Constructs

Yale

Architecture

Spring 2006

Constructs

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

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 *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; the full character set visually constructed from its own Postscript code.

Front and back cover: Richard Rogers and Renzo Piano, Centre Pompidou interior view 1977, photographer, Martin Charles. Courtesy of Richard Rogers Partnership.

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Rogers, Lipton, and Wise

Sir Stuart Lipton, the 2006 Edward Bass Fellow in Architecture at Yale, is chief executive of Stanhope PLC and has been a commercial developer since the 1960s. He was chairman of London's Commission for Architecture and the Built Environment from 1999-2002. Lipton will teach a studio with architect Lord Richard Rogers ('62), founder of the Richard Rogers Partnership, who is the Chief Advisor on architecture and urbanism to the Mayor of London and has just completed the 10 million-square-foot Madrid airport, and for the first time is working on projects in New York City. They will be joined by engineer Christopher Wise, a founding partner of Expedition Engineering and who will share the Davenport chair with Richard Rogers. Nina Rappaport discussed with them their past collaborations and experiences with urban revitalization projects as well as issues surrounding Stratford, England, the site of the studio project.

Nina Rappaport: How have you worked with developers in the past, and how do you find that work in terms of your design and expertise? How have those relationships developed?
Richard Rogers: In the late 1970s/early '80s, after we had finished the Pompidou Center and had begun Lloyd's of London, Stuart Lipton approached us with an amazing scheme to do a mixed-use development along the south bank of the Thames near the Festival Hall and National Theater. It was the Coin Street development, which included a 15-story galleria starting at Waterloo Station and linking the South Bank cultural area to the north bank with a pedestrian bridge across the Thames, and it consisted of offices, retail shops, and dwellings. It was an amazing experience; the first scheme had already been turned down, so we did another that was called in for public inquiry.

Stuart put together a brilliant team of consultants, each of whom were full of ideas and have since become friends. It included engineers, lawyers, landscape architects, and retail, housing, and office experts. Whenever I have the chance, I return to those same people. It was a very dynamic exchange that has informed our subsequent experience. We didn't always agree, but we had strong discussions. That is an ideal situation: where you have a developer who is full of ideas, who will listen to yours; we listen to his, and somehow, out of the soup, something is created. Although the project was never built, it was still a catalyst that has stimulated later work. For a good project, 90 percent of its success is because of the relationship between architect and client. Whether it is Lloyd's of London, the Pompidou Center, or Chiswick Park, which we are building for Stuart, in the end it is all about the relationship, even on the personal level. The point of contact might not always be the chairman of the company, but it is critical to realize and acknowledge that you can't play table tennis on your own.
NR: Do you see a difference when you are working with a cultural client versus a developer whose bottom line is what matters versus design? And can more design be incorporated into a project when it is a public one versus a private development?
RR: There is a difference between clients—public and private, cultural and corporate. Many developers want to build last year's building. And this is a problem, because they will want the building core to be designed by a core specialist, the developer specifies the exact distance between the core and the external wall and the architect can end up merely changing the color of the wrapper around the building.

Having said that, Chiswick Business Park, where Stuart Lipton is the main client, is really a revolution as far as business parks are concerned, because at the heart is a large green park enclosed by a cluster of office buildings, and behind the office buildings are the car parks. I wouldn't say that the idea to put cars around the edges is mine or Stuart's—it came out naturally in our discussion while we looked at the pedestrian traffic flows and the views from the building and the nature of public spaces. This has allowed us to do an amazing public space. So in that sense Stuart is an ideal client, with vision and experience.
Stuart Lipton: The brief to Richard was to reinvent the Georgian villa in a modern vernacular. We knew from experience at Stockley Park, a 1980s business park we had developed, that the old idea of buildings in a landscape standing apart from one another was outdated. People enjoy one another's company, so the brief was to place the buildings close together in a street, giving each building on the site equal prominence to ensure equal land values. Richard and his team produced an elegant plan that cleverly utilized the site to form a strong identity.
NR: For this second Yale studio about the developer and the architect, the idea of collaboration seems to be even more evident since you have already worked together. How will you direct the project for the studio and what is the value for the students to focus on East Stratford, in London, near the 2012 Olympics, as the site?
SL: Each of us has strong views about urban needs. This project for Stratford is an opportunity for us to think collaboratively about a mixed-use solution that can act as a magnet to regenerate a very run-down piece of the city—which could be any city. Stratford has a wonderful transportation network, but it has been neglected for a century. The project has the potential for bringing together the community, which is very diverse. Most particularly, it offers us an opportunity to produce architecture and public space for the twenty-first century as a team. Figuring out how the activities and the uses overlap will be an interesting target. How do we build mixed-use areas for the twenty-first century? How do we take into account social and civic issues such as livability, crime, health, and education? How do we improve the quality of life by creating a place that is quite wonderful? It is interesting to look at what we tried to do twenty-five years ago for Coin Street. The mixed-use aspects there, the life and activities, are absolutely relevant—it could have been yesterday.
RR: To me, this project for Yale students is a valuable exercise because of the nature of the development and the complexity of the situation. The Thames Gateway will have one million people moving into an area the size of the city of Manchester. The Mayor of London would like to see it become a real piece of London rather than a series of new towns or suburban sprawl.

The complexity has to do with integrating this new city into the area around it. How does it both stretch out into the neighborhood and simultaneously draw people inward? Making that link is one of the more difficult tasks, as well as giving the place a real heart, at not only the public-space level but also in terms of commerce, leisure, and so on.

As to the East Stratford area, the critical part is to be able to bridge the different levels of the city: how you connect the upper town with the lower is the interesting design problem. There is a fantastic amount of water and marshlands and there is the danger of flooding. The Thames Gateway Barrier was supposed to last for one hundred years but is now just going to last for twenty. It is a serious problem. East Stratford sits on the northwest of the Thames Gateway, so it has a very commanding and important position. Our hope is to achieve something dynamic between developer, users, and professionals.

Chris Wise: Stratford presents key issues, for the profession in a broader sense, which is how to engineer infrastructural systems. The most fascinating ones are those that we occupy all the time. The reason I am interested in Stratford is because it is a test bed. We can conduct an experiment at Yale to see how robust those systems are and whether we can establish a hierarchy. This is so that we can help ourselves, as much as the students, to understand how to make something that is not only okay on the day you build it but also will function well in the future. To my mind, there is an infrastructural system that can grow and develop over time, but the roots are quite strong: It is a question of how to identify the roots and understand how the system might grow.

NR: How do you build architecture and public space for the twenty-first century with systems, roots, and flexibility to adapt to change? What is the mechanism for built-in flexibility?

SL: First, you must build decent buildings. In the world we live in, buildings are going to change in use. When we describe mixed use, the buildings change from lofts to offices to apartments, and that is the way of the future.

RR: The way we live today is completely different from the past. Technology has freed us from the space of the office—we can take work home, which means that live/work/leisure realms are not so clearly defined. We are now trying to weld together and overlap activities between rich and poor, young and old, single and married, even between ethnic groups, in order to create an inclusive society: buildings and public spaces have to reflect these requirements. Buildings are the shelters for those activities, so you have to ask, "How do you integrate these different uses in the right way and also have a certain amount of flexibility, knowing that it is all going to change very fast?" The one constant is that we know that whatever we do is going to change in the next few years.

CW: There has been a real change in the way people use technology in the past five years, and this change is happening faster and faster. We are right in the thick of the digital age. In the old days you could speculate on what might happen, but it was difficult to ground your supposition in any kind of rational interrogation or analysis. We can test scenarios of complicated interrelationships that we couldn't guess ten years ago. This is commonly done in big engineering projects and the financial world, maybe less so in architecture.

SL: I would translate that in slightly different terms. For many years we have been building a product that is focused on "all things to all men." I think there is going to be a trend away from that, and lifestyle will be much more fit-to-purpose. Environmental needs are going to be quite different, depending on whether you are single or a member of a family. Living conditions, office and leisure needs are all different. We are still living in a wasteful environment where energy is considered only a modest part of the overall problem, and lifestyle is merely a by-product of habits. I think we are going to get away from the general world we live in and create buildings that are more specific and relevant to use. You might want a loft with a 15-foot ceiling, where you can have a mezzanine area for an office, to create a live/work space. Someone else might want an apartment that could easily be adapted for an elderly person's lifestyle in the future. Demographics change often. Our experience is that development and demographics do not match.

The other side of this is that lifestyle changes will reflect the fact that buildings are much more temporary in nature than they used to be. We are used to making buildings with short life cycles, and science now looks at twenty-year expectancies. The elements of the building are usable in the longer term, but as technology changes we know that buildings will be completely different. There will be new technical moves that might be energy-generating rather than energy-demanding. And the lifestyles of the people living and working inside will be completely different; they may even have chips in their bodies, not just in their computers.

CW: That is a retake on the S's—site, structure, services, state, systems, and stuff—each has a shorter and shorter life cycle, but the longer-lived ones, like site, stay forever. We intend to design the project so that students can look at the individual nature of buildings in the way Stuart is describing. As they get a greater understanding of how they work on their own, the students will learn how the buildings relate to community and how to make a sustainable community. This means considering the site's multiple facets, not only with regard to energy and its built fabric but also its desirability and livability quotient—how to make people want to live there, stay there, and dedicate their lives there. So the objective is making a place sustainable as much as it is making buildings sustainable.

SL: Absolutely. That is why my big drive is for a social environment; quality of life is a number-one agenda for people today. I look to a return to the town square, a mix of uses with social cohesion in an uplifting holistic environment that will counteract against crime. It will encourage better health by being safe and enjoyable so that people will walk.

RR: I have some doubts that we will be tailoring environments in response to specific needs. Of course in some areas you will be designing specific buildings, but the well-served space that is flexible remains a predominant factor and concern. I am a little less convinced that things will change that quickly as long as you can change the mechanical parts, which have a short life, but a lot of the plugging-in of services will be to existing structures.

We need to understand that cost and value are totally separate issues—that is where we often get lost in discussions about sustainability. Sustainability is about value and about how we deliver those values via public space and buildings. That is what real architecture is about. In some ways there are fundamental things that haven't changed since the beginning of mankind: People still like to sit on the stoop and face the sun and watch people go by, and you want children to be close to parks. Many of those fundamental desires and needs are still important and represent core values. Once these are identified, you have a much more fluid situation, which holds the possibility of developing and delivering extremely exciting twenty-first-century enclosures.

SL: I always enjoy this kind of debate with Richard. Public spaces have been around for thousands of years, and their essence hasn't changed. We can send a man to the Moon, we can make human body parts, but we haven't progressed in the built environment, which hasn't changed for hundreds of years. Technology will turn architecture and our living and working environments into something different—more humane, more social, and probably more automated.

NR: In such a large-scale project as East Stratford, which is really rebuilding a whole city, what is your role compared to that of the politician? And how as a member of the political arena do you see the professional's involvement with the politicians?

RR: In the UK, the public sector provides public transport, and now they are encouraging affordable housing. The critical thing is to make public projects such as a road more than a road, or a house more than a shelter—to make it a real place for people. The politicians have power, but there is a poor link between professionals and politicians, as well as between users and buildings. I think—perhaps because of all my work in politics—that as professionals we must close that link. Politicians on their own are isolated and must look at how to get re-elected. We need to encourage them to think beyond tomorrow's vote and influence them accordingly.

SL: Worldwide, there are conflicts in the zoning process; increasingly high density is demanded in cities, and this throws up a debate about congestion, privacy, and social conditions. There is a tension between the monoculture required by business because of security and the energy created by mixed-use projects, where long days present a return to the town square. The civic nature of cities has been forgotten. Developers have replaced public authorities in providing public space.

NR: And what about the role of cultural projects in the development process, especially in terms of a large-scale urban revitalization project? How can public/private partnerships be more successful?

CW: Often politicians are not well-informed, and cultural projects tend to fall into a void. If you look at the Javits Center, in New York, which we are working on with Richard, it is a similar story. They need to inject a degree of reality about what is possible, affordable, and fundable to give someone the chance to say what is valuable or not.

SL: I have a passion for cultural buildings. Twenty years ago, Sir Nicholas Serota, then director of the Whitechapel Art Gallery and now director of the Tate, asked me to help him with a renovation. Since then I have been involved with Bob Venturi on the National Gallery, Herzog & de Meuron on the Tate Modern, and Dixon-Jones on the Royal Opera House. Perhaps this type of transformation, such as in Bilbao, was started with projects such as the Sydney Opera House. Civic buildings generate value for everyone as they add to society and business.

RR: It is interesting to look at Barcelona, which is the best example of a major regeneration project in Europe. It has had three mayors who have worked with a clear urban and social vision closely together with a small group of architects continuously over twenty years. If you look at Ground Zero, on the other hand, it is the most embarrassing story—not because architects or engineers have failed but because of a complete lack of political will. No one is taking on leadership or thinking about quality, and the net result is that we have nothing to show for it. It should be a sustainable place that looks toward the future as well as taking on the needs of the community. This could be *the* great contemporary urban place in New York.

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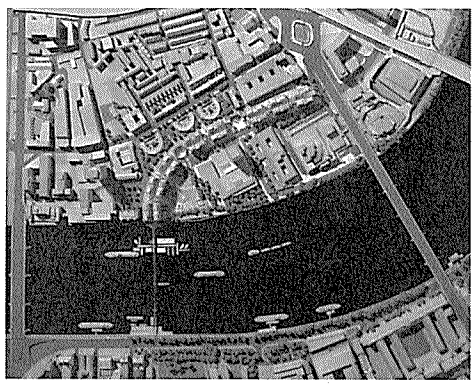

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1. Site of East Stratford, London, 2005.
2. Model of proposal for Coin Street, Richard Rogers Partnership, unbuilt project, London, Stanhope Developers, 1999.
3. Chiswick Park, Richard Rogers Partnership, Stanhope Developers, 2004.

Sunil Bald

1.

Sunil Bald, of Studio SUMO in New York, is teaching an advanced studio as the Kahn Visiting Assistant Professor at Yale in the spring semester. He also gave the lecture "Fold, Crease, and Tear Along Perforation" on January 19, 2006. Nina Rappaport met with Bald to discuss his current work and interests.

Nina Rappaport: How did you jump from small-scale projects in New York to the large-scale business school project just completed at the Josai International University in Japan? It is interesting that quite a few other New York architects, such as James Stewart Polshek and Steven Holl, did their first major buildings in Japan in the 1960s and '80s.
Sunil Bald: After my partner, Yolande Daniels, and I gave a lecture at Josai International University, we were asked to develop ideas for two tiny sites near the campus, but those did not happen, so the university asked us also to look at a much larger site for a new business school at its other campus. We were requested to develop a proposal, even though we had very little to go on programmatically. I had worked for Antoine Predock years before on comparable projects, so scale wasn't as daunting as the issue of how something gets built in Japan and learning ways of interacting with people from a different building and design culture.
NR: What was your approach to the design of this project once the program was figured out? Did they give you free rein?
SB: Not exactly, although in our limited experience it does seem that the architect in Japan is given more responsibility in shaping program rather than just accommodating it. We started with an assumed and very generic collection of usable spaces: offices, classrooms, two auditoriums, and a maximum 10-meter structural span for a concrete column/slab system. Without much to go on in forming interior programmatic relations, we asked what kind of architectural object would organize the exterior part of this disorganized edge of the campus. As a result, probably the most interesting spatial experience of the building is outside of it and slipping through and inhabiting the exterior spaces that it organizes. Sectionally, the first-floor slab lifts up to allow this slippage. The public spaces on the first two floors that conform to the landscape mediate between the different elevation shifts of the site, connecting the building to the hillside. This also forms the base of the three-story classroom bar, which is a single-loaded corridor; its 500-foot length winds back on itself in a J shape: a three-story glass-bridge hairpin. Though we didn't set out to make a J, they were happy with it, so we went with this symbolic flow and reference to Josai.
NR: How have you learned from these operative insertions in terms of being instrumental in the design of this project? Earlier projects, such as Flip-Flop, the 1998 apartment conversion, related to sculptural detail and objects in a space. Does this project relate to the same issues but just with more square meters?
SB: That previous work did deal with highly defined programmatic instrumentality, but in this institutional setting we were much less directive, making opportunities for activities rather than mechanisms. Josai is a large building, so we had to look to the interstices for these moments—a small kink that might create the slightest widening, and in the smallest space there would be an intensity of occupation—making the cracks in our own design. This school's faculty wanted spaces evoking hotel lounges where work gets done informally, rather than in a conservative boardroom. In these spaces the insertions were much closer in scale and concern to our previous design interests. We designed the furniture and had more control within the modest budget.
NR: What elements have transformed your projects in a larger way, recoding a norm in an unexpected solution or creating irony in a project, such as in your Shot Gun House installation or the Mini-Max prefab home? How does the reworking of a program transform the everyday beyond the expected, through the narrative of the process or the product?
SB: We are interested in how everyday situations that when overly interrogated might have something of greater importance that you wouldn't normally ascribe to them. We have been working on a prototype manufactured house, Mini-Max, where we began with simple observations of things as banal and mundane as the domestic aspirations of minivans and the obsolescence cycle of electronic components such as iPods, not unlike issues explored by the Smithsons' Appliance House from the 1950s. While the manufactured house depends on an economy of scale to be feasible, most buyers want to think of their house as permanent, not as a consumer item with a finite life. This led us to look at basic domestic programs to see if a house could not only absorb the economic system that allows it to exist but also question its permanence. Our spaces are increasingly defined by components rather than by walls and are predicated on one's interaction with those components. For example, we listen to an iPod differently from an 8-track in a basement rec room (forgive my nostalgia). The interchangeable components led us to make a series of movable dashboards as walls, so that the room can change according to which component you want to turn on. These are linked by bellows like those used for New York public buses. There are similarities to Flip-Flop, but this is a high-tech project that is reliant on technology developed for other industries, rather than things we found on the street.
NR: But I noticed that the Mini-Max House is not really that high tech; Richard Rogers', the Smithsons', and the plug-in houses are more so. Yours is more about found technologies than new or futuristic ones. There is an interesting correlation between Flip-Flop and the components in Mini-Max, but how do you see the relationship of the body to the space in Mini-Max as different from that of Flip-Flop? Is one more generic and the other more specific to outfitting a space?
SB: Flip-Flop had a more direct relationship to the body, where the body had to conform to these manipulated found objects, and they in turn had to conform to you. Mini-Max is a bit more about technologically outfitting and spatially altering your environment rather than being "high tech", as you say. Flip-Flop was based on an "off the sidewalk" economy; Mini-Max is very off-the-shelf or "off the Web" in how it is made and in what it contains. But the process of making and acquiring these "shelf" items still has to be coordinated or developed for it to be feasible.
NR: Do you think about similar issues with your recent art gallery spaces, both of which are renovations: one for the Museum of African Art's (MAA) temporary space in Long Island City, and the other for the Museum of Contemporary African Diasporan Arts (MoCADA)—white gallery/loft spaces without the orientation of objects. Is the white-box gallery something that you have consciously considered?
SB: It has been interesting to take on the question of the white-box gallery for these two clients. We are not fighting it, but we are struggling with it. The MAA project was a low-budget renovation, $18 a square foot, so they couldn't really afford new walls. We used construction fencing and other economical materials for finished surfaces in the lobby/store, and a system of cables for hanging fiberglass paper in the gallery space. It is important to note that in a space for African art, white is not necessarily a "neutral" color but one associated, in some of these cultures, with concepts as extreme as death. African art does question our assumptions about neutrality, and as an institution the Museum for African Art has historically reconceptualized notions of display. Our orientation was really more focused on how to address and project the temporality and transience of this institutional space.

MoCADA is a fledgling organization in Bedford-Stuyvesant, but it is moving into a new space in the new BAM cultural district. It has been an art space for its community and is now growing into a space for the art community, making it an architectural challenge to balance these two institutional aspirations. One is predicated on the complexities and messiness of identity, the other on the neutrality of a space for art. But rather than identify an aesthetic specific to the African diaspora, we focused on the notion of diaspora itself and how the spatial mapping of the (usually forced) migration and scattering of the people of a continent might be communicative while also having its own spatial or tectonic integrity in a map that we designed for the lobby space.
NR: Would that be considered the narrative of the architecture that you have developed with your research on Brazil and the historical work on politics and power? If narrative makes the work more political, realism has more potency in regard to sociopolitical and economic issues—so would you say that narrative in architecture is the space assisting in the process of telling the story indirectly?
SB: In my Brazil research I have looked at narrative as the history that is contemporaneous with the architectural object; it is written simultaneously as the architecture is made. I have been looking back at the mythologies—including Brasìlia's—that were written to frame the architecture culturally and politically. Instead of architecture shaping identity, it examines the identity of architecture. Of course, buildings and narratives—having very different types of presence in our physical and psychological worlds—can and do become dislodged from each other or establish new affiliations.
NR: Are you conscious of making narrative in your own work so that projects tell a story about another time and place or is it just a separate aspect of your own research and interests?
SB: Narrative is sometimes in our architecture, but it is not direct and is not something we feel entirely comfortable with. One recent project is an investigation of an architectural typology of the Shotgun House in Houston's Third Ward, for an installation which looked to narrative to show that there was something there that hadn't been there before in order to acknowledge an erasure. The Shotgun House has been traced back to West African dwellings as a vernacular that became slave dwellings or houses for the poor over here. So how do we work with it so that the house tells its own story? It is also an architectural history that has been marginalized, so the only way we could look at it was through narrative. And we found amazing stories about the domestic lives of slaves and wrote them on the surfaces, giving the words a material quality through surface and shadow to architecturalize the narrative, rather than make a narrative or signifying architecture. It is interesting to contrast African art's relation to narrative and the Western canon's move toward abstraction, much prompted by its own abstract reading of African art that was itself imbedded with meanings indecipherable to Western culture. So the role of art has been all too easily erased in the quest for a pure aesthetic.
NR: How will some of these interests of yours, in narrative, insertions, and political spatial relationships, be incorporated into your studio at Yale?
SB: The dynamics of my interest in the relationship between architecture and political power have changed considerably since my Brasìlia research, through the fact that globalization is talked about in terms of corporate brand names as much as nation-states. The Yale studio will examine some of these issues from the point of view of an institution, the World Social Forum. This group attempts to work in ways antithetical to the goal of centralizing power by advocating for issues resulting from the underside of globalization and by working polycentrically and nonhierarchically from an office in São Paulo. The city has an amazing architectural history, and I thought it would be interesting to explore an architecture sited there that organizes and advocates, not by the UN model of a single locus for building consensus but through making decentralized strategic networks. The hope is to explore the spatial and political relationship between architecture and power beyond national or corporate monumentality.

1. Studio Sumo, Business School, Josai International University, Japan, 2005.

Will Bruder

Amy Lelyveld, critic at the School of Architecture, interviewed Bishop Visiting Professor Will Bruder about his recent shift in practice and outlook on the built environment.

Amy Lelyveld: You had a reputation for being a maverick architect, a desert iconoclast, off the mainstream path. And now you're doing awfully big work and doing it cooperatively. How you are framing that new work in terms of the history of your office and where you started in industrial design and participating in General Motors' competitions?

Will Bruder: I was a pragmatic Midwestern kid with a great railroad set who got into making industrial design objects. These weren't plastic kit cars. I was sculpting them in clay and carving them in wood—literally, laminated mahogany—doing the whole hundred coats of paint to get to what the car might be. It was on such a large scale that it required both design and hands-on sculpting. I won the regional prize, and it took me on my first big journey as a young man. I was sixteen in that August of 1963. Back then, when you won a GM regional award, they flew you to Detroit for a week as their guest, so I was also exposed to Saarinen's General Motors Technical Center in Warren, Michigan. I smiled at Yale's Saarinen conference last year, because I had walked those halls as a young man, not having a clue. At that point in my life, that was a dream: to go to the Tech Center and become a great industrial designer. GM was sort of my stepping-stone. I was sponsored by Fisher Body Plant, and, after seven months, I determined industrial objects were not what I wanted to produce—either as an artist or a designer. Well, I don't know if I knew the word *artist* at that point. I just told my parents that this wasn't it. And I went on and started talking to some architects, because that was a design thing.

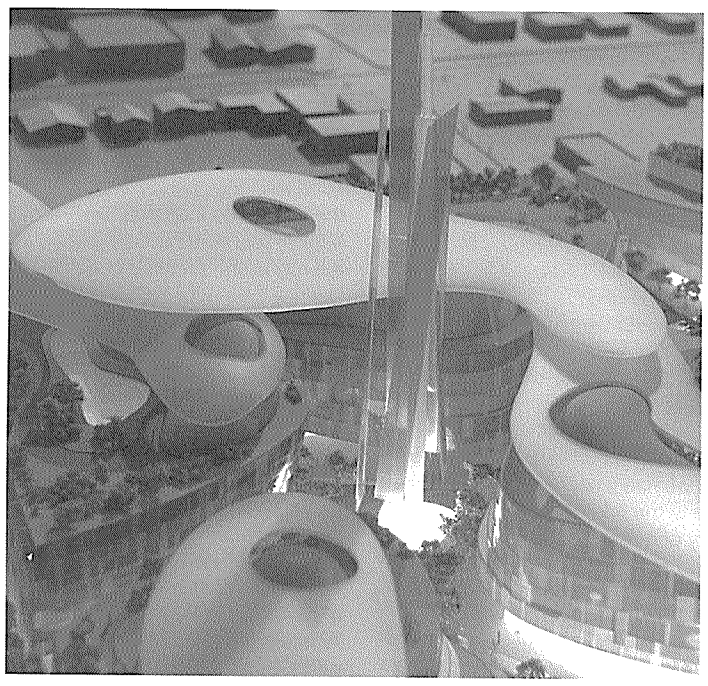
AL: So it was then that you knew that it was architecture for you?

WB: Yes, and today my latest sandbox is a 12,000-acre site, which is the entry portal to the city of Phoenix. It is a 28-square-mile void, which is coming from the Indian reservation to the city. It is a chance to create the portal image of the fifth-largest city in America. Housing is intriguing, but not for that. What Phoenix does not need is another satellite community of the worst kind. But it potentially could be an 8,500-foot airstrip on the site that allows for the landing of 747s. There's the ability for corporate headquarters and manufacturing facilities to have sustainability. But what the hell does that mean? Why isn't Arizona leading in solar energy?

About halfway between Phoenix and Tucson you can be on the freeway and, suddenly, you drive through a pecan orchard that has now become quite mature. It's this profound thing. You're coming through a desert and suddenly you are in this unbelievably open, lacy, gridded grove of pecan trees. And it just takes your breath away, because it's such a contrast. And with that as an inspiration, wouldn't it be interesting to have the edge of Phoenix emerge like a mirage on, literally, the liquid horizon of the heat? Coming from raw desert suddenly into and under a trellis or grove, maybe two miles square, of photovoltaic collectors on racks that become the armature for an otherworldly sort of industrial, corporate park complex, leaving the majority of the land raw. But the portal is the journey under this lattice of photovoltaics. And these photovoltaics would power everything we would ever do in these 12,000 acres. Wouldn't that be an interesting sort of epic? The development company is a subsidiary of Arizona Public Service, the biggest utility company in Arizona. So I put forward the solar grove idea with the president of this utility company.

AL: Then, you could produce even more power for the city, because that's the threat of Phoenix—being a leech on the desert.

WB: Exactly, so we could turn it around and do the leadership thing, because they're hoping to engage companies in Asia and Europe to bring their head quarters to this site. We are reinventing the collaborative process, because we're not talking about Will Bruder doing 12,000 acres, we're talking about choreographing a script that the world can "engage" in on the highest level and setting up a selection process not unlike what Erwin Miller did in Columbus, Ohio.



1.

AL: But this is so different, I imagine, from the vision of the desert that brought you there in the first place.

WB: In the summer of 1967, after working in an architect's office, traveling, reading, and studying, I went to Arizona for the first time, because one of the guys in the studio invited Paolo Soleri to lecture at the art museum. And Paolo arrived not only to lecture, but came with three or four scrolls—100-foot-long crayon drawings on butcher paper. You could see his vision. It was pre-*Arcology* (his book), pre-Arcosanti. I needed those million people in the desert to work with.

So, I worked with Soleri on *Arcology*. I worked on the city of 4 million people called "3D Jersey." And I saw the construction of the new studio at Cosanti. Those eight months were totally formative. And then I finished my degree, and I went to work for Gunnar Birkerts. He was one of the architects who learned from observing Saarinen who had the proper complement of pragmatism and good tectonic-making: It was the analysis of a problem and ability to solve things in really good ways. That, along with a bit of creative skill, could take you to great successes. But it was also a process. Saarinen was moving with such velocity that he developed—really, matured—the foundation for how great architecture still really happens: in collaboration. Saarinen really was the first person I know of to push the envelope with the idea of the model, the three-dimensional model as a tool to think things through. If you worked at his studio and later at Roche/Dinkeloo's or Pelli's, it was all about making models. It was about the recognition that you couldn't read buildings just in drawings, even though Saarinen could draw like a god. Birkerts was gaining commissions at that point in his life. I saw the work evolve, and those are tools that I bring to my studio every day. But I needed to have total freedom in order not to compromise. I ended up arranging Birkerts' entire slide collection, from his first job to his last. So I found all the skeletons. And I looked at those skeletons. And I never wanted to be in that position.

AL: But then you had the confidence to step away from that and find your million people in the desert. And when you got there, you gained a reputation as a maverick. But from the beginning, it seems to me, a lot of the projects you were making were collaborative.

WB: True, I'm the best collaborator when I'm the director of the orchestra: It's about choreography. It's not the buildings that you build, but the spaces in between the buildings. In trying to invent cities of authenticity, buildings can be part of that authenticity, but the spaces in between—challenging the texture and making the texture of a city—are much more interesting to me.

AL: And you became known for a sensitive use of tough materials, for using, the palette of the desert in elements such as masonry and metal. But given your builder's interest in materials and a concern in the detailing, as well as how you bring light and lightness into buildings, I wonder what the role for that will be when you move to a project of 12,000 acres?

WB: Well, the sculpture background never gives me up. It is the weaving and choreography of materials where joints so often become light, when two materials come together that it is often the void, rather than the connection, that makes the magic. These are issues that continue. Everything is deserving of unique attention. Projects such as the elevation of the Nevada Museum of Art and the Vale Apartments, where we manipulate ordinary materials into redefinition and reinvention, is my great pleasure in life.

The first idea for the 12,000-acre project is a sort of solar portal. I'm thinking of the grain and texture of the memory of that pecan grove down the road and the quality of walking under a dappled forest. I think the texture and the quality of life will be totally unique, which will always hold as people look at the project and relook at it over time. Hans Scharoun was never really respected, except by those who got to experience the work, and then the myth grew on that reality. And Alvar Aalto's ideas, too, were often missed, in that geometries can't be perceived by the camera, because you're working against perspective all the time.

When the president of the Nevada Art Museum said to me, "Thank-you so much for what you gave us," I realized it is more than what these folks had. It is the same palette of materials, and yet it isn't: instead of $1,000 a foot—it was $200 a foot. It's a Midwestern thing—I like to make people happy.

And yet, architecture is such a fragile thing. Isn't it funny how you remember so many quotes in your life? As a young man, I found Corbusier's comment about creation being "a patient search" as bullshit, and now I see it as wise. It doesn't come easy. Sometimes you're on, and sometimes you're not. But it's about a search and not accepting the obvious. While the idea might be there in a quick way, having the rigor and discipline to keep chasing for the better answer is tough. If you know it's the right idea, then you won't be able to throw it out. The work gets improved by constantly trying to throw it out.

AL: I came across a 1984 interview where you were asked, "Where do you go from here?" You responded, "I haven't reached any kind of potential yet. I want to do groups of buildings, more innovative uses of materials, experiment more, do some fresh thinking, such as use the scrap brick in the pile at the brickyard. Rammed earth, sod roofs, bigger things, smaller things. I want to do planning, more public work, learn more about solar. Travel more. You think you know something, but you really don't know anything. I've got an awful lot to learn." How does that seem twenty years on?

WB: If I was writing that today, the list would be a lot longer!

1. Will Bruder Architects, section of model of ASU Arts and Business Gateway, Arizona 2004–present.

Ant Farm 1968–1978

1.

The exhibition *Ant Farm 1968-78* was cocurated by Constance Lewallen, senior curator of exhibitions for the University of California Berkeley Art Museum, and Steve Seid, assistant curator for video at the Pacific Film Archive. It was on view at Yale from August 29 to November 4, 2005.

During a lecture on the opening night of the exhibition *Ant Farm 1968–1978* at the Yale Architecture Gallery, Curtis Schreier, Ant Farm member, was asked where he thought one might see work like the collective made today or in the future? Schreier said, "We are hoping to throw it back to you and your generation to continue these experiments." Dean Robert Stern rose, turned to the audience, and said, "Not as long as I am dean at Yale!" It was a hilarious moment. And despite the dean's generosity in bringing the *Ant Farm* exhibit to Yale, the exhibit highlights the divide that still exists between the experimental architecture of the 1960s and '70s and what followed.

A larger theme in the counterculture of nomadics, constantly moving around but somehow making community out of that process. —Chip Lord

The art world—curators, patrons, critics, and the public—has never had a problem appreciating Ant Farm's projects and innovations. Its work has been placed in gallery exhibitions by Walter Hopps, David Ross, and John Handhardt, and the group's Media Van project was supported by a grant from the Corcoran Gallery. Ant Farm's Cadillac Ranch, perhaps the best-known sculpture in America, was commissioned by Spiral Jetty patron Stanley Marsh, and Stewart Brand had the group construct a 50-foot-by-50-foot inflatable pillow in the Southern California desert. The collective has also been praised by critics such as Gregory Battcock, Douglas Davis, and realist Paul Krassner. Ant Farm consciously chose not to work in the traditional architectural workshop but wanted to create projects for galleries and museum spaces, and thus pioneered in video, conceptual, and performance art.

Today it is quite common for architects to organize or curate exhibitions in gallery spaces. They have forsaken building sites for the European *kunsthalle* and spaces like New York's Artists Space and the Storefront for Art and Architecture, among others. Some later migrate into professional building practice with a catalog ISBN number and a public reputation. In fact, I was once told by one of New York's most successful architects that when he arrived in the city, one of the city's more established architects said to him: "You will never get anywhere without me in this city." Not wanting to owe this "patron" anything, he created exhibitions in downtown galleries before beginning his building practice. He also could participate in architectural debates or public discussions in the context of a downtown gallery space that could not be done in teaching, publishing, or building practice. I suspect Ant Farm chose the world of galleries, publications, and museums for very much these same reasons, as Schreier has commented: "In 1970 and 1971 we did a lot of propositions, drawings, collages—an outpouring of a lot of things that were designed to form architectural concepts but were temporary in nature. If we had a name for a project, we would go to the printer quickly and make stationery or a rubber stamp, and suddenly it was real."

This was an architectural trail already blazed by European architecture groups like England's Archigram, the French group Utopie, the Italian radicals such as Superstudio and Archizoom, who were featured in MOMA's 1972 landmark exhibition, *The New Domestic Landscape*. The work of Ant Farm belongs firmly in this international avant-garde tradition of images and propositions coming from Europe, communicated in journals and magazines such as *Domus* and *Architectural Review* to American universities during the late 1960s and early '70s. It is the only American group of the period (although Pulsa, also from Yale, made similar propositions experimental) whose body of work can stand up to the architecture propositions of Archigram, Coop Himmelb(l)au, Haus Rucker, and Superstudio. One only need look at the various (and now largely forgotten) American groups featured in Jim Burns's important 1972 text, *Arthropods: New Design Futures.*

But while Ant Farm sketched with the same facility and imagination as the Europeans, they took their theoretical propositions further in at least one respect. Perhaps because the Ant Farmers are a generation younger than Archigram's Peter Cook, Michael Webb, and Superstudio's Adolpho Natalini, Ant Farm lived their work directly, unlike the Europeans who simply speculated on the future. Archigram, for example, always claimed that its projects were buildable, yet the group's importance is bound up with its visions of a future urbanism, and its designs always remained primarily theoretical, if brilliant, propositions. Ant Farm took its ideas on the road: They lived and worked in their Media Van, driving it across the United States to various architecture schools.

But what is it that they "built," and how do we assess it as architecture? Critic Michael Sorkin perceptively points out in the show's catalog that "Ant Farm's work happily and continuously owned up to the rubric and practice of architecture." Despite their acceptance and success in the art world, all of the members of the group worked in offices (of Philip Johnson, Charles Moore, landscape architect Lawrence Halprin, to name three) but considered their work to be primarily architectural speculations. Ant Farm founder Doug Michels was, after all, trained at the Yale School of Architecture ('67), where he noted that "the seeds of Ant Farm were sown." He explained that it was the interdisciplinary and cooperative spirit engendered in Paul Rudolph's Art and Architecture Building—"where all the students came together in the rooftop coffee shop in an interactive and interdisciplinary atmosphere"—that inspired him to form the group.

In 1970-71, the collective took its "pneumatic nomadic" inflatable architecture across America in the project "Truckstop Network." In a customized Chevrolet "Media Van" and trailer, like "Lunar Rover," they transported an "Instant City" that French historian Caroline Maniaque claims was a venue for "spreading ideas, diffusing information, and images." In a drawing, Archigram's Peter Cook produced his "Instant City" dirigible hovering over the English landscape; however, Ant Farm went out and designed, lived, and worked in their "Instant City" van for four months. Schreier claimed: "The guys in Europe shaking their fists said, 'We want freedom now. We want utopia now. We have all the architectural abilities. We've got campers, plenty of gasoline. Just gas up our camper, inflate our home. Why should we stick around with cinder blocks and concrete and dig holes for a foundation?'" (Lewallen, Constance M. and Steve Seid, *Ant Farm: 1968-1978*, University of California Press, 2004, p. 55).

The original intention of the van was to create an environment, according to Schreier, that would allow one to "go into the woods and inflate an "inflato," hang out there with your girlfriend, shaded by trees, and listen to some good music." But they were ambitious, impassioned architects and chose instead to "camp" in front of various architecture schools. They would pull up to an architecture school (including Yale), sometimes unannounced, and unfurl "Ice-9"—an erotic tail-finlike inflatable—at the entrance. Schreier would say, "See, everybody?" and create Situationist-like performances and installations that they would videotape. In New Haven, the group created its performance piece "Horns and Headlights" in a campus parking lot.

Perhaps their best-known and most distinctive building project was the 1971 House of the Century, on Mojo Lake, outside of Houston, Texas, where they created a brick-and-mortar (actually Ferro cement) version of their inflatable Ice-9 balloon. The house's interior walls have—or had, since it is currently rotting away—tucked-and-rolled upholstery coverings and hippie redwood burl-like floor and table assemblies rising up out of the swampy lake. Like no other house in the world, it is both unique and typical of Ant Farm—more art-world installation or folly—bringing to mind Anti Lovag's house for Pierre Cardin or André Bloc's inhabitable concrete sculptures—than a studio-designed residence (of course, Ant Farm was the contractor-sculptor-builder).

I hope Yale students who spent time at the exhibition, installed with plywood walls and cutouts by exhibition director Dean Sakamoto—understand that although Ant Farm's impulses were more Frederick Kiesler than Frank Lloyd Wright, they nevertheless follow the great tradition of individualistic, anarchic, activist American architects/artists that it is one of our most valuable contributions to the culture of architecture. So students, don't be afraid to head in that direction and stay there if you so decide.

—William Menking
Menking is editor of Architect's Newspaper *and professor of architecture and city planning at Pratt Institute. He was cocurator of the 1999* Archigram *exhibition.*

1. Ant Farm installation at Yale School of Architecture, 2005.

TRANS-CENDENT TYPE

1.

The *Architectural Record*'s 2004 Venice Biennale of Architecture exhibition, *Transcending Type*, was exhibited at Yale from November 14, 2005 to February 3, 2006.

Transcending Type, an exhibition that originated at the U.S. pavilion in the Venice Biennale of Architecture in 2004, has been adapted nicely to the Yale School of Architecture Gallery, where there is ample space to compare the models, videos, collages, and other objects presented. Curated by Robert Ivy and other editors of *Architectural Record*, the show presents six American firms engaging common building types in uncommon ways. In almost every case the disruption of type is on the level of programmatic complexity and its expression in a flexible building structure. There is, somewhat surprisingly, little that is unexpected, aside from the occasional flourish in presentation technique. More than anything, *Transcending Type* presents what one hopes is the apex in architectural design's passionate love affair with digital rendering and modeling techniques, demonstrating the propensity for morphologies and topologies to transcend typologies without really articulating a new condition for the built environment.

Two projects stand out for their use of the computer as an integrative tool, developing new approaches to design based on the computation of economic, political, or social data and producing formal objects that in some way reflect the complicated milieu of the present. "Resi-Rise," originally proposed in 1999 by KOLMAC (Sulan Kolatan and William MacDonald), is the most interesting in this regard. It proposes an iconic urban residential skyscraper that molds its formal excess in the terms of a new conception of flexible habitation. The undulating form of the tower is produced by creative interpretation of zoning laws and the relative desirability of views and floors and then is further contorted relative to a system of flexible modular living units, which themselves expand and contract with the needs of the inhabitant or investor. Flexibility is the key here, and the model is concerned mostly with the structural frame for these contingent conditions; it is a latent structure for the realization of all sorts of habits and habitations. "Resi-Rise" is similar to the "Flex City" project for Ground Zero by Archi-Tectonics of 2001 (not in the exhibition). In both, one imagines the architects emulating Dr. No, glued to a field of computer screens and plugging in economic, political, and cultural conditions to some sort of übersoftware, the processed data producing a universally appropriate built condition. As always in such ventures, the formal result appears to be much more than a function of its flexible rhetoric; indeed, KOLMAC's model is so striking and elegant that there is little evidence of the purported innovation in urban planning and development from which it claims to derive.

George Yu's "Shop Lift: Rethinking Retail" shopping center is a remarkably similar take on a typology, this time presenting a horizontal structure interweaving retail, recreation, and residential uses. The model is hard to read but shows a sense of the spatial environment that would be created by such programmatic mashing. Further emphasizing the premise that it shares with "Resi-Rise" (aside from the importance of a catchy title), "Shop Lift" is unabashed in developing the fantasy that innovative architectural design can get away with something in the face of unbridled economic development and an emphasis on the bottom line. If architects were in charge, Yu seems to be indicating, economic resources could be unproblematically invested in experimental forms and new models of social conditions. Design, so long after the modernist fantasies have faded, can still change the world, or at least—and this is where the pitch to the developer comes in—it can put consumers closer to the shopping mall.

What is odd about this show is that while each participant takes on a very different building type, in each case the possibility of "transcendence" is based in the multiplication of programs. Thus, what KOLMAC is to the residential skyscraper and George Yu is to the shopping mall, Lewis.Tsurumaki.Lewis (LTL) is to parking, Studio Gang (Jeanne Gang, Louis I. Kahn Assistant Visiting Professor, Fall '05) is to the stadium, and Reiser Umemoto (RUR) is to the highway. LTL is refreshingly simple in its practical interweaving of parking lots into a hybrid residential/retail/office structure, although the presentation is probably the most unsatisfying in the show. Studio Gang proposes a stadium that sits atop and amid office towers in a high-density commercial district. In terms of programmatic mix, "Baseball in the City" is the least aggressive in the exhibition; perhaps as a result, it is the most engaging as an image of an innovative urban experience. Reiser Umemoto's video *Ecstatic Planning*, on the other hand, is the most formulaic and egregious. It is formulaic because, rather than seeing any distinction between building types and transportation infrastructure, it explicitly proposes that the highway is simply another typology that is dissolving into programmatic flexibility and morphological relationship to the cultural landscape. As a result, it doesn't transcend anything. Given the rise in gas prices, wars for oil, and the destruction of the environment in which the highway system participates, RUR's project might be said to be innovative in its ability to propose a complex vision of the future of transportation infrastructure without thinking about social, political, and economic implications in any material way.

Predock Frane's kinetic sculpture *Acqua Alta, Spiritual Space* is an exception. Designed as a quasi-site-specific installation relating both to the aqueous condition of Venice and the position of the skylights in the United States pavilion at the biennale, it sits a little uncomfortably in the Yale Gallery. Its allusion to an architecture of open structures and experiential conditions serves as a good framework to engage the rest of the show.

If *Transcending Type* is code for mixing programs, there are plenty of high-end, mixed-use developments already available for analysis and exhibition. In Manhattan, SOM's Time Warner Building is perhaps the most transcendent of these: a developer's dream of hotel, office, residential, and retail. Pelli Clarke Pelli Architects' 731 Lexington, at the other end of 59th Street, reiterates the model. KPF's recent project for the West Side Stadium puts a slight twist on the role of architecture in this economically driven programmatic excess: Its stadium, though buffered by an ability to partially transform into a convention space when not being used by athletics, justifies its allocation of public land and resources by use of a solar-power-generating skin—the building doubles as a power plant. Something has been transcended in this project, but I don't think it is an architectural typology; perhaps it is a transcendence of the myopia on the part of the current architectural culture to see architecture as design and thus limit proposals to innovations in form.

In *Transcending Type,* we are dealing with the type of design sensibility that emphasizes visual explorations over material concerns—seemingly thinking that if it looks really cool it will solve some amorphous problem of urban rigidity that no one is really worried about anyway: It morphs, it warps, it rethinks the urban condition. It is a type of architectural design that aims to look like it transcends. If the projects don't actually all look the same, one project feels pretty much like the next one, busily imagining an abstract future of the digitally rendered architectural sublime, transcending, often quite beautifully, the specifics of any material concerns facing the culture of building today.

—Daniel Barber
Barber (MED '05) is a PhD candidate at Columbia University Graduate School of Architecture, Planning, and Preservation and a lecturer at Yale School of Architecture.

1. Transcending Type *at Yale School of Architecture, showing the KOLMAC Project, 2005.*

Previews

Prairie Skyscraper: Frank Lloyd Wright's Price Tower

To mark the fiftieth anniversary of Frank Lloyd Wright's Price Tower, the Price Tower Arts Center, in Bartlesville, Oklahoma, organized the exhibition *Prairie Skyscraper* (in collaboration with the Frank Lloyd Wright Foundation, of Scottsdale, Arizona), which will be shown at the Yale Architecture Gallery, from February 13 to May 5, 2006, in an installation designed by architect Zaha Hadid, Yale Saarinen Visiting Professor, spring 2004.

Anthony Alofsin, a noted Frank Lloyd Wright scholar and professor of architecture at the University of Texas at Austin, curated *Prairie Skyscraper* with the assistance of Mónica Ramírez-Montagut, curator of collections and public programs at Price Tower Arts Center. On exhibit is a comprehensive selection of the center's collection of historic artworks and objects relating to the building, including never before exhibited Wright documents, photographs, drawings, and building components from its own holdings and from those of the Wright Foundation's archives, as well as original furnishings—desks, chairs, tables, and textiles.

Wright described the building as the "Tree That Escaped the Crowded Forest." It was first designed in the 1920s for St. Mark's-in-the-Bouwerie in Manhattan, as a visionary project that remains relevant today. Redesigned and built in 1956 on the Oklahoma prairie for the H. C. Price Company, the Price Tower integrated office, commercial, and residential space within a richly decorated structure whose cantilevered floors "broke the box" of conventional construction. Initially realized to serve as an office building in 1956, Price Tower was then transformed into a hotel and restaurant that is the centerpiece of the museum's permanent collection.

The most striking aspect of the Price Tower is its "taproot" system. Based on the structure of a tree, the building's central core contains circulation and services from which cantilevered reinforced-concrete floors extend like branches. The surfaces of the concrete walls, ceilings, and floors flow from one another, creating a sense of unity incorporating plasticity and structural continuity. The resulting form is that of an unconventional base, an articulated top, and a freestanding skin, with vertical green copper louvers integral to the structure shading the residences and horizontal louvers for the office spaces.

"*Prairie Skyscraper* documents how this singular building came into existence and demonstrates how it epitomizes Frank Lloyd Wright's lifelong passion for merging architecture, design, and art," says Richard Townsend, executive director and CEO of Price Tower Arts Center. The exhibit also projects into the future by showing Hadid's design for the new addition.

Accompanying the exhibition is an illustrated catalog published by Rizzoli International Publications and edited by Alofsin, with additional essays by Ramírez-Montagut; Hilary Ballon, professor of art history at Columbia University; Joseph Siry, professor of art and art history at Wesleyan University; and Pat Kirkham, professor at the Bard Center for the Decorative Arts, in New York. The exhibition, its tour, and publication are made possible in part by the Henry Luce Foundation, the Buell Family of Bartlesville, the Silas Foundation, the Oklahoma Tourism and Recreation Department, Oklahoma Humanities Council, the "We the People" initiative of the National Endowment for the Humanities, ConocoPhillips, the American Architectural Foundation, the Oklahoma Arts Council, and the National Endowment for the Arts Oklahoma.

After being shown at Yale, *Prairie Skyscraper* will travel to the National Building Museum, in Washington, D.C., from June 17 to September 17, 2006.

Adapted from the catalog introduction by Mónica Ramírez-Montagut, curator of Collections and Public Programs at the Price Tower Arts Center.

1.

Philip Johnson and the Constancy of Change

From February 16 to 18, 2006, the Yale School of Architecture and New York's Museum of Modern Art will cohost the symposium "Philip Johnson and the Constancy of Change." The conference will begin at MoMA on February 16 and continue at Yale through the weekend.

Men do not know how that which is drawn in different directions harmonizes with itself. The harmonious structure of the world depends upon opposite tension like that of the bow and the lyre. —Heraclitus

Johnson, who died at the age of 98 on January 25, 2005, had a flamboyant presence and an impressive influence on both American and world architecture for more than six decades. His work, as much as his persona, produced a wealth of debate and controversy. At Johnson's own request, there was to be no memorial event after his death; nevertheless, his work as an architect, as well as his broadly disseminated views on architecture, art, history, politics, and education, pose many questions that deserve discussion. "Philip Johnson and the Constancy of Change" will assemble curators, scholars, and architects to critically analyze his total career. The diverse sessions will address Johnson's eclectic and erudite rapport with history, his endorsement of different versions of modernism, his tactical use of rhetoric and the mass media as an architectural modus operandi, his social persona, and the politics of patronage.

On Thursday night, the symposium will begin at the Museum of Modern Art, where Terence Riley, the Philip Johnson Chief Curator of Architecture and Design, will give the talk "Portrait of the Curator as a Young Man," which will be followed by a screening of the 1965 film *This Is Philip Johnson*, directed by Merrill Brockway. Then Jeffrey Kipnis, professor at the Knowlton School of Architecture at Ohio State University, will speak on Johnson's later curatorial work in "The Very Picture of Architecture."

The event will move to the Yale School of Architecture on Friday and Saturday for four thematic sessions and three concluding talks. In the first session, "Roaming Through History," the architectural historians Kurt W. Forster, Vincent Scully Visiting Professor of architectural history at Yale, Charles Jencks, and Mark Jarzombek, professor of history of architecture at MIT, will discuss Johnson's extensive knowledge of architectural history—an erudition that found expression in his built, curatorial, and written work. Johnson's oeuvre drew on an array of historical styles, and as a part of his self-made myth he promoted an eclectic approach to the past—an attitude that he perceived as anti-ideological. Forster will trace the ongoing tradition of "The Autobiographical House," which Johnson enriched with a series of pavilions on his New Canaan estate. Jencks will address Johnson's aphoristic and eclectic interest in history in "The Truths of Johnson"; Jarzombek will analyze the classical impulse of Johnson's historiography in "Producing Johnson." Finally, Alan Plattus, of Yale, will give a response to this session.

On Friday night, Dean Robert Stern will give welcoming remarks, followed by keynote speaker Vincent Scully, Sterling Professor Emeritus of the history of art at Yale, who will reflect on Johnson's work as an architect. The first session on Saturday morning, "Reckoning With Modernism," will trace how as curator, educator, and architect, Johnson participated in the propagation of different versions of modernism in architecture. In these transitions from one style to another, however, Johnson was more the promoter than the originator of the succession of architectural paradigms. Phyllis Lambert, founding director of the Canadian Centre for Architecture, will give a talk titled "Breaking With Modernism," in which she will reopen the question of the collaboration between Mies van der Rohe and Johnson on the Seagram Building. Swiss art and architecture historian Stanislaus von Moos's lecture, "Playboy Architecture Then and Now," will address the tension, given their two dissimilar psychologies as well as differing conceptions of modern architecture, between Johnson and Sigfried Giedion as it evolved in the years after 1945. Mark Wigley, the dean of Columbia's School of Architecture Planning and Preservation who cocurated the controversial MoMA exhibition *Deconstructivist Architecture* with Johnson in 1987, will give a talk titled "Reaction Design." Yale's Sandy Isenstadt will be the respondent for this session.

The second session on Saturday will address Johnson's use of "Rhetoric and Media." He was known for effectively bringing words and images into play to stage a tension between the two modes of knowing underlying the art of architecture: thinking (idea) and feeling (beauty). This session addresses his tactical use of both the visual and written media in constructing a cunning and ingenious modus operandi for his architecture. His mastery of media helped to organize his dispersed utterances into a visible, sophisticated counter intellectualism, the philosophical underpinnings of which will be dissected in this session. The speakers will include Ujjval Vyas, a scholar from Chicago, who will address Johnson's interests in his lecture "Philip Johnson and the Rhetoric of the New." In a talk, "Johnson on TV," Beatriz Colomina, professor of architecture at Princeton University will establish the structural connection between the "modern-ness" of Johnson's architecture and his operative use of the mass media. Detlef Mertins, chairman of the Department of Architecture of the University of Pennsylvania will give a talk, "A Taste for Modern." Emmanuel Petit, conference coordinator, will be the respondent for this session.

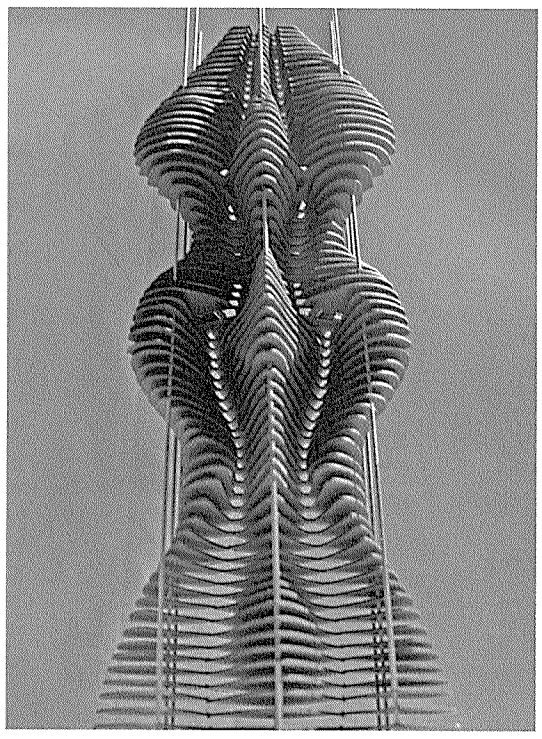
The symposium will continue on Saturday afternoon with analyses of Johnson's "Politics of Patronage." For Johnson, both art and architecture were closely linked to the social scene from which they emerge. His social finesse allowed him to acquire a position of power within the discipline, from which he built not only his own reputation in relation to influential clients and peers but also promoted younger generations of architects, whom he affectionately called "the kids." The speakers in this session will discuss Johnson's persona in architectural culture, as well as the influence of his patronage, through talks such as Columbia Buell Center director Joan Ockman's "The Figurehead," professor of architecture at Columbia University, Reinhold Martin's "Liquidity: Architecture and Oil," City College department of planning chairman Michael Sorkin's "The Plot Against Architecture," and Sci-Arc visiting scholar Kazys Varnelis's "Johnson's Empire." Yale's Peggy Deamer will give the response for this session. To close the conference and help to interpret Johnson's influence on the current generation of architects, commentary will be offered by architects Peter Eisenman and Rem Koolhaas.

—Emmanuel Petit
Petit is assistant professor at Yale School of Architecture and the Johnson conference coordinator.

Conference: On the Waterfront

Adjunct professor Alexander Garvin has organized a conference, "On the Waterfront", from March 31 to April 1, 2005 that will showcase the world's rapidly changing urban waterfronts, which are increasingly becoming sites of dra-

2.



3.

matic new housing developments. On Friday night, architectural historian Robert Bruegmann will give a keynote talk that places waterfront redevelopment within a historical context. The next day, there will be a discussion of contemporary waterfront residential development in three cities: London, New York, and Toronto. Each discussion will be led by a panel that includes a developer, a planner, and an architect. The participants for the London panel will include Sir Stuart Lipton, Bass Fellow in Architecture and founding chairman of the Commission for Architecture and the Built Environment in London; Richard Burdett, advisor to the Mayor of London; and Malcolm Smith ('96), a director of urban design and leader of Arup's Integrated Urbanism Unit. For the New York discussion, the panel—which will focus on the western Queens waterfront—will include Thomas Elghanayan, president of Rockrose Development Corp.; Joseph Rose, former chairman of the New York City Planning Commission, director of the Department of City Planning, and partner in the Georgetown Company; and architect Thom Mayne of Morphosis, who is working on the site that had been slated for Olympics housing. For the Toronto segment, the participants will be Alan Vihant, vice president for development of Concord Adex Toronto; Christopher Glaisek ('97), vice president for planning and design of the Toronto Waterfront Revitalization Corporation; and architect Bruce Kuwabara, of Kuwabara Payne McKenna Blumberg Architects.

Digitally Fabricating Future Architects

After years of sensitive planning, the Yale School of Architecture is now equipped to further explore computer-aided design and the enormous potential of manufacturing. A rich variety of digitally based fabrication techniques are being used in elective digital design and fabrication seminars.

Yale's approach is characterized by the cultivation of a Ruskinian intellectual sensitivity to the translation of design representation into tangible form and a consciousness of the artisan's role that has flourished amid the enduring dominance of modernist tenets. In looking at the implications of what became the modernist call to master the means of production, this has ultimately constituted a surrendering of the possibilities of making custom-crafted architecture and has, in contemporary practice, had the ironic result of an entrenched passivity toward the emergence of standardized materials, products, and components.

Over time this passivity has wrought less interest from the wider profession about how architectural components are made, which makes it generally difficult for an architect to know when an original design idea involving custom project-specific solutions is reasonable in terms of its material realization, from either a technical or an economic perspective. At Yale, through the efforts of faculty such as Kent Bloomer, the desire to design and prototype highly original building components—whether aesthetic, structural, or otherwise functional—has always been kept very much alive. The digitally based fabrication efforts of current students and faculty continue a curricular and cultural disposition that has always embraced sensitively crafting materials into rich architectural compositions—which now increasingly involves computation.

It is an implicit goal of the digital design and fabrication courses to provide students with the information, tools, and experience they need to pursue the creative opportunities afforded by recently developed and emerging manufacturing methods. The digital fabrication equipment now available to students includes three laser cutters, two Computer Numerically Controlled (CNC) milling machines, a 3-D printer, a device that uses wire to cut foam into complex shapes, and a CNC water jet. The water jet uses precisely directed high-pressure water mixed with an abrasive to cut a wide variety of materials as thick as two-plus inches, including steel plate, aluminum, stone, concrete, and wood products. The use of the water jet enables students to use direct digital fabrication for architectural artifacts employing the actual materials that the designer specifies.

To complement and facilitate use of the school's fabrication equipment, Yale has an array of hardware, software, and data-extraction/manipulation devices. Students can become proficient in robust yet easily learned computer modeling programs and, in advanced seminars, powerful parametric modeling programs originally developed for other professions and industries. But for several years now we have gone beyond the advanced computer programs and helped students cultivate the skills necessary to harness the potential of custom-crafted project-specific computer code. Michael Weinstock, a visiting faculty member from the Architectural Association, in London, offered the seminar "Evolutionary Design," which illustrated this aspect of the curriculum. His students composed custom algorithms that explore the emerging parallels between biological and computer code to digitally generate highly original biomimetic designs.

Weinstock's students have also explored applications for the 3-D scanner. This device can capture precise surface data from objects as large as an automobile, as well as much more geometrically complex artifacts. The software that comes with the 3-D scanner quickly and automatically stitches together data captured from multiple scans as an object is rotated; the resulting model can then be imported into other programs for further manipulation and refinement. Data obtained this way can be used for everything from transformative and generative design—where creativity is stimulated by appealing aspects of the original artifact—to the replication of historic castings in architectural restoration.

In Mark Gage's seminars, students research and design using advanced digital modeling environments. They learn to digitally translate the theoretical content in the seminar into a series of formally intensive material projects. For example, the course "Form, Shape, and the Emergence of Exoticism" investigates a new discourse involving exotic forms and assemblages in architecture through the filter of the explosive computational, technical, and material innovations of the past decade. As Gage explains, exoticism forgoes the constraints of mere algorithmic digital formalism, single-surface styling, and biological mimesis in favor of a more evolved attitude toward the reciprocity between neo-baroque architectural bodies, organs, skins, materials, and skillfully tuned part-to-whole relationships. "Specific theories of emergence, symmetry, morphogenesis, evolutionary developmental biology, anomolism, intricacy, and para-micronic versus contemporary beauty are opportunistically examined and linked to both their formal residuals and architectural potentials," says Gage. The students design program-less bodies from parts in an attempt to generate unified wholes, as well as the reverse: subdividing wholes into parts to generate bodies that perceptually oscillate between the two extremes. References from formal aesthetic theories that are dependent on resonant part-to-whole relationships allow the student work to flirt with allied judgments on what constitutes the beautiful, the ugly, and the mundane.

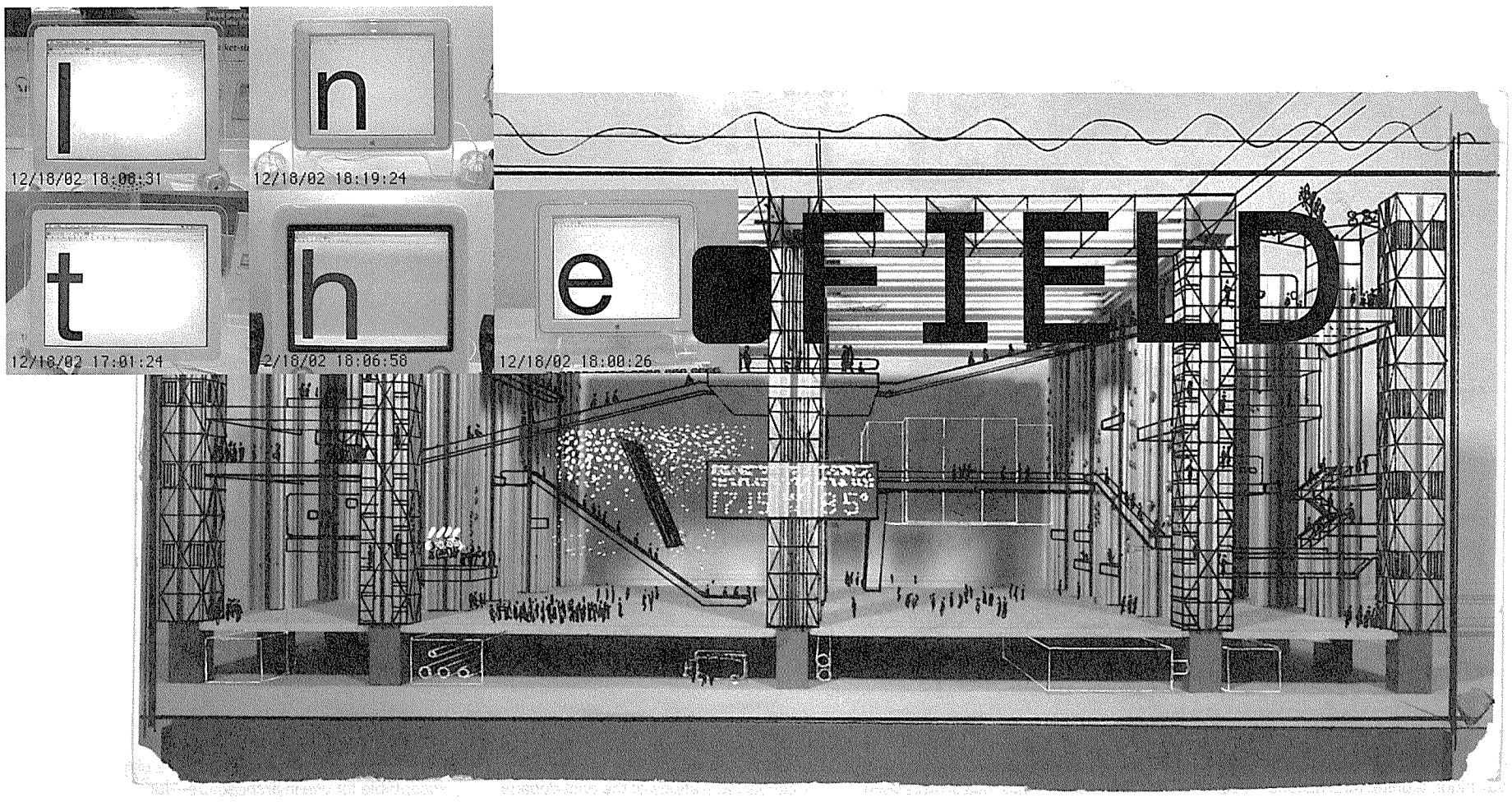
Other courses take a grounded look at the implications and issues surrounding architects' adoption of the relatively seamless digital design and manufacturing paradigms found in other professional arenas. For example, John Eberhart's course "Modeling, Animation, and Assembly" exposes students to a paradigm requiring them to model architectural components three-dimensionally in various computer programs; transform these representations into tangible schematic design prototypes via 3-D printing, CNC milling, or digitally driven cutting devices; animate anticipated assembly sequences; and finally fabricate a kit of parts that can be assembled into a full-size mock-up representing a selected portion of the student's design. One reason Eberhart's courses typically embrace both the Computer-Aided Design (CAD) and the Computer-Aided Manufacturing (CAM) is that he has been instrumental in researching and acquiring most of the school's software, hardware, and fabrication equipment, and he can provide students with a detailed, big-picture look at the relationships between design, representation, and making in a new digital world.

Seminars such as Kevin Rotheroe's "Material Formation in Design" and "Craft, Materials, and Computer-Aided Artistry" focus more intently on digitally based methods of manipulating materials and the creative opportunities they generate, which fall into two categories: formal, in terms of geometric configurations that were previously difficult or impossible to make, or economic, in the sense that the efficiency previously only attainable by high-volume production (low-cost per unit produced) can now be achieved for low-volume or even one-off manufacture. In other words, the production efficiency of the digital devices students learn about is distinct from that of conventional manufacture in that it is no longer dependent on capturing or making a high-volume market. This reality brings the architectural profession and the academy right back to some of the important questions posed by John Ruskin in the middle of the nineteenth century in response to the advent of industrial manufacturing and the mechanical age. For Ruskin, industrial processes were only acceptable for use in architecture—for artistic, social, and craft reasons—if their products (typically metal castings or rolled sections) were transformed or adorned in some fashion by skilled artisans. Ruskin valued the hands-on creativity and intellectual interpretation of the artisan who could transform a piece of material into a building component according to a designer's rendered representation. Mechanization's elimination of the artisan's role diminished both the merit of the process as one suitable for the art of architecture and the merit of any building that utilized manufactured products untouched by artistic hands. However, to varying extents, because they enable customization and efficient production of bespoke components, computer-aided manufacturing methods significantly alter the industrial reality to which Ruskin objected. Artistic hands have new opportunities to intervene reasonably in a standardized world.

The most important of these opportunities does not lie in the realm of hand-based transformation or decoration of tangible manufactured form but within the realm of the digital representation from which an original architectural artifact is directly or indirectly made. The craftsperson's interpretive role is no longer necessary because ambiguity is largely eliminated from the representation, especially for three-dimensional design. In other words, the precision of a representation (and subsequently the computational data extracted from it) is such that the designer's intention is more fully defined and controlled. Indeed, the computational instructions for automated making—better known as the code directing the CNC of material-forming machines—directly translate design representations into tangible forms. Artistry takes place during the representation's creation, not in the skilled interpretation of it celebrated by Ruskin. A fundamental aim of digital fabrication education at Yale is to highlight this new reality for students, weave it into the historical curricular fabric of intellectually considered hands-on materials investigation, and set students on a professional path that includes proactive exploration into the operational parameters and creative potential of CAD/CAM. These learning experiences will enable architecture students to define themselves as digital Master Builders, equipped to cultivate their originality and control the crafting and constructing of their designs.

—Kevin Rotheroe
Rotheroe is a lecturer at Yale School of Architecture.

1. Philip Johnson collage, Pentagram Design, 2005.
2. Price Tower 1956, Frank Lloyd Wright, Exterior view of the south façade. Photograph by Steven Brooke Studios 2004, courtesy Price Tower Arts Center.
3. Jason de Baeor ('06), project for Mark Gage seminar, fall 2005.



1.

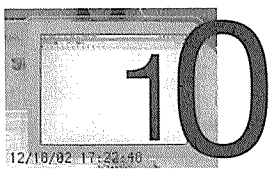
The Root of Radical

Two events were devoted to Cedric Price last fall at Columbia: the exhibition, *Cedric Price: The Fun Palace,* from September 19 to November 11, 2005, and the symposium *The Cedric Price Summit,* on September 21, 2005.

Would you believe that OMA's Seattle Public Library was cribbed from the past? Koolhaas explained it best during a recent interview: "If I look at the new library in Seattle, maybe in a pathetic way we are trying to be Cedric Price." Commenting in an interview on the occasion of the 2004 Tate exhibition *This Was Tomorrow* and the cultural legacy of the 1960s, Koolhaas adds, "It is fascinating that [Price] is making such an incredible comeback. I'm not sure anyone really knows why. Maybe in some way he represents our guilty conscience." Architectural nostalgia can inspire even its nemesis, as it has Columbia's School of Architecture Planning and Preservation, which last fall hosted both an exhibition on the work and a symposium on the personality of Price, who died in 2003. Organized by Dean Mark Wigley, these events gave the students and faculty a reason to ponder the architect, his work, and its mystifying renaissance.

Columbia's focus on Price is part of an effort to fill the historical lacuna of the 1960s and '70s, says Wigley, who has shown repeated concern for an avant-garde busy suppressing its own past. Price arrived on the London scene in 1956 with the important group exhibition *This Is Tomorrow*. Then in his early twenties, Price was finishing his post-Cambridge education at the Architectural Association. He then opened his own firm and befriended a cast of characters that included Reyner Banham, Buckminster Fuller, Arthur Korn, and members of Team Ten. In this mix, as Britain apprehended a postindustrial Pop-colored future, Price spun what Wigley calls the "radical dream"—a reconfigurable and interactive "multiplex" for the people of East London, a massive space-frame with endless plug-and-play activities. Widely recognized as a seminal work, a precursor to Piano and Rogers's Centre Pompidou (1971–77) and an influence on student work at the time, the dream was restaged as the subject of *Cedric Price: The Fun Palace*, exhibited at Columbia University's Arthur Ross Gallery from September 19 to November 11, 2005.

For students acquainted with Price as well as those just discovering him, it appears the exhibition succeeded in a way that the conference struggled to replicate.



Originally commissioned by the Canadian Centre for Architecture (CCA) as part of a yearlong exploration of four architects (*Out of the Box 2003-4*), the *Fun Palace* exhibition was conceived by Wigley under the in-house direction of Mirko Zardini and designed by Louis-Charles Lasnier. Self-consciously historiographic, the CCA project aims "to expose the process of analyzing the archives of architects" and to question their critical interpretations. The exhibition thus presents the filigree of Price's architectural drawings in a forensic lineup with newspaper clippings, questionnaires, and reports, all neatly sealed inside slim metallic briefcases. The curators pinned nothing down figuratively or otherwise; instead, tiny magnets effortlessly press the artifacts to their supports, leaving the installation open to modification based on new research and visitor feedback. The CCA project attempts a courageous history free of the monogamous relationships between author and subject, an alternative to the monographic exhibition that Zardini complains is "loaded with the star-system attitude and self-promotion." Wigley took the risk of erecting a monolithic figure at Columbia with an exclusive focus on Price. At the CCA, Price was neighbor to Gordon Matta-Clark, Aldo Rossi, and James Stirling, enabling a dialogue between what Wigley sees as opposing tendencies, the anti-monumental and the monumental.

At "The Cedric Price Summit" on September 21, 2005, dialogue was given over to a lively fan club including Juan Herreros, Bernard Tschumi, Michael Webb, Keller Easterling, and Stanley Mathews. No one could completely avoid oedipal pitfalls or casting their histories in sentimental and mythological terms. Herreros, of the Spanish team Abalos and Herreros, for whom Price was a great mentor, was the only speaker to revisit the breadth of what he called Price's "heterodox" practice, touching on the architect's battle against self-satisfied careerism, his deep meditation on the flexibility of built form, and his concerns for ecology. With a unique use of slides, Herreros made a case for Price in the history of diagrams and architectural agitprop, showing the latter's deft efforts at representing concepts and his visualization of intangibles like the obsolescence of materials and the fluctuations of program. Herreros also notably linked Price to a critique of globalization and its bullish homogenizing effects through notions of adaptability and restraint.

"Price was very clear when architecture was not the solution," explained Mathews, a historian whose dissertation work centered on the architect. Mathews narrowed in on the summit's implicit bias toward questions of practice and professional ethics by suggesting that if Price had a Hippocratic Oath it might be "Do no harm." He pointed out that he had once successfully petitioned the RIBA to have the right not to build. Price, who strove to empower the individual in society, can be understood as designing large-scale "social prosthetics," Mathews said.

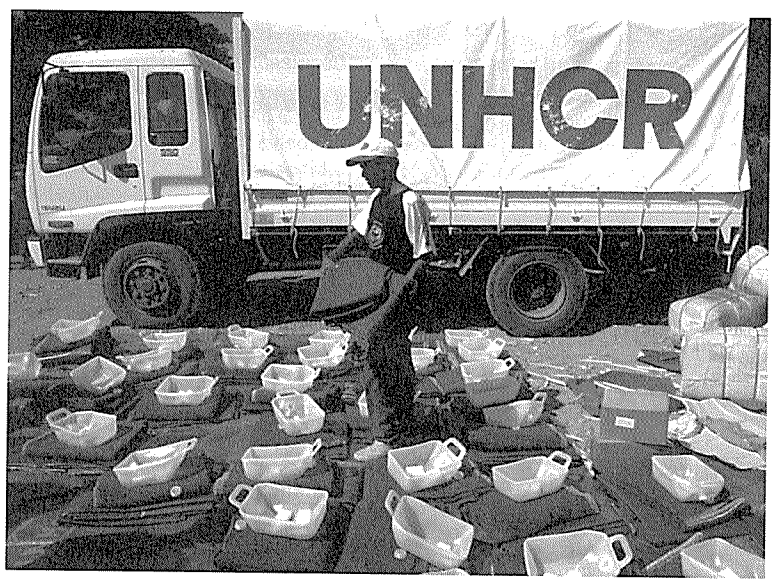
Michael Webb, Archigram member and professor at Columbia, focused on the issue of architectural image-making. Archigram visuals, Herbert Muschamp divined, in the obituary he wrote for the *New York Times* in 2003, celebrate a cultish generation to which Price served as guru. Webb addressed this apparent affinity but made a playful effort to confuse the critic's arrow of influence: "Cedric did everything Archigram did without the eye candy." Webb was altogether pithy and personable; and in the end he got his history straight, but not without characterizing Price as something of a reactionary. "Cedric came first," Webb admitted. But the architect was in comparison to Archigram, bare-boned, designing "the mechanism by which to achieve the happy state, figureless and colorless." Price's visual rigor found its mirror in his code of honor. According to Webb, "Cedric's disdain for the pretensions of architects was almost total." In both parable and satire, Webb caricatured Price's affectations by demonstrating his use of a detachable stiff collar, no doubt borrowed from his partner, actor Eleanor Bron, who was in the audience. Wigley explained, "Price was Victorian in his manners. He was like a man who stepped into a time machine and dropped in on the twentieth century."

Although perhaps a man lost in time, Price was by no means a nomad, having tried his hand at overseas projects only late in his career. Nevertheless, Keller Easterling, of Yale University, has found herself trailing Price against a backdrop of spaces like airports, "where Price had been before." In this and other ways, Easterling insinuated Price's influence on the concept of megastructure, the urban-scaled container programmed with the diversity and adaptability of a city. Recently the megastructure has experienced a resurgence among critics partly in relation to Price's work but also to that of Koolhaas and more generally to issues of globalization. Easterling admits that Price is part of her "personal pantheon," but "not as a formal memoir, nor media as accoutrement, but in his way of understanding technology, as part of architecture in global expansion, exploded to states of exception and enclaves of territory." Easterling makes it clear that it isn't easy to see Price lurking in the "postmodern festival of space, form, and symbol." She asks, "Is Koolhaas Price's undoing?" As a former playwright and actor, Easterling identified in Price a struggle for "better performance" and a serious engagement with reality. She explained that architects have techniques to deal with their own society but relatively nothing to deal with the real. Price avoided the "tragic flaw of cybernetics"—that is, being "a loop of the loop," according to Easterling. By virtue of being a professional he had sufficient information to act. Indeed, Price handed out surveys when designing the *Fun Palace*, and as Stanley Matthews notes in a 2001 catalog, "Potteries Thinkbelt: an Architecture of Calculated Uncertainty," Price applied some of the first computer-generated data from the Ministry of Labor on population and unemployment for one of his most theoretical projects. Through active engagement translated into terms of active organization, Price moved architecture as Easterling so menancingly put it, towards "the contribution of the hush puppy."

Yet contributing an active engagement even through a lecture was difficult early on for Price. Tschumi recalled that the students' invitation to have Price lecture at the Federal Institute of Technology (ETH) in Zurich was rejected by professors. If you look at that period, Tschumi continued, it was evident that Price was a "visionary"—and Tschumi benefited from his vision. In a deferential salute to Price's magnetism, Tschumi's thesis project from the ETH—a Xerox-gray atmospheric array of space frames, walkways, and ramps—appeared on the screen: "I've never shown it before, because it looks so much like Cedric," he said. Tschumi recounted how Price set his path to Shadrach Woods, 1970s London, and the "hothouse and germinator" of the Architectural Association, as Price would call it. Tschumi emphasized that aspects of Price's work were remarkably germane to his own, like the idea of "nonaesthetic delight" as well as Price's advance on the realm of the architectural program. At that time, according to Tschumi, the Architectural Association asked students to do a very difficult thing: write their own program. This authoritative empowerment of the architect beyond the role of service provider, defying the simple transcription of a client-defined program, for Tschumi came from Price. He noted that Wigley is working to make Columbia the home of an "expanded architect." Tschumi believes that there is a change in the mentality of the school signaled by the Price events—"Work on mastering the computer model is shifting to a more practical, technical, and social engagement." In acknowledgment of this and recent debates at Columbia over the efficacy of the architect in the public realm, Tschumi evoked the adage that architects are not specialists; they have the power of an overview.

The power equation, as any equation for that matter, cannot be applied to Price without some imbalance. Tschumi seemed to address this by quoting Koolhaas's now famous characterization: "Price is a prince trying desperately to be a frog." It might be helpful to add that of the noteworthy competition entries for the redesign of the Penn Station rail yards in 1999, Price's was the only one to eschew the megastructure. As one critic put it, Price opted out of playing the developer *en travesti*, an attitude that has of late propelled "visionary" design. The exhibition and summit successfully celebrated Price's early work to a fault: No one noticed that Price had backed out of his own myth.

—Alexandre De Looz (Yale College '97) works for MESH Architects in New York City.



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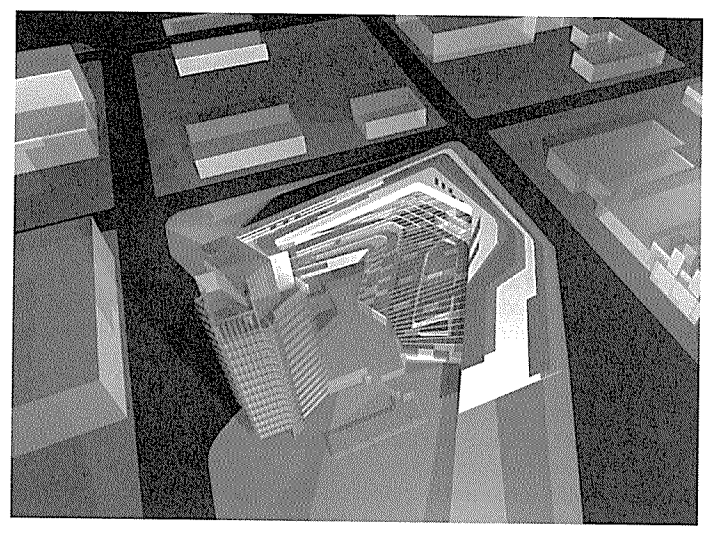


3.

SAFE: Design Takes On Risk

The exhibition *SAFE: Design Takes On Risk*, curated by Paola Antonelli, was on display at the Museum of Modern Art in New York from October 16, 2005 to January 2, 2006.

The spate of unrelenting natural and technological calamities in the twenty-first century that seem to increase in both frequency and magnitude—SARS, Katrina, Bam (Iran) and Pakistan earthquakes, and 9/11—raises serious questions about our safety, health, as well as the environment and the future of design. These unpredictable events coincide with trends in urban planning where economics appears to be the sole driving force for form-making—with all other performance issues reduced to afterthoughts. This is a worldwide epidemic.

What if this approach was inverted? What if providing for a healthy context generated good urban planning, architecture, and design and could do so economically? In such a scenario, public health would operate as an organizing structure in the city wherein systems of transit, education, global agencies, zoos (acting as sensors, i.e., West Nile virus), airports, food markets (detecting bird flu), monitoring stations (registering geological and weather events) would expand the barometers of urban health from the traditional types of hospitals, clinics, and pharmacies and systems of clean and dirty infrastructures would become what the highway was to the twentieth century. These new infrastructures would be able to absorb change at the building scale with sensing devices equipped to monitor the environment and its inhabitants. SARS proved that the presence of examining rooms equipped with infrared technologies at airports stabilized fears and helped to maintain economies of affected cities salvaging fallout from WHO travel restrictions. These technological advances appear in the public and shape experience but in a discontinuous way. These kinds of interventions still remain specialized, episodic, and yet to be integrated into daily life, an exception to this begins with *SAFE: Design Takes on Risk*.

Organized as a visual index of the latest in innovative design products for safety and survival, *SAFE* detailed three hundred items for this growing market and predicted the future of a new design culture concerned with decreasing risk and surviving disastrous conditions.

"Clean-call" disposable telephone covers, a bulletproof quilted duvet, a water collection device called "Watercone," and Shigeru Ban's "Paper Log House" were just a few of the provocative objects comprising the exhibition. The vast array of problems resulting from emergencies would overwhelm any designer, but here this reality served as the point of departure for a pioneering show featuring works of individual designers, artists, and collaborative teams. Reflecting the complexity of crisis, the sampling of risk presented through the elegant objects intended to mitigate or adapt to emergencies could not have been more timely. Within display categories such as "Shelter," "Armor," "Property," "Everyday," "Emergency," and "Awareness," questions of how to cope with unexpected risks and how to maintain ourenvironment, cities, bodies, and minds during traumatic events emerged as ultimate design challenges.

A new global community of designers represented in *SAFE* have been concerned with risk, catastrophe, and survival for varying lengths of time, but all predict and prepare for a future preoccupied with fear—about environments and communities subject to pandemics, weather disasters, violence, and terror, as well as day-to-day accidents. As society suffers these crises, these designers propose to maintain our world through design, object by object.

Antonelli documents our tumultuous times and new culture of anxiety through this collection of objects, prototypes, and products that consistently focus on safety, primarily through material fabrication and personal response. *SAFE* expands upon her previous exhibition, *Objects of Design,* which sought to reflect the "spirit of the times." Each object in *SAFE* embodies not only the forces inherent in its fabrication, but also the imposed forces of its use and context. Thus, the show frames new design intentions and embodies new approaches and forms—what might be called a new "risk aesthetic."

Risk aesthetic results in "products" rather than "objects," because the works on display are not precious. They are, instead, high-strength, durable, smooth, easy to clean, and made with innovative materials that emerge from an advanced material science once out of range but now readily available to anyone. The exhibition illustrates that access to NASA-level technology and an ongoing move away from traditional forms of safety design have created a mainstream market of design products concerned with quality of life, especially universal equity of health and hygiene. Each product comes with its own expiration date, such as the clean-call disposable telephone cover and "Blizzard Survival Bag," which is used only once.

In her 1957 essay, "Pliable Plane: Textiles in Architecture," Anni Albers described a "felt-lined yurt in Outer Mongolia that can be dismantled in fifteen minutes." It is easy to imagine a shifting landscape of adaptable nomads surviving through their limited material inventions. In many ways, *SAFE* realizes Albers' thesis with transformable products like the "Parka/Air Mattress," "Basic House," paraSITE homeless shelter, and "Urban Nomad Shelter," which is inflatable and reusable. Lasting slightly longer than just moments are the "Ha-Ori Shelter," "Global Village Shelter," and "Paper Log House"; when installed in multiples, these not only re-establish individual housing but re-form communities. Shigeru Ban's "Paper Log House," is easily readapted to one site in Turkey from Kobe, Japan, by adjusting to local material dimensions and larger family units.

SAFE launches the necessity of a knowledge-driven design culture based on risk, safety, and emergency into the mainstream. It shows both tested designs and those yet to be realized, but it underestimates need on a massive scale. Few of the sensual products on display could perform adequately in a large urban crisis. Denise Scott Brown's recent observations in "What Should New Orleans Do?" calls on "architects, environmentalists, and planners to rethink" the city in face of disaster by "studying it as a series of overlapping systems and disciplines of thought." To be truly visionary, designers must accept that risk is eternally present at all scales and at all times—the future of how we design, build, and plan our cities depend on it.

—Hilary Sample
Sample is an assistant professor at Yale School of Architecture.

Frank Lloyd Wright at Heinz

As Yale mounts its Zaha Hadid-designed exhibit, *Prairie Skyscraper*, another show with a broader view of Wright and his relationship to contemporary architecture is closing in Pittsburgh. Raymund Ryan's *Frank Lloyd Wright: Renewing the Legacy* was on display through January 16, 2006, at the Heinz Architectural Center of the Carnegie Museum of Art, where Ryan ('87) is a curator. Both shows reevaluate Wright's work for the present and future.

When Raymond Ryan was an architecture student at Yale, Frank Lloyd Wright, he notes, was "not terribly fashionable." Nonetheless, students enjoyed Alexander Gorlin's ('80) graduate seminar on the architect, especially because frequent guests from an older generation, such as Edgar Kaufmann jr., imparted first-hand experiences with Wright to the group.

Now Ryan and his contemporaries are re-engaging Wright by considering his buildings as sites for new designs. The exhibition had its genesis in Ryan's interest in the proposed additions and competition schemes by renowned contemporary architects for two of Wright's projects, the Darwin D. Martin House (1903–05), in Buffalo, New York, and the H. C. Price Company Office Tower and Apartments (1952–56), in Bartlesville, Oklahoma. Ryan's initial inquiry also led to the incorporation of current restoration efforts and ongoing historical scholarship in his exhibit.

The Heinz show displays the models and drawings of five entries for a limited design competition for the Martin House Visitor Center, including those by Brian Healy Architects ('81), Architectural Research Office, Schwartz/Silver Architects, and Office dA. Toshiko Mori won the commission with a design whose shallow, inverted hipped roof and sheer glass walls contrast notably with the other, more tectonically ambitious schemes, as well as with own Wright's project. "How do you deal with a father figure?" Mori asked. "You can't try to kill him or to imitate him." Instead, Mori's illuminated, diaphanous structure faces the Martin House in restrained aesthetic opposition.

In contrast, Zaha Hadid tackles the Price Tower with characteristic formal zeal. Her project for a low-rise expansion of the Price Tower Arts Center envisions the building as a network of interweaving and overlapping horizontal ribbons augmenting the base of Wright's structure. The audacious project—still in search of construction funds—seems architecturally successful partly because its emphatic horizontality is more obviously a foil than a competitor to Wright's rich and complex high-rise. As part of Hadid's presentation, a floor-mounted abstraction of the building's trapezoidal plan spilled down from the gallery wall and through multiple rooms of the exhibition. A computer-animated fly-through showed Hadid's design self-constructing, with swerving floors, walls, and roofs moving as if at freeway speeds.

A more subtle update came from Wendy Evans Joseph Architecture, whose interior renovation of the Price Tower suites transforms the former office and residential building into a boutique hotel. Joseph takes a largely kit-of-parts approach that responds to both Wright's design sensibilities and his small elevators. At the Martin House, Hamilton Houston Lownie Architects' recently completed a lengthy, meticulous, and costly restoration, shown in photographs and construction documents indicating the near ruin from which the Martin House has now been rescued.

The balance of the exhibition consisted of a profusion of original drawings, letters, photographs, furniture, and stained-glass windows, elucidating the nature of Wright's relationships with Darwin Martin and H. C. Price. While devoted patrons clearly valued Wright, the show made clear that the current generation of architects also holds the master in high regard.

—Charles Rosenblum
Rosenblum (Yale College '87) is a critic and historian of architecture living in Pittsburgh.

1. *Cedric Price, renderings of the Fun Place, 1960–1961 courtesy of the Canadian Centre for Architecture.*
2. *UNHCR United Nations High Commissioner for Refugees (est. 1950), UNHCR Plastic Sheeting, c. 1985. High density polyethylene, 13' 1 1/2" x 16' 4 7/8". Manufacturer: Qingdao Gyoha Plastics Co., Ltd., China, 2004.*
3. *Zaha Hadid Architects, rendering of the addition to the Price Tower, courtesy Heinz Architectural Center of the Carnegie Museum of Art, 2005.*

REGENERATING New Orleans

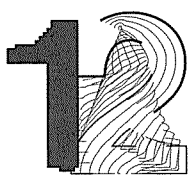
Constructs editor Nina Rappaport worked with David Hecht ('05) to curate an interdisciplinary debate with Yale graduates and affiliates as well as a few specialists in the field who have been focusing on the rebuilding of New Orleans.

Rebuilding the city of New Orleans and the Gulf Coast is an incredibly complex proposition. Far from a blank slate—the modernist dream of a new city-in-waiting—it is an architectural palimpsest of its diverse political and social relationships.

Vision

Few compelling visions have emerged to guide the city's redevelopment. Should a large-scale planning initiative rethink the city's basic morphology? What infrastructural improvements could both help the city rebuild and prepare for future needs?

Maarten Struijs: Besides the "Genesis infrastructure," there are secondary infrastructures: mobility, energy, information, waste, and so on. All of these have the potential to reshape New Orleans as a contemporary city. Just as with water management, designers can have a big effect on the city by shaping the secondary infrastructure systems.
Diana Balmori: Imagine rebuilding New Orleans as a water city based on a partly floating modern technology, with a new infrastructural matrix that rises and sinks with the various water levels, escape chutes for water, and wetlands created along the Mississippi. This partially floating, tethered city would invite private entities and individuals to build on it.
David Waggonner: What city are we to rebuild? Before Katrina, when composer-producer Allen Toussaint was encouraged by his son to live large and leave his modest downtown neighborhood, he countered, "Large is a spirit to me, not a place." Planning initiatives and substantive input must rise from the neighborhood level to avoid the political resistance of top-down decrees. Neighborhood ideas—from a place where people were basically satisfied with neighborhoods as they were—need to be integrated into a unified vision of the city's future.
Robert Orr: A large-scale planning initiative to rethink the city's basic morphology would be a very bad idea. Sociologists will tell you that a city is made up of myriad intricate connections between people that are cemented by repetitions evolving over time. The intimacy of these connections makes what we know of as neighborhoods. To change all that would make the foreign planner a real threat to community.
David Waggonner: The vision of a new New Orleans starts with what remains: pedestrian precincts, fine old buildings, much of the tree canopy, beautiful street types and boulevards, and an interesting urban pattern that shifts and skews.
Tim Culvahouse: An oddity of the city's morphology is that there is little or no commercial connection perpendicular to the river between the major uptown/downtown streets. That is, the radial streets are largely residential. Rezoning could allow periodic commercial connections linking, say, Tchoupitoulas, Magazine, and Prytania streets, which would encourage and support the densification of neighborhood centers along these streets. In particular, connections between Magazine and Tchoupitoulas could promote denser mixed-use development along the highest ground in the city.



While an obvious strategy would be to create such links on the major avenues (Louisiana, Napoleon, etc.), the history of real-estate subdivision would suggest otherwise. These major avenues were centerpieces of subdivided plantations. The minor streets at the former plantation boundaries (Upperline is a good example), where the grids of sequential subdivisions collide, provide richer opportunities morphologically. The convergence of not-quite-parallel radial streets and the oddly shaped lots that result suggest the potential for public moments, just as the diagonal of Broadway crossing the Manhattan grid has generated commercial and transit nodes.
David Waggonner: Two other elements of a vibrant, sustainable vision need mention. First, the Port of New Orleans was the reason for the Louisiana Purchase. Its needs and opportunities for improvements should be given consideration; they will condition other land uses. Second, transit is a priority. Making the city more compact would encourage redevelopment along corridors that could incorporate a light-rail system. At the regional scale, the planning mechanism to build a fast train line between Jacksonville and Houston is in place. This system would not only put New Orleans at a commercial crossroads but also provide another means of evacuation along the Gulf Coast for unforeseen catastrophes. Infrastructure is the framework that allows people to respond and to improvise. It is the basic algorithm from which, like jazz, the music of the plan can be played, from the inside out.

Water

An effective water-management strategy would provide the framework to jumpstart the rebuilding. Can the city be rebuilt in a meaningful way with the existing levee system, or does it require a fundamental rethinking of water management and land use?

David Waggonner: Water management in New Orleans is a continental, if not global, issue. The perspective from which one needs to address today's situation begins long ago and far upriver.
Diana Balmori: Water can be seen as a liability or an asset. This could be New Orleans' chance to become a new kind of city, a model for cities located on rivers. Seizing the opportunity would mean going further to create a city that works with the river and its fluctuating conditions. Holland is ahead in thinking in these terms, but only as far as the technology, not the reinventing of the urban form to go with it. It could be as visionary as Venice was in its time and with luck, as beautiful.
Kimberly Brown: New Orleans is a precarious, floating city with a mysterious reputation. However, the levee system should be rebuilt, but not to its previous level. The city needs to address the fact that some of it will (and should) be underwater in the future.
Tim Culvahouse: The pre-hurricane levee system at New Orleans suffered from a fundamental problem: It was an all-or-nothing enclosure. A prudent rebuilding would subdivide the city into numerous discrete cells so that a single levee break would not flood it entirely.
David Waggonner: Land must be allocated for improved levees, flood walls, and water-retention areas. Water management becomes a land use when integrated with parks and parkways. A special economic zone for urban waterfront conservation and development—incorporating the lakefront to the north with the river on the south, as well as the internal waterways and canals—might be established.
Robert Orr: In Mississippi, water solutions were sought worldwide. The prototypical low-lying and flood-prone situation in the Netherlands occupied considerable debate time on the Mississippi listserv "swarm," with side debates about water and land management, floating houses, and many other pertinent issues. Ultimately the debate subsided because the Netherlands does not experience the same wave-velocity issues that coastal Mississippi does. However, the greater protection that New Orleans enjoys from wave velocity may pose more compelling comparisons with the Netherlands.
Maarten Struijs: In Rotterdam, we understand that the city begins with the "Genesis infrastructure," which separates land from water and defends it against both water and wind. These projects are difficult and multidisciplinary. When architects, engineers, landscape architects, and designers participate and cooperate, there are opportunities for cities to reinvent themselves. Designers can influence design decisions with a poetic approach but will succeed only when they understand all the other participating disciplines.

Water and Power

Devising and implementing a water-management strategy requires cooperation between cities, parishes, and the state and the federal governments. Who can take the lead in this process? And more generally, who should be in charge of rebuilding the city, and how would they be empowered?

David Waggonner: A bit of history would help: The deltas of southern Louisiana began forming about 5,000 years ago, and since then the lower Mississippi River—a powerful current that drains something like 1.4 million square miles of North America—has shifted channels multiple times. Its current channel was activated, and the delta formed that created the site of New Orleans, about 2,000 years ago. About fifty years ago, the U.S. Army Corps of Engineers constructed the Old River Control Structure to maintain the Mississippi in its present channel through New Orleans. Certainly this is not an issue that is manageable at a state or local level.
Tim Culvahouse: Although one might like to imagine a single person in charge of the levee's rebuilding and management (on the model of Florence Nightingale at Scutari), it's a stretch. The jurisdictional balance to be struck, however, should be between local interests and regional consistency—the logic behind a unified levee board.

David Waggonner: A federal government responsible to its people, occupying its now-empty seat in the world environmental community, is a fundamental need. A comprehensive view of water management is the responsible and effective approach. The question of who directs the city's rebuilding and the water-management measures to be deployed within the urban settlement is a different issue—one better suited to the mind-set of the architect-planner.

Leadership

In the immediate aftermath of Katrina, an absence of strong leadership exposed the deep social, economic, and political divisions that now haunt the rebuilding. Today, a void of leadership is impeding a comprehensive reconstruction effort. What form should this leadership take? Can it adequately represent the people of New Orleans? Or does real long-term planning in New Orleans require that "experts" make hard decisions that may be unpopular today?

Wade Ragas: Most of the parishes [surrounding New Orleans] are now functioning almost normally, although lots of repair work remains. The most devastated areas in St. Bernard and Plaquemines are making heroic efforts to overcome the destruction of almost 90 percent of their housing stock. It is only in Orleans Parish that constant chaos among elected officials and their appointees has become the norm rather than the exception. Little concrete action has occurred to allow the citizens and business community to take their role in rebuilding their lives. Electricity is still off in large tracts of Orleans. Plans for ten years in the future are being debated, while little progress is being made to stem the torrent of job losses.
Diana Balmori: Leadership will probably have to come from the outside, but the independent water-management body will eventually need to be empowered locally. An old argument about water management is that it leads to centralized authoritarian rule due to the need to organize large geographic areas. It explained early autocratic Middle Eastern kingdoms, where water was scarce and critical. We ourselves have placed the management of our rivers with the U.S. Corps of Engineers, a military body. But Holland does not fit this organizational pattern, and it has very good water management.
Robert Orr: Whereas the situation in Louisiana continues to digress into increasingly solipsistic bickering over individual entitlements and ineffective finger-pointing, Mississippians have enjoyed effective leadership in Governor Haley Barbour. The governor mandated his commission to organize through consensus rather than through dictate. Rather than "experts" making real decisions on long-term planning that may be unpopular, the governor's consensus approach has offered informed real choices by the "experts," from which citizens can make their own long-term planning decisions. The result in Mississippi has been a wide-

spread engagement of common vision with surprisingly little dissent.

Tim Culvahouse: It would be worth revisiting the rise of the Vieux Carre Courier and the related preservation movement that took place in response to Robert Moses's plan for a riverfront expressway. That was an effective grassroots response—but it also occasioned racial and class fallout: The expressway was instead blasted through the Creole African-American community, eviscerating the Sixth Ward. One might also take care not to oppose "the people" and the "experts"; significant historic-preservation expertise emerged locally in the development of the earlier French Quarter preservation movement, and the Vieux Carre Commission was not staffed by experts from Dallas.

Wade Ragas: The citizens have a chance to take back their government through an election in April of this year. The willingness of the citizens to accept the responsibility of electing a capable government that will have to make hard decisions and do unpopular acts in the short run to save the patient is a test for democracy in New Orleans.

David Waggonner: There is no Haussmann to lead this effort; there is no Robert Moses to force the way. One must hope that whoever leads the reconstruction efforts not only appreciates the particulars of place and people but also has the courage to direct the redesign and reinvestment for the common and future good. Leadership must come from within. How much time do the afflicted have to aright themselves? Who will stand before and behind the hard decisions about the urban footprint, neighborhoods, communities, private properties, competing land uses, and economic development that must be made?

Whether one candidate's "Two Americas" message adequately encompasses issues raised by Katrina is debatable. Whether *Newsweek's* coverage three weeks after the storm asking "Why Bush Failed" and positing "Poverty, Race and Katrina: Lessons of a National Shame" appropriately identifies our failures could be questioned. What cannot be denied is that we in America have to attend to our house. The lack of real leadership in our polyglot land is obvious, at least if one desires a sustainable course.

Tragedy of the Commons

In the current absence of leadership, individuals are making individual decisions about their homes and neighborhoods. An individual in Lakeview decides to rebuild her house. Her neighbor across the street does not return; her next-door neighbor abandons his property, and the other neighbor sits on his damaged home, neither repairing nor razing. Here, four people made four different rational, self-interested decisions. Now multiply this scenario across the city. How can we empower individual actors to make local decisions without compromising large-scale goals and shared resources? In the current vacuum of leadership, can the city be rebuilt at a local level? Must government take the lead on these issues or can private enterprise take control?

Kimberly Brown: New Orleans was not developed by one big-business entity, and it would be detrimental to the city for it to be overhauled by large developers. New Orleans's ambience and cool intrigue lie in the fact that many individuals developed it over a long period of time. Let the roux-seasoned melting pot continue. If the homeowner decides to rebuild her house in Lakeview, she should. If in a few years the lot next door becomes a mechanic's shop, it will work itself out.

I am interested in some of the zones of the city turning into "O-zones," or places of zero zoning, where the flavors of New Orleans are able to surface in new and thought-provoking ways. I am also interested in seeing parts of the city turn into *l'eau* zones, where water is embraced and is integral to city planning. Just to note: "O-zone" was coined by the architectural firm Bumpzoid, during its commentary on the 1999 IFCCA's competition for New York City's Westside. I developed *l'eau*-zone this past summer for a project in Rotterdam.

David Waggonner: Louisiana lacks a planning culture. The tradition is one of individual decision deal-making instead of community planning. Activists too often represent particular interests rather than broader concerns. Even the grain of neighborhoods is complex: The City Planning Commission map of neighborhoods indicates a city with seventy-three divisions. And those here are betting on the future; by placing and keeping their time and money on the line, they earn their right to have a say. Individual actors can be empowered to make local decisions through a reliable framework for planning and redevelopment that reinforces and reinvents neighborhoods and collections of neighborhoods.

Maarten Struijs: When infrastructure unifies, rebuilding can start from the idea of a hybrid city, a place where anybody can respond to local opportunities. And for those who don't have opportunities, the collective—the state or the city—must offer support. Otherwise Katrina will work out as the powerful force of modern urban design that excludes everybody who is not wanted.

Tim Culvahouse: A model for consideration would be the city's program for the improvement of tax-delinquent structures, which allows (or allowed) a prospective entrepreneurial owner to take possession of a delinquent property and invest in its improvement as a prerequisite to seizing ownership. The city has fewer resources now, so an incentive system is much more likely to succeed than any program requiring action by the municipality.

Wade Ragas: The insurance and mortgage-lending industry are likely to be the real decision-makers, both on the Gulf Coast and in other markets in the future. Insurers cannot continue to sustain these losses. They will withdraw their product, effectively ceasing development. Once lenders experience the enormity of their losses and the taxpayer is called upon to help shoulder the load, you will see a far more conservative stance emerge on lending along the coast. This will be the beginning of the marketplace deciding where development will and will not occur.

Changing Demographics

Post-Katrina New Orleans will look extremely different demographically from the city that existed before the storm. New Orleans is going to be a smaller and more diverse city. How should planning and land-use decisions respond to these demographic shifts? Can a successful rebuilding campaign help to open New Orleans's traditionally closed moneyed class and modernize its social contract?

Robert Orr: New Orleans's romantic historic neighborhoods and renowned jazz heritage have allowed it to sleep through the bad years of urban renewal as well as the good years of urban renaissance that other American cities are beginning to experience. No one seemed to notice that the city was stagnating while others were changing, and that the moneyed class was holed up in its comfortable splendor, just as full of self-interest as the "tragedy of commons." Perhaps Katrina is the wake-up call New Orleans needs to force everyone to begin looking at both the city's advantages and its flaws and intervening on the latter for the benefit of the former.

Diana Balmori: Spatially, technologically, and administratively, New Orleans can be reinvented, but it will be a new city. Kenneth Jackson has described New Orleans' social fabric as the most closed society in the United States. Is that to be reconstructed? No infrastructure, no type of urban planning alone, can solve social issues. The images we saw of people left stranded in the city resembled scenes of disasters in third-world countries like Rwanda or Bangladesh. Social structure resists change. But the upheaval has been so wrenching and the dislocations so severe that economic intervention of the kind used in third-world countries to encourage individual initiatives and small businesses may provide a way to attract new people and energy to the city. Imagine New Orleans as an inclusive new water city.

David Waggonner: The ethnic mix in New Orleans has shifted often in its 300 years. Though the racial undertow makes it hard for people of color to stand, the root problem we face in America is class and economics. The traditional ruling class in New Orleans and beyond would perhaps want to insert itself into the present void. This group's historic lack of competitive instinct and fixation upon old-world emblems such as the Mardi Gras balls, with their quaint tableaux, is likely to continue. Yet in these uneasy times, some will step outside the circle and embrace the force of history; new alignments will take place that reflect the flow of capital into the market, and new opportunities can create an expanded moneyed class.

Tim Culvahouse: The closed moneyed class of New Orleans has for a long time been paralleled by an absentee moneyed class: corporations based in Texas and elsewhere. What the city needs are moneyed interests who desire to be a part of its culture but do not desire to belong to Comus (the Mardi-Gras crew and party).

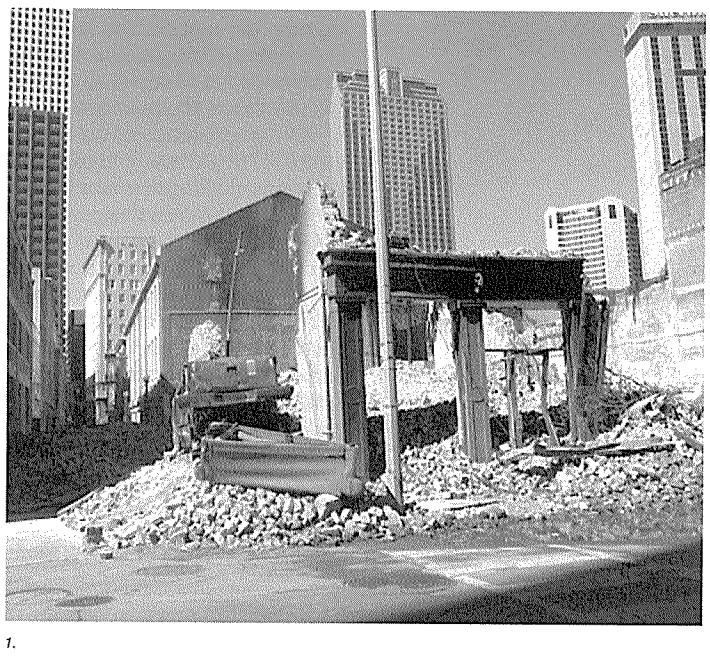
Wade Ragas: The U.S. labor market is one of the most mobile in the world. Now, through these unforeseen events, many citizens of New Orleans and the Mississippi coast have become aware of the higher standards of living, better education, and better social services available in other parts of the country.

Over time, each city becomes populated by the mix of income and skills needed to make it thrive. Many employers are diversifying geographically so that no one storm can severely cripple them. The population of New Orleans and the Gulf Coast will be diminished for some years to come. The marketplace in a private-property rights environment will decide what is built where and by whom and who can afford to live there. The demographics will reflect the skill set required within this geography and the resulting income distribution.

David Waggonner: The objective is not to be a city with a smaller population than before. It is to be a smarter, more sustainable and defensible city—less stretched and more elegant, if less wild—where one still feels the beat of the drum and the spirit that moves it.

*Participant bios: **Diana Balmori**, principal of Balmori & Associates who last fall taught an advanced studio. Balmori has designed and written extensively on river and waterfront cities; **Kimberly Brown** ('99), the director and project architect at the Carl Small Town Center of Mississippi State University College of Architecture, where she runs community-based design programs; **Tim Culvahouse** (MED '86), principal of Culvahouse Consulting Group, who received his BArch from Tulane and taught there as a visiting professor in the spring of 2005; **Robert Orr** ('73), principal of Robert Orr Architecture and Town Planning who participated in the Gulf Coast design charrette, and led the Waveland, Mississippi team; **Wade Ragas**, who holds a doctorate in real estate and urban analysis and has taught real estate finance for thirty years at the University of New Orleans and has spoken extensively on post-Katrina issues; **Maarten Struijs,** city-architect of Rotterdam, Professor at the Rotterdam University of Professional Education whose infrastructure projects include flood control and the design of a new metro line in Rotterdam; and **David Waggonner** ('75), Principal Waggonner & Ball Architects, New Orleans, who is part of the Mayor's Urban Design Committee and is engaged to provide a planning framework for St. Bernard Parish.*

1. Towards the center of New Orleans, photograph by David Hecht, 2005.
2. Tim Culvahouse, drawing of the Bayou river roads, 2005.



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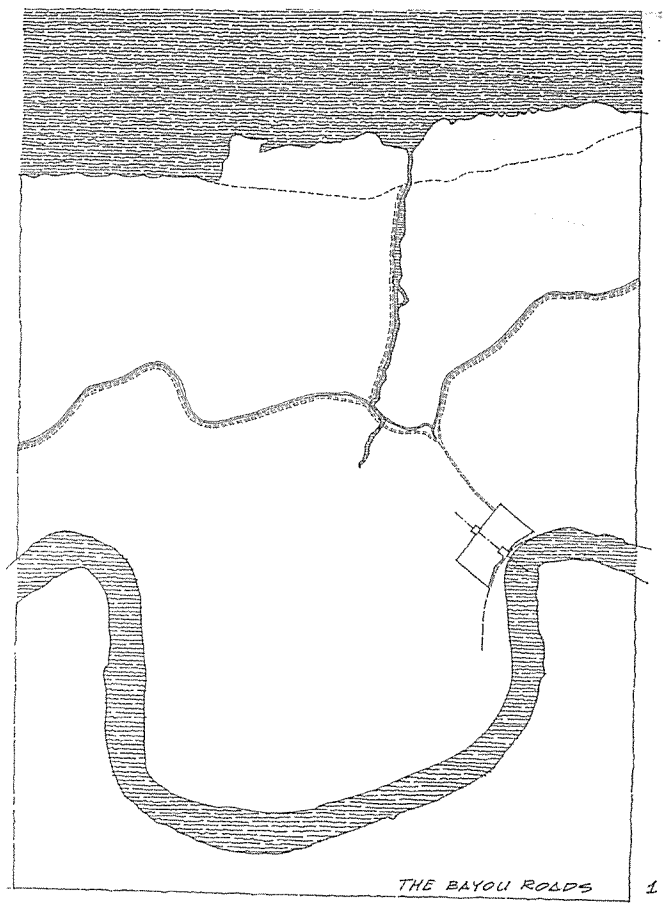

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Bruce Mau

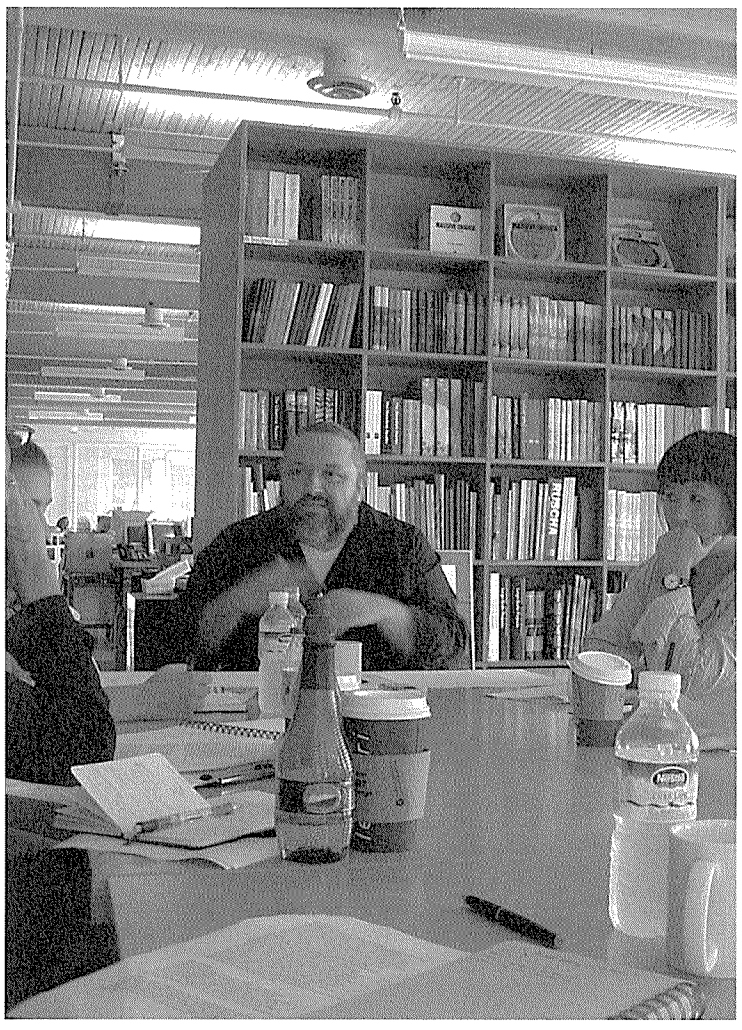
The fall advanced studio of Brigitte Shim, Saarinen Visiting Professor, and Hilary Sample, associate professor met with graphic designer Bruce Mau in his Toronto studio to discuss the ideas in his book and exhibition, *Massive Change.* Mau, who recently started the Institute Without Boundaries, has been an active participant in the world of design working with architects such as Rem Koolhaas on his book *S,M, L, XL*.

The Shim/Sample studio spent five days looking at Toronto and meeting with some of its most well-regarded thinkers, artists, designers, architects, and planners to discuss the proposed studio project, Cities Centres, an urban think tank located on the University of Toronto campus. With Mau, the students discussed his recent interdisciplinary work with architects, global design issues, and Toronto's new role in urban development. Hilary Sample culled the following excerpts from Mau's four-hour conversation with the students.

Student Julia McCarthy: What is the forum for "fundamentally collaborative global design" as you present in your book? And how will this discourse cross practices, cities, nations, international boundaries, and so on? What do the tools produce if the power to effect change is the capacity to produce work?
Bruce Mau: So what I ask myself out of these questions is, What is already happening? How is the discourse already behaving in this way? In *The World Is Flat*, Tom Friedman outlines a shift in the global situation from a world where the haves have it all and the have-nots have very little—and how we still have a worldview that is shaped like a hill, where we are on the top of the hill looking down into the valley of the have-nots. It is a stark picture, because there are only about a billion at the top of the hill and about five billion in the valley. What Friedman shows is that the hill is flattening out because of the tools we are developing. We are living through a period in world history where nothing like this has ever happened. The capacity of our tools is doubling every year. It's an absolutely staggering situation. It used to double every eighteen months; for most of history it doubled every hundred years.

In a way it is just the beginning of the wired revolution, and we are just beginning to see its effects. I made a presentation at the first Red Hat conference, organized by the company that supports the open-source software Linux. One of the presenters at the conference was the director of IIT Bangalore, which is now bigger than any technical university in America. India is producing more programmers than America, so the idea that we have a lock on this kind of work in this part of the world is a myth that we must debunk as soon as possible, because we need to work in a global way. The director of IIT Bangalore noted that we don't have any idea what the open-source revolution means for the developing world: Before its emergence, if you lived in Africa, India, China, or Brazil, you would have to either buy software or steal it—now it is free. It is a huge market, and when you liberate that kind of intellectual power and the tools, it's a fantastic new situation.

When we organized the exhibition *Massive Change*, one of the most important things was to say, "Let's look at design, not from the designer's perspective but from that of the citizen. What areas of my life are being transformed, shaped, and worked over by these new capacities that are doubling every year?" If you look at it that way, you realize that the design practice comes from the culture of guilds, which was a protectionist idea of keeping people out: "I am going to make a body of knowledge and keep it within a boundary." But what is happening now is that the knowledge base is porous. The boundary is becoming more and more difficult to protect. In Canada there is a movement to register graphic designers like architects, which is absolutely going in the opposite direction of the rest of the world. That is not to say that expertise does not need to be regulated, but when the tools double every year the capacity to do things is increasingly liquid. For example, we did a high-definition cinema piece for Samsung that has five screens, which five or ten years ago would have been possible only with a Hollywood studio. Now it can be integrated into the tool. Therefore, our capacity to solve problems is broader and has to do with our client's interest and less to do with the product we produce.



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Student Sara Rubenstein: What is it about cities in this age of exponentially expanded technology that makes them the driving force of commerce versus the Internet?
Bruce Mau: One of the ideas I got in my head while working on *Massive Change* is that if you take an image of the globe today and draw a line around it anywhere, during the next fifty years we will rebuild everything on one side of the line. Today, we are about 6 ½ half billion people; by 2050 we should be about nine billion. That is 3 billion more in fifty years—half of everything that is already built. Are we going to build everything in North and South America again to meet the needs of an additional three billion people? How do we do that? If we open the paper today we can see how stupidly we are doing it. Germany can't deal with the fact that they are not going to be German in the future. Canada says, "Bring 'em on in." We are going to add 340,000 people a year to deal with an aging workforce. All over Europe they are struggling with population decline, because when you educate and liberate women they don't want to have eleven children, so the birthrates decline.
Student Brian Hopkins: In our industrialized society, if we are inventing tools, then we are effectively acting as some kind of filter. What kind of things do we wind up producing then? Shouldn't we steer ourselves in some kind of direction? It seems so difficult.
Bruce Mau: I'm always staggered when people in your situation talk to me about being powerless. And it happens a lot. One of the best examples is when I did a crit at the AL&D [University of Toronto's Faculty of Architecture, Landscape, and Design] where a student analyzed the medical system and in her presentation talked for thirty minutes about Foucault in relationship to her design for medical administration building. I asked the students if they had gone down to talk to the hospital staff. I said, "Well, you would be shocked at how responsive and cumbersome bureaucracy is—that you can grind it to a halt by writing one letter. If you actually ask questions and make propositions, then you can change things." What took hold in the last decade in architecture and design in particular is the idea that we are somehow out of the mainstream of power, that we are not able to effect change or set the agenda. The reality is that we represent the pinnacle of the history of mankind. The capacity that you have has never been produced in the history of mankind.
Brigitte Shim: The question for the students is whether they will go through their professional careers as consumers or citizens. There is a choice as to whether you pick and choose or ask, What can I do to make the world a better place? How can I use the skills that I've been given to make things better? That makes some kind of difference in the place that I'm in—which the consumer often mentally drives.
Bruce Mau: It is critical that you realize that you don't have the luxury of cynicism. Cynicism is for people who don't act. Designers don't have the luxury to be critical as an endpoint: They must demand to be critical not just as an end in itself but as a process. The ultimate ambition of your work is to make a change. The one common denominator that is produced is the demand on you to make a difference. There is a role for critics: It is to be critical—to complain—which I don't find productive. There is no shame in articulating how bad something is, but that is not the product—it is only one step in the right direction, and the next step is the solution. Someone like Dean Kamen [founder of DEKA and inventor of the Seguay and the INDEPENDENCE™ IBOT™ Mobility System] is nothing if he doesn't do something about it. If as a designer he says the car is a successful means of transportation and its average speed is only eight miles per hour, then it is inconsequential for me to be critical of it unless I can think of something better. You have the capacity and obligation as architects and designers to take action. My view is that you have to understand that capacity in the context of citizenship and ask, "What actions am I going to take that contribute to life, quality, social justice, and equality?"
Student Laura Killam: The anti-globalization stance is not limited to radical activists. This summer, for example, the city of Vancouver turned down Wal-Mart's bid to build a store in South Vancouver. Although the conceit of *Massive Change*—to be "ambitiously positive" about the possibilities of designing nature—broadens the scope of what design can be and questions the position that the art world

must be anti-capitalist, what are the limits on the degree to which we are willing to embrace global capitalism?

Bruce Mau: Let's start with a reality check, because this gets complex, and one of the most difficult things to understand is where you are in this sweeping change in history. One of the most extraordinary talents of the human mind is its capacity to naturalize almost any desired effect, to make normal what is quite new and unique. So we understand the situation we are in to be the natural order, but in fact it is anything but. And one of the things that we realized with *Massive Change* is that almost all of your experience is a designed one. If you could imagine the number of times you can close your eyes and open them in an environment that is not designed and produced for you, you would realize how much of your reality is designed. If we look at all of the effects of the innovation we have experienced during the last several centuries over what it was in the past, we see that most of the problems we have are from our successes rather than our failures. There are some assessments that would never support our free-floating economy that don't get challenged: for example, the conflict between an interest in global sustainability and the corporate interest in profit at all costs. For the most part even corporate, interest isn't for profit at all costs. Within a capitalist model, which contrary to rhetoric is hugely regulated by social input, we control our business in two ways: one by what we do and the other by what we buy. Wal-Mart is a mirror of our society; in other words, they do what we want. If we didn't go there and buy all those things, they would not be in business.

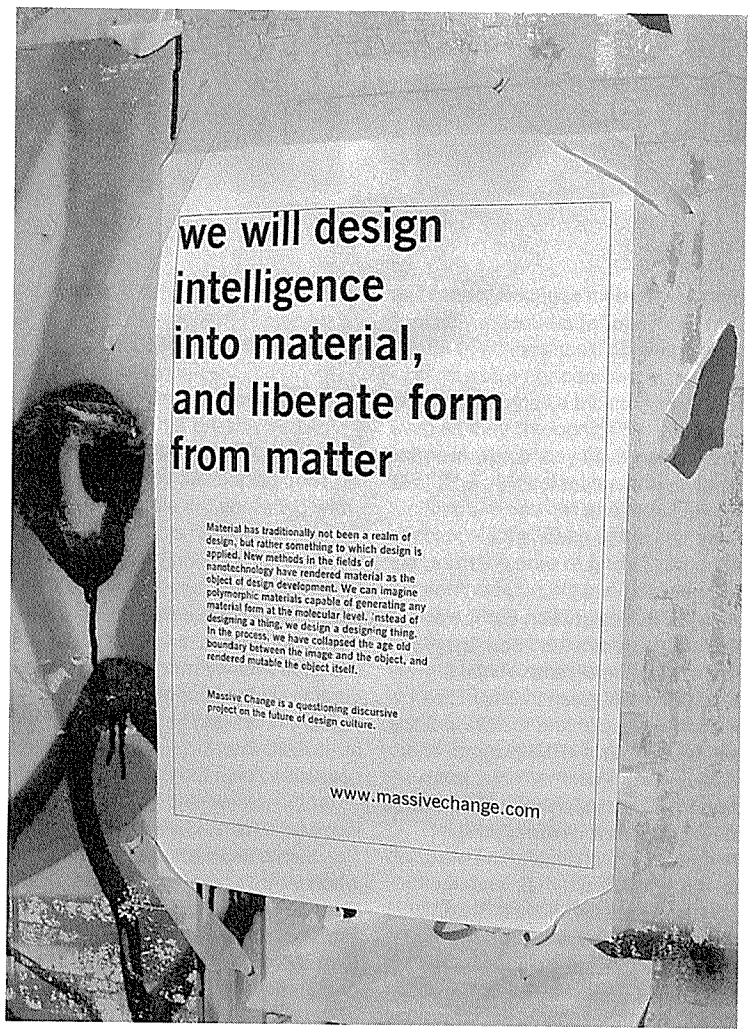
Student Lauren Killam: If the arts community stops questioning the direction we are moving in as a global culture, who will? How can you reconcile an interest in global sustainability and corporate interest in profit at all costs? Is being radically opposed and resisting the corporatization of the world simply retrograde?

Bruce Mau: My interaction with the art world over the last decade has been pretty harrowing. If you imagine that the critical voice is there and that it is where the innovation is going to come from, I think we are in trouble. The art world is ultimately a capitalist model—there is nothing harsher. The artist is ripped off: Work is bought at a low price and then circulated in a capitalist system that rapidly inflates the price, and then someone like Larry Gagosian makes a fortune. Wal-Mart couldn't even come close to the difference between what Gagosian makes and what the average artist makes. So to think of the art world as the avant-garde because it invented the concept—that there is a critical voice that it is somehow discrete from capitalism—is a fallacy. *Zone 6: Incorporations*, a book project I worked on in 1992, is about the end of the object. We still think of things as being separate from energy and dynamics that we can somehow understand as a discrete entity, but it is part of a network of force, energy, and matter that we've put in a complex web of everything else. So within the art world is a complex intersection with capital. You can map the stock market by the number of pages in *Artforum*. In 2001, the market was down and the number of pages in the magazine was down, so they track together. But the single most interesting thing to me is this conflation between critical and negative. Something happened in the art world that to be critical and serious you had to have a negative articulation as the real voice of art. Most of the artists in history were not negative; they were making beautiful things that we still look at today. It's not that they weren't critical in methodology and practice: There is a critical methodology to get to the most critical thing you can do, which is a new idea.

Student Lauren Killam: Your stance in *Massive Change* is that "embracing advanced capitalism, advanced socialism, and advanced globalization" is "ambitiously positive." But in the show it seems to be politically unjust and critically optimistic, to be leaving things out to make people question their stance on globalization. One could take issue with you and ask whether you are anti-globalist or not?

Bruce Mau: We should make a balanced argument there, but the fact is that there is a mountain of discussion on the other side. Hernado de Soto, who is working on property law in twenty-one developing countries, wrote the book *The Mystery of Capital: Why Capitalism Triumphs in the West and Fails Everywhere Else* (2000), in which the real point was to say that the market is not a natural ecology but a designed ecology and that we determine what happens. The way that we design is what will determine what has value.

De Soto says that if we don't design the infrastructure of the market right, then people who don't have the capacity to move freely are constrained by their inability to access the benefits of capital. And the real benefit of capital is to say that I can borrow against this object: I can take my house and borrow against it. We take for granted that you can take a mortgage for a house. In most of the developing world a house is not an asset you can leverage for an investment. In Guatemala, property is not secure because the whole system that identifies a piece of property is not information that can circulate. If Canadians bought their houses with cash, we would look a lot more like Guatemala. It's the infrastructure of property that supports that. De Soto has identified $4.6 trillion of unregistered property values in the developing world, which turns out to be forty-six times all the World Bank loans to all developing countries in the world during the last thirty years.



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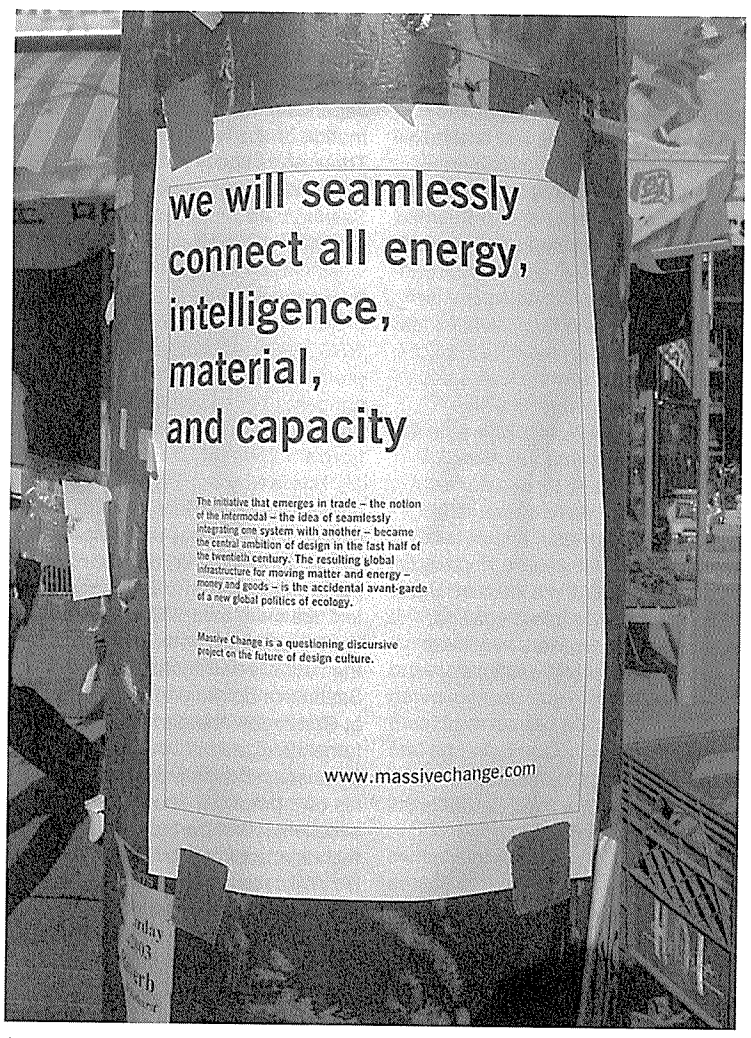

3.

Brigitte Shim: In a way, what has happened is that the regulators have become obsolete and corporations listen to people, so they can respond to public opinion—because they want to sell their products.

Bruce Mau: Personally, I think that the anti-globalization movement is completely wrongheaded. It isn't that we shouldn't be critical of it. We should be as critical as possible of corporations, because they are powerful and they make a lot of changes. And when they do things they don't often see the implications; they aren't designed to see them. The people who are designed to see them are the regulators. The protests should be directed at the governments, because they are responsible for regulating what these things can do.

We do a lot of work in branding and communications, and the single most interesting realization is that companies think they own brands. Naomi Klein says that companies control brands and manipulate you. That is not true: People own brands. You have a file in your head that says "Nike"; you decide what Nike is going to be, and if Nike transgresses that file then you punish them by not buying. Branding is a mechanism in our culture that functions as a public-address system. Branding is a way that we send messages back. The companies you should be afraid of have no brand, such as those that are dumping chemicals into the Niagara River.

I don't want an anti-global world; I want a global world—I want to collaborate with people in Korea and Tokyo. And I want to see how cultural effects in India change the way we do things. One of the new cars there is the REVA electric car—it is a sweet beauty. If we had that car today the air quality would be better. So I don't want an anti-global world, and I don't agree with all the criticism that has been put forward. A lot of the anxiety that is produced is from change, pure and simple: Things are going to be different. In the twenty years that I've had my design business, we've introduced computers and fax machines. For example, the demise of the family farm is a transformation that has been going on for a long, long time. And it's what happens in business every day. At a particular point in time a certain scale of operations works because it makes sense economically: the economy of technology, distribution, how things fit together, and how the whole system works supports a particular scale. But as you produce new possibilities, some things change and some things are no longer plausible. Typesetters used to be a big business in Toronto, and they supported the taxi industry as messengers. The ads would be sent by taxi to and from the typesetter for a series of corrections, so that in one day seven to eight ads would go around. Those typesetting businesses are gone now, and taxis take mostly people around; hundreds of jobs are gone. Not because someone decided that we are going to globalize typology, but because the industry changed so that it was no longer necessary for typesetters to be there. We incorporated those tools, for better or worse, into the one we have on our desktops, so we can do the typesetting ourselves that we would have sent to an expert. And that is what is happening everywhere.

Student Sarah Rubenstein: *Massive Change* is largely about reducing our dependence on traditional resources and instead using innovation and new technology to find other means. Do you think that those physical, energy, and social trends are happening fast enough and implemented broadly enough to displace the depletion of more traditional resources as well as to secure the resources needed for living in future generations?

Bruce Mau: If you take the example of Dean Kamen again and the INDEPENDENCE™ IBOT™ Mobility System, one invention has the possibility to change entire cities. This is from one person who is critical but also creates a real solution to a problem. The fact is that the pressure on innovation goes up. All the things that are marginal become plausible options. In the movement economy, we focused on cars from all over; they are staggeringly beautiful—such as the Smart Car—and they are radically different in terms of the economy. The ecological-movement tool of the past was the wagging principle: get out of the car. People are not getting out of their cars. People are desperate to get into cars, and there is decades of evidence that it isn't going to work. The way to get them out of their cars is to get them into something different.

1. Bruce Mau with Brigitte Shim
2, 3. Massive Change Utopia Station, *poster project, curated by Molly Nesbit, Hans Ulrich Obrist, and Rirkrit Tiravanija for the Venice Biennale, 2003. Photographs courtesy of Bruce Mau Design and the Institute without Boundaries.*

Book Reviews

1.

Perspecta 37: Famous

MIT Press, 2006, pp. 120
Editors: Brendan Lee ('04), DaeWha Kang ('04), Justin Kwok ('04), Robert McClure ('03).

Perspecta 37: Famous examines the cultural phenomenon of fame. Although "starchitect" has yet to enter the official lexicon, the editorial staff of the Oxford English Dictionary noted that its first printed usage was in the *Chicago Tribune Sunday Magazine* in January 1987. In *Famous,* an article by Jeff Lyon "Ego Building: Name-Brand Architects May Draw Tenants, But Will Their Signature Skylines Stand the Test of Time?" gives a rough idea of when the connection between design and celebrity entered the popular consciousness as we understand it today. The essay offers a glimpse of this cult of personality within architecture as manifested in media and the marketplace.

Fast-forward nineteen years, to 24-hour media coverage and ready accessibility: Headlines in the mainstream press regularly exalt celebrity and sensationalize the architect as well as express disillusionment: There are Gehry's regeneration projects for Los Angeles and Brooklyn; the Kimmel Center's lawsuit against Viñoly; Calatrava's foray into residential towers in Malmö, New York, and Chicago; and anything by Zaha. All of this underscores the continuing relevance of *Perspecta 37.* The editors aimed to "challenge the role of fame in architecture by calling it out for what it actually is and asking the critical questions that are all too often glossed over in the media's focus on celebrities."

Designed by Jeffrey Lai (MFA '04), this *Perspecta* is organized more like a glossy magazine than a dense academic journal. Juxtaposing historical analysis with commentary, the essays are interspersed between interviews, charts, and graphics. The effect is an immensely enjoyable read. However, the issue would have benefited from a less descriptive and more analytical editorial statement clearly presenting the issues at hand and introducing each selection. As a result, the journal tends to meander. It opens with "The (Trans)formation of Fame" by Mark Jarzombek, which presents a well-footnoted history of fame, followed by "Notes on Fame," by Nancy Levinson, who astutely points out that fame in architecture is often limited to an audience of other architects. The issue's organization becomes less clear thereafter, suggesting a series of loosely related articles with no prescribed order.

The diverse viewpoints are best revealed by the five people selected for the interviews, from which several themes emerge. One theme is that of age in "Young Architect" Greg Lynn's interview that complements Mark Wigley's essay, "How Old Is Young?" The business and marketing of fame is brought to the fore in the interview with Dean Robert A. M. Stern. It resurfaces again in "The Branding of the Architectural Author" by Peggy Deamer. The cool remove and reluctant acceptance of fame by European "starchitects" Rem Koolhaas and Zaha Hadid reflect different cultural perceptions of fame between Europe and America, sharply contrasting both Lynn's and Stern's embrace of fame. A historical perspective is given in Eeva-Liisa Pelkonen's "Alvar Aalto and the Geopolitics of Fame." Alfred Barr's 1936 diagram of art movements, which Pelkonen uses as an illustration for her essay, is reinterpreted in Roxanne Williamson's new diagram.

In the interview with Hadid, the obvious question about being a female architect is asked, which sets up Michael Sorkin's statistical data in "What Can You Say about the Pritzker?" The last interview is with patron and developer Will Miller, of the Cummins Foundation in Columbus, Ohio. Unfortunately, the topic of patronage and the architect-client relationship is not explored further.

Perspecta 37 broaches a broad range of issues and serves as an ideal primer for other recently released books, such as *Edifice Complex: How the Rich and Powerful Shape the World* by Deyan Sudjic (Penguin Press, 2005) and Charles Jencks's *Iconic Building* (Rizzoli, 2005). Whereas the editors of *Perspecta* provide a measured and somewhat deferential viewpoint, Sudjic and Jencks do not, as they both provide an opinionated and entertaining read. Sudjic emphasizes that in architectural patronage it is the patron or client's vision that drives the design rather than the architect's vision of the celebrity architects whom they often employ. In this light, even the star architect comes off as an overly eager bit player. Whereas Sudjic examines the motives, Jencks examines the impact of highly stylized landmark buildings and how they affect architectural practice. Iconoclastic and cheeky, Jencks is also an appropriate contributor to *Perspecta 37*. And read together, these three volumes offer insight into the vision, wherewithal, and savvy that is required of architects to develop a name for themselves. *Perspecta 37* has enough to hold one's interest, like the guilty pleasure of *People* magazine, while more ambitious readers may take notes to glean lessons and cautions.

—Irene Shum ('00)
Shum was most recently a member of the curatorial team of the 2005 exhibition, "Greater New York" at P.S.1 in Long Island City.

Eero Saarinen

By Jayne Merkel
Phaidon Press, 2005, pp. 256

Fate was very fickle to Eero Saarinen. Although it served him up an extraordinary life with the talent and means to forge an enviable architectural career in postwar America, it also cut him short at the height of his powers, just weeks after turning fifty-one in 1961; then, sadly, it left languishing his reputation as one of our nation's preeminent architects; as few stepped forward to champion his accomplishments or follow the idiosyncratic trail that he had blazed. Within ten years of Saarinen's death, he had become a non-entity of sorts, his work not being taught in architectural schools or discussed regularly in the scholarly community. Beyond the circle of talented architects whom he had mentored, friends and family who fiercely preserved his memory, aficionados of mid-century design, and those fortunate enough to work in or visit the places he had created, Eero Saarinen all but faded from our collective consciousness.

In the intervening years since his passing, only a handful of monographs on Saarinen's work have appeared. In 1962, when he was posthumously awarded the Gold Medal of the American Institute of Architects, Yale University Press published *Eero Saarinen on His Work*, a collection of comments that he had made about his projects that were collected and edited by his widow, Aline. The same year, Allen Temko, editor of *Architectural Forum*, published a small but extremely valuable monograph on Saarinen for Braziller's "Makers of Contemporary Architecture" series. Written while his final buildings were being completed, it provided an articulate analysis of Saarinen's work within the context of contemporary criticism. Nobuo Hozumi, a Japanese architect and a former employee of the Saarinen office, authored a few publications (in both English and Japanese) that provided background information on the workings of the practice. Three years ago, Princeton Architectural Press published Antonio Román's *Eero Saarinen: An Architecture of Multiplicity*, which, curiously for a doctoral dissertation, was neither well researched, substantive, nor scholarly. The newest monograph, Pierluigi Serraino's *Eero Saarinen 1910–1961: A Structural Expressionist,* produced this past autumn by Taschen, concentrates on selected Saarinen projects but suffers, like Román's work, from a number of factual errors.

This is why Jayne Merkel's impressive monograph *Eero Saarinen* is so significant. It stands as the best-researched, best-written, and most comprehensive book on the architect to date. Supplementing the text are more than 200 images, many of them published for the first time. Organized thematically—with chapters devoted to Saarinen's upbringing; his experiences at Cranbrook; the partnerships with his father, Eliel, and brother-in-law, J. Robert Swanson; and the projects he executed in his own practice—the monograph does an excellent job of portraying the architect, the technical aspirations he held for his work, his client relations, and the spirit of the times in which he labored.

Clearly, Merkel is interested in revealing her subject in a fresh light, from a perspective born out of new sources of information as well as the distance that separates our age from Saarinen's. In addressing the criticism that has long shadowed his work, she shows how critics decried Saarinen for abandoning the prevailing modernist rectilinear aesthetic in favor of free-flowing sculptural forms, pointing out that they failed to properly foretell future trends in architecture. Merkel also notes that Saarinen, often his most severe critic, acknowledged that the designs of some of his buildings were less than satisfactory and that if given the chance he would have approached them differently a second time around. To help readers fully appreciate the historical nature of the debate, Merkel draws heavily from contemporary commentary in her analysis of the architect's projects.

One of the best features of the monograph is the way Merkel weaves Saarinen's personal life into the narrative, which brims with anecdotes, reminiscences, and insights into the man and his milieu of friends, family, colleagues, and clients. Saarinen lived a rare and charmed existence in which extremely talented and prominent people always surrounded him, beginning at Hvitträsk with his parents, who carefully prepared him for a life in the arts, and ending with his second wife, Aline, who just as carefully managed his public persona. In between, the cast of characters involved is a veritable who's who of creative talent: Charles Eames, Ralph Rapson, Florence Knoll, Harry Weese, Frank Lloyd Wright, Albert Kahn, Philip Johnson, Alexander Girard, Kevin Roche, Gunnar Birkerts, Cesar Pelli, and Matthew Nowicki, to name a few. His patrons were absolutely top-notch: George G. Booth (at Cranbrook), Charles. K. Wilson, J. Irwin Miller, William Hewitt, Frank Stanton, and Thomas J. Watson Jr., among many others. Although few other architects could boast of such connections, Saarinen took them all in stride, partly because he knew his worth and partly because he felt they could help him achieve the lofty goals he had set for himself.

In fall 2006, Yale University Press will issue a catalog on Saarinen to accompany the first major exhibition on his work, *Eero Saarinen: Realizing American Utopia*, organized by the Yale School of Architecture and the Finnish Cultural Institute in New York (scheduled to open in Helsinki at the Museum of Finnish Architecture in October 2006). Along with essays based on those delivered at the Yale Saarinen symposium in April 2005, it will include an immense amount of scholarship. However, Merkel's monograph will hold its own very admirably as it is, and will always remain, a valuable contribution to the field.

—Mark Coir
Coir is director of the Cranbrook Archives and Cultural Properties, in Cranbrook, Michigan.

Joel Sanders Michael Bell

Both the Monacelli Press, 2005, pp.192

Joel Sanders, associate professor of architecture at Yale, and Michael Bell, associate professor of architecture at Columbia, each just published books. *Joel Sanders, Writings and Projects* and *Michael Bell, Space Replaces Us, Essays and Projects on the City*, with the Monacelli Press. They met to discuss parallel influences and differences in their work, for the first time.

Michael Bell: I remember seeing your 1994 PA Award for the Kyle House in Houston, where I was living and teaching at Rice. I was interested in the project but didn't know you or your work and couldn't place it easily. How did a New York architect deal with Houston? The system of planar layering, framing, processes of objectification, and perspective had parallels to some of my interests. Before working with

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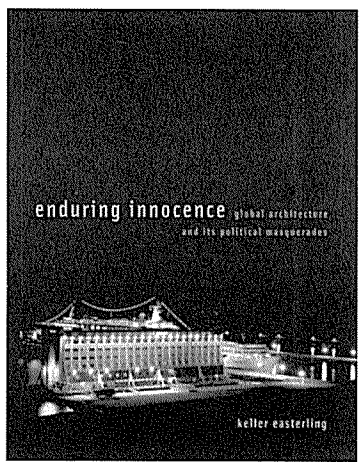

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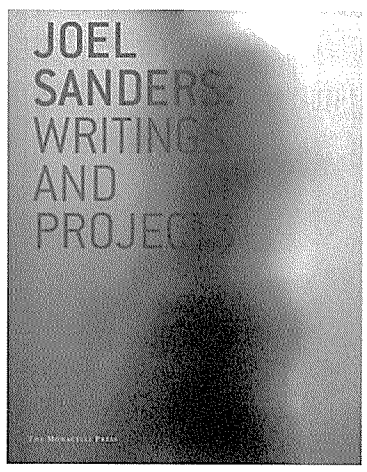

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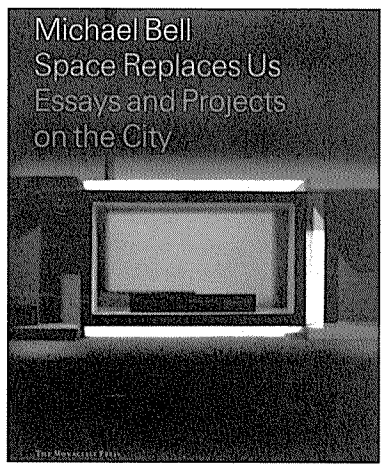

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Houston's urbanism I was very absorbed with writings by Robert Slutzky, James Turrell, and the essay by Bruno Reichlin on Le Corbusier's ribbon window—which comes up in your work. The house seemed to be both about Houston but also discrete and driven-through theories of vision in art and architectural history.

Joel Sanders: The house was a direct reflection on Mies's use of the picture window at the Farnsworth House as a device to frame the "natural landscape," imported to a tight suburban site. Working with the idea of man-made framing of views, our strategy was to dematerialize boundaries by erecting a "fence" that replaced the unsightly view of neighbors with images of constructed landscapes. The way architecture regulates the eye and body of the viewer emerged out of thinking about the nature of art-gallery architecture: I was considering how the white cube, in shaping museum spectatorship, might be applied to domestic space. Subsequent projects were about engaging the other human senses: exploring how the tactile interacts with the visual. Projects such as the Vitale Loft or the 24/7 Hotel feature molded surfaces calibrated to respond to the body.

MB: The horizontal and vertical planes have different purposes in your early work. The horizontal realm is rudimentary, pragmatic, and somewhat literal; it is where you plant your feet. The vertical plane extends vision: It destabilized the vantage point. But my instinct is that now you are much more likely to make the two surfaces continuous. The planes transition from the horizontal and vertical and fold back on themselves. They are single surfaces and volumes, not so much the visual apparatuses of your earlier work.

JS: Yes, in later projects the reciprocal relationship between vision and the other senses is explored. As a consequence, projects like the House for a Bachelor and Five-Minute Bathroom attempt to merge rather than differentiate vertical planes associated with vision and horizontal surfaces—floors and furniture—that receive the body. Our goal became the creation of tactile environments through the use of continuous surfaces that integrate both hard and soft materials. The computer was the next step in generating forms whose geometries follow the contours of bodies as they interact with architectural space.

Recent projects—capitalizing on a theme in the essay "The Gym: A Site for Sore Eyes"—focuses on the reciprocal relationship between optical and tactile, virtual and actual space, and the way technology facilitates opportunities for sensory experiences. The Access House, 24/7 Hotel, and FIT all feature soft but wired environments where the senses meet through the merging of architecture and technology.

MB: Blue House was a cubic Mobius strip. Its surfaces are continuous, and the building was struggling to be single-sided/surfaced, but there are orthogonal geometries and flat surfaces. There was a strong distinction between the way the space flowed versus the surfaces, between the mechanics of construction and the virtual surfaces of the skin. But other concepts of vision influenced my work such as in the DIA publication *Vision and Visuality,* about visual subjectivity and the construction of power by Hal Foster, Norman Bryson, and Rosalind Krauss. Bryson claimed that the construction of vision was a political one. His linking of instrumental work on vision with social/political work on subjectivity was significant and brought to the fore how vision is a politically constructed enterprise. Your Houston project has that reference.

JS: That book was also significant for me: Its focus on the politics of the gaze eventually led me to consider the work of feminist cultural critics that linked vision, human subjectivity, and gender. My preoccupation with the role architecture plays in staging gender identity, a theme first explored in the book *Stud* and the project House for a Bachelor, stemmed directly from these discussions of vision and power.

In fact, my recent interest in creating haptic environments that breach traditional distinctions between furniture and enclosure inadvertently developed from this earlier interest while collaborating with Diana Fuss on the article "Bergasse 19: Inside Freud's Office" (included in *Stud* and reprinted in this book), which considered how Freud's careful arrangement of furniture and antiquities activated space, prescribing the psychoanalytic relationship between doctor and patient. Contrary to the stereotype of the detached analyst that gazes directly at his patients from a distance, Freud looked away from them as he sat in a chair, the arm of which lightly grazed their heads while they reclined on a couch enveloped by Persian carpets. This sensual configuration of furniture and objects privileged hearing—the talking cure—rather than seeing.

MB: Robert Slutzky and Joan Ockman's essay "Color Structure Painting," where they demonstrate how Slutzky's paintings were "turning space inside out," engaged me as it relates to architecture. The space was not just layered; it was pulled into and through itself. Frank Stella's essays delivered at Harvard in 1982 and published as *Working Space*, in which he discussed Mondrian's New York City and described the white background field as projecting in front of the colored bars; and Bryson's analysis of Raphael's Marriage of the Virgin, which he described as providing a form of optic black hole that drained the otherness from the painting, were also significant. How do you "turn space inside out," and what is the nature of that space? Would it be more arid, less viscous, more physically dense and weighty?

The 1998-99 exhibition *16 Houses* explored techniques of power such as the economics and policy of public housing and focused on urbanism as a form of territory, which was essentially devoid of mass—emptied by money and its processes. Instead of the blankness of Mondrian's whiteness, it was procedures of urban space. *Slow Space*, also published by Monacelli, was a study in the blankness of Houston. Developing a theory of urbanism, as dystopic and as slowed or drained, I was trying to eradicate the gaze, to foreclose space. With *16 Houses,* I stopped working on vision directly, thinking that I wouldn't make architecture as objects again, but now I'm working on a house in upstate New York called the Binocular House; it's for two people whose careers are deeply involved with vision, so I am back in some way to these issues—building them!

JS: My interest in exploring the reciprocal relationship between architecture and society at a variety of scales, has recently broadened from smaller residences to institutions, hotels, and landscape architecture collaborations with Diana Balmori. But we continue to design residential architecture, including a house that is just breaking ground in Hudson, New York, and is being built by the same contractor who is building your project in nearby Ghent. Who would have thought that we had so much in common—Mies, Foucault, Monacelli Press, and now Mitch, our mutual contractor?

Enduring Innocence

By Keller Easterling
MIT Press, 2005, pp. 208

The concept of the masquerade is used in a very specific manner throughout *Enduring Innocence: Global Architecture and Its Political Masquerades*. Following Henri Bergson, the masquerade is treated as "comic" because it obscures nature; "political masquerade" obscures the nature of politics itself. Neither a matter of persuasion nor coercive consensus, politics becomes a trick to fool subjects even as they "recognize the altered landscape in which they have been fooled" (p. 195). The political masquerades of global architecture can veil and index a number of propositions. Each of the six "stories" that form the core of *Enduring Innocence* concentrates on the possible effects of one or more "duty-free" spatial products—a fragile logic, an ephemeral territory, a dissolving legal formulation. As Easterling writes, "Spatial products act not only as a glyph or monument to an overt political text but as *heavy* information that becomes a nuanced, unexpected subject of action or practice" (p. 6; emphasis added).

The attempt to be duty free—free of regulation—is also an attempt to persuade without sticking it out, to be free of the constraints of location, which are replaced by "enclosures of familiarity" achieved through products that actively serve the disguises of "sweetness and sentimentality that often accompanies power." This architecture of segregation, secrecy, and exemption embodied by these spatial products is a masquerade that simultaneously conceals and reveals the affinities between tourism and totalitarianism in North Korea, between "broadcast urbanism" and ethnic politics in India, between building and subtraction in the ecology of architectural activity, between the segregated worlds floating over revenue streams in Mediterranean tomato production worlds, and between all of these worlds and the "spaces of friction at the edges of [the] segregated logics" embodied by these worlds.

The spaces that form the materializations of global digital capital are relatively new frontiers for social science and demand a reorientation of scientific canons and political truths. For these spaces are sites of a kangaroo capitalism that is temporarily successful in hopping over local conditions to capitalize on "bandwidths"—of satellite signals, of photosynthesis, or of sunshine and temperature. Reading *Enduring Innocence* as an anthropologist, however, is to be struck precisely by the agility of what seems to be the obdurately material forms of global architecture. Easterling's invitation to think of spatial products within these bandwidths cybernetically, as "heavy information," is destabilizing and disorienting in the best sense. These products, she suggests, broadcast their effects out of their segregated locales, trawling the seas that isolate them from landed politics for contradictions and arbitrage opportunities out of the cross hairs of the political conflicts that they inevitably encounter.

The cultural scientist—that quintessential archaeologist of the local—is often unable to tolerate the seeming sameness of the global site, the effects of which spread through mobile spatial products such as cruise ships and greenhouses, technoparks and logistical centers, golf resorts and spiritual environments, which are all discussed in the book. In this regard, the author's methodology is exemplary.

The concept of masquerade allows for the existence of multiple fictions that permit the political sedimentation of the product. But her method of indexing reveals the range of conceptual encounters that are possible in the field that can be, in turn, swapped for one another, resulting in the dissolution of sediments. As one example, her "indexing" demonstrates the affinities between the global industry of subtraction and "planning utopias, political maneuvering, terrorism and war" (p. 163).

This comprehensive indexing does not especially urge context sensitivity as much as it shows the interchangeability of encounters between practices and ideologies. The global therefore does not emerge in opposition to noncontiguous and noncontemporaneous territories, such as nations. Rather, Easterling's method makes plain the compatibility of the global with more canonical objects of cultural sciences, including nations and regions. "Broadcast urbanism," for example, reinforces a global field "commensurate with the broadcast dimensions of the satellites themselves," by vaguely referencing any number of traditions of the modern, which can be combined and laminated to "signal a standard degree of readiness."

Enduring Innocence suggests that the landscape of contemporary politics and violence can be read through the dispositions of the market rather than through conceptual paradigms of consumption or production. Spatial products become indicators in "characterizing the market's weakness, resilience, or violence." How does one locate the historicity of the contemporary in the set of mechanisms associated with spatial products? What do these mechanisms say about the political possibilities of our times? The author offers powerful insights. The violence of contemporary varieties of monist thinking—whether the ideologies of neoliberal market utopianism or redemptive ones of heroic resistance—is countered with the possibility of a "multitude of possible negations," exemplified by practices of piracy and ecumenical understandings of error. Thus, Easterling directs our gaze critically toward naturalizations of the market that underlie political ideology that are often disavowed or, at best, assumed to be self-evident.

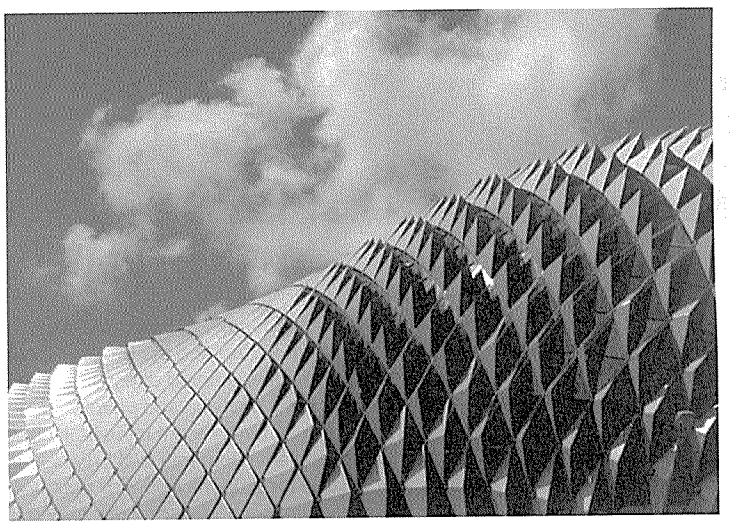
In this reading of the dispositions of the market through the masquerades of orgmen, tourists, gurus, and brand managers, the figure of the citizen—the classical horizon of modern politics—is no longer the lone subject of politics. The urbanism practiced by these characters through their masquerades constitutes a "solvent" for the fables that launder monist ideologies and make them more malleable in the service of accumulations of power. Yet these very processes also harbor the possibility of an outside, a special ethical landscape that substitutes the market's accumulation strategies and its accompanying political consensus—what Easterling refers to as "innocence and the violence of remaining intact"—with something else. They expose a world in which "many more sites are political fronts and [because] there is no definitive revolution, only the possibility of continual revolutionizing" (p. 134). This is the profound political and philosophical turn effected by *Enduring Innocence*, and it should effectively reorient our readings of contemporary urban politics from the evidence out of all sorts of architectural sites—from duty-free zones to globalizing megacities.

Enduring Innocence is a subtle and poetic meditation on the state of the contemporary world. The book exhibits the author's virtuosity in sifting through diverse landscapes, perusing and indexing actions of making, sorting, and harvesting. Meaning is located and dispersed in such action rather than in epic confrontations with ideas and ideologies. From "suicidal" or delirious states of self-containment, architecture moves into a much more social realm, one of exposure and contagion. The many urbanisms thus exposed provide a precise and complex platform for unraveling the nature of the global everyday.

—Vyjayanthi Rao
Rao is an assistant professor at the New School for Social Research.

1. *Perspecta 37: Famous*
2. *Eero Saarinen*
3. *Enduring Innocence*
4. *Joel Sanders*
5. *Michael Bell*

Academic NEWS



1.

Joint Forestry and Architecture Program

During the past several decades the School of Architecture and the School of Forestry and Environmental Studies have had an on-again, off-again relationship—sometimes offering collaboratively taught courses but more often simply providing students alternate, complementary views of both the built and natural environments. In recent years, however, changes in the architectural and environmental fields have brought a new urgency to formalizing this long-standing if not eager relationship.

Shaken by Michael Shellenberger and Ted Nordhaus's controversial essay "The Death of Environmentalism," the environmental community has become increasingly aware that its preoccupation with environmental science and policy alone is not sufficient to solve impending environmental crises. Environmentalists are therefore struggling desperately to shape a new direction of tangible action through design without the expertise to do so. This pivotal moment in the environmental community is matched by a struggle within the architecture community to address the biological and societal dimensions of sustainable design with rigor and sophistication. Since methods to achieve eco-efficiency in architecture and urban design have matured, the profession must now turn to objectives that can be realized only through a deep understanding of principles of biophilia ecosystem function and dynamics, as well as their application to restorative and socially responsible environmental design.

Recognizing that Yale's schools of the "built and natural environments"—the School of Architecture (SOA) and the School of Forestry and Environmental Studies (FES)—have the complementary expertise to resolve these internal struggles. Stephen Kellert of FES and Jim Axley of SOA worked with a broad cross-section of faculty members from both schools to draft a proposal for a joint master's degree program, which was approved enthusiastically by both faculties last spring. After a thorough review by the provost's office—and some fine-tuning—the proposal was then submitted to the Yale Corporation, where it was accepted.

The joint degree program will allow exceptionally qualified students to obtain both a professional master's degree in architecture (MArch I for students without an undergraduate professional degree and MArch II for those with one) and a master's of environmental management (MEM) degree in one year less than would be required to obtain the two degrees separately. In addition, the joint program has been structured so that students will complete their studies concurrently and thus edify both schools with a new view of sustainable design and action. The news has spread rapidly, with a number of first-year students and new applicants showing interest in the program. There is every expectation that the program will achieve its primary objectives: one to train individuals to be become the leaders of a new generation of restorative environmental design; and, in the process, to catalyze changes within both departments that will serve to maintain their international positions as the leading schools in their respective fields.

The prospects of this new joint program are reflected in the successes of past graduates who took advantage of the resources of both schools during their years as students at Yale like William McDonough ('76), perhaps the best known "green architect" in North America, and Peter Calthorpe ('79), North America's "green urban designer." Ed Arens, director of UC Berkeley's Building Science (read "green") Program, received a master's degree from both schools and went on to obtain his PhD at the University of Edinburgh. Peter Clegg, a similarly distinguished British green architect, received a master's degree in architecture from the University of Cambridge and then a master's in environmental design from FES. Two recent grads of the SOA MArch program with growing regional reputations for their green design—Raphael Sperry ('99), current president of Architects/Designers/Planners for Social Responsibility, and Paul Stoller ('98), a codirector of Atelier Ten's New York office and a SOA faculty member—also took full advantage of the FES program during their years at Yale.

These designers are currently defining the profession of sustainable architecture and urban design, and graduates of the new joint program will broaden its vision to shape the environmental services of a restorative discipline that will benefit future generations of all living things.

—James Axley
Axley is a professor and coordinator of the program for the School of Architecture.

Kurt Forster's "Surface Tensions"

At the beginning of his stimulating, provocative, and elliptical lecture in a crowded Hastings Hall at Yale University on October 10, Kurt Forster—Vincent Scully Visiting Professor in the history of architecture—instructed his audience to set aside the customary anxious stresses of daily affairs and to relax into the visual spectacle about to unfold before them. As unexpected as it was welcome, Forster's injunction disarmed the audience: critical listening had now become an opportunity for pleasure. The crowd visibly relaxed.

Forster proceeded to lead his bemused audience into the labyrinth of surface representation in contemporary architecture, with a very long historical view. Opening with seductive images of the Tugendhat House seen through its plate-glass casing, he discussed the relevance of surface and material to building, landing on the potentials of glass in the promotion of multiple readings (transparency and reflectivity) and the relationship of plate glass to the photographic plate. Forster then discussed the particularly symbiotic relationship between photography and architecture, seen from the perspective of nineteenth-century technical limitations but advancing into twentieth-century surface treatments, both architectural and photographic. He underscored the well-established fact that photography made modern architecture; or, rather, that photography made architecture modern, a truth first revealed more than twenty years ago by Reyner Banham, Richard Pommer, and Beatriz Colomina. But Forster's purpose was not to rehearse established arguments. He moved quickly from the architectural photograph back to building surface and the range of treatments possible in modern building. The latter half of the talk surveyed surface treatment in buildings from Karl Friedrich Schinkel to Louis Sullivan to Frank Gehry, ending with Herzog & de Meuron's Eberswalde Library to underscore his main point and conclude the lecture.

In discussing surface in Gehry's recent work, Forster noted that, "Its 'depth'... lies on the surface rather than beneath it. The vaunted iconic effect ... springs at least in part from the projective power of surfaces rather than a conventional recourse to signs." The statement had something of the power of epiphany, calling up for me the memorable words of the poet John Ashbery: "There are no words for the surface, that is, / No words to say what it really is, that it is not / Superficial but a visible core" ("Self-Portrait in a Convex Mirror," 1975). This sense was enhanced by the ensuing discussion of the Eberswalde Library, where Forster focused on the conquest of depth by surface or the conquest of surface by depth—however one likes to see it, there is a reinvestment in the notion of depth mapped onto architectural surface, the refusal to accept the superficiality of surface treatment as superficial at all. Forster urged his audience to acknowledge and re-embrace surface appearance as constitutive of what lies beneath, or behind. He freely acknowledged the antecedent of Labrouste's Bibliothèque Ste.-Geneviève, which Forster said constitutes the transformation "of a building into an image of its reality." Is the Eberswalde Library a building that will be remembered as the Bibliothèque has been? Perhaps not. But Forster's interpretation should be considered (in spite of his deceptive introductory injunction), as a call to architects to think about the prominence of surface in architecture not merely as an opportunity but as a specifically architectural (and complex) opportunity.

Forster's engagement with images and architecture is long-standing. For an early article in *Oppositions*, Forster analyzed Scamozzi's Theater at Sabbioneta (1588–90) in a brilliant display of archival archaeology. He unearthed the original iconography of the theatrical interior in relation to the larger public space of the city and the sociopolitical space of Italian Renaissance culture. Forster revealed that the interior walls of the building—imbricated with perspectival construction and projective images from the city of Sabbionteta—acted as screens for the display of civic space, reinscribing its power structures within public theatrical spectacle. The "virtual" nature of these projections and their direct relation to their site (large and small, real and conceptual) recalls this lecture, but turned inside out: If exterior surface projects interior depth, Forster himself long ago already told us that interiors have the same power to project from surface into space, whether the space of their physical, cultural, or sociopolitical context or perhaps something else. His long historical range reminded us to dwell with some skepticism on the immediate present; if surface occasionally recedes in the face of other burning interests in architecture, it always resurfaces in the fullness of time and space. Furthermore, Forster's reconnection of architectural surface and spatial depth, however it may be understood, reminded us that the practice of architecture might conceivably involve doing something other than just whatever you want.

—Claire Zimmerman
Zimmerman is a lecturer at the School of Architecture and a PhD candidate focusing on photography and modern architecture at City College.

The Green Machine at Yale

"If you want to build sustainable architecture, don't start with a glass building."
—Patrick Bellew

Eighty years ago, before the advent of air-conditioning, the first amazing 20-story "skyscrapers," with external shading and fully operable windows, marked a new era of building technology. The science of building has advanced to 40-, 80-, and even 110-story, climate-controlled towers that consume incredible amounts of power. Density is sustainable and environmentally beneficial when the energy consumption per person is therein reduced. But the design of high-density towers, and even moderate and low-density housing and office structures, has a great deal to learn about eco-effectiveness.

For the past five years, Yale students have had the opportunity to take a new type of course in environmental systems, one that links systems and environmental issues together in the design studio. This course, a requirement of the MArch I program, is led by two of the formidable forces in sustainable design today: Thomas Auer, of Transsolar, in Germany, and Patrick Bellew, of Atelier Ten, in London. Conceived by professor Jim Axley, the course allows students to think beyond the basic calculations of U-values to the greater environmental, global, and social aspects of design, incorporating sustainable-design principles into their larger studio projects.

Teaching the physics, design methods, and tools involved in sustainable design—including thermodynamics, climate influence and climate-responsive building design, acoustics and thermal comfort, building materials, embedded energy, daylighting, and environmental sources of energy (passive and active systems, e.g., labyrinths and earth ducts, etc.)—Auer and Bellew, with the assistance of Atelier One's New York–based Paul Stoller ('95), provide the students with a wealth of information. Bellew notes that they introduce students to design strategies often found in vernacular architecture that are great resources for designing in a variety of climates. As Auer notes, "Before air-conditioning was

invented, people had to design their buildings in order to survive. It's important to understand the principles and to translate them into contemporary architecture. Modern design methods, materials, CAD, etc. changed architecture—but the physics always remains the same."

In the course, students form teams and are assigned a city (from Richmond, Virginia to Kuala Lumpur) and must design a structure related to their second-year institutional building studio. Wind roses, light/daylight modeling, and psychrometric charts assist the students in analyzing sites and creating design strategies to deal with local environmental conditions.

All of this may sound like an enormous task, especially for two instructors who live thousands of miles from campus and are working simultaneously on some of the most innovative buildings currently on the boards and under construction. These include the Ashmolean Museum in Scotland, the Beijing Linked Hybrid in Peking, the Suvarnabhumi Airport in Bangkok, and Comcast Center in Philadelphia. Bellew, who engaged environmental issues while working with Ted Happold, says that it is important for him to fly over to the States to teach young architects because he believes that the job of creating good environments in buildings belongs to the architects. He is especially passionate about working with students because he thinks that the feedback he receives and the buzz the course generates will lead to better long-term building design. Both Auer and Bellew make themselves available to the advanced studios at key points in building reviews when environmental issues are addressed. In the fall, Auer assisted Jeanne Gang's and Brigitte Shim's advanced studios, both of which incorporated sustainable issues. Bellew also worked with Shim's studio and advised Glenn Murcutt's advanced studio on its Vermont project to develop ideas for large-scale underground thermal storage and cooling systems as a way of eliminating the need for air-conditioning.

Now the Yale School of Forestry & Environmental Studios and the School of Architecture have joined forces (see adjacent article). The ground-breaking program will enable architects to design successful, socially and environmentally responsive projects while integrating the aims of both schools toward the development of more sophisticated and intelligent methods for future design.

—Rose Evans
Evans ('07) is working with Hopkins Architects in London on Yale's School of Forestry and Environmental Sciences Building.

The "Architecture Student Is a Design Team"

Neil Thomas and Aron Chadwick of the engineering firm Atelier One, in the United Kingdom, offered a fall seminar at Yale on philosophy of structures called "Liquid Threshold, Chaotic Structure."

Nina Rappaport: What is liquid about engineering architecture, and what does it mean for the students? Are you talking about process or building?
Neil Thomas: It implies something that is not rigid or fixed, which is how we practice engineering at Atelier One—it is fluid. "Liquid Thresholds" refers to the line that goes toward chaos. Some of the projects we have shown the students, such as our plan for Federation Square in Melbourne, demonstrates finding the fine line between being chaotic—and therefore undoable—and maintaining an order within that still maintains the impression of chaos but it isn't at all. If the project had been too large and abstract it would have become too costly, so it is about finding an order within such a larger structure.
NR: Where does that order come from?
NT: Engineering is being able to see things from different points of view and not resolve them in a single way. You have to think through the problem to have a solution, so it is not just solving one issue at a time. To be able to do that you have to think about it simplistically in order to do it—you have to know the answers before you begin.
NR: Even though it is so complex, aren't you now able to solve numerous issues with the computer?
NT: None of the things we have done are that complicated. At Arup, they have a 3-D unit and an advanced geometry unit, but engineering has always been about geometry. It is just that we now have tools that are more capable of analyzing complicated surface forms. Before we could think of them but perhaps not draw them. The computer is the tail wagging the dog. So the shape of the building, such as the Arts Center in Singapore, is driven by an architectural desire through engineering. This also relates to the way the shading works, the way the wind hits the building, and the way the structure spans.
NR: Are the students required to consider how to integrate environmental issues as well?
NT: In the seminar, we taught the students about engineering with the understanding that it is a part of architecture. We started with basic ideas: the tools and principles of materials and structures. They need to look at the wind—whether it goes up or down or sideways—snow, people, and so on. They must think about engineering as immediately as they think about design. The architecture student is a design team unto themselves; they have to understand all aspects of building.
NR: Many engineering professors have recounted the history of engineering feats through failure such as Henry Petroski and James E. Gordon. What is it about failure that teaches architecture and engineering students about structure? Why is it important to understand, and even appreciate, failure in structural design versus teaching structures simply from the perspective of how buildings stand?
NT: At Yale, we showed them increasingly more complicated issues over the semester. We make things and make them fail. The way the students talked about structures at the end of the course was so different from at the beginning. From failure you can see how a structure works. You are not sure what it does when you just see it standing, but when you set something up—even something simple—and then break it, you can see the tension and the compression of forces. One example was buckling failure, and they got it straightaway. They built models for each class.
NR: So you think it is valuable because if they physically understand it, then they can feel it intuitively. Is it your hope that the students will come away with an intuitive understanding of engineering?
NT: That is how I design, just as you have said, by feeling the structure; it is inside of me, not just in computers and numbers. You need to know the answer. Structures are not that difficult when you reduce them down. And if you get students to start thinking that way, then it is not scary for them at all.
NR: What failures do you use as examples for them to learn from? And how do they test their own models?
NT: The "wobbly bridge" in London is one that is very clear. There was also a failure of a space-frame roof in the United States that was a perfect example of how forces in structures go to nodes. Other examples are the Tacoma Narrows Bridge, the hotel in Kansas with the walkways—these are all famous ones—and the Paris Charles de Gaulle airport. We talked about the World Trade Center, too.

Their last task was to describe the influences on a building—all the conditions of the environment and the envelope—and why it might be the way it is. So they started to think about structural systems and how to close the environmental system as well. They can now say where the loads go and can see the external effects upon the building. This is making the structure from design and systems; it is integrated design. They could do a report, draw, or build a model of it. And they had to build something every two weeks.
NR: Do you have any failures in your work that you showed them?
NT: Well, I shouldn't say, but at one Pink Floyd concert we made a stage with an arch, and there was a track with a little arm on the car where two helicopter searchlights were supposed to be. We had built it from scratch, and one of the shifts on the cable wound off the pin and shot across the Air Force base (where the concert was held) and buried itself in the opposite wall. We pushed it too far too quickly. But the Tacoma Narrows Bridge failed because of laziness; they had already seen two similar failures and knew about that situation. If success breeds failure, failure also breeds success.
NR: So you are also teaching them about responsible risk? How do you learn to take risks at all?
NT: If you push structures to the limit, sometimes you come across something that no one has thought about before. But how can you be responsible for that? Every building we construct is a prototype, in fact. So there has to be a bit of conservatism in the design, because you do have life-and-death issues, but understanding failure exposes an understanding of structures.

Yale Organizes a Salzburg Seminar

The Salzburg Seminar, based in Salzburg, Austria, was established in 1947 to foster a dialogue between European and American intellectuals on cultural and political topics. Since its establishment, the organization has broadened its outreach to fellows from Asia, Africa, Australia, and Central and South America. In mid-July, the Yale School of Architecture was asked by emeritus faculty member and Salzburg Seminar board member John Cook to cosponsor a forum titled "Public Life," the first event on architecture in the history of the seminar. The activities are held in the Schloss Leopoldskron, an eighteenth-century castle, once the home of Max Reinhardt, the famous Berlin theater director and founder of the Salzburg Festival who fled to Hollywood during the Nazi occupation, but more famously the backdrop for the *Sound of Music*. The seminar fortuitously coincided with the annual Mozart Festival, offering a unique opportunity to enjoy the rich cultural heritage of the city for those able to tear themselves away from the intense and enjoyable evening discussions.

The week long event consisted of five plenary Yale faculty presentations and workshops with fifty invited international fellows. In speaking on "Public Life," the faculty discussed the contributions of planning and architecture to the evolving and dynamic life of the contemporary city. Dean Robert Stern, the host of the event, spoke on the importance of urban theater to the development of New York City, from Broadway's redevelopment to the annual street fairs; Ricky Burdette, founder of the Cities Programme at the London School of Economics and advisor on architecture to the mayor of London, spoke on the confluence of global and local development in his city; Patrick Bellew of Atelier 10 demonstrated how principles found in nature, such as the performance of African termite mounds, have formed the conceptual thinking behind his firm's adventurous projects in Singapore and Melbourne; Keller Easterling questioned the politics of the pirate-citizen in the new global free-trade zones; and Fred Koetter illustrated the overlapping patterns of environmental, political, and economic use in large-scale projects designed by Koetter, Kim & Associates in Seoul, Cairo, Toronto, and southern Spain.

Edward Mitchell and Keith Krumwiede, who assisted in the organization of the events, analyzed urban patterns of growth using digital tools. Their informal talks introduced the format for presentations by the fellows, who shared their research and design projects in many of the world's global capitals.

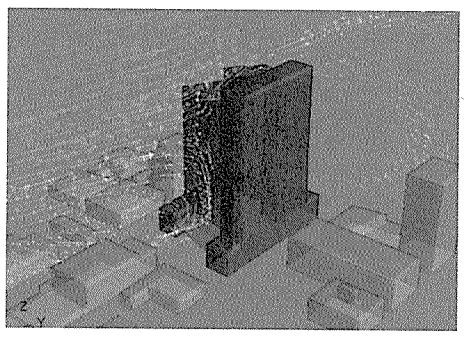
Afternoons were spent in seminars and discussion groups. Alan Plattus conducted a charrette on the symbolic aspects of public space, developing sketch designs for New Haven's Ninth Square district. Alex Garvin shared four case-study projects from his office—the Lower Manhattan Redevelopment, the New York Olympic bid, plans for a new greenbelt around Atlanta, and plans for the West Side of Manhattan—to outline the importance of constructing a public for large-scale projects. Koetter, Bellew, and Mitchell assisted the fellows in drafting statements that outlined the complications of sustainable development. The official seminar ended with informative and often entertaining reports by the fellows on the workshops' conclusions.

The workshops and casual evening project presentations fostered the greatest dialogue between experts from various fields, exposing the complex issues that architects face in the global community. The faculty discussions of New York's and London's financial and public successes after the economic downturns of the 1960s and '70s were countered by many of the fellows' concerns about the negative aspects of globalization, especially in countries whose subsistence economies are exploited by Western development. Many claiming that global economic shifts, which have largely benefited those of us in the developed world have often been disruptive to the traditional patterns of public life.

The seminars also encourage participation from professionals outside of the field as the Salzburg Seminars has a diverse roster of fellows including Marshall Fellows, Nobel Prize winners, political leaders, and artists who will become a valuable resource to our own Yale community. Some of the more dynamic speakers brought their expertise in the fields of law, history, journalism, and cultural studies. Warren Hofstra of Shenandoah University spoke on the struggles between the seventeenth-century global economies of Virginia tobacco plantations and the highly orchestrated zero-sum economies of the smaller Virginia colonies. Maguelonne Dejeant-Pons, head of the Spatial Planning and Landscape Division of the Council of Europe, presented new policies for sustainable communities governing development in the European Union. Shane O'Toole spoke on recent development in Dublin. Other fellows showed small-scale public projects, including Srivathsan Aravamuthan's rehabilitation of the urban lagoons in neighborhoods in Chennai, India; Maria Varona's plans for squatter housing communities in Manila; Mary Helgeson's low-income housing development in Minneapolis; and Irina Korobina's films documenting the problems of preserving the great works of the Russian Constructivists in Moscow.

—Edward Mitchell
Mitchell is an associate professor and organized the Yale participation with Keith Krumwiede, assistant dean.

1. Esplanade National Center, Singapore, Michael Wilford & Partners, Atelier One engineering, and Atelier Ten, environmental engineering, 2002.
2. Fluid dynamic study for the Manitoba Hydro in Winnipeg, Canada, KPMB Architects, Transsolar environmental engineers, image courtesy of Thomas Auer.
3. Reflections in Tugendhat House, Ludwig Mies van der Rohe architect, Brno, Czech Republic, 1930, courtesy of Kurt Forster.



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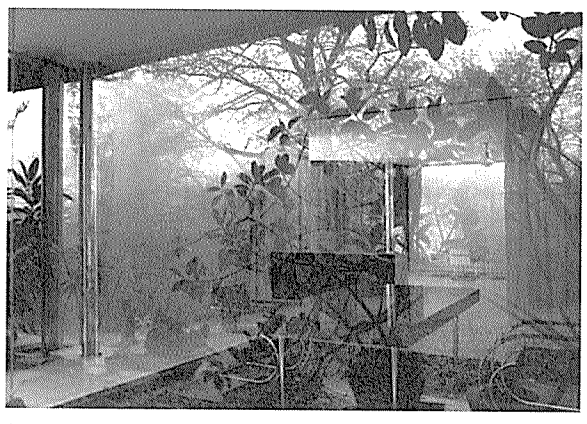

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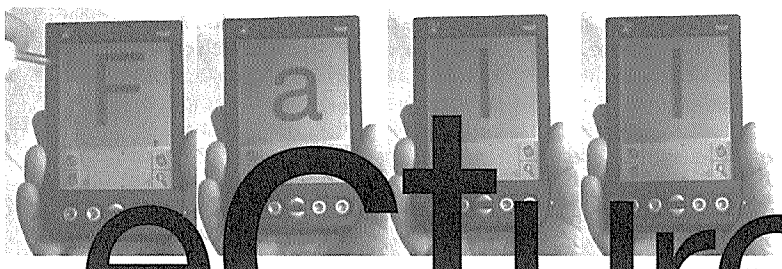

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September 8
Chip Lord and Curtis Schreier
"Ant Farm"

We were influenced by the 1960s, Buckminster Fuller, and rock bands. Modernism was the dominant dogma of design, and the Berkeley Art Museum was designed as a Brutalist design, so we rebelled against the gallery and ended up at Yale on a tour with Doug Michels ('67). We made nonpermanent structures with Army surplus parachutes and took them to the beach and inflated them. The wind would create the building, and eventually it would die. We added performance works and architectural performances staged and decorated by Ant Farm. Some were guerilla events with, say, fashion models at computer labs, and we made photographs to signify environmentally generated experiences. In a sense it predicted virtual reality; however, we were not interested in the technology but rather the idea of the Electric Oasis, which was Archigram-influenced and was set up like a rock festival.

In an art park, we created a temporary sculpture, *Citizen's Time Capsule*, with suitcases that were buried in upstate New York for twelve years. The earth-core sample came back questionable as having toxic content. We used gossamer materials and then foam materials; we went from the ephemeral to the permanent. We are the first technology society to decide our own permanence.

Why do we do architecture at all? To have mobility—with semipermanent architecture in the built environment. Doug Michels worked with dolphins and had the idea to make a lab that would roam the sea; it would be new for architecture. For us, as romantics, it was new; we were kind of a "was." So he thought the dolphin was for the future and proposed a dolphin planet and ways to get water and dolphins into outer space.

In spending all of our dollars on the Vietnam War we were primed to believe in the space age.

There is very little new in architecture. The vision of architecture is to see broadly, and all politicians are narrow.

There is not much analogous to our work in architecture today. Our work was instinctual. At the time there was an authoritative way and nothing else; there was also great support from peers for group and alternative work, and it was cheaper to live. Today, too many outlets exist within the profession. It's a different circumstance.

September 12
Jeanne Gang
"Through Material"

Our ideas are developed through material rather than being about material. It is a position and a different relationship, where ideas are possible through materials rather than in a more baroque use of materials, which is what I see in practice now.

We start with a proximity to something, such as a construction detail, and zoom out and in to get at certain meanings. In our time, we are zoomed out. There is a process in our work and the way we think about things in the subject matter of compressive space and architecture.

For the exhibition at the National Building Museum, we wanted to see how we could support the stone from the ceiling, but there was no place for it, so it hangs in tension. We made a composite with the stone backed in laminate and glass to keep the stone in place. There is no data for this kind of stone in tension, but we found a way for it to interlock in a dovetail, or like a puzzle piece, using aerospace material testing with a fiber backing. People are so embarrassed to use resin and glue, but glue is a material as much as glass or stone. We started with a material and moved out to the form.

In a speculative project we looked at two baseball parks, both accessible by train near the Chicago city center, and found that what was normally a transparent facility became a huge building over time. At Wrigley Field, people park their cars in the surrounding neighborhood, and we had our students map the parking on game days. The stadium bleeds into the city, and people end up watching the games in and around the city. It is the only sport where the field is defined by a triangular base, making it ideal for urban conditions. The idea became to build on existing infrastructure, putting the project downtown with a kinetic stadium that floats out and connects to different buildings at all floor-plate levels.

In our work we respond to the particular as opposed to the general. I see our interest in the decorative as a process of looking for patterns that have structural necessity in building. It is then a zooming out.

September 15
Esther da Costa Meyer
Brendan Gill Lecture
"The Raw and the Cooked: Lina Bo Bardi"

Cued by the environment, Lina Bo Bardi rejects the use of nature as a foil, relying instead on a mimetic interplay with the surroundings. For a tiny building, hidden by a tangled skein of thick vegetation and a bamboo grove, Bo Bardi chose nonauratic, homespun materials: traditional tiles for the roof, wooden planks for the floor, and wooden bracing on the exterior. Only the nylon sliding doors allude to the urban and the modern, recalling the Japanese influence prevalent in São Paulo.

Bo Bardi presents a critique not just of Modernist architecture, but of colonialism. In the end, Bo Bardi remained European, though perhaps her architecture did not. Her capacity to see things anew—from the lowly and raucous to the elegant and ethereal—and her unwillingness to take anything for granted gave her a critical distance that marked her as different. But the receding Italian past left lingering traces. Over the years, she cast off one by one the spoils of a profession grown distant and over cultivated. One has only to look beyond the liveliness of her wonderful sketches, so joyous and full of humor, to find the sense of dispossession that characterizes her late work, a hunger for the irreducible and the primordial. The quest that led from the Glass House to the willful solecisms of the little wooden institute stemmed neither from a retrenchment nor from a search for origins, but from what one critic has identified as a "profound sense of bereavement." Perhaps this is what Bo Bardi implied when she once described Brazilian architecture after the war as "a light shining in a field of death." Perhaps the past was not in abeyance after all, even after so many years: a contemporary dictatorship could not help but evoke another, awakening old fears and opening old wounds.

September 26
Massimiliano Fuksas
"Four Projects: Lost in Translation"

The Venice Biennale of 2000 was very important to me, because I discovered that it is not enough to be a good architect, to do good architecture, or to do good buildings. We must be part of *una cosa*; I don't know which thing, but I think it is to be engaged in this world.

Bruno Zevi asked, "What are you planning for the next ten years?" And after three months, I was obsessed with this question. The biennale was the result of this question. And what I want to do is not to make only buildings, but to do something else for life. To be an architect is a project of life.

I think that in what we are doing now we have many possibilities. We can really do what we want. But we are in a space that is concentrated, and we live also in one minute all of our life. We are so concentrated today that we don't even know it, and for that reason I think of the concept of the harbinger as something you can't do, that is too far, too much that is completely irrelevant. Ours is fixed, because we can do avant-garde in real time. We can give, today, the avant-garde. For 2000 years, we threw away the program that was utopia.

People said that, politically, I started to be antiestablishment, but now I have built such a huge building, the Fiera, that is very "establishment." You have to ask Berlusconi if he thinks the same; he controls all the media—try to speak with him and ask him why he was not at the opening of the building.

I was in a Luis Barràgon house two days ago in Mexico, and I was so touched by the work that I think I have to change a lot of my life. I will try to give emotion with my architecture to the people who have not enough good emotion in their life.

October 10
Kurt Forster
Vincent Scully Visiting Professor
"Surface Tension in Contemporary Architecture"

We have been taught to mistrust appearances. That may be one of the reasons we pay them so much attention. We are always asked to look for the substance of things and not be distracted by superficial matters. In moral terms, this may well be for the better, but in terms of sense and experience, how can we be responsive to and interact with our environment if we must do so against injunctions?

Surfaces have a lure of their own. More than just gaze at them, we're tempted to touch them—again fighting injunctions or at least overcoming inhibitions.

The impressions emanating from a surface—sprays of light or wandering shadows—exercise a curious power over our thoughts. Eye and hand, touching and seeing, pair up and equip us with formidable instruments of perception.

As we face surfaces, we spontaneously scrutinize them, gleaning even minor variances and fleeting changes, as if the very act of observing conjured up what we observe.

It is precisely for this mysterious transformation of a work into a thing, of a building into an image of its reality, that the Library at Eberswalde by Herzog & de Meuron begins to speak to our sensibilities. No surprise then that the presence of the building does not depend on any of the familiar quantities—volumes, composition, type, or material—but rather on the power images exercise upon our imagination, as if the senses acted faster and in more diverse registers than our disciplined cognition. All is surface, and surface is everything

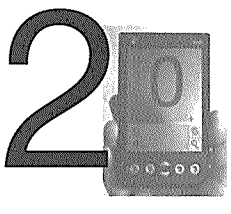
Content is thereby not brought back in the terms that the architectural, abstract approach and professional procedure already holds, for content. It is not by harking back to a particular typology, by picking up one or another motif, by layering in something that comes from a completely differing context supposedly establishing a link to the past that causes the content to come out. The content comes out in the same sense as Valéry, as the thing; the artifact itself in the end is a thing.

I think we can no longer simply insist that it is possible to make these reductions, to say that architecture is this, it should be tectonic, it should be honesty, it should be true to materials, and so forth. All of these things are a great bag of goods that you should not be able to take on board.

October 24
Ada Karmi Melamede
"Recent Work"

In the *New York Times*, recent articles have mentioned "The Hedgehog and the Fox," an essay written by Isaiah Berlin, primarily in reference to politicians. I believe, however, that it may have more to do with architects and architecture. Berlin started with a line from a Greek fable: "The fox knows many things, but the hedgehog knows one big thing; and the fox all his life is somewhat tormented by the hedgehog." He then says that if we take this line extremely seriously we may find that the difference between foxes and hedgehogs is the most profound difference between people. On one side we have the foxes, who see life as a series of episodes that are wholly unconnected. On the other side we find the hedgehogs, who believe in a universal principle that ties the world together. Berlin categorizes writers into foxes and hedgehogs. He describes Shakespeare and Balzac as foxes, and Plato and Proust as hedgehogs. However, Berlin cannot identify whether Tolstoy fits into either category, but he believes that perhaps Tolstoy was a fox who all of his life wanted to be a hedgehog. It is rather difficult if for your entire life you are one thing that wants to become another. I believe this is the dilemma of architecture and architects.

I think that every time we try to resolve a specific problem in architecture, we try to find the glue or the thread that connects



all functions together. Every time we look into the relationship of things, we try to find what is unique about each function, which is of course a conflict. I believe that architecture should contain this conflict rather than erase it.

I come from a place that is full of conflict—economically, politically, and culturally. I am sure you have all read the book *The Unbearable Lightness of Being*, and I can tell you that lightness of being is not present in Israel. That absence colors our thoughts, categories, and temperament. The past in that country intervenes with the present on a daily basis, and I am not sure we can escape it.

All of these projects deal with tensions that come out of these conditions. They are tensions between the flow of architecture and the issue of containment, between private and public, and between heavy and light construction that are specific to Israel. In the end, my work addresses the tension between order and freedom in the largest sense of those words.

October 27
Brigitte Shim
Eero Saarinen Visiting Professor
"Site Unseen"

At the outset of every project, my partner Howard Suttcliff and I are faced with how we inscribe the surface of the earth and the traces that we leave. We concern ourselves not just with the immediate act of building but with how the results of that act develop over time.

Canada, where I live and work, is a large global land mass. Each building is relatively small in comparison with the area we take up. It's important to think about the environmental effects of the built world and not to ignore conditions such as climate, latitude, or geomorphology. For us, the ability to carve, sculpt, and shape the earth allow us to create a site for architecture, a site unseen.

Our sites are physical, cultural, metaphorical, and often unseen at the beginning of a project. Unlike other parts of Canada, the sites we work with are fairly banal; they are in edge or suburban conditions. The work then is to create the site, not just a physical site but a place for architecture.

Toronto contributes a specific set of conditions to situate our projects. It is the largest city in Canada; the population of the metropolitan area is about 2.5 million. In Canada there is the concept of "allophone," meaning that neither English nor French is a person's birth language. Toronto has the largest population of allophones in Canada. It is a city where Mies's and Pei's office towers clearly emerge out of the city's industrial origins.

Our first and last projects, covering a fifteen-year span, are both small in scale and for the same client on the same property. The first project contains the DNA of a range of issues and agendas that our practice has been exploring over the last fifteen years. This early garden pavilion and reflecting pool enabled us to think about a constructed landscape. And thinking about what a retaining wall is, as well as beams, platforms, and roofs, where all part of this investigation. We didn't have to think about doors, windows, or mechanical systems. We were interested in the notion of time and how it could be embedded into a project.

October 31
Charles Jencks
"The Iconic Building:
The Power of Enigma"

The argument is that iconic buildings are here to stay whether we like it or not, and in Britain, architects don't like it. They fight it, they attack it, and they think it's retrograde. I just had a debate with Peter Eisenman at Columbia three or four days ago, but as we all know, Eisenman, like the other usual suspects, is always on the list of iconic architects. He is an iconic architect, of course, producing anti-iconic iconic buildings, of which there are quite a few now. So my argument is that we are at a very strange position.

The decline in meta-narratives, the skepticism toward meta-narratives—that is, narratives of history, progress, emancipation, democracy, freedom—however you read history, people have less belief in them. And this decline in belief has been going on for well over two hundred years, not only in the Nietzschean death of God but meta-narratives in general. And with this decline comes the decline in the role of the monument. With that double decline, the iconic building has risen because society still wants landmarks; it still wants to pay extra money for prominent buildings and still demands of an architect that they somehow give them the kind of excitement that architecture had in the past.

As in the art world, there is a demand among the public and among other architects, at least on a certain level, for iconic buildings—for the risk-taking, creative, never-seen-before gesture. Although on at least one level this is liberating, I'll be arguing that the problems of the iconic building as a genre are obvious: its aspect as a one-liner, its destruction of city fabric, its tendency to upstage itself—one iconic building after another renders the previous one obsolete—its tendency toward malapropism, that is, getting it wrong, as well as a host of other problems.

It seems to me that an iconography of our time has to be built upon something that is affecting all of us, and today—particularly today—we are understanding things about the universe that other ages haven't understood so well. That is, we live in a cosmogenesis—a process—and we now know its age: 13.7 billion years. We know our history back to the first few seconds; we can tell it as a single, creative, unfolding event. And it is that narrative, like the Genesis narrative, which holds a possible iconography.

November 3
Glenn Murcutt
Bishop Visiting Professor
"Sustainability: A Cop-out for Good Design"

My lecture tonight is about the questions of sustainability and whether in fact it's a cop-out for good design. I have to say that on the whole we see sustainability—the dead end of it—using sustainability for a replacement of good-quality design.

A lot of the formulae (LEED, BASIX) are a great problem because architects and lots of people outside of architecture tend to think that if you fulfill this requirement, it's going to produce architecture. And of course it doesn't; it often produces very bad building design.

There are so many issues that need to be considered in the making of an architecture of place, of the spirit of place, of place-making, such as but not limited to understanding the following: the geomorphology of the region, the geology, the hydrology, the topography, the tones and eco-tones—such as we have in our bodies from our foreheads to our eyebrows, to our eyelids, to our eyelashes, this gradation through our bodies. These are all elements of change in the landscape, so why shouldn't we be adapting our buildings to these changes? How do we locate a building in relation to prevailing winds in summer that bring the beautiful water-laid perfumes? Do we do it? No, we don't think about it because we seal our buildings. How do we deal with waste, what do we do with waste, what are the issues with waste management? Remember, waste is a product of our so-called standard of living, which in fact is a misnomer—it is a standard of consumption. Why don't we start working with the place, working with climate instead of against it? And working with culture—like the European culture in Australia, the mixture of the European culture and the Aboriginal culture. Human needs and human aspirations and how those needs can fulfill those aspirations are essential.

All of these issues must form a natural part of thinking about an architecture that is responsive to place, an architecture of response. I would prefer to think it is not an architecture of imposition.

Sustainability will fall on its face unless we pull our act together and start bringing other factors into it.

November 7
Neil Denari
Myriam Bellazoug Memorial Lecture
"Formagraphics"

Formagraphics, as you might imagine, is the place where something like the two- and three-dimensional intersect, and more extensively, it's also the place of a material discourse. What I mean by "material," of course, is tectonics, and the material life of architecture meets a kind of cultural discourse. I openly admit that I'm a pretty intuitive person and an intuitive designer; and architecture for me has been a twenty-year practice of trying to discipline the intuition, of trying to engage the ability to make work from a very personal standpoint but also to struggle with the issue of legitimation. To struggle with the issue of relevance, and possibly with issues of meaning, is about trying to carry out a contemporary discourse.

I had always hoped and imagined that building outside of where I live, Los Angeles, would raise questions as to what the architecture would be. So I was searching for an architecture that had the potential to be a vessel of meaning on the one hand, and on the other would be eminently buildable but would still have the possibility of a cultural discourse as well as one about materialization.

Clearly, tonight was about trying to not necessarily make you wonder what the references are, but mostly to outline the ambition that the work is or wants to be readable by you or someone else in a particular way. The work has perhaps obvious characteristics to it and things that are also obscure and filtered at the same time.

Over the years I have been able to allow thickness, *poché* if you will, to come into play in the work, whereas when it first came out in the Gallery MA project, it was very much "I have a two-dimensional surface." Frankly, you can only do so much with that, and allowing it to become solid with relief, allowing it to disengage, is a liberating kind of a moment.

November 14
Michael Maltzan
"Oblique Actions"

I am fascinated by contemporary cities and spaces like Los Angeles. I was born in Levittown, New York. This colors how I think about our work and urban life, especially my respect for issues of social and public space as well as what role architecture has in that equation, mediating those contexts and the conflicts they productively produce. I am continuously exploring how these issues are experienced by the user, the inhabitant, or the participant through the tools and devices of things like movement and physical visual perception.

I was looking at a different way of observing the relationship between this exterior form and the interior form. And I got very interested in an idea that is a game that mathematicians play, I guess among themselves, called "geometric dissecting," in which you can take a shape, very often a pure shape, and by looking at different ways of dissecting it geometrically you can begin to create other shapes, in this case a series of irregularly sided figures. What was interesting to me about that was that, in a sense, the exterior and interior shapes shared an almost geometric memory of each other, but it meant that the exterior form did not depend on a typical way of generating that form—it had, for instance, a heptagon. In our case, or in these dissections, it has no real center but is much more about potentially a kind of graining of the space—not so much a center that you look through or occupy but that you potentially look across.

Because the area where we are building a bookstore in China is swamp from the river, a concrete building—especially one that tries to cantilever in both directions like this—was going to be too heavy on its point loads, so we had to make a steel building. The problem with that is, from an engineering standpoint, there is very little steel that has been done at this level of complexity in China. Guy Nordenson, a structural engineer who we work with a great deal, was very involved in this project in developing a system that could both work from an engineering standpoint but also take into consideration all of these perforations. It is a beautiful system where these almost Vierendeel ladders happen periodically through the building, and then a net of tensile bracing covers the entire exterior and is also the thing that allows the panels of metal to bolt into it.

In this competition [Fresno] I started to see the possibility, and really the importance, in a more open and conversant network of movement, where the building user and the viewer, as well as the passage of the incidental urban habitant, play both active and ambient roles. It is really connected to a continually emerging and elastic set of relationships with form, program, site, and, hopefully, each other.

Lecture excerpts were compiled with the assistance of Marc Guberman ('07), Andrew Young ('06), and Alexander Bierig (Yale College, '07).

1. Chip Lord and Curtis Schreier
2. Jeanne Gang
3. Esther da Costa Meyer
4. Massimiliano Fuksas
5. Kurt Forster
6. Ada Karmi Melamede
7. Brigitte Shim
8. Charles Jencks
9. Glenn Murcutt
10. Neil Denari
11. Michael Maltzan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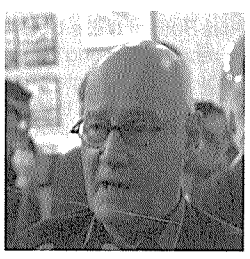
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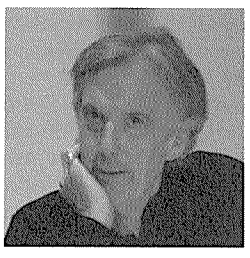
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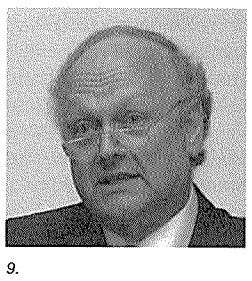
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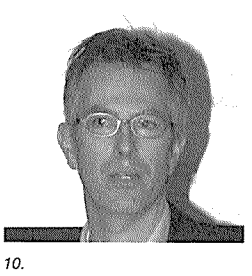
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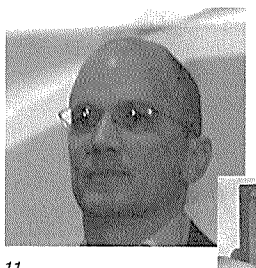
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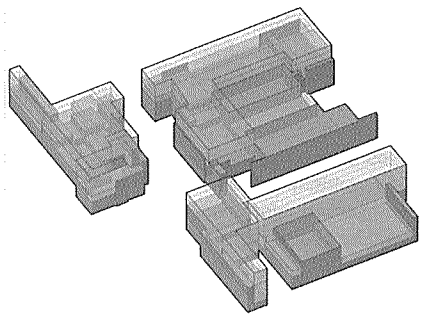
Advanced Studios



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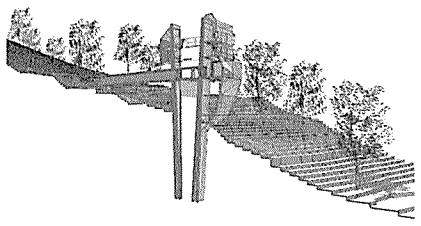

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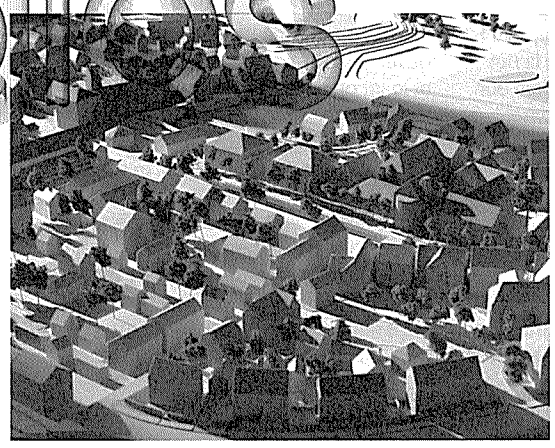

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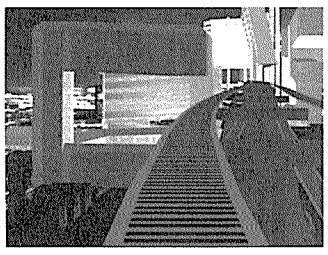

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Peter Eisenman,
Louis I. Kahn Visiting Professor
with Michael Young

Peter Eisenman's studio investigated "an idea of criticality in architecture based on a different relationship of the individual architectural unit to the general idea of the city." Using the competition program for a 250,000-square-foot central library in Hamburg, Germany, the semester's approach was based on an argument put forward by PhD student Pier Vittorio Aureli in his thesis for Delft University. The argument presents Alberti's reflection on the house as a small city and a small city as a house as a way to understand the design of a city—through that of its constituent parts. But Aureli noted that when architecture's utopian visions died in 1939, becoming more modest, partial, and realistic, the building no longer prefigured an idea of the whole, which lead to cities able to be constructed only by juxtaposing single fragments. Thus, it is the form of architecture that must be first recognized in the building of the city.

In the first part of the semester, the students analyzed formal strategies for the critical role of architecture in the city such as Nolli's Map of Rome, Piranesi's Campo Marzio, Venturi's *Complexity and Contradiction in Architecture*, Rossi's *Architecture of the City*, Ungers's Green Archipelago, and Koolhaas's Bigness. Then they explored buildings discussed in Aureli's thesis by OMA, Ungers, Rossi, and Sangall. After the analysis, the students divided into teams to design a library building with housing, retail space, a community center, an archaeological center, and parking, sited next to St. Petri, a historic church, on the Domstrasse above an ancient Roman Castrum. For the complex site and program, the students were asked to engage both the theoretical issues and the urban implications proposed by Aureli's thesis. Both of these tasks were handled by a realistic building proposal that could effectively incorporate program, site, and structure. However, the formal outcome was to have a direct impact on the senses and not require a complex diagrammatic explanation. The resulting projects were primarily orthogonal, turning both in on themselves and opening up to the city. The merging of the two types of issues—theoretical and urban—through a real building proposal became the challenge of the semester as it was presented to the jurors: Stan Allen, Pier Aureli, Kurt Forster, Charles Gwathmey ('62), Jeffrey Kipnis, Leon Krier, Greg Lynn, Emmanuel Petit, Alan Plattus, Massimo Scolari, Sarah Whiting, and Mark Wigley.

Glenn Murcutt,
Bishop Visiting Professor
with Amy Lelyveld

As Glenn Murcutt, Bishop Visiting Professor, emphasized, "Sustainability is being used as an excuse for bad design. ... I am very interested, on the other hand, in true sustainability, about the products we use, about how we go about designing buildings that minimize the impact of mechanical systems." For his studio he chose the site of a former copper mine, so students could explore issues of how to remediate and culturally interpret the effects of mining on the natural environment.

After a visit to the site, Strafford Vermont's Elizabeth Mine, on the wooded rolling hills and ridges of Vermont's Upper Valley—which from 1803 to 1958 was the oldest large-scale mining operation in the country—the students experienced firsthand how abandoned mine buildings embody the "150-year history of adaptation to changing technologies, markets, and times." The mine is now considered a historical, environmental, recreational, and cultural asset that demonstrates both the "influence of the land on human activity and the impact of human activity on the land," and it is a Superfund site.

The students were asked to listen to the site's many voices and design a learning center integrated with the landscape that would educate children above the age of twelve by orienting them to the historical, environmental, and cultural context as well as the rhythms and strictures of the surrounding land. The architecture students could develop many aspects of the program for the site. But at minimum the center was to provide two classrooms for sixteen students each, an assembly space, a dining room and an associated kitchen capable of feeding thirty-five people, and overnight accommodations. The students were also asked to provide a clear strategy for waste management, power, and water supply.

In assessing three stages of toxicity and land-erosion issues, students struggled with the problem of where to locate the center; they selected sites that hugged the bowl formation in the center of the tract and relied on existing road systems. They designed projects that either scattered buildings with separate functions over the site or housed all the programs in one structure. Some opened up bar-shaped buildings to the landscape with louvered and paneled systems that could then close down in the dead of winter, while other centers were proposed to be active year-round with sustainable heating systems. With input from environmental engineer Thomas Auer, they incorporated geothermal, gray wastewater, green roofs, and passive solar systems. In one interpretation, a student recreated a mine shaft in a modern glass enclosure that would draw heat from its preexisting system into the building. Issues of integrating landscape and structure, nature and education programs, as well as sustainable systems, allowed the students to develop schemes that provided solutions to real concerns of the numerous landowners who previously had no common vision for the site. The review jury included Patrick Bellew, Will Bruder, Peggy Deamer, Kenneth Frampton, Brigitte Shim, Marion Weiss ('84), Tod Williams, and Ed Hathaway, an EPA project manager of mining sites.

Leon Krier,
Davenport Visiting Professor
with Jim Tinson

The studio taught by Leon Krier and Jim Tinson ('94) used Colonial Williamsburg as a "laboratory" for an introduction to principles of traditional architecture and urbanism. As Krier said, the studio was "about understanding urban structure and relating it to the linguistics of architecture; why some buildings are built in brick and others in stone or in wood, and why some buildings are vertical and others are horizontal, in a compacted crash course in all of the tricks that make up traditional architecture."

Students traveled to the site and then prepared comprehensive urban analysis that started with the position of Williamsburg in the region, the natural environment, and the major landforms that shape its physical setting. This work extended to a more detailed understanding of the historic city, its physical and symbolic organization, and the hierarchy of its neighborhoods, streets, blocks, and lots. Students also made a parallel study of individual buildings and the interdependent relationship of "vernacular" and "classical" in the creation of an urban environment. Through detailed, measured drawings, they looked at the inherent relationship of architectural vocabulary to construction, considering the materials, forms, proportion, and architectural elements of each building. Details were then organized in a comprehensive lexicon of building elements that was shared within the studio, combined with analyses and drawings.

This study became the basis for a master plan to reorganize Williamsburg and create a series of new neighborhoods. Krier and Tinson executed a master plan as the framework for design studies that the students carried out in the second half of the semester. The Colonial Williamsburg Foundation, which lent its assistance to the studio, had proposed two sites that would be redeveloped. The students also developed concepts for twelve new blocks, forming a new quarter within the city that would embody the spirit of the place. Each designed a block or series of blocks within the master plan. They then selected principal buildings within their blocks for which to complete more detailed designs. Through an ongoing discussion of what defines traditional building and the vernacular within the language of Williamsburg, the students created convincing solutions for a new neighborhood that challenged convention, looking creatively at materials and technology. In the final review the jurors— Pier Aureli, Thomas Beeby ('65), Ed Chapell, Peter Eisenman, Jeff Klee, James Howard Kunstler, Jaquelin Robertson ('61), David Schwarz ('74), and Stanley Tigerman ('60)—were shown designs for streets, blocks, individual lots, key open spaces, and significant buildings that comprised a compelling new model for town planning.

Alan Plattus, Professor

Alan Plattus led his sixth China Studio in a three-way collaboration with architecture students and faculty at Hong Kong University and Tongji University, in Shanghai. Plattus scouted the site in Shanghai last summer with Leslie Lu ('77), head of architecture at the University of Hong Kong, noting that " the city is now experiencing all the side effects of overdevelopment but is seemingly less raw and unfinished and perhaps a bit more sophisticated, if also more predictable than before." This year's site on the banks of Suzhou Creek was where three previous studios had studied the redevelopment of former industrial areas. Now it is an emergent district where the community is reusing old factories and warehouses as art galleries, design offices, and show rooms, with a wealth of cultural integrity.

Yale students went to Hong Kong to meet their counterparts, and together they proceeded to Shanghai. There, the students from all three schools toured the development site and then worked in mixed groups on a series of analyses designed to introduce them to Shanghai's urban and architectural landscape. They also traveled to Suzhou to visit the classical Ming gardens.

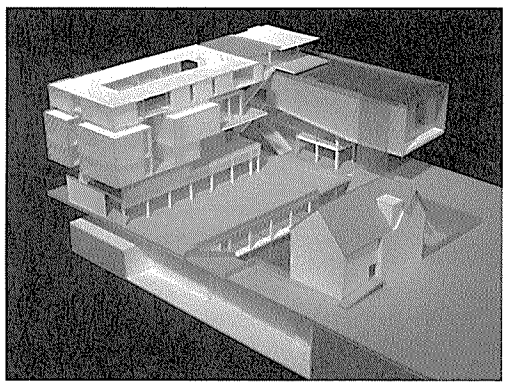
Students were confronted with the development of several adjacent blocks where traditional low-rise high-density housing and historic warehouses have survived. They considered the possible redevelopment options in light of emergent development trends in Shanghai, including the phenomenon of SoHo-like arts areas, preservation-based commercial and residential projects, and the development of new public spaces.

The final review with the Hong Kong students, at Yale, revealed divergent approaches to the problem. While the Hong Kong students worked in larger groups and developed detailed analyses of the site and its programmatic possibilities leading to lively master plans for predominantly low-rise arts districts, the Yale students, working in teams of two, moved much more quickly to an exploration of three-dimensional urban and even architectural form, in all cases grappling with the problem of reconciling the scale and density of new development with the texture and character of the existing urban fabric and life. The teams presented projects to the jury of Tony Atkin, Diana Balmori, Ellen Brennan-Garvin, Keller Easterling, Edward Mitchell, Joel Sanders, Graham Shane, Gary McDonough, and Adam Yarinsky.

Brigitte Shim
Saarinen Visiting Professor
with Hilary Sample

Brigitte Shim with Hilary Sample, organized a studio to design a 90,000-square-foot building based on the concept of the Toronto-based organization City Centres: A Think Tank for Cities, which proposes to bring together global experts in finance, urban planning, housing, community relations, multiculturalism, policing, architecture, and human rights. The students worked to develop a building that was a physical embodiment of the goals of the organization.

The students traveled to Toronto, a multicultural city, with 52 percent foreign-born residents, for an intense emersion in the urban issues. There they met with Bruce Mau (see page 14), urban specialists, and toured the site on the campus of the University of Toronto. They also visited existing think tanks, such as the University's Fields Institute for Research in the Mathematical Sciences and the Munk Centre for International Studies, as well as the Perimeter Institute for Theoretical Physics, in Waterloo, Ontario. These projects served as precedents for studies of the relationship between public and private



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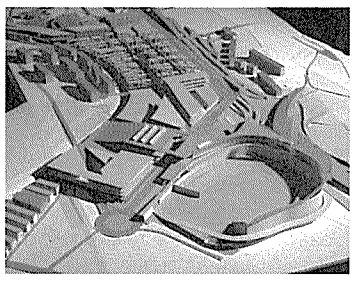

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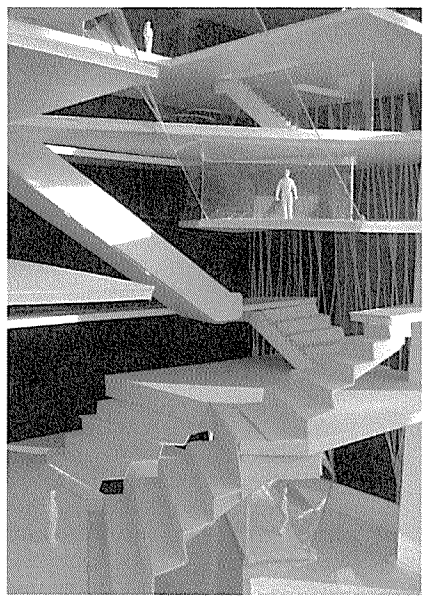

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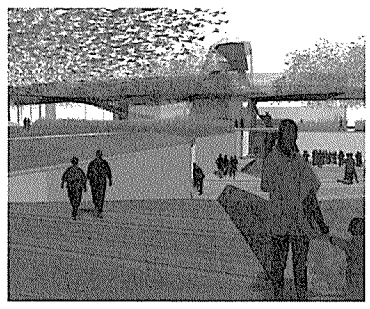

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spaces that are typical of study centers. However, the City Centre studio project proposed to invert these models and asked the students to design spaces that actively engage the public, along with providing the research and housing facilities.

Each student worked to develop a critical relationship with the city, program, site, and current construction methods, as they investigated design at fundamentally different scales, from the city and its existing viable infrastructures to tectonic analysis, in an integrated and synthetic manner. During the studio, a rigorous process of modeling, including large-scale fabrications and drawing, was emphasized as a tool for understanding each scale of investigation as well as their overlaps and interrelationships. Shim and Sample asked the students to explore questions of skin, envelope, and circulation, as well as "the building's presence and its role in terms of monitoring, registering, and making palpable the atmospheric conditions around us that are often quite invisible." They invited faculty specialists including Diana Balmori, Neil Thomas and Aran Chadwick, Thomas Auer, Patrick Bellew, John Eberhardt, and Kevin Rotheroe to assist with landscape design, fabrication, engineering, and sustainability issues.

This studio resulted in speculative investigations where in one project, surfaces of glass were layered with wood fins. Wood louvers and green walls invented new skins and emphasized each student's ideas about light, air, and weather in relationship to the quality of the public, private, and impromptu spaces. Circulation through layered spaces internalized public courtyards with glass roofs and screened atrium walls that filtered light deep into the building. The guest jurors—Patrick Bellew, Will Bruder, Kyra Clarkson ('95), Kenneth Frampton, Jeanne Gang, Glenn Murcutt, Neil Thomas, and Michael Weinstock—engaged questions of how public space is ultimately made, the very question that existing think tanks have omitted and which a new type of institute would need to address as a twenty-first-century model.

Fred Koetter and Ed Mitchell
Post-Pro Studio

Using a development site in Helsinki, Finland, Ed Mitchell and Fred Koetter led an "intense investigation of different urban settings, and how architecture relates to the situational city . . .looking at emergent urbanism and what's happening at the edges of cities as they transform into something that is yet to be determined." Students analyzed how infrastructure must to be reconfigured in order to have a city emerge in a new form so that urban design can be adept at managing temporal structures, ordering movement, and prognosticating future trends without the aid of specific programs or clients and without the traditional zoning diagrams and spatial devices on which architects have historically relied.

Through a special grant in Finland, the studio worked in cooperation with the Helsinki University of Technology on plans for an area at the edge of the city, which they visited, and then participated in a joint workshop with Finnish students to discuss possible urban scenarios. They also analyzed significant works of architecture in and around the city and explored their new proposals with city planners and stakeholders.

Helsinki's regional population of more than one million represents roughly 20 percent of the population of Finland. The city's new position in relation to the rest of Europe, with potential direct train links to St. Petersburg, looks toward increased density and popularity. Extensive plans for new housing are aimed at drawing the family-oriented suburban population back to the city core while maintaining affordable alternatives for the working populace. Helsinki's settlement patterns of outer areas are strongly associated with the Garden City movement of the early twentieth century and postwar suburbanization; however, these concepts were seen to be detrimental to the future ecology and social structure of the city. The studio proposed extreme urbanisms for new housing, while upholding the existing qualities and resources of the city and its surrounding environment.

As the students addressed the historic importance of the city—their vision focused on a constructed building landscape. Because the Yale students were not as restricted by local politics, their approach was different from that of the Finnish teams. The Yale approach was developer- driven rather than dependent on public funding. The goal was to retain urbanism hand in hand with the exoticism of the northern landscape while not conforming to a suburban model. Looking for a reinterpretation of the Garden City model, some students incorporated alternative energy sources, such as wind turbines, and intermingled ice and water so that the waterfront would become part of the site. Others preserved the 1960s suburban model as well as the 1930s villa type and intensified the land between the two with connections through the highway infrastructure. Some made large-scale buildings that punctuated the site and altered the city's perimeter circulation and cross-axis. In a lively review the jurors—Antti Ahlava, Keller Easterling, Chris Genik, Eeva-Liisa Pelkonen ('94), Alan Plattus, Hilary Sample, Richard Sommers, Charles Waldheim, and Michael Weinstock—debated the historic model versus a new paradigm.

Jeanne Gang
Kahn Visiting Assistant Professsor

Jeanne Gang chose as the premise of her studio a concept for a Labor History Museum, in Chicago, historically the epicenter of important labor struggles. The site, that of the 1886 Haymarket Riot—the event that led to the eight-hour workday—was only marked with a commemorative plaque in 1998. The students first conducted research on making and technology, site and environment. A visit to Chicago introduced the students to experts like historian Terry Tatum from the City of Chicago and labor representative Les O'Rear. Each student selected an area of research (labor history, construction, the anarchy movement, and museum and social club typologies), creating a graphic analysis that was incorporated into their programmatic concept of what a labor history museum could be in this "city that works."

Potential artifacts and narratives that form the worker's struggles in industries such as meatpacking, steel manufacturing, farm equipment, printing, candy making, and railcar production, were contrasted with today's service-industry orientation. Some students designed vast halls for the display of large-scale manufacturing equipment and others created classrooms to provide a closer interaction with history.

The students were encouraged to incorporate ideas for architecture that conceptualized making in relationship to both physical labor as well as using new digital design tools. This resulted in an exploration of materials in new juxtapositions, structural configurations, and hybrid spatial connections. Structural engineer Neil Thomas and environmental engineer Thomas Auer assisted the analysis. To push design concepts that embodied the physicality of making and technology, the students identified a verb to explore: e.g., stacking, bending, casting, or assembling. These processes were explored for conceptual connections to labor and work through large-scale models that helped to establish an idea within a physical point of reference prior to the development of program analysis. Site and environmental studies were then developed simultaneously with the museum program.

Some students looked at the idea of assembly and how it relates to the putting together of a building—as well as that of people gathering in these spaces—and how it could foreground its own assembly as it is built. Others explored actions such as bending, both spatially and technically, leading to formal invention using steel. The jurors—Sunil Bald, Julie Eizenberg, Daniel Friedman, Fred Koetter, Hilary Sample, Neil Thomas, and Michael Weinstock—debated the work and methods as Gang emphasized how the studio was "between industry and the worker. It was exploring the physicality of buildings and the way that they are made."

Diana Balmori and Joel Sanders

In a studio that worked to define the border where building and land, architecture and landscape, meet, students were asked to undertake the design of the Shanghai Theater and Park for a site in the French Concession, the subject of a competition that was won by Beyer Blinder Belle with Balmori Associates. Students were challenged to blur architecture and landscape rather than burying one or erasing the other. The studio traveled to China to visit the historic site of the classical Suzhan gardens, with pavilions, lakes, bridges, and courtyards that flow easily into one another. They also met with the head of the government's media department, the client for the theater, and the head of city planning, the client for the park. Not only had the architecture and the landscape been separated in concept, but they also had two totally different government agencies as clients. The city-planning department primarily wanted the park to function as a lung for the city, while the media office wanted a theater/monument, with the park as a service area.

Precedent analysis concentrated on the relationship between buildings and landscape in the past and at the historical Chinese sites. At the same time, the theater as a building type was studied in detail. Theaters tend to be conceived of as freestanding objects whose opaque walls shelter a series of interior functions—auditorium, stage, and back-of-the-house facilities—spaces that are indifferent to their surroundings. This project offered an opportunity to rethink these conventions and design schemes that would allow for rich spatial and programmatic overlaps between theater and park, while coming to terms with the technical requirements that resist material and spatial continuity.

In teams of two, the students focused on two different scales, developing comprehensive schemes for the overall site and its relationship to the urban context. At the smaller scale, they detailed sample vignettes: paradigmatic spaces where building, body, and landscape meet. Shifting back and forth between these two scales, the students created provocative environments that allowed actors and audience to meet at the interface between interior and exterior, nature and architecture. The first exercises included abstracting a successful instance of the integration of architecture and landscape at the Suzhou garden into a principle that could apply to our time and place. The translation was a double one—across time and culture. In presentations to the jurors—Frederick Bland, Anuradha Mathur, Geoffrey Lynch, Alan Plattus, Ali Rahim, Joseph Rosa, Ken Smith, Valerie Smith, and Charles Waldheim—the diverse approaches were revealed. Some students used layering methods through walls and screens opening and concealing views, or through terraces creating an outdoor theater that merged with the cityscape. Others used groves of trees that were interspersed within the program in courtyards with varying landscape elements to organize the entire site. For some, circulation routes traversing the site were integrated with a total theatrical experience.

1. Chris Dial and Katherine Burke, Project for Peter Eisenman studio, fall 2005.
2. Russell Greenberg ('06), Project for Glenn Murcutt studio, fall 2005.
3. Paolo Campos ('06), Project for Leon Krier studio, fall 2005.
4. Timothy Kirkby and Gray Shealy ('06), Project for Alan Plattus studio, fall 2005.
5. Laura Killam ('06), Project for Brigitte Shim, studio, fall 2005.
6. Alan Slamic ('08), Project for Fred Koetter and Ed Mitchell, Post-Pro studio, fall 2005.
7. Abigail Ransmeier ('06), Project for Jeanne Gang studio, fall 2005.
8. Chris Kitterman ('06), Project for Diana Balmori and Joel Sanders studio, fall 2005.

Faculty News

James Axley, professor, received $148,000 in funding from the U.S. Department of Commerce, National Institute of Standards and Technology, to continue research to develop a next-generation building airflow analysis method. As one of five faculty members, Axley participated in the course "Modeling Natural and Hybrid Ventilation" for European PhD students in Denmark, August 15–19, 2005, organized by Professor Per Heiselberg of the International Energy Agency (IEA) Hybrid Ventilation Centre, Aalborg University. In December 2005, Axley presented two papers: "International Workshop of Natural Ventilation," at the Architectural Institute of Japan, Tokyo; and "Wind Engineering Center of Excellence Open Seminar," at the Tokyo Polytechnic University, Atsugi, Japan. With Professor Stephen Kellert of the Yale School of Forestry and Environmental Studies (and subcommittees), Axley has developed a proposal for a joint master's degree program between the Schools of Architecture and Forestry and Environmental Studies, which was recently approved (see page 18).

Deborah Berke, adjunct professor and principal of Deborah Berke & Partner, in New York, was featured in *Metropolitan Home* (November 2005) for the design of her East Hampton home. The 3,400-square-foot house is marked with expansive yet private exterior spaces, designed with landscape architect Margie Ruddick.

Phil Bernstein ('83), lecturer, spoke in a plenary session at the 2005 AIA Convention, in Las Vegas, on technology's role in practice innovation and wrote an article for the AIA "Change Is Now" series. He gave a master-speaker address at "Greenbuild 2005," the U.S. Green Building Council's annual conference, titled "Going Green Means Going Digital: Using Technology to Realize Ideas in Sustainable Design," in November 2005.

Peter de Bretteville ('68), critic in architecture, was awarded an AIA Los Angeles 25-Year Award for his de Bretteville-Simon Houses in Los Angeles.

Keller Easterling, was appointed by the Yale Corporation as associate professor with tenure, at the School of Architecture. Her book, *Enduring Innocence: Global Architecture and Its Political Masquerades,* was published in November 2005 (MIT Press) and is reviewed in *Constructs* (page 16). She gave lectures based on the book at the Salzburg Seminar, the Center for Contemporary Culture in Barcelona, Cornell University, the University of Virginia, and the Urban Center, in New York. Easterling's article "With Satellites: Remote Sensing in South Asia and the Middle East" was published in *AD: Special Issue on Radial Ecology* (eds. Brian McGrath and Graham Shane, 2005). Her essay "Love Boat: DPRK" was published in *Architourism* (Buell Center for American Architecture, eds. Joan Ockman and Salomon Frausto, Prestel Publishing, 2005). The article "Not Everything" appeared in volume 2 and "Only the Many" in volume 3, both summer 2005. Easterling wrote the foreword to *Situating*, a catalog of the Architectural League's Young Architects competition and exhibition, and delivered a talk about Cedric Price at Columbia's "Price Summit," on September 21, 2005 (See page 10).

John Eberhart ('98), critic in architecture, received a SMARTer Kids Foundation grant to assist the Yale School of Architecture in purchasing electronic "whiteboard" technologies and digital classroom software. With his firm, John Eberhart Architects, he is currently designing a 3,000-square-foot house in Fairfield, Connecticut; a 1,200-square-foot house in Los Angeles; and a 4,000-square-foot commercial/retail space in Milford, Connecticut. In addition, construction began on a renovation project in Fairhaven, Connecticut, and was completed for a beach house renovation in Milford.

Martin Finio, critic in architecture, and his partner, Taryn Christoff of Christoff: Finio Architects, will be featured in *House and Garden* magazine as part of the April 2006 "New Tastemakers" issue. His firm has been short-listed to design a new entry for the P.S.1 Contemporary Art Center in Queens and is currently working on the design of a large oceanfront house in East Hampton, New York.

Mark Foster Gage ('01), assistant professor, with his firm Gage/Clemenceau Architects, is designing the 500-room M Grand Resort in Asheville, South Carolina. Projects in Manhattan include a 1,000-square-foot loft renovation on Wooster Street and a mixed-use tower on Second Avenue. The office is also competing for the International Tsunami Memorial Project in Khao Lak, Thailand, and a small performance-center project in New York City. Gage/Clemenceau Architects was selected as a finalist in the national competition to design a line of recycled street furniture for Chicago, which was on exhibit at the Chicago Architecture Foundation in the competition "reThink/reDesign/reCycle" as part of the Young Architects Forum. It was displayed in Chicago's *Live Green* exhibition last October.

Deborah Gans, critic in architecture, lectured at the Five Colleges associated with UMass Amherst and at Kent State in November 2005. Gans's forthcoming book, *Design Like You Give a Damn*, as well as the work of her firm, Gans & Jelacic, was exhibited at the University of Sydney, October 29–November 5, 2005. The third edition of her book *Le Corbusier Guide* will be published by Princeton Architectural Press in March 2006, with a new introduction. Gans's interview with William Katavolos appears in the winter issue of *Bomb* magazine. Gans & Jelacic is currently designing an artist residence/studio in Woodstock, New York, and a restaurant in the Chelsea district of Manhattan.

Alex Garvin ('67), adjunct professor, opened his firm, Alexander Garvin & Associates, to focus on multidisciplinary strategies to improve the public realm. The firm provides physically, financially, and politically feasible plans that generate support from local residents, business leaders, developers, architects, and public officials. As a result of his report, "The Beltline Emerald Necklace: Atlanta's New Public Realm" (commissioned by the Trust for Public Land), which proposed a 22-mile linear park and 1,400 new acres of open space along a proposed transit line, the Atlanta City Council passed a tax-increment financing district to fund the project.

Dolores Hayden, professor, spoke in the fall at the annual meeting of the American Studies Association in Washington, D.C., and at the Parsons School of Design in New York. She was the keynote speaker at a conference on public art at Wesleyan University and another on sprawl for the Connecticut Sierra Club. Hayden's two most recent books on the built environment, *A Field Guide to Sprawl* (2004) and *Building Suburbia* (2003), have both been named top-ten books in urban studies by Planetizen. The *Field Guide*, with aerial photos by Jim Wark, will be exhibited at the Hudson River Museum in February 2006. Hayden appeared on CNN's program *In the Money* to talk about the history of transportation and on Connecticut Public TV's special *Sprawl: Driven by Denial* to discuss the history of land use. Her essay "Building the American Way: Public Subsidy, Private Space" was published in *The Politics of Public Space* (Neil Smith and Setha Low, eds. New York: Routledge, 2005), and the article "The Trucks vs. the Town" appeared in the *Hartford Connecticut Courant*. A WKCR New York interview with Hayden was published in the September 2005 issue of *Landscape Architecture*.

Mimi Hoang, critic in architecture, with her firm nARCHITECTS, received an AIA 2005 Honor Award for *Canopy*, its MoMA/P.S.1 installation. Hoang participated as a juror for the Emerging New York Architects' Roosevelt Island Competition and the AIA Honor Awards in Puerto Rico. In the past year, Hoang and her partner, Eric Bunge, have lectured at the University of Toronto, Berkeley University, University of Pennsylvania, and the Polytechnic University of Puerto Rico. In 2005, the firm's work was published in the *New York Times*, *A+U*, *Concept*, *Frame*, *Lotus*, *Praxis*, and *Quaderns* and exhibited at the Kunst Werke Berlin. Current projects include Switch Building, a seven-story apartment building and art gallery under construction; Party Wall, an interactive installation at Artists Space, and a new town house, in New York.

Amy Lelyveld ('89), critic in architecture, received a 2005 AIA Honor Award from the Mid-Hudson Westchester Chapter of the organization for her design of an addition to an 1814 farmhouse in Gardiner, New York.

Ed Mitchell, assistant professor, completed renovations on a house in Bethany, Connecticut, and the design for a house in New Milford, Connecticut. He is currently working on houses in New York State and Connecticut. This past semester, Mitchell lectured at Columbia University, the Boston Society of Architects (BSA), Northeastern University, Baruch College, the Salzburg Seminars, and the Technical University of Helsinki. He is completing work on a research grant from the BSA for developing programming language for urban-planning logistics. His article "The Guerilla Farmer's Almanac" was published in *Log* 5 (May 2005).

Alan Organschi ('88), critic in architecture, and his partner, Elizabeth Gray ('87), with their firm Gray Organschi Architecture were the recipients of two 2005 Connecticut AIA awards. The Il Poggio House, in northwestern Connecticut, received a residential award, and a pair of prefabricated laminated-wood bridges was honored in the Encompassing Art Award category. Having completed the design and construction management of the Calvin Hill Daycare and Kindergarten Project Rooms last year, the firm is currently designing an infant and toddler child-care facility sponsored by the Friends Center for Children, on a site in Fairhaven, Connecticut. The Firehouse 12 Music Recording and Performance Center—Gray Organschi's design for the adaptive reuse of an abandoned city fire station on Crown Street in New Haven—celebrated its completion with a gala opening in September 2005.

Eeva-Liisa Pelkonen (MED '94), assistant professor, chaired the Second International Alvar Aalto Research Conference on Modern Architecture, titled "Art and Architecture. New Visions. New Strategies," in Jyvaskyla, Finland, in August 2005. Hosted by the Alvar Aalto Academy, the conference brought together art and architectural historians (Romy Golan, Branden Joseph, Joan Ockman, and Felicity Scott) and theoretically inclined practitioners (Caroline Bos, Juhani Pallasmaa) to discuss the post-World War II intersection of art and architecture. Pelkonen's essay "The Geopolitics of Fame" was published in *Perspecta 37: Famous*.

Ben Pell, critic in architecture, with his New York-based practice PellOverton, recently completed construction on a residential renovation in Manhattan. In addition, the firm is renovating a strip-mall site in Stamford, Connecticut. The recent project "Walldrobe/Wearpaper," which uses CNC fabrication technology to produce a wearable leather wallpaper system as thin leather panels that you hang on your wall and then fasten together to become clothes with a set of nickel-finished wire snaps, was published in the 2005 August/September issue of *Architectural Record* and in the Dutch magazine *BlendNL*, as well as posted on *Metropolis* magazine's online edition. The project, which was also featured in the traveling exhibition *Technology Performance Ornament,* at the Urban Center in New York during the summer of 2005, will appear in an upcoming special on the Japanese television station Nihon TV.

Nina Rappaport publications editor, had her essay, "Landscape Architecture as Cultural Criticism" published in *Ken Smith Landscape Architect*, (Knowlton School of Architecture, Princeton Architectural Press, 2005). She presented a paper, "Structural Identity in Footbridge Design," at the International Footbridge Conference at the Institute of Urbanism and Architecture Venice, in December. Her essay "Structure and Decoration" is forthcoming in the journal *30/60/90* (March 2006). She presented the project she has been working on with David Reinfurt and Colin Cathcart for the Design Trust for Public Space, *Long Island City, Connecting the Arts*, to a delegation from Enschede, Holland, and at the Noguchi Museum for New York Open House, in fall 2005.

Dean Sakamoto (MED '98), critic in architecture and director of exhibitions, with his office Dean Sakamoto Architects, is designing a Vision and Strategic Plan for the Chapel West Special Services District, which includes a new location for the Yale School of Art's Sculpture Building. Other current work includes a renovation of the King-Lui Wu–designed Benjamin Dupont Residence in Woodbridge, Connecticut and consulting for the East Main Street Façade Improvement Program in Bridgeport, Connecticut.

Joel Sanders associate professor, with his firm, Joel Sanders Architect (JSA), is designing a Lobby and Interface Media Lounge for the Yale University Art Gallery. Projects under construction include the Watson/Laudato House, in Hudson, New York, and the General Services Administration renovation of the Peck Federal Office Building and Plaza, in Cincinnati, Ohio. "Hearways"—a collaboration between JSA, Karen Van Lengen (KVLA), and Ben Rubin (Ear Studio)—will be included in *Open House*, an exhibition sponsored by the Vitra Design Museum and Art Center in Los Angeles, in summer 2006. Sanders lectured on "Architecture and Sound" at the Architecture League on November 3, 2005. His NYC 2012 proposal with Diana Balmori for an Olympic Equestrian Facility on Staten Island received an American Institute of Architects Honor Award. In the past year, JSA has been featured in the *New York Times*, *Dwell,* and *Glamour*.

Robert A. M. Stern ('65), dean, with his firm, Robert A.M. Stern Architects, last fall completed institutional projects including, renovation and addition at the Baker Library of the Harvard Business School, the Smeal College of Business at Penn State, Feil Residence Hall for the Brooklyn Law School, the McNeil Center for Early American Studies at the University of Pennsylvania, and the Jacksonville Public Library. New commissions include the Curry School of Education at the University of Virginia, the Mason School of Business at the College of William and Mary, an instructional building at Bronx Community College, and a residential life center at Florida Southern College. A new monograph on the firm's residential work, *Robert A. M. Stern: Houses and Gardens*, was published by the Monacelli Press, 2005. In November, Dean Stern participated in the Deans of New York symposium "21st Century Schools / 21st Century Cities," sponsored by the New York Institute of Technology, School of Architecture and Design.

Barry Svigals ('76) critic in architecture, completed work on a larger-than-life bronze statue of St. Albert the Great for the new Academic Center for Science, Art, and Technology at Albertus Magnus College, in New Haven, Connecticut. Dedicated on November 15, 2005, the 9-foot-by-4-inch-high caryatid supports the entrance canopy for the new building designed by Svigals & Partners. Svigals often integrates figurative sculpture into his architecture, including the Schwab Center for Information Technology at Norwalk Community College and on the façades of the Center for Undergraduate Education and Gentry Building at the University of Connecticut.

Claire Weisz ('89), critic in architecture, with her design partner Mark Yoes ('90), received three awards for the Bronx Charter School for the Arts, including a 2005 Honor Award from the AIA New York Chapter and a design excellence award for K–12 facilities from the Boston Society of Architects (BSA). Weisz + Yoes Studio was short-listed in the Mill Center for the Arts (NEA) and the Orange County Great Park Stage II competitions.

Returning Visiting Faculty

Stefan Behnisch, who as Saarinen Professor spring 2005 taught with Gerald Hines, inaugural Bass Fellow, is the Saarinen Professor this spring semester teaching an advanced studio. Behnisch participated in a three-day international workshop, in November 2005, organized by the Ventspils City Council to promote a dialogue about the future development of the city center and rejuvenation of an important park. The firm is working on a project for a 800-seat concert hall. The firm also received the commission for the Werner-von-Linde Halle, Sports Hall, in Munich, Germany, to be completed in 2006, and the Uffici Pubblici Comune di Ravenna e ARPA, in Ravenna, Italy, to be completed in 2007.

Mario Gooden, who was the spring 2005 Kahn Visiting Assistant Professor, will be teaching first year studio and a seminar. His recent projects include Beach House, to replace structure destroyed by Hurricane Hugo; The History and Science Museum, Charleston; and the Degaussing Office Building, a project that proposes the reprogramming of a former maritime facility in Charleston Harbor.

Greg Lynn, Davenport Visiting Professor, returns for his fifth year teaching an advanced studio. A preview of the Vitra "Ravioli" chair was on view at the 2005 Salone Internationale di Mobile in Milan. His project The Predator is installed at the Museum fur Moderne Kunst, in Frankfurt.

Tropical House Travels

The exhibition, *Tropical House,* curated by Robert Rubin, was disassembled and packed up in its container and re-erected at the Hammer Museum at UCLA last fall, where it was exhibited in its new tropical habitat.

Deans Discuss Education Today

At a roundtable discussion in October 25, 2005, organized by Judy DiMaio dean of the School of Architecture and Design of the New York Institute of Technology and led by Ray Gastil, director of the Manhattan Office of City Planning, the deans of seven New York metropolitan-area architecture schools discussed the direction of teaching architecture and design studios in the last five years, focusing on the increased need for professionalism, collaboration, skills, and identity.

Robert A. M. Stern emphasized that a problem with "infantilizing" projects exists in the schools because not all disciplines are represented—for example, structural and environmental. "Being in architecture school without working on buildings is akin to medical students working without a body," Stern said. Mark Wigley (Columbia University) added that an "infantilizing" of the schools has occurred as well because significant areas that have emerged in the last five years in both the university and the profession—political, monetary, and economic conditions—must be acknowledged in teaching architecture students.

Whether or not architecture schools should be research-focused was a major topic. Stern noted that it is the faculty that performs independent research and disseminates ideas, but he would not separate the research arm of practice and education, since architecture schools are not "think tanks" but rather places where students are taught how to build structures. And perhaps more postmortem analysis of buildings' successes and failures could also take place.

Wigley emphasized that architects should be taught beyond a five-year horizon, while Stern pondered how one could predict what would happen in five years and that perhaps it would be better for architecture students to be trained simply to have solid skills. George Ranalli (City College) noted that there are hidden myths in the profession: "You're taught that things are 'talent-based' rather than 'reality-based,' and in time you realize that talent is just a small part of the success of an architect." Both Ranalli and Stern agreed that basic skills and a nimble attitude would best prepare an architect for the future.

Another hot topic—often revisited in schools but never dismissed altogether—was the relevance of the jury system as a pedagogical tool. Whereas DiMaio suggested that the jury format is antiquated, Urs Gauchat (New Jersey Institute of Technology) stated that juries require students to learn to present an idea and address an audience, which are important skills. Ranalli observed that a jury obliges students to ferret out what is important, and that the faculty has an obligation not to "stack" the jury with friends but rather to foster the varied exchanges that constitute a healthy academic environment. Gauchat said that with the emergence of the "global jury," the format is increasingly invigorated.

While Stern continued to express the belief that architecture is indeed a profession that has to be taught, Wigley suggested that the naïveté of a young graduate can actually enhance an office environment. Peter Wheelright (Parsons School of Design) added that students must also be taught to love the built environment. Gauchat suggested that design adds value to projects and that architects must shake their tendency to apologize for the profession.

In conclusion, most everyone commented that firms often choose architects because of the schools from which they've graduated, and as Wigley emphasized, schools are obliged to nurture their respective identities. Wheelright suggested that architects need to get a better grip on the discourse of architecture. But Thomas Hanrahan (Pratt Institute) concluded that there is "an interest in building again, a positive interest in the behavior of buildings, which has surfaced in the last five years."

—Sophia Gruzdys
Gruzdys is director of the undergraduate architecture program at Yale.

Arts Area Renovation Update

Louis Kahn's Yale Art Gallery, now undergoing a major restoration by Polshek Partnership (James Stewart Polshek '55), is slated for completion in 2007. With the opening up of the gallery spaces, the re-engineering of a new "pogo" wall unit, and the replacement of the five-story glass-window wall facing York Street, the 1953 museum will take its place as part of the University's master plan for the Yale Arts Area now undergoing its most significant expansion in a generation. The new sculpture department's building on Howe Street by Kieran Timberlake is expected to be completed in 2006. A new drama school building is being programmed, and the forthcoming renovated A & A Building, with the addition of a new art library and the History of Art Building by Gwathmey Siegel & Associates, is slated to open in 2008.

YSoA Book Series

The School of Architecture book series, coordinated by publications editor Nina Rappaport, continued with the publication *Eisenman/Krier: Two Ideologies by* The Monacelli Press. A book event in November 2005 at the Institute of Classical Architecture in Manhattan was attended by Peter Eisenman, Leon Krier, and more than 100 others.

Upcoming books for the spring include: *Poetry, Property, and Place* which highlights the first studio of the Edward Bass Fellowship in Architecture, with architect Stefan Behnisch and developer Gerald Hines focusing on the Garibaldi-Repubblica site in Milan. The book will be distributed by Norton Press.

The Yale Building Project, presents the history of the program and projects with essays by Richard Hayes ('84). The book will be distributed by Yale University Press.

1. Peter de Bretteville, de Bretteville-Simon Houses, Los Angeles, 1976.
2. Martin Finio, Christoff: Finio Architects, rendering of oceanfront house, East Hampton, New York, 2005.
3. Mark Gage, Gage/Clemenceau rendering of International Tsunami Memorial Project, Khao Lak, Thailand, 2005.
4. Mimi Hoang, nArchitects, Party Wall, Artists Space Installation, New York, 2005.
5. Alan Organschi, Il Poggio House, Northwest Connecticut, 2005.
6. Ben Pell, PellOverton, Walldrobe/ Wearpaper, "Technology Performance Ornament", Urban Center Gallery, New York, 2005.
7. Claire Weisz, Bronx School for the Arts, Bronx, New York, 2004.
8. Yale Art Gallery, under restoration by Polshek Partnership.


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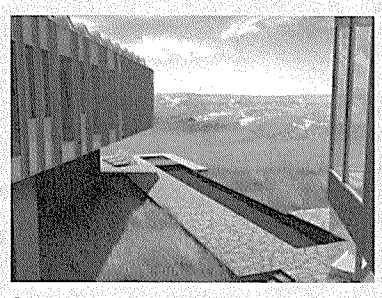
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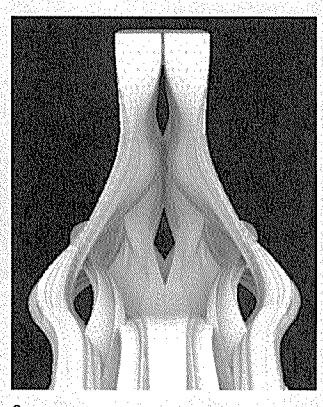
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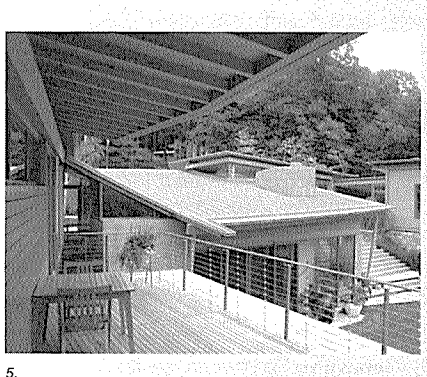
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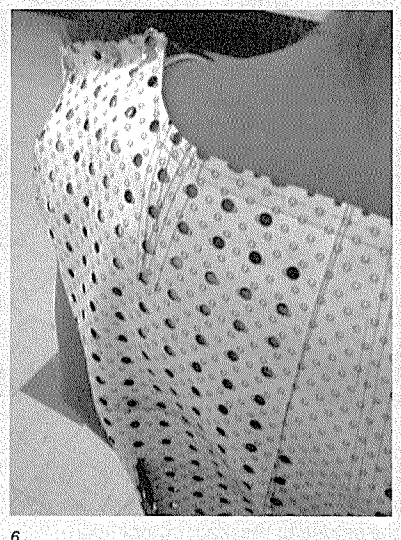
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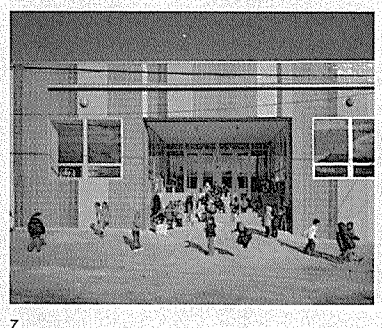
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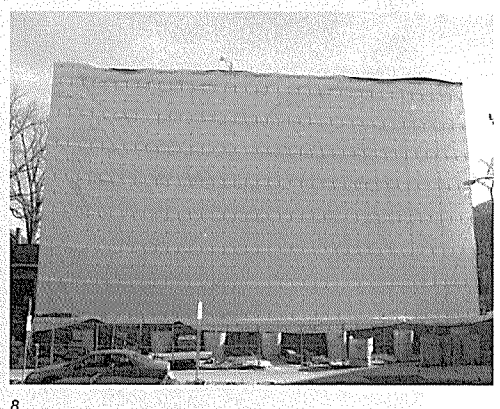
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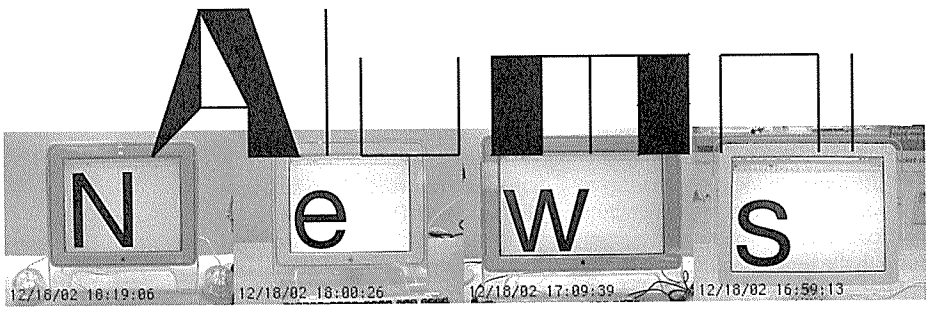


Alumni News reports on recent commissions, research, projects, and publications by graduates of the Yale School of Architecture. If you are an alumnus, please send your current news to *Constructs*, Yale School of Architecture, 180 York Street, New Haven, CT 06520-8242.

1950s

Hugh Newell Jacobson ('55) received the first-ever 25-Year Building Award from the American Institute of Architects (AIA) Potomac Valley Chapter for his Lee Residence, completed in 1961. In addition, Jacobson's Boxwood Winery in Middleburg, Virginia, was completed in September 2005.

Robert Kliment ('59), of R. M. Kliment & Frances Halsband Architects, completed the renovation of the 1882 University of Kentucky Main Building, which had been gutted by a fire in 2001. The building design makes a clear distinction between restored historic walls and new elements.

1960s

Charles Gwathmey ('62), partner of Gwathmey Siegel and Associates Architects, recently completed a preliminary design package for the 82,000-square-foot History of Art Building that will be connected to the Paul Rudolph-designed Yale Art & Architecture Building, which will be renovated under Gwathmey's leadership. The new addition will replace departmental offices now residing in Street Hall (which will be taken over by the Art Gallery) and will house additional space for the Art & Architecture Library.

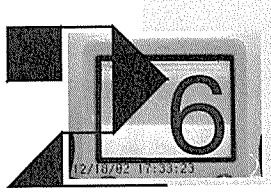
Jonathan Barnett ('63) was the keynote speaker at the AIA New York Chapter's 2006 inaugural board event at the Center for Architecture on December 6, 2005. Barnett is a professor of practice in city and regional planning and director of the Urban Design Program at the University of Pennsylvania.

Craig Hodgetts ('66), of Hodgetts + Fung Design Associates, completed construction on the Hyde Park Miriam Matthews Branch Library, in South Los Angeles, in November 2004. The library has become a big attraction, tripling both book circulation and patronage. The building received a U.S. Green Building Council LEED rating and includes a garden designed by landscape architecture firm Katherine Spitz Associates and an interior space defined by a panoramic pool of deconstructive structural elements. The firm is currently designing the $17 million state-of-the-art performance center for Menlo-Atherton High School, in Atherton, California.

1970s

Calvert Bowie ('77), with his firm Bowie Gridley Architects, has been selected to design a new building as part of the University of Virginia's School of Nursing's master plan for Milton Hershey School, in Hershey, Pennsylvania, and a concept design for the School of Communication at American University, in Washington, D.C.

Leslie Lu ('77) was elected head of the Department of Architecture at Hong Kong University in mid-December 2005.



Wendell E. Wickerham ('78) established his own consulting practice, W/E/ Wickerham Associates, in 2003, after twenty-one years at Shepley Bulfinch Richardson and Abbott, of Boston, where he was a principal in the education practice group. The new firm consults in library and learning-center programming, conceptualization, and planning. At his office in Winchester, Massachusetts, he is currently working both with institutions and other architects in project advocacy, development, and planning. Recent clients/projects include Ohio State University, Tulane University, Suffolk University, and Duke University School of Medicine.

Melanie Taylor ('79) and Robert A. M. Stern ('65) were featured in "Are McMansions Going Out of Style?" in the *New York Times* (October 2, 2005). Taylor, a New Haven architect, was mentioned for her work on a 3,000-square-foot home to be built in Cheshire, Connecticut, for a client more interested in architectural amenities than size. This growing trend, Taylor suggested, is a possible response to "an aging population [that] increasingly includes empty-nesters who are looking to downsize."

1980s

Turan Duda ('80), with Duda/Paine Architects of Durham, North Carolina, completed work on the Ruth and Herman Albert Eye Research Institute at the Duke University Medical Center. The 74,000-square-foot building—dedicated on April 8, 2005—is the first in a three-phase development for the Duke Eye Clinic.

Daniela Voith ('81), of Philadelphia-based Voith & McTavish, is designing renovations to Dwight Hall on Yale's Old Campus. Construction is slated to begin in May 2007.

Frank Lupo ('83), senior associate at FXFOWLE Architects of New York, is currently working as part of the team developing a renovation and expansion of the Jacob K. Javits Convention Center designed by the Richard Rogers Partnership. He is also involved in two residential towers, one on 31st Street and the other on 29th Street, in Manhattan, for the Clarett Group.

Michael Winstanley ('83), with his firm Michael Winstanley Architects Planners, based in Washington, D.C., and New York, presented a master plan for the historic downtown of Los Alamos, New Mexico, in September 2005. The project incorporates the property owner's concepts for redevelopment scenarios to define a plan for growth without jeopardizing existing occupied buildings.

Robert Bostwick ('85), of Collins Gordon Bostwick, in Cleveland, recently completed work as design principal of the Bowling Green State University Cedar Point Center at Firelands College. The building houses state-of-the-art classrooms, a flexible 450-seat auditorium, and conference areas equipped with the latest in distance-learning technology.

Price Harrison ('87) received an AIA Honor Award from the American Institute of Architects Middle Tennessee Chapter for the Harrison and Rowland "Double House" in December 2004 and was featured in the "Beyond Functionalism" chapter of James Gauer's *The New American Dream: Living Well in Small Homes* (Monacelli Press, 2004). *Elle Decor* magazine also featured the house in their July 2005 issue.

Siamak Hariri ('85) with his Toronto firm, Hariri Pontarini Architects, is designing the University of Waterloo School of Pharmacy and a two-tower high-rise development in Halifax. Other recent projects include Camera, a small cinema/bar for filmmaker Atom Egoyan and Hussain Amarshi of Mongrel Media; renovations and additions to the University of Toronto's Faculty of Law and its Department of Economics facilities; collaboration with HtO on a master plan for a chain of parks in Harbourfront West, which seeks to reconnect Toronto with its waterfront; a study to develop the Don Valley Brickworks as the Toronto Cultural Centre for the Evergreen Foundation; and a competition-winning design for the Baha'i Temple for South America, in Santiago, Chile. Hariri has been an adjunct professor at the University of Toronto's School of Architecture, Landscape, and Design since 1991, and he lectures locally and internationally, with recent engagements at the ACADIA Conference in Toronto, as well as conferences in Chile, Germany, and Brazil. He is also a member of the Toronto Waterfront Design Review Panel.

Richard Hayes ('86) received a scholarship to the MacDowell Colony and a grant from the Graham Foundation for Advanced Studies in the Fine Arts for his work on essays for the upcoming book on the Yale Building Project. Hayes presented a talk on "Design-Build in the Sixties" at the Rhode Island School of Design in November 2005; in addition, he presented a paper at Yale University on architect E. W. Godwin's designs for Oscar Wilde's house in London and will speak on the same topic at Princeton University in spring 2006.

David Hotson's ('87) work on the Gerard L. Cafesjian Museum of Art in Yerevan, Armenia, began construction in May 2005. The project, slated for completion in 2008, will be the most significant building constructed in Armenia since the republic achieved independence from the Soviet Union in 1991. As a major international cultural institution on a prominent site within the capital city, the development of the Cafesjian Center will symbolize a new period in the history of the Armenian Republic. Patrick Bellew, Yale faculty member and director of the environmental consultancy Atelier Ten, is currently working with Hotson on the museum project. The building will exploit the local climate and site conditions to make the museum a model of environmentally responsible design.

1990s

Celia Imrey ('93), of New York-based Imrey Culbert, in a joint venture with SANAA of Tokyo, have been selected winners of the competition for a new 64 million euro satellite museum of the Louvre to be located on a 62-hectare former mining site in Lens, France. The team was chosen from a field of over 300 international competitors. This will be the second collaboration between SANAA and Imrey Culbert. They are currently working together on the new Glass Pavilion of the Toledo Museum of Art, in Ohio.

Johannes M. P. Knoops ('95) was recently honored with a 2005 Unbuilt Architecture Award for a conceptual proposition titled "Unmasking Foundations in Pools of Pleasure." The competition was an integral part of the Boston Society of Architects' Annual Design Awards Program. In addition, his project for an Upper East Side rooftop, "Urban Oasis," was distinguished with a People's Choice Award. The project was produced for the AIA New York Chapter summer exhibition *New York NOW*, which celebrated the institution's diversity (April 1–July 9, 2005).

Mason Kirby ('98) started his own residential and commercial design firm in San Francisco at the beginning of 2005.

Gretchen Wagner ('98) started her firm, Scape Design Studio, in Sun Valley, Idaho, in October 2005. Her first project is the Idaho Rocky Mountain Ranch, a historic dude ranch fifty miles north of Sun Valley, where she is directing major maintenance and restoration of the lodge and guest cabins, as well as designing new support buildings.

Maureen Zell ('98) and Marc Roehrle ('98), along with Steve Fellmeth, won Northeastern University's Alumni Veterans Memorial Competition in November 2005. Their winning design acknowledges Northeastern students and graduates who sacrificed their lives in service to the country and was chosen from among sixty-six official entries to the open competition.

2000s

Aristotelis Dimitrakopoulos ('00), an architecture professor at Savannah College of Art and Design, had four essays—"Horror Vacui: Jostle, Huddle, and Tales of Narrowness in Hellenic Urbanism," "Attican Ectopia," "Hyperboles and Paraboles in the Attican Landscape," and "Roadside Showcases and Hyper-Urban Growth: A Retrospective Manifesto"—published in the book *Transitional Athens* (September 2005).

Tim Hickman ('00), with partners Jason Alread ('91) and Paul Mankins ('91), formed Substance Architecture Interiors Design in Des Moines, Iowa, in 2004. In the first year of partnership, the office has grown from five to thirteen full-time employees. They recently completed their first project, a 5,000-square-foot studio for their own firm. The office is working on a multimodal transportation facility for the University of Northern Iowa in Cedar Falls, Iowa, that will be a transportation hub and visitor's orientation center; East Village Square, a 114-unit apartment building in Des Moines, Iowa, with a combination of market-rate and subsidized units where the twenty first-floor loft units are designed for live-work-retail; a vacation home in Copper Mountain, Colorado; and a 5,000-square-foot office building for Wes Higgins, a curtain-wall consultant in Wausau, Wisconsin.

Dana Gulling ('03) completed her fifth quarter at Savannah College of Art and Design, where she teaches a fourth-year studio sequence that has a mixture of graduate and undergraduate students. Gulling presented a lecture, "Aspirations for the New Generation," and participated in a panel discussion at the annual Institute of Classical Architecture and Classical America conference, "Three Generations of Classical Architects: The Renewal of Modern Architecture," at the University of Notre Dame (September 29–October 1, 2005).

2005

Many members of the Class of 2005 have sent us news of their recent employment and further education.

In the U.S.:
Boston— **Lewis Wadsworth** is working with Goody Clancy & Associates.
Chicago—**Marissa Brown** works with Brininstool & Lynch; **Christopher Fein** and **Sangyup Lee** are working with Hammond Beeby Rupert Ainge; **Charles Gosrisirikul** is with Skidmore Owings & Merrill.
Los Angeles—**Kevin Conway** is working with DMJM Harris; **Guvenc Ozel** is with Frank O. Gehry & Associates.
New Haven— **Jeffrey Stone** is working with Pirie Turlington Architects; **Ashley Forde** and **Nicholas Stoutt** are with Pelli Clarke Pelli; **James Fullton** and **Brett Spearman** are working with Pickard Chilton.
New York—**Doreen Adengo** is working with Robert A. M. Stern Architects; **Emily Atwood** is with Gluckman Mayner ; **Ralph Bagley** works with Kohn Pedersen Fox Associates; **Daniel Barber** (MED) is a PhD candidate at Columbia University; **Ceren Bingol** is working with Grimshaw; **Brent Buck** and **Jean Kim** are with Tod Williams & Billie Tsien & Associates; **Thomas Carruthers** and **Vanessa Ruff** are with Gwathmey Siegel & Associates; **William Dudley**, **Christopher Hall**, **Jesse Lafreniere**, and **Jennifer Newsom** are with Cooper Robertson; **Mathew Ford** is working with Eisenman Architects; **Ruth Gyuse** is at Cook + Fox; **David Hecht** is with Peter Gluck; **Matt Hutchinson** and **Noah Riley** are at SHoP; **Mang Lee** and **Yory Teperman** are with Skidmore Owings & Merrill; **Craig Morton** is at FXFOWLE Architects; **Julia Stanat** works with Santiago Calatrava; **Jiwon Yoo** is with the W Hotel Group; and **Christopher Yost** works with Deborah Berke & Partners.
Philadelphia—**George Ristow** is working with Kieran Timberlake Associates.
Providence—**Rosamond Fletcher** (MED) is a critic in architecture at the Rhode Island School of Design.
San Francisco— **Tracy Yu** is working with Skidmore Owings & Merrill.

Abroad:
Dublin—**Genevieve Fu** is working with Heneghan Peng Architects.
London—**Jonah Gamblin** works with Hines.

Alumni Book Notes

Victor A. Cusack ('43), of William L. Pereira Associates in Los Angeles, recently co-authored a book on a Los Angeles icon, *A Symbol of Los Angeles: The History of the Design and Construction of the Los Angeles International Airport Theme Building* (Donning Co., 2005).

Christopher Glass ('68), practicing in Camden, Maine, recently published a book on house design, *At Home in Maine: Houses Designed to Fit The Land* (Down East Books, Maine, 2005).

Sara Caples ('74) and Everardo Jefferson ('73) edited "The New Mix: Culturally Dynamic Architecture" (*Architectural Design, 5*, 2005). In the issue, they pose the question, "Is there is a direct correlation between the widening of the ethnic origins of practitioners and diversity in design?" A panel discussion with the editors and authors Ruth Palmon and Kazi Ashraf was held at the Urban Center in New York on December 2, 2005. The event was cosponsored with Urban Center Books and was moderated by John Morris Dixon, former chief editor of *Progressive Architecture*.

Alexander Gorlin ('80) recently published *Creating the New American Town House* (Rizzoli International, 2005). In his book, Gorlin reveals the breadth of this classic housing type, examining cutting-edge designs realized across the U.S., including New York, San Francisco, Los Angeles, and Seattle, by renowned architects including Steven Ehrlich, Hugh Newell Jacobson ('55), Stanley Saitowitz, and 1100: Architect. The book continues the discourse Gorlin began in an earlier book, *The New American Town House* (Rizzoli International, 2000), which surveyed the adaptation of this urban dwelling type to the demands of the twentieth century.

AIA Connecticut Awards

Yale graduates and faculty were honored with various AIA Connecticut Design Awards in fall 2005. The jury included Doug Ashe, **Jonathan Levi** ('81), and Li Chung (Sandi) Pei. **Gray Organschi Architects** ('87 and '88) received a Built Award for their Two Bridges project in Washington and Madison, Connecticut, and a Residential Award for the Il Poggio House in Northwest Connecticut. **Cesar Pelli & Associates** received a Built Award for the National Museum of Art in Osaka, Japan. The firm of **Tai Soo Kim** ('62) garnered a Citation for Interior Architecture for their Ross Commons/La Force Hall at Middlebury College. **Peter L. Gluck** ('65) and Partners received a Residential Award for the Double House in New Canaan, Connecticut. The New Haven firm of **Craig Newick** ('87) won a citation for the Colman-Macri House façade detail in Clinton, Connecticut.

Rome Continuity and Change

For centuries, Rome has beckoned artists, historians, aesthetes, and architects with its romantic ruins, perfect architectural proportions, and superb gelato. In May last year, more than thirty second-year architecture students and three Yale faculty members—Alec Purves, Stephen Harby, and Sophia Gruzdys—flew to Rome to participate in a four-week drawing seminar. Titled "Rome, Continuity, and Change," the course explored the city's many architectural layers—from Nero's buried palaces to Renzo Piano's recently completed Auditorium Parco della Musica—and offered a comprehensive journey through Rome's built heritage.

Like numerous architects in history—Michelangelo, Schinkel, Le Corbusier, and Louis Kahn—we spent our days walking, observing, and drawing the city. To give the course theoretical structure and to facilitate our drawing skills, site visits were organized thematically. Our earliest excursions traversed Rome's axial thoroughfares, such as the route between Piazza del Popolo and San Giovanni in Laterano. We drew the various domed spaces, such as the Domus Aurea, the Pantheon, and Sant'Ivo alla Sapienza; measured and documented complex courtyards, including the Palazzo della Cancelleria, the Palazzo Massimo, and Santa Maria della Pace; imagined reconstructions at sites of antiquity, such as the Roman Forum and Hadrian's Villa near Tivoli; and sketched Bernini's sculptures at the Galleria Borghese. These visits were enriched by the expertise of guides Jan Gadeyne, Jeffrey Blanchard, and Yale faculty member Bryan Fuermann. While packed with historical and theoretical content, class exercises centered on recording observations with pencil, paper, pen, or brush. As stressed by Alec Purves, "The most effective way to engage architecture is by direct observation, and that observation is best served by on-site drawing. Nothing gives more pleasure, nor directs students more strongly to notice things that they would have otherwise overlooked."

In our sketchbooks, we recorded daily observations and completed a more sustained study during the trip's final days. During that period, it was not rare to see a classmate carefully documenting every tile on the floor of Santa Maria in Aracoeli—lying on the ground drawing the negative space formed by cornices at the Piazza di Sant'Ignazio—or diagramming the space needed to park Smart Cars and Vespas on Rome's cobblestone streets.

At the seminars's end, at a gathering at the American Academy in Rome, faculty and guest critics reviewed the final projects, inspiring Alec Purves to say, "My greatest satisfaction during the four astonishing weeks in Rome was to watch others develop this same enthusiasm and curiosity and to see them find delight and inspiration in observing everything from an underlying geometric structure to the momentary fall of light." And delight in this we did.

—Abigail Ransmeier and Melanie Domino ('06)

2005 Building Project

When New Haven Mayor John DeStefano Jr. visited the 2005 Building Project at 590 Orchard Street in mid-August, it was no surprise—given his own recent contributions to the city—that much of his interest pertained to its sustainable aspects. DeStefano's initiatives with New Haven public schools—specifically, the Barnard Environmental Magnet School's massive solar power project, slated to be the fifth-largest solar photovoltaic system operating in New England—parallels the Class of 2005's attention to improving the environment as well as the city.

As it has since 1996, the students worked in collaboration with Neighborhood Housing Services of New Haven, but for the first time in the project's 38-year history, the state supplied additional funds. The Connecticut Clean Energy Fund provided an educational grant to pay for the inclusion of photovoltaic panels in the 1,500-square-foot, single-family residence located in a low-income neighborhood. It works to everyone's advantage—while 590 Orchard's PV panels will generate energy for the entire city, the city will pay the owners for producing that energy. These new dimensions and responsibilities assumed by the students will have far-reaching effects for both the program and the community.

The 2005 Building Project departed from precedent in other ways. Initial design teams were formed based on special interest, such as fabrication, low-cost housing, the environment, contemporary lifestyle, and context. Although the context group's proposal won out, general interest in sustainable building techniques and economic efficiency arose from the process, leading to a new set of conditions for building.

"Good neighbor," whether related to architecture directly or not, implies respect—for others, for one's surroundings. But what assumptions come with that designation, and how has it changed over time? Given the context of a traditional residential street, the Class of 2005 understood the idea of "good neighbor" to be not only an ethical necessity but a design challenge. Instead of quiet integration, they opted for architectural impact and sustainable features for the whole community.

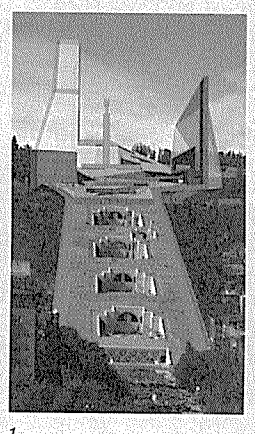
Since the building would be smaller than the neighboring houses, the students placed its greatest mass in front, facing south. This provided the major plane for the house's photovoltaic panel system. At the other end of the house, a north-facing window floods the primary living space with light. The house's ridge, or "roof" line, describes its energy-gathering function: a high front gable sloping down low to a rear shed roof. This dramatic transformation is accented by a standing-seam metal roof on the exterior, while interior luminosity is enhanced by whitewashed birch walls with quarter-inch offsets. These variously ruled surfaces reiterate the shifting conditions and changing geometry of the structure throughout. Its most dramatic moment occurs, however, with the insertion of a north, warped-glass window, which symbolically holds the light.

The students made two unusual design decisions, placing the master bedroom at the front on the ground floor and creating a side entrance. The latter decision is another "first" in the program and was determined not only from the private function of the bedroom but the restricted width of the site's frontage. The main, side entrance, leads directly into the heart of the house, which contains the service core of kitchen and full bathroom.

Other features contribute to overall energy efficiency, including south-facing windows with solar shades (made of re-usable materials) and a window placed high on a second-floor bathroom wall. An upstairs play area features built-in cabinetry. The 2005 Building Project held valuable lessons regarding social responsibility and physical context. The class of 2005 found that challenging traditional assumptions, such as the need for a front door that faces the street and incorporating sustainable concerns is necessary for meeting the new requirements of our growing cities that respond to our environment.

—Marc Guberman ('07)

1. David Hotson, rendering of Cafesjian Museum of Art, Yerevan, Armenia, 2005.
2. Johannes Knoops, Unmasking Foundations in Pools of Pleasure, conceptual proposition, 2005.
3. Substance Architecture, Open Office Studio, Des Moines, Iowa, 2005.
4. Architectural Design, 5, 2005 and *The New American Town House, 2005.*
5. Yale Building Project, 2005.



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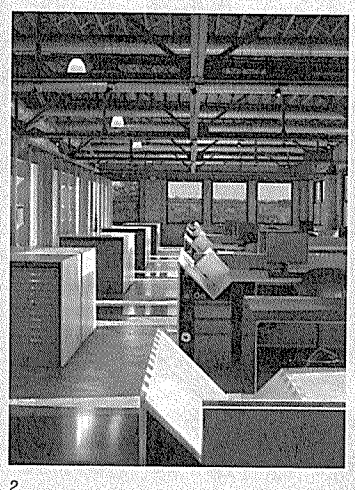

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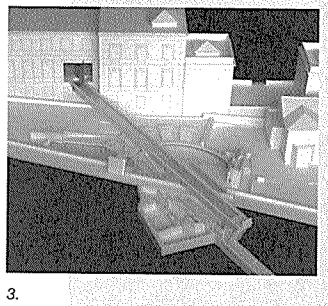

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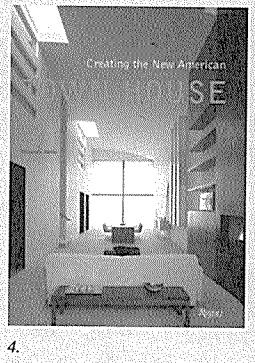

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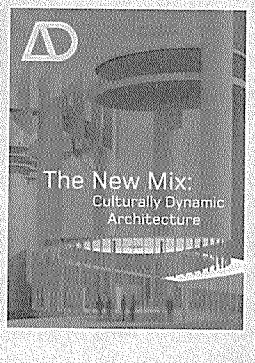

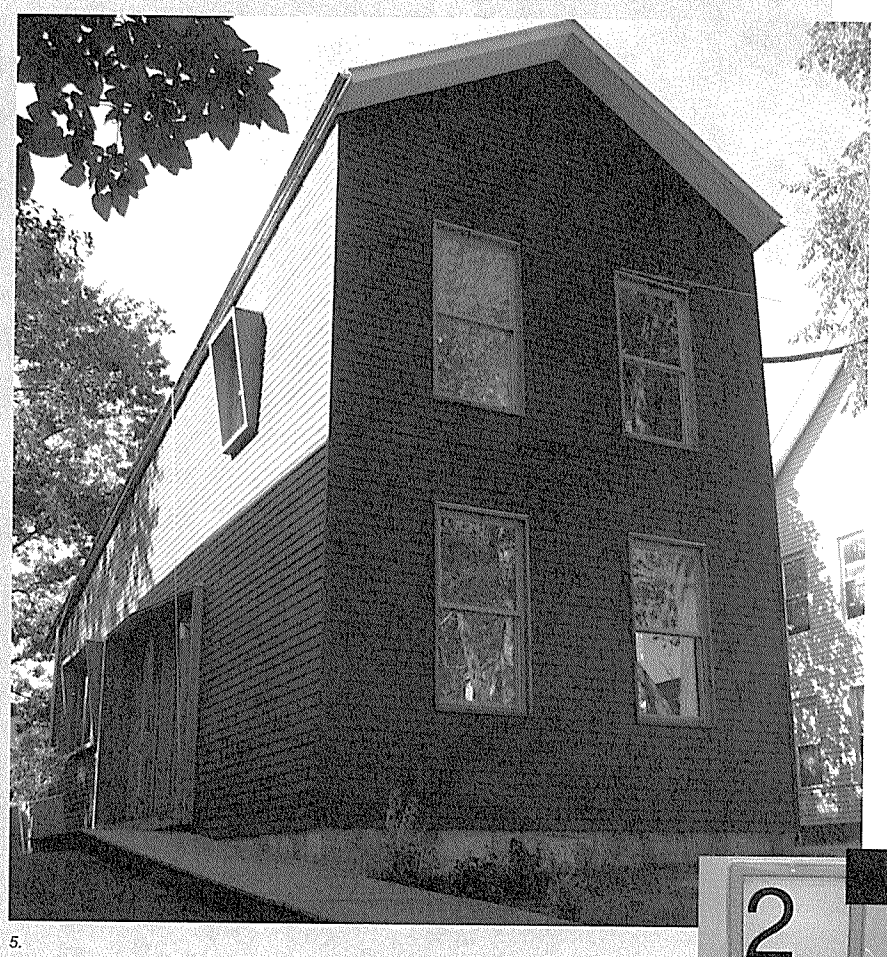

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Yale University
School of Architecture
180 York Street
New Haven CT 06520–8242

Yale School of Architecture Calendar
Spring 2006

A&A Building, 180 York Street
New Haven, Connecticut

Lectures

Lectures begin at 6:30 p.m. in Hastings Hall (basement floor) unless otherwise noted. Doors open to the general public at 6:15 p.m.
The Spring Lecture Series is supported in part by Elise Jaffe and Jeffrey Brown.

Stuart Lipton
Edward P. Bass Distinguished Visiting Architecture Fellow
Monday, January 9
"Does Real Estate Have a Social Function?"

John Frane, Jeanne Gang, Sulan Kolatan, Paul Lewis, Hadrian Predock, Jesse Reiser, Marc Tsurumaki, George Yu
Thursday, January 12
"Against Type"
A panel discussion held in conjunction with the exhibition *Transcending Type*

Suzanne Stephens, Moderator

Sunil Bald
Louis I. Kahn Visiting Assistant Professor
Thursday, January 19
"Fold, Crease, and Tear Along Perforation"

Mirka Beneš
Timothy Egan Lenahan Memorial Lecture
Monday, January 23
"Weaning Through Transposition in Landscape/Architecture:
The Case of Baroque Rome"
This lecture is supported by the Timothy Egan Lenahan Memorial Lecture Fund.

Richard Rogers
Davenport Visiting Professor
Thursday, April 6
"Current Work"

Frank Gehry
Louis I. Kahn Visiting Professor
Paul Goldberger
Friday, April 7
"A Conversation"

Year-End Exhibition of Student Work
May 20–July 29

Tony Fretton
Paul Rudolph Lecture
Monday, February 6
"Buildings and Their Interiors"
This lecture is supported by the Paul Rudolph Lectureship Fund.

Wendy Steiner
Brendan Gill Lecture
Thursday, February 9
"What is Aesthetic Conservatism?"
This lecture is supported by the Brendan Gill Lectureship Fund.

Amanda Burden
Eero Saarinen Lecture
Monday, February 13
"Shaping the City: A Strategic Blueprint for New York's Future"
This lecture is supported by the Eero Saarinen Visiting Professorship Fund.

Craig Dykers
Monday, February 20
"A Way of Thinking, A Way of Working, and the Works of Snøhetta"

Steven Johnson
Roth-Symonds Lecture
"The Urban Web"
This lecture is supported by the David W. Roth and Robert H. Symonds Memorial Lecture Fund.

Werner Sobek
Gordon H. Smith Lecture
Monday, April 3
"Archi-Neering the Future"
This lecture is supported by the Gordon H. Smith Lectureship and Architecture Fund.

Richard Rogers
Davenport Visiting Professor
Thursday, April 6
"Current Work"

Frank Gehry
Louis I. Kahn Visiting Professor
Paul Goldberger
Friday, April 7
"A Conversation"

Year-End Exhibition of Student Work
May 20–July 29

Exhibitions

Exhibition hours are Monday through Friday, 9:00 a.m. to 5:00 p.m.; Saturday, 10:00 a.m. to 5:00 p.m.
The Architecture Gallery is located on the second floor.

Transcending Type
Until February 3, 2006

Transcending Type is the exhibition organized by *Architectural Record* for the Venice Biennale 2004. It includes large-scale installations by Lewis.Tsurumaki.Lewis, Studio/Gang, kOLMAC, Reiser + Umemoto, Predock_Frane, and George Yu Architects.

The *Transcending Type* exhibition is supported in part by Autodesk Inc. Related publications produced by the school are supported in part by the Kibel Foundation Fund, the Nitkin Family Dean's Discretionary Fund in Architecture, the Paul Rudolph Publication Fund, the Robert A. M. Stern Fund, and the Rutherford Trowbridge Memorial Publication Fund.

Prairie Skyscraper: Frank Lloyd Wright's Price Tower
February 13 to May 5, 2006

This exhibition is a history of the development of Frank Lloyd Wright's Price Tower, with an installation designed by Zaha Hadid along with original furnishings.

Prairie Skyscraper: Frank Lloyd Wright's Price Tower is organized by Price Tower Arts Center, Bartlesville, Oklahoma, in cooperation with the Frank Lloyd Wright Foundation Archives, Scottsdale, Arizona. The exhibition, its tour, and the catalog are made possible in part by the Henry Luce Foundation, the Buell Family of Bartlesville, the Oklahoma Tourism and Recreation Department, and the Oklahoma Arts Council. The exhibition installation was designed by Zaha Hadid and Office of Zaha Hadid, London, and is coproduced by Price Tower Arts Center and the Yale School of Architecture.

Symposia

"Philip Johnson and the Constancy of Change"
Thursday–Saturday, February 16–18

Organized by the Museum of Modern Art, New York, and the Yale School of Architecture, this symposium will critically analyze Philip Johnson's career as an architect, a teacher, and a curator.

Thursday, February 16, 6:00 p.m.
MoMA, New York, Titus Theater 1
Jeffrey Kipnis and Terence Riley

Friday, February 17, 3:30 p.m.
Yale School of Architecture, Hastings Hall
Kurt Forster, Mark Jarzombek, Charles Jencks, Alan Plattus

Friday, February 17, 6:30 p.m.
Yale School of Architecture, Hastings Hall
Keynote Address
Vincent Scully

Saturday, February 18, 9:00 a.m.–6:00 p.m.
Yale School of Architecture, Hastings Hall
Beatriz Colomina, Peggy Deamer, Peter Eisenman, Sandy Isenstadt, Rem Koolhaas, Phyllis Lambert, Reinhold Martin, Detlef Mertins, Joan Ockman, Emmanuel Petit, Michael Sorkin, Stanislaus von Moos, Kazys Varnelis, Ulf Wyas, Mark Wigley
"Philip Johnson and the Constancy of Change" is supported in part by the Yale University Provost's Office.

"On the Waterfront"
Friday–Saturday, March 31–April 1
Hastings Hall (basement floor)

This symposium will focus on significant waterfront projects in London, New York, and Toronto viewed from the perspective of planners, developers, and architects actively involved in reshaping those cities' waterfronts and harbors.

Friday, March 31, 6:30 p.m.
Keynote Address
Robert Beauregard

Saturday, April 1, 9:30 a.m.–6:00 p.m.
Richard Burdett, Tom Elghanayan, Alexander Garvin, Christopher Gliserk, Bruce Kuwabara, Stuart Lipton, Thomas Mayne, Joseph Rose, Matthew Urbanski