to housing, but John Patkau sees only minor, functional links to such sources. He has another spirit in mind, saying that there is nothing wrong with redundancy or "fat" and not always searching for the simplest solutions. Although the Patkaus are pragmatic, they don't idealize technology. They see new possibilities in today's manufacturing and construction environment. Their cottage is a wooden machine for living in, set within the gallery's open, modernist expanse of white structural steel and Sheetrock.

Samuel Mockbee and Coleman Coker's proposal for *Fabrications* is essentially a ramp, which can be seen as a continuation of the long ramp of the Wexner Center, to a small elevated room. The ramp rises between layers of walls to an aerie that becomes a place of meditation above the gallery floor. Sitting in close proximity to the stalky metal legs of Moss's bleacher fragments, Mockbee/Coker's project is made of rough timber framing units, two-by-fours constructed as a kit by students in Memphis, where Coker teaches. Inspiration for the project comes from the layout of an old school bus inherited by a man named Joe Harris and used by him as a home in rural Mississippi. Initial sketches outlined the linear array of interior elements: kitchen, bed, TV, and a rust red curtain to block light near the bed. Photographs of the exterior

show the stairs up to the back of the bus and the windows filled in with plywood panels. The local gesture that makes the bus inhabitable also develops an abstract façade of opaque, translucent, and transparent openings against the orange metal of the bus.

One might question how a man comes to inhabit a bus—and have reservations about the social structures that might produce such living conditions. But that is not Mockbee and Coker's intent: Harris lives in his bus of his own accord on land owned by his family, and they wouldn't presume to relocate him, with reformist zeal, to an "appropriate" dwelling. They take another approach to the implied political questions about local and global action. After the exhibition the pieces of the installation will be picked up and carted to Mississippi, where they will become components of an addition to Harris's bus/house.

Ordinarily a bus moves, providing views out to the landscape, but Mockbee/Coker's reinterpretation of it remains static. Transformed into a ramp that breaks, on a regular cadence, the four-foot module of the building, it permits views out to the space of the gallery. As Coker says, this is how we experience architecture, as it unfolds in motion and in time. The intention was not to make a diorama of a rural setting in a high modern envelope, but to give a general sense of landscape and the varied interactions between built and natural, fixed and moving, gallery and construction.

Stanley Saitowitz's project goes about "demarcating" space in a mode that is materially present yet almost invisible. For a location that functions both as a reading room adjacent to the galleries and a passageway to a black-box theater, he developed a more articulated area for reading. Through the use of half-inch-thick acrylic sheet, he was able to delimit space and allow more ephemeral readings of light. (He speaks about this project as an attempt to make real the transparent quality of computer renderings.) Books, and readers, are displayed within the angular planes. In addition, the gallery walls are laminated with the acrylic material, placing them—and perhaps the museum as an institution—on display. He extended a clear Plexiglas floor over part of an existing stairwell, a gesture reminiscent of the glass floors in nineteenth-century library stacks. Its vertiginous position heightens viewers' experience of retrieving information. The plastic is lit at the edges and etched to increase the complexity of the layering and reflections, establishing a diaphanous atmosphere, like a clouded hall of mirrors.

Saitowitz selected some of the books to be displayed in his new reading room, but the space will continue to function primarily as a place where visitors may peruse catalogues and background reading about all the exhibitions in the Wexner Center galleries. It may also be a site for the projection of images from the other *Fabrications* venues. His project becomes a collector for the gallery space, including the ensemble of projects of which it is a part. He comments that "the Wexner is full of images but no materials"; his proposal, by contrast, is "full of materials and no images." It could be viewed as a vitrine for its own display or as a reversal of container and contained, the transparent planes simultaneously enclosing and enclosed.

PLACING A BIT OF BREAD IN A MUSEUM WILL IN NO WAY CHANGE THE FUNCTION OF THE MUSEUM BUT THE LATTER WILL CHANGE THE BIT OF BREAD INTO A WORK OF ART.[3]

In his essay for *Thinking About Exhibitions*, Daniel Buren saw architecture as background, support, and frame for any work—art submitting to architecture. How does this translate when architecture is made into artifact, when architecture is placed as an object center stage, changing its quality: submitting architecture to architecture? Putting a building in a building—inside, where it doesn't have to protect from the elements, where it may not accommodate habitation, where it is shielded, no longer a self-sufficient piece—raises certain fundamental questions about what architecture is and how it is different from art. Like mobile homes in huge showrooms or prefab log cabins in trade shows, buildings on display are made smaller, domesticated. This is partially a response to their lack of function, even though they may still be wired for electricity and filled with furniture (usually carefully roped off from the spectators and their real weight). These structures never get wet or sooty or graffiti covered. Seen in rooms filled with hushed conversations, they are themselves perhaps muted, although now at the center rather than the "distracted periphery"[4]—empty envelopes on display. The seams and details are brought into high relief by the pedestal of gallery placement.

As his essay continues, Buren notes that, with the fading of the pedestal for art, the spectator becomes "knee deep in wall to wall space,"[5] a sentiment that brings to mind Robert Irwin's scrim installations, in which the quality of light and space becomes the thing displayed. Space is also the central fact of the modernist architectural program. Like the Guggenheim, which Buren calls triumphal architecture, the Wexner Center clearly gives up the fiction of the neutrality of space. Though Buren sees such architecture as smothering in its subversion, Peter Eisenman has provided a space that actively participates, a catalyst for the presentation of work. *Fabrications*, in turn, calls into question the situation and status of architecture within the museum and outside it.

If we can accept buildings as an illustration of a sort of cosmology, then by looking at fragments of architecture in a museum, we are also surveying a history of ideas, a possible schedule of political power and worldview, a relationship of humanity to god and science. Buildings are bound up in an emblematic way with elements of style, material, and form. The *Fabrications* pieces may be models about contemporary culture: position papers on building, dwelling, and North American life.

3
Daniel Buren, "Function of Architecture," in *Thinking About Exhibitions*, ed. Reesa Greenberg, Bruce W. Ferguson, and Sandy Nairne (London and New York: Routledge, 1996), 314.

4
Susan Buck-Morss, *The Dialectics of Seeing: Walter Benjamin and the Arcades Project* (Cambridge: MIT Press, 1989).

5
Buren, "Function of Architecture," 322.

Full Scale

SAN FRANCISCO MUSEUM OF MODERN ART

Wexner Center for the Arts, Columbus

THE MUSEUM OF MODERN ART, NEW YORK

HODGETTS + FUNG DESIGN ASSOCIATES

KENNEDY & VIOLICH ARCHITECTURE

KUTH/RANIERI

Mockbee/Coker Architects

Eric Owen Moss Architects

MUNKENBECK + MARSHALL ARCHITECTS

OFFICE dA

Patkau Architects

ROB WELLINGTON QUIGLEY, FAIA

Stanley Saitowitz Office

SMITH-MILLER + HAWKINSON ARCHITECTS

TEN ARQUITECTOS WITH GUY NORDENSON

MoMA

Left: Dwelling: Cultivation (installation), Cheekwood Museum, Nashville, Tennessee, 1996
Right: Constructions (installation), Memphis Center for Contemporary Art, 1994

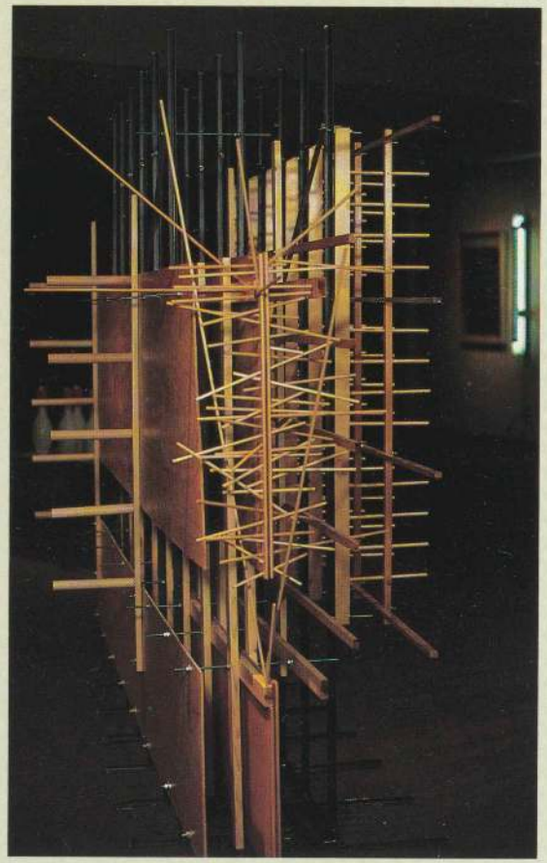
Samuel Mockbee and Coleman Coker

MOCKBEE/COKER ARCHITECTS

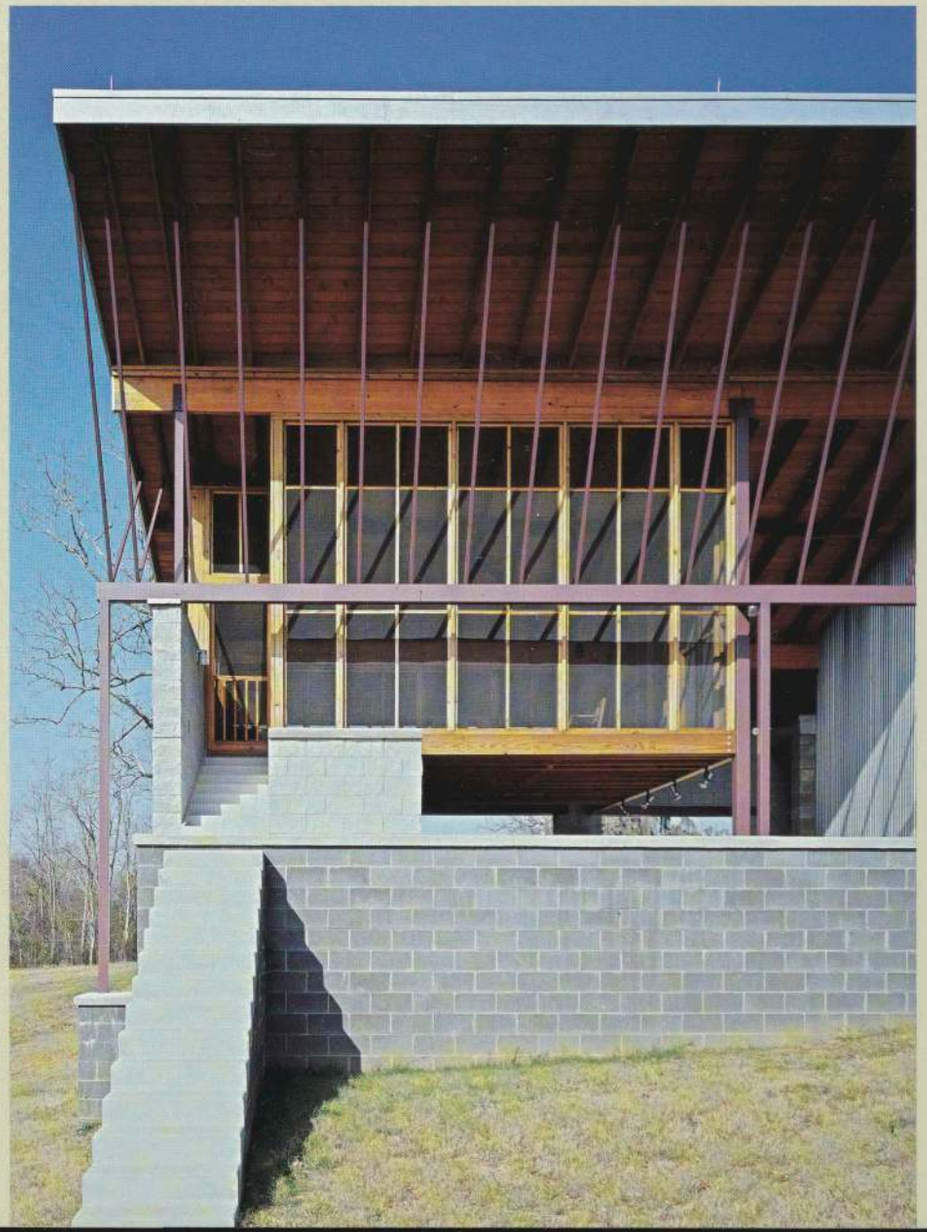
Samuel Mockbee is an architect and painter living in Canton, Mississippi. He studied architecture at Auburn University, receiving his professional degree in 1974. He has held visiting faculty appointments at Harvard University, Mississippi State University, and Clemson University and was recently the Davenport Visiting Professor of Design at Yale University and the Bruce Goff Professor of Creative Architecture at the University of Oklahoma. He is the founder and current director of Auburn University's Rural Studio in Greensboro, Alabama, a program dedicated to rural design issues. The program was recently acknowledged by the American Institute of Architects' Education Honors Program as one of the top academic programs of national significance. Mockbee regularly paints the place where he lives and the people who are his neighbors. In 1993 he was awarded a grant from the Graham Foundation to develop a large painting about a family in Madison County, Mississippi, entitled *The Nurturing of Culture in the Rural South*.

Coleman Coker is an architect who lives and works in Memphis. He has received the American Academy in Rome's Rome Prize for Design Arts (1995–96) and the Loeb Fellowship in Advanced Environmental Studies at Harvard University's Graduate School of Design. He currently teaches at the Memphis College of Art and is the director of the Memphis Center for Architecture, a design program open to students from architecture schools in the Southeast, in which the students are offered a direct relationship with the made thing. The program emphasizes the presence of things through critical hand-making. Coker makes large-scale, three-dimensional constructions and intertwines these fabrications with built architectural work. He has recently shown his work in Rome and at Nashville's Cheekwood Museum in an installation entitled *Dwelling: Cultivation*. He has also served as board member for the Memphis Center for Contemporary Art and was a founding member of *Number*, a regional arts quarterly.

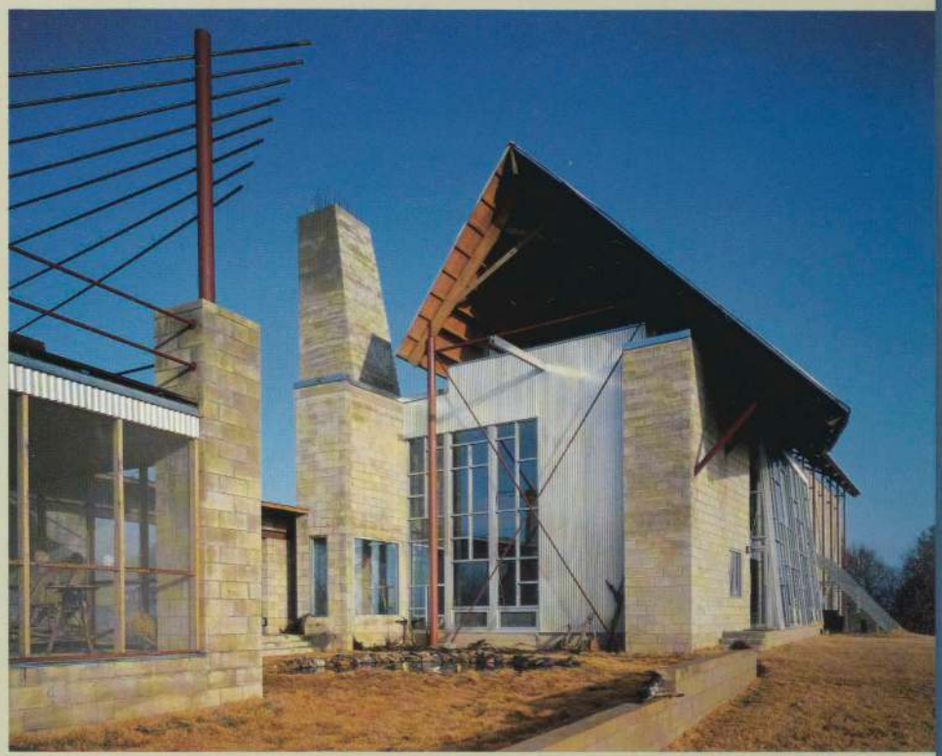
Since Mockbee and Coker formed their partnership in 1986, their work has been honored on numerous occasions. They received *Architectural Record*'s Record Houses Award in 1997 for their most recent residence, House on the Tennessee River, and the American Institute of Architects National Honor



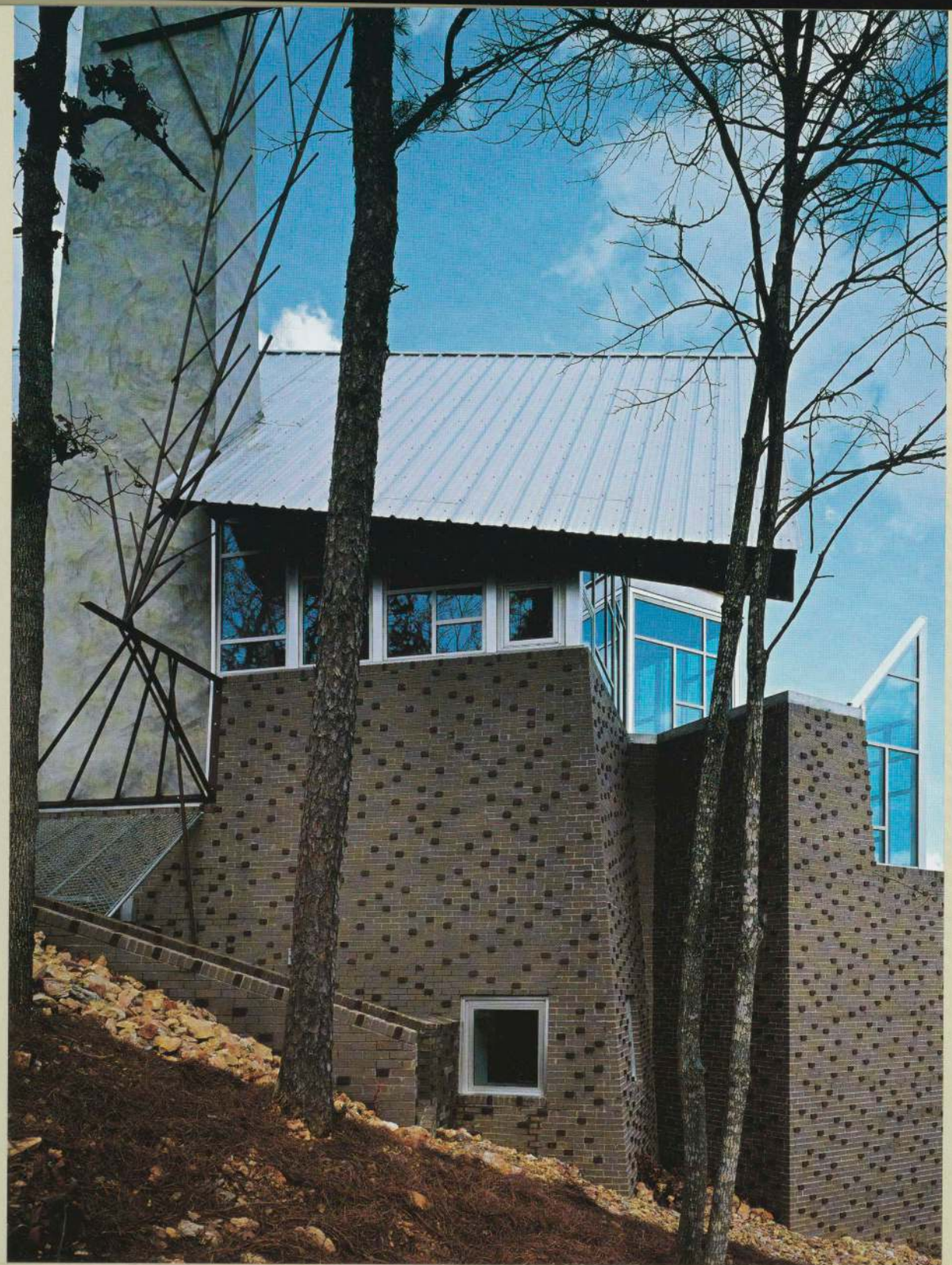
Left: Barton Residence, Madison County, Mississippi, 1991
Right: Cook Residence, Oxford, Mississippi, 1991



Award in 1994 for the Cook Residence. The Barton Residence received the Record Houses Award in 1992, and an earlier proposal for three low-cost homes, "Breaking the Cycle of Poverty," received a *Progressive Architecture* award. A monograph on the firm's work, *Mockbee/Coker: Thought and Process*, was published by Princeton Architectural Press.



Mockbee and Coker have a unique collaboration, working sometimes together, sometimes singly, with each bringing elements from his own background—Mockbee as a painter and Coker as a sculptor—to the team. Their shared background as artists gives their approach to architecture a different edge, which is apparent when Coker speaks about making and thinking and the bond between the two. Mockbee/Coker's work is often referred to as regional or contextual (Coker jokes that that just means that the firm won't be hired outside the area); they are able to take forms found in the powerful vernacular landscape of the rural South and reinterpret and re-present them without recourse to cloying sweetness. There is a toughness and rigor about their use of modern forms, but this is a modernism informed by local histories, memory, and an unexpected palette of materials. And there is also in their work an attempt, without romanticizing or aestheticizing the poverty of the region, to affect the lives of the people in these rural areas.



Opposite and below: House on the Tennessee River, Hardin County, Tennessee, 1996

Below and opposite: Samitaur Building, Culver City, California, 1989–95

Eric Owen Moss

ERIC OWEN MOSS ARCHITECTS

Eric Owen Moss was educated at the University of California, Berkeley, and at Harvard University Graduate School of Design. He began teaching at Southern California Institute of Architecture in 1973 and is currently on its board of directors. He has held the Eero Saarinen Chair at Yale University and the Eliot Noyes Chair at Harvard's Graduate School of Design, as well as appointments in Copenhagen and Vienna.

Moss opened his office in Los Angeles in 1973; the work of the office includes a large body of commercial, public, residential, industrial, and speculative projects. He first gained recognition for his work in the largely abandoned light industrial area of Culver City, California. His interventions have resulted in a unique large-scale transformation of the area. The projects have yielded life and economic activity, providing a model for new approaches to the revitalization of the post-industrial American city.

Moss insists that his architecture go beyond the necessary, and this is evident in the scale of the detail and the building. His work has often been described in terms of distortion, plasticity, and theatricality—qualities it shares with baroque art and architecture, which are typified by a transformation of classical forms. In baroque buildings, curvilinear lines and forms play off more rigid rectilinearity, the viewpoint of the spectator is emphasized, and gestures expand theatrically. The hyperactive surfaces of walls, veiled with layers of ornamental pattern, appear to dematerialize. Interior spaces tend to swirl, and there is often ambiguity about the limits of the space; the edges become blurred.

Although Moss acknowledges that "we can't build infinity," his projects, too, seem to expand, to move. He colonizes specific sites and their histories, so that they are not so much renovated as reinhabited, with a power that reforms the whole in a manner reminiscent of a Robert Rauschenberg collage. The juncture of old and new work becomes a third entity, not wholly of either and richer than each alone. This juxtaposition is filmic, moving not in single frames but with the moving viewer. As Herbert Muschamp has noted, what most buildings are like at seventy miles an hour, Moss's are at a walk.

Moss's work has recently been exhibited in Duren, Germany; Barcelona, Spain; Lisbon, Portugal; and Copenhagen, Denmark. He was one of the four American architects invited to represent the United States at the 1996 Venice Biennale. *Eric Owen Moss: Buildings and Projects 2*, his second Rizzoli monograph, was recently published, as was *The Box* (Princeton Architectural Press).

Current projects include work in Vienna, Spain, France, New York, Los Angeles, and Culver City. His latest completed building is the hundred-yard-

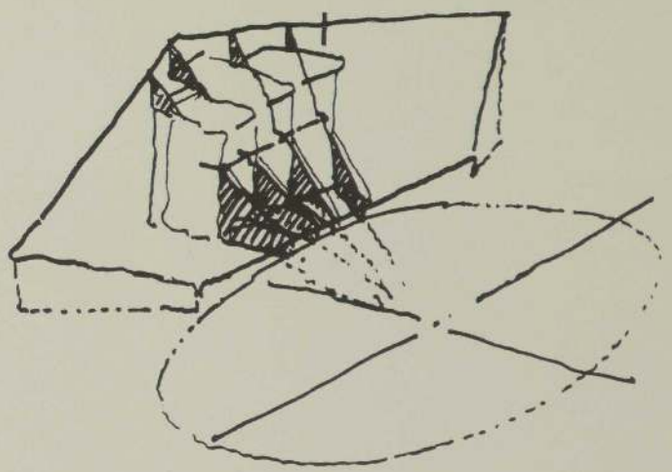
Lawson/Westen House, Los Angeles, California, 1988–93

long Samitaur office block, the headquarters for Eastman Kodak, situated over a road in Culver City, and the PS Building, the headquarters of an international digital design firm. A concert hall for experimental music for the Los Angeles Philharmonic in Culver City is his next project.

Moss has been the recipient of thirty design awards from *Progressive Architecture* and the American Institute of Architects and is a fellow of the American Institute of Architects.

The Box, Culver City, California, 1990–94

Plaza Vieja, Havana, Cuba, 1994
Preliminary sketch (left) and model (right)



ERIC OWEN MOSS

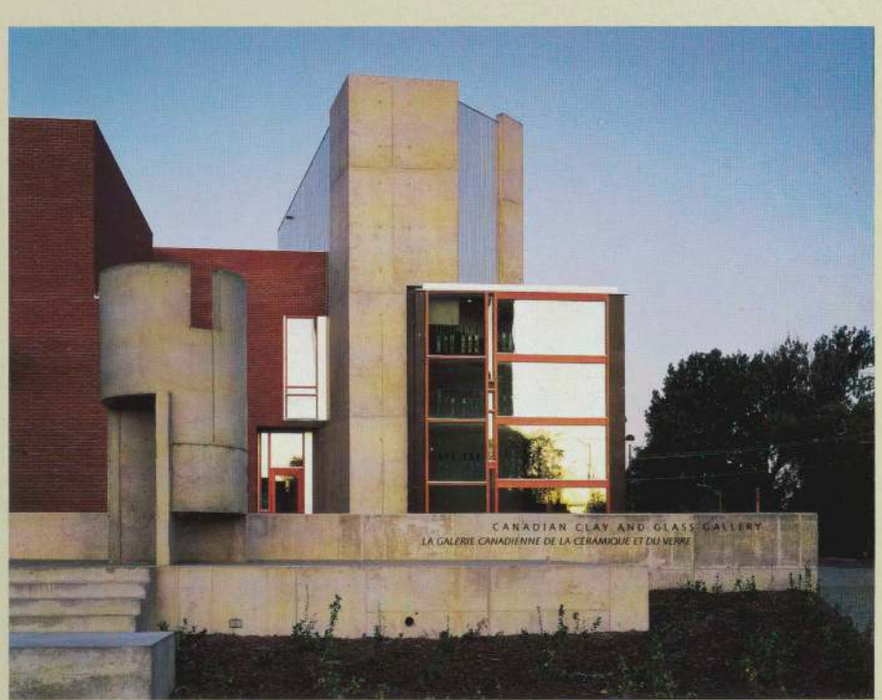
Canadian Clay and Glass Gallery, Waterloo, Ontario, 1988–92
Exterior (left) and view of entrance from interior gallery space (right)

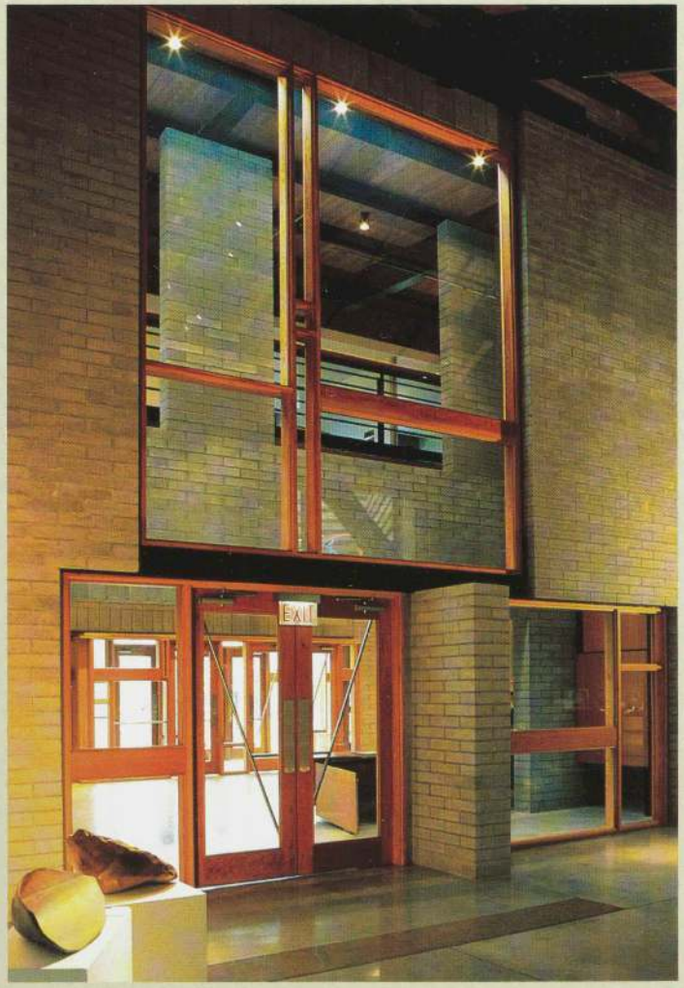
John Patkau, Patricia Patkau, and Michael Cunningham

PATKAU ARCHITECTS

John Patkau studied at the University of Manitoba, receiving a bachelor's degree in environmental studies in 1969 and a master's in architecture in 1972. Upon graduation he received the Royal Architectural Institute of Canada Medal. He is a fellow of the Royal Architectural Institute of Canada. In 1978 he founded Patkau Architects with Patricia Patkau in Edmonton, Alberta. The firm relocated to Vancouver, British Columbia, in 1984.

Patricia Patkau studied at the University of Manitoba, receiving a bachelor's in interior design in 1973. Upon graduation she received the University of Manitoba Gold Medal. Following this, she studied at Yale University, receiving a master's in architecture in 1978. She is a fellow of the Royal Architectural Institute of Canada.





Strawberry Vale Elementary School, Victoria, British Columbia, 1992–96

Michael Cunningham studied at the University of Calgary, receiving a bachelor of arts degree in 1977 and a master's in environmental design in 1982. Upon graduation he received the Royal Architectural Institute of Canada Medal. He became an associate of Patkau Architects in 1992 and a partner in 1995.

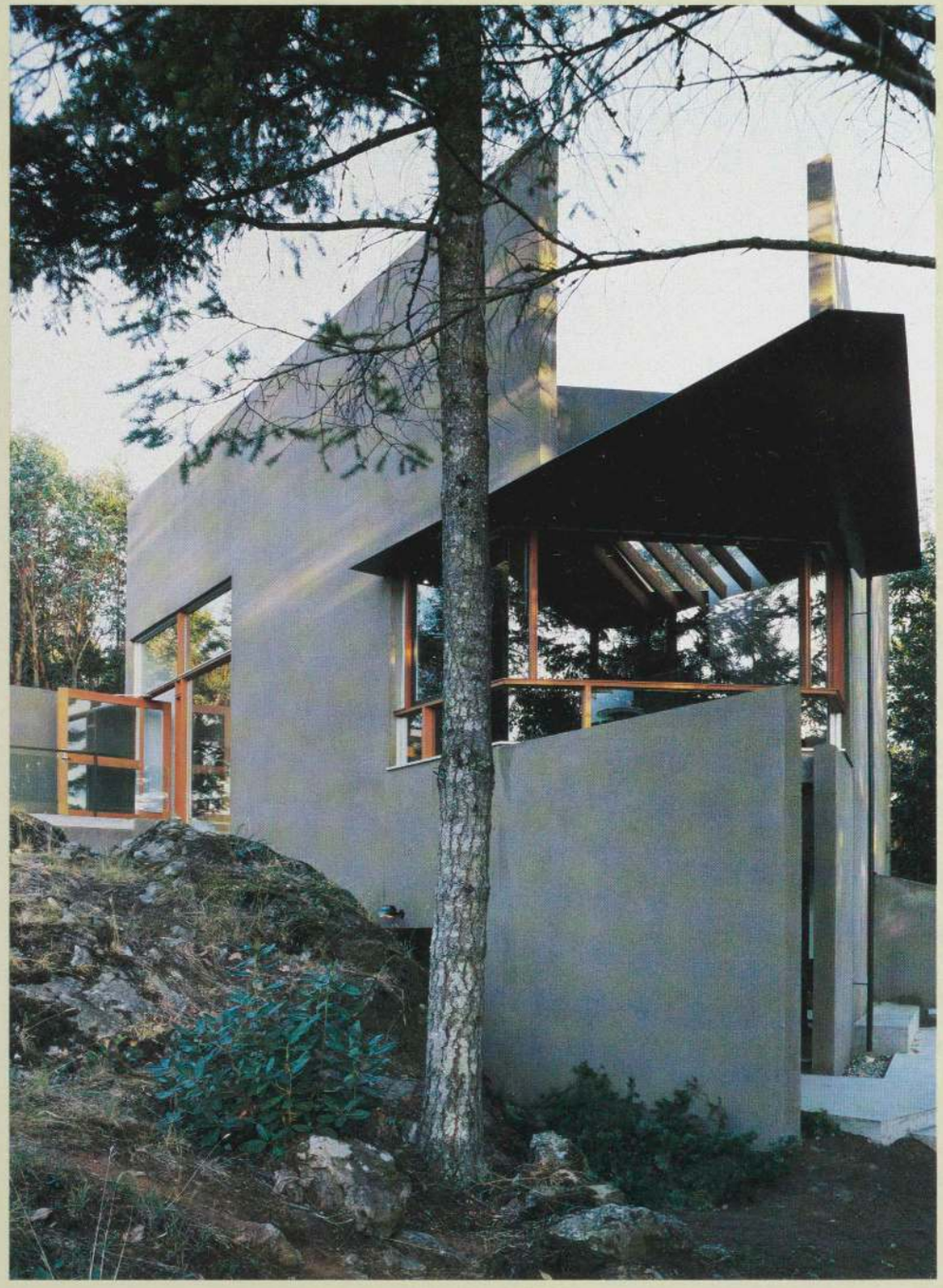
Patkau Architects is known for its residential and institutional work, which has received numerous national and international design awards, including recognition from *Progressive Architecture* and *Canadian Architect*. In 1986 the firm won an invited national competition for the Canadian Clay and Glass Gallery in Waterloo, Ontario. In 1996 it was selected to represent Canada at the Venice Biennale, and in the same year it won an invited international competition to design a Nursing and Biomedical Facility at the Texas Medical Center for the University of Texas, Houston.

The Patkaus are "plain speaking and plain thinking," John Patkau says, suggesting that architectural theory is not an initial generator for this firm's work. In previous work the architects have been concerned with the "found potential" of sites, and their buildings often function as means to

understanding the surrounding landscape. They speak of the importance of capturing the particularities of a site, both to understand the problem as it is given and as an antidote to what they view as the homogenized quality of contemporary culture, the sameness from place to place of interstates and suburban cluster developments. Drawing ideas from program, context, client, topography, and climate, they develop referential or associative links between the form a project takes and the qualities that characterize its site.

In addition to their practice, John and Patricia Patkau have taught, lectured, or been guest critics at a number of universities in Canada, the United States, and Europe. Patricia was a full-time member of the Faculty of Architecture at the University of California, Los Angeles, from 1988 to 1990. In 1993 she was a visiting professor at the Graduate School of Design at Harvard University, and she is presently an associate professor at the School of Architecture at the University of British Columbia. In 1995 the Patkaus jointly held the Eliot Noyes Chair at the Harvard Graduate School of Design.

Barnes House, Nanaimo, British Columbia, 1991–93



Nursing and Biomedical Sciences Building, Houston, Texas, 1997
Competition model, east elevation (left) and southwest view (right)

Mill Race Park Boathouse, Columbus, Indiana, 1993

Stanley Saitowitz

STANLEY SAITOWITZ OFFICE

Stanley Saitowitz was born in Johannesburg, South Africa, in 1949. He received his bachelor's degree in architecture from the University of the Witwatersrand, Johannesburg, in 1975, and his master's in architecture from the University of California, Berkeley, in 1977. He has been in practice since 1975. Profoundly influenced by the dramatic landscapes of Africa, Saitowitz is concerned with nature's modes of operation, focusing on site transformation and human geography. He sees this as a way for architecture to renew itself as a part of a larger ecology.

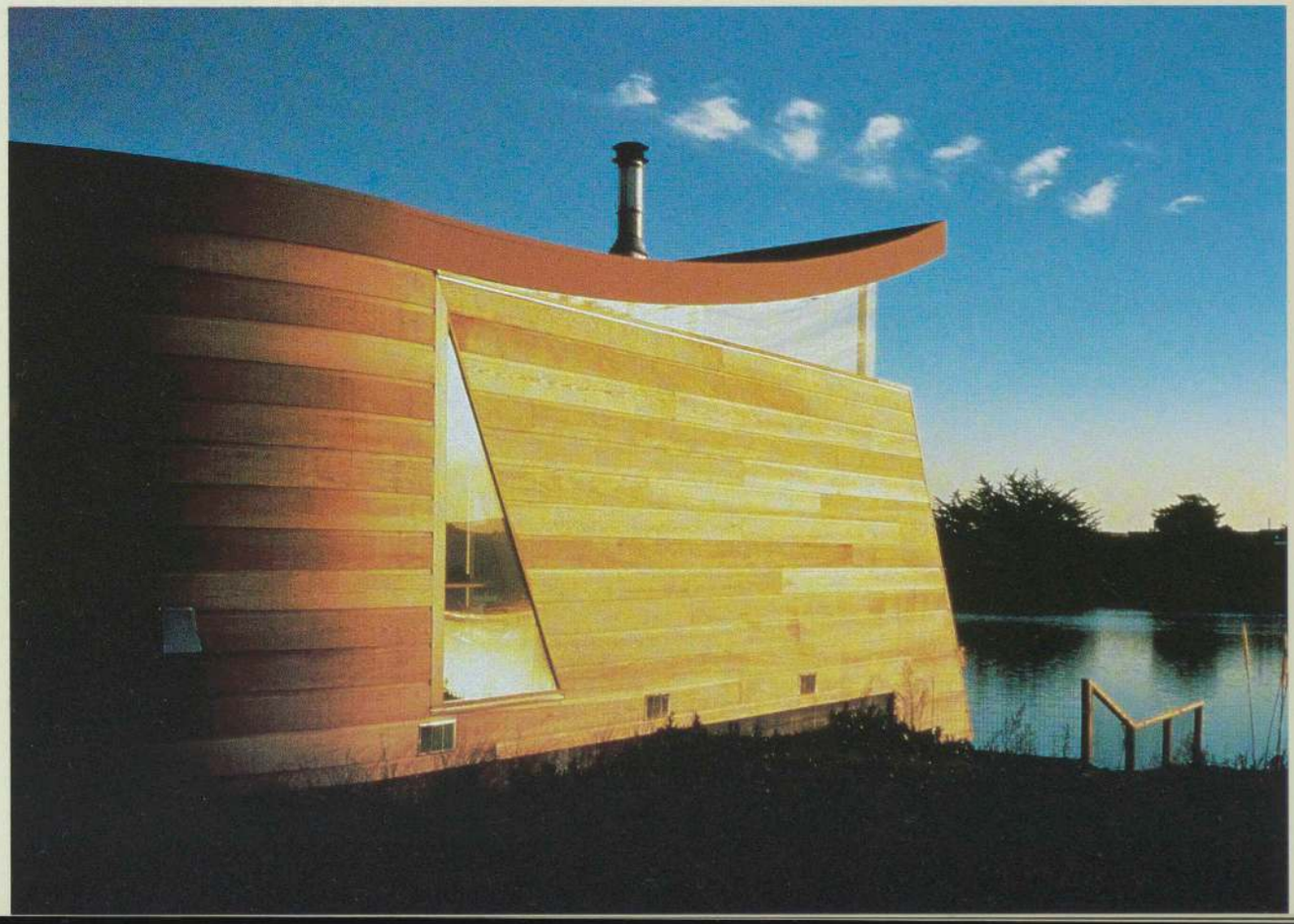
Saitowitz has written that "the site of architecture is the horizon, the crust of the earth, the edge between ground and sky." He characterizes his work as geological, "a type of human geography" revealing growth and form. Like the Patkaus and Mockbee/Coker, he is interested in what the site can generate. Saitowitz asserts the fundamental interaction of architecture and space as the principal way in which space is demarcated, and he relates this to the natural realm and its rhythms.

Though one can see profound links to history and vernacular traditions in his work, his buildings are new formal and social constructions. As Michael Benedikt points out, Saitowitz represents a crossbreeding. He is an architect with a modernist training who, having grown up in the Transvaal, was influenced by the social and political climate of South Africa and the intense, arid landscapes of the African veldt. His work combines a social mission with artistic ambition, using available technologies to relate to the specifics of the site and to the economic realities of building production.

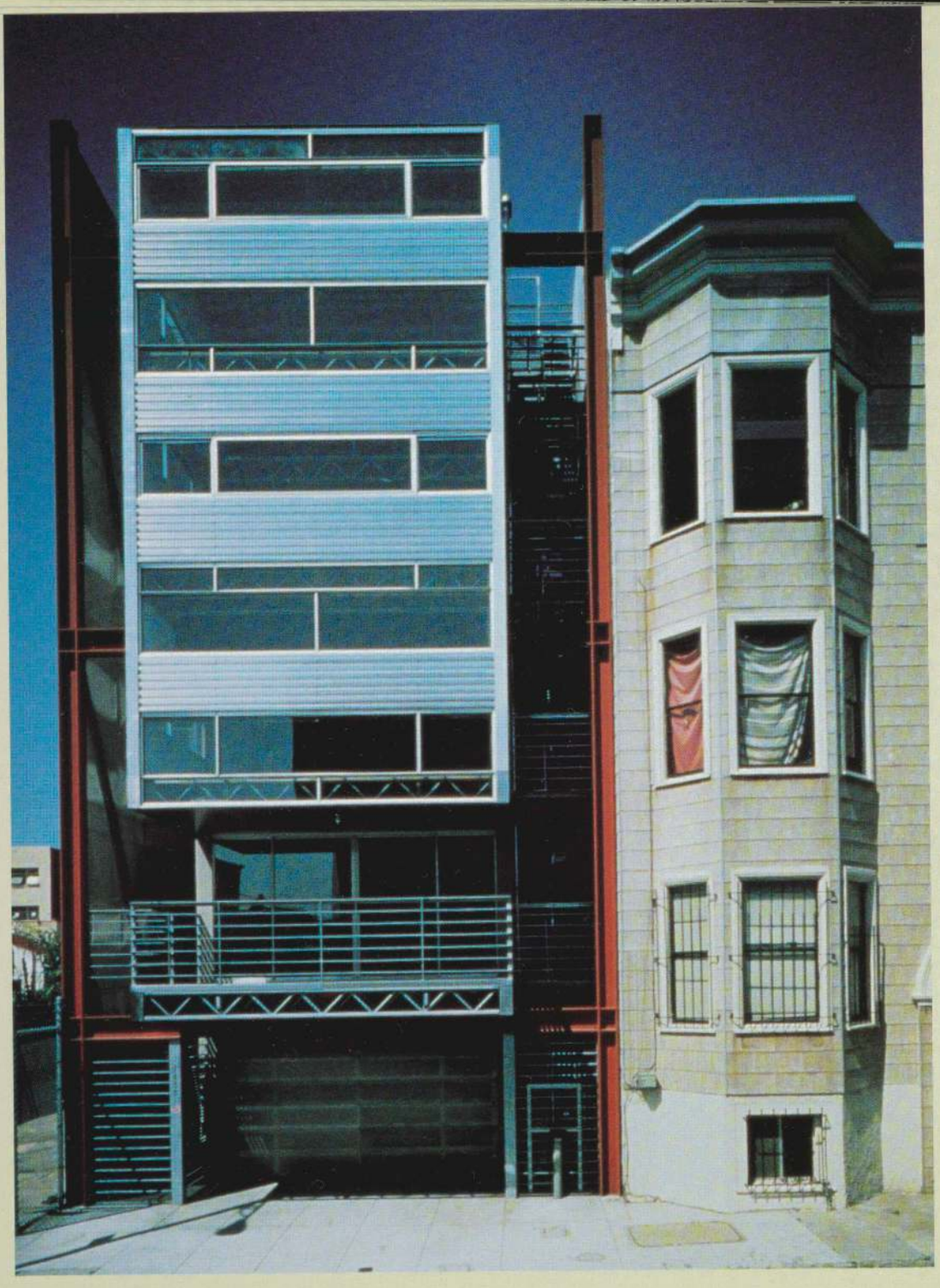
Saitowitz is a professor of architecture at the University of California, Berkeley, and has held many distinguished faculty appointments, including

McDonald House, Stinson Beach, California, 1989

the Eliot Noyes Chair at the Graduate School of Design, Harvard University, and the Bruce Goff Chair of Creative Architecture at the University of Oklahoma. He has also taught at the Southern California Institute of Architecture; the University of California, Los Angeles; the University of Texas; and the University of the Witwatersrand. He has lectured extensively in the United States and abroad. Saitowitz's work has been published in local and international magazines, and his paintings, drawings, and models have been exhibited in numerous galleries and museums. *Geological Architecture*, a traveling exhibition of his work, was organized by the Walker Art Center, Minneapolis, in 1990 and traveled to the San Francisco Museum of Modern Art, Harvard University, and other venues. *Stanley Saitowitz: Architecture at Rice 33* was published by Rice Publications and Princeton Architectural Press in 1994. *Stanley Saitowitz: A House in the Transvaal* was published by Harvard University Graduate School of Design and Princeton Architectural Press in 1996. A monograph entitled *Geological Architecture* is currently in preparation.

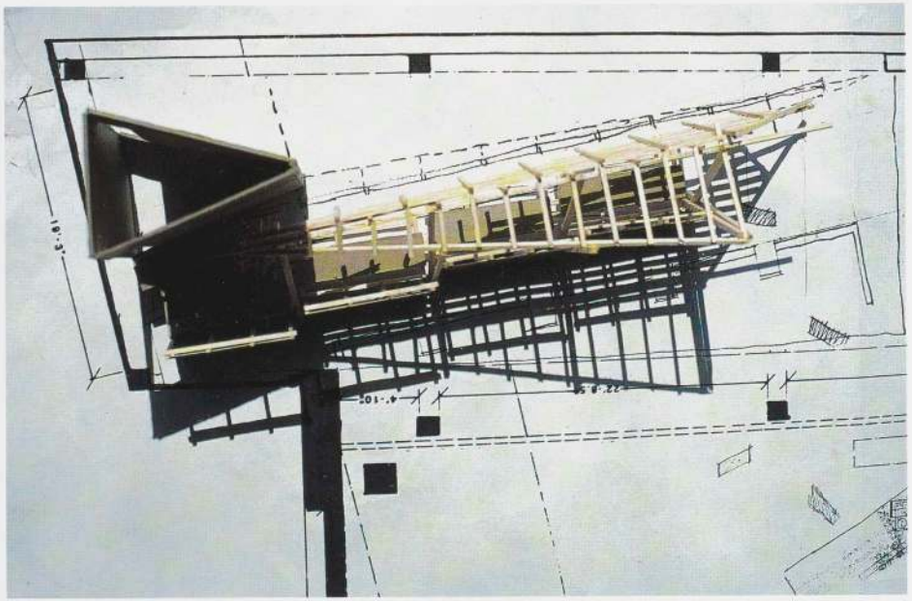


Below: California Museum of Photography, Riverside, California, 1990
Right: Live/Work Housing, 1022 Natoma Street, San Francisco, 1993

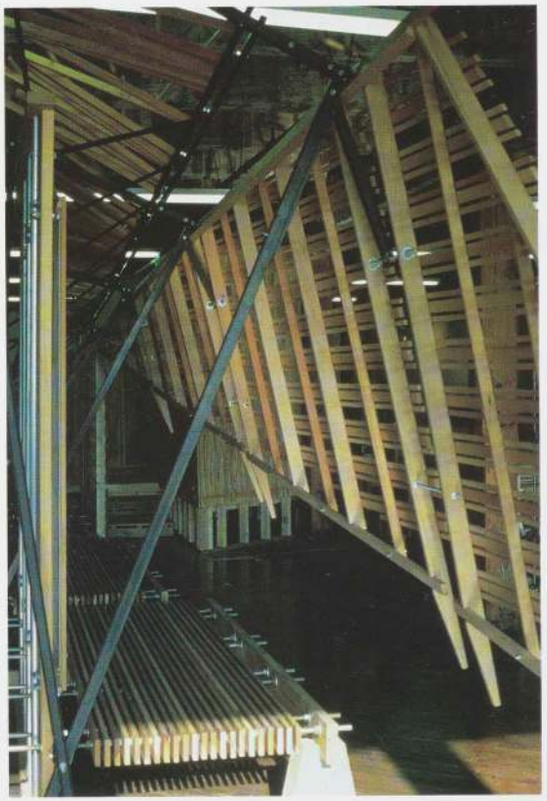


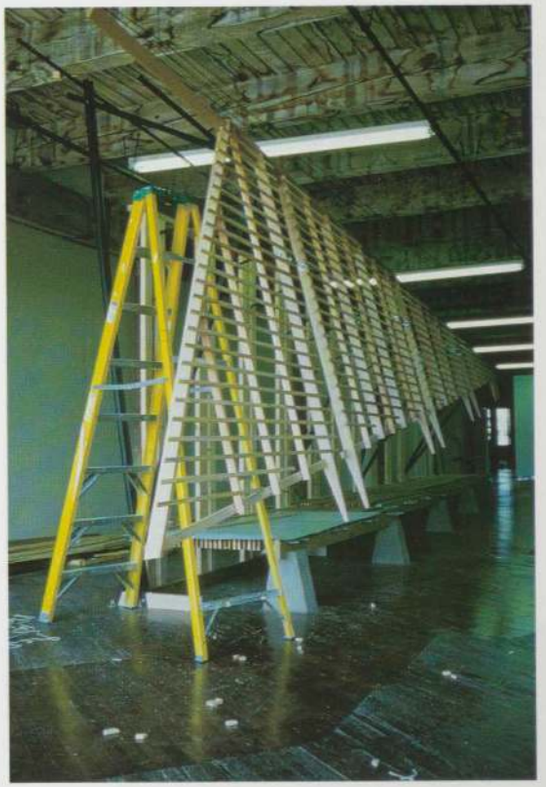
Left: Brebnor House, Transvaal, South Africa, 1978
Right: New England Holocaust Memorial, Boston, 1995

MOCKBEE/COKER ARCHITECTS

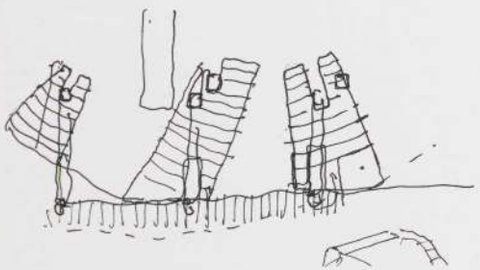


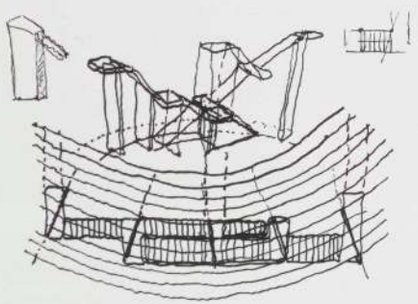
Samuel Mockbee and Coleman Coker's installation is essentially a wood and metal ramp constructed as a kit by students in Memphis, where Coker teaches. Inspiration for the project came from the linear layout of an old school bus that serves as a home for a man in rural Alabama. After the exhibition parts of the installation will become components of an addition to this home.

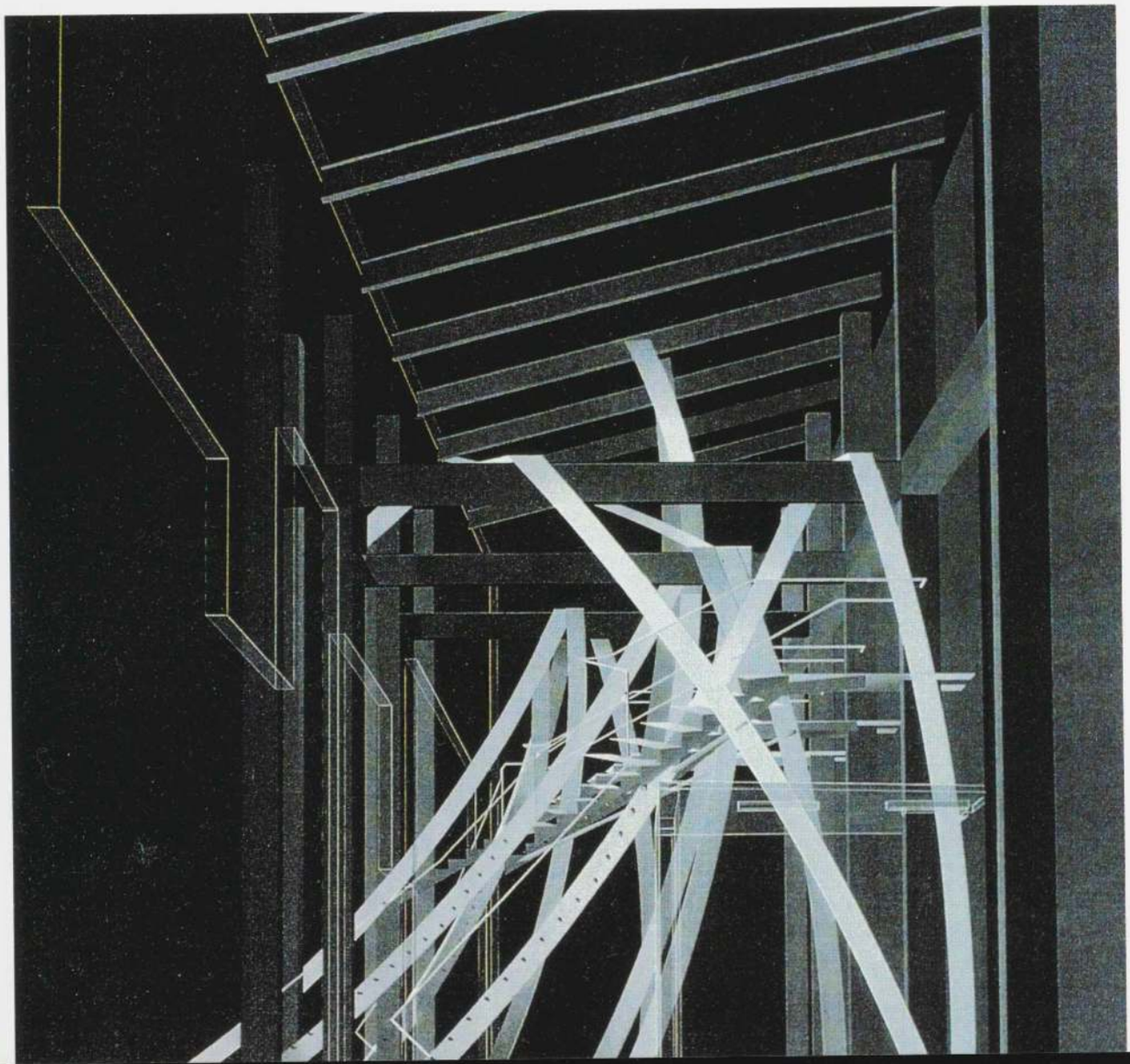




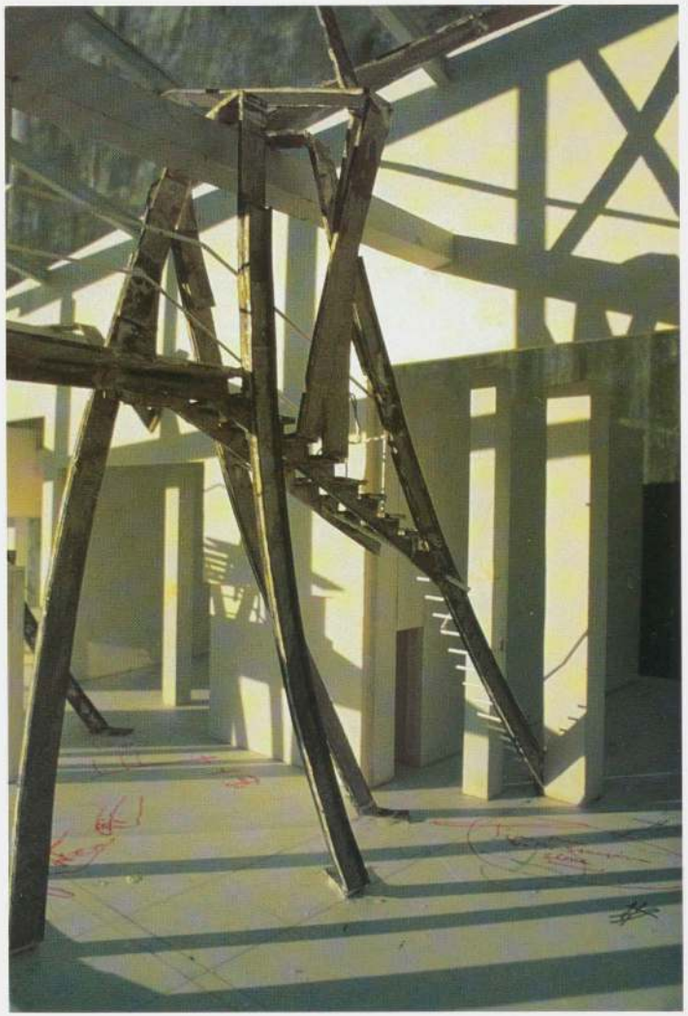
ERIC OWEN MOSS ARCHITECTS

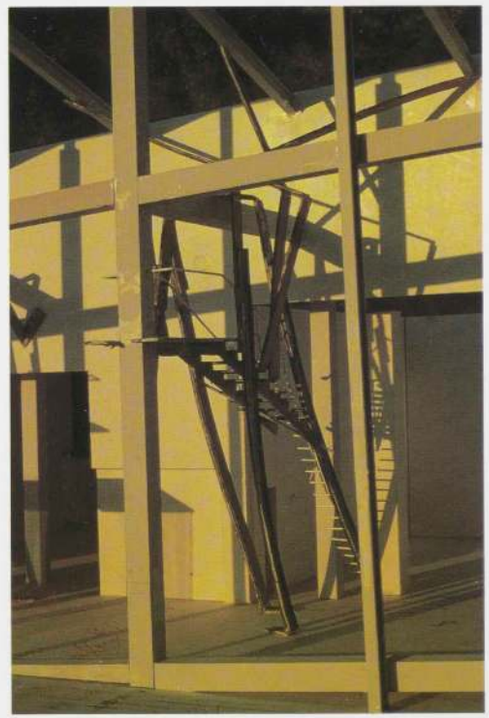




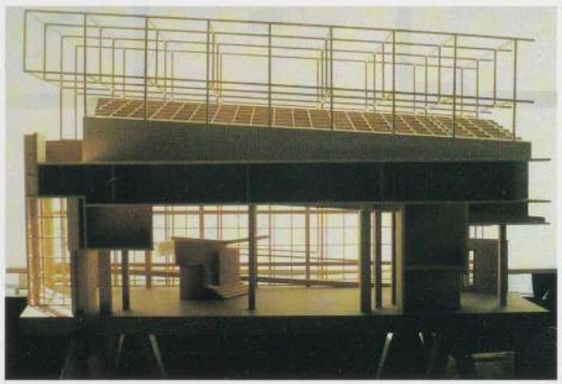


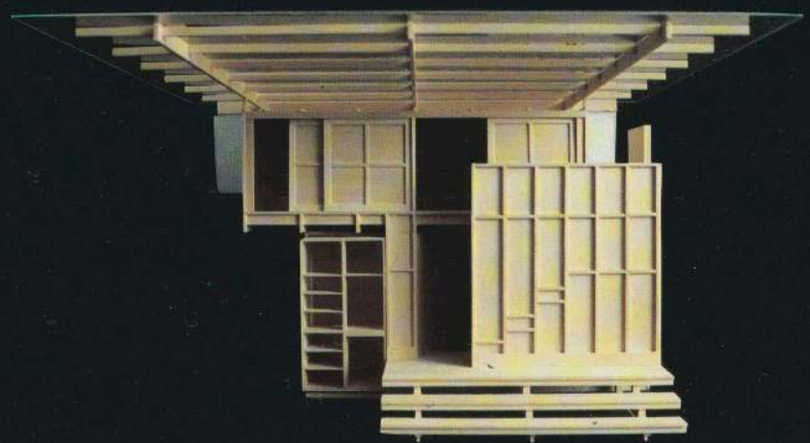
Eric Owen Moss's installation, a series of steel bleacher fragments, explores gravity and space through a sculptural, three-dimensional entity. The seats, which could also function as steps to viewing perches high above the gallery floor, suggest different vantage points from which to view the gallery space and the other projects within it.



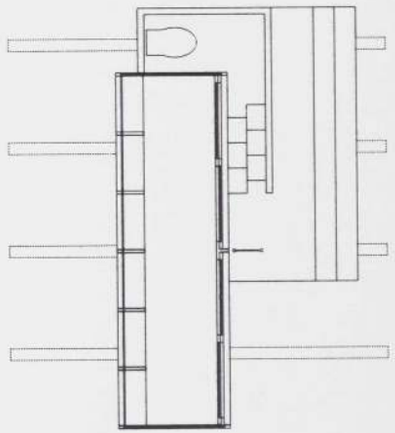


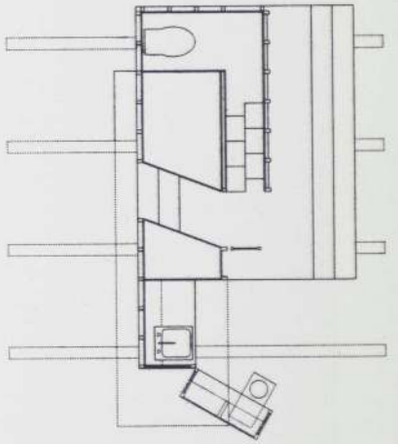
PATKAU ARCHITECTS

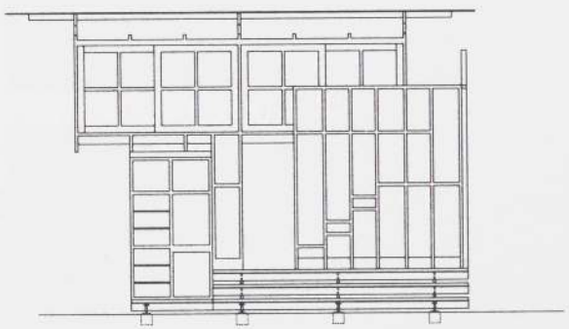


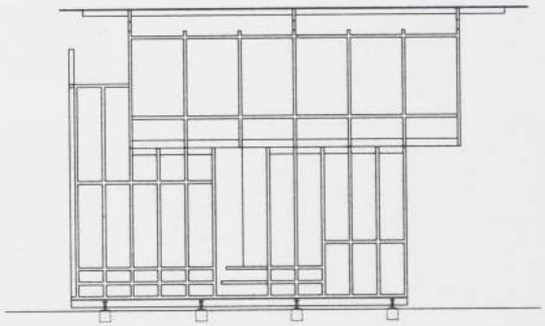


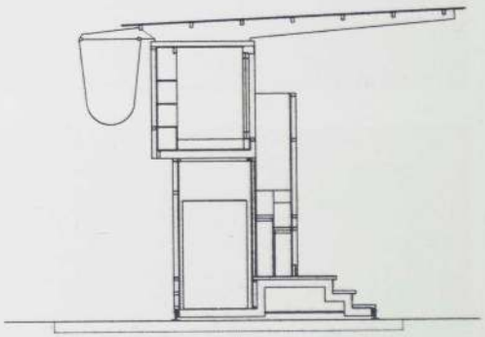
John Patkau and Patricia Patkau's installation is a small, self-contained cottage made of wood, which could be placed in virtually any outdoor site. The unit, which sleeps two, includes a loft bed, a kitchen, and a bathroom with a composting toilet. When the cabin is relocated, its electricity will be self-generated with a bank of photovoltaic cells, and rainwater will be collected and distributed throughout the unit.

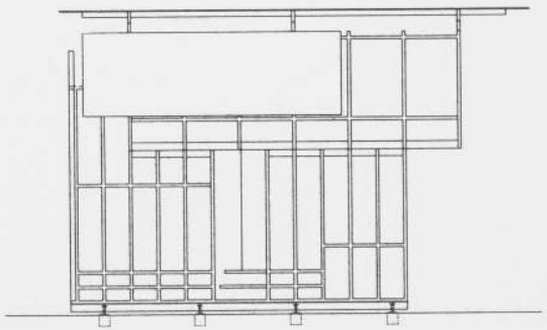


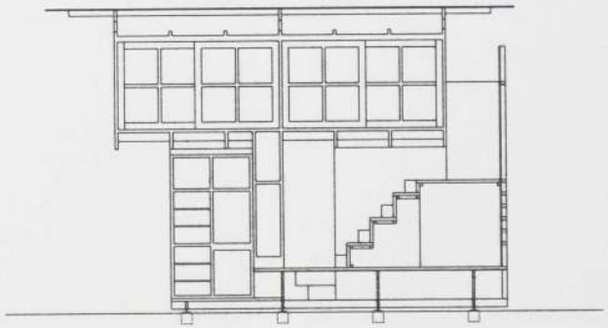


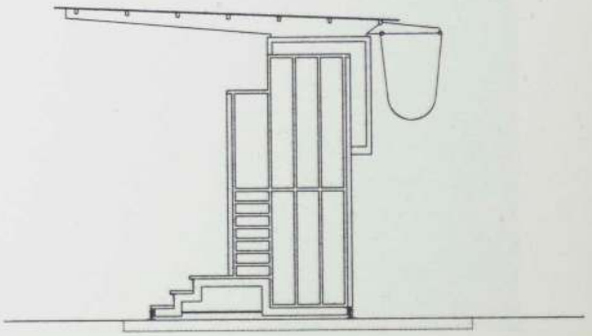




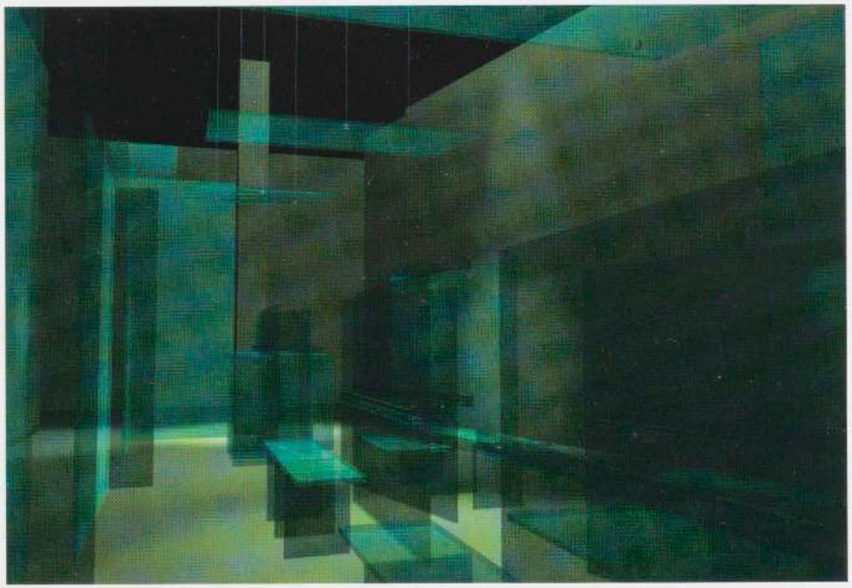


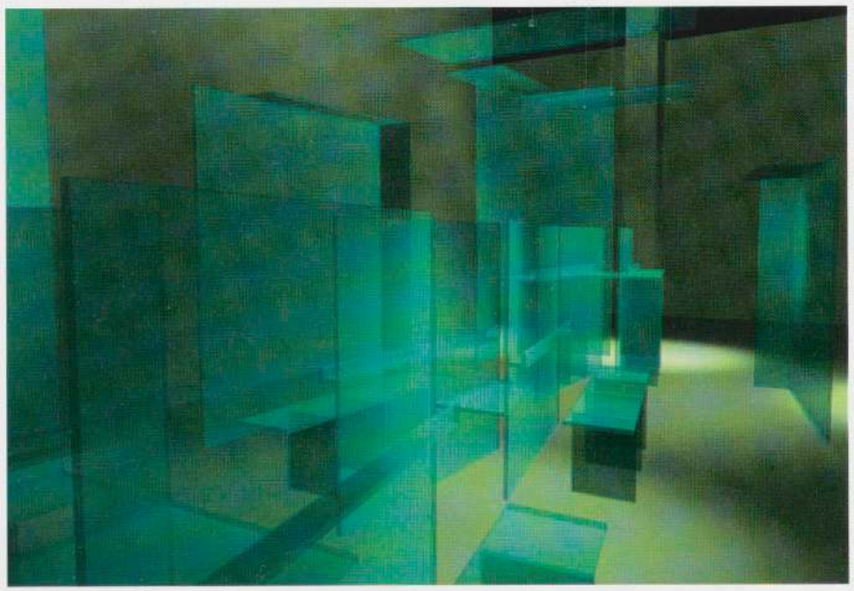




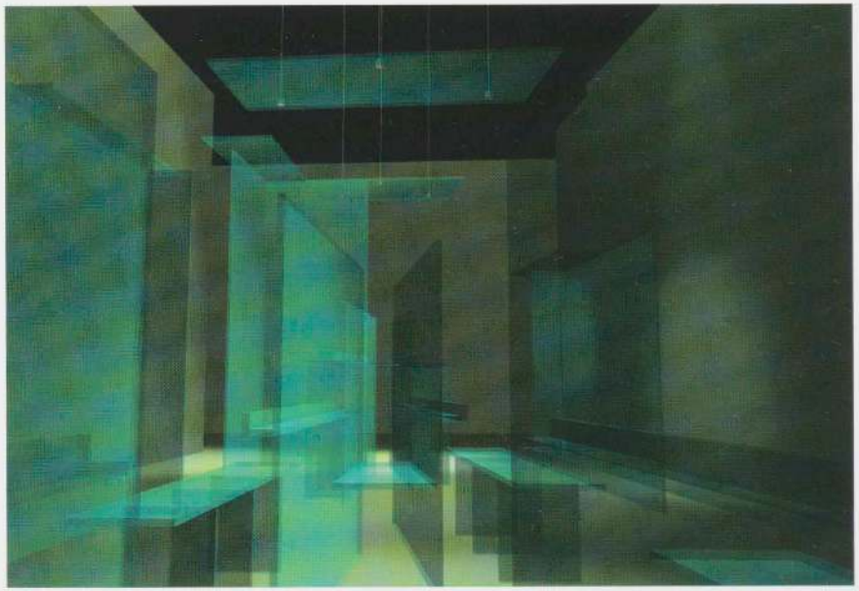


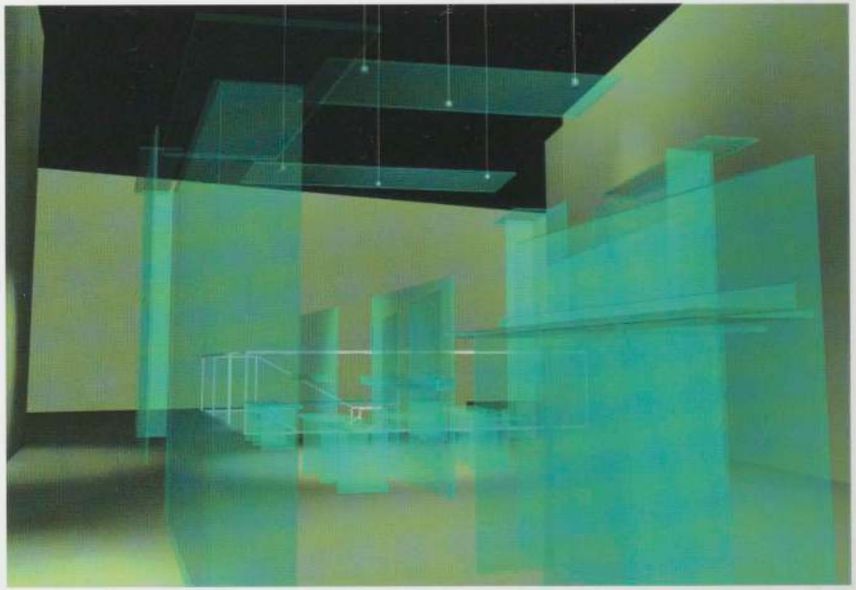
STANLEY SAITOWITZ OFFICE

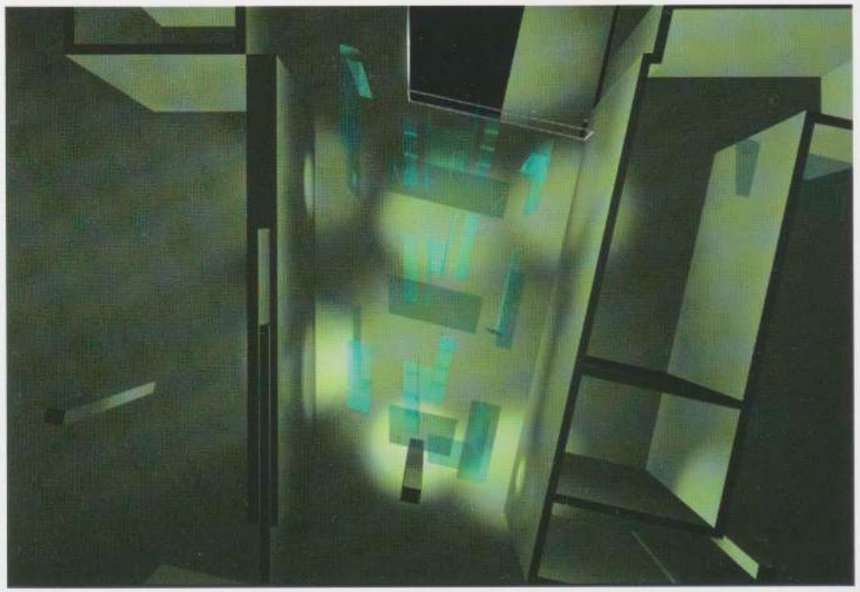


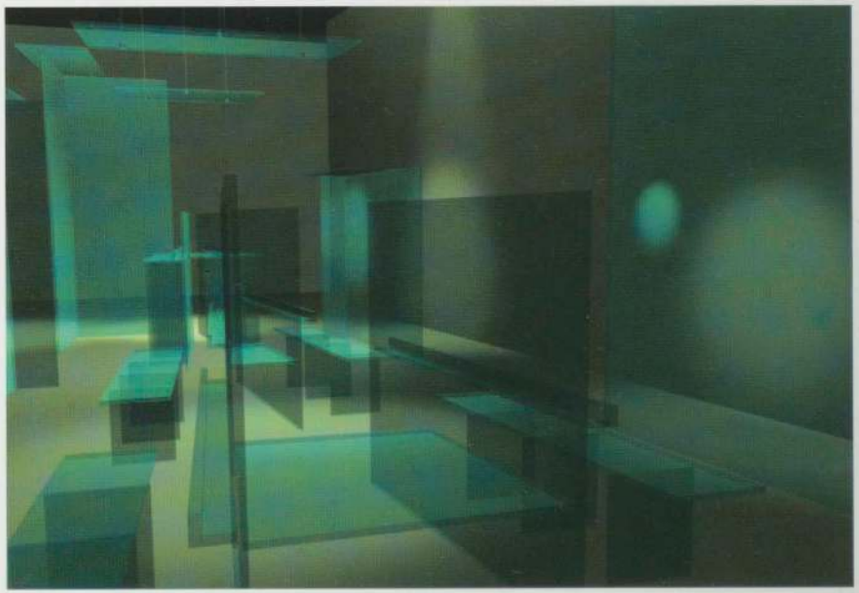


Stanley Saitowitz's project uses one-half-inch thick sheets of clear acrylic to demarcate space in an area of the Wexner Center that functions both as a reading room and a passageway to a performance space. Seating and bookshelves are of transparent acrylic, and the gallery walls are laminated with the same material, placing them, and perhaps the museum, on view. The project functions as a reading room, a place for reflection, and a site for the display, not of images, but of reading materials and the people who use them.

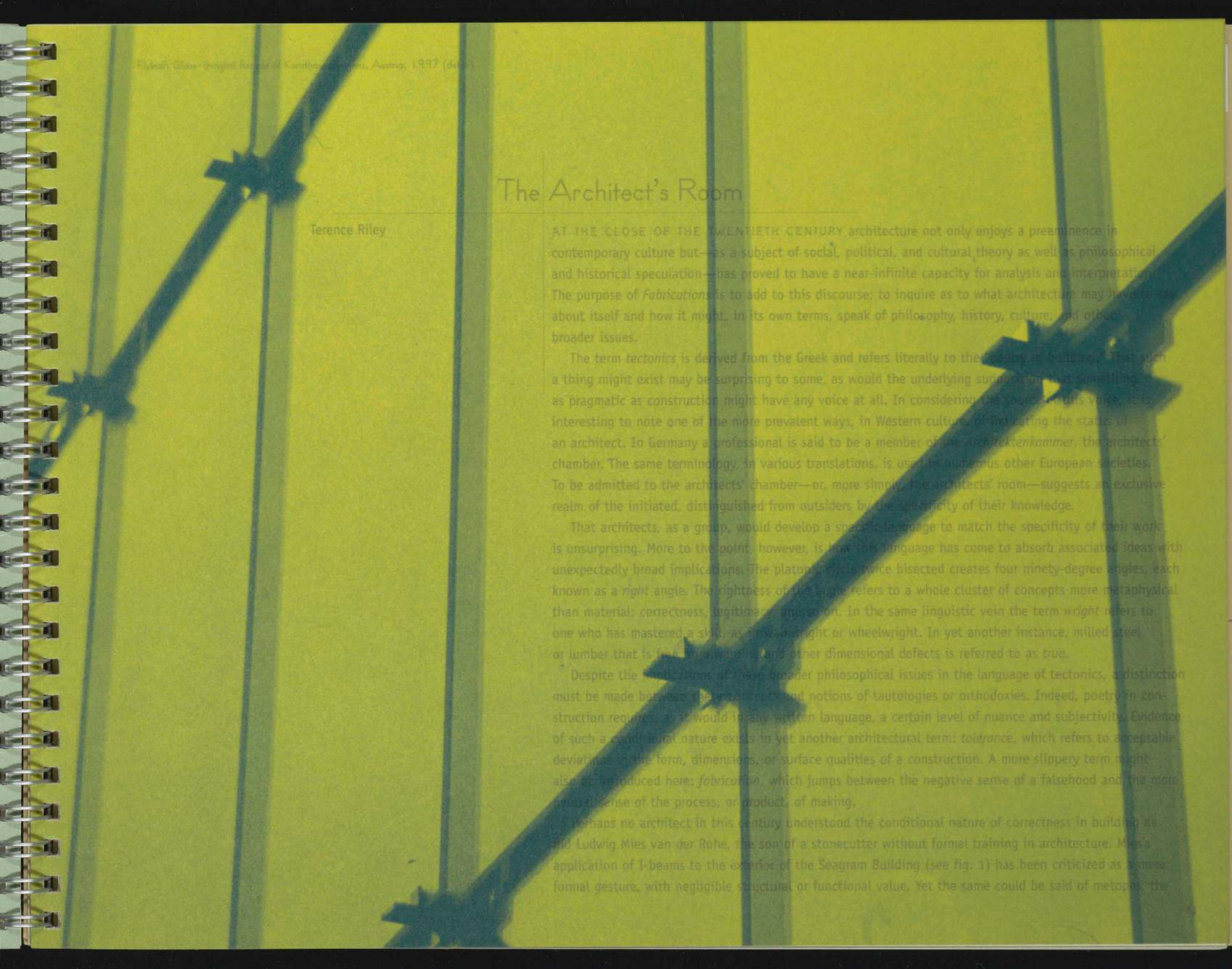








MoMA



Flytech Glass doorglass facade at Kunsthaus Graz, Austria, 1997 (detail)

The Architect's Room

Terence Riley

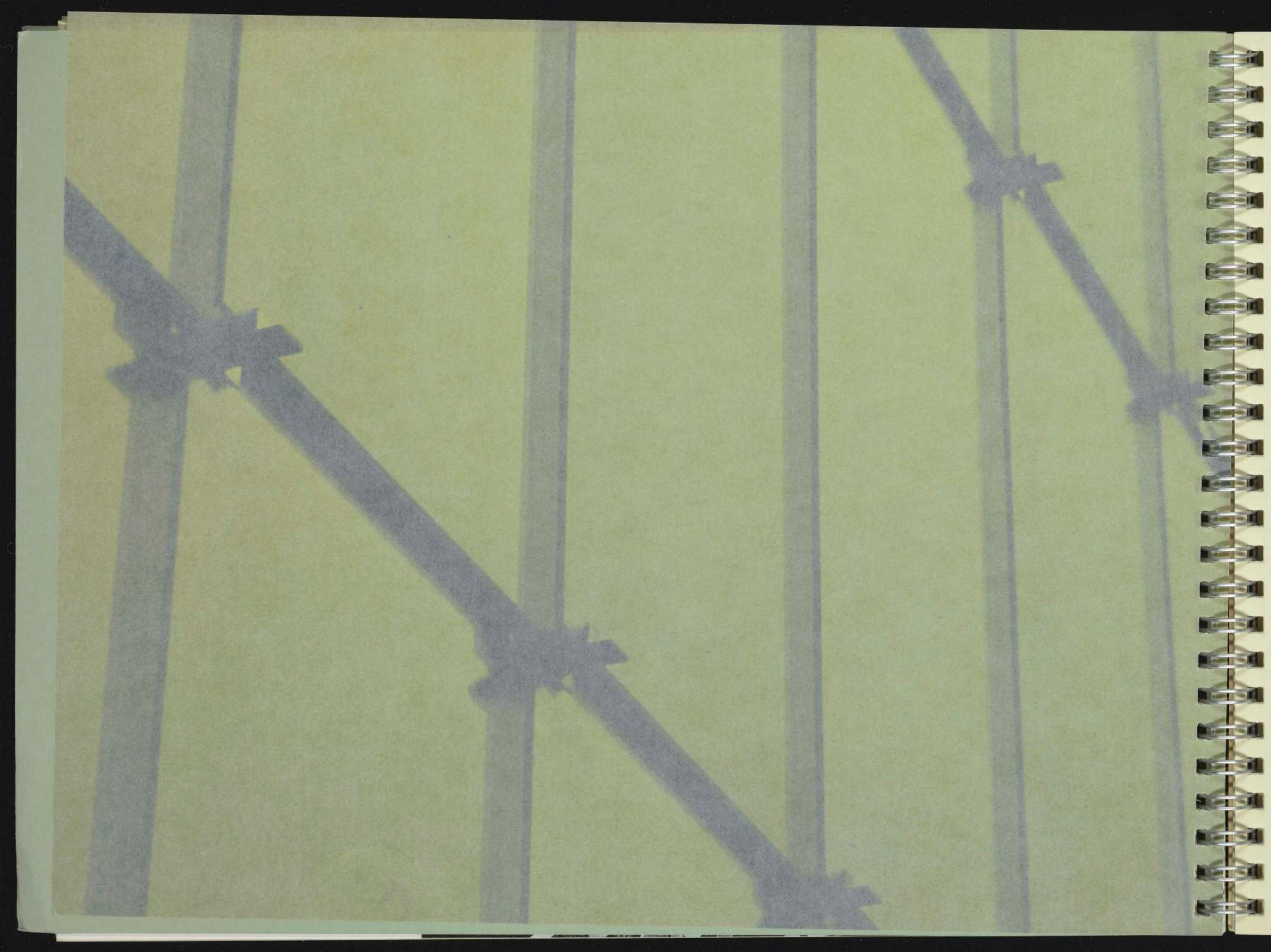
AT THE CLOSE OF THE TWENTIETH CENTURY architecture not only enjoys a preeminence in contemporary culture but—as a subject of social, political, and cultural theory as well as philosophical and historical speculation—has proved to have a near-infinite capacity for analysis and interpretation. The purpose of *Fabrications* is to add to this discourse: to inquire as to what architecture may have to say about itself and how it might, in its own terms, speak of philosophy, history, culture, and other broader issues.

The term *tectonics* is derived from the Greek and refers literally to the poetry of building. That such a thing might exist may be surprising to some, as would the underlying supposition that something as pragmatic as construction might have any voice at all. In considering the tectonic arts's voice, it is interesting to note one of the more prevalent ways, in Western cultures, of indicating the status of an architect. In Germany a professional is said to be a member of the *Architektenkammer*, the architects' chamber. The same terminology, in various translations, is used in numerous other European societies. To be admitted to the architects' chamber—or, more simply, the architects' room—suggests an exclusive realm of the initiated, distinguished from outsiders by the specificity of their knowledge.

That architects, as a group, would develop a specific language to match the specificity of their work is unsurprising. More to the point, however, is how this language has come to absorb associated ideas with unexpectedly broad implications. The platonic circle once bisected creates four ninety-degree angles, each known as a *right* angle. The rightness of the angle refers to a whole cluster of concepts more metaphysical than material: correctness, legitimacy, and so on. In the same linguistic vein the term *wright* refers to one who has mastered a skill, as in wainwright or wheelwright. In yet another instance, milled steel or lumber that is free of warps, twists, and other dimensional defects is referred to as *true*.

Despite the [illegible] of these broader philosophical issues in the language of tectonics, a distinction must be made between [illegible] and notions of tautologies or orthodoxies. Indeed, poetry in construction requires, as it would in any written language, a certain level of nuance and subjectivity. Evidence of such a conditional nature exists in yet another architectural term: *tolerance*, which refers to acceptable deviations in the form, dimensions, or surface qualities of a construction. A more slippery term might also be introduced here: *fabrication*, which jumps between the negative sense of a falsehood and the more positive sense of the process, or product, of making.

Perhaps no architect in this century understood the conditional nature of correctness in building as did Ludwig Mies van der Rohe, the son of a stonecutter without formal training in architecture. Mies's application of I-beams to the exterior of the Seagram Building (see fig. 1) has been criticized as a mere formal gesture, with negligible structural or functional value. Yet the same could be said of metopes, the



Flyleaf: Glass-shingled façade of Kunsthaus Bregenz, Austria, 1997 (detail)

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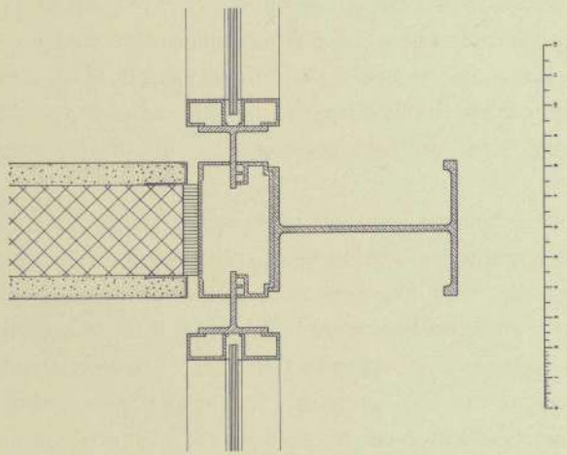
Figure 1: Mies van der Rohe, Seagram Building, New York City, 1958
Plan section through curtain wall and applied exterior I-beam
Mies van der Rohe Archive, The Museum of Modern Art, New York



sculpted rectangular elements placed rhythmically in the cornices of ancient Greek buildings (see fig. 2). Within the language of architecture they achieve the same goal: the fabric of the structure speaks poetically of itself. The metopes recall the unfinished, exposed butt ends of the timber roof rafters of older Greek architecture, and in a similar fashion the applied I-beams refer to the structural steel lattice wrapped behind the curtain wall.

If these formal devices might be said to reveal certain aspects of the building not otherwise apparent, there exists a more direct relationship between the term *reveal*—referring to the slight gap that separates various elements of a construction—and the language of architecture. A reveal uncovers the processes and defines the materials of its own making. An elegant example of this idea of revelation in contemporary architecture might be seen in Peter Zumthor's recently completed Kunsthaus in Bregenz, Austria. Eloquently demonstrating that fabrication can transcend the mundane, the museum is a complex interweaving of its inner concrete shell and outer glazed skin. The typical insulated-glass curtain wall is completely rethought and expanded into a visible expression of its various components: an external skin of translucent glass shingles, which acts as a light filter and heat shield (see flyleaf); a one-meter-deep interstitial space, which acts as a thermal barrier; and transparent clerestory glazing, which brings the filtered light into a plenum of space above each of the four levels of galleries. The carefully calculated shingling of the outer skin serves to reveal rather than conceal this complexity.

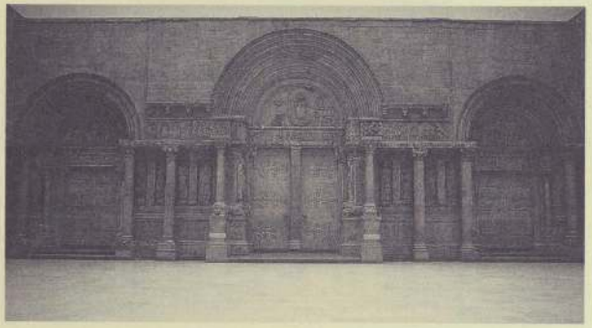
Figure 2: Plan and elevation illustrating the Doric order, plate 12 of The Four Books of Andrea Palladio's Architecture (London: Isaac Ware, 1738); the metopes can be seen in the cornice above the columns between the alternating decorative disk and cow's skull motif.

The four architectural installations in the Abby Aldrich Rockefeller Sculpture Garden at The Museum of Modern Art, New York, were conceived by four individual architects or teams following mutual discussions and analysis of the site. As a group, the four installations reveal not only certain aspects of their materials and construction but also various aspects of the site and its specific context. Like the full-scale fragments in a Beaux-Arts museum (see fig. 3), the installations are seen as having an intrinsic aesthetic dimension as well as a didactic one: each of the pieces also engages broader issues, speaking to individual concerns.

Of all the activities in the repertoire of construction, glazing (the installation and fitting of a building's glass surfaces) is most closely associated with this century and the philosophical and architectural issues that have defined it. The installation by Henry Smith-Miller and Laurie Hawkinson (Smith-Miller + Hawkinson Architects) transforms the International Style façade of Philip Johnson's 1964 East Wing, with its clearly defined separation between structure and skin, by literally and philosophically "building upon it". The classical framed view that it creates—not so different from, say, peering out from between the columns of the Parthenon—suggests a universal perspective, an objective and unchanging view of the world.

In Smith-Miller and Hawkinson's construction, various aspects of the East Wing façade are reconsidered and reconfigured. The relationship between the black steel piers and the transparent glass panes is

Figure 3: Fragment of a medieval church (full-scale reproduction)
Hall of Architecture, Carnegie Institute, Pittsburgh



inverted; a new glass pier acts as a support, and the dark hue of the skeletal structure is extended into the building as a series of planar surfaces. Furthermore, the classical sense of spatial continuity is challenged by a series of folded plates that rise up from the floor of Johnson's East Wing and seemingly pass through the glass façade, becoming the installation's metaphorical, rather than universal, horizon. The relationship between vision and structure is also challenged: a dark panel obscures the view from one section of the Johnson façade, replacing it with a digital view of the site landscape projected into the building's interior.

Alfred Munkenbeck and Stephen Marshall's (Munkenbeck + Marshall Architects) minimal shelter consists of a canopy supported by three slender columns with an infill of woven steel mats on two sides. The canopy hovers over the bridge that spans the eastern reflecting pool of the Sculpture Garden, creating an assemblage of new and preexisting parts. In its spare, essential form, the structure recalls the underlying Miesian influences on Johnson's design of the garden. Yet, upon closer inspection, other influences can be noted. The nineteenth-century German theorist Gottfried Semper suggested a model of the primitive hut as an early source of architecture. Semper's hut consisted of a base of stone, which rooted the structure and provided a suitable surface for the hearth. Atop the stone base, Semper imagined, rose the timber frame structure of the walls and roof, which were then infilled by woven materials, unifying masonry, carpentry, and weaving, each used in the most effective way.

In Munkenbeck and Marshall's shelter the stone hearth has given way to a stone bridge, and the household fire is replaced by the image of water. Semper's structure suggested a kind of cosmic connection between the earthbound masonry below, the lighter framework above, and the skyward trail of the smoke from the hearth through the peak of the roof. While there remains a dialogue between the frame structure and the woven infill material, there is a definite shift from the vertical "axis mundi." As the water below

and the canopy above are both reflective, the space between becomes a slice between the celestial and the mundane, with light coming from above and below simultaneously.

The proposal by Enrique Norten and Guy Nordenson (TEN Arquitectos) consists of a glass structure situated in a paved, open area of the garden. Beneath the structure's glass canopy the garden's two-by-four-foot marble paving slabs have been removed, revealing the rubble of the townhouses that formerly occupied the site. Distinctly recalling the architecture of an archaeological site, the installation restores the memory of the previous construction to the current condition. Standing below the canopy and upon the rubble, the viewer experiences a shift in physical, as well as historical, point of view. As if to confirm the notions of relative permanence and transience previously mentioned, the bricks of the Beaux-Arts townhouse have been transformed into a subsurface sedimentary layer.

This installation also reminds us that a new fabrication might be made by the removal or displacement, rather than the addition, of material. As evidenced by such projects as Michael Heizer's earthworks or Gordon Matta-Clark's excisions of architectural fragments, such operations can have profound effects on the natural landscape. In a densely built environment, the effects are no less profound. As this type of environment will characterize the twenty-first century, perhaps more than any other, Norten's installation speaks of the future as much as the past.

The installation by Monica Ponce de Leon and Nader Tehrani (Office dA) is a lightweight, transient structure with multiple references, made entirely of sheet steel. The material was subjected to a number of transformative operations traditionally associated with metalworking, each calcuated with the assistance of computer analysis: perforation, which reduced its weight; milling the surface to produce a texture; and bending and folding, which gave it a form and structural stability. In this instance the form resembles a cascading staircase, suggesting the amount of strength imparted to the otherwise relatively weak material. Folding and bending techniques were also used to assemble the various sections of the installation, interlocking them in the manner of large shingles.

While the installation suggests the form of a stair, it is also a self-supporting canopy that rests against the bulk of the eighteen-foot-high masonry wall that forms the northern edge of the sculpture garden. The metalwork here, unlike that in other types of canopies, is continuous and not divided into structural and nonstructural members; rather, a different type of contrast is suggested. The juxtaposition of the masonry and the metalwork underscores their fundamental differences and recalls the experimental house projects of the French architect Jean Prouvé, particularly the projects exhibited in the 1951 *Exposition des arts ménagers* in Paris. In that unbuilt scheme, a masonry wall was to be the spine of the house, and factory-produced curved metal sections were to rest against it, creating the interior space. In both

the Prouvé project and the Office dA installation, the qualities of the masonry—heavy, massive, site built, permanent—are played off the qualities of the metalwork—lightweight, perforated, factory built, transportable.

In each of these four "fabrications," there is a revelation or, as Heidegger would have said, an "unconcealment." The rightness or truthfulness of these works derives not from a conception of orthodoxy, but from the art of fabrication.

The Tectonic Garden

SAN FRANCISCO MUSEUM OF MODERN ART

WEXNER CENTER FOR THE ARTS, COLUMBUS

The Museum of Modern Art, New York

HODGETTS + FUNG DESIGN ASSOCIATES

KENNEDY & VIOLICH ARCHITECTURE

KUTH/RANIERI

MOCKBEE/COKER ARCHITECTS

ERIC OWEN MOSS ARCHITECTS

Munkenbeck + Marshall Architects

Office dA

PATKAU ARCHITECTS

ROB WELLINGTON QUIGLEY, FAIA

STANLEY SAITOWITZ OFFICE

Smith-Miller + Hawkinson Architects

TEN Arquitectos with Guy Nordenson

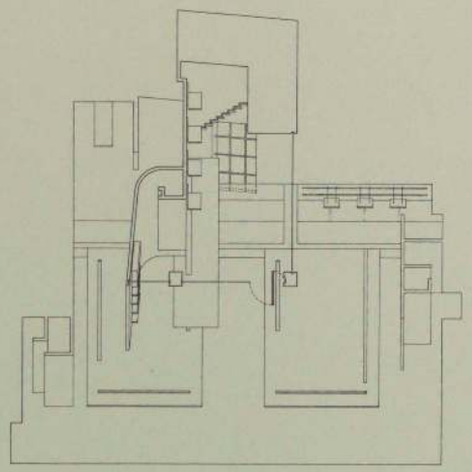
Yohji Yamamoto shop, London, 1987, axonometric (left) and side elevation (right)

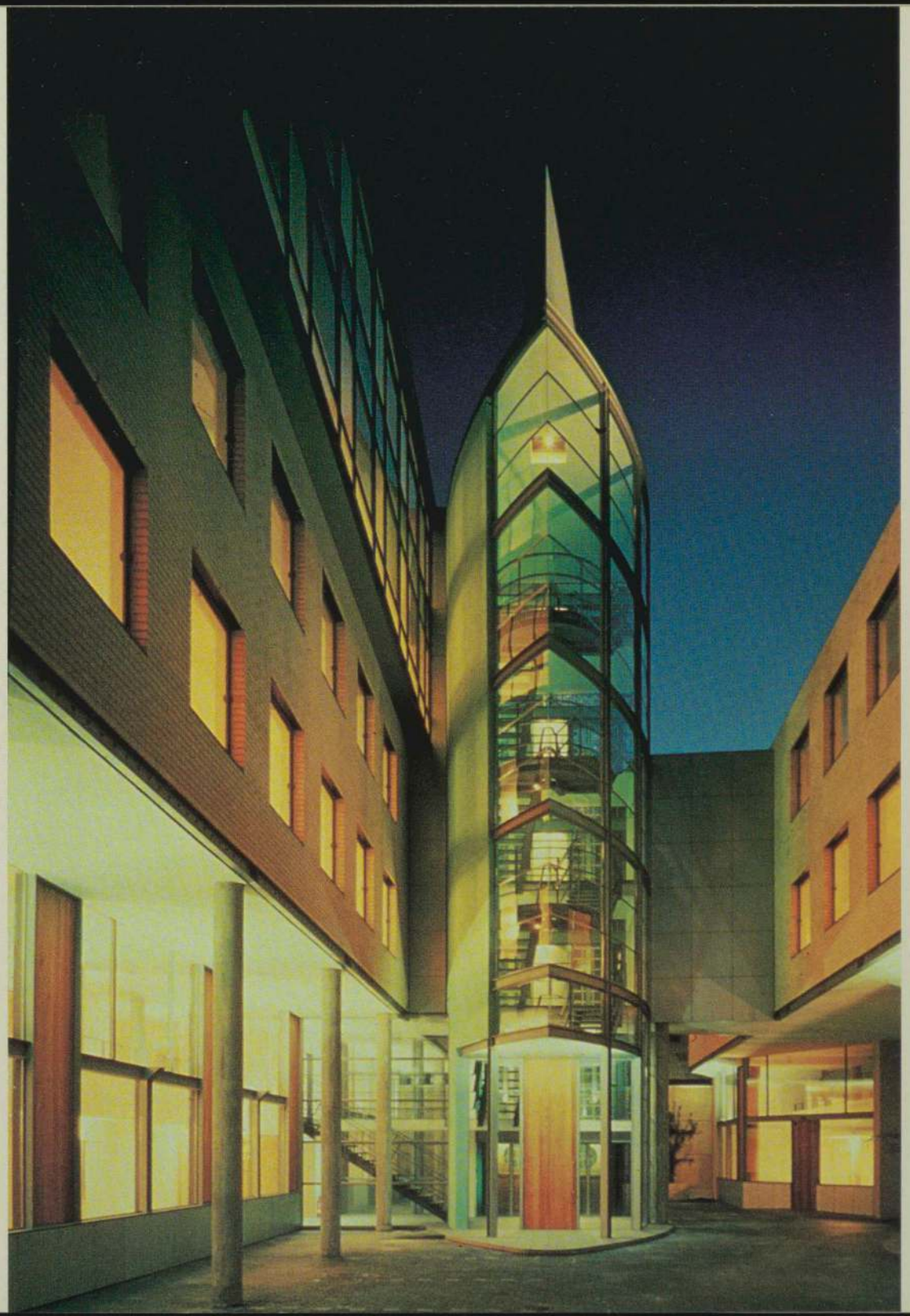
Alfred Munkenbeck and Stephen Marshall

MUNKENBECK + MARSHALL ARCHITECTS

Alfred Munkenbeck was born in 1947 in New York. He received his bachelor of arts degree from Dartmouth College in 1969, majoring in sculpture. He went on to study architecture at the Harvard Graduate School of Design and earned a master's degree in 1974, with a concentration in urban design.

Munkenbeck has worked for Sert Jackson and Co. in Boston and for James Stirling in the United Kingdom. In Athens he joined Zebekoglu Bokhari and later Idea Network to design new towns, schools, and universities in the Middle East. He and partner Stephen Marshall opened the London-based firm of Munkenbeck + Marshall in 1984. Munkenbeck has taught at the Architectural Association, Kingston Polytechnic, Cambridge University, and the Boston Architectural Center and has lectured in the United Kingdom and abroad on the firm's work. He is a member of the Royal Institute of British Architects and the Architecture Club of London and is an assessor for the Civic Trust Awards in the United Kingdom.





Jessica Square, Wandsworth, London, 1988

Stephen Marshall was born in Glasgow and received his bachelor of science in architecture from Strathclyde University. In 1978 he was elected to the Royal Incorporation of Architects in Scotland (RIAS). He worked for Farrell Grimshaw on Charles Jenck's house in London before winning a Harkness Foundation scholarship to attend the Harvard Graduate School of Design. He received a master's degree from Harvard in 1982. Returning to London, he joined the faculty at the Southbank Polytechnic as design tutor. As a partner in Aylward Laing Marshall Robson, he entered several international competitions before founding Munkenbeck + Marshall.

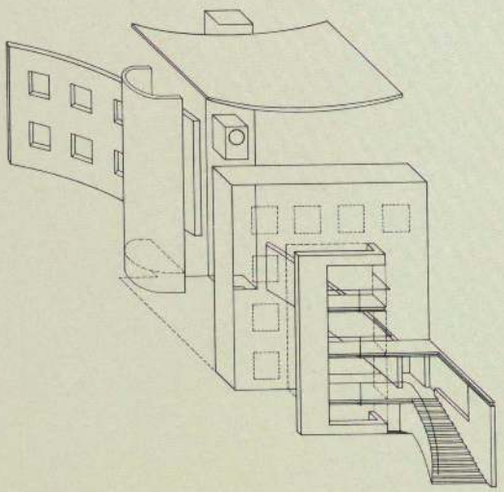
In London, Munkenbeck and Marshall's projects have included a clothing shop for Yohji Yamamoto, a residence for Charles Saatchi, and the fifty-thousand-square-foot Jessica Square office building. In 1992 their speculative office building at 87 Lancaster Road won a commendation from the Royal Fine Arts Commission and the Conservation Award from Kensington Borough. In 1995 the Metro photographic laboratory and studios won a Civic Trust commendation as well as a design award from

87 Lancaster Road, London, 1987
Courtyard axonometric (left) and front elevation (right)

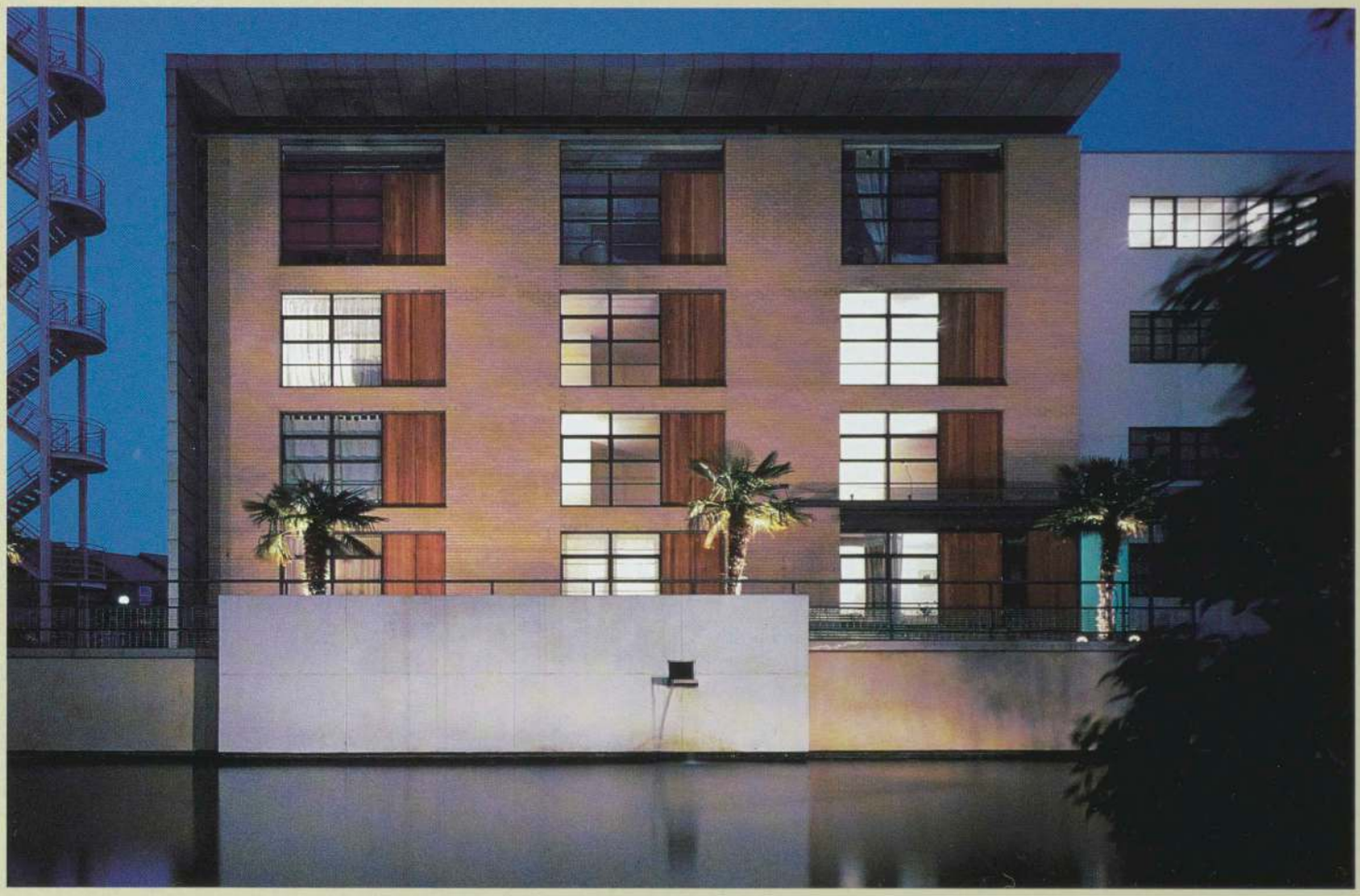
the Borough of Islington. Abroad, they have won competitions for Umm al Qura University in Makkah, a golf resort in Bahrain, the Sursock Street apartments in Beirut, and an embassy with diplomatic housing towers in Cairo.

They have recently completed two new waterside apartment buildings in London. A large, newly built contemporary residence and the conversion of an art deco factory into an advertising and media center are under construction. In the design stage is a project to develop the northern end of the island of Zanzibar into a resort destination including several hotels, golf courses, and water sports facilities. Also in design is the conversion of an eighteenth-century cast-iron frame mill into a gallery for the Visual Arts Trust in Shropshire.

Although Munkenbeck and Marshall are based in London, a large part of their architectural work is located abroad. As a result, their practice employs multiple strategies. At home their work inevitably involves the incorporation of modern forms and materials within an area of strong historical context. In tropical, Middle Eastern, and Mediterranean countries, the goal becomes the creation of a future fabric, often in the absence of immediate context. In both cases the firm's work seeks to bridge the present and future conditions with an architectural language that is neither historical nor oblivious to history. The architects' clear and unabashed references to the forms and materials of modern architecture are balanced by their appreciation of the purely physical qualities that those forms and materials may have. Abstract yet sensual, formal yet visually compelling, Munkenbeck and Marshall's architecture draws upon the imagery and technologies of contemporary practice but incorporates the tectonic traditions of the twentieth century.



Left: Daylight Studio, Metro, London, 1996
Right: Alaska Apartment Building, Bermondsey, London, 1993



Monica Ponce de Leon and Nader Tehrani

OFFICE dA

Monica Ponce de Leon was born in Venezuela and is now living in the United States. She received a bachelor's degree from the University of Miami in 1989, followed by a master's in architecture and urban design from the Harvard Graduate School of Design in 1991. She is an assistant professor at Harvard Graduate School of Design and has taught at Northeastern University and the University of Miami.

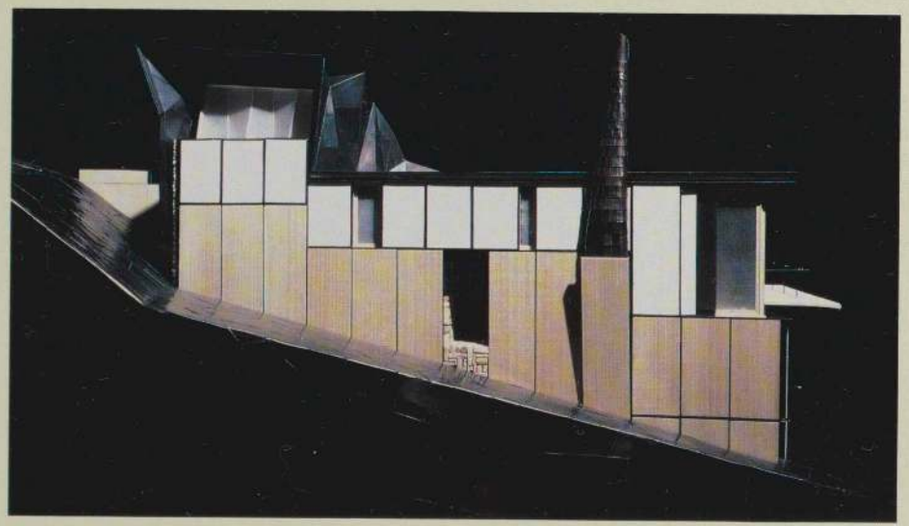
Nader Tehrani, who is of Persian descent, was born in England. He received a bachelor's degree in architecture from the Rhode Island School of Design in 1986 and a master's in architecture and urban design from the Harvard Graduate School of Design in 1991. He also attended a postgraduate program in history and theory at the Architectural Association in London. He currently teaches architecture and urban design at the Rhode Island School of Design and Harvard Graduate School of Design.

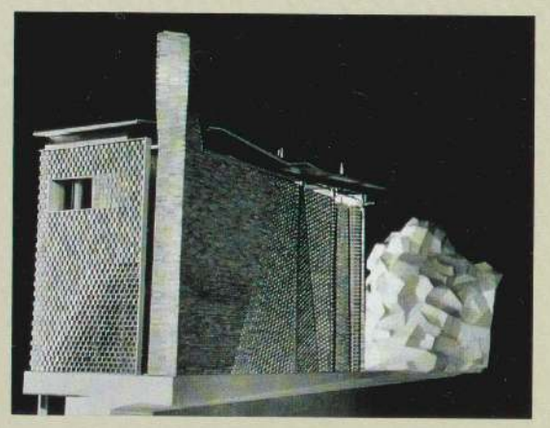
Opposite: The 836 Overpass, "Miami—Public Infrastructure for the Tropics," 1991
Below and right: Mill Road House, Madison, Alabama, 1994, front and rear elevations

Office dA's work is diverse in scope and scale, ranging from the design of interiors to urban design and infrastructure. In the short time that they have been practicing architecture, Ponce de Leon and Tehrani have developed intuitive strategies of superimposition, grafting, and transformation as fundamental design operations. Rather than rearticulate the traditional dichotomies that have polarized architectural debates—structure versus skin, program versus form, and so forth—they attempt to blur those distinctions through various methods, be it by melding program with structure or by eradicating the distinctions between surface and volume. While much of their work is developed on the computer, the intended results are projected onto current methods of architectural production, such as masonry or metal construction.

Among Office dA's notable designs is "Miami—Public Infrastructure for the Tropics," a project that received first prize in the 1993 Boston Society of Architects (BSA) Unbuilt Design Awards and was published in the *New City Journal of Architecture* (Princeton Architectural Press). The Mill Road House and Casa La Roca have both won *Progressive Architecture* awards, in 1995 and 1996, respectively. The Greene House, built in 1990, was published in *Casas Internacionales* and *The New American House* (Whitney Library of Design). The Northeastern University Interfaith Spiritual Center, consisting of the redesign of a religious interior, was also awarded a BSA Unbuilt Design Award (it is currently under construction). More recently, Ponce de Leon and Tehrani have been awarded the 1997 Young Architects Award from the Architectural League of New York.

Below and center: The Suchart House, Phoenix, Arizona, 1996,
sectional view of courtyard, and main living area





Opposite (far right) and below: Casa La Roca, Caracas, Venezuela, 1995,
view of terra-cotta screen wall

Below: North Carolina Museum of Art, Raleigh, 1997, outdoor cinema and amphitheater
Opposite: Corning Glass Center 2000, Corning, New York
(Phase 1 completed October 1997, Phases 2 and 3 to be completed 1999)

Henry Smith-Miller and Laurie Hawkinson

SMITH-MILLER + HAWKINSON ARCHITECTS

Henry Smith-Miller began his private practice in 1977, following a seven-year association with Richard Meier and Associates, during which he was a project architect for several nationally recognized architectural projects: the Atheneum at New Harmony, Indiana; the Albany Mall Art Museum; and the Bronx Developmental Center. He received an undergraduate degree from Princeton University, a master's in architecture from the Graduate School of Architecture at the University of Pennsylvania, and a Fulbright grant to study architecture in Rome. Smith-Miller has been a visiting adjunct professor at Columbia University, the City University of New York, the University of Virginia, the University of Pennsylvania, and Harvard University. He has been Thomas Jefferson Professor in Architecture at the University of Virginia, as well as holding the Saarinen Chair at Yale University.

Laurie Hawkinson received her master of fine arts degree from the University of California, Berkeley. She later attended the Whitney Independent Study Program in New York and received her professional degree in architecture from the Cooper Union in 1983. Currently an associate professor of architecture at Columbia University, she has held visiting adjunct professor positions at Southern California Institute of Architecture, Harvard University, Yale University, Parsons School of Design, and the University of Miami. Hawkinson's collaborative projects include the North Carolina Museum of Art "Master" Site Plan and Project, now built, for an outdoor cinema and amphitheater (with artist Barbara Kruger and landscape architect Nicholas Quennell); the L.A. Arts Park Competition;

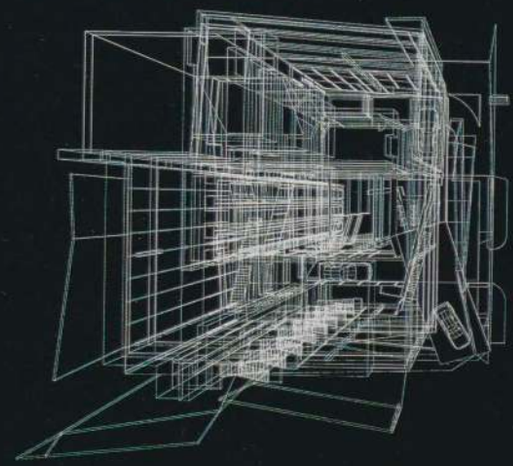
and the Seattle Waterfront Project (also with Kruger and Quennell). She worked with artist Silvia Kolbowski on a project for the Wexner Center's recent exhibition on suburbia, *House Rules*.

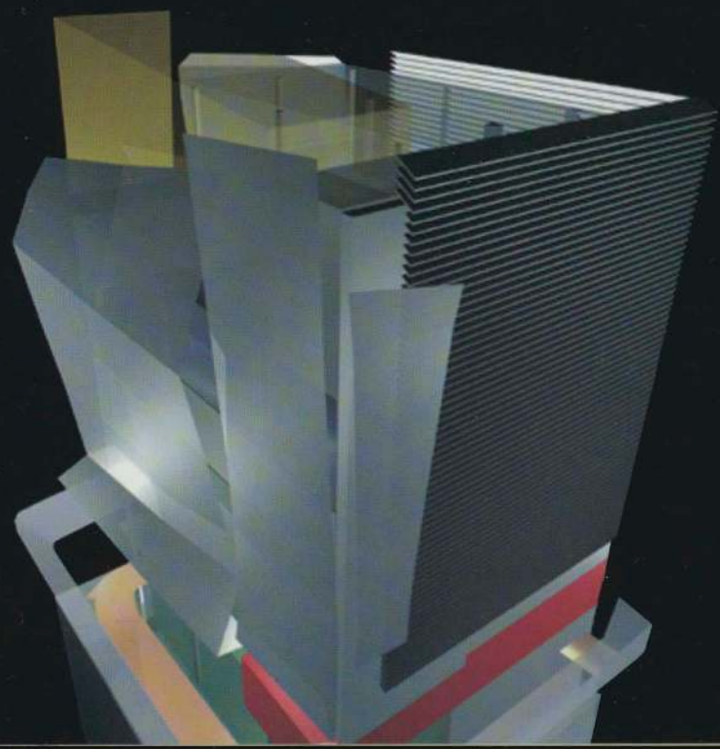
Smith-Miller + Hawkinson Architects, founded in 1977, is an architectural firm with offices in New York and Los Angeles (since 1989). The firm consists of principals Henry Smith-Miller and Laurie Hawkinson. Its projects span a very wide scope, from small to very large and complex interiors, from additions to freestanding single- or multi-use structures. Recent projects include a new mixed-use building for Samsung in Seoul, Korea; the Wall Street Ferry Terminal for Pier 11 in Lower Manhattan; and the Corning Glass Center Project, a three-phase, $30 million project, presently under construction. Smith-Miller + Hawkinson was one of six American architectural firms invited to exhibit in the Italian Pavilion at the 1996 Venice Biennale for Architecture. *Smith-Miller + Hawkinson*, a monograph, was published in 1995 by Gustavo Gili, and the firm was also included in the film *The New Modernists: Nine American Architects* (1993), by Michael Blackwood.

The work of Smith-Miller and Hawkinson displays a strong interest in a general culture of architecture: its design and technological histories, as well as its complex and changing relationship to society. Whereas the work of the early modernists focused on a mechanical definition of technology, Smith-Miller and Hawkinson's work embraces a more comprehensive vision that fuses the mechanical with the digital, enriching the architectural expression of both. The architects are particularly interested in focusing on the ways in which the architectural program—the location and accommodation of functions, activities, and services—can be developed through innovative interpretations that give physical expression to those underlying motivations. Through their programmatic analyses and materially expressive investigations, they seek an architecture that is sensitive to and transformative of contemporary cultural needs and ideas.

Wall Street Ferry Terminal for Pier 11, New York City (to be completed 1998)

Shilla Daechi Building, Seoul, Korea (to be completed 1999)





SMITH-MILLER + HAWKINSON

Enrique Norten

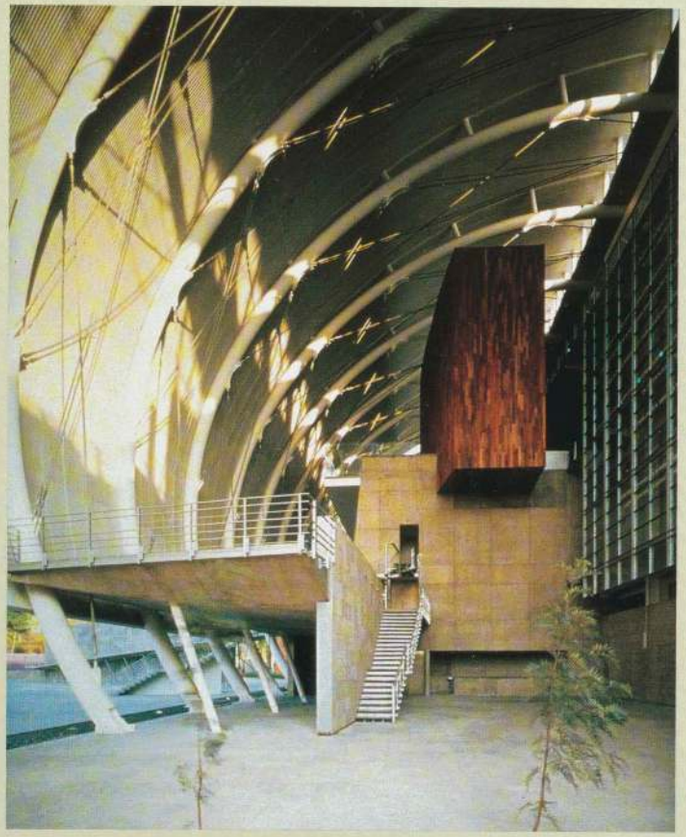
TEN ARQUITECTOS

Enrique Norten was born in Mexico City. He studied architecture at the Universidad Iberoamericana in Mexico City, where he obtained his first professional degree in 1978. He received his master's in architecture from Cornell University in 1980. Norten has taught at Universidad Iberoamerica in Mexico City, Southern California Institute of Architecture, Rice University, and Columbia University. He has also been a distinguished visiting professor at Cornell University, O'Neal Ford Professor at the University of Texas at Austin, the Eliot Noyes Visiting Design Critic at Harvard University, and the Lorch Professor of Architecture at the University of Michigan. In 1998 he will be the Miller Professor of Architecture at the University of Pennsylvania. He is a founding member of the magazine *Arquitectura* and serves on its editorial board.

Norten started his professional practice in Mexico City as a partner in Albin y Norten in 1981. In 1986 he founded the firm Taller be Enrique Norten Arquitectos S.C. (TEN Arquitectos S.C.) in Mexico City with partner Bernardo Gómez-Pimienta.

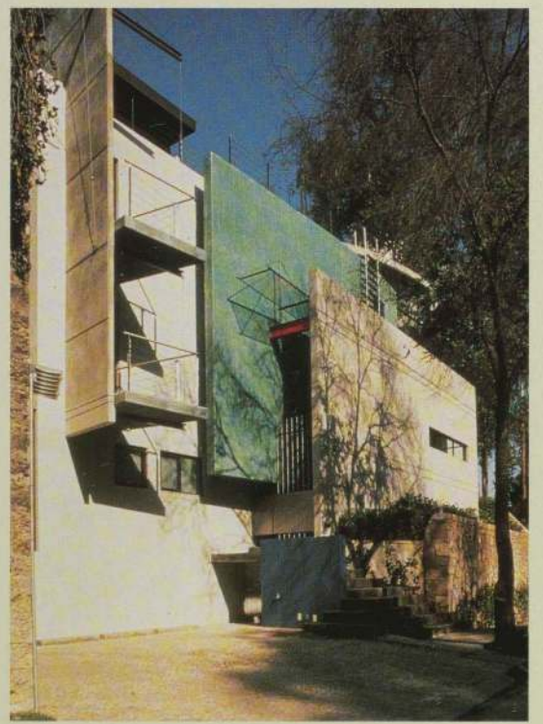
International in outlook, Norten has broken with the pattern established by fellow countryman Luis Barragan, whose masterly modern works constitute a profound exploration of national identity through architecture. In his recent work Norten has explored the underlying currents surging through the international architectural community without abandoning strong local and cultural affinities. Turning away from the masonry language that has dominated Mexican architecture for more than a thousand years, his work embraces a new language of lighter materials, complex forms, and more daring techniques. The lightness of Norten's architecture does not come from its relative weight but from the maximization of the concept of being light. The enveloping structures of his new large-scale buildings, simultaneously roof and façade, seem to hover, with no apparent allegiance to gravity.

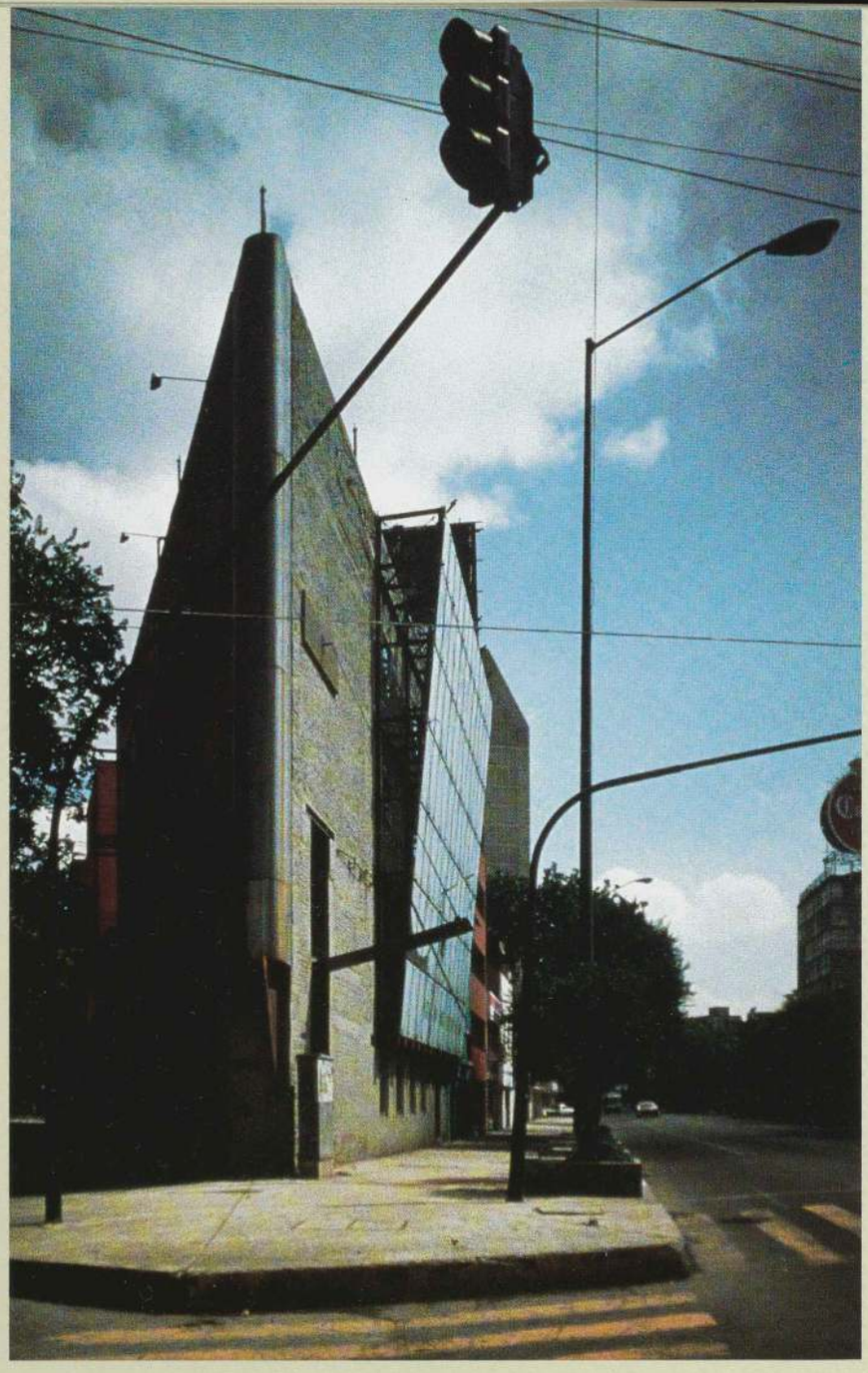
Several of the buildings designed by TEN Arquitectos have been honored with numerous awards and publications. Norten was honored with the Architecture Prize of the National Fund for the Arts, and he also won *Progressive Architecture* awards in 1994 and 1995, the Record Houses Award in 1993, and awards at the Mexican Biennale in 1990, 1992, 1994, and 1996. TEN Arquitectos received the Latin American Grand Award at the Buenos Aires Biennale in 1993, and the firm was invited to participate in the Venice Biennale in 1996. Monographs on the work of TEN Arquitectos have been published by Gustavo Gili in 1995 and by Korean Architects in 1996.



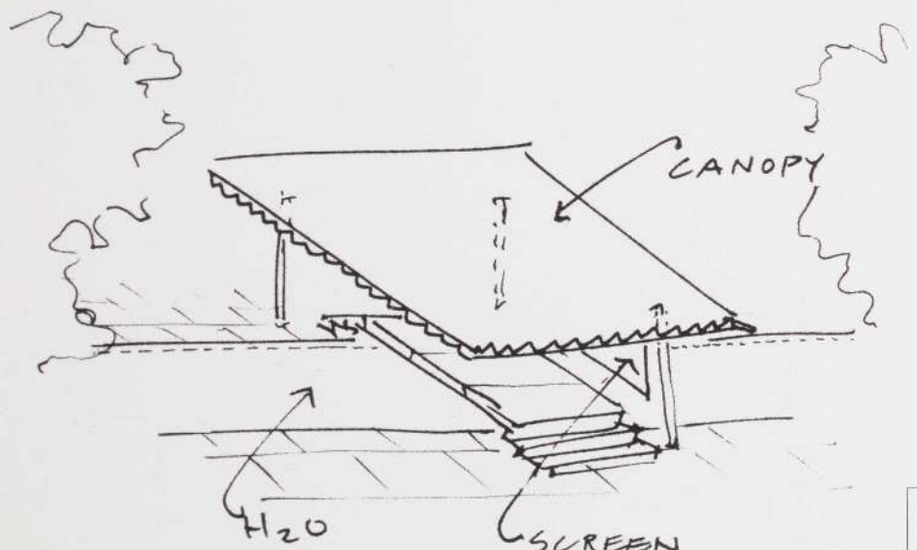
Opposite and below: National Theater School, Mexico City, 1994

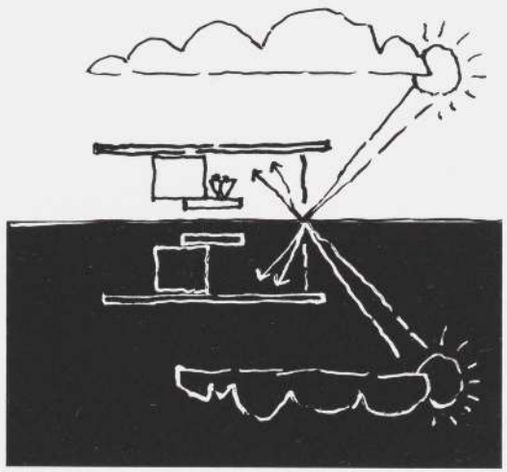
Left: House LE, Mexico City, 1995
Below: Residence, Bosques de las Lomas, Mexico, 1990–91
Right: Lighting Center, Mexico City, 1987–88

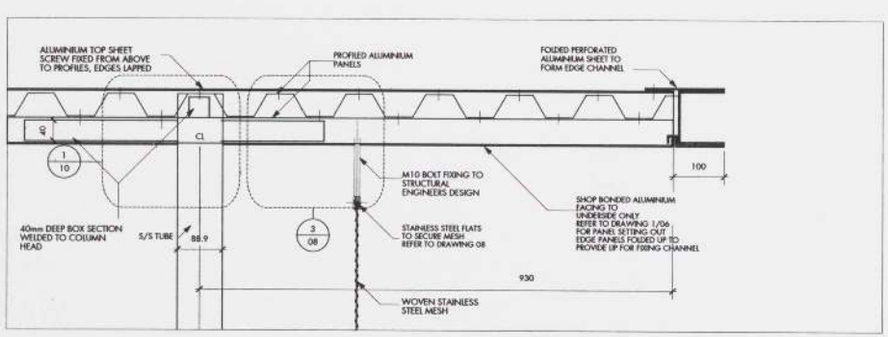




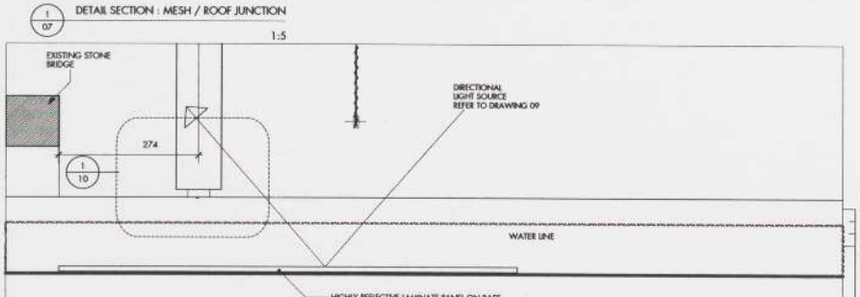
Left: Insurgentes Theater, Mexico City, 1993
Below: Televisa Services Building, Mexico City, 1993







1/07 DETAIL SECTION : MESH / ROOF JUNCTION
1:5

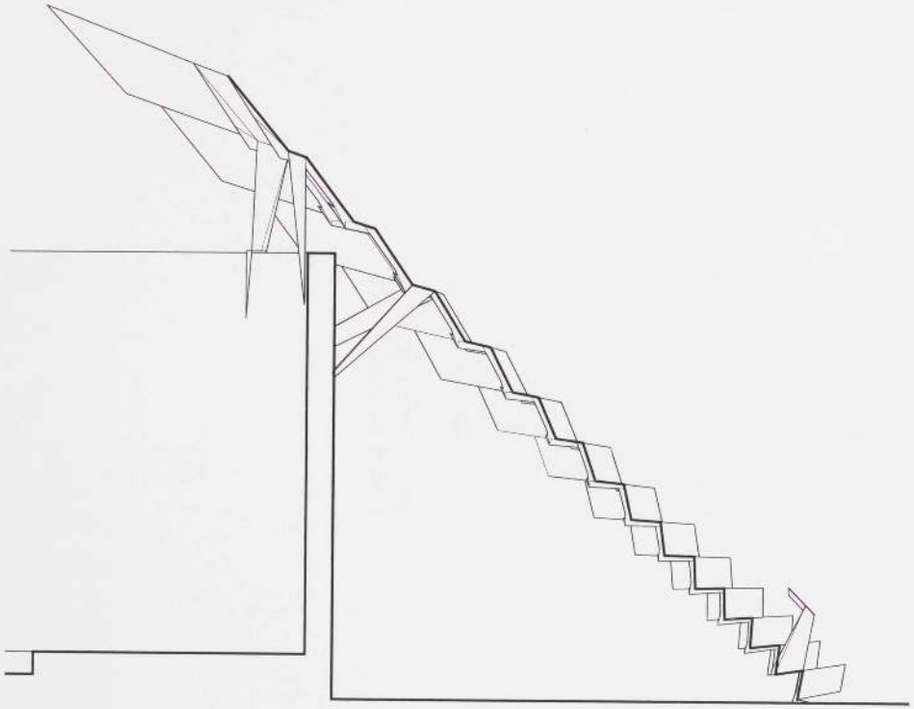


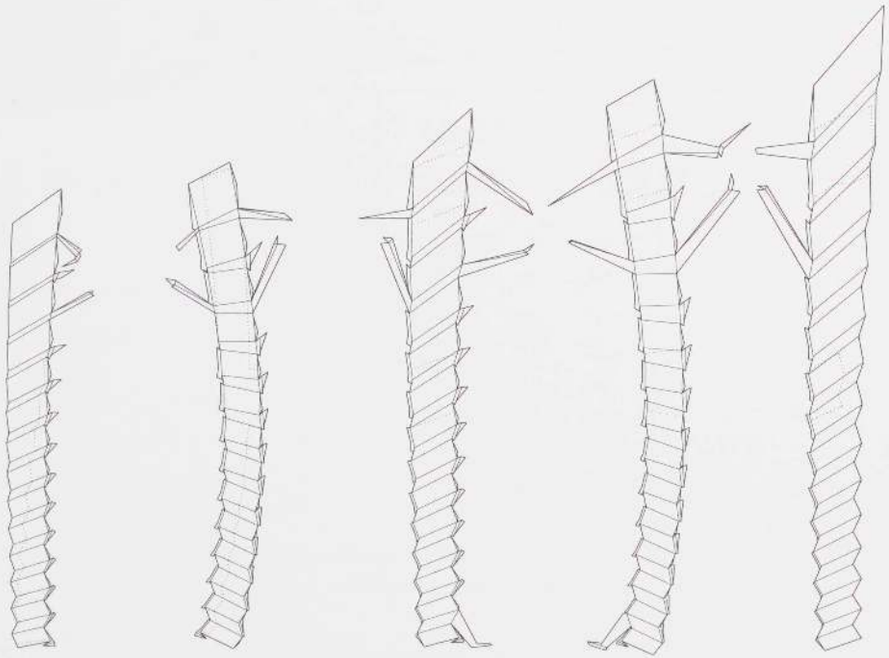
2/07 DETAIL SECTION : MESH / POOL JUNCTION
1:5

PRELIMINARY
munkenbeck + marshall ARCHITECTS
TITLE: ROOF DETAIL SECTION
PROJECT: MOMA NEW YORK
JOB:
DATE: 29 OCT 97
SCALE: 1:5
DWG 07 D

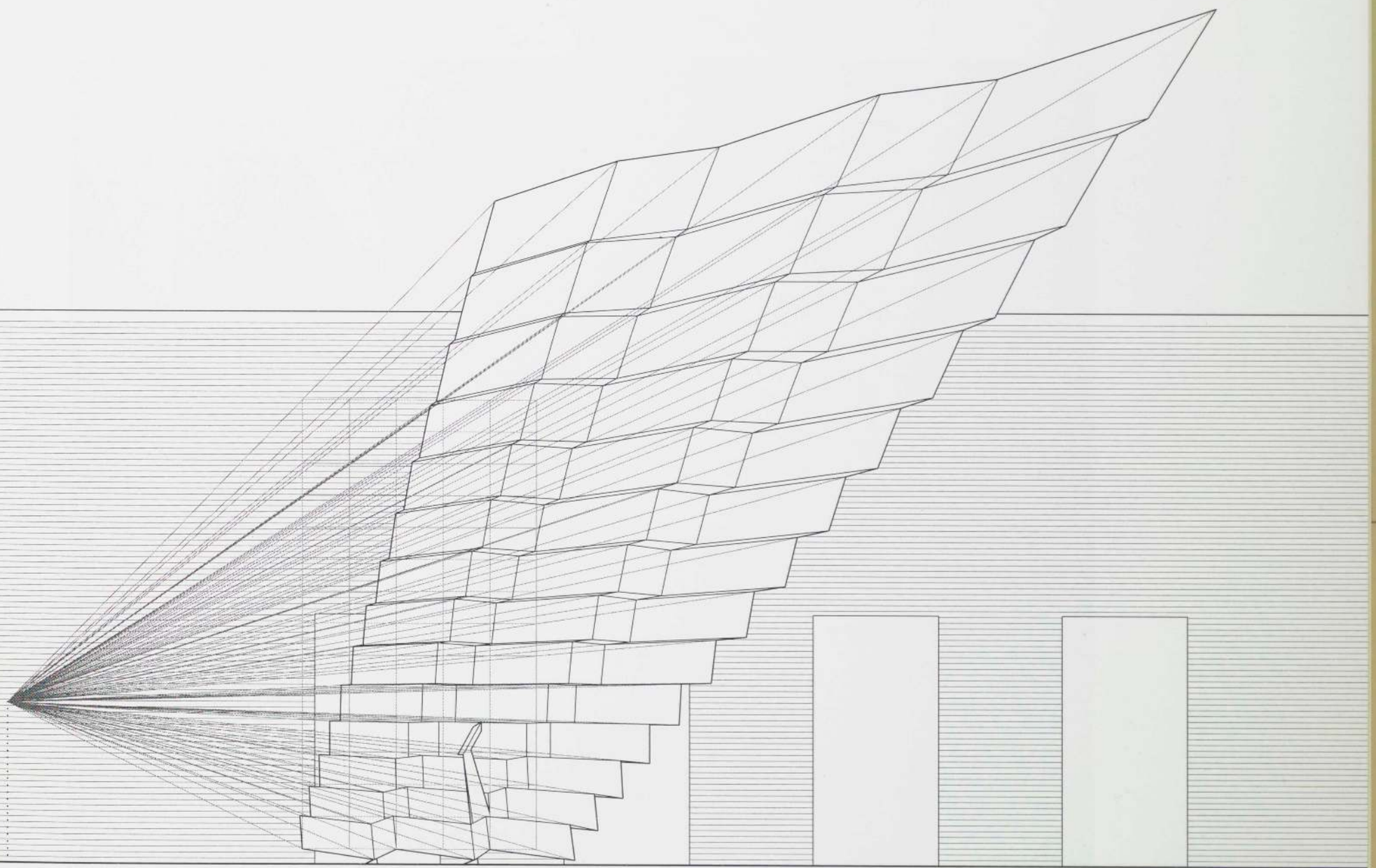
Alfred Munkenbeck and Stephen Marshall's minimal shelter consists of a canopy supported by three slender columns with an infill of woven steel mats on two sides, recalling Mies van der Rohe's spare, essential forms. The installation incorporates the bridge that spans the eastern reflecting pool of the Sculpture Garden, creating an assemblage of new and preexisting parts. Opposite, above left and right: preliminary concept sketches; opposite, below: detail sections; below: view from southwest.

OFFICE DA

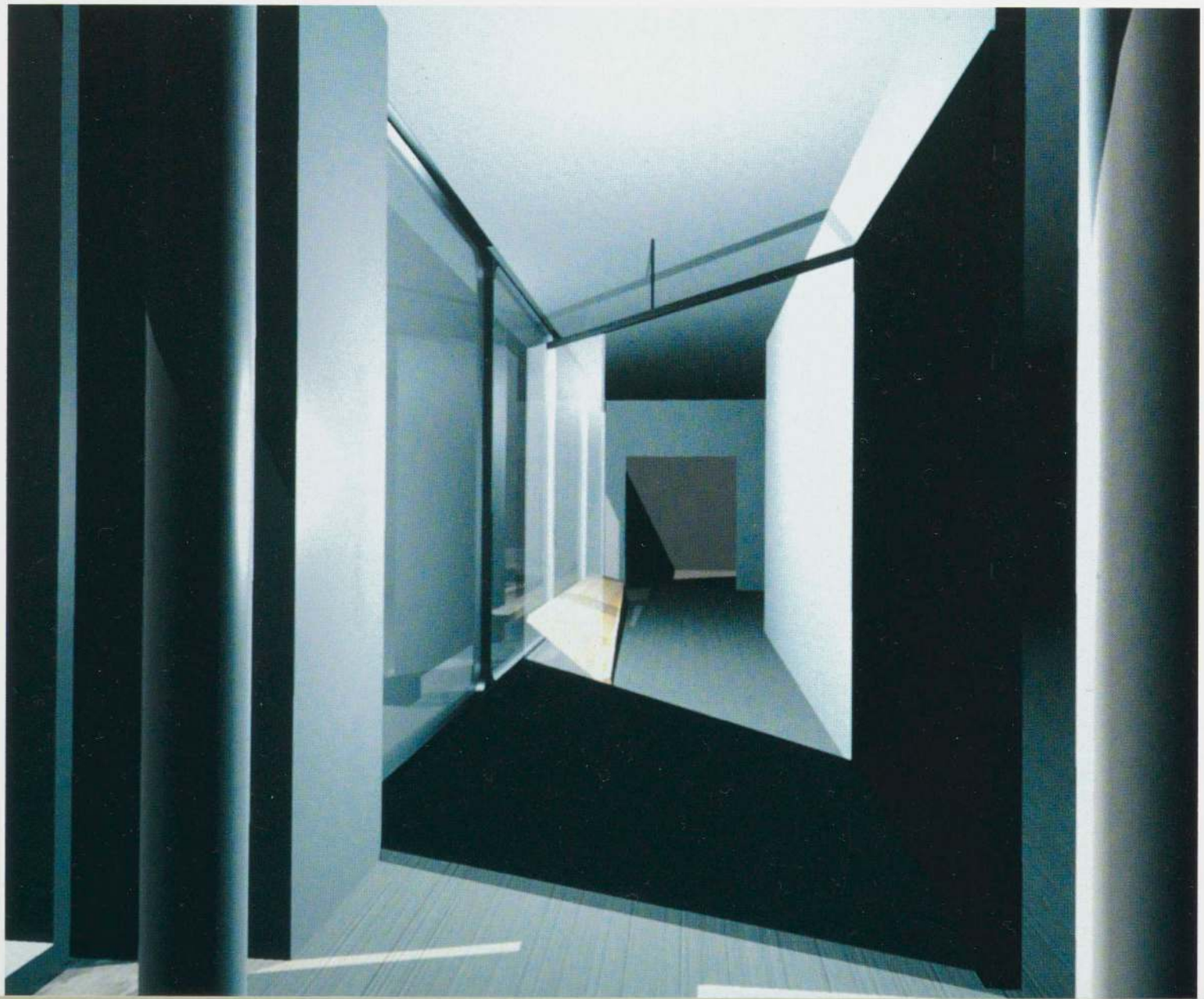




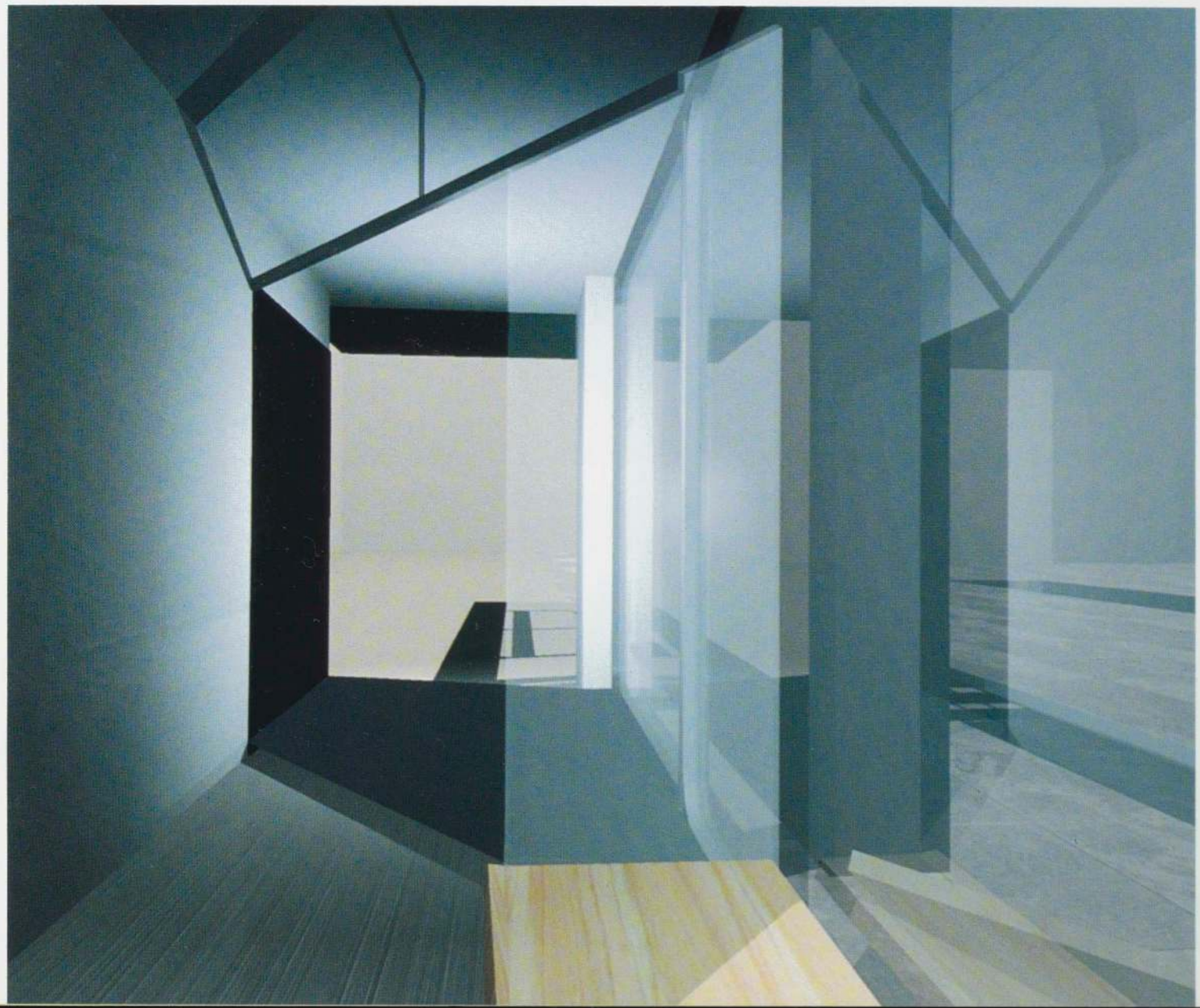
Monica Ponce de Leon and Nader Tehrani's fabrication incorporates a set of divergent interests and strategies related to the acts of making, building, and manufacturing. Folded-steel-plate technology blurs the traditional distinction between structure and skin. Triangulated geometries give the steel skin rigidity, while folded columnar plates give the structure lateral bracing. Opposite, above: section; opposite, below: folded-steel components; below: elevation.



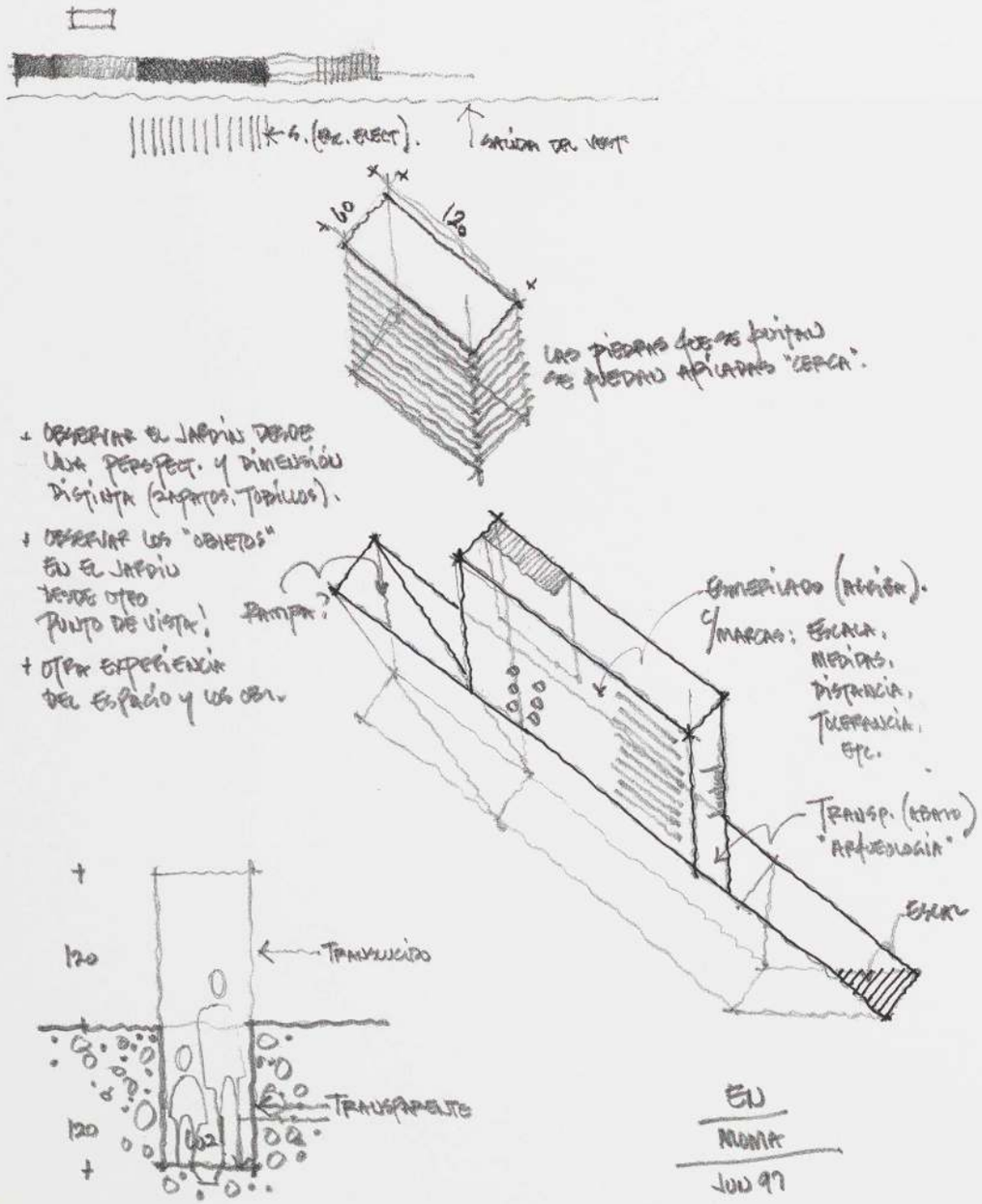
SMITH–MILLER + HAWKINSON ARCHITECTS



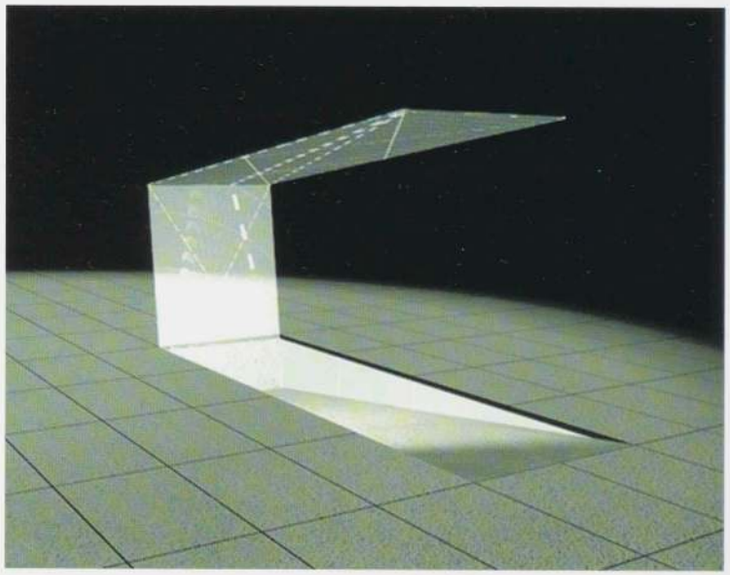
Henry Smith-Miller and Laurie Hawkinson explored the relationship of inside to outside within and without Philip Johnson's 1964 glass curtain wall. Issues of fabrication—such as datum, level, and true—are elaborated in the installation of the new plywood floor (surface), the glass window (plane), the black rubber wall (skin), the steel framing (frame), and the wire-mesh landscape (garden surface). Opposite: view from west; below: view from east.

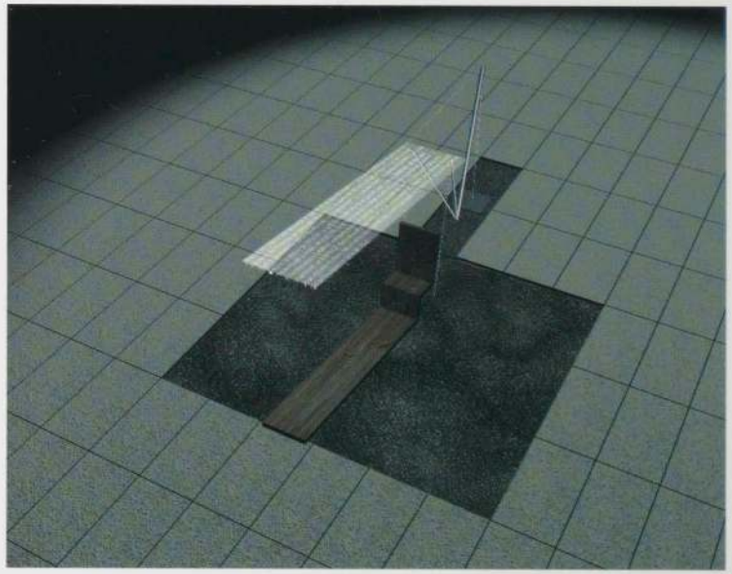


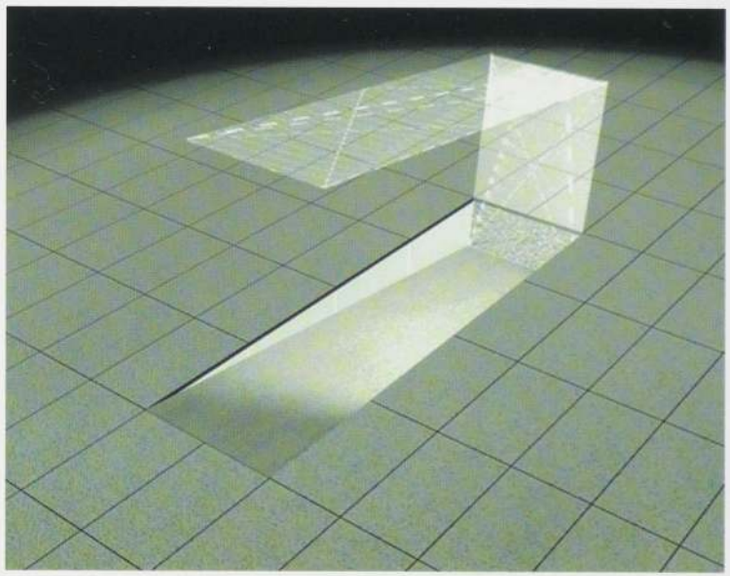
TEN ARQUITECTOS with Guy Nordenson

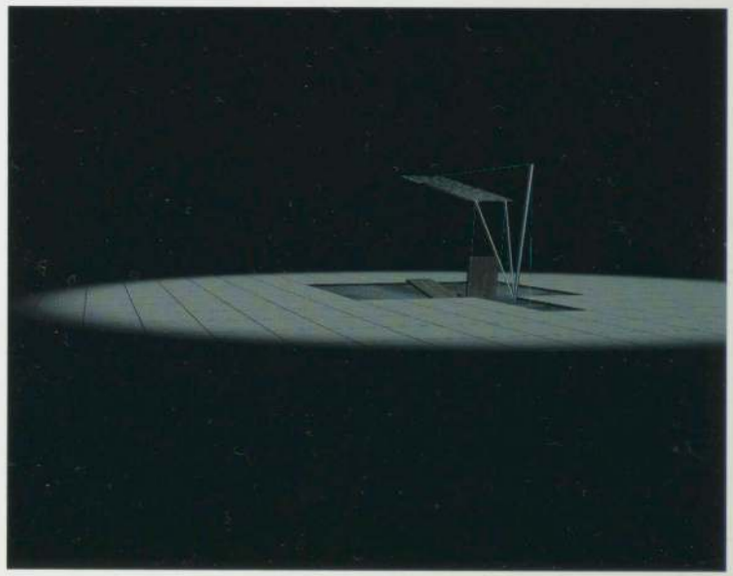


Enrique Norten and Guy Nordenson's installation is both an archaeological excavation and a space for human occupation, delimited by a floating, semitransparent plane above and a parallel solid plane below, which bends to seat a person. The occupant faces Rodin's sculpture of Balzac, and a dialogue is emphasized by the text engraved in the canopy above. Opposite: preliminary concept sketch; below: various views.









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INSTALLATION CREDITS

SAN FRANCISCO MUSEUM OF MODERN ART

Hodgetts + Fung Design Associates
Design team: Craig Hodgetts; Hsin-Ming Fung; Henry Buckingham; Christian Foster
Major materials: parachute fabric; birch plywood; steel; flutes; Masonite

Kennedy & Violich Architecture
Design team: Sheila Kennedy; Frano Violich; Eric Bunge; J. J. Dooley; Markus Froehlin; Scott Murray
Major materials: plaster; drywall; steel mesh

KUTH/RANIERI
Design team: Byron Kuth; Elizabeth Ranieri; Steven Const; Peter Mavridis; Zoe Prellinger; Mikhelle Taylor
Major materials: synthetic industrial felt (Pacific States Felt & Mfg. Co., Inc.); straight paraffin wax (Dussek and Campbell National Wax Company); lightweight C-clamps

Rob Wellington Quigley, FAIA
Design team: Rob Wellington Quigley; Jim Darroch
Major materials: wood; steel; plastic
Consultants: Ray Quigley, Sr. (structural engineer)

WEXNER CENTER FOR THE ARTS

Mockbee/Coker Architects
Design team: Coleman Coker; Marc Fugnitto; Samuel Mockbee; Scott O'Barr; Dan Osborne; Chris Robinson; Brad Smith; Jon Tate
Acknowledgments: Don Estes and Jill Brogdon (Estes Products, Memphis, Tennessee); Joe Harris (Greensboro, Alabama); Jesse James Harris (Colo, Alabama)

Eric Owen Moss Architects
Design team: Eric Owen Moss (architect); Scott Nakao; Richard Lin; Lutz Erickson; Francisco Delgado
Consultants: Joe Kurily of Kurily, Szymanski, & Tchirkow (structural engineer); Tom Farrage & Co. (fabrication)

Patkau Architects
Design team: John Patkau; Patricia Patkau; Timothy Newton
Consultants: Fast + Epp Partners (structural engineers); Boelling Smith Design (fabrication)
Major materials: M1 Composting Toilet (Clivus Multrum, Inc.); Millennia photovoltaic panels (Solarex); lighting (Novus); wood (Forest Alliance of British Columbia; MacMillian Bloedel, Ltd.; and HMS Lumber, Inc.); plywood (Snowcap Lumber); glass (Tempa Glass); refrigerator (Nova Cool)

Stanley Saitowitz Office
Design team: Stanley Saitowitz (principal); Jansen Lum (project manager); Katrine Ostergaard
Consultants: Michael Gemignani, Paragon Frames (fabrication)

THE MUSEUM OF MODERN ART

Munkenbeck + Marshall Architects
Design team: Alfred Munkenbeck and Stephen Marshall (design principals); Emma K. Parkes (project architect); Chris Russell
Consultants: Anthony Hunt Associates Ltd. (structural and civil engineers); Flack & Kurtz (consulting engineers); Bruce Gitlin, Milgo Bufkin (fine architectural metalwork)
Major materials: stainless steel (Milgo Bufkin); woven stainless-steel mesh; aluminum profiled decking; spray-painted aluminum facing; mirrored laminate board; architectural floodlights
Acknowledgments: Bruce Gitlin (Milgo Bufkin)

Office dA
Design team: Monica Ponce de Leon and Nader Tehrani (design principals); Matt LaRue (project coordinator); Tim Dumbleton (animation); Jay Berman; Ben Karty; Richard Lee; Jill Porter; Christian Schaller; Phillip Smith; Lee Su
Consultants: Bruce Gitlin (Milgo Bufkin); Michael J. Theiss, P.E. (Office of James Ruderman LLP, structural engineer)
Major materials: steel (Milgo Bufkin)
Acknowledgments: Bruce Gitlin (Milgo Bufkin); Michael J. Theiss, P.E. (Office of James Ruderman, LLP); Dr. Edward M. Brown and Professor Judith Wolin; Mr. David Netto; Dr. Ahmad and Parvaneh Tehrani; Mrs. Maria del Pilar de Ponce de Leon Sola and Mr. Angel Ponce de Leon

Smith-Miller + Hawkinson Architects
Design team: Laurie Hawkinson and Henry Smith-Miller (design principals); Ferda Kolatan (project architect); Karin Taylor (project manager); Wanda Dye; Maria Ibañez de Sendadiano
Consultants: Ove Arup and Partners, New York (structural consultants); R. A. Heintges Architects (curtain wall consultants)
Major materials: tempered glass (John Depp, Inc., Architectural Glass Products); blackened-steel structure and glass fittings; marine-grade plywood; black skate-top rubber
Acknowledgments: New Line Cinema; Wesley Depp (John Depp, Inc.); Martin Myers; Phillip Meskin

TEN Arquitectos with Guy Nordenson
Design team: Enrique Norten and Bernardo Gomez-Pimienta (design principals); Guy Nordenson (engineer); Mark Seligson; Francisco Pardo; Julio Amezcua; Catalina Aristizabal
Consultants: Noah + David Construction (general contractor)
Major materials: Glass (John Depp, Inc., Architectural Glass Products); metal (TriPyramid Structures, Inc.)
Acknowledgments: Wesley Depp (John Depp, Inc.); Tim Eliassen (TriPyramid Structures); Tim Crowley (Noah + David Construction Corporation)

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