YALE ARCHITECTURE

CONSTRUCTS

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Niall McLaughlin

Niall McLauglin of London is the Spring 2015 Norman R. Foster Visiting Professor. He delivered the lecture, “Origins and Translations,” on January 22. Nina Rappaport conducted the following interview with him in his London studio.

Nina Rappaport How did you start your practice in London, and what brought you there from Ireland?

Niall McLaughlin I was passing through London for a couple of months on my way to live in the U.S. My mother is from New York. I got a flat on Portobello Road, where I met an amazing group of neighbors, so I stayed. They all became friends for life. I started my own practice designing little loft conversions for them. They were poets, writers, and photographers. I felt at home.

NR In your recent buildings, in both sensitive landscapes and urban contexts, you have created environments that integrate new materiality and tectonics in conversation with the past. How has your interest in materiality guided your work and experimentation?

NM I tend to see things as being complex and equivocal. The biggest influence on me as a student at the University College of Dublin was Robin Walker, who had worked for Le Corbusier and Mies van der Rohe and for whom Mies was a prophet. He gave extraordinary lectures about the corner steel I-beam section detail in 880 Lake Shore Drive, which was a massive problem for him. Robin firmly believed in the version of Mies that comes through the Anglo-American tradition, that insists upon the truth of architecture. But he couldn’t square it with what he actually saw in Mies. So, after I left university, I was interested in where Mies came from, as in the tradition of Gottfried Semper and Karl Bötticher and the relationship between the *Kernform* (conceptual form) and the *Kunstform* (representative form). I’m not *so* interested in the idea of architecture having a truth-telling capacity, but rather how it communicates a semblance of truth. …

NR But what does it represent if the material is not concealing? You’re revealing the qualities of the material in your work, for example, in your design for the the Bishop Edward King Chapel, in Oxford.

NM One of my favorite words is *semblance,* or appearing to reveal. It seems that notions of truth—to materials, to structure, to program—ignore the fact that we are figurative creatures. The idea that you can get beyond representation, to something more fundamental than that, I can’t accept. I love Semper’s observation that the white marble of the Parthenon, so dear to Winkelmann, is nothing more than a ground for the epithelial layer of paint, which is the architecture. The material is destroyed in favor of the idea.

NR Unless you go back to Marc-Antoine Laugier’s ideas and the primitive hut? How does the material become shelter as a pure form, as in weaving branches to make a hut?

NM One of my interests at the moment is the idea of the primitive. It is fascinating that Laugier’s primitive hut presupposes a stable external thing outside human culture; perhaps he was saying that in previous times it would have been God, but now it’s nature. So, he drew Nature, giving architecture to man. I would call either God or nature an external correlative with which architecture was supposed to have a mimetic relationship. What is amazing about Semper is that he says the mimesis does not occur in relation to something outside human culture but that architecture is mimetic of human culture itself. And, so, the most fundamental impulses of human culture, which are really dance and drama, are reified or given concrete identity in certain physical representations. The underlying harmony of the world is enacted in rhythmic activity, which, in turn, is fixed into things through repetitive knotting, weaving, and binding; these basic forms of human manufacture, which are mimetic of human ritual and activity, are the origin of architecture. The primitive hut has four elements: the earthwork, the hearth, the tectonic frame, and the woven screen; each one is characterized by ways of making. Semper says, “Weaving is always associated with the separation of the inner world from the outer world, and that’s the origin of architecture.”

NR How, then, did you conceive of the chapel design and its representation?

NM The chapel is a kind of embodiment of Semper’s primitive hut; it has the earthwork, the woven screen, the tectonic frame, and the hearth. The floor and seating make a monolithic concrete earthwork; it supports an independent timber frame, which is enclosed in a woven stone screen, and, inside, the tabernacle is lined with metal. These elements are isolated and given identity in relation to one another. It was a very direct, quite literal homage to Semper. We wanted to make a timber-woven outer wall, but then we were asked to make the building in stone, and we thought, “How do you weave in stone?” So, the stone bond on the outside, which we invented, is intended to be a tapestry motif.

NR How does it relate to a spiritual quality that’s beyond the material, in terms of what Rudolf Schwarz called “the ineffable,” so influential to Le Corbusier? How does the sacred space achieve relevance today as the ineffable in terms of tectonics and spiritual qualities?

NM We almost have an excess of references—but that is how we work. I had two systems, one of which related to the “ineffable” aspects, which are the sense of spatial experiences and ideas of the divine. I went from Mies to Schwarz’s extraordinary book *The Church Incarnate* and his methodology for creating the presence of the divine or the threshold of infinity. His diagrams show in theological terms how a human being experiences the world. He talks about the eye, the ear, and the hand generating a symbolic system, which we used directly in the chapel. In tectonic terms, we refer to Semper, but the spatial model comes very strongly from Schwarz. He talks about the altar and the light of the star being brought into the eye and the darkness of the body coming up to the eye and an image being formed where the darkness meets the light. And his drawing looks like a plan of people gathering around an altar. Schwarz has a fabulous description of the altar as the threshold of eternity, as though worlds were dissolving. He uses the metaphor of the body as something that understands the world, and his model is an understanding of God. He equates the relationship between light and structure as the threshold of the divine. We have formed a structural frame within which the community sits, and beyond the structural frame the white wall goes all the way around the edge, and there’s a breach in the frame. Schwarz writes that there should be a breach in the structure, and, beyond that, you must put something that stands for the loneliness of God: endlessness and isolation. He considers a window, or an image, but decides that a white wall would do best. We made an outer rim that represents the infinity of God, and, within it, the structure represents the space made for human community, assembling as though they are the darkness of the body and looking toward the altar, where they meet the light of the star. It was quite systematic with regard to Schwarz, Semper, and the theme of the primitive hut.

NR When someone designs a chapel, one always wonders whether they have to believe in the ideology represented by the structure they are designing or might they take a more holistic and humanistic approach. Does the religious aspect matter to you in terms of the design?

NM What we do is create versions of the world for other people, and so our job is to absorb their world and make a building that embodies it. The basic plan form came from the chaplain. He held up his hands parallel to each other to explain the antiphonal form of a traditional collegiate chapel, but they kept bending into an ellipse when he mentioned community. So, we made an ellipse with the altar at one node and the lectern at the other.

NR How did the tectonics, the latticework as its own structure, and the construction evolve in terms of the reference to Semper? Are you following a particular trajectory of church design?

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NM Its impulse is in Semper’s tectonic frame, which we wanted to be independent. We were having a clear conversation with a suite of buildings, from Schwarz’s Frankfurt church to Peter Zumthor’s St. Benedict Chapel, which is obviously in conversation with Schwarz’s. So, twenty-five years later, we are developing that conversation a bit further: each architect gives the structure some separate identity. Schwarz places it just outside the wall; Zumthor places it just inside. We move it farther in, creating this ambulatory between the wall and the structure and clarifying this idea of an inner world and an infinite world beyond. I liked the idea of the elliptical ambulatory expressing endless Christian wandering. You can walk around the perimeter, looking in toward stillness and light—the idea of “placelessness” in the heart, which in Christian thinking is that you leave your things behind until you find God. So, the delivery is a continuation of a conversation.

NR When you design for that which is not ineffable, does this quality enter the project in other ways, as in the athlete’s village, in Stratford, whose surface is more Ruskinian in contrast to Semper? How do you reconcile what you have written about as an abstract building with applied design, as in the façade, in terms of the authenticity of the chapel?

NM The 2012 London Olympic Park was managed ruthlessly. The buildings were going to be used by athletes for six weeks, and then they were to become part of the housing stock of the city. It’s counterintuitive to design it for athletes and then use it for another purpose; you’re better off designing it for others and then reengineering it for athletes. But then it had to comply with all the standards of the International Olympic Committee and those of registered social-housing landlords. They hired architects to design what they called a chassis as the generic form of the building, and then, with the Architecture Foundation, they asked architects to design facades.

NR Did you find you were designing enough of the building, or was it too superficial?

NM I became quite interested in this separation of inner and the outer forms, and it ties back into Semper’s ideas of represented form. We said, “Here’s our project: it’s a façade.” Semper took from Bötticher the principle that the visible form is a representation of the invisible structural idea. He also thought the building should be bedecked with emblems that embody parables and ideas from the society that created it.

NR In using a concrete casting of the Elgin Marbles, how did the relationship of

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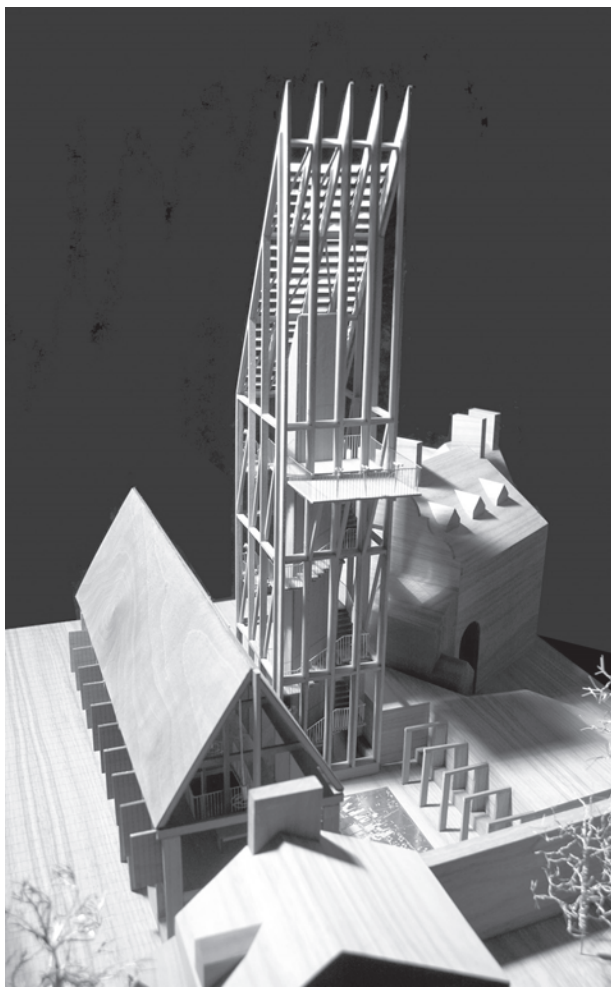

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1. Niall McLaughlin Architects, detail of clerestory and stone fins, Bishop Edward King Chapel, Oxford, England, 2012. Photograph courtesy of Niall McLaughlin Architects.

2. Niall McLaughlin Architects, main chapel ceiling, Bishop Edward King Chapel, Oxford, England, 2012. Photograph courtesy of Niall McLaughlin Architects.

3. Niall McLaughlin Architects, Auckland Castle, County Durham, model, 2014.

4. Niall McLaughlin Architects, Auckland Castle, County Durham, model showing new tower, 2014.

5. Niall McLaughlin Architects, Housing in Stratford, concrete panel details, 2012. Photograph courtesy of Niall McLaughlin Architects.

6. Niall McLaughlin Architects, 5 Axis CNC machining of relief positive for Housing in Stratford, 2011. Photograph courtesy of McLaughlin Architects.

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copy and—many times removed—original become part of your design concept?

NM The marbles are lost pieces that have become something on their own. They were burnt, damaged by a volcano, defaced by Christians, and blown up by the Venetians. When Elgin took them down, he cut the backs off, turning solid stone walling elements into veneers. They were taken to London, the most polluted city on earth at the time, where they acquired a sulphurous coat. There was a dreadful attempt to clean them by chipping the surface until they whitened. So, it's this weird mixture of being copied, translated, and re-idealized—all the time. We were able scan them one long night in the British Museum, and the Keeper of the Stones suggested that we use the section with the horses. I thought of them as a "lost troop." We were looking at this idea of deracination—something completely removed from its context and offered as an abstraction. The idea of these stones, shaped by hand for the cult site of a god, under the eaves—the Ruskinian ideal—which are then taken away and become lost, become modern.

NR Yet your appropriation takes them to yet another level of commodification, like Warhol.

NM In fact, we quoted Warhol in our competition statement. He said if you reproduce something often enough you produce a kind of numbness. What we did was funny. We went there and said, "Watch us! We're doing this right in front of you!" It was a very simple idea. It was one of the most enjoyable projects I've worked on.

NR Now, you are working on a complex site for Auckland Castle, in County Durham, which has both historical and religious themes but also has room for new insertions. How do you address these different considerations?

NM The Normans built this castle on a fantastic site overlooking a ruined Roman fort. It became the seat of the Prince Bishops of Durham and the bishop's palace. In the nineteenth century, one bishop bought twelve paintings of Jacob and his Twelve Sons by a Spanish Counter-Reformation painter, Francesco de Zurbarán—a very odd thing for an Anglican bishop to do. No one knows why Zurbarán painted this theme at a time when the Jews were being thrown out of Spain. But then he decided to send the paintings to Brazil, and they disappeared, eventually turning up at an auction house in London. A Durham bishop bought them because he was interested in Jewish naturalization and Catholic emancipation, and he lined his dining room with them. Recently, when the diocese wanted to sell them, Jonathan Ruffer, a local boy made good, said he would buy the paintings if they would also sell him the castle. So, he bought both and plans to make a museum of religious faith, a visitor attraction, an art gallery, and develop cultural tourism to revive the economy of the town.

NR What are you inserting into this historic site, which is now protected with seven listed buildings?

NM We are doing the master plan, an extension, and a new museum building called "Five Thousand Years of Faith," funded by the Heritage Lottery Fund, so it needs to apply to all faiths, from paganism to modern culture. SANAA is designing a café in the gardens. Ruffer also bought the old bank in the town and is turning it into a gallery for his collection of Italian and Spanish Counter-Reformation art and has made a link with the Prado.

We are designing a museum wing with a tall roof referencing the long, narrow tithe barns in medieval England, built in stone and supported up by an extremely lightweight metal roof. The building will contain large exhibits and artifacts. The other part is a new welcome building, in timber. The wooden shutters will open and contain representations of the castle at different stages of development. We are also building a viewing tower so that the building itself will be an exhibit on the communicative capacity of architecture to speak about itself and its own place. When you look down into the courtyard, you will see a map of the landscape depicted in a mosaic built into the ground, as in cathedrals with labyrinths or symbolic systems inscribed on the floor.

NR What is the focus of your studio at Yale this semester?

NM Andrew Benner, who is teaching with me, and I have developed a brief around public representations of democratic institutions in the context of an almost autonomous world city, like London. We are examining the relationship between conceptual ideas and material practice. Our teaching is very iterative, allowing design ideas to emerge through physical making and trusting the creative potential of making and remaking.

Rafael Birmann

Rafael Birmann is the Edward P. Bass Distinguished Visiting Architecture Fellow in Spring 2015 teaching a studio with associate professor (adjunct) Sunil Bald, for a massive site in Brazil. Birmann gave the lecture, “Walking from Site to City,” on January 5. He was interviewed by Nina Rappaport in New York.

Nina Rappaport What is your background, and how did you become a developer in São Paulo?

Rafael Birmann I never really chose this profession. My father sold his bank to form a real estate company. I was a kid of twenty-four at the time, and he called me to work with him. I replied, “Father, what do we know about real estate?” And he said, “We know how to handle this—we managed a bank!” But, in fact, we didn’t know anything. He was ill and died after three years, and I was left in charge, not really knowing anything of real estate. I didn’t choose this business, but I love it. It is a profession that has everything—engineering, architecture, business, finance, art, philosophy, and urbanism.

NR Speaking of urbanism, do you feel like you are creating cities in terms of decisions about land use and what gets built where? Often, developers have more control than city-planning departments, which react to proposals rather than have proactive visions.

RB We do, but in the field most see developers as speculators—and I resent that. We just do what the city, architects, and legislators allow us to do. Lately, I have been interested in urbanism. I want to get involved in the discussion about cities, but when we go to urban forums and conferences, there are no developers—zero!

NR When you go to these events, do others see you as developers in terms of having an impact on urban forms?

RB They see us as the enemy; the developer is a money-seeking bloodsucker. I was at one of these forums where everybody was from a non-governmental agency—and I, from the private sector, was the only one there *not* looking for money! In Brazil, architects are very biased: they have this perspective that developers can’t see beyond money. I think it is a shame. I saw Andrés Duany at a forum in Stockholm, and I was surprised by his speech against developers.

NR What have been your most interesting or complex projects, in terms of collaborations? How do you assemble teams and carry a project to fruition?

RB In 1990, when we first started using American architects, we wanted to specialize in office buildings at a time when nobody else did. After a few buildings where the architect took the lead, we decided to bring in some American architects. So, we hired Skidmore, Owings & Merrill when the US market was down. We had a huge group of consultants and our local architect, and we traveled to the United States for meetings. We did all the schematic and design development here in the US, but the construction documents were done in Brazil. I don’t like to, as we say in Portuguese, “set plate.” I want to go to the kitchen and see how you cook. That’s not the usual way in Brazil. Nowadays, we have big and complex teams, and I follow every step along the way.

NR Do you feel that you’re involved in the design process, too? Do you like to design conceptually, even though you are not formally trained as a designer?

RB Although I’m not a designer, I like to get involved, and we have lively discussions. I like to have the final word in the design. Maybe that’s not what architects like; maybe I get a little, how do you say, imposing.

NR How is the project on Avenida Brigadeiro Faria Lima, where you are incorporating public space for the first time on a private site—different from the way you have approached other projects?

RB The site is very interesting because it is L-shaped. Most developers would do big buildings facing the avenue. But I thought we could put the building at the corner to open up a terrific opportunity, and we ended up with six thousand square meters of public space. We had some tough legal issues, however, in buying a small street that belongs to the city. Without it, I couldn’t set the building back from the avenue. Even though everyone agreed, it took me two years for approvals. I am already excavating the site but still without final approvals. It is making a terrible impact on my schedule.

Adjacent to the Faria Lima site there is a public block with a small day-care center, and the city wanted to sell it to invest in day-care elsewhere. And that discussion got mixed up with my discussion. I proposed a new public space incorporating private development to generate money for the public space, use private-sector know-how to make money to make public space.

NR What did the city think of this private developer doing good?

RB The mayor liked it. He called his secretary of urban development, Fernando de Mello Franco, but I’m still waiting to hear back!

NR It seems difficult for government officials to imagine beyond a traditional way of urban development and change their perspective that developers are interested only in profit and not engaging in civic issues. How do you think city officials can change their view of developers?

RB I think my proposal is kind of revolutionary, at least in Brazil. In all my experience, city officials don’t want private-sector involvement. One issue that makes me anxious is how much we’re losing by not talking; we need to find some common ground.

NR I understand that you are now working on a huge new development north of Brasília, where, since the city was built, there has been a housing issue for those who work in government and in the service industries. Lower-income people live in favelas, as though the planning just stopped. How has your new project transpired to become a new city?

RB Next to the Plano Piloto there is a sixteen-million-square-meter site with four million square meters of open land; it has the potential to be a big city. Brasília represents many wrong ideas, but Niemeyer, like a sacred cow, cannot be criticized. During construction of Brasília, the workers built favelas inside the Plano Piloto, and the city officials decided they had to move them. Most of the problems originated there. All the land in Brasília was owned by the government except for one farm, due to a bureaucratic mistake; so, we bought it a few years ago.

NR But middle-class people were living there as squatters, so who owns the land and properties now?

RB Because the government owned all the land but didn’t supply housing for the people to live in, one-third of the houses sit on irregular proprieties, without titles or building approvals, but, unlike favelas, these are upper-middle-class houses. Today, there are seven thousand illegally built houses on our property.

NR What will you do with them?

RB We are selling the residents the titles to their houses. The government is doing the same thing in other areas, although, because they are the government, they face enormous restrictions. As private developer, I can sell the titles for one-third of the price. My son, who has moved there to work on the project, just told me that the attorney general will use our “regularization model” for all of Brasília. We will build new houses for about one hundred fifty thousand people. Sobradinho, which has middle- to low-income inhabitants, is adjacent. So, we have to plan the area as a single entity. As with our site on Faria Lima, we are looking beyond its borders to understand what’s going on. We are planning for a stormwater system, public transportation, and a four-million-square-foot park, all going behind our boundaries. We are ending all squatter housing or irregular ownership. It is a goal the government has not been able to achieve, but we will.

NR You are really thinking in terms of a holistic approach to urbanism and have taken the opportunity to plan these areas with a vision. As you said, it could serve as a model for others, even though the ownership issues are so complex.

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1. Rafael Birmann, B 32 Faria Lima Avenue rendering, Pei Partnership, São Paulo, Brazil, 2014.
2. Main development site at Paranoazinho, Brazil, 2014.

RB Exactly. This project is very typical of Brazil. Existing occupation, poor and rich, a big mess—it is difficult blending all of these things together, unlike a clean slate. So, if we can sort these out, this could be a model.

NR What are the design issues at this vast scale? How will you use this in the Yale studio you are teaching with Sunil Bald?

RB One of the issues is how you “jump-start” a city. We want to build a downtown at the area’s gravitational center. But how to phase and start building? How to achieve viable critical urban mass? We will start with a shared street, with two big public spaces at both ends and mixed uses along it. With less cars and lots of pedestrians. We will create the urban experience that Brasília doesn’t have, as a car-based place. The funny thing about Brasília is that people who live there like it. Hard to understand. If you go to a restaurant, and it’s closed; you have to take the car to find a second one because there’s nothing next to it.

NR What will the students design at Yale this semester?

RB The students will work on creating a language and developing unit and block typologies. Unfortunately, crime is rampant in our society—we are dominated by fear. That has led to what we call “fear architecture.” People build walls everywhere; they enclose themselves in prisons while the bad guys roam free. They want houses inside gated communities, surrounded with high walls and barbed wire. That probably is the most destructive factor to urban life in Brazil. We want to provide an alternative, even against all marketing gurus advice; we want to build neighborhoods without gates, walls, or fences. We want to tear down the walls, of bricks and prejudice, and build open urban space—quality public space that can conquer fear.

NR How has your experience increased your awareness of city making and what other developers should do?

RB Developers need to think beyond their site’s boundaries. I say, “Why don’t you look across the street? How to relate, to connect to that?” Most developers think about what type of unit to build—two or three bedrooms and so on. Some may go further and ask about the architecture. But the latest thing is to think beyond the site, toward the street and the overall city. That has been a very interesting discussion.

When I go to Stockholm or the United States and talk to people working on public space, place-making, or, say, at the UN-Habitat, they still don’t want to talk to developers. My son and I went to Medellín for a World Urban Forum conference with twenty-two thousand people. One guy laughed when we told him we were developers and said, “What are you doing here? We’re talking about cities.” And we said, “We do that every day.”

Tatiana Bilbao

Tatiana Bilbao is the Spring 2015 Louis I. Kahn Visiting Assistant Professor and will give the lecture, “Lessons from Two Gardeners,” on April 9, 2015.

Tatiana Bilbao, Casa Ventura, Monterrey, Mexico, 2012.

Nina Rappaport How did you start your firm, and how has Mexico City provided you with both a local and a global sensitivity, to allow you to do projects in places as far away as Ordos, China and Lyon, France?

Tatiana Bilbao When I was in school, I was very interested in influencing how the city was being built, and I obsessed about becoming a planner. After school I worked in the Urban Housing and Development Department of Mexico City. I realized that it was almost impossible to do anything to improve the quality of life for the citizens because the system needed to respond much more to economical forces, driven by political interests more than anything else. Also, it was really nice how the city was developing organically. So, I realized that it was probably more important to make little interventions through private practice. I learned a lot working for the city—it was like getting a doctorate—but then I ran into a friend, Fernando Romero, who was just coming back from working at OMA, and we started an office in his family’s garage, evolving into a big firm with three partners. Finally, we realized we had no common ground, and we each went our own way.

NR How do you engage with and combine the informality that’s rooted in Mexico with more formal, abstract architectural issues, particularly in terms of the housing issues you have been involved with?

TB That is a very good question but difficult to answer because I think I work more organically. My family background is European, so that is my education; on the other hand, I’ve lived all my life in Mexico City, where people take the initiative to go to the government and ask for things like a park. However, food and health care are the priorities, and planning is at the end of the list. But, people push, and it happens.

NR You did this yourself as part of the planning process for the Aguascalientes?

TB The huge master plan for Aguascalientes takes away the electric lines, which liberates a huge piece of land dividing the whole city. We analyzed every single square meter that was around the line we were going to plan, and we tried to find an organic way of deciding what to put there, based on the data gathered but also on the information that the urban tissue was giving us. The governor of the state, who commissioned us, said, “I am really amazed with your work, what you did with this project, because the city had a scar, and you are not stitching it, you are erasing it.” This is something we really wanted to do to put things together organically.

NR I am interested in how your architectural designs are exquisite and yet not precious, partly because of the materiality of construction in Mexico. How do you use the local materiality and engage local builders with what they know best how to do?

TB I try to determine what their capabilities and ideas are and use, as well as learn from them. When we helped artist Gabriel Orozco build his house, it was very important to include the local builders in the process. If we didn’t include them, we wouldn’t have been able to do it, although it didn’t look so difficult. However, when we arrived, we realized they had no skills, no way of reading a plan or understanding even how to do concrete! Cement, water, and sand was too hard for them to understand. But instead of, “Oh, no, let’s find someone else!” we thought, “Let’s go with this and see what their capabilities are.”

NR Do you now base your designs on your knowledge of the available local building skills and the materials at hand, or does the design concept come first?

TB We definitely consider the local conditions. For example with the Tangassi Funeral Home, we imagined a dramatic space with four different stages of intimacy or collectiveness—depending on how you want to see it—something very different from the typical funeral home in Mexico. We wanted to have a hall with lots of light, and we knew we needed to understand the possibilities of using concrete with the pigment, the color of the aggregate there, and how we were going to expose all the imperfections of the concrete. Once we understood that, we did the design. In this case, we knew we would have local builders who were not experienced using concrete, so we worked from the understanding of what they were able to do.

NR Since the emergence of a global architecture, there has also been a renewed regionalism based on local culture. In your work, is this just something you do because that’s where you happen to be or are you more conscious of the regional?

TB This is an interesting question because I’ve realized recently how much Gabriel’s work as an artist has influenced me—because of the situation we faced and the construction process. I studied architecture at a school that was trying to be very global but did not have the software or teachers to teach designing architecture with an algorithm—it was really strange! This led me to becoming more honest, to be who I am and not attempt to mimic all methods out there.

NR How does the simplicity of form in Mexican architecture, along with the work of Lina Bo Bardi, serve as an inspiration in terms of your formal compositions, such as in the Biological Park Building Technology of Monterrey, in Sinaloa, Culiacán, with its shifting layers, or the unbuilt spherical Irapuato Music Hall?

TB I tend to absorb the formal ideas behind it; it’s an unconscious process, as well. It started about the time we did Gabriel’s house as a radicalization of the idea of geometry, of going back to basics and starting from the most simple, direct forms in the program and our aesthetic concepts of the space and so on.

NR Are you looking for beauty in the form and an identity for the projects?

TB I think an aesthetic definition—and I’m going to say something that sounds very contradictory—but also a kind of rebellion to this organicity.

NR How do both aspects apply to the Casa Ventura house, in Monterrey, which is formally intricate yet appears organically tucked into the hillside?

TB The clients wanted a more organic flow in which you could feel the space as well as both a lot of privacy and openness. So, I said, “Okay, let’s find some sort of strategy to take the hills into account.” First, we need to do a house you can meander to, feeling like it’s all on the same level, even though you need to climb steps. Second, we need to understand the topography, the trees, and the vegetation. They wanted to be able to clearly divide the public from the private space within the house. When they are sleeping or grow older, they want to be able to secure it with a bulletproof door because they are afraid of burglars. So, I used the land that’s a little bit less hilly for the public space and placed the private quarters on the hill, so it’s really not accessible: you would need to be Spiderman to get there from the outside. We found that the shape of a hexagon was the perfect geometric solution to pull it all together.

NR How did you convince your client to accept these multiple layers of construction?

TB They were incredible clients and said, “You can do whatever you want.” And I said, “We need you to be here every Friday to review and be sure we are going in the right direction.” At the end, they were really engaged with the project and truly worked on it with us. I don’t think the architect should define every single corner of the place. We should put in the platform, and then it develops and evolves over time. This is something about organicity that I like in my work, and I really truly leave it to grow.

NR In such a collaboration you have a strong attitude about the responsibility of the architect toward the private client and the client’s collaboration, but also, more generally, what do you see as the architect’s social and political responsibility?

TB I see my profession as the second-most important, after doctors. I really take it seriously. And one major criticism I have of architecture today is that space is not defined via an algorithm. A space is for people to live in! The responsibility is not only to the human being but also to consider what you are going to insert into the environment.

NR You’re also designing a small, inexpensive home in a kind of informal and adaptable vernacular style. How did you design both the system and concept for the project?

TB We needed a very practical idea, to have it look organic and be flexible according to different inputs in different regions. But we needed a model, a prototype, that would adapt to these changes, not only the climate but also culture. In the south, in Chiapas, where we are working now, we needed to include a very traditional kitchen and a bathroom that is also a dry toilet.

NR How did you find out about all these local housing requirements and traditions?

TB We conducted about two thousand interviews with some students and people from the finance department, using just five simple questions. We needed a base model, and a young woman who had recently joined the office said, “Why don’t we use the Ordos concept? It’s a beautiful project and could work as a modular system.” I normally don’t go back to previous projects, but this worked in many ways.

NR Do you see this house type making up entire neighborhoods or is it just here and there?

TB It is designed to be here and there. It has two versions, one more rural and one that is going to be in more suburban areas, where the people see it as their house for the rest of their lives, and the suburban people see it more as a transitional home before they can really afford a “house in the city.”

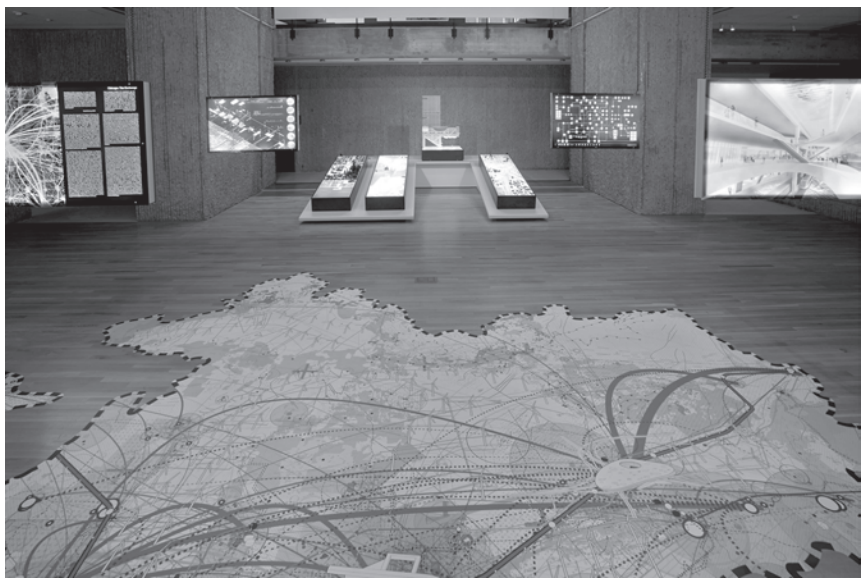
NR This project also has been a return to your interest in housing. How are you reengaging in these issues that deal with thousands of housing units and a complex governmental structure?

TB I’ve been trying to push the politics of the social-housing department in Mexico. The country’s full of thousands of social-housing units, which are single-family houses stacked side by side, with huge, straight streets. So, we really need to change. My father was the director of both my elementary and high school. He had a sign on the door: “If you don’t arrive with a solution, then you are still part of the problem.” I had that in mind about the social-housing issue and the poor who end up with a house and a mortgage. Under the former government, I crashed the wall, literally, but the Infonavit—which includes corrupt local governments, corrupt and greedy developers—is the only institution that can make a change. Huge developments are built in small, poor towns, increasing the population by the thousands without services. When I started pushing for better solutions, their first response was that the problem was the people who are not capable of demanding a good place! Finally, with this new government, we are having a serious conversation to find new solutions.

NR What is your specific focus for the Yale studio in terms of site and project as well as addressing these housing issues?

TB One big issue that has not been yet addressed is that people abandon their homes and credit. So, with the students, we are looking at the abandoned places that still have people living there. Infonavit is supporting research, so the students can look at twelve areas in different parts of the country in various contexts. Each team will have to find a clear strategy of intervention in each site that could reverse the abandonment and attract back its inhabitants or, they will have to propose a solution to terminate, reduce, or transform the area.

Infra Eco Logi Urbanism



Installation views of *InfraEcoLogi Urbanism*, Yale Architecture Gallery, 2014.

Infra Eco Logi Urbanism organized by RVTR, was exhibited at Yale from August 25 to November 20, 2014 and is on display at Taubman College of the University of Michigan from January 22 to February 22, 2015.

It is refreshing that the Yale School of Architecture has foregrounded the projection of speculative urban futures as an urgent topic of disciplinary concern with the recent exhibition *Infra Eco Logi Urbanism*. The show explores the emergence of the megaregion as an increasingly common condition of urban form, examining possible ways architecture might engage this milieu. So, while much of the extant scholarship related to megaregions currently resides within the fields of planning, economics, and political science, the work exhibited serves to expand this discourse by probing the possibilities afforded by architecture's and urban design's intensified engagement with the burgeoning phenomenon. In this sense, the exhibition is both timely and provocative.

Specifically, *Infra Eco Logi Urbanism* is a speculative research project undertaken by RVTR, an Ann Arbor-and Toronto-based design practice led by Geoffrey Thün, Kathy Velikov, and Colin Ripley. In RVTR's words, the project "posits a manifesto for architecture at the regional scale...aiming to reconceptualize future urban ecologies, cross-border governance, politics, infrastructure, and public architecture...[by] investigating what have been considered the 'back of house' activities of cities...[such as] infrastructures, logistics, and ecologies." Prior to being shown at Yale, the exhibition was installed at the UQAM Centre de Design, in Montreal, and the Paul Crocker Gallery, in Toronto.

Funded by the Social Science and Humanities Research Council of Canada, the Taubman College of Architecture and Urban Planning, the University of Michigan Office of Research, the Rackham Graduate School at the University of Michigan, and the MI Group, the exhibition speculates on a future for North America's Great Lakes Megaregion (GLM). This is a geography that, the authors' note, comprises portions of two countries, eight states, two provinces, and twelve metropolitan areas and encompasses the watershed of five Great Lakes as well as a population of nearly sixty million people.

The exhibition is made up of twenty-eight large, backlit panels that float at eye level and depict an array of maps, diagrams, renderings, photographs, and text. On the floor at the center of the gallery is an enormous vinyl map of the GLM that consolidates much of the cartographic information, shown elsewhere in the exhibit, into a kind of territorial carpet of woven economic and ecological vectors. Just beyond the large floor map, to the back of the gallery, are four models of the architectural speculations generated as part the research—three showing the extents of specific sites operated upon, and the fourth a larger-scale detail section model of one of these three sites. All the components of the exhibition are expertly crafted and elegantly organized, inviting the viewer to meander, consume, and digest the vast amounts of content displayed.

The research project and exhibition are organized into three parts. Upon entering the gallery, the elevated platform to the right contains six of the double-sided hanging panels, offering a kind of abbreviated survey of historical disciplinary references related to utopias, urban megaforms, and large-scale "urban interiors." These include seminal urban speculations such as the Smithson's "Hauptstadt Berlin" proposal, Cedric Price's "Potteries Thinkbelt" project, and O. M. Ungers's "The City in the City. Berlin: A Green Archipelago." The precedents are contrasted with a series of images and texts related to seemingly benign elements, like highway rights of way and easements around interchanges, as well as legislative and administrative codes related to land use and zonings, demonstrating the potential of these elements as being ripe for intervention and inflection. This opening content serves to telegraph the focus of the other two portions of the exhibition, as well as the particular predilections of the designers themselves.

On the opposite side of the gallery is the most provocative and compelling portion of the work. Here, RVTR elaborates a series of cartographic projections—referred to as "Sheds," as in "water-sheds"—that articulate distinct geographies of activity and shared influences. In total, eleven sheds are described, in addition to a Borderlines map that consolidates the political and administrative boundaries that presently exist within the GLM. These entities are sorted under four broad thematic categories: Environment-Sheds, MobilitySheds, EconomySheds, and EnergySheds.

Within these four categories we find highly specific classifications, including the GeoShed; the EnviroShed;, the AgriShed; the CargoShed; the CommodityShed; the CommuterShed; the EventShed; the MediShed; the TechShed; the PowerShed; and the PotentialShed.

Beyond their graphic sophistication, what is most captivating about these maps, is their capacity to recast the familiar geography of the Great Lakes region through the lenses of different economic considerations. In each "shed" map, changing areas of intensity and influence emerge depending on the priorities established by their classification. Here, the transactional and transnational nature of contemporary urbanization activities in the GLM is made expressly legible for contemplation and reflection. Ultimately, though, the challenge with mapping regimes such as these is how to define the "so what" of their elaboration and, in particular, the potential planning and design responses they might imply. Which brings us to the center of the exhibition.

Hanging above the large cartographic carpet on the floor of the gallery are fourteen double-sided backlit panels that elaborate the design-proposition component of the research. These include additional maps, exploded axonometrics, bird's-eye perspectives, and interior views of multilevel architectural space. RVTR describes this section as locating "systematic point[s] of leverage" that retool "current infrastructures for the common ends of providing a new public infrastructural network," attempting to bundle essential uses related to distribution, mobility, amenity, and energy onto the monofunctional skeleton of the existing highway network. The design proposition is based upon a kind of amplified mobility supercorridor that bisects the GLM, extending roughly 2,200 kilometers from Montreal to Minneapolis while slicing across local, state, provincial, and national political boundaries. This retrofitted highway infrastructure expands its mobility capacity by introducing new formats of transportation while bundling these conveyance systems with an array of mixed programmatic activities related to energy, ecology, and exchange. The bundling produces what the authors describe as a "*conduit urbanism"*—a kind of linear accumulation of urbanization activities and services. This portion of the work is familiar, reminiscent of projects like Aramis in France or the earlier experiments of designers like Norman Bel Geddes, Egmont Arens, and, Lawrence Halprin, when the potential mobility afforded by the proposed interstate highway system was seen as a liberating opportunity for the design and planning of new patterns of settlement and economy.

The exhibition focuses specifically on three terminals along this proposed line: *"The Crossing,"* at the Detroit-Windsor border; *"The Exchange,"* in the heart of Chicago near the I-90/I-290 interchange; and *"The Gateway,"* adjacent to Toronto's Pearson International Airport. The architectural propositions elaborated for each of these nodes is emphatically megastructural, and though each is described through the contemporary rhetoric of ecology, rhizome, and assemblage, their formal disposition and resolution harken back to a period in urban history (mid century modernist planning) with a very different set of connotations beyond their graphic sophistication, and a period that many might see as continuing to stigmatize vanguard urban design and planning practices to the present day.

There can be no doubt that the proposed megastructures of RVTR are clearly distinct from those of their predecessors. The heavy *béton brut* concrete of Paul Rudolph and Walter Netsch has been replaced by the airy lightness of fritted glass and soaring structural lattices. And the planned displacement of low-income immigrant neighborhoods by Robert Moses, Edmund Bacon, and Edward Logue for the promotion of auto-centric mobility conduits has been replaced by a focus on the productive capacity of "orphaned" spaces and easements within existing intercity mobility systems. Even the monofunctional housing blocks proposed during this prior period have been replaced by the panacea of mixed-use public amenities and institutional services. However, there is little question that the three nodes are predicated on the theory that the "big building" is the essential architectural instrument for negotiating the frenetic complexities of contemporary urban activities. Which provokes a simple question: why?

For all the data-driven precision of the projective cartographies and the careful attention paid to political-actor networks, codes, and legislation, it is disappointing to find the design responses to these inquires so familiar, so ardently architectural. This creates a sense of disconnect between the rhetoric of the research ambitions and the manifestation of the design proposition. Certainly, the existing "port" facilities, adjacent to which these three proposals are sited (airport, in Toronto, seaport, in Detroit/Windsor, and train yard, in Chicago) could be viewed as megastructural. But this would ignore the systemic nature of these sites as polyvalent landscapes of accumulation, rather than singular platforms of urban activity.

This is not to dismiss categorically the value of what is proposed—it is too well considered to not take into account. But it does suggest the need to critically evaluate architecture's actual agency in the emerging megaregional phenomenon. For example, rather than focusing on the singular "big building" as the preferred instrument of intervention, architecture might consider engaging the building in multiple, concentrating on the franchise or the repeated combinatory product. Instead of pursuing the production of heavy, self-contained, hyper-programmed urban interiors, architecture and urban design might focus on the pursuit of distributed landscape systems and infrastructures that are woven into existing settlement patterns, as a corollary to the pursuit of "lighter" building typologies. Or, in lieu of focusing on the few, highly legible moments where numerous urban systems come together, urban design might endeavor to manipulate the hidden, less tangible, but more influential logics of systems like land tenure and real estate valuation. Which is to say that if the critical consideration of the transactional nature of contemporary urbanization tells us anything, it is the need to pursue more agile, modulatable formats of settlement and infrastructure, not larger, heavier, less flexible configurations, which are as apt to fail as their mid century predecessors.

RVTR rightly notes that "there is increasing skepticism that traditional architecture and urban design practices can effectively operate within an urbanism characterized by dynamic and emergent behavior." As such, the elaboration of new strategies and systems for engaging contemporary urbanization activities within the milieu of the megaregion are urgently needed. *Infra Eco Logi Urbanism* is presented as "a model for interrogation, debate, and refinement." It is expressly "utopian" in orientation and, as such, demands critical reflection. It does not answer even a mere fraction of the questions posed by the emergence of the megaregion as an urban phenomenon. Few projects could. But what it does do—quite well—is frame the phenomenon as a topic of urgent concern for all of the urban design disciplines, architecture in particular.

—Christopher Marcinkoski (M.Arch '04) is assistant professor of landscape architecture and urban design at the University of Pennsylvania. He is a founding partner of PORT and previously was a senior associate at James Corner Field Operations, in New York.

Infra Eco Logi Urbanism in Discussion

On the occasion of the *Infra Eco Logi Urbanism* exhibition at Yale, assistant dean Bimal Mendis (B.A. ’98, M.Arch ’02), professor Keller Easterling, and Chris Marcinkoski (’04) asked questions of Geoffrey Thun, Colin Ripley, and Kathy Velikov of RVTR regarding practice and urban design at an immense scale.

Bimal Mendis Your research considers the phenomenon of the urban “megaregion.” What is the cumulative result of the proliferation of these entities throughout the world? Taken together, do they constitute or converge toward a new form of urbanism?

RVTR Since the urban formation of the megaregion—that is, continuous polycentric urbanization territorialized over a regional geography—was first identified in the early 1960s by geographers and authors such as Lewis Mumford, Constantinos Doxiadis, and Jean Gottman (who coined the term *megalopolis*), its implications have been a topic of study and interrogation by planners, geographers, and urban designers worldwide. In the literature we have found that almost everyone who has studied megaregions, from urban planners to economists and policy researchers, would argue that this is, indeed, a new form of urbanism and that its implications are more than just scalar.

One of the results of the megaregion’s emergence is that it has really challenged how we think and act on the question of the city. Cities today—particularly those that constitute the territories of mega-regions—are increasingly decentered and distributed across extensive geographies, and entangled with their peripheral landscapes and hinterlands. The notion of the city as a contained and identifiable entity has become somewhat of an anachronism. If we can no longer delineate the sovereign domain of the city, then the same is true regarding what was traditionally understood as the space outside of the city—the wilderness, the countryside, the periphery. These landscapes and zones coexist and coevolve with the urban environment.

The spatial collapse between city and territory has coincided with corollary conceptual collapses within design disciplines. As Antoine Picon has pointed out, it is increasingly difficult to make viable distinctions between ideas of territory and landscape, between landscape and architecture, between architecture and territory, between architecture and environment. It is no longer possible to take distanced, disciplinarily exclusive or exterior positions—everything is intertwined. This has profound implications for architects and urban designers for how we consider urban questions, for the nature of how we model and visualize these conditions, and for the characteristics and scope of the urban and landscape projects we propose.

Megaregions also precipitate a crisis in urban politics and policy. Due to their scale, complexity, and diversity, they challenge the functional status and authority of preestablished jurisdictional units—whether those of cities, electoral districts, states, provinces, or nations. The megaregion introduces a new layer of physical and constitutional consideration that is distinct from that of the city, state, or nation. Decision-making regarding shared issues—such as infrastructure, environment, resource sovereignty, and labor—requires new frameworks of governance. Also imperative is a reconception of what is common and how it is made available to a population of implicated publics insofar as their identity as citizens, their rights, and their ability to participate in the political process. We try to address, or at least approach, the spatial and societal implications of some of these questions within the speculative propositions of the *Infra Eco Logi Urbanism* project.

Chris Marcinkoski Can you talk about the appeal of the hyperprogrammed “big building,” or megastructure, as an instrument of contemporary urban design? It’s a typology that has really only found traction in the rapidly urbanizing contexts of Southeast Asia and, on occasion, in Europe, where there is a dearth of developable land. What is its efficacy in the horizontally diffuse context of North American? And how do you see this typology generally responding to the emerging discourse around megaregions?

RVTR We’ve had a fascination with the hyperprogrammed big building for some time now, and this project has in many ways been an opportunity to experiment with the possibilities, and the limits, of megastructures in the contemporary urban condition of the Great Lakes Megaregion. In the project we explore megastructural propositions at two sites: the Detroit-Windsor Crossing and the Highway 401-427 interchange, near Toronto. Both are located in what might be defined as a peripheral urban condition.

One of the primary questions of the periphery is that of scale—but also speed. Operating in the infrastructurally scaled and shaped urban territory, specifically with railway stations and transit hubs, necessitates a certain scale of intervention to begin with. How could these infrastructural structures be crossbred with other urban programs to produce new metropolitanisms within the megaregion?

It was Kevin Lynch who perhaps first proposed that large-scale buildings could operate as “nodes” within the diffuse urban landscape, coalescing not only functions but also a legible hierarchy of built form. We are compelled by the capacity for monumental forms to produce a distinct otherness within the urban periphery, providing a figure within the diffuse urban field and opening up new aesthetic, spatial, and social possibilities.

The megastructural typology can, we think, be expanded beyond its initial formulation in the 1970s and its very well known critique by Reyner Banham. One of the reasons the megastructures built during that period were seen as failures was that they were cut off from their context, especially in central urban locations—as was the case in Montreal’s Place Bonaventure. Some megastructures, such as La Défence in Paris, that were conceived as much more open and interconnected urban systems with a strong public-realm design, have over time formed very successful urban precincts.

An expanded definition of the type might find that North America has actually produced certain native species of megastructures, quite different from those found in European or Asian contexts and well adapted to North American forms of urbanism. We might look to some of the major regional shopping malls, casinos, resort complexes, interconnected hospital complexes, and some major airports. These can all be seen as versions of hyperprogrammed, megascaled buildings that produce their own distinct urban forms, spatial formations, social frameworks, publics, and interiorities. Many of these are, in fact, located within diffuse urban fields. We think the real question is whether we can imagine alternative urban roles and social possibilities for these structures that might be more heterogeneous, open, and accessible to a variety of publics.

An incredibly compelling characteristic of megastructures is that, due to their scale and complexity, they produce a kind of “city in a city.” This makes them particularly interesting to consider within the context of megaregions, which are often characterized by nonhierarchical market, infrastructure, and logistics-driven urban agglomerations. No longer associated with a specific urban “center,” these megastructures hold the potential to coalesce urban programs and spaces, produce new urban societies, and provide figuration within the urbanism of the periphery.

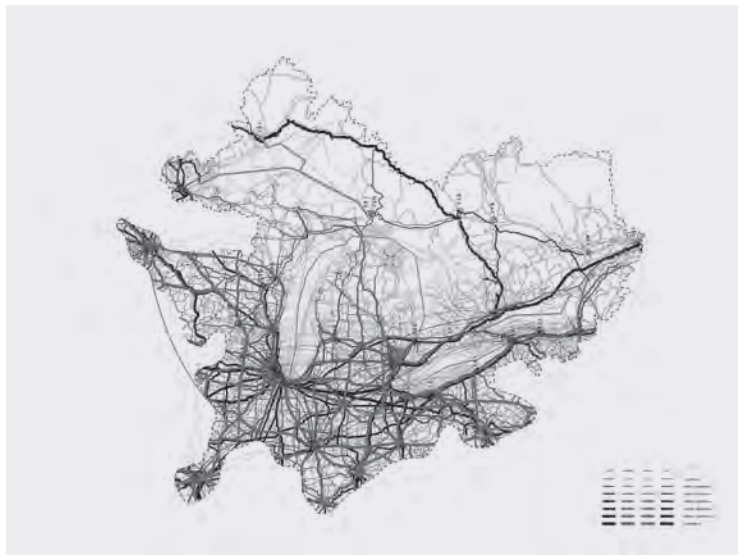
Keller Easterling How do you plan to instrumentalize some of your proposals? In other words, how will you develop a broader audience and gain the respect of environmental and political science as well as global governance? How will you address unsympathetic political climates?

RVTR From the outset, the proposals included in the *Infra Eco Logi Urbanism* project have been conceived of as speculative. For us, they are about thinking and working on urban questions with the aim of producing an imagination for our collective urban prospect in which design is mobilized to envision scenarios that posit plausible future worlds—including the value systems, attitudes, and design objects that might be produced through them. If the proposals are intended to be instrumental, it is in how effectively they create occasions for discussion and debate and how they catalyze new thinking on urban questions. The ability to imagine alternative futures is essential to political change. That said, the question of how architecture and urban design can develop a broader audience beyond the discipline is one that we continually consider.

As this has been a multiyear project, we have had the chance to present and discuss the work at conferences and lectures in the Netherlands, Japan, Germany, Spain, the United States, and Canadian venues within the GLM. Opportunities to reach extradisciplinary audiences have ranged from a broadcast with NPR and a review in *The Wall Street Journal*, when the exhibition opened at Yale to our consultation with the Province of Gelderland (NL) regarding its ongoing development of a renewable-energy corridor linking the port of Rotterdam to the Ruhrgebiet.

When the exhibition first opened in Montreal, we organized a series of events that allowed access to the work by a range of constituencies. We led a weeklong student workshop that introduced a group of environmental design students from UQAM to the analytical techniques and design methodologies proposed by project. The exhibition formed part of Montreal’s “Nuit Blanche” cultural and artistic festival, during which more than two thousand visitors saw the show in a single evening. We also assembled a public debate with architects, planners, political theorists, and cultural geographers to discuss questions raised by the propositions embedded in the work—it was a lively event. We hope to host another such event at Taubman College, when the *Infra Eco Logi Urbanism* book is published by Park Books later this year.

In terms of current political climates, we have found some very encouraging transformations under way in southern Ontario—especially with regard to renewable-energy installations and regional high-speed rail—Ontario has recently announced a commitment to implement an HSR link between Toronto and London. Within this context, we see our central role as one of raising awareness about the issues involved and investigating potential outcomes, implications, and scenarios.



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1. CargoShed transportation movement systems from *Infra-EcoLogi Urbanism*, RVTR, 2014.
2. The Chicago Exchange from *InfraEcoLogi Urbanism*, RVTR, 2014.
3. Model of the Toronto Gateway from *InfraEcoLogi Urbanism*, RVTR, 2014.

New Haven Mayor Toni Harp

Toni Harp graduated from Yale's MED program in 1978 and then began a career as a civic leader, first as a member of New Haven's Board of Aldermen, and then as State Senator for Connecticut's 10th District. In 2014, she was elected Mayor of New Haven. Professor Alan Plattus interviewed her in the mayor's office this winter.

Mayor Toni Harp

Alan Plattus Mayor Harp, most people in the architecture community probably are not aware that you attended and graduated from Yale's MED program and that the program is what brought you to New Haven.

Toni Harp Yes. I worked for the American Society of Planning Officials for about two and a half years before applying to graduate school. In the MED program, I worked on housing development and the impact of homeownership on community life. I studied three places to determine the increase in the proportion of homeownership needed to stabilize the communities; New Haven was one of them.

AP What was your impression of New Haven when you came here in 1976? How would you characterize the city in those days?

TH I grew up in Utah, and I had no real concept of what Connecticut was like, except for Bing Crosby's *White Christmas.* Its population density surprised me. I was a member of the Black Workshop and the Black Environmental Studies team, over on Lake Place. One of the things I found stunning was how people would stand out on Lake Place and Dixwell every evening and operate a numbers racket right there on the corner. Even then, it was a far more diverse community than most people recognized. The other thing that struck me about New Haven was the idea of community schools and that money was invested directly into the city. My first year here, they had a children's parade in which students from all of the schools paraded around the city, showing some of the work they had done. I didn't realize the degree to which direct federal funding impacted the city. Once that funding was withdrawn, I saw a big change in the city. I thought the fact that it was divided into communities that were active and engaged in the life of the city was different than what I'd seen in other places I'd lived. The neighborhood engagement that occurred back in the 1970s has been lost. It is one of the things that I'd like to reinvigorate as we move forward in this administration.

AP What do you remember about the level of community engagement with the School of Architecture?

TH There was a lot of interaction between the students and the community. Students made lots of architectural drawings for projects for community organizations. Engaging in those processes was very empowering both for the students and the communities. Actually, I met my husband here. He worked with the Black Workshop and had his own business. The Black Workshop was a nonprofit that worked with young people, churches, and their organizations to help them focus on their physical environment. It assisted in building day-care centers, too.

AP When I returned in 1986, we started the Yale Urban Design Workshop, which initially worked with the Dwight neighborhood and then spread out and worked with communities throughout Connecticut. Your office has also been an important advocate for cities at the national level, too. How do you see that role evolving and found new opportunities to advocate for New Haven at the broader and national level?

TH I've gone to Washington once, but I think some of the problems the administration and Congress are having make it difficult for the federal government to focus on cities. We're the "model city," and now we might want to call ourselves the "renewable city," since we've been around for 376 years. Recently, we remodeled or rebuilt most of our schools in a $1.5 billion initiative. We got resources from nonprofits and the state and federal governments—and we've also partnered with Yale, partly because we have the School of Architecture and people who, like us, are constantly thinking of new ways to achieve things and develop partnerships.

AP You sound guardedly optimistic about the federal government. I have been pessimistic for some time now; as I explain it to students, one party doesn't really need to have an urban agenda because people in the cities vote for them anyway, and the other party doesn't want to have an urban agenda because its support is mostly in places outside of cities. However, it sounds like you've had some experience suggesting that maybe we can, if we're entrepreneurial, overcome some of that.

TH I think the Obama administration is trying to find ways to leverage resources where they're most needed. We applied as a "Promise Zone," and if we are designated as such, it will give us added points and subsequent applications for federal funding.

AP That is a great attitude, especially when you reflect that New Haven has been very clever at using federal money to do what it needs to do, for example, in building highways. When Henry Cisneros was working under Clinton, university partnerships with cities were explicitly funded, and New Haven got a couple of big grants. Are there particular areas, such as coastal resilience, where the federal government seems to be spending money lately?

TH We are collaborating with forty-two agencies and very hopeful that we will get some funds for coastal resilience projects. We are collaborating with Bridgeport and Stamford to apply for potential funds from the Rockefeller Foundation.

AP How else are you working with other cities?

TH One of the things we are doing is trying to attract a gigabyte network to the state, which would put us on par with the level of Internet service elsewhere. I think it's really important for New Haven to have access to fiber, and we ought to partner with other cities to attract some of these infrastructure banks to come in and lay the fiber so that we have that infrastructure. Stamford, New Haven, West Hartford, and other towns have issued an RFQ. We hope to advertise for an infrastructure entity to come in and retrofit our town, which will galvanize even more development.

AP As someone who has seen a long evolution here from the perspective of a public official, what do you think are the dynamics reshaping the landscape within which mayors operate?

TH We still have a vigorous manufacturing sector and are competitive in terms of European countries, but we have to adjust the educational needs of our population to solve some of the urban problems we've had. We don't have the big companies that are going to hire twenty-five thousand workers with basic skills at good wages. We have to prepare the workforce for five years from now—we need a highly educated, flexible workforce with multiple skills.

AP In 1995, when Doug Rae, Cynthia Farrar, and I first taught a course on New Haven at Yale, we called it "New Haven and the Problems of the American City." The one big problem that still is on the table is education. While we have been able to upgrade and renovate the schools beautifully, from an architectural perspective, there are still many challenges. How are you working on education and youth issues?

TH We are focused on disengaged youth who don't come to school and have been suspended or expelled. They're making our streets unsafe for others as well as for themselves. We brought in police officers, firemen, teachers, and community activists and identified the families with disengaged kids. Then we went door to door and reached out to the parents, not the children. During the summer, we engaged student organizations, such as Yale Debate, which got twenty-five young people to articulate their position in the community. They were basically saying, "Everybody argues against you now. Wouldn't you like to be able to argue against them?" The husband of a Yale School of Medicine faculty member developed software that would allow all the agencies that impact the lives of these families to chat about planning for these disengaged kids. We discovered that the kids staying in school get into less trouble. All of these agencies now are planning together in real time to help these young people. It's very exciting.

AP What other opportunities out there are you excited about in terms of ongoing projects or those that you see on the horizon?

TH Route 34 is on land we received from the state, and Alexion Pharmaceuticals is building its international headquarters there. There's a real opportunity for the community to come together and help define the western portion of that corridor. We had a number of community-based development organizations, some of which were started back in my student days by School of Architecture students, that have all been dismantled. I'd like to see us reengage the communities in development through the "Livable City Initiative."

AP That is an issue very close to my heart. Our experience with the Greater Dwight Development Corporation has been overwhelmingly positive in that regard. The city-scale projects are very exciting; I'm thinking, for example, of the ongoing challenge of reconnecting the Hill and the area around the train station with downtown.

TH We are working on the Hill-to-downtown and reconnecting those neighborhoods. We have a commitment from the state to lower the highway, so the new development on the former coliseum site will be the entryway into the city. We're excited about a 4.5-star hotel that will be in the first phase of that development. And we will begin work with the Department of Transportation on a new garage over at the train station.

Then, we will do transit-oriented development in that area. River Street—which is not in downtown, but across from all of the oil stations—could be redeveloped. One of the things I'm looking to do is build amenities, like swimming pools and a skating rink, into our communities.

AP Downtown is tied more and more to its residential function as a good place to live. The bigger-scale retail is not likely to be coming back to cities like New Haven, but, instead, people want to live there.

TH We now have Market New Haven and other cultural attractions; we are cited for our International Festival of Arts and Ideas, our summer concert series, and Restaurant Week; and we probably have the most interesting and internationally diverse food venues per square mile in the country. We are the most walkable city and soon will be the most bikable, and we are working on a new transportation plan.

AP How can your colleagues in the architecture and design professions help with all of this?

TH One of the things that you can do—and have done—is to work with us from a community basis. We're open to new ideas. I would like to think about urban design more than we have. I've asked city planner Karyn Gilvarg (M.Arch '75) if she would find ways to integrate urban design in a more thoughtful and procedural manner.

AP One of the challenges for cities like New Haven is balancing the need for new development with the historic character of the city, which is not always immediately compatible with the needs of a contemporary city.

TH Thankfully, there are advocates who care about preserving our history. It's one of the things we have that a lot of other places in America don't. I didn't realize that we were the first city to have a government tree-planting operation or that we were the first planned city in the country. I think it's important that we always maintain a sense of who we are.

Why Can't We Talk About Architecture?

From left: Keller Easterling, Ellis Woodman, Jennifer Leung, and Sam Jacob.

The panel discussion "Why Can't We Talk About Architecture?" was held on December 15, 2014 on the fourth-floor of Rudolph Hall and was organized by Jennifer W. Leung on the occasion of the Poynter Fellowship in Journalism, awarded to British architecture critic Ellis Woodman. Architecture critic for London's *Daily Telegraph* and author of *Modernity and Reinvention: The Architecture of James Gowan,* Woodman was joined by Yale professor Keller Easterling, author of the recently published book *Extrastatecraft: The Power of Infrastructure Space,* and Sam Jacob, Eero Saarinen Visiting Professor, cofounder of FAT Architecture, contributor to *Icon* and *Dezeen*, and author of the blog, Strange Harvest.

Ellis Woodman I proposed to Jennifer the issue of why we cannot talk about architecture. The question refers to the reasons we don't have a real public discourse. A desire to address that failing was a key motivation when, at the age of thirty, I left practice and became a writer about architecture. I thought there was an opportunity to write about architecture with the seriousness with which art and film critics or novelists address their subjects, without patronizing a general audience. I write for both professional and general audiences, but there isn't that much of a difference.

When I started writing, there was a generation of architects who had begun to offer a new set of ambitions for British architecture. I write about buildings, and my activity is closely related to the core of that discipline. I think there are a lot of architects that could do better than I can, although one thing I have over them is independence, I wouldn't like to overstate the importance of that. I am up to my knees in architects, so I am complicit to a certain degree. At the same time I welcome that complicity because I think it means the writing is situated within a cultural discussion and has the possibility of being polemical.

The idea that a critic should have a position is an interesting one. I certainly don't think I have a theoretical position, and I don't think, in a way, any English critic does. There is something in the national character that makes it hard to adopt such a strident theoretical standpoint. Maybe Colin Rowe was the last English architect-writer who was capable of that sort of polemical standpoint.

So what questions might that critical basis be grounded on? Sam and I were talking the other day, and Sam was making the observation that we actually write the same article over and over again. I think that's certainly true of me. The two questions I'm always asking are: does it work, and does it meet its obligations to the city?

I worry that the discussion about the stuff of architecture, about its form and spatial effects, is in retreat. In the last year architectural exhibitions, biennales, and triennials have left me feeling bleak about the state of the public discourse. Thus, I question how we can strengthen it to contribute to the design of architecture.

Keller Easterling Here are some ways in which people don't talk about architecture when it is architecture and urbanism that is at stake or when space is the underexploited variable in global power plays.

You all probably know that I work on spatial products, repeatable free zone world cities, broad band urbanism and global standards that shape most of the space in the world. This space generates *de facto*, forms of polity that can outpace law, and it is the secret weapon of some of the world's most powerful players in the world.

Audiences often think that the infrastructure space I describe is means the death of architecture when I think it signals a new political power. And I wonder why we can't talk about that power.

We also often think that extradisciplinarity related to social and political sciences somehow overshadows architecture. But really, it's the other way around. There are multiple disciplines that could use our skills and evidence.

And as irritating as it is for Ellis to see an architecture biennale that is more like bad sociology or bad art, it is very irritating to me to see a kind of miniaturization of global political problems in the gallery especially when these are, with self-congratulation, treated as somehow sufficient. It is also irritating that culture treats architecture as if is somehow soft. Not appropriate for governance or real decision making or real research funding. Only appropriate for the gallery. I wonder why we can't we talk about architecture and urbanism as having the skills worthy of respect and funding beyond the often powerless fee-for service position.

Just at a moment of ubiquitous computing, internet of things, smart city etc., the book I just finished, *Extrastatecraft*, is asking us to see space itself as an information system whether or not it is enhanced with digital technology. I am always amazed that if there is a choice between tuning the eye to see information latent in and carried in space or see information carried in a shiny new technology, audiences will often see something redemptive in the technology. But apace is the underexploited medium of invention at the moment. So again, I am left asking, "why can't we talk about architecture?"

Jennifer Leung The idea that architecture needs to define itself against other forms of criticism, as well as itself, is interesting. I'm thinking about art criticism in particular, when in the 1970s, Rosalind Krauss was working against Clement Greenberg. What do you think about the practice of writing against one's predecessors?

Sam Jacob At a certain point, I felt there wasn't any writing that I wanted to read. There had been a kind of failure of the older generation to describe architecture and design in a relevant way. This was just at the moment when the Internet was making it possible to publish without anybody between you and the reader. And that is how I started to write. I chose to write from a very particular position, that of an architect. I wanted to write about the stuff around me, the stuff around us, and to try to understand that in architecture terms.

I suppose my real medium is the review. I often like to choose the most ridiculous subject: for example, the film *Sex and the City 2*. Here was a cultural phenomenon using two great words—"sex" and "city"—that nobody had written about in terms of architectural content. So, in relation to Ellis's point, there perhaps is already a public debate about what cities are, what architecture is; it is just that we're not participating in it.

Sex and the City is a proposition about the city exactly the same way *Delirious New York* was a retroactive manifesto about Manhattan. So, maybe it's productive to see what *Sex and the City* is really saying about the contemporary city.

The introductory scene was an incredible story of the history of Manhattan in three phases: nature, city, and commodity. "Once upon a time, there was an island with some Dutch, some Indians, and some beads." And then, on the screen, Manhattan turns into this Swarovski-covered city. I suppose that is the thesis of the film, that urbanism has dissolved into consumerism; that what we once understood as the diversity of Manhattan has been replaced by a thousand ways of making exactly the same decision.

So this is an example of the types of subjects I'm interested in, which are usually nonarchitectural and noncanonical but always placed in dialogue with core disciplinary ideas. Perhaps it is in places like *Sex and the City 2* that the real arguments about the future of the city are actually taking place. And this is the trick in most of my writing: trying to turn things inside out, turning low codes into descriptions of much more important issues and vice versa.

JL I wonder if it may not be a desire for sex and the city but rather for something like real estate. In journalism, architecture is talked about in the style or the arts-and-culture section. Often part of the review is to talk about its success or failure as an investment, and how stakeholders feel.

KE I found the architecture I wanted to write about was not on the architecture pages but on the international pages of newspaper. I started writing *Enduring Innocence* because I opened the paper one morning and saw a Hyundai cruise ship—the one that was used in the *Love Boat* television series—and it was being used for a cruise ship tour of the DPRK. So many of the stories about real estate are drenched in fictions and puffy fairy tales and other fantasies.

EW When I write for the *Daily Telegraph*, I'm very conscious of the fact that architecture is covered in various sections, and I write for the arts pages. To be candid, it is hard to persuade my editor to write about a building that isn't an arts building in the arts pages. Certainly, the move to digital is helping to break down that format. They understand why you might review a museum, a theater, or an exhibition, but if I want to write about social housing or a school, it is a struggle.

JL Who has influenced your methodology and interest in writing?

EW For me, John Summerson is the great communicator. I'm not a historian, but the history of architecture is a fundamental reference point for everything I write. If I'm reviewing a department store, well, what does this mean as an addition to the history of department stores? Before we get to criticism, the more useful thing I hope I do is describe, with some precision and economy. Summerson writes so beautifully, if only I could write like him. I sense Sam has a much stronger connection with Banham. The best Banham writing has this speculative quality. His wonderful L.A. book is looking at a subject that hadn't received much critical inquiry, and discovers in it a very potent set of architectural implications. One can think of many architects for whom a project of writing runs parallel to their work as designers. A fundamental difference between the two activities is that you cannot really be critical as an architect—you have to contribute to the world in a positive manner. For example, Koolhaas's writing is sardonic and shot through with cynicism, but I don't think you can bring those same attributes to architecture.

SJ I think it's self-provocation. It's partly about trying to define an idea that is somewhere in front of you but slightly fugitive, to capture its shadow and begin to think about it as an architectural problem or project. I think making buildings is also a way of talking about architecture. In that sense, building is directly related to forms of writing, drawing, and making models. They are not very different from the act of imagining architecture.

JL As much as writing is changing, so is practice. What are the implications for the future?

EW I can imagine that, in a couple of years, my building reviews will be in voiceovers with film footage. This year, I've already been making a lot of films for *Architectural Review.*

SJ The abilities to communicate and publish immediately and directly are increasing. The idea that you can build a practice that is indistinguishable from a point of view is also inevitable. Your personality, your 140-character witticisms, and your Instagram posts will inevitably become your architectural persona; they will be the way you announce architecture to the world. That is very exciting.

Big Data, DIY

Uneven Growth: Tactical Urbanisms for Expanding Megacities was on display at the Museum of Modern Art from November 22, 2014 to May 10, 2015.

In 2014, two skyscrapers painted a certain kind of picture of the contemporary city. One World Trade Center opened in New York, becoming the tallest building in the Western Hemisphere. It was solid and shiny, but not fully leased. If it follows the path of its twin predecessors, it may never be, even though a number of floors are filled with paying government tenants, there to pick up the slack. Earlier in the year, in Caracas, Venezuela, the illegal but densely packed tenants of the 45-story Torre David, a thriving squatter high-rise occupied incrementally after its developer died during construction, were cleared through forced evictions. A much-cited paragon of resourcefulness and informal settlement, of people making do outside of planned systems, the tower is destined to return to the global real estate market that could not finish and fill it the first time. Next to Caracas' unfinished tower, New York's finished one, though architecturally complete, appears like a kind of shell, a polished exterior without the urgency of the simple need to animate its inner life. Together, the two buildings demonstrate an awkward fact of contemporary life: private development and city planning processes aren't always the most efficient mechanisms for addressing basic human requirements, and when they fail, other systems inevitably step in to take over the job.

Curated by Pedro Gadanho, the exhibition *Uneven Growth* looks to harness these other, or informal, systems to interrogate and address economic and social inequality in a handful of large cities around the world. In much of the writing that surrounds the show—in the catalog, on the companion website, and in texts like Justin McGuirk's *Radical Cities,* which inspired some of the show—the formal elements of the city are juxtaposed with the creativity and ingenuity of its informal elements. Rather than focusing on recently planned cities, the show looks at established urban entities, and instead of totalizing designs, the curators privilege small, activist, and community-based projects—so-called tactical urbanisms—to show how they might be powerful forces in contemporary city-making. *Uneven Growth* adopts the format developed for the exhibitions *Rising Currents* and *Foreclosed,* the two previous entries in MoMA's "Issues in Contemporary Architecture" series. As with those shows, the work on display was produced over more than a year, and the teams received feedback on the developing projects through a series of workshops and public presentations.

The exhibited projects—for sites in Hong Kong, Istanbul, Lagos, Mumbai, New York, and Rio de Janeiro—can be divided into those that accept the curatorial imperative to act tactically (Rio, Lagos, Mumbai) and those that shirk it in favor of more systematic proposals (New York, Istanbul, Hong Kong). The urban prototypes designed by the Lagos team, the catalog of domestic products for Rio, and the do-it-yourself, scaffolding-like structures imagined for Mumbai use small and/or lightweight design interventions as a means of coaxing the host cities into more humane forms. At the other end of the spectrum, the Hong Kong team proposes extending the city into the sea with a series of new islands, while the New York and Istanbul projects look to policy, community organizing, and political processes to rescript the ways in which those cities create and manage housing.

In many of the projects, there is a sense that the work is probing the quantitative with the qualitative and that there is a mismatch between the big problems, which are stated using numbers, statistics, and charts, and the small solutions, which are shown in renderings and illustrations. Thanks to the statistics quoted in the text, we know the growth rate of Brazil's lower-middle class but not the projected socioeconomic effect of the "Varanda Products"—sunshades, hanging planters, plastic chairs—so lovingly imagined and illustrated by the team of RUA Arquitetos and MAS Urban Design. Likewise, the display of the New York project, which proposes hopeful mechanisms for building up affordable housing stock, leaves too much unexplored. Although the collaborators from CohStra and SITU Studio thoughtfully document housing dilemmas faced by poor New Yorkers, the work doesn't attain the verisimilitude necessary to seriously address these problems.

The show's full title, *Uneven Growth: Tactical Urbanisms for Expanding Megacities,* is indicative of what doesn't work. Hitching tactical urbanisms to the idea of uneven growth assumes a relationship between the two concepts, which appear to be tenuously related, based on the work produced for the show and accompanying catalog. It is seductive to look for solutions to the very big in the very small, but the work on display struggles to illuminate the mechanisms through which this connection might play out. As Gadanho noted in remarks during the opening events, the show intends to demonstrate that there is no single solution to the many problems in the contemporary city. This is undoubtedly true, but these projects never rise to the level of a plausible solution, and with few exceptions, the work is loaded with so much ambiguity (admiration and trepidation, seriousness and satire) that the research and responses bleed unhelpfully together. The effect is visually overwhelming and intellectually understimulating.

The examples of a priori tactical urbanism scattered throughout the catalog are often more provocative. Instead of looking at the little with the big or the quantitative with the qualitative, they tend to be extremely specific responses to very particular local contexts. The efficacy and intelligence of these projects can be discerned in a straightforward manner: the terms of their creation are simply stated, and the responses are easy to judge. The hybrid taxi stand and market structure in South Africa, by 26'10 South Architects, to name one example from the catalog, creates a shared space for two programs and thereby increases vitality for both while adding legitimacy to previously ad hoc structures. There is a modest, but not unimportant or trivial, effectiveness built into many of these examples that lends an idea of the potential (and limits) of tactical urbanism. It would not diminish the potency of these projects to say that their urgency comes from the fact that they feel plausible exactly because they are not interested in being comprehensive.

Rather than emphasizing "uneven growth," a loaded term layered with political, economic, social, racial, and geographic meanings, MoMA might have emphasized the tactical urbanisms, asking the designers to imagine small-scale, clientless architectural projects for contemporary cities and then tasking the curatorial team with analyzing and unpacking the uses and potentials of those projects. That would have been a more modest show (less megacities, more design), but it may have produced more tangible and interesting results. As it stands, the participants in this show were asked to produce their own research, analyze it, fit it into the rubric of *Uneven Growth,* and then design and communicate a response. In final form, the show is both sexy and ungainly, an excuse for the museum to engage a group of young architects on subjects with immediate topical import, while guaranteeing uneven output by dictating an ambitious process-based agenda and pairing unrelated offices in collaborative working groups. Many of the projects seem to have taken the teams too far outside of their comfort zones, and the results are not as strong as what many of these designers have previously shown they are capable of doing on their own.

MoMA's exhibition is evidence for an architectural moment that, once again, acknowledges the possibilities for social responsibility within the discipline and finds energy in work with an ethical and moral component. As a result of this trend, which MoMA first explored in its *Small Scale Big Change* exhibition in 2010, the problem-solving proclivities of contemporary practice are turning (at least in part) from concerns about efficiency and performance to issues of fairness and public interest. The exhibit registers MoMA's agreement with the popular sentiment that cities matter, and are changing, and it's heartening to have the museum acknowledge that designers have something to say on these matters. But it is difficult for an institution dedicated to art and public exhibitions to make commitments to research when it's not at all clear what the results of that research might reveal or look like.

As this museum and many others continually demonstrate, art is a human response to the complexity of a world that can't be easily pinned down. The artistic process involves observation and the communication of ideas. It grapples with filters and makes visible new ways of understanding the fact of being alive in a certain time and place. It engages the world through its disengagement with received ideas, producing cultural effects out of private processes. Some of the projects in *Uneven Growth* work on their own terms, but as an attempt to grapple with and codify recent trends in global urbanism—as a would-be research project and a laboratory of invention—the show asks too much and delivers too little. Nevertheless, MoMA is establishing a reputation as an institution that wants to engage contemporary architecture in a serious way, and the museum has begun to build connections to a new generation of practitioners and theorists. This track record should be acknowledged and supported with the hope that sustained attention and longterm support might produce new ways of looking at the city and new audiences for that work.

—Nicholas McDermott (M.Arch '08)
McDermott is a partner at Future Expansion, Office of Architecture and Urbanism, and a member of the faculty at the New Jersey Institute of Technology.

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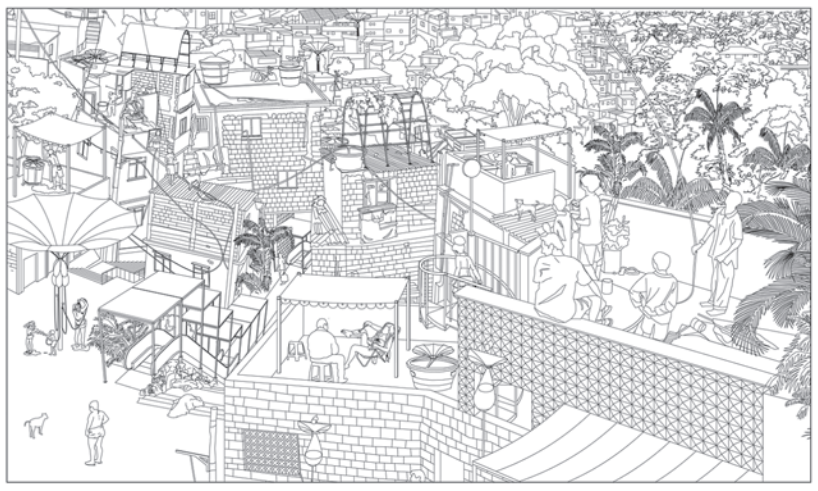

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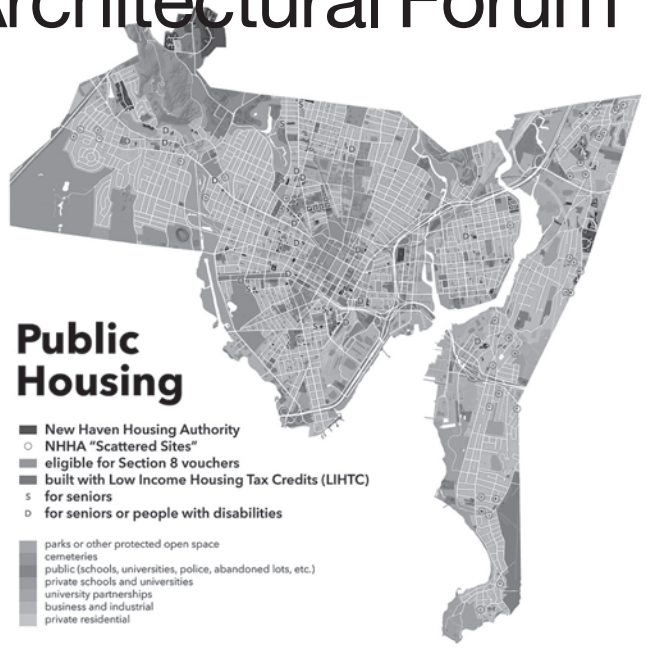
1. Installation view of *Uneven Growth: Tactical Urbanisms for Expanding Megacities*. November 22, 2014–May 10, 2015. © 2014 The Museum of Modern Art, New York. Photograph: Thomas Griesel

2. The Carioca Way of City Making. 2014. Varanda Products panorama. Courtesy RUA Arquitetos and MAS Urban Design, ETH Zurich

3. Lagos Tomorrow. 2014. Transportation. Courtesy NLÉ and Zoohaus/Inteligencias Colectivas

Fall 2014 Architectural Forum



Bill Rankin, Radical Cartography, New Haven public housing, 2011.

This fall's Architectural Forum, continuing as in past seasons to draw a crowd from across the university, welcomed four scholars, each challenging conventions in undertaking architectural scholarship in four completely different ways. A joint effort between the departments of the History of Art and the School of Architecture, the forum invites scholars undertaking cutting-edge and interdisciplinary scholarship to Rudolph Hall's Smith Conference Room. This semester, the forum lived up to its promise and packed a program that included discussion of everything from "radical cartography" to a conversation about race and architecture, from unconventional tile construction to efforts to understand our current obsession with mobile communication devices through attention to the role of the "screen" as an under recognized medium in material history.

The forum opened with a talk by John Ochsendorf, professor of architecture and of civil and environmental engineering at MIT, on the topic of Gustavino vaulting. Ochsendorf's interest in handmade Gustavino tiles—composed in elaborate geometric patterns that are structural—comes from his day job as an adviser on contemporary engineering projects. He noticed that where an engineer would find a historical structure—say, a bridge in Mexico that had withstood centuries of earthquakes—to be unsound and in need of rebuilding, Gustavino ceilings, which are only one centimeter thick and are created with patterns that aren't mathematically calculated, have an incredible load capacity. This, ultimately, led Ochsendorf to research the possibilities of "integrity that cannot be computed."

Ochsendorf presented the history of the Gustavino Company, which introduced the Mediterranean technology of vaulted tiling to the United States, tracing how this vernacular building technology became an important feature in buildings, such as at Grand Central Terminal, throughout the nineteenth and twentieth centuries in America. After emigrating from Spain to the United States, Rafael Gustavino talked his way into the job of tiling the Boston Public Library by arguing he could do it more cheaply than it could be done with steel. The project was a sensation, and Gustavino ceilings became a national trend just before concrete and steel became standard. The technology eventually fell out of fashion in the middle of the century, but Ochsendorf argued convincingly for the technique's enduring potential to create beautiful and structurally complex constructions.

Giuliana Bruno, professor of visual and environmental studies at Harvard University, continued the forum's focus on materiality with an attention to understanding how the proliferation of screens in everyday life can inform our reading of art history. Bruno began by considering the conceptual history of the "screen," emerging first as an interior-design object used as a pictorial platform. She emphasized the long history of artists using screens to create rich environments in tandem with other mediums to make sensorial experiences that prefigure today's ubiquitous multimedia environments. Bruno ultimately issued a challenge for thinking about material culture, pointing out that screens could not exist without architectural and embodied spaces. Their immersive qualities add layers to our daily environments. The talk generated a lively discussion, with one attendee thanking Bruno for providing the evocative framework for understanding how screens—referring, specifically, to her laptop—play such an important role in constructing material relations today.

On another Monday night, the crowd again packed Smith Conference Room, this time to hear Bill Rankin, assistant professor of the history of science at Yale. Currently completing a manuscript on the history of standardized international mapping, he presented what he described as his personal forays into unconventional mapmaking in his blog, "Radical Cartography." Rankin's ambition is to critique the idea of the "base map" as a neutral layer that objectively describes the landscape upon which all other data should be overlaid. He is interested in how this standardization privileges topological features over social ones. Rejecting this model of mapping, Rankin is driven to create his own maps, in part, he says, because historians critique the base map but don't actually undertake the work of producing better ones.

Rankin presented a series of maps of Phoenix as a critique of how most area cartography focuses on the dichotomy between the city's physical landscape and human development, viewing the terrain as a tabular rasa for rapid postwar development. Instead, his maps create hybrids of natural, social, and legal data (such as future development plots and land-management boundaries), highlighting issues such as racial geographies and the distribution of age groups across the metropolitan area. Rankin's mapping of race data, in particular, emphasizes how "data selection is key" in terms of how maps depict a single race in isolation to make an argument about segregation. Using the same data, he amplifies all groups to argue for extreme diversity of heterogeneous groups while showing how that data is aggregated—at the level of the block, ward, or municipality—can completely change the visual output. Questioned by an audience member about whether he was actually creating art objects rather than usable instruments, Rankin came back with the idea of geographic objectivity, saying, "There are two kinds of lying: deliberately misleading … and mapping."

Like Rankin's critique of the base map as neutral and Bruno's argument against screens as an ahistorical phenomenon, Mabel Wilson uncovered an alternative story by looking at the racialist history of American architecture to explain how civic architecture can encode ideas of a racial nationalist project. An associate professor at Columbia's GSAPP, Wilson juxtaposed two prominent institutions on the National Mall as a means of highlighting the social and ideological contexts of their creation. The first, the Smithsonian, was embedded within efforts to use Italianate architecture to form a nationalist architecture, cementing an Anglo ideal. Wilson notes how this project masks the use of slave labor in the Capitol and creates a racialist other for a country expanding its territorial borders over indigenous lands.

Wilson juxtaposed this implicit racial architectural project with that of David Adjaye's National Museum of African American History and Culture, currently under construction at the other end of the National Mall. She argued that, rather than an interpretation of a pan-African architecture, which has been suggested in keeping with Adjaye's own transnationalist background, the design specifically references African-American historical culture. One precedent is W. E. B. Du Bois's *Temple of Beauty* exhibition structure, which attempted to import African, specifically Egyptian, architectural motifs as a means of creating a distinctly African-American civic architecture. Her discussion set off a lively debate that centered on the symbolic politics of the museum and its selection process. Indeed, Wilson was part of a design team that was passed over in favor of the Adjaye team. As in previous presentations, the question-and-answer session of the talk spilled long into the evening hours.

—Eric Peterson (MED '15)

Cities of Darkness: Greg Girard

Kowloon Walled City, Hong Kong. Photographs by Greg Girard, 1995.

The role of photography in the representation of interstitial places, liminal territories, and urban communities is essential to the way in which we understand the culture of cities. Eugène Atget's photographs of Parisian street scenes, for example, drew out an appreciation for the pictorial ordinariness of the city just as Walker Evans's observations of Havana, in 1933, translated the vernacular of cafés and hand-painted signs into relics. The distinct vantage point of the camera can elucidate objects and people that are often hidden in plain sight.

The status of this mode of representation in the contemporary Asian context was brought to the attention of students and faculty at the School of Architecture through the work of the Canadian photographer Greg Girard, who came to speak this fall at the school.

Girard, who has spent most of his career in Asia, examines the social and physical transformations of the Asian city. His work has been published in books such as *The City of Darkness* (1993), *Phantom Shanghai* (2007), *Hanoi Calling* (2010), and *The City of Darkness Revisited* (2013); he has worked on assignment for publications such as *National Geographic, The New York Times,* and *Der Spiegel,* as well as exhibiting at New York's International Center for Photography.

At Yale, Girard presented two series as interpretive records of the spatial realities and daily lives of residents of extraterritorial spaces in the Asian city. His work calls to the fore the importance of photography to bestow iconic significance on the "makeshift." The first series Girard discussed is rooted in his recent book, *The City of Darkness Revisited* (authored with Ian Lambot), which focuses on Kowloon Walled City. The photographer recorded life in this legendary unplanned, labyrinthine city in Hong Kong, thought to have been the most densely populated place on earth when it was razed twenty years ago and replaced by a sterile urban park. Thirty-three thousand people lived there in more than three hundred interconnected high-rise buildings, none of them built by an architect.

Girard captured the unregulated area, covering a single Hong Kong block at the end of the Kai Tak airport runway. The images showed a world unto itself, largely ignored by both Chinese and British authorities—a place of decrepit dark lanes and shadowy stairways, of malodorous and damp narrow alleys, where rainwater is backed up by garbage. Families share 250-square-foot apartments, products are made, and drug dealers are rampant. It is a locale that has long fascinated architects and writers (the 1988 film *Bloodsport* was filmed there).

The second series Girard presented, "Half the Surface of the World," is a collection of photographs taken at U.S. military bases around the Pacific and designated by the Pentagon as the U.S. Pacific Command (PACOM), covering half the world's surface. His images record the bases he first encountered when he lived and traveled in Japan in the 1970s. They show a landscape intended to feature the characteristics of American small-town or suburban life of the 1950s—with the unexpected intrusion of an attack jet or warship at the end of the block.

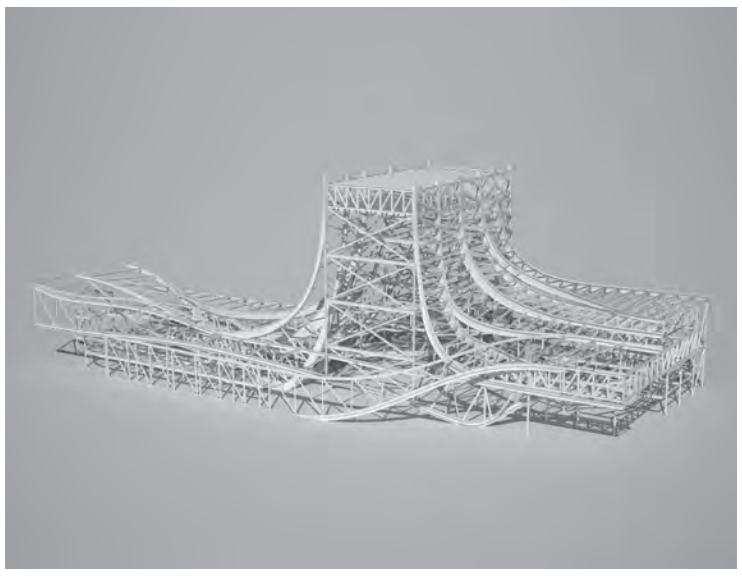
Presented together, the two series called attention to two very distinctive—and seemingly opposed—urban typologies: random construction of the unplanned Chinese community, absent bureaucratic control, and the pristinely ordered American military bases established after World War II and the Korean War.

Because Kowloon Walled City was considered by many to be one of the world's most horrible slums, the inevitable questions following Girard's presentation dealt with a concern about whether his images "intellectualized" or "aestheticized" an environment where people lived under conditions that most would find unacceptable. However, Girard, who spent five years photographing and interpreting the ways in which this city survived, felt that it incorporated an authentic community life in spite of its surface appearance as socially compromised and anarchic.

Girard was hosted at Yale by seniors in the architecture program enrolled in the senior research colloquium led by Karla Britton. His talk contributed to the larger theme of the colloquium, which addressed research methods and approach to representation of urban transformations in cities around the globe including Hong Kong, Beijing, and Ulaanbaatar. Speakers such as Girard have deepened the students' work by drawing out the importance of personally documenting sites and places on research trips, such as those done through Yale College's summer travel research grants.

—Karla Cavarra Britton
Britton is a lecturer at the school. She is the author of Auguste Perret *(Phaidon, 2001); editor of* Hawaiian Modern *with Dean Sakamoto (Yale University Press, 2008); and editor of* Constructing the Ineffable *(Yale School of Architecture, 2011).*

Systems Integration



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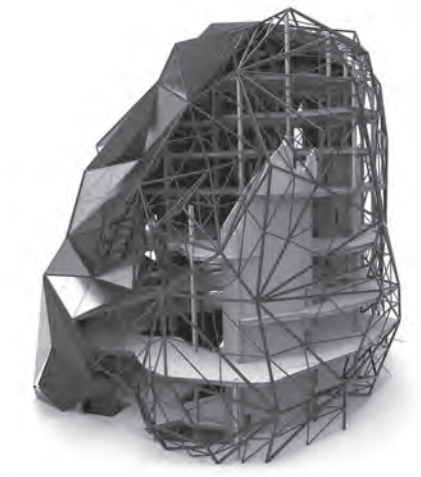

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1. Systems integration project, 2011 by Avi Forman, Steven Gage, Diana Nee (all '12).
2. Systems integration project, 2014 by Dionysus Cho , Kara Bicykowski, Jack Wolfe (all '15).

Architecture students are saturated with imagery. Images are, in large part, the currency of architecture schools (and of the profession, for that matter). Students don't make the architecture they represent in their design studios. They can only point to it with drawings and models and words. And few of us ever set foot in the vast majority of architecture that influences our work. Architecture is constantly being reduced to images, and architecture students are given little indication that it's otherwise. Through this insatiable addiction to imagery, we come to understand architecture largely from its surface.

Therefore, the overriding ambition of "Systems Integration," a fourth-semester core sequence course, is to get behind the image of architecture to uncover what sustains that image. The course is an extension of the design studio in both literal and figurative senses, in that we select a group of the students' projects from their previous design studio to develop further (literal) and in that the course, while part of the technical sequence of the curriculum, emphasizes thinking about technical issues with the same design mind that's used in the studio (figurative).

For "Systems Integration," students must design the building of their buildings. We ask them to see architecture as a complex system of systems, to design those systems, and to design how they combine in time and space to create architecture. Space is something we are all familiar with when talking about architecture and design, but time is often overlooked as a critical factor—not in the sense of time equaling money but in how the temporal sequence of construction plays as important a role in how architecture is perceived and experienced as anything else.

About fifteen projects are selected from the fall semester design studio to be used in the course: based on broad criteria, some are chosen because they are straightforward and well-suited for advancement, and others because they present design challenges that will be tested when faced with questions of constructability. In either case, by designing the infrastructure required for these proposals and confronting the so-called "realities" of gravity, life safety, the building industry, and so on, students come to realize the opportunities for innovation inherent in these constraints and develop a whole new arsenal of tools to carry into the advanced studio sequence.

The students work on the projects in teams: two or three are paired with the author of the selected project; and while the original author may maintain a leadership role, design decisions are established by consensus among these members and their instructors.

Student teams are matched with a team of faculty "consultants," composed of an architect, a structural engineer, and a mechanical engineer. They meet with this assigned team on a weekly basis to review progress and plot the course of their work. These critics also give assignments intended to provide a structure within which to pace the development of the projects. Students propose and develop, as fully as possible, appropriate systems related to structure, enclosure, egress, climate, and light. The investigation and development of each is based on the technological role each system plays within the building as a whole and on its suitability relative to larger issues of architectural intent. The goal, however, is that these advances ultimately serve to both reinforce and re-inform the formal origins of each work.

A more familiar version of this course, taught in many other architecture programs, is known as "Comprehensive Design," as a separate course, while the work of "Systems Integration" at Yale is combined with the design studio into a single course. There are several advantages to structuring the sequence the way we do. First, it's apparent that students are already stretched when faced in the studio with trying to resolve the spatial and organizational challenges of a program into a convincing architectural form without also having to answer to quantifiable structural and mechanical issues. Second, students are able to take a more objective position once some time has passed, after the physical and emotional exhaustion of a studio final. And, third, we believe it is instructive for students to recognize how far many presumably completed studio projects need to be unpacked in order to be repackaged as viable architectural propositions.

The demands placed on buildings are formidable, arising from both the physical environment and the people who inhabit them. Climate, gravity, our thirst for energy, our need for safety and comfort, and our materials and methods of construction all conspire as conditions that require their own unique yet interrelated responses if a design is to harbor human occupation robustly and intelligently. "Systems Integration" addresses these issues directly. Students focus their attention on isolating, developing, and, ultimately, synthesizing the many layers of structure and infrastructure required to bring architectural ideas into a sustainable physical reality. The results of this labor lead to a more comprehensive rendering of students' original conceptual intentions, one that goes deep below the surface of architecture.

—Martin Finio
Finio is the coordinator of the Systems Integration course at the school. He is partner in the New York-based firm Christoff: Finio.

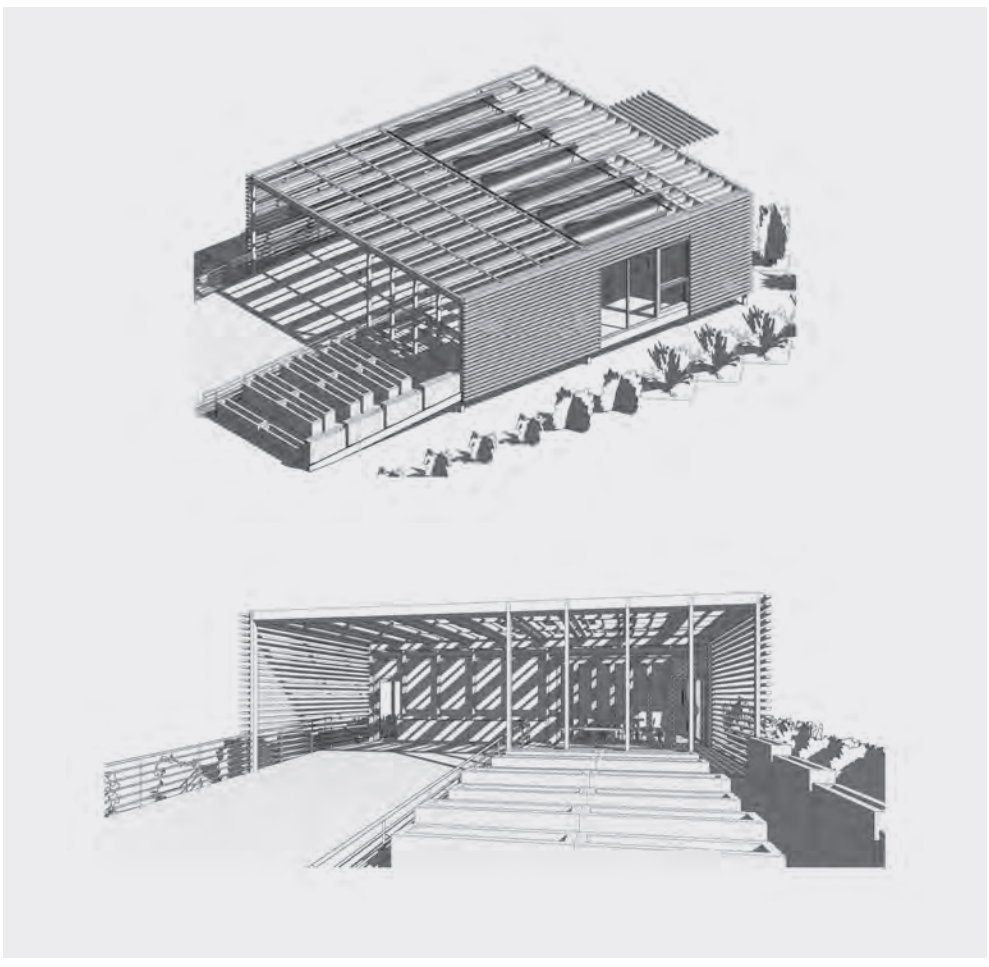
Solar Decathlon

In 2000, the U.S. Department of Energy introduced the "first-of-its-kind solar house competition." Fourteen teams representing universities and colleges from the United States and Puerto Rico competed in ten different categories as they designed and constructed solar-powered houses over a fifteen-month period. The houses were shipped to Washington, D.C., in 2002 and assembled into a solar village on the National Mall, where their performance was measured and their design features were assessed. Beginning in 2005, the Solar Decathlon has occurred biannually, and, in 2015, the solar village will be located in Irvine, California, for the second time.

In December 2013, a small team of Yale undergraduates in architecture and engineering prepared a proposal and submitted an application for the 2015 decathlon, eventually getting selected as one of eighteen teams from across the United States as well as from Germany, Italy, and Panama. Over the next eight months, they assembled a larger team of students, developed a schematic plan, determined a budget, and met all the required milestones set up by the Department of Energy. When the Center for Engineering Innovation and Design at the Yale School of Engineering, which had originally agreed to serve as the primary "home" for the project, pulled out, citing financial and staffing concerns, the School of Architecture stepped up to advise the students insofar as we were able given our commitment to a major design-build activity: the Jim Vlock First Year Building Project.

The premise of the Solar Decathlon—that the design, construction, and operation of a net-zero-energy house fully powered with solar energy serve as both an important educational tool and a model for wider adoption in the residential market—may be noble, but it is fraught with many problematic assumptions. The use of a private-property boundary as the site and unit for energy balancing misunderstands how energy systems behave; the privileging of solar power for producing electricity neglects much more efficient and much less expensive zero-carbon methods for energy supply; and the requirement that the house interior be homogeneously conditioned and lighted at standard levels perpetuates a century-old approach to the human environment that is not only extraordinarily energy-intensive but also no longer reflects our contemporary understanding of human physiology. As such, the School of Architecture agreed to play a more central role in furthering the design and development of the project under two conditions: that all involved consider the decathlon not just as an end product to be delivered but as a means for asking and exploring important questions about systems and technology, and that the students be willing to challenge the performance criteria developed by the Department of Energy to extend the bounds of energy efficiency and the possibilities for alternative approaches.

A seminar was organized during the 2014 fall semester to foreground these pedagogical questions while developing the design of the house. The seminar was open to undergraduates and master of architecture students to bring in experience to a student project, rendering it as the only instance at the Yale School of Architecture in which undergraduates and graduates team together in a major design project. We have also been fortunate that so many partners have joined us to support the project as well aid in teaching the seminar: the Yale Climate and Energy Institute has handled all the administrative paperwork and budgeting aspects; Yale Facilities has provided design and analysis in mechanical engineering, electrical engineering, and environmental health and safety; Yale's West Campus is supplying space and supplemental materials; Atelier One provided the structural engineering design; and Atelier Ten provided the lighting design.



Solar Decathlon rendering sketch, Yale School of Architecture team, 2014.

At the close of the fall semester the team finalized the design development drawings. Now, the hard part begins. In order to move into the construction phase, the focus needs to shift toward resources—financial, material, and human. If we can raise the necessary funds, find donors to provide technology and materials, and hire skilled builders, Yale's first entry in the Solar Decathlon just might be ready to open for visitors to California next October.

—Michelle Addington
Addington is the Hines Professor of Sustainable Architectural Design at the School of Architecture and the School of Forestry & Environmental Studies.

Fabrication Comes of Age

Fabrication is deeply embedded at Yale, beginning in the 1950s with hands-on work with the sculptors Erwin Hauer and Robert Engman. Since 1967, the Vlock Building Project has involved students in the field as well as shop fabrication. Over the past fifteen years, with the introduction of sophisticated computing, fabrication has been incorporated into workshops, studios, and seminars as both a set of tools and as design provocations. John Eberhart ('98), critic in architecture and director of the fabrication lab; Mark Foster Gage ('01), assistant dean and associate professor; Brennan Buck, critic in architecture, and Kevin Rotheroe, lecturer, sat down with *Constructs* to discuss new directions in fabrication at the school and in the profession.

John Eberhart Back in 2001, when we really got serious about fabrication technologies, there wasn't much going on anywhere, so we became leaders in this area. We had a limited amount of money and didn't know whether it was going to take off or what would give us the most impact. We focused on two things: the water jet, which really expanded the material range to where, all of a sudden, you could start designing models in one-quarter-inch steel or output complex shapes in various materials with a milling machine. Other schools began to take note of our program, and an "arms race" began to occur. That ended around 2006, and, since then, we've been reevaluating and realigning. We get something and see how the students respond. Over time, the curriculum has responded to capacities and capabilities, or it has moved faster, and we have had to respond.

Brennan Buck The ideas that underlie fabrication are clearly established and accepted, and it is now an open question as to whether fabrication, as a set of techniques, has more to tell us about how to think about architecture.

Kevin Rotheroe I agree. Our collective endeavors at Yale are focused on the exploration of technique and the cultivation of aesthetic possibilities. While other institutions have acquired equipment now considered commonplace and some focus on either avant-garde form-finding or robotic process efficiency, our approach is deeply rooted in the long history of making. We are at the forefront of exploring fabrication technology vis-à-vis modes of representation and focusing on emerging design opportunities that artfully dovetail with the means and methods of the building design and construction industry, as custom fabrication always has. Our approach to the study of fabrication reflects the pluralistic approach of the school, though there has been a general shift in toward iterative 3-D printing as an integral part of the design process and away from fabricating prototypes in the actual materials. I'm trying to both embrace and resist this in my "Craft Materials + Digital Artistry" seminars because I think the experience of making, of crafting something original out of "real" architectural materials, enhances design thinking: the lines and virtual representations mean more from the moment one begins addressing an architectural problem.

JE We've been shifting to rapid prototyping, and, in many ways, fabrication is established. In the past two years, we have pivoted toward 3-D printing and representational tools, adjusting where we are as that technology evolves from devices that output a facsimile at the end of the design process to an iterative design procedure wherein students can constantly, and inexpensively, print and test a physical form.

Mark Foster Gage In 1999, I was one of the students at Yale who was interested in producing artifacts during what John referred to as the "arms race." There was a kind of legitimization of the object by virtue of its process. You could show up at a review and say, "This was laser-cut," and everyone would say, "Oh my God, this was laser-cut!" and fondle it, no matter what the thing was. We were the first school to give students nearly unlimited access to the tools so that the tools became part of the studio culture. And we had an advantage over many in that our shops are in the building. When the novelty of the process wore off about ten years ago, students could use these tools in a more transparent way, and the conversation became how to make the thing better using technology as a design tool, instead of as a novelty.

We're using these tools to develop the students' ability to speak the language and then sending them into the world. For instance, in the most recent seminar I taught, we had students working with Materialise in Belgium to fabricate a $40,000, four-foot-tall 3-D print. They knew how to prepare and manage the files and spoke the machine language. We sent another student from the seminar to work with Garfagnana Innovazione, a CNC stone-fabrication unit in Tuscany, and he was able to jump right in and work with the robotic stone carvers to CNC-mill a two-by-two-foot prototype that the class worked on collaboratively. We're arming our students for more interdisciplinary crossovers with industry—like in that particular example. I believe we were the first school to realize that the equipment we have now can be used as a training device to not only design new forms and objects but also to learn to speak an important new machine language in the profession which has very little fluency.

KR There was, indeed, a time when using a new technology to make something seemed to sanctify the design, to impart it with virtue whether or not it was actually well designed. We've moved beyond such hype to treating digital means as everyday tools, which is healthy. In my course "Custom-Crafted Components," we emphasize the notion that, while there are formal features that can be produced only through digital devices, in most cases digital methods simply make custom design more reasonable, technically and economically. Many of our students enter the profession armed with the ability to resist jaded perspectives about when and where it is reasonable to do something highly unusual.

BB Yale has the equipment not just to make scale models but also to work in architectural materials such as steel, concrete, and stone. In the 2012 "Assembly" seminar, a group of twelve students produced a full-scale pavilion out of three hundred sheets of folded aluminum—all cut in the basement, folded on the loading dock, and then installed on the New Haven Green. In retrospect, we can ask how it changed the way the students designed. One thing it did was to even out some of the hierarchies and the sequential nature of designing a building. Rather than looking at the site, developing the massing, and then working on the detailing and materiality, the "Assembly" project required that we think about materials and tectonics from the beginning. Students had to design not sequentially, from large to small, but across scales simultaneously.

JE As students in the early 1990s, we were often limited in what we could design because of the potential for representation. If you could represent something with a straight edge and a utility knife, the form would make its way through a design process. Now, with rapid prototyping, you can do this iteratively. Students can express their ideas through multiple ways of form-making, and it is not so precious.

MFG This iteration places them in a design process that resonates more with what is happening in professional offices. Instead of Frank Gehry or Rem Koolhaas telling fifty interns to each make a model, our students can use robotic tools to generate fifty models on their own. Some of the students in my current seminar, "Theory through Objects," are working to produce meaning through different attitudes toward form. One of the students produced a 3-D printed model the size of a coffee cup that represented what he called a "gir-Audi." It was a giraffe and an Audi occupying the same space, and it was ridiculous and brilliant. Ten years ago, a student could not have produced it because there was no way to model it except by hand drawing. You can't convey the meaning of what a giraffe or an Audi is without having access to the actual 3-D complexity of these forms, and you can't access the form without the ability to produce something easily with 3-D printing and the software required to model it. Ideally, the software and the 3-D print will become so common as to be invisible, and the students will simply be able to manifest their ideas. That's the goal, and I think that's where Yale is going right now.

JE In the core curriculum, every first- or second-semester student is exposed to required courses in which they have to make something using a tool. But even those courses become somewhat critical of the fabrication processes. Often, people realize that milling something out of a piece of foam is a very time-consuming, expensive, and wasteful process. Those courses then pivot and ask, once you've milled the thing, how else would you think about it? That's when you start folding the material using more complex processes, handmade versus machine-made, and that moves right into working with fabricators. My own experience with fabrication equipment goes right into working with precast concrete on large-scale projects in my office, producing formwork in sixteen different variations. The students' experience is moving right into professional practice.

BB One of the things you quickly learn when you shift from student to instructor is that, if your knowledge is purely technical, you will fall behind quickly. It's important to understand the conceptual implications of any technique or technology. That's what we have to offer, more than a specific technical knowledge.

JE We're at the point now where a lot of the technical teaching of equipment is happening from student to student. That's one of the reasons the 3-D printers are located on the studio floors. You can always tell when something really hot is coming out of the 3-D printer because you get six or seven students crowded around, looking at it. I think these things will be like refrigerators: we won't remember how we survived without them. We will get smarter in terms of how we life-cycle this equipment. The robot may not be necessary anymore. There was a huge explosion of technologies in the past decade that has plateaued.

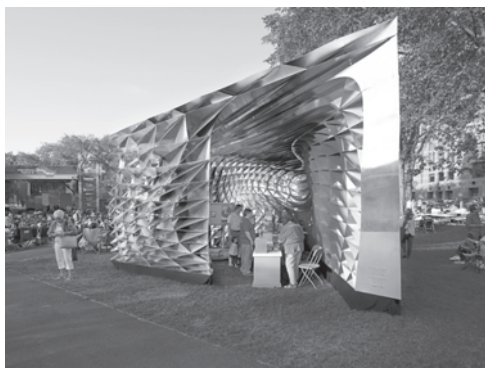
MFG I think a little differently. There is too much information out there to count on any one group of technical expertise. Things are fracturing, and certain people will take on certain interests. If you are interested in something you don't know about, you download the intelligence like you would an App, or you collaborate with an expert in that area. Innovations in fabrication aren't really in the machines themselves anymore but in the materials you use with them. All of a sudden, that distinction is breaking down; the innovation is contingent on both, not on one or the other.

JE After the 3-D printing was up and running, the students asked, "What's the next big thing?" I think it's in things like Arduino, the mini-microprocessors, and layering the ability to control something through an input stimulus and output reaction—and to fold that into design is an interesting moment. In my current post-professional seminar, we're doing an Arduino-based smart panel. We are putting them throughout the building, and they're reacting to sunlight or people walking by. The students have really responded to the potential.

BB I think there is a little crisis, a micro-crisis, around technology and complexity. I'm moderating a panel at this spring's ACSA conference called "Architecture's Complexity Complex," about architecture's complexity complex and about our collective loss of faith in complexity as a discipline, which we have been pursuing since the middle of the twentieth century. More people are questioning complexity as we plateau in terms of computation and fabrication technology, placing these technologies into a more interesting and fraught territory than when they were new.

KR We're in a period of absorption and digestion, when technological change is leading us to diverse aesthetic expressions and distinct notions about the relative virtues of various forms of complexity. While we are settling in to a period of mature creative exploration with established tools, digital devices will evolve in wonderful ways as we keep investing in and collaborating more with outside enterprises. Some of the people I work with in the aerospace industry are developing large-scale, automated additive materials to make complex metal structures. The time may well come when architects will be able to harness 3-D printing as an actual production technique for making complex forms.

JE For a while, you could get more and more complex because you were pushing against technology. Now, we realize you can get as complex as you want, and there isn't any barrier. Now, you look at something now that is incredibly complex, and you ask why, not how.



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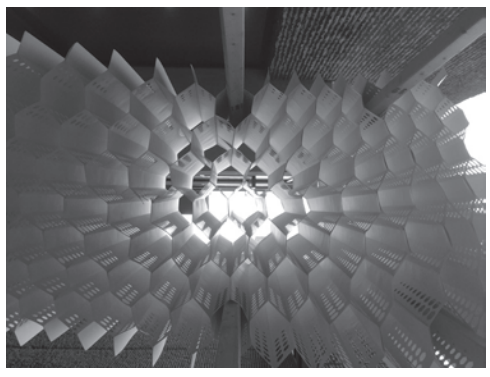

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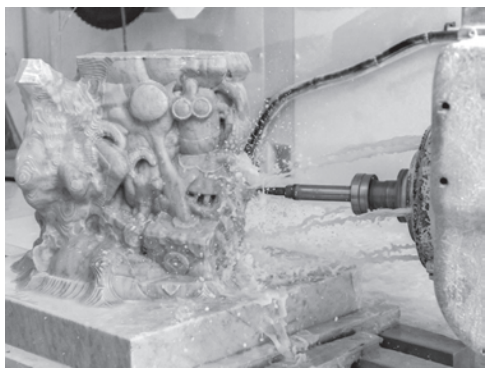

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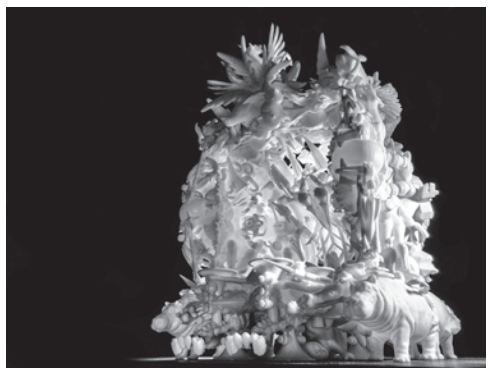

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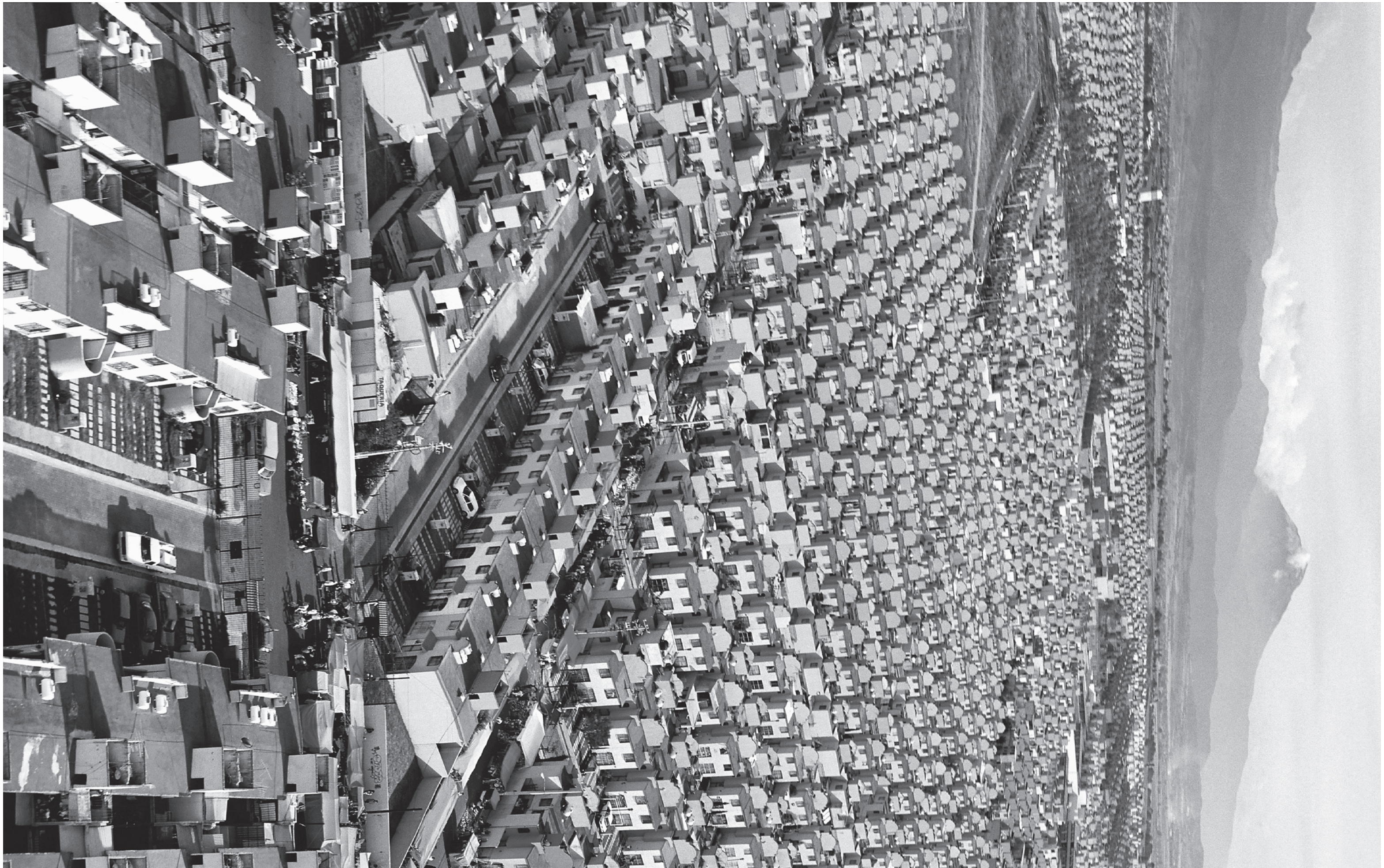
1. Assembly Pavilion, New Haven Green, 2012.
2. Visualization III installation on front steps of Paul Rudolph Hall, Spring 2014 with students Lisa Albaugh, Jessica Elliott, Anne Lawren Householder, Sarah Kasper, Elizabeth LeBlanc, and Caitlin Thissen (all '16)
3. Student operating a robotic cutting tool in the fabrication laboratories at Yale, 2014.
4. Project from Disheveled Geometries seminar research with Mark Foster Gage by Adam Wagoner ('15).

47,547 Homes, Ixtapaluca, Estado de Mexico. Photograph by Livia Corona Benjamin.
(30" x 40" | Archival C-Print, Ed. 5+2 AP | 2000)



2014 Jim Vlock Building Project

Jim Vlock Building Project, New Haven, 2014.

Each year, the Jim Vlock Building Project gives first-year students the opportunity to work collectively designing and building a finished work of architecture. While lively team dynamics, valuable hands-on experience, and challenging constraints continued this year, two new partners—an open-minded community non-profit and a fearless private-equity firm—enabled a different take on the 2014 house that positioned it as the first prototype in an ongoing exploration of new housing in New Haven.

The prompt was startling: design an 800-square-foot house on a narrow lot with a 500-square-foot unit for a homeowner and a 300-square-foot rental unit. What client would be interested in such a tiny house?

Several, in fact. For one, NeighborWorks New Horizons, a New Haven non-profit dedicated to building affordable housing, was interested in testing unconventional house designs, a perfect match for students eager to design. But with experiments come unknowns: Would such a small house sell? Could students make this a livable space? HTP Ventures, a private-equity firm owned by New Haven entrepreneur Thach Pham, stepped up to cover the risk. Additionally, the selection of a "sliver lot" in the West River neighborhood was intentional: the 2014 Building Project is part of an ongoing collaboration with the New Haven Livable City Initiative to encourage innovative development of the city's vacant sliver lots, too skinny to entice conventional developers.

Led by studio coordinator Alan Organschi ('88), the semester began with a rapid-fire sequence of design exercises focused on developing a "minimum dwelling code" to prepare students for the challenge of designing small spaces. By early March, each first-year student had designed a two-unit, 800-square-foot house. Just before spring break, the pool of fifty-four was culled to seven houses, which were assigned to student teams. In late April, the winning scheme was selected by faculty consensus, with representatives from NeighborWorks and HTP Ventures. Under the leadership of Building Project director Adam Hopfner ('99) and lecturer Avi Forman ('12), the class was redistributed into task forces responsible for structure, envelope, site, systems, massing, and cabinetry to fine-tune the design and prepare construction documents before student work crews began assembling formwork on May 19.

The house is unusually sited on the lot, 65 feet from the street. Because the old footings of a previous house are buried underground, the new construction was moved to virgin soil that could bear the new frost-protected shallow foundation without additional excavation and fill. This decision saved $15,000 and used seventy-five percent less concrete. The result is a generous front yard, seen as an opportunity to offer a visually shared garden on the street.

Despite its 19-by-22-foot footprint, the house feels expansive. The front door opens to an airy double-height living space, linked to the bedroom above without sacrificing privacy. French doors topped by a massive window extend the living area to a private patio sheltered by mature trees. The smaller, third-floor unit is entered via an exterior concrete-and-steel stair, sheltered by a wood-clad canopy.

To maximize livable space within the tight setback and height limitations, the southeast and northwest corners are both chamfered, giving the house a unique form. Both generic and particular at once, the house's iconic form owes its shape to the technical language of regulation; but, ultimately, it is a design opportunity, an appropriate metaphor for a semester devoted to designing within extreme constraints of time, program, area, zoning, and budget.

The generous donors included Breakfast Woodworks, Stony Creek Quarry, Kohler, Norstone, Daltile, and Plumen, all who made it possible to select durable materials that will age gracefully: white-cedar shingles, bamboo floors, solid-core birch plywood cabinetry, custom concrete stair treads, granite countertops, and stone pavers. High-efficiency windows offer a view to the landscape from every interior space.

In the aftermath of the recent economic crisis that exposed traditional homeownership as a fragile construct, this house seeks to challenge accepted norms of house and home through its scale and adaptability: the larger unit may be occupied by a homeowner who can rent out the third-floor apartment for additional income. Eventually, the homeowner may take over all three floors and connect the two units by simply adding one door, as the family grows. Or they may move to a larger house while the tenant purchases 179 Scranton, starting the cycle again.

On September 18, 2014, the house was given a Student Award of Honor by the Connecticut Chapter of the U.S. Green Building Council, which cited the project's adaptability and ethos of reduced consumption via a reduced footprint. This is the first year NeighborWorks New Horizons and HTP Ventures have partnered with the Yale School of Architecture. The collaboration looks to have a promising future, engaging issues of risk, adaptability, and financial sustainability within the tradition of the Jim Vlock Building Project.

—Katherine Stege ('17) and John Kleinschmidt ('17)

Jordan River Peace Park Update

Faculty of the Yale School of Architecture's Urban Design Workshop (YUDW), including its director, Alan Plattus, and project manager, Andrei Harwell, returned to the Middle East in May to move forward with detailed planning for what will be the region's first transboundary "peace park," the Israeli-Jordanian Jordan River Peace Park, proposed for a site seven kilometers south of the Sea of Galilee. The YUDW began work on the park in 2008, when it partnered with regional environmental non-governmental organization EcoPeace (previously known as Friends of the Earth Middle East), to conduct a weeklong intensive international design charrette on-site in Jordan. During the charrette, eight Yale School of Architecture faculty members and graduate students collaborated with nineteen Jordanian, Palestinian, and Israeli architects, engineers, professionals, and students, as well as local leaders and stakeholders, to develop the initial conceptual plans for the park. The charrette was documented in the 2009 film *Bridging Waters,* directed and produced by Yale undergraduate filmmakers Sofy Solomon and Reid Whitman.

The proposed 2,000-acre peace park draws together two historically significant areas along the Jordan River—to the north, the Naharayim-Al Bakoura area, where a now abandoned hydroelectric station was built in the 1930s, and to the south, the Jesr Al Majama-Gesher area, an important historical crossing point of the Jordan River Valley. The park will ultimately encompass land on both sides of the Jordan-Israel border, providing four miles of continuous access to both banks of the Jordan River, creating a substantial ecological preserve, offering economic-development opportunities for the region through ecotourism, and raising awareness of the river's continued degradation due to upstream damming and raw-sewage discharge on both sides of the border.

Since 2008, the YUDW has worked with EcoPeace, along with local architects, to advance various elements of the park, including preparing interpretative materials, designs for signage, and detailed plans for the restoration of a 1930s Bauhaus-style train station on the site. The recent three-day workshop focused on the detailed planning of the Gesher area, bringing together planners, architects, economists, and stakeholders to consider its redevelopment. Gesher is proposed to become the southern entry into the park, where, eventually, it is hoped that visitors will cross the Jordan River from Israel to Jordan on one of three bridges: an ancient Roman-Byzantine bridge (currently under reconstruction), a 1904 Ottoman railway bridge, or a mid-twentieth-century British post road bridge. Plans prepared during the charrette explored improvements to the visitor arrival and orientation sequence, expanded access to the Jordan River through a riverfront promenade, and development of an interpretative center and museum in the Ottoman-era customs house.

To the north of Old Gesher, in the Naharayim-Al Bakoora area, the Palestine Electric Company once produced power for the region from the waters of the Yarmouk and Jordan rivers. Here, a dry reservoir and the extensive ruins of the powerhouse, canals, and dam—heavily damaged in the 1949 war—sit in a characteristic arid landscape, interspersed with arid agricultural production. The river and canals created an island, now known as the Peace Island. Special regime status was conferred on this territory in the 1994 Jordan-Israel Peace Treaty, allowing Israeli citizens and others to visit the Jordanian area directly from Israel without a visa. Within the peace park framework, it is hoped this special status will allow visitors to enter the park from either Jordan or Israel without the need for a visa, facilitating special kinds of meetings and encounters that are otherwise difficult to arrange due to complex border issues.

In addition to its historical landscapes, the Peace Park will stand along one of the world's most active migratory bird flyways, where 500 million birds pass overhead annually on their way from Africa to Asia. A constructed wetlands in the former electric-company reservoir bed will create badly needed habitat and provide a resting place for birds along their migration path. Related bird-watching and ecotourism will provide economic-development opportunities for the adjacent Jordanian communities, and a new eco-lodge and conference center, reusing former electric-company worker housing, is planned near the eastern entry to the park, from Jordan.

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1. The Old Gesher site, where historic Roman-Crusader, Ottoman, and British bridges cross the Jordan River in parallel, and will become the southern entry into the Jordan River Peace Park.
2. In the Naharayim area at the north edge of the proposed park, canals and spillways of the Palestine Electric Corporation once channeled the waters of the Jordan River to join with the Yarmouk in a large reservoir, for hydroelectric generation.

As the first major step toward the creation of the Peace Park, in August the Jordan Valley Authority (JVA), on behalf of the Jordanian national government, signed a memorandum of understanding with EcoPeace to pursue development of a national park on the Jordanian side of the border, to be called Bakoura National Park. The Urban Design Workshop has agreed to continue in its capacity as planner and designer of the park, in support of EcoPeace and the JVA, and looks forward to another workshop in Jordan in the coming year.

The YUDW's recent work on the Jordan River Peace Park was supported, in part, by funds from Elise Jaffe + Jeffrey Brown. The documentary film *Bridging Waters* is available on Vimeo.com.

—Andrei Harwell
Harwell ('06) is a Critic at the school and a project manager at the Yale Urban Design Workshop.

Spring Exhibit

Installation of *Archaeology of the Digital: Media and Machines*, 2015.

Archaeology of the Digital: Media and Machines

Archaeology of the Digital: Media and Machines on display through May 1, 2015, marks the second phase of a research project initiated with the eponymous 2013 exhibition, spearheaded by the Canadian Centre for Architecture (CCA); the first part was on display at Yale in spring 2014. Curated by Greg Lynn, the initiative investigates how architecture engaged with digital technology from the 1980s until the turn of the century. The first exhibition identified the earliest practices of Frank Gehry, Peter Eisenman, Chuck Hoberman, and Shoei Yoh, who looked to computation as a design medium that could serve architectural ambitions—anticipating the technology before it was available.

Media and Machines, the second of three *Archaeology of the Digital* exhibitions, stems from the CCA's digital archiving initiative, in which a total of twenty-five seminal projects that engaged architectural design with digital technology are being assembled, inventoried, investigated, cataloged, and archived in the CCA Collection. This process of discovery already suggests that the period from the mid-1980s until the turn of the century will prove to have been a pivotal moment in architecture.

The first exhibition identified the earliest practices that adopted computation to serve architectural ambitions that predated, anticipated, or led to the invention of digital technologies. Many of the same approaches persist in *Media and Machines,* including experimentation in formal, spatial, and material language; procedural or parametric processes, and robotic motion. However, in this second exhibition the architects have a deeper engagement with the digital in each project. The breadth of creative scope among the projects extends from the design of buildings to that of interactive media and robotic mechanisms; drafting machines based on the catastrophe theory; generative algorithms, and the writing of disciplinary and cultural theories.

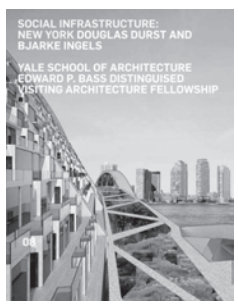
One thing the architects have in common is the extension of what would be considered an architectural object or environment beyond a mere building through an intensive use of digital tools. In the projects presented here, architects looked to technology to shape new and unprecedented experiences, in many cases approaching the digital both as a design medium and as media content to be integrated into architecture. The projects include Asymptote's New York Stock Exchange "Virtual Trading Floor" and "Operation Center," Karl Chu's "Catastrophe Machine" and "X Phylum," Bernard Cache's "Objectile Panels," dECOi Architects' "HypoSurface," Oosterhuis_Lénárd's "NSA Muscle," and NOX's "H^2Oexpo" pavilion.

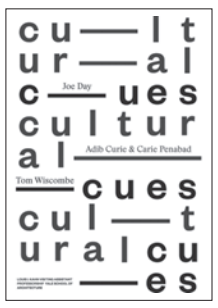
This ensemble forced the CCA to address both technical and critical issues regarding archival and curatorial practices, challenging the institution to adapt and expand its methodologies to accommodate new forms of digital material. Not surprisingly, the difficulty in collecting and displaying the material is emblematic of the questions that these projects posed for the discipline of architecture in the 1990s as well as today. The cultural landscape was very different back then, as both architecture and art rethought the edges and centers of their fields in light of the immersion, interaction, and immateriality made possible with digital media. As architects expanded the scope of their design work into art and media practices, they explored an interest in addressing people in intelligent interactive environments, along with the proposition that buildings should be active rather than passive.

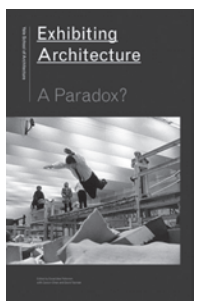
The desire to interact with and immerse physical spaces in media and machines exposes the paucity of vision in today's robotic fabricators and digital apparatuses. Seen in relation to the robotic interactivity of a self-driving car or the overlay of the virtual and the real in augmented-reality glasses, these projects remain architecture's most poignant engagements with the experience of digital technology. They are more relevant than ever and are worth learning from.

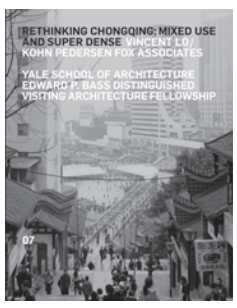
—Greg Lynn
Lynn is curator of Archaeology of the Digital *and Davenport Professor at Yale.*

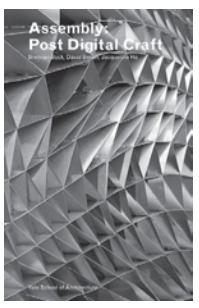
Yale School of Architecture Books











The school is publishing new books this spring with Actar D:

SOCIAL INFRASTRUCTURE: NEW YORK
The Edward P. Bass Visiting Distinguished Architecture Fellowship
Yale School of Architecture
Douglas Durst and Bjarke Ingels

Social Infrastructure: New York is one of a series that documents the Bass Fellowship at the Yale School of Architecture studio led by real estate developer Douglas Durst of the Durst Organization, a leading New York firm known for spearheading sustainable high-rise developments, and architect Bjarke Ingels, founder of the Copenhagen- and New York-based Bjarke Ingels Group with Yale faculty member Andrew Benner ('06). Their students explored potential synergies between public and private programs in the design of inhabited bridges that cross major waterways in metropolitan New York. The featured projects from the studio demonstrate a diverse range of approaches for combining residential, cultural, and commercial activities on complex and dense infrastructural sites in imaginative and productive ways. The book includes interviews with Durst and Ingels, and an essay by the latter. The book is edited by Nina Rappaport, Andrew Benner ('06) and James Andrechuk ('13) and designed by MGMT Design.

CULTURAL CUES
Louis I. Kahn Visiting Assistant Professorship
Yale School of Architecture
Joe Day, Adib Curie & Carie Penabad, and Tom Wiscombe

Cultural Cues is the sixth book featuring the work of the Louis I. Kahn Visiting Assistant Professorship, which bring young practitioner-educators to the school. It includes the advanced studio research of Joe Day, of Deegan Day Design, in "NOWplex"; Tom Wiscombe, of Tom Wiscombe Architecture, in "The Broad Redux"; and Adib Cúre and Carie Penabad, of Cúre & Penabad, in "Havana: Housing in the Historic City Center." Sited in Los Angeles and Havana, these studio projects explore contemporary interpretations of the implications of cinema, the museum, and the house, taking cues from their complex cultural and urban contexts. Along with the student work, interviews with the architects about the work of their professional offices and essays framing the Yale studios are combined with insight into the pedagogical approach of these practitioner-educators. The book is edited by Jeffrey Pollack ('14) and Nina Rappaport and is designed by MGMT Design.

EXHIBITING ARCHITECTURE: A PARADOX?
Edited by Eeva-Liisa Pelkonen with Carson Chan and David Tasman

Exhibiting Architecture: A Paradox? brings together a collection of essays that are an outgrowth of the eponymous symposium at the school in fall 2013. The forum was convened by associate professor Eeva-Liisa Pelkonen (MED '94), David Andrew Tasman ('13) and curator Carson Chan.

The ambition of exhibiting architecture entails paradoxes: how to exhibit something as large and complex as a building or a city, and how to communicate something as elusive as an architectural experience that unfolds in space and time. To be sure, architecture poses a challenge to exhibition as a medium. What is it we exhibit when we exhibit architecture: should we be satisfied with photographs of buildings and sites or should we aim to display whole buildings or fragments and models of them? These were among the questions the organizers posed to the group of architectural and art historians, practicing architects, and curators who were invited to participate and contribute essays to the book. Their discussions address the exhibition as a medium and challenge the preconceived idea of what architecture is by examining a range of possibilities as to how architecture is made, experienced, and discussed.

The book is designed by Amy Kessler ('14) to guidelines of MGMT Design.

Other Recent Titles

RETHINKING CHONGQING: Mixed-Use and Super-Dense

Edited by Andrei Harwell ('06), Emmett Zeifman ('11), and Nina Rappaport. The book documents the work of the school's seventh Edward P. Bass Distinguished Visiting Architecture Fellow, Vincent Lo, of Hong Kong-based Shui On Land, and Saarinen Visiting Professors Paul Katz, Jamie von Klemperer, and Forth Bagley (BA '02, M.Arch '10), of the firm KPF, assisted by Andrei Harwell ('06). The advanced studio developed ideas for a dense mixed-used site at the central rail station of Chongqing, in western China. The book features interviews with the KPF team and Vincent Lo about working in China. It also includes an essay by Daan Roggeveen and Michiel Hulshof about the growth of development in the region. Texts are translated into Chinese; the volume is designed by MGMT Design.

RENEWING ARCHITECTURAL TYPOLOGIES: House, Mosque, Library

The fifth title in the Louis I. Kahn Visiting Assistant Professorship series, features the three advanced studios led, respectively, by Makram El Kadi and Jiad Jamaleddine (L.E.FT Architects), Hernan Diaz Alonso, and British firm AOC (Tom Coward, Daisy Froud, Vincent Lacovara, and Geoff Shearcroft). Edited by Nina Rappaport and Leticia Almino de Souza ('12), it includes interviews with the architects about the work of their professional offices and essays on the themes of their studios. The book was designed by MGMT Design.

Studio Series

The Studio Series of "On Demand" books, designed to guidelines set by MGMT Design, and published by the school may be ordered through the school's Web site, www.architecture.yale.edu.

KNOWING HOW IN DOWNTOWN LAS VEGAS

Published in fall 2014, the latest in the series, *Knowing How in Downtown Las Vegas*, describes the work of professor Keller Easterling's eponymous advanced studio, which focused on understanding and configuring new programs for sites in downtown Las Vegas. The students took on the task of remediating environmental and development issues related to infrastructure, water, garbage, suburban expansion, and energy. In addition to designing innovative structures, students were asked to create an amplifying and multiplying "active form" that would operate in subtle ways. The studio strove to be an improvisational precedent for the value of knowing not only what but also how.

A TRAIN OF CITIES

Presenting the work of three post-professional studios, led by associate professor (adjunct) Edward Mitchell and professor (adjunct) Fred Koetter, *A Train of Cities* was published in summer 2013. The book analyzes and recommends ways to revitalize the south-coast Massachusetts communities along the commuter-trail routes by networking their physical and economic patterns. The book analyzes the historic structure of these areas, with student work done in Taunton, Fall River, and New Bedford projecting the potential for education, new industry, housing, and agriculture as sources of potential economic growth and development leading to a brighter future for these older industrial cities.

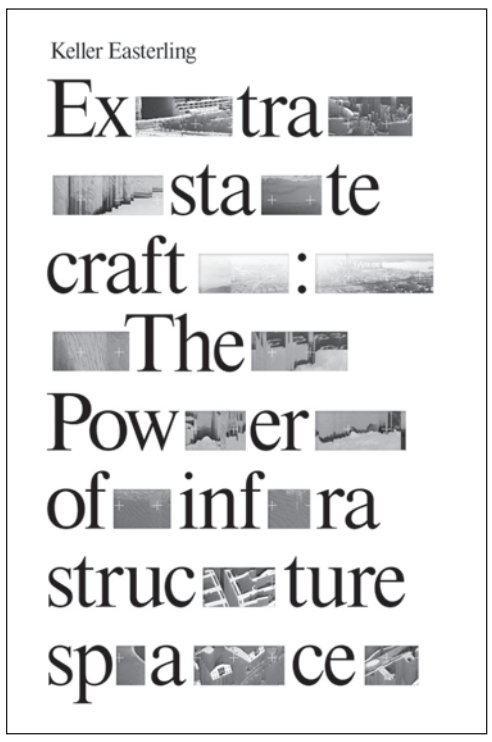
ASSEMBLY

The book *Assembly* documents a Yale School of Architecture 2012 design-build project: a pavilion for the International Festival of Arts and Ideas on the New Haven Green. The project was initiated by students in the post-professional program and constructed in the school's fabrication labs. Its unique aggregation of plasma-cut aluminum panels rendered the pavilion completely transparent from certain vantage points on the green. The book includes a description of the design and building process as well as a series of essays and interviews on integral themes including the teaching of digital fabrication in architecture. Assa Abloy supported the project and this publication.

Book Reviews

Extrastatecraft: The Power of Infrastructure Space

By Keller Easterling
Verso, 2014, 254 pp.



Keller Easterling's book *Extrastatecraft: The Power of Infrastructure Space* hits a particular chord as a beautifully written and thoroughly researched treatise on how the ideology of liberalism came to dictate the future of architecture and urbanism through capitalism. The author is already well known for her books *Organization Space* and *Enduring Innocence: Global Architecture and Its Political Masquerades*, the latter recounting "stories of spatial products in difficult political situations around the world." The first book sets the context as follows: "Architects are accustomed to resolving spaces according to aesthetic or geometric principles. This book, however, is interested in organizational expressions of spatial arrangements as well as the sites or agents of change within those organizations." Both books are critical of contemporary and global urbanization, aided significantly by architects as complicit agents of spatial change. Thus, *Extrastatecraft* comes as the logical continuation of investigating the architect's role vis-à-vis the increasing influence of ideological liberalism on inhabitable space around the world. The space as product is thoroughly examined as an academic consideration.

The book's six chapters—"Zone," "Disposition," "Broadband," "Stories," "Quality," and, finally, "Extrastatecraft" (a term coined by Easterling)—cover contemporary issues of current global architectural practice. Can new practices ever hope to correct how space has gone out of control? The book ties together all of the extraordinary government practices into a singular, globally oriented urban strategy influenced by liberalism. "Zone" unfolds Easterling's long-term research about the rise of free-trade ports into complex de facto cities claiming global success, such as Shenzhen, in China. "Disposition" discusses the suburban dislocations of technology and human habitation away from cities. "Broadband" describes how the Third World is crafting its global future. "Stories" is a historical recap of globalization via telecommunication and its effects on ways of living as well as its planning. "Quality" comprises a fascinating review of the rapid historical rise of the international standardization of ubiquitous products and its effects on global production of space and networks through uniformity, hegemony, and top-down organization. The final chapter, "Extrastatecraft," summarizes discoveries from earlier chapters by defining contemporary urbanism.

On deeper reading, it seems "extrastatecraft" has become a global standard beyond politics and ideology that makes cities like Shenzhen successful. It contributes to the research on extended urbanism begun in Harvard's *Project on the City,* with Michael Craciun's chapter "Shenzhen: Ideology" (published in 2001 and edited by Rem Koolhaas et al.). Many have written on Shenzhen since, including Andrew Ross in the book *Digital Labor* (2012). Easterling goes beyond cultural-studies methods to focus on the economics of free-trade zones. This material emphasizes the idea of the emergence of *homo economicus* among architects and urbanists. According to Easterling, this concept is a contemporary resurgence of a character in Karl Polanyi's book *The Great Transformation,* from 1944. "The success of business in the late nineteenth century emboldened a belief in *homo economicus,* laissez-faire, and the utopian liberal state," she concludes. *Homo economicus* captures the majority of Easterling's intentions by showing that, no matter what the particular global case studies are today, the cultural strategy appears the same: an economic plan solidifying urban typologies in familiar trappings, deployed on the ground toward a more prosperous future. The chapter "Broadband" is a chilling report on how cultural strategies distributed via informational, technological, and mobile communications create dependency for entire continents, such as Africa. Analyzing Kenya's postcolonial development in terms of the economic reality of immaterial and irrational infrastructure, Easterling compares the cost of broadband to that in the West, revealing that the companies implementing it demonstrate an inevitable infrastructure and urbanism that is irrational but lucrative, following conventional typologies of habitation, work, and transport in between.

This is where the brilliance of Easterling's propositions come in. The essence of the book lies in its three main directions of inquiry. Infrastructure space has become like an independent software to be developed further as matter. However, the formulation of "spatial software" seems to carry the statement into something that architects are inevitably connected with: matter that has a capacity for carrying not only materials but data and information, as well. The author's trust in her term *spatial software* is concurrent with the widely used term *anthropocene*.

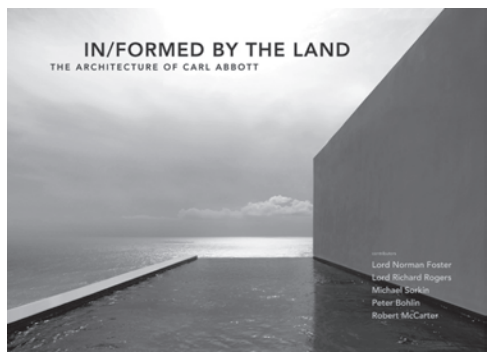
Easterling's afterword delivers a sharp message to spatial practitioners of the future: "The stories that accompany infrastructure space are also active forms that propel and inflect its disposition... The ideological stories of economic liberalism that attach to infrastructure space and commandeer political policy can, ironically, profoundly compromise liberty." This is perhaps the book's most daring idea. Rather than simply confirming the apparent latency of architectural practice being complicit with capitalism, it raises an awareness in emerging architects and designers about what they are learning, building, and forging in their practice. What is the role of an architect in this situation in which an apparent complicity of extraordinary skills vis-à-vis extraordinary operations is making infrastructure space not only possible but also real and habitable?

The comparative views of the introduction and the afterword challenge the professions of architecture and urbanism in binary terms: whether to be in the game or against the game. Some of the most potent discussions, such as the space of infrastructure and mobility, in Easterling's book are precisely those that focus on the alternatives to default binary positions of architectural practice and challenge the roles of architects and urbanists. Easterling's book is a global paradigm in search of a future role for architects and what they should be educated for. The knowledge provided by this extraordinary book is crucial for both contemporary spatial activists and academics. In it, Easterling has carved out her position as a public intellectual, influencing not only the daily practice of architecture and urbanism but also the general public's democratic power to craft its own spaces of habitation.

—Srdjan Jovanovic Weiss, PhD
Jovanovic Weiss is an architect and theorist, founding principal of NAO and the School of Missing Studies, and author of the books Almost Architecture, Socialist Architecture: The Vanishing Act, Evasions of Power: On The Architecture of Adjustment, *and* Lost Highway Expedition. *He currently teaches at Columbia GSAPP and Penn Design.*

In/Formed by the Land: The Architecture of Carl Abbott

ORO Editions, 2013, 256 pp.



In creating this survey of his work, architect Carl Abbott ('62) chose his tour guides well. Essays by people close to Abbott, along with comments by the architect himself, provide some rich insights into his architecture.

Architect and architectural historian Robert McCarter describes Abbott's design work as being closer in spirit to the early Modernists such as Van Doesburg, Rietveld, and Mondrian, than that of anyone practicing today. He notes that the work is often as much at home on the sea as in the landscapes to which it is anchored, like an oceangoing vessel, connecting Abbott to Le Corbusier as well.

Fellow Yale classmate Lord Norman Foster ('62) sees Abbott's work as displaying a strong sense of place, often referencing Florida's gulf coast. An early Florida-based influence was Paul Rudolph, whom Abbott later followed to Yale. He used a concrete-block design from a Rudolph house in another for the same client, making a connection not only to the client's architectural history but also to the local beach sand, used as aggregate in the blocks. Foster sees another of Abbott's progenitors in Frank Lloyd Wright, particularly in the way Abbott links small spaces as antechambers to great spatial explosions punctuated with light and views.

Michael Sorkin lauds Abbott's architecture for its affirmation of a site's most elemental gifts: views, sun, wind, and water. For Sorkin, this work is a counterweight to all of the tawdry excesses that one might associate with the state of Florida. Abbott's houses are designed from the inside out, orchestrating the views to the natural world. They always possess repose, recognizing that the beach is first and foremost a place to do nothing and revel in idleness, through which one might see familiar surroundings in a fresh new way, without distraction.

Peter Bohlin finds in Abbott's architecture evidence of his fascination with nature, always summoning his spaces, inside and out, in service and homage to it. Another Yale classmate, Lord Richard Rogers ('62), reflects on what might at first seem an uneasy alliance in Abbott's work: the combination of the "organic and the International": a sharp, abstract architectural language amid lush, tropical vegetation. In Abbott's hands, that unity works in a way that strengthens each through a study in elegant contrasts. Rogers describes them as "works of art grounded in their location."

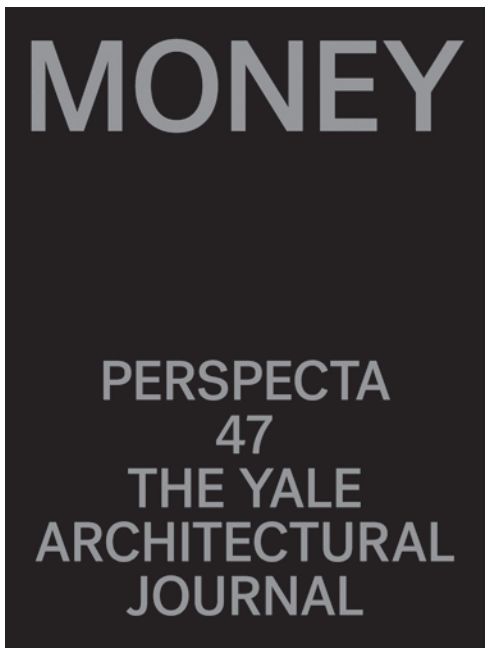
Abbott grew up in coastal Georgia and writes movingly about its influence on him as an architect, particularly his reverence for the natural world that he developed in observing and painting the plants and animals he found surrounding the history-laden built environment. When his family moved to Florida, he was immersed in rich colors and intense sunlight. He began his architecture studies at the University of Florida, moved on to Yale, and then worked in Hawaii and with Team 4 in London before returning to the United States to work for I. M. Pei. Finally, in the late 1960s, Abbott returned to Florida to open his own practice, where he has continued to explore the power and legacy of the so-called Sarasota School, the movement started by Rudolph that fused the International Style with Wright's sense of nature as sacred.

Primary photography by Steven Brooke and restrained graphic design by Sean Harris provide the perfect frames for the architecture. The twenty-six projects presented (annoyingly, without dates), mostly residences in warm climates, certainly reflect the influences of those cited by the essayists and Abbott (along with strong hints of Gwathmey and Hejduk) and seem well married to, and yet contrasting with, their sites—the consistent theme over this architect's nearly half-century of practice.

—Michael J. Crosbie
Crosbie is associate dean and chair of the architecture department at the University of Hartford, an architectural critic, and author of the book, The New York Dozen, Gen X Architects (Images 2011), *among many others.*

Perspecta #47 Money

By James Andrachek, Christos C. Bolos, Avi Forman, and Marcus A. Hooks
MIT Press, 2014, 240 pp.



Money—a topic often taboo within architecture—is brought to life by the essays and numerous interviews within the gold pages of *Perspecta 47*. No doubt architects will flock to the shelves to purchase this issue, hoping to find solutions for their personal financial crisis.

However, as this issue of *Perspecta* makes clear, the architectural money crisis is not a crisis, but a condition. Over and over, we are shown in the journal examples of architects struggling to build, struggling to keep their office afloat, to find success; even architects that we have put on the pedestal of architectural history—Louis Kahn, Le Corbusier, H. H. Richardson, and Rem Koolhaas—are not immune to economic woes.

At points, the discussion boils down to the value of the architect. Naomi Lamoreaux states it clearly: "[Money] is a simple way to measure value." Does this condition we find ourselves in mean that architects are generally perceived as having little value? The texts in *Perspecta,* written by those internal to the field, deny this allegation. Perhaps that is due to what Keller Easterling calls our "narrative of artistic autonomy"—the sense that our cultural value supersedes financial value. Case in point: architecture competitions that demand many billable hours with little chance of financial gain. Peter Eisenman suggests that "financial value is independent from that of our disciplinary project." But why does it have to be? No one resists the idea that the star architect—our latest example of simultaneous financial and artistic success—adds value to the project of architecture. Throughout the issue, there is an underlying tone that implies that the artistic aspect suffers in this transaction, but could that be the envy and overcriticality of those who haven't achieved this level of success?

Aiming to fight this condition, Frank Gehry Architects / Gehry Construction, SHoP Architects / SHoP Construction, and Gluck+ are three firms that take on increased responsibility in order to gain more control in projects and take a bigger piece of the pie. The consensus is that the largest slice will be taken by the developer, then the contractor, and, much further down the line, the architect. But with more control comes proportional risk and liability—a reason for these offices to form their own construction arms. This does not address the fallacy of architecture itself, but merely ventures into another pre-established territory. John Portman is mentioned as someone who is able to make money while still maintaining architectural "street cred," a term used by Gregg Pasquarelli. Bernard Tschumi mentions Adolf Loos as an architect-turned-developer who still maintained his credibility. Architecture venturing into development, construction management, building, or even digital facilitating does not address the fundamental issues within architecture. However, the discussion of the minutia of practice seems much more fruitful than the even more complex questions of the urban condition and the economics of cities. One step at a time…

But since we are in the era of Bitcoins—perhaps our twenty-first-century version of the German *Notgeld*—we have to question how the digital fits into this equation. Eisenman explains the distraction of the digital—the Facebooking, tweeting, and constant bombardment of imagery—and remarks, "It is a little wonder that architects have time to work, much less think." Hard to deny.

Other authors are much more optimistic about the power of digital devices—from iPhone apps that show component models to number-crunching, cost-estimating algorithms—to make architecture more efficient, so that we can actually spend more time designing, rather than managing our own processes. This efficiency is embedded in the hope of new BIM technology: if we reduce our inefficiency, we'll make more money.

The design of this issue by Jessica Svendson (M.F.A. '14)—is an obvious reference to the value of gold and the gold standard (which no nation any longer uses) but as the issue progresses and we learn how long this financial situation existed in architecture, the gold tone evokes the permanence of a sepia print.

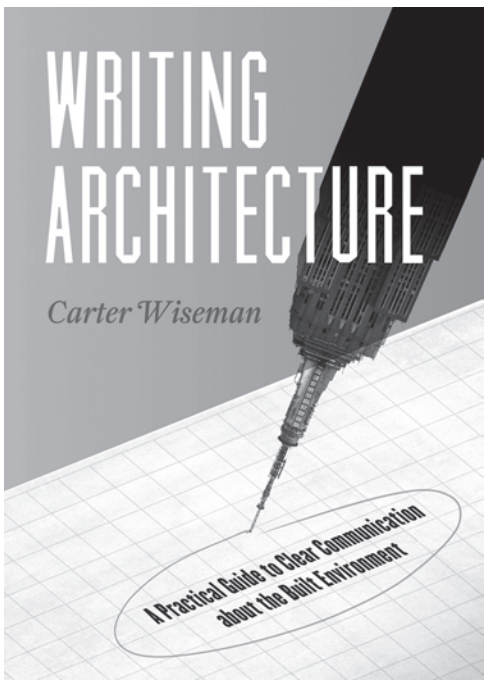
Perspecta 47 often points to inadequacies of architectural education. Design schools make a point of leaving out financial constraints in studio classes. This is a flaw that needs correcting. How can architects be expected to be financially savvy when we have been taught to ignore the finances? It is reiterated that professional practice courses attempting to address finances do so within the realm of traditional practice, where the problem exists, instead of looking for new models.

It is also difficult to ignore the missed opportunity of productively engaging the AIA in this discussion, as an organization that should have power to address the value of the architect. But this omission signals that the new generation is not willing to sit around and wait for an organization to enact change but will find ways of making that change on its own. They'll find a way to crowd-source, to be entrepreneurial, to create great architecture, and perhaps even be able to afford having a family *and* a Le Corbusier chaise.

—Kyle May
Kyle May is Principal of Kyle May, Architect and Editor-in-Chief of CLOG.

Writing Architecture

By Carter Wiseman
Trinity University Press, 2014, 240 pp.



Like any good book, Carter Wiseman's new work, *Writing Architecture,* can be read more than one way. A clear and concise manual—"a practical guide," as he calls it—for architectural students and practitioners who want to improve their writing, it provides relevant advice for the former on organizing ideas, expressing opinions, and defending arguments and, in the last two chapters, focuses on ways professionals can secure commissions and communicate with clients.

Wiseman ends the book with examples of the exercises he gives Yale students in his writing class, aimed at preparing them to respond to requests for qualifications and proposals. A rarity in most schools, the course reveals a blind spot in architectural education, which typically emphasizes visual representation rather than written communication, even though the latter may be critical in getting a commission. As Wiseman observes, most clients cannot read plans or sections, so they read architects' descriptions far more carefully than we acknowledge; and while our design skills might gain us credibility in the profession, our success as practitioners depends mostly on our writing and rhetorical skills.

From that perspective, Wiseman's practical guide has an implicitly polemical purpose, making a persuasive case for the value of writing in a profession that has paid far too little attention to it in the past. But the book has value even for those not convinced by that argument: You can read it not just for advice on how to succeed in architectural practice but also for what it says about architecture itself. Indeed, the book's title, *Writing Architecture,* suggests a parity between the two is rarely discussed within the discipline.

Wiseman's first chapter, on structure, makes that point. He writes about the importance of grabbing readers' attention and guiding them into a text, much as a building must do for those who enter. The author also talks about the value of understanding one's readers, as architects must understand the inhabitants of a building; the need for a piece of writing to have a clear structure, as a building should; and the importance of paying attention to transitions among the various parts, as critical to the success of written work as to the built.

In one chapter after another, Wiseman's characterization of good writing applies to a good building, as well. Both must adhere to coherent structural standards, appeal to reason and emotion, reveal meanings we might otherwise miss, make connections to the past, and spur our imagination about possible futures. Writing does not just put architecture into words; writing and architecture represent different forms of the same human activity, that of mediating our relationships with one another and the world around us.

This approach suggests that anyone who can learn how to design can also learn how to write, since the two activities parallel each other so closely. As I read—and thoroughly enjoyed—Wiseman's book, I wondered if he might consider writing a sequel, called *Architecture Writing,* flipping the format to present writing in entirely visual terms and show how rhetorical concepts can work like plans and sections. Such a book might not help clients understand architecture, but it would help architects understand that everything we do in this profession, whether drawing or writing, comes down to effective communication.

—Thomas Fisher
Fisher is professor of architecture and dean of the College of Design at the University of Minnesota. Former editor of Progressive Architecture *magazine, he has written extensively about architecture and related topics in numerous books, book chapters, and articles.*

Fall 2014 Lectures

The following are edited excerpts from the fall 2014 lecture series.

August 28

FAT / SEAN GRIFFITHS, SAM JACOB, CHARLES HOLLAND
Eero Saarinen Visiting Professors
"Once More with Feeling"

SG We recently edited the book *Radical Post-Modernism,* with Charles Jencks, who coined the term *figural section* to describe a feature of our work. It is a slice of building that is almost pictorial. It is spatial only in the sense that it is a surface you might respond to and might do something to, but it is not spatial architecture, particularly in the sense that was popular when we first started our firm twenty years ago. At that time, in London, architects like Zaha Hadid were doing incredible spatial gymnastics, partially with an eye to the future, and we thought we couldn't do that because we were too young and it would not be very interesting. Instead, we were interested in flatness from art, in terms of taking something powerfully symbolic and making it almost mute.

SJ What was important for us in terms of techniques was Photoshop. At the time, people were learning rudimentary three-dimensional programs and beginning to develop incredible objects and spaces. Instead, we began to explore a sophisticated form of collage that could take references from many different sources and blend them into a single new kind of space.

What emerged was the idea that architecture itself is information…a house as information, rather than a machine for living in, and architecture as communication.

Our concept for the British Pavilion at the 2014 Venice Biennale is really a justification for why we did everything we were ever going to do. It displays the story of the origins of modern British architecture, beginning with William Blake and ending with Stanley Kubrick. Blake's poem about building the new Jerusalem in "England's green and pleasant land" is really the country's second national anthem. The story it tells is set against the problems of the industrial cities, poverty, and inequality, and righting some of those wrongs.

Inigo Jones, the band Joy Division, and the Royal Crescent are all part of the story of modern British architecture, justifying our approach of combining things that, it seemed, should never come together. It is fitting that one of the last acts FAT performed was to build a mound in the heart of the British Pavilion, which was both an anchor—with the Neolithic barrows, the demolished slums being heaped into the new, optimistic future of housing estates, and a mound for the past and future of British architecture—and a burial mound for us, right in the heart of the Giardini.

September 1

KAY BEA JONES
George Morris Woodruff, Class of 1857, Memorial Lecture
"Suspending Modernity: The Architecture of Franco Albini"

The Milanese rationalist Franco Albini had a long and prolific career that was insufficiently recognized. In 1956, Denise Scott Brown encountered Albini at the CIAM summer school in Venice and later wrote about the key role the architect played in continuing the Modern project in Italy after the war. Albini was certainly keen to the realities of urban life and the newfound ways to be essentially modern, even while dealing with the facts of postwar Italy. He embraced tradition—not unlike the spirit of T. S. Eliot or Carlo Scarpa—and, in fact, it is this relationship between modernity and tradition that has continued to build my interest in Albini's work. Sara Williams Goldhagen and others have considered a modern architecture that answers to a "situated Modernism." My aim today is to re-situate Albini's contributions among some of the greatest modern designers and offer a portrait of the talented architect while raising some questions about the relationship between influence and novelty regarding Albini's participation in the international Modern *zeitgeist*.

For Albini, the idea of the primal room may not seem so readily significant until one thinks about what others were doing at the time. During the 1930s and 1940s, Mies van der Rohe, Walter Gropius, and Le Corbusier were all designing modern objects. The buildings are exploded point, line, and plane; they are artifices that are viewed and designed from the outside in. But it is not until the 1950s, well after Louis Kahn designed the Yale Art Gallery, his tour de force of geometry and the open plan, that Kahn decides he would no longer rely on the open plan but use the defined room with proportions, with a contained space and its geometries.

It has been a conundrum because it is not hard for me to see how, between Kahn's new monumentality and Albini's magical abstraction, we find similar responses to post-ideological Modernism. Both architects were very active during the period of late Modernism, with clear criticisms of the problems of ubiquity, of the one-size-fits-all critique of the International Style. Land speculation, mass marketing, and mass consumption were entirely changing the environments in which they worked. Both of them taught while they practiced, were involved in the discussions of their time, and showed a great deal of reverence for human culture. They both held an idea of tradition that was very carefully defined and critically assessed but, above all, constantly changing. They introduced a new reverence for site, context, the city, the human experience, and the integrity of materials—always with innovation, where tradition and modernity were no longer perceived as being in opposition. Thus, both architects—albeit from different cultures—came to the same conclusion: situated Modernism.

September 4

ALAN ORGANSCHI AND LISA GRAY
Louis I. Kahn Visiting Assistant Professors
"Scarce Means, Alternative Uses"

LG Tonight, we will speculate on the nature of what a practice is and how you make buildings out of ideas in the time you have. We studied Louis Kahn's buildings and oracular cryptic statements—the way he talked to a brick and said, "What do you want, brick?" And the brick replied, "I'd like to be an arch." Kahn answered, "Look, I want one, too, but arches are expensive: I can use a concrete lintel. What do you think of that?" And the brick repeated, "I'd like to be an arch." Mysterious utterances like this were all around us when we attended Yale. The lesson could be: "Do what you think is right; keep at it even when you think it is hard, and even when people disagree."

Alan and I knew that building would be the medium in which our ideas would be played out best. Maybe that is part of the DNA here at Yale. We believe that building is the medium through which architectural ideas are most forcefully and unforgivingly expressed. Today, we are officially two practices—Gray Organschi Architecture and JIG Design-build. We take on, really omnivorously, architectural design, construction management, fabrication, interior design, wood and metal working, site design, and quantitative environmental analysis. We weave all of that into a tangle of processes that involve reflection and documentation, representation, testing, assessment, and execution—what we collectively call design. I would characterize our approach as one of extreme earnestness, maybe even in a delusional sense, of taking on every design and building challenge. We are occasionally reckless, too, perhaps mostly in our material experimentation, but we are dogged in the belief that practice is the orchestration of large themes executed in small and particular scales, rather than hyperspecialization.

AO I also want to take on Kahn's suggestion that architectural work is crafted: I wish our work were craftsmanship. There are a lot of questions about craft and the relationship of architects to craft. I do not think architects actually craft anything. I think they enable craft. If they are crafting things, building things themselves, we risk a conceptual paucity. Sometimes, taking on too much produces a lack of conceptual clarity, and that is something we are trying to correct.

LEFT TO RIGHT: FAT / CHARLES HOLLAND, SAM JACOB, AND SEAN GRIFFITHS,

October 9

JUSTIN MCGUIRK
Brendan Gill Lecture
"Radical Cities Across Latin America"

I started thinking about the topic of radical cities in Latin America several years ago, when I was keeping my eye on a generation of architects who seemed to be doing socially conscientious work in places that desperately needed it. In Latin America, I started thinking about architecture and writing about activist architects. But after starting my research, I realized that Latin America has a long history of testing radical ideas in city-making, and my book about architecture gradually became a book about cities. A housing estate in Mexico City, designed in the 1960s by Mario Pani to hold 100,000 people, was the largest of its kind in Latin America. The Corbusian idea of the city was taken to its conclusion there. No housing estate in Europe was built on this scale. But Latin America is also where the Modernist idea of utopia goes to die.

Gradually, from 1979 onward, because of new liberal politics trickling down from the north as well as the Washington consensus, which argues that the free market should take over the question of free housing, architects were removed from the equation of how to house millions of the poor as the challenge became more of a social issue. Architects were replaced by economists and social policymakers, and laissez-faire urban politics took hold, as we still see today.

I was naive and quickly realized that the utopian ideal I was talking about was not so utopian, especially in Latin America. These social housing projects were not quite what they might have been. A housing estate in Buenos Aires called Pierre de la Buena was designed by a major practice, with a young Uruguayan named Rafael Viñoly as project architect. He imbued the housing with as much of the idealism of the time as he could. The project was symptomatic of many problems of housing estates across Latin America: they were not actually used to house people being evicted from the slums and were built by a military dictatorship as a way to buy votes. These house-building programs were a way of feeding credit lines to the construction companies and drove a tremendous amount of corruption. Another problem is that they were often located on the periphery of cities, hours away from peoples' jobs, and they were disconnected, and eventually kind of ghettoized. I asked, if this paternalistic approach to housing had a very checkered history in Latin America and was often ethically dubious, was there a more idealistic bottom-up approach that did not result in a slum? And I found a case, in northern Argentina of an extraordinary woman who was building houses faster than the private sector could. Milagro Sala, the leader of a revolutionary socialist movement, Tupac Amaru, took government funds but instead of building housing she started to build factories for building materials and employed the local community.

KAY BEA JONES

ALAN ORGANSCHI AND LISA GRAY

JUSTIN MCGUIRK

ANNABEL WHARTON

October 30

ANNABEL WHARTON
Vincent Scully Visiting Professor of Architectural History
“Manipulating Models”

It is quite magical: having never taught before in a school of architecture, I am learning much more from my students than I am teaching them. In the ambiguity of my talk’s title, “Manipulating Models,” lies the subject matter of the lecture: models are manipulated, acted upon, and fashioned; and beyond this sanctuary of models, they also fashion, manipulate, and act upon the world. It is this significance and historical agency of models that I want to explore.

I will begin by defining my terms. A *model* is a thing that has an analogue, real or imaginary, to which it refers but from which it must differ in significant, measurable ways, in complexity, scale, economics, material, function, and the like.

Another term that bears a very heavy burden is *agent.* In both philosophy and common discourse, the terms *agent* and *agency* are embedded in very complex concepts of human morality, personal integrity and intentionality, and individual autonomy. In chemistry and business, the meaning of *agent* is less burdened and closer to its etymological roots. *Agent* is derived from its Latin root, *agura,* which means to lead or set in motion. In chemistry, the agent is merely a substance, but it is one that has a physical, chemical, or medicinal effect on proximate things.

In treating models as agents, I am, as in chemistry, naming nonhuman entities: spatial objects that have an effect on their environments without ascribing to them an inkling of consciousness or intentionality. A model agent differs from a chemical agent insofar as its effects on its setting are much less predictable than in science. The model agent is also like a business agent: it may be a sign tasked by its principal—architect, patron, or owner; although if and how those tasks will be carried out can never be contractually binding. That is, an architect may intend a model, like a building, to behave in certain ways on her behalf, but, as you all know so well from studio critiques as well as from construction, the structure’s actual performance in the world is never fully controlled. Like all agents, human, chemical, or business, model agents can be strong or weak, insofar as their weakness or strength can be defined by their relationship to analogues. The power of architectural models lies in their relationship to their prototype.

A “strong” model acts as a dominant subject that determines its “weak” object. Weak model agents act like copies, and a copy is always subordinate to its archetypes—it is the nature of copies. In contrast to most human and chemical or business agents, model agents exert their agency in part by oscillating between their weak and strong potentials.

TOD WILLIAMS AND BILLIE TSIEN

GREGG PASQUARELLI

JOHN PATKAU

November 6

TOD WILLIAMS AND BILLIE TSIEN
William B. and Charlotte Shepard Davenport Visiting Professors
“A Deliberate Architecture”

TW Let’s talk about a deliberate architecture that is also a deliberate practice. Deliberate practice comes from being able to have separate ideas come together as a single idea. It’s not just our two ideas—it’s our studio’s and our client’s as well. We are building on past experience, whether it is models that went before, paradigms, or our own work.

BT It turns out there is the term *deliberate practice,* which means continuing to hone your craft which is the way we approach our work.

TW What are our beliefs? It sounds like a religious question. Billie and I have worked hard to agree on certain things: number one, that we are producing architecture. It is our passion, and we believe that the foundational function of architecture is service, to be of use.

I think many people will equate service with being servile, and I don’t think that is true. When you answer a need, you can also transcend it with your response. Architecture has the potential to be an incredibly noble way to live.

Being of use is also a great way to be quietly powerful, to move slowly. This really comes more from Billie than from me. We are definitely in a world that seems to move increasingly faster, and we have decided that it is better for us to move as slowly as possible, which is frustrating to many people.

BT We have two key words here, *belong* and *connect,* because we have a slight disagreement on which one we should use.

TW I want to feel like our work is connective in every way—that it belongs not only to the past but also the present. If it really belongs to the past and the present, it should have some traction in the future. Not all buildings last. But our belief is that we want to do work that lasts, that outlives us, so we take very seriously these marks that we make, seeing them as our children.

BT In India the site for a technology campus for Tata had a large storage building that was removed and we attempted to restore the other existing buildings using our Indian architects and then added new buildings. We kept as many of the trees as possible so that the buildings dodge the trees. The longer of the fingers of the building is a main building that is running from top to bottom, which is the administration building. We are making sure the buildings will be lower than the canopy of the trees so the courtyards are actually roofed, with very large oculi that bring the light down.

November 13

GREGG PASQUARELLI
Myriam Bellazoug Memorial Lecture
“Design Risk: Design Reward”

This talk is long overdue but not easy. As a profession, we must discuss the central catalyst for most decisions about designing and making our world—money and risk. We need the Avengers. We need the ability to have multiple talented people come together to try and solve these incredibly complex problems.

We had a set of rules to break—like, don’t build in your own city, at least not until you are good enough that you can get away with it. SHoP is working on some towers that are more than 1,200 feet tall: one in downtown Brooklyn, which will be the tallest in the borough, and two in Manhattan.

The next rule we are breaking is: Don’t try to work with developers too much or you will get into big trouble—you are sleeping with the enemy, it is a slippery slope to hell, it is a really tricky process, and your ideas will be compromised. The first time we were able to do that was with the Porter House. We found the site, negotiated an air-rights transfer, put the deal together, and invested in the building to get it built with the developer. We found that as soon as we were at risk with our client, we had more design freedom than we had ever had before because they saw the relationship in a completely different way.

But, finally, what value do you create? We have to rethink the way we work as architects within the industry. It is kind of like Newton’s third law: the more you go in the direction of the technical, financial, and political side of things, the more freedom you have to go in the opposite direction to push design ideas and make things happen.

Another rule to break is: Don’t get involved in means and methods. We have always felt that if you are going to get buildings built, taking risks and pushing the envelope, you better know how that building goes together or it is going to get VE’ed out as soon as possible. We like to use technology to celebrate humanity, not to celebrate technology.

The last rule to break: Don’t try to do it all. We are developing a software called Envelopes. With it, you will be able to look up any site, and it will give you all the zoning information and tell you what you can do, all the bonuses, and within sixty seconds it will mass your building for you. We believe software like this will help everyone get more commissions in the future.

By acting on the ferocity of our convictions, we seek to recast the role of architects as those who reveal the coherence in our chaos and, through their collective imprint, reveal the lurking beauty in the bedlam of our world. But we have to prove that Newton was correct and have equal and opposite reactions. We need to be “both/and.” We need to take the risks and break the rules.

November 20

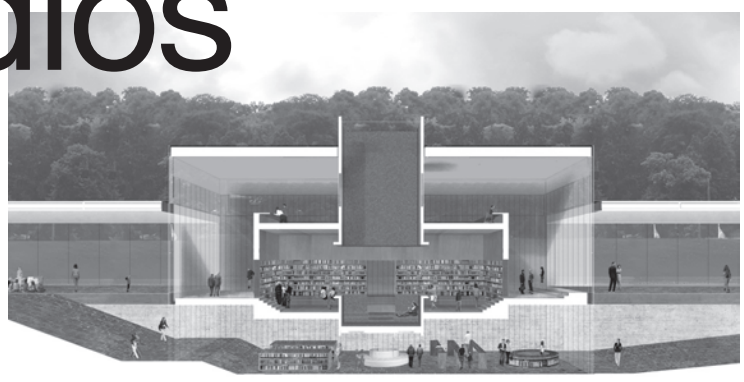
JOHN PATKAU
Norman R. Foster Visiting Professor
“Work Play”

The title, “Work Play,” reflects a strong duality in the nature of the two types of projects in terms of both their intentions and their circumstances. The research component of the work I am showing is a very serious endeavor in the office, where building projects are characterized by ongoing concerns that have evolved over time. From the outset, we have looked to the “found potential” of a project as a point of departure: aspects of site, climate, building context, program, or local culture that would facilitate an architectural form evocative of the circumstances. Thus, individual projects take on distinct identities in response to differing circumstances so that the formal relationship between our projects is loose, at best. We see this as an appropriate expression of the diversity of our environment. Over time we have come to understand that architecture arises from a diversity of circumstantial considerations only through a synthetic act of imagination. Most commonly, it is an expression of cultural purpose, environmental response, or construction and technology. The more inclusive the approach to the diversity of circumstances that surround a project, the more complete the work of architecture.

Craft is intellectual in the first instance; it is the construction of ideas, a rigorous set of relationships that form an armature for the ongoing development and elaboration of a project. Craft is also aesthetic, the product of sensibility of the mind and the eye. Finally, craft is physical, the material product of the mind and the hand, often using technology as a tool. Like the act of imagination from which the architectural project is formed, the more inclusive craft is, the more complete the work of architecture.

The lecture excerpts were compiled by Nicolas Kemper (’16).

Advanced Studios Fall 2014



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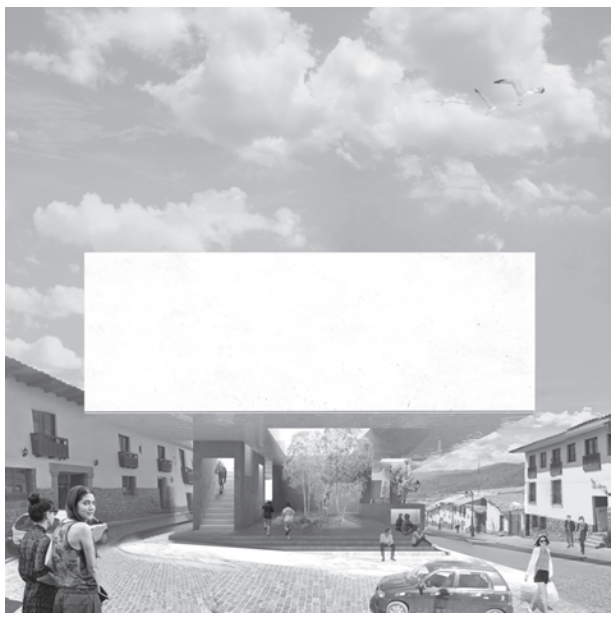

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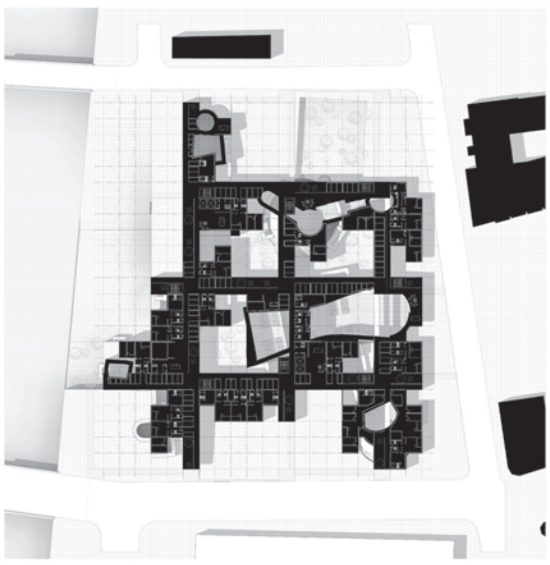

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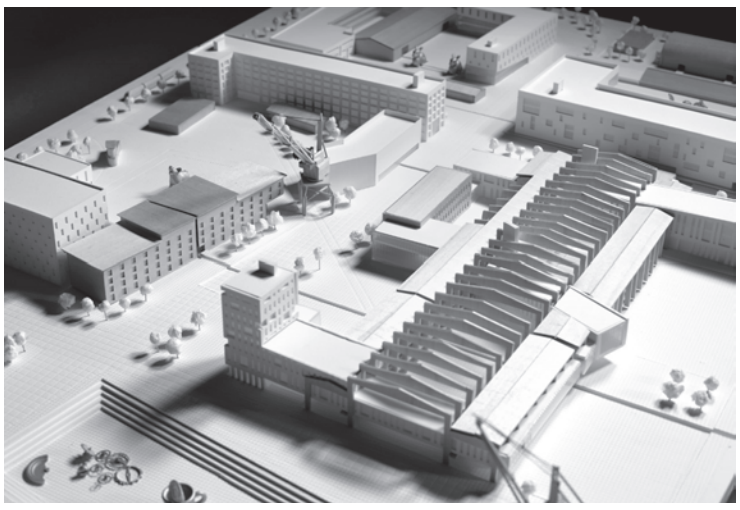

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Among the wide array of design subjects in last fall's advanced studios, many were sited in New Haven or involved projects related to Yale initiatives, from a museum of musical instruments on Yale's campus and a church, to the revitalization of New Haven's industrial waterfront. Other studio projects were located in Boston, Cuzco, Helsinki, London, and China. The following are some of the highlights.

Tod Williams and Billie Tsien

Davenport Visiting Professors Tod Williams and Billie Tsien, along with Andrew Benner ('03), built on Yale's legacy in Peru and the development of the Yale International Center for the Study of Machu Picchu and Incan Culture, in Casa Concha, Cuzco to ask the students to design an academy in Cuzco. The organization that it would house would promote research on contemporary Peruvian and Andean socioeconomic issues as well as sponsoring an educational exchange with the local community. The students were asked to design a small facility for visiting scholars and students, classrooms and workshop spaces to train teachers, a school for local youth, a space for farming in collaboration with the Yale Sustainable Food Project, and space for educational programs to enhance regional weaving techniques and provide computer literacy.

Students traveled to the Peruvian highlands, tracking the deep section from the coastal shoals to the Andean terraces and the edge of the Amazonian cloud forests. Focusing on Cuzco as an opportunity to connect an ancient city with contemporary urban concerns and opportunities, the students tested the potential of temporal experience as well as an architecture that can be used to embody and cultivate Cuzco's character in light of the confluence of global trade and tourism and a desire for authenticity.

The students were challenged with building into a tight and steep urban site, finding ways to dig into and step down the hills, often using the roof as a fifth facade within the terraces. Some used their buildings to provide green space and gardens that climbed over the structure. Others placed communal and public programs in a stone base that deftly negotiated the steeply sloped site. One student lifted the education programs and private spaces for visiting scholars above the main volume with the spaces below punctuated by light wells.

With sensitivity to the context, students engaged the qualities of the massive stone walls of the pre-Columbian-Peruvian architecture by placing intimate spaces within them or by contrasting the stone with stark white stucco and wood window screens, painted blue to resonate with Cuzco's colonial buildings. Connecting the site to its surroundings became a major focus within the studio as students created a new streetscape, with passages slicing into the site to connect the academy to the surrounding neighborhood. One student focused on internal spaces to organize the disparate constituencies that share the building around three courtyards, where rain flows down to a stream that crosses the site. The jury—Sandra Barclay, Tatiana Bilbao, Jean Pierre Crousse, Martin Finio, Joel Sanders, and Annabelle Selldorf—were fully engaged in the approaches to the site and culture as they critiqued the work.

Peter Eisenman

Peter Eisenman, Charles Gwathmey Professor of Practice, and Miroslava Brooks ('12) led a studio that investigated what might be considered the problem of irrationality within the formalist tradition of rationality. The students paired up to design a new Catholic church, adjacent to New Haven's State Street train station, taking inspiration from the pre-Enlightenment era of sacred architecture. During the studio's travel week in Italy, Davenport Visiting Professor Pier Vittorio Aureli took them to see early Christian churches in Bologna, Ravenna, Rimini, and Modena.

After the initial urban analysis of New Haven, a town founded by Puritans as a theocracy, the students focused on designing the church, located at the collision of two overlaid urban grids. The challenge was to deploy aspects of "unreason" with the hope that the result would not resemble a suburban church, but must be an avatar through which students could arrive at an understanding of the nature of architecture as a discipline.

One project—a matte building eroded by seemingly irrational figural voids—could be seen as a formal and political critique of the contemporary church in which the normative city, represented by the grid structure, was positioned against the sacred city, or the figural. Another team responded to the studio brief by replacing an interior central nave of an early Christian basilica within an exterior urban void, which radically reformulated church typology on an urban scale. The diptych configuration of the two partial figures was particularly interesting because it proposed an alternate planometric configuration to the typical symmetrical church plan. In response to the studio's visit to St. Cataldo Cemetery in Modena, another group of students presented a variation on a courtyard typology. Placed above the existing train station, the autonomous, static form of the cloister was put into tension with the temporal nature of the train station, challenging the idea of ground as a stable datum in architecture. At the final review, students presented their projects to Ionanna Angelidou (Ph.D '18), Anya Bokov (Ph.D '17), Harry Cobb, Peggy Deamer, Sean Griffiths, Sam Jacob, Caroline O'Donnell, Ellis Woodman, and Guido Zuliani.

Alan Organschi and Lisa Gray

Alan Organschi ('88) and Lisa Gray (B.A. '82, M.Arch '87) , the Louis I. Kahn Visiting Assistant Professors, explored the potential of new timber technologies and contemporary high-performance wood in architecture for new development surrounding Ball Island, on the Mill River in New Haven, Connecticut. The site of the abandoned English Station Power Plant, in the former industrial area, has great potential for new industrial development and now hosts experimental wind-power projects.

Through the design of four urban building types and their associated structures and enclosure systems, students tested the capacity of wood, an ancient building material, to produce beautiful and innovative architecture. A research trip to Finland and Austria to tour historical and contemporary mass-timber architecture and innovative manufacturing facilities specializing in wood construction, provided inspiration for the semester's work.

Each student undertook the detailed design of an individual building, taking into consideration the context of urban culture and infrastructure on the vast site. Each building type—manufacturing-recreational (long span), live-work housing (mid- and high-rise repetitive span), vehicular and service infrastructure (dynamic high loading), and market space (open flexible structure)—was tested as an architectural solution within a shared, studio-wide master plan for a mixed-use industrial and residential zone.

Students produced projects that operated at a range of scales and addressed a multitude of issues, including sensitivity to the ecological characteristics and vulnerabilities of a coastal riparian site; responsive and appropriate urban place-making; structural feasibility using contemporary timber construction technologies; building-envelope performance and site orientation. Each student designed a project on a different part of the site, and all the projects had connections between one another and were carefully knitted into a newly envisioned neighborhood plan. The students presented their projects to a jury of Sandra Barclay, Peggy Deamer, Kyle Dugdale ('16), Pekka Heikkinen, Hauke Jungjohann, Tim Love, Joeb Moore (M.E.D. '91), John Patkau, Eero Puurunen (M.E.D. '11), Milton Puryear, and Susie Rodriguez. The studio projects and the research will be published and, later this year, presented to officials at the U.S. Department of Agriculture, the U.S. Forest Products Laboratory, and the Binational Softwood Lumber Council.

John Patkau with Tim Newton

John Patkau and Tim Newton ('07) investigated architecture as the spatial and formal outcome of a process of material construction for a Yale Collection of Musical Instruments museum. Currently, only ten percent of the collection is displayed due to lack of space. The provocation of the studio was to design a museum building that would be accessible to the Yale community and the broader public within the block described by the streets of College, Temple, Wall, and Elm. It included community facilities, rehearsal rooms, and performance spaces in a 50,000-square-foot structure.

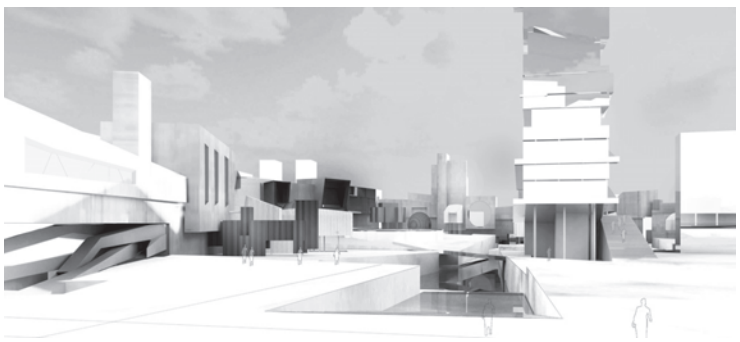
The students first analyzed the site as they investigated precedent studies and the experiential, expressive, and physical characteristics of different building materials. After developing a block master plan within which they proposed a museum site for their building project, and a trip to Stuttgart, Bregenz, and Zurich to see projects by UNStudio, Frei Otto, Peter Zumthor, Le Corbusier, Shigeru Ban, and Christian Kerez, as well as various materials laboratories, the students developed their projects at three scales, an exercise that would inform the spatial and structural potential of the building.

The students' projects were extremely varied as a consequence not only of a diversity of material/constructional strategies situated within many site strategies, but also a diversity of museum exhibit strategies. Individual projects ranged from lyrical landscape-based proposals incorporating both tectonic and stereotomic building forms, reinterpretations of the courtyard as the fundamental organizational type at Yale, and almost archaic mass masonry spatial excavations to clusters of highly sculptural steel dia-grid volumes situated in strident juxtaposition to the historicist context of Cross Campus.

The projects were presented to a jury of Michelle Addington, Cynthia Davidson, Alex Felson, Kurt Forster, Kenneth Frampton, Lisa Gray (B.A. '82, M.Arch '87), Pekka Heikkenien, Joeb Moore (M.E.D. '91), Alan Organschi ('88), Surry Schlabs (Ph.D '17), and Mark Simon ('72).

Alan Plattus and Andrei Harwell

For last fall's China Studio—now in its fifteenth year and the fourth in collaboration with the Tsinghua University School of Architecture, in Beijing—Alan Plattus and Andrei Harwell ('06) focused on an active, 170-hectare industrial area on the banks of the Hai River, situated east of the historic core of Tianjin and west of the new Binhai Central Business District (CBD), now under construction. Adjacent to a stop on the new high-speed-rail line, the area, which is less than an hour away from central Tianjin and



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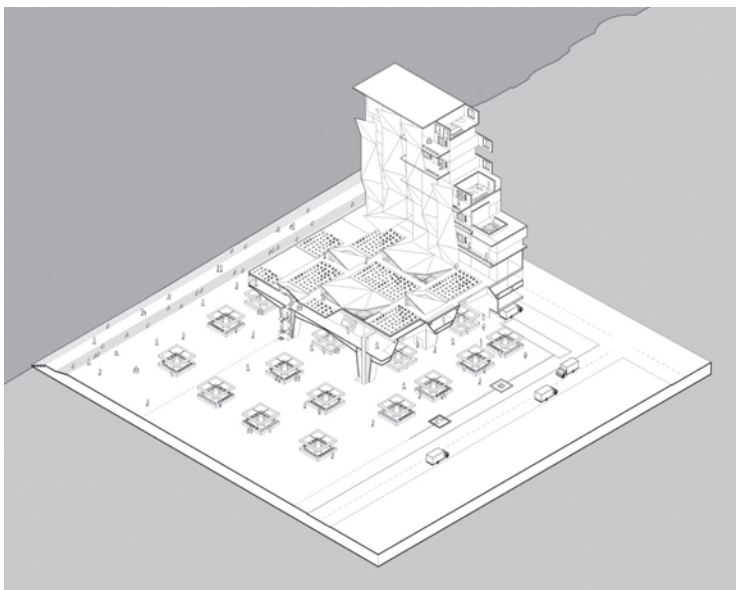

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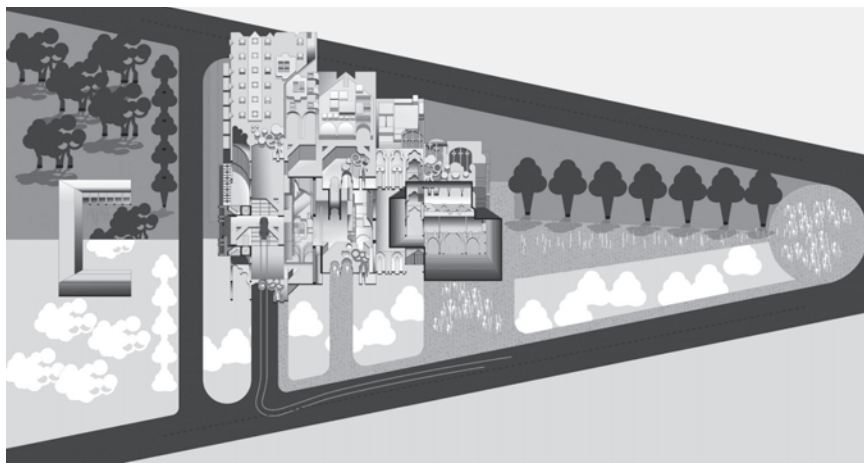

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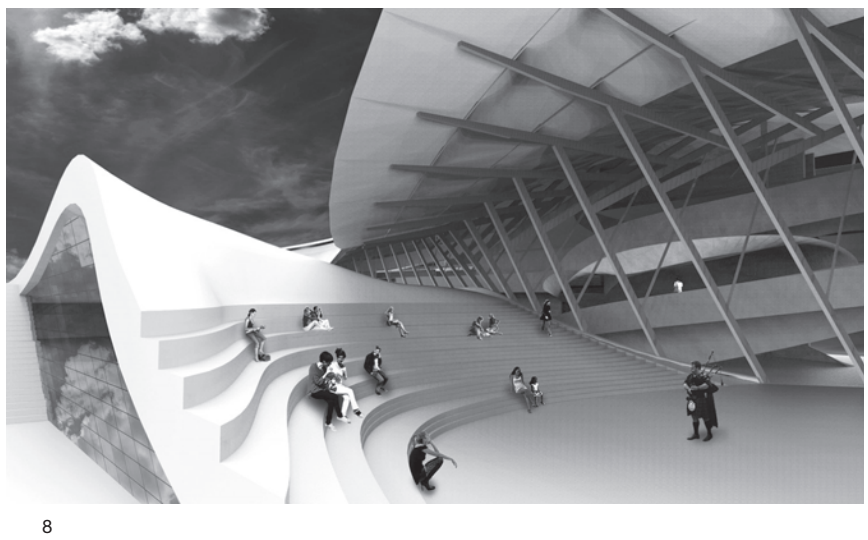

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1. Olen Milholland, project for Tod Williams and Billie Tsien advanced studio, fall 2014.
2. Raphael de la Fontaine and Adam Wagoner, project for Peter Eisenman advanced studio, fall 2014.
3. Julcsi Futo, project for Joel Sanders advanced studio, fall 2014.
4. Mahdi Sabbagh and Jonathan Sun, project for Alan Plattus advanced studio, fall 2014.
5. Charlotte Algie, project for Ed Mitchell and Aniket Shahane post-professional studio, fall 2014.
6. Perry Wexelberg, project for Gray Organschi advanced studio, fall 2014.
7. Kara Bicykowski, project for FAT advanced studio, fall 2014.
8. Dionysus Cho, project for John Patkau advanced studio, fall 2014.

Beijing's South Station, eventually will link to the new CBD. While the site is still industrial, it has been rezoned as "urban" land slated for redevelopment. In order to propose critical models for future sustainable development, the studio focused on understanding the potential consequences of the urban form and the function of the corridor created by the high-speed-rail connection, along with current planning and design strategies.

Students traveled to China to tour the site and other relevant projects in and around Tianjin and Beijing. They also met with local planning officials and collaborated with their student counterparts at Tsinghua University to develop preliminary site analysis and design concepts. This interaction continued throughout the term via videoconferencing, until the Tsinghua students and faculty traveled to Yale to participate in final reviews.

Working in pairs for the first half of the semester, the students developed overall master plans for the entire site and then, after a mid-semester review, focused on the detailed design of one area of the master plan. The students' approaches to the challenges of the development potential presented by the water and an island were rich and varied. While one group developed the site as a mixed-use, mixed-density urban project with an attractive public waterfront, convention center, and new train station, another group developed a waterfront university arts campus. Others looked at the potential of the site's industrial structure, with one proposing an urban brewery district that used existing production capacity and another envisioning an enclave-based urban structure that adjusted and reused existing buildings to create a variegated urban fabric. The final group examined Chinese high-rise housing estates to look for ways to intervene on the ground plane to make them function more like integral pieces of the city. Common themes for this major chunk of city included strategies for fabric making, transit-oriented development, industrial building heritage and reuse, and waterfront redevelopment. The students presented their proposals to a jury of Ila Berman, Hua Xianhong (Tsinghua University), Charles Holland, David Kooris, Liu Jian, Gary McDonogh, Dennis Pieprz, Sun Chenguang (Tsinghua University), and Ben Wood.

Ed Mitchell and Aniket Shahane
Post-professional Studio

As an introduction to the M.Arch II program at Yale, the post-professional studio is an opportunity for incoming students to begin exploring the role of architecture and architects in the city. In past semesters, the studio projects have been based on several broad architectural and urban initiatives currently under consideration in and around Boston. This year, Ed Mitchell and Aniket Shahane ('05) asked the students to revisit the 1962 Boston City Hall competition, a centerpiece of the urban-renewal campaign that is seminal to both the history of Boston and the discipline of architecture.

Sponsored by the Boston Redevelopment Authority, the 1962 competition for Boston City Hall was won by the then young and unknown Kallmann McKinnell & Knowles. The firm's Brutalist-style design was in many ways a last gasp of Modernist heroics. Over time, the building has suffered from changes to its interior, poor access, environmental problems, and an unpopular aesthetic. Moreover, the large public spaces surrounding the building are often lifeless, windblown wastelands. The students were asked to revisit the original competition as a basis for thinking about a contemporary city hall on the same site. They were not required to make a physical renovation but, rather, tackle some of the fundamental problems that the post-professional studio looks to engage with: the role of the building in the city, the idea of public architecture, and the concept of the public as it might be constructed today.

Students began the studio with a series of analytical and design exercises to spark thinking on the nature of cities and city halls as civic buildings. Working in teams of two, they then went on to develop proposals for a city hall. The results were as provocative as they were varied. One student proposed an intricate building that was composed of a string of folly-like spaces under the premise that city government, as a smaller form of government, should be housed in a series of small-scale spaces. Another team designed a large, very formal building as a mixing chamber for government and business in order to support the future vision of Boston as a global hub. A third group proposed a large, user-friendly underground hall, which was a cross between a park, a flexible office space, and a coffee shop. The students presented their projects during a lively review that engaged the public and the jurors: Ila Berman, Anya Bokov (Ph.D '16), Brian Healy ('81), Susie Kim, Fred Koetter, Michael Kubo, Gregg Pasquarelli, and Alan Plattus.

Sam Jacob, Sean Griffiths,
and Charles Holland

The FAT team of Sam Jacob, Sean Griffiths, and Charles Holland returned as Saarinen Visiting Professors to conduct a studio at Yale, as their last collaboration. Although it was meant to be a wake for their now disbanded office, they were surprised at the way the students engaged with them in FAT's own revisionist history. After studying techniques such as copying, sampling, superimposition, repetition, and rescaling in the works of London architects—Sir John Soane, Nicholas Hawksmoor, Christopher Wren, James Stirling, the Smithsons-Independent Group, and Archigram, among them—the students produced a speculative project as a "mind map" based on one of the precedents but from their own perspective.

During studio travel week, the students visited their London site at Nine Elms-Vauxhall Embankment, an area soon to be home to the new American Embassy and associated projects by Frank Gehry, Sir Norman Foster, and others at the refurbished Battersea Power Station. While there, the students learned of the proposed transformation of the other parts of the Vauxhall site from the developers and local authority planners and began to investigate ideas for a program. Returning to New Haven, they used their mind map as a starting point for developing three physical architectural models for Vauxhall. The students used the work of John Hejduk, Aldo Rossi, and Piranesi, among others, to combine and recombine methods, motifs, and languages into one project. The students presented this work, along with the mind-map installation, at midterm.

To develop their proposal, students engaged in new hybrid forms of representation that fused the rich history of architectural drawing with digital rendering. They developed highly personal graphic languages through which emerged their visions for Vauxhall. As they investigated representation techniques, they carried forward their ideas for programs, many of them hybrid which parallel the imagery, including housing; others for a slaughterhouse and restaurant and still others for museums and schools.

At the final review, students extended the language of the studio to an active jury that debated technique, hybrid form, and representation. The jury included Tim Altenhof (Ph.D '19), Peter Eisenman, Florian Idenburg, Jimenez Lai, Ariane Lourie Harrison, Skënder Luarasi (Ph.D '19), Joan Ockman, Annabel Wharton, and Ellis Woodman. The studio and review was an emotional coda for FAT.

Joel Sanders

Joel Sanders, professor (adjunct), and Josh Dannenberg based their studio program on the brief issued in July 2014 by the Solomon R. Guggenheim Foundation and the city of Helsinki for an open international competition to design a 12,100-square-meter affiliate of the museum. The studio's twofold objective was to provide a series of alternate proposals that would address the specific and often contradictory viewpoints articulated by the stakeholders. They also asked the students to engage a series of broad issues that are reshaping the future of architecture and the contemporary art museum, including the sustainable integration of architecture, landscape, and infrastructure; the creation of civic-minded cultural institutions that bridge global and local concerns; and the relevance of iconic cultural buildings in the twenty-first century.

The project is highly controversial. Although it was conceived by government officials as an economy-boosting cultural attraction along the lines of the Guggenheim in Bilbao, the anticipated building is seen by some as the imposition of a foreign institution on Finnish culture. During the first few weeks of the term, the students conducted design research that exposed both sides of the dispute. Ari Wiseman, deputy director of the Guggenheim, and Cara Cragan ('00), the museum's director of architectural projects, presented the issues to the students in New York City. The students later traveled to Helsinki, where they studied the site and spoke to architects, urban designers, and city officials about their divergent perspectives. They also visited buildings by Eliel Saarinen, Alvar Aalto, and Steven Holl, among others. The studio paralleled one being taught by Aalto University's Pirjo Sanaksenaho, so the Finns hosted the Yale students, who reciprocated at final reviews in New Haven.

On the final day of the Helsinki trip, the students decided to expand the site boundaries so they could modify the program while satisfying the competition brief for the original site limits. The students took great interest in the larger context, and their projects acted as a responsive urban sponge, absorbing a variety of environmental and infrastructural forces and doubling as a transit hub that is climatically hospitable to Helsinki's short winter and long summer days.

After creating master plans to activate the underused waterfront site, adjacent to a nineteenth-century park and arts district, as an art park, half the students expanded the museum's educational mission to set in motion a more community-minded institution. Others embraced the challenge of creating a mixed-use transportation complex that combined the museum with the rebuilt ferry terminal, providing facilities for joggers, bikers, and boaters. Two students proposed a public-private partnership that merged the museum with a mixed-use commercial complex, incorporating private art galleries and an arts convention hall. The projects were presented at final review to Tatiana Bilbao, Holly Block, Cara Cragan ('00), Jean Pierre Crousse, Theo Issaias (Ph.D '19), Peter MacKeith ('85), Eeva-Liisa Pelkonen (M.E.D. '94), Joseph Rosa, Marc Tsuramaki, and Mabel Wilson.

Faculty News

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Sunil Bald, associate professor (adjunct), was honored for career achievement in practice and teaching at the 2014 Annual Gala of the Society of Indo-American Engineers and Architects. His New York–based Studio, SUMO, with partner Yolande Daniels, broke ground on two Japanese projects in December: a new 25,000-square-foot university dormitory for international students, in Chiba, and the renovation of a 1970s university cafeteria, in Saitama. Other new projects include a renovation of the Wakefield Branch Library, the third project the firm has been awarded through New York City's design excellence program. In November, Bald lectured on his work at the University of Minnesota.

Kent Bloomer, professor (adjunct), with his New Haven-based Bloomer Studio, designed and fabricated a large ornament program for the new Slover Library, in Norfolk, Virginia, designed by Newman Architects. The project included the renovation of the historic Seaboard building, to which he contributed a large program of ornamentation on the atrium ceiling, main façade, outdoor loggia, and children's library. The building was dedicated on January 8, 2015.

Karla Britton, lecturer, gave a lecture at the Royal Institute of British Architects' symposium on architectural photography in November on the work of Robert Damora (B.Arch '55). At the Royal Netherlands Academy of Arts and Sciences, Amsterdam, she addressed the theme of "The Politics of Urban Religious Architecture" in an October lecture. She was also invited by the Lubar Institute for the Study of the Abrahamic Religions, University of Wisconsin-Madison, to speak at the event "The Holy in a Pluralistic World: Rudolf Otto's Legacy in the Twenty-First Century." Britton has recently published in *CLOG: World Trade Center, Pidgin Magazine 18: Ethics,* and *Faith & Form*.

Turner Brooks (B.A. '65 and M.Arch '70), professor (adjunct), with his firm, Turner Brooks Architect, celebrated the opening of the Cold Spring School Community Building, in Fair Haven, Connecticut, on November 15, 2014. Designed with Aaron Amosson ('03), the project expands facilities for the small progressive elementary school according to a master plan developed with Sonya Hals ('00) in 2008. The building rounds out the array of old industrial and wood-frame houses that make up the campus, providing space for "all-school" events, including music, drama, and athletics. Other current work includes a theater-and-arts building for the Burgundy Farm Country Day School, a small progressive elementary school in Alexandria, Virginia, slated to start construction in spring 2015; the design for a house at Lake Placid, New York; and a project for homeless housing in New Haven.

Peggy Deamer, professor, presented a keynote address at the "Industries of Architecture" conference in Newcastle, England, on November 13. She also gave a lecture at the University of Newcastle's School of Architecture and the Built Environment. In October, she participated in the workshop "Labor Leeds," conducted by Autodesk at "OfficeUS," the American Pavilion of the Architecture Biennale in Venice. Deamer contributed the chapter "Office Management" to the exhibition's publication, *Agenda*. She also delivered two talks at Penn Design on architectural work and the activist organization she founded, the Architecture Lobby.

Keller Easterling, professor, had her book *Extrastatecraft: the Power of Infrastructure Space* published by Verso in November 2014. This past fall she gave talks about the book at University of Houston; DPA Madrid; the US Pavilion at the Venice Biennale; ETH Bern Switzerland; The Institute for Architecture and Technology, Copenhagen; Storefront for Art and Architecture, New York; MIT; the Judd Foundation, New York; the Montreal Biennale; ECA, Edinburgh; AA Night School Book Club, the Bartlett School of Architecture, and London School of Economics, all in London. The following essays were published this fall: "Disutility" in Joseph Grima, ed. *SQM: An Index of Radical Domesticity* (Lars Muller); "Interplay" in Pierre Belanger, ed. *Harvard Design Magazine: Wet Matters* (GSD/MIT Press); "The Management," in Ashley Schafer ed., *Office US* (MIT Press); "Shadow States," in Jack Self and Shumi Bose eds., *Real Estates: Life without Debt* (Bedford Press); and "Launch," in Yale's *Perspecta 47: Money* (MIT Press).

Alexander Felson, assistant professor and director of the Urban Ecology and Design Lab, received a National Science Foundation grant to study active-waste heat rejection via green-wall technology. In addition, the lab completed the Guilford Coastal Resilience Plan and is continuing to develop a resilience framework for Bridgeport, Connecticut. Working with the Ecological Society of America, the lab developed a large-scale land-planning project that integrates ecological research along the American River Parkway in Sacramento, California, and it is developing a similar project for the society's centennial conference in Baltimore, Maryland, this August.

Martin Finio, critic, with his New York-based firm, Christoff:Finio Architecture, was featured in the December 2014 issue of *Architectural Digest* in an article written by Paul Goldberger about a recently completed house. The firm also received New York City Landmarks Commission approval for a four-story glass-and-timber preschool in Williamsburg, Brooklyn. He and his partner, Taryn Christoff, will be lecturing in February, in Essex, Connecticut, as part of the Centerbrook Architects Lecture Series.

Mark Foster Gage ('01), associate professor, of New York–based Mark Foster Gage Architects, is designing five new retail projects for Nicola Formichetti in Hong Kong, Beijing, and Chengdu. He produced a project for H&M at the Coachella music festival, in April 2014; and recently completed a concept store for Diesel in Williamsburg, Brooklyn. He recently lectured at the Princeton University School of Architecture symposium "Delight," presented his work at the TED affiliated "INK" conference in Mumbai, India; and delivered the Michael F. Marmor keynote lecture at the AAO, in Chicago. He was a respondent to Graham Harman's Syracuse School of Architecture lecture, in New York, and spoke on "Object-Oriented Ontology" at the symposium on "Speculative Realism," organized jointly by Syracuse University and the University of Pennsylvania.

Alexander Garvin (B.A. '62, M.U.S. and M.Arch '67), professor (adjunct), had two books translated into Chinese and published in China: *The American City: What Works, What Doesn't* and *Public Parks: The Key to Livable Communities*. In February, his book *The Planning Game* will also be published there. Recently, he has given lectures at Aalto University, in Helsinki; the General Meeting of the Urban Land Institute, at the Javits Center, in New York; the International Planning History Society conference, in St. Augustine, Florida; and the Center for Architecture, in New York.

Andrei Harwell ('06), critic, continued his planning work, in May 2014, with professor Alan Plattus on the Jordan River Peace Park, along with regional partner EcoPeace Middle East, including an on-site workshop with students and faculty from Bezalel Academy of Arts and Design and other stakeholders. At the Yale Urban Design Workshop (YUDW), Harwell will shortly issue the final concept-plan report for the Thames River Heritage Park, proposed to tie together sites in Groton and New London, Connecticut. He is also completing a study for the old town-hall site in North Branford, Connecticut. In November, Harwell presented the work of the YUDW at the "Community-Campus Partnerships" symposium, sponsored by the Five Colleges, in Holyoke, Massachusetts. His mapping of Connecticut's Naugatuck River, developed with landscape photographer Marion Belanger (MFA '82), was on exhibit at ArtSpace New Haven through January 31.

Dolores Hayden, professor, gave the keynote address "Domestic Revolution: A New England Scandal from 1868" at the conference "New England and the World," at Boston University's New England and American Studies Program. She organized and chaired a panel at the 2014 Urban History Association meeting "Los Angeles Projects: Collaborations in Public History, Environmental History, and Urban Humanities." Her biographical essay "Alice Constance Austin" will be included in the archive on women architects, organized for the Beverly Willis Architecture Foundation by Columbia University professors Mary McLeod and Victoria Rosner.

Yoko Kawai, lecturer, published the chapter "Erabu, Tsukuru, Tsunagu: Telework ga Jiyu ni suru Sumai-kata," or "Choose, Create, Connect: How Telework Liberates Ideas of Dwelling," in *Korekara no Sumai to Machi (Future Dwellings and Cities)*, edited by Yumiko Horita et al. (Tokyo: Asakura Shoten, 2014). She and her office, Penguin Environmental Design, completed "Garden of Bridge," a Japanese garden for the Tokyo Friendship House at the Frost Valley YMCA, in New York's Catskill Mountains.

Leon Krier, Yale's inaugural Robert A. M. Stern Visiting Professor, is currently at work on phase three of the Poundbury master plan in Dorset, England. He is also collaborating with Estudio Urbano on a master plan for the Paseo Cayala district in Guatemala City.

Jennifer Leung, critic, authored "Screen Testing, Test Driving" for the summer 2014 inaugural issue of Columbia GSAPP's *ARPA Journal*. Last November, she participated in "Ventriloquism," in the Storefront for Art and Architecture's "Cabaret Series." In August 2014, Leung critiqued Erik Møller's Halden Prison on MoMA's "Design and Violence" online curatorial platform. In December, she moderated the discussion "Why Can't We Talk About Architecture?" featuring Ellis Woodman, recipient of Yale's Poynter Fellow in Journalism, with Keller Easterling and Sam Jacob (see page 9). In the fall, Leung participated in "Design for Social Change," at Songshan Cultural & Creative Park's 2014 Taipei Design & City Exhibition; "Transplant," at the Taiwan Economic and Cultural Office in New York's "Young Taiwanese Architectural Designers" exhibition as well as in the ArchiteXX roundtable "Futures of Design Practice." She presented new research on strategies for postcrisis city-making in "Future Perfect: Distributing Phylogenetic and Cultural Capital," at the "Emerging Practices" conference, at Tongji University's College of Design and Innovation; and "Notes Towards a Botanical Urbanism," at Rutgers University Department of Landscape Architecture and Environmental Sciences.

Alan Organschi ('88), critic, will serve on the jury for the U.S. Tall Wood Building Prize Competition, an international design-build challenge organized by the United States Department of Agriculture, the Binational Softwood Lumber Council, and the Softwood Lumber Board. He was also a juror for the National Wood Design Awards in the fall. His research on dense urban construction in wood, "Timber City: Architectural Speculation in a Black Market," will be published along with the work of his firm Gray Organschi Architecture in the upcoming book *Timber in the City*. The firm, with Elizabeth Gray (B.A. '82, M.Arch '87), received a New York City Public Design Commission Award for Excellence in Design for their Joseph A. Verdino Jr. Grandstand at the South Shore Little League on Staten Island. A new classroom building for New Haven's Common Ground High School and the Henry David Thoreau Bridge, at the Steep Rock Preserve in Washington, Connecticut, are under construction.

Eeva-Liisa Pelkonen (M.E.D. '94), associate professor, moderated a panel discussion on Alvar Aalto at the Vitra Design Museum, in Weil am Rhein, Germany, in September as part of the opening ceremonies of the exhibition *Alvar Aalto: The Second Nature,*

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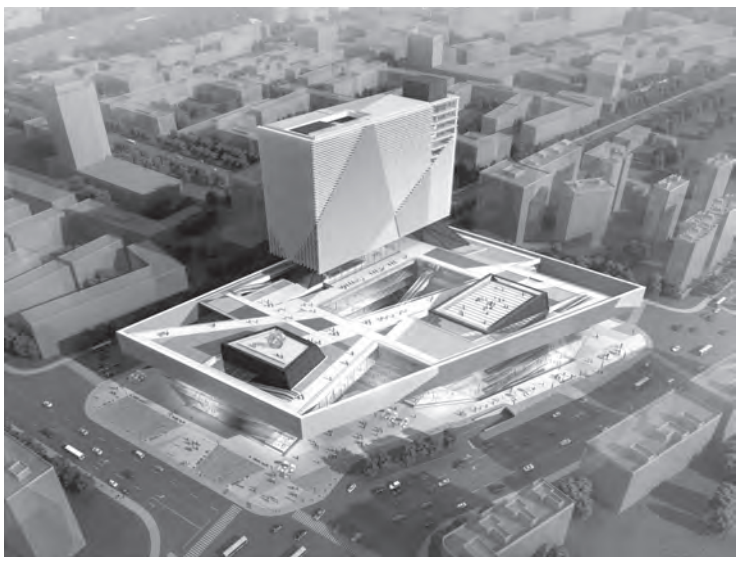

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1. Gray Organschi Architects, rendering of Common Ground High School, New Haven, Connecticut, 2014.
2. Aniket Shahane, Office of Architecture, rendering of house in Watermill, New York, 2014.
3. Joel Sanders Architect, Kunshan Phoenix Cultural Mall, Suzhou, China, 2013 – 2016.
4. Leon Krier and Estudio Urbano, Paseo Cayala district plan for Guatemala City, 2014.
5. Christoff:Finio Architecture, rendering of a preschool in Williamsburg, Brooklyn, 2014.
6. Yoko Kawai, "Garden of Bridge" Japanese Garden, Frost Valley YMCA, Catskills, New York, 2014.
7. Peter Eisenman with his students in Italy, fall 2014.

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for which she served as academic adviser. She also wrote three essays for the catalog: "Symbolic Imageries: Alvar Aalto's Encounters with Modern Art," "Alvar Aalto and the New Nordic," and an "Interview with Kenneth Frampton." Pelkonen gave the talk "Architecture's Humanist Turn: Milan, 1951" at the international workshop "The Space of Display," at the Swiss Institute for Art Research, in Zurich. Her recent articles include "Sobre la Realidad de las Formas" or "On the Actuality of Forms," for Chilean magazine *Materia 06* (fall 2014), and "Reordering Reality while Playing: On Architecture and Creativity," for Swiss magazine *Archithese* (October 2014).

Nina Rappaport, director of publications, will have her book *Vertical Urban Factory* published with Actar in the spring. The eponymous exhibition will be displayed at EPFL's Archizoom, in Lausanne, from March to May 2015. In fall 2014, a condensed version of the show was exhibited at London's King's Cross, where she also participated in a discussion with architectural critic James Pallister and was on a panel about London's urban manufacturing. Docomomo New York/Tri-State's new journal, *Mod* featured her co-authored article "Greening the Glass Box." In January, she was on a panel discussion organized by Open House New York and the NYC Economic Development Corporation. And, in Madrid, she is delivering a talk for the Industrial Architecture conference and at the University of Madrid's school of architecture.

Joel Sanders, professor (adjunct), with his New York–based firm, JSA, received a 2014 Chicago Athenaeum International Architecture Award for the Kunshan Phoenix Cultural Mall, in Suzhou, China, designed with Yale colleague Brennan Buck, of FreelandBuck, and featured in a special issue of *Architectural and Logo Design Work Magazine*. Profiles of JSA were published in *Time & Architecture* and *Concept* magazines. The firm's projects were included in the Chicago Athenaeum's *The City and the World* exhibition, at the Chamber of Architects of Turkey, in Istanbul; and *100 Architects of the Year 2014,* at the Korean Institute of Architects, in Seoul. Sanders lectured this fall at the Tecnológico de Monterrey, in Mexico; Aalto University, in Finland; and the University of Waterloo, in Canada. He was also a moderator for the panel "Guggenheim Helsinki Competition: Designing a Museum of the Future," at the New York Center for Architecture, a topic that coincides with the advanced design studio he taught last fall at Yale. JSA's pro bono project for a kindergarten and community center, in Buenaventura, Colombia, is slated to begin construction this spring.

Dean Robert A.M. Stern ('65), with his firm Robert A.M. Stern Architects, dedicated Heavener Hall, home of the undergraduate programs of the Warrington College of Business of the University of Florida in Gainesville; the new Children's Addition at the East Hampton Library in East Hampton, New York; and the Bedford Family Center at the Westport Weston Family Y in Westport, Connecticut. The firm announced new commissions including residential projects: 20 East End Avenue, in New York for developer Corigin; Portals in Washington, D.C., for Republic Properties; a 67-story tower in Chicago for Related Midwest; and a corporate headquarters office building for OG+E in Oklahoma City for developer Clayco. Dean Stern presented the lecture "The Life and Death and Life of a Great American Building: Paul Rudolph Hall" at the annual meeting of the New Haven Preservation Trust and spoke on the subject of his recent book *Paradise Planned: The Garden Suburb and the Modern City* (The Monacelli Press, 2014) at the Congress for the New Urbanism in Buffalo, New York, where his firm's Heart of Lake project in Xiamen, China, was honored with the CNU's Charter Award. The monograph *Robert A.M. Stern Architects: Buildings and Projects 2010–2014* was published in December, 2014 by the Monacelli Press.

Aniket Shahane ('05), critic, with his Brooklyn-based Office of Architecture, is working on several New York City row-house projects that experiment with the reorganization of one- and two-family housing types. A beach house, in Watermill, New York, is slated to begin construction in winter 2015.

Eisenman Receives Topaz

Peter Eisenman, Charles Gwathmey Professor in Practice, has been named the 2015 recipient of the Topaz Medallion for Excellence in Architectural Education, the most prestigious award for architectural education in the United States. Professor Eisenman has had a long and significant teaching career concurrent to his architectural research and practice based in New York. His dedication to students and their development is commended through this award. As Tod Williams, Davenport Visiting Professor, emphasizes, "Peter is a charismatic and engaged professor. Both when he taught me and now, he has mesmerizing energy that, when it catches a student, it is impossible to shake. Now, I see him as the elder statesman at Yale, and think, he has always been the same—his energy has not slipped a bit." As professor Alan Plattus notes, "Teaching has always been an integral part of Peter's conception of his role as an architect. While—at the stage that he is at in his career—many of his contemporaries play, at best, a cameo role in the studio and the classroom, Peter is still deeply committed to teaching and treats his students as colleagues in his unrelenting search for architectural ideas."

Yale students have benefited from Eisenman's perspective on architectural discourse through drawing, theory, and advanced studio courses beginning in spring 1980, when he had his first appointment, as the William B. and Charlotte Shepherd Davenport Visiting Professor. At the time, he was directing the Institute for Architecture and Urban Studies, which he founded in 1967. After teaching at Harvard, Princeton, Ohio State, and The Cooper Union, he returned to Yale in spring 1999, when he taught alongside Philip Johnson as the Eero Saarinen Visiting Professor.

In fall of 2001, Eisenman became the Louis I. Kahn Visiting Professor, and in 2010 he became the inaugural Charles Gwathmey Professor in Practice. Some recent students have come to call his coursework "the 1-2-3" program: beginning with Formal Analysis, an M.Arch I first-year core-curriculum course; followed by Diagrammatic Analysis: Criticality After the Index, an elective often taken during the second year; and finally, the option to participate in an advanced design studio. As Daisy Ames ('13) comments, "Peter's dedication to the discipline of architecture shows in his relentless commitment to teaching. He encourages his students to investigate architecture and produce work based on rigorous discussions. The students learn to express and support their ideas thoroughly, and most important, architecturally. My strongest projects, analyses, drawings, and thoughts were products of Peter's insight and direction."

Work of Eisenman's students featured prominently in the 2012 International Architecture Biennale in Venice. In 2012-13, Eisenman worked with students and Matt Roman ('09) on *Palladio Virtuel*, an exhibition at Yale's Architecture Gallery that presented his own analysis of Andrea Palladio Roman notes, "Most architects of my generation know only stories of Colin Rowe, John Hejduk, and other 'monsters' of architectural education, many of whom share the Topaz distinction. Naturally, their work and pedagogical influence still resonate today. But the standard bearer against whom we all continue to measure our own commitment, curiosity, and passion, as teachers and architects, is Peter. I would argue that, even more so than the extraordinary effects of his buildings, projects, and texts, Peter's lasting legacy will be his absolute devotion, at every level, to his students and to the belief that education alone, in all aspects of life, keeps our minds agile and our hearts young."

Past Yale recipients of the Topaz Medallion for Excellence in Architectural Education include Serge Chermayeff (faculty, 1963–1969) in 1980; Vincent Scully Jr. (B.A. '40, GRD '49 and Sterling Professor Emeritus in the History of Art) in 1986; Charles Moore (dean of the Yale School of Architecture, 1965–1970) in 1989; and Stanley Tigerman (B.A.'60, M.Arch '61) in 2008.

Alumni News

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

Constructs, Yale School of Architecture
180 York Street, New Haven, CT 06511
By email: constructs@yale.edu

1950s

Herbert Newman ('59) and his firm, Newman Architects, joined forces with Kent Bloomer and Ray Gindroz on the Slover Library project in Norfolk, Virginia. After more than six years of planning and development, the new library opened in January. Newman has been on the Yale faculty since 1965. Yale adjunct professor Bloomer, on the faculty since 1966, designed the architectural ornamentation for the project. Gindroz, who consulted on the urban design of the city of Norfolk, including on the library, taught urban design at the school from 1967 to 1988.

1960s

Robert Tennenbaum (MCP '61) is collaborating with Bill Finley, original director of Columbia, Maryland, on a book to be published this year about new ways to finance a new city for 500,000 people in which cars are replaced by a personal transportation system. His ongoing series of thirty-six "Abstract City Plan" paintings were shown in six galleries in Maryland.

Henry Smith-Miller ('66), of New York-based Smith-Miller+Hawkinson Architects, recently completed the Emergency Medical Services building for the NYC Department of Design and Construction, on Zerega Avenue, in the Bronx, including a green roof, solar-powered domestic hot water, and photovoltaic power for the facility's back up battery system. Rainwater harvested from the roof, and stored in an on-site cistern irrigates the local community garden. The building's translucent exterior has an intelligent skin, conditioning sunlight by day and offering a beaconlike presence by night. The project was awarded the 2014 Municipal Art Society's Masterworks Award for best new infrastructure.

1970s

Hilary Brown ('74) participated in the Kennedy School's Bipartisan Program for Newly-Elected Members of Congress as part of its three-day intensive session. She joined copanelist the Honorable Rodney Slater at breakfast and was part of a discussion moderated by David Gergen about infrastructure for the twenty-first century, with Robert Puentes of the Brookings Institute and Harvard economist Edward Glaeser.

Louise Braverman ('77) and her New York City-based firm won numerous awards, including *Architect* magazine's 2014 Annual Design Review Award (Citation Winner in the Bond category), the 2014 Chicago Athenaeum American Architecture Award, and the New York State Design of Excellence Award for the Centro de Artes Nadir Afonso, in Boticas, Portugal; the 2014 New York State Design of Merit Award (International category), the AIA NY/Boston Society of Architects Housing Design Award, the 2014 Architizer A+ Award (special mention), and honorable mention in the Live category of the *Architect* magazine's 2014 Annual Design Review Award for the Village Health Works Staff Housing project, in Kigutu, Burundi.

Kirk Train ('78) was awarded the William C. Noland Medal by the Virginia Society of the American Institute of Architects. The society's highest honor, the medal is presented annually to a Virginia architect for making significant and lasting contributions to the profession and society at large.

1980s

Aaron Betsky (B.A. '79, M.Arch '83), was recently appointed the Dean of the Frank Lloyd Wright School of Architecture at Taliesin West, in Scottsdale, Arizona.

Michael Winstanley ('83) and his firm, Michael Winstanley Architects & Planners (MWAP), recently completed the master plan for Southern Baptist Theological Seminary in Louisville, Kentucky, including the renovation of the 1921 James Gamble Rogers' Mullins Complex into a new undergraduate residence hall for Boyce College. The project manager was Leejung Hong ('04). The firm is currently completing and the renovation and restoration of Daniel Burnham's 1907 Union Station in Washington, D.C. After the building assessment in August of 2011, a rare earthquake hit the Washington region, resulting in damage to the plaster and gold leaf vaulted ceiling in the Main Hall. In 2013 ceiling restoration began, involving master plasterers, painters and gild craftsmen, led by the MWAP Team.

Norikho Dan ('84) delivered the lecture "Symbiotic Thoughts of Architecture," at the HKU Shanghai Study Center in November. The talk suggested mediation as the only contemporary notion that can regard all the conflicts of the city and the natural environment as positive energy, turning chaos into a more fruitful symbiosis.

Marion Weiss ('84) and her firm, Weiss/Manfredi, won the 2015 AIA Institute Honor Award for the Krishna P. Singh Center for Nanotechnology, in Philadelphia. Three of the firm's projects, the Novartis Visitor Reception Building, the Novartis Office Building, and the Krishna P. Singh Center for Nanotechnology, received 2014 Architect Annual Design Review Awards. Its Barnard College Diana Center received two awards, the AIA New York State "Award for Excellence" and the "Best in New York State" award.

David Harlan ('86) and his firm, David D. Harlan Architects, won the Stanford White Award, given annually by the Institute of Classical Architecture and Art, in the category "Residential: New Construction under 5,000 s.f.," for the Extown Farm Cottage, in New Canaan, Connecticut.

Maya Lin (B.A .'81, M.Arch '86) was awarded the $300,000 Dorothy and Lillian Gish Prize, one of the largest in the arts, given annually to "a man or woman who has made an outstanding contribution to the beauty of the world and to mankind's enjoyment and understanding of life," in November 2014.

John Blood ('87) and Elizabeth Danze ('90), with their Austin-based firm, Danze Blood Architects, received the Chicago Athenaeum American Architecture Award for 2014, one of the highest and most prestigious building award programs in the United States, for the T3 Parking Structure, in Austin, Texas.

Craig Newick ('87) won a 2014 AIA Connecticut Design Award for his project "Accessibility," a handrail made of European steamed beech and fin plywood. The piece was designed as a second handrail for a client who was recovering from double hip replacement surgery to better negotiate the stairway of her 1910 home and was made by Bryan Smallman.

Steve Dumez ('89), director of design and partner of Eskew + Dumez + Ripple, based in New Orleans, received this year's Architecture Firm Award from the American Institute of Architects. The highest honor the AIA bestows on an architecture firm, it recognizes a practice that has consistently produced distinguished architecture of lasting social and cultural value for at least ten years.

1990s

Lance Hosey ('90) was elevated to the AIA College of Fellows in 2014. His latest book, *The Shape of Green: Aesthetics, Ecology, and Design* (2012), was a finalist for the 2014 Urban Design Awards Book of the Year and has been Amazon's Number One bestseller for sustainable design.

Jason Alread ('91) was recently appointed director of the school of architecture at the University of Florida. He was also named one of the top thirty most admired educators for 2014 by *Design Intelligence* while teaching at Iowa State University, where he was director of graduate studies in the department of architecture.

Scott Specht ('93) with partner Louise Harpman ('93) and their New York-based firm, Specht Harpman Architects, was featured in the January/February 2015 issue of Texas Architect, in the article "Running with X-acto" that focused on their "highly integrated, small-scale architecture," demonstrated in projects such as zeroHouse and Micro-loft.

Kian Goh ('99), currently pursuing her doctorate in urban studies and planning at MIT, spoke at the Yale School of Management as part of its "Design & Innovation" recruiting seminar in January 2015. Her talk was entitled "Design the World? Limits and Possibilities Confronting Planetary Crises."

Devin O'Neil ('99) and Faith Rose ('99), of their New York-based firm O' Neil Rose Architects, saw their Choy House project featured in *New York* magazine's "Design Hunting" issue, in October. The story was also featured in *Curbed*. Mayor De Blasio recently appointed Rose as the new executive director of the New York Public Design Commission.

2000s

Ghiora Aharoni ('00) celebrated the publication of *Missives*, the catalog of his recent solo exhibition, which opened in fall 2013 at the Dr. Bhau Daji Lad Museum (formerly the Victorian & Albert Museum), in Mumbai, in November.

Ben Bischoff ('00) and his firm, MADE, was featured in the "Shopping With…" section of *The New York Times*, with Tim McKeough discussing the firm's favored cabinet pulls and knobs.

Colin Brice ('00), of New York–based Mapos Architects, has completed the design of two flagship stores in Times Square for Asics Sportswear and Citizen watches; a hotel renovation in Lake Placid, New York; creative workspaces, and retail boutiques for Fresh across Asia and North America. On the boards are two houses in Dallas, and Hampton Bays, New York; a distillery in Washington D.C.; retail concepts in Indianapolis, London, and China; and a boutique hotel concept in Hudson, New York. His firm was featured in *Architectural Digest* in January 2015 as one of the "Top 10 firms on the Rise!"

Dominique Davison ('00) and her firm, DRAW Architecture + Urban Design, received the AIA Kansas City Firm of the Year award. The firm also received the "25 Under 25" from Thinking Bigger Business Media, a Kansas City award that celebrates small businesses with less than twenty-five employees.

Elijah Huge (B.A. '98, M.Arch. '02), associate professor at Wesleyan University, received a research grant from the Hagley Museum and Library's Center for the History of Business, Technology, and Society for his work "Saving the City: An Encyclopedia of Calamity-Mollifying Devices for the Modern Metropolis." Huge is teaching at Yale in spring 2015.

Clover Linne ('03) has been made an associate at Moore Ruble Yudell.

Michael Kokora ('04) became a partner at OMA in August 2014 and is based in Hong Kong. After joining the Rotterdam office in 2007 he became an associate in 2010. In 2009, he established OMA/AMO Asia, together with David Gianotten. Kokora is responsible for leading OMA/AMO's portfolio in the Asia Pacific region and is developing projects in China, Southeast Asia, and Australia. He oversaw the design and construction of the Shenzhen Stock Exchange, completed in 2013. Other projects have included the conceptual master plan for Hong Kong's West Kowloon Cultural District, an office tower in Kuala Lumpur, a residential project on the Peak in Hong Kong, a cultural resort and a broadcasting facility in Indonesia, and AMO's revitalization projects in Jakarta. Kokora is an assistant professor at the University of Hong Kong, where he teaches in the master's of architecture program.

2010s

Nicholas Gilliland ('10) and his firm, Tolila + Gilliland Atelier d'Architecture, has been named by the European Centre for Architecture Art Design and Urban Studies and the Chicago Athenaeum: Museum of Architecture and Design as being among the forty emerging architects under forty who "will influence the near future of European architectural design, thinking, and theory with the direct consequence of impacting future environments and future European and international cities."

Brad Baer ('11) and his digital agency, Bluecadet, recently designed and developed the Harvard Graduate School of Design's new campaign Web site.

Emmett Zeifman ('11) has taken a position as a full-time instructor at SCI-Arc, where he is currently teaching the first-year M.Arch I studio and visual studies courses. He also continues to work on the journal *Project* and has started his own design work.

Stephen Gage ('12), who studied at the University of Cambridge, as the school's inaugural Bass scholar, received the RIBA President's Prize for Outstanding Master's Degree Thesis of 2014, by the Royal Institute of British Architects. His thesis is titled "Repurposed Pasts? Architecture and Identity in the Gothic Revival University."

Jaeho Chong ('13) worked with Korean artist Kimsooja and a research team from the Wiesner Group to create the sculpture *A Needle Woman: Galaxy Was a Memory, Earth Is a Souvenir* on the Cornell University campus. On display from September through December 2014, the 46-foot-tall artwork was commissioned by the Cornell Council for the Arts and made of polymers.

Hochung Kim ('14) and Minu Lee ('15), together with Jeong Sik Yoo (M.F.A. '15),

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1. Weiss/Manfredi, Center for Nanotechnology, Pennsylvania. Photograph by Albert Vecerka, Esto. 2014.
2. Kimsooja and Jaeho Chong, *A needle woman: Galaxy was a Memory, Earth is a souvenir*. Courtesy Cornell Council for the Arts, ã Kimsooja Studio. Photograph by Aaron Wax, 2014.
3. Danze Blood Architects, T3 Parking Structure, Austin, Texas, 2014
4. Michael Winstanley, ceiling of Union Station in Washington, D.C., recently restored, 2014.
5. Newman Architects, Slover Library, Norfolk, Virginia. Photograph by Peter Aaron, Esto, 2014.

Brian Hickey (M.F.A. ’15), and Kyungjin Kim (M.F.A. ’14), won a competition organized by the U. S. Institute for Theatre Technology (USITT) that asked students in architecture and theater to research and design an answer to the question “What is the ideal theater for teaching professional theater?” Their winning design proposed a new building that would allow for programming dedicated to the Yale Repertory Theatre as well as events, festivals, and collaborations with the Yale School of Music.

Bryan Maddock (’14) was a runner-up in the *Architectural Review*’s Global Architecture Graduate Award (GAGA) for his work in the Fall 2013 Elia Zenghelis Studio.

Class of 2014 News

A.J. Artemel is working for Prophet, in New York; Henry Chan is working for Diller Scofidio + Renfro, in New York; Danielle Davis is working for Robert A.M. Stern Architects, in New York; Violette de la Selle is working for SHoP Architects, in New York; Chessin Gertler is working for Cambridge Seven Associates, in Boston; Brandon Hall is working for Studio Gang Architects, in Chicago; Daniel Jacobs is working for SHoP Architects, in New York; KJ Lee is working for Huff+Gooden Architects, in New York; Bryan Maddock is working for the Office for Metropolitan Architecture, in Hong Kong; Eleanor Measham is working for Robert A.M. Stern Architects, in New York; Thom Medek is working for Bernheimer Architecture, in New York; Christian Mueller is working for Robert A.M. Stern Architects, in New York; Justin Nguyen is working for Rockwell Group in New York; Cristian Oncescu is working for Pelli Clarke Pelli Architects, in New Haven; Allen Plasencia is working for XTEN Architecture, in Los Angeles; Jason Roberts is working for Weiss/Manfredi, in New York; Alex Sassaroli is working for Andrew Berman Architect in New York; Katie Stranix is working for Studio Gang Architects, in New York; Xiaodi Sun is working for Richard Meier + Partners, in New York; Ian Svilokos is working for Karma Royal Group, in Bali; Nika Taubinsky is working for Morris Adjmi Architects, in New York; Mark Tumiski is working for LMN Architects, in Seattle; Brittany Utting is working for Thomas Phifer and Partners, in New York; Constance Vale is at SCI-Arc and working for Collins Vale Studio; Caroline VanAcker is working for Beyer Blinder Belle, in Washington, D.C.; Kate Warren is working for Richard Meier + Partners, in New York; Evan Wiskup is working for the Office for Metropolitan Architecture, in New York.

New Haven City-Wide Open Studios

In October four School of Architecture students unveiled three new site-specific installations at the Goffe Street Armory, in New Haven, as part of Artspace’s annual City-Wide Open Studios. The installations were among twelve commissioned pieces displayed, in addition to work by more than two hundred regional artists. Artspace is a nonprofit dedicated to showcasing emerging artists and building new audiences for contemporary art around New Haven.

Michael Cohen (’15) produced “Earth Cylinders,” a series of rammed-earth rectangular prisms on the armory’s north lawn that explored the ancient technique as a counterpoint to the building’s brick facade. The piece is the latest in a series of rammed-earth structures he has designed and built in New Orleans. Jonathan Sun (’15) created “Light Column II,” a thirty-five-foot-tall hanging column made of thin film that passes through the central void of a staircase intended to heighten the experience of the stairwell by both contrasting and emphasizing the existing characteristics of the space. It is supported by tension instead of compression and is without a structural function. John Kleinschmidt (’16) and Andrew Sternad (’16), in the design partnership Shallow Studio, created “Against the Grain” in the armory’s cavernous drill hall, the largest interior space in New Haven. They removed and cleaned deteriorating floorboards and suspended them from a steel truss to form two chevron-shaped curtains, a reference to the former military post. The narrow space between was just wide enough for visitors to walk through. Each floorboard was connected by a white mason’s line—over three miles in total—to its former location on the floor, where replacement boards were toothed in. The piece served as a backdrop to the Open Studio events.

Project Journal

The journal *Project* was initiated in 2012 and is edited by Alfie Koetter, Daniel Markiewicz, Jonah Rowen, and Emmett Zeifman (all ’11). Produced twice yearly, *Project* focuses on architects who engage in debate and critical evaluation in the field and serves as a platform for developing and disseminating critical positions in contemporary architecture. Issue 4 will be available in February.

Design Briefs

Poreform

Two recent Yale alumni, Amy Mielke (’13) and Caitlin Gucker-Kanter Taylor (’13), won the Holcim Foundation’s top 2014 award in North America for their Poreform project, a floodwater runoff system for Las Vegas conceived in Keller Easterling’s spring 2013 advanced studio. A customizable urban surface calibrated to collect and channel floodwater, Poreform provides a scalable solution for water capture and storage systems in arid cities and offers a perspective on how future urban infrastructure can be resilient and adaptable in the face of climate uncertainty. The basic unit of Poreform is derived from the skin of a lizard, but it is applied at the scale of civil-engineering infrastructure and uses comparable technology. Conceived as a porous concrete surface poured in place with fabric formwork that is capable of rapid saturation and slow release, it reframes water as a valuable resource rather than a liability.

Las Vegas loses 74,000 megaliters,or 60,000 acre-feet per year of rainfall, to the shallow aquifer in the form of urban runoff, the result of frequent major flooding. At the same time, the city is spending precious energy pumping water uphill from Lake Mead to the newest suburbs and from the deeper principal aquifer to offset what is lost to runoff. The downtown area floods because all detention basins are located in the suburbs. A prototype is currently in development with the support of the Holcim Foundation. The $100,000 award has been featured in *Architectural Record*, *Architect, L’Architecture d’aujourd’hui,* and *Metropolis,* which called the project a “‘game changer’ in sustainable design and engineering.”

The Mound of Vendôme

History, according to Napoléon Bonaparte, is a set of agreed upon lies. The exhibition, *The Mound of Vendôme,* explored the renegotiation of historical truths through the rise, fall, and reconstruction of a nineteenth-century Parisian monument. Curated by David Gissen (’96), architectural historian and associate professor at the California College of Arts in San Francisco, the exhibit was displayed in the Octagonal Gallery at the Canadian Centre for Architecture from June to September 2014. Gissen was inspired by the shifting meanings of urban monuments and spaces in the wake of the Occupy movement, in 2011.

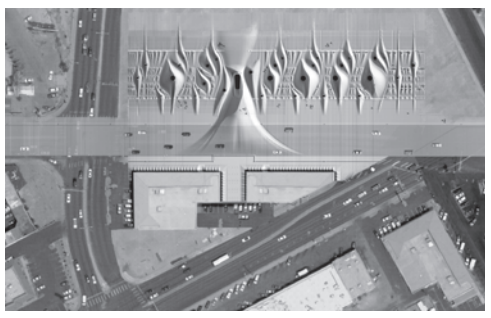
The column was originally installed in celebration of the conquests of Napoleon I; but according to Gissen’s research, by the 1870s the column had come to signify the “barbarism” and “false glory” of imperialist domination under Napoleon III. The Paris Commune, during its brief governance of the city starting in 1871, decreed its destruction and set about raising a mound of dirt and straw to dampen the vibrations from its fall.

For Gissen, the ephemeral existence of the mound sheds light on “the transient nature of meanings that we impose on memorial landscapes.” He resurrected the mound through models and renderings commissioned for the exhibition, and he petitioned city officials to re-create the symbolic earthwork in the Place Vendôme. In addition to commissioned materials, the exhibition drew on primary sources from the CCA’s extensive collection of Commune-era documents including photographs, maps, and drawings from the period. Part social history, part historic conjecture, the exhibition aimed to capture the range of collective memories latent in a historic urban space.

9 x 18

The question of how to reimagine new uses for New York City Housing Authority’s (NYCHA) 20.3 million square feet of parking spaces was put forth by the Institute of Public Architecture last fall. The project,“9 x 18”—the dimensions of a parking space—was awarded to fellows Nathan Rich (’10) and Miriam Peterson (’10), of the New York City-based studio Peterson Rich Office, with urban designer Sagi Golan. The team analyzed ways to challenge New York City’s building code to create new potentials for affordable housing and amenities, a focus of Mayor Bill de Blasio.

Their project conducted detailed analyses to see how the city’s current mandate to provide parking with housing could be reconfigured to rehabilitate this underused open space. Looking at the statistics of the number of cars per resident compared to the acres of parking lots, they proposed a few scenarios that would transfer the sites to other, more desirable uses, including housing, street-level community and retail spaces, and neighborhood amenities, such as libraries, while consolidating parking garages. In these schemes, parking could even generate revenue for a developer and NYCHA. Rich and Peterson’s work has garnered attention: Michael Kimmelman wrote an article about the study in the September 14, 2014, edition of *The New York Times;* last fall it was included in No Longer Empty’s exhibition at Harlem’s new Sugar Hill housing development, and the designers gave a short talk at the Municipal Art Society’s Jane Jacobs Forum.



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1. Poreform, Amy Mielke (’13) and Caitlin Gucker-Kanter Taylor (’13).
2. *The Mound of Vendôme*, installation, Canadian Centre for Architecture, Montreal, 2014.
3. 9x18, parking spaces in comparison to housing units in New York City, Nathan Rich (’10), Miriam Peterson (’10), and Romi Golan, 2014.

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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Yale School of Architecture
P. O. Box 208242
New Haven, CT 06520

Telephone
(203) 432–2296

Email
constructs@yale.edu

Web site
www.architecture.yale.edu/constructs

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Cover
Niall McLaughlin Architects, Bishop Edward King Chapel, Oxford, England, 2012.

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Yale School of Architecture

Spring 2015 Events Calendar

Lectures

All 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, except where noted.

Thursday, January 8
RAFAEL BIRMANN
Edward P. Bass Distinguished Visiting Fellow in Architecture
“Walking from Site to City”

Monday, January 12
DOUGLAS RUSHKOFF
David W. Roth and Robert H. Symonds Memorial Lecture
“Kairos, Chronos, Time, and Space: Designing for Humans in a Digital World”

Thursday, January 15
ANTHONY VIDLER
Vincent Scully Visiting Professor in Architectural History
George Morris Woodruff, Class of 1857 Memorial Lecture
“The Brutalist Epoch: Histories, Theories, and Criticisms”

Thursday, January 22
NIALL McLAUGHLIN
Lord Norman Foster Visiting Professor
“Origins and Translations”

Thursday, February 12
STEVE BURROWS
Gordon H. Smith Lecture
“Today Is the Greatest Time in History to Be an Engineer”

Thursday, February 19
HERNAN DIAZ ALONSO
Eero Saarinen Visiting Professor
“Shaken, Not Stirred”

Thursday, March 26
SARAH HERDA
Eero Saarinen Lecture
“A Different Kind of Architect”

Monday, March 30
LEON KRIER
Robert A. M. Stern Visiting Professor
“Le Corbusier after Le Corbusier”

Thursday, April 2
JEANNE GANG
Paul Rudolph Lecture
“Getting Real”

Tuesday, April 7
5:30 p.m.
JULES PROWN
Paul Mellon Professor Emeritus of the History of Art
“Louis I. Kahn in Conversation: Interviews with John W. Cook and Heinrich Klotz, 1969–70”
Presented with the Yale Center for British Art

Thursday, April 9
TATIANA BILBAO
Louis I. Kahn Visiting Assistant Professor
“Lessons from Two Gardeners”

Thursday, April 16
EELCO HOOFTMAN
Timothy Egan Lenahan Memorial Lecture
“Another Green World”

Exhibitions

The Architecture Gallery is located on the second floor of Paul Rudolph Hall, 180 York Street.
Exhibition hours:
Mon.–Fri., 9:00 a.m.–5:00 p.m.
Sat., 10:00 a.m.–5:00 p.m.

Archaeology of the Digital II: Media and Machines
Through May 1

Media and Machines marks the second phase of the research project initiated with the 2013 exhibition *Archaeology of the Digital*. Curated by Greg Lynn, this initiative investigates how architecture engaged with digital technology from the 1980s until the turn of the century. The first exhibition identified the earliest practices looking to computation as a design medium that could serve architectural ambitions anticipating the technology before it was available or used. Many of the approaches persist in this second exhibition, including the experimentation in formal, spatial, and material language, procedural or parametric processes, and robotic motion. With projects such as Asymptote’s New York Stock Exchange “Virtual Trading Floor and Operation Center”; Karl Chu’s “Catastrophe Machine” and “X Phylum”; “Objectile Panels,” by Bernard Cache; “Hyposurface,” by dECOi Architects; “Muscle NSA,” by ONL [Oosterhuis_Lénárd]; and NOX’s “H2Oexpo,” this exhibition focuses more on the digital. The breadth of creative scope among these works extends from the design of buildings to that of interactive media and robotic mechanisms, drafting machines based on the catastrophe theory, generative algorithms, and the writing of disciplinary and cultural theories.

Year-End Exhibition of Student Work
May 17–July 31, 2015

Archaeology of the Digital was organized by the Canadian Centre for Architecture, Montreal, Canada. The CCA gratefully acknowledges the generous support of the Ministère de la Culture et des Communications, the Canada Council for the Arts, the Conseil des Arts de Montréal, and the Graham Foundation for Advanced Studies in the Fine Arts. The presentation at Yale is sponsored in part by Elise Jaffe + Jeffrey Brown.

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