Constructs

Yale Architecture

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Fall 2002

Constructs

To form by putting together parts; build; frame; devise.
A complex image or idea resulting from synthesis by the mind.

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A Note on the Type: Helvetica Neue R

The intention of this project is to render a type family by using the language and functions of software. Instead of bold, medium, italic, etc., it should now be possible to involve other dimensions (time) or qualities (the ability to move, grow, hide, read) in the production and use of digital typography.

Variations on a typeface, Helvetica Neue, emphasize different modes of production for the headlines of this issue of *Constructs*. These include: resolution (low-resolution bit mapping); machine translation (AutoCAD and Nokia cell-phone LCD display); 3-D characters for time-based displays; a preview mode from Adobe Illustrator; and a version of the full character set visually constructed from its own Postscript code. Future types will explore aspects of network communications using Global Positioning System software, Palm Pilot interface, and scripting languages.

This issue includes two additions based on programmatic randomness: Helvetica Neue R Sizer by Joe Pirret and Helvetica Neue R Denser by David Reinfurt.

—Paul Elliman

Cover:
Cecil Balmond and Toyo Ito, The Pavilion at the Serpentine Gallery, London, 2002. Photograph Daniel Bosia.

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cecil balmond

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Cecil Balmond, chairman of the Europe and Building Division of Arup, will be returning to Yale to teach as the Eero Saarinen visiting professor in September. He will give a lecture entitled "Informal Networks" on Thursday, October 28, 2002. This fall Professor Balmond has a book coming out, *The Informal* (Prestel, 2002). He discussed his approach to engineering architecture in a conversation with Nina Rappaport this summer.

Nina Rappaport: During the past few years we have been discussing your collaborative work with architects in a role that often has gone unrecognized. This no longer seems to be the case. Your new book discusses your projects with Rem Koolhaas, Daniel Libeskind, Foreign Office Architects, and UN Studio. It seems that you are now focusing your energies on the total process of making the building. So, as I have asked other engineers in this issue of *Constructs*, how do you collaborate with architects, and how does your work merge with that of the architect?
Cecil Balmond: I actually work as an architect in terms of the way I engage the space. So although I am trained as an engineer, I engage space with the sensibilities of an architect. When I am working with an architect—and this is where the recognition comes in—it is difficult because the engineering work is absorbed as architecture. But if a building has obvious structural overtones then people think, "Well maybe this is a collaboration"—which during the last two years has become clearer, in a way, as I become better known. And now when people see that I have been involved in a project, they know that the space has been influenced by my interventions, whereas usually the architect does the design and the engineer makes it work.
NR: How did you and Toyo Ito recently collaborate on the project at the Serpentine Gallery in London?
CB: Last year at the Serpentine I worked with Daniel Libeskind on the project *Eighteen Turns.* People saw that it was obviously about structure, and equally it was about space. This year they asked me to work with Ito. We have similar ideas about space. We want to make it interesting, flexible, novel, innovative, and yet functional. So we did a simple box that is an algorithm and a beautiful pattern, so that one is not sure if it is all about pattern or all about structure. This pavilion was a joint venture of design intent: it is his architecture, my structure, our design. And Ito has championed my idea of the informal by saying that is where he thinks his architecture is going.
NR: What do you mean by *informal*—the title of your book and a term which you've said you would like to copyright as it relates to your work? How would the informal differ from what other engineers might call intuition? Is intuition more going with the gut?
CB: I think intuition is something that has to be sharpened. I have been working on honing my intuition with experiments in form-finding, which is sharpening one's gut. The gut is still paramount, and it is what you go on in the end. There comes a moment when you are faced with the facts, but intuition tells you that maybe it can still be done even though the facts don't. And that is true in life. But what I mean by informal is an actual approach to design. I use my Eastern intuition to look in and be able to come out with an answer. Nonorthodox design is a body of work that would be called informal, that is based on nonclassical ideas, so there are no fixed centers to the work. A center can move, and adjacency matters. It is more absolute than contemporary ideas such as relativity, simultaneity, or working symmetry. It is something that I do more as I enter the nonlinear world, the world of curving shapes and morphing. You need some kind of rigor; I am trying to build up a methodology and rigor. So it is an approach to design that I am trying to classify and label, and do so in my book. With the non-Cartesian spaces it would be helpful to have a debate and lay down a theoretical approach. One approach is to say, "Okay, I want a museum. I will draw a square and put in a door and work from a plan inward." My design methods are from an idea outward.
NR: So this informal approach is in contrast to that of architects, who work from the outside in and then engineer structure afterward, as even Frank Gehry works. Does the informal relate to your interest in concealing the structure to make it a subtle part of the building?
CB: Yes, so that for example the Serpentine Gallery pavilion was started with a simple line in space that was repeated in a certain way. We got what we got. The project in Arnheim with Ben van Berkel began as a line flowing by hand that turned into something. The Chemnitz Stadium roof with Kulka & Konigs was one arch that repeated itself and came to what it came to. So I have a very different stand from the structural engineer who works on a great piece of structure that you can completely understand. That is great. There is no harm in that; I like that too. But it is more fun if you have a piece of work—a building or a bridge—that is like the Chemnitz stadium, which is ambiguous, and you start to wonder what is the structure. Or the Kunsthal, where the best compliment I received was from someone who said to Rem, "I don't know what this is about—it feels like it is all structure but you can't see it." The building is what people must enjoy, and as a consequence they might see that it is about engineering.
NR: So have you basically rejected the macho technology that shows off the structure? Your engineering is more organic and internal.
CB: I am interested in releasing architecture from structure, whereas other engineers trap the architecture through the structure. I would like to create something more subtle, as you said, so that it has a slight ambiguity and can be structure, architecture, or pattern—but I like the structural ambiguity. It is why a piece of coral is intriguing: Is that a piece of structure? Of course it is. Is that a piece of architectural delight? Yes, it is. A piece of coral is a spatial map, a kind of growth form. And those sorts of things interest me.
NR: So it is this nonlinear architecture that you feel is appropriate to your approach of the informal. Why is there such a synergy for you with this type of work?
CB: In this area of "blob" architecture,

space is fundamentally linked to an engineering of surface that automatically links it to structure. So you can't enter the spaces without an intimate collaboration between engineer, architect, and materialist. This contemporary area of space will open up new potentials in collaboration. Gradually people are accepting that this all comes together and that architecture is not a compartmentalized profession. Nonlinear work is an area in which engineers would be a prime motivational force. Structural engineers as well as environmental engineers will contribute. As people understand how space works in environmental terms, I think these ideas will come to be influential in making the spaces habitable and interesting.

NR: And how does this work relate to new ways of looking at structural skin?

CB: A lot of the work now is surface, which is skin and structure. On one end I am doing a major sculpture with Anish Kapoor that will take up the Turbine Hall of the New Tate Gallery as the world's biggest contemporary structure and the world's biggest spanning structure. And it all has to do with skin. Skin with its structure, and also a piece of structure that at that scale is architecture.

NR: So being almost the architect in a way, or the artist-engineer, you get to do the best part of the job—the concepts, constructs, and equations. Do you feel you would be able to do the kind of work you have been doing without the architects you are now working with? You once told me you could start your own architecture office.

CB: That is interesting to think about. Well, in the case of the pavilion at the Serpentine, I would say, yes, I could do it because I make those shapes myself. But on the other hand, working with the architects I do gives me access to important work that I then have a leeway to experiment with. In a way I need them: their work and ideas push me, and it is a fertile ground of collaboration. I do think my ideas influence them, as Rem has said. I think it is two-way. It is the art of collaboration that interests me. Good engineers take an architectural hypothesis and then extend and stretch it, and show architects an area they couldn't have grown in, because they didn't understand it even in their own language. So work I do with Rem might still look like Rem, but there might be something happening in a project that has pushed him further than if he had not worked with me. And in part of that you encompass your own work and push it further too.

NR: Even your approach to teaching is different from the norm of teaching engineering because you teach design to architecture students. How does this relationship work in a studio setting, and does this compare to your working method with architects in general?

CB: I work with the students as an architect. If I work with an architect, I work as an architect with them. I am working to understand space with them, but of course I bring engineering know-how. When I draw a line I understand how it is going to work. So, with students, as I work on architectural notions of space I like to turn the ideas of design into reality and give the students an idea of how to improve materials and shapes.

But one issue is that students don't know how to get out of the abstraction on the computer, so the work often just stays as a computer image, and it is hard for them to know how to shape it up in the real world. The best input I can give to students is how to move from the pattern idea to the abstract language of design to a reality.

NR: At Yale this year will you offer a problem similar to the nine-square problem of a few years ago?

CB: This year at Yale I want to concentrate on proportion, because recently when I was at the Architectural Association as an external examiner some of the traditionalists were saying that they didn't see proportion in the work. But proportion in the computer age is different; it is about overlapping things and scaling effects. So I could begin with the history of proportion from the Greeks and harmonic means and look also at it in a contemporary sense. I use a simple program like the pavilion so that we can concentrate on the tectonic and structural features.

NR: Of your current projects with Rem Koolhaas—Whitney Museum addition, Porto Music Hall, Los Angeles County Museum of Art (LACMA)—which do you see as going to another area of the informal, especially LACMA, which is basically a shed structure?

CB: We are thinking about the cover, the skin, and how to let light in. Architects leave big spaces to engineers to solve, and they don't understand how structure works after 30 or 50 feet—so engineers come into their own and really help structure a big span. I am considering a fabric structure with a series of moving arches.

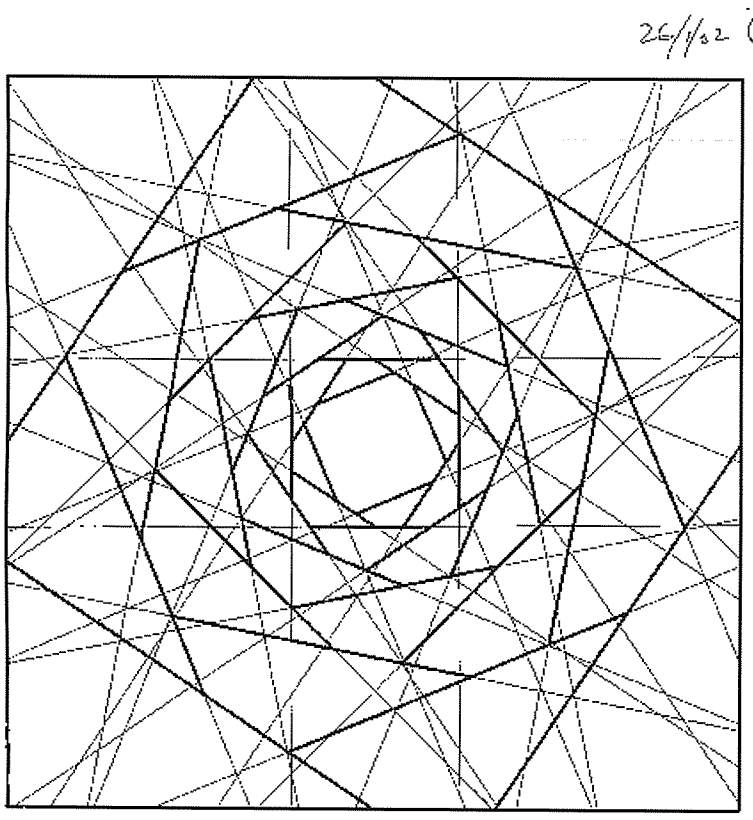
NR: How does this project then become a collaboration?

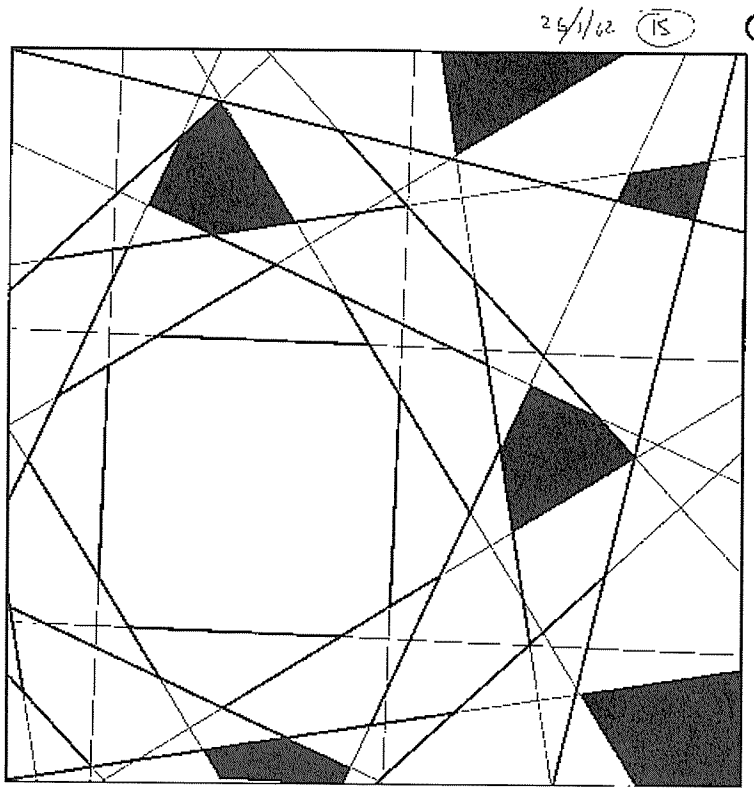
CB: It is Rem's eye and his vision, and my vision and my eye, about space. At LACMA we have been able to come up with ideas that break down all the light coming in through a lightweight roof as against a heavy roof. And we look at different materiality and skins, and have interesting patterning.

NR: So does this nonlinear work provide more collaboration than other types of engineering?

CB: I think these areas of nonlinearity and new spaces will push true joint enterprises, and we can instead talk more about the design of buildings and the social conditions for a good life and sustainability. Architects have a part and engineers have a part, but I think at the moment it is very lopsided. People need to see that architecture is interwoven with engineering, and you can't separate them. That is what I would like: integration.

Top and bottom: Balmond's drawings of the algorithm for the Toyo Ito Pavilion at the Serpentine Gallery, summer 2002. Courtesy of Cecil Balmond.





"Dense-cities: An American Oxymoron?" Symposium and Exhibition

Friday, September 20, 2002

6:30 p.m.: Keynote talk
"Dense-cities: An American Oxymoron?"
Winy Maas, MVRDV

Saturday, September 21, 2002

9:30 a.m.: Morning Session

Welcome
Robert A. M. Stern,
Dean, Yale School of Architecture

Global Density
Michael Sorkin, Chair, Urban Design,
City College of New York

Nature in the Dense City
James Corner, Chair, Landscape Architecture, University of Pennsylvania

William Burch,
School of Forestry and Environmental Studies, Yale University

Temporal Densities
Brian McGrath, Columbia University

Lunch
1:30 p.m. Afternoon Session

Designing for Density
Fred Koetter, Yale University

Density and Development Post 9/11
Phil Aarons, Millennium Partners

Density and Sprawl
Douglas Kelbaugh, University of Michigan

Planning for Density
Alexander Garvin, Yale University

Reception

The Dense-cities symposium is supported in part by the Ministry of Foreign Affairs/Consulate General of The Netherlands in New York and Susan Henshaw Jones.

Exhibition hours of the Architecture Galleries are Monday through Friday, 9 a.m.–5 p.m. and Saturday 10am–5pm.

Exhibition: 3D City: Studies in Density, Recent Work by MVRDV, *September 4–October 25, 2002, in the A&A Gallery.*

"Eisenman, Krier: Two Ideologies" Symposium and Exhibition

Symposium

Friday, November 8, 2002

6:30 p.m. Keynote: Roger Kimball, Managing Editor, *The New Criterion,* "Is There Any Architecture After Modernism? (Re)positioning Architecture: (Post)modernism, (Re)presentation, and the Discourses of (Dis)play."

Saturday, November 9, 2002

9:30 a.m. Welcome: Robert A. M. Stern, Dean, Yale School of Architecture

I. History: Sarah Whiting, Harvard Graduate School of Design; "No," Anthony Vidler, Cooper Union; on Colin Rowe
Response: Michelangelo Sabatino, University of Toronto

II. Urbanism: Stan Allen, Princeton University; on Piranesi, "Fields, Fragments, and Figures"
Robert Somol, University of California at Los Angeles; on Nolli, "A Funny Thing Happened on the Way to the Forum"
Response: Sanford Kwinter, Rice School of Architecture

Break

III. Politics: Kurt Forster, Professor, History of Art and Theory of Architecture, Federal Institute of Technology, Zurich
"How Eisenman Cut the Gordian Knot of Architecture: Looking at Giuseppe Terragni (1904-1943) from Afar"
Maurice Culot, Director, Institute Francais d'Architecture, Paris; and Archives d'Architecture Moderne, Brussels, "On Albert Speer, Architect"
Response: Alan Plattus, Yale School of Architecture

Lunch

IV. Language: Demetri Porphyrios, Yale University, on the Classical
Mark Wigley, Columbia University, on the Autonomous
Response: Emmanuel Petit, Princeton University

V. "Then and Now," Peter Eisenman, Yale University; "Learning from Modernism," Leon Krier, Yale University

Afterword: Vincent Scully, Yale University

This symposium accompanies an exhibition at the Architecture Gallery from November 4, 2002–February 7, 2003, of drawings and models of House IV "Eisenman, Krier: Two Ideologies." The exhibition consists of the presentation of Eisenman's House IV, organized in association with the Canadian Centre for Architecture, and of Krier's Atlantis project, adapted from an exhibition initially prepared by Hans-Jürgen Müller, Helga Müller, and Pete Klöss.

The Eisenman/Krier symposium is fully funded by Enid Storm Dwyer, and publication of the proceedings is supported by Elisha-Bolton Foundation and Gilbert P. Schafer III ('88).
Symposium location: McNeil Lecture Hall, Yale Art Gallery

Why Glenn Murcutt Matters

Pritzker Prize–winner Glenn Murcutt will return to Yale this fall as the Bishop visiting professor and will give a lecture on Thursday, November 7, 2002.

"Europe has architecture; Australia has landscape." It's an obvious comment from an unlikely source: Tim Winton, a contemporary Australian author who explores Australian identity in the space of the outdoors in his novel *Dirt Music*. Flying into Sydney, a city—or more accurately, sprawling suburb—of four million people, it is obvious to even casual observers that after 200 years of European construction the mountains, the harbor, and the beaches remain its most forceful organizing feature. Although Sydney has a population density rivaling that of Chicago, it is not organized around a grand civic space but around the harbor. Public life is lived outside. And this outside is a place that's experienced in movement. It is a transitional space. It's salutary that the most significant political speech of Murcutt's era was made outside, on the steps of the parliament house, by Gough Whitlam, who was elected prime minister after he had been sacked by the Queen of England's representative.

Glenn Murcutt, this year's Pritzker laureate, is the architect of the Australian outside. He builds nowhere else. Murcutt steadfastly refuses lucrative commissions from Europe and the United States. Fiercely regionalist, he has not built much beyond a 200-mile radius of Sydney, where he lives and works. From this seemingly limited position, Murcutt's influence has reached far. In terms of defining Australian cultural identity, there is arguably no one who has made a larger contribution. Architecture is well qualified for defining identity, but Murcutt's work in particular harbors a precise articulation of the Australian romance with the wilderness. Whether in the country or in Sydney, his architecture suggests that habitat is an understanding and appreciation of living with the ecology of the wilderness.

Murcutt's architectural education started with remarks his father made about the idiosyncrasies of the Australian landscape, showing him the subtleties of the ground, climate, and flora that are the result of the landscape's most significant attribute: low rainfall. With no underground aquifers to provide a supply of well water, occupying the land is synonymous with living with a paucity of water. This extends beyond simply attempting to collect and use rainwater. With a population the size of Texas (20 million) and a landmass the size of North America—drier than any in the world—emptiness, scarcity, and conserving resources are integral to the cultural character of Australians.

Murcutt's first criticism of his Modernist architectural heroes in California came from this cultural attitude. The amount of energy required to heat and cool the glassy architecture of Craig Ellwood, Richard Neutra, and, by implication, Mies van der Rohe appalled him. He realized that this aesthetic of transparency could never be sustained in Australia, not because it wasn't beautiful or hadn't been tried before but because culturally such an extravagant use of energy would never be tolerated. "Australians are window openers," Murcutt says. If you've traveled in a car with an Australian on a hot day, chances are you'll understand what he's talking about. So Murcutt's buildings open up. His architecture poses the following question: How do the buildings close down? Transparency in his work is a sliding scale that is regulated by the users for the weather conditions. Just as a yacht must be constantly trimmed, Murcutt's architecture demands participation. For more than two decades he has claimed that his buildings do not need mechanical heating and cooling, and it's this pragmatic and ethically driven attitude toward scarcity that has culturally positioned his work.

The skins of Murcutt's buildings are specific, articulate, and as seasonally programmed as the angophora tree (Murcutt's example), which sheds its bark in a colorful display each year. These skins are more varied than the forms and planning of his domestic pavilions and are instrumental in activating the relationship between the occupants and the natural environment. In the Marie Short House (1975), a combination of mesh fly screen, glass, and metal adjustable louvers wrap the double pavilions to manipulate the circulation of the slight breezes. For the northern side of the Bowral House (2001), he uses roof overhangs spatially to modulate the transition between inside and out. The house's skin is expanded to become part of the interior circulation, and the roof slides down as a windbreak for the house. One of the less understood reasons for Murcutt's frequent use of corrugated zincalum (formerly called galvanized iron) is that the material sheet has an edge that allows the roof to "feather down" to a single line against the sky, reinforcing the changing transparency he sees in the native dry sclerophyll forest. The material is also familiar to the construction industry—it's common in the vernacular buildings of rural areas—as are many of his details. Part of Murcutt's ability to succeed in Australia, a country generally ambivalent to architectural innovation, was his acceptance of standard building techniques and a talent for tweaking them to his purposes.

When the Marika-Alderton House (1994) is closed down it is never sealed. Located in the tropical far northeast of Australia for an Aboriginal client, the house has one side with open slats that continually allow it to breathe. In working closely with the community on an Aboriginal Alcoholic Rehabilitation Center ten years earlier, Murcutt found a correlation between his reading of the landscape and their occupation of it. There is an Aboriginal desire to view the horizon from within a dwelling and to imagine the flows of natural forces and fauna continuing unimpeded through the space. This loosening in the interior of programmed space is familiar in Murcutt's plans, where circulation along the long axis of the pavilions is often continuous and punctuated only by sleeping and eating zones. His interest in Aboriginal habitation of the land has coincided with a growing public interest, through the land-rights issue in the plight of the Aboriginal peoples. This led to the 1985 Aboriginal ownership of perhaps the most symbolic landscape form, the red rock in the middle of Australia, and the resumption of its native name: Uluru.

If Murcutt's work is a cultural barometer of developing attitudes within Australian life, then his career is a testament to the pugilistic character of Australian politics, as a result of a perhaps overindulged individualism. He once opened a lecture at the Royal Australian Institute of Architects by announcing that he would gladly return his drawer full of awards for the smooth passage of his projects through the local building authorities. The approval system, which allows neighbors' opinions to override any architectural argument, has consistently denied building permits to inventive projects. Along with Harry Seidler, Murcutt has repeatedly challenged the decisions of city councils. Eleven of his projects only won building approval after he went to the Land and Environment Court, the highest possible legal appeal. (Only once did he lose in this process.) Ironically the council's most common reason for rejecting Murcutt's plans was that his designs did not harmonize with the natural setting or blend with the natural environment. If for nothing else, Murcutt and Seidler are Australian architectural pioneers for legally hacking out a political clearing for architecture. After many battles and awards, Murcutt now generally only gets delayed in council and is able to negotiate a settlement without compromising his work.

That Murcutt has provided a precedent and strategy for younger architectural practices to navigate the pitfalls of the profession might be contribution enough, but his influence extends well beyond building-department approvals. He has taught in Sydney since 1970 and has helped many former students start their own practices. Although Murcutt has always practiced on his own, he has been amenable to anyone who has called him for advice, and often volunteers details and information on his building products. His pavilion house form has become so ubiquitous that it is considered the antecedent of the "Sydney school." Moreover, while the pavilion (in Murcutt's case between 15 and 20 feet deep) is a nostalgic reference to the agricultural tradition of Australia, it now also represents an idea of occupying the landscape in an ecological way.

To the Pritzker jury, Murcutt's unique practice is in contrast to that of "most of the highly visible architects of the day." It's solitary, modest, and does not participate in the usual forms of self-promotion. Recognizing a small practice that makes low-rise work with lofty aspirations may be a response in part to the events of the past year, in which architecture played some part. However, the decision also highlights the relationship of architectural practice to the expanding global culture of architecture.

Habitation for Murcutt, no matter where, means allowing nature to invade domestic life through architecture. Nature is instrumental. By focusing on movements and cycles of the ecology, Murcutt situates his architecture within an ecosystem, where it becomes part of the landscape, is responsive to it, and does not dominate it. Substitute the sun, wind, and water patterns for urban infrastructural forces and one starts to understand Murcutt's ideas as an engagement of existing complex systems that transfer to larger scales and forms. Thus, as the commissions have become larger, Murcutt has elongated his pavilion. The horizontal forms, sometimes as long as 265 feet, are now of a scale that substantially mark the landscape and suggest an architectural extravagance within a culture of scarcity. His work has been understood outside Australia as an environmentally sensitive domestic approach, but it is more. To occupy the Australian landscape with the bold confidence often promised by Australian culture is to realize architecture's potential to collude with nature while simultaneously fulfilling society's desires.

—Jeremy Edmiston
Edmiston, who studied architecture in Australia, is a principal of System Architects in New York and teaches at City College.

Glenn Murcutt, Drawing of C. Fletcher & A. Page House, Kangaroo Valley, NSW Australia, 2000. Drawing courtesy of Glenn Murcutt.

Eisenman and Krier

Peter Eisenman, the Kahn visiting professor, and Leon Krier, the Davenport visiting professor, will both be teaching in the fall. Their work will be the subject two exhibitions: *Peter Eisenman: House IV* and *The Atlantis Project of Leon Krier,* November 4, 2002–February 9, 2003. A symposium, *Eisenman/Krier: Two Ideologies,* will be held on November 8 and 9, 2002.

In 1989 *Architectural Design* published a special issue entitled "Reconstruction/ Deconstruction," which featured on its cover two images juxtaposed vertically: the upper image showed an aerial rendering of Leon Krier's design for the Prince of Wales' new town of Poundbury; the lower pictured a view of Peter Eisenman's project for a hotel in Barcelona. The two "views" were separated by a jagged red line.

The reference, intentional or not, to the graphic format and polemical intent of Pugin's *Contrasts* (1836) seems inescapable. And though the editors of *AD*, unlike Pugin, would appear to endorse neither alternative, there is little doubt—in cover and contents alike—that we are meant to consider and implicitly to choose between competing and diametrically opposed worldviews. As if there were any doubt, the text below the cover images announced the title of the lead article, or rather interview: "Peter Eisenman Versus Leon Krier: My Ideology Is Better than Yours."

Now while we might be inclined to blush, giggle, or shake our heads knowingly at the baldness of this formulation, we must recognize, in foreshortened caricature, the dualistic mechanism of a great deal of architectural criticism, polemics, and journalism, if not theory as well, since the time of Pugin. Krier and Eisenman are here served up, as they have been so many times, not as individual personalities—although the personalities, much more than the dueling ideologies, seem the most interesting aspect of the interview transcript—but as ciphers for fundamentally and irretrievably opposed positions on architecture, and presumably just about everything else.

Perhaps it was all more exciting in the seventies and eighties, when these battles really did seem to be for the soul of architecture, and so many of us had been brought up on a story structured by Wolfflinian comparisons and dual-slide projection. Eisenman's skeptical avant-gardism and Krier's rationalist traditionalism do seem the stuff of future (and, no doubt, some current) history surveys, but one hopes that the graduate seminars will go beneath and beyond the simple juxtapositions to see that what passes for competing worldviews are produced and interact within the same discursive "world."

Of course, I would not be so contrarian or revisionist as to suggest that all of this is a merely epiphenomenal smoke screen for postures that, deep down at some sort of Marxist base or underlying structural level, really amount to the same thing. Indeed the first thing to be said about certain remarkable, even important, similarities between these two iconic "figures" is that, unlike some of their presumptive camp followers, they are both, for all their showmanship, deeply serious about the positions they articulate, and clearly believe their well-publicized differences matter—publicly, and not just as publicity. So on the eve of yet another public rehearsal of these differences in dueling studios and a joint exhibition at the Yale School of Architecture, a few reflections on the Eisenman-Krier phenomenon might suggest the real complexity of that relationship—and, at the same time, of the architectural discourse that they have, at their best, helped to advance.

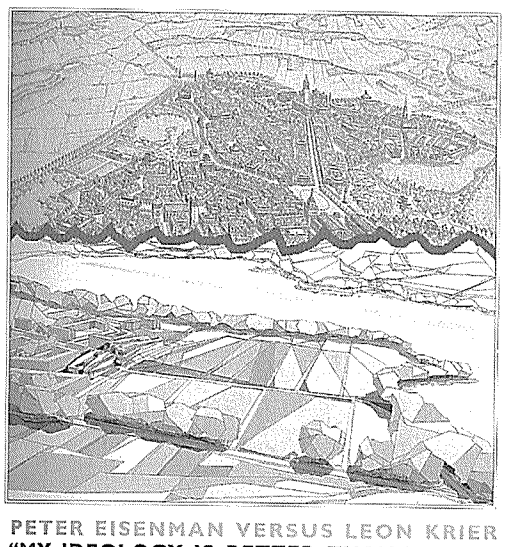
For this discussion, a much better starting point than the easy and tendentious journalistic juxtapositions exemplified by the *AD* cover would be Krier's extraordinary portrait of Eisenman that was the poster for their early encounter at Princeton in 1977. (And it is worth noting here that Krier is probably the greatest, and wittiest, architectural cartoonist since Le Corbusier, saying more with an economical and pointed sketch than most of us do with pages and lectures full of academic prose.) The sketch is poignant but not at all unfriendly and seems to me at least to depict Eisenman as something of an apostate or fallen angel.

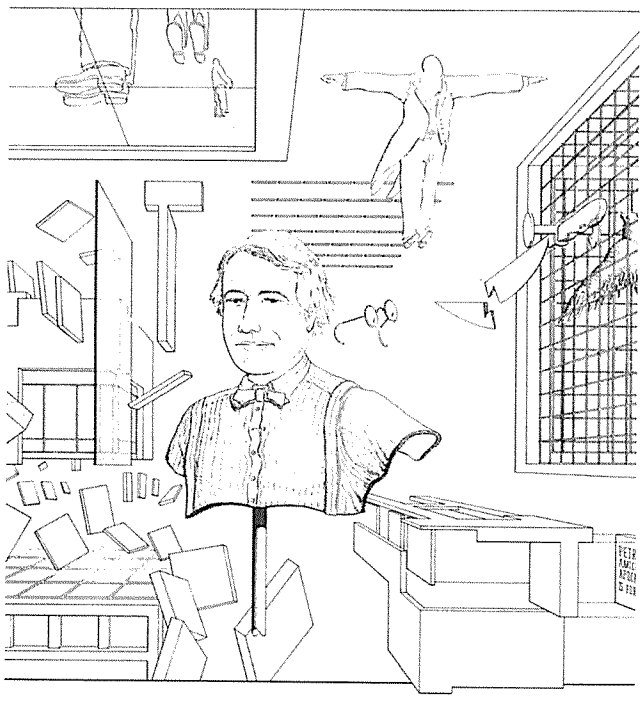
Indeed there was, and to some extent still is, no more ruthlessly rigorous rationalist than Eisenman, whose early search for the fundamental atomic particles of architectural form—both classical and Modernist—led him, not by accident, to Noam Chomsky's aptly entitled *Cartesian Linguistics,* of 1966. (This also begins to explain Eisenman's occasional encounters with Christopher Alexander, whose *Notes on Synthesis of Form* of 1964 is another index of the high-water mark of structuralist rationalism in architecture.) Of course, we now think of Krier as the epitome of a continuous and uninterrupted commitment to Enlightenment rationalism, and Eisenman as the self-proclaimed heir to the critique of the Enlightenment and its tragic twentieth-century endgame. But Krier's cartoon of "orderly" fragmentation and their ongoing dialogue remind us, I believe, of the extent to which the sophisticated neoclassical fundamentalism of one and the high Modernist (and later Post-Modernist) formalism of the other share roots in a line of thought described by Robin Middleton and others, leading from Laugier to Le Corbusier and now beyond in a variety of seemingly conflicting directions. If it now seems unlikely that, having embraced a post-Enlightenment, post-structuralist vision of radical discontinuity and indeterminacy, Eisenman will return to the rationalist fold, or that Krier—having served an apprenticeship with Jim Stirling (about whom Eisenman also wrote early on and tellingly) and aided and abetted that architect's Post-Modernist tendencies—would back off his more thoroughgoing anti-Modernist stance, than we—and, I suspect, our protagonists—can still perhaps recognize a common point of departure.

Surely that point is in part identified with the influence of Colin Rowe (on Eisenman, Stirling, and many others) and his own vexed, and eventually politicized, struggle with the convergences and divergences of the classical tradition and the Modern movement. While Tafuri and his students identified an incipient schismatic modernity in the linguistic radicalism of Mannerism and the anti-Enlightenment visions of Piranesi, Rowe seemed to trace the possibility of a partial reconciliation through many of the same sources. Thus Eisenman, in part influenced by the Venetian theorists that he helped introduce into Anglo-American discussions, would eventually seek to purge Modernism of what he came to consider the vestigial humanism identified and encouraged by his teacher Rowe, rejecting what seemed to be the ideological and stylistic compromises of the directions taken by contemporaries such as Michael Graves. Krier rejected just as vigorously the compromises of that Post-Modernist conjuncture, already implicit in the direction taken by Stirling from the time Krier was in his office and fully revealed in the realized project for Stuttgart.

That Eisenman and Krier turned away from that crossroads and headed off in very different directions we know all too well. But isn't part of the interest of the current encounter at Yale to retrace the various paths to the crossroads and remember, for example, that although both Rowe and Tafuri, in different ways and for very different reasons, renounced Modernist utopianism, Krier and Eisenman, in their rigorously uncompromising diagnoses of the current situation, created ideological and formal enclaves of alternative order that accommodate very little of the contaminated reality of the everyday landscape? What the images on the *AD* cover share, for all their insistent opposition, is their isolation from anything outside their self-constructed frames. These are opposed views of architecture in part because they dare to be complete views in an era that is increasingly unable, or unwilling, to follow any line of thought to its conclusion. These antagonists thus conspire to set an extraordinarily, perhaps an impossibly, high standard for our own efforts.

—Alan J. Plattus
Plattus is professor of architecture at Yale

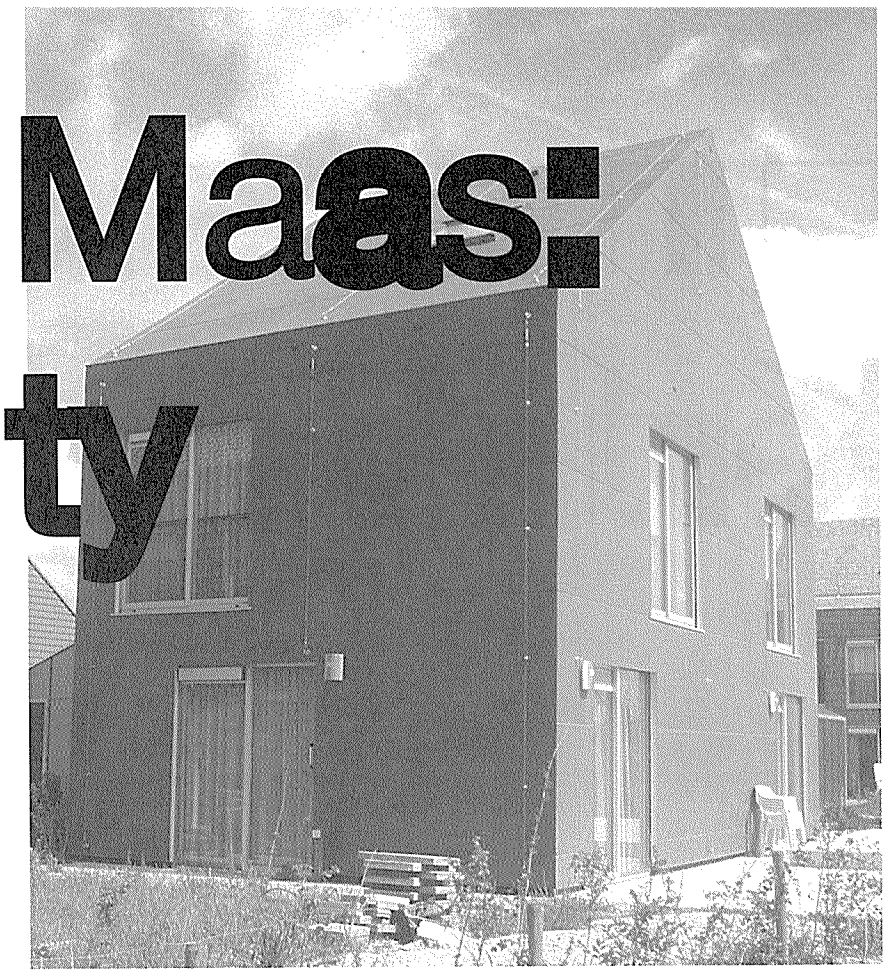




Left to right: Cover of Architectural Design, *"Reconstruction Deconstruction," 1989*

Drawing by Leon Krier, poster for exhibition Peter Eisenman: House Number X, *at Princeton University, 1977.*

Winy Maas: 3D City



The Dutch firm MVRDV—Winy Maas, Jacob van Rijs, and Nathalie de Vries—will hold its first exhibition in the United States, *3D City, Studies in Density*, at Yale (September 4–October 25, 2002). A symposium "Dense-cities: An American Oxymoron?" (September 20 and 21, 2002) will take up issues raised by the exhibition. Winy Maas will be giving the keynote talk at the symposium on Friday, September 20, and will be teaching an advanced studio at Yale as the Eero Saarinen visiting professor in spring 2003. This spring Maas discussed new projects, globalism, and politics with Nina Rappaport. An expanded interview appears in the catalog for the show.

Nina Rappaport: A few years ago in the United States some were critical of MVRDV's work. One criticism was that the work is too pragmatic and the other that the work is overly capitalist. How do you see that criticism now, and is it at all relevant?

Winy Maas: Well, those were very heavy words. Architects are pragmatists if they want to make buildings, and I would not say that pragmatism is a style. But at a certain moment in history it can be very useful to point to the role of banality within architecture, which would lead to a new banalism that goes very far. And second, to refer to our firm as a new kind of capitalist is complicated. And when you question the political role of architecture at the moment—and our work, especially that of Pig City, which now has become highly political—the comments don't apply anymore.

NR: What did it do for the way you work, and how did you approach new issues? Did you feel a need to answer criticism in general?

WM: It helped us to get to the next step, because we all need critics—not as collaborators, but independently. Some people say there is a crisis in criticism now because it is not deep enough. There is a need for public debate to enrich your envisioned operation.

NR: Can you think of examples where this criticism has made a difference in your approach to an actual project being shown in the exhibition at Yale, *3D City*?

WM: Criticism is a very useful tool for focusing topics and for defining the next one. And it can intensify the trajectory of subjects. *Farmax* was about density, as a simple excursion that "discovered" the maximum, and *Datascape* is the experimentation of the limit on current society. It showed what you can do at the moment, and if you want to go beyond it you have to change a law, a by-law, or a moral. It translated criticism into "progress or transgress" or the next step. One of the answers for *Datascape* was scale, as explored in *Metacity/Datatown*, and ideology and capacity as explored in the 3-D city. These issues were not only raised by us but by critics as well. This will come out in a series of books next year, as a "bookazine." They will show different studies on the 3-D city, which could be seen as a new skin around the Earth.

NR: And now you appear to follow another form of pragmatism by inventing a new software system, the FunctionMixer, for urban planning. How did this evolve?

WM: This came out of *3D City* because creating cities involves so many elements that we should involve not only the physical but spatial time (phasing), consumer choices, and changes in society. The new simulation software can explore human desires into a grand operation and optimize groups of desires, investigate synthesis, and show economic value.

NR: This is a high-powered Sim-City program. Who operates the program, and can you plug in your own data for individual planning situations? What are the data elements that you plug into the simulation?

WM: We start with the "FunctionMixer" program for neighborhoods or cities, and look at how you combine offices with housing, or factories with housing, or water treatment with Ikeas or offices, and what kind of density you can reach and what kind of shape, or form, or configuration comes out of that. That is the first step of the optimization. The second step is the "Region Maker," connecting local pressures with global desires or global pressures and local resistances. We concentrate on how to combine different migration schemes and how cities wish to show themselves.

NR: So is the information that you used basic planning data or is it idealized and fictional data as different scenarios?

WM: The Region Maker can download data from a regional planning office, and manipulate it and show escapes from that. One project, *Climate City,* which will be finished in 2003, shows the climatic changes on Earth; you can combine that with the real situations in the environment. So there is fiction, but it is also an instrument to control data and know the weaknesses—and maybe it is also a design tool. A smaller program under development is on the ideal home, which is more of a consumer-based software program. At the Berlage Institute we are working on a program that is called "The Absorber," which absorbs the instant ideologies. It filters the ideology to apply it on the program that then changes information into other configurations. And last but not least, the "Evolver" will be an evaluation device, a Darwinistic enterprise that can suggest paths by criticizing the input.

NR: The "Absorber" could create something like a computer-designed catalog house, but it is also extrapolating from the individual pragmatic need of the consumer. The result is like MVRDV's recent development for a community in Ypenburg, Holland, selected as an entry for the new Netherlands Institute of Architecture Prize. In this project you are addressing housing in large-scale developments and the residents all seem to like living there. Do you know that?

WM: I hoped, but I didn't know that. What do they like?

NR: They like the pathways and the openness without car traffic. It seems very private, yet it is not a gated community. Parents like it because they can relax while the kids enjoyed their pseudo-independence. It reminded me of a beach community.

WM: We made so many gates that it is not gated. The terrible thing in the United States is the cul-de-sac planning, which extrapolates so enormously on gatedness. I am interested in the maximum amount of streets, so that it is impossible to gate, as in our Harleem Meer project. But it also raises questions about how to work under circumstances where you have to build very cheap houses with a technology that is very fixed.

NR: This relates to other discussions about the normal status of architecture and the issues of suburbia with the Dutch planning for VINEX. How do you find ways to get around building codes and zoning regulations to design a more creative project?

WM: There are two levels of the project. In the book *Farmax* we discussed suburbanity and suggested the idea of "light urbanism" as an answer, so that it can change easily. But we couldn't do that totally because of the production, financing, and market systems already in place. So at Ypenburg we were asked to design a neighborhood of 900 houses on an existing plan. We said, let's avoid the car so that we can make it denser or give more space to the garden. Let's cut the houses into smaller units and make paths and save on materials, and then use roofing material for the houses with every block in another material, so you are aware of that act of differentiation. Then we decided to make a house without details, so that the details don't interact. And the client said, okay no gutter, no sewage system for the rain, it just simply goes into the ground—so the houses are weeping houses. We made a collection that has a certain individualism but also a Monopoly game appearance. The exterior can always balance privatization by the residents: some have fences and others garden gnomes. We made garden sheds, which are normally like barracks for bikes, in glass for use as a greenhouse to make the environment more transparent. The side effect is a control act: there is not too much rubbish—because you can see in.

NR: Some show off their stuff and others board it up; so if you give them the freedom to decide how to use the shed, it becomes something else, even an artist's studio.

WM: It will manifest itself, and that is in a way *datascape.* It can be criticized or discussed.

NR: Do you feel it is too much of a parody, or a cartoon, of suburban life? Do people who live there understand it? Is it *The Truman Show* in a different dress?

WM: I agree it plays with it and raises the question by doing the architecture we want to make in suburbia. It maybe more like the film *Dog Days*, with new architecture in Vienna. But how honest are the New Urbanists? They are much more cartoonish than this proposal. These are normal houses, but they are not dressed up. And it makes you wonder if that is a good direction. And that questioning is a good thing.

NR: What questions will the exhibition *3D City* raise and what is its relevance in the United States?

WM: We are showing the four or five steps in the work on *3D City* as a chronology of our investigations at universities including *3D City*, *MetaCity/Datatown*, and *Pig City*, to start a discussion on density. Can density exist in America, with all of its vulnerability, safety, and cultural issues? And how will it look? I would like to work with the students in the spring term to study this in Manhattan.

NR: And are these the issues you would like to raise at the "Dense-cities" symposium at Yale in September?

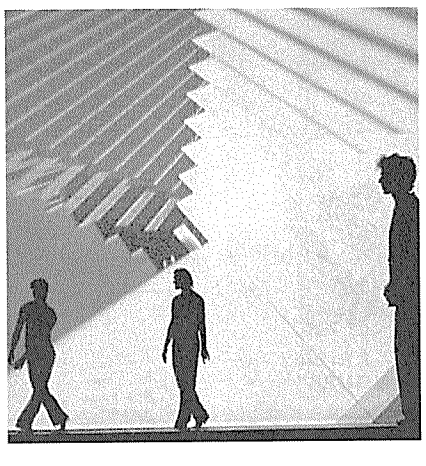
WM: I am intrigued by the question as to whether it is possible to have new densities in the United States. On the one hand New York is one of the most emblematic, dense cities in the world—which is copied now by Asian cities to the extreme—and it uses that image intensely. But it is a monumental nineteenth-century monster, which seems not to progress or transgress. I am intrigued to know why despite its potential, the architectural, cultural, and economic machines are not producing models that can innovate that city especially after September 11.

NR: The idea that architects can have an impact on politics is rare in the United States. How have things changed in the Netherlands where the murder this year of the politician Pim Fortuyn has made a large impact on culture. He had referred to some of the concepts of MVRDV such as Pig City which were not appreciated by some people. Do you have to watch what you make and say now?

WM: Yes, and it is a very sad moment, but in the Netherlands it is the first time in a long time that you have to watch what you say. The Dutch government had wanted to make a docudrama on *Pig City*, but now the farmers who participated in the stacking-farms project refuse to take part in it. The building concepts are going ahead, but they don't want to go public because the murderer was an animal-rights activist.

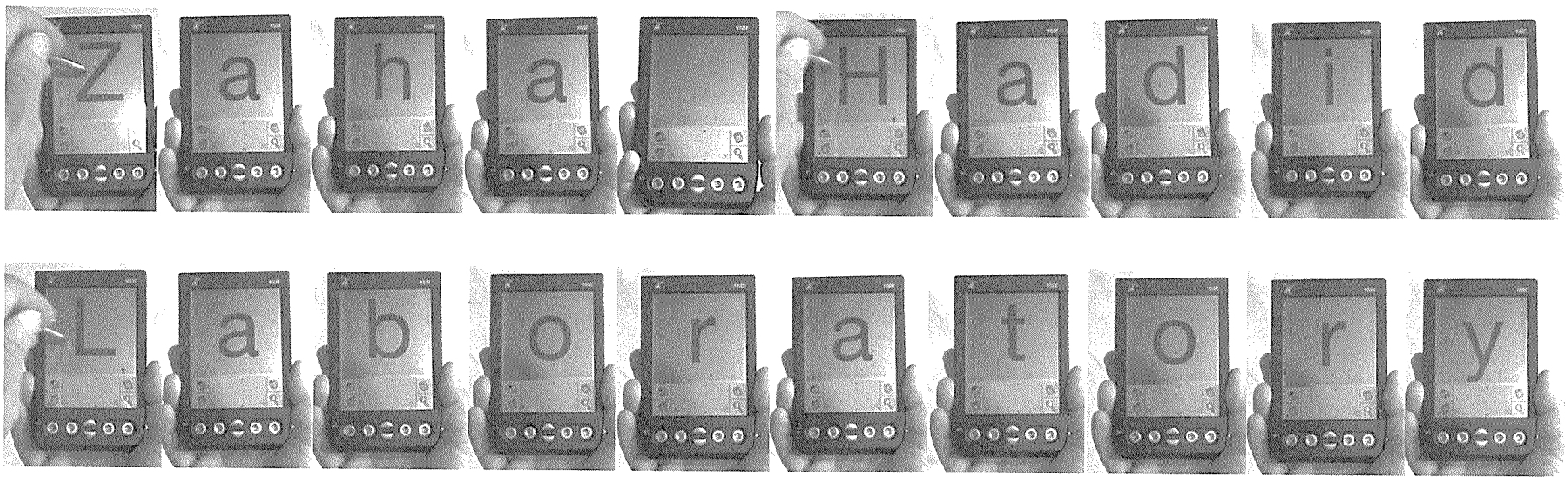
NR: But there are the same types of fanatics in the United States. Part of the issue with architecture here is that the focus is on design and style, which is safer.

WM: Yes and maybe that is why political architecture doesn't exist in the end. Forms are not as dangerous. Beauty solves everything. No?



From top:
MVRDV, Ypenburg, the Netherlands, 2002. Photography by Nina Rappaport.

MVRDV, Manyfacts with Scapino Ballet, 2001. Photograph courtesy of MVRDV



Zaha Hadid Laboratory, the architect's first comprehensive show in the United States, was held at the Yale Architecture Gallery from March 25 to May 10, 2002. It is now at the National Building Museum through November 17, 2002.

Zaha Hadid Laboratory describes both the Office Zaha Hadid (OZH) as a laboratory for architecture and the exhibition itself as a site of experimentation, framing the architect's current approach to making visible or intensifying landscape formations and forces of movement in a way that gains access to a new aesthetic.

The installation (designed by Woody Yao of OZH and organized by Dean Sakamoto, director of exhibitions at Yale) transformed the Yale Art & Architecture gallery into lanes of movement through which visitors circulated in different directions with few opportunities to stop. A visitor could see all of the projects simultaneously, with no one space, view, or exposure more important than another. Such simultaneity produced an overload of information exacerbated by supersaturated colors, black backgrounds, low lighting, and an intermittent sound installation. Although perhaps confusing to some, the organization of the materials—with its repetitions across different modes of representation, such as boards of images and text on the perimeter walls, images on solid partitions, and large translucent single-image panels hanging free in the space—created a dynamic and provocative set of spaces, suggesting an affiliation with the projects themselves.

In the book *LF One* (Birkhauser, 1999), Hadid has qualified her current work in terms of landscape as a search for "potentially productive analogies to inspire the invention of new artificial scapes and landforms pertinent to our contemporary complex, multiple, and transient processes." Given that landscape itself is an unstable term, it is worthwhile to ask how it functions and what it contributes to the work of OZH. Toward this end, a series of primary landscape concepts—site, ground, flow, topography, and open space—are used here to interpret some of the projects on exhibit, with particular attention to Land Formation One, an exhibition space for the 1999 garden festival in Weil am Rhein, and the Strasbourg Terminal. These two recently built projects, which are prominently featured in the exhibition, provide the clearest examples of the role of landscape in the work.

Hadid has described her attempt in this sequence of projects "to elicit new fluid spatialities from the study of natural landscape, formations such as river deltas, mountain ranges, forests, deserts, canyons, iceflows, oceans, and so on." If landscape is understood in terms of site, Land Formation One not only engages its site but also suggests a process of transformation in which a building becomes its site. Rather than being a freestanding or isolated object, it is embedded in its physical surroundings. This embedded condition is contrasted with OZH projects on flat or urban sites, such as the contemporary art centers for Rome and Cincinnati, in which the relationship of the architecture to the site is established primarily through plan geometries.

In terms of ground, Land Formation One's ambiguous terraced ground transforms the pavilion roof into a path, an operation of layering that also occurs at the Strasbourg Terminal, shown here in large photographs, in which the ground is multiplied, slotted, and folded up from the existing surroundings. Hadid describes how the terminal blurs the boundaries between natural and artificial environments. Yet this project is most successful when it is the least blurred—when its precisely calibrated slots and poles in the elevated ground plane produce different conditions of light. This project's strength also has to do with the graphic quality of its ground plane, produced by material absence or presence, and the equalization of sources of luminosity.

In Land Formation One Hadid articulates the ground as a series of flows, employing four linear paths of similar dimension and speed that rise from the ground and intertwine to form the pavilion. She identifies this "smoothness of transitions between spaces" as one of the "primary characteristics we look for in landscape spaces, in distinction to traditional urban and architectural spaces"—folding together boundaries between inside and outside into a series of spaces that move between them. A related strategy of multiple trajectories is seen in both the Strasbourg Terminal, where in addition to pedestrians the flow of cars, trams, and bicycles project the formal vectors that produce the design, and at the Wolfsburg Science Center, where multiple flows are "pulled through the site both on an artificial ground landscape and inside and through the building."

Because Hadid's design process formalizes circulation, it gains its strongest identity in projects such as the terminal, where the primary program is multiple scales and routes of movement. However, because fluidity does not always support an institutional client's programmatic requirements, in the Center for Contemporary Art in Rome OZH thickens boundaries rather than removing them to weave a "dense texture of interior and exterior spaces" that will render the institution porous for the casual visitor.

Hadid's use of landscape tends to reinforce its traditional identity as architecture's "other." For example, landscape as flow is understood in contrast to architecture as static and permanent. However, some OZH projects go beyond a definition of landscape that relies on this opposition. With the Rosenthal Contemporary Art Center, Hadid proposes an "urban carpet" that combines multiple aspects of landscape into an unstable hybrid metaphor, with a potential to engage some of landscape's internal contradictions. Yet what is an urban carpet? A soft layer placed on top of a hard floor? A woven fabric of multiple strands? The images on view do not yet suggest how material and tectonic strategies might be used to develop this concept.

The OZH work in the exhibition avoids both hierarchies and specificities. Its dynamic forms are not deployed to orient a visitor-occupant in relation to specific urban landscape elements or spaces. An example of this evenness can be found in the undifferentiated strips of windows along the paths of LF One, placing the primary focus on the flow itself. The Wolfsburg Science Center, now under construction, offers an exception to this evenness and suggests that different kinds of landscapes exist in tension with each other. In this project, the main structural supports produce a taut interaction of two funnel shapes to the ground, deforming it in relation to the craterlike interior landscape of the open exhibition space. The articulation of these tensions produces an unstable hybrid condition, supporting an internally differentiated space that takes advantage of the multiple grounds to allow diagonal views between levels.

Although reinforced concrete is a constant for OZH as the material of choice for realizing its flowing forms, it is most effective at the larger scale of current projects in supporting the architect's desire for subtle transitions and nuanced spaces, compared to its tendency in earlier smaller-scale works—such as Land Formation One or the Vitra Fire Station—to reinforce the sense of the building as sculptural object. In contrast, the terminal's materials of concrete and tarmac—perhaps by echoing a normative road landscape—produce a resonant materiality as well as a sense of tectonic layering.

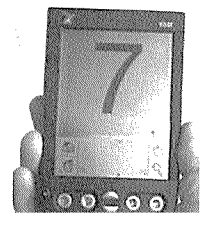
Topography is an aspect of landscape that plays an important formal role in most of the projects on exhibit. This role is most visible in Hadid's series of intricately cut and folded small relief models, which explore landscape forms while demonstrating a "multitude and subtlety of territorial definitions." Examples in the projects include the Strasbourg Terminal, where a sloped plane of concrete visually links the parking deck to the adjacent street level. A more singular, less nuanced topographic condition is represented in the Bergisel Ski Jump (recently completed and shown here in dramatic images where it is combined with an expression of athletic movement into a gesture that extends the existing slope toward the sky).

Hadid's polemical use of landscape as metaphor, as shown in this exhibition, invokes a potentially innovative claim for architecture in general. But it does not yet challenge the paradigm of the sculptural plastic object, largely because the reference to landscape is limited to a visual register. The work has yet to challenge the architectural rhetoric that has historically relegated landscape to the visual domain, where emphasis on the surface of things suppresses materiality and construction. This challenge is part of the current critique in the discipline and practice of landscape architecture that focuses on pragmatic concerns of spatial operations and material effects.

The show is at its strongest and most enjoyable when it takes advantage of hybrid conditions in the work to create sparks within the exhibition itself—between projects and also between different modes of representation. This hybrid potential is especially strong in the work of OZH because of its emphasis on representation and the play between two and three dimensions (i.e., graphic and sculptural expressions). These sparks occur when the form and organization of the exhibition resonate with the project materials it presents, for example between the photographs of the light-animated parking deck of the Strasbourg Terminal and the white lettering and projections of light, which direct our attention to the floor of the gallery as part of the site and therefore of the work.

—Linda Pollak
Pollak is a partner of Marpillero Pollak Architects in New York, coauthor of Inside Outside: Between Architecture and Landscape*, and is design critic in architecture at the Harvard Graduate School of Design.*

Zaha Hadid Laboratory *at the Yale Architecture Gallery, March 25–May 10, 2002. Photograph by the Yale Media Center*



Building Consensus from Ground Zero

With the one-year anniversary of September 11 approaching, the process to rebuild at Ground Zero has begun in earnest. At the center of the negotiations is urban-planning professor Alexander Garvin ('61), who in February was named vice president for planning, design, and development of the Lower Manhattan Development Corporation (LMDC), the group appointed to coordinate the rebuilding of the World Trade Center site and its surroundings.

In New York City on July 20, the LMDC sponsored "Listening to the City," a meeting to review the initial round of schemes for rebuilding Lower Manhattan. It was one of the most unusual events in the history of urban planning. Forty-five hundred New Yorkers attended the "Town Meeting for the 21st Century," as it was billed, in which participants were polled electronically about the site's development, and the results were displayed and discussed in real time. Although the event was well received by the participants, it underscored many of the difficulties facing the city in the coming months. It raised tantalizing questions about just how the process will lead to great design.

Criticism of the LMDC has been circulating since its inception, when New York governor Pataki and city mayors Giuliani and Bloomberg appointed 12 board members, nearly all of whom have backgrounds in the financial industry as well as deep connections to the two administrations (the development schemes can be viewed at www.lmdc.org). Critics pointed out the lack of representation from neighborhood groups, victims' families, survivors, minority communities, and the design community, who were relegated to roles in nine "advisory groups." (An exception, it should be noted, is Billie Tsien, of Tod Williams Billie Tsien & Associates, and recently Louis I. Kahn Professor of Architecture at Yale.)

The board's starchiness reflects the economic and political sensitivity of the site to the governor and mayor, due not only to its revenue-generating potential but also to the powerful interests that control it. The site is owned by the Port Authority of New York and New Jersey, which both states control and must raise its own revenue. Last summer, just before the attacks, the Port Authority leased the site for 99 years to Silverstein Properties, a real estate developer, and Westfield America, an international retail developer, for $120 million a year. Although the buildings are gone and the lessees are receiving billions in insurance payments, they still have a legal say in what gets built. As the Port Authority's chief engineer Frank Lombardi bluntly put it, "The site is not a blank slate."

Indeed. On the morning of July 16, four days before "Listening to the City," the initial six schemes were released to the public at a press conference at Federal Hall. By the afternoon the city had responded with a polite, but unanimous, thumbs down. The schemes were developed by the large New York firm Beyer, Blinder, Belle, the winner of an RFP process to master-plan the site, but it was clear that each reflected the financial requirements of the Port Authority and the leaseholders. All six included 11,000 square feet of office space, an amount equal to that lost, and one million square feet of new retail and hotel space, more than existed previously. The schemes also set aside land for a memorial and new cultural institutions, of course, but in the flashing images shown on the nightly news, it was the banal office towers crowding each scheme that New Yorkers saw and responded to. Where was the soaring memorial to the victims? Where was the visionary architecture?

Unfair questions to ask of a preliminary set of master plans, perhaps, because the buildings are merely massing models, but the Port Authority, the LMDC, and their designers made their own bed. Maybe they misread the public's mood, or maybe they couldn't find a subtle way to deal with the commercial interests on the site. Whatever the case, giving office and retail development equal time and space to the memorial—if not in substance, at least in the way the six schemes were presented—was, at best, politically insensitive. For his part, Garvin said, "We accepted the Port Authority's program. It was easy to predict that it would not be popular to remove half the site from development and erect the same program on half the site."

And so it was that 4,500 concerned citizens accepted the LMDC's invitation to discuss the rebuilding of Lower Manhattan. The scene was a room at the Javits Center, New York's enormous space-frame convention hall, whose high-tech aesthetic and inhuman scale remind one, ironically, of the World Trade Center turned on its side. The room was a field of five hundred round tables of ten, each with a laptop, ten keypads, and a professional "facilitator" from AmericaSpeaks, a non-profit company that bills itself as "a neutral convener of public participation forums." At the center was a stage, usually held by the lead facilitator, a sort of master of ceremonies who introduced speakers, read questions, and explained the polling process, always with solemn reference to "the events of September 11" and "the power of democracy." Suspended over the crowd were eight giant screens, showing the speakers and posting the data that participants entered on their keypads and laptops. On the perimeter bustled the press and the public-relations people, taping interviews and answering phones.

The data entered by the participants was received by the AmericaSpeaks "Theme Team," who then posted it on the screens in the form of charts, graphs, and bulleted points. Some data was numerical, but some was anecdotal. Participants were asked, for example, to discuss their "hopes and concerns" for Ground Zero, and then to create a short list of "themes" and type them into their laptop. The lists were sent to the Theme Team, who culled them for consensus, reducing them to a few points that could be shown in the space of a PowerPoint slide.

If this is democracy then a shopping mall is a public space, even if AmericaSpeaks does its best to ensure "neutrality." In democracy, the citizens grant power to their leaders; in this process it is the leaders, appointed by those in power, who granted a voice to the people. They could have just as easily taken it away. On a more ephemeral level, the process exhibited a troubling corporate aesthetic: suits, boardrooms, PowerPoint presentations, focus groups, press conferences, speeches, spin. None of this is inherently bad, of course, but it would be naïve not to notice the aesthetic correspondence between the schemes and the process. In such an emotional situation, and with reports of corporate malfeasance on every front page, we might ask, is this what we want?

Despite this, the meeting appeared to be an earnest attempt by the LMDC to include the public's desires in the process. One sign of this was the sophistication of the schemes' presentations, which included maps of the neighborhood, existing conditions, land use, and infrastructure. Paul Goldberger (Yale College '72), architecture critic for the *New Yorker*, was moved to call it "the biggest urban-planning class in history." Another sign of the LMDC's good intentions is the back-to-the-drawing-board attitude they have taken since the meeting, pushing back the deadline on the next round of schemes to absorb the public's "hopes and concerns," and even hinting at a change in the program to allow for less office space on the site and a different type of architectural qualifications.

To the participants' credit, they saw beyond the wall of commercial high-rises to the plans' more subtle aspects, and real, positive consensus was reached about certain elements. It was agreed, for example, that it would be desirable to sink underground all or some of West Street, the wide, busy throughway on the western edge of the site that has always acted as a barrier between the waterfront and the rest of Lower Manhattan. Further, that a "memorial promenade" should be built over it, visually connecting the Statue of Liberty with Ground Zero. The participants also liked the idea of reintroducing the Manhattan street grid to the site, which was removed when the Trade Center was built in the 1960s. And finally, the recommendation that received the loudest, most defiant applause: restore the skyline with a tall, symbolic building.

But where to go from here? How does design arise from this sort of political process, in which so many people have input and so many factions, many with little care for good design, have an interest in the outcome? "This is not architecture," Garvin said at the meeting, meaning that this is planning, a field of design that can account for politics. "The process has just started. You can expect many other designs to be put forward and other designers to be involved before we arrive at the final program and site plan for the property. You can also expect a much broader set of planning issues to be presented." It should be an interesting fall.

—Ted Whitten ('01)
Whitten works in New Haven and is a freelance architectural writer.

"Listening to the City," Jacob Javits Center, July 20, 2002. Photograph by Ted Whitten

Zaha Hadid and Frank Gehry Respond

At Yale two approaches to rebuilding downtown New York resonated with new ways to think about urban space and city life. Zaha Hadid, Saarinen visiting professor, and Frank Gehry, Kahn visiting professor, discussed their views in May 2002 with vice president of urban planning, design, and development of the Lower Manhattan Development Corporation and Yale professor Alexander Garvin. The following are excerpts from their discussion.

Frank Gehry: When you accept the task of being a teacher, you have to choose what to give to a project that would be interesting pedagogically. When I teach here I am interested in a project that has a simple program. [When Gehry taught at Yale in 2000, the project was a one-room cathedral in Los Angeles.] Students will find reasons to hide behind the program. … Philip Johnson once said that the most important buildings are one-room buildings—and this fascinated me. I am always for projects that have that kind of simplicity. It forces the student to see who they are, what they are, and what they bring to the table.

I didn't think of doing something at Ground Zero, because it was untouchable for a long time—it was a grave site. I was called on September 13 and asked for my opinion because Trump was named to do a project. I stayed out of the discussion, and I thought that using the site as a studio project was even opportunistic. But then I happened to be watching the news, and Mayor Giuliani was talking about Ground Zero. He said that it should be a soaring, beautiful place where people from all over the world would want to come. I thought of the Pantheon, and how it would have to be ten times that size. So I began thinking about the one-room building—not a religious one or a memorial—but just a beautiful place for people to bring what they want to it. If a Catholic church wanted a service, they could have one; if Quincy Jones wanted to do a concert in the space, he could.

But it really is an impossible project. I would have to go to a shrink for years before I could begin it myself. I thought it might even be mean to assign it to these twelve Yale students. They took it on. I told them that it was okay to fail and that the struggle was in the process. I didn't want a memorial on the site. In the studio there were a variety of responses. They couldn't get rid of 9/11, even though I said to not use it. This was a pedagogical experiment, and it kind of worked. But it is not relevant to Ground Zero.

Zaha Hadid: I was at my hotel in New York on September 11 and saw what was happening. I thought the New York skyline was unlike any other. The tragedy shook my world, because to me the achievement of America has been extraordinary. I was teaching an architecture studio in Vienna in the fall when I thought that the idea should be to occupy the site quickly. I wanted to look at urbanism in a new way. The Viennese students' reactions and emotions were different than those here.

At Yale I wanted to see how people would respond and look at the site, despite all the difficulty—to see how to reconsider life there, considering that the site has tremendous density. And try to look at it in a positive way. For the students it was a struggle, and they can learn a great deal more. So there are many layers of emotion, urban configuration, and complexity through which to think about the site in a complex and fluid way to give us a reconfiguration of what was there before. Critical thinking involves learning from the experience of what happened there; nothing is achieved in life without difficulty. What then gives you strength to tackle the problem are things in the future. To teach is to open the door and show the students a different light beyond that crack.

Alexander Garvin: On 9/11 I was shocked. It never occurred to me that months later I would be entrusted with the job of what to build on the site. What I have to work with every day is complex, and there are many players, all wanting their own thing. We have to build something great. It has to be a place that is like Rick's in the movie *Casablanca*—where everyone comes. Some ideas in the studios might even fit into the blueprint of what is being worked on downtown.

The world saw my city destroyed; now we have too many cooks. We are going to have something great. We can't do anything less than that. Architects can find a place in the process. … I am dedicated to having great architecture—that is why I am doing this.

Frank Gehry: There is much talk about the site and tremendous pressure, because all eyes are on it. I hope they suspend the design of the commercial work and do something interesting. … It will take a Thomas Krens [of the Guggenheim] or a Rolf Feldbaum [of Vitra] to do something. Bilbao is a miracle for that city, and it made something new. New York should learn from that experience. It would be a shame if it were mundane. There has to be a patron willing to be supportive of a person's work.

The architects, city, and civic groups have to partner and will this into existence by using one another's talents. It happened in Bilbao because the government made a deal to have Calatrava and Foster. They did it with commercial intent, and there was prestige involved.

Temporary Memorials

Many in the Yale design community have been involved in the efforts to rebuild Lower Manhattan, both from the official planning arena and as volunteers.

The Viewing Wall

Yale faculty member Diana Balmori has been an early advocate for temporary memorials in the city post–September 11. A participant in the New York New Visions (NYNV) memorial process committee and chair of its temporary memorials subcommittee, she has recently joined the Civic Alliance. Balmori thinks the concept of temporary memorials could continue around the city, arguing that "temporary buildings and memorials are liberating. Something that is not permanent deals with changes in attitude toward time. It is a new intellectual process."

A mid-April request from the Lower Manhattan Development Corporation (LMDC) for ideas about design and programming for a temporary fence around Ground Zero resulted in a charrette that included Balmori and a handful of architects, planners, and designers actively involved with NYNV. (Balmori had submitted an earlier model that countered the initial plan for a 40-foot plywood construction fence around Ground Zero.) Recommendations were forwarded to the LMDC and the Port Authority of New York and New Jersey, which oversaw the final design and drawing of the plans for the Viewing Wall, slated for completion this fall.

The 14-foot-high wall will be a flexible system of structural steel beams fitted with 2-inch graffiti-proof galvanized mesh and Plexiglas panels. The Church Street elevation will provide full visibility of the site and will include 5-foot-deep alcoves set back from the sidewalk. There will also be educational/historical panels at intervals along the fence as well as places where people can write messages and leave mementos.

As seen in plan and one prototypical portion, the viewing wall appears to be a thoughtful and carefully considered interim step. Balmori thinks the overall memorial for the tragic event not only needs to somehow reflect its magnitude but also must be approached and conceived in an unprecedented manner. This delicate process will undoubtedly be a lengthy and political one. If an international competition is staged (as the LMDC intends), the decision-making and details will take years. In the interim, the work toward realizing temporary memorials will continue with determination and energy.

—Tracey Hummer
Hummer is associate editor at Art in America.

Tribute in Light

As Richard Nash Gould (Yale College '70 and M.Arch '73) watched the World Trade Center fall he realized how dark it was at night and that the amount of emergency lighting on the ground couldn't replace the illumination the towers had provided. Gould shared his observation with Municipal Art Society (MAS) chairman Philip Howard (Yale College '70), stating, "We have to put the lights back." And because Gould had been an artistic director at Yale's Woolsey Hall, he thought, "Why not take searchlights and point them up to the sky?" Although MAS took on the project, they didn't know if it could be accomplished technically and politically.

Simultaneously architects John Bennett and Gustavo Bonevardi were working on a light project, and artists Julian LaVerdiere and Paul Myoda, working with Creative Time, made an image of towers of light for the *New York Times*. These visions from the city's collective consciousness drew all parties together, including MAS and lighting designer Paul Marantz of Fisher Marantz Stone. Working under MAS, they made a plan for the "Tribute in Light." Marantz knew that 40 searchlights from the Winter Olympics were available, but after a test additional lights were deemed necessary. MAS had more lights made, and the project culminated in a $500,000 installation from March 11 to April 13, the six-month anniversary of the disaster. With donations from numerous corporations, such as General Electric and Con Edison as well as MAS, and after much political negotiation (an objection from the Audubon Society, issues with the FAA), locations were obtained for the lights and the "Tribute in Light" became, as Gould said, "a gift to the people of the City of New York."

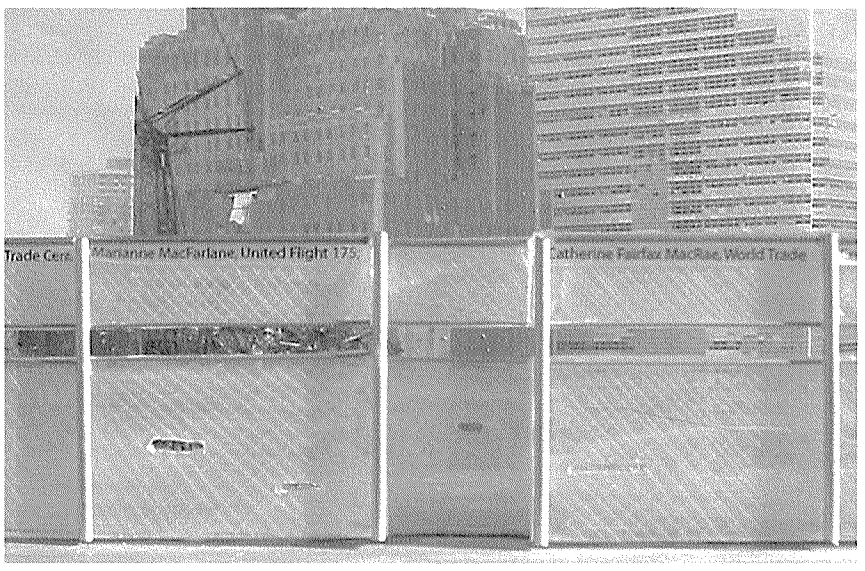
—N.R.

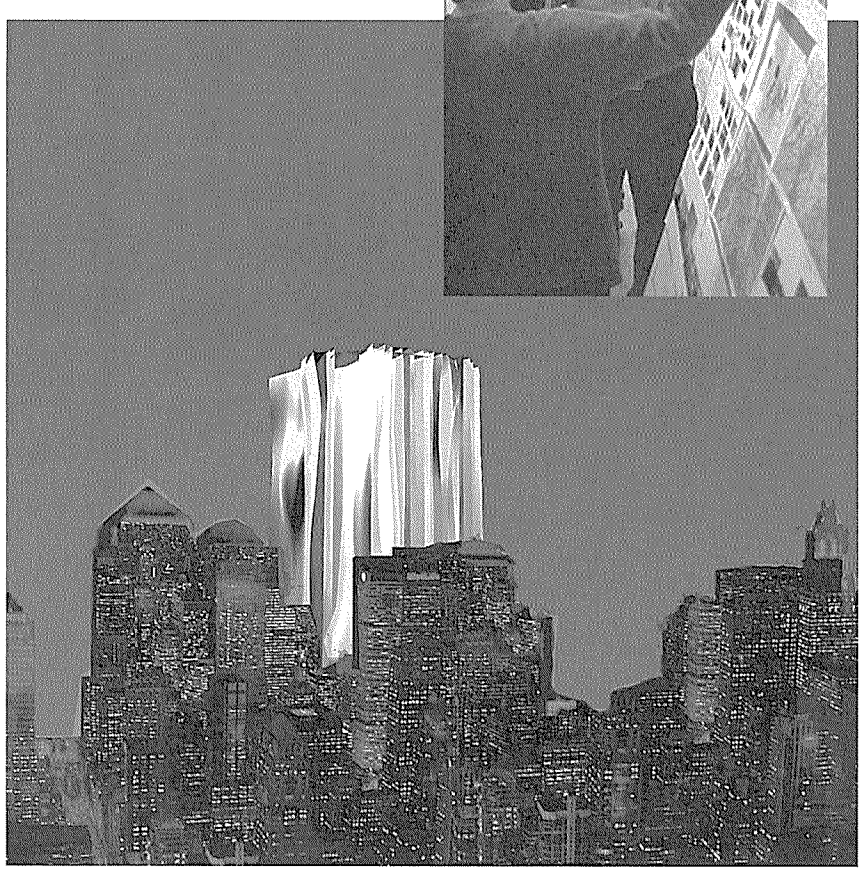
Clockwise from top left:
Alexander Garvin on a review at Yale, 2002. Photograph by John Jacobson

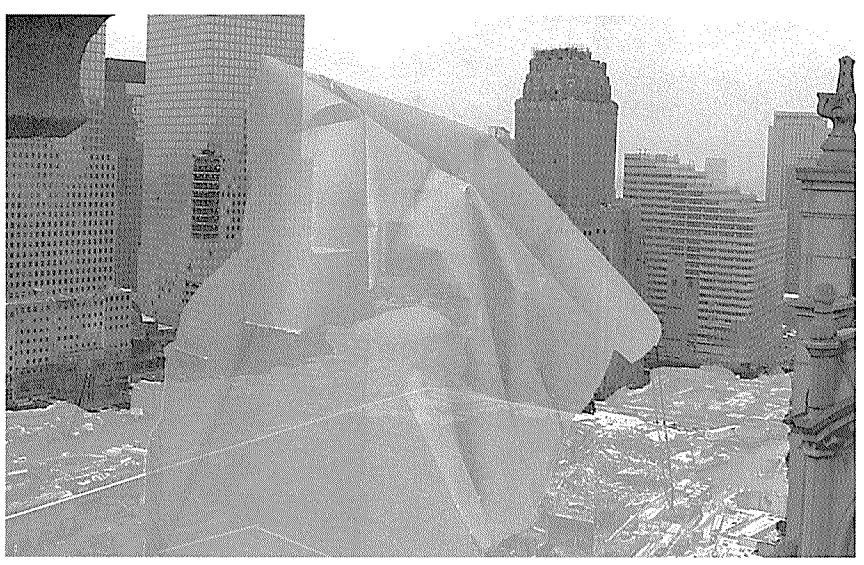
Plan for the Viewing Wall, New York New Visions with Diana Balmori, 2002. Montage courtesy of Diana Balmori

Jessica Russell and Jenny Huang, Project for Zaha Hadid Studio, spring 2002

Donelle Briscoe, Project for Frank Gehry Studio, spring 2002







Cartography in the Age of Digital Media

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On April 5, 2002, a group of artists, architects, cartographers, and scientists gathered to present their work in a multidisciplinary symposium evaluating the use of digital mapping in their respective fields.

Technology provides not only a subject of design as a set of problems to be solved but also the very means by which design is practiced. It comes as no surprise then that the current renaissance in computer-based techniques of visualization, in such technologies as Geographic Information Systems (GIS) or Light Definition and Ranging (LIDAR), should be of great interest to designers and architects. Although the question of the specific effects of computer-based visualization on the practice of design is by no means settled, there is a general sense that these technologies represent a genuine qualitative shift in the field. In addition, the increasing rates at which these technologies are being developed have made them a moving target in our attempt to assign meaning to them. Today the source material captured by visualization and mapping processes—from the nanoscale to that of cities—can be scanned at an ever greater resolution, generating larger and more inclusive sets of data to be studied and operated upon by ever more sophisticated analytical and design tools.

In *Cartography in the Age of Digital Media*, a symposium that took place at the Yale School of Architecture in April, the question of what should be done, either formally or critically, with the new mapping technologies was explicitly left open. Instead the symposium focused upon the ways these technologies are used today and the variety of material problems to which they are a response. Diana Balmori, lecturer in landscape, and Michael Silver, assistant professor at Yale, gathered specialists not only from architecture and art but also from cultural geography, physics, environmental science, geophysics, computer visualization, and urban planning. Their presentations demonstrated the potential uses and present effects of digital cartography both as a means or subject of creative practice and as a powerful tool applied to a number of scientific, economic, and social problems. This rewarding symposium asked us to look very carefully at these technologies and their ongoing transformations in different disciplines, so that we neither use them naively nor criticize them without understanding their role in shaping the way we see the world.

Body as Database

Artists Lilla LoCurto and Bill Outcault opened the symposium with their presentation titled "Unfolded Bodies," which explored map projection as a sculptural problem by using their own bodies as a subject of scanning. This sculptural issue resides in the act of translation between a three-dimensional object, such as a globe, and the rendering of its surface information as a two-dimensional map. For LoCurto and Outcault, such acts of translation resonate with the Cubist desire to represent all sides of an object at once. Influenced by Fuller's isohedron maps of the globe, their earliest cartographic projects comprised isohedral images of their bodies from a standard flatbed scanner. They then printed and displayed the images like photographs. LoCurto and Outcault were interested in the violence implied in the cartographic manipulation of the body into skin flattened onto the wall—albeit a digitally sanitized violence. In one recent work they scanned themselves with an army-owned 3-D body scanner. They translated the resulting data, which captured only the body's surface as though it were a hollow tube, into a format readable by cartographic software through a custom program called Body Mangler. From this LoCurto and Outcault produced a series of portraits of a fully scanned body—a photographic level of detail distorted according to conventional map projections (Mercator, Robinson, and Amulet) and other software-mediated graphic manipulations.

Artist Justine Cooper's presentation, "Rapt: MRI Self-Portraits," continued the theme of body as database, locating the work within the history of medical dissection and imaging, which resulted in such noninvasive techniques as the Xray and, more recently, the MRI. Like LoCurto and Outcault, Cooper uses herself as the subject in a process of body scanning. Magnetic Resonance Imaging (MRI) is a spectroscopic technique that scans organic tissue for its absorption and emission of energy at the radio-frequency range of the electromagnetic spectrum. The resulting information—in effect a volumetric digitization of the body—is formatted as voxels, or 3-D pixels. In "Rapt" Cooper rendered this data (using among other programs the voxel-modeling software VoxelView) to produce a translucent, almost cloudlike black-and-white animation, within which her digitized body was disassembled, reassembled, and traveled through to an atmospheric composition evoking the sounds from the scanning action of the MRI. In "Rapt 2" she suspended from a gallery ceiling 76 sheets of architectural film, each with an MRI section of her body, to create a ten-meter-long "databody," which spatialized the body's ephemeral presence in the MRI scans.

Scanning Architecture

In James Glymph's presentation, "Capturing Curves," the problem shifted to the use of these technologies in architectural practice. Glymph, a partner in Frank O. Gehry & Partners, presented Gehry's recent work—Guggenheim Museum Bilbao; Experience Music Project, in Seattle; Der Neue Zollhof office complex, in Düsseldorf; Walt Disney Concert Hall, in Los Angeles; and the DG Bank Building, in Berlin—as resulting from an iterative process that in each case generated its own particular set of technical problems, whether in visualizing forms or fabricating building elements. Glymph focused on the technical solutions to these problems, including the adaptation of a CAD software package for airplane design (CATIA) to architecture, CAD-CAM manufacturing, the use of lasers for on-site assembly of building components, the use of CAD drawings and models to coordinate complex building projects, and even the development of a parametric computer program to search for the optimal arrangement of irregular curved panels to skin a building. For Glymph, such technologies free the architect from cost-driven confinements of standardized building techniques, allowing a wholly new form of architectural practice. In Gehry's office digital cartography acts as a mediator between the formal imagination of the architect on the one hand and material properties and methods of construction on the other. The precisely curved metal-panel skins of Gehry's recent buildings are both the result and the site of this mediation.

The role of digital cartography in mediating a designer's formal intention was considered more explicitly in the work of Michael Silver and his Yale students, as presented in his talk, "LIDAR and the Limits of Representation." From design exercises that make use of LIDAR's ability to register movement as a modeled form, to the design for a student center at Yale based upon an extrusion of a LIDAR scan of a neighboring building, Silver experiments with LIDAR almost as a form of automatism, to expose the form-making power implicit in this technology. His work addresses the following related questions: To what extent is computer-aided design the work of the designer? To what extent do computer environments generate form? For Silver, this issue of design agency in the age of digital media can only be dealt with through an intensive engagement within the design practice of the technologies themselves.

Virtual Cities

In "GIS at Ground Zero," John Ziegler presented striking evidence of the shift in urbanism wrought by digital cartography. Principal of Space Track Inc., a New York–based GIS consulting firm, Zielger worked with the city in the wake of September 11 to provide detailed and up-to-the-minute mapping information relating to the disaster site. This information had to be coordinated from a number of disparate sources—FEMA (Federal Emergency Management Agency) maps, urban flood-plane mapping, property and tax maps, gas- and steam-line maps, and the most current GIS satellite data available—over ten days. The city's complex "data needs," including the integration of spatial and nonspatial information such as street names, further complicated this effort. With the use of such tools as CAD, relational database management, and ArcIMS (a GIS data-distribution system over the Internet), this information could be overlaid as needed according to the logistical demands of the disaster-response effort. While vector data (as in CAD drawings or LIDAR) were used as much as possible because of the intelligence (distances, etc.) incorporated within the vectors, such information was often approximated through the superimposition of CAD working drawings onto the raster data of satellite images (as taken from Space Imaging's Ikonos satellite, which produces images at one-meter resolution from an altitude of 423 miles).

The need to better integrate urban-planning and disaster-response information, along with the technical capability to do so afforded by GIS, CAD, and other digital-mapping tools, has led a number of cities and regions to create information-dense computer models (or even simulations) of themselves—as in the LIDAR models developed by Terra-Point, a Houston-based partner of Ziegler's Space Track, for Houston and New Orleans for flood-control projects. It is easy to imagine a trajectory where these computer models, as they grow in detail and richness, become a sort of virtual urbanism within which changes to the actual city fabric are modeled virtually before being built. We can assume that the potential uses of this powerful tool in urban planning have only begun to be understood.

Konrad Perlman (Yale College, '60) spoke on "Interactive GIS" and on the evolution of his career in Washington, D.C., as an urban planner and later as a GIS consultant. He also sees the future in such projects as Virtual Arlington, a real-time 3-D model developed from GIS data that allows instant impact analysis of proposed changes to the urban fabric. Perlman came into urban planning prior to the refutation of the figure of the heroic master-planner in the late 1960s and the increased discontent of community groups, which led to planning that focused more on the design of systems and standards. At the same time, this systemic approach prefigured the virtual city in projects such as MAGIS (Municipal Automated Geographic Information System) in 1974. MAGIS, a computer-aided synthesis of a set of studies on urban renewal in Washington, D.C., included land-use and property data over a ten-year period. MAGIS produced a neighborhood classification system according to activity, ownership, and rise and decline, to aid in setting development policy. MAGIS was an early step in the application of computers in urban planning—and part of a lineage that Perlman argued will continue to grow in complexity—to approach a complete virtual overview of the city.

Digital Nature

The extent of digital cartography's cross-disciplinary migration could also be seen in the presentations of three scientists—in oil exploration, environmental science, and quantum physics—for whom mapping has had a powerful effect in understanding the natural environment. In "Subsurface Visualization," Duane Dopkin, of Houston-based Paradigm Geophysical, showed how voxel modeling is used in oil-and-gas exploration to map and analyze data derived from seismic analysis of the earth's subsurface. Now rendered as an information-dense volume, the subsurface can be analyzed in terms of the feasibility and logistics of hydrocarbon extraction. The analysis of this data places intense demands on available computer visualization technology, making necessary the management of terabytes of data and the processing of information on the order of gigaflops per second. For this reason oil exploration has been an important impetus in the technological development of neural networks as a tool in data visualization and interpretation.

Jeffrey Albert, an environmental scientist at Yale, spoke on "Digital Mapping and the Natural Environment," specifically on manipulations of Landsat images by techniques like adding infrared information to highlight environmental data useful in such areas as forestry and water policy.

In "Energy Mapping," Harvard University physicist Eric Heller discussed his research in quantum scattering, where very slight changes in initial conditions—in a stream of emitted electrons, for example—often lead to very different experimental outcomes, as the paths of the electrons diverge in response to both external conditions and quantum effects. Much of this—in terms of time-dependent effects and in the way that the electron pathways can behave both as wave and ray paths—can be understood only through mapping. Heller consequently advises scientists to "always make maps if you can, even if you think you know everything." He traced his compelling images of quantum scattering to a lineage including the work of Ernst Chladni, whose 1808 demonstration of nodal lines occurring on vibrating sand-covered plates was fundamental to the science of acoustics and to the study of wave behavior in general. In the study of quantum scattering, scientists rely upon scanning tunneling microscopy (STM), which both visualizes the scale of atoms and allows their manipulation. Showing an early application of nanotechnology to design, Heller cited nanotechnologist Don Eigler's influential work in his use of STM to design what was in effect the world's smallest logo, constructed out of 70 iron atoms, for IBM.

Information and Representation

As a general-purpose machine, the computer processes all information in much the same way. In its migration across disciplinary boundaries, it has had a powerful synthetic effect, essentially transforming discipline-specific forms of knowledge—captured through some kind of scanning process—into abstract and mutually compatible information. Information possesses its own operational rules, regardless of its content, as Claude Shannon, the founder of information theory, demonstrated in 1948. By allowing for and accelerating the content-free manipulation of captured data, the computer has greatly increased the way rate techniques and technologies are transferred among disciplines, allowing advances in one field to be quickly adapted to another. Both the medical imaging of MRI scans, as Cooper showed, and subsurface imaging in oil exploration, as Dopkin discussed, make use of voxel modeling. And it is possible to envision an advance in voxel rendering achieved by the oil industry subsequently applied to MRI imaging.

It follows that any advance in techniques of information manipulation, whether in art or in science, can—and will—find an application outside its field of origin. As an invention, information has become the venue for an unprecedented process of social and technological synthesis.

In the same way, computer-based tools developed for design visualization, like those Julie Dorsey discussed in "Beyond the Surface," can be seen as extending beyond design, simply through enhancing the intelligence that may be embedded within a given data set, image, or model. Dorsey presented three current projects from the MIT Computer Graphics Group: a rendering tool to simulate the appearance of weathering on computer-modeled surfaces (to yield, for example, the patina of aged copper or marble); an "image-based modeling and photo-editing" system that allows a scanned 2-D photograph to be modified and rendered as a 3-D image by a hybrid of surface and volumetric modeling; and an intuitive system of sketching scenes in perspective, with 3-D-like features, but through a "projective 2-D representation" process intuitively similar to traditional illustration. Although these tools were developed for specific problems—increasing the "photo-realism" of computer-rendered environments or simplifying the user interface of a 3-D design program—they can also be seen as new capabilities accruing to information in general, potentially available to enhance any of the cartographic techniques discussed above.

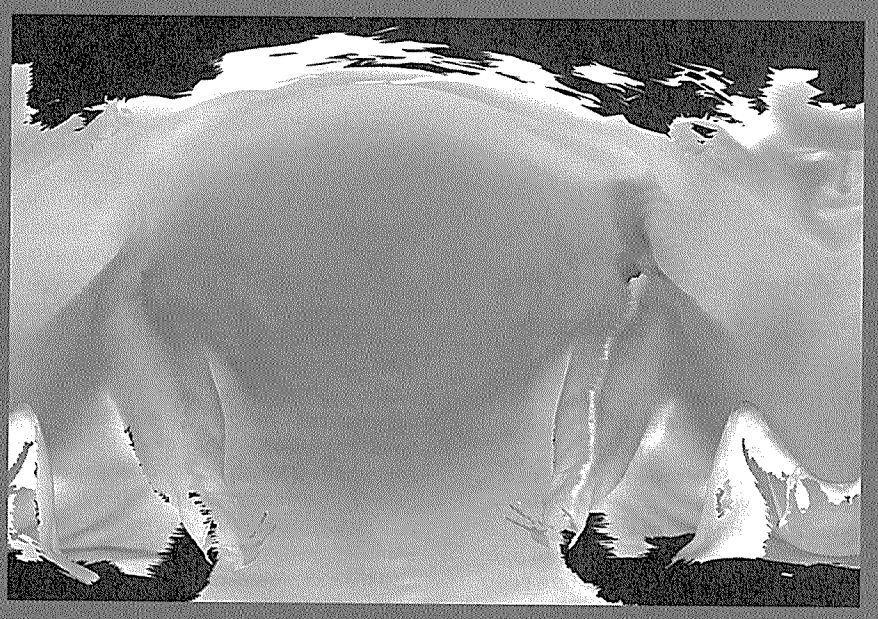
At the same time these technologies—from mapping to surveillance and simulation—entail a problematic relationship between the world, now cast as base material to be scanned, and its mapped or modeled representation. Architect Laura Kurgan began to get at this situation in "Remote Sensing," with two installation projects, "New York, September 11, 2001: Four Days Later" and "Spot 083-264, Kosovo, June 3, 1999," that represented commercial satellite imagery of these highly fraught events. In choosing these images—a one-meter resolution image of Ground Zero taken by Space Imaging's IKONOS satellite and a series of French SPOT satellite images of a war zone in Kosovo—she asks us to consider their social, political, and technological ramifications vis-à-vis the events on the ground below.

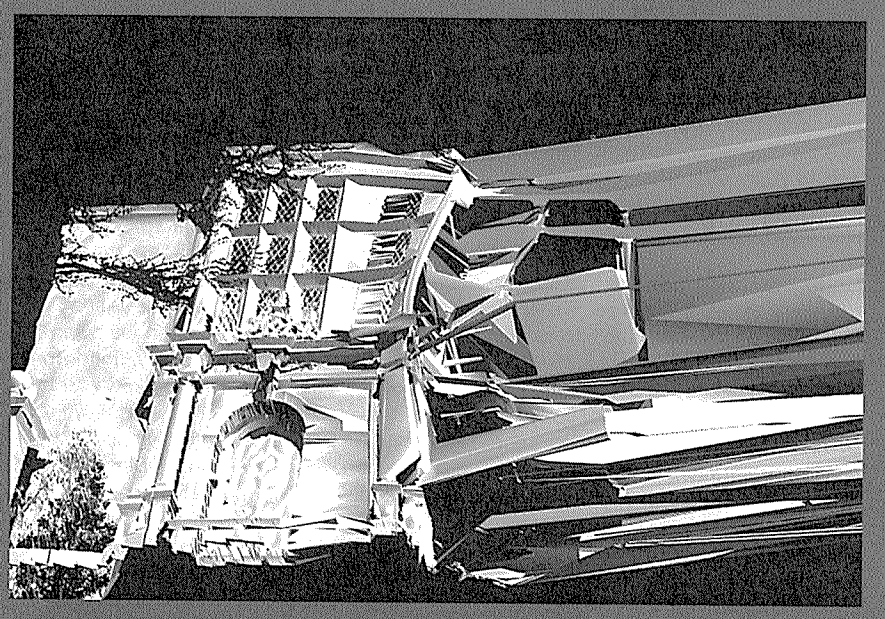
In the final presentation, "Moving Maps: Historical Perspectives on Representing and Transferring Spatial Knowledge," Denis Cosgrove, professor of cultural geography at UCLA, placed mapping within a larger historical perspective and focused on the ideological role of maps in colonization and the establishment of the modern state, as well as the ways in which cultural elements in map composition often belie their claim of objectivity. For Cosgrove maps function as part of a complex cultural process. From early two-dimensional representations of the globe, as in Ortelius's *Typus Orbus Terrarum* (c. 1570), to the 1972 Apollo image of "Spaceship Earth," maps consciously or unconsciously put forward a cultural or political agenda at the same time that they extend the range of human senses. One can compare pre-WWII European "statist" maps to commercial ones produced contemporaneously in America to see how they register differences in agendas. Maps can entail bias through the choice of a given theme, as in the preference for statistical mapping among early-twentieth-century racial theorists, or even graphically, as in the moral weight often associated with graphic shading.

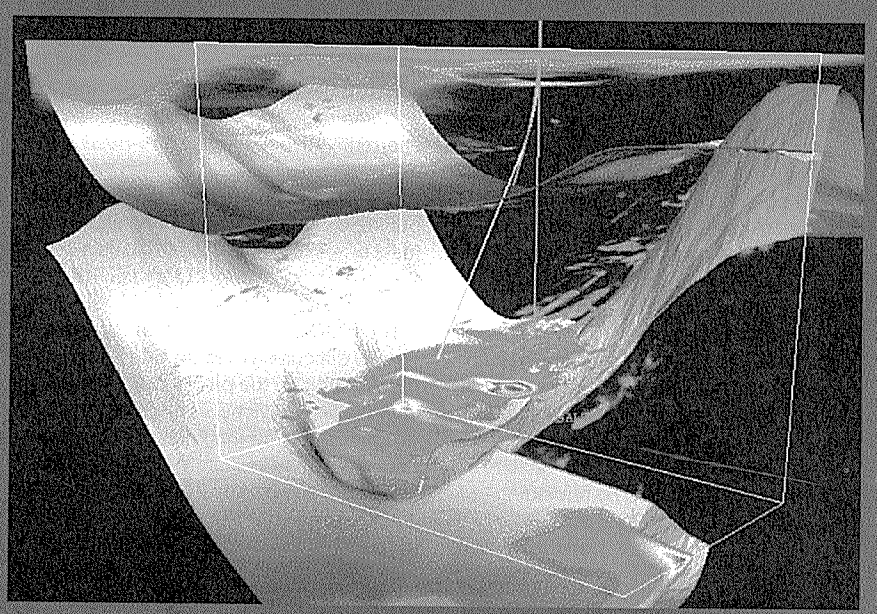
In the fascinating array of work, technologies, and ideas presented at the symposium we find some of the most pressing issues in design practice today. Although the presentations spanned work in a number of fields and pressed digital cartography into the service of very different applications, the lack of a common critical stance among the presenters only served to highlight the multidisciplinary nature of the source material itself, allowing us to better see the myriad ways in which mapping technology—and information technology in general—has, and continues to, organize our world. If there was a common theme among the presentations, aside from the use of related technologies, it was illustrated in Balmori's discussion of the work of Carl Sauer in the symposium's introduction. Sauer's work—for example, *The Early Spanish Main* (1966)—was largely responsible for the shift of the discipline of geography away from the environmental determinism of physical geography and toward cultural geography's emphasis on the interaction between culture and natural landscape. This interaction could be seen as the focal point of the symposium: as the technologies and applications of digital cartography grow more sophisticated in their ability to map and model (and hence control) places and events in the natural world, the gulf between the natural and the cultural grows more narrow—perhaps becoming practically indistinguishable. It is evident that design has an important role to play here, whether in terms of driving inventions or as a critical voice, in the unfolding of this ongoing process.

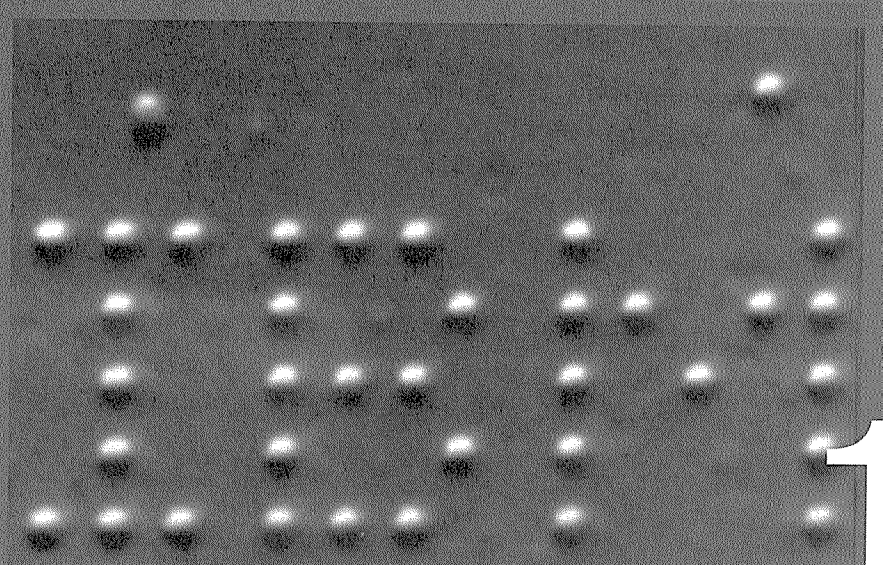
—Branden Hookway

Hookway is author of Pandemonium: The Rise of Predatory Locales in the Postwar World *(Princeton Architectural Press, 1999) and a Ph.D. candidate in architecture at Princeton University.*









From top: "Rapt," Justine Cooper, 2000

"Unfolded Bodies," Lilla LoCurto and Bill Outcault, 2001

Mike Silver, Alumni Reading Room Addition, Yale University, LIDAR Image Transformation, 2002

Duane Dopkin, Digital Cartography

Don Eigler, IBM Logo

Spring Events Reviewed

Women, Family, and the Practice of Architecture

On Friday, January 25, 2002, a discussion was held at Yale with Peggy Deamer, educator, principal of Deamer + Phillips, mother of two (13 and 11 years old); Deborah Berke, educator, principal of Deborah Berke & Partners Architects, mother of one (8 years old); Lise Anne Couture ('86), educator, principal of Asymptote, mother of one (4 years old); Audrey Matlock ('79), educator, principal of Audrey Matlock Associates, caretaker of teenage nephew; Alan Plattus, educator, principal of the Yale Urban Design Workshop, father of two (12 and 14 years old); Susan Rodriguez, principal of Polshek Partnership, mother of one (6 years old).

Bigger than a sewing circle and larger than a coffee klatch, the "Women, Family, and the Practice of Architecture" discussion was nevertheless an intimate affair. Associate dean Peggy Deamer organized the event as a continuation of conversations that began between students and faculty several years ago, when lecturer Phil Bernstein took a moment during his Professional Practice class to wonder about the underrepresentation of women in the field of architecture. Gathered around a table in the Fourth Floor Pit, students and members of the public aired their questions and concerns, focusing on the particular challenges of juggling work and child-rearing. All the guests, with the exception of moderator Alan Plattus, were women, and most were mothers.

The guests came without prepared papers but were encouraged instead to talk from experience, tell personal stories, and share insights and advice. Scratch the surface of these anecdotes and one finds the complicated history of the women's movement: the struggle for inclusion along with the search for new definitions of success and new paradigms of leadership—a struggle whose beginnings in architecture date back to when many of the panelists were students.

Deborah Berke started by reminding everyone that the individual success stories of the women present were not a reflection of the conditions in the profession in general. Although statistics for women enrolled in architecture schools have improved, the number of women in the profession remains a small percentage—about 10 percent—and the number of women principals drops to about 5 percent. Why are these statistics worrying? "Numbers matter," Peggy Deamer said, "because as long as we are not represented numerically—as long as the concerns of women are marginal—we're going to be seen as the exception, not the rule."

One might ask, Why hasn't more progress been made since the "revolutions" of the 1960s and '70s? Plattus suggested that it has to do with those generations' ambivalence toward positions of power. Having succeeded in ousting the Establishment, they were reluctant to exercise their newfound power and institute lasting change. "Our generation has seen enormous advances in terms of gender balance and diversity. We've also seen an enormous regression." So the discussion turned to the question of power—not only how women achieve it but how they define it. How is the definition of success linked to power (or empowerment)? How do fulfillment and choice come into play?

Berke offered diverse interpretations of power, which included "getting the best jobs, or being in the position to hand out the best jobs, or being in the position to determine who gets written about, who gets famous and why." Finally, good work must be valued as a form of power. She stressed that, even more importantly, all levels of the profession, from principal to intern, need to be ennobled. Berke insisted that the empowerment of women in the workplace must include changes to the more general systemic problems within the profession itself. She said, "I laugh when I read articles about how they need to legislate change for young medical interns in hospitals to prevent them working 36 hours straight—because people's lives are at stake. I think, maybe we need to stop young architects from charretting five days straight—because our built environment is at stake." It is these types of conditions that make it all but impossible for many young architects, male or female, to envision balancing a professional life with other aspects of life, especially child-rearing.

The factors that make a life in architecture so difficult have to do with conditions perpetuated by the profession, such as underselling services, setting unrealistic deadlines, and offering health insurance that is not commensurate with income level. As Deamer repeatedly mentioned, it also has to do with role models, not only at the office but at the universities. She feels that the way the master's degree in architecture is structured contributes to the perpetuation of a "star system," from the types of critics hired to a work ethic emphasizing highly authored "atelier-style" production and "maniacal" individual genius.

"I hope you haven't come here today for answers," Susan Rodriguez said. It is not even a question of hoping to find the perfect balance or of working less. She insisted that it is a matter of accepting "the day-to-day liability of fitting it all in." There was general agreement that there is a way to increase the degree to which Women's "other lives" are valued, recognized, and engaged in the workplace. Lise Anne Couture was optimistic, listing half a dozen successful young principals who appeared at the 2000 Venice Biennial with children in hand. The fact that children are appearing at the sides of both male and female parents/partners is an indication of shared responsibility for child-rearing, as well as a new level of acknowledgment of the issues within the workplace.

Is there an ideal configuration for a practice that allows the inclusion of women's "other lives"? Is the husband-wife team the answer? Couture, who runs Asymptote with her husband, Hani Rashid, said it works well but didn't get into specifics. Rodriguez, who is the only female of seven principals at Polshek Partnership, insists "size doesn't matter." Audrey Matlock says that because of their financial stability, big firms have the potential to be more supportive of women's needs—one day. Berke's medium-size firm seemed to offer the most concrete solutions, such as health insurance for gay as well as heterosexual partnerships. With regard to the specific issue of raising a family and working in architecture, no one could overemphasize the need for supportive husbands/partners or the importance of child care. "Find a great babysitter," Rodriguez said.

If the questions asked were any indication, women students remain hesitant to join large firms for fear of restrictive male hierarchies, and they are anxious about asking questions in job interviews regarding maternity-leave policies and so on. Dean Robert Stern insisted that students *should* ask questions in interviews, because inquisitiveness is the sign of a good worker. But Couture cautioned that badly timed questions about maternity leave could be as off-putting as questions regarding vacation time. Nevertheless, in an interview your questions communicate your values, and in the end these are not things to keep silent about—especially in the search for a rewarding workplace or a fulfilling lifestyle. Happiness is individually calibrated, as was evidenced by this small sample of women architects who have cooked up lifestyles that successfully combine parenting with the practice of architecture.

—Jessica Russell
Russell ('02) has recently joined the architectural workforce.

From left, Susan Rodriguez, Peggy Deamer, and Audrey Matlock. Photograph by Sarah Lavery

Bottom: From left, Alan Plattus, Lise Anne Couture, and Deborah Berke. Photograph by Sarah Lavery

Future Focus, *the year-end exhibition 2001–2002 took over the A&A Gallery from May 24 to August 2, 2002. It highlighted work from the studios showing research into what is possible and what is desirable in architecture. Photograph by Yale Media Center, 2002*

Revealing New Ground

The exhibition *Revealing New Ground* was held at the A&A Gallery from February 11 to March 8, 2002, and was organized by Tomoaki Tanaka ('91).

As noted in the exhibition press release, *Revealing New Ground* examines the cultural and architectural influences that educational training has exerted on 11 Japanese designers who studied at the School of Architecture and then returned to their native country to practice. The show features the work of Tukasa Yamashita ('64), Kazuhiro Ishii ('74), Yukihide Numaguchi ('78), Jun Mitsui ('84), Norihiko Dan ('84), Hirohisa Hemmi ('87), Hiroshi Miyakawa ('89), Koichi Yasuda ('89), Hidetoshi Kawaguchi ('89), Tomoaki Tanaka ('91), and Kazutaka Watanabe ('92). Taken as a whole, their projects highlight the commonality fostered by the wedding of an education in the Western idiom with Eastern culture and a specific geographic location. Individually their works manifest how each has used that common experience in a singular way. Using the full panoply of media, from sketches and computer images to models and aerial photographs, the exhibition sheds new light on such prominent issues as context, concept, and cultural expression.

1. Ground
The show proposed to examine the common ground of an architectural education at Yale and cultural origins in Japan. Mightn't these metaphors of ground and its excavation invite thoughts of archaeology and Michel Foucault's archive? "Meanwhile I was learning a different set of meanings for archive, seeing it not as the sum total of events and things that had been recorded but as the system that governed what could be recorded... [t]he sequence of mentalities that had made this list possible" (Leonard Barkan, *Unearthing the Past, Archaeology and Aesthetics in the Making of Renaissance Culture*, Yale University Press, 1999, p. xxiii).

2. Gloss and glossary
Gloss: "Interlineal translation, or series of explanations upon a continuous text" (*Oxford English Dictionary* [OED], Compact Edition, Oxford University Press, 1971, p. 1159). Strictly speaking, this essay is a review of the *Revealing New Ground* exhibition. The discerning reader will discover that it is in fact less a review of the work mounted than a statement of possibilities, a wish list of several "mentalities" I eventually wished were more discernable in the 11 architects' work. This text is a list of glosses, a glossary that tracks moments of Japanese-American exchange that hew to a few common synthetic themes—the "mentalities." These may be expressed as dialectics, and the three (horizontal-aerial, natural-technological, and whole-cellular) should be understood to characterize, in varying proportions, any of the 11 projects exhibited.

2b. Glossy (horizontal-aerial)
"Wearing an outside show, made to look specious" (*OED*, p. 1159). Architects tend to portray works of architecture in their new condition, especially as described by digital renderings or preserved by photographic documentation. Indeed this exhibition privileges this highly representational mode, and the installation emphasizes aerial and other constructed perspectives. By contrast, Junichiro Tanizaki, in his plea for a traditional Japanese aesthetic of shadow and wear, describes the decidedly horizontal character of Japanese space that is "likened to an inkwash painting, the paper-paneled shoji being the expanse where the ink is thinnest, and the alcove where it is darkest. Whenever I see the alcove of a tastefully built Japanese room, I marvel at our comprehension of the secrets of shadows, our sensitive use of shadow and light" (Junichiro Tanizaki, *In Praise of Shadows*, translated by Thomas Harper and Edward Seidensticker, Leete's Island Books, 1977, p. 20).

3. E-makimono (horizontal-aerial)
Consider Japanese painting: *Sumi-e* landscape painting is characterized by three compositional motifs—"high and distant," "flat and distant," and "distant and profound." These works tend to draw on memory rather than direct observation from nature. They also tend to employ a vast, rather than narrow, point of view (Japan National Tourist Organization, *New Official Guide to Japan*, Japan Travel Bureau, 1964, p. 231). This is true of traditional architectural representation as well: "Without a vanishing point, the representation of a building and its various rooms may be extended indefinitely, and in the scroll paintings called *e-makimono* buildings are often extended for several feet without the drawing being organized, as a composition, around any single dominating element." "These effects, consequences of a repetitive structural framing system, led to 'Mondrian-like patterns' much admired by (then) contemporary Western architects" (Arthur Drexler, *The Architecture of Japan*, Museum of Modern Art, 1955, pp. 56–68).

4. Bungalow (horizontal-aerial)
The American bungalow, as distinctive an American architectural form as the skyscraper (see "tree," below), apparently has origins in Japanese architecture. If developed independently from Eastern dwellings, the wide-spreading one-story California bungalow was quickly recognized for its resemblance to the East Indian Bungalow, and the name was quickly borrowed. The form culminated in the "Japanesque" bungalows of Greene and Greene, whose projecting eaves and deep verandas reinforce a specifically horizontal character (Clay Lancaster, *The Japanese Influence in America*, Walton H. Rawls, 1963, pp. 104–12).

The Japanese garden, famous in the West as an epitome of the Japanese aesthetic, comes in two varieties: the "natural" and the "flat." Each is intended to be the subject of a horizontal regard (JNTO, pp. 261–62).

5. Noguchi (horizontal-aerial)
Isamu Noguchi, an American raised in Japan, created stone gardens that emphasized illusory spatial effects that changed as viewers' points of view shifted. His marble "garden" for the Beinecke Library at Yale (1960–64) is intended to be seen both from an adjacent reading room, as if in a medieval cloister, and from above, invoking cosmological symbolisms. "According to Noguchi, the elements of the sunken garden might yield infinite interpretations when contemplated" (Ana Maria Torres, *Isamu Noguchi: A Study of Space*, Monacelli Press, 2000, pp. 122–25).

6. Metabolism (technological-natural)
"Today's Tokyo, like Manhattan, is a town where dynamic and static elements are in continual conflict. It is a place where isolation and clamor, skyscrapers and wood-construction houses, the residual images of Edo and intimations of the twenty-first century are mixed like discordant sounds, but where there is nevertheless tremendous life and a curious equilibrium. It is in this context that architecture must be built."

"As with other great cities, there is a depth to Tokyo that is both real and imaginative. The narrow, mazelike back streets of the Shitamachi and the trees, casting dark shadows, and the complex topography of the Tamanote constituted a metaphorical forest created by gods and humans, and in a sense this forest survives." (Fumihiko Maki, *The Present That Is Tokyo*, in *SD* (Space Design), no. 8601, quoted in Serge Salat, *An Aesthetic of Fragmentation*, in *Fumihiko Maki*, Rizzoli International Publications, 1988, p. 19).

7. Tree (technological-natural)
The tree was an important conceptual device to the Metabolists, who proposed linear-organic models of organization for Tokyo in 1960. Frank Lloyd Wright, whose Imperial Hotel in Tokyo (1915–23) formed an early architectural export from America to Japan, cited Japanese (he credited Shinto ideals) attitudes toward nature in his description of his American "organic" architecture: "The Japanese have never outraged wood in their art or in their craft. ... Whether pole, beam, plank, board, slat, or rod, the Japanese architect got the forms and treatments of his architecture out of tree nature" (Frank Lloyd Wright, *An American Architecture*, Horizon Press, 1955, p. 108). Elsewhere Wright would liken his 1929 design for a tower at St. Mark's, in New York (later realized in Oklahoma), to a tree, as a fusion of technology with the "natural" (Frank Lloyd Wright, *The Story of the Tower*, Horizon Press, 1956, p. 15).

8. Bonsai (technological-natural)
What of bonsai, appearing in *e-makimono* as many as 1,000 years ago, the traditional art form in which trees are miniaturized, deliberately stunted, as a means to a greater illusion of realism?" (JNTO, pp. 274–5). "[T]he Japanese have a way of seeing things and a way of thinking peculiar to themselves, and even while absorbing from (foreign) cultures, the Japanese have come to create their own culture ... an identity between subject and world ... what I call a vertical (or subjective) world." Kitaro's verticality posits a unity of subject and world, contrasted to a Western "horizontal" world of conflict between man and nature. Kitaro argues that "Japan must develop from the vertical to the horizontal, from time to space" (Nishida Kitaro, *The Problem of Japanese Culture* (1938), excerpted in Tsunoda et al., *Sources of Japanese Tradition*, Vol II, Columbia University Press, 1958, p. 362).

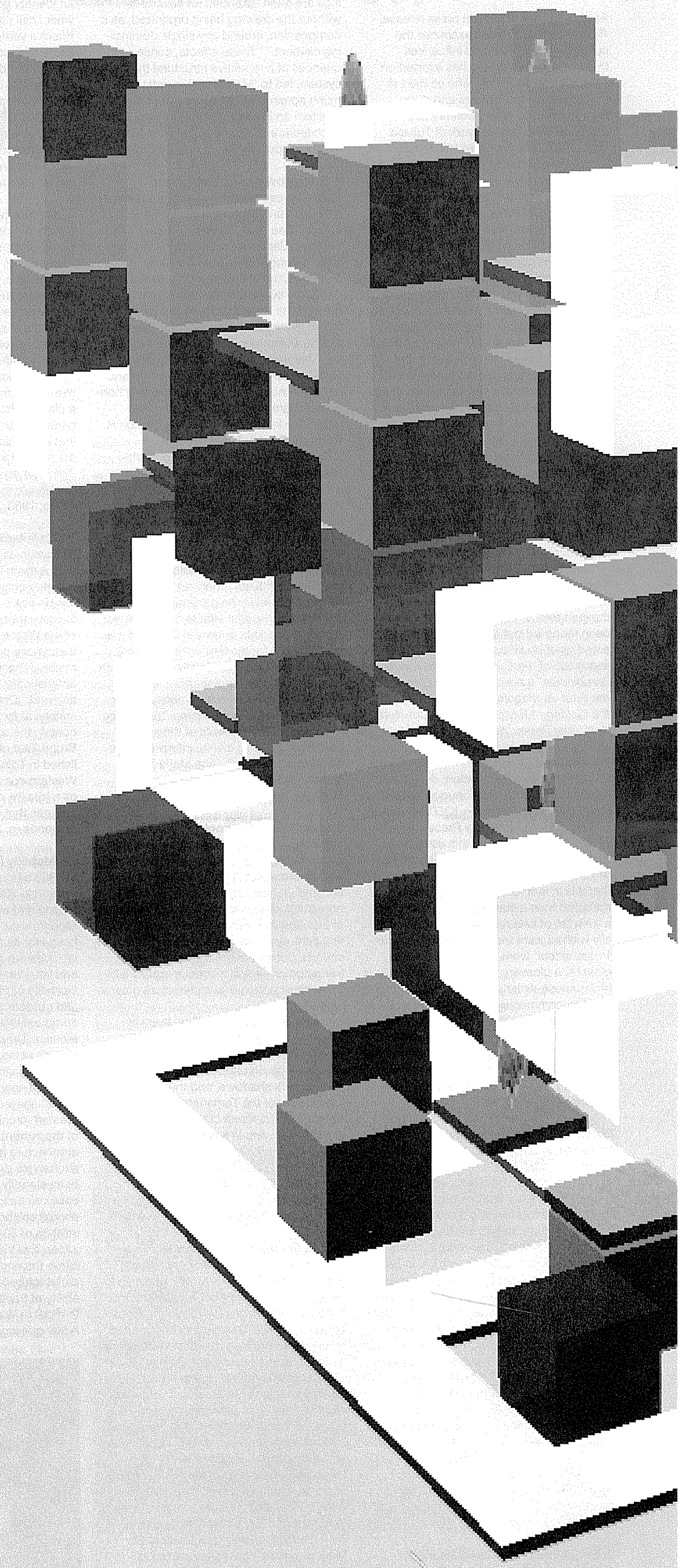
9. Katsura (whole-modular)
Kenzo Tange, allied to the Metabolists, has explained how such a spatial condition underscores the cellularity of Japanese architecture, which he contrasts to Western considerations of unity: "Japanese architecture is an architecture of vistas, of continuity, of perspective. There is a constant movement of space, a gentle shifting from place to place; but no matter how far one pursues the movement one never arrives at a conception of a plastic whole. The tension, the immobility necessary to produce plastic unity, is lacking: everything changes with one's movements, and with time" (Kenzo Tange, *Tradition and Creation in Japanese Architecture, in Katsura*, Yale University Press, 1960, p. 31).

10. Cellularity (whole-modular)
"Space in Japanese architecture is additive. A room is a closed volume adjoined by other closed volumes. Though they may vary in scale, they are seldom intended to express those overriding preoccupations of the Western architect with spatial sequences progressing from minor to major. Japanese architectural space characteristically knows no beginning, middle, and end" (Drexler, p. 55). Of the Shinto shrines at Ise, four small buildings that contain the sacred symbols of Shintoism, Bruno Taut observed (in a lecture published in Tokyo in 1936) a particularly Western conception of unified beauty: as a totality, containing "no capricious features that offend the reason of man" (Tsunoda, p. 363).

11. Mobility (whole-modular)
In 1953 a house was made in Nagoya, packed in 700 crates, and shipped to the Museum of Modern Art in New York. The Modern's curators chose a Japanese house for its particular relevance to modern Western architecture, giving its "post and lintel skeleton frame construction; flexibility of plan; close relation of indoor and outdoor areas; and decorative use of structural elements" as its relevant characteristics (Drexler, p. 262). Recall the Shinto shrines at Ise. Each is completely rebuilt every 20 years on an identical adjoining site, and each time the shrines are consecrated anew (Drexler, p. 35). Perhaps Western architects were sufficiently aware of the currents of traditional Japanese architecture by the time the first of the 11 exchanges began, and it seems Japan has been steadily saturated with Western influences since long before that time. We should celebrate this show for its demonstration of 30 years of mobility between Japan and Yale, but it may only reveal either the ongoing importing of American architecture to Japan or the particular suitability of traditional Japanese architecture to modern Western architectural thinking. A few questions remain unanswered: What would characterize an unexpected hybrid of Japanese and American influences wherein the sources of each were thoroughly subsumed within a coalescent whole? And did Yale really never graduate a Japanese woman?

—Maitland Jones
Jones ('92) is a partner in Deborah Berke & Partners Architects in New York and worked at the Osaka architecture firm Takenaka Komuten in summer 1991 as a recipient of Yale's Takenaka Exchange Fellowship.

Revealing New Ground, *A&A Gallery, Yale School of Architecture. Photograph by Yale Media Center, 2002*



From the exhibition 3D City: Studies in Density, Recent work by MVRDV *September 4–October 25, 2002. Yale School of Architecture Gallery, 180 York Street, New Haven, Connecticut*

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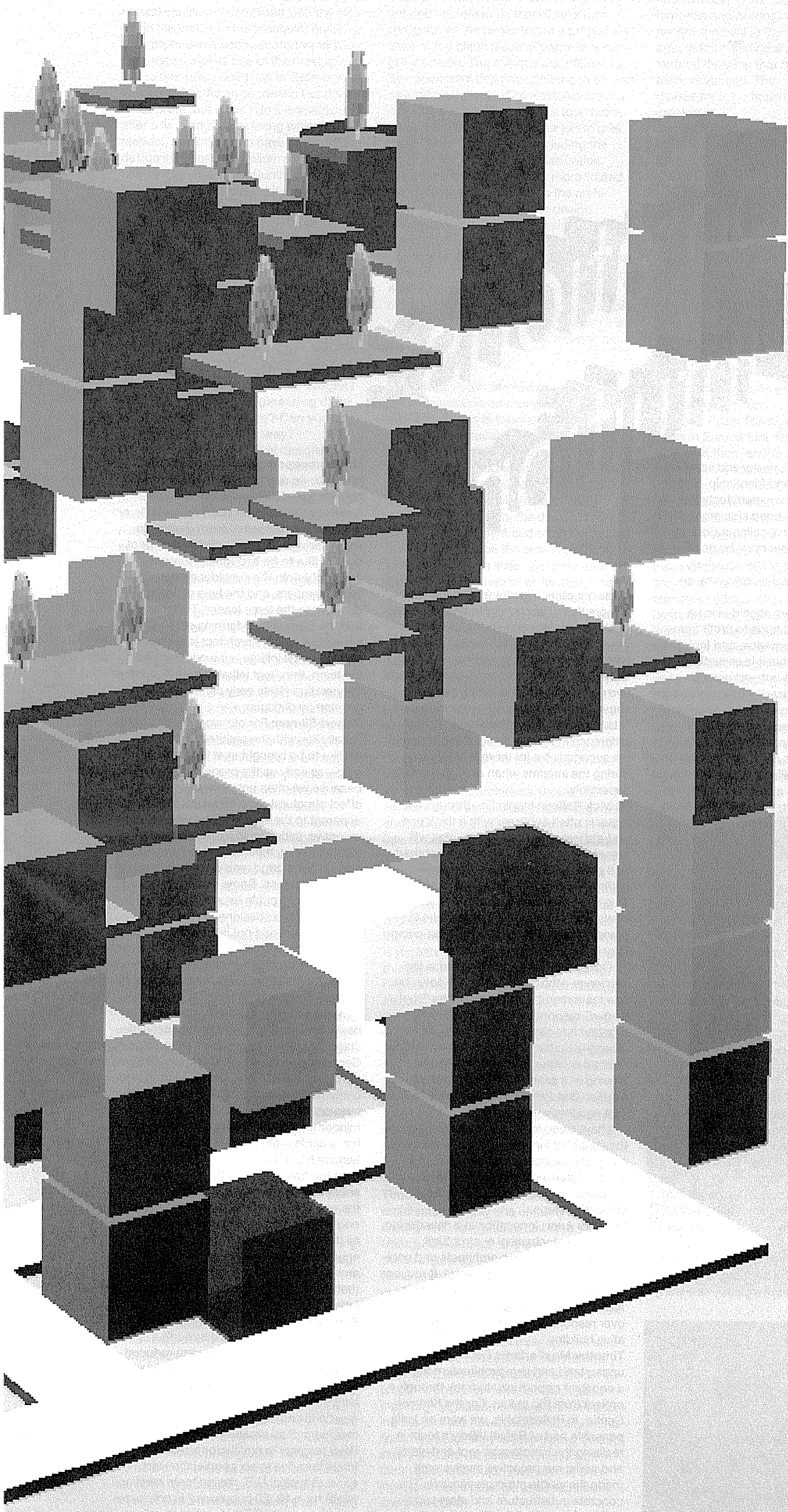


Engineer Collaborations: Innovation and Intuition

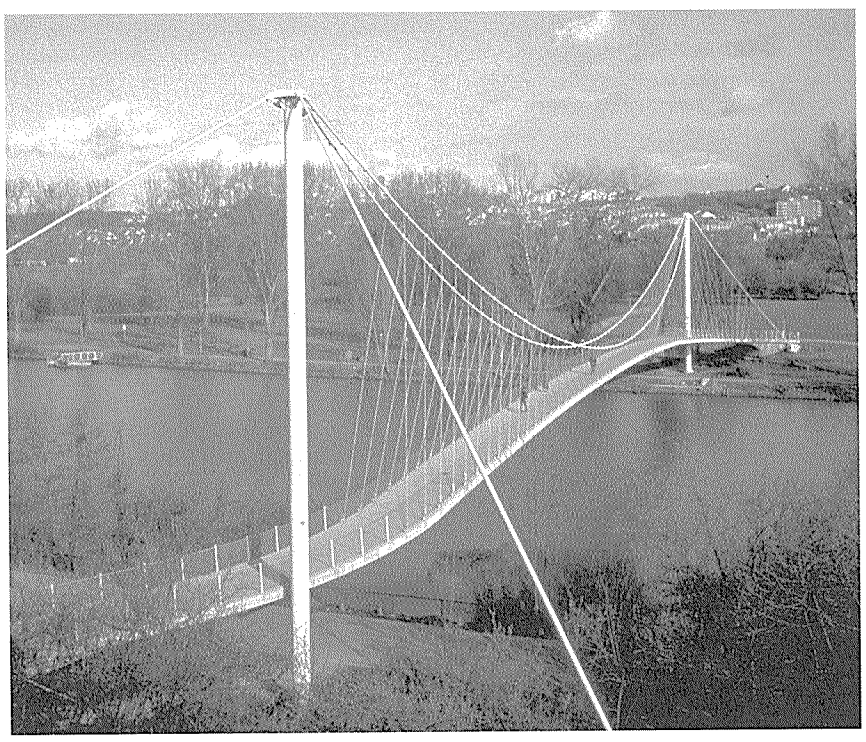
This spring, Nina Rappaport, editor of *Constructs,* held a discussion on collaboration, with engineers who have been teaching at Yale during the past two years. James Axley, professor at Yale; Patrick Bellew of Atelier Ten, based in London; Thomas Auer of Transsolar, based in Stuttgart, Germany; Timothy MacFarlane of Dewhurst MacFarlane, based in London and New York; Jorg Schlaich, based in Stuttgart, Germany, who assisted with reviews in Frank Gehry's spring studio; and Robert Silman of Silman Engineers, in New York.

Nina Rappaport: Great innovations in architecture are often those in which architects and engineers collaborate to design a new structural solution or systems design, taking risks and making new forms. These points of innovation frequently are considered provocative and the essence of great design. What enables such innovation to occur between the architect and engineer?
James Axley: Historically one thinks immediately of Louis Kahn and Buckminster Fuller at Yale, Kahn and Le Riccolais at Penn, and Kahn and Komendant in Philadelphia. One imagines that Kahn was curious about Bucky's ideas—especially the space frames and geodesic domes—and tried to make use of them first in the Yale Art Gallery, where the concrete, almost space-frame floor structure shapes the use of the space and enables an "organic" integration of mechanical system and structure, and, later and more ambitiously, in his tall-building proposal based on a tetrahedral space frame. One also imagines that Kahn trusted Le Riccolais and felt comfortable with him in his day-to-day academic life, so that the latter could insinuate himself into the often very private world of pencil-to-paper talk-draw design. In turn Kahn made good use of Komendant's competence, ability to offer complete structural-design service, and willingness to explore the potential of prefabricated post-tensioned, prestressed concrete construction in its early development simultaneous to the Richards Lab. Curiosity and interest in new ideas, trust and friendship, and/or a simple need for competent technical advice and services bring able architects to search for technical collaborators. Both architect and engineer must be good designers—masters of the cognitive, dialectic game of design, driven by an interest in form.
Jorg Schlaich: There should also be curiosity about, and hope to profit from, the knowledge, experience, and fantasy of the partner. For that it is essential to understand that it is not—as usually assumed and practiced—the responsibility for the visual/functional on the one side and the analytical/technical on the other that distinguishes architects and engineers, but the types of project, as discussed by David Billington. The architect's work is buildings in a complex, multifunctional social context; the engineer's work is structures that are functionally simple. So architects lead in small buildings, and engineers lead if the structure governs—as in a bridge—and both are equally responsible in case of a large building. But neither can delegate the responsibility for the visual/artistic design. After all, in a good collaboration nobody cares who contributed what—only the outcome counts.

An innovative contribution from an engineer can occur only if the architect makes stimulating use of the former's knowledge and fantasy by not proposing a solution but rather describing the concept so the engineer can propose structural alternatives. I experience that continually with the "right" architects; most of our joint and "good" projects result from such an approach: the Hamburg Museum glass roof, with Volkwin Marg; the Max-Eyth-See footbridge, with my sister Brigitte Peterhans; the Berlin Main Station Lehrter Bahnhof, with Meinhard von Gerkan. The John Hancock Building, in Chicago, is for me an excellent example of an optimal collaboration (Bruce Graham, Fazlur Khan, Myron Goldsmith).
Robert Silman: I think these great innovations are the result of frequent face-to-face meetings. It is synergistic—one party feeds the other's instincts, and the result is more than if each were to design separately. Communication is the essence of this collaboration. When design is accomplished by exchanging drawings or ideas without personal interaction, the collaborative part of the result is simply not the same. On projects where we work with "starchitects," we notice a great deal of difference in the personal meetings, and we accomplish a lot more than we do during the interims when each is working separately.
Patrick Bellew: Inspiration through dialogue is often achieved with a thick pen and a sheet of trace, when an idea will somehow emerge and then be stretched and pulled in different directions or—if it is sufficiently brilliant—left just as it emerged. This is the reason why Internet or video-conference meetings will never take the place of face-to-face meetings: the chemistry is not the same.

Collaboration is also achieved in the challenge—the gauntlet thrown down by one team member to another. The "challenged" responds and by the next get-together has developed the idea, often issuing a challenge of his own. Another method is osmosis: a good design team arriving at a seemingly obvious consensus solution that from the outside appears brilliant and innovative.

I have been fortunate to experience the "buzz" of innovation within a team on many occasions. Not all the results might be characterized as "great innovations in building," but many represented small innovative steps.
Thomas Auer: Innovation in a new design, caused by mechanical or structural aspects, occurs when architects and engineers speak the same language. It requires circumstances in which building owner, architect, and engineers are willing to take over responsibility to make a highly innovative building.
Timothy MacFarlane: For engineers who understand and love architecture there is a constant opportunity to think through a project from the outset. For the Kimmel Center, in Philadelphia, we were an indispensable part of Rafael Viñoly's team in realizing the spectacular roof and glass end walls; our proactive involvement made the visible structure feasible. The concrete substructure and steel superstructure are also significant achievements, but they are embedded within the cladding and therefore harder to appreciate. As proud as we are of our contribution to this building, there is no question that the architectural composition of the whole is the architect's responsibility and achievement. Our part was to believe in his idea and to help him realize it in the most elegant and economic way possible.



Schlaich Bergman und Partner, Bridge over the River Minden, Germany, 1994. Photograph courtesy of Schlaich Bergman und Partner

Nina Rappaport: How do you collaborate with an architect on a project, and how do you define your role? Do you consider the collaboration teamwork, or is it highly segregated from design to engineering? At what point in a project do you like to be brought in to work?
Jorg Schlaich: We consider ourselves team members, and the type of project determines the team leader. This means that the team should form as early as possible. Usually if the architect is the team leader, he will initiate our work; if we lead the team, the client initiates it. Only if the cooperation starts early can the project develop by dialogue.
Robert Silman: For our work the initiative usually lies with the architect. However, we like to be brought in at the very beginning—as early as the program phase—because we often notice issues that might affect structural considerations and are not apparent to the architect. We are always proactive, initiating structural questions and promoting the issues. It is important that we get a good read on the architect's design intentions. Some architects have a great deal of trouble expressing themselves, and their designs turn out to be rather visceral and not intellectual, making it difficult for us to complement. And when there is no structural input at the outset, the project is often not as successful as it might have been.
Timothy MacFarlane: For our work it is best that we begin at the earliest possible stage. The David Lawrence Convention Center, in Pittsburgh, is our largest project; the structural solution was developed and confirmed within two days of intense discussion with Rafael Viñoly. Other than minor modifications, the building—which has a cable roof with a clear span of 420 feet anchored to massive steel frames that form the framework for the ancillary spaces—has been built in accordance with the very first sketches, even through value engineering. Guiding the process through all the hoops has required our team of engineers to work very closely with the architect, client, and contractors to ensure that the basic principles are maintained intact.
Patrick Bellew: It is very rare that real innovation can be applied through a scheme when the engineers are reduced to "fitting out" a predesigned shell. How we collaborate is more difficult to be prescriptive about—the mechanisms are meetings and sketches between team members. Real breakthroughs are more likely to occur in small group sessions (maximum five to six people) than large ones. (A typical U.S. design team meeting might have 12–20 people and is not, in my experience, a hotbed of architecturally integrated innovation.) For a new extension to the Virginia Museum of Fine Arts, with architect Rick Mather, we are having creative meetings with two to three from the architect's office, two from my office, and a structural engineer from Dewhurst MacFarlane and Partners. We resolve spatial, environmental, and structural issues in an integrated way.
Thomas Auer: As we develop building concepts in a design team, we look for synergistic effects. For example, the solar chimney of the Debitel building, in Stuttgart (architect RKW), drives the

natural exhaust and is also an architectural element. For the Prisma building, in Frankfurt, where our collaboration with the architects Auer & Weber began in the competition phase, the requirement of natural ventilation combined with the atrium in the center of the triangular building and resulted in a sophisticated ventilation concept as well as one of the most innovative recent office buildings in Germany.
James Axley: As an academic I seldom collaborate, but when I do it is invariably after a long courtship during which trust, respect, and friendship have grown. Initial design inquiries over vellum on a desk offer the greatest opportunity for innovation. The most skilled architects I've worked with—including Fred Koetter, Marvin Buchanan, Richard Fernau, and Laura Hartman—consider design to be personal and intimate. They can't tolerate the interference that most engineers offer. Participants must know each other well enough to anticipate and interact impulsively. And of course they must be able to bring something to the table.

Nina Rappaport: Do you see yourself as a designer or a scientist/technologist? How does design in engineering differ from that in architecture? Can you be inventive in an intuitive way?
Jorg Schlaich: A structural designer cannot be creative without a profound scientific/technological background. But a creative designer is more than a scientist who detects what is already available in nature—he is an inventor, who constructs something new. Innovation in engineering equals knowledge plus intuition.
Patrick Bellew: I see my colleagues and myself as designers first and scientists second, though some of my team members would see it the other way around. There are great differences between architectural engineering and architecture, but it is vital that engineers "speak the same language" as architects and understand something of the history of architecture, design theory, and practice if they are to contribute to the process of building design. I believe that intuition is a most important quality for both engineers and architects. Computers allow ideas to be tested and simulated to the smallest degree, but the jumps and moves that are made in the design process usually rely on intuition first and refinement by modeling second. No practice can afford to spend too much time computer-modeling up blind alleys. Computers do allow for ideas to be tested thoroughly—when the outer reaches of intuition are reached.
James Axley: Back in the days when "design methodology" was an accepted specialty in academic architecture, Horst Rittle made the useful distinction between "tame" and "wicked" problems: the former were well-defined problems, having well-established systematic methods for their resolution, and the latter were ill-defined, without such methods available. Importantly "wicked" problems become defined through their resolution—they are open-ended and demand the specialized cognitive skills that make "design" as understood by architects such an intellectually satisfying pastime. Certainly the most interesting architectural design problems are "wicked." Technologists go about their business developing methods to solve routine "tame" problems (e.g., sizing a beam, column, furnace), but the leading edge of any science or technology is invariably populated by "wicked" problems. Innovative collaborations result when you bring masters of the "wicked" arts in technology together with those in architecture. Engineers and architects at the leading edge are "wicked" problem junkies. It is this shared skill—often simply called "design skill" in architecture—that enables them to work together to innovate.
Robert Silman: Clearly we are not scientists. We are technologists employing the theories of science to arrive at technical solutions to practical problems. We do not conduct basic research or strive for knowledge for its own sake. Engineering design is certainly different from architectural design in that we do not concentrate on program—we leave that to the architect. We are of course interested in form, performance, sustainability, efficiency, and so on—all things that the architect is also concerned with. But the direction of our design concentrates on the applied physics of the building and its equilibrium; we hope to satisfy the problems raised by these issues with the best use of form and materials possible. Much of invention, be it architectural or structural, is intuitive. One should understand that one's intuition grows remarkably according to one's experience level. However, intuition is seldom a substitute for hard work—they go together.
Timothy Macfarlane: I have always considered my role to be that of structural designer. At the beginning of a project we start with a blank piece of paper or a computer screen. The choices are influenced by parameters that have nothing to do with scientific judgment. The variables are too numerous to lend themselves to a mathematical equation, and it is our job to give the different parameters, including the physical forces, an appropriate value. We are carrying out within a more limited sphere the same process as the architect—that of composition or design.
Thomas Auer: I am not a designer; I'm an engineer. But it is our company's philosophy to merge the aims of the architect with respect for the structural concept into an environmental mechanical design. Our objective is to enable design in an environmental context. And to reach this aim it is certainly necessary to be inventive in an intuitive way.

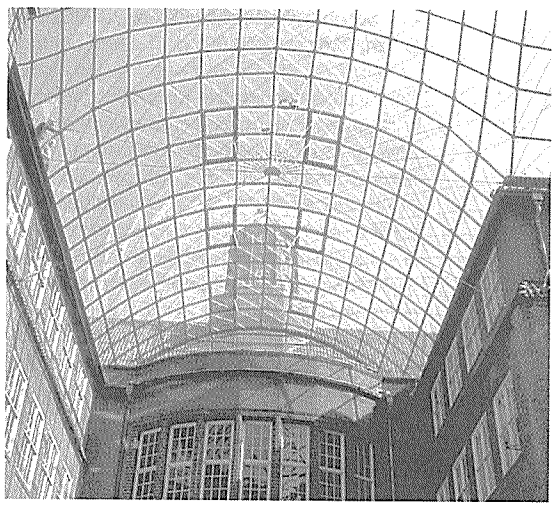
Nina Rappaport: Should there be an equal education exchange so that architectural design is taught to building-engineering students since architects learn structures?
Jim Axley: The cognitive skills that serve the designer—the "wicked" problem-solving skills—are difficult to teach. As a method of instruction, the design studio is particularly inefficient and often ineffective, but it appears to be the only systematic way to build these skills. If engineers are to enter the intimate world of "design," they have to develop these cognitive skills. At the University of Bath, the technical curriculum developed by Ted Happold required engineers and architects to take design studios together.
Patrick Bellew: I was fortunate to have been trained in that program with Tim. I believe very strongly that until engineers are trained thoroughly in architectural design theory it will remain a struggle to move collaboration forward on a broad front.
Jorg Schlaich: Architects should learn the vocabulary of structures, just as engineers should learn that of architecture to stimulate curiosity and permit a dialogue. But it is impossible for one person to learn both fields if we do not want to produce laymen who just copy what has been done before. I need all my time to keep me up to date and am happy to be guided where I lack the knowledge. The engineer's education is probably too analytical/inductive rather than synthetical/deductive. In fact, engineers should be taught conceptual design as early as the university level. The way Zaha Hadid and Frank Gehry taught architecture students in their studios at Yale, engineering professors must teach their students. I did so for 20 years—it was a burden and a joy.
Robert Silman: Yes, a certain amount of architecture should be taught to engineers, but a traditional design course would be futile. Perhaps some history and architectural technology—how buildings fit together—would be useful.
Timothy MacFarlane: Working within architecture is only one of many routes an engineering graduate can take. Unfortunately much of the engineer's education is geared to providing common-denominator skills. My own interest in architecture led me to teach at architectural schools, which is how I got my architectural education.
Thomas Auer: For instance, there is also a deficit in the education of mechanical engineers, and more architects should be taught in environmental design of buildings. Highly glazed buildings without shading devices are not environmentally friendly, even though they are portrayed as such in architecture magazines. This does not mean glazing shouldn't be used in buildings, just that it must be used sensitively and intelligently.

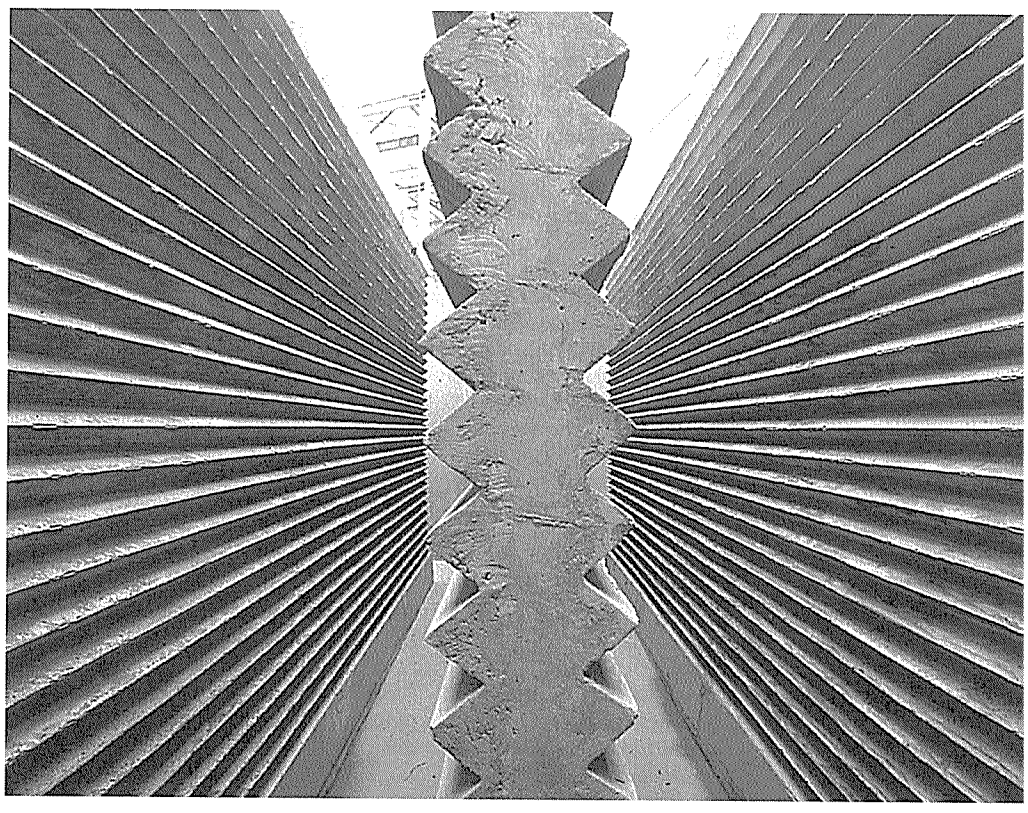
Nina Rappaport: Why is it that in the past ten years infrastructure work in Europe has been more artistic than in the United States? Why does European engineering seem to be more integrated with architecture than it does here? And how is it that more architects there—such as Norman Foster, Nicholas Grimshaw, and Ben van Berkel—are involved with infrastructure?
Robert Silman: European clients seem to be seeking this sort of design more than U.S. clients. When U.S. clients want this type of architecture, they seem to go to Europe for it. Most of our building work is driven by economics, either through real estate interests or through nonprofits or government agencies intent on providing economically "safe" designs. In the field of high-rise engineering, the U.S. engineers are still the best in the world. It is in the area of form-finding and structural/architectural detailing that the Europeans are more advanced. They simply have the market for it, perhaps because they have created it.
James Axley: The nature of project funding is the possible, if uninteresting, reason for this. European governments have more socially directed programs in which there is project funding to support a collaborative team approach to design from the start. Civil and building technology is held in much higher esteem and has greater political clout in Europe than here simply because Europe had to rebuild after WWII, whereas the United States directed its funding to aerospace and war technologies. Research-and-development funds are not only more generously provided in Europe but are better managed and coordinated. And there happen to be great engineers there who emerged because of this larger focus.
Thomas Auer: The best structural engineers in Europe look for an architect to work with them on the infrastructure. The system in the United States is probably more functional than Europe, but that is not a reason for bad design.
Patrick Bellew: Another reason less infrastructure design is occurring in the United States is that fuel costs are low, so there is less incentive to pursue more integrated solutions to produce more environmentally friendly buildings. In Europe our fixed fuel costs are much higher, and the social impetus behind conservation, recycling, and so on has never been stronger. This tends to lend weight to the movement for integration of building solutions, because then we can maybe, just maybe, begin to turn around the impending global crisis that will otherwise envelop us all.
Timothy MacFarlane: A lot of it has to do with fees as well. There is an unfortunate but understandable inclination for a lead consultant with responsibility for choosing and paying subconsultants to minimize their roles and fees. The result is obvious: Pay peanuts and get monkeys. In our experience in the United States, when we are employed by the architect, the financial constraints have led us to reconsider the way we work. I would not like to be a monkey, but I would like to be properly rewarded for being a design engineer. Architects working on large infrastructure projects need the same encouragement, but the client has to be willing to reconsider how they appoint the consultants. A subservient relationship is a poor recipe for well-integrated design.

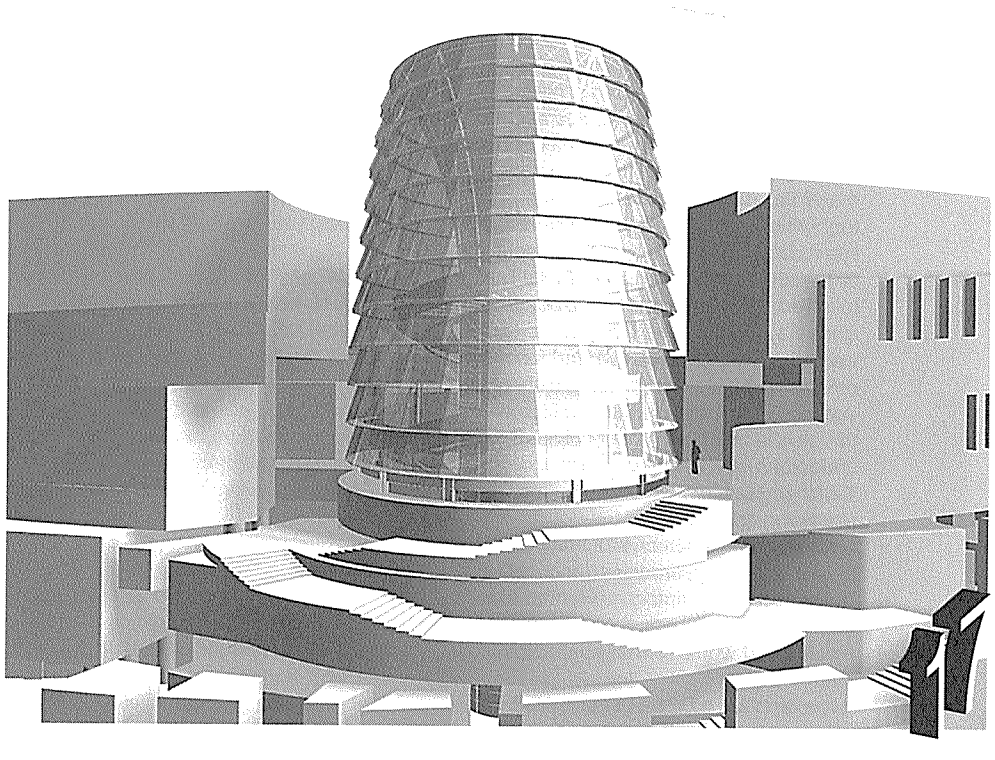
From top: Schlaich Bergman and Partner, Geschichte Building, Germany, 2001. Photograph courtesy of Schlaich Bergman and Partner

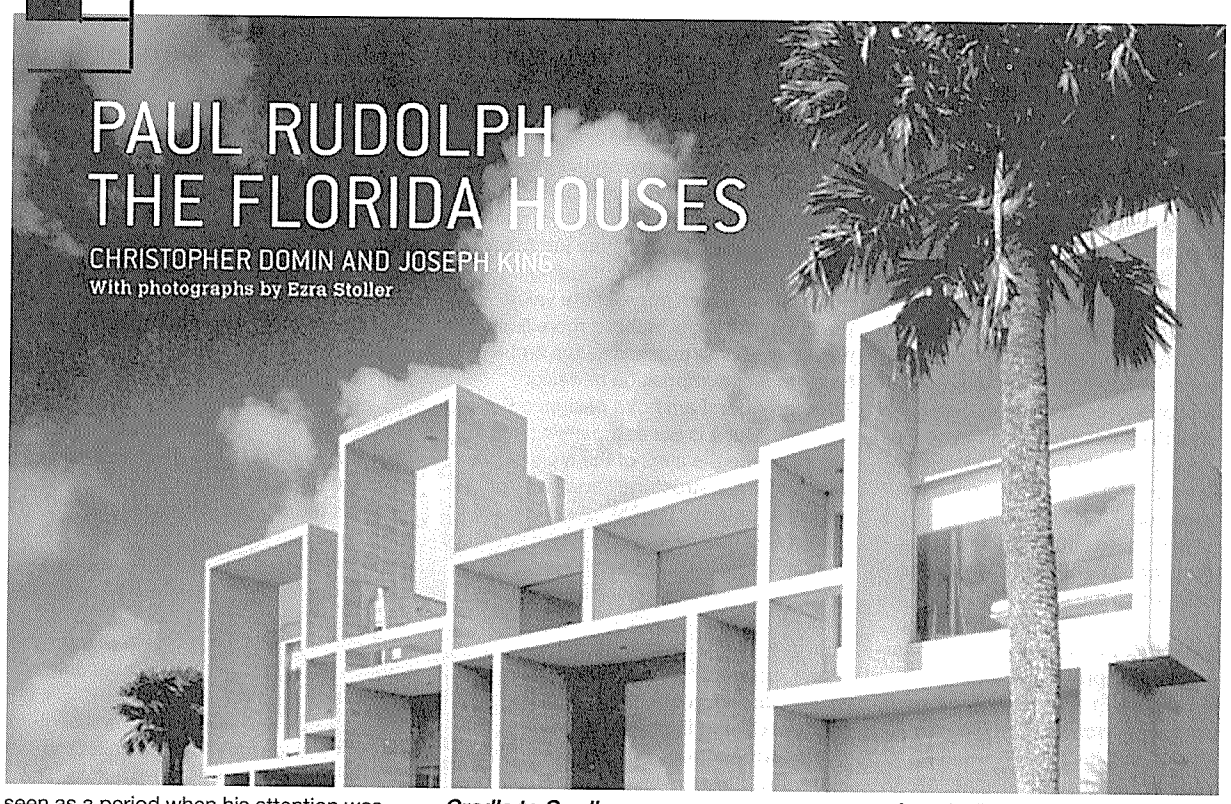
Atelier Ten, Insulating Labrinth Wall, Federation Square, Melbourne, Australia, 2001. Photograph courtesy of Atelier Ten

Dewhurst, MacFarlane & Partners, Mori Arts Center, Roppongi, Tokyo, Japan, 2002. Photograph courtesy of Dewhurst, MacFarlane & Partners









Paul Rudolph: The Florida Houses
By Christopher Domin and Joseph King, Princeton Architectural Press, 2002, Cloth, 256 pp., $40.00

Paul Rudolph is back in print. With scarcely anything for a quarter century, we are now surrounded by contemporary publications. John Howey's *The Sarasota School of Architecture 1941–1966* started this revival, followed by Tony Monk's monograph, *The Art and Architecture of Paul Rudolph,* and the Building Blocks series edition of Ezra Stoller's photographs of the Art & Architecture Building. The most recent addition, *Paul Rudolph: The Florida Houses*, by Christopher Domin and Joseph King, focuses new attention on Rudolph's seminal work, produced at the beginning of his career. As the first publication to make use of the newly created Paul Rudolph Archive at the Library of Congress, it skillfully reconstructs a 20-year period of extraordinary exploration and development. The authors have assembled Rudolph's presentation drawings and vintage photographs for each project, and the historical and cultural context for each period is recreated in essays and in-depth building descriptions.

Beginning in 1941 and intermittently until 1952, Rudolph worked with Ralph Twitchell, who had established a design-build practice in Sarasota. After studying functionalism at Harvard with Walter Gropius and observing Marcel Breuer's careful approach to form and materiality, Rudolph returned to Florida determined to create a distinctly American Modernism. Sensitive to the extreme climate and delicate ecology of the Florida coast, the work of the partnership is carefully sited, often using structural piers to suspend the floor above the earth. Initially utilizing a system of Cypress wooden-plank roofs, the projects continually evolved through Rudolph's restless experimentation. The Knott Residence, with its plywood vaults, and the Healy Cocoon House, with a catenary roof, would conclude the work of the partnership. The authors remind us of Rudolph's increasing international reputation, as well as the stress between his creative ambitions and Twitchell's steady pragmatism, which ultimately brought their collaboration to an end.

Thus in 1952 Rudolph began his independent practice with the Walker Guest House. Structurally light, tectonically simple, and seductively clever, it is a handyman's Farnsworth House. Beautifully photographed by Stoller, its extensive exposure caught the public's attention, and opportunities from clients like Philip Hiss followed. The Umbrella House, commissioned by Hiss, moved Rudolph beyond the limits of his Gropius-inspired functional determinism. The spatial complexity of the interior volume and the studied facade of this simple box were more richly developed and confidently handled than in his Twitchell years. As Domin observes, "The technological aspects of the design are downplayed in deference to a larger set of issues. History, urbanism, and regionalism are now the primary referents." This breakthrough allowed new concerns to emerge that would remain central to his mature work.

Rudolph's time in Sarasota is commonly seen as a period when his attention was focused on the design of discreet domestic spaces. However, as the authors point out in the book's conclusion, Rudolph's first important public buildings are also part of his early practice. This connection could have been developed further. For example, the 1957 Harkavy House, designed concurrently with the Jewett Art Center, has a similar facade dominated by a projecting steel screen that operates at a public scale while delicately protecting a transparent curtain wall behind it, thus creating a wall that is at once thick and thin, open and closed. Likewise, in the spatial development of the Umbrella House one sees the beginnings of the mature public buildings. A double-height glass wall flanked by three spatially distinct elevations dominates the central hall of the house. If this room were mirrored around the reflective glass wall, the space would be a miniature version of the gallery at the A&A Building. Ideas present within the houses are developed in the later public buildings, bonding the domestic work to the institutional. One was not possible without the other.

The book reveals how photography and publicity were critical to the meteoric rise of Rudolph's early career. In response to the needs and desires of magazine editors, the drawings and photographs of these houses were consciously constructed to anticipate the printed page. The sophisticated leisure of postwar domesticity proposed in Rudolph's exquisite renderings was realized in the world created in each of Stoller's photographs. The complexity of this cultural construction and our contemporary attraction to it is carefully analyzed in Robert Bruegmann's introduction to the book. Although this subjective imagery served Rudolph well, it obviously does not completely describe each of the projects. This poses a problem, because the authors rely exclusively on this vintage imagery. Seductive photographs and sexy renderings dominate the page and leave the unscaled plans too small to decipher. By sacrificing information, the beauty of the book does not always serve the intelligence of the text.

The authors, publisher, and archivists have made this valuable material available for the first time in many years and added significant new contributions to our understanding of it. The new attention being brought to Rudolph's early domestic work is both timely and important. It is in fact essential to a complete understanding of his architecture.

—John Woell ('95)
Woell is an architect at Steven Harris Architects, in New York.

Cradle to Cradle
By William McDonough and Michael Braungart, North Point Press of Farrar, Straus and Giroux, New York, 2002, Cloth, 193 pp., $25.00

Pick up this book and the first thing you notice is the weight. Architect William McDonough ('76) and his partner, chemist Michael Braungart, have challenged the concept of the paperback with a block of polymer-blend pages, infinitely recyclable as book "paper," to illustrate a central theme of *Cradle to Cradle*. It's waterproof (you can read it in the bathtub), uses high-heat water-soluble ink safe enough to go down the drain, doesn't fade or smudge, is pure eco-effective—and it's heavy. In other words, a lot of creative thinking went into a product that looks and feels like a mere paperback but may save the world.

McDonough and Braungart introduce their theories by way of historical context. The industrial revolution resulted in our current state of environmental alarm: toxic waste, global warming, diminishing resources. The process of industry was never designed to be anything but efficient, a situation that the authors challenge us to remedy. The contemporary "cradle-to-grave" method of production—a short-lived, dead-end cycle that takes in resources and eventuates waste, both in the process of making and at the end of the product's useful life—is described as itself obsolete.

Upon realizing in the 1960s that the environment was in rapid decline, environmentalism started to take hold in industrialized nations. As the authors describe it, eco-efficiency as preached by environmentalists—a call to reduce, reuse, and recycle—pits environmentalists against industry in the form of regulation. As the authors say, "Such proscriptions can be seen as a kind of guilt management for our collective sins, a familiar placebo in Western culture." They explain that conventional recycling is really "down-cycling," degrading the quality of the materials as they're processed together, a practice that results in a less useful material each time.

McDonough and Braungart submit a new way of looking at environmentalism. Eco-effectiveness challenges industry leaders and designers to consider the ingredients, methods, potential future uses, and energy sources used in production and design. They're asking us to rethink things from the start, and they use nature as the best example of a perpetual and self-contained nondestructive system. They describe a "waste-equals-food" approach, where one separates industrial production into "biological nutrients"—those safe to go back in the environment—and "technological nutrients," which are expected to remain in the industrial complex forever (such as the material this book is made from) and are too valuable and nonbiodegradable to be reintroduced into nature. This is cradle-to-cradle design: products that use a hybrid of the two different "nutrients" are designed to be disassembled as they enter back into the industrial process.

Using a conventional approach to recycling, it would be difficult to convince today's "consumer" to return items back to industry. The authors offer the "product of service": "products containing valuable technical nutrients—cars, televisions, carpeting, computers, and refrigerators"—would be reconceived as services. "When they finish with the product, or are simply ready to upgrade to a newer version, the manufacturer replaces it, taking the old model back, breaking it down, and using its complex materials as food for new products."

Okay, so maybe some of their ideas will be hard to implement. But McDonough and Braungart's basic tenet is that commerce doesn't have to take a backseat to ecology; that when you weigh the cost benefits and environmental benefits in the same equation, the results are positive for both sides. And they have good examples to show that some in industry are already willing to make the first steps toward implementing their ideas—clients such as Ford, Nike, and the City of Chicago.

So given the grandeur of the theories and the promise of a brighter, less wasteful future, why did this book feel like a chore to get through? Perhaps it's because the ideas are introduced through negative example: where we are now is really bad. The world we inhabit is described as an environment of outgassed carcinogens, teratogens (I don't even want to know what they are), and endocrine inhibitors—of running shoes abrading toxic dust. As true as I'm sure it is, it sounds alarmist and darkens the tone of the book. These are the ideas of optimism, and delivering them through preachy finger-wagging lessens their impact.

That's sad, because most of this stuff is groundbreaking and original. (Kevin Kelly also discusses recycling issues in some of his writings, and a lot of the work toward this of course began in the 1960s.) We are given a synergistic view of a utopia in which industry emulates nature, for profit. We in design and business are spoken to directly and given practical applications and ways of thinking about our work. It's about choice. As a product designer and architect, I can embrace some of the ideas in *Cradle to Cradle*. I've used ingredients in some of my products that are an outgassing nightmare. I haven't given ample consideration to solar gain, sustainable resources, and natural airflow in my building design. It's easy to forget, given all the other design constraints—not the least of which are client-driven—that it takes effort to make the right choices. And it's time to learn what those choices are. Reading this book is a good start. It may be a bit heavy, but you can handle it.

—Stuart Basseches ('85)
Basseches is an architect and product designer in the firm Bi-Product, based in New York.

PERSPECTA 33
Mining Autonomy

Perspecta 33: Mining Autonomy
Edited by Michael Osman ('01), Adam Ruedig ('01), Matthew Seidel('01), and Lisa Tilney ('01), MIT Press, 2002, Cloth, 120 pp., $20.00

Perspecta has a remarkable history and legacy as it continues to hold a valuable place in architectural publishing as a vehicle through which emerging professionals cast their own editorial gaze onto the contemporary scene. One effect of a youthful and changing editorial lineup has been an ongoing examination of architecture's disciplinary and professional specificity, as well as its limits, as each editorial group frames an agenda for architecture after high Modernism. *Perspecta 33: Mining Autonomy* returns to debates from the late 1960s and early '70s to find a critical vocation when faced with what the editors poignantly refer to as "disciplinary uncertainty." Indeed their investigation of the discourse of autonomy not only invokes many of the key participants of the Institute for Architecture and Urban Studies who had appeared in earlier issues of *Perspecta* but also examines practices that look to the outside of the discipline in a different manner, particularly to encounters with electronic technologies. The editors' project is at the same time a contemporary and optimistic one that updates these disciplinary fault lines to suggest prospects for architectural practice.

Positing a new modality of autonomy—one located not at what they refer to as the "autonomous center" but at the limits of the discipline—the editors propose a critical practice at the margins, a position they see as distinct from either architecture's withdrawal from, or uncritical assimilation to, the conditions of late capitalism. The "periphery of the architectural discipline" to which they refer and, in fact, the center/periphery opposition that they invoke, are far from self-evident within the current context. Furthermore, the editors' notion of criticality remains in need of explication, a situation that elicits a brief interjection by Lauren Kogod (in a discussion regarding a portfolio of recent projects) clarifying that what is perhaps at stake is no longer autonomy as critical but a criticism of autonomy. Despite this occasional confusion with regard to the historical specificity of theoretical terms, what stands out as the important and timely ambition of the project is the insistence that a critical attitude remains of consequence to architecture, providing a welcome refusal of the "postcritical" agenda for practice.

The first half of the volume engages the discourse of autonomy (through its legacy or refusal) via texts by Hubert Damisch, Anthony Vidler, Stanford Anderson, Diane Y. Ghirardo, Christopher Wood, Robert Somol, and Sarah Whiting, and a portfolio discussion between K. Michael Hays, Kogod, and the editors. The second half includes a range of issues facing architecture as it encounters other discourses, technologies, and sociopolitical and cultural forces, with texts by Elizabeth Grosz, Bernard Cache, George Wagner, Michael Stanton, Hashim Sarkis, and Neal Leach. One of the most compelling issues in *Mining Autonomy* is the question posed in the editorial statement regarding whether "examples of contemporary critical work [have] surpassed the usefulness of the autonomy model." If autonomy, as the editors rightfully note, "was considered an assertion against the perceived bankruptcy of mass culture"—and if, as a number of authors also discuss—the practice of architecture always and already involves a complex relation to the forces of late capitalism (whether more so than other forms of aesthetic practice remains to me an open question), then how would one specifically characterize and discuss those "critical" practices located "at the interface between autonomous withdrawal and cultural determination"? The mediating function could not simply be a translating mechanism, as they seem to suggest. This would leave them in the postcritical camp, which—as whimsically noted by a contributor to *ANY* 23—enjoys "leaving the heavy stuff behind." For if autonomy is to be adequately surpassed, which seems historically inevitable given the increasing foreclosure of late capitalism, then its replacement would have the burden of forging a strategic and political, if nondeterministic, vocation for the discipline.

The difficulty is registered in the last sentence of Somol and Whiting's contribution. They posit—unexpectedly, given what precedes the remark—that their "projective program does not necessarily entail a capitulation to market forces but actually respects or reorganizes multiple economies, ecologies, information systems, and social groups," but fail to demonstrate how this capitulation is avoided. Although I would agree that practices engaging forces of postmodernization need not necessarily be identified with assimilation and neoliberalism (hence the cogency of articulating autonomy and immersion), questions remain for me as a theorist regarding architects' self-positioning within those very forces—in particular questions as to how they articulate a political relation to those conditions. It is in this regard that the search for traces of engagement within the autonomy model—an insistence on its political cast through historical or metonymic linkages, as in the texts by Damisch and Vidler—emerge as one strategy. Another might be read in Hays's attempts to reconcile Somol's position with his own more radical agenda (through a semiautonomous critical model that opens onto other aesthetic modalities). Moreover, in the first half of the volume, autonomy is positioned not simply as a critical legacy arising out of Modernism but as virtually the *only* form of criticality within Modernism and its progeny. Questions remain regarding what practices have not been addressed in this picture and why. Other overtly political lines of flight from within architecture might have been useful to rethinking contemporary strategies, practices that not only acknowledge the forces within which the discipline necessarily operates but hold out at least some residual utopian notion of actively transforming that condition. That *Mining Autonomy* raises so many issues is a measure of its contribution to contemporary debates (so many questions could never be answered in one volume), and I look forward to the next installment.

—Felicity Scott

Scott is coeditor of Grey Room *and teaches art history at Bard College.*

Modernists Anonymous

On February 14, 2002, a roundtable discussion was held on Arverne in conjunction with the exhibition.

The Architectural League of New York invited four teams to submit alternative proposals for housing on the largest undeveloped site in New York currently under development by Housing, Preservation & Development (HPD). The roundtable promised to bring the teams into dialogue about innovation in housing in the United States with each other, the developer, and Ehrenkrantz, Eckstut & Kuhn (EE&K), the firm already selected for the project.

The scenario was simple: according to assistant commissioner James Lima, HPD was seeking a way to "up the ante on access to design thinking," and the four invited teams were looking for a way to pursue architectural research. The roundtable—moderated by Rosalie Genevro, executive director of the Architectural League—addressed the increasing rift between the pragmatic world of the developer and the research-oriented one of academia, with the goal of bridging this gap and providing ways in which academia and the proposals by CASE, City College, Columbia, and Yale could influence HPD and the profession as a whole.

The team proposals eschewed formal design research for systems of design based on diagrams, temporal organizations, market research, and technological catalogs. Bruce Fischer, of CASE, presented a scheme that looked at the regional scale of New York in the context of future economic growth juxtaposed with the specifics of the small-scale villa.This project's strength was not so much in its pseudo-economic model but in its attempt to reorganize the site into an infrastructure for future large-scale development.

The Columbia team's more focused research of market forces and housing produced a rich set of theoretical questions. Michael Bell asked, "How do we satisfy this parcelization while also allowing an 'unfolding' into the landscape?" Yet the irony of the market-research approach to architecture is its debilitating effect on the generation of form. Where (and when) does one begin the design and construction of a ten-year housing development in a market on a two-month cycle, especially, as Bell attests, "when design does not have time to enter into it".

Further compounding the notion of authorship, the Yale team—represented by Deborah Berke, Peggy Deamer, Keller Easterling, and Diana Balmori—proposed "a series of organizational systems with no fixed master-plan objective" in the shape of a "reticulating line" as a street that formed interlocking builtscape and landscape fingers and a natural filtration system. Well-presented material samples in the exhibition prompted Genevro to ask, "If you do not do the master plan, who lays it out in the end?"

The specificity of Arverne's landscape became the focus of the City College team or, as Douglas Gauthier, representing System Architects and SHoP, put it, to "make architecture happen on the beach and within the beach." Michael Sorkin extended this concept by providing the most identifiable architecture for Arverne, in the hopes of returning to Rockaways' heyday. His rhetoric of nostalgia metamorphosed into a fantasy of representation, recalling the stage sets for the *Lord of the Rings*. Although its excessiveness became a welcome change from the hesitancy to form, its playful indulgence without the rhetoric of research left it inaccessible as a viable urban strategy.

Almost across the board the proposals emphasized the interstitial and incomplete character of Arverne, reading the site as part of a larger urban network and as an overlooked local landscape. In rethinking the city, the proposals generated numerous ideas at an abstract level but left form untheorized. And although resolutely contemporary, the repetition of rendered perspectives that accompanied the presentations appeared to coalesce into a generic blur. Although the projects offered an alternative to the nostalgic traditionalism of New Urbanist architecture, the end result was a kind of anonymous Modernism that lacked aesthetic bite, a legacy of the strong ideology of postwar urbanism and housing.

In contrast, EE&K's scheme typified the normative approach to place. Their watercolor technique provided a recognizable representation for traditional myths of community. Yet in rhetoric the proposals were nearly indistinguishable. Peter Cavaluzzi, of EE&K, argued that, like the Yale team, his firm had created an "open" scheme. The difference was ideological. Theirs also portrayed no second thoughts about the role architecture plays in peoples' lives. The financing and zoning of private streets and commercial rules ensure that the community remains cohesive and private; and traditional architectural contributes to the making of "place." In this light, Lima admonished the research teams' failure to clearly advocate design, presenting instead a skeptical role for architecture in contemporary society. Indeed the architects seemed unsure of where design happens. Or, as Gauthier asked, "When does the crowbar of architecture come in? At the beginning of the process? At the end?"

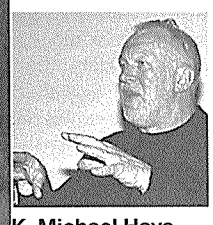
This strategy left the teams open to a traditionalist's critique. Dean Stern argued, "None of the schemes address town-planning ideas of the past century. The teams are focused on object fixation, not on the space in between." In response Bell argued, "These are thematizations of projects rather than 'actual' projects. They are partial responses by the architects, but could they be anything else?" For Easterling the generative aspect of the symposium was the large number of "species of documents that were produced. One resource from the architecture schools is experimentation." Indeed schools can bring a level of speculation into the discussion beyond that of trying to get it right. Yet perhaps the problem of the proposals was not that they explored an alternative approach but that they did not go far enough. Does the gap between the profession and academia need bridging? Or might the complete indulgence in the speculative process extend the divide, allowing for more compelling alternate realities to emerge?

—Noah Biklen ('02) and Bimal Mendis ('02)

Spring Lectures

Lise Anne Couture ('86)
Bishop Visiting Professor
January 14, 2002
"Convergences"

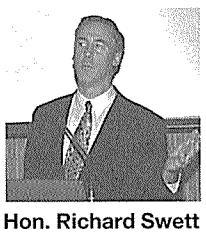
For the Stock Exchange Project there was the pleasure for the architect in indulging in and learning about all of these different worlds—finance, business, and design. We can be in more than one place at the same time. As architects we are always interested in how one moves through and understands a space. . . . Now people have more than one workplace. There is the place where they work and the space of the computer screen that they look at, designed by graphic designers and computer engineers. . . . It is in the nature of the architect to be visionary, not just visual, so that it made sense to us that architects [should be asked to] design the virtual Stock Exchange. . . . Our use of materials is a way to harness possibilities that we uncover in more experimental work. It is a way to grasp the boundary between real and cyber space, and to engage occupants to be hyperaware, as well as to move away from superficiality or complied depth of networks. We are constantly blurring boundaries between public and private or collapsing realities together. . . . The more we become immersed in virtual reality, the more vibrant reality becomes. When they do turn away what do they get? More tactility.



K. Michael Hays
Myriam Bellazoug Lecturer
January 24, 2002
"The Autonomy Effect, or Architecture at Its End"

Lecture delivered to mark the occasion of the Publication of Perspecta 33: Mining Autonomy, *edited by Michael Osman, Adam Ruedig, Matthew Siedel, and Lisa Tilney (MIT Press, 2002)*

Continuing the *Perspecta* project, what I want to propose here is that the recent turn toward the production of effects was implied in the autonomy thesis all along—was latent in the autonomy thesis as its necessary other. What is at stake in this story I want to tell is architecture's relation to, and its representation of, the developing forces of capitalism, though the word *capitalism* doesn't appear in the architects' explanations of their work. Rather it is the city, in a generalized form, which functions as a sign for a mode of production, as what is being represented. It is striking that the autonomy argument almost always appears together with some notion of city. . . . So I am going to suggest that the neo-avant-garde (mainly the work of Rossi, Eisenman, Hejduk, then Tschumi, Libeskind, and Koolhaas) is the form that modern architecture assumes when it has its back against the wall. To put it too dramatically, the neo-avant-garde is the form architecture assumes when it is threatened with its own dissolution. The threat, as such, comes from outside. But the process of dissolution is always integral to a certain kind of architectural project—the autonomy project. . . . Let me try to unpack this a bit: Tschumi is banking here on the main argument of the autonomy thesis. The production of architecture is the result of a specific labor, a specific practice. But the designer does not fabricate the materials he works with (this is why, according to the thesis, it is a mystification to speak of the architect as creator). The materials of architectural practice are not neutral and therefore available to a unity that is imposed upon them by the architect. It is rather that the materials of architecture, its elements and operations, preserve a specific weight and formative potential of their own. Therefore, in some sense, if the architectural system is autonomous, there is nothing that can be added to it, notwithstanding the illusion of choice. . . . At the same time, however, there is the haunting resonance that the whole thing could have been done differently, that the system set up is a fragile artifice. . . . Architecture must constantly be produced as architecture. . . . What I have suggested is that this system (on which the neo-avant-garde worked) makes sense only as a deduction from several conceptual schemes or models superimposed on one another: (1) the transformation of the city in history; (2) the city as itself a system of rationalization, commodification, and reification that produces architecture as representation; and (3) autonomy as the nexus of this representational system that is involved with the abolition of a certain project of architecture under its own internal momentum but continues to push through that project until it turns into something else. And that something else, whatever we decide it is, is what we have inherited from that moment.



Hon. Richard Swett
Roth-Symonds Lecturer
January 28, 2002
"Design as Public Policy"

One day an architect goes to heaven. He admires the design of the pearly gates, but he is in the wrong place and ends up at the gates of hell and begins designing improvements (pedestrian malls, flush toilets, etc.). He gets popular, and God calls, trying to get the architect back. . . . If designed properly, architecture enhances our relationship to our surroundings and to nature; it doesn't detract from it. Good design sustains. Lousy design degrades surrounding areas. . . . Design in Denmark and Scandinavia is highly valuable and is based on durability. It's a collaborative effort, whereas ours is a system of adversaries rather than advocacy. . . . We have narrowed our leadership role to a void. . . . Professional schools should have a one-semester course about planning boards and democratic institutions to influence students' thinking; it is a different way of speaking; debate is the coin of the realm. . . . We have to draw more effective lines between good design and good quality of life.

Phyllis Lambert,
Brendan Gill Lecturer
January 31, 2002
"Mies Moves"

I am looking at how Mies moved or approached his work . . . and the way he advanced in the language of his architecture. . . . His theory was in advance of what he could build—the glass towers were really classical. . . . He wanted to do something with a higher ethical meaning than a house or an office building. . . . At IIT Mies looked at how the body moved through space. It was a great clear span as an exoskeletal structure. He looked at movement around IIT as imaginary space, asked the observer to move, and gave the observer the freedom to move. The Stuttgart collages show how he moved, as in Einstein's films of 1925. He frames and uses montage in his own work, looking at buildings from different angles. . . . In the Seagram Building one can move through this space. Mies is going from the street, across the plaza to the lobby, and continues sequentially in a free way through the buildings.

Yung Ho Chang
February 11, 2002
"In-situ Architecture: A Chinese Practice"

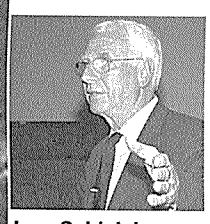
Architecture is part of the site no matter what. But there are three practices relating to site. . . . Practice one is the "soldier farmers" who use the shovel to draw a plan, and other people ram the earth to build the building. It is designed on location, using a tool both for the location and for design and construction. . . . Practice two is exploitation of construction. There is the issue of speed. So often speed is a requirement of architecture. You need overnight service, or two-hour design-while-you-wait service—design right away as a take-away. Design can be done on the spot for an architecture office or home. Practice three is how a set of drawings can be done with working drawings if you use the most conventional structural system of an 8 x 8 module design with basics. There is still a chance to deal with size, quantity, and speed. . . . Our project, "Sliding, Closing, Swing Door," in Beijing in 1998, is about how the door is used and how people interact with small architectural elements. Sculpture is only to look at, so we made something for people to interact with. . . . Does China have more to do with form or image? Is there such a thing as Chinese space? At the 1997 *Cities on the Move* exhibit in Vienna, we carved out a courtyard in the middle of the space and made an empty center for gathering. . . . The client thinks we are interested in something more important than aesthetics. We avoid confrontational discussions about forms or styles. . . . We have no control of the construction team. The client does. The client will ask to change things. The whole Chinese society is developing new things they never had before; it is better than nothing.

Will Bruder
Paul Rudolph Lecturer
March 28, 2002
"Looking Back, Looking Forward"

Curiosity is the factor that defines what an artist will become. What I believe in is the education of an artist. . . . I like to look at things and see them in a different way. I like to laugh, and I care about life from beginning to end. Many things that aren't architecture stimulate me as an architect. . . . At the core of who I am is the firm belief in art and the Bauhaus foundation. . . . The lesson from Bruce Goff is to listen to the client. Architects do work because of clients, not in spite of them. Clients can give optimism. An architect is an educator, not just at a university but in his or her work with clients. . . . I was intrigued by going to the edge of the desert; it was infinity, there was no fence line. Distance didn't change, but space and time did. What was all pristine was anarchy. . . . Another theme is how stuff happens. In Jackson, Wyoming, I was impressed by the region. As architects we should look inside those places to build for those places. This rafting school in Jackson was the building that broke all the rules as part of the rules. Constraints are no excuse not to design great architecture. It is a complicated urban building that happened in a town. It is complicated to do intelligent, complex things and weave materials, forms, space, and function all together. . . . The Phoenix Library [is] a geological metaphor: Crystal Canyon in the center, saddle bags at the side. It moves from something to something beyond. . . . I would like to do less things better.

Zaha Hadid
Eero Saarinen Visiting Professor
April 5, 2002
"Current Work"

What I have learned is that one must have a degree of humor. Mistakes are unavoidable, and we have to learn from them. Also, I see that it is important to believe in certain ideologies from early on and not give up. . . . In the Autostadt project at Wolfsburg you inhabit the structure; there are not separate rooms, but a seamless line from the structure. The floor slab is supported by columnar voids. The whole of the interior landscape is modeled as an interiorscape. There is a large terrain cutting through the spaces as uninterrupted floor. . . . In Singapore the parkscape is like a distorted grid. Usually in that city every building is an island with a tower. Instead this is a horizontal grid with spaces carved out of the hub for a larger park, so that the heritage buildings of the British colonial era keep existing in the landscape and have a meandering space around the slide of the center with an agitated roofscape. . . . The idea is that you move through the whole site—a parkland on the edge, with interesting views and light—not just a place only for work spaces but where new clusters can grow. . . .
At the Liepzig Werk for BMW [recently won in a competition], the factory was designed, and we had to place a system of operation into different parts of it. We made a landscape: one kilometer of cars and people move through the buildings with a showroom. . . . The parking goes into ribbons and peels off to be a landmark sign to the car park, where workers can park according to their work shifts. A standard conveyor is hung from the ceiling to move the car through to the body shops. . . . The new building hooks onto the adjacent factory with locker rooms and production spaces, and moves people up and around through levels on trays.



Jorg Schlaich
Gordon Smith Lecturer
April 8, 2002
"Light Structures"

Mr. Gehry is a good architect, but he knows nothing about engineering. So although he recommended me to speak here at Yale, he doesn't know anything about what I do. . . . Lightweight or light structures are the joy of engineering because they offer more possibilities that the engineer can contribute to the structure's form, and they show the flow of forces. I think it is best to reduce material and consumption of resources as long as they are more stable. And they are beautiful, and this is the point. . . . The largest cable bridge we did in Calcutta was all riveted without any welding. It was a great adventure to use local technologies, and it created labor for the people. In Hong Kong the lightweight structure is made of tensile and compressive forces. The three masts are unusual in a river used for shipping. There was a competition. We reduced the span, and thus costs, and won the competition. It was the first cable-stay bridge with three masts. . . . Lightness is of course a relative thing. . . . As engineers, the queen of our designs is the bridge, which can adapt to its special boundary conditions and landscape. Nothing is more annoying than standard bridges that are put on any site.
. . . Thinking in inversion is interesting and useful. We inverted a suspension bridge with continuous flow. It could have been a suspension bridge, but in this region in Germany they have only arch bridges. It could be a suspension bridge with one cable or one arch. One arch has a three-dimensional shape, which results in quite an interesting geometry. It was prefabricated and could only be installed for a few hours each night. One of the joys of engineering is trying new shapes, and pedestrian bridges are the right size for that. . . . We did a folding bridge with three hinges. We could have done it in one piece, but it was more effective as a movable structure. The span is only 25 meters. It opens twelve times a day. . . . What we learn from bridges we can apply to buildings, such as to the new suspension roofs for sports halls. . . . Structural engineers should not be restricted and should move freely and apply experiences from one type of project to another. . . . I believe in an order to the discipline—Tatami mats and bricks that give order to building. It is not just economy but a geometric discipline that results in clearness and beauty.

Thomas Krens
Eero Saarinen Lecturer
April 15, 2002
"Art, Architecture, and the Phenomenon of the New Museum"

The Guggenheim has embarked on a complicated project. There is clear direction, but it is not easy to explain. We are very involved with the notion of what a museum is. It is not a retail venture; it is more complex and subtle, similar to many aspects of the world. . . . We are in the entertainment business, because it all depends on whether people cross the threshold or not. . . . The art museum is fundamentally artificial because of the display of objects out of their context. It is now a necessity for museums of the twenty-first century to act as agents of agitation, information, and cultural change, even as they fulfill their traditional functions. Art is for the masses, not for a few people. . . . The only thing authentic about Las Vegas is its inauthenticity. I had no interest in this, but there can be a lesson there as it expands the concept of the museum and achieves a perfect balance with unlimited functionality. Was it possible to do something in Las Vegas as an architectural statement to challenge conventional wisdom? . . . The first (jewel box) is in the Venetian. It is 8,000 square feet with four galleries of Corten steel, both inside and out, inspired by the velvet walls of the Hermitage. These are some of the most beautiful exhibit spaces I have ever seen. Works are hung with heavy, powerful magnets. The second is 210 by 160 feet with a 71-foot ceiling. A 65-ton beam lifts and moves large sculpture. The room could contain the Frank Lloyd Wright Guggenheim (without the glass dome) inside it. It is a space that is hard to experience in photography. It is an ambitious and athletic space, and is infinitely flexible for certain types of exhibits.

Sylvia Lavin
April 18, 2002
"Plastics: It's Enough to Make Your Skin Crawl"

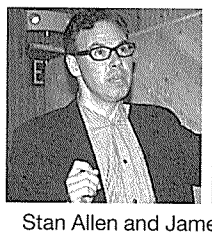
Ever since Tafuri, the engagement with the contemporary world has been essential for historians—if you don't have engagement you are moribund as a historian. There are two common projects excluded from this discourse. One is that Tafuri doesn't like the role of innovation police, those who are always seeking the new. The other is to take something that most people think is good and relevant and turn it around and make it bad. My interest in this regard is plasticity and the role of the historian to launch a project into a different context. . . . Plastic is dominant in material and form. In 1960 plastic and plasticity were both engaging and troubling in architecture. . . . Molded plastics had an adjustment to high Modernism; they defied "form, following, function" and program-driven buildings. It is not form and function but plastic, excess. . . . Plastic is everywhere except in architecture. Plasticity in the arts is the norm. It is the undoing of Modern authority. . . . Why are we so anxious about things that are in the popular world? Why does that seem to be perceived as so threatening? The common response is to turn to program. I have no form, I have intention—that is annoying, and it is boring. I am a democrat, and I give to the poor. . . . I don't want to be the ventriloquist for plastic. . . . The battle is between the significant and the materiality; the value of plastic is its capacity to launch a new territory.

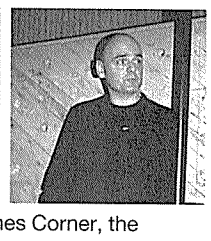
Spring Landscape Lectures 2002

The 2002 Spring Landscape Lectures, which formed the basis of Diana Balmori's "Art, Landscape, and Ecology" seminar, illustrated various aspects of the current state of the relationship between architecture, urban planning, ecology, and landscape architecture. This year's speakers —William Morrish, Stan Allen and James Corner, Margie Ruddick, Stefan Tischer, and George Hargreaves—highlighted the evolving interdependence of these fields, relatively recently reunited after Modernism effectively divorced landscape and architecture.

Landscape architects often drive the initiative that broadens the scope of architecture to include a site's ecological function and often its cultural narrative. Common to all six speakers was a wry sense of this negotiation as an uphill battle. Many described the frustration that arises from the need to convince both architects and politicians that the landscape office should be a critical part of the design process while simultaneously working with a sense of domain that includes the traditional territories of both architecture and urbanism. This recombination of specialized professions requires both the traditional diplomacy of design negotiation and the creation of a new way of communicating among design disciplines, as well as between designers and civic organizations. Landscape architects are taking on the urgent task of simplifying the articulation of complex schemes to a number of audiences without compromising the intricacy of ecological or artistic principles behind those schemes. As George Hargreaves summed up in his talk, "Right now we feel that things [landscape architecture] should be about process and not a palpable place."

William Morrish's approach to this challenge was to found a think tank on metropolitan urbanism that provides a framework for architects, landscapers, and policy makers to communicate in a way that he believes allows design to become nuanced in unprecedented ways. He argues that we should change the public perception of the landscape through "semantics and example as well as building design." To this end he proposes terms like *infraspective* to imply that we should be looking at urban and natural infrastructures together.





Stan Allen and James Corner, the Timothy J. Lenahan Lecturers, reiterated the idea that it is necessary to change how we perceive and define landscape. To this end they refer to their award-winning competition entry proposal to adapt the debris from the World Trade Center site now in the Fresh Kills landfil, itself a potential memorial for the World Trade Center collapse, as a "lifescape." We must read the landscape as a working thing, rather than as something picturesque. Strategies of layering, described through consistently straightforward diagrams, create a composite of mobility, flux, and strategic disposition. For example, a cornfield may serve as a provisional architecture for a long-term development strategy as part of a complex network of systems that programs a master plan to evolve over time without being fixed initially. According to Allen, "Landscape surfaces are performative conditions that are a factor of material condition." Allen and Corner's method of representation allowed them to track these fluid conditions without freezing them.

Like Allen and Corner, Margie Ruddick regards nature as infrastructure. Her work, which she describes as "environmentally responsible landscape," originates with natural systems and ties into cultural and economic conditions. With projects in India and China, Ruddick illustrated landscape as a network of cultural information as well as of ecological systems.

Stefan Tischer's talk, "Memory into Site," framed landscape as a bearer of cultural memory at all scales. His landscape plan for a site north of Berlin, where the largest WWII women's concentration camp stood, is about the exposure of human history through landscape. Through revealing the larger infrastructure systems embedded in the landscape, Tischer strives to "make a design that gives you maximum information without trying to manipulate you emotionally."

In the final lecture of the series, George Hargreaves reiterated what speakers before him had demonstrated in countless projects: when the definition of landscape is broadened so that even small projects aim to be explicitly tied to ecological systems, it is self-evident that landscape practitioners must accept the responsibility of their role as shapers of urban infrastructures. As the physical scale of landscape projects increase, landscape architects must operate comprehensively in terms of "space, structure, surface, and program."

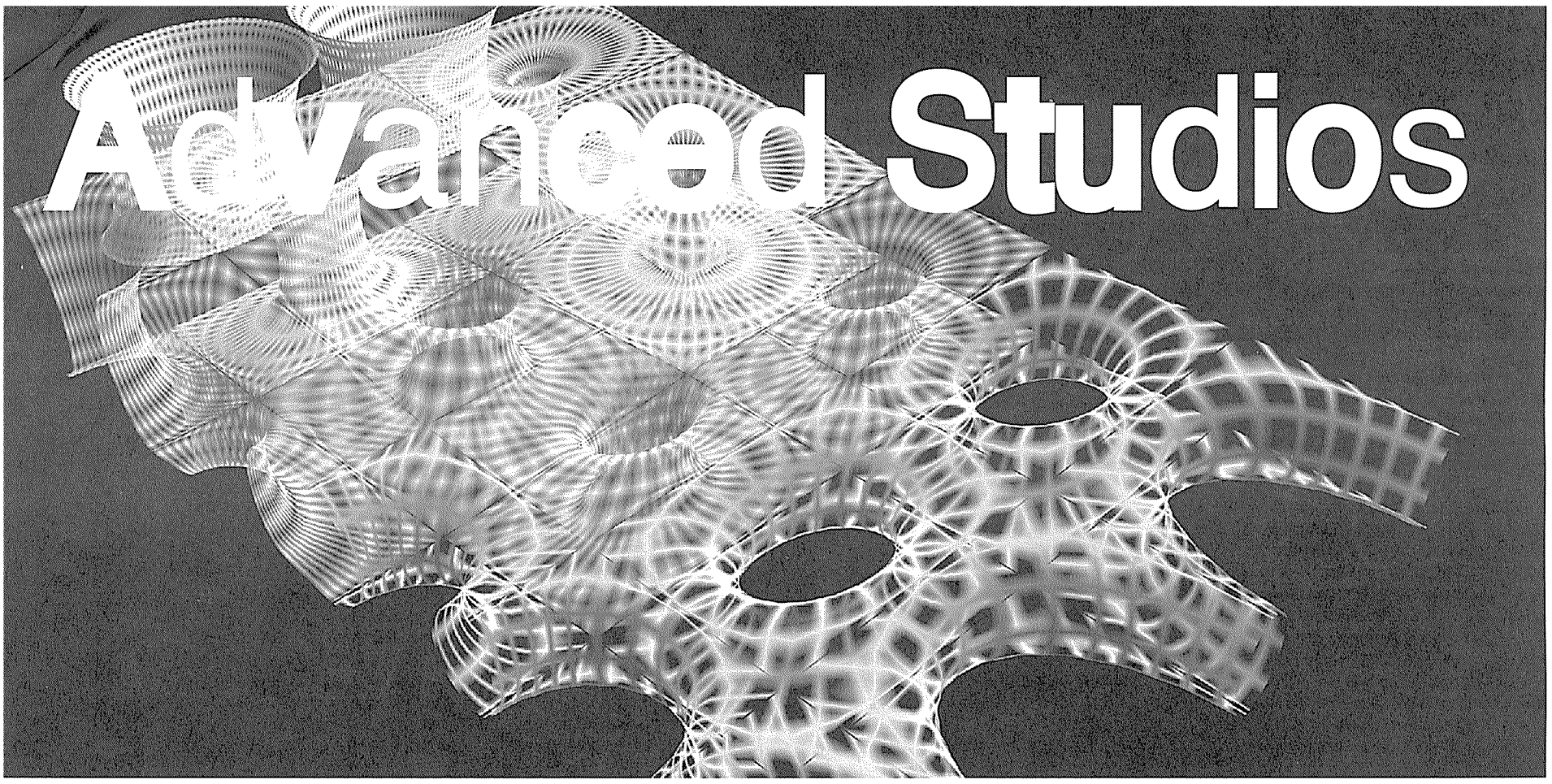
Going beyond the current landscape-architecture projects that integrate ecology into the traditional architect's concept of site—such as phytoremediation of brownfields and sculpting topography to manage rainwater—the landscape architect emerges as the one who orchestrates and articulates the new significant site configurations.

—Cythnia Barton ('02)

Photographs of lecturers by Victoria Partridge, Sarah Lavery, and John Jacobson

Background photograph of Hastings Hall wall by Justine Kwok ('03), 2002

Advanced Studios



The spring 2002 advanced studios contended with issues of rebuilding downtown New York and design projects ranging from individual buildings to large-scale planning schemes. Studio-based travel took students far and wide from Los Angeles and Madrid to Turkey and India.

Lise Anne Couture

Bishop visiting professor Lise Anne Couture ('86), assisted by Mark Gage ('01), explored the Madrid plan for the 2012 Olympic games, incorporating media and technology within the sports venues and integrating future infrastructure for the city.

The studio focused on the impact of media and technology on the programmatic and spatial aspects of the Olympic games as well as how the event could transform a city and leave structures of value. After studying the Madrid Olympic master plan and visiting the 250-hectare site on the edge of the city, students returned to Yale to harness Maya computer-program rendering techniques for their media-driven schemes. Each student selected a section of the site and a sports event, often combining them in new juxtapositions in the Olympic Park. A final jury of Diana Balmori, Peter De Bretteville, Chris Glaisek ('96), William MacDonald, Ed Mitchell, and Hani Rashid not only discussed the projects but also the pros and cons of designing with the computer. The students presented visionary concepts for conceiving the Olympic games' dependent infrastructure, weaving of events, public spaces, transportation, circulation, urban development, and integrated programs, not forgetting the practicalities of the best viewing positions, camera viewpoints, security, and the extravaganza's cost.

Robert McClure explored the design of a media center with a corporate-sponsored linear development evolving into a transportation structure as an armature for advertising, which Balmori viewed as a "building becoming a bridge or a form zooming through the forest." Picking up where McClure left off, Jason Carlow meshed infrastructure with an event—the modern pentathlon—and focused on the future landscape infrastructure more than the media. Mitchell stated, "The marathon is great because it can rewrite the image of the city. There is a lot of camera time that the Olympics provide for a global network so that the city can show itself off, but you are not taking advantage of this." The spatial choreography was of interest to MacDonald, because the project does not have to be based simply on a linear sequence but on "the qualities of space that the spectators would be moving through."

The future life of the structures resulted in flexible and adaptable elements; ideas for modular buildings, for example, could become post-Olympic showcases for new technologies. Eli Huge's aquatic facilities and soccer field emphasized the idea of a human-performance laboratory, connecting swimming, diving, and soccer with a new fast-skin clothing product. Igor Siddiqui designed bleachers in extrusions that connected to the various water sports through pools, a plan that Glaisek saw as adaptable to post-Olympic whitewater rafting. Jonathan Fritz's use of special animation techniques to illustrate moving sidewalks through the site led Rashid to state that he had "given over to the seductiveness of the computer. You have very provocative ideas. . . .Why not allow the computer to become part of the research tools in the first place? It could be used a lot earlier." Dean Stern replied, "What is more important, the presentation or the ideas?"

Greg Lynn

Davenport visiting professor Greg Lynn, with José Sanchez, based his studio's project on the competition brief for the expansion of the Kunstmuseum in St. Gallen, Switzerland, which combines natural history collections with displays of avant-garde art. Using the brief as a way to dissect issues of ornament, decoration, abstraction, and the spatial effects of architecture, they did not focus on engaging the program or site.

The students began their projects with formal and technological issues rather than cultural paradigms or typologies to design a surface for the museum's extension. The use of CAD-CAM modeling combined with the architecture school's new CNC mill gave a physical presence to the process, as the model-making process was similar to creating a prototype. The approaches focused on surface extension as topography, landscape, deformable curving envelopes, and tubular spaces. They studied architectural precedents as part of the new paradigm of surface geometry, including panelization and subdivision, component elements, window and door apertures, and how surface can work with structural integrity while incorporating decorative possibilities. In addition, there were restrictions on the site: the addition could not touch the walls of the historic building, and some spaces had to be underground.

Sarah Strauss's surface formed a flat facade, creating a wall and a skylight system with laminated glass tubes, plastic tubes, and concrete tubes to close the gap between the new and the old buildings, which Jeffrey Kipnis on the jury along with Peggy Deamer, museum director Claudia Gould, art historian Irving Lavin, Robert Stern, and Stanley Tigerman ('60), found interesting because the "tubes fold up to become the plane." But Kipnis (who gave a similar studio at Columbia from a cultural standpoint) expressed concern about treating the surface as a sign, which "has to be avoided at all costs." In Kayin Tse's project, which delaminated one surface, Lavin found the "dramatic act of transforming the facade remarkable as a way of generating a result." Kipnis felt that "regardless of the pyrotechnics of design, it maintains the integrity of surface as well as all of the operations of differentiation of space and structure, and relationship of the building to the ground . . . in terms of that conceptual surface, independent of any of the typological systems."

Ameet Hiremath found a classical, ornamental, and structural typology using hollowed-out columns so that structure, mass, and decoration worked harmoniously, which Lynn likened to Horta and Guimard's work. Deamer observed that the struggle is "how you take an idea about surface and let that organize more than just surface." Surface here, for Deamer, "seems to yield to the logic of the section and the spaces. What Ameet proposes by approaching decoration—what the studio proposed—is that we shouldn't be scared of it." Stern noted that Lynn uses the question about decoration to imply that there is something more valuable when decoration comes out of a construction system than decoration that is applied. But Stern said he could "see no argument one way or the other for one being better than the other." Kipnis agreed that Lynn's "whole architecture is staked on that. The idea of the studio relates to the evolution of geometry into topology and therefore stages a new social setting for art, which then has performative implications on the work."

The optimization of surface as well as the instrumentation of surface through technology and its reflection in the architecture was evident in Jon Nafziger's project as he developed a flexible surface panelization system that would fit together in any way. Lynn argued that these projects "should be like mathematics, where the new developments subsume all knowledge of previous systems."

Deborah Berke

Deborah Berke, with Maitland Jones ('92), challenged students to design a building for the Department of Sculpture at Yale as a way to investigate how and whether artistic expression can be taught—and, if so, what kind of environment is best suited to that end.

The students not only designed the studio spaces in the building as part of the Arts Campus on York and Chapel Streets but also support spaces such as storage, wash rooms, common spaces, classrooms, lecture halls, and exhibition and crit spaces, which are often overlooked in schools as merely appendages to the studios. In presentations to jurors Roger Duffy, Charles Gwathmey ('62), sculptor Kara Hamilton, Joel Sanders, and dean of sculpture Joe Scanlon, students investigated art pedagogy and formal expression.

Rain Minney envisioned students and faculty as collaborators, proposing a structure that incorporated flexibility into checkerboard building facades of screens that could be modified according to spatial needs. While some thought the flexibility was copping out, others felt it foregrounded what art education is. Mutability and flexible spaces in Jiankun Jiang's building caused Sanders to suggest eliminating the horizontal ground plane so that there could be more curves. "A mutable sweeping ramp could carry the project, and mechanical elements could operate the walls."

The location of the studios versus the support spaces and circulation was key in Hideaki Ota's project, where the three archetypes—interaction, critiquing, and showing—could be visible to everyone. Thus ramps forced people to meet, which to Hamilton, who preferred the idea of courtyards, wasn't the right place for serendipitous interaction. But how and when students want to interact became an issue even when considering whether the brushes should get washed in a public area. Gwathmey noted that the "ramp could be more than an object but a connector between all the spaces, a much more open and modulated ground floor that was less prescribed." While Dana Gulling used the courtyard as a main focus, a more hierarchical arrangement guided Olaf Recktenwald's project, where education passed through the university to students and followed individual concerns up and outward to the top. Using concrete frames for a series of permanent walls and flexible partitions for artist spaces, he explored how to accommodate the artist/user variation in lighting to change the quality of space. But Berke raised the issue of how much design is needed for artists who like to make their own spaces anyway.

Others focused on building access. Youngsoo Kwon proposed a roof for graduate studios reached independently from the exterior, which Gwathmey appreciated as "a little studio village in the air on the roof." Scanlon felt the circulation and the staircase appropriate for students to trickle down from studios and said the design was sensitive to the "shades of privacy and interaction." Accidental, scattered, and complex layouts versus orderly and systematic spaces prompted discussion of where creativity truly happens. Sanders argued for "speculation that occurs in those unforeseen places."

Steven Harris

Steven Harris, assisted by Tom Zook, investigated the nature of sustainable architecture in India on a 2,500-acre site with canyons and valleys that surrounds the village of Shilim in the western Ghats between Mumbai and Pune, in India. The project was for an eco-tourist resort actually in planning development.

After a ten-day midterm trip to the site in India as well as a thorough study of the ecology, hydrology, alternative energy, and culture of the site (which had been documented in an extensive master plan by the developer), each student selected one of five components of the program and a section of the site on which to build. The intersection between a typical spa resort (riding, yoga, and conference center) with the local culture provided a fruitful starting point. Ways of combining programs with the natural environment in sustainable architecture and the relationships among leisure time, nature, and work were made evident in the student presentations to jurors Guy Battle, Keller Easterling, Martin Finio, Gavin Hogben, site developer Vrinda Khanna, and landscape architect Margie Ruddick. Students found ways to site the buildings, and even located a new lake for the resort's water supply. Throughout the semester they consulted with the sustainable-architecture firm Battle McCarthey, which is working on the project.

The distribution of buildings over a rugged landscape and their relationship to nature (with streams running down a ravine to the valley) became the prime focus of the projects. The students designed buildings as long bar-shaped rows of objects, singular volumes, and diverse scattered forms. Some, such as Rashid Saxton, made individual buildings as prefab structures. To Hogben, Abe Ahn's design was like a "ruin, but there's a water culture," which introduced water management as part of a strategy for siting the buildings and interpreting the canyon. Hogben felt "the scheme got interesting when all of the surfaces ended up as kind of like lips on which the buildings perched. Sometimes it seems like buildings are floating on the water, and sometimes it seems that that quality is part of the management system." Dean Stern saw the horizontal forms as emulating Paul Rudolph's compositions.

Other schemes addressed how the shifting monsoon-to-drought climate would influence the landscape, as in Dana Bettinger's project, where rooms would fill with water and then be emptied again. Ruddick brought home the issues of corrosion and erosion, showing how the dam's actual location created possibilities to "sculpt the landscape in a very very aggressive way, but because of its siting in a sort of hidden location, it is quite soft."

Circulation between the structures took the form of meandering paths settled into or around the landscape and created boundaries between different uses in Kyle Bradley's project. Suejin Sung used the rice patties of the existing ecosystem as the organizing principal, pressed into one distortion as parasol roof. Jody McGuire harnessed local agriculture to integrate organic farming with the spa. Khanna observed to McGuire, "You have made a version of the real landscape. . . . You are not just taking the landscape but gave it architectural zing in order to create a better way."

As the idea of a luxury resort in India was hotly debated, Harris said, "We are looking at another idea about a spa that has a relationship to the landscape rather than the thread-count of the towel, the quality of music, and the granite on the floor. . . . It is a type of spa that should make us tune down, so that you can see other things."

Zaha Hadid

Zaha Hadid, returning to Yale as the Saarinen visiting professor, led a studio with Douglas Grieco and Wendy Ing that addressed the future of the World Trade Center site. The students generated a new formal language based on the premise that a Center for World Trade could follow the new organizational structure of today's business. Downtown could be again a dynamic place of communication and exchange.

Students analyzed the site's programmatic ingredients, possible spatial patterns, and formal principles to create large building complexes for downtown. They investigated different phenomena of the city—such as speed, water, and duration—and studied the existing commercial and residential typologies, new technologies, media, mixed use, and an international business organization to inspire their newly conceived structures.

In pairs, students presented new symbols for contemporary global life to jurors Alexander Garvin ('61), Frank Gehry, Sand Helsel, Sulan Kolatan, Simon Koumjian, William MacDonald, Alan Plattus, and Paula Sanguinetti. The jury synthesized the pragmatics of entering and exiting the building, connection to the ground, circulation, building core, subway and roadway location, safety issues, and public spaces with the more fantastic imagery of vertical programming, deformations of space, penetrable facades, and lighting effects to point to a new hybrid architecture for post-September 11 New York.

Facades and surfaces were featured prominently as Josh Coleman and Jenny Yoo and Jian Hei integrated bands of light representing the program on their building's exterior as advertising in an electric megastructure and seamlessly woven programs. Gehry commented, "Looking at the failure of urban space formally, this brings excitement and urban density." He questioned how it would work and bring people there. Garvin pointed out that "the usual answer is mixed land use. This is a different idea."

James Gayed and Jeffrey Straesser emphasized telecommuting as the next wave in combining business with residential spaces. Their building skin carried business uses and wrapped residences inside, stressing connectivity. But Gehry exclaimed, "I can't believe you are doing this—it seems so imprisoning as a model for development. It is a fun thing to play with, but wow!" Garvin questioned why anyone would want to live there. And Koumjian asked, "Why not make it the opposite way? Reprogram the skin, and the center would dissolve—and you could bring the living and working together." Kolatan would have had them "treat the facade more like a veil for layers and multiple views rather than something that is more substantial."

In other projects, building core and its potential openness intrigued students such as Jason Balecha and Pengzhan Du, who opened up their elevator cores like lanterns, allowing in light and air. MacDonald said, "What you are doing is taking a big blob as a mass and aerating it, giving a great deal of verticality and space to the city." Garvin saw it conversely as a hermetically sealed area. Stern, pleading that he didn't want to be "Mr. Life-safety," thought it "exacerbated the problem of the WTC, which is, how do you bring a huge number of people down to the ground. We now know that we need more circulation in skyscrapers." Hadid appreciated the "birdcage effect with the incredible porosity of the thin-skin steel frame, like the diagram in the bottom. It is much more transparent than solid."

Students investigated issues of scale, perforation, circulation, layering, and time. Victoria Partridge and Jenny Huang, striving to reinsert the "world" into the World Trade Center, based their project on the physical manifestation of time zones as they mapped the 24 time zones onto the building. Plattus thought that the "iconography and its instrumentation is a terrific investigation. . . . Interesting things come out that are absolutely supportive of the armature and the argument that you have set up."

Frank O. Gehry

Frank O. Gehry, assisted by Gordon Kipping, returned to Yale as the Kahn visiting professor and headed a studio that would commemorate the tragic events on the WTC site, asking the students to design a one-room space for universal use where people of all cultures could assemble and talk.

The studio's premise suggested that deterrence through understanding was the most appropriate commemoration of the tragedy. The students first analyzed contemporary art and a range of single-room spaces, from the Millennium Dome to mosques, looking at ways to keep the rain out but not be merely functional buildings. On their studio trip to Istanbul they experienced the awe-inspiring Hagia Sophia, and their visits to the New York site gave the project poignancy. In the final weeks engineer Jorg Schlaich assisted the students with the design of their structures.

Students grappled with the issue of the tragedy and how to address the political and emotional events as they presented their work to jurors Henry Cobb, Peggy Deamer, Jeffrey Kipnis, Irving Lavin, artist Frank Stella, and Stanley Tigerman. Whereas some created flowing spaces of singular forms—ribbons of space and curvilinear shapes—others made rectilinear or mazelike structures as occupiable sculptures. The discussion revolved around form-making, architectural research, and meaningful emotive space. As Gehry said, "It is not a memorial, but the idea is to explore form and design. And it is not Zaha either." In looking at Donghyun Kim's project, Stella wondered if it really had to be enclosed, but Gehry emphasized that they would just make a trellis otherwise. "I wanted them to have to deal with a building."

Many students used art and the body as points of departure. Andrew Mackie's expressionistic paintings evolved into plan and section, which Lavin compared to Borromini's ground plane and elevations. Donelle Briscoe captured the body, hoping everyone could become more embodied and feel more alive. Tigerman noted that "the love of detail and the idiosyncratic condition that you have with the structure is what we should discuss." Most felt the blue-resin model to be seductive, and Cobb believed "that kind of room is sculpture." Johnny Cruz based his project on a physical embrace and its release as fleeting time, so that the embrace became the space. Deamer felt "it would be identified as an object that is a memorial—that is not to say one is better as a field condition or as an object."

Sarah Lavery's forest of 3,240 carbon-fiber tubes on a grid system opened up to the sky and down to a space inspired by Turkish cisterns, which Lavin saw as "making an urban landscape out of this disaster." Shirly Gilat Robbins led visitors away from the site across the Hudson River to a vertical sculpture vista point. Gehry emphasized the need to look at this project's formal language, because "one of the issues with the project was to develop and evolve a language."

Emily Wilson integrated additional functions and vertical circulation systems with suspended viewing platforms and mixed-use commercial buildings, questioning how retail works with a postapocalyptic landscape. Hiang Koon Wee suggested a vertical three-day walk up his building. But Lavin refused to believe that "the WTC had consciously become a vertical pilgrimage similar to the Tower of Babel—sacrilege. It was against God because you could reach God. It was destroyed because it was heretical, which is a critical understanding of the destruction." Graffiti inspired Scott Price to create a new ground in a horizontal topographic form inscribed with human activity. Kipnis noted, "It is not just landscape as ground, but landscape that becomes roof and adds a trajectory in architectural research."

In the closing discussion Kipnis retold the ironic comment that Yamasaki, the designer of the Twin Towers, had made about the building: "It is so fragile that it will take the cooperation of the world community to maintain it." And Kipnis also noted that the project "is about the fact that architecture was implicated in a powerful way."

Thesis

The thesis option resulted in independent design projects such as Derek Warr's design for a "Digital Archive," which deployed a photographic army of tourists on a floating archive ship using the form of Sierpinski Sponge (a three-dimensional cubic fractal) as spatial repertoire in the modules of ship construction. Gabriel Fonseca's "International Border Crossing" created three scenarios for border crossings to Mexico in 2000, 2010, and 2020 and investigated how the stations were made, used, and developed with the influence of NAFTA, commerce, the stock market, and environmental issues. Michael Balagur's "Howlarium: An Investigation of Poetry as a Site for Architecture" multiplied the effects of poetry through architecture using the intersection of two diagrams: *Howl* by Allen Ginsberg and New York City's tenement building, subway platform, and street grid. Cythnia Barton investigated emergency and temporary shelters for migration and refugee border sites, especially as they are deployed, organized, and built in India.

MED

MED final projects included Joseph Ferrucci's research, "Italy on the Move: The Role of the Railway Under Fascism," which investigated the Italian railway system during Fascism and its impact on social behavior, urban configurations, topographic form, economic conditions, and cultural dignity. Simone Brott's "Architecture's Self: Architectural Subjectivity Close Up," posited that the architectural close-up is where architectural subjectivity is established. Chris Wellman's "Towards a New Christian Architecture," demonstrated in research and design that Scripture supports the view that God's truth can represented by design of churches." And Michael Lee Poy looked at African-American marking of the earth with a storefront installation on York Street.

Opposite: Ameet Hiremath, Project from Greg Lynn Studio, spring 2002

Clockwise from top left:
Yansong Ma, Project from Zaha Hadid Studio, spring 2002

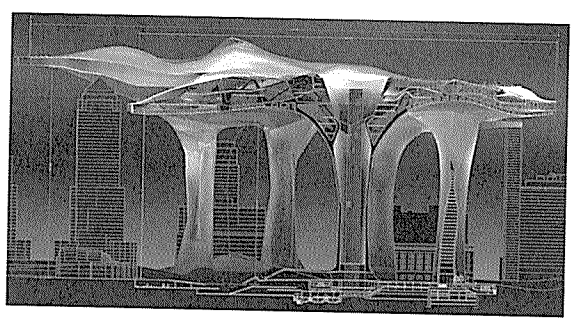
Youngsoo Kwon, Project from Deborah Berke Studio, spring 2002

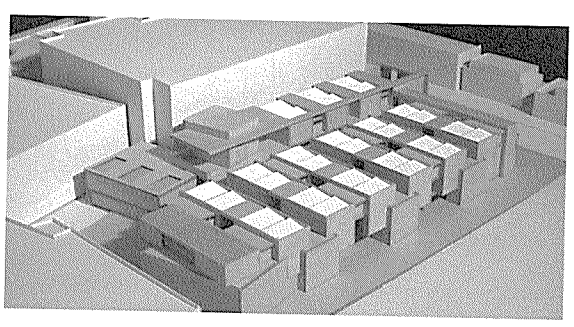
Suejin Sung, Project from Steven Harris Studio, spring 2002

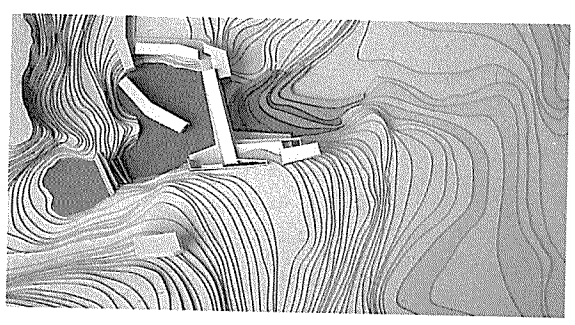
Derek Warr, Thesis Project, spring 2002

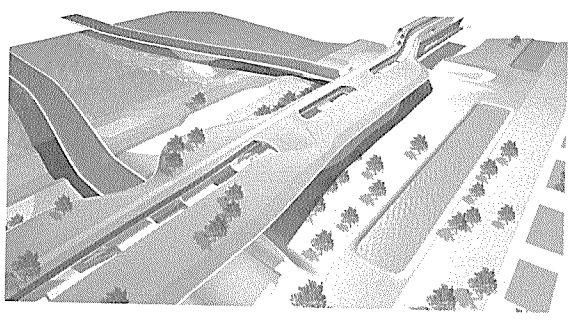
Michael Lee Poy, *African Ground, MED, 2002*

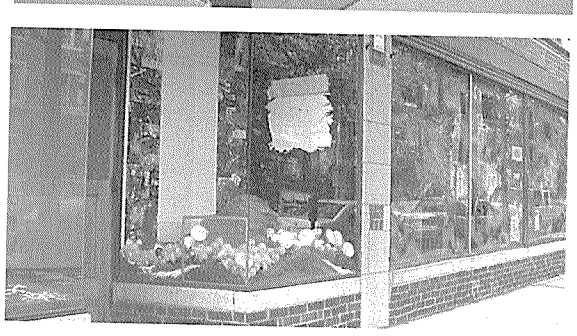
Robert McClure, Project from Lise Anne Couture Studio, spring 2002

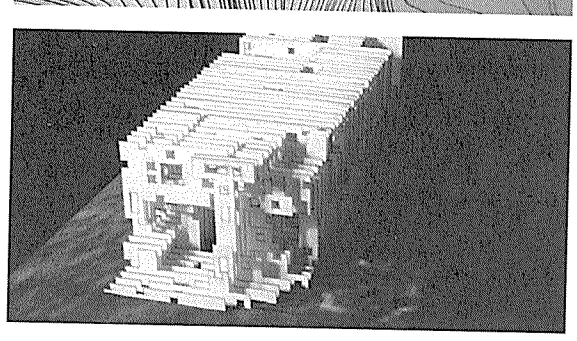












Faculty News

Diana Balmori, lecturer in landscape architecture, with her firm in New York is currently at work on the Socrates Sculpture Park, in Long Island City, New York. She was the keynote speaker in the symposium "New Roofs for a New Century: The First International Conference." During the "Green Roof Symposium," part of the Earth Pledge Spring 2002 Lecture Series, she presented "Case Study of Green Roofs in NYC: Battery Park City and Earth Pledge." Balmori is a member of the Temporary Memorials Committee of New York New Visions, which has designed a fence for Ground Zero, and is on the executive committee of New York New Visions as well as the Regional Planning Association Memorial Committee for New York. She has also begun research for the Yale Code, a collaborative project of the Yale School of Forestry and Environmental Science and the Yale School of Architecture. Balmori's Yale seminar "Architecture Landscape Ecology" recently presented its work at *Evolve New York Open Studio* at Columbia University (May 9, 2002).

Deborah Berke, adjunct associate professor, with her firm Deborah Berke & Partners in New York, has launched a new line of contemporary furniture. The objects, including tables, sofas, chairs, and accessories, have clean modern lines and are made of recycled wood with hemp upholstery. Berke's firm has recently expanded to include two partners, Maitland Jones ('92) and Marc Leff, to become Deborah Berke & Partners Architects.

Kent Bloomer, adjunct associate professor, completed the Peristyle in Lakelands Maryland; the Acanthus Circle in Kentlands, Maryland, and a trellis at the Manhattan Kansas Library this year.

at the Harvard Joint Center for Housing Studies, lectured with Kimberly Vermeer of Urban Habitat on "Smart Growth and Affordable Housing" for the Citizen's Housing and Planning Association. Taylor & Burns have been selected by the Pawtucket Armory Association in Rhode Island to design the conversion of the existing 43,000-square-foot armory into a performing-arts center.

Peggy Deamer, associate dean, gave a plenary speech at the 18th National Conference on the Beginning Design Student at Portland State University entitled "The Fictions of Studio Design: (De)Formation" (March 2002). With her firm, Deamer + Phillips, she recently completed the Tobin Addition, in Waccabuc, New York; the Williamson House, in Sherman, Connecticut; and the Connector Building at Yale University, linking One Hillhouse Avenue with 277 Temple Street. The Arverne proposal, on which Deamer collaborated with faculty members Diana Balmori, Deborah Berke, and Keller Easterling, was published in *Architectural Record* (May 2002).

Keller Easterling, associate professor, launched her Web installation "High Line: Plotting NYC" as part of an exhibition held in the spring at the Municipal Art Society (see adjacent page). In November 2002 she gave a talk at the University of Pennsylvania's World Urbanization and Landscape Conference on future directions for landscape architecture in the face of global urbanization. Easterling received a grant from the Whitney Humanities Center at Yale to study an agricultural/urban formation in Spain. She has also written several articles, including "Error," which was published in Spanish architecture journal *Fisuras* (2002); "Enduring Innocence," in the collection *After the World Trade Center* (Routledge, 2002); and "Parrando's Paradox: Error in the Holy Lands," in *The Next Jerusalem* (2002).

Martin Finio, critic in architecture and partner in Christoff:Finio Architecture in New York, is currently renovating the interior-design department of the Parsons School of Design, in New York. The project will include a new Materials Study Center as well as a gallery honoring the furniture and fabric manufacturer Angelo Donghia. Listed in the *Wallpaper* 2002 Design Directory as one of the top 25 new design firms in the world, Christoff:Finio is also designing a poured-in-place concrete house on the Delaware River.

Mark Foster Gage ('01), critic in architecture, is currently at work on two apartment renovations in New York. He continues to work with Robert A. M. Stern Architects as a consultant. Gage recently completed a speculative house for *Lucky: The Magazine About Shopping* based on storage and display.

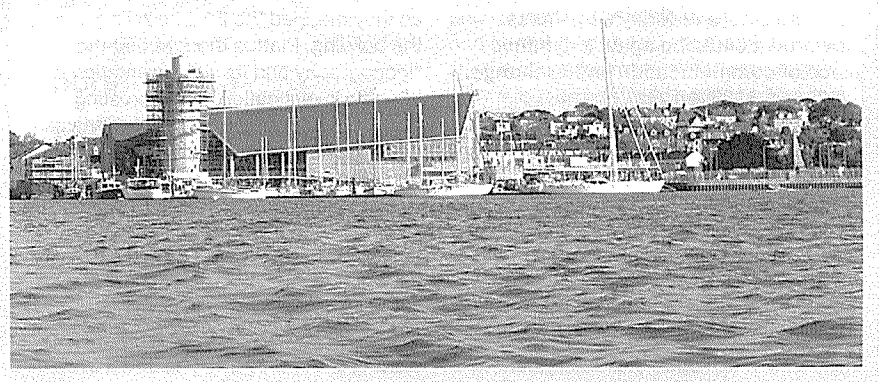
Deborah Gans, critic in architecture, with Gans & Jelacic in New York, had furniture featured in *AD Magazine*. The firm's work on disaster-relief housing was the subject of an article in *Fast Company* (May 2002) and an interview on NPR.

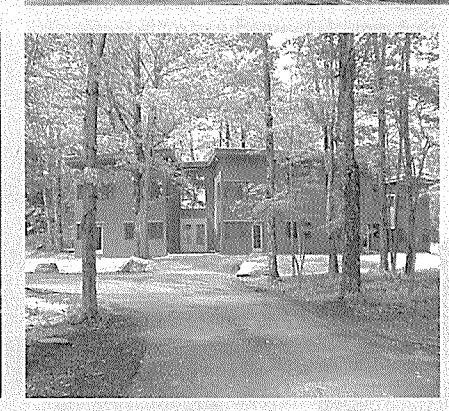
Alexander Garvin ('67), professor, has been named vice president for planning and design of the Lower Manhattan Development Corporation.

Louise Harpman ('93), critic in architecture, and Scott Specht ('93), of Specht Harpman in New York, were named as Emerging Voices by the Architectural League of New York for 2002. They were also finalists in the annual PS1/MoMA Young Architects Competition.

Steven Harris, adjunct associate professor, will be participating with his New York firm in the Bienal de Arquitectura, in Santiago in October 2002. His John Berendt Town House was published in *Architectural Digest* (April 2002). The Weiss House, in Cabo San Lucas, was published in *Ambientes* (August 2002) and *House & Garden* (September 2002).

Michael Haverland ('94), assistant professor, was recently awarded one of 18 International Charter Awards for Design from the Congress for the New Urbanism for his addition to the Dwight School in New Haven, which he designed with the UDW in collaboration with TAMS Architects. The project was also featured in the February issue of *Architectural Record*. He is at work on a house in East Hampton, Long Island, and has recently completed a loft in Greenwich Village, New York City.





Dolores Hayden, professor, took part in "A Conversation About Contemporary Landscape Photography" at the Yale Art Gallery. She has also been a commentator for the Guilford Preservation Alliance on a plan for urban design in Guilford, Connecticut. Hayden's essay "What Is Suburbia?: Naming the Layers in the Landscape" appears in *Smart Growth: Form and Consequences* (Lincoln Institute of Land Policy, 2002). Her poem "On the Hundred-Per-Cent Corner" was published in the *Yale Review* (January 2002). In summer 2002 Hayden read from her work at the New Haven International Festival of Arts and Ideas.

Andrea Kahn, critic in architecture, co-organized a conference with Margaret Crawford this spring entitled "Urban Design: Premises, Pedagogies, and Practices," in conjunction with the Van Alen Institute, Harvard Graduate School of Design, and Columbia School of Architecture, Planning and Preservation. The goal of the conference was "to raise public awareness of urban design and to vitalize its role in urban discourse and development." Kahn is currently working on a publication that further explores themes developed over the course of the conference.

Lauren Kogod, lecturer, was the theory session moderator at the 90th ACSA Annual Meeting, New Orleans, April 11–14, 2002, for a session entitled *"This Will / Will Not Kill That."*

M. J. Long ('64), critic in architecture, is nearing completion of the National Maritime Museum Cornwall, in Falmouth, England. The Queen of England recently toured the project with Long, as the first stop on her Golden Jubilee Tour. The museum has been featured in several new articles and will be the subject of an upcoming book. Long has also been awarded an Honorary Doctor of Science by the University of Brighton; and has been appointed to the Design Advisory Committee of the Commission for Architecture and the Built Environment and to the RIBA/ARCUK Visiting Accreditation Board to Mexico.

Audrey Matlock ('79), critic in architecture, has opened ExUrban, a branch office of her New York firm, Audrey Matlock Architects, in Sag Harbor, New York.

Ed Mitchell, associate professor, organized a summer 2002 conference at Pratt Institute entitled "Building at Ground Zero." In April he gave the talk "Have You Ever Been Experienced?" at the ACSA conference in New Orleans. Mitchell currently has a house under construction in Courtland Manor, New York.

Herbert S. Newman ('59), critic in architecture, is working with his firm on a variety of projects in Connecticut, including the Greenwich Reform Synagogue; Yale New Haven Ambulatory Services Corporation, in Guilford; and Darien High School. He is also designing the renovation of Marcel Breuer's Jewett House, on the Vassar College campus, in Poughkeepsie, New York. Newman's firm recently completed the Harry A. Conte West Hills Magnet School, in New Haven, and the Maritime Aquarium, in Norwalk, Connecticut. He coauthored the article "Hot Tips: 24/7 Dining Concepts for Your Campus," published in *College Planning & Management* (February 2002). Newman recently received the New England Golden Trowel Award from the International Masonry Institute for his parking garage at Southern Connecticut State University.

Eeva-Liisa Pelkonen (MED '94), assistant professor adjunct and chair of the MED program, has contributed the article "Constructed Grounds: New Strategies in Contemporary European Architecture" to the book *Built Surface: Architecture and the Pictorial Arts from Romanticism to the Twenty-First Century, Volume* 2 (Edited by Christy Anderson, Ashgate, 2002). She is completing her dissertation, *Alvar Aalto, Modernity and Self-Identity*, at Columbia this fall.

Turner Brooks ('70), adjunct associate professor, has recently completed a student dormitory for Marlboro College, in Marlboro, Vermont, as well as the Blue House for Yale art history professor Christy Anderson and her husband, Kevin Gallagher, in Conway, Massachusetts. His Yale Boathouse has been featured in *arkkitehti-lehti* (June–July 2002) and *arck-itektur.aktuell* (April 2002).

Carol Burns ('83), critic in architecture, principal of Taylor & Burns Architects in Boston, director of the Harvard Institute of Affordable Housing, and Housing Fellow

Nina Rappaport, lecturer, had her paper "The Modernist Reception and Image of Industrial Buildings" selected for the Seventh International DOCOMOMO Conference in Paris in September 2002. Her article on an experimental factory appeared in *Architectural Record*,(June 2002), and her piece on Constance Adams ('90) was reprinted in the book *Design Is*, a compilation of articles from *Metropolis* magazine (Princeton Architectural Press, 2001).

Dean Sakamoto (MED '98), critic in architecture and director of exhibitions, has recently completed Miso, a contemporary Asian restaurant in New Haven's Ninth Square district. Other current projects include master planning for Alexander Vineyards, a new winery and residential complex in Jamesport, New York, and design of a permanent exhibition for the Schick razor company in Milford, Connecticut.

Joel Sanders, associate professor, has exhibited his work in *Big Brother: Architecture and Surveillance* (June 2002), at the Museum of Contemporary Art, Athens, Greece; and in *New Hotels for Global Nomads*, at the Cooper-Hewitt, National Design Museum (September 2002). In June he delivered the lecture "Plumbing the Depths" at the Chicago Museum of Contemporary Art. Sanders contributed work to the Third Anniversary Exhibition of Henry Urbach Architecture, in New York, and published his article "Curtain Wars: Architects, Decorators and the 20th Century Interior" in *Harvard Design Magazine* (winter/spring 2002).

Robert A. M. Stern ('65), dean, received the President's Award from the Architectural League of New York in April 2002. His architectural practice, Robert A. M. Stern Architects, won the four-way design competition for the new Main Library in Jacksonville, Florida, in December 2001; the new Public Library in Clearwater, Florida, broke ground in June 2002. The firm has begun design work on the Smeal College of Business at Pennsylvania State University, in State College, Pennsylvania, and the Gerald R. Ford School of Public Policy at the University of Michigan, in Ann Arbor; and was recently selected for the new Law School Building at Florida International University, in Miami. Recently completed projects include Manzanita Hall, the new home of the College of Arts, Media, and Communication at California State University, Northridge, designed in association with Peter Devereaux ('82) and his firm Fields Devereaux; and the Hobby Center for the Performing Arts in Houston, Texas.

Claire A. Zimmerman, lecturer, received a Fulbright Fellowship to the Humboldt University, in Berlin, and a Berlin Grant from the Social Science Research Council, in New York. She presented her papers "Transactions Between Photography and Architecture" and "Unbuilt" at the Mies van der Rohe Symposium at IIT in Chicago and the Society of Architectural Historians 2002 annual meeting in Richmond, Virginia, respectively.

Undergraduate Program News

Berlin Studio

Victor Body-Lawson's undergraduate Senior Project Design Studio selected the Union Internationale des Architectes (UIA) Student Competition 2002 in Berlin for their spring semester work. The aim of the competition, which takes place every three years, was to generate design ideas for the development of an inner-city area in Berlin-Mitte. The site, poised between East and West Berlin, required students to address issues of connection and reintegration within a historically divided urban space. Students were asked to focus on solutions that linked the area of redevelopment with the existing urban fabric, weaving and bridging disparate elements of the city together. The urban-design questions generated by the problem, involving current architectural debates of New Urbanism, the social city, mobility, and the service-and-science society, are what originally drew Body-Lawson to the competition as a basis for the design studio. Yale student **Andrew Philip Heid** (Yale College, '02) received a $5,000 Japan Institute of Architects Award for his entry, "This Is Not a Park," which "sought to network and fabricate wilderness in Berlin" in a collage of provocative images.

Book Notes

Ann Satterthwaite's ('60) book *Going Shopping: Consumer Choices and Community Consequence* (Yale University Press, 2002) traces the history of shopping from Mesopotamian merchants to Wal-Mart and the Internet as well as its effect on community and social interaction.

Brent C. Brolin ('68) has written a revised edition of *Architectural Ornament: Banishment and Return* (W. W. Norton, 2001), an investigation of the place of the artist in society and the changing role and relationship of the artist to the public from antiquity to the present. He has also written *The Designer's Eye* (W. W. Norton, 2002), about the visual craft of design in architecture.

David Gosling ('61), a city planner in London who died this year, published the book *The Evolution of American Urban Design* (John Wiley & Sons, 2002).

Exhibition News

Last year's exhibition, *Architecture or Revolution: Charles Moore and Architecture at Yale in the 1960s*, was reviewed in *Casabella* (April 2002) by Nicholas Adams, who wrote that it was an important tool in understanding Moore's contributions to the field of architecture. He described the show as an "uncommonly honest exhibition" that was "pleasingly open about the contradictions in Moore's own character and philosophy."

Traveling Exhibitions

Zaha Hadid Laboratory is currently being exhibited at the National Building Museum from August 17–November 17, 2002.

Yale-Japan is at the Axis Gallery in Tokyo through fall 2002.

Saving Corporate Modernism was held at the Old State House Museum in Hartford, Connecticut, March–September 2002.

Cesar Pelli's exhibition, *Building Designs 1965–2000,* was held at the National Building Museum from September 2001–January 2002.

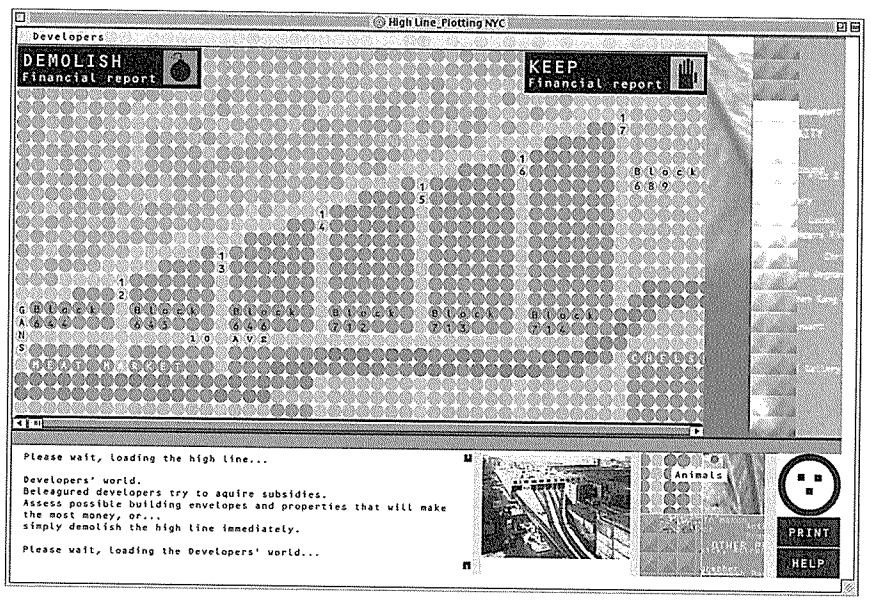
Koetter Kim's *Cities and Buildings* was exhibited at Syracuse University in April 2002 and will travel to the University of Tennessee in spring 2003.

Marisa Angel (art history '02) has installed *Project Abstract: Urban Museum of Modern Architecture, New Haven* in seven kiosks at postwar Modern buildings in New Haven. The display opens on September 14, 2002, at the Dixwell Fire Station.

High Line: Plotting NYC

"High Line: Plotting NYC" is an experimental urban document installed on the Web that generates scenarios for Chelsea's elevated railway, known as the High Line. The project was undertaken with support of the Design Trust for Public Space in New York City in partnership with Friends of the High Line (FHL), the advocacy group working to develop the railway as a linear park. A second project, also supported by the Design Trust, allowed Casey Jones to prepare a book of recommendations, which included historical information and a compendium of previous responses to the site. Given the rigor of that work, "High Line: Plotting NYC" was free to experiment in new mediums with a real problem in urban design.

Because FHL assembled supporters from all over the city—not only from the design professions but also fashion and entertainment—the character of their advocacy was very different from a typical preservation effort. "High Line: Plotting NYC" further encouraged that instinct toward a broader range of urbanity while addressing the need among urban advocates for that impossible document that galvanizes politics around a common desire in the city. The only currencies of decision-making in municipal governments are white papers, feasibility studies, urban land-use review proposals, and environmental impact statements, which often



convey specialized information in bureaucratic jargon.

Typically, even for urbane citizens who are able to instantly dissect sophisticated persuasions in all current media, planning documents are best rendered by master plans and soft stand-ins—bird's-eye or sidewalk views of a world that depict little of the city about which everyone feels so strongly. For example, it is difficult to see the varieties and layers of urban populations and the mix of cultures, politics, classes, and degrees of commercial activity—those unpredictable excesses of urbanity.

"High Line: Plotting NYC" suggests that desires, motives, and negotiations might be communicated in a format that mimics the most important factor of the city's organizational architecture: the multiplication of voice and authorship. The experiment uses several media programs for designing Web sites to make not only a Web site but also a Web installation that operates like a game. As a visual but not merely illustrative format, the installation communicates explicit instructions for urban spaces and programs, and it argues that in the city these must always enter into a skeletal and somewhat less predictable mix than those depicted by most planning documents. The "narrative game" format conveys, in its structure and organization, a multiplied voice that is finally more important than its content. Adventure stories, spy thrillers, and murder mysteries often propel the story by continually causing it to exit itself. The character leaves one system or environment and is deposited into another. Information or motive from one system causes changes in another. Finally, the pleasure is in linking the stories after the fact through a series of events rather than expositions.

"High Line: Plotting NYC" is composed of four very different worlds with completely different kinds of graphics, evidence, data, and ideas. Shifts between the environments are abrupt and comedic. All activity is monitored in a Tamagotchi-like text box. The player can print out a transcript of this text at the end of each session. Whereas each of the worlds is occasionally playful, dark, or absurd, the database for the installation is quite large and filled with pertinent data and evidence about very plausible possibilities.

One of the four worlds uses plan documents showing property allocations and legal rights of way. Many public-space advocacy groups argue that adjacency to public space increases property value. Bryant Park is an important test case because its recent restoration caused dramatic increases in value all along its perimeter. The High Line is almost exactly the same size as Bryant Park, but because it is linear, it has a much longer perimeter and contacts many more properties. Many Chelsea property owners, who oppose the FHL and wish to tear down the structure and build on the property, also own adjacent properties. Because the object of this world is to improve the fortunes of a beleaguered developer seeking public subsidies, the site calculates the potential property-value increase for each adjacent site that retains the High Line. Registering in the Tamagotchi text box, along with all the data, are the developer's pleas for help, for a safety net, and for someone else's money.

Another world in the installation resembles a game like those available on a cellphone readout, designed to soak up time with beeps and short tunes. Here it is called the game of "Trap," because it is structured around the desires and revenues associated with tourism. FHL often refers to Promenade Plante in Paris as a precedent for the High Line project. This tourist world looks at this precedent as just one of many possible scenarios. It assembles a number of tours, each based on fairly banal market-science experiences. There is a walking tour that appeals to those who spend time and money on extreme exertion; a heritage tour that concocts a historical narrative from the old rail line and meat-packing district; an art tour that follows a gallery circuit; and a sports tour that involves Chelsea Piers and the proposed Olympic stadium in the old rail yards. The user plays with each of these packages, looking for spatial conditions that resemble other global landmarks and acquiring souvenirs or other approving beeps as a measure of success. The text box notes the acquisition of experiences and tabulates revenues generated.

A third world travels along the length of the High Line at the upper and lower levels using panoramic photographs. It is the only world that actually depicts the High Line in photographs rather than abstractions. The background character is an unidentified hybrid animal—a cross between a bird and a dog—whose howls and chirps are heard at intervals. Touching some buildings triggers either historical details or opinionated comments, as spoken by this creature. The voice is a little too candid about the true motives and pretenses of designers, developers, community politicians, and art and fashion aficionados. Yet it also records a good deal of historical and contextual information on surface and sensuality.

The fourth environment portrays the High Line as a party rather than a physical site. Gigantic egos and ambitions also change cities. The party, and, by extension, the High Line is among other things a set of political associations that boosts the careers of all those involved. Various contingencies interested in the Chelsea railway pass across the screen like schools of fish, and the user activates quotations from some members of each group, which then appear in the text box.

Finally, the effect of playing this game or writing between these four narratives is an act of multiplying authorship, of mixing and remixing the excess of things that rush in to fill a vacuum anywhere in the city.

—Keller Easterling

Easterling is an associate professor of architecture at Yale. Visit the Web site at: http://thehighline.org/plottingnyc.

Opposite page from left: Steven Harris, Weiss House, Cabo San Lucas, Mexico. Photograph courtesy of Steven Harris, 2002

Turner Brooks Architects, Marlboro College dormitory, Marlboro, Vermont. Photograph courtesy of Turner Brooks, 2002

M. J. Long Architects, National Maritime Museum Cornwall, Falmouth, England. Photograph courtesy of M. J. Long Architects, 2002

This page: High Line: Plotting NYC Web site, Keller Easterling, 2002

Alumni News

1940s

Henry F. Miller's ('48) 1949 residence in Orange, Connecticut, has been placed on the National Register of Historic Places. It is one of only three Modernist buildings listed for the State of Connecticut.

1950s

John V. Sheoris ('53) was selected for the 2002 Michigan AIA President's Award, designed to honor architects who work in corporate or educational settings. Sheoris is currently professor emeritus of architecture, College of Architecture and Design, Lawrence Technological University.

James D. Gibans ('54), of Herman,Gibans, Fodor Inc. Architects, was elected to the AIA College of Fellows in recognition of "contributions to society through significant public service" based on his 30 years work toward the revitalization of Cleveland.

1960s

Lord Norman Foster ('61), of Foster and Partners, recently completed the design of a comprehensive Master Plan for the Museum of Fine Arts, Boston. The plan includes a "jewel box" garden enclosure of glass and steel, new pavilions for exhibits, educational facilities, and a restaurant. Foster and Partners also continues to work on the Hearst Headquarters Tower in New York, a triangulated steel structure that combines the existing building with a soaring faceted glass tower above.

Charles Gwathmey ('62), of Gwathmey, Siegel and Associates, had his Louise Wells Cameron Art Museum, in Wilmington, North Carolina, featured in the *Wall Street Journal* (April 18, 2002). The 42,000-square-foot building is the first museum devoted entirely to the art of the state, with galleries for temporary shows as well as the permanent collection. Gwathmey's work to restore his parents' house was featured in the *New York Times* (June 6, 2002), and his step son Eric Steele wrote an article on the design of his own loft with Gwathmey in the *New York Times Magazine* (June 16, 2002).

Charles Hagenah ('62) and **John Lee** ('63), were participants in the Sunwall Design Competition, sponsored by the United States Department of Energy as part of the National Solar Design Competition in 2000. The competition focused on the design of a solar wall for the south facade of the Forrestal Building in Washington, D.C., the largest proposed solar wall for a federal building in the United States.

Jonathan Barnett ('63) FAIA, FAICP, continues his diverse urban-design practice and teaches at the University of Pennsylvania. This year he was chair of the AIA's National Honor Awards Jury in Urban Design and of the awards jury for the Congress for the New Urbanism. Barnett's new book, *Redesigning Cities*, is due out this fall. *Planning for a New Century: The Regional Agenda*, which he edited as well as contributed an essay to, was published by Island Press in 2000.

Peter Gluck ('65), with his firm Peter L. Gluck & Partners, is designing a new building in East Harlem for the Little Sisters of Assumption Family Health Service (to open next year). The five-story, $7 million building was designed with a facade of glass and ventilating panels, and was the subject of an article in the *New York Times* (April 28, 2002).

Thomas W. Luckey ('66) has been designing and building large-scale play structures for children. His work has been installed in children's museums across the country including Memphis, Tennessee; Seminole, Oklahoma; Decatur, Illinois; and Garden City, New York. Luckey's work is renowned for being "safe yet fantastic and crazy-looking."

Walter A. Hunt Jr. ('67), vice president and managing principal of Gensler Associates in New York, has recently completed the new flagship store for Toys 'R' Us in Times Square. The project has won both the Retail Store of the Year award and a Clio, an unusual prize for an architecture project. With his firm Hunt is currently designing the $55 million expansion and renovation of the Liberty Science Center, in Jersey City.

Doug Michels's ('67) Cadillac Ranch, a project that he created in 1974 with Ant Farm, has become the 11th landmark on historic Route 66 and was restored as part of Hampton Hotels Explore the Highway with Hampton "Save-A-Landmark" campaign. The ranch features ten ravaged and graffiti-covered Cadillacs buried nose down in an Amarillo, Texas , wheat field. Beginning in May, volunteers worked with the original Ant Farm collective to re-tire, scrub, and paint the classic cars. Michels is also at work on the Arches of 19th Street, a proposal for Houston, Texas.

1970s

Jay Warren Bright ('71) has recently completed several home renovations in the New Haven area.

Peter J. Wood ('71) is a professor and coordinator for the professional program at the Prairie View A&M School of Architecture. His daughter, Anne E. Wood, has been admitted to the Yale School of Architecture for fall 2002. She will be the third generation of the family to attend Yale.

Everardo Agosto Jefferson ('72) and **Sara E. Caples** ('74), of Caples Jefferson Architects in New York, had their firm's Heritage Health and Housing Building in Harlem featured in the *New York Times* (January 31, 2002). Known to city residents as "the patchwork building" for its colorful facade of painted metal pieces, it was cited as a successful example of the new building movement in Harlem, combining Modernist and Caribbean influences. The firm was also featured in an article by Jayne Merkel in *AD* (August 2002).

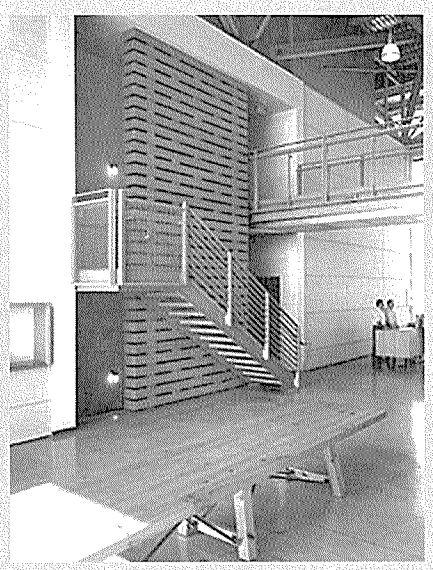
James Oleg Kruhly ('73), of James Oleg Kruhly & Associates in Philadelphia, had an exhibit of his firm's current work at the Philadelphia AIA last year. His Pasquerilla Spiritual Center for Penn State was featured in *Town & Gown* (December 2001). Kruhly's sensitive conversion of a three-story Philadelphia town house for an owner who had suffered a debilitating stroke will be included in the book *The New City Home: Smart Design for Metro Living*, by Leslie Plummer Clagett (Taunton Press), a collection of adaptable home designs.

Andres Duany ('74), of Duany & Plater-Zyberk in Miami, wrote an article entitled "In Celebration" for *UrbanLand* (January 2002) discussing Disney's Celebration development. With **Elizabeth Plater-Zyberk** ('74) the firm has broken ground on the Liberty Harbor North Project, in Jersey City, and their master plan for the Tacheles area, in Berlin.

Fiske Crowell ('75) is the managing principal of Kallmann, McKinnell & Wood Architects (KMW) in Boston, where he is currently at work on three buildings for the University of California: the Natural Sciences building for UC Riverside, the Management School for UC San Diego, and the Academic Building for UC Santa Barbara. In addition, he is managing the construction of libraries for Howard University and Washington University, the GSA Federal Laboratories in Baltimore, Maryland, and the Independence Visitor's Center in Philadelphia. Last year KMW completed a ten-year renovation of the Sterling Law Buildings at Yale.

Thomas Payne ('74) and **Marianne McKenna** ('76), of KPMB Architects in Toronto, are working on projects in both Canada and the United States. Payne is managing the renovation of Sprague Memorial Hall for the Yale School of Music, the Trinity College Library and Information Technology Center, in Hartford, Connecticut. He recently completed the new Goodman Theater in Chicago, part of a larger city initiative to revitalize the downtown North Loop District, and renovations to the Hilton Toronto Hotel, which has received several awards both in Canada and the United States. McKenna recently completed the Jackson-Triggs Niagara Estate Winery in Niagara-on-the-Lake, Ontario, for which she received a Canadian Architect Award of Excellence and an *Interior Design* Magazine Award for Best Winery. She is the partner-in-charge of three recently awarded commissions: Le Quartier Concordia for Concordia University, in Montreal; Montreal Center for Genomics and Proteomics at McGill University; and the Performance and Learning Center for the Royal Conservatory of Music, in Toronto.

Patricia Patkau ('78), of Patkau Architects in Vancouver, is currently working on the Biblioteque Nationale du Quebec, the new main library in Montreal, and the Gleneagles Community Center in West Vancouver, Canada. Two of her houses,



the Shaw House, in Vancouver, and the Agosta House, San Juan Island, have been published in *GA Houses 68*. The Shaw House was also featured in *Record Houses* (April 2002) and the Agosta House in *Architecture* (December 2001).

Gavin Macrae-Gibson ('79) is currently working on the renovation of an addition to 450 Seventh Avenue, a 1931 commercial property in New York. Macrae-Gibson Architects will refurbish the building and add a 17-story portion of LED spandrel panels to be integrated within the existing 48-story 450,000-square-foot building. The firm has designed A Taste of Art, a new gallery and gourmet café in Tribeca. The renovation of Macrae-Gibson's home in Hastings-on-Hudson was featured in the *New York Times* (June 20, 2001).

Melanie Taylor ('79) had her "New American Home" featured on HGTV (February 6, 2002). The $1.25 million house was designed to "shape a warm, secure, and delightful life."

1980s

Alexander Gorlin ('80), **Marion Weiss** ('84), and faculty member **Deborah Berke**, with their architecture firms, offered pro-bono design services for new libraries in lower-income school districts around New York City. The program, Library Initiative, a partnership of the Robin Hood Foundation and the New York City Board of Education, was established to design, build, equip, and staff new elementary school libraries. Each architecture firm was assigned one prototype. The libraries were completed in spring 2002.

Domenic Carbone ('82) recently co-authored *Most Admirable*, an architectural history of the Rhode Island State House, designed by McKim, Mead & White. He is currently serving as restoration architect for the State House.

Charles D. Dilworth ('83), principal with STUDIOS Architecture in San Francisco, is currently working on a 57,000-square-foot City Hall for Milpitas, California, and a schematic design for a 260,000-square-foot supercomputer and research facility in Livermore, California, for the Lawrence Livermore National Laboratory. His design for the Richmond DHS Phase3 Offices, a 200,000-square-foot office and library building for the California Department of Health Services, is under construction and expected to be completed in 2004.

Paul Rosenblatt ('84) launched Springboard, in Pittsburgh, to "stimulate, inspire, create, and produce new architecture, clear communication, and innovative design." The firm has recently consulted with Herman Miller Inc., Maridon Museum, Pittsburgh Children's Museum, and the Carnegie Museum of Art. An article on Springboard's design for the glass show was featured in the July 2002 issue of *American Crafts Magazine*. Rosenblatt has also been selected to show a piece of his artwork, "*(under)FOOT*," in the Pittsburgh Biennial.

Marion Weiss ('84) and her firm, Weiss/Manfredi Architects of New York, have completed the design of their award-winning proposal for the 8-1/2-acre Olympic Sculpture Park for the Seattle Art Museum. The design, a continuous Z-shape park, will create a connection between the city and Puget Sound on the site where a former fuel-transfer facility overwhelmed the water's edge. The new constructed landscape, built over and around roadways and rail lines, will contain parcels for sculpture exhibitions. Completion is expected in 2004.

Maya Lin ('86) is completing the design of a large-scale sculpture for Main Street in Hartford, Connecticut, as part of the Wadsworth Atheneum's expansion scheme by UN Studio of Amsterdam. This new plan will move the entrance from Main Street to Atheneum Square North, making room for Lin's artwork. She was the subject of the *New Yorker* article "The Reluctant Memorialist" (July 8, 2002). Lin was recently elected to the position of Alumni Fellow of Yale University.

Mark D. Linder (MED '86), currently teaching at Syracuse University, gave a lecture entitled "Literal: How *Art Forum*

Stole the Idea of Architecture, 1967" as part of the Collins/Kaufman Forum on Modern Architecture at Columbia University on January 31, 2002.

Madeline Schwartzman ('86) hosted an evening of her films at the Millennium Theater in New York in March 2002.

Raymund Ryan ('87), currently teaching at the school of architecture at the University College Dublin, has written the introduction for **Ti-Nan Chi**'s ('86) monograph. He will collaborate with Chi on the Taiwanese exhibit at this year's Venice Biennale.

Byron Bell ('88), **Maya Lin** ('86), **Charles Gwathmey** ('62), and **Henry Smith-Miller** ('66) were featured this summer in the exhibition *Architects of the Academy*, at the National Academy of Design Museum in New York, which highlighted the important role of architecture in the history of the academy.

William T. Ruhl ('88), of Ruhl Walker Architects, has received the 2002 Boston Society of Architects Interior Architecture Honor Award for the Hunter/Ritacco Loft in Boston. He is working on houses in Dover and Hyannisport, Massachusetts, and New Canaan, Connecticut; and lofts in Boston and Providence. He has also had two of his loft projects published in *The New City Home* (Taunton Press, 2002), *USA* (Loft Publications, Barcelona, 2001), and *Casa Viva* (2002).

Steve Dumez ('89), of Eskew Dumez Architects, has been elected president of the New Orleans AIA chapter for 2002.

Claire Weisz ('89) and her husband **Mark Yoes** ('90) were the subject of an article in the *New Yorker*, "The Little Pavilion That Could" (January 21, 2002). The firm's temporary addition to Kevin Roche's Museum of Jewish Heritage, in Lower Manhattan, has been given a reprieve from the wrecker's ball after an intervention from the New York Department of Cultural Affairs. Erected in eight weeks in 1997, the building—a pair of glass trapezoids—was slated to be removed to make way for an expansion to the museum. The city is currently trying to find a new home for the "very well-designed little glass building," which had become an underground icon.

1990s

Lance Hosey ('90) won the competition to design the African-American Burial Ground Memorial at Monticello, the historic home of Thomas Jefferson, in Charlottesville, Virginia. His proposal was selected from among 200 entries. He also won a 2002 IIDA Best Workplace design award for the offices of Interactive Applications Group in Washington, D.C.

Marc Turkel ('92) and **Morgan Hare** ('92), principals of Leroy Street Studio, were featured in the *New York Times* (April 18, 2002) for their design of a movable live-work loft in Soho, complete with a drawbridge. **Adrienne James** ('99), an associate with the firm, also worked on the project.

Charles Lazor ('93), of Blu Dot, and **Granger Moorhead** ('95), of Moorhead and Moorhead, both had projects exhibited in the show *Skin, Surface, Substance + Design* at the Cooper Hewitt, National Design Museum, in New York (May 7–September 15, 2002).

Daniel Hisel ('96), former designer and project architect for Shinberg Levinas in Bethesda, Maryland, has been named assistant professor of architecture at the Syracuse University School of Architecture. He will be teaching design studios and a history/theory seminar.

Jim Cronenberg ('98) had his work as project architect for a house design with Cole/Prevost featured in *Metropolitan Home* (May 2002).

Charles Wittock ('98), of cwarchitects, has designed a variety of innovative demountable storage systems, clothing displays, and movable furniture for clients in Brussels and Amsterdam. He is also organizing an international bookbinding exhibition, with the support of the Guggenheim Museum, which will show designs by architects for their own monographs (including Tadao Ando, Sir Norman Foster, and Zaha Hadid).

2000s

Rosemary Buchanan (MED '00) had an article on a new office space in Chicago in *Architectural Record* (June 2002).

Ken Masden ('01) has a tenure-track teaching position at the University of Texas San Antonio, where he was hired to help secure NAAB accreditation for the school. He is currently teaching a second-year design studio and a digital-media course.

Koon Wee ('03) with his wife, Eunice, published an essay/review in *Singapore Architect Journal* (December 2001) on the concurrent Mies van der Rohe exhibits at the Museum of Modern Art and the Whitney Museum last fall in New York, and the culminating symposium at Columbia.

Aaron Betsky Moves (to) the Netherlands

In his new post as director of the Netherlands Architecture Institute (NAI), Aaron Betsky ('83) is at the helm of one of the foremost architectural institutes in the world. Funded by the Dutch government and helped by 100 staff members, the NAI mounts exhibitions, runs programs, provides research facilities, archives Dutch architectural materials, has a premier architectural bookstore, and, most importantly, functions as a hub for the international architectural network stimulating discussion and activity. Betsky's new domain, in a dynamic Jo Coenen-designed building at one end of Rotterdam's Museumpark, is a long way from San Francisco, where he was director of media and design arts at SFMoMA for six years. But he was raised in Holland by American parents and speaks fluent Dutch, which makes his transition an easy one.

The Netherlands—where architecture is already on many people's cultural and political radar screen—is a perfect fit for Betsky, emphasizing that he is "passionate about architecture and passionate about making other people passionate about it. And the NAI is a great engine to show people fantastic architecture, both historical and contemporary." One of the things that most intrigues Betsky about the Netherlands is the interface between architecture and issues of land manipulation through artificial polders, dams, and population density. It is a place where "you can't just send your problems out over the next hill, because there is no next hill. So how you arrange things spatially is central to the terms of the way people think."

Funding for the NAI is in place through 2004 as part of government allocations of more than 30 million euros a year to architecture in general. However, as Betsky points out, the country's political climate has recently changed. With a revolt led by the populist Pim Fortuyn, who was murdered this spring, the government has been pushed toward a more right-wing agenda with less emphasis on culture. But in general Dutch politicians listen to what architects have to say. As Betsky notes, "You can have a beer with the minister of culture, and the new councilman wants to see me on Saturday."

Betsky has found the mixture of nineteenth-century European town-planning traditions and monumental planning combined with a Modernist belief in the importance of infrastructure has led to a richly varied and successful planning process. He admits that "Holland is hardly free of bad planning and suffers a surprising amount of typical Americanized suburban sprawl. The experiments in privatization with VINEX [the plan to build thousands of houses in 20 years] are most problematic because too much power is given to the private developer to do the American thing." But Betsky remains convinced that even what is mediocre in the Netherlands is pretty high quality, and the public spaces are better.

In addition to mounting a lineup of exhibitions, such as the current UN Studio installation and a 2003 version of the MVRDV exhibition now at Yale, Betsky's principal initiative is the new NAI Prize for the best building designed and constructed by an architect under 40 in the last two years. The prize is modeled somewhat on the Architecture League's Young Architects program; the jury for the first prize, which met in the spring, included Dean Robert Stern. The five buildings selected as finalists will be exhibited at the Eighth Venice Architecture Biennale, and their drawings and models will become part of the NAI's extensive architectural archive.

Betsky is enjoying his new life in a sprawling 1950s Modernist house, formerly a town's administrative office. Set in a garden oasis surrounded by shopping centers, it seems a lot like California. Betsky believes that Americans should visit the Netherlands to see how social housing is integrated with market-rate housing. "You can build with the land, not just on it, by using infrastructure to make architecture," he says. To him engendering, supporting, and nurturing a public debate about architecture is in the end ten times more important than marketing.

—Nina Rappaport

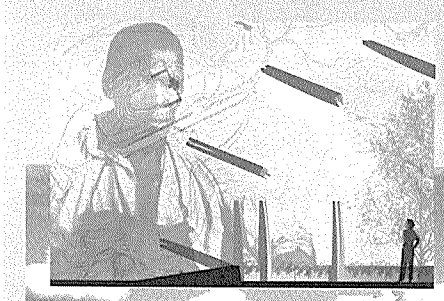
Opposite page from left: Kuwabara Payne McKenna Blumberg Architects, Jackson-Triggs Niagara State Winery, Niagara-on-the-Lake, Ontario. Photograph courtesy of KPMB Architects, 2002

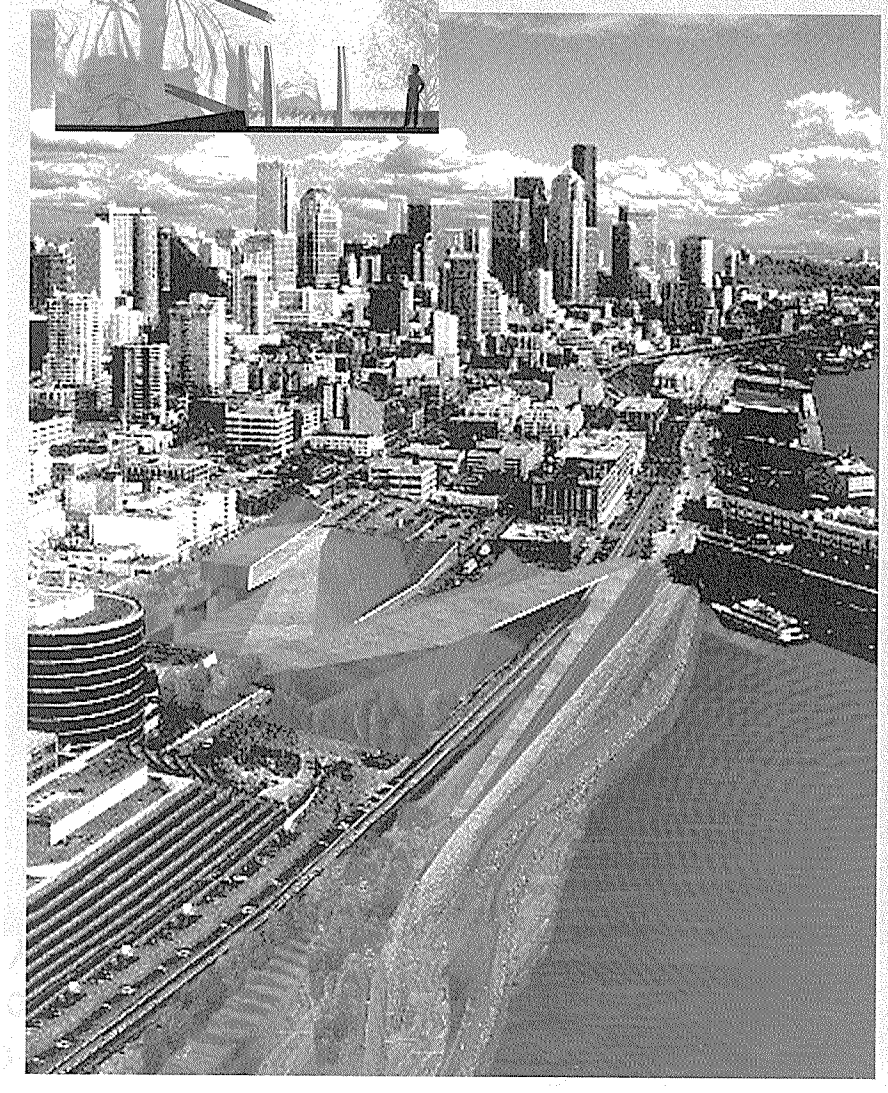
Doug Michels with Ant Farm, Cadillac Ranch, built 1974. Photograph by Doug Michels, 2002

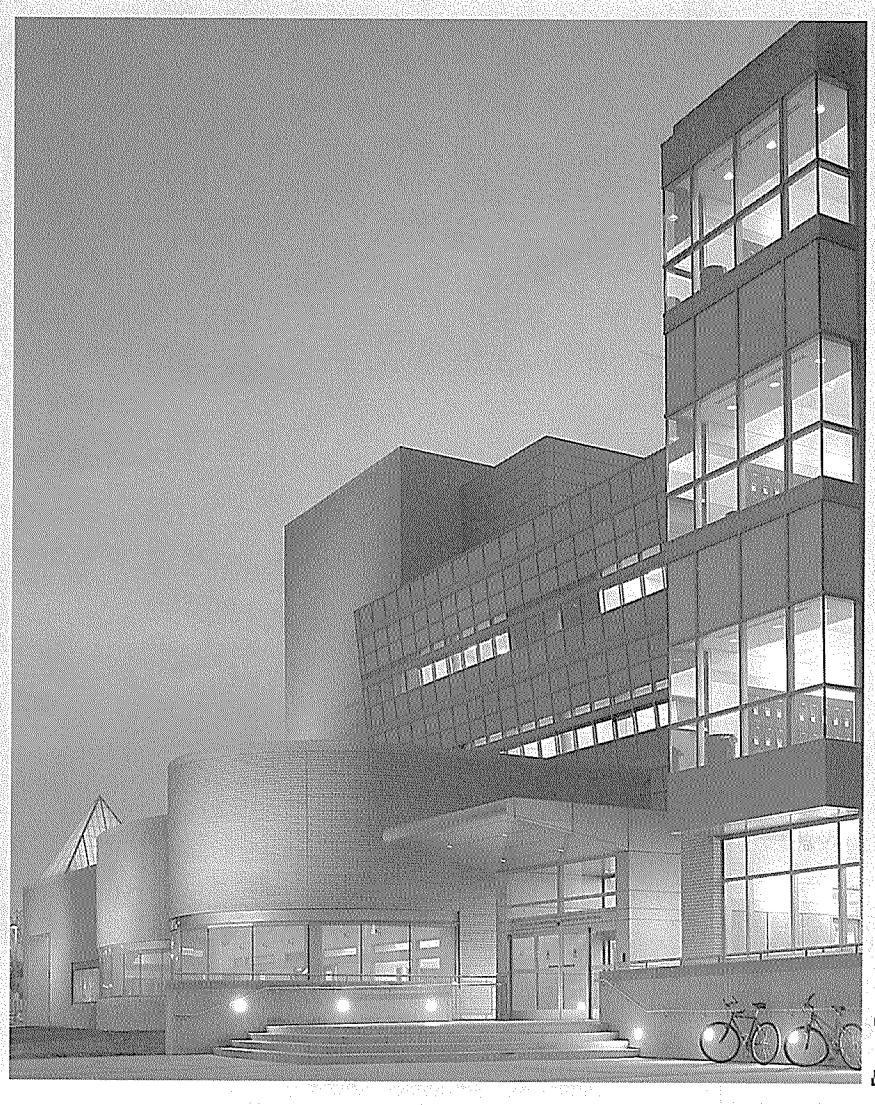
This page top: Lance Hosey, African-American Burial Ground Memorial, Monticello, Virginia, 2002

This page from left: Weiss Manfredi Architects, Seattle Art Museum Sculpture Park, Seattle, Washington, Rendering, 2002. Courtesy of Weiss Manfredi Architects

Gwathmey Siegel and Associates, FSU Library for Information Technology & Education, Ferris State University, Big Rapids, Michigan. Photograph courtesy of Gwathmey Siegel and Associates, 2002







Yale School of Architecture Calendar
Fall 2002

Exhibitions

September 4–October 25, 2002

3D City: Studies in Density, Recent Work by MVRDV

Rome Studio, Stephen Harby and Alec Purves, Faculty, Third Floor, North and South Halls, to 18 October

October 21–December 16, 2002

Building Project Design Process, Louise Harpman, Faculty, Third Floor, North Hall

Building Project Construction Process, Paul Brouard, Faculty, Third Floor, South Hall

November 4, 2002–February 7, 2003

Peter Eisenman, House IV, Main Gallery

Leon Krier The Atlantis Projects, North and South Galleries

Symposia

Dense-cities: An American Oxymoron?
Winy Maas of MVRDV with Philip Aarons, William Burch, James Corner, Alexander Garvin, Douglas Kelbaugh, Fred Koetter, Brian McGrath, and Michael Sorkin.

Friday, September 20, 6:30 p.m.
Saturday, September 21,
9:30 a.m.–6:30 p.m.
Hastings Hall, A&A Building

Eisenman, Krier:Two Ideologies,
Stan Allen, Maurice Culot, Peter Eisenman, Kurt Forster, Roger Kimball, Leon Krier, Sanford Kwinter, Emmanuel Petit, Alan Plattus, Demetri Porphyrios, Michaelangelo Sabatino, Vincent Scully, Robert Somol, Anthony Vidler, Sarah Whiting, and Mark Wigley.

Friday, November 8, 6:30 p.m.–Saturday, November 9, 9:30 a.m.–6:30 p.m.
McNeil Lecture Hall, Yale Art Gallery

Lectures

Monday, September 9
Joseph Rose, Eero Saarinen Lecturer
"Power Architecture and the Rebuilding of New York City"

Thursday, September 12
*Hillary Brown
"Sustainable Environmental Design Priorities and Policies"

Monday, September 16
Will Alsop
"Working with the Public"

Friday, September 20
Keynote for "Dense-cities" symposium
Winy Maas, MVRDV

Thursday, September 26
*Jonathan Rose
"Connecting Smart Growth and New Urbanism with Sustainable Environmental Design"

Monday, September 30
Louisa Hutton and Mathias Sauerbruch
"Recent Work"

Thursday, October 3
Julie Snow
"Surface"

Thursday, October 10
*Bill Browning
"The Benefits and Limitations of the U.S. Green Building Council's LEED Rating System"

Monday, October 21
Toshiko Mori, Paul Rudolph Lecture
"Immaterial/Ultramaterial"

Monday, October 28
Cecil Balmond
Eero Saarinen Visiting Professor
"Informal Networks"

Monday, November 4
Stephen Kieran and James Timberlake
"From MANUAL to Transfer Technology: The Architecture and Research of Kieran Timberlake"

Thursday, November 7
Open House for Prospective Students
Glenn Murcutt
"Some Old, Some New and Some to Come: Thirty-odd Years Working with Australian Landscapes"

Friday, November 8
Keynote address for
Eisenman/Krier symposium
Roger Kimball, Brendan Gill Lecture
"Is There Architecture After Modernism?"

*James Axley/Steve Kellert Series
"Issues in Environment and Design"

Lectures begin at 6:30pm in Hastings Hall (basement floor) unless otherwise noted. Doors open to the general public at 6:15 p.m.

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