Constructs Yale Architecture

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Contents

Alejandro Zaera-Polo

Alejandro Zaera-Polo is the School's inaugural Lord Norman R. Foster Visiting Professor. He will give a lecture, "Envelopes," on November 4, 2010.

Foreign Office Architects, Yokohama International Port Terminal, Yokohama, Japan, 2002.

Foreign Office Architects, Carabanchal Social Housing, Madrid, Spain, 2010.

Foreign Office Architects, John Lewis Department Store and Cineplex, Leicester, England, 2008.

Nina Rappaport How has your practice, Foreign Office Architects (FOA), changed since you are no longer in partnership with Farshid Moussavi?

Alejandro Zaera-Polo As you can imagine, it is a complex situation in which projects we began together have yet to be developed. The idea at the moment is to stay in London, which is still an interesting place to be. The practice is specialized in large-scale work, for which we have to be in London or New York. But I have a small office in Barcelona. I'm still interested in doing work that addresses multiple scales and multiple typologies. I don't think there will be many changes ideologically, vocationally, or typologically.

NR Do you see opportunities that you could pursue on your own rather than in a partnership?

AZP In a way we were doing fairly independent work for a number of years. I may pursue more work, for example, in Spain, and with Yale it looks as if I am going to have more intense involvement in the United States.

NR There are many themes I see evolving and changing in your work—in particular, Yokohama was groundbreaking in its form, performance, infrastructure, and constructability. Now that it is understood as part of architectural culture, how has that project enabled you to further explore similar ideas or expand your repertoire of work?

AZP Yokohama is not something we invented in terms of form and content; it was something that was in the air. There were a lot of people working on hybridizing infrastructure and landscape or on infrastructure and the city, and obviously Yokohama was just a great opportunity to explore that at a very large scale. We were lucky, and we hit the jackpot. It enabled us to construct a practice that was successful for many years. But I think the most interesting thing about doing Yokohama was the opportunity to be exposed to and engaged in a project that mobilized such a large amount of resources and technology. It was a very sharp learning curve at the beginning of my career since we were thrown into a situation where we needed to react very quickly. At the same time, it put a lot of pressure on us, because, of course, what do you do after such a project? At that time I started to develop smaller, mostly government projects in Spain. The aesthetics of the single surface suddenly became the reason we were being sought, even to do a little restaurant. There was an attempt to move away from the project both aesthetically and conceptually. That's what generated our research on envelopes, skin, and tessellations.

NR The typologies that Yokahama merged into hybrid infrastructure should be a model for public space, as it combines the two beyond the single purpose and has a greater presence in the city both aesthetically and in terms of functionality. Many people would say the success of this should be repeated.

AZP We have repeated the general concept in competitions for landscapes, parks, and so on. Now I am doing a project in Passeio, in the north of Spain, for a fish market in a very compressed space. The Yokohama model of having a public space on top of an industrial facility worked very well for this narrow site. The budget for the building is much simpler, but there are many things that are related to Yokohama. The shopping mall we did in Istanbul also has ideas from that project. I feel more confident about going back to it, but at the beginning we had to do something to prove ourselves beyond the surface- or landscape-oriented project.

NR What were the structural challenges of the project as it changed midstream and was no longer an efficient or elegant structural system? What was the learning curve you had to face in terms of structural complexity and the design of hybrid structures?

AZP I have always been interested in structure, probably because of my education in Spain, since in architecture schools you become capable of calculating the structure of a high-rise building up to the size of the reinforcement bars. It's mad. It's an education that is totally inefficient because it sometimes takes people ten years to finish. It's unsustainable for a public institution to spend that much money. One of the things that developed in Yokohama was the possibility of linking the structure to the circulation. It generated the form of the building in a more naïve, more theoretical way in the competition entry because everything was supposed to be made with a folded piece of metal. Therefore, it incorporated into the project some of the things that many people were talking about at the time—the folding single-surface issue. If I had to do it again, I would do a building with half the amount of steel.

NR Today it would be considered a materially unsustainable building. How would you bring elements such as sustainability or social responsibility into other projects?

AZP I am more interested in understanding the constraints and challenging the status quo, but within reason. Yokohama was impeccable in terms of circulation, as well as structural and programmatic rationality, but there were a number of questions the project avoided in terms of social and environmental responsibility. I was carrying a huge weight of theoretical ambition that I needed to deploy somewhere, and once I did it at a large scale I was released. I'm much more interested in looking at briefs and commissions with a more balanced mind, while still being able to be experimental, but not in an extravagant manner.

NR How does the idea of patterning, tessellation, and array in the repetition of forms contribute to your work, and how has it changed in more recent projects?

AZP I have always been quite interested in patterns, but recently we started doing projects that were formally complex, and therefore regular patterns became more difficult to apply as tiling of the surface. This triggered a series of experiments that address the problem of how to make patterns which are to some degree repetitive yet produce forms that are differentiated and irregular, demonstrating the relationship between the irregular and the repetitive.

The main interest in engaging with pattern was precisely the fact that we were aiming to do a complex form which had to be clad, so regular tessellations wouldn't do. Or if they would, you had to make irregular pieces on the edge. From the perspective of detailing an object, it was not very satisfying. Probably the real reason why pattern became interesting was because of a certain ambition of consistency with every aspect of the building. Therefore, when we started cladding one of these objects, we found there were parts that were challenged by the whole—and there was friction between the part and the whole—the immediate reaction was to try to ease that friction, to produce consistency. Then it became interesting because the patterns offered or produced literal constraints that would fix the form, going from the form to the patterns and back.

NR How does this relate to ideas of surface and skin or to building envelope? It seems that you are not interested in surface but rather in ideas of thickened skin, in terms of exploring new ways to relate the parts to the whole.

AZP The whole discourse of the surface is uninteresting to me. I'm totally against it; the investigation of skin pattern is merely a kind of interesting geometrical game about itself. The discourse about the envelope and the interest in patterns is against that because you can do any pattern, but what is important is that you do a pattern whose relation to the whole is consistent. I'm interested in the attachment of the surface to massing, to iconography. I'm interested in developing a set of attachments that determine the tessellation of an envelope. The whole project of the envelope is to overcome the focus on the surface by itself and say, "This surface is irrelevant unless it is linked to other issues that have to do with representation, function, overall massing, or climate control."

NR Which of your current projects most represents this holism in your thinking?

AZP I would say the social housing project in Carabanchel, Spain. Often you have a theory and you deploy it, but if you are lucky, the building comes to something else that you then theorize. We started with a very low budget and very difficult constraints in terms of square meters and number of units, and height. We were going to get a very deep housing block, but we liked that idea because we had a very deep housing pattern. We tried to make all the units cross-ventilate, basically creating double-aspect units and because of that we had a very small proportion of façade per unit. So we started toying with the possibility that, because of the small amount of façade, we should have a glass building. But the block was oriented east to west, so we were forced to incorporate a shading device. We came up with the idea of the bamboo louver screens and terraces that acted in a very literal way. The tessellation allowed the building facade to display a set of collective desires in which the pattern is repetitive yet differentiated because every inhabitant uses it in a different way. That is important for me because it is a moment in which environmental performance, solar shading, and the creation of a climatic buffer on the façade intersects with iconography or expression.

NR Is that what you mean in terms of the social and political aspects of the envelope? Hasn't the building envelope always been politically and socially oriented because of the milieu, the client, and the public aspect of the façade?

AZP Politics is regimes of power, and regimes of power affect the political, social, economic, everything. At Carabanchel I am interested in the expression of a collective that is at once consistent and differentiated. In Europe these days, when you get a social housing project, you cannot do a Hilbersheimer or a Gropius project. The idea of optimum repetition is almost fascist; nobody likes it. Architects may be compelled to paint a façade in a different color or do a little gesture with a material, but that is all. There is the double agenda of the envelope: it is environmental because it provides views and shade and protects from wind, and at the same time it conveys an image of the community, which is an image of differentiation. It also operates on an iconographic and environmental level. Now, I am looking at the differences between the aspect ratios of the volume and the consistency of the material as well as a number of social or political issues related to every one of these envelope typologies. I am trying to overcome the focus on the surface and give it a certain ideological or political edge. I have never been interested in ornament and decoration; I am interested in politics.

NR Architects in Europe often are seen to be more political than Americans.

AZP I think I am quite well positioned to do that because, among my peers, I am one of the few who was born under a dictatorship. The political is losing cachet at exponential speed. The electorate is no longer Labor or Conservative, Republican or Democrat; it's a swing electorate, the majority of which has no faithfulness to a certain ideology or political position. People vote depending on very concrete matters. If we manage to position the architectural discourse politically, we would be in a very good position to capture some of the power of this new electorate.

NR By putting housing on the agenda, for example, or the physicality of architecture as a political statement?

AZP I think what we need to do is explain the political effects of material organizations, and I don't know if you can actually do it, but I think you can try to set up references or frames whereby the adoption of certain formal or material strategies can be immediately read as having a political effect. In a way, the envelope project is about identifying one sector of the discipline that is particularly interesting because it has always been political. It is the interface between public and private, between inside and outside; it is a point that regulates many of the things that architecture does in constructing a community. I choose that element as a field of research on the political.

NR Are you teaching so that you can guide the next generation to focus on the political and new modes of construction? How do you combine research and teaching in the field of architecture?

AZP My main interest in teaching is not to transfer knowledge but to develop it. I am much more interested in research. I think the main purpose of a relevant graduate institution should not be to produce manpower of whatever quality you want. It's not to produce the next generation of leaders in the field; the point is to produce knowledge rather than individual architectural projects.

NR How will you incorporate research into your studio at Yale?

AZP The studio will research the city as ecosystem setting up the framework for an investigation that will inevitably address typology as a fundamental disciplinary question. We will explore the new architectural effects of bridging between natural and artificial ecologies and setting up networks between human and non-human agencies for the Campo de Marte Airport site in São Paulo.

Hernan Diaz Alonso

Hernan Diaz Alonso is the Louis I. Kahn Visiting Assistant Professor. He will give a lecture, "Do I Look Like I Have a Plan?," on September 30, 2010.

Hernan Diaz Alonso, Xefirotarch, rendering for Kaohsiung Maritime Cultural & Popular Music Center International Competition, 2009.

Hernan Diaz Alonso, Xefirotarch, PS 1/MoMA, Young Architects Competition, 2005.

Nina Rappaport In a subtle way your teaching and work is about a new or renewed aesthetic that is difficult. It is not a totally pleasing image or composition, nor is it easily comprehended; rather, it is a more intellectual concept for an aesthetic theory. How do you define this aesthetic theory and how do you teach it so that it becomes part of the vocabulary in design and architecture?

Hernan Diaz Alonso I've been teaching for ten years in the States, at three schools. In a weird way I think it's like a wild animal. I never feel like I'm fully in control, in the sense that I still don't consider myself a teacher; I see myself as the director of a laboratory. My methodology changes over time, but there are recurring logics.

NR But you need some kind of method and direction, even if it morphs into something else over time?

HDA Yes, you do need it. Whatever I teach is based on where I want to go, not what I know. Teaching is always like an adventure—to quote the Joker from *Dark Knight:* "Do I look like I have a plan?" The idea behind one project becomes the genesis for the next, toward a different direction. The problem of aesthetics has been a natural progression in my thinking. Since graduating with my bachelor's degree in Argentina, I've been obsessed with form. I was first attracted to the autonomy of form as a main discourse in architecture, but over time I have realized that I have to refine and become more specific.

NR Your work is also very cinematic, as if it is meant more for the screen than for the real world. When did you switch your interest from filmmaking to architecture?

HDA When I was eighteen, I wanted to become a filmmaker. But the school in Argentina was not going well, so I took classes in architecture to get credit and then went back to film school. One young student that became a TA showed me the catalogue of the *Deconstructivist* show at MoMA, where I first saw the work of Coop Himmelblau, Zaha Hadid, and Enrique Miralles, and that work influenced my decision to continue studying architecture. Then when I started using computers and animation, it was an interesting opportunity to start exploring earlier interests. The problem became less about geometry controlling form and more about the idea of image as the vehicle for the production of form. That is what the software is for: it produces images so simulation overtakes representation.

NR Back to the question of aesthetics: What is your interpretation of beauty, and do you think there should be a general definition or comprehension?

HDA If you're interested in the problem of form, one way or another you're interested in beauty in the most classical definition of it. Evolving from that idea, I realized I was really interested in the beautiful rather than beauty. Of course the theories are similar, but beauty has a specific philosophical and intellectual implication. To me, the beautiful is a present moment; maybe something is beautiful, and then it can stop being beautiful. The work I was producing along those lines was not considered beautiful by most people.

NR Why is that?

HDA I think the work operates with a different logic, with certain autonomous entities that have to do with a methodology that produces a particular kind of aesthetic. So the word *grotesque* comes into play.

NR If you want to produce something that is beautiful and you have an aesthetic that defines what is beautiful, can you then control the creation of that aesthetic?

HDA Yes, absolutely.

NR For example, some people think the silver skeleton ring you wear is beautiful, and others think it's hideous.

HDA That is the difference between beauty and the beautiful. We all agree on beauty: there are rules defining my ring as beautiful maybe for some, but not for others. But we are producing beautiful work; if not, I would not be interested. I have never been interested in an intelligent or a strategic architecture. I have a very primitive approach. For me, it's about a sense of arousal or lust. I need to feel excited about the things I produce, and I want other people to feel excited. How you do that is a different thing. The work that became grotesque gave people a reaction. And of course if we want to go deep and be specific, which I never like to do much, this has to do with affect. The *grotesque* is an interesting notion because we tend to confuse grotesque with something ugly or disgusting, which is not the case. The meaning of the word relates to Goya's paintings of the black period because they didn't fit within the aesthetic canon of the time. I like the duality between those two meanings. Grotesque is an emerging quality; I don't think you can produce grotesque, I think something becomes grotesque. The sense or notion of a horrific quality, the production of horror and fear, is interesting because there's an excitement. The horrific is something you can choreograph in one project. The options of what we find beautiful, exciting, or arousing are more complex than they used to be. I think beauty and anger, beauty and perversion, can co-exist.

NR Do you sometimes design this way for a shock effect?

HDA It's certainly not in the forefront of my thinking. I've always been a big fan of the fashion designer Alexander McQueen. He killed himself at my age, during a midlife crisis. I think his work at the beginning was all about shock—and probably my early work was too—but then he began to refine it and became incredibly sophisticated rather than shocking. I think it became deep work that elicited an emotional reaction. I would like to think of my work that way too.

NR What do you mean exactly by sophistication, and how does it relate to beauty?

HDA I'm actually more obsessed with the problem of sophistication and virtuosity than the problem of beauty. If the work has a high level of sophistication—even if the origin is something disgusting, perverse, cancerous, or rotten—if you filter it to a high level of sophistication and precision, then it becomes something incredibly sublime and acquires a whole different dimension. There's almost a sublime quality that comes into it.

NR Why are you interested in the sublime, and how do you define it?

HDA I have a much more visceral reaction to the world than a manifesto; I just grab sublime as a sound bite. We do not add to the sublime era and then figure out what that means. The way I look at things is much more myopic. I'm obsessed with "misfit" as a methodology and working with incredibly precise moments of formal geometry with completely imprecise, drastic conditions.

NR How do you apply this to an architectural or industrial design project?

HDA We are working on two families of things now. One is a chair with completely independent structure and skin. We are using a three-dimensional ornament: roses that get chemically treated and then frozen. The flowers decay almost to the edge of rotten, and then we freeze them so the surface is maintained. The work is taking on an idea of the romantic as the natural progression of things. We are also designing a silverware collection. Next year we will design a small architecture space for the Centre Pompidou, which is a combination between the two projects. The silverware collection is incredibly precise and almost baroque in its saturation of formal maneuvers, and the chair is both very rustic and aggressive. It has conditions on the surface that I've never addressed, supported by an incredibly precise structure. I'm interested in those kinds of "misfits" as well as the problem of multiple techniques and aesthetics in conflict and friction. It has to do with the idea of the beautiful and the horrific, a lust that has a stunning quality.

NR What is your perspective on biomimcry in architecture and design? Some of your early work looked like interior body parts; is this conscious?

HDA I'm interested in organs and cancers, and I'm interested in plastic surgery. I never considered my work in relation to biology because I never look at those things directly. I always look through cinematic versions of everything, so that's why I always say my work is more cinematic than biological. Let's say my work looks like blood and coagulation. But I would not look at the real thing; I would look at vampire movies and figure out the cinematic effect of blood coagulation. So if I want to look into plants, I would look at them on the Discovery Channel. As Jeff Kipnis said, "If you want to learn how to paint an apple, you don't study apples, you study other people's paintings of apples." I'm interested in the transformation of the things I'm interested in through image-editing, so my work is cinematic.

NR Do you want to go back into cinema now?

HDA Yes. Actually, I think the work can do all of that. I consider myself a designer more than an architect. I like to design stuff. Sometimes it happens to be a building or a pavilion for P.S.1, sometimes it's product design, sometimes it's a book, sometimes it's cartoons for kids—right now we're developing that. The main reason I stayed in architecture was Zaha Hadid. She was incredibly important as one of the first architects to really make a big deal about the image, the painting. But I live absolutely in the present. I have no interest in historic validation, although it is worth knowing the precedents and architectural history.

NR Are your new commissions, such as the museum pavilion for TBA21, moving you toward becoming a building architect?

HDA Francesca Von Hasburg, who commissioned my firm to make one of three pavilions for different artists and architects, let us make ours the shape of a small building rather than a pavilion. It is the size of a big house with a small apartment for an artist-in-residence. I have a tendency to work completely in the present. One reason we don't get many projects is because every time one starts to take shape, I lose interest and want to rework it. The pavilion was based on principles of cell mutation and aggregation as an interaction between variations of a single thing. But now I'm much more interested in the logic of "misfit" or not such coherent elements, so we are contaminating the pavilion with this new idea of the misfit. Projects are not isolated conditions; they are part of a family of things we are working on.

NR What do you hope to impart to students when you teach? What will you be teaching at Yale?

HDA In the end you have to work as a teacher with what interests you. In that sense, the students are working on what you're working on. But they're taking life on as well. I'm always interested in having the students feel committed to the absolute pure state of being an architect. But to achieve that they really need to be willful and to play and to have fun. There has to be an ambition to produce an alternative quality that has to do more with contemporary culture than anything else. The rules of what we consider erotic or sensual have nothing to do with what they were a century ago; we are kind of like monsters in constant mutation. What fascinates me about computers is that if you look historically at any aesthetic exercise—and this is what I'm interested in working with the students on—they are about making a fake sense of perfection based on imperfect techniques, in painting, sculpting, architecture, Palladio, whatever. Today we have these absolutely perfect machines with 100 percent precision, and I'm obsessed about producing an imprecise aesthetic with them, like a reverse logic.

NR How have the restrictions and the need for a client in architecture informed your work?

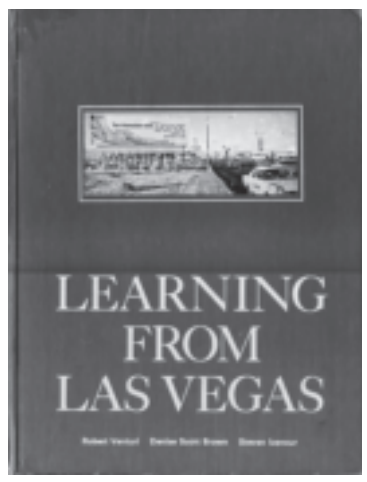
HDA Even when I do product design or animation, my logic is that of an architect. As much as I play at trying to break away from the boundaries and restrictions, they are there. The funny thing is, I always like the students to think of that, too. I am incapable of thinking about an abstract problem without a client or a competition or a site or a square-footage program. However insane or radical the work might look to other people, it always comes out of trying to figure out the problem. That is why I like architecture and could not be an artist. And that is what I'm interested in exploring with the students at Yale. The problem will be the concept of "misfit" and collapsing structures. I'm going to be thinking about those implications. I can only do what I do, and we'll see where that takes us.

Architecture After Las Vegas

The symposium "Architecture After Las Vegas," organized by Stanislaus von Moos, Vincent Scully Visiting Professor, took place January 24 to 25, 2010.

"Tanya" Billboard on the Strip, Las Vegas, 1968 © Venturi, Scott Brown and Associates, Inc., Philadelphia.

Sequence, upper Strip, driving north, Las Vegas, 1968, © Venturi, Scott Brown and Associates, Inc., Philadelphia.



Book cover of *Learning from Las Vegas,* Robert Venturi, Denise Scott Brown, and Steven Izenour, The MIT Press, 1977 edition.

Pages 30 and 31 from the 1972 edition of *Learning from Las Vegas* courtesy of Robert Venturi, Denise Scott Brown, and Steven Izenour, *Learning from Las Vegas,* and The MIT Press.

If *type* equals form plus use, as Aldo Rossi claimed in 1966, then *style,* according to cultural theorist and journalist Tom Wolfe, equals form plus money. In his 1963 essay "Las Vegas (What?) Las Vegas (Can't Hear You! Too Noisy) Las Vegas!!!," he characterized the new strip city as the first instance in history of a proletarian style—a sui generis hypertrophic expression of the tastes of a new economic and demographic majority, the American middle class. Encountering Las Vegas only two years after Wolfe's description was published, Denise Scott Brown and Robert Venturi were, for their own reasons, just as exhilarated and amazed by the surprising beauty and novel urbanity of this emerging human settlement pattern. But whereas Wolfe was concerned with describing the connections between evolving cultural and aesthetic forms, Venturi and Scott Brown were interested in how an unprejudiced analysis of this formal/social/economic complex could be set to work in the creation of architectural and urban form.

In 1972 Venturi and Scott Brown's book *Learning from Las Vegas* propounded a theory of this new urban landscape. The book, and the urban phenomenon itself, offered a lens through which to view the global course of urbanism over the next half century, and their writings and projects changed many architects' ways of thinking. The symposium "Architecture After Las Vegas," held at Yale on January 24 and 25,was organized by Vincent Scully Visiting Professor Stanislaus von Moos on the fortieth anniversary of the Las Vegas studio headed by Venturi and Scott Brown, in 1969. It was convened in connection with two exhibitions at the School of Architecture—one curated by Martino Stierli and Hilar Stadler, featuring photography and film from the 1969 studio, and the other a showcase of the work of Venturi and Scott Brown curated by Yale School of Architecture exhibition director Dean Sakamoto (MED '98) and David Sadighian (MED '10), and titled *What We Learned.* The two-day conference examined what there is left to learn, not only from Venturi, Scott Brown, and Steven Izenour's (MED '69) investigation but from the urban phenomenon of Las Vegas.

Almost everything about Venturi and Scott Brown's record of what Yale's Emmanuel Petit called their "safari trip" into the emerging urbanism of the Southwest was controversial, from the subject matter to the lessons drawn by its authors and even the design of the book itself. Aron Vinegar, of Ohio State University's Knowlton School of Architecture, started by describing the first edition of the book, designed by Muriel Cooper, one of the cofounders of the MIT Media Lab and founder of the Visible Language Workshop. Cooper, whose career design critic Janet Abrams has characterized as translating space into time and time into space, laid out the pages in striplike film sequences on fields of white space to reproduce the experience of moving along the Strip. The cloth cover had an image of the famous "Tanya" billboard, provided by the authors, overlaid with a glassine jacket and covered in words that kept the architects' designs "under wraps." Venturi and Scott Brown were unhappy with the design, complaining that the "Swiss" graphics were inimical to the book's philosophy. The second edition was published in 1977 in a less expensive and easy-to-handle "travel diary" format. The emphasis shifted from illustrations to text, removing the conflict between the "interesting" subject matter and the layout. As Scott Brown said, "We wanted to be able to read the book in bed."

Beneath the controversy about the book design loomed a much larger one: Why study Las Vegas at all? At the symposium architect Valéry Didelon reviewed the initial uncomprehending European response—Tomás Maldonado's characterization of their work as "cultural nihilism," and Nasrine Faghih's denunciation of *Learning from Las Vegas* as "nothing else than a systematic defense of social and esthetic degeneration" in *AMC.* American response was equally hostile. Beatriz Colomina, of Princeton, related Charles Moore's dislike of the Yale studio and Paul Goldberger's comment that he did not understand the point of the 1976 Smithsonian exhibition *Signs of Life.*

In fact, Venturi and Scott Brown's choice was overdetermined on many levels. Urbanism was a focus of the period: Sibyl Moholy-Nagy, Bernard Rudofsky, and James Stirling had published studies on vernacular urbanism; Scott Brown's University of Pennsylvania planning and sociology professors, including Melvin Webber, Herbert Gans, and Walter Izard, had studied automobile-engendered urbanism; John Kouwenhoven, Reyner Banham, Charles Moore, J. B. Jackson, John Appleyard, and Kevin Lynch examined its characteristics; David Crane and the British artists of the Institute of Contemporary Arts celebrated the role of signage in contemporary urbanism; Edward Ruscha published art books of deadpan imagery. And as Scott Brown pointed out in her talk, the "euphoric discovery of poverty, social unrest, diversity, nondirectiveness, and psychiatry," leading to democratic or advocacy planning, was funded by federal money for urban renewal.

In addition, Venturi and Scott Brown participated in a larger exploration of the communicative processes at work in the reception of architectural form. At the conference Mary McLeod, of Columbia University, described Modernism's failure to communicate with the populations it aimed to elevate to the utopian life that preoccupied such thinkers as Alan Colquhoun, Christian Norberg-Schulz, Carlo Giulio Argan, Aldo Rossi, George Baird, and Charles Jencks. Venturi and Scott Brown's ideas derived from sources richer and more diverse than the largely phenomenological and semiological background of these European writers. As Maristella Casciato of University of Bologna recounted in her talk, both Venturi and Scott Brown had witnessed postwar Italy's interest in the "interaction between history and common taste … that formed the common ground of the Italian realistic approach to architecture and the city in the mid-fifties." Their eclectic mix of referents—including T. S. Eliot, William Empson, and other literary figures as well as Lancelot White's theories of animal behavior, Ernst Gombrich's perceptual theories, systems analysis, and gestalt theory—contributed to the force and freshness of their analysis.

Added to these many influences was Venturi's architectural interest in the wall as a light enclosure separable from structural support. Karin Theunissen of Delft University of Technology, observed that for Venturi the Modernist, the wall was still the point. And Venturi reminded the audience of the lessons of past architecture ignored by Modernists that offered alternative conceptions of buildings as shelter and communication rather than simply form and space. She showed how in their 1965 Canton, Ohio, YMCA project and 1968 Humanities and Social Sciences Building at SUNY Purchase, the wall functioned as a permeable screen both separating and relating an interior street that organized complex programs to exterior public spaces. The National Football Hall of Fame, a "Bill-Ding Board" that separated communication at the urban scale from spatial enclosure at the building scale while integrating both into a material structural object, encapsulated these ideas in material and architectural form in 1967.

Thus Venturi and Scott Brown's "discovery" of the Las Vegas Strip arose from a multivariate set of sources and interest. According to Neil Levine, of Harvard, the resultant book "captured more succinctly and provocatively than most other texts the fundamental historical issues at stake and put them together in … a seemingly unambiguous and diagrammatic way." Their emphasis on surface communication, in Kurt Forster's estimation, resulted in overlooking the "far older entanglement between structure and ornament." More than a surface or a plan, however, Venturi and Scott Brown viewed the city as a social and physical process, what Melvin Webber termed the "communication channels" of a new "nonplace urban realm." They understood the city to be, as Von Moos phrased it, "the result of process and curvilinear movement within ever-changing contextual parameters of growth—in short, the city as fluid, indeterminate, and systems-driven rather than form-driven."

As part of this systematic view, Venturi and Scott Brown were interested in what Martino Stierli, of the Institute for the History and Theory of Architecture, ETH, Zurich, called the regime of mobilized vision created by the automobile. Like the nineteenth-century metropolis, the mid-twentieth-century exurb, to use A. C. Spectorsky's term, was made possible by the invention and spread of new means of transportation—the railroad, in the case of the former, and the automobile, in the latter. Both engendered new forms of social aggregation, and thus new architectural and urban forms. The car, according to Stierli, thus constituted a "machine for a new perception of the city." Because of its affinity with the mobilized gaze, made possible by the auto, Venturi and Scott Brown used film, among other novel instruments, as an important analytic tool. They adapted Ruscha's photographic technique in *Every Building on the Sunset Strip,* with its 27 linear feet of carefully spliced photographs of both sides of the length of the road, taken from a moving vehicle. They also embraced Ruscha's intellectual stance, the deadpan, or nonjudgmental, position and neutral portrayal. According to Stierli, "The 'deadpanning' procedure clearly produces an image unavailable to the human eye without the aid of a prosthetic apparatus. In other words, it does not simply *represent* reality, but it *constructs* its own new visual reality." But if the car is more than a neutral or passive viewing portal, it is not only because the camera mounted on it creates what Stierli called a rhetoric of objectivity and a performance of naïveté. The presence of the car begets a new order to serve the kind of vision possible and proper to it. Billboards are, as Appleyard, Myer, and Lynch showed in *The View from the Road,* angled toward the fast-moving driver so as to be perpendicular to the shallow angle of vision at high speeds. The rhythm of streetlamps—Venturi and Scott Brown's example of the hidden order—exists in its characteristic regulated beat to provide the level of illumination needed for driving.

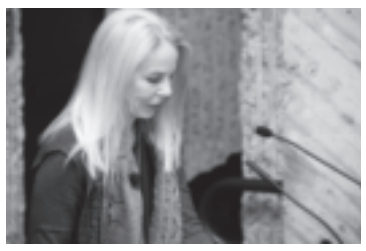
For Venturi and Scott Brown, Las Vegas was thus more than an example of a new kind of vision. It constituted an archetype—in the literal sense of an ultimate example of an emergent but barely conceptualized form of urbanism. Neither good nor bad in itself, its virtue was in its exemplary functional/spatial qualities. Although McLeod asserted that they were not concerned with type as a generative principle or a reason behind form but more interested in image, surface, and explicit message, in fact Venturi and Scott Brown's research was deeply grounded in typological considerations. Mob and movie interests combined to create a new building and urban type—the casino, with its dramatically inviting false front, gambling located at the front and cheap rooms behind, on the great auto-processional way. These types were derived inductively, however, rather than understood as Platonic ideas behind form. A socioeconomic-spatioarchitectural invention,


Robert Venturi


Denise Scott Brown

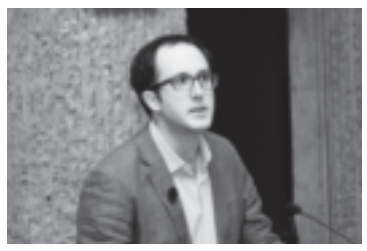

Peter Fischli


Emmanuel Petit


Libby Lumpkin


Katherine Smith


Stanislaus von Moos


Martino Stierli


Valéry Didelon


David Schwarz


Karin Theunissen


Aron Vinegar


Maristella Casciato


Beatriz Colomina


Dan Graham


Neil Levine


Kurt W. Forster

Strip architecture corresponded precisely to Rossi's notion of the type as "form plus use." For Venturi and Scott Brown, the houses of Levittown, combined with the older main street and the newer strip, comprised a tripartite urban and architectural typology derived from new American urbanism just as Rossi's typological system of house, district, and monument was drawn from traditional European urbanism. As a formulation of the disjunction between form and content, and the recognition of architecture as a language, both in the semiotic sense of a set of symbols not intrinsically arising from either human or material actions and in the sense of a culturally shared set of associations, the Decorated Shed was the material realization of these typological concerns.

One of the most immediate products of the study was to apply the "learning from" methodology and insights to the Strip's other half, the suburban subdivision. Inspired by Scott Brown's mentor Herbert Gans's sojourn as a participant observer in the Levittown community outside Philadelphia, Venturi and Scott Brown's 1970 Yale studio, "Learning from Levittown," was structured, as was "Learning from Las Vegas," as a research studio. Students undertook a "content analysis" of contemporary magazines, advertisements, TV commercials, soap operas, and cartoons for clues to the meanings that suburban house forms had for their inhabitants. Colomina noted that both Strip and suburb were "about" communication, treating casino and house equally as forms of media, as billboards. In a response session by architects, Yale's Peter Eisenman observed that a community of speakers demands grammar and rhetoric, and that while grammar normally precedes rhetoric, at least conceptually, in Las Vegas the rhetoric was the signs and the new grammar was the Decorated Shed.

Thus Venturi and Scott Brown's lasting intellectual influence is at least two-part: a logical separation of the building's surface from its structural undercarriage—the Decorated Shed—which radicalized Modernism's free façade by making it "about" communication rather than its own construction; and a reassessment of the sociopolitical role of architecture posited by Modernism, from "learning from" in order to alter to "learning from" in order to apply, or possibly hypertrophy. Venturi and Scott Brown's book both offered Las Vegas as a paradigm of the new urban and social condition and set Las Vegas free to be investigated as an epitome of that new condition by others. It provided a stance, a point of view, and a method for others to generalize as they undertook their own investigation. In this way it also proposed a structural shift. More profoundly than Agrest and Gandelsonas's distinction between semantic and syntactic, particular and general, meaning and social structure, Venturi and Scott Brown determined that meaning was structural in both the linguistic and the material senses.

At the symposium, Rafael Moneo, speaker in the architects' panel, noted that the most important lesson of Venturi and Scott Brown's work was the experimental-critical method of "learning from" one's own work—the circle of research and making that results in insight and creation, words and buildings. But for most architects, formal emulation was the rule. Didelon described how after architects got beyond its supposed caving in to the worst banalities and degradations of commercial society, the premise of the Decorated Shed was widely adopted by contemporary architects in Europe as well as America, including Massimiliano Fuksas, Quinlan Terry, and Ricardo Bofill.

As Stan Allen, dean of the Princeton School of Architecture, noted, the "Vegas effect" is today deeply inculcated into the profession: the lesson that architects can and should trust the complex dynamics of urban form; that it is more complex and nuanced, more advanced, than architecture. Certain architects—Jean Nouvel and most famously Rem Koolhaas—ingested the structural, as opposed to the formal, lessons underlying Venturi and Scott Brown's Las Vegas's urbanism. For Koolhaas in particular, *Learning from Las Vegas* provided a basic approach underlying not only his *Delirious New York* but *arguably* his entire approach to architecture and urbanism.

Disentangling the rise of architectural Post-Modernism from the enduring lessons of *Learning from Las Vegas,* Allen cited three of its general lessons: permission for a broader notion of architectural making that could include research, writing, and teaching; the possibility of collaboration; and the skill of structuring an argument with images. Allen pointed to two, in some respects, opposite forms of visual analysis adumbrated by the book: realism and the diagram. The first is phenomenal and specific, whereas the second abstracts the "hidden order" Venturi and Scott Brown discerned in the rhythm of streetlamps and casino layouts.

If the response of architects varied from horrified rejection to unquestioning replication and thoughtful adaptation, Venturi and Scott Brown's relationship to artists was one of mutual inspiration. Richard Hamilton, Robert Rauschenberg, Jasper Johns, Claes Oldenburg, Andy Warhol, Dan Graham, and Ruscha were among the artists their work both drew upon and paralleled, as Katherine Smith discussed and the artists present at the conference confirmed. Graham's "Homes for America," published in *Artforum* in 1965, explored the social and aesthetic implications of the same suburban home types as "Learning from Levittown." Graham, who spoke at the symposium removed the house's front façade, allowing a glass front to function as window, mirror, and billboard, a complex relationship implicit—but not until Graham created his work, actually embodied—in the house. On the other hand, in the "Learning from Levittown" studio and the *Signs of Life* exhibit, Venturi and Scott Brown treated the suburban house as a rhetorical device under the control of the owner, as a phenomenon of social interaction, with the house as an interlocutor. Both viewed the house as rhetorical, but whereas Venturi and Scott Brown's process was more akin to loving display, with lessons learned subsequently incorporated into their own designs, Graham added to the operation already present his own intensification, which had the effect of "making strange." The effects of this latter approach are evident in the work of the artist Peter Fischli, who mentioned at the conference, how he discovered Pop Art at the age of fifteen. The love of the banal and the trivial, and the fact that everything in it was familiar but artists were working on it, was irresistible to one who had grown up in a house and household dedicated to Modernism. Fischli's black-and-white images of Swiss fun fairs "bump up against the wall of the visible" to re-create the experience of the upside-down disorientation of mind and body.

The lessons to be learned from the ever-evolving city of Las Vegas are more equivocal ones. Since 1969 the exuberantly matter-of-fact communicative neon devices called signs have given way to more banal themed extravagances such as pirate ships and volcanoes and three-quarter-scale Michelangelos, and even to good taste in the form of art museums and upscale shopping. The frisson of shock having moved on to the megalopoles of Asia and West Africa, what is there left to learn from Las Vegas?

David Schwarz ('74) spoke about his approximately 12 billion dollar plan for Harrah's retail, dining, and entertainment corridor, at 270 acres the largest such development under single corporate ownership, planned to entertain three to five million people each year. The project, on hold at present, incorporates lessons from successful pedestrian environments and calls upon an industrial loft type to evoke edgy arts environments and encourage signage. Libby Lumpkin, former director of the Las Vegas Art Museum and professor at the University of New Mexico, described Las Vegas's new City Center in a similar vein. The largest privately funded construction project in American history, at 17 million square feet, the project is aimed at a narrowly defined upper-middle-class market. Cut off from the Strip, it pays no heed to context, its glamour embodied by abstract glass surfaces. Designed like a gated community, the plan hides the buildings from view, and any foot traffic must enter by means of the high-speed auto ramp and over a bridge. If the principle of earlier Las Vegas developments was to market to the broadest and most diverse audience possible, this project has the opposite aim. It combines Strip urbanism with upscale resort models imported from other places, making a new La Jolla in Las Vegas.

In her keynote address, Scott Brown called upon students to combine a nonjudgmental attitude toward the actual environments of the postmillennial city with the activist goal of bringing people together by means of the "living will" of architecture. She also made a plea for an open-ended stance: "A real artist will search for the truth but make sure never to find it." Ralph Stern, of University of Nevada, Las Vegas, examined developments beyond the Strip, revealing that the real lessons of Las Vegas may be found in the outskirts rather than on the Strip—in terraced subdivisions, military posts, artificial lakes, the ever-disappearing desert. Here the desert is revealed not as the pristine boundary of the neon Strip or the tabula rasa for further development, but as its necessary if unrepresented other. The cinematic imagery Stern described turns the real Las Vegas into an image of itself only occasionally showing this aspect of its reality.

Thus Las Vegas is a moving target. The over-the-top imitative splendors of Venice evoked by Von Moos's opening talk, the "View from the Gondola," which in their size and profusion exceed their originals to become hyperreal, just as Baudrillard said they should, are lessons learned from Las Vegas. At the extreme, Las Vegas sensitizes us to the existence of a hypermodern city in which authenticity and geography are outdated concepts. It makes possible to architects and artist influences as shown at the conferences, such as Diller and Scofidio's moving meditation on "real" and hyperreal Venices in Las Vegas, Florida, Macao, Tokyo, and Qatar—seen and heard from the bow of a gondola gliding through these places and originally projected onto the screens of the Arsenale at the Venice Architecture Biennale in 2008. These sound-and-sight portraits betray a tinge of nostalgia for the "real" Venice, even as the presenter disavows any notion of authenticity. Thus do the current incarnations of the Vegas effect evoke nostalgia for the once vilified Vegas of forty years ago. But as Von Moos reminded the audience, what is awkward, uncomfortable, and ugly about our current environment is therefore a window onto that world. What new forms of awkward, uncomfortable, even ugly urban and suburban life will "Architecture After Las Vegas" encounter?

—Deborah Fausch
Fausch is an architect and historian/theorist whose current book project addresses the architectural and urban theories of Venturi and Scott Brown.

The traveling exhibition, *Eero Saarinen: Shaping the Future,* ended its tour at Yale School of Architecture and the Yale Art Gallery this spring.

Eero Saarinen: Shaping the Future

Eero Saarinen: Shaping the Future, exhibition installation at the Yale School of Architecture Gallery, 2010.

Cover from General Motors brochure, "Where Today Meets Tomorrow," Courtesy of Eero Saarinen Collection Manuscripts & Archives, Yale University Library.

Magazine Cover from *Time,* July 2, 1956, courtesy of Eero Saarinen Collection Manuscripts & Archives, Yale University Library.

Eero, Aline, and Eames Saarinen, courtesy of Eero Saarinen Collection Manuscripts & Archives, Yale University Library. Photography by Tony Vaccaro, 1958.

Eero Saarinen: Shaping the Future, a richly comprehensive exhibition that began a museum tour in 2006 at the Kunsthalle Helsinki, wrapped up at Yale in May. It was an appropriate finale: Saarinen had a long association with the university, first as a student (BFA, 1934) and then as architect of the David S. Ingalls Rink (1958) and the Samuel Morse and Ezra Stiles colleges (1960–62). He worked on Yale's master plan in the 1950s and was in the process of moving his firm from Bloomfield Hills, Michigan, to New Haven when he died at age 51 from a brain tumor, in 1961. His papers now reside in the Sterling Library, thanks to the donation of architect Kevin Roche, who with John Dinkeloo took over the Saarinen office after his death. Yale Associate Professor Eeva-Liisa Pelkonen (MED '94) spearheaded the research behind the catalogue and exhibition, which she organized with curator Donald Albrecht.

At Yale, the Saarinen show was exhibited in two parts in buildings designed by a pair of Saarinen's contemporaries: the Yale University Art Gallery (1953) by Louis Kahn, and Paul Rudolph Hall (1963). Most of the architectural material was displayed in the lofty central space of Rudolph's craggy-faced architecture school, including magnificent models of Ingalls Rink and the St. Louis Arch, as well as drawings and photographs of Saarinen's best-known projects. Several little-known works, unique to the Yale venue, were on exhibit, including his student plans for a Residence for a College Dean (1932). One of the show's special delights was its presentation of Saarinen's work in the context of his time, with the inclusion of such artifacts as a short film called "American Look," made by General Motors to promote Saarinen's GM Technical Center, which opened in 1956. That 25-building complex, set in a manicured landscape around a rectangular pool, was the largest architectural commission in the United States at the time. Dubbed the "Versailles of Industry," its innovative design, construction, and plan made Saarinen a star and landed him on the cover of *Time* in July 1956. By the late twentieth century, critics had relegated Saarinen to the attic of Modernist history, but this exhibition provided a critical re-evaluation of his work and an exploration of his stature in the culture of postwar America.

The other half of the exhibition, at Kahn's Yale Art Gallery, focused on the domestic and private side of Saarinen's life and career. On display were prototypes of his early furniture designs, such as the upholstered molded wood chair that he and his best friend, Charles Eames, created for the "Organic Design in Home Furnishings" competition at the Museum of Modern Art in 1940. There were bits of personal memorabilia as well, such as his ticket from the first-ever commercial jet flight, on a Boeing 707, in 1958. (Before the advent of the jet, Saarinen frequently took the prop flight from Detroit to New York, a longer haul that he called the "four-martini trip.")

Saarinen's family was central to his early life, of course, and the exhibition provided glimpses of his artistic home life as the son of the legendary architect Eliel Saarinen, who created Cranbrook. His mother, Loja, a sculptor and weaver, was so influential that he initially wanted to become a sculptor. When Eliel was building the Kingswood School at Cranbrook, he commissioned his son, who was twenty, to design the furnishings. Later, Florence Schust Knoll, an orphan who was sent to study at Cranbrook, became an honorary member of the Saarinen family. Loja hoped that "Shu" and Eero would marry; they didn't but became lifelong friends and collaborators. Shu married Hans Knoll, and they created the Knoll design company.

The catalogue and exhibition revealed the forceful influence of another woman in Eero's life whose role has been far less understood: his second wife, Aline B. Saarinen. That he attained such a degree of fame during his life and even after his death was due in no small part to Aline. She was a highly accomplished and well-known media figure in the 1950s and 1960s. When she met Saarinen, she was an art critic at *The New York Times,* one of the few women journalists on the paper. During their marriage she published a history of the great American art collectors called *The Proud Possessors,* which rode the best-seller lists for months in 1959. After Saarinen's death, she reinvented herself as a television correspondent and became the first woman network bureau chief when NBC News sent her to Paris in 1971.

Aline and Eero Saarinen were a modern power couple, deeply ambitious for each other and for themselves. When they met he was unhappily married and longed for a wife who could help him attain his lofty goals. He confided to his psychiatrist that he wanted to be someone who does not just "contribute to culture" but is a "person of culture." Aline—an attractive, intelligent, sophisticated divorcée who was well connected to a wide circle of media figures on the East Coast—must have appeared to him the angel of unanswered prayer. He was an organized thinker who liked to put ideas in graphic form, and he drew a little chart, on display during the exhibition, rating Aline's potential as a mate against three other candidates whom he discreetly labeled X, Y, and Z. She outscored them all in categories including Heart ("generosity/sex/home life") and Head ("basic intelligence/own accomplishments/help with husband's work").

Aline B. Louchheim, as her byline read when they met, arrived in Detroit in January 1953 to interview Saarinen for a profile in *The New York Times Sunday Magazine.* She was dazzled by the still unfinished GM Technical Center and instantly smitten by its architect. The attraction was mutual: though Eero wrote Aline polite letters, typed by his secretary (the carbon copies are in the Saarinen archives at Yale), after she returned to New York he wrote her ardent love notes that his secretary surely never saw. Aline's article on him, published in the *Times* in April 1953, was titled "Now Saarinen the Son." Eliel had died only three years earlier, and in her story Aline painted a psychological portrait of Eero as a sensitive genius who had struggled to escape the ghost of his dead father. She positioned his architecture at the forefront of contemporary design, as the expression of the triumphal spirit of postwar American industrial and technological power. "He is already the most widely known and respected architect of his generation," she told the *Times* readers.

Saarinen divorced and married Aline when he was 42 and she was 39. Each had two children from their first marriages, and together they had a son, named Eames for Eero's old friend. Their marriage, Aline said, was "work-oriented"; in the evenings they would repair to a shared workroom with facing desks. Aline would sit at her typewriter writing for the *Times* or magazines such as *Vogue* or *The Atlantic,* and Eero would draw on his tracing paper, working through a project brought home from the office. They were intensely engaged in each other's creations, and though we may never know the extent of her influence on his designs, she appears to have offered regular critiques. "We are literally brutal, though very good, critics of each other's work," she once wrote.

Aline could also be a brutal critic of other people's work. She wrote a letter to Eero in the spring of 1953, when their affair was still new, describing an expedition he had missed to New Haven to see the nearly complete Yale Art Gallery: "It's lucky you didn't go—you would have become ill when you saw Kahn's building. … It is really a horror, without any distinction at all, and heavy and rude and ugly besides. It may be building, but it certainly isn't architecture."

Aline's most obvious influence on Eero's career came from her skill in public relations. She cultivated media contacts and wrote eloquent letters to journalists about his work. She entertained writers who trooped out to Bloomfield Hills, including the *Time* magazine correspondent to whom she fed juicy anecdotes for his cover story on Saarinen. She was a vivacious hostess to a parade of friends and clients—Alexander Calder, Charles and Ray Eames, J. Irwin Miller. She introduced Eero to a number of her East Coast friends and doubtlessly helped secure certain commissions, such as the residence hall at Vassar, her alma mater.

After Saarinen's death, Aline turned into what we might call the Yoko Ono of architecture. She kept a tight grip on Eero's image from her second-floor office in the firm's new headquarters near New Haven. Though shattered by his death, she worked hard, supplying material for an outpouring of tributes to him in the press. Within two months she helped orchestrate a half-hour TV special on Eero for CBS. Within a year she produced a handsome, slip-cased book, *Eero Saarinen on His Work,* published by Yale University Press. Fiercely protective of his legacy—and upset by his critics—Aline set a policy of barring press access to his projects until they were completed. Only then, she believed, could his designs be understood.

Most important, Aline used her determination and social skills to ensure that his nine unfinished projects were completed. She became the firm's ambassador, reassuring clients that his associates could execute Saarinen's designs. William Paley, the chairman of CBS, probably would have sought a new architect for the company's Manhattan headquarters if Aline hadn't stepped in, according to Roche. She went to client meetings with the architects and even weighed in on the dark granite chosen for the exterior. She also smoothed the way with Najeeb Halaby, the head of the Federal Aviation Agency, client for Dulles Airport, and was on the dais the day it was dedicated in 1962, with President Kennedy and former President Eisenhower. Earlier the same year the "Today Show" broadcast live from inside the TWA Terminal on its opening day—and there she was, seated next to John Chancellor, discussing Saarinen's architecture. By then she was becoming a regular on television: her poise and easy eloquence made her a natural, first as a contributor to the "Today Show" and ultimately as a correspondent on the "NBC Nightly News." She was tempted once to leave the world of TV, when President Lyndon Johnson wanted to name her his ambassador to Finland in 1964—he recognized both her prominence and the power of the Saarinen name, but the appointment never materialized.

Eero once told Aline she lived on "rabbit time," while he lived on "elephant time." Architects were considered and deliberate; journalists jumped. But neither, it turned out, had much time at all. A few months after Aline was sent to run the NBC bureau in Paris, she became ill and died of cancer, in 1972, at the age of 58. But like Saarinen, she had already achieved much more than most mere mortals.

—Cathleen McGuigan

McGuigan, a cultural critic for Newsweek *magazine, is working on a biography of Aline Saarinen.*

Positioning Global Systems

Positioning Global Systems, a symposium organized by the MED students was held April 15–16, 2010.

Fuerstengrube, Schlafhaus, Germany, 1917.

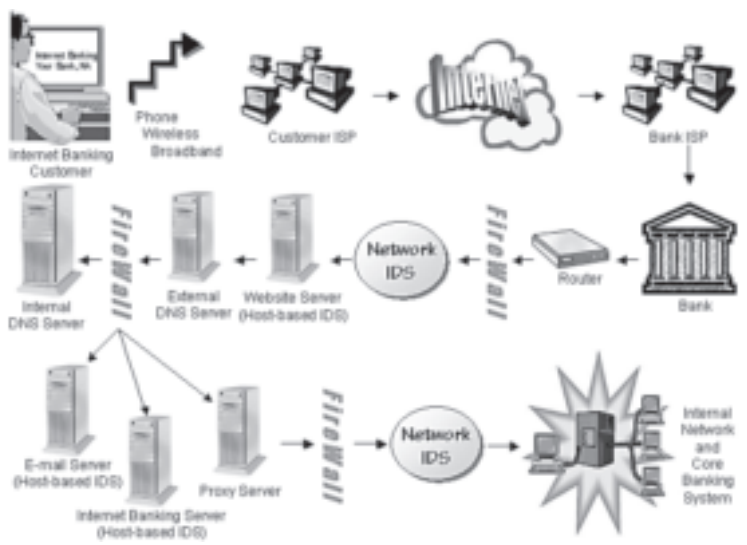


Diagram of typical online banking system architecture, courtesy of FDIC, "E-Banking."

Fruitdale Neighborhood, Oakland, California. Photograph by Robert Lemon.

Our culture has had an unrelenting fascination with images of our planet. Famous examples include the pictures astronaut William Anders took of the planet Earth during the Apollo 8 mission, in December 1968. One of these—an image of a bright spherical swirl of cerulean sea, with wispy cloud formations covering mottles of yellow-brown earth and forest green—was selected for the front cover of Stewart Brand's *Whole Earth Catalog* (1968). Touted as an "evaluation and access device," the compilation of "hippie" products inspired a diverse group of architecture practices, including Chip Lord, Doug Michels (M.Arch. '67), and Curtis Schreier's Ant Farm collective, Lloyd Kahn's *Domebook* manuals, Nicholas Negroponte's Architecture Machine Group, and Ettore Sottsass's Global Tools design school. This was not the first time designers positioned the globe as a legitimate interest for architecture culture. R. Buckminster Fuller's Dymaxion Air-Ocean Maps, Otto Neurath's ISOTYPE diagrams, and Herbert Bayer's environmental graphics are evidence of architectural interest in design of the global and at the global scale.

The Yale School of Architecture's annual graduate student symposium, this year titled "Positioning Global Systems," offered an attempt to once again explore the role of the global in contemporary and historical understandings of the built environment. Organized by students David Sadighian (MED '10), Nathan Bright (MED '10), and Ozlem Caglar (MED '10), the symposium featured papers by a diverse group of international doctorate students that expressed the organizers' desire to explore "the relationship between global networks and locality in the built environment." As with past symposia, this event coincided with the annual Roth-Symonds Lecture, delivered this year by sociologist Saskia Sassen, whose talk, "Bridging the Ecologies of Cities and of Nature," was an appeal to architects and urbanists to consider methodologies from the biological sciences as a way to understand and manage issues at the regional and global scales.

Sassen's remarks set the stage for the presentation of papers. Her appeal to architects to communicate with global practitioners resonated with the papers in the morning session—all of which considered issues of translation and dislocation. These terms were taken quite literally so the scope was ambitious. As papers considered the literal and figurative repositioning of practices and systems of representation from one geographical location to another, as well as the problems of language and communication stemming from these dislocations.

In the first paper of the morning, Hye Jean Chung (Film Studies at the University of California, Santa Cruz) analyzed contemporary Korean cinema, providing the audience with an overview of how issues of physical dislocation and translation can become embedded in representations of the built environment. Chung used clips and stills from the South Korean monster film *The Host* (dir. Bong Joon-ho, 2006) to argue how its CGI techniques and digital (i.e., non-physical) spaces betray the global dimensions of contemporary film production. Deploying familiar postmodern globalspeak in the service of her argument, she quoted Sassen, Michel Foucault, and Arjun Appadurai to support the idea that, in essence, *The Host* was "global" because it incorporated production techniques from across the Pacific to depict South Korean spaces. This is a bold argument, to be sure, yet one wonders if Chung was analyzing something that is endemic to contemporary film production. Without a comparative approach that looked at film production in other Asian territories, Chung seemed to be making larger claims about film—claims outside the scope of the paper yet all too present. But what exactly is architectural about *The Host*? Chung seemed to conflate issues of space with issues of architectural representation—a conflation that is important to architecture culture that deserves further interrogation.

Olga Pantelidou (MED '09, National Technical University of Athens) attempted to re-evaluate arguments regarding issues of physical versus digital space. Her paper concerned Wells Fargo's decision to emphasize online instead of branch banking during the late 1990s. Melding careful historical accounts and incisive formal analyses, Pantelidou argued that Wells Fargo's banking policies de-architecturalized banking. Her conclusion can best be summarized through an act of architectural dislocation: the computer screen has replaced the building façade. But perhaps this is just a case of architecture changing representational formats. Although the translation from building to screen has resulted in a kind of "digitization" of bank architecture, to what extent has the digital truly occluded the physical? As with the previous paper, there was a sense Pantelidou was analyzing something all too familiar, so much so that the paper's relevance to architecture discourse and, more important, to our understanding of globalization became lost in a presentation that was more a history of Wells Fargo than anything else.

If the first two presenters in the morning session discussed the architectural consequences of the digitization of labor practices, then the last paper considered how individual perceptions of space can challenge the understanding of labor and geography. For his paper, Robert Lemon (University of Texas at Austin and visiting scholar at UC Berkeley's College of Environmental Design) used GIS and GPS data to analyze how Latino residents in different Oakland, California, neighborhoods understood and characterized spatial boundaries. When mapped out onto GIS, Lemon's fieldwork revealed a discrepancy between physical space and the perceptions of that space. He concluded that this discrepancy was as much a result of cultural differences in ideas about space and boundaries as a reflection of his subjects' occupations (many were mobile vendors working in the neighborhood with pushcarts or taco trucks). Unlike Chung's analysis of South Korean film production, Lemon based his conclusions on the effects of spatial dislocation in urban areas on the individual subjects.

Whereas the morning papers relied on technology as evidence to support their conclusions, the afternoon session's speakers expanded their methodological palette by introducing other ways to view the problematic distinctions between the local and the global. The first paper employed an art historical approach to understand how architects deployed a kind of social housing in central and Eastern Europe. Erin Eckhold Sassin (Brown University) looked at the various incarnations of *Ledigenheime* (housing for single people) throughout Upper Silesia, Prussia, and large German cities. Using architectural drawings and archival photographs as evidence, Sassin demonstrated how building typology changed spatial configurations according to different aspects of urban life in different geographical locations yet maintained essential physical characteristics that made its architecture instantly recognizable. Sassin's regionalist understanding nevertheless begged an important question: Through what media channels were such building typologies transmitted?

Such concerns and analyses about the distribution and allocation of information suggest an infrastructural approach. For his paper, Matthew Heins (University of Michigan Taubman College of Architecture and Urban Planning) tackled the issue of containerization through its various infrastructures as a way to question the differences between the local and the global. Using case studies in Chicago and other parts of the American Midwest, Heins concluded that containerization was the very instrument which elided any distinction between local and global. He also deployed a subtler, although more familiar narrative throughout his presentation: containerization as being a kind of exemplar for postmodernity. Heins's focus on American examples also threatened to undermine his invocation of the global. If containerization facilities in Illinois illustrate a point about globalization, can the same be said about similar facilities in Europe, South America, or Asia?

While Heins's paper considered the ubiquity of commercial standards and its effects on global infrastructures, Andrew Crocco (University of Pennsylvania's Annenberg School for Communication) focused on that most immaterial of phenomena, information, and its effects on urban planning in Asia. Crocco's paper, "Network Gods and Real Simulations," considered the planning and development of Songdo International City, near Incheon, South Korea, designed to incorporate ubiquitous computing, or "ubicomp," into all its buildings and infrastructures. For the uninitiated, ubicomp (also referred to as "pervasive computing" or "ambient informatics") is a kind of human-computer interaction (HCI) that incorporates information processing into all kinds of everyday objects. Ubicomp is not unfamiliar to architecture audiences. For example, OMA's Prada Store in SoHo used a variant of radio-frequency identification (RFID) technology embedded in walls and media screens to help customers make purchases.

Crocco described how such technologies could be deployed at the urban scale. He focused on the collaboration between designers at Kohn Pedersen Fox, master planners Gale International, and HCI specialists to promote a vision of contemporary living in which computers were involved in all aspects of urban life. Crocco presented a vision not unlike that suggested by Alex McDowell's production design work and visualizations for the film *Minority Report* (dir. Steven Spielberg, 2002). The analysis primarily investigated the extent to which digital life hampers the necessary physicality of urban life. What is the role of architecture in a world that privileges interaction with information over the perception of space?

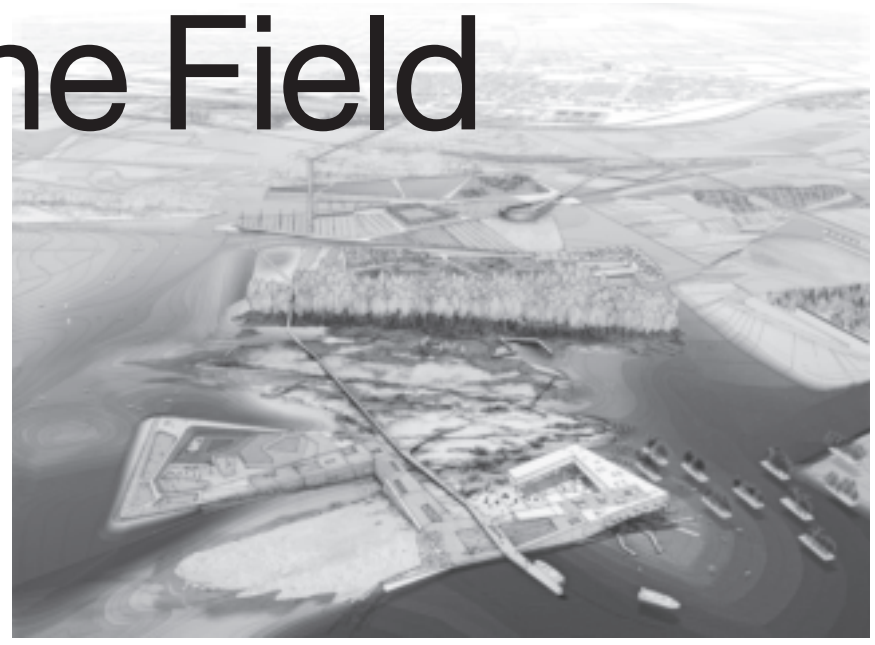
This was one of the issues underlying Maria Prieto's paper. Prieto (University of Navarra) considered how Web 2.0 technologies and open-source modes of collaboration affect the representation of architectural space. Using various architectural competitions in Spain as well as examples of online collaboration from various architecture-related websites, he concluded that the only feasible way for the field of architecture to keep abreast of such developments is by a total redesign of the "online public space of architectural production." The characteristics of this space, however, remained vague; he focused on theories of space and representation without necessarily connecting them to the manner at hand.

Such problems continue to vex contemporary discourse. As these papers demonstrate, architecture culture may be a little too reflexive or reactive in times of rapid technological development. This situation may even be exacerbated once architecture culture looks to other disciplines for guidance. This lesson might be learned from Hegel's essay "The Owl of Minerva," in which he argued that philosophy was too reactive and not forward-thinking. As Sarah Whiting suggested in a panel discussion held at Rice University earlier this year, the same can be said about architectural discourse, a practice plagued by its tendency to "look (and be) backward and regressive." One wonders if the same could be said about the discourse concerning globalization and its relation to architecture and urbanism. The papers in the symposia all identified a similar set of problems tied to issues of representation, interpretation, power, and politics. Yet there was hardly any sense of a prescriptive approach, no sense of "We must look at things in a new way." What will instigate this endeavor—another massive oil spill? Flotilla attacks? What is the contemporary equivalent of William Anders's photographs of Earth?

—Enrique Ramirez (MED '07)
Ramirez is a doctoral candidate in the history and theory of architecture at Princeton University.

In the Field

Rising Currents: Projects for New York's Waterfront



Architecture Research Office and dlandstudio's *New Urban Ground* transforms Lower Manhattan with an infrastructural ecology. Exhibited in *Rising Currents*, Museum of Modern Art, New York.

Artificial reefs, excavated landforms, and re-imagined streetscapes are all part of The Museum of Modern Art's, *Rising Currents* exhibition, on display through October 11, 2010. The show is the outcome of an architects-in-residence program with ARO and dlandstudio, LTL Architects, Matthew Baird Architects, nArchitects, and SCAPE Studio, held at P.S.1 in 2009, which placed architects at the helm of a provocative agenda to reinterpret the New York–New Jersey harbor in the face of sea-level rise and storm surges. The in-depth exploration of climate-change scenarios was initially investigated by Guy Nordenson, Catherine Seavitt, and Architecture Research Office through a research study completed with funds awarded by the AIA 2007 Latrobe Prize. At P.S.1 each design team concentrated on adjacent zones in the harbor, generating a proposal to address climate change through earthworks, green infrastructure, urban design, and architecture. The show placed these designers into an arena currently inhabited by climate scientists, modelers, engineers, and restoration ecologists.

The exhibit provided a series of tantalizing strategies for engaging with this future watery world and the combined proposals coalesced into a vibrant activation of the harbor. The crenelated waterfront edges and offshore fragments suggest local-scale responses. At the same time, waterfront infrastructure and ecological parkland are combined with buildings and water transportation to repurpose the harbor. The combined proposals forge a heterogeneous patchwork which can also be read as distinct studies that explore the harbor as a testing bed for architectural responses.

After my visit to MoMA's show, I contemplated whether the zones provided an effective scale for designers to respond to climate-change issues. Designing such large and unbounded urban parcels is uncommon for architects, yet working at this broader scale facilitated a dialogue among designers, engineers, ecologists, and bureaucrats. Since sea-level rise poses problems across coastal lowlands, evaluating large areas of the harbor should help calibrate the range of design practices to the scale of the problem. Moving forward with climate-change solutions will undoubtedly require us to weigh options and target certain sites while leaving others to flood. From this perspective, certain projects had more promise than others.

I also left the exhibit wondering whether creating a truly multidisciplinary collaboration would be more effective than positioning the architect in a lead role. Given the complexities of climate change and the vast scale of the challenges, the best solutions will undoubtedly be multidimensional. That said, one specific goal of the exhibit was to de-emphasize wholly technical solutions and foster a creative investigation into design responses that reposition environmental concerns as opportunities. Still, most of these proposals paid little heed to the cost implications or to the most efficient solutions. Instead, teams suggested massive alterations at huge expense. However, they might also employ ecological, engineering, and economic forecasting models along with land-use change analysis. Although many of these issues are outside the realm of the architect, in *Rising Currents* they drove the process. Each team had to amass information on their own initiative, soliciting input from technical, scientific, community, and government sources.

Given that the land-water interface is dynamic and increasingly intense, should we necessarily be implanting this aqueous land with heavy investments in program and architecture? A more cautious approach would be to consider the harbor more holistically, viewing the edges as buffers and managed habitats while diverting money and effort into developing smart approaches that support larger inland and upland sites. LTL and Mark Baird's massive earthworks for the Palisades offer less benefit than developing a series of locks along the Arthur Kill to maintain inland water levels, control flooding infrastructure, and provide a hydrological management tool to foster high and low marshes. At the same time, retrofitting post-industrial land and dealing with soil toxins leaking into the harbor, as in Baird's proposal, is of critical concern.

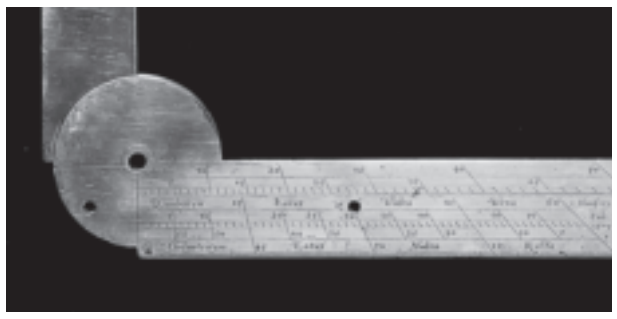
A final question is whether sea-level rise increases the potential for these blighted and underused sites to be redeveloped. Several zones include areas of urban blight, which plagues cities around the world. Will anchor programs, such as those proposed by LTL, coupled with the billions of dollars of proposed land transformation truly reactivate under used and degraded land?

These critiques aside, the exhibition and the design teams deserve praise for reconsidering the role of design as a tool to synthesize ecological, engineering, and human-settlement patterns. All teams proposed seawalls or other wave-attenuation strategies using barriers. nArchitects' "hanging" buildings and LTL's proposed anchor program were the only schemes with architectural solutions. nArchitects' dynamic and inflatable barrier system introduces an engineering solution that also creates a neighborhood layout. While costly as a whole, ARO and dlandstudio's retrofits of street networks in Lower Manhattan provide incremental retrofits that are adaptable, multifunctional, and achievable over time yet make sense in light of real estate values. They provide a series of convincing infrastructural operations to address sewage overflow, storm surges, and sea-level rise. LTL's notion of increasing the coastline and creating a more porous and resilient buffer promotes ecosystem services such as habitat creation, as well as creating varied parkland. The ecological petri-dish concept introduces experimental research on salt-adaptive plants and shifting coastal ecosystems as a methodology to guide decisions in the future.

Baird's team provided a refreshing global analysis of industrial ecology and proposes a post-industrial solution to the site and region. SCAPE's project was notable for proposing bioengineering solutions relying on the oyster life cycle expanded to activate a harbor nursery and toxin cleanup for the Gowanus Canal. Probably the most achievable and lowest-cost proposal, it linked scales of action to the harbor ecosystem and geography, relied on the harbor and Gowanus Canal as an oyster nursery, and employed the oysters as ecosystem engineers. Configured as an infrastructural armature, the oysters perform wave attenuation, increase habitat around Governors Island, and clean the Gowanus Canal. The appropriately scaled ecological program reprograms the harbor geographically and responds to its anthropogenic impacts.

Although architects are currently only peripherally involved in large-scale ecological challenges such as climate change or biodiversity loss, this exhibit reconsiders their role and function in society. Given the complex land uses at the water's edge, designs responsive to sea-level rise and storm surge require both an ability to navigate urban land development and expertise in ecology and engineering. Architects who take up these challenges need to expand their knowledge and even shift the emphasis within their profession from aesthetics to stochastic or messy landscapes, hidden or embedded infrastructure, and adaptable built systems and dynamic forms for a more sustainable future. A more operational design approach with relational networks, scripting, and phasing will require serious collaboration and less emphasis on the signature of the architect.

—Alexander J. Felson
Felson is an assistant professor, joint faculty with the School of Forestry and Environmental Studies and the School of Architecture.



Humfrey Cole, surveyor's folding rule (detail), 1575, Museum of the History of Science, Oxford, England.

Aquatel Pier, LTL Architects, Exhibited in *Rising Currents*, Museum of Modern Art, New York.

Perfect Precision

As a nine-year-old, I owned a wooden ruler, calibrated to sixteenth of an inch, but with a working accuracy that was undermined by the abuses of its many non-mathematical uses. By the time I reached graduate school it had been replaced by an altogether more sophisticated architectural scale, an instrument of triangular section that promised to translate dimensions with ease and exactitude.

Yet this device seems like a child's toy when measured against what could be seen in *Compass and Rule: Architecture as Mathematical Practice in England, 1500–1750* on display from February 25 to May 30. In the darkened galleries of Louis Kahn's Yale Center for British Art, eyes strained to discern the minute calibrations of precision instruments in polished brass, silver, and ivory with names that are only half-familiar: quadrant, architectonic sector, astrolabe shadow square, altazimuth theodolite. Displayed alongside architectural drawings by Inigo Jones, Sir Christopher Wren, and even King George III, they claim a staggering precision: tools that divide an inch into hundredths are supplanted by those that split it into thousandths.

During the exhibition's opening week, Frank Salmon of Cambridge University explored the motivations behind such exacting measures in the lecture "Getting the Measure of Antiquity." Salmon focused on the eighteenth-century rivalry between James "Athenian" Stuart and Julien-David LeRoy, driven in part over measures of reliability and precision in the documentation of the antiquities of Greece. Stuart's claims to "accuracy and fidelity" led him to document his dimensions to three decimal points of an inch, but his ambitions were undermined by the tendency of his brass rule to expand in the heat of Greece.

Indeed, the student who has struggled over a measured drawing will recognize that precision in such matters is a distinctly relative calculation even under the best of conditions and will know any claim to fastidious exactitude should be qualified with an equal measure of diffidence. As Salmon observed, such caution is, if anything, reinforced by eighteenth- and nineteenth-century drawings of brave young architects scaling the precipitous heights of classical ruins, one hand on the precariously balanced ladder, the other grasping the rule. In such cases, the precision of lived experience is surely more in keeping with the schoolboy's wooden ruler than with the millesimal calibrations of the ivory sector viewed in Kahn's galleries.

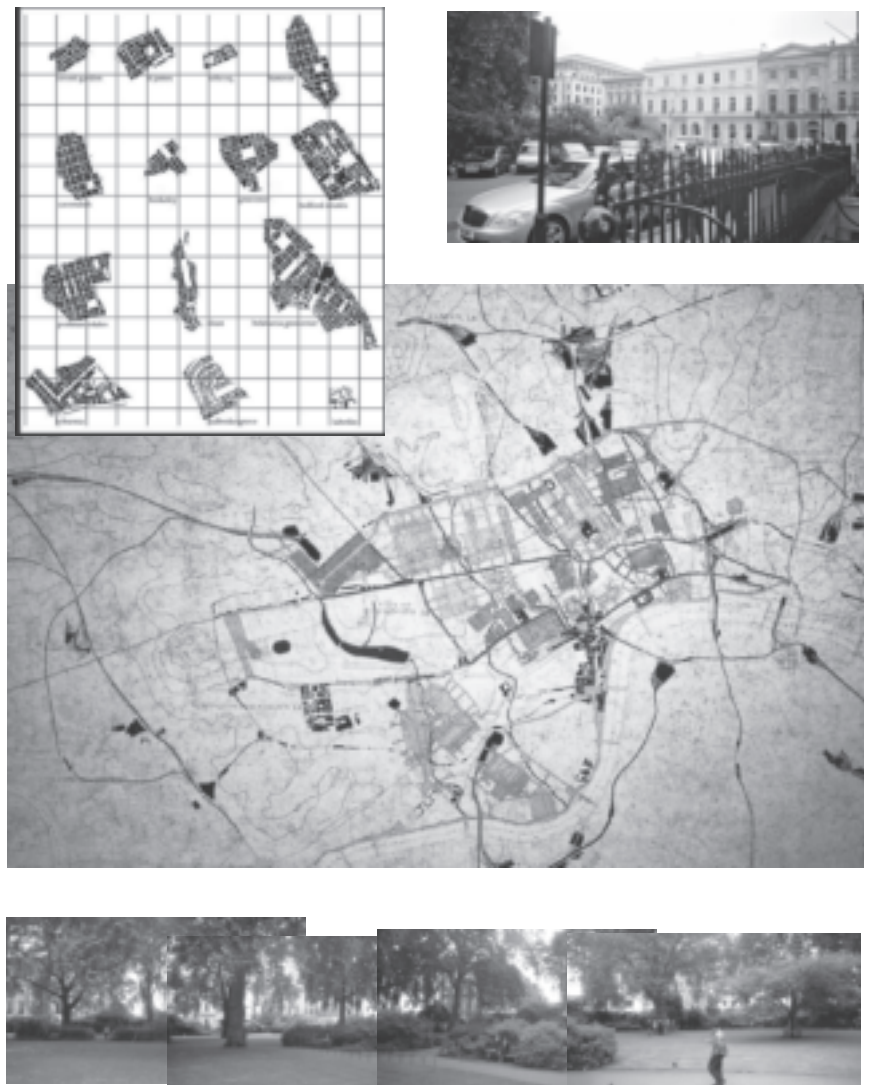
The fabric of the Yale Center for British Art might itself offer a similar, albeit more contemporary, lesson. George Knight ('95) is currently coordinating repairs to the center's exterior courtyard, which is overlooked by the building's legendary steel-paneled façade. Kahn's original drawings for those panels show dimensions specified to the sixteenth of an inch, the numbers inscribed with precision; yet, as recent explorations have shown, the building's underlying concrete framework was poured with an accuracy that was measured by a different order of magnitude altogether, deviating from the construction documents by a factor of inches, not sixteenths. Built reality evidently follows a logic distinct from the claims of the drawings. Indeed, alongside the polished silver and ivory devices of architect, scholar, and king, *Compass and Rule* presents a number of instruments that bear the marks of having been used to pragmatic ends on the building site and even on the front line of military defense. Unsurprisingly, perhaps, they are typically tools of less exacting precision.

The potential for discrepancy between drawing and building remains firmly in place today. In the "Compass and Rule" class offered at Yale School of Architecture with the collaboration of Victor Agran ('97), exhibition co-curator Stephen Johnston (Museum of the History of Science, Oxford) prompted parallel speculation on the tools of contemporary drafting software. Just as the exactitude of the sixteenth-century sector was undermined by the reality of lead, ink, or stone, the on-screen dream of infinite precision in unlimited digital space eludes the grasp both of the plotted drawing and the built product. Even direct translations of digital fabrication must depend on the calibration of drill bit and water jet. Ultimately it is this that protects the architect, now as then, from the illusion of complete control, the hubris of perfect precision in an imprecise world.

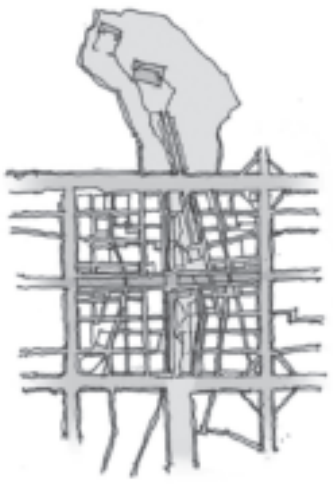
—Kyle Dugdale
Dugdale is a Ph.D. candidate at the Yale School of Architecture.

Ecological Urbanism

Grahame Shane, urban design professor at Columbia, and Fred Koetter, professor and former dean at Yale, discussed their current thinking about urbanism and urban ecology with Alexander Felson, joint faculty in the School of Architecture and the School of Forestry at Yale. For *Constructs* they expanded upon their discussion.



Grahame Shane, Koetter-Rowe 1971–72 thesis project analyzing London Estates with St James Square and expansions working as a recombinant system, 2009.



Koetter Kim & Associates, Sewoon diagram, Seoul, South Korea, 2008.

Koetter Kim & Associates, Sewoon rendering, Seoul, South Korea, 2008.

Alexander J. Felson Ecologists have recently expanded their focus from studying non-urban sites to studying cities. They are working to define urban ecology through research and analysis with the underlying assumption that cities can be quantitatively evaluated through some useful metrics that may help to guide planning and design. What is your perspective on urban ecology? How was it integrated into your urbanism studies, and what would you say is the role of scientific analysis in urban planning?

Grahame Shane Buckminster Fuller lectured at the Architectural Association (AA), in London, when I was a first-year undergraduate in 1963 and introduced the idea of a global, ecological system. In the early 1970s, when I was a young teacher for Alvin Boyarsky at the AA, ecological issues came to the fore again. A wonderful group called Street Farmer wanted to turn London's streets into vegetable gardens and build eco houses.

In the 1990s my students integrated a more ecological approach to urbanism partially though an emphasis on cybernetics and feedback, treating urban economic and social networks as information systems with feedback mechanisms. These mechanisms allowed urban actors to create and maintain ecological patches that were in a dynamic state of disequilibrium, temporarily holding chaos at bay. The idea of biotopes as ecological patches connected to information formed patch dynamics across urban systems. Concepts such as succession and migration had a resonance with ideas, such as the Chicago School of Sociology's neighborhood theory, as well as New York City's Special District Zoning Code, led to my writing of *Recombinant Urbanism* in 2005.

At a conference organized by the Cary Institute of Ecology, in Millbrook, New York, attended by Yale School of Forestry faculty, in the late 1990s, it became clear that ecologists had expanded their ideas about dynamic systems to include patterns of perturbation and resilience. Then ecological models became unstable because they were based on probability and chaos theory. This was very exciting, as it linked back to the way I had analyzed London in my master's thesis for Colin Rowe and Fred Koetter at Cornell in 1970–71. Patches of order and disorder shifted and changed over time within the growth of cities and the organization of people within them. Ecologists attending the Cary conference said, "we're really not used to thinking about people as active agents in shaping the ecology and designing urban ecology." They recognized that other species, such as beavers or salt-marsh plants altered systems overtime, through modifications to flows, flora, and fauna—but not people.

In that London study, I documented how the city grew incrementally around large land-holding units that Inigo Jones designed in the 1600s with secondary houses on the attached street grid and service areas at the back; they existed throughout London's development. What is interesting is that we still create cities in enormous incremental fragments, whether at the center or in the suburbs. After 1945, when the oil industry expanded outside the U.S, we completely transformed how we think about urbanism. This first occurred in 1961 with Jean Gottmann's identification of the networked megalopolis, a city of 32 million stretching from Boston to Washington. People reacted by making fragments in enclaves, which they could control, giving a local sense of order, as at Battery Park City Special District, developed in New York City in 1978. And so we went back to the idea of controlling a local limit within the larger whole. Cheap oil, land, and cars powered expansive ex-urban development on the city edge, fostered in part by media and advertising.

In 2008 with the huge collapse of this fragmentary system from a spike in oil prices, a war, and then the mortgage-banking crisis, ex-urban, ecologically fragile places, such as Florida, the Southwest, and California, collapsed economically. The ecology of the city that we have been used to since 1945, the growth machine of sprawl, has blown its fuse. The crisis allows us to rethink this ecology, which is really very opportune.

Fred Koetter It isn't the first time this has happened. I think it's interesting because there is an underlying group of people who try to understand the city in similar ways. They have different ways of identifying issues, but there is a common thread that runs through them. This is to understand how and when things happen in unpredictable ways in the city, either by natural or man-made disasters, and what might have caused these things and what their implications are; it gets generalized. Rem Koolhaas comes from a culture that doesn't like large generalizations, which is a good thing in that he assumes an open, flexible system that is not scripted, that is unpredictable, and that leaves room for speculation. When you put that sort of culture of speculation, or that mentality, next to what has existed historically in cities for a long time, or that has informed the profession of city planner, with the speculative approach, the new means of inquiry can have a transforming effect. This attitude of speculative inquiry, which is how Colin Rowe and I wrote about it in *Collage City* in 1978, still has great influence upon my interpretation of the city. Ultimately, that view can be boiled down to the realization that the art of predictability is not a precise art at all; in fact, that is where the planner is always called in to solve problems. The profession of city planner is trying to perfect policies, understandings, and facts, but the practice often has nothing to do with facts. How could it?

Since the writing of *Collage City* I realize that, in practice, now more than ever, there is a lack of pre-vision; the city is even less predictable than it was at the time we did that work. The simple text is that planning in a traditional way assumed things could be made predictable and analyzed for a predictable conclusion. *Collage City* was a challenge to that way of thinking, and it is not the way things work at all. Today, this means that we have to make assumptions in the way that the philosopher Karl Popper defines and posits conjecture. For him, there is no predictability; you have to assume some conditions of conjecture, which in Popperian terms can be tested only by refutation. For example, one might say the city should be like this or that, and there is the refuting of this or that—a testing of assumptions and speculations. The refutation does not mean that it is a fact, only that it doesn't add up to your own speculations. Conjecture remains a way until its establishment proves it. You try to put fifteen chairs into one room, but the room is not big enough—there you have a conjecture and refutation. It is not always based on statistics.

Grahame Shane How would you then define "conjecture" in cities, and how does conjecture relate to the block or the patches of the block?

Fred Koetter One example, urbanistically, is the internal and external life of the Asian block in Seoul, South Korea. Within the large blocks there can be many structures. Large streets define the edges within which there is a high degree of flexibility, which is incredible. A house can be internally organized, and the process that established that configuration doesn't affect or make a relationship to the hard edge. You have a set pattern of the major roads, which define the big blocks; the internal flexibility doesn't have to carry the load of the bigger streets, so that provides freedom. The bottom line in cities is that you have to have some things that are fixed and some that are not, so the city has to have some planned areas and some not. There is a balance that exists in that transition that makes the good city good; if you had a city of complete repetition and no means of breaking out, then that would not be good. There is fixed and unfixed, which is a basis for a theory. The system of streets is fixed, but it has predictability built into it.

Grahame Shane Within the frame there are a variety of patches.

Fred Koetter That is where the frame starts changing. There is another kind of opportunity. There are different ways of imagining the process of verification. Popper sheds light on the subject when he speaks about conjecture and repetition. Conjecture had an initial okay wherein people thought, "Yeah, that might work. Yeah, that's okay." Then you test it. If it doesn't work, it doesn't work, but it had a chance of working.

Grahame Shane Well, you don't have to build it these days to do that. You can test it with GIS or 3-D software.

Fred Koetter Right, but it still may not work. It is still a prediction.

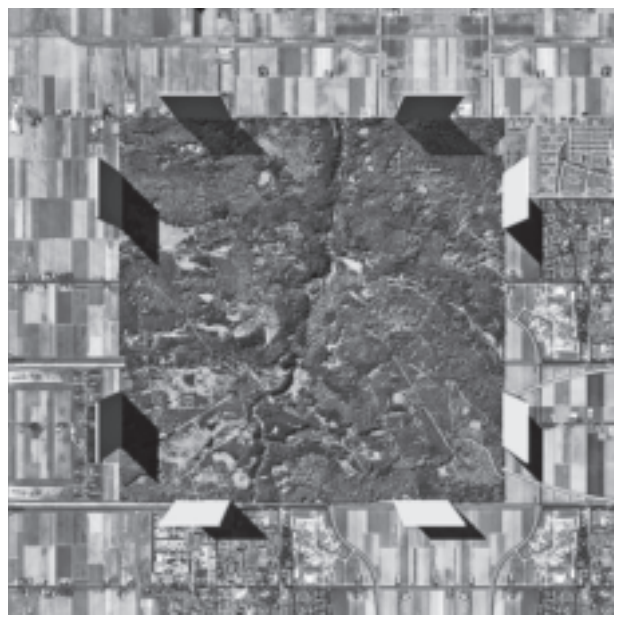
Grahame Shane But it raises all sorts of questions. You can ask those questions and maybe use a GIS model, and some of the things may have shifted around. But it's all possible.

Fred Koetter If ecology is about survival, that combination of the unpredictability of the dependable framework—the things that cannot be defined or predicted—is what constitutes the ecology of the city. The flexibility is what keeps creating new opportunities for survival and what keeps the city alive.

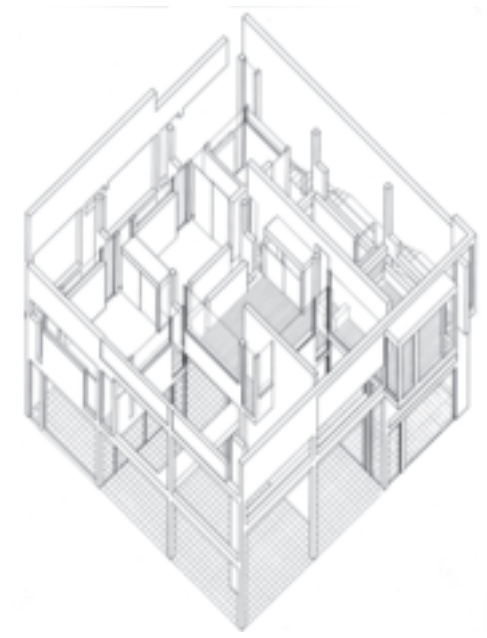
Alex Felson An ecologist focuses on biology and the constraints of the city when the issue of preservation and restoration of an ecological community is at stake. It's not about coupling urbanism as a dependable framework with the dynamic processes of an ecological community. But there may be an opportunity to capitalize on either the dependable or more stochastic aspects of urbanism to promote biological function. Ideas you mention of conjecture and planned, versus unplanned components of the city are subtle but critical perspectives on urban ecology, but not from the perspective of the scientist.

Fred Koetter I think that's true about conjecture. There's some sort of proposition, which seems to be something that would be worth looking for—that's what's important.

Analyzing Peter Eisenman



Pier Vittorio Aureli, Dogma Stop City, rendering, 2009.



Peter Eisenman, Autonomy House II, drawing, 1969–70.

Architecture: Impasse

New searches into architecture's autonomy

Architecture and architectural debate are in a state of impasse marked by the lack of strong positions, and thus a lack of oppositions in architecture. A reason for this impasse is perhaps the theoretical and historical education architects have received in the past few years: they have been taught the particularities of certain histories, theories, and practices, leaving them with a shattered mosaic of historical evidence that never assembles enough of a picture, not even momentarily, to trigger action or reaction, positions or oppositions. Consequently hefty debates about positions in architecture no longer exist in today's culture of dispersed political and strategic tiptoeing! What is wrong with opposition, with positions causing oppositions? Nothing! This prompted me to write the following manifesto:

Architectural Impasse
We are in a time of impasse!
After we learned not to learn about *the* history but histories,
After we learned not to learn *the* canon of architectural history, theory, and practice, but histories, theories, and practices we still enjoy,
After we learned not to learn about *the* discipline of architecture but any discipline.
It seems as if we who have learned those lessons have learned nothing except a 'dispersed multitude,' which leaves us dispersed in our thoughts and practices of architecture.
Those who taught us not to learn what they learned succeeded,
They succeeded and still succeed,
As they knew what they wanted us not to learn,
As they knew who they wanted to oppose,
As they knew why they wanted to oppose, what and who they opposed.
Being dispersed in a dispersed multitude we are left with nothing to oppose.
Any opposition, as much as any position, requires—even if only provisionally—its definition. Only that which can be defined as that to be opposed can be opposed.
In today's vast multitude of architectural histories, theories, and practices, no positions light up from within the mercy multitude—no wonder that neither oppositions nor positions are caused.

Consequently, hefty debates about positions in architecture no longer exist in today's culture of political and strategic tiptoeing!
What is wrong with opposition, with positions causing oppositions?
Nothing!
Obviously this is not a call for violent architecture debates, but a call for taking positions, risking opposition, producing architectural projects and polemics—and welcoming debate—rather than comforting oneself in the latest commercially successful and aesthetically elegant renderings of architecture.

Peter Eisenman is one of the best examples for such an oppositional attitude: his entire career has been marked by oppositions. Even Eisenman's most recent studio at Yale, in fall 2009, was set up in this spirit of thinking—countering the intellectual impoverishment, amnesia, historical and theoretical ignorance he diagnosed as being the cause of today's architecture. Eisenman is in good company with his diagnosis: his sometime collaborator at Yale, Italian architect and theoretician Pier Vittorio Aureli, has critiqued in his writings the "dispersed multitude" that has led to "political-intellectual agnosticism and stagnation over the last decade" in the discipline of architecture. (See *The Project of Autonomy: Politics and Architecture Within and Against Capitalism,* Princeton Architectural Press, 2008.)

For Eisenman the problem is generational. It is linked to the education of architects as much as to the use of the computer and computation; is closely linked to the younger generation's fascination with the tools and the techniques to generate Architecture. Young architects, Eisenman says, are obsessed with parametric design without knowing or having even studied the inherent parameters of architecture. Architecture is therefore no longer motivated "from within" but rather "from without." Scientific constructs, mathematical formulas, and biological and physical phenomena seem closer to the young architect's heart than his or her own discipline: architecture. The result is a formulaically derived formal exuberance stemming from the confusion between form-making with architecture. Often grotesque and uninhabitable "architectures" emerge as the outcome of the latest coding experiments. Architecture is optimized according to a few parameters, neglecting all others. Those who preach a parametric architecture with the aim of producing a more differentiated architecture that appropriately reflects its own environment's complexities, are in fact reaching for an undercomplex reductionism.

At Yale, it seems this development has to be brought to an end, or at least needs to be imbued with criticality as Eisenman suggests, in his studio, that architecture and the theory of architecture should return to the celebration of architecture's autonomy. (An interesting déjà vu effect occurs: in the 1960s and 1970s rather uncritical obsessions with computation and scientific methodologies ceased to engage with architecture as such and triggered a strong call to refocus on autonomy in architecture, through Eisenman in the United States and the New Rationalists, such as Aldo Rossi in Italy.) Eisenman's Yale studios can be seen as tests for a return of this inquiry into architecture's autonomy and to the search for architectural grammar. It is perhaps ironic that Eisenman, now in his mid-seventies, is returning to the project he started his career with in the late 1960s. This return is even more remarkable since its motivations have also reappeared. At that time Eisenman inquired into architecture's autonomy in opposition to the Method Movement in England and the logics of computation he had encountered while studying at Cambridge. Today the same agents are threatening the discipline of architecture, and again Eisenman's response is: "Focus on architecture's autonomy!"

The new development is that Eisenman found in Aureli a much younger cheerleader knowledgeable about the 1960s projects of autonomy in Italy, and eager to extend these projects through his future design work. However, each has something entirely different in mind: Eisenman's critical research into the autonomy of architecture began with his provocative analysis of the work of Italian Fascist architect Giuseppi Terragni, arguing that the formal syntax of the Casa del Fascio, in Como (1932–36), could be entirely separated from its political semantics.

Eisenman's own work, in particular the early "10 Houses," continued this research into architecture's autonomy and its deep syntactical structure. Programmatic and sociopolitical aspects of architecture were thereby widely neglected. Eisenman considers his work critical in the sense that it is critiquing from within the architectural discipline. The aim is to critique and reinvent architecture continuously, not from outside of the discipline but from within. It is a position that received harsh criticism from the postcritical advocates of Sarah Whiting and Bob Somol. Eisenman, the "father of critical architecture," as the postcriticals at Columbia's "State of Architecture" conference in 2003 labeled him, remains unimpressed and follows his research in autonomous and critical architecture with his "Design for the City of Culture."

In contrast, Aureli does not conceive of autonomy in merely aesthetic terms as Eisenman does; instead, he follows the Italian Rationalists of the 1960s and 1970s, still associated with a political rather than an aesthetic critique. It is from this motivation that Aureli researches the autonomy of urban politics. Therefore, architecture and urbanism are at once elevated and reduced to rhetorical devices. In "Architecture as Framework: The Project of the City and the Crisis of Neoliberalism," Aureli and Martino Tatarra describe form as following nothing other than itself. Form is the precondition for the establishments of boundaries that define the inside and the outside. In this function architectural form is part of the political process of inclusion and exclusion.

Clearly relating their argument back to Aldo Rossi's discussion on the architecture of the city, Aureli and Tatarra suggest the physical artifacts of forms are embodiments of political and cultural specifications. Aureli's project, "A City Without Landmarks: A Proposal for the New Administrative City in the Republic of South Korea," tries to find answers.

Located two hundred kilometers south of Seoul, on a 73-square-kilometer site, Aureli's multifunctional administrative city tries to find a grammar that would establish the principles for the urban fabric without actually determining the architectural fabric itself. Aureli's reductionism deliberately reduced architectural form to a frame that is void of any rhetoric except that of the presence of its own form. Here architecture is reduced to a framing device.

Borrowing from Archizoom is obvious and intentional: while the Italian group's "Non-Stop-City" (1968–72) suggests a city as an endless, formless expansion of infrastructure and mobility, Aureli proposes "Stop City" (2009) which emphasizes limits with the aim of reducing the city's complexity and return to a very simplified architectural form—an architecture "freed from image, from style, from the obligation of useless innovation of new forms … and from itself, as to constitute itself as the very framework for the city."

Aureli's work reproduces the modern urbanism of functional segregation, resulting at best in a polemic that is spatial, social, and political reductionism, and consisting of monotonous grids lined by Hilbersheimer blocks—a rhetorical tour de force that reduces architecture and its inhabitants to uniform addressees as it condemns living and working in the chicken coops. Nevertheless the project refreshingly opposes today's dispersed multitude of continuously differentiated curvilinear architectural forms, and its polemic, although borrowed, is a refreshing opposition to the formal exuberance of contemporary architecture. However, its failure is its critical uncriticality: the naïveté with which "form" is assumed as the all-potent agent that works simply through its mere ontological existence. Never once is it apparent how the project works or how it becomes a socio-political agent of a new autonomous, zero-degree architecture reduced to a chicken-coop-like urban framing device.

Indeed, this is the end of architecture: when "architecture is freed from itself," as Aureli and Tatarra put it in "Architecture as Framework." The language spoken by this city may have a grammar similar to the Hilbersheimer building block. This is "a deliberate vertigo of nothingness, of emptiness," which imprisons and frames life within its grammar on a micro (living and working cells) and macroscale (urban cells).

Obviously Aureli's notion of architecture's autonomy is diametrically opposed to Eisenman's understanding of it: while Eisenman's forms are motivated from within the discipline of architecture, Aureli's are entirely unmotivated, in the sense that their sole motivation lies within themselves, in their mere ontological existence, which is expected to have—as a device to organize space—social, political, and technological implications. Aureli's uncanny urban visions leave precisely the hauntedness, the de Chirico-like absence of all that, which constitutes the political: namely, life.

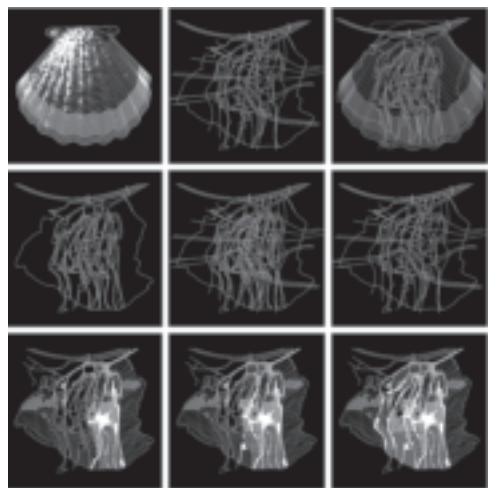
Impasse continued

Obviously the return of autonomy in architecture has reached an impasse, one that has drawn attention to that caused by the disciplines' "fatalistic consent," which left most of us without orientation, position, and opposition.

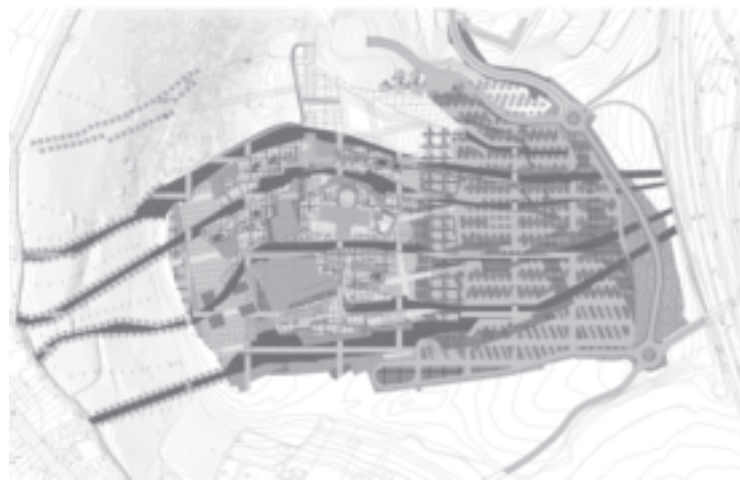
What is next if we end the "dispersed multitude," marking today's architecture, along with its apolitical and utterly meaningless formal exuberance, the resultants of the non-standard paradigm?

Perhaps Eisenman and Aureli will provide a way out of the impasse in their next projects. So far neither of their concepts of autonomy seem to be viable solutions or returns to architecture—or, more precisely, to today's architecture. Perhaps the reason for this can be found in their forgetfulness that they need to address the question: what *is* the architecture that we need and can return to today? It seems problematic to assume that the means of the past will help us pave the way to the return of architecture. While Eisenman and Aureli may keep searching in the past and the present for the appropriate means for the project they are committed to, it is up to everyone to stop being afraid to take positions about architecture itself—and subsequently oppositions—and begin to find our respective returns to architecture. Whether this will be a critical or autonomous architecture has yet to be seen, as the entire search may not even be all that relevant today.

On the occasion of the opening of the Galicia City of Culture, Ingeborg Rocker dissected both the Yale studio and the new building by Peter Eisenman, the Charles Gwathmey Professorship in the School of Architecture.



Eisenman Architects, Galicia City of Culture, Santiago, Spain, Diagrams and Volumetric analysis, 2004, courtesy Eisenman Architects.



Eisenman Architects, Galicia City of Culture, Santiago, Spain, diagrams, 2004, courtesy Eisenman Architects.

Eisenman Architects, Galicia City of Culture, Santiago, Spain, section model, 2004, courtesy Eisenman Architects.

Eisenman Architects, interior view of Galician National Archive, Galicia City of Culture, Santiago, Spain, main entry level. Photograph by Manuel Gonzales Vicente. Courtesy Fundación Cidade da Cultura de Galicia, 2010.

Eisenman Architects, Galicia City of Culture, Santiago, Spain, showing the Hejduk Towers, an integral part of the City of Culture complex. Photograph courtesy Eisenman Architects.

Artificial Excavations

Galicia City of Culture

Two buildings of "Galicia City of Culture" ("Cidade da Cultura de Galicia"), designed by Eisenman Architects for Santiago de Compostela, open on October 20, 2010. The complex, one of Peter Eisenman's largest works, is a new 141,800-square-meter cultural center comprising six buildings: a museum devoted to Galician history, a contemporary art museum, the National Library, the National Archives, a research center for heritage, and a performing-arts center, all situated on a single site on Mount Gaiás, in the pilgrimage city of Santiago de Compostela, in northern Spain. Devoted to Galician culture past and present, the center is intended as a meeting point for research, creativity, and cultural activities.

The complex's entryway and information center is marked by two towers, designed in 1992 by architect John Hejduk for the Belvís park. Hejduk died in 2000, and the towers were not built until Eisenman suggested their construction in 2002 as a tribute to his friend.

Upon completion the complex will be fully integrated into the landscape, and the constructed stone composition of the roof will extend the natural topography of Mount Gaiás. The City of Culture Forest, a woodland, and five footpaths, also designed by Eisenman, ensure the transition from the architectural topography to its surroundings.

The design for the City of Culture can be seen as a great synthetic moment in Eisenman's work since many of his previous inquiries are realized here, some for the first time. In particular the 1980s "Cities of Artificial Excavation" projects and the 1990s smooth, continuous figure-ground topologies come to mind. "Cities of Artificial Excavation" countered Eisenman's 1970s houses that inquired into syntactic structures of "architecture's autonomous, self-referential language." With the "Cities of Artificial Excavation" Eisenman began to engage with the particularities and semantics of physical sites. In fact, the sites themselves became the loci of his interventions: it was here that present, past, and fictional histories were used to construct architectural topographies.

A similar strategy is now used in the Galicia City of Culture, where Eisenman's project layers three sets of information on the hilltop site: First, the form of the plan of the medieval center of Santiago de Compostela, a historic pilgrimage city; second, a modern Cartesian grid laid over the medieval routes; and finally, the topography of the hilltop, which distorts the flat geometries of the previous two sets of information, resulting in a topologically thick surface that is both figure and ground. The figurative starting point for the design process was the *venera*, the scallop shell symbol of Santiago, which was superimposed on the hilltop's topography and thus roughly determined the project's circumference. Superimposing the street pattern of the medieval center onto the site resulted in five major streets that differentiate the architectural topography into its various functional building components. They separate and link the different building components, connecting them with one and another as well as the entire cultural city to its surroundings.

The Cartesian street grids leave three-dimensional traces within the new complex as they become materialized in the overall building organization and the structural and façade systems. Nevertheless, none of these logics dominate the others; rather they continuously challenge one another, leaving indexical marks of their interrelations throughout the design. The result is a highly complex matrix of different interrelated systems. In addition, this "systematic collapse of systematicity" is set in tension with programmatic, structural, and material constraints. Throughout the building Eisenman renders this struggle of competing logics visible. Changes in geometry and material highlight the superimposition of logics, turning Eisenman's architecture once again into a palimpsest of its design formation and logics.

The architecture is marked through the continuation of the ground, and the subsumption of the architectural figure into the ground with the emergence of figuration achieved through a carving into the existing topology of Mount Gaiás. The continuity of the mountain topography, as much as the that of the building's geometries, is interrupted through the interaction of various elements with one another, yet remains legible throughout the complex. This "continuous discontinuity" or "discontinuous continuity" becomes particularly apparent in the roof topography, where a continuous smooth stone surface is fractured through lines representing the fictitious histories and logics grafted onto the site. Multiple, often incompatible, readings become possible within this strongly figured topography.

From Index to CodeX:

The readings are enabled through indexes, traces of a former presence. In this case the hilltop topography, the shell, the medieval street pattern, and the Cartesian grids leave their indexical trace as a footprint in the Galicia City of Culture.

As in many of his previous projects, Eisenman uses the index as a clue to the readings his building provides. Here form follows not simply form nor index, in the sense of a process leaving a simple trace, but rather form follows a set of rules. For the Santiago project Eisenman argues that neither code nor indexes, in the traditional sense, were used:

> "The idea of code is [here] not used in a restrictive sense but rather like a DNA code with the possibility of reorganizing a context. … Coding is a process that, in its reorganizing or rewriting of the original, erases the traces of process usually found in an index. This rewriting, or rereading, is different from that which is recognized by formal or pictorial conventions." (Eisenman in *From Index to CodeX*).

Eisenman claims that the Santiago complex marks an important shift from index to coding, suggesting that the different information sets that constitute the project (shell = rough outer limits of the project and park), site topography (topography of roof and plaza, deformation-organization lines throughout the building, façade construction), Compostela map (streets that differentiate the complex into 3 x 2 building complexes), and Cartesian grids (structure, façade, stone roof) act—as they reorganize and rewrite each other—like codes. Each of these formal traces become contexts for one another, reorganize and become reorganized. Eisenman compares this activity with DNA code, which also has, he argues, the capacity to reorganize its context, namely the body it constitutes.

I would argue that Eisenman's Santiago project is not marking this important shift from index to code since he still seems to elaborate his design strategies not on abstract nonfigurative code but on figurations. The elegance of any code's operation (including that of the DNA genotype, a cell's genetic constitution) is its abstraction, its formlessness, which may result in form (DNA's phenotype, its observable traits). Starting the project in Santiago from pregiven formal traces (Medieval city plan, Cartesian grids, shell, etc.) is counter to the formless logic of code's operation. Codes are never a form but rather a set of rules, such as those for repetition and scaling, which may result in form. As in all of Eisenman's previous projects, this one does not escape the formal operations he is so accustomed to, and misses engaging code on the level of code. Any conceptual engagement with code would require a suspension of the will to work with form. Form would, and could, only be the result of code's writing and rewriting processes, which may or may not assemble anything formally known. To think of code as form is to confuse the phenomenon with the generative logic that sets it forth.

Eisenman's project for Santiago clearly does not depart from the figural approach. On the contrary, it is a renewal of his unbroken will to form, to signify with form. His interest in the autonomy of architecture prohibits a reduction of the design of architecture to the design of an algorithm (logical framework) according to which design versions could emerge. Eisenman instead determines every inch of his forms explicitly in light of architecture's past and present discourse. Knowing this, it is surprising to see how some of the roof details do not line up where the material logics of fabrication derail the otherwise compromiseless authoritarian formalism. Nevertheless, the will to form—a will to architecture—remains the dominant theme in Eisenman's architecture, which still has at its core the belief in the autonomy of architecture, in the autonomy of architectural form.

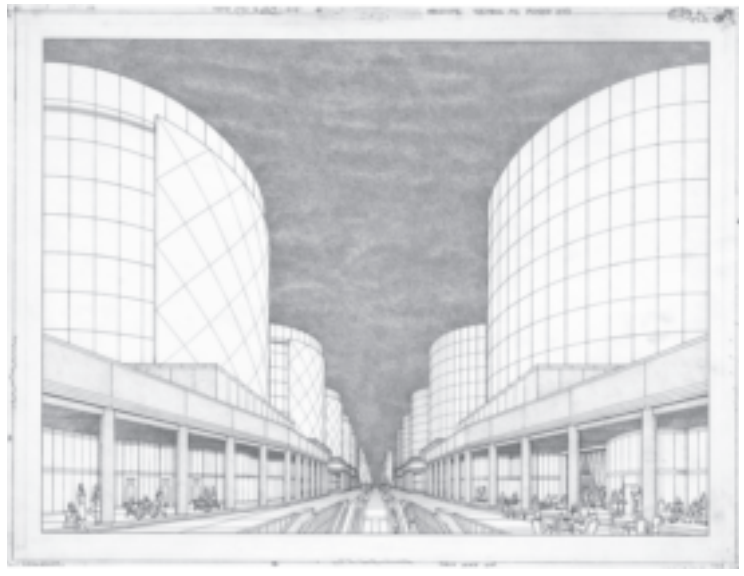
Eisenman's project remains critical because the design can be seen as a site of disciplinary critique conducted through the reading, interpretation, and reproduction of existing logics of operation. The critique of architectural discipline is uttered in and through the means the discipline provides. Eisenman's design for the Galicia City of Culture—as much as his recent studio at Yale University with Pier Vittorio Aureli—can be seen as a clear rebuff to the advocates of a postcritical design practice.

The clash of different rational logics of spatial organization, and the indexes they leave in the City of Culture, indicate Eisenman's criticism of the discipline's uncritical dependence on these design logics as they have dominated our designs and representations. Today, as years ago, Eisenman's stubborn persistence in fighting the discipline's status quo, much as computation challenges to threaten the discipline's very existence, has a refreshing oppositional note. The strength of his work lies precisely in its insistence that Architecture, more than anything else in Architecture, matters.

—Ingeborg M. Rocker
Rocker is an assistant professor at the Harvard Graduate School of Design.

James F. Stirling Architect & Teacher

On the occasion of the opening of two exhibitions on James Stirling, Anthony Vidler, dean of the Cooper Union School of Architecture and curator of the



James Stirling (Firm), *Siemens AG Headquarters, Munich, Germany: perspective,* 1969–1970, ink, colored pencil and graphite on paper, 47.3 x 61.9 cm, courtesy James Stirling/Michael Wilford fonds, Collection Centre Canadien d'Architecture/ Canadian Centre for Architecture, Montréal.

James Frazer Stirling, *View of oast house, United Kingdom,* 1950s–1970s, gelatin silver print, 6.9 x 9.9 cm, courtesy of the James Stirling/Michael Wilford fonds, Collection Centre Canadien d'Architecture/ Canadian Centre for Architecture, Monrtéal.

Anthony Vidler The exhibition, *Notes from the Archive*, is the result of the cataloging of the James Stirling archive at the Canadian Centre for Architecture. It seems the passing of time has allowed for a historical perspective on the work of an architect who had an extraordinary influence while he was alive. An early recipient of the Pritzker Prize and a RIBA gold medalist, Stirling built widely in Great Britain, Germany, the United States, Italy, and Singapore. His work was, despite a certain amount of controversy, a heroic attempt to overcome the uniformity of International Style Modernism, and his teaching in Europe and Yale was inspirational to generations of students. It is appropriate to look back on this mercurial figure in order to look at his own aims and design processes in terms of the approaches, ideas, themes, continuities, and discontinuities in the light of contemporary interpretations that simply looked at superficial changes in his style. Second, Stirling has always been thought of as someone who didn't theorize, yet his notes and writings show that his "theory" is deeply embedded in the design process itself, rather than being applied to the work from the outside.

Emmanuel Petit Stirling was one of the most influential professors at Yale from 1959 to 1983. An entire generation studied with him. From the series of interviews I conducted with some of his former students for the show *An Architect's Legacy,* it became clear the reason many students came to Yale was to study with Stirling. Robert Livesey explained that Stirling's "theory" was more to be understood as "a working method"—an expression Livesey borrowed from Robert Maxwell. As you say, opposed to theorizing as a philosopher, he theorized by working through the design material itself. I hope both exhibits bring that out with regard to Stirling's work: he was very much an architect's architect as well as an architect who theorized through doing.

AV He had very strong ideas about architecture, with a deep knowledge of architecture of all ages but particularly the Modern movement and the Corbusian moment. He had a desire, expressed early on, and a will to overcome the difficulties of inheriting the "heroic age" of the Modern movement, as Peter Smithson called it. After the passing of the "masters"—Corbusier, Mies, Aalto, Wright—the younger generation of the 1950s was faced with the need to develop an architecture that, without denying modernity, nevertheless could respond to the needs of the postwar period, its demands for social housing and its emerging mass culture. As we know, many turned against the Modern movement. Some, such as Team Ten, took an anthropological social view. Stirling himself was inclined to examine the traditional and modernist roots of architecture in order to extend and adjust their languages for present needs. The basics were for him the question of the program, conceived not simply as a list of spaces assigned by a brief. In the archive we find briefs, in the margins of which he already had begun to sketch combinations of functions. For him, the program was volumetric from the outset. Once the volumes for each function had been identified, he would search for the appropriate means to bring them together; the volumes are brought together programmatically through circulation. The final move was the adjustment of these combined volumes according to the context—their "associational" references, how the building might in some way be meaningful to the outside world.

EP Yale graduate Robert Kahn ('80) gave us one of the sketches he and Stirling had worked on together at a desk crit, and it showed the unfolded volumetric shapes of the Carpenter Center laid open as if the building was gradually transforming into a sequence of publicly accessible spaces. The drawing seems to unravel the program of the building—not only the functional program but also the formal program of Modern architecture—into the updated version of Kahn's own project. This sketch is a quasi-didactic illustration of Stirling's working method, and it is so exciting to see, in a simple sketch, the whole thematic of Stirling's relationship to Corbusian Modernism.

AV And that's exactly what Stirling did with the three museums, Düsseldorf, Cologne, and Stuttgart. He identified some of the most important urban incidents in Modern movement architecture, such as the entry elements of Corbusier's Salvation Army Hostel, decomposed them, and recomposed them through his reading of Neoclassical museums, especially the Altes Museum, bringing them into conjunction with the site. You are correct in assuming that early in his career, when he was attempting to construct new typologies as in the Leicester University Engineering Building and Cambridge University History Faculty building. But as he moved into more urban projects, the disassemblage of those typologies began to construct *partis* that could be inserted into a context, sometimes almost invisibly, as in the large open cylindrical courtyards in Düsseldorf and Cologne.

In the book I wrote to accompany the exhibition, I make the argument that, for Stirling, typology is neither fixed nor mechanical, nor entirely submerged into collage, as in Colin Rowe's version of Nolli's 1748 Plan of Rome. And that is where I think he stood his distance from Colin Rowe and Rowe from him. There are two major influences: the Corb effect and the Rowe effect. If you look at Stirling's thesis, which has been thought to be totally influenced by Rowe, it actually reflects more of the 1930s and 1940s Modernist British architects such as Tecton and Ernö Goldfinger, who were inspired by Russian and European Modernists.

EP One must also look at him in terms of Post-Modernism, and when I wanted to provoke his former students to address the issue, I noticed it always created some kind of resistance, as if they were saying, "Our master could not have been a Post-Modernist." However, some claimed that Post-Modernism is really too broad a category to even talk about, because what would it mean to call him a Modernist, a late Modernist, or a Post-Modernist? But what I found interesting is that everybody had to acknowledge that something major happened in his way of conceptualizing architecture near the 1970s, when the themes he previously had an interest in (in the 1950s and 1960s), turned into something else. For me, it is just a truism to claim that this "something else" was merely a modified version of his earlier work; we should talk about the emergence of his explicit humor and of his witty self-negating forms, which start to be central to his architecture after Derby and certainly after Düsseldorf. In this time, even the drawing style and appearance changed; this was partly due to his own evolution as an architect but was also influenced by the changed cultural significance of the architectural drawing in the 1970s—think of John Hejduk, Michael Graves, or the MoMA's Beaux-Arts show in 1975. In talking with Leon Krier, he claimed that the drawing technique was all due to him; everybody else had doubts that this was the main reason.

AV Certainly the archives demonstrate that everything for which Krier has claimed responsibility, were tendencies already in the office. The different styles of axonometric drawing already had been explored in the office, including the top down and the bottom up, as seen in Choisy. Also, Modernism was already seen as returning from and originating in the ideas of Neoclassicism. It was Rowe in 1949 who had established the underlying academicism of Modernism, and this had been confirmed by Banham in 1960. Stirling understood this, and this is where he departed from the Smithsons, who still wanted to be Modernists in relationship to their programs. Stirling was, as you said, an architect's architect and was open to looking at the entire architectural heritage. What separates Stirling from these narrow Post-Modernisms of citation is that Stirling was never deliberately historicist in his evocation but was always abstractly historicist. His *partis* may have played with symmetry, but they also destabilized symmetry at the same time. The "drum" in Düsseldorf, Cologne, or Stuttgart could then be seen as the drum outside of Corb's Salvation Army Building, or it could be the drum of an empty Altes Museum—it was very abstract.

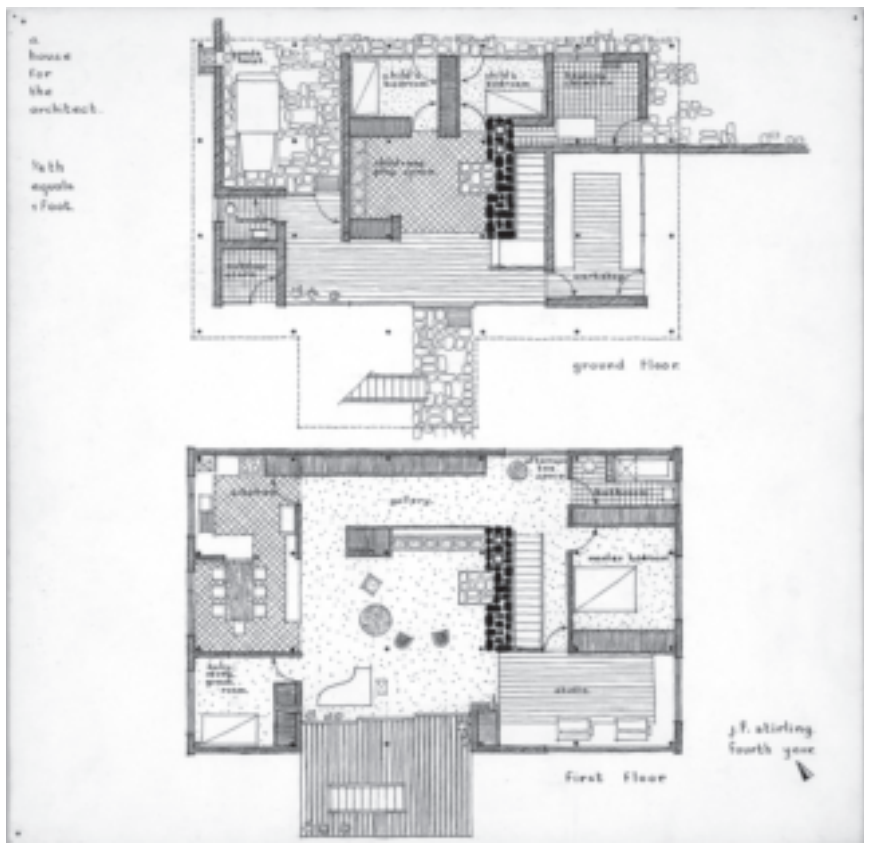
EP Stirling would show up three times during the semester for about a week each time and spend all his time in the studio. The students described him as being very casual in his discussions with them and in desk crits. He constantly would have a pencil in his hand and sketch little doodles that became smaller and smaller as his belly became bigger and bigger, because he was increasingly distant from the paper and couldn't do big movements. He was interested in the overall *parti* and would draw the whole building, the envelope with the circulation. All the little sketches that were taken from the students' desks consistently showed the whole building with the public path leading through a series of volumetric forms. There would be many sketches on the same page, but the student was left without big conclusions, but …

AV … a process. Process takes something, disaggregates it, and then puts it back together again, only to disaggregate it. In the exhibition I take three projects: the Wissenschaftzentrum, which was built, the Latina Public Library, which was not built, and the Bibliothèque National competition. I chose the competition proposal because, as it was so condensed, a flip book could be made out of the series of iterated *partis*. It's almost as if these little drawings are moving on the page. Stirling's process was embedded in drawing from the start—he would start off drawing on the back of an airplane ticket and end up with a building.

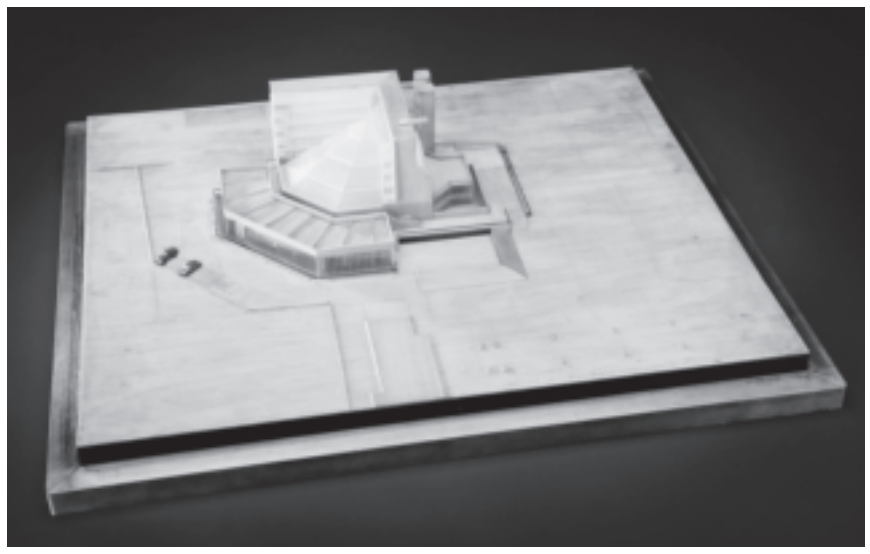
EP In hindsight, you can always reconstruct what would follow from earlier moments in history—once you know what the whole thing is. Then you can say it was already all there from the beginning. I am a bit skeptical of such an approach, as it builds smooth continuities out of a potentially very heterogeneous series of historical occurrences.

The structure of our show at the School of Architecture emerged from the work Stirling's former students submitted to us: the series of studio assignments and student's projects suggest their own narrative, while many parallels with Stirling's career are apparent. The first part of our show is called "Articulated Functionalism" and starts in 1959, when Stirling begins to teach at Yale as a visiting critic. The student projects in this portion show a stronger influence of Rudolph and Kahn than Stirling. This is partly due to the fact that Stirling wasn't there as much as he would be later, after the mid-1960s, when he became the Davenport Professor, (a chairmanship he would share with Robert Venturi for five years). In this section of the exhibit, there are projects for a hotel in New Haven and the Fort Worth Museum, with student work by Robert Finkle ('60), James McNeely ('60), and Der Scutt ('61). The second part is called "The New City" and includes Steve Heiken ('71), Doug Michels ('67), and Craig Hodgetts ('62), in whose work you see Archigram graphics. The next section is titled "Urban Insertions," and covers the early to mid-1970s. It includes studio projects for the Mellon Center for the Arts in New Haven, (now the Yale Center for British Art), a project for Yale student residences at Whitney Avenue and Grove Street, and the Düsseldorf Museum, with its sense of fragmentation, and public path and the ruined façades that Stirling used in his own projects. There is also his 1970 Derby project, in which the round plaza appears. In the next section, "Architectural Agglomerates," we show two studio projects: the Tehran Museum of Science and Technology and the Tuscany Government Center. Finally, the last section is "Fragmented Monumentality," which includes all the museum projects—Stuttgart Staatsgalerie, the Fogg Art Museum, the Hood Museum, the Tate Museum addition, as well as the Cornell Performing Arts Center. This large part of the exhibition will be shown in the center of the architectural gallery of Rudolph Hall—with students including Richard Clarke ('79), Patrick Hickox ('79), Robert Kahn ('80), Alex Gorlin ('80), John Boecker ('82), Frank Lupo

exhibition *Notes from the Archive: James Frazer Stirling, Architect and Teacher,* at the British Art Center and Emmanuel Petit, associate professor at the Yale School of Architecture and curator of the Yale School of Architecture exhibition, *An Architect's Legacy: James Stirling's Students at Yale, 1959–1983,* met to discuss the exhibition and their perspectives on the work and the teaching of Stirling.



James Frazer Stirling, *House for the Architect: plans,* 1949?, ink on cardboard, 25.1 x 25.5, cm, courtesy James Stirling/Michael Wilford fonds, Collection Centre Canadien d'Architecture/Canadian Centre for Architecture, Montréal.



James Stirling (Firm), *History Faculty Building, University of Cambridge, Cambridge, England: presentation model,* 1963, wood, plastic, graphite and metal, 57 x 67 x 15 cm (largest), courtesy James Stirling/Michael Wilford fonds, Collection Centre Canadien d'Architecture/Canadian Centre for Architecture, Montréal.

Unknown photographer, *Portrait of James Stirling,* ca. 1960, gelatin silver print, courtesy James Stirling/Michael Wilford Fonds, Collection Centre Canadien d'Architecture/ Canadian Centre for Architecture, Montréal.

('82), Tim Lenahan ('84), and Marion Weiss ('84), among many others. We picked about ninety original drawings from seventy-five students to tell the story of Stirling's studios in his quarter-century-long teaching career and provide a graphic pathway through the gallery which leads from episode to episode … a bit like in his own architecture.

AV In the exhibition at the Yale Center for British Art, we have some 380 objects chosen from some 50,000 at the CCA. In my first cut, I brought it down to 5,000, then 2,000, then 500, and finally 380. My idea is a less monographic exhibition, not always chronological, but it does begin with his first projects at school and ends with Braun in Melsungen, his last built project. The exhibit's narrative is an entryway into how an architect's mind works and how that process is transformed into the way in which an office works. In a sense you're entering into an active archive of a working office, and the show demonstrates its working method. We start with a rather straightforward juxtaposition—Stirling's so-called "Hope Chair," depicted by Krier in the lobby of the Milton Keyne's Olivetti headquarters—facing his Corbusier chair, conversing with one another as do Classicism and Modernism; these chairs that also represent Stirling's lifelong passion for collecting furniture. The first section is "Stirling at the School"—the school being the Liverpool School of Architecture—which shows projects which nobody has seen, in the style of Marcel Breuer, Bruno Taut, Expressionism, Modernism, and Corbusianism.

The books he read in school are displayed, and we have a full presentation of his thesis project for a whole town center. Part of the thread of the exhibition is to demonstrate his original interest in urbanism from the start. We have photographed the entire book that he made for the presentation of his thesis for a new town, the program of the new town, the program of the center, and his sources, such as Clive Entwhistle's projects for the new town center before Stirling got there. The exhibit then follows his move to London, his brief experience as a town planner, his plans for St. Alban's, and then his confrontation, if you like, with Modernism as he worked in various London firms. And, of course, the dilemma of what to do after Modernism? We have a notebook from the early 1950s in which he recorded his readings and his impressions of his visits to Corbusier buildings in Paris, his theories on how Modernism evolved, his diagrams about how Modernism moved to the present, and his hopes and aspirations for himself as an architect who would be able to overcome the heavy burden of Modern movement legacies.

We also have his bird-watching notebook and dozens of his photographs of architecture arranged in parallel ways. We see his emerging interest in what he calls the "Functional Tradition," or the British vernacular of industrial and rural buildings. There are his permits to photograph the Liverpool docks, and photographs of houses, kilns, and castles, which are in a section called "Struggling with Corb." It demonstrates how he resolved the struggle with his precedent-setting quasi-vernacular, quasi-Modernist housing project at Preston, in Preston, Lancaster. The exhibit then follows the trail from his housing in Runcorn new town to the housing project built in Lima, Peru, at P.R.E.V.I., which was perhaps the most successful of his housing projects. Working with the United Nations on an international competition launched by Peru's socialist government between 1967 and 1971, he developed a prefabricated structural system the owners could build in, up, and over as a growth system that was, in a recent survey of owners, judged the most successful architecturally. To me, that gently of assuages some of the vitriol that has been launched against Preston and Runcorn, which were left unmaintained and eventually demolished.

The next section is called "New Typologies," starting with the projects for Selwyn College, Cambridge, and moving all the way through Leicester, St. Andrews student housing to the Florey building in Oxford. "Urban Assemblages" shows how these new typologies were disaggregated and inserted into the city fabric in the museum projects. Buildings at Cornell, Harvard, and Berlin, indeed, became little cities within themselves. Then, we enter a room called "Content into Form," in which we demonstrate the process of design with the Wissenschaftszentrum, the Latina Library, and the Bibliothèque Nationale.

We end the show with the Braun Headquarters in Melsungen. In responding to Emmanuel, yes, you can always look back at as a historian, but Stirling was always looking back as an architect. Projects continuously reappear in his work so that the weathervane on the top of his thesis building becomes the weathervane in Florey, the unbuilt Olivetti Headquarters becomes the Braun Headquarters, in Melsungen. He always is working on his own architecture. His projects for *Roma Interrotta*, which is at the center of "Urban Aggregates," shows how he is using his own buildings to construct a little city outside of the walls of Rome.

To me, what has been a revelation from the archival research is to see how he was always working on new subjects in new contexts but with material he stored away from a previous work. The possibilities for the so-called "striped pajama" buildings are there in his first architectural tours of Italy and finally emerge in Cornell, where they become a hill town. Another revelation was his ability to manipulate volumes; for him, unlike for Le Corbusier, the plan is not the generator and neither is the façade—his buildings are always, literally, axonometrics. Once inside, you feel you are in space that is carved out, organized as space.

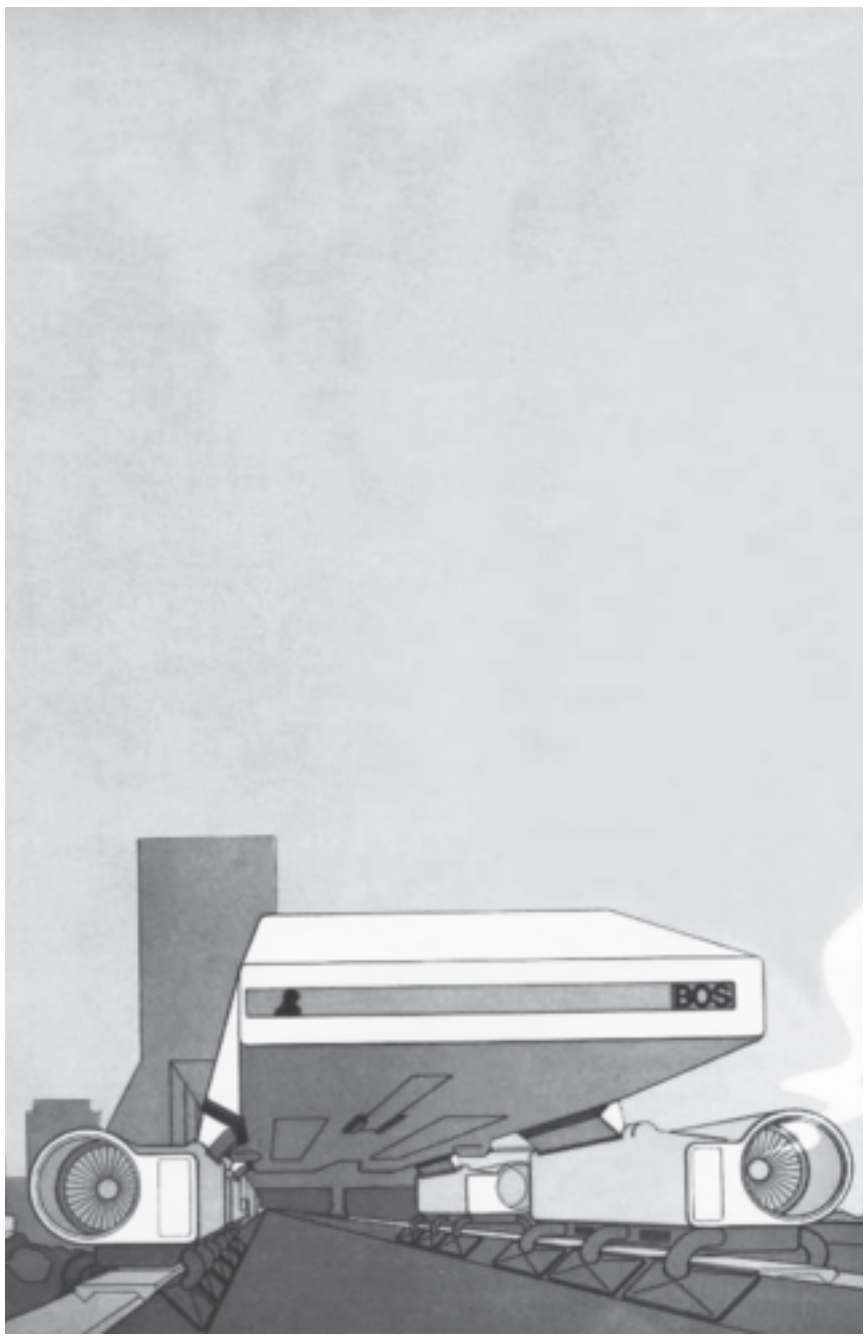
EP For me, the exhibition of the student work has revealed the similarity between Stirling's own work and the work produced by the Yale students. You can see a synchronicity between Stirling's thinking and what the students were making. Sometimes, however, you see slight deviations and diachronies between the two: both occurrences are important in evaluating what the value of teaching is! On the one hand, teaching is a mimetic exercise, and especially with a figure like Stirling, students liked to emulate whatever the "master" was doing; it is safe to say that nobody will miss this point in our exhibition. On the other hand, however, we all also cannot help but like the Socratic teaching method, wherein an individual is encouraged to find his or her own working method. When you are working in direct contact with a teacher, you get so influenced by them that the world starts to look like theirs. Perhaps that was the case back then as it still is today. Maybe it just takes a while before whatever you learned gets absorbed, and your own voice starts to come forth.

James F. Stirling on Exhibit Fall 2010

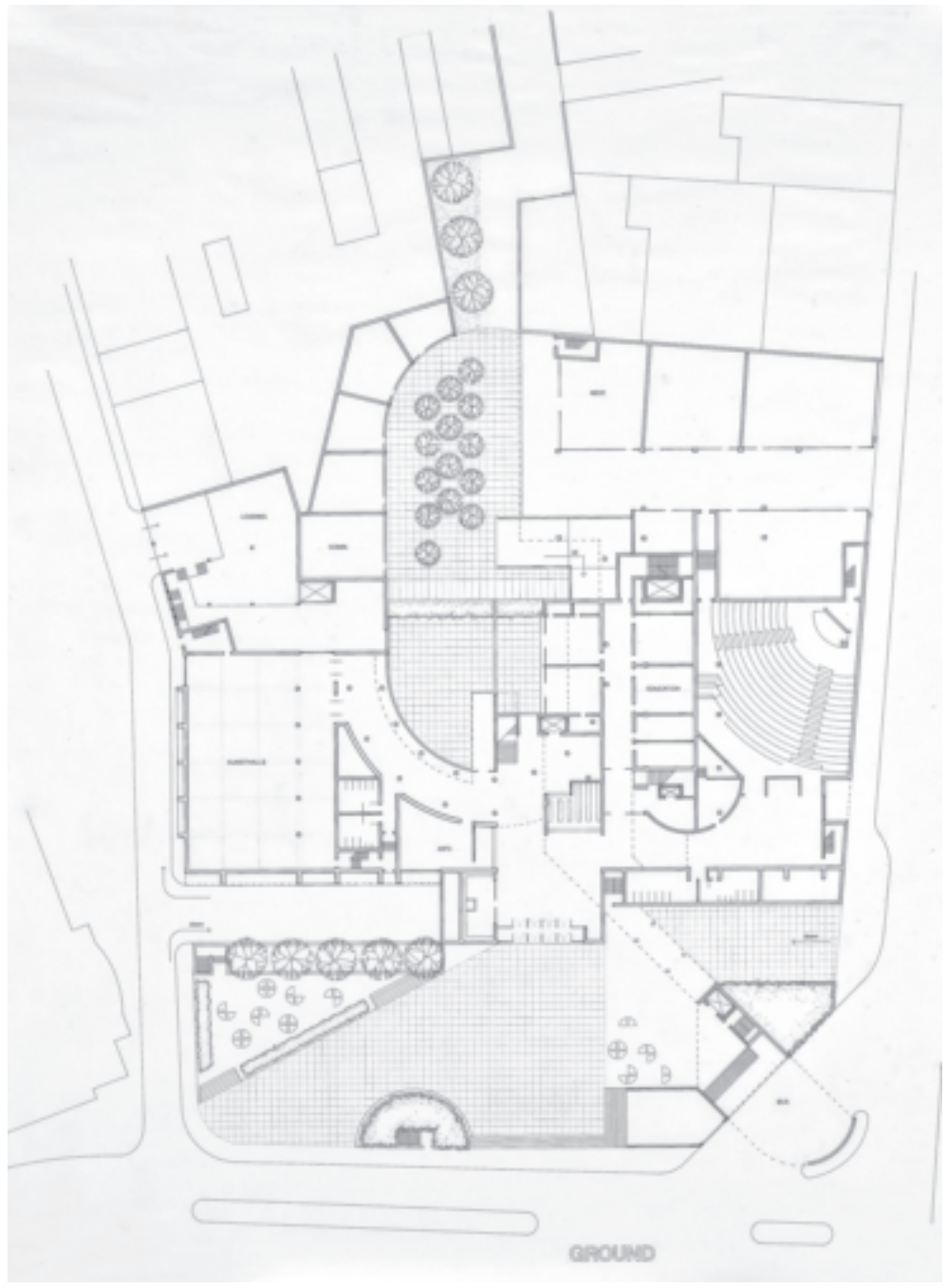
The Yale Center for British Art and the Canadian Centre for Architecture, in Montreal (CCA) have co-produced the first exhibition of the archive of British architect, Yale School of Architecture professor, and Pritzker Prize laureate James Frazer Stirling (1924–1992).

The exhibition, *Notes from the Archive: James Frazer Stirling, Architect and Teacher,* will open at the Yale Center for British Art on October 14, 2010 through January 2, 2011 and features more than three hundred original architectural drawings, models, and photographs selected from the James Stirling/Michael Wilford fonds at the CCA. Curated by Anthony Vidler, Dean and Professor of the Irwin S. Chanin School of Architecture at the Cooper Union, the exhibition will deepen our knowledge of Stirling's unique approach to the design process and demonstrate continuity in his work. As an exhibit of an archive rather than a monographic retrospective it emanates from the CCA's first public presentation of material from the Stirling/Wilford fonds in 2003–04, with the exhibition *out of the box: price rossi stirling + matta-clark.* Following its opening at Yale, *Notes from the Archive* will travel to Europe in 2011 and to the Canadian Centre for Architecture, in spring 2012. The exhibition will be accompanied by a book by Anthony Vidler published by the Yale Center for British Art and Canadian Centre for Architecture, in association with Yale University Press.

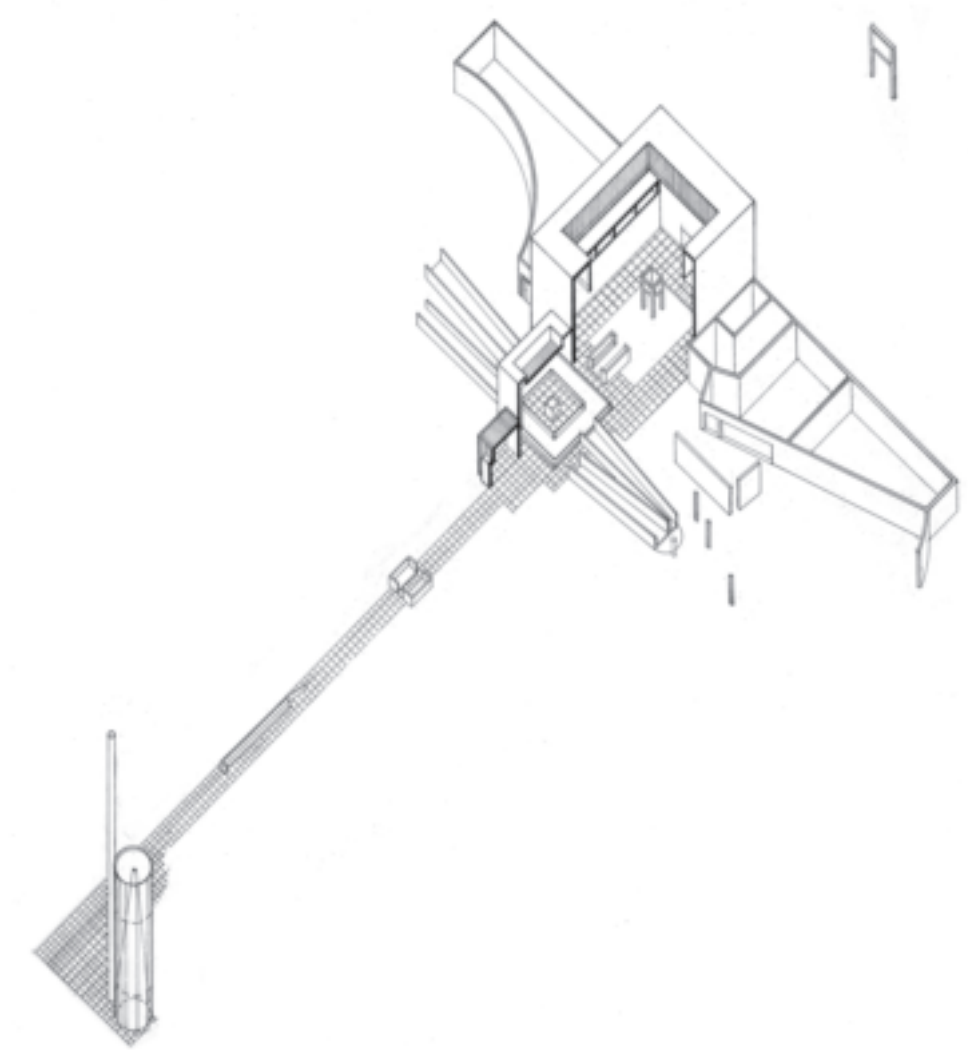
A concurrent exhibition, *An Architect's Legacy: James Stirling's Students at Yale, 1959–1983,* will be held at the Architecture Gallery of Rudolph Hall, Yale School of Architecture from January 28, 2010–February 11, 2011. This exhibition includes over ninety architectural drawings by about seventy students organized thematically by curator and associate professor Emmanuel Petit.



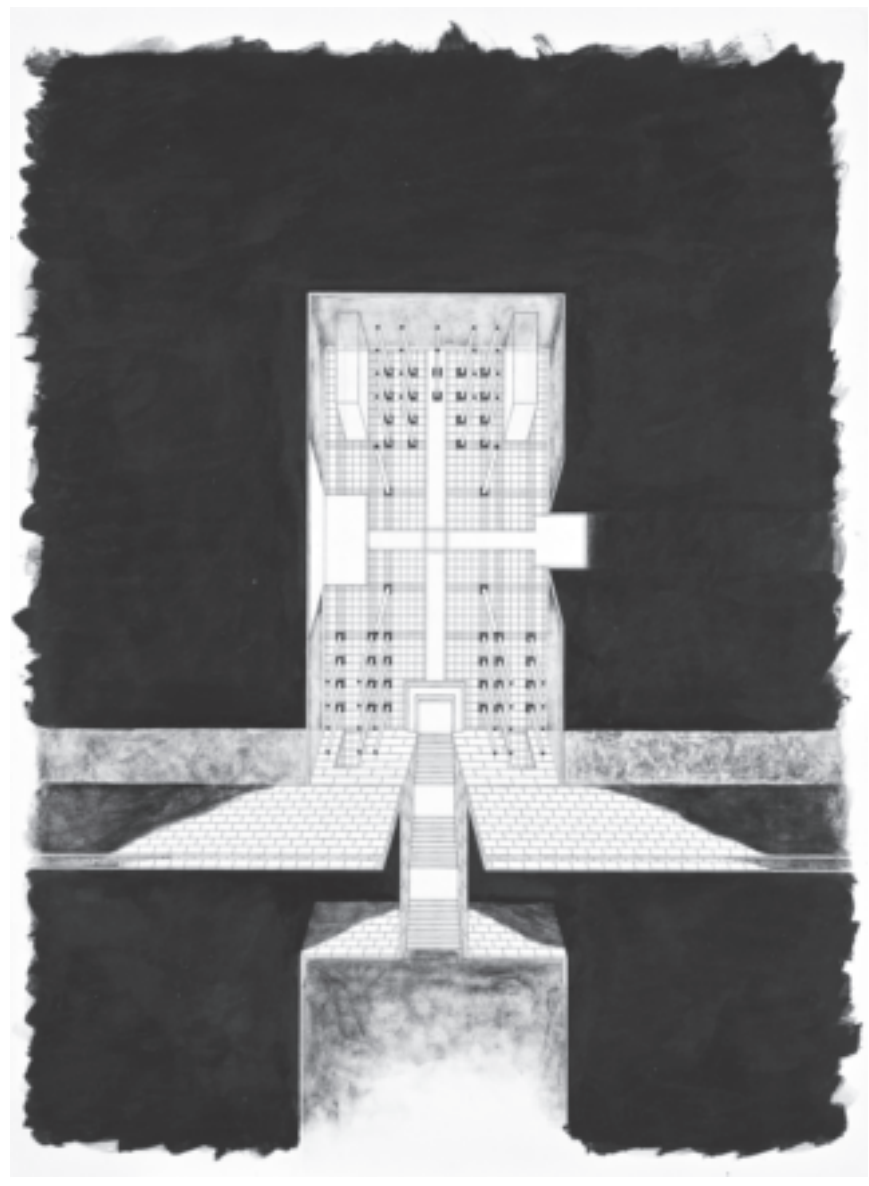
Craig Hodgetts ('67), Keith Godard & Lester Walker, "LINC Landliner," 1966.



Robert Charney ('76), Museum for Northrhine Westphalia, Düsseldorf, 1975.

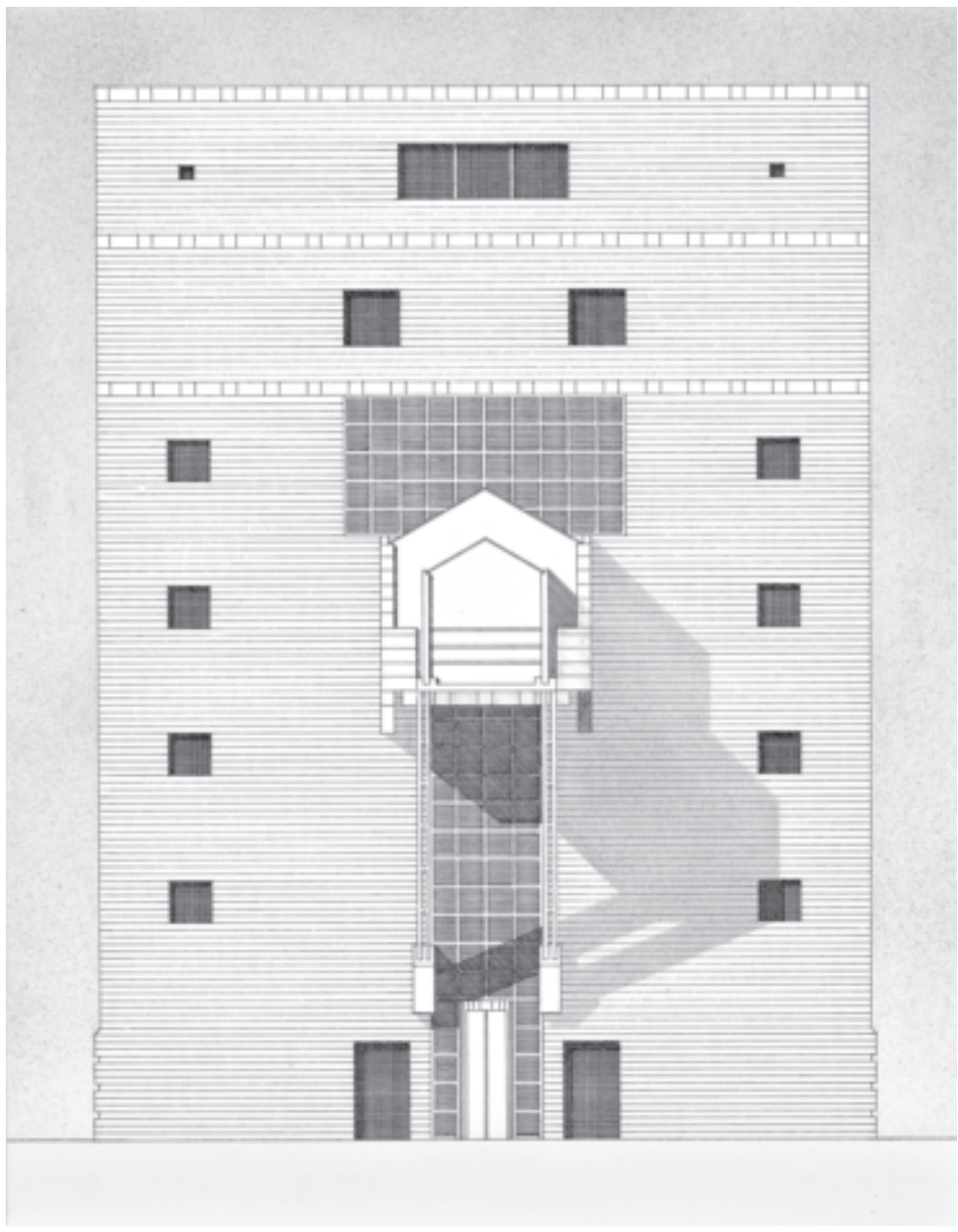


Louise Braverman ('77), Museum of Science and Technology, Tehran, 1976.

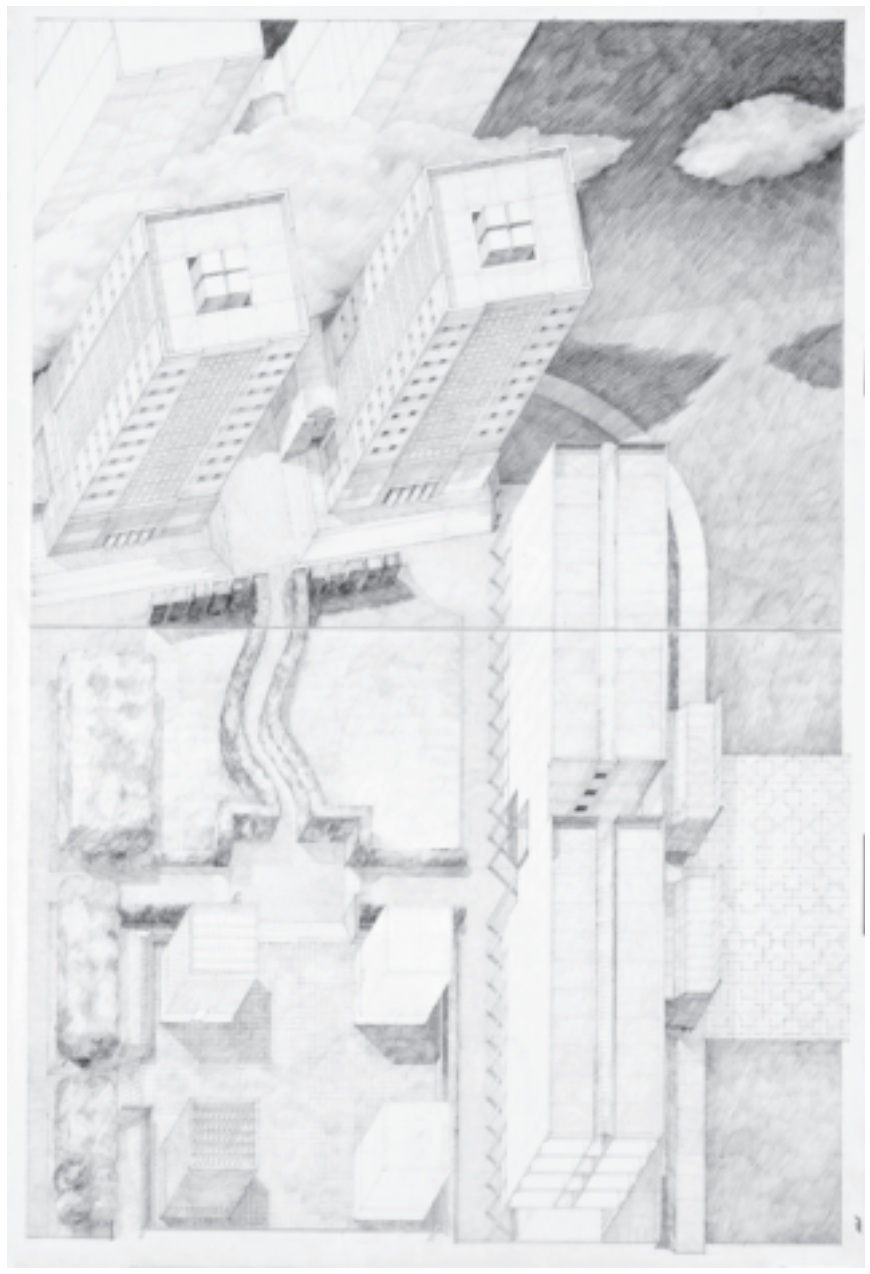


Richard Clarke ('79), Staatsgalerie, Stuttgart, 1978.

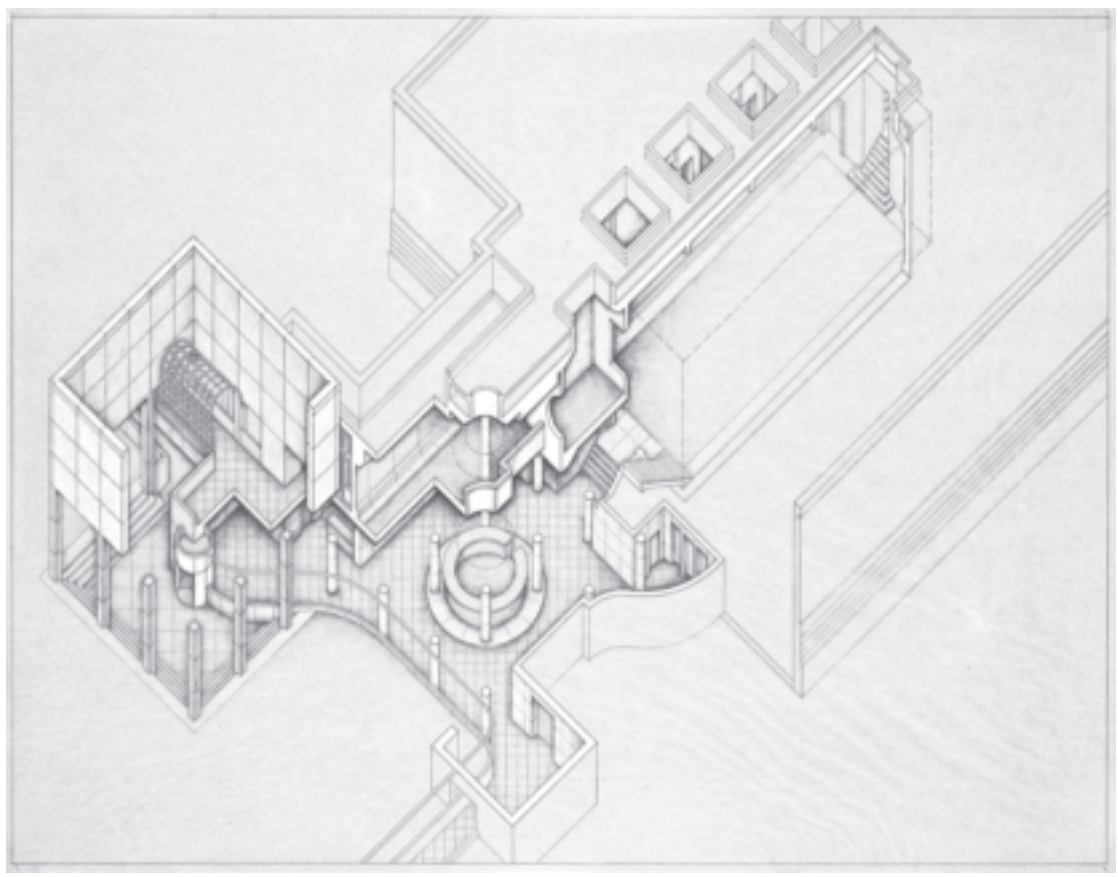
Stirling's Students at Yale



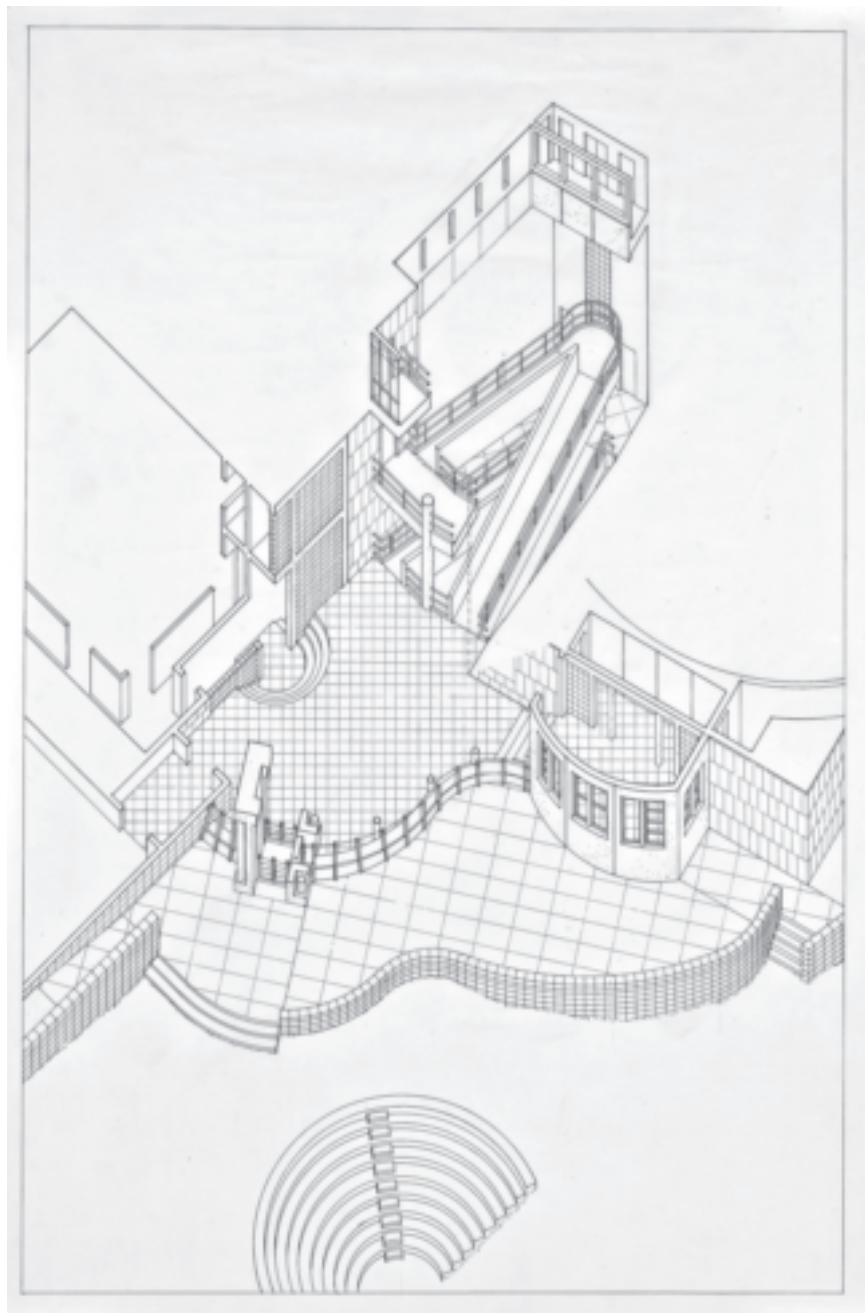
Robert Kahn ('80), Fogg Art Museum Extension, fall 1979.



Mac Ball ('78), Tuscany Government Center, Florence, fall 1977.



John Boecker ('82), Tate Museum Addition, London, 1981.



Michael Davis ('84), Cornell Performing Arts Center, Ithaca, 1983.

Drawings from the exhibition, *An Architect's Legacy: James Stirling's Students at Yale, 1959–1983* at the Architecture Gallery, Paul Rudolph Hall, Yale School of Architecture from October 13, 2010 to January 28, 2011.

Building Information

Two events reviewed here, discussed the relationship of computer technologies, building information systems, and architecture.

"We've BIM Here Before, or Data Organization Is the New Lineweight"

—quotation from an audience member

One Saturday last April, a small group of architects, architectural educators, technophiles, and theorists gathered to share their premonitions, angst, and prophesies for building information modeling, or BIM, in the symposium titled "Building Information Modeling: Implications for Architectural Pedagogy." Organizers Phil Bernstein and Peggy Deamer could not have represented the range of interested participants better: Yale professor Deamer has never opened a Revit file, and Yale lecturer Bernstein ('84), markets it as a vice president at Autodesk. At stake was the recognition that this new shift in representation is profound but occurring outside of any theoretical framework, as if it were just another bell or whistle for playing.

Bernstein has had the BIM show on the road for so long now that he effortlessly painted the clearest—and most foreboding, for those who choose to ignore it—picture of the business side. He relishes the opportunity to warn educators that practice is moving much faster than the academy, in a "theory-free zone" that, left on its own, will leave no ground for the academy to stake any claim.

Deamer followed, allowing that her presumed naïveté on the subject keeps her thinking on it "pure." She built up to an argument for a new architectural pedagogy so simple and elegant that everyone in the room seemed to snap to attention. But more on that later.

What followed was a series of presentations by educators from around the country (and one from Australia) who, in one way or another, each are grappling with the provocations of including building information modeling in their own curricula. It was a testament to both the problems and the possibilities of BIM (one being its decidedly inelegant acronym) in the academy and only magnified the need to come to terms with what, exactly, BIM is and how it fits into architectural education and practice.

Penn State's John Messner believes we should be creating courses that mirror changes happening right now in the profession, particularly those that have to do with the increasing need for collaboration. He cited Tom Kelley's essay, "Ten Faces of Innovation" as identifying the ideal pedagogical goal: to create T-shaped people, those who embody empathy for information across disciplines, with deep knowledge in a particular domain. He sees BIM as an ideal platform for this kind of person as it does not reside in any one discipline but spans many.

Auburn University's Josh Emig and Paul Holley run the only jointly administered integrated design and construction degree program in the United States, the master's of design-build program, which teams architecture graduates with construction-management graduates in an intense cross-disciplinary curriculum centered on the use of integrated BIM software.

Anna Dyson ('96) and her colleague Ted Ngai—of the Center for Architecture Science and Ecology (CASE), a joint research collaboration between Rensselaer Polytechnic Institute and Skidmore, Owings & Merrill—spoke of their attempts to develop next-generation systems, thinking twenty to thirty years in the future to eliminate non-renewables from building use and change the DNA of how we build. For them, this approach goes hand in hand with developing models for blending academic and professional research, possible only through "massive integration." But it begs the question, are we teaching tools or are we teaching how to be critical thinkers?

John Durbrow of IIT in Chicago believes BIM has radically changed the building delivery process and, as a result, will radically alter architectural education. Hence IIT's new master's of integrated building delivery—a curriculum based on the convergence of entrepreneurship, development policy, real estate finance, project construction, and information management—leads to, as he sardonically mused, the new role of "the integrating transprofessional."

Scott Marble and David Benjamin presented the Columbia Building Intelligence Project (C-BIP), a three-year pilot program designed to explore new collaborative relationships they believe have the potential to transform the building industry. Each year the project will run on a three-semester cycle, with a New York think tank in the fall and international think tanks in the spring and summer. These brainstorming sessions will bring together leading experts from various sectors of the building industry in an open dialogue about state-of-the-art working processes and research that will form the future of industry.

In presenting work by students that focused on the impact of technology on design processes, Columbia University's David Fano, a founder of CASE Design, spoke of BIM as a tool that re-establishes the architect's status as master builder, empowering her as a new communication expert.

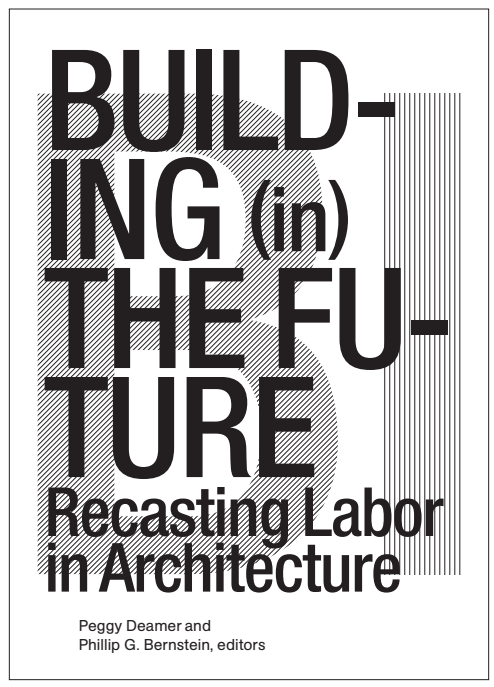
University of Melbourne's Paolo Tombesi gave perhaps the day's most electrifying presentation. He invoked Duccio Turin's 1966 lecture on the economic role of construction, "What Do We Mean by Building?" which had electrified Turin's audience at the Bartlett School of Architecture. Tombesi took this question and carried it through a head-spinning journey that touched on everything from education (knowledge that must be imparted vs. knowledge that can be trained) to labor practices (building as industry vs. building as artifact) in an attempt to completely redefine the priorities of building, fabrication being the least important in this new paradigm. "The ultimate objective should be that of making building a branch of architecture, rather than keeping architecture a privileged but inward-looking subset of building," he said.

University of Minnesota's Renee Chang, rounded out the day's presentations by looking at the history of curricular change agents in architectural education, from the Beaux-Arts *esquisse,* submitted as a form of limitation, and the Actual Facts vs. Factual Facts of Josef Albers and the Bauhaus, to the digital revolution of the 1990s, when the curriculum didn't really change but simply absorbed this new representational component. BIM has arrived at a point when the curriculum is overfull, she says, and the next tool will be only more data-heavy, so what will be the filter that helps students know what is important and what is not? It is the faculty who can teach students to think laterally, think simultaneously, and learn to separate actual facts from factual facts—no matter what the technology.

Which brings us back to Deamer, who is imagining a new curricular model with a three-year M.Arch. program, in which the first year is devoted to an emphasis on two-dimensional composition, the second to an emphasis on three-dimensional/spatial themes, and the third devoted to four dimensions. In my opinion, the greatest contribution BIM has given us, besides the intelligence embedded in every digital line, is the ability to represent time. We can now imagine an architectural education that seizes upon the temporal opportunities presented by raw computing power, while still trusting in the nimbleness of the human mind and eye. BIM, and our relationship with it, are at the moment in that awkward adolescent phase: clumsy, with exaggerated features, and in existential crisis. BIM and the architecture profession will soon emerge, fully formed and empowered, and in hindsight we will wonder what all the fuss was about and how we ever got anything done in AutoCad.

—Martin Finio

Finio is a critic in architecture at Yale and a principal of New York–based Christoff:Finio Architects.



Building (in) the Future Book Event

On February 24, 2010, the School of Architecture convened a panel at the Center for Architecture, in New York, on the occasion of the publication of the book *Building (in) the Future: Recasting Labor in Architecture* (Yale School of Architecture with Princeton Architectural Press, 2010). Expanded from an eponymous 2006 symposium, the book features a selection of essays, edited by Yale faculty Peggy Deamer and Philip Bernstein.

Deamer presented an overview of the symposium and subsequent book to define and theorize upon the rapidly changing methods of making architecture as it has been affected by, new highly integrated production technologies, pointing out that both work, as it defines the practice of architecture, and collaboration, as it defines the implementation of constructive process, are being fully redefined by these emerging technologies. The architects and theoreticians involved in this discussion are at the forefront of defining these developing paradigms.

Above all, the emergence of building information modeling (BIM) and its effect upon integrated project delivery (IPD) allows architects to become more closely connected to the realization of their designs while diminishing their authority over the process.

Bernstein ('84), lecturer at Yale and a vice president at Autodesk, helped illustrate this emerging practice by re-creating the common contractual triad of architect, client, and builder. Instead of a series of partitions that separate each member from at least one other stakeholder, he redrew a cast of interconnected players joined through shared responsibility to meet the established goals of the architectural project. He cited Autodesk's role as the creator of Revit, the dominant BIM software product, and presented the company's experimental use of the information technology to create their new offices. The well-integrated project team included an architect, an engineer, a builder, and subcontractors who shared in a reward for a successfully delivered project. Bernstein showed that when the responsibilities of a project are shared across disciplines and attached to a proportional reward, there is little need to motivate various parties to collaborate and meet the project objectives.

Chris Noble, a contributor of an essay to the book, and an attorney, pointed out that the new collaborative structures precipitated by BIM and IPD illustrate how outdated our concept of intellectual property is, as established in the standard AIA documents. Its blunt and inflexible insistence upon the ownership of documentation via the definition of the "instruments of service" is obsolete; equally damaging is the converse

Lazor Office, FlatPak under construction, 2006

effort to defer all responsibility for the final product upon the builder by "means and methods." Noble described how he, the AIA, and related organizations are working to revise their standard contracts to acknowledge highly collaborative relationships. He cited precedents in other industries, such as software that allows contributors and users to easily "click through" intellectual property agreements to maintain the speed and fluidity these relationships require.

Scott Marble presented a practitioner's perspective by showing three projects completed by his New York–based firm Marble Fairbanks. He outlined its relationships with a wide variety of consultants, describing the efficacy of shared information and the greater potential for innovation, proposing that, in this way, architects may reconsider the design process altogether—collaboratively. After presenting the projects, Marble returned to a theme commonly shared by architects with strong technological leanings: the immediacy afforded by technology allows them to be closer to the production of architecture and enables them to cultivate a sense of craft. Perhaps the craft knowledge is a fair trade for absolute authorship.

Above all, the discussions of the evening highlighted the much overdue necessity that architects reconsider the long-standing barriers built around our practice. What once protected us now isolates us. The new technology gives us the tools to recast our future.

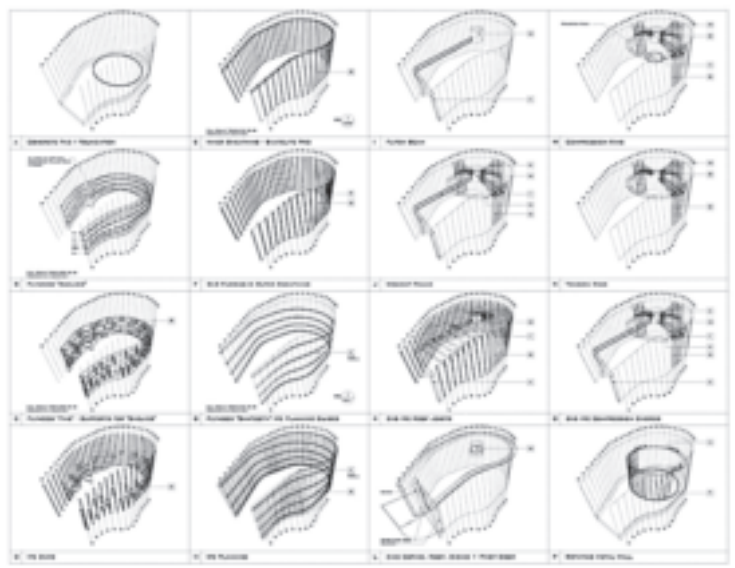
—Michael Tower

Tower ('00) is principal of Brooklyn-based architecture firm, Studio Tractor.

Designing & Building

Just back from a conference at Cornell, Peter Gluck ('65), Tom Gluck ('97), and Stacie Wong ('97) of Peter Gluck and Partners, and 2009 Saarinen Visiting Professor Bill Sharples with Coren Sharples of SHoP Architects continued their discussion about design-build for *Constructs*. Here they envision the renewed role of the architect as builder and in control of construction.

Peter Gluck and Partners, Urban Town House, New York City, 2010.



SHoP Architects, Camera Obscura, drawing of construction sequence, Greenport, New York, 2005.

Tom Gluck We are discussing something that goes beyond the normal comprehension of the role of an architect. We all agree that architects have been doing less and less and therefore have had less control and influence on the development of buildings. The issue is how can architects take on more responsibility and get involved deeper in the process.

Peter Gluck The profession changed drastically in the 1960s, starting with a new breed of contractor that represented large developers. Their intent was to "value engineer" the work of architects' drawings and the construction process. The developer, through his construction manager (CM), took control of the actual drawings, allowing the developer to determine whether a material, product, or detail was worth his money. The developer's ownership of the building was generally limited to five or ten years, by which time he no longer cared about the building. Construction time, which represented lost revenue, became more important than the building's future. Traditional sequencing and quality construction were lost along with the value of traditional builders. Contractors became brokers and slaves to time and money.

At the same time America was becoming really litigious. Every project of any kind had lawsuits. In reaction to that, the AIA retained lawyers who told architects to do less and less. Architects learn design in school and go to the office to learn how to build and supervise the construction. Then, every time an architect enters a building site, he became a potential liability. After three to four generations of architectural practice we have evolved into a situation in which architects don't know how to build. Few schools deal with it. However, the popularity of programs like the Yale Building Project, The Design Workshop of the Parsons School of Constructed Environments, and Rural Studio at Auburn University show students' growing recognition of this problem in the profession.

Coren Sharples One of the things we set up SHoP Construction to do is to take the complicated elements of the projects we designed and provide a design-assist service as a bridge between the architecture and construction teams. While we would not be the construction manager of the entire project, we would serve as a consultant or as a sub to the construction manager, to assist with a particular piece going back and forth between the maker and the designer.

Peter Gluck And because it is essentially in-house, it is seamless in terms of technology.

Coren Sharples But the end fabricator is not in-house, so, for example, we don't have the capacity to build something on the scale of the screen wall for the Barclays Center, at the Atlantic Yards in Brooklyn. From the inception of SHoP Architects, what held us back from being a true design-build firm was that fear of being limited in scope. We bought a table saw and thought we could just build things ourselves. But in some ways I regret that we're not more hands-on because that's the kind of thing we love doing. At the same time we have aspirations to design large-scale projects.

Tom Gluck We work on projects from the earliest stages, whether it's site selection or financing, depending on where we enter the process. We are integrated across the wall of design and construction, similar to using the table saw: you can be the CM on a job and work together with all the trades in real conditions, both early in the design process and later in the field.

Peter Gluck We are both talking about a new craft that goes beyond the romantic notion of the craftsman as someone who makes something special by hand. We are trying to understand what the new craft is. It is how you get feedback in a highly technical new world. We are involved in the crafting of all the trades, of which there are twenty or thirty in any given project, which is why we are totally involved in construction.

Bill Sharples If you want to design a beautiful plywood chair, you work with material. If you want to design an amazing building, you have to understand what tools are involved—working with the subcontractor and understanding how the different trades come together to assemble the building. Although we're not out there physically hammering, we are interacting with the subs on the site. I think that goes back to the idea of craft: you need to understand what the subs do so that you don't cede control over the way things get resolved.

Tom Gluck We have gone about as far as we can go in terms of taking financial responsibility. We build buildings, and we're willing to guarantee the price for the completed structure. We use two AIA contracts: the architect-owner contract for the design portion and the owner-construction manager contract for construction with the option of a guaranteed maximum price. What normally happens is that an architect has one contract and the contractor has another. Everything becomes about whose fault it is. The owner and his lawyers are the judges. When these contracts are used independently they create chaos. But when the same party has both contracts, it doesn't matter. Whose problem is it? It's ours! The person doing the schematic design models in our office also does the documentation. We do our own structural and mechanical drawings, using engineers of course, and that same person can be the one opening the jobsite, unlocking the chain at 7 a.m., and running the trades all the way through to completion. We have two separate companies because of personal liability, but in the office it's seamless, not only over the course of a project but also every day. I may be at my desk doing design drawings until noon and then start talking to bidders on the phone, after which I'm managing construction.

Coren Sharples That goes back to the issue of craft, because if you need to be involved in everything to make the translation from hand to brain, the person has to be the same. If we have design-build but we have different companies with different sets of people doing the architecture and the construction management, it doesn't work.

Tom Gluck That's just a vertical monopoly. The way to make better buildings is to have more time to design and to do so with the benefit of feedback from the field. Through our integrated process we are able to talk to subs during schematic design and extend the design phase well into construction.

Bill Sharples We have followed a historic strategy very similar to yours. The reason we have SHoP Construction is to ensure that everything is coordinated and craft quality is being controlled. Rather than going to the CM or the superintendent, the client will come straight to us. In our real estate development projects there was a vested interest: if the project turned out really well, the return would be really great. Porter House, in Manhattan, is probably the best example. The problem we had with that model is that it's not really scalable. To control quality and craft at the scale of the Barclays Center you have to be very strategic because the construction companies do not let you into their yards. Our staff understands both how a building goes together and how things are fabricated. We bring those two groups together through our Advanced Technology Group. When we design a curved brick wall, the architects understand the details needed to make the building as well as the script for the formwork. In a smaller project, Camera Obscura, the team designed and managed construction.

Peter Gluck Is SHoP Construction basically a subcontractor to the GC and/or CM on large projects?

Bill Sharples Yes, it can be. In the case of the façade development for the Barclays Center, SHoP Construction has been contracted by ASI Limited, the façade contractor, to deliver "direct to fabrication" files for the weathering steel-latticework system. SHoP Construction can also team up with other fabricators to provide integrated services. We are looking at Information Room management for integrated services between the trades and the general contractor as the CM in a 3-D virtual environment.

Peter Gluck But who is building the building? Who's the contractor? With whom does the client have a contract? Is it SHoP Construction? It seems that SHoP Construction should be the CM for the job.

Bill Sharples That is the goal.

Coren Sharples After school, we had to choose between working for a more creative conceptual atelier or working for a big corporation, in which you'd be a cog in a wheel working on uninspiring buildings. So. we set out to work on our own. The insurance companies wanted us involved in construction, with a limited liability clause, but then would charge higher fees if we didn't provide CA services: the lawsuits happen when you're not on the site.

Peter Gluck Lawyers actually would like design-build to go further. For several reasons, they find that losses are fewer when there is a design-builder. Rather than retreating and being defensive, how can we get involved and take on more responsibility and therefore more control to make better buildings? How can we have a bigger economic role, to lead to a better business model than most architects develop for themselves—that of the starving artist? The allure of the starving artist is all too true, bu neither necessary nor desirable.

Bill Sharples The issue with lawyers and building information modeling (BIM) is that one camp says you're giving the contractors way too much information, and as a result you're placing too much liability on yourself. The other group says we are supposed to be doing this as we always have been. Now we have a tool that can actually rationalize.

Tom Gluck We are saying that we have that responsibility anyway, so we want to be paid for it.

Bill Sharples That is a level of resolution that goes back to the old days, when architects detailed everything. The biggest problem with BIM is that if you do any form of integrated project-delivery at the end of feasibility and schematic design, you have a model that can be used for early pricing. To get a model or even a traditional set of drawings up to that stage requires you to do more work.

Peter Gluck But you can certainly see the change already. One of the organizations, Design-Build Institute of America (DBIA), is just fourteen years old. They have been taking over construction to such an incredible degree that they are now lobbying states to allow design-build for school construction and so on. There is a huge movement, and New York City is joining in as well. The problem is that design-build is really build-design: there are no architect-led design-builders. Duke University just built a basketball stadium for basketball coach Mike Krzyzewski. This is their first design-build project, and it was extremely successful. It was completed on schedule, and it's a good building. I think it's going to change, as you said, since at the end of a recession the paradigm changes. All of this is going to be much more critical than before. BIM is great for contractors, and all the technology schools are teaching kids who will work for the contractors to run computers. The contractors are going to be the ones empowered by the use of BIM. Design-build is going to be accepted across the country for major projects, and the contractors will have staff architects. There may be three or four starchitects who will make glitzier twists than anyone else but who represent the profession ... badly.

Bill Sharples The person who puts the pencil to paper is going to be the one who makes sure the nail goes in the right place. The knowledge is with those who design and have embedded that knowledge in the model; they are the gatekeepers.

Peter Gluck We need to empower and expand the role of the architects; all of these really cool, smart, intelligent people are now relegated to doing very little.

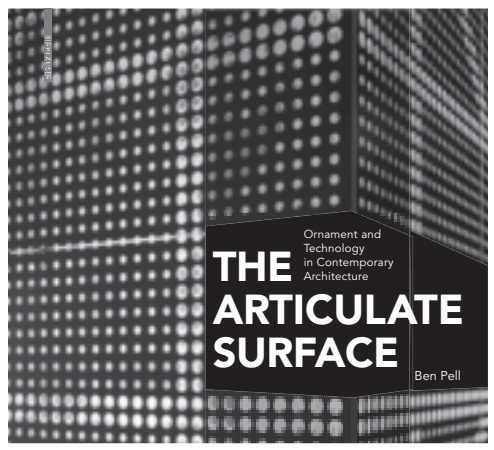
Bill Sharples In order for that to succeed, it has to start in the academy.

Coren Sharples Peter, you described a scenario in which the architect is in-house. I hope this will give us the opportunity and a level playing field, so that those who can compete with better design will have the opportunity to rise to the top.

Peter Gluck The idea that BIM can solve all the problems is garbage. You can make equally unbuildable 3-D models as you can 2-D drawings.

Coren Sharples One of the things that drove me crazy in the early days of computer modeling was that kids would make amazing renderings that bore no resemblance to the building that was being drafted because there was a disconnect between the staff that was doing the modeling and rendering and the staff that was doing the working drawings. Using BIM technology, in which the working drawings are extracted, or at least built upon the same 3-D model that is used for renderings, is a big step toward solving that problem and uniting visualization with production. We're learning the limitations for management when the building exists only on a hard drive; you have to learn new ways to visualize and control what is happening. For example, the generation that has become very facile with using the technology doesn't know how to manage a team of ten people. We often make the markups together on a large screen. But at some point there is going to be a generation that is so comfortable with this that they'll be able to take it to the next level.

Book Reviews



Marion Manley: Miami's First Woman Architect

By Catherine Lynn and Carie Penabad
University of Georgia Press, 2010, 248 pp

I was delighted to see this book appear since I had met Marion Manley (1893–1984) almost thirty years ago, when I was writing a series on the history of Miami architecture for the *Miami News.* After learning about her pioneering work on the University of Miami campus, I met her at the simple Modern house she had built years earlier, which was nestled in a grove of native trees with an antique Volkswagen parked in the yard. Manley was in her late eighties then, somewhat frail but still spunky, a unique character with a very important story. Happily it is well told in this book.

The authors of the monograph, Catherine Lynn and Carie Penabad, an architectural historian and architect, respectively, who teach at the University of Miami, recount Manley's story both sympathetically and critically while shedding light on the relatively short history of architecture in South Florida (Miami was incorporated in 1896 with a population of barely 300). It also details the trials of a woman in a man's world at a time and place where the profession was only beginning to define its role and the character of its work. In an unusually complementary collaboration, Lynn and Penabad alternate the authorship of the chapters so that each has a single voice, with very little overlap.

Manley was born in Junction City, Kansas, in 1893, ten years after her parents had moved there from Buffalo, New York. She studied architecture at the University of Illinois, when the Beaux-Arts style was at its zenith of influence in America, and then moved to Miami in 1917 at the urging of her older brother, who had settled there. At the time the city was practically a frontier outpost, and she became a member of its first generation of architects and planners. As the authors note, although she had more opportunities there than she might have had in a more established place, she nonetheless struggled as a woman practicing on her own and did not always get her due recognition.

During a real estate boom in 1924, Manley opened her own office and built several houses in the Mediterranean style of the day. However, as the authors state her buildings were more "sober, restrained, and far more regularized than the typically animated, picturesque" once then common in Miami. She "captured some sense of the grandeur of a distant past with relatively modest means, relying more on the overall proportions of the work than on fine architectural detailing." Manley, as so many architects did in the tropical climate, created a number of outdoor rooms—loggias, porches, and veranda. She also supervised construction carefully, insisting on high-quality work.

A hurricane in 1926 brought Miami's first real estate bust, ahead of the Great Depression. Manley lost her library in the storm and her practice in the slowdown, but she moved in with a friend, found a job with some good local architects, and after Roosevelt's election was asked to work on some WPA projects—a U.S. post office and federal courthouse in downtown Miami for which "she was given little credit for her contributions—a situation that would occur throughout her life."

In the late 1930s Manley developed an interest in vernacular architecture shown in two modest but innovative wood-framed houses built before the war influenced by tiny climatically sensitive houses on stilts constructed by Bahamian immigrants in South Florida in the nineteenth century. One designed with Chicago architect Chester Hunt was inspired by Tunisian houses that the clients had admired when they lived in North Africa. Those flat-roofed, white-walled structures also resembled the Modernist buildings of the period.

In different ways all of these buildings inspired the work Manley would do at the University of Miami. Although ambitious plans for a Mediterranean-style campus were abandoned by the fledging institution after the 1920s financial crash, its persistent president, Bowman Ashe, father of one of Manley's friends, kept the school alive through the Depression and war years. He hired Manley to sketch designs for a boldly sculptural (but unbuilt) music hall and to create temporary quarters for training airmen before the United States entered the war. As university architect Manley also had a role in choosing the architect she would work with on a new postwar campus, Robert Law Weed, a fellow convert to Modernism who had built successfully and efficiently in the service.

Together Weed and Manley turned the costly Mediterranean-style plan into an economical and climatically sensitive International Style campus that would accommodate returning veterans on the G.I. Bill. In fact University of Miami had one of the first Modernist campuses in the United States.

Lynn and Penabad are most enthusiastic about a series of climatically sensitive houses that Manley designed in the 1950s, '60s, and early '70s that preserve the landscape, foster natural breezes, and adapt to the tropical climate in energy-efficient ways. These buildings have lessons to teach us even today. Manley died in 1984, before ideas like hers came back into favor, but the timely publication of this book makes clear the relevancy of her work.

—Jayne Merkel
Merkel is a New York–based architectural critic, a contributing editor of AD/Architectural Design, *in London and* Architectural Record, *in New York.*

The Articulate Surface:

Ornament and Technology in Contemporary Architecture

By Ben Pell
Birkhauser, 2010, 190 pp.

Ben Pell's book, *The Articulate Surface: Ornament and Technology in Contemporary Architecture,* frames the contemporary through a focus on the architectural surface. Through a series of short essays and thirty-six projects, it explores the surface as a performative membrane, a site of political imaging, and a communicative interface between architectures and their audiences.

Pell's book contributes to a current debate surrounding the return of ornament, decoration, and envelopes, that includes Jeff Kipnis's "Cunning of Cosmetics," Farshid Moussavi's *Function of Ornament*, Robert Levit's critique of Moussavi's book in, "Contemporary Ornament, the Return of the Symbolic Repressed," in the *Harvard Design Review*, *OASE* #65 *Decorative Tradition in Architecture*, 306090's book, *Decoration*, and *Praxis 9, Expanding Surface.*

Pell argues that the historic separation of excess and essences is untenable today, or at least available for a productive reconfiguration. The seemingly paradoxical combination of the two, as an "essential excess," is manifested in the deployment of surfaces that are articulated—both in material and geometrical terms, as well as in the sense that they speak or attempt to communicate. He explains that this contemporary trend focuses on the surface as a site of representation that is enabled and facilitated by digital fabrication tools. Pell's introductory essay provides an effective account of the cultural shifts of the late Modern period (illustrated by Paul Rudolph's A&A Building), Post-Modernism, the digital 1990s, and the current return of ornament.

While the book registers a trend, it stops short of claiming that it is a new movement. The diverse projects and protagonists featured here lack the shared motives that define a movement. The book is organized into four chapters based on production techniques: "Applied," "Perforated/Cut," "Layered," "Cast/Formed," "Stacked/Tiled." The author's choice of organizational structure highlights the fabrication techniques, resulting in curious juxtapositions of extremely diverse projects. The fact that FOA's John Lewis Department Store appears next to FAT's Villa de Heerlijkheid creates a startling contrast. While the two projects are linked by the shared technique of "layering," they are antithetical in terms of motives and means. Presenting the two projects side by side, creates a relationship that forces the reader to rethink both.

This leads to a reconsideration of the uncanny return to representation, symbols, ornament, and images. Pell claims that this new articulateness is the result of the parallel process of technological innovation *and* the desire to enable architecture to reclaim its function as a site of representation. The question is, why now? How are the ornamented surfaces of today different than those of Post-Modernism? If those mapped a trend toward representation, then what are they saying today? The emergence of pattern is not limited to architecture; we have also seen the proliferation of prints and patterns in the branded imagery of fashion and industrial design.

The architectural trend toward representational surfaces is driven by diverse motives and realized with many different techniques: the ironic redeployment of vernacular motif, the desire to camouflage one figure with an applied surface pattern, the testing of a spectacular visual effect, or experimentation with material or tectonic configuration. The diversity presented in the book forms a survey organized in categories, but not necessarily comparative, sorted, or advocated. Pell's attitude toward the range of projects seems to be one of authorizing inclusion rather than critical differentiation.

To dig deeper the reader must examine the means and effects of these surfaces. How thick are they? Do they conflate the roles of support and supported in a productive way? Do they play any environmental role? What is the unit or module, and how does it relate to the whole? How do the patterns negotiate the normative figures of windows and doors? What is the relationship between pattern and volume?

The Articulate Surface is illustrated beautifully with photographs of prototypes and completed projects highlighting different surface effects, but there are few wall sections and technical detail drawings. This emphasis on the image suggests that it is a kind of pattern book of surface strategies, where the effect is prioritized over mechanics and the relationship of the surface to the volume that is it applied to. While indexing the current interest in the architectural surface the book reinforces the importance of the image. The architect's role is increasingly one of producer/manipulator of images—iconic buildings as images, images as pattern applied to buildings, and images as the primary means of communicating with audiences both architectural and general. Pell's book opens up some of these critical questions and offers a significant contribution to contemporary debates surrounding issues of surface articulation, digital fabrication, as well as the reemergence of ornament in architecture.

—Eric Höweler
Höweler is a principal at Boston–based Höweler + Yoon Architecture and design critic in architecture at the Harvard Graduate School of Design.

The Real, Perspecta 42

Edited by Matthew Roman ('10) and Tal Schori ('10)
MIT Press, 2010, 176 pp.

Every review is really an introduction, and in polite company that begins with a name. Have you met "The Real?" Of course you have, and will again, repeatedly, in *Perspecta* 42. The name is dropped persistently in titles and in key passages as an editorial reminder of the issue's difficult and intriguing subject. But as student editors, Matthew Roman and Tal Schori propose in their brief preface "encounters with the real" (not to be confused with reality) that are hardly proper or cursory: they are tricky, elusive, and often occur as trauma. The real is both absolutely unavoidable and infuriatingly incomprehensible: it is "central to our understanding of architecture" and impossible to know. Presumably that is why they have assembled such a diverse collection of contributors with such divergent approaches and positions. They "hope to expose the paradoxical nature of the real" by "navigat[ing] architecture's disciplinary boundaries to locate the real in the most unlikely of places." In that regard *Perspecta* 42 does not disappoint, though more than a few of the essays do. That may be the price of coming to terms with a perplexing subject that, like the effort to contain the BP oil spill in the Gulf of Mexico, requires all available means, even those that sometimes work at cross-purposes, or hardly at all. The relentless flow of crude oil from a deepwater fissure in the ocean floor that disperses almost invisibly throughout the sea with an incalculably devastating effect is an adequate analogy for encounters with the real. This is very different than the "glimpse" or "dust" or "whiff of brute fact" that Lorens Holm depicts provocatively in the first essay, seemingly aligning the real with the sublime or entropic drain. To the contrary, the real makes insistent, harsh, and often vague demands, as the title of Mirko Zardini's essay on the architectural response to the 1973 oil crisis suggests: "The Crisis that Made

Architecture Real." The BP disaster, like Hurricane Katrina before it, begs for a sequel to his essay speculating on ways architecture is made more real—not merely more relevant, interesting, or instrumental—by confronting the environmental, economic, and urban traumas endured by New Orleans and the Mississippi Delta.

The essays in *Perspecta* 42 might be organized into three basic approaches: the practical real (pragmatism, technique, and "the physical"), the impossible real (Lacan, the body, and "the traumatic"), and the performative real (artwork, hybrid media, and "the imaginary"). Of these approaches the articles that deploy pragmatist strategies range the most widely on the real-reality spectrum. At the reality end are Albena Yaneva's earnest argument for "a realist approach to architecture" and Damon Rich's cautionary tales about valuation systems for real property. At the real end are three essays that cast practicality as a means toward unlikely possibility. Mario Ballesteros praises the contingent partial tactics of the Chilean architects Elemental as a recuperation of the robust, flexible practicality of Modernism. Lucia Allais offers a kind of pragmatist historiography, reconstructing how "opportunistic" and "banal" grant-writing exercises helped generate the theoretical positions advanced by the Institute for Architecture and Urban Studies and its journal, *Oppositions.* Andrew Zago's "Awkward Position" is perhaps the most projective and original essay in the issue. He advocates an attitude that abandons claims of mastery, ironic posturing, and myths of authenticity and is instead perverse, artless, clumsy, and funny. Surprisingly there is no mention of the work of Charles Peirce, the American philosopher whose "pragmatic maxim" is based explicitly on a theoretical distinction between the real, which he called "firstness" (pure quality and possibility, including abstract signs) and reality, or "secondness" (sensation, material, and fact).

Lacan makes multiple appearances in the issue, the most fascinating and productive in essays on digital design. Emmanuel Petit's examination of the "performative aesthetics of the body-as-organism" calls for a more "vulnerable" identity for the architect who uses digital media to explore the immersive spatiality of a "carnal" and "grotesque" body. As much as anyone in the issue, Antoine Picon directly engages the question of architecture's stake in the real, which, he writes, is "not only … the foundation of reality; it also epitomizes reality's capacity for change." He sees the work of many digital designers as efforts to "reconcile" the "strangely continuous world, full of fascinating properties like complexity and emergence … with the categories of everyday experience" and to "overcome the notion of a clear-cut separation between the human subject and the nonhuman things that surround him/her." In the performative category are excellent essays by Keller Easterling, Matthew Stadler, Andrew Blauvelt, and Bjarke Ingels. Easterling describes *Floor.dwg,* a document found on an AutoCAD exchange network. She describes it as "an exuberant rehearsal of existing, and quite common" ways that "the ordinary floor is absorbing technologies that radicalize its familiar role" and asks architects to appreciate its "excessive silliness and beauty." Blauvelt's brief history of inflatable architecture "as a useful trope for exploring both the potential and limits of reality" might be read as the precursor to Petit's endorsement of entrails-like interiors.

The real appears in many guises in *Perspecta* 42, but one term should not go without mention: *brutalism*. Hal Foster remarks that in moments of social crisis there is "a tendency to think about the real in its most brute manifestations" and speculates that today "there might be a neo-brutalist turn in architecture." Spyros Papapetros also turns to brutalism to connect Gordon Matta-Clark's implicit humanist concern with geometry and the debates on proportion in Britain two decades earlier, at the time of the New Brutalism. He ultimately suggests that the fanciful cancer drawings Matta-Clark produced at the end of his short life are his final "brutal confrontation with the real." These two passages are among many in *Perspecta* 42 that insist that no casual introduction to the real's disturbing effects is sufficient.

—Mark Linder
Linder ('86) is the chair of Syracuse University School of Architecture's Graduate Program.

Al Manakh: Gulf Cont'd

Volume Magazine by Archis + AMO + CLab, 2010, 536 pp.

Can a region of the world simply not matter? "Despite the crisis," writes AMO editor Todd Reisz (Yale College '96 and M.Arch. '03) in *Al Manakh: Gulf Continued*, "the Gulf still matters; it probably matters even more than we once thought." So to whom must the Persian Gulf region's importance be proven? Who is the "we" Reisz is referring to—the architects, academics, journalists, economists or Westerners, more generally who have been all too quick to dismiss this region? In fact, this book's most important audience might be the people within the Gulf itself. So I applaud *Al Manakh Cont'd* for not simply being a book by Western experts about the Gulf; instead, this project engages the region as a place that matters enough to have a book written for it.

The driving force behind *Al Manakh Cont'd* was AMO, the research arm of Rem Koolhaas's firm OMA. Koolhaas opens the book by arguing against the "West's lazy critiques" of the Gulf and insisting that, despite the global financial crisis, a city like Dubai can still represent freedom (to an Iranian), opportunity (to an Indian) and modernity (to an Arab). While Koolhaas has the first word in the book, his is certainly not the last on the Gulf. Instead, the voices represented in this book's collaborative authorship encompass something like 140 contributors (from 33 cities in 19 countries and including Yale's Bimal Mendis (Yale College '98, M.Arch. '02) and Joyce Hsiang (Yale College '99, M.Arch. '03), over half of whom are writing from the Gulf.

Al Manakh Cont'd documents six cities—Abu Dhabi, Doha, Dubai, Manama (Bahrain), Kuwait City and Riyadh—in what is billed as a "536-page book of interviews, travelogues, analyses, propositions, infographics and photography." It has five main sections. "Crisis and Crises," the introductory section, deals with the global financial crisis that struck overexposed Gulf economies like those of Dubai and Kuwait particularly hard. In a brief contribution that reads more like a PR statement, Falah Al Ahbabi (general manager of the Abu Dhabi Urban Planning Council, *Al Manakh Cont'd* exclusive sponsor) implicitly contrasts the fate of sister emirate Dubai with Abu Dhabi's resilience in the face of the crisis. "Cities that plan better," Al Ahbabi claims, "do better."

"Consultants" is a short but insightful section that skeptically examines the role of "Western expertise" in the Gulf, epitomized by OMA/AMO partner Reinier de Graaf's ironic piece on "Ten Steps to Becoming a Successful Urban Consultant." Vision looks at the future of the Gulf and explores how its biggest cities might sustain their "unprecedented urban experiment" through crises and doubt. Yale Sociology graduate student Tabitha Decker (Ph.D. '12) brings a socio-spatial lens to her analysis of the Dubai metro, interrogating the project's dual role as an infrastructural investment and yet another icon of Dubai's urbanism.

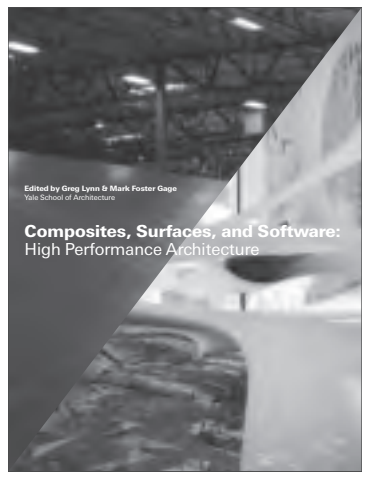
"Cohabitation" addresses the social and cultural dynamics of life in Gulf cities for this region's eclectic population. Two of the most thought-provoking pieces are the back-to-back essays of Farah Al-Nakib and Alia al Sabi (young women from Kuwait and the UAE, respectively), taking on the too-often unbroached topics of national identity, citizenship, and belonging in their home countries.

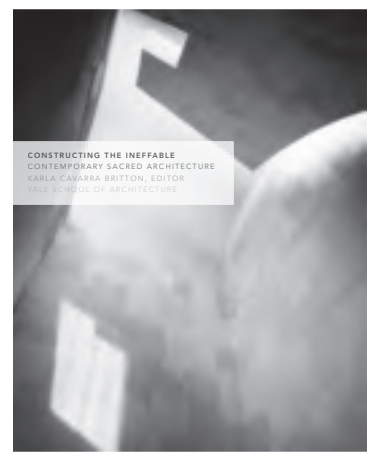
Finally, "Export Gulf" traces the transnational connections and influence that allow for, among other things, "the Gulf model" of real estate development to be replicated abroad, from North Africa to Southeast Asia. Todd Reisz follows remittances of expatriate workers' salaries that sustain their "Gulf wives" and build "Gulf houses" back home in the south Indian province of Kerala. Doha-based policy analysts Hady Amr and Noha Abouelda hab review Qatar's rise as a diplomatic leader in the Middle East and its varying degrees of success in high-level mediation in conflicts in Lebanon, Yemen, and Sudan.

The variety in the authors' contributions—in terms of style, length, readability and willingness to broach controversial topics or to be critical—can be striking. To collect this entire range of voices in one book is certainly an accomplishment. "Distinguishing the voices 'on the ground' from those offering an outsider's commentary is not difficult," write the editors in the book's introduction, "and therefore it is clear that more work is to be done in stimulating the exchange of ideas and opinions over supposedly porous boundaries."

So what would these exchanges look like in real life? How would the contributors to *Al Manakh Cont'd*—those writing from within the Gulf as well as those on the outside—respond to divergences in one another's viewpoints? As the editors suggest, there is a difference between bringing a diversity of voices together on the page and creating the kind of genuine dialogue the Gulf so badly needs on the issues raised in the book—amongst policymakers, academics, the media, and in society more generally. *Al Manakh: Gulf Cont'd* is a much-needed step in that direction.

—Mohamad A. Chakaki
Chakaki (Yale School of Forestry '06) is a Ph.D student at the Aga Khan Program for Islamic Architecture at MIT.





Yale School of Architecture Books Fall 2010

The following books are being published by the School of Architecture this fall:

Composites, Surfaces and Software: High Performance Architecture edited by Greg Lynn and Mark Foster Gage ('01) with Stephen Nielson ('09) and Nina Rappaport. Designed by Jeff Ramsey and distributed by W.W. Norton.

This book highlights the innovators in numerous high-tech industries, culling their opinions and expertise to see how sharing materials, tools, and techniques strengthens disciplines from boat building to architecture. Focusing on the three topics of composites, surfaces, and software, the book includes essays by Greg Lynn and Mark Gage, along with case studies in the automotive, aeronautic, and boat building industries that have defined the cutting edge of performative technology. Essays by Chris Bangle, Frank Gehry, Lise Anne Couture ('86), and Bill Pearson among others, demonstrate how technology is applied to new developments in architecture design and fabrication. A studio at the Yale School of Architecture gathered intelligence from the competitive sailing industry to glean new possibilities for the design of a boat building facility and show the potential for cross-pollination of form and materials across industries. It is published with the support of Autodesk.

Learning in Las Vegas edited by Nina Rappaport, Brook Denison ('07), and Nicholas Hanna ('09). Designed by MGMT Design and distributed by W.W. Norton.

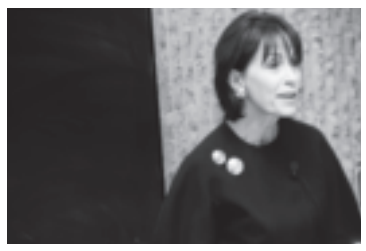
This book features studio conducted by the fifth Edward P. Bass Visiting Architectural Fellow, developer Charles Atwood, who was Vice Chairman of the Board of Directors of Harrah's until 2008, and Washington, D.C.–based architect David M. Schwarz ('74) who, turning around the Yale 1968 Las Vegas Studio asked what could be learned from other places and applied to Las Vegas to combat the lack of pedestrian and street oriented urbanism. Assisted by Brook Denison ('07) and Darin Cook ('89) students created master plans for hundreds of acres spreading from the intersection of Las Vegas Boulevard and Flamingo Road. The book includes an essay on Las Vegas by Steven Flutsy and Pauliina Raento and narrates the process of research, analysis, and design the students applied to world's premiere themed playground, while finding innovative ways to transform Las Vegas into a livable and pedestrian-oriented city.

Constructing the Ineffable: Contemporary Sacred Architecture edited by Karla Cavarra Britton. Designed by Think Studio and distributed by Yale University Press.

The book, published with support of the Yale Divinity School and Yale Institute of Sacred Music, features analysis of sacred buildings by their architects in dialogue with scholars from the fields of theology, philosophy, and history raising both concrete and theoretical issues on the nature of sacred space and its role today. The essays by Vincent Scully, Kenneth Frampton, Jaime Lara, Karsten Harries, Miroslav Volf, Emilie M. Townes, Diana Eck, Mark Taylor, Thomas Beeby ('65), Stanley Tigerman ('60), Richard Meier, Rafael Moneo, Fariborz Sahba, Steven Holl, Moshe Safdie, and Peter Eisenman, call attention to modern architecture's history of engagement and experimentation with religious space, while addressing expressions of sacred space such as landscapes, memorials, and museums.

Spring 2010 Lectures

The following are excerpts from the spring 2010 lecture series.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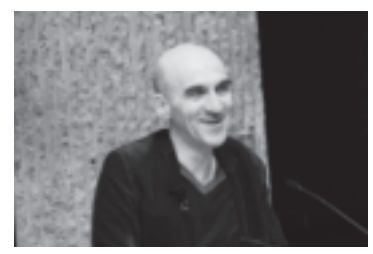
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Katherine Farley
Edward P. Bass Distinguished Visiting Architecture Fellow
"Off the Grid: A Developer's Perspective"
January 7

If an architect cannot understand all of the different perspectives that are brought to bear in making a successful building (many of these are determinants of whether or not a building gets built), that architect's design will never leave his or her desk, and his or her impact on the built environment will be diminished.

I would like to focus on our collective challenge as architects and developers, to understand not only what constitutes excellence today but what will constitute excellence in each of the different markets in the future. Excellence is measured by a number of different parameters, from urban planning to addressing social issues and tenants' changing preferences as well as technology, sustainability, security, affordability, and of course design. As developers and institutions wrestle with these and other issues, we invite architects to work with us in thinking through these problems. I've been privileged to work with a number of great architects, and without their ability to go "off the grid" beyond the purely architectural role, these projects would never have been successful or, in many cases, gone forward.

To leave you with my brief observations as a developer about the skills these architects share in addition to their pure architectural talents: an understanding that a successful project requires expertise of many kinds integrated into a collaborative team; an understanding of the macro-economic and political context of a project; an understanding of the market and cultural preferences; a willingness to listen to target base users; flexibility for changes in the course of the development; an understanding of the financial aspect of the project; and responsiveness to timing constraints, especially in the emerging markets. We like working with architects who are willing to take rough drafts or informal designs and work with stakeholders as the design advances. A willingness to build key relationships among the stakeholders is also necessary to move the project through the obstacle course of zoning, planning, approval, financing, and so on. Finally, the architect has to be familiar with local construction capabilities and design projects that can be well executed by local contractors.

Elizabeth Meyer
Timothy Egan Lenahan Memorial Lecture
"Sustaining Beauty:
The Performance of Appearance"
January 11

A couple of years ago I wrote the manifesto "Sustaining Beauty." It is the least academic of the things I've published and was written during a summer when I felt particularly dissatisfied with the discussion of sustainability in American design practice. Clearly, it is not surprising that landscape architects, when they talk about sustainability, often focus on ecological issues. … Aesthetics and definitely the word *beauty* rarely are used within the discussion of landscape architecture sustainability, and when they are, they are used in a dismissive way. … The discussion of esthetics essentially trivializes landscape architecture as ornamentation in this particular practice.

If sustainability is expanded in any way, it is talked about in terms of the three *E*'s: ecology, equity, and economy, but not the fourth E of esthetics. I want to make a claim for re-inserting esthetics into the sustainability discussion, and I want to make a case for appearance as more than an issue of style or ornamentation. … I argue for esthetic experiences that are cognitively rich. I am drawing on pragmatic esthetic theory, not only the contemporary theory of Richard Shusterman but his also references to people like John Dewey. An immersive multisensory experience that is embodied can lead to recognition of, curiosity and respect for, and attentiveness to the natural world, and maybe even cause a change of habit.

The experience of beauty requires a connection between what we see in the "now" and what we know because of prior experience. Something might appear miraculous and magical because of the color saturation of the ground plane and simultaneously horrify us because of our understanding that those colors are harmful and potentially dangerous or disturbing. The condition of something being both beautiful and ugly, spanning an esthetic range, connects projects to the cognitive dissonance, or the convulsive beauty, that was discussed earlier in the twentieth-century by the Surrealists. I would like to get back to this challenging sense of beauty, rather than the comforting sense of beauty, as one of the possible ways that we can begin to think about sustaining beauty.

Guy Nordenson
"Sublimating Structure"
Gordon H. Smith Lecture
January 14

It was thanks to Harold Bloom's great essay in *A More Rigorous and Practical Criticism* that I discovered the writings of not only Paul de Man but also Derrida and Foucault and gained the critical means that have, over a rather slow development, helped me clarify my evolving practice as an engineer. What de Man calls "Foucault's orientation toward any structure that operates on the level of the empirical and the concrete" was also for me the route to following … "a journey to abstract ourselves through fabrication." I would like to argue that under those creative circumstances that are available to the engineer, the practical criticism as outlined by de Man is extremely useful.

These lessons were useful to me as they extended the relationship of author and reader, author as reader, and critic as author, and so on, to the relationship of author and collaborator, author as collaborator. This is also where such an outlook on practice as a "paradoxical combination of free will and grace" implicates the concept of sublimation and disinterestedness.

As structural engineers, our work is rarely present in the final architecture. It may be partly glimpsed or re-presented as architecture, but a complete understanding of the structure in the finished work requires close reading of the architecture, deduction, or study of the construction documents. As a student of structure I can attest there is always interpretation. To my mind, invisibility or dissimulation of structure is a good thing for creative practice. Structure can be realized in ways that are tectonic, atectonic, or even immanent. Creativity can be real even if it is secret. It is up to the "reader" to find what matters. What this means in practice is that the work of the structural engineer is at least a dialectic between the empirical necessities of strength, stiffness, and stability and the rhetoric of presence and representation.

Stanislaus von Moos
Vincent Scully Visiting Professor
"The City as Spectacle:
A View from the Gondola"
January 21

I confess to have been among the many who were absolutely convinced that this would be the new way of addressing key issues of architecture in an automobile and media-driven world. To the despair of some of my friends (and of my then employer), I was even beginning to produce some clumsy variations on the theme of this sort of Pop theory.

In retrospect, I can't repress a certain smile at this maverick lesson on the contrast between the Doge's Palace and the Libreria in Venice. Nor am I sure that Bob and Denise would choose exactly the same terms today. ...

Though a few years later the Venturis continued to use Venice as a stage for spectacular variations on the theme of the decorated shed—calling the Canal Grande itself onto the witness stand for their claim that architecture should be no more than a flat decoration applied to an invisible structure behind, demonstratively so with their project for the rebuilding of the Accademia bridge done in the year Aldo Rossi was director of the Biennale (1985).

One can't help noting that, seen against this background, most of their "serious" projects and built works seem curiously impervious to the Pop rhetoric that presides over a polemical project like the Ponte dell'Accademia—polemical like the Plan Voisin—extravagantly beautiful also for its perhaps involuntary sarcasm with respect to Venice's second nature as an increasingly close European relative of Las Vegas.

As far as the Venturis were concerned, this position perhaps could tentatively be described as pragmatic, functionalist, and even quasi-transcendentalist—in the sense that their functionalism transcends ergonomy and technics and aims toward what they appear to perceive as an inner, sociobiological logic of human relations in a pluralist world.

Chris Perry
Louis I. Kahn Visiting Assistant Professor
"Networks and Environments"
January 28

The term *network* is ubiquitous in the Information Age, and the definition of an *environment* as a temporal field of interaction might also be seen as characteristic of our technologically augmented times. To this extent, our interest has been to engage such technologies as a means of exploring their implications for architecture at formal as well as programmatic scales.

What is of interest in respect to our work at Servo is the degree to which issues of performance and aesthetics in relation to technology are as relevant today as they were fifty years ago and thus present a continuing challenge for yet another generation of architects practicing in an age of significant technological advancement. Not unlike the postwar generation, contemporary architecture equally is engaged with the exploration of how the predominant technology of its time, in this case the computer, informs the discipline of architecture.

As one avenue into this general area of inquiry, our practice has focused on the development of full-scale experimental prototypes, each of which provide a platform for exploring the spatial, material, and programmatic effects of new fabrication and interaction technologies, such as lighting, sound, digital display, and motion sensing. Our interest with these more abstract and experimental projects has been to engage traditional areas of architectural inquiry in terms of space as defined by form and geometry. At the same time, we explore the more dynamic and intangible technologies of the information age. … By extension, these environments are fundamentally active and provide for a general dynamic of feedback and exchange between the system and its users, allowing each to adjust and respond to the other over time.

Eeva-Liisa Pelkonen
"Eero Saarinen's Search for Architecture"
February 8

Saarinen's death could not have been more untimely. He died at the peak of his career while nine major projects—for example, the St. Louis Arch, TWA Terminal, Dulles Airport, and CBS Tower—were still on the drawing board or under construction. Thus he never got to see some of his most celebrated buildings. Two of his closest collaborators, Kevin Roche and John Dinkeloo, completed them, with his widow, Aline, in charge of client and public relations.

Saarinen once remarked to his second wife, Aline—a celebrated author and journalist—that she lived in "rabbit time," while architects lived in "elephant time." A photograph taken a few years before Saarinen's death reminds me of the contrast between the façades of his two great urban buildings, the U.S. Embassy in Oslo and the CBS Tower in New York. The former flickers endlessly, living in rabbit time, as it were, while the other is somber and solid, existing in elephant time. Although his life span was hardly elephantine, Saarinen seems to have believed that his buildings should have at least an elephant's mind: they should recall the past, engage the present, and speculate about what the future might bring. … Saarinen often is referred to as having suffered an "untimely" death, a term Shakespeare used to characterize departure from the "timely," natural course of events.

Elihu Rubin
"The Three Faces of Urbanism "
February 11

The first face of urbanism is material. It is literally the façades of buildings…

The second face of urbanism is plural: the faces of people. It is story, social history, memory, ways of life—the infinite flow of human activity over, around, and through the physical city…

The third face of urbanism is that of power. It is at once the most immense and immediate of the three faces. The face of power can be distant and abstract; it is the power of institutions, knowledge, and ideology, encompassing politics and law, and it is economic power…

The Prudential Center used the first face—architecture and urban form—to advertise some aspects of the second face—a way of life and a legacy—managed by the insurance corporation.

Our question hovers around the third face. The Prudential Center, in Boston, is the archetypal case of a public-private partnership in urban development. It has become the de facto mode of urban development, the idea being that private development is in the public interest. But as the Pru's design demonstrates, private agendas do not always coincide with the general welfare of citizens.


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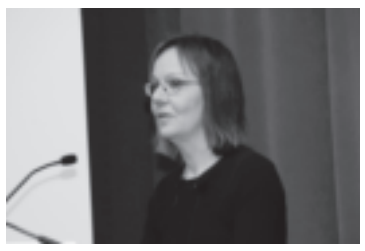
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1 Katherine Farley
2 Elizabeth Meyer
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8 Tom Vanderbilt
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13 Jürgen Mayer H.
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Tom Vanderbilt
"Traffic"
February 22

We cannot think about urban space or any inhabited space without thinking about the traffic environment, which Danish urban planner Jan Gehl calls the "life between buildings."

Whether the traffic environment has been designed in the best way or in accordance to a designer's wishes is another subject altogether. The mirror in cars in the United States that say "objects are closer than they appear" is just one of the visual illusions we deal with in driving. It is also a hint to just how complicated and mysterious the world actually is. Tonight I want to get you to think in a new way about the peculiar aspect of the built environment and the way we act within it.

I wanted to know how traffic functioned on a micro level, for us as individual drivers, or how the individual changes as he or she enters an automobile. … What we see when we are out on the road is not always what we get as we're moving at these unnaturally high speeds, which is quite novel in the course of human evolution. Driving puts our visual and perceptive systems to the test and skews our sense of the environment, often without our awareness.

Bryan Bell
"Expanding Architecture"
March 25

There is not a single issue that is not a design issue. The term I use is social economic environmental design; the acronym is SEED, which purposely sounds like LEED. It's really a triple bottom line of sustainability, not just the environment, which is not the only issue the world faces. It's obviously an important issue, one that has really opened the doors for the public to understand our relevance.

There is a need for an expansion of the role we play as designers. I would describe the typical role we play as being very passive. You sit in your office and wait for a phone call, and that is how you get a job. So design activism is really about going out and finding a need for design—one that the public probably doesn't understand, so we need to build the case for our value. As designers, we have the ability not just to solve but to identify problems.

One problem in education is that we design for hypothetical people, then when we graduate we still want to design for hypothetical people, and the real people seem to get in the way somehow. What I learned from Sambo Mockbee is that poetry comes from people. It's not just from light and materials, it's also from people and places.

The massive shift we need is not going to happen through supernatural forces; it will only happen if we in the design community become activists for the human community. Our potential is waiting to be realized. The need is undeniable—the only thing stopping us is us.

Emmanuel Petit
"Doppelganger Postmodernism"
April 1

The critical category of Post-Modernism has turned into a kind of bad bank for subprime architectural styles to be relegated to historical space as an embarrassing episode of arbitrary aesthetics, nostalgic ethics, and compliant politics. As a consequence, even some of its main protagonists continue to disavow their association with it. The 1970s and 1980s have heard the critical voices who formulated (mainly Marxist) resistance against Post-Modern architects' facile acceptance of the image-driven world and, by extension, of consumerism. Hal Foster, Kenneth Frampton, Andreas Huyssen, Fredric Jameson, and Manfredo Tafuri are only some of the detractors of the ideology of complacency they located at the core of architecture during these years. In *Postmodernism, or the Cultural Logic of Late Capitalism,* Jameson claimed Postmodern architecture capitalizes on "pastiche," which he defines as "the wearing of a linguistic mask, speech in dead language ... amputated of the satiric impulse, devoid of laughter and of any conviction ... the practice of a kind of blank irony."

His critique stands, but it is not useful for me to rehearse what has now turned into a historiographic cliché. Post-Modernism in architecture has a lot to teach about the "architecture" of human reflection and self-reflection in the sense that the artifacts of Post-Modernism are a rich index and repository of the mechanisms of Western thinking—which is, by the way, neither linear nor univocally optimistic nor is it always conclusive with clearly defined (and fixed) positions directed at the future ... and not all thinking is instrumentalist and prêt-à-porter, so to speak. I want to search for a different terminology to talk about Post-Modernism and suggest the beginning of a phenomenology of the self-reflective in Post-Modern architecture. I submit that there is a sister concept of Jameson's pastiche: irony, which is more productive to theorize (or re-theorize) Postmodernism within a perspective, foregrounding its critical instruments and philosophical concerns and not its so-called easy aesthetics.

Armin Linke
Myriam Bellazoug Memorial Lecture
"Phenotypes Limited Forms"
April 5

The problem is how to show or how to use photographs today. Not only what to photograph but how to exhibit them, how to present them. I will show you the different strategies I tried to develop to place photographs in space.

It's a very interesting moment right now for photography because of the switch from analog to digital technology. It is not something that changes the way we take photographs, because basically the system of the camera obscura is still the same ... what changes is the way images are distributed and the interaction of the images. At the moment we have access to an incredible amount of images.

The installation *Phenotypes, Limited Forms* was presented two years ago. We worked with students of curatorial design and basically tried to develop an installation from an Internet project I presented seven years ago at the Venice Biennale of contemporary art. I put my archive on the Internet, and people could select images and put together a unique book, which was sent to them. It was also an issue of photography in the art system, the fact that for only thirty dollars you could get an *unicum.*

With digital photography there is a lot of photography done in a diffuse way. If you think, for example, of reportage images like those of the London Tube bombs or Abu Ghraib, they have very strong information content but are not made by professional photographers. They are made by other means via a kind of diffused authorship. It's interesting to develop new systems or new ways to read these kinds of images which are produced without artistic intention and don't have artistic content. It depends on how you use them.

Frank Gehry
Davenport Visiting Professor
"Current Work"
April 8

This year I waited for Bob to call me to come teach, and when there was no call, I thought, "What happened?" So I called him, and he said, "Last time you were here you said it was your last time, so I took you at your word." I begged him to let me back in. I love this school more than I can tell you. What am I going to talk about?

I've become passionate about trying to change the plight of the architect. It goes like this: You get hired by the client to design a building, they love it, you love it, you put it out to bid, it always comes in at more, and all of a sudden the owner and contractors are partners, and you are on the other side—you're marginalized. Over the years, the profession has done everything possible to protect us from the big bad world of lawsuits and things that happen out there that you don't have any control over, but because you're the architect you get blamed for it. By overprotecting us, like overprotective parents with their children, you infantilize us. I think we've become marginalized because of that; the master-builder model from the past is what we should follow. We should take more responsibility and become more involved with the construction process by following things through to the end. The last few years I've been doing that, and I've ended up becoming friends with the clients, who are more happy. It's a better place to be. There is a move now in the profession for single contracting, where the contracts are written as a partnership with the owner, architect, and contractor, but that is still two to one. In that equation you don't have the power you need to deliver a building, and the payment and profit come at the end. The owner, architect, and contractor get their bonuses at the end based on performance, which further compromises the architect because you are torn between what you propose and what you do. Not everyone will get caught in that, but I think it's a recipe for disaster.

The point is that we have the tools to be more progressive and take more responsibility.

It's those experiences [from design to construction] that have led me to try to be more proactive. If I have any legacy, I hope it will be for making our profession more proactive, responsible, and powerful and less marginalized going forward.

Jürgen Mayer H.
"Pre.text/vor.wand"
April 12

The title "Pre.text/vor.wand" refers to "pre-writing/pre-wall" as a kind of pre-architecture. The work I am presenting represents ten years of my firm's achievement. It is also still a search for what is architecture. What actually is it we're trying to find, and what are we trying to address, as a pretext for the attempt to achieve something else? I don't know what it is, but if it is building work as some sort of institution, we are trying figure it out.

It is a search for an architecture that tries to push the limits of the discipline but also looks into the planning and material we are used to dealing with in architecture—not only building materials but also the virtual media and all the interconnectivity between all these realities. One of the main obsessions always seems to come back, starting with the surface and different aspects of the state of connection patterns, which seem to have become a primordial soup for the work we are doing. I have about three hundred different patterns now. They come on shipping slips or order forms or inside envelopes … and it's actually nice how they come to the office for free.

It also becomes a metaphor for what we deal with in architecture: how certain boundaries or limitations actually divide public and private space, the personal and the neutral.

We test in summation, in our work at a small scale, how these patterns can become three-dimensional and inhabit a wall, an envelope, or environment. But it is mostly found objects that we enlarge and re-interpret and use as a starting point of spatial exploration.

Saskia Sassen
Roth-Symonds Lecture
"Bridging the Ecologies of Cities and of Nature"
April 15

I am working with a biologist on an experimental project at the heart of which is the notion that both cities and nature are complex systems—each with multiple ecologies —that interact in negative ways. One question is, can we make them interact in positive ways? There is a hypothesis in there: Given that both are complex, given that both are marked by multiple ecologies and multi-scalar mobilities, it should be possible to alter the valence of the many interactions they have. It is also a way of contesting notions of the environmental challenge of the world of remediation, of minimizing and of flattening the subject. On the contrary, I want to pull out the multiple levels, the multiple effects of the city.

At Columbia University there is a strange thing called the Earth Institute, which is a beautiful name. When it was given the name twenty years ago, nobody really knew what it meant, but now we have a better sense of it. They asked me to do a sort of forecasting project and let me choose the collaborators. The project is "Cities, Environmental Sustainability, and Forecasting for 2050." And I said, "No, 2020." I think forms of knowledge and damage, potentials that are positive, and so on, allow us to make intelligent, rather than extravagant, forecasts.

How can we begin to use the multiple capabilities of cities and the complexity of cities and nature to make those articulations have a positive valence in nature? The other thing, of course, is that cities are extremely creative, including new types of socio-national conditions. One of the reasons for this is the multi-scalar capacities. What is just an event in a rural setting or a small town becomes a new socio-national condition in a large city. And urbanization itself alters nature's qualities. I think producing a sort of third space, where all kinds of other ecologies are a mix of what we have made, becomes edited or materialized as another condition in the space of the city and nature's politics.

Spring lecture excerpts were compiled by Avram Forman ('12), Nicky Chang ('12), Vivian Hsu ('11), Ronald Lim ('11), Brian Spring ('11), and Leticia Woulk Almino de Souza ('11)

Advanced Studios Spring 2010

Courtney Crosson project for Andy Bow and Patrick Bellew studio, spring 2010

Anne-Marie Armstrong project for Frank Gehry studio, spring 2010.

Eliza Higgins project for Katherine Farley-Deborah Berke studio, spring 2010.

Adam Tomski project for Griffiths-Holland-Jacob studio, spring 2010.

Frank Gehry

Frank Gehry, Davenport Visiting Professor, and Katherine Davies ('04) focused on the ideal space for music as in past Gehry studios, but this time the studio, on a dramatic site overlooking the Golden Horn, in Istanbul was infused with political implications. The objective was to link people through culture rather than war by means of a 2,000-seat concert hall for Daniel Barenboim's West-Eastern Divan Orchestra, which pairs Israeli and Palestinian musicians and provides housing, a kindergarten, as well as a school for the study of Middle Eastern music.

Students traveled to the site and met with the client, then went to Berlin for a concert at Scharoun's Berlin Philharmonie and to Los Angeles over spring break to visit Frank Gehry's office and attend a concert at the Disney Concert Hall. In addition to meeting with Barenboim they met with Mariam Said, who cofounded the West-Eastern Divan; Yasu Toyota, a world-renowned acoustician with Nagata Acoustics; and Craig Webb, from Gehry's office. The students also attended concerts on their own in major concert halls on the East Coast.

The students' solutions addressed the site and program in varied ways, working primarily with physical models and alternative methods and materials, ranging from baked meringues and double metal skins, to crushed lumber, as well as every machine in the fabrication lab. They presented their ideas to a vocal and engaged jury, including Paul Goldberger, Irving Lavin, Greg Lynn, Filiz Ozer, Mariam Said, Michael Sorkin, and Carsten Seibert.

The burden of the program's social and cultural implications pushed many students to focus on the concert hall rather than the symbolism of the project. Some reflected on the traditional architectural forms of the geode-like mosque niches; others separated the audience in recesses that provided directional spaces. Circulation and progression through public spaces directed the hall's volumes, with open plazas leading to narrower passageways toward the cliff's edge. The complex acoustics often fragmented the design, as each student was challenged to create a holistic synergy.

Katherine Farley and Deborah Berke

Katherine Farley, vice president of Tishman Speyer, led the fifth Edward P. Bass Visiting Architectural Fellow studio with architecture professor Deborah Berke, calling for a mixed-use program of market-rate housing grounded in the developer's requirements for a hillside neighborhood in São Paulo, Brazil.

The studio began with Tishman Speyer's Nate Shanok leading a one-day crash course on development in Brazil, after which the students researched the city of São Paulo, completed site analysis, and analyzed feasible programs. They presented their master plan concepts to Tishman Speyer on their trip to Brazil, prior to midterm. There they visited icons of Modernism, Tishman Speyer's developments in Rio de Janeiro and São Paulo, met with Tishman Speyer's local team, and toured Brasília.

One major decision the students were asked to make early on was whether to sell off the southern half of the site to a retail developer or to develop for multiple uses. The resulting projects presented to the jury—Patrick Bellew, Andy Bow, Peggy Deamer, Tom Farrell, Sean Griffiths, Audrey Matlock ('79), Cathleen McGuigan, Rob Rogers, Annabelle Selldorf, Nate Shanok, and Claire Weisz ('89)—inspired questions of ethical development, sustainability, and affordability in this fast-growing economy.

Some students proposed compositions of residential towers that considered security, ecology, amenities, and the relationship to the surrounding neighborhoods. Others used landscape as an organizing strategy, taking into account seasonal transformations, water flow, prevailing winds, and circulation as a framework. Students incorporated performative architectonic elements such as modular shading panels and voided interior spaces that created unique identities. The organization of new neighborhoods led to unique arrangements of volumes and programs around gardens or community services, while topographic landscapes across the site contrasted with superblocks of Modernism. Few projects reused the existing buildings, and most focused on a variety of flexible spaces fluctuating from small to large, open and closed, oriented from the edge to the center of the site.

Charles Holland, Sam Jacob, and Sean Griffiths

Charles Holland, Sam Jacob, and Sean Griffiths of FAT, with Jennifer Leung, led their second studio at Yale to explore conceptual ideas in connection with the design of a new border crossing at Dover, England. Two sets of introductory design exercises—the first, exploring material, fabrication, and formal possibilities inherent in heraldic devices and environments; the second, considering the polemical condition of historical and contemporary border crossings—were reviewed on both sides of the Atlantic by architects, artists, graphic designers, and urban planners. Subsequently, students developed individual architectural proposals suggested by the idea of Englishness as both a high and low form of custom, behavior, taste, and cultural production. The work of the studio brought the site—Dover and its White Cliffs—into relief through a number of analytical frames, including that of a historical seaside fortification, the sublime natural edge of England, a prototypical town economy and population, and an infrastructural and economic link to the continent as a border town.

Students presented final proposals to a jury of Mark Gage ('01), Fred Koetter, Michael Meredith, Ed Mitchell, Elihu Rubin (Yale College '00) Felicity Scott, Stanislaus von Moos, and Wouter Vanstilphout, ranging in scale from discrete waterfront buildings to town-scale rehabilitation strategies.

Programmatically, the former included projects housing a ferry terminal, a casino, or mixed-use housing. The latter operated at the convergence of contemporary global economies and the local townscape through designs that employed a network of truck stops, community agriculture allotments, a twenty-first-century world's fair, the picturesque landscape, or a linear intermodal transportation hub. The various projects demonstrated several shared interests, including the recognition that *site* is a dynamic term that changes throughout history, political ideology, transitional populations and economies, and its climate.

The other concept was the relative architectural value of iconography, symbolic form, and material traditions taken from both specific cultural contexts and mass consumer culture. While the pre-Modern heraldic offered a graphic and geometrical logic by which to marshal figural and symbolic form into a dense set piece, Denise Scott Brown's concept of the heraldic was seen as the dialectical opposite and better half of the physiognomic in her decorated shed versus duck typologies. The innovation of the studio was the attempt to modernize and challenge these definitions of heraldry through the intersection of contemporary political and programmatic issues, and new materials and technologies.

Andy Bow and Patrick Bellew

Andy Bow and Patrick Bellew, Eero Saarinen Visiting Professors with Timothy Newton ('07) offered a studio that addressed the issue of sustainable tourism along resorts in Palmeraie, northeast of Marrakech, Morocco. The focus was a master plan and individual buildings for a carbon-positive eco resort to be a prototype for other similar developments in Morocco and the rest of Africa. The students were asked to create a responsible tourist resort that not only offers much-needed jobs and enhances prosperity, but also provides energy for the local community.

The studio traveled to the site to select the area to be developed and begin the master plan as well as to ascertain the sensitivity of the natural resources, especially water. They critically analyzed the notion of an eco resort and found solutions for integrating it with landscape without disturbing the natural surroundings, while also serving the area residents. The students' vibrant color palettes and materials reflected the culture in Palmeraie.

Some students proposed close-knit resorts similar to the vernacular Kasbah and souk. In other proposals, rainwater catchment elements were integrated in the building designs and traditional deep walls and courtyards were employed for passive ventilation with canopies forming new roofscapes. Other projects took advantage of landscape diversity, while a few developed variegated landscape schemes with patchworks of programs such as farms, or linear construction with water flowing between solid elements. Each project presented to the jury of Deborah Berke, Ljiljana Blagojevic, Katherine Farley, Anthony Fieldman, John Patkau, Joel Sanders, Mark Simon ('72), Albert Taylor, and Michael Yusem, was uniquely attuned to the environment and set new standards for sustainable desert developments.

Chris Perry

Chris Perry, Louis I. Kahn Visiting Assistant Professor, led a studio focusing on themes of anticipatory futuristic design in connection with the development of infrastructure networks at CERN (the European Organization for Nuclear Research) outside of Geneva, Switzerland. The students were challenged to increase the exchange between scientists, create a coherent architectural identity, and integrate three very disparate and haphazardly planned facilities: CERN's primary hub in Meyrin, Switzerland, that serves as the informal "center"; Prevessin, a research site at the French border; and Point 5, which houses American scientists.

The studio began with analysis of the work of Reyner Banham and Cedric Price as well as network and feedback theories of the 1950s and 1960s. It was followed by a visit to CERN to meet with scientists and tour the campuses. Students were asked to define a set of proposals for CERN's centennial in 2054. Borrowing from Banham's use of extrapolation as a method of forecasting, the studio reimagined both the instrumental and aesthetic potential of architecture phasing, introducing new transportation infrastructure between the sites for iterative growth and fluid communication. Because officials at CERN are also interested in making the institution more energy self-sufficient, the students investigated energy production and distribution.

The second scale of design was more specifically building-oriented, mixing communal facilities for seminars, lectures, conferences, temporary office space, exhibitions, restaurants, entertainment, and recreation, as well as retail in a way that would enhance exchange between scientists and their respective research communities.

Some students designed projects that operated as both architecture and infrastructure with elevated corridors supported by structural nodes comprising a regional distribution system for light rail as well as pedestrian circulation that doubles as environmental-technology systems. Others placed more emphasis on landscape in the development of an interstitial building fabric for the Meyrin campus. The issue of designing for flexibility and expandability was often discussed in the review by the jury of Alex Felson, Kurt Forster, Helene Furjan, Catherine Ingraham, Ed Keller, Ferda Kolatan, Ed Mitchell, Ciro Najle, Alan Organschi ('88), Michael Su, and Stanislaus von Moos.

Greg Lynn

Greg Lynn, with Brennan Buck, asked students to design a cavernous interior space for the aging of agricultural products (fermentation, finishing, molding, pollination, and air drying) across the street from Claude Nicolas Ledoux's Royal Saltworks at Arc-et-Senans in France, which was selected to serve as formal inspiration. After a visit to the site, the students were challenged to design a vast, but not necessarily singular void, predominantly insulated from the exterior envelope, employing the sophisticated technologies of energy, generating heating, cooling, ventilating, and lighting, as integrated building systems.

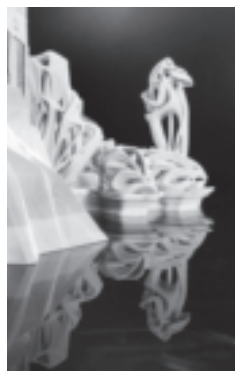
Forbidden to resort to current strategies of blending the landscape and the building with filleted surfaces or subterranean Hobbit-like architecture, each student was asked to achieve massiveness in both the exterior gesture and for interior spaces. Rather than excavating a solid block as was done centuries ago, the studio used a contemporary architectural sensibility of surfaces, extending the pedagogy from Lynn's 2009 Terzo Braccio studio.

With the requirement that the space for aging and growing food must be expressed on the exterior façade, students drew from the agricultural and industrial contents of the interior: grapes, rinds, leaves, vats, barrels, distillers, bees, and so on. A number of them focused on the visual relationship between the interior cavernous space they were creating and Ledoux's bulbous gatehouse. Others considered the gatehouse's colonnaded grotto as a model for a massive, yet surface-based language of articulation and porosity. Some were faceted or crystalline while others adopted the literal references of Swiss cheese or honeycomb forms, which they presented to the jury of Giovanna Borasi, Peter Eisenman, Greg Foley, Frank Gehry, Charles Holland, Ed Mitchell, Richard Schulman, and Anthony Vidler.

Mark Gage

Mark Gage ('01), associate professor, led an advanced studio according to an École Des Beaux Arts method of exercises, independence, and autonomy with a required set of drawings and models. To improve the technical, representational, or design skills

Katsunori Shigemi project for Chris Perry studio, spring 2010



Francesca Singer project for Mark Gage studio, spring 2010.

Tyler Velten project for Hilary Sample studio, spring 2010.

Cory Collman project for Greg Lynn studio, spring 2010.

needed for completion of the final project, the students participated in the short form of the *esquisse* (an eight-hour exercise). The results were specific as to presentation, building typology, and spatial organization. Although remaining true to Beaux Arts concerns by not incorporating social and economic information in their designs, students arrived at their solutions using contemporary technologies and methods for production in contrast to Beaux-Arts ink drawings. Employing these techniques and aesthetic theory, they designed a freestanding complex adjacent to Delefortrie's 1910 Musée Océanographique, a research institution directed by Jacques Cousteau from 1957 to 1976, situated on the steep Monaco cliff. Students traveled to Paris and Monaco to see the project site and Beaux-Arts masterpieces including Charles Garnier's Casino de Monte Carlo.

For many students, the challenging cliff was almost all-powerful, with one student proposing a cascading series of platform trays, loosely hung in between the cliff face that re-read baroque figural drapery as a new form of architectural matter in between mass and texture. Another student focused the visual reflection of articulated individual pavilions composed against the cliff. Some looked to other organizing systems such as fractal geometry at varying scales to guide the architecture, circulation, and ergonomic details. Interiority was the defining aspect of another, in which volumetric crevices focused the program and articulated a series of directional material gradients using color and texture to accentuate the project.

In presentations to the jury composed of Hernan Diaz Alonso, Cody Davis ('09), Peter Eisenman, Kurt Forster, Ariane Lourie Harrison, Keith Krumwiede, Chris Perry, Emmanuel Petit, David Ruy, Stanley Tigerman ('60), and Anthony Vidler, the students addressed issues of the waterfront, temporal process, views from above, sequence of museum spaces, weathering, and the studio's rigid methodological requirements.

Sunil Bald

Sunil Bald based his studio on the proposal for the new 250,000-square-foot Miami Science Museum as a vehicle to explore issues of architecture, landscape, and urbanism in a context of environmental and economic instability. Sited in downtown Miami on the edge of Biscayne Bay, the project complements its neighbor to the north, Herzog + De Meuron's Miami Art Museum and architecturally provides an opportunity to engage in a dialogue between science and art.

The students studied the display techniques in science museums, and found that while traditional natural history museums focus on identifying the remote, the marginal, and the exotic, an expanded understanding of the micro and macro scales of time and space, and the dissolution of physical and biological boundaries of life and matter, allows the contemporary science museum to portray a diminutive humanity in its quest to spatialize the universe. Consequently, the spectacle of the science museum has become participatory rather than solely scopic. The studio traveled to Miami to meet representatives of both the Miami Science Museum and the Miami Art Museum and experience the urban and natural landscapes of the area while focusing on the effect of climate change.

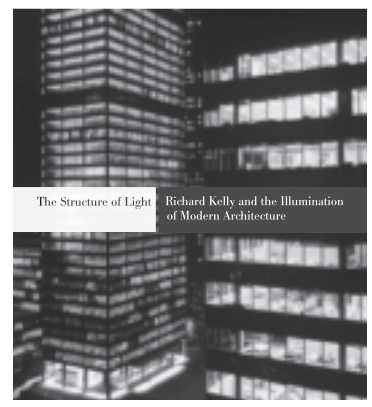
The student's projects, which ranged from the epistemological to the contextual, were presented to the jury of Michelle Addington, Alexander Felson, Leslie Gill, Aaron Hockett, Frank Lupo ('83), Terrence Riley, Hilary Sample, Bill Sharples, Brigitte Shim, Ada Tolla, and Marc Tsurumaki. Some students focused on circulation; others determined ways of meeting the ground and core or dispersing program with interactive stations. Still others addressed how to meet the water's edge and adjacent eco-systems. Many students focused on the spectacle of the space while others extended the flow into a zigzag on the hillside, or parallel bars pulled apart with ramping for circulation. One repeated theme was the public domain of the museum. During the design process students negotiated lines between the architectural and the curatorial, the real and the analog, stage and display, the micro and the macro, object and landscape, and the local and the universal as they developed their rigorous solutions.

Hilary Sample

Hilary Sample, associate professor, led the studio "Rethinking Urban Health Infrastructures," for a Montreal site, which examined the city's two-decade-long public-health crisis. Nearly all of its teaching hospitals are overcrowded and outmoded; and historically significant hospitals are scheduled to close. They will be replaced by an emerging typology in the architecture of health care—the superhospital. Montreal is scheduled to build two superhospitals, which will incorporate campus and research park, consolidating the operations of several independent facilities. However, as the existing hospitals are emptied, there will be a vacuum in neighborhood care. A reciprocal typology—the clinic—proposes to address local concerns through a flexible and adaptable architectural model. The premise of the studio was that a clinic, unlike a superhospital, is a more sustainable building type, and its civic presence emerges as a distinct architectural image critical to a new urban infrastructure for health.

The students also conducted preliminary research into urban health infrastructures and established a trajectory for each student's 20,000-square-foot proposal. Working with professor Annmarie Adams, of the McGill University School of Architecture, and Howard Davies, from Montreal-based Atelier Big City, students focused on specific health and service issues. Each picked a different treatment program related to autism, traumatic brain injury, diabetes, or homelessness. Other projects explored the clinic as a site of a specific experience—one as a birthing center, and another as a blood bank. While all projects reimagined the care environment, one proposed a strategic intervention for incorporating green space into the existing Montreal General Hospital, integrating the Mont Royal Park into the health infrastructure. Each project developed an innovative clinic type that speculated on the way architecture might contribute to new conception of care by generating new formal types of health clinic. They presented the projects to a jury of Sunil Bald, Howard Davies, Sam Jacob, Jennifer Leung, Ben Pell, Jennifer Pindyc, Peter Rose ('70), Ashley Schafer, Brigitte Shim, and David Theodore.

Jacquelyn Hawkins project for Sunil Bald studio, spring 2010.



The Structure of Light

Fall Exhibition

The Structure of Light: Richard Kelly and the Illumination of Modern Architecture at the Yale School of Architecture Gallery, August 23–October 3, 2010

On the centenary of Richard Kelly's birth, the exhibition, *The Structure of Light*, curated by Dietrich Neumann, celebrates the work of one of Modern architecture's most prominent lighting designers. Kelly (1910–1977) graduated from the Yale Department of Architecture in 1944 and resumed his earlier practice as an independent lighting designer. In the following three decades his collaborations with Ludwig Mies van der Rohe, Louis I. Kahn, Philip Johnson, and many others helped to define the nocturnal imagery of Modern architecture.

Kelly's career began at a felicitous moment. A whole range of new technologies for architectural illumination had been introduced, and a long period of prosperity emerged after the Great Depression and World War II. Modern architecture became firmly established as the dominant style, bringing with it new building materials, structural approaches, and ideologies. Large expanses of glass would make the previously popular floodlighting of façades less applicable, and instead interior lighting would determine a building's exterior appearance at night and render its spatial depth visible.

Kelly was instrumental in formulating something that we might call a *nocturnal modernity*, a particular aesthetic vocabulary for the home, public spaces, and work environments at night that had a lasting impact on the appearances and reception of Modern architecture. If carefully considered, such nighttime appearance would reach beyond the mere fulfillment of functional needs toward a particular interpretation—a mise-en-scène bringing qualities to a building undiscernible during the daytime that were hardly considered part of the Modernist mainstream, namely mood, theatricality, and drama. Indeed, Kelly adopted much lighting technology from the theater, together with the conviction that artificial light could help to shape the changing patterns of modern life.

The complete control and flexibility of artificial light allowed a selective rendering of space and determination of use that was more specific than in daylight. Perhaps Kelly's most lasting contributions to Modern architecture were his determination to make the light source invisible and to plan for the reflective luminosity of materials and surfaces. A selective, purer image of a building would emerge in which certain walls would magically glow, large windows would be relieved of all reflections, and exterior landscapes would be theatrically enhanced. Thus, lighting had to be planned from the very beginning because the positions of recessed lights and the reflective qualities of certain materials needed to be determined.

Thanks to Kelly's work, the nocturnal images of, for example, Johnson's Glass House, Mies's Lake Shore Drive Apartments and Seagram Building, and Eero Saarinen's Dulles Airport have become iconic representations of groundbreaking lighting strategies. Kelly also worked on significant daylight applications, for Louis Kahn's Kimbell Museum, in Fort Worth, Texas, and for the Center for British Art, at Yale.

With a selection of drawings, new luminous models of contemporary and historic lighting designs, archival images, and photographs, the exhibition presents Kelly's work in its historical context and examines its legacy in architectural illumination today. Many items are on loan from the Kelly family archive as well as the Kelly papers in the Manuscripts and Archives of the Yale University Library.

—Dietrich Neumann

Neumann is a professor at Brown University and was Vincent Scully Visiting Professor in History of Architecture at Yale from 2007–09.

Fall Symposium

The Structure of Light: The Legacy of Richard Kelly and Architectural Lighting Today is sponsored by the Yale School of Architecture and the Yale Center for British Art.

A two-day symposium will be held in conjunction with the exhibition on Richard Kelly, to examine his work and legacy in the context of the history, present, and future of architectural illumination. The symposium will be held at Hastings Hall except for Saturday morning, which will be convened at the Yale Center for British Art.

October 1, 2 p.m.
Lighting and Modern Architecture
Martin Bressani (McGill University)
"Gaslight and Modernity in Mid-19th Century Paris"
David Nye (Syddansk University),
"Electric Light and Its Social Context"
Bart Lootsma (Leopold Franzens University)
"Light, Advertising, Architecture"
Response: Barry Bergdoll (The Museum of Modern Art)

Richard Kelly in Context
Sandy Isenstadt (University of Delaware)
"Stanley McCandless: Lighting for Stage and Architecture"
Margaret Maile Petty (University of Wellington, New Zealand)
"Lighting Is Architecture"
Alice Friedman (Wellesley College)
"The Art of Light"
Response: Alan Plattus (Yale University)

6:30 p.m.
Keynote Address
Rogier van der Heide (Phillips Lighting)
"Making Something Out of Nothing"

October 2, 9 a.m.
Lighting and Modern Architecture II
Michelle Addington (Yale University)
"Evolving Technology, Devolving Lighting"
Matthew Tanteri (Parsons School of Constructed Environments)
"Kelly and Daylighting: The Collaboration with Louis Kahn"
Jules Prown (Yale University)
"Working with Kahn and Kelly on the Lighting at the Yale Center for British Art"
Roundtable
Michelle Addington, Amy Meyers (Yale Center for British Art), Jules Prown, and Peter Inskip (Architect)

11 a.m.
Richard Kelly's Legacy: Architectural Lighting Today
Jennifer Tipton (Yale University)
Howard Brandston (Lighting Designer)
Jean Sundin and Enrique Peiniger (Lighting Designers)
Response: Emmanuel Petit (Yale University)

2 p.m.
New Developments
Mark Major (Lighting Designer)
James Carpenter (Architect)
Tim and Jan Edler (Lighting Designers)
Response: M.J. Long (Yale University)

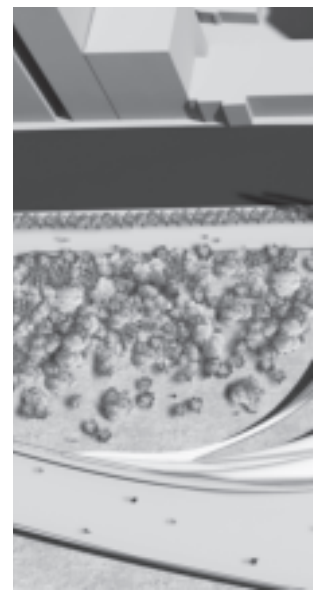
Closing Lecture
Yann Kersalé (Light Artist)
Closing Remarks
Dietrich Neumann (Brown University)

The exhibition and symposium are supported by the Yale School of Architecture, Yale's Kempf Fund, and Brown University. An accompanying book is being published by Yale University Press.

Faculty News

Turner Brooks Architects, Center for Discovery, North Campus, 2009.

Luke Bulman and Thumb, primary graphics for the American pavilion 12th International Architecture Exhibition at the Venice Biennale



Michelle Addington, professor, is collaborating with Rajendra Pachauri, a 2007 Nobel Peace Prize recipient, to develop a new policy for energy-efficient buildings. She was chosen by *Architect* magazine as one of the top ten faculty in architecture nationwide for the year 2009. She gave guest lectures at the University of Toronto, the University of Virginia, and the City College of New York. She also spoke at the "Architecture Therapeutics" conference at the University of Toronto in March. Addington gave a workshop on sustainable design for the Egyptian Ministry of Housing, in Cairo, March 22, 2010 and a lecture on urban building design to Chinese mayors during the Yale Environmental and Sustainable Development Leadership program in Spring 2010. Her essay "Architecture of Contingency" appeared in a publication in conjunction with *Hylozoic Ground,* the installation by architect Philip Beesley for the Canadian Pavilion in the 12th International Architecture Exhibition at the Venice Biennale this fall. She also wrote the foreword for *Thermally Active Surfaces in Architecture,* by Kiel Moe (Princeton Architectural Press, 2010).

Kate John Alder (MED '08), critic in architecture, consulted on the landscape design for New York–based WXY's conceptual intermodal plaza in the Bronx.

Sunil Bald, critic in architecture, delivered a lecture in Spring 2010 as part of the Architectural League of New York's 2010 Emerging Voices program. His New York-based firm Studio SUMO designed an outdoor tea pavilion, Teacozy, installed at Johns Hopkins University's Evergreen Museum in May. The firm was selected to design a minimal shelter, Restbox a 2.5-meter cube, of silicon rubber bands, for Korea's Soswaewon Garden in the 2009 Gwangju Design Biennale, in South Korea. Studio SUMO's work also was exhibited this spring at the Catholic University, in Washington, D.C., and at the Bouton Draper Gallery, in Sydney, Australia.

Phil Bernstein ('84), lecturer, spoke in Manchester, England, at the International Council for Research and Innovation in Building and Construction conference on the future of technology in the building industry. He received the Connecticut Construction Institute's "Distinguished Achievement Award," with Scott Simpson (Yale College '70) of Kling/Stubbins Architects, and John Tocci, of Tocci Builders, for their respective roles as owner, architect, and builder of the Autodesk AEC Headquarters project, in Waltham, Massachusetts.

Turner Brooks ('70), adjunct professor, museum for the Cushing Collection opened at the Yale Medical Center on June 4. The museum, which honors Dr. Harvey Cushing and his pioneering in modern brain surgery, includes a small gallery space, an archive, and a seminar room buried in the bowels of the Yale Medical School's main library. Brooks also completed the Center for Discovery's North Campus, a small living and teaching campus for autistic children, in Harris, New York.

Luke Bulman, lecturer, and his graphic design office Thumb are designing the graphics and book for the exhibition *Workshopping: An American Model of Architectural Practice* for the American pavilion at the 12th International Architecture Exhibition at the Venice Biennale.

Makram el Kadi, critic in architecture, with his firm L.E.FT completed the Beirut Exhibition Center, the first project in the city's new downtown reclaimed landfill area. The firm currently is designing a new Zenith Tower for Beirut and completing the Beirut Marina with Steven Holl Architects.

Peggy Deamer, professor, wrote "The Changing Nature of Architectural Work," in the *Harvard Design Review.* In the summer of 2010 she was a visiting professional research fellow at Victoria University of Wellington New Zealand's School of Architecture

Alex Felson, critic in architecture, lectured at Harvard University's "Critical Ecologies" conference, April 2010, focusing on ecological applications for design professionals. His essay, "Defining Ecology in Ecological Urbanism," co-authored with Linda Pollak will be published in the conference proceedings. Felson, with John Beardsley, co-organized the conference "Designing Wildlife Habitats" at the Harvard affiliated Dumbarton Oaks Center, in Washington, D.C., May 14–15, 2010. His paper, "Designer Ecosystems and the Aesthetic Potential of Research-Based Design," will be published in a collection of essays. He is the principal investigator for the NYC Parks Commission on the Million Trees project, for which he directed a long-term forestry study and implemented research plots to analyze carbon sequestration, sustainable management, and biodiversity of constructed forests. Felson is overseeing a Hixon-funded project on Yale's campus to test alternative land management using compost tea applications. He presented his work at the Ecological Society conference "Suburbanization and Amphibians: Designed Ecological Solutions," in the spring.

Martin Finio, critic in architecture with his firm Christoff:Finio Architecture, recently completed a private house in New York that was featured in the February/March issue of *Mark.* Other projects nearing completion are a 10,000-square-foot house on the east end of Long Island that will generate all of its own power as well as 20,000 square feet of new courtrooms and support spaces for the Brooklyn Supreme Court. Finio was an invited speaker at the ASCA conference, in New Orleans, to discuss the pedagogy behind his course, Systems Integration.

Mark Foster Gage ('01), associate professor and assistant dean, with his New York–based firm Gage/Clemenceau has a 5,000-square-foot penthouse renovation under construction in Lower Manhattan and a 3,000-square-foot beach house under construction on Long Island. His essay "Software Monocultures" is included in the book *Composites, Software and Surfaces: Towards a High Performance Architecture,* which he co-edited with Greg Lynn (see page 17). Gage's article "The Subjugation of Concepts" was included in the compendium *Pulsation,* by Eric Goldemberg, and his "The Aesthetics of Sustainability/L'Esthetique de la Durabilite," in the French journal *Architorm.* His drawings are included in the book *Architects' Sketches: Dialogue and Design* by Kendra Schank Smith (Elsevier Press, 2008) representing the only digitally derived work to be included among work by Borromini, Bernini, Da Vinci, Mendelsohn, and Scarpa.

Dolores Hayden, professor, will deliver the presidential address of the Urban History Association's national conference "Sustainable Cities?" in October. This past year she chaired the Urban History Association's session at the Organization of American Historians meeting "What Is There New to Say About Urban Renewal?" Hayden edited a special symposium section for the British journal *Planning Theory and Practice.* Her book of poetry, *Nymph, Dun, and Spinner* will be released in October.

Joyce Hsiang ('03), critic in architecture, and Bimal Mendis ('02), assistant dean and director of undergraduate studies, were awarded a 2009 AIA Upjohn Research Grant to design and develop a sustainability index to measure and manage sustainable urban development. The project also is supported by Yale's Hines Fund for Advanced Research in Sustainable Design. Hsiang and Mendis founded Plan B Architecture + Urbanism, in New Haven, and are currently working on an urban strategic plan for the government of the Maldives, a 2,000-square-foot summerhouse in Connecticut, and a music center in Sri Lanka. Their firm recently completed a planning study for a mixed-use development in Milwaukee. Mendis's article "Educational Entrepreneurship" and Hsiang's "The Doxiadis Effect: A Master Plan for Riyadh" and "KSA on Message," an interview of UN ambassador and media personality Muna Abu-Sulayman, were published in *Al Manakh 2: Gulf Continued*, a special issue of *Volume,* by Archis, AMO, Pink Tank, and NAi (see page 18).

Jennifer Leung, critic in architecture, gave the lecture "New Ecologies" at the National Taipei University of Technology (December 2009). Her essay "Growing Profit in the War on Error" was published in *On Farming* (Actar, 2010), the inaugural issue of a new book series called "Bracket: Architecture, Environment, Digital Culture." She was interviewed by Geert Lovink, research professor of Interactive Media at the Hogeschool van Amsterdam, for a chapter called "Blogging and Building: The Netherlands After Digitization," in his book *Zero Comments* (Routledge, 2010). Leung has completed two residential renovations in Manhattan, a 900-square-foot apartment in Union Square and a 1,800-square-foot loft in Tribeca, and is designing a residential renovation in the West Village.

Ariane Lourie Harrison, lecturer, and her partner Seth Harrison, of New York–based Harrison Atelier, are designing the production "Anchises" in collaboration with Jonah Bokaer, an internationally recognized choreographer and performer whose works for Merce Cunningham and Robert Wilson have won great acclaim. The project includes the set, a production book, and visuals for the performance, which focuses on the sociological implications of life extension in the anthropocene, or posthuman, era. "Anchises," commissioned for the opening of Dance SouthWest's new theater, Pavilion Dance, in Bournemouth, premieres on October 1. It will also be staged at the Arnolfini, in Bristol, on October 9 and at the Abrons Art Center, in New York City, on November 17. The firm developed a dramaturgy partnership with Bokaer and visual artist Daniel Arsham for the production of "Replica," which is touring Europe. The firm is continuing its work in sustainable design with the Fire Island Land Trust. Lourie Harrison published two installations of "Observations" in *Log* 18 and 19.

George Knight ('95), critic in architecture, and his firm Knight Architecture recently completed the design of Bark Hot Dogs, a restaurant in Park Slope, Brooklyn. The studio's recently completed renovation of the Saint Thomas More Chapel won awards from the Associated Builders and Contractors of Connecticut and the Connecticut Building Congress. The firm is completing the restoration of the Yale Center for British Art's Lower Court, the first phase of the center's Conservation Management Plan.

Fred Koetter, professor, and his Boston-based firm Koetter Kim and Associates will complete the construction of Cornell University's new Physical Sciences Building in November. The 196,000-square-foot interdisciplinary center for chemistry and physics provides state-of-the-art facilities that encourage interaction among the departments of chemistry and chemical biology, physics, and applied and engineering physics. The new building provides internal circulation routes and connections to existing buildings and the campus.

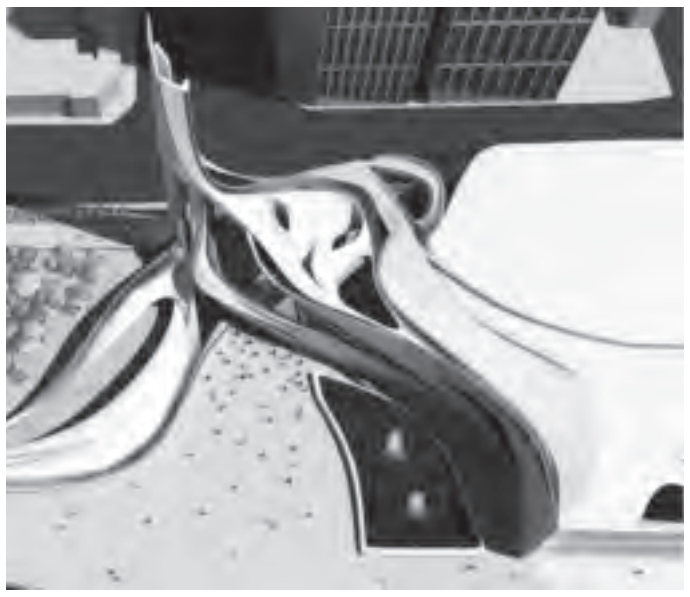
Herbert S. Newman ('59), critic in architecture, with his firm Newman Architects worked on the designs for the renovations and expansions of the Slover Memorial Library, in Norfolk, Virginia; the East Rock Magnet School, in New Haven; the John Jermain Memorial Library, in Sag Harbor, New York; the First Presbyterian Church, in New York City; and the Ridgefield, Connecticut, library. The firm also completed the design of new student residential facilities at Fairfield University, the University of Maryland Baltimore County, the University of Oklahoma, and Oberlin College. Additionally his firm completed comprehensive renovations of Yale's Calhoun College; the North Branford, Connecticut, Intermediate School; and a new Center for Performing Arts at Lynn University, in Boca Raton, Florida.

Eeva-Liisa Pelkonen (MED '94), associate professor, gave two talks at Columbia University: "Saarinen's Search for Form" at the conference "Saarinen@100," on January 30; and a lecture based on her book *Alvar Aalto: Architecture, Modernity, and Geopolitics* at the "Just Released" event at the Buell Center for the Study of American Architecture, in March. In February, she gave the opening lecture "(Un)timely Saarinen" at Yale's installation of the exhibition *Eero Saarinen: Shaping the Future,* which also was published in *Log* 16. In March, Pelkonen gave talks on Alvar Aalto at Roger Williams University and the Paul Rudolph Foundation. She received a grant from the Graham Foundation for the Fine Arts for her forthcoming book, *Kevin Roche: Architecture as Environment,* to be published by Yale University Press in conjunction with the opening of the School's exhibition on Roche.

Ben Pell, critic in architecture, presented the work of his office Pell Overton at the New York offices of Skidmore, Owings & Merrill in their 2010 Professional Development lecture series. The firm's recently completed 13th Street, New York, house renovation was featured in the "Home" section of *The New York Times* on April 29, and the office's renovation of a 3,000-square-foot duplex penthouse at 770 Park Avenue was featured in the May issue of *House Beautiful.* The architects are designing the Blue School, a private institution founded by the Blue Man Group in Lower Manhattan. Pell's book *The Articulate Surface: Ornament and Technology in Contemporary Architecture* was published in August by Birkhauser (see page 17).

Emmanuel Petit, associate professor, published "The Architecture of Self-Reflection" in *Archithese* (March 2010); "On the Entrails of Architecture's Organism" in *Perspecta* 43: "The Real"; and the preface to *Outsider Architect: An Autobiography* by Stanley Tigerman (University of Chicago Press, 2010). Petit received a Griswold Research Grant from Yale to edit a book on Colin Rowe. In spring 2010 he gave public lectures at Yale and at Harvard titled "Doppelganger Postmodernism." His firm, EPISTEME Architects, is currently designing a house in Luxembourg.

Alan Plattus, professor, participated in the conference "Bringing the Jordan River Back to Life: Strategies for Rehabilitation," in Amman, Jordan, organized by Friends of the Earth Middle East, an environmental NGO with Jordanian, Palestinian, and Israeli directors. He presented the preliminary plans for Jordan River Peace Park, at the



Gage/Clemenceau Architects , Khaosiung Marine Culture and Pop Music Center, 2009.

Koetter Kim & Associates, Physical Science Building, Cornell University, under construction, 2010.

MOS Architects, Instant Untitled, 12th International Architecture Exhibition at the Venice Biennale, rendering, 2010.

confluence of the Yarmouk and Jordan rivers, initially developed as a charrette in May 2008, for which Plattus led a team of Yale faculty and students. The Yale Urban Design Workshop currently is working on plans for transforming a Modernist train station into a visitor's center.

Nina Rappaport, publications director, is curating an exhibition, the *Vertical Urban Factory,* to open at the Skyscraper Museum, in New York, on November 9, 2010 where it will remain on view through March. It stems from her research with a New York State Council on the Arts grant and an advanced studio with Michael Tower ('00) at Parsons School of Design. She also was awarded artist project sponsorship from the New York Foundation for the Arts. The exhibition is designed by Sarah Gephart (Yale Fine Arts '98 and Michael Tower of Tractor Studio). In conjunction with the exhibition she will lead panel discussions at Parsons on November 10 and at Pratt on November 15 on topics of factory cities and industrial urbanism. She presented a paper, "Sustaining Industries," at the Iberia Docomomo conference in Oviedo, Spain on April 21, which will be published in October. Her essay, "Toward a New Structural Theory" was published in *AD The New Structuralism* in July 2010 and she is giving a talk at a conference on similar research at the ETH, Zurich, on October 7.

Dean Sakamoto (MED '98), critic in architecture and director of exhibitions was recently recognized as a Fellow by the AIA. He is a recipient of the Yale South Asian Studies Council's International Collaboration Award as the principal investigator in a teaching and research project in Chandigarh, India. Sakamoto's article "A New Course for Tropical Architecture," based on his fall 2009 seminar, was published in the June 2010 issue of *Singapore Architect* magazine. His New Haven-based firm Dean Sakamoto Architects is the design consultant for the master plan of the Kahului International Airport, in Maui, Hawaii. DSA recently completed a comprehensive renovation and structural stabilization of the Department of Anthropology's 51 Hillhouse Avenue building and the redesign of the Judaic Studies Department at Sterling Memorial Library for Yale.

Hilary Sample, associate professor, with her New Haven-based firm, MOS, received an Academy Award from the American Academy of Arts and Letters, in New York. MOS has been selected to build an installation "Instant Untitled" in the American Pavilion, "Workshopping an American Model of Architectural Practice," at the Venice Biennale's 12th International Exhibition. The firm also recently exhibited designs for the sustainable house prototype Element House at the Museum of Outdoor Arts, in Denver, for which Sample interviewed Paul Stoller ('99) of Atelier Ten in the catalog. In the spring Sample presented the work of MOS at the ARCHiLIFE conference, in Saint-Nazarie, France and at the Art Institute of Chicago. Her research on "Building Health Headquarters" was presented at the University of Toronto John H. Daniels Faculty of Architecture, Landscape, and Design conference "Architecture, Therapeutics, and Aesthetics." Her essay "Robots, Towers, and Maintenance" was published in *306090 Sustain and Develop* (Spring 2010).

Daniel Sherer, lecturer, had two catalogue essays published: "Rationalism and Paradox in the Architecture and Design of Franco Albini and Franca Helg, 1934–1977" for an exhibition at the Galleria Fragile, in Milan, Italy; and "Jacob Kassay: Opacity and Reflection" for Franklin Artworks, held in Minneapolis in April. Sherer conducted an interview with Kurt Forster about Swiss art collector Bruno Bischofberger, which will appear in *Displayer: Austellungsdesign und Kuratorische Praxis* 4, 2010, a journal published by the Center for Art, and Media Studies, ZKM, in Karlsruhe, Germany.

Robert A.M. Stern ('65), Dean, with his architectural practice, Robert A.M. Stern Architects, will dedicate a number of academic buildings for the Fall of 2010, including Bavaro Hall for the Curry School of Education at the University of Virginia in Charlottesville; Our Lady of Mercy Chapel at Salve Regina University in Newport, Rhode Island; the Christoverson Humanities Building at Florida Southern College in Lakeville, Florida; and the mixed-use academic and residential North Quad at the University of Michigan in Ann Arbor. Several of the firm's projects have broken ground in the past sixth months, including a new garden city in Xiamen, China, and a new Fitness and Aquatics Center at Brown University. The George W. Bush Presidential Center will break ground in November. The firm was recognized with two Palladio awards, one for the Flinn and Edelman residence halls at the Hotchkiss School in Lakeville, Connecticut, and the other for Alan B. Miller Hall, home of the Mason School of Business at the College of William and Mary in Williamsburg, Virginia. Dean Stern will receive the Historic District Council's Landmark Lion honor in October. His book *Robert A.M. Stern: On Campus* will be released in November.

A Mixed Bag: Ph.D. Lunchtime Discussions

In "Gucci or Goller? Architectural Theory Past and Present" (*Fabrications 10,* August 1999), Harry Mallgrave asked, "Is it any longer possible for two architects vested in two competing conceptual paradigms to hold a sensible discourse, to speak in the same tongue?" He went on to note that contemporary architectural discourse assumes a working knowledge of "the terms and conceptual nuances of existentialism, structuralism, literary criticism, Heideggerian ontology, Marxism, linguistics, sociology, Benjaminian aesthetics, presumed Nietzschean nihilism, and of course the various and sundry . . . strains of poststructuralism." To this list we surely could add other more recent and equally extensive categories.

At Yale the potential dangers of miscommunication are doubtless even greater than at schools with more monolithic pedagogical approaches. But here lies the value of the lunchtime discussions sponsored this year by the school's new doctoral program. A series of informal monthly meetings brought together a small but diverse group of Ph.D., MED, and M.Arch students and faculty members from both the architecture school and the department of the history of art. The conversation was prompted typically by the initial provocation of a text, person, or place drawn from the Ph.D. program's ongoing seminar material or from the current life of the school, be that the writing of Heinrich Wölfflin, the culture of midcentury Rome, or the architecture of Venturi Scott Brown. In some cases questions were directed toward a particular guest, such as Scully Visiting Professor Stanislaus von Moos or Associate Professor Emmanuel Petit. In all cases the circle of conversation expanded rapidly to include the remainder of the assembled company.

To be sure, the discussion did not always reach consensus. Topics of debate ranged wildly across space and time, often pursued with no end in sight and interrupted only by the summons of the afternoon's obligations. Nor was it always clear that all parties shared the same framework of terms and definitions. But the very act of dialogue seemed hopeful: it was a vote of confidence for the possibility of a group of architects vested in disparate conceptual paradigms to hold a sensible discourse, to speak in the same tongue seated, literally, around the same table. This is the promise of such debate and, perhaps, of the new Ph.D. program itself: to offer a place within the school's curriculum for the sort of considered conversation that can challenge, probe, and inform tomorrow's scholarship and practice.

—Joseph Clarke and Kyle Dugdale
Clarke and Dugdale are Ph.D. students at the Yale School of Architecture.

Instant Untitled

In the installation, *Instant Untitled,* by MOS Architects, the firm of associate professor Hilary Sample and Michael Meredith, forty spherical, metalized nylon balloons, partially filled with helium float above the courtyard of the American Pavilion at the 12th International Architecture Biennale in Venice as part of the exhibition "Workshopping an American Model of Architectural Practice," curated by Jonathan Solomon of 306090 and the High Museum in Atlanta. The courtyard measuring 26 feet wide by 20 feet deep is formed by the two wings of the pavilion that flank either side of the central entry. The bilateral symmetry of the plan is reinforced by the columns and pediment of the neo-classical façade. Within this u-shaped space, the balloons hover at the level of the roofline and dip only in deference to the lower branches of a single tree. Forming a canopy over the courtyard, this assembly of mirror balls imperfectly reflects the ground below, elevating the image of the ground plane to the level of the ceiling.

Although the concept of a horizontal mirror has been explored by renown artists such as Olafur Eliasson and Anish Kapoor, this installation is different in that the mirrored plane isn't a static, fixed form. It is a cluster of many mirrors all reflecting partial views, with each globe free to drift independently of the others. Like magnified glitter, the reflective surfaces produce dazzling atmospheric effects through alternately bounced and filtered light. Second, and perhaps of greater architectural significance, is the way the installation charges the habitable space between the ground and the canopy. In this intermediate band, a complex network of bright green nylon straps tethers the balloons both to weighted discs on the ground and to each other. Rather than hide the mechanism that binds the buoyant balloons, it is expressed. In fact, the architects make more of it than is necessary: each balloon is tethered at four different points and as the straps are of different lengths, some are pulled taut while others hang slack. Together, they comprise an intricate architecture of knots and tangles whose drooping figure creates the appearance of effortless suspension.

Instant Untitled, as a temporary piece, is intentionally designed to be lightweight and modular. The balloons were inflated on site and the benches were shipped as components and assembled at the pavilion. It reflects an interest in processing, using sphere-packing software alongside physical models to create these types of clumps and piles. *Instant Untitled*, is an ephemeral delight.

—Meredith McDaniel
McDaniel ('10) works at MOS Architects.

PROTOtype

Visitors to the Duncan of Jordanstone College's "PROTOtype" conference in Dundee, Scotland, cosponsored by the Victoria & Albert Museum enjoyed an immersion in the current state of craft on opening night through Faythe Levine's cult Do-It-Yourself (DIY) documentary *Handmade America*. In the following two days speakers explored the interface of prototype with business theory (Michael Schrage, MIT) the metatheory of the Darwinian struggle between utopian and dystopian elements in the marketplace (Frederic Schwartz, University College London); and the guitar shoes that Lady Gaga will never wear, while Levine's anarchic "makers" continued to populate the conference with a wholesome note of untamed reality. In this revival of DIY techniques that were once the province of the creative homemaker and the work guild, America's anarchic craft explosion poses a powerful counterweight to design theory and industrial practice, one that openly repudiates intellectual discourse in favor of the relationship between maker and product.

Constance Adams ('90), Synthesis/NASA), kicked off the formal sessions with a presentation of hardware and architectural prototypes developed for the U.S. space-flight program, ruminating on Mars, the scrimshaw, and the human relationship with tools and form-making, which she argues has led to the apparition of Homo sapiens astronauticus: the space-age (hu)man. Paired with her in the morning's panel session was MIT MediaLab's Leo Bonanni who discussed the evolution of paradigms in computer-aided craft, which is fueling an open-source bazaar of tinkerers and hackers who are refashioning the design and production of tools through rapid prototyping processes outside of the industrial domain. Craft professor at Dundee, Hazel White, presented an evocative project: a set of wirelessly linked tactile knitted objects in a wooden box to help the aged and infirm place phone calls to loved ones.

The V&A, currently in the process of selecting an architect for its new satellite museum on Dundee's Firth of Tay, was represented by curator Glenn Abramson (Yale Art History Ph.D. '01) and Catharine Rossi, holding down opposite positions on the spectrum between the cult of the chic and detailed scholarship of built objects. Of particular interest for the design process was Liz Sanders's presentation of materials and processes used to develop metaphorical prototypes and to define built spaces for clients, and TU Delft's professor Pieter-Jan Stappers's talk on the continuum from methodologist to tool designer and product designer to consumer. Simon Starling closed the discourse by bringing us back toward Levine's makers with a presentation of his nuanced and charged time-laden artworks in the post-Fluxus 1960s tradition.

Alumni News

Alumni News reports on recent projects by graduates of the school. If you are an alumnus, please send us your current news to:

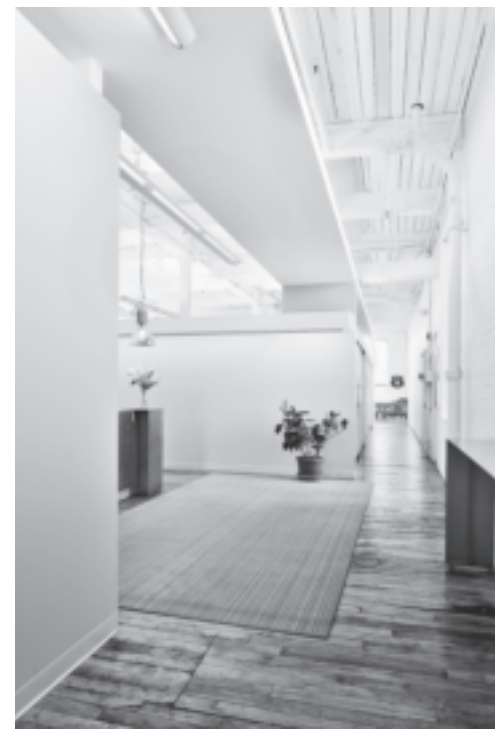
Constructs
Yale School of Architecture
180 York Street
New Haven, CT
06511

Feilden Clegg Bradley Studios, Yorkshire Sculpture park, Wakefield, UK, 2006. Photograph by Jonty Wilde.

Albert, Righter & Tittmann, House in New Hampshire, 2010.

Barton Phelps, Arroyo House, Beverly Glen Canyon, California, View from the north, 1985.

Charles Dilworth, STUDIOS Architecture, Bouygues Immobilier headquarters, Paris, 2009.



Newick Architects, Towers / Golde offices, Connecticut, 2010. Photograph by Frank Poole.

1950s

Harold Roth ('57), William Moore (BA '63, M.Arch.'66), and Barbara Fabiani ('77) of Roth and Moore Architects, completed the new Worthington Hooker School, in the East Rock area of New Haven, in the spring. The project included the integration and adaptive re-use of a 1950 Christian Science Church by Douglas Orr (BFA '19, MFA '27)

James Stewart Polshek ('57), who founded Polshek Partnership Architects in 1963, has continued as design counsel after retiring a few years ago. This summer the firm changed its name to Ennead Architects, with graphic design identity created by Pentagram.

Harold Fredenburgh ('58) is teaching a tall-building studio at Parsons School of Constructed Environments this fall.

1960s

Thomas Beeby ('65, and former Dean) is now Chairman Emeritus at HBRA Architects where he was the design director since 1971 and its CEO since 1998. He will supervise the firm's transition to new leadership and continue to provide counsel but will focus on personal artistic and intellectual inquiries.

1970s

Peter Rose ('70) with his firm, Peter Rose + Partners, completed the opening of an 80-room housing annex at Kripalu Center for Yoga and Health in the Berkshires. The building won the 2010 National Award for Specialized Housing an Honorable Mention in the Environments category of I.D.'s 2010 Annual Design Review.

Barton Phelps ('72) was honored in February at the event "California Gleaming: A Celebration of Contemporary Architecture in Los Angeles," organized by Henri Loyrette, president-director of the Musée du Louvre.

Peter Clegg (MED '74) is a founding partner of London-based Feilden Clegg Bradley, which was recognized with the Award of Sustainability Architect of the Year by the U.K. Green Building Council in association with *Building Magazine.* The firm has accumulated more than 20 RIBA Awards, culminating in the 2009 U.K. Stirling Prize for the Accordia housing project, featured in the eponymous book (Black Dog Publishing, 2009). Clegg has a part-time professorship at Bath University and gave a lecture tour on the West Coast with the Cascadia Green Buildings Group. The firm's environmental sustainability projects are documented in *Feilden Clegg Bradley: The Environmental Handbook* (Right Angle Publishing Ltd., 2008).

Hillary Brown ('75) has joined the full-time faculty of the Spitzer School of Architecture at the City College of New York. As professor, she directs the architecture track in the College's new M.S. program, Sustainability in the Urban Environment, offered with the Grove School of Engineering and Division of Science. She is principal of New Civic Works, a sustainability consulting firm advising governmental and institutional clientele in greening their capital programs, and is a member of a National Research Council study committee addressing federal high-performance green buildings for the National Academies.

Patricia Patkau ('78) with her Vancouver-based firm Patkau Architects won the first design competition for new construction at the Fallingwater Institute, in Pennsylvania. The firm received the 12th Governor General's Medal in Architecture for the Grande Bibliotèque, a central library for the province of Québec. In addition to her practice, she is a professor in the School of Architecture at the University of British Columbia.

1980s

Jacob D. Albert (BA '77 and M.Arch. '80), James V. Righter ('70), John B. Tittmann (BA '81 and M.Arch. '86), and John Barron Clancy ('96) of Boston-based Albert, Righter & Tittmann Architects received a 2010 AIA New Hampshire Excellence in Architecture Design Award for the New House, in New Hampshire.

Maya Lin (BA '81, M.Arch. '86) and eleven other artists, including musician Bob Dylan, composer with conductor John Williams, with actor-director Clint Eastwood, were named this year's National Medal of Arts winners by President Barack Obama on February 25, 2010.

Charles Dilworth ('83) is managing principal at STUDIOS Architecture, in San Francisco. The firm recently completed the interior design for the new headquarters of Bouygues Immobilier, in Issy-les-Moulineaux, Paris. The design was based on transparency, communication, and the environmental responsibility of developers. Using the symbolic structure of the tree, the building's core is covered in wood, linking floors vertically and then spreading out at its peak over the boardroom and reception areas. The firm also completed the renovation and consolidation of Dow Jones and Wall Street Journal into five floors in midtown Manhattan to create a centralized workplace with the most up-to-date technology and design features.

Douglas Garofalo ('87) and his firm were featured in the May issue of *Wallpaper.* He is currently a professor at the University of Illinois at Chicago's School of Architecture.

Craig Newick ('87), with his firm, Newick Architects won the Connecticut Business Architecture Award 2010 for the offices of landscape architect Towers/ Golde. The award is given for projects that help shape effective business performance and illustrate the potential for architecture to positively influence the business environment.

Duncan Stroik ('87) was featured in the *Wall Street Journal* on March 18, 2010, for his religious architecture. The article cites his Shrine of Our Lady of Guadalupe, outside the small Mississippi River city of La Crosse, Mississippi and his chapel for Thomas Aquinas College, northwest of Los Angeles, which employs a complex, high classical architectural vocabulary. Stroik also gave the lecture "Is There a Sacred Architecture?" at Sacred Heart University, in Fairfield, Connecticut, on March 4, 2010.

Cary Bernstein ('88) and Mark Cavegnero Associates have been selected for the City of San Francisco's Public Works As-Needed Architectural Services program. She received an IIDA-NC 2010 Honor Award for "One & Co." She currently is working on a two-unit residence, a single-family house, a video production facility, and a studio for an industrial-design firm. Bernstein recently was named the chairwoman of the SFMOMA Architecture and Design Forum.

Gil Schafer ('88), of G. P. Schafer Architect, was awarded a 2009 Honor Award in Historic Preservation from the AIA New York State Chapter for the restoration of the William C. Gatewood House, in Charleston, South Carolina. The house was featured in the May 2010 issue of *Town & Country.* The firm also received a 2009 Citation Award from the AIA Westchester/Mid-Hudson Chapter for its design of Willow Grace Farm, in Dover Plains, New York.

Claire Weisz ('89), Mark Yoes ('90), and Layng Pew ('89), partners at New York–based WXY, recently completed the conceptual design for a new intermodal plaza at Fordham Plaza, in the Bronx, New York. Significant improvements in traffic safety and public amenities will be achieved by the federally funded project initiated by NYC DOT. Their design for the Xinjin Landscape Bridge, in Szechuan Province, was awarded in an international competition with Weidlinger Associates for a 772-foot-long bridge.

1990s

Charles Bergen ('90) joined McKissack & McKissack last October where he is managing two design build projects at the United States Coast Guard and Department of Homeland Security Head Quarters at Saint Elizabeth's in Washington, DC.

Granger Moorhead (BA '91, M.Arch. '96), principal of architecture and design firm Moorhead & Moorhead, was spotlighted in *The New York Times,* on February 11, 2010, along with his brother and partner, Robert Moorhead. The article featured their project *Ice Heart*, a 10-foot-tall frozen sculpture installed at 46th Street and Broadway, in New York, for Valentine's Day. The project "picked up the lights of Times Square" and generated little waste: the ice blocks, made from New York tap water, melted away.

Johannes Knoops ('95) won the 2010 People's Choice award for the "Raise the Roof" Kinetic Architecture Competition for his entry "Evoking Obsolete Devices with Kinetic Fantasies." Conceived during his Fellowship at the American Academy in Rome, the project imagines two kinetic additions for Porta San Sebastiano which transform from museum lecture halls into outdoor movie screens.

Jamie Unkefer ('95) and Jeff Goldstein ('01) with their Philadelphia-based firm DIGSAU teamed with landscape architecture firm Studio | Bryan Hanes to win the International Garden Festival with the project Veil Garden. The festival, set on the site of Les Jardins de Métis/Reford Gardens, in Quebec, Canada, is recognized as one of the most important events of its kind in North America and one of the two leading annual garden festivals in the world. The Veil Garden, designed in response to this year's theme, "Paradise," opened to the public on June 26, 2010. The firm is completing a master plan for Greene Street Friends School, in Philadelphia, and participated in Philadelphia's Architecture Center Infill Competition this spring.

Douglas Bothner ('96) an associate at Ziger/Snead Architects has been elected to the Board of Trustees of the Contemporary Museum. Bothner has won an honor at the 2009 American Institute of Architects of Maryland's Design Awards and numerous honors from the American Institute of Architects of Baltimore.

David Gissen ('96) edited the "Territory" issue of *AD* (May 2010), which investigates the emerging "geo-architectural" aesthetic in which buildings produce new geographical sensations, effects, and realities. Gissen also was promoted to associate professor with tenure at the California College of the Arts, where he coordinates the history/theory curriculum in architecture.

Pankaj Vir Gupta ('97), principal of Vir.Mueller architects, collaborated with Christine Mueller and Cyrus Samii on the book *Golconde: The Introduction of Modernism in India* (Urban Crayon, 2010). Golconde, a dormitory for the Sri Aurobindo Ashram on the coast of the Bay of Bengal, in Pondicherry, India, was designed by architects Antonin Raymond and George Nakashima. The monograph includes previously unpublished photographs, construction drawings, and selections from archival letters and journals. A book launch and lecture took place in May at the Alliance Française, in New Delhi.

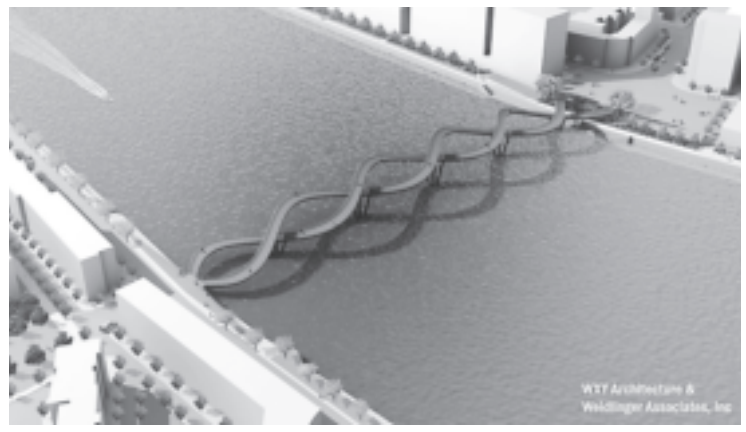
Drew Lang ('97) and his firm Lang Architecture have completed the preliminary design phase for a 31-story, 210-room full-service hotel in midtown Manhattan. The firm continues to lead the Faubourg Street. Roch Project (FSRP), a New Orleans 501c3 nonprofit with the mission of holistic neighborhood revitalization. FSRP is launching an energy-conservation business venture called Thermal Coupling, in partnership with the Louisiana Green Corps, to provide green-collar job training to disadvantaged and high-risk young adults in New Orleans.

Melissa Delvecchio ('98) a partner at Robert A.M. Stern Architects has been invited to be on the jury for the design awards for the New York Chapter of the Society of American Registered Architects.

Hemmant Jha ('98) is working with research groups at universities and corporations to help translate research into devices and solutions for emerging lifestyles

Duncan Stroik, Shrine of Our Lady of Guadalupe, La Crosse, Mississippi, 2008.

G.P. Schafer Architect, William C. Gatewood House, restored kitchen stair, Charleston, South Carolina, 2009.



WXY entry for bridge competition with Weidlinger Associates, Xinjin Landscape Bridge in Szechuan Province, rendering, 2010.

Peter Arbour with RFR Consulting Engineers, Paris, Liquid Wall, entry for AIA New York competition, 2010.

DIGSAU with Studio | Bryan Hanes, Veil Garden, Les Jardins de Métis / Reford Gardens, Quebec, Canada, perspective rendering, 2010.

Igor Vasilevsky, Druzhba Sanatorium, Yalta, 1986. Photograph by Aidan Doyle ('10), 2009.

and environments. In addition, Jha has set up a nonprofit, Wheelwell.org, for the development of wheelchairs and devices for people with physical disabilities. Wheelwell is working with Northwestern University to create inexpensive primary medical devices for the developing world, with possible offshoots for the developed world. Jha also is teaching a product-design workshop at the Institute of Design, IIT, on "Personal Mobility and the Wheelchair."

Edgar Papazian ('99) with his firm, Doon, has just completed the "Eyebrow House" in Portland, Oregon as well as the "Stealth Addition." He has recently released a new edition of his book, *Scaleless: Approaching the Armenian Genocide*, which was shown this spring in an art gallery in Portland, Oregon entitled "Book Power."

2000s

Trattie Davies ('04), Jonathan Toews ('03), and Frederick Tang ('04) deFT Projects have been working together on projects in New York, including a duplex renovation for art collectors on Fifth Avenue as well as projects for the Park Foundation, including a proposal for Urban Camping for the New Museum and a design for a Linear Park in Hudson, New York.

Peter Arbour ('04), an architect at Paris-based RFR Consulting Engineers, won the first prize for the Innovative Curtain Wall Design, a competition of the AIA New York. His project Liquid Wall will be featured in the exhibition *Integrate: Innovate* at the Center for Architecture in October. Liquid Wall is a unitized curtain wall system constructed of ultra-high-performance concrete and stainless steel. It includes improvements in natural daylighting, ventilation, direct integration with building mechanical systems, and 100 percent material recyclability.

Doreen Adengo ('05) is a licensed architect working with New York–based Gruzen Samton Architects, the architect-of-record for Foster's new Yale School of Management Building. She teaches at the Parsons School of Constructed Environments.

Alan Knox ('08) is working in Austin, Texas, and has been selected one of twelve finalists in the international FreeGreen "Who's Next" competition, with the challenge to re-envision the typical suburban family home in an ecologically conscientious manner.

Gene Cartwright (Yale College '04 and M.Arch '08) and Jeff Geldart ('08) were featured in the "From the Academies" section of the most recent issue of the ICA's journal, *The Classicist,* No. 8, for their work in the Demetri Porphyrios Corfu studio at Yale in 2008.

Parsa Khalili ('09) recently has resumed his employment at Richard Meier Architects after returning from travels abroad, sponsored partly by Yale School of Architecture's Winchester endowment.

Karen Rizvi ('09) won a Fulbright scholarship to study vernacular architecture and sustainable habitat design in Egypt. In addition to her research she will intern at the Library of Alexandria.

Three New Books on Houses

New Classic American Houses was recently published by The Vendome Press, showcasing the work of AR&T (Jacob Albert, BA '77 M.Arch '80, James Righter M.Arch '70, John Tittmann BA '81 M.Arch '86). It catalogs the firm's cannon of classic American house styles inventively updated and redefined. From Greek Revival to Shingle Style, Gothic Revival to Adirondack Camp style their work, as Robert A.M. Stern describes in his foreword, is "rooted in memory yet completely at home in the manners and mores of the here and now."

Ike Kligerman Barkley Houses was published by The Monacelli Press this spring, focusing on twenty-one of the firm's apartment and house designs. Thomas Kligerman ('82) and his firm have been awarded numerous design and professional awards including the New York Chapter AIA Honor Award as well as being among *Architectural Digest*'s "AD100 Architects and Designers" for five years running. With a foreword by Robert A.M. Stern, the book catalogues the firm's sophisticated balance between historical precedent and modern refinement.

Peter Rose: Houses by William Morgan, with a foreword by Rafael Moneo, was published by Princeton Architectural Press in June. It features five of Peter Rose's (BA '66, M.Arch '70) houses in complete detail from client collaboration to construction. Rose has completed works at an impressive range of scales always employing his love of craftsmanship, solid building materials, and old fashioned building techniques. The relatively small scale of these residences and second homes in many ways provide the testing ground for his new ideas.

Class of 2000 Reunion

Over a rainy weekend in April, twenty members of the class of 2000 gathered in New Haven for a ten-year reunion. The Architecture School provided gathering spaces, coordination, and tours of Paul Rudolph Hall. On Saturday morning a roundtable was held to discuss the varied journeys class members have taken since graduation—starting their own firms working in large companies, becoming TV personalities, teaching and writing, and sadly, leaving the profession altogether. People were invited to present their work, and a digital copy of the conversation has been added to the school's archives.

The discussion started with presentations by a series of thoughtful alternative practices. Oliver Freundlich and Ben Bischoff traced the history of their Brooklyn-based design-build-fabrication firm, MADE. Tom Morbitzer and Goil Amornvivat talked about their collaboration, TUG Studio, a New York–based interiors, architecture, art-making, and teaching practice. Goil also talked about his life as a television personality and how it has impacted his professional pursuits. Dominique Davison showed the work of her eponymous Kansas City firm, which has grown by getting involved in local urban-design issues. Tim Hickman described the impressively large-scale work of his Des Moines partnership, Substance Architecture. And finally, Andrew Cocke presented some of the research that his firm, Here, of Washington, D.C., has conducted into parametric modeling and digital fabrication.

Independent practices like these lend themselves to being presented—after all, by their nature they consist of original projects, full of unique images and narratives, all of which are the sole provenance of the people doing the presenting. Of course, the majority of the class is not in this position—either they work for others, or their work doesn't generate presentable content, or they aren't interested in sharing work in this sort of forum. Nonetheless, their contributions generated stimulating group discussions, many of which focused on the technical issues of practice. Carmen Menocal discussed her work as a project manager at Perkins Eastman; Taek Park shared his experiences at Foster & Partners; Sonya Hals showed her work at Turner Brooks Architect; and Samer Bitar talked about leaving SOM and venturing out on his own. While the independent practitioners have experienced the thrill of building their own projects, those who have chosen to stay with larger firms have had correspondingly large experiences, and the two groups compared notes throughout the weekend.

On a personal note, despite the immediate success of several of its members, the members of the class of 2000 have always seen themselves as misfits. We were a small class, starting with only 30 students, with an unusually high percentage of people with little or no architectural experience. We were the last class before the Robert Stern era, finishing our first year before he arrived; those who came later seemed more polished to us, more experienced. Yet somehow all of this led us to think of ourselves as more authentically Yale—independent, quirky, and committed to blazing our own paths, for better or worse. It has been a tough ten years, even for those who have found success. Coming together in New Haven was invigorating and reminded us of the ideas that drove us, showing us how far we have come.

— Ted Whitten
Whitten ('00) is an architectural writer and architect in New Haven.

Somewhere Between East and West

The era of Soviet architectural history between the social disquiet of 1968 and the collapse of the government in 1991 has been largely overlooked by the media and academia. Far from the lofty Constructivism of Tatlin's 1919 tower, and still gripped by Stalin's rabid denunciations of Modern design principles, the institutional architecture of the Soviet Union during the 1970s and '80s carries with it countervailing philosophical influences and peculiar cultural associations. When Nikita Khrushchev lifted the ban on "formalism" at the 20th Party Congress in 1956 and embraced previously renounced practices of Modernist architecture, he effectively created a type of ambivalence in Russian architectural practice that would persist for a generation. Projects such as Georgy Chakhava's 1975 Roads Ministry building in Tbilisi, Georgia, counterposes Socialist reform principles with Modernist utopian projections, combining the use of concrete with local materials in a manner previously prohibited by Stalin. Such architecture seems to operate on several levels: it eschews the singular heroism of the past with projects such as the 1934 Palace of Soviets, re-examines the origins of the social revolution, and opens up to the advance of Western liberalism.

During the summer of 2009 Aidan Doyle and Ryan Welch traveled throughout Russia, Ukraine, and Georgia to film a documentary about little-known late Soviet architecture. Under the auspices of the School of Architecture's George Nelson Fellowship, they endeavored to understand the phenomenon of Russian Modernism after Stalin's reign as the uneasy symbol of social reform and inexorable Western influence, as both expression and protest. They traveled thousands of miles and conducted more than 30 interviews, gaining access to archived film footage and original drawings never seen publicly in the United States. Doyle and Welch photographed and filmed each building extensively, interviewing each of the five living architects as well as family and friends of the two deceased architects. Druzhba Sanatorium, Yalta, Ukraine; Wedding Palace, Roads Ministry, and the Museum of Archaeology, Tbilisi, Georgia; Kazan Circus, Kazan, Russia; Dostoevsky Theater, Novgorod, Russia; and Kiev Crematorium, Kiev, Ukraine. The work-in-progress was exhibited at the School of Architecture's third-floor galleries in spring 2010. Over the next two years they will develop the documentary that will expose these works, at once extravagant and restrained, and fill a gap in architectural history.

Yale School of Architecture
Fall 2010 Events Calendar

Exhibitions
Yale School of Architecture Gallery
The Structure of Light: Richard Kelly and the Illumination of Modern Architecture
Curated by Dietrich Neumann
August 23–October 2, 2010

An Architect's Legacy: James Stirling's Students at Yale, 1959–1983
Curated by Emmanuel Petit
October 13, 2010–January 28, 2011

Yale Center for British Art
Notes from the Archive: James Frazer Stirling, Architect and Teacher
Curated by Anthony Vidler
October 13, 2010–January 2, 2011

Symposium
Friday October 1–Saturday October 2, 2010
"The Structure of Light: The Legacy of Richard Kelly and Architectural Lighting Today"
A two-day symposium will be held in conjunction with the exhibition on Richard Kelly, to frame key issues in Kelly's work. The symposium will bring together historians, critics, architects, and contemporary lighting designers to discuss the past, present, and future of architectural lighting, including: Dietrich Neumann, Martin Bressani, David Nye, Bart Lootsma, Barry Bergdoll, Sandy Isenstadt, Margaret Maile Petty, Alice Friedman, Rogier van der Heide, Michelle Addington, Matthew Tanteri, Jennifer Tipton, Mark Major, Howard Brandston, Amy Meyers, Jules Prown, Peter Inskip, James Carpenter, Jean Sundin and Enrique Peiniger, Tim and Jan Edler and Yann Kersalé.

Lectures
Unless otherwise noted, lectures begin at 6:30 p.m. in Hastings Hall (basement floor) of Paul Rudolph Hall, 180 York Street.
Doors open to the general public at 6:15 p.m.

Brigitte Shim
Eero Saarinen Visiting Professor
"Remapping My World"
Thursday, August 26

Billie Tsien and Tod Williams
Louis I. Kahn Visiting Professors
"Lasting"
Thursday, September 2

Mario Carpo
Vincent Scully Visiting Professor
"The Cathedral or the Bazaar? Agency, Indeterminacy, and Digital Form Making"
Thursday, September 16

Hernan Diaz Alonso
Louis I. Kahn Visiting Assistant Professor
"Do I Look Like I Have a Plan?"
Thursday, September 30

Anthony Vidler
"James Frazer Stirling: Notes from the Archive"
Wednesday, October 13, 5:30 p.m.
Yale University Art Gallery (Robert L. McNeil, Jr. Hall), 1111 Chapel Street
Jointly organized by the Yale School of Architecture and the Yale Center for British Art

Emmanuel Petit
Gallery Talk, "An Architect's Legacy: James Stirling's Students at Yale, 1959–1983"
Wednesday, October 13, 4:00 p.m.
Yale School of Architecture Gallery
Jointly organized by the Yale School of Architecture and the Yale Center for British Art

Robert Maxwell
Paul Rudolph Lecture
"James Stirling: The Critical Act"
Monday, October 18

Eisenman/Vidler Conversation
Peter Eisenman, Charles Gwathmey Professor in Practice
Anthony Vidler, Dean Cooper Union School of Architecture
Thursday, October 21
Jointly organized by the Yale School of Architecture and the Yale Center for British Art

"Vincent Scully: An Art Historian Among Architects"
Thursday, October 28
Film produced by Checkerboard Film Foundation

Alejandro Zaera-Polo
Lord Norman R. Foster Visiting Professor
"Envelopes"
Thursday, November 4
Open House

Kurt Forster
"Stirling on the Continent: A Truly Grand Tour (de force)"
Wednesday, November 10
Yale Center for British Art Lecture, 1080 Chapel Street, 5:30 p.m.
Jointly organized by the Yale School of Architecture and the Yale Center for British Art

Emmanuel Petit
"Synchrony and Diachrony: James Stirling's Students at Yale"
Thursday, November 11, 5:30 p.m.
Jointly organized by the Yale School of Architecture and the Yale Center for British Art

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

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Foreign Office Architects, Carabanchal Social Housing, Madrid, Spain, 2010.

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