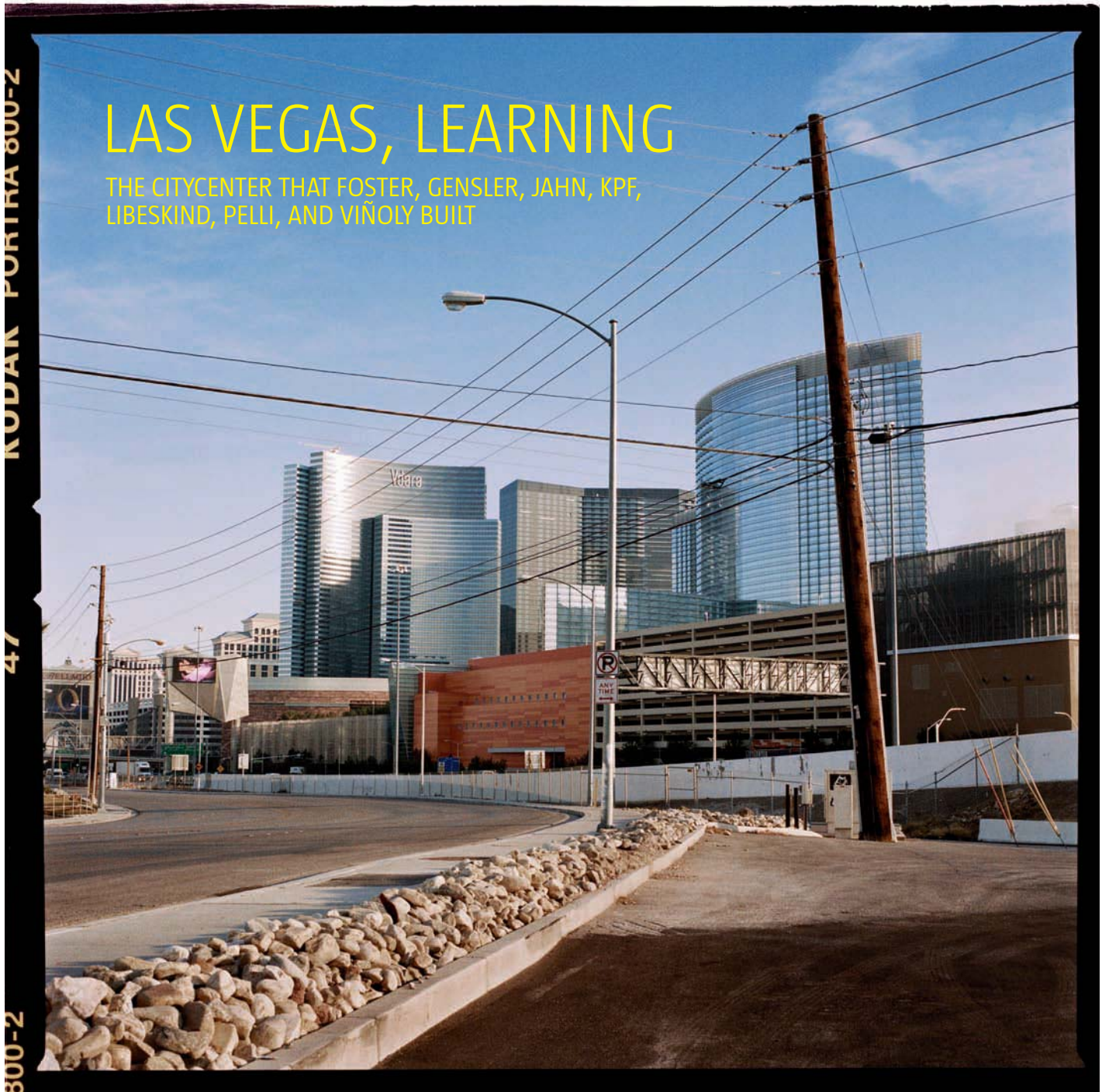


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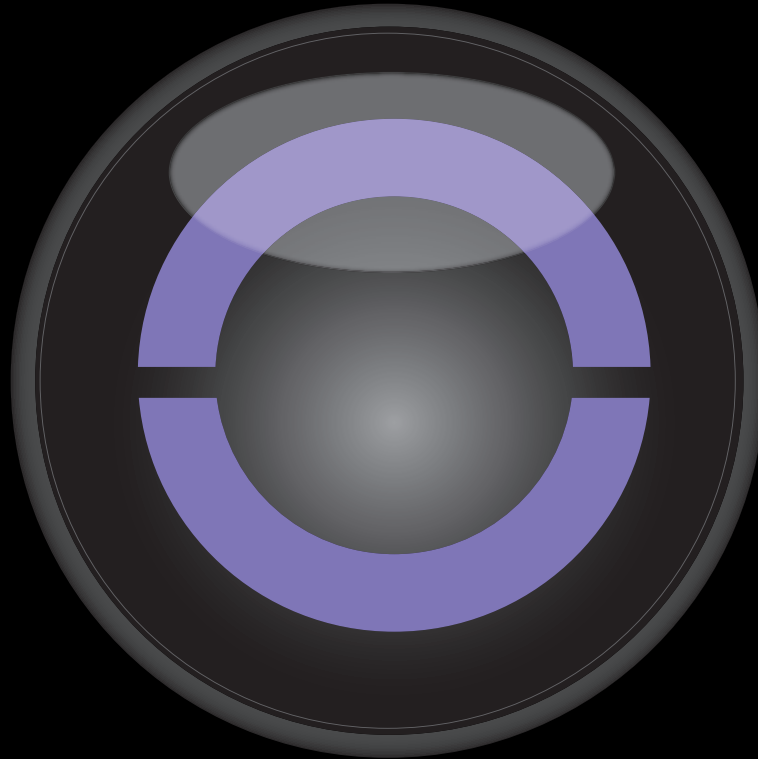


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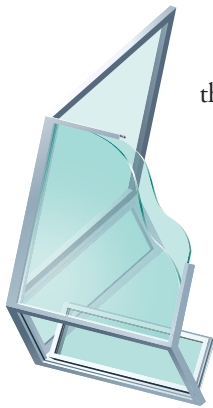




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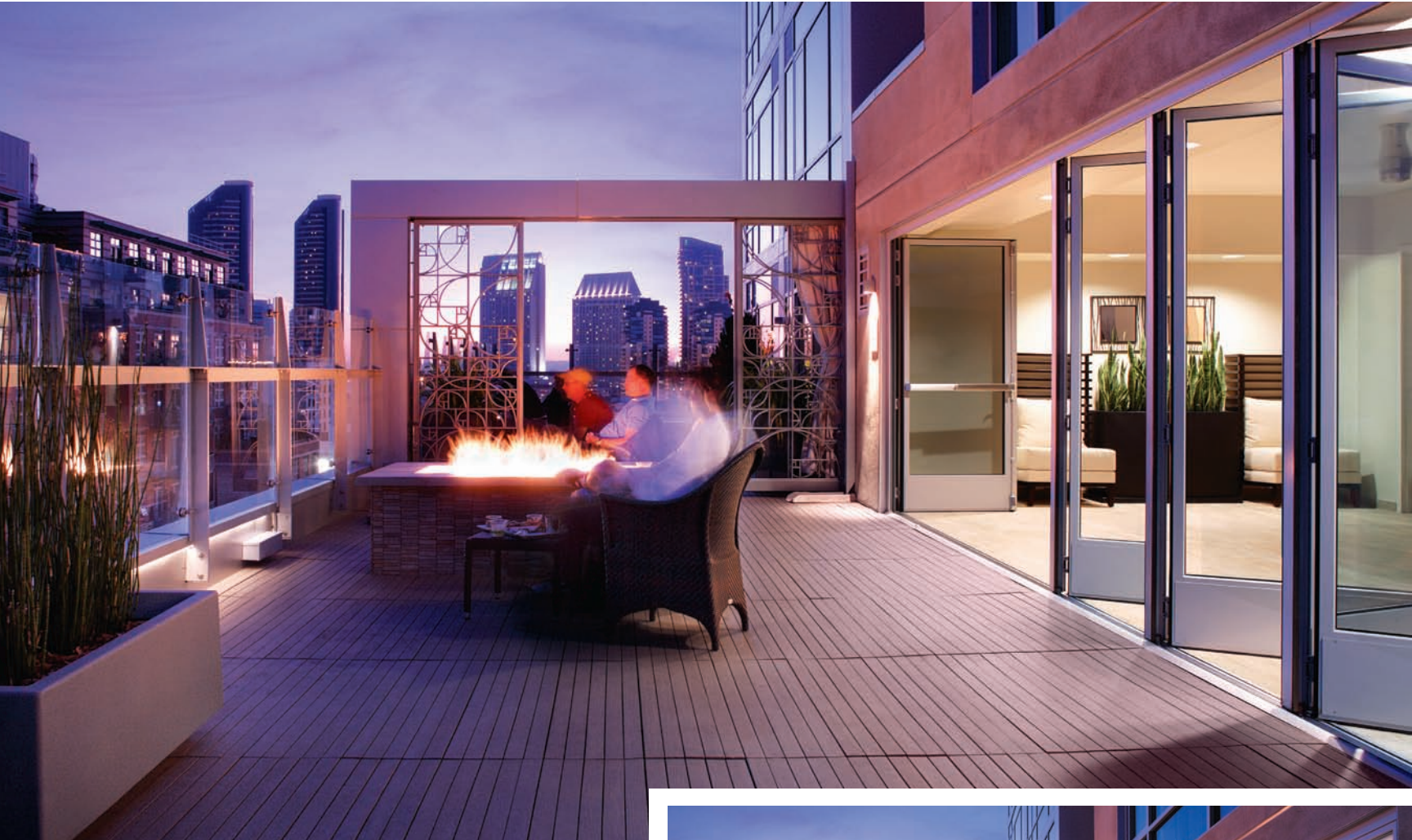
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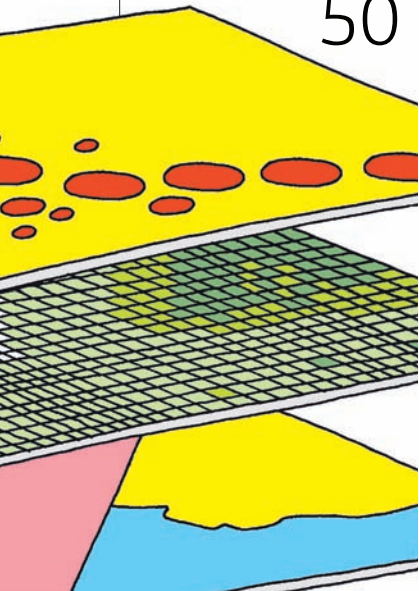
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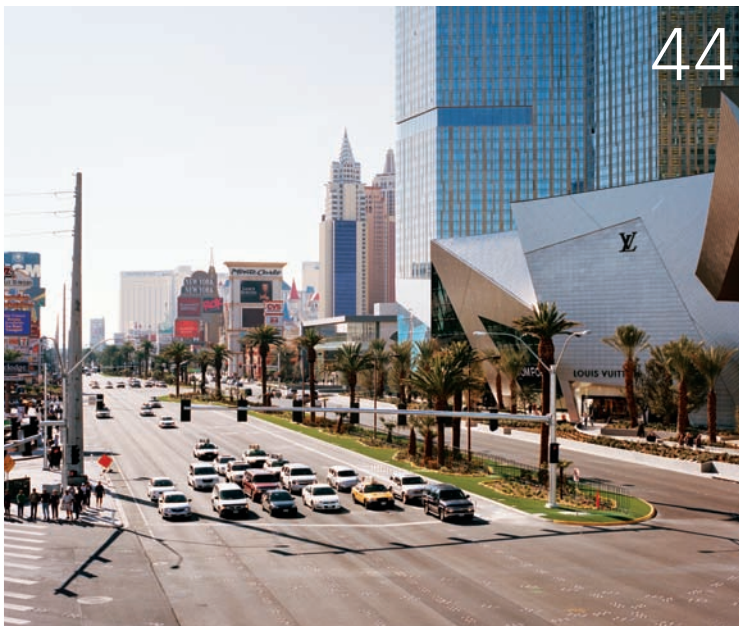


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**Marcy Ryan**

Senior Graphic Designer

Now the senior graphic designer for both *ARCHITECT* and *ECO-STRUCTURE* magazines, Marcy Ryan learned the ropes of publication design at Marymount University in Arlington, Va., where she art directed the literary magazine while earning a bachelor's degree in graphic design with a minor in fine art. Ryan grew up in northern Virginia (in a house that her father built himself) and still lives in the area with her boyfriend and their cat, Scoots Magoo. She recently served as art director on an independent film, *Nightstars*.

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“ROBERT VENTURI,  
RUTH BUZZI, AND  
AL GORE WALK  
INTO A BAR ...”

# GREEN PLAY

**MY DOG MORTIMER LOVES TO PLAY** with balls. He especially likes the kind that squeaks when you bite down on it, but he’s not choosy. He’ll chew on or chase pretty much any ball, pretty much all day long. I used to laugh at Mortimer’s single-mindedness, until a friend at the dog park pointed out that humans have basically the same obsession, just with fancier names, like baseball, basketball, golf, and tennis. And of course with less chewing.

The point is, everyone needs to play, not just dogs and children, but grown-ups as well. Neuroscientists will tell you that play is biologically essential at all ages, affecting how we invent, socialize, and adapt to circumstance. Play also makes us happy. Alas, few of the adults I know feel like they have the luxury time right now to blow off steam, what with the recession, unemployment, two wars, a paralytic government. ... The laundry list of possible and bona fide calamities facing our nation goes on and on, and the effect on individuals can be devastating.

“The opposite of play is depression,” psychiatrist Stuart Brown said, in a talk at the 2008 Art Center Design Conference. Current circumstances would suggest we’re a nation in desperate need of some time in the sandbox. I got some myself recently, in a rather unlikely venue: the sober-sounding exhibition “Contemplating the Void: Interventions in the Guggenheim,” at New York’s Guggenheim Museum.

To celebrate the 50th anniversary of Frank Lloyd Wright’s Fifth Avenue landmark, the museum solicited proposals for its famous spiral atrium from artists and architects around the globe. Curator Nancy Spector describes the show as a “self-reflexive folly,” and more power to her for encouraging lightheartedness in these dark days, and in such an art-historically loaded setting. All work and no play makes Frank a dull boy. Many of the artists whom Spector invited really rose to the occasion. I guffawed at Christian Marklay’s suggestion to release thousands of ping-pong balls, golf balls, and marbles from the top of Wright’s corkscrew ramp.

The show is pretty evenly split between designers and artists, but alas, many of the architects—perhaps daunted by the prospect of tinkering with Wright’s late-career masterpiece—failed to find humor in the situation. There was an unfortunately high incidence of gee-whiz digital designs, as though eccentric, abstract form was the only thing architects’ imaginations are capable of producing nowadays. Cool renderings of cool shapes once seemed like a taste of architecture’s future; increasingly, they seem like remembrances of things past, when form followed fashion with little thought for function. Standards have changed, for the greener good.

Thankfully, “Contemplating the Void” included architectural exceptions to the rule of blobular banality.

Two submissions in particular stood out. If they were jokes, in the conventional sense, both could begin something like this: “Robert Venturi, Ruth Buzzi, and Al Gore walk into a bar ...”

Los Angeles–based Ball Nogues Studio suggested converting the museum into a “breathtaking and sustainable” candy factory (below), dedicating the rotunda to an enormous sugar-pulling machine. New York’s WORKac thought the Guggenheim would do well as a green water park, aka the Flow Show, capturing rain on the roof and channeling it down Wright’s ramp as a water slide. Both firms’ renderings recall the work of Charles Moore and Robert Venturi circa 1970, all Pop enthusiasm and social irony, but with a thoroughly modern attitude toward the environment.



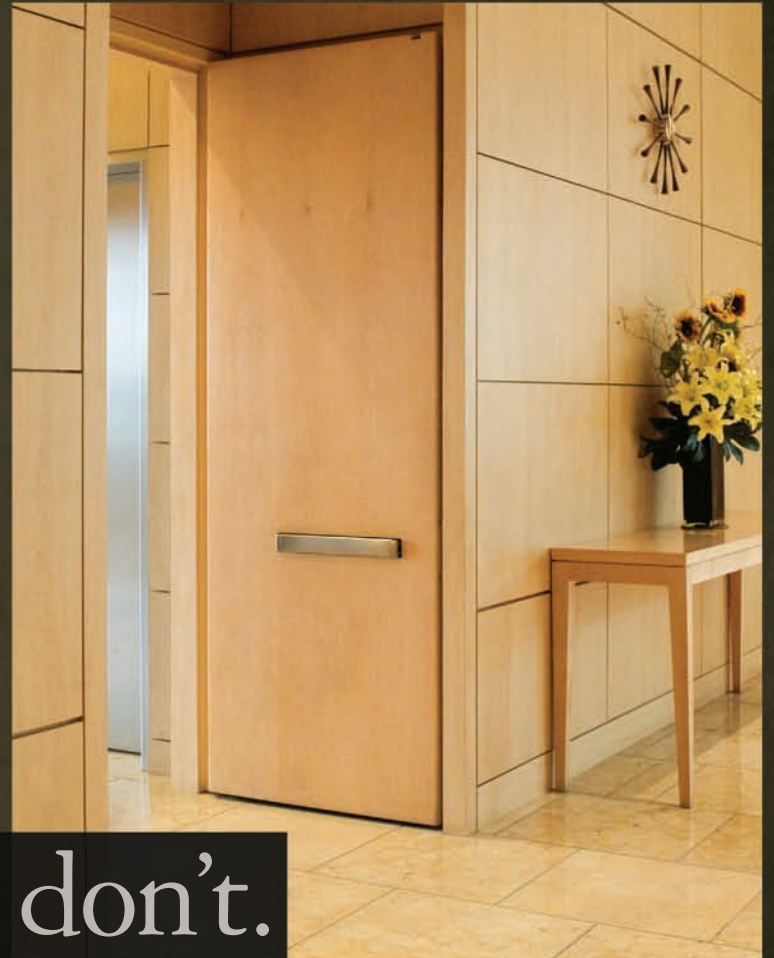
Ball Nogues Studio’s pulled candy machine

I hope Ball Nogues Studio and WORKac’s smart-but-playful thinking rubs off on the profession at large. It would be all too easy to dismiss the schemes as silly pranks, to overlook them because they don’t conform to the sustainability movement’s unfortunate default positions: Chicken Little anxiety about the future and an unwelcoming air of gravitas. Both make for bad PR, no matter how grave the prospect of an increasingly unlivable planet. Green architecture doesn’t have to be painfully earnest, the structural equivalent of a hair shirt. Why not save the world and have fun while we’re at it? The more the merrier.

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The acting **Architect of the Capitol** for the past three years, **Stephen Ayers** was nominated by President Barack Obama to a full term as chief of the agency responsible for the sprawling Capitol complex.



**Tricia Stuth**, an associate professor of architecture at the University of Tennessee, Knoxville, and a member of the firms CURB and Applied Research, was one of nine to receive the **2010 AIA Young Architects Award**.



Longtime Charleston, S.C., Mayor **Joseph P. Riley Jr.**, who helped create the Mayors' Institute on City Design, was awarded the **2009 National Medal of Arts**, as were 11 others.

# LONDON CALLING

KieranTimberlake wins U.S. Embassy competition.



**THE PHILADELPHIA FIRM** of KieranTimberlake has been chosen by the State Department from a starry shortlist to design the new U.S. Embassy in London. KieranTimberlake won the project over Morphosis, Richard Meier & Partners, and Pei Cobb Freed.

The \$1 billion project is far more inventive than most other embassies produced in recent years by the State Department's Bureau of Overseas Buildings Operations, or OBO. The OBO has finished 50 new embassies and 69 new diplomatic facilities worldwide since 2001; this is only the fourth design competition for any embassy since that which Eero Saarinen won

for London in 1956. In recent years, especially, the OBO seemed to have decided that good-looking buildings were anathema to security needs, which are indeed pressing: Since 1998, there have been more than 150 attacks on U.S. government properties overseas.

KieranTimberlake's renderings suggest that any battlements will be cannily disguised. The new London embassy will be a glass cube set atop concrete stilts, veiled on three sides in tented layers of lightweight polymer shades that hold solar panels and make the surface interesting. The embassy grounds, designed with the landscape architect Laurie Olin, will create the required 100-foot-deep security buffer from the street by placing the building inside circles of parklike spaces that terrace upward to the building's entrance.

The embassy is moving from its current location on Grosvenor Square, in central London, primarily for security reasons. (That building, which has been listed as historically significant, was sold last year to Qatari developers.) Its new incarnation will occupy five acres in the southwest part of the city, near the Battersea Power Station. The embassy site lies on the south bank of the Thames River, a mile downstream from London's heart. Groundbreaking is scheduled for 2013, and the building is supposed to open in 2017. **BRADFORD MCKEE**

## WWCOT to Become Part of DLR Group

**THE CALIFORNIA ARCHITECTURE** firm WWCOT is merging with the Omaha, Neb.-based DLR Group, both firms announced on Feb. 23. WWCOT's five offices (including one in Shanghai) will be known as DLR Group WWCOT. The merger helps DLR Group, a firm of 500, extend its reach westward: DLR previously had 15 offices around the country, but only one was in California. "We do work with national clients, and ... California is obviously a place many of our national clients are," says Jon Pettit, a DLR managing principal.

WWCOT boasts a long history in California and an extensive portfolio of K-12 and higher education work there, which will complement DLR's education practice. "We are now the largest K-12 practice in the country," says Adrian Cohen, formerly the managing partner of WWCOT. Cohen will direct DLR Group WWCOT from the Los Angeles office and assume the new title of regional leader.

Pettit says talks with WWCOT began a few months ago. "What we thought was exceptional was that they're a very decisive firm," he notes. WWCOT's leadership, Cohen says, welcomes the chance to access out-of-state markets: "It's a win-win. It opens up all kinds of doors for everyone." **AMANDA KOLSON HURLEY**

JANUARY 2010  
ARCHITECTURE  
BILLINGS INDEX



- ↑ 44.9 commercial
- ↓ 43.1 institutional
- ↑ 40.3 mixed practice
- ↓ 50.1 multifamily residential

SOURCE: AIA





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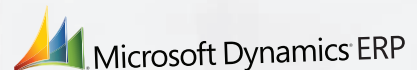
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# BUSINESS



INTERVIEW BY EDWARD KEEGAN  
PHOTO BY MIKE MORGAN

Yes, having multiple insurance policies means paying more for proper coverage, says broker **Barbara Sable**. There are, however, “more entrants in architects and engineers professional liability insurance,” she notes. “That’s keeping rates lower than they might otherwise be.”

→ **BEST PRACTICES**

## Multiple Exposure

ARCHITECTS ARE REDEFINING WHAT IT IS THEY DO FOR A LIVING. BUT THE LIABILITY ISSUES CAN BE AS DIVERSE AS THE SERVICES OFFERED.

**BIM MANAGEMENT, PRODUCT DESIGN**, eco-consulting ... chances are, your firm is doing more than just designing buildings. Which means a blanket liability policy is most likely insufficient. How do you determine what coverage you need? ARCHITECT asked Barbara Sable, an Ames & Gough broker who specializes in liability protection for architects and engineers. Before arriving at Ames a decade ago, she worked at Victor O. Schinnerer & Co., an underwriting management company. Sable likes dealing with architects, whom she describes as having a great

blend of creativity and analytical capability. “You get a chance to discuss business in a different way,” she says.

**How has the changing nature of architectural practice been addressed in the insurance industry?**

Starting with 1997 AIA documents, we saw an evolution that allowed architects to provide a broader range of services. It muddied the waters. There’s less clarity as





to what an architect does. If you read the definition of “professional services” in the policies of eight major insurance companies, they’re all different.

#### What new services are most prevalent?

We see a lot more specialty consulting—sustainability, furniture design, modular housing. If an architect is experienced in hospital design, they might be working with their clients in a business consulting mode. Architects are helping their clients understand how to maintain their systems better: facilities management, operational, and commissioning type stuff. We have clients doing BIM modeling management as a stand-alone service. That needs to be looked at from the point of liability. It becomes an IT type of exposure.

#### Isn't modular housing pretty close to traditional architectural practice?

There's little clarity as to what modular housing might mean. How much is fabricated off-site, and how much is constructed on-site? How many variations are there? That's what an underwriter is interested in. One might be concerned that if you make a mistake in a prototype, you make a thousand mistakes. Some underwriters are concerned that it's more of a product than a service.

#### And product design liability is different than architectural design?

Any time you might be doing product design, we recommend having your liability and general coverage with the same insurance company. If there's a debate as to whether [product design] is a professional liability exposure or general liability exposure, it's within one insurance company, not a debate between two companies.

#### What should the architect who is engaged in, or considering, these services do?

If you're doing something nontraditional, have a conversation with your broker. Explain what you intend to do, or what you are doing. Verify that you have coverage. Insurance is nobody's favorite topic.

#### Is there an upside, insurance-wise, to nontraditional practice?

Expanded services allow you to differentiate yourself from your competitors and allow you to strengthen your client relationships. Studies have shown that the more you strengthen your client relationships, the less frequently you have a claim. That can be a favorable development in the eyes of an underwriter.

#### But can there be additional costs of insuring for these additional services?

Everyone is concerned about the price of their coverage. Some architects hesitate to have an open conversation with their brokers and insurers. They think, “If I tell them, it might cost me more.” That may be true, but you're better off having that conversation—and having a covered claim. □

→ ENTREPRENEUR

# Think Loca

## AT SPACIO | DESIGN, FOSTERING THE BEDROCK ON WHICH TO BU



TEXT BY AMANDA KOLSON HURLEY  
PHOTO BY WILLIAM ANTHONY

**Sons of Fresno:**  
Kiel Famellos-Schmidt  
(above left) and  
Shaunt Yemenjian of  
Spacio | Design.

**HERE'S THE THING** about starting a business in a downturn: Although it may seem rash, entrepreneurs actually have more time on their hands and less to lose, financially, than they would in a busy cycle. Shaunt Yemenjian, a principal of the months-old practice Spacio | Design, knows this from experience. Last year, while working at an A/E firm in Fresno, Calif., he watched his workload evaporate—and decided it was time to act, right around the time he got laid off.

“When things are healthy, you don't have time to think about ... learn[ing] new techniques. A down economy is an opportunity to recalibrate, to define what your values are and what you want to accomplish,” Yemenjian says. There is some make-or-break pressure, too, which Yemenjian cops to: “The bottom line is, success is the only option.”



# Ily, Act Globally

## COMMUNITY NETWORKS IS ILD A SUCCESSFUL PRACTICE.

Spacio | Design (pronounced SPAH-cio, inspired by the Italian word for space, *spazio*) was officially established last September by Yemenjian and his co-principal, Kiel Famellos-Schmidt, a fellow casualty of the same recession-bitten firm. But its genesis dates back further, to 2005, when Yemenjian was working in Los Angeles and doing side projects with a colleague—Dario DiMauro—under the name Spacio.

Yemenjian moved back to Fresno, where he grew up, and DiMauro took a job in New York, but the name persisted, in a modified form. Yemenjian says it sums up the mission now as well as it did then. “Our chief interest is space. We don’t concern ourselves so much with, ‘Do we do hospitals, commercial [projects], schools?’ We are interested in anything that has the opportunity for creativity.”

So far, that has meant the conversion of a Starbucks store into a Fatburger franchise; the design of a single-family home in Hawaii; an 80,000-square-foot shopping center; a master plan for a “technopark” in Armenia, for an invited competition; and the adaptive reuse of a storage building into a banquet hall. Spacio | Design has offices in Fresno and Los Angeles, where Yemenjian attended graduate school at the Southern California Institute of Architecture. Mike Lancy is the partner in L.A., and is licensed; Famellos-Schmidt and Yemenjian aren’t—yet. Also involved in the firm on a more flexible basis is DiMauro, Yemenjian’s collaborator from earlier days, who is now back in L.A. and the firm’s director of design. The foursome uses Skype to keep in touch, but they also manage face-to-face meetings on a regular basis; Famellos-Schmidt or Yemenjian will drive to L.A. unless Lancy, an amateur pilot, flies to Fresno.

Famellos-Schmidt—a Fresno native, like Yemenjian—graduated from the University of California, Berkeley, before completing a one-year fellowship at the San Francisco nonprofit Public Architecture and then working on projects in Nicaragua and Sri Lanka. **As he spent more time in developing countries, he says, “I felt drawn back [to Fresno], to use the skills I learned in school and abroad [and to] focus that attention on improving my city.”**

So he moved back in 2006 and threw himself into community activism. He became involved in a city effort to create a 10-year plan to end homelessness and sat on the board of the group Creative Fresno. After one too

many local newspaper articles that revealed, he felt, a lack of architectural awareness, he and colleagues from the office—including Yemenjian—proposed Archop (pronounced “ark hop”), an event program modeled on Fresno’s existing Arthop, which lets community members mingle and talk with artists at gallery open houses downtown.

With the support of the AIA San Joaquin chapter, Archop launched in October 2007 and has run eight exhibits, four lectures, and three installations so far. From those events, Famellos-Schmidt spun off archop.org, a website that features local design and construction news, critical reviews of buildings, and interviews with design professionals. The aim of both the website and the events is “to build up the knowledge base” among Fresnoans regarding the built environment.

**In a supposedly flat world, Spacio’s early successes testify to the importance of local networks.** The Fatburger franchise and Hawaii project arose from Yemenjian’s and Lancy’s contacts in L.A. Likewise, Famellos-Schmidt is finding that the network he built in Fresno for altruistic reasons is “feeding directly into the business.” When he announced the new venture on Twitter, a friend offered him a free desk in his coworking suite; the firm pays only for Yemenjian’s desk there, which keeps rent overhead down to a manageable \$125 per month. People in Fresno see Famellos-Schmidt as a voice of the architectural profession, so when someone he knows has a potential project, “Even if they don’t think of me to design it, they’re coming to me for a recommendation.”

Yemenjian says it’s not yet clear whether this surge of goodwill—and of leads—will translate into billings, but he hopes so. He’s optimistic about the future of Fresno, which is located right in the middle of the state. “I see in Fresno a real opportunity over the next 10 or 15 years to become a powerhouse in California”—due, he says, to its location, its affordable housing stock, a forward-thinking mayor, and the promise of high-speed rail, which will connect to L.A.—255 miles away—in about 90 minutes.

Famellos-Schmidt is frank about leveraging his community involvement for the sake of Spacio | Design, but he adds that you have to have the right motives. “It’s not an instant payback,” he notes. “You have to be committed to the cause. Getting into it won’t work if you don’t have passion.” □

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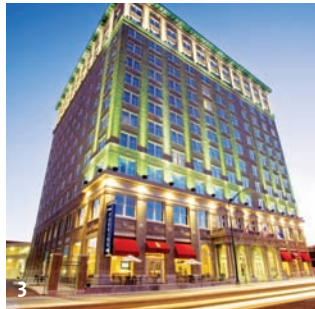
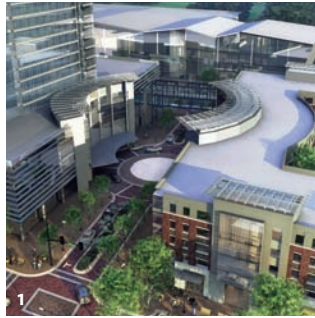
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→ LOCAL MARKET

# Jackson, Miss.

TEXT BY MARGOT CARMICHAEL LESTER



**YAZOO CLAY, A MUDROCK DEPOSIT** under metropolitan Jackson, Miss., wreaks havoc on building foundations. The material's volume can expand 10 percent with just a 4 percent increase in moisture. But local construction companies and engineers have developed standards for deeper piles and moisture management that keeps the clay stable. That, combined with public funding, has cranes in the air around the so-called Crossroads of the South.

"Downtown Jackson is in the midst of the biggest renaissance in its 200-year history," crows Charles Alexander, a partner at hometown firm Dale and Associates Architects. But there is one challenge, he laments: a lack of available local financing. "Attempts to interest local banking entities in participating in development opportunities has been met with less-than-favorable results," Alexander says. "Bankers are taking a wait-and-see attitude."

But that hasn't dampened spirits in author Eudora Welty's hometown. Corinne Fox, director of the city's Department of Planning and Development, says that thanks to a Downtown Strategic Plan completed by the city in 2004, "19 private projects totaling \$1.5 billion are being planned or are under construction. Public projects represent a total of \$400 million."

Although Jackson's population is on the decline, locals are bullish on the city's future. "Jackson's people and our civic organizations are actively working to increase attractions and services to the surrounding region," says Steve Davis, vice president of local firm Canizaro Cawthon Davis. For instance, organizations in the Fondren and Belhaven neighborhoods are engaged in community visioning designed to drive development that meets local needs. "Our strengths include a vibrant and diverse group of citizens pulling together for Jackson's success," Davis says. "Because we avoided much of the excess of the 2000s, we have also been spared much of the pain." □

**1. Capital City Development**  
**ARCHITECT:** Dale and Associates Architects, Jackson, Miss.  
**COMPLETION:** 2011. **BRIEF:** \$100.8 million mixed-use project adjacent to the new convention center includes hotel, residential, retail, and a 1,500-car parking structure.

**2. Jackson Convention Complex**  
**ARCHITECTS:** Dale and Associates Architects, in association with Arquitectonica, New York.  
**COMPLETION:** 2009. **BRIEF:** \$59.7 million, 330,000 s.f.

**3. King Edward Hilton Garden Inn**  
**ARCHITECTS:** Thomas Hamilton & Associates (lead), Richmond, Va.; Forum Studio, St. Louis.  
**COMPLETION:** 2009. **BRIEF:** \$90 million reworking of a once-vacant hotel into a combination residential/hotel building; now on National Register of Historic Places.

**4. Mississippi Children's Museum**  
**ARCHITECT:** Canizaro Cawthon Davis, Jackson. **COMPLETION:** 2010. **BRIEF:** \$13.2 million building in Lefleur's Bluff State Park will have 20,000 s.f. of exhibition space.

**POPULATION/EMPLOYMENT**  
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**MARKET CONCERNS**

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- Aging infrastructure
- Limited private financing

**FORECAST**  
 "The city's primary strength is people with vision and a can-do attitude," says Dale and Associates Architects partner Charles Alexander. "New energy and forward-looking organizations are also a winning combination. Jackson is fertile ground for launching new ideas."





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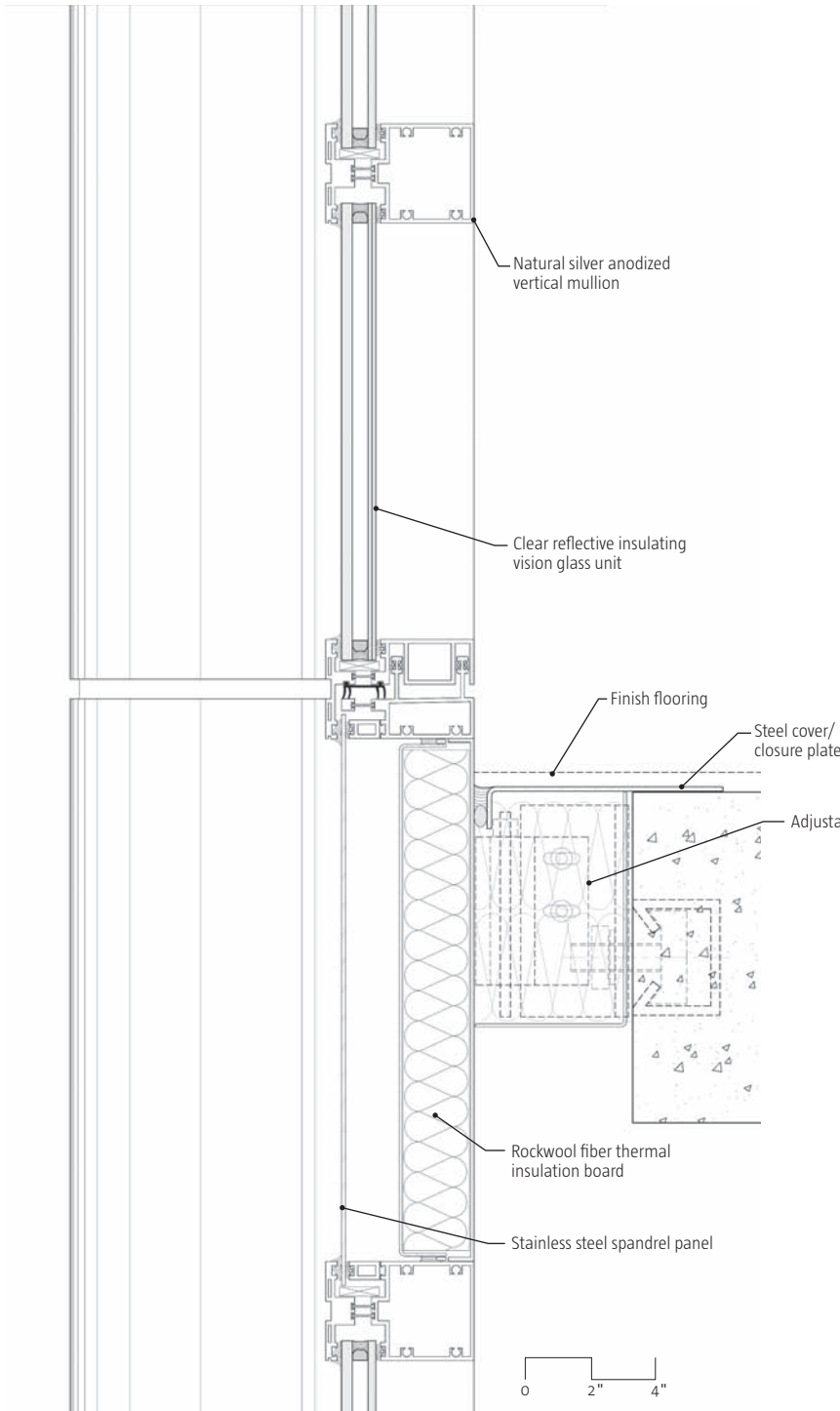
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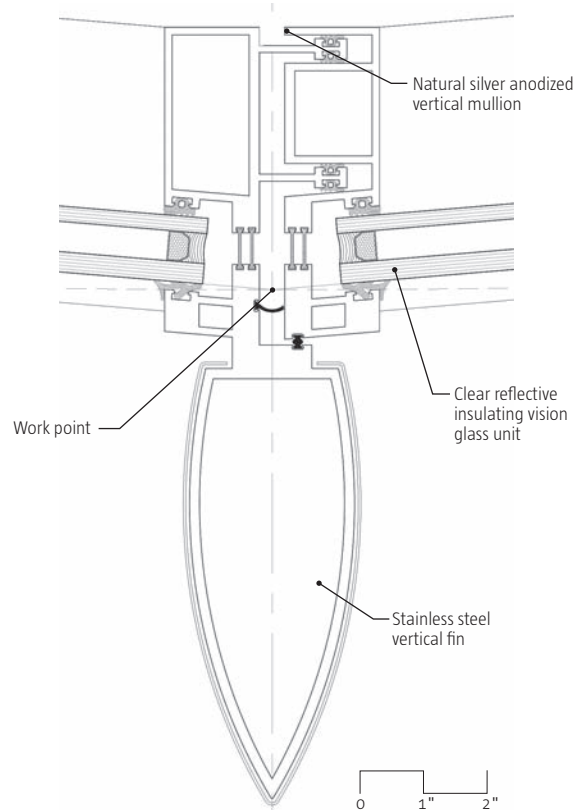


# TECHNOLOGY

**Vertical section**



**Horizontal section**



→ DETAIL

## Burj Khalifa Curtain Wall

**Architect:** Skidmore, Owings & Merrill  
**Location:** Dubai, United Arab Emirates

TEXT BY GIDEON FINK SHAPIRO





Made up of approximately 28,000 flat panels, the Burj Khalifa's curtain wall varies little in appearance from bottom to top. At the uppermost levels, the unitized panels were made narrower and taller than on lower floors, easing the installation process. The skyscraper's "curved" façade serves two design purposes, dispersing both the Dubai sunlight and the desert wind.

**FOR SKIDMORE, OWINGS & MERRILL (SOM)**, designing the cladding for the record-setting 2,717-foot-tall Burj Khalifa required simplifying technology and pushing its limits. While the tower—which opened Jan. 4 but was closed at press time because of technical problems—is constructed from standard components, nothing about it remains strictly conventional when applied at such an unprecedented scale and height.

With a surface area of 1.2 million square feet, the unitized curtain wall comprises roughly 28,000 prefabricated panels of double-layer glass set within extruded aluminum frames. Spearhead-shaped stainless steel fins vertically accentuate the mullions and cover the angled joints between adjacent panels. How does this vast architectural skin modulate the light, heat, wind, and dust of the Dubai desert?

Adrian Smith, who was the skyscraper's lead designer before leaving SOM in 2006, says the façade is curved in order to disperse sunlight. The reflective coating—Sunguard Solar Silver 20, which transmits only 20 percent of visible light and 15 percent of solar energy—would have turned a flat curtain wall into a blinding mirror. Since curved glass was beyond the budget, the rounded effect was achieved with flat panels whose angled joints are concealed behind the fins. To mitigate the inevitable buildup of dust, the panels have no horizontal ledges. Automated window-washing machines are housed at four heights along the elevation.

The curtain wall varies little from ground to top.

"It's a fully customized system, but cladding is one area where you don't want to take too many risks," says George Efstathiou, the managing partner at SOM's Chicago office who directed the project. Typical panels on the Burj measure 4 feet 6 inches wide by 10 feet 8 inches high and weigh about 800 pounds each, growing wider at the building's edges and taller toward the top. On the uppermost stories, each unitized panel was made narrower and taller to facilitate installation: Less width meant less susceptibility to wind on the hoist up, and the doubled height halved the number of crane picks.

Wind-tunnel simulations were completed using a 1:500 scale model (about 5 feet high), outfitted with more than 1,000 pressure sensors, at the labs of engineering consultant RWDI in Ontario. The tower's ability to withstand wind loads of 110 pounds per square foot—in negative as well as positive pressure—comes less from the cladding itself than from the refinement of the building's structural design and its tapering, trifoil form.

The curtain wall was one of the first Burj elements to take shape, says Smith, now a partner at Adrian Smith + Gordon Gill Architecture. SOM's client, Emaar Properties, commissioned three full-scale mock-ups early on in order to establish the tower's appearance. Later, the façade would indirectly cause major delays. When Swiss manufacturer Schmidlin went bankrupt in 2006, the fabrication contract was given to Hong Kong-based Far East Group, which rushed the components to Dubai for final assembly and heat-strengthening. □



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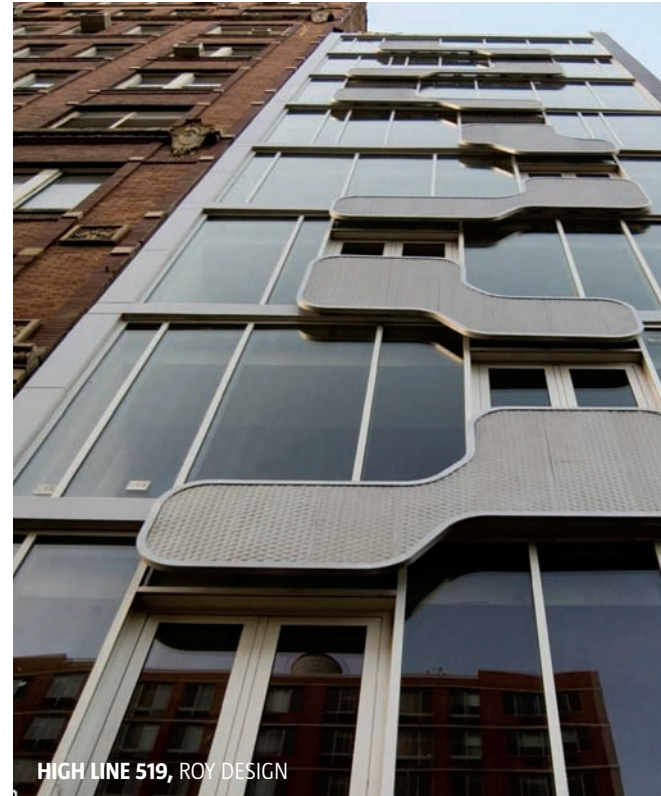
TEXT BY BLAINE BROWNELL

One of the most conspicuous uses of materials is architectural cladding. It's also among the most demanding applications, given the challenges of moisture penetration, heat transfer, UV degradation, and more. New materials not only offer striking visual effects while meeting these challenges, but they also provide creative strategies related to energy conservation and material optimization. High-performance concretes do away with steel reinforcing and reduce thermal conductivity. Metal, glass, and ceramics are profiled and shaped, adding structural rigidity even as less material is used. Responsive shading materials actively reduce solar heat gain while permitting views. The objective in architectural skins today is achieving more with less. [See more Transmaterial 3 products online.]

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## GREENPIX

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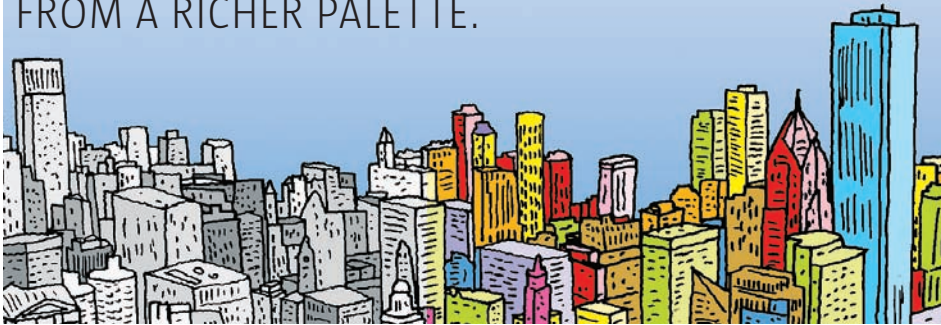


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TEXT BY LANCE HOSEY  
ILLUSTRATION BY PETER ARKLE

GREEN DESIGN WOULD BENEFIT FROM A RICHER PALETTE.



“ARCHITECTS ARE AFRAID of color,” says Janine James, polymath designer and the founder of the New York multidisciplinary firm The Moderns. “And when architects fear something, they call it uncool.” Whether or not we all suffer from some form of chromophobia, it’s true that architects tend to avoid most of the visible spectrum, with their models of white foam board, gray chipboard, and pale wood, and buildings of concrete, steel ... and pale wood. Few architecture curricula even offer, much less require, a course in color theory, a foundational subject of study in most other design disciplines.

**Sustainability seeks to make design more compatible with nature — and nature without color is, well, virtually nonexistent. Most living things depend on a rich palette to navigate their worlds, and people are no different.**

Advertisements in color are read up to 42 percent more often than the same ads in black and white, and the human eye can distinguish more than 10 million hues, so it stands to reason that color perception serves a biological purpose. In the mid-1990s, researchers at Texas A&M University studied perceptions of scenic beauty in forest landscapes and found that people invariably were drawn to the green-yellow range of the spectrum. Apparently, we associate verdant colors with food-bearing vegetation — shades that literally nourish.

Color can be a subtle persuader or a powerful lure, influencing health, well-being, and mood. In *Color and Human Response*, Faber Birren notes that red can raise blood pressure, pulse rate, tension, respiration, and perspiration, while blue has the reverse effect. An experiment by interior designer Shashi Caan during a 2006 design show found that the color of a room can influence how much people socialize in it. Other research indicates that people’s perception of temperature can change with the color of a space: Blue-green can lower the comfort range, while red-orange can raise it, by as much as 10 degrees in either direction. Could a savvy color palette reduce reliance on air conditioning and save electricity?

But color can aid energy conservation more directly. On a summer day in the South, the surface temperature of a white roof can be 80 degrees lower than that of a black roof, and studies in Florida show that surface reflectivity alone can cut a building’s cooling costs by a quarter. U.S. Secretary of Energy Steven Chu estimates that lightening up the colors of all the roofs and pavement in the U.S. would slash emissions by the same amount as banning all cars for 11 years, a staggering claim.

Color can benefit the entire triple bottom line of people, planet, and profit. So why is color selection not normally considered pertinent to sustainable design? □



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# Windows, Doors & Glazing

TEXT BY KIMBERLY R. GRIFFIN



**VT Industries** uses a thermoset process to cover the entire surface of its new **VT Powder Coat** doors with a protective shell that resists scratches, making the doors suitable for high-impact areas. Available with an antimicrobial finish, the doors come in five standard colors—Dover white (shown), white sand, black, stop red, and lapis blue—with a smooth or micro-texture coating. • [vtindustries.com](http://vtindustries.com) • Circle 100



Approved for light commercial applications, **Ply Gem Windows'** Mira Premium Series Impact Windows now include casement options. The impact-resistant glass is designed for coastal regions and prevents wind-borne debris from breaking through. Eight exterior color options and several styles are available. The series is Energy Star qualified for all climate zones, incorporating low-E glass with argon gas to reduce heat loss. • [plygem.com](http://plygem.com) • Circle 101





The **Gramercy Series** levers are the newest addition to **Sargent Manufacturing Co.**'s Studio Collection. Inspired by New York's Gramercy Park neighborhood, the decorative levers can be used with commercial-grade mortise and tubular locks, electromechanical and access control locks, exit devices, and master key systems. Polished and satin stainless steel finishes are available, with optional inserts of textural Santoprene rubber, black or brown leather, birch, or brushed stainless steel. Each lever incorporates a MicroShield antimicrobial coating to reduce the spread of bacteria. • [studiocollection.com](http://studiocollection.com) • Circle 102



**AElement** from Salto Systems is a new RFID wireless hotel lock that allows end users to control an entire building's security, grant access privileges to specific rooms, and gather audit trail data from every door—all from the front desk. AElement operates on a 2.4-GHz wireless network to communicate in real time with the server via a series of gateways and repeaters. If the connection is lost, it will automatically scan for an alternate signal. • [saltosystems.com](http://saltosystems.com) • Circle 103

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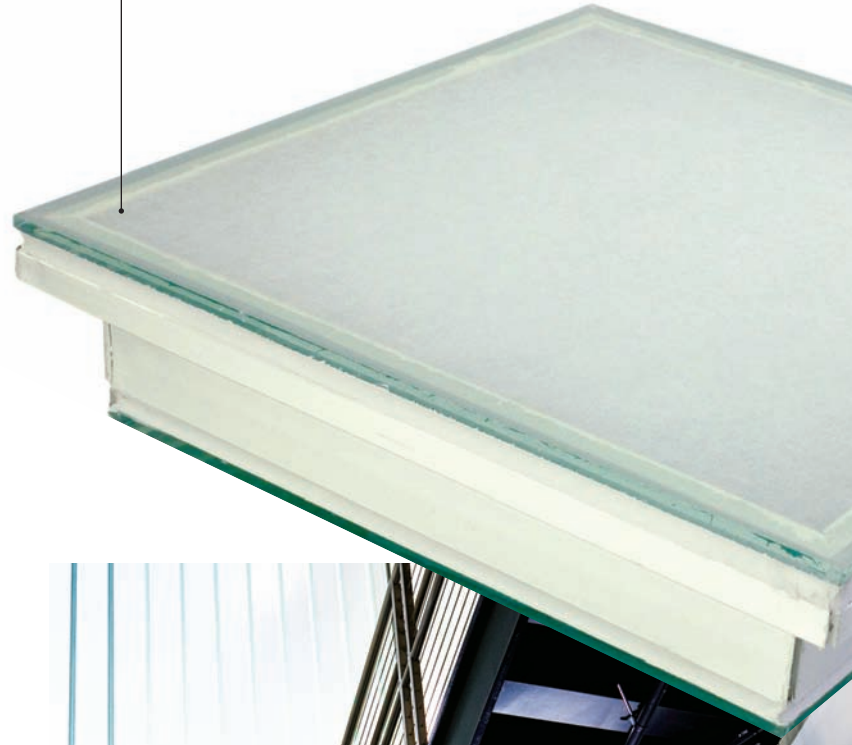
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The Pilkington Profilit Hurricane translucent glass system from Technical Glass Products (TGP) is approved by Miami-Dade County and the state of Florida for 60-PSF design loads in channel glass lengths up to 10'. The system consists of self-supporting cast glass channels and an extruded metal perimeter frame and protects buildings against high winds and windborne debris while admitting natural light. Several colors, coatings, and patterns—in textured and nontextured glass—are available. • [tgpamerica.com](http://tgpamerica.com) • Circle 105



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# CULTURE



→ EXHIBIT

During the Victorian age, British architects like Charles Barry and A.W.N. Pugin, designers of the Houses of Parliament (below), rediscovered their nation's medieval architectural heritage. Photography became a critical tool for both preservationists and practitioners, as London's Victoria and Albert Museum explores in the exhibition **Gargoyles and Shadows: Gothic Architecture and 19th-Century Photography**. Through May 16. [www.vam.ac.uk](http://www.vam.ac.uk)



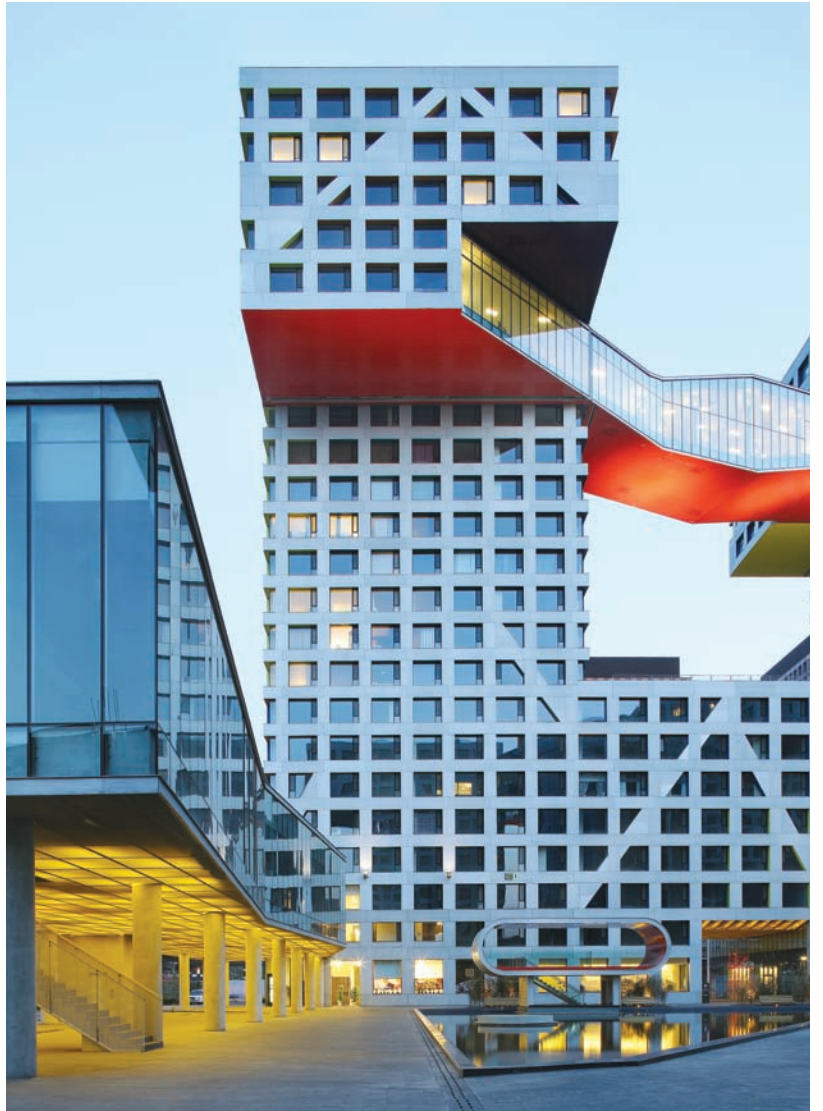
## →EXHIBIT

Last fall, blogger Geoff Manaugh invited designers to take part in a studio he led on the spatial implications of quarantine. Their responses are on display in **Landscapes of Quarantine**, at New York's Storefront for Art and Architecture. Bring your own hazmat suit. Through April 17. [storefrontnews.org](http://storefrontnews.org)



## →FILM

Save the Hamilton Wood Type and Printing Museum! That's the simple message of filmmaker Justine Nagan's documentary, **Typeface**. The struggling museum, located in a preserved type factory in Two Rivers, Wis., boasts a collection of 1.5 million wood type specimens (above). The real jewels of the museum, however, are its volunteers: elderly former factory employees who are among the last practitioners of the art of wood-type fabrication. [typeface.kartemquin.com](http://typeface.kartemquin.com)



## →BOOK

In his latest monograph-cum-think piece, **Urbanisms: Working With Doubt**, Steven Holl argues that cities shouldn't be developed strictly according to rational formulas, and that urban design would benefit from heavy doses of intuition, uncertainty, and subjectivity. His 2009 Beijing complex, **Linked Hybrid** (above), serves as a case in point. \$55; Princeton Architectural Press

LEFT: KARTEMQUIN FILMS; RIGHT: FROM **URBANISMS: WORKING WITH DOUBT**, STEVEN HOLL, PRINCETON ARCHITECTURAL PRESS 2009





Marin County Day School  
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→ CRIT

# A Plan for Haiti

ARCHITECTURE FOR HUMANITY LAYS OUT A RECONSTRUCTION ROADMAP.



TEXT BY ARCHITECTURE FOR HUMANITY

**ALMOST TWO MONTHS** after its Jan. 12 earthquake, Haiti no longer dominates the news. But it's still top of mind for Cameron Sinclair and Kate Stohr, co-founders of the design services nonprofit Architecture for Humanity (AFH). The group, which has been part of Haiti's recovery since the first post-disaster hours, published "A Plan for Reconstruction"—an edited version of which appears here—on *The Huffington Post* on Jan. 17, and then on its own site on Jan. 18 ([bit.ly/9QnFmL](http://bit.ly/9QnFmL)). Updates appear on the AFH site as partnerships are made and actions move forward. Reached by phone weeks later, Sinclair says of the plan, "It's been pretty well received by all communities." Because half of Haiti's population is under the age of 20, he notes, getting schools up and running is a pressing short-term goal. **Of more immediate concern is how the many temporary housing camps will weather the rainy season, which peaks in May, and the hurricane season that starts in June.** "One of our partners is managing a camp of 50,000—parts of it will flood," Sinclair says, soberly. "The health issues related to that are going to be astronomical." BRAULIO AGNESE

## Haiti Quake: A Plan for Reconstruction

1. *Community-Based Anchors:* We will set up community resource centers to supply architecture and building services to community groups, NGOs, and social entrepreneurs on the ground. We've already talked with a dozen local and international organizations to create the Haiti Rebuilding Coalition.

2. *Distribute Lessons Learned:* Translate and distribute the *Rebuilding 101 Manual* we developed after Hurricane Katrina and the tsunami. If we only share "best practices" we never really adapt and learn. The handbook of "what not to do" is far more valuable.

3. *Earthquake-Resistant Housing Manual:* Adapt, translate, and distribute an earthquake-resistant housing manual for local NGOs and community groups. A coalition can work on this, including Haiti-based AIDG, Build Change, Engineers Without Borders, and other partners.

4. *Provide Building Expertise:* Provide teams of architectural and construction professionals to develop and build community facilities, including schools and



medical centers. These teams will be local and regional, with some international support. The full-time staff must also have a unique knowledge of disaster mitigation and long-term sustainable development.

5. *Build a Construction Workforce:* Train and educate incoming volunteers and community members in building safely, emphasizing the need for sustainable materials and construction techniques. It is not about just building homes, but jobs.

6. *Disaster Preparedness:* Hurricane season is primed to devastate Haiti once again. If a hurricane hits Haiti head on, the loss of life will be severe, and every housing camp will be wiped out. Last year we developed a hurricane-resistant disaster-recovery center for Port au Prince. We will complete that project and look to implement other centers.

7. *Build Schools:* We will design, develop, and implement community and civic structures for various partners. Beyond the basic human right to give children access to education, if they don't have a place to go, parents can't work, and there is no economic stability. Schools are the focal point in community recovery.

8. *Implement Digital Acupuncture:* Working with groups like Inveneo, Samasource, AIDG, and the 50x15 Foundation, we can incorporate information communications technology into all of the community facilities. Bridging the digital divide, we can give the

aid agencies the technology they need to expedite the recovery process but also upgrade the digital infrastructure of Haiti for the long term.

9. *Safe, Secure, and Sustainable Housing:* It is our job to build homes that are not only safe but incorporate the needs, desires, and dreams of the families that will live in them. Additionally, we are not just building a roof over someone's head—we are building equity. We can force better building codes by building examples of what the future will look like.

10. *Support Social Entrepreneurs and Job Creation:* As in many of our other post-disaster programs, we will work with women's empowerment groups and artisans to help rebuild their facilities, speeding up job creation and the ability to distribute microloans.

11. *Open Source and Share Everything:* If your focus is social change, not financial gain, it is only innovative if it is shared. We were fortunate enough to win the TED Prize in 2006, and from that [\$100,000] we built the Open Architecture Network. All of the works we produce are shared openly, under Creative Commons license. In two years, hundreds of humanitarian design solutions have been uploaded. By connecting with other NGOs and open sourcing construction documents, we can influence many building programs in the region. We can leave a legacy of innovative, locally appropriate solutions to protect from future disasters. □



**Kate Stohr and Cameron Sinclair** co-founded the San Francisco-based nonprofit Architecture for Humanity in 1999. The group brings design, construction, and development services where they are most critically needed, both on an ongoing basis and in response to natural disasters.



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TEXT BY MIMI ZEIGER

→ LETTER FROM NEW HAVEN

# Pop Rules

WEIGHING THE LEGACY OF THE **YALE LAS VEGAS STUDIO.**

**“WELL, ‘WHAT HAPPENS IN VEGAS ...’**” began a Yale University professor, Emmanuel Petit, about halfway through the first day of the “Architecture After Las Vegas” symposium held at the New Haven institution in January. It was just a matter of time before someone invoked Sin City’s marketing slogan—such low-hanging fruit at a highbrow conference. The crowd that filled the auditorium of Paul Rudolph Hall—academics, architects, and students—tittered at the pop-culture quip.

Pop was the order of the day. The conference, organized to celebrate the work of Robert Venturi and Denise Scott Brown, was held in conjunction with a pair of exhibitions, “What We Learned: The Yale Las Vegas Studio” and “The Work of Venturi, Scott Brown and Associates,” which featured, among other things, the gilded antenna from the architects’ Guild House apartments. Also hanging in the Architecture Gallery were photographs of that 1968 studio trip to Vegas: oversized snapshots that capture a desert city full of signs and parking lots. In light

of CityCenter (see page 44), the Vegas in the viewfinder looks oddly innocent, but when Venturi and Scott Brown and students touched down for 10 days of research, the Strip was the Wild West of architectural production.

The 1972 book that followed, *Learning From Las Vegas: The Forgotten Symbolism of Architectural Form*, is now almost as iconic as the Stardust sign. Discussed at length by several speakers, including Columbia University architectural historian Mary McLeod and Ohio State’s Aron Vinegar (author of *I Am a Monument*, a 2008 book about the book), *Learning From Las Vegas* is best known for introducing symbolism with its influential discussion of Ducks and Decorated Sheds. But in her keynote address, **Scott Brown made clear that the Learning From Las Vegas studio was as much a social project as it was about form (something that gets lost when Venturi and Scott Brown’s work is lumped under Postmodernism).**

Defying prescriptive modernist orthodoxies about form and planning, the studio took the progressive





After Robert Venturi and Denise Scott Brown visited Sin City in 1968 (left), Yale students in tow, the book they wrote with Steven Izenour became a seminal architectural text. But what the husband-and-wife team pursued in their *Learning From Las Vegas* studio was also fundamental to their architecture practice, as a recent exhibit (far left) at the Yale School of Architecture Gallery, "The Work of Venturi, Scott Brown and Associates," demonstrated.

teachings of 1960s social scientists and activists such as Herbert Gans and Jane Jacobs to heart. A marked shift within the discipline, the studio was, according to Scott Brown, an activist outgrowth of the movements then bubbling up on campuses: civil rights, social justice. Or as Yale's architecture dean, Robert A.M. Stern, said, Venturi and Scott Brown "have the ability to see things as they are and not how they think they should be."

Theirs is a philosophy that continues to inspire subsequent generations of practitioners. "They continue to exert greater and greater influence on us," noted attendee Michael Meredith of MOS, drawing parallels between the heroic forms the architects battled against then and starchitecture today. **"Basically, the corporate-expressionist architecture they were fighting against still remains. If anything, it has become more dominant."**

Contemporary cross-disciplinary design studios and books such as those in Rem Koolhaas' *Project on the City* series are clearly indebted to *Learning From Las Vegas*. Bringing a sociologist's toolbox to architecture expanded practice in the process. "In retrospect, Las Vegas reminds us to follow the path and condition of open-mindedness in meeting new conditions," Scott Brown reflected.

Indeed, though architecture is fragmented into many camps, Venturi and Scott Brown's vision and wit are still meaningful. "Their explorations of high and low culture, of the landscapes of pop—and ordinary—culture, of representation, image, and architecture in an era concerned with communication and media, seem completely relevant," says Sam Jacob, a partner at the London-based firm FAT who is teaching a Yale studio. "Maybe more relevant now than in their own time." □



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TEXT BY BRAULIO AGNESE  
PHOTO BY STEFAN HESTER

"Architects want to do the right thing when it comes to using reclaimed materials," says PlanetReuse founder and principal **Nathan Benjamin** (right), "but they don't always have the time to do the research." Operations manager **Tim Bensman** adds, "We provide a professional face to these materials."

**THE GREAT THING ABOUT** entrepreneurship is there's always a gap to be filled. Nathan Benjamin started planetreuse.com in January 2008 as a Craigslist/eBay-type site for reclaimed building materials that could be used in new commercial projects. He realized, however, that although the listings were diverting waste from landfills, they weren't addressing the communication gap between design and construction teams and the deconstruction/demolition community. So Benjamin and his business partner, Tim Bensman, became brokers for reused materials.

"Each discussion about this topic is different—for contractors, for architects, for owners," Benjamin says, and PlanetReuse, which continues to list products, talks to each party in its own argot—specifications, schedules, bottom-line dollars. Benjamin and Bensman, LEED APs and friends from their time at a Kansas City, Mo., general contractor, work with architects during the design phase at no cost, finding chances for materials reuse. (Here, Benjamin notes, his architectural engineering degree proves invaluable.) If there's a match, PlanetReuse stays on through the project's end, taking a brokering fee at the product-purchase phase while offering up to 20 percent savings over similar, new products.

Benjamin says he and Bensman have spent the past two years ensuring they had a solid business model "in our backyard," and the website highlights mostly Midwestern projects, including one in tornado-ravaged Greensburg, Kan., with BNIM Architects. Their diligence has paid off. The company claimed 300 percent growth last year, and a recent issue of *KC Business* labeled Benjamin one of the area's "rising stars." Now, PlanetReuse is looking to expand its horizons. "We're talking about some military-type projects in Guam," notes Benjamin. Adds Bensman: "We can go anywhere sustainable minds want to take us." □

## LINKS

### **aia-mn.blogspot.com**

Now four years old, Threshold, AIA Minnesota's official blog, has picked up speed recently. Most posts focus on local things—the occasional "In Plain Sight" series, for example, is about lesser-known parts of the Minnesota landscape—but Threshold also covers topics of national and international interest.

### **mappingmainstreet.org**

What, exactly, is "Main Street"? Politicians and newspaper editorials would have you believe it's a single place that represents a "true" America—as opposed to, say, the rarified realms of Wall Street or K Street. In fact, the U.S. contains almost 10,500 Main Streets. Each has its own story to tell, and the documentary project Mapping Main Street wants to record them all.

### **zweigwhite.blogspot.com**

Top AEC consulting company ZweigWhite finally joins the blogosphere with The Board Room, which launched in November. Now you can enjoy business-savvy insights, information, and opinions in bite-size form.

### **nybooks.com**

Once in a while, the language of architecture applied to another realm seems absolutely fitting. A recent example is *n+1* assistant editor Charles Peterson's *New York Review of Books* essay about the websites MySpace and Facebook. The custom, "urban culture" of the former, Peterson emphasizes, contrasts sharply—and to MySpace's detriment—with the latter's ongoing "suburban period," in which homogenization of form has helped catapult Facebook to the top of the social-networking business. • [bit.ly/gmFIFN](http://bit.ly/gmFIFN)

### **detroit.blogs.time.com**

Last summer, Time Inc. bought a Detroit house to serve as the home base for a multi-outlet journalism project about the city. Why? The Motor City's rise, fall, and future, wrote editor-in-chief John Huey in a September article introducing the yearlong effort, constitute a "great American story." In its first five months, The Detroit Blog—which reports on daily life, business, and culture—has proved to be a compelling read.





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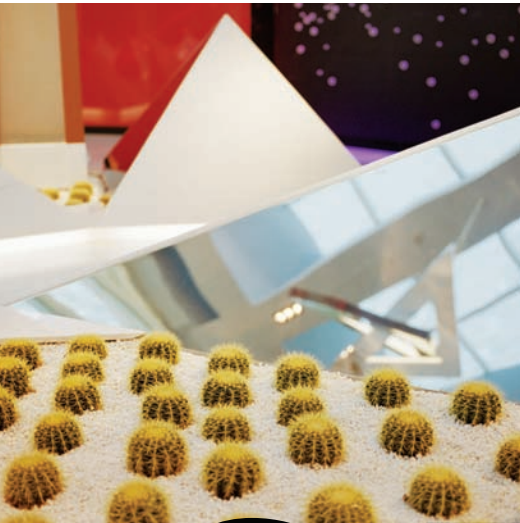
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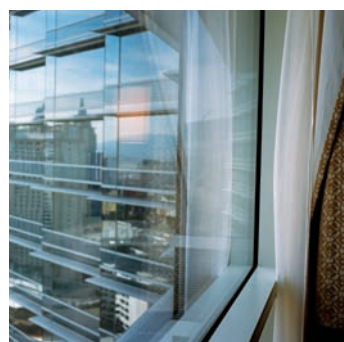
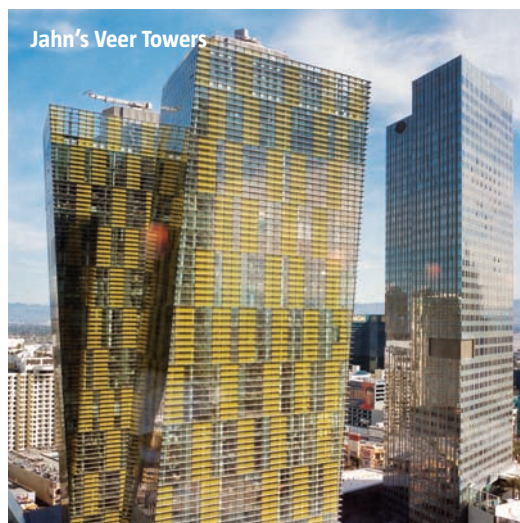


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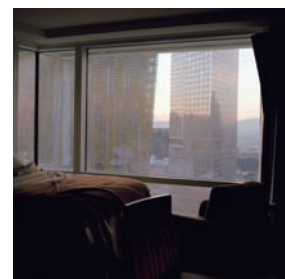
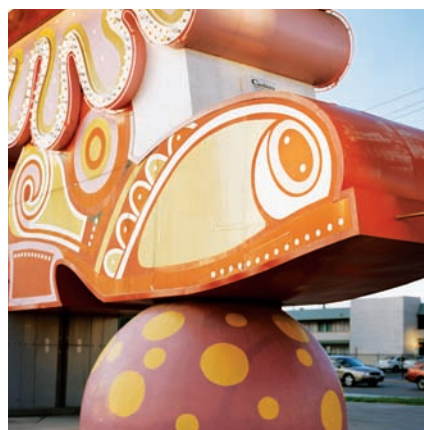


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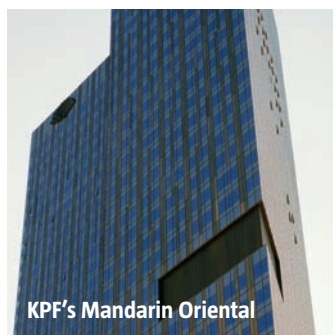
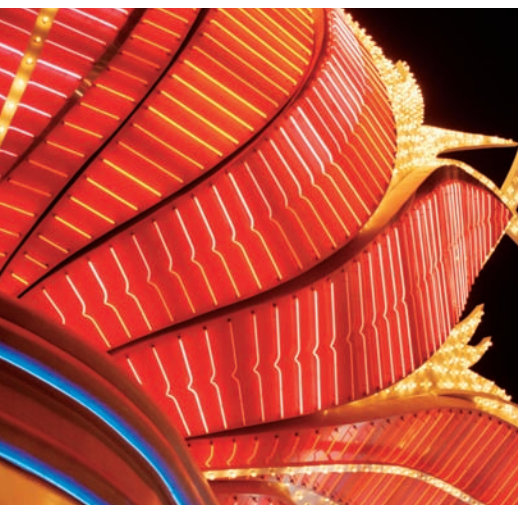




Libeskind's Crystals mall



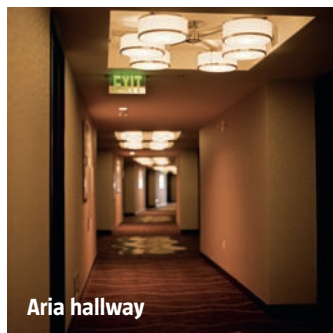
Foster's Harmon Hotel & Spa (background) and Crystals (foreground)



KPF's Mandarin Oriental



Aria porte cochere



Aria hallway



Crystals interior



TEXT BY FRED A. BERNSTEIN  
PHOTO COLLAGE BY JASON FULFORD

## THE NEW LAS VEGAS CITYCENTER WAS DESIGNED BY A RAT PACK OF STAR ARCHITECTS. CAN THEIR HIGH-MODERN MEGAPROJECT MOVE SIN CITY'S DESIGN STANDARDS BEYOND THE ERSATZ?

**"THERE MUST BE AN ELEVATOR CLOSER TO THE ROOM,"** sighs a woman from Nebraska, pulling a suitcase down a hallway at the Aria Hotel. Like a real city, CityCenter, the new Las Vegas resort that includes Aria and three other hotels, forces people to walk—except that, at CityCenter, most of that walking takes place indoors. After all, Aria, with more than 4,000 guest rooms, has hallways that are 300 yards long.

Even in a city built on poker and slot machines, CityCenter, which opened in December, is an extraordinarily big gamble. Its owner, MGM Mirage, is betting that people will flock to a resort that offers contemporary architecture by the likes of Daniel Libeskind and Helmut Jahn instead of the kitsch of the Venetian, with its camera-ready gondoliers, or Paris, with its ersatz Eiffel Tower. Yet **it's not at all certain that people from Houston will want to spend time in a complex that, when all is said and done, resembles downtown Houston.**

If CityCenter fails—and its future is anything but clear—that will be seen as proof that Americans don't like modern architecture. Which could impact what gets built, far beyond the Las Vegas Strip, for decades.

The gambler who made that bet—the bet that could affect not only his career, but yours—is Jim Murren, the 48-year-old chairman of MGM Mirage. Murren launched the project in 2004, hosting weekly meetings with prominent architects, mostly listening, he said, and absorbing their collective wisdom.

That part was nothing new for Murren, who studied art history and urban planning at Trinity College in Hartford, Conn., and planned to go to graduate school for architecture. In his senior year, he applied for a fellowship that would have taken him to Europe. When he didn't get it, he opted for a job on Wall Street, where he became so successful that his earlier ambition faded.

And then, like a lot of people who study architecture but don't ever practice, he found a way back to his first love, in his case building more in five years than most architects can create in a lifetime. CityCenter cost MGM Mirage and its partner, Dubai World, some \$8.5 billion, making it the largest privately funded construction project in the history of the United States.

**Murren could have gone for a modernist theme park—perhaps with one hotel based on Mies van der Rohe's Lake Shore Drive apartments, another based on Le Corbusier's Unites d'Habitations, and maybe a restaurant shaped like Fallingwater.** But that would have been as fake as Luxor, the glass pyramid just down the Strip from CityCenter, which represents the "old approach" that Murren hopes to bury.

Murren lived in Manhattan for many years and believes in the importance of downtowns, as well as the value of modernist architecture. And he doesn't just talk the talk. After moving with his family to Las Vegas, he commissioned a pre-fab house by the California architects Marmol Radziner that was trucked to the Nevada desert. In his yard is a Skyspace by James Turrell,

one of his favorite artists.

And yet his choices at CityCenter, which covers 67 acres and contains some 18 million square feet, were tame. True, he hired Daniel Libeskind to design the centerpiece shopping mall, called Crystals. The building is cutting-edge—but only in the most literal sense. And **Murren hedged his bets by bringing in David Rockwell to put a happy face on the building's interiors.** Now there are curvy, rustic looking accoutrements, including a two-story indoor pavilion that looks like a wicker basket, competing with Libeskind's angular architecture.

For the high-rise buildings at CityCenter, Murren's team narrowed a list of nearly 100 architects to five: Rafael Viñoly Architects, Pelli Clarke Pelli, Foster + Partners, Murphy/Jahn, and Kohn Pedersen Fox (KPF). But those firms weren't permitted to design the interiors of their buildings. They wanted to, according to Sven Van Assche, vice president of design for MGM Mirage, but, he says, "when I looked at their portfolios, they didn't have the eye we needed."

Instead, the company brought in more than 45 interior design firms. They include a few established brands: Bentel & Bentel Architects for the vast café in Aria; Karim Rashid for the Silk Road restaurant in the Vdara hotel; and Adam Tihany for the interiors of the Mandarin Oriental hotel.

But all of that makes CityCenter a rather odd advertisement for contemporary architecture, since the architecture is, with just a few exceptions, only skin-deep. It is, however, an advertisement for collaboration. Each section of CityCenter had an architect of record: HKS for Aria, Leo A Daly for Vdara, and Adamson Associates for the Mandarin, Veer, Crystals, and Harmon structures. Those firms, in turn, reported to Gensler, which served as executive architect for the entire project.

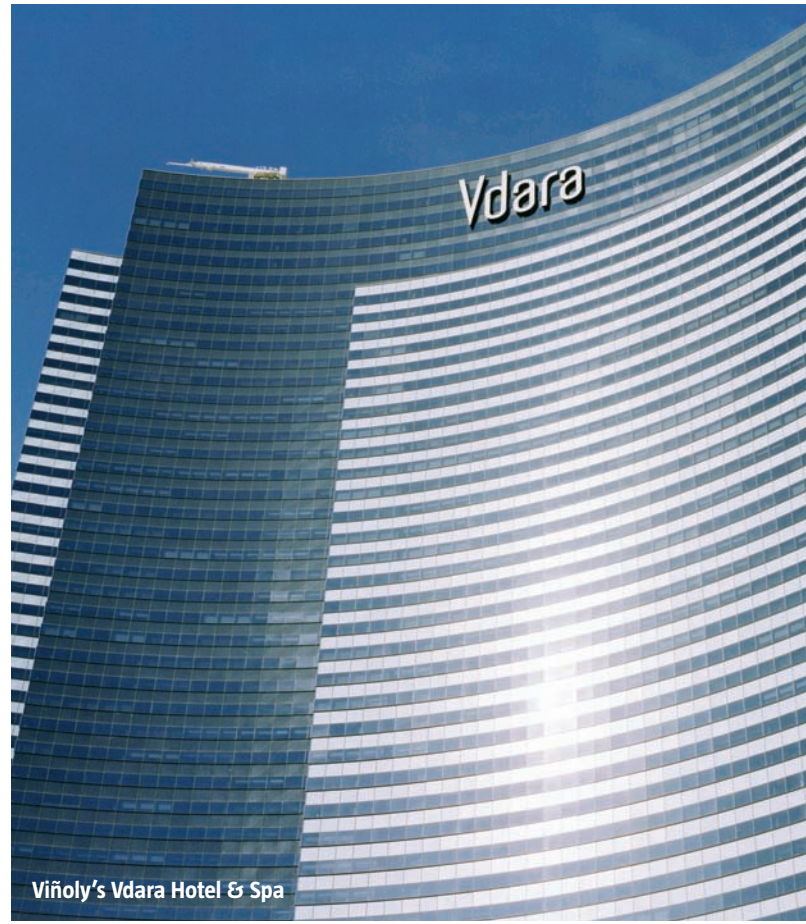
How did the multi-tiered collaboration work? The design architects were responsible for massing and curtain walls; the architects of record did most of the construction documents; and Gensler coordinated their efforts. "We were the glue that held the project together," says J.F. Finn, Gensler's principal in charge of CityCenter. In addition to serving as a kind of owner's rep, his firm got involved in design decisions during the construction phase, says Finn. But **Gensler's main role, he says, was as a "cat herder."**

With all those cats to herd, there were countless meetings and presentations. For MGM, the main players were Van Assche; Bill Smith, president of the MGM Mirage Design Group; and Bobby Baldwin, president and CEO of CityCenter and chief design and construction officer for MGM Mirage. Murren attended meetings when he could and was even known to sketch ideas.

During a freewheeling conversation in January in his office inside the Bellagio Hotel, Murren seemed surprised to learn that architecture isn't a lucrative profession; after all, he said, he had paid his architects "very handsomely" for their work. (And when a man who has







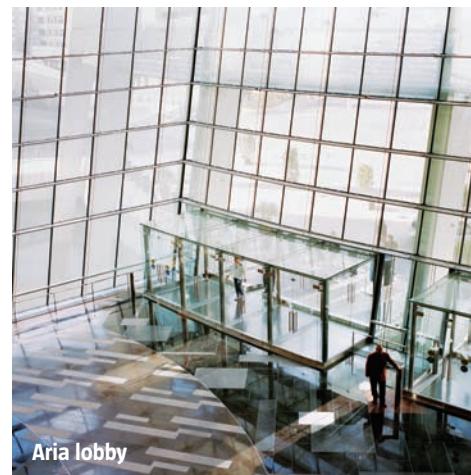
Viñoly's Vdara Hotel & Spa



CityCenter Tram



Café Vetro at the Aria



Aria lobby



Pocket park



made as much as \$8.5 million a year says handsomely, he means it.) So what did his star architects deliver?

The Harmon Hotel, a capsule-shaped tower with a façade of glass that seems too blue in places—as if a protective covering of plastic hadn't been removed—may be the least important building of Norman Foster's career. It doesn't help that the tower, which was supposed to reach 49 floors, topped out at 28. (The top 21 floors were canceled after defective rebar installation was discovered in 2008.) But it's hard to see how the building would have been up to the standards of Foster's best work even as originally designed.

A further indignity: The interior build-out was delayed as part of a cost-postponement strategy. Now, because there's no one to look out the windows, much of the exterior is covered with billboards for "Viva Elvis," a show in Aria's theater.

**The beneficiary of Foster's woes may have been Helmut Jahn, whose 37-story Veer Towers are now more visible from the Strip than they would have been had Foster's building reached its intended height.** What did Jahn, who like Foster can be a great innovator, make of the opportunity? His towers lean toward each other "like a pair of drunken tourists careening down a hotel corridor at the end of a very long night," in the words of *Los Angeles Times* architecture critic Christopher Hawthorne. But the mustard-colored exteriors make the careening tourists seem a little queasy.

KPF and Viñoly designed the complex's other "small hotels"—the 400-room Mandarin Oriental and the 1,500-room Vdara, respectively. Viñoly's is the least appealing, a vast crescent of dark glass far back on the CityCenter site, reminiscent of the Wynn hotel at the other end of the Strip. KPF's Mandarin Oriental, by contrast, approaches the Strip with a "plinth" that is comparable, in size and appearance, to a sleek new high school. The glass tower that rises from the platform is a beautiful envelope, but not much more than that. Ko Makabe, the chief designer for KPF, points to its well-proportioned entry courtyard, which is meant to give Mandarin guests a feeling of arriving someplace special, and its Asian-inspired curtain wall (made in China after U.S. bids came in too high). All of which are lovely, but none of which break new ground.

And yet the influence of KPF on CityCenter goes beyond the one hotel. The entire complex reminded me of Roppongi Hills, a mixed-use development in Tokyo designed largely by KPF. It turns out that, soon after CityCenter was proposed, Makabe and KPF principal Paul Katz led Baldwin, Smith, Van Assche, and others on a trip to the new complex. Impressed by what he saw, Baldwin invited KPF to compete for the plum Aria commission. Pelli prevailed in that bake-off, but KPF was brought back in when Mandarin Oriental chose a CityCenter location.

**It is Cesar Pelli's vast building, which curves around both of CityCenter's traffic circles, that dominates the complex, both in size and quality.** The Aria tower is extraordinarily graceful, thanks to metal louvers that break the vertical sweep and sawtooths that break up the horizontal arcs, without ever becoming busy. And the interiors are defined by the architecture. The hotel lobby, a towering space supported by huge, angled beams, is open and light, with exposed structure that ensures that Pelli's work wasn't hidden by an interior designer. In fact, Remedios Studios of Long Beach, Calif., filled the space with benches and dividers that recall, with just the right

level of abstraction, the amenities of a city park.

At Aria, even the guest rooms respond directly to the architecture; the building's hundreds of sawtooths mean that each room's windows include a 90-degree turn. Since guests want to be able to black out sunlight, MGM struggled with the right drapery system, according to Van Assche, but resisted the temptation to value-engineer away the sawtooths. Meanwhile, the building's gentle curves mean you never see the full length of those hallways, a blessing for visitors.

That its largest building is by far its most graceful is only one of CityCenter's contradictions. Another is that it wants so badly to be urban, but turns out to be anything but. The site was master-planned by Ehrenkrantz, Eckstut & Kuhn Architects (EEK), the Manhattan firm known for designing New York's Battery Park City 30 years ago. EEK design principal Peter David Cavaluzzi says his most important goal at CityCenter was to bring "buildings and activity right to the Strip, which to a large extent is very new for Las Vegas, where everything in the past had been pulled back."

Admirable idea, but the size of the complex means that only a few of its buildings could have street frontage—the others are reached via traffic circles, which make some, but not enough, provision for pedestrians. A tram connects CityCenter with the Bellagio to the north and the Monte Carlo to the south; given its short range and lack of connections to the rest of Las Vegas, it can't really be called public transportation. **The complex would feel at home in Singapore or Dubai, but in a city like New York, a 67-acre interruption of the street grid would be considered utterly anti-urban.**

"We tried to do things that are less about the automobile," Cavaluzzi acknowledges, "but in Las Vegas, the force of the car asserts itself so profoundly. I think we came close." In 20 or 30 years, he speculates, "maybe CityCenter can be retrofitted to respond to new types of transportation technology."

**Another contradiction is that the project is touted as a model of green design, but what it really shows is the limits of that designation.** "The toilets are being used in Mexico right now," says Murren, the chairman, explaining one of the building's sustainable features: The contents of the Boardwalk Hotel, which previously occupied the site, were recycled whenever possible; that included sending bathroom fixtures south of the border. And he reels off a list of other green features, which together, he says, cost hundreds of millions of dollars—expenditures he "had to justify to the shareholders." (The buildings have received a series of LEED Gold ratings.) It's impressive for a CEO to know about—and even go to bat for—things like low-flow showerheads.

Yet it's hard to imagine anything less green than 18 million square feet of air-conditioned space in the Mojave Desert. Admirable as some features of the complex may be, the only truly sustainable decision would have been not to build it.

Some days, the CEO himself leads tours of the complex, and he always makes a point of stopping in a small park, a tightly defined rectangle between the Aria lobby and Crystals. It's no wonder that Murren—who wrote his senior thesis on vestpocket parks—admires this compact park with a classy Henry Moore sculpture as its centerpiece. Clearly, he knows that small can be beautiful, too. □



## MEET THE GEODESIGNER

GIS TECHNOLOGY, LONG RELIED ON BY PLANNERS, IS MAKING INROADS INTO ARCHITECTURE. WHAT HAPPENS WHEN DATA-RICH MAP LAYERS MEET 3D BUILDING DESIGNS?

**EARLIER THIS YEAR**, nearly 200 people—planners, engineers, developers (of both software and real estate), architects, and academics—gathered in Redlands, Calif., at the corporate headquarters of ESRI. Founded as the Environmental Systems Research Institute in 1969 by Jack Dangermond, the company is the market leader in GIS (geographic information system) technologies; its ArcGIS is the most widely used software of its kind, with versions that can be used online and on mobile phones. ESRI was hosting the first-ever GeoDesign Summit: three days of sessions and workshops geared to map out the future impact of GIS on design.

Loosely defined as the integration of geographic analysis and tools into the design process, the term “geodesign,” while not proprietarily linked to ESRI, is viewed as part of the company’s lexicon by the geospatial community, broadly composed of urban planners, cartographers, geographers and other social scientists, and emergency response and military analysts, among others. Geodesign, as Dangermond sees it, is shorthand for the complex interrelationship of spatial data and architecture. It is the interface between land use, census blocks, traffic patterns, air quality tables, and any other data set, on the one hand, and the process of building—site planning, conceptual design, programming, and construction drawings—on the other.

Dangermond, who has a master’s degree in landscape architecture from Harvard’s Graduate School of Design, is as much resident philosopher as company president, and he draws his ideas about GIS and design from landscape architect Ian McHarg’s 1969 book *Design With Nature*. McHarg’s book spelled out the connections between environmental impact, social factors, and appropriate development. Holistic planning may seem commonsensical now, but at the time, it was part of a growing backlash against Modernism’s sweeping gestures. The GeoDesign Summit expressly set out to explore technological advances, but its goals were no less lofty than to save the Earth.

“From a sustainability point of view, there’s great potential in geodesign to move design in a new direction,” explains Thomas Fisher, dean of the University of Minnesota’s College of Design and the summit’s keynote speaker. (He’s also a

OUTBREAKS OF  
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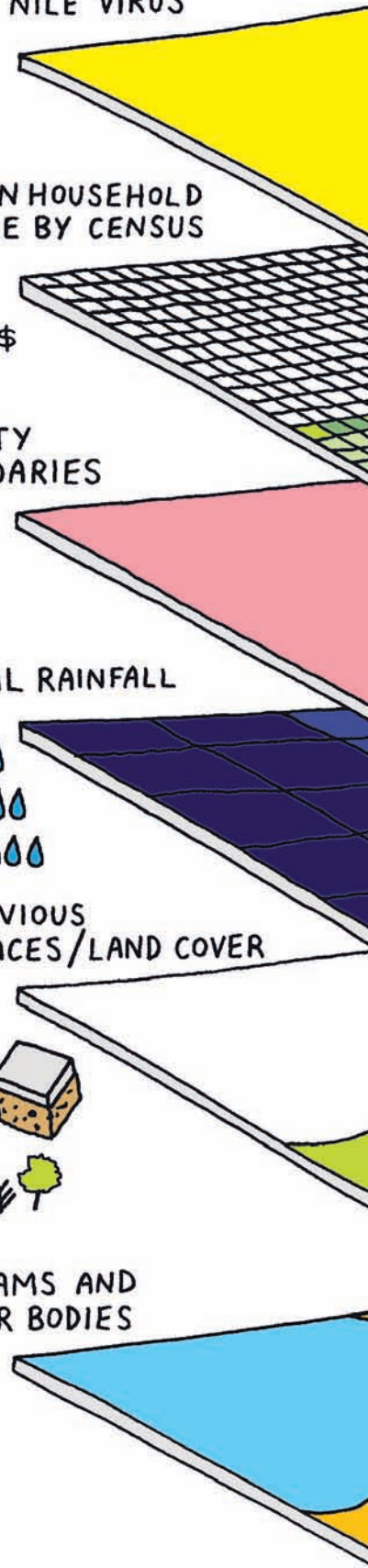
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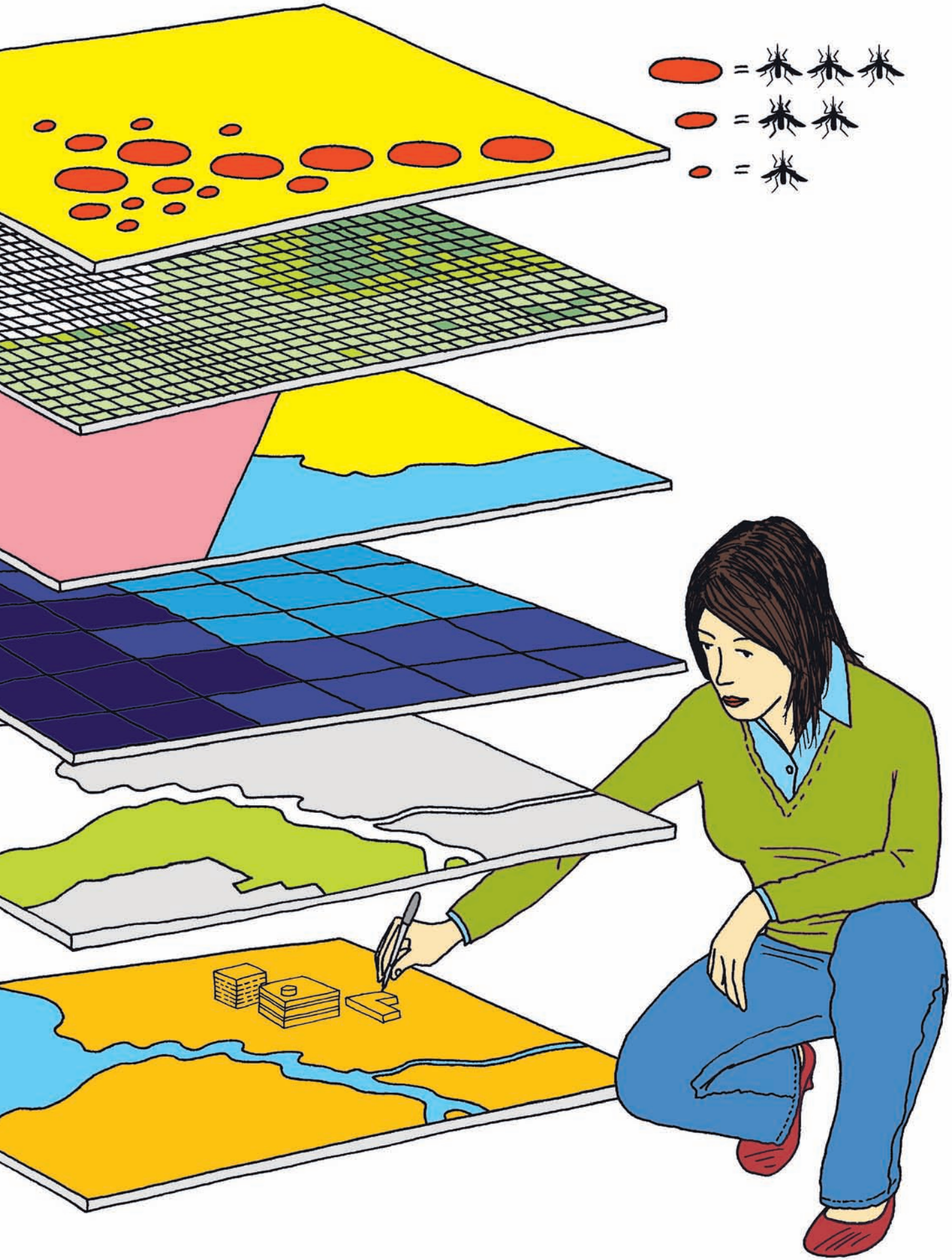
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STREAMS AND  
WATER BODIES







## Designers often work intuitively, but geodesign allows them to make decisions based on consequences such as carbon output.

contributing editor to ARCHITECT.) “It asks, ‘How can we use our buildings more effectively?’ and answers the question, ‘Do you need to build at all?’ As designers, we are often intuitive, but our decisions are not based on data. We don’t know the consequences. Geodesign allows architects to make decisions based on [impacts] such as water [use] and carbon output.” In his talk, Fisher said that geodesign could potentially forestall the kinds of housing development patterns that led to the recent economic crisis, and could help track food production and foresee possible shortages. The claims may sound omniscient, but they are rooted in real-life data.

To understand geodesign, it is important first to be clear on GIS. Urban planners, conservationists, sociologists, and others have long used it to manage and visualize database information across a region or an urban area. The U.S. Forest Service can use a GIS map to manage information about endangered species (points may represent Southern Spotted Owls), or a city manager may use GIS to layer types of crime and crime rates over land-value maps. Importantly, GIS maps can change over time, so it’s possible to track how an event can impact surrounding conditions. And increasingly, the data underpinning GIS visualizations can be downloaded by the public for free or at very low cost.

Given the right data sets, GIS can go beyond locative analysis and reveal social and cultural information. In 2005, the Spatial Information Design Lab, a research group at Columbia University’s Graduate School of Architecture, Planning and Preservation, mapped the city-prison-city-prison migration loop in five U.S. cities, with striking implications. The lab’s co-directors, Laura Kurgan and Sarah Williams, identified individual “million-dollar” blocks whose residents had been incarcerated at a public cost of \$1 million or more. “Architects tend to just use GIS for base maps or land-use diagrams,” says Williams, who teaches data visualization to Columbia’s architecture and planning students. “But that is just one slice. It offers a dynamic way of representing unseen patterns and contextual relationships across a regional area.”

So, what happens when architects, and not just planners, embrace the potential of GIS and geodesign? Things get data-rich and complicated very fast. “It used to be that we were operating in the walled garden of architecture, but now we are moving from a place where it was hard to find information to where we are flooded with place-based data,” says Nicholas de Monchaux, an architect, urbanist, and professor at the University of California, Berkeley, comparing the old analog maps and tables with Google Earth. “That change will have a sweeping effect on the design profession.” For both Williams and de Monchaux, the challenge is getting architects to think about data as part of a creative decision-making process and to translate geospatial analysis into built form.

De Monchaux’s most recent project, *Local Code: Real Estates*, is a deliberate attempt to advance how data is used. He and his students used GIS to trawl through land-use records to identify city-owned abandoned lots in New York, Los Angeles, Chicago, San Francisco, and Washington, D.C., with the thought that the sum total of these empty spaces could be optimized for better use.

Using 1,600 vacant sites in San Francisco as a case study (the aggregate parcel is the size of Golden Gate Park), the team layered climate data, health and crime studies, watersheds, public infrastructure such as sewers and transportation, and census reports over the map. With all information layers visible, they generated a landscape proposal—a system of small-scale greenway interventions—tailored to each of the sites. At every location, what was underused and wasted space was transformed into a park, a slice of urban agriculture that acts as a heat sink (optimizing thermal performance) and as part of the watershed by discharging water back into the soil. By treating the locations as both individual sites and as a system or ecology, de Monchaux was able to quantify the positive effects these greenways would have on San Francisco’s energy usage and stormwater remediation, eliminating, he claims, the need for some expensive infrastructural upgrades.

Geodesign in practice is not restricted to a single ESRI-developed software. In fact, its biggest potential for impact on the world at large comes at the intersection between tools—where ArcGIS, Google Earth, CAD, and BIM programs come together. The best way to understand the twin superpowers of GIS and BIM (building information modeling) is to think of *Powers of Ten*.



Ray and Charles Eames' 1977 short film for IBM visualizes both macro and micro systems; beginning with a couple on a picnic blanket, the film zooms exponentially outward from a distance of 1 meter to 100 million light years. This is GIS: It offers a grand, global scope. The film then reverses itself and plunges deep into cellular and atomic structures. Here, the parallel is to BIM; programs such as Revit contain the innermost workings of buildings—steel structure down to door handles and screws. “BIM/GIS integration promises the replacement of abstract zoning standards with building ... performance that can be tested and modeled for not only the building site, but ... the city on the whole,” explains de Monchaux.

Perhaps Masdar City in Abu Dhabi, in the United Arab Emirates, best illustrates geodesign's capacity for holistic analysis. Abu Dhabi Future Energy Co. and architecture firm Foster + Partners envision a planned city that is driven by solar and renewable energy and is totally sustainable—zero carbon, zero waste. Given that the city is set to house upward of 50,000 people and 1,500 businesses, each piece must act as part of a larger system in order to achieve carbon neutrality; on a grander scale than de Monchaux's Local Code, Masdar City incorporates buildings into the GIS model.

Shannon McElvaney, director of geospatial services at Pacific GPS and formerly spatial solutions consultant at Critigen, was on the multidisciplinary team responsible for Masdar City's scenario planning, translating huge spreadsheets of data—on land use, population density, energy usage, high-speed rail transportation—into three-dimensional maps that visualized the information on both an urban and a regional scale.

Because GIS can't handle the amount of information graphics used in a BIM program like Revit, McElvaney and his colleagues used basic scripting to dissect massing and pieces of the building, then placed those attributes in the GIS map and ran projections into the future. Then, by transferring the model from GIS to Google Earth, they illustrated landscape and construction scenarios in 3D. The team could quickly answer questions about how design choices affect the net carbon and energy use at each step. For example, on the regional level: How does wind flow across the desert impact the city in terms of heating and cooling? On the urban scale: What would happen to water and waste systems if the city were 50 percent commercial and 50 percent residential? On the building scale: What is the energy offset if we put solar panels on the walls or the roofs?

“The design process worked as a feedback loop,” says McElvaney of how geospatial analysis affected the architecture. “First, we would figure if we could meet our goal. Then the engineers would talk to the designers about how that would impact the buildings. Ultimately, [citywide] need for decreased energy use might change the façade skin or the structure's positioning.”

The geodesign process works for more conventional structures as well. In fact, these applications speak to something both radical and everyday. Imagine taking a design developed in BIM and placing the building's parametric attributes in GIS: for instance, a five-story building with 26 residential units and ground-floor commercial. With GIS, it is possible to see traffic conflicts and identify the need for new stoplights or more parking. In the case of an office building, it is possible to input room coordinates and corridor loading, then use GIS tools to see how the data impacts emergency evacuation.

Two big challenges face geodesign today, one internal and one external. The first is to ensure that GIS evolves into an open-source platform, rather than proprietary software, so that rapid integration and innovation can take place. The Open Geospatial Consortium (OGC) is made up of 395 companies, universities, and government agencies that are working to make GIS interfaces function seamlessly across platforms and between softwares, because interoperability is critical. The OGC advocates for free, open access to specifications.

The second challenge is training architects to design with geospatial tools. Fisher is making headway on this front, developing a geodesign curriculum at the University of Minnesota. He hopes that optimizing GIS for architecture will foster an agile profession ready to respond not only to local conditions, but also to climate change and global crises.

“All these things are happening quickly. Our decisions will affect millions of people,” Fisher says. “We don't have time to make geodesign a back-burner issue.” □

Imagine taking a design developed in BIM and placing it in GIS, making it possible to see traffic conflicts or environmental impacts.







## **EVERYTHING MUST GO**

# **Brian Ulrich is far from the only artist to take American consumerism as his theme, but he may be the one with the best timing.**

It was in 2001 that Ulrich, a photographer based in Chicago, began a wide-ranging exploration of consumer culture, a project called *Copia*. In the first two phases of the project, “Retail” and “Thrift,” he documented the buying habits of the middle and lower classes, capturing a historic boom in consumption.

At the boom’s height, back in 2005, Ulrich often would drive by a closed-up grocery store near his home. Bounded by a strip of asphalt below and a ribbon of night sky above, it looked, he thought, a bit like a Rothko painting. He took some photos, but didn’t come across many other shuttered stores. At least, not until the epic bust, which he also was on hand to chronicle.

Since May 2008, when he began the third cycle of *Copia*—“Dark Stores, Ghost Boxes, and Dead Malls”—in earnest, Ulrich has traveled the country, scouting dead and expiring malls, retail strips, and big-box stores with help from publications that cover commercial real estate and websites such as [deadmalls.com](http://deadmalls.com). A Guggenheim fellowship has allowed him to devote himself wholly to the project: “I can return to spots over and over again,” Ulrich says, citing Randall Park Mall in Cleveland, which he’s photographed four times. Wherever they are, abandoned malls have “a very subtle but dramatic effect” on the surrounding area, he says. “When these malls go down, they drag the whole local economy” down with them.

The photo at left shows a former Pep Boys store in Columbus, Ohio, photographed in August 2009. Ulrich had spent a long day shooting at a mall down the street; it was 3 a.m. when he stopped here. Inside the lobby, he could see a dead bird. He went in for a close-up, not realizing a motion sensor was still active. “I started to step in, and this alarm went screaming,” Ulrich recalls. “It probably went off for half an hour.” This being a ghost store, though, no one came. **AMANDA KOLSON HURLEY**



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# → BUILDING

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TEXT BY ERNEST BECK

## W HOTELS

LOS ANGELES; ATLANTA; NEW YORK; HOBOKEN, N.J.  
HKS; PICKARD CHILTON; GWATHMEY SIEGEL & ASSOCIATES ARCHITECTS

The W Hollywood Hotel & Residences splits guest rooms and residential units into two connected buildings. Billboards, designed by Sussman/Prejza, are attached to a steel structure that stands parallel to the hotel. When illuminated, the supergraphics become a “glowing icon in the night,” HKS principal Eddie Abeyta says.

**SINCE THE DEBUT** more than a decade ago of the W hotel chain, the contemporary lifestyle brand of the Starwood hospitality empire has always used design and architecture—as well as a hip attitude—to attract guests from the worlds of media, fashion, and entertainment. With 36 hotels already in the lineup and a raft of openings now under way to nearly double its footprint and expand its residential offerings, W is again highlighting design as a brand-builder and location signifier.

The new W Hollywood Hotel & Residences, for example, at the legendary corner of Hollywood and Vine, was conceived as a tribute to the movie industry and the celebrity culture and city that surround it. “Imagery is so important for Hollywood,”







says Eddie Abeyta, design director for the W Hollywood project at Dallas-based HKS Architects. “So we tried to connect the forms and architectural expression with what everyone has in their mind about Hollywood.”

The 15-story development includes a 300-room hotel and a separate tower with 144 condos, in attached buildings made of conventional glass, aluminum, and architectural precast. But a number of design details, materials, and decorative features provide a requisite shot of glamour. Most appropriately, guests approach the hotel on a red carpet made of terrazzo with custom-made integral red aggregate. A two-story glass wall facing the hotel lobby (or “living room” in W-speak) features a retractable screen for showing movies, which transforms the façade into a giant silver screen.

The layout of the hotel provides spaces for both public gawking and secluded dealmaking. Because the site sits atop a busy Metro Rail stop, riders can catch a glimpse of Hollywood bigwigs at work as they approach the escalators. On the second and third floors, rooms have been converted into special spaces for press-only junkets with celebrities. The lobby, with its dramatic circular staircase (very Fontainebleau, as some critics have pointed out) and a chandelier (by Portland, Ore.-based Designstudio Ltd.) with cascading Swarovski crystals, is pure Hollywood.

By comparison, two New York-area W hotels and another in downtown Atlanta are all cool corporate sleekness, in line with W’s typically minimalist aesthetic, with some interventions to break the mold.

On the New Jersey waterfront, the W Hoboken Hotel & Residential Condominiums is a 26-story wedge-shaped metal-and-glass tower by New York-based Gwathmey Siegel & Associates Architects. The north and south façades feature a sawtooth pattern formed by angled bay windows in the hotel’s midsection. This approach lends a distinctive pattern to the exterior while the bay windows enhance the room experience so guests “don’t feel they are in a module or a box,” says principal Robert Siegel. Across the river at the W New York–Downtown Hotel & Residential Condominiums, also by Gwathmey, the soaring 57-story tower features a glass curtain wall with a pattern of white, gray, and clear panels, as well as a lobby terrace fronting the World Trade Center Memorial.

For the Atlanta W, New Haven, Conn.-based architects Pickard Chilton chose a reflective glass and aluminum curtain-wall system, and bisected the otherwise boxy tower in the Allen Plaza office complex with a slit at floor 16—separating the hotel from the condos—to provide space for a pool and spa with city views. “The goal was a high-profile hotel in the heart of the leading city in the Southeast,” says principal Jon Pickard. That vision included a rooftop helipad, which, he adds, “provides a little more panache” and a discreet entry for arriving A-list guests.

Unique touches at each of its locations are what make W a savvy brand: Hire different architects who know the area, target the likely traveler, add a trendy name, and you turn each hotel into a destination.

## W HOLLYWOOD HOTEL & RESIDENCES • HKS







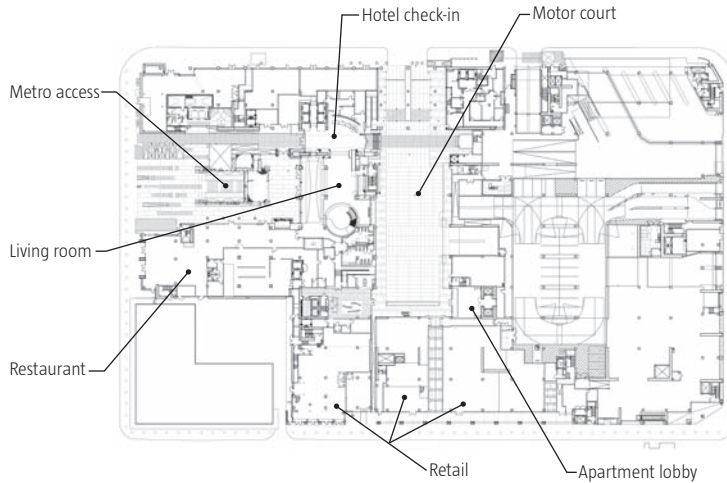
**1.** The double-height lobby of the W Hollywood has touches of silver-screen glamour. A chandelier of dangling Swarovski crystals dominates the red runner-clad circular staircase that leads to the second floor, which houses meeting rooms and spaces for celebrity press junkets.

**2.** At the main guest entrance, the red terrazzo carpet that signifies the approach to the hotel continues inside in the form of a plush red carpet.

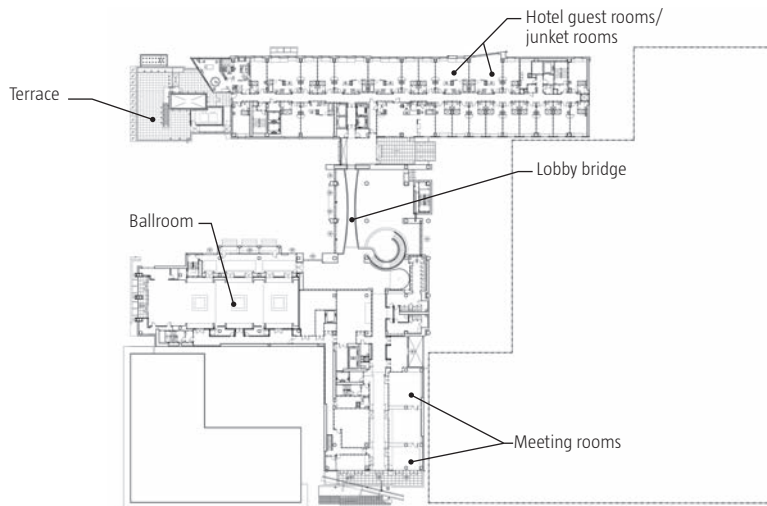
**3.** Several discrete seating areas allow for people watching and for wheeling and dealing. The second floor catwalk becomes a sculptural element in the space, and a double-height curtain wall overlooks Hollywood Boulevard.



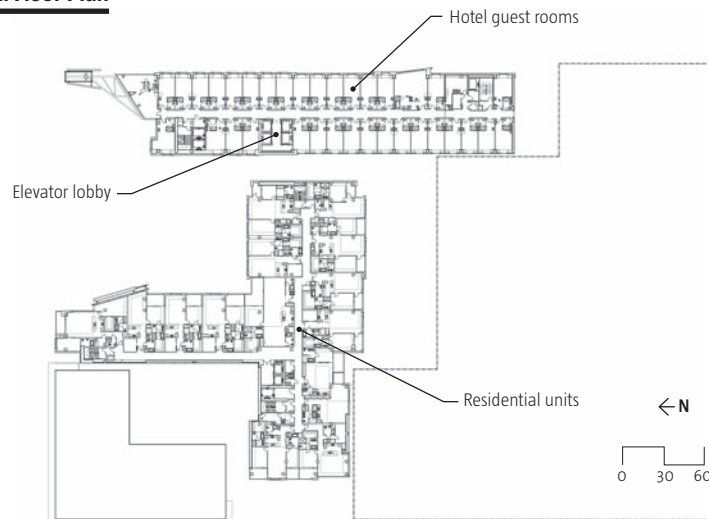
## Ground Floor Plan



## Second Floor Plan



## Typical Floor Plan



## Project Credits

**Project** W Hollywood Hotel & Residences  
**Client** Gatehouse Capital/HEI Resorts & Hotels  
**Architect** HKS  
**Interior Designer (residences)** Daly Genik Architects  
**Interior Designer (hotel)** Architropolis (early phase); Myhre Group (middle phase); Designstudio w/Lee & Sakahara (final phase)  
**Interior Designer (restaurant)** Zeff Design  
**Mechanical Engineer** Critchfield Mechanical  
**Structural Engineer** DCI Engineers  
**Electrical Engineer** Rosendin Electric  
**Civil Engineer** Fuscoe Engineering  
**Geotechnical Engineer** Golder Associates  
**General Contractor** Webcor Builders  
**Landscape Architect** Rios Clementi Hale Studios  
**Signage** Sussman/Prejza  
**Lighting** Kaplan Gehring McCarroll Architectural Lighting  
**Art** Lendrum Fine Art  
**Food Service** Ricca/Newmark  
**Acoustics** Charles M. Salter Associates; Acoustonica (hotel interiors)  
**Security** Niscayah  
**Exterior Building Maintenance** C.S. Caulkins Co.  
**Elevator Consultant** Lerch Bates  
**Size** 969,726 gross square feet

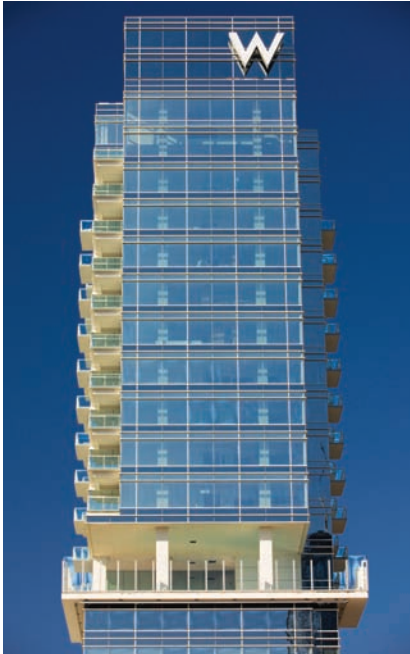
## Material & Sources

**Coatings** GE ge.com  
**Building Management Systems** Siemens siemens.com  
**Carpet** Atlas Carpet Mills atlascarpetmills.com; Design Origins shawhospitalitygroup.com; Masland Carpets maslandcarpets.com; Fabrica Fine Carpets & Rugs fabrica.com  
**Exterior Wall Systems** Werner Systems (curtain wall) woodbridgeglass.com; Clark Pacific (precast) clarkpacific.com; STO (plaster) sto.com  
**Glass** Oldcastle oldcastle.com  
**Gypsum** USG usg.com; Georgia/Pacific gp.com  
**HVAC** Critchfield Mechanical cmihvac.com  
**Lighting** iWorks iworksus.com; Hallmark Lighting hallmarklighting.com; Lightolier lightolier.com; Elliptipar elliptipar.com; Translite-Sonoma translite.com; Vision 3 Lighting vision3lighting.com; 3G Lighting 3glighting.com; Kurt Versen kurtversen.com; Specialty Lighting Industries specialtylightingindustries.com  
**Stone** Cold Spring Granite coldspringgranite.com  
**Paints and Finishes** Frazee frazeepaint.com  
**Roofing** Siplast siplast.com  
**Wallcoverings** Wolf Gordon wolf-gordon.com; MDC Wallcoverings mdcwall.com

→ Full materials & sources at architectmagazine.com



W ATLANTA DOWNTOWN  
HOTEL & RESIDENCES  
PICKARD CHILTON



**W Atlanta Downtown Hotel & Residences**

The recently opened W Atlanta Downtown Hotel & Residences, designed by New Haven, Conn.-based Pickard Chilton, has 237 guest rooms and 74 residences. For a change of pace from its sleek corporate cousins in the Northeast, the W Atlanta features a more partylike atmosphere courtesy of interior designer Burdifilek.

**Project Credits**

**Project** W Atlanta Downtown Hotel & Residences, Atlanta

**Developer/Owner**

Barry Real Estate Cos.

**Design Architect** Pickard Chilton, New Haven, Conn.

**Architect of Record** HKS, Atlanta

**Interior Design** Burdifilek

**Restaurant Design** CCS Architecture

**Structural Engineer** Uzun & Case

**M/E/P Engineer** Jordan & Skala Engineers

**Civil Engineer** Kimley-Horn

**Landscape Design** HGOR

**Lighting Design** Quentin Thomas Associates

**General Contractor** Hardin Construction

**Curtain Wall Consultant** CDC

**Curtain Wall Manufacturer** JAMCo.

**Size** 430,000 square feet



## BUILDING ① 2 3

**W NEW YORK—DOWNTOWN HOTEL &  
RESIDENTIAL CONDOMINIUMS**  
 GWATHMEY SIEGEL & ASSOCIATES ARCHITECTS

**W New York—Downtown Hotel &  
Residential Condominiums**

The W New York—Downtown Hotel & Residential Condominiums is located by the World Trade Center Memorial Site and features a 57-story-high curtain wall with gridded panes of clear, white, and gray glass. Designed by Gwathmey Siegel & Associates Architects, the project—which features 217 hotel rooms and 222 residences—is scheduled to open this summer.

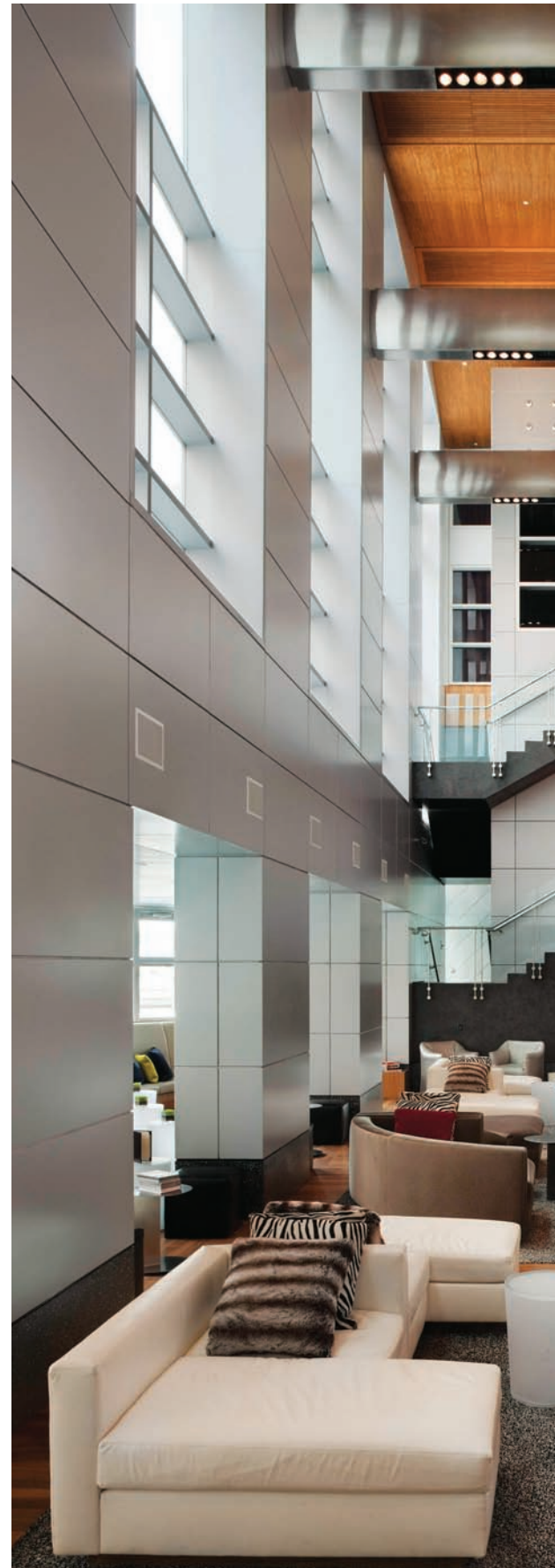
**W Hoboken Hotel & Residential  
Condominiums**

Also designed by Gwathmey Siegel & Associates Architects, the 26-story W Hoboken Hotel & Residential Condominiums sits just across the Hudson River from its downtown New York compatriot. The building contains 225 hotel rooms and the top nine stories are devoted to 40 condominiums.



W HOLLYWOOD EXTERIOR AND LOBBY: TIM STREET PORTER; W NEW YORK RENDERING: DBOX. THESE AND ALL W ATLANTA PHOTOS COURTESY W HOTELS WORLDWIDE.

W HOBOKEN: PAUL WARCHOL, COURTESY GWATHMEY SIEGEL & ASSOCIATES ARCHITECTS.


**W HOBOKEN HOTEL &  
RESIDENTIAL CONDOMINIUMS**  
 GWATHMEY SIEGEL & ASSOCIATES ARCHITECTS





#### Project Credits

**Project** W New York—Downtown Hotel & Residential Condominiums  
**Developer** The Moinian Group  
**Architect** Gwathmey Siegel & Associates Architects, New York—Robert Siegel, Charles Gwathmey (principals-in-charge); Gregory Karn (senior associate)  
**Associate Architect** Avinash K. Malhotra Architects  
**Construction Manager** Tishman Construction  
**Structural Engineer** Rosenwasser/Grossman Consulting Engineers  
**M/E/P Engineer** Cosentini Associates  
**Geotechnical Engineer** Mueser Rutledge Consulting Engineers  
**Exterior Wall & Roofing** Israel Berger & Associates  
**Landscape Architect** Thomas Balsley Associates  
**Vertical Transportation** Van Deusen & Associates  
**Expediter** Jerome S. Gillman Consulting Architects  
**Size** 390,000 gross square feet

**Project** W Hoboken Hotel & Residential Condominiums, Hoboken, N.J.  
**Developer** Ironstate Development Co.  
**Architect & Interior Designer** Gwathmey Siegel & Associates Architects, New York—Robert Siegel, Charles Gwathmey (principals-in-charge); Dirk Kramer, Steven Forman, Gregory Karn, Thomas Florkewicz (associates)  
**General Contractor** AJD Construction  
**Structural Engineer** Goldstein Associates  
**M/E/P Engineers** Cosentini Associates  
**Civil Engineer** LGA Engineering  
**Geotechnical Engineer** Mueser Rutledge Consulting Engineers  
**Landscape Architect** Melillo & Bauer Associates  
**Lighting Designer** Hillmann DiBernardo Leiter & Castelli  
**Food Service** Romano Gatland  
**Acoustics** Harvey Marshall Berling Associates  
**Fire Protection** R.J. Bartlett Engineering; Rolf Jensen & Associates  
**Cost Estimator** Hanscomb Faithful & Gould  
**Specifications** Construction Specifications  
**Size** 360,000 gross square feet  
**Cost** \$110 million

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# → BUILDING

1 ② 3



TEXT BY EDWARD KEEGAN

The Wit hotel, designed by Chicago-based Koo and Associates, brings hipsters to a Doubletree property in the city's central Loop.

## THE WIT

CHICAGO  
KOO AND ASSOCIATES



**DESPITE A CENTURY** of rectilinear traditions in Chicago architecture—with Frank Lloyd Wright’s Prairie Style houses and the modernist moves of Mies van der Rohe and Skidmore, Owings & Merrill—curves have been de rigueur in the recent projects making a splash in town. Think of Frank Gehry’s Pritzker Pavilion and Studio Gang’s Aqua Tower. But local architect Jackie Koo (and her eponymous firm, Koo and Associates) has taken a stand against this curvaceous trend with the recently opened Wit hotel, proving that once again, straight lines are in.

Located in the central Loop, the Wit is fronted by a slashing chartreuse zigzag (dubbed “the lightning bolt” by the hotel’s marketers) across the 27-story glass façade, a bold move made more surprising by those looking closely at the fine print—the 298-guest-room Wit is part of the usually humdrum Doubletree Hotel chain, hardly known as a boutique hotelier. “Boutique hotels are location-centric,” says Koo, who credits the coveted site in Chicago’s theater district with convincing the chain to take the project in a more offbeat direction.

The small, 9,500-square-foot corner site is filled to its limits by the 250,000-square-foot building, which was developed as two discrete pieces. The north half exposes the structure’s concrete frame, while the south comprises the hotel’s signature folded glass façade and the dynamic canted roof that rises toward the intersection of State and Lake streets. Breaking the mass of the slender building gives it a smaller scale on the streetscape—in contrast to its generally larger neighbors. The chartreuse glass of the lightning bolt bends to fill the canopy protecting the entrance—and casts its wickedly hip color onto pedestrians unlucky enough not to stay at the hotel.

A double-height lobby puts the Wit’s comings and goings on display for riders on the adjacent elevated trains; the north end of the building sandwiches two of the hotel’s three eateries—the more casual on the first floor, the more formal on the second. A single separate entrance from the street allows public access to both.

The two restaurants at the base have been well received, but it’s the rooftop one that drew overflow crowds of hipsters during its inaugural summer. Central countertops are shielded from the sun by inverted umbrellas and movable tables are scattered for intimate groupings. From any vantage, the skyline view dominates.

Although the hotel is not LEED certified, the owners tout a handful of eco-friendly features that include heat pumps, low-E glazing, and dual-flush toilets. Lighting was designed to beat industry standards by 30 percent, with expected annual savings of 1.24 million kWh.

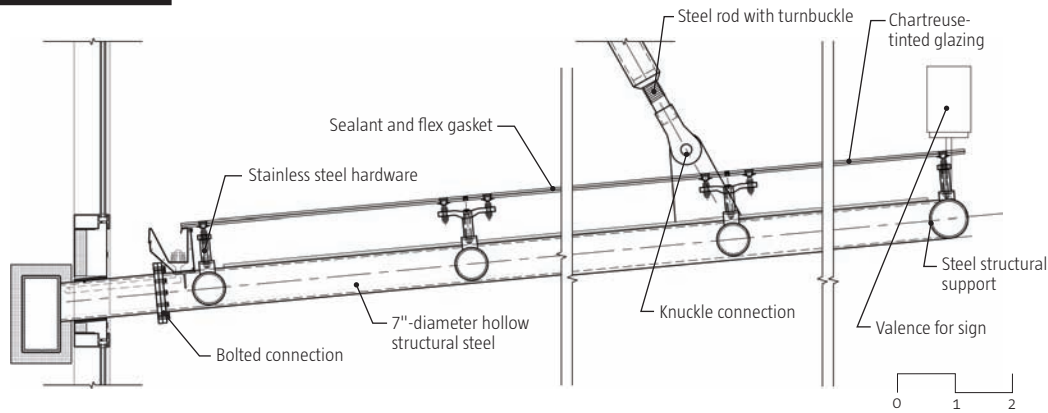
Koo has made the most of a relatively modest budget, so that both concrete and glass conspire to put hipster drama in what could have been a very ordinary structure. By canting the planes of the curtain wall and resolving them with a streak of bright color, she’s built what she calls a “one-move”—but not one-note—design strategy, a successful ploy that ensured the building’s signature design could not be value-engineered out during the process. And the Wit responds to the developer’s constraints while creating a new beacon in Chicago’s theater district.

“It’s a marquee without being a sign,” Koo says.





## Entry Canopy Detail



1. Located on a 9,500-square-foot corner site in Chicago's central Loop, the Wit hotel is most easily identified by the chartreuse lightning bolt worked into its 27-story glass façade. Lured by the possibilities of the hip theater-district location—so much so that the developers, ECD Co., commissioned a robotic helicopter to take photographs of the site even before the design began to take shape—the hotel's parent company, Doubletree Hotels, decided to take a design approach akin to that of a boutique hotelier.

2. The hotel's double-height lobby at the corner of State and Lake streets features floor-to-ceiling glazing, which encourages people on the adjacent elevated trains to look inside, making this an ideal location to see and be seen. Interiors by Beverly Hills, Calif.-based Cheryl Rowley Design depart from the hotel chain's business-casual norm.



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## BUILDING 1 ② 3

1. The interior of the rooftop lounge draws a trendy crowd with its open floor plan and high industrial metal ceiling with exposed duct work. Floor-to-ceiling glazing offers an expansive view of the Loop. The lounge's mod vibe fits in with the hotel's other boutique attributes, which were a departure for its normally staid parent chain, Doubletree.

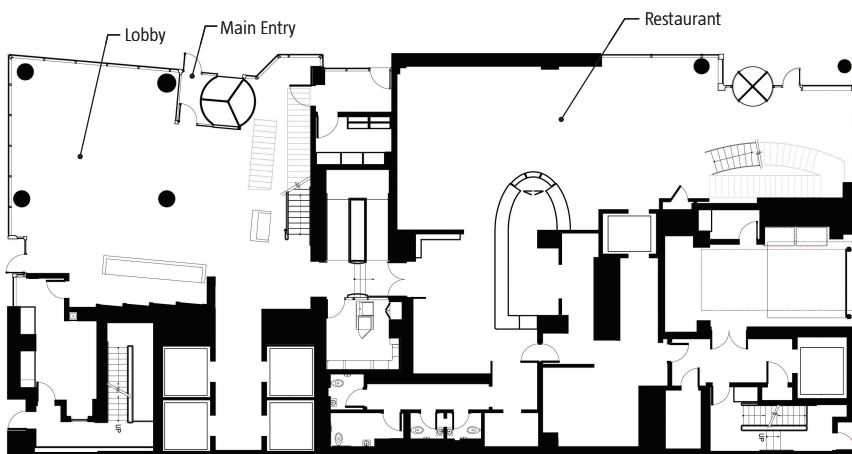
2. A small, private outdoor terrace off the roof-level restaurant is perched on the building's southeast corner. To complete the line of the building when viewed from below, a concrete frame brackets the space.

3. When the weather is warmer, patrons—hotel guests and locals alike—spill out onto the rooftop terrace, which features inverted umbrellas shielding bar-height countertops and perimeter tables and banquettes. Glass panels extend up to what would be ceiling height to help mitigate the high winds that can come off nearby Lake Michigan, without obstructing the view.

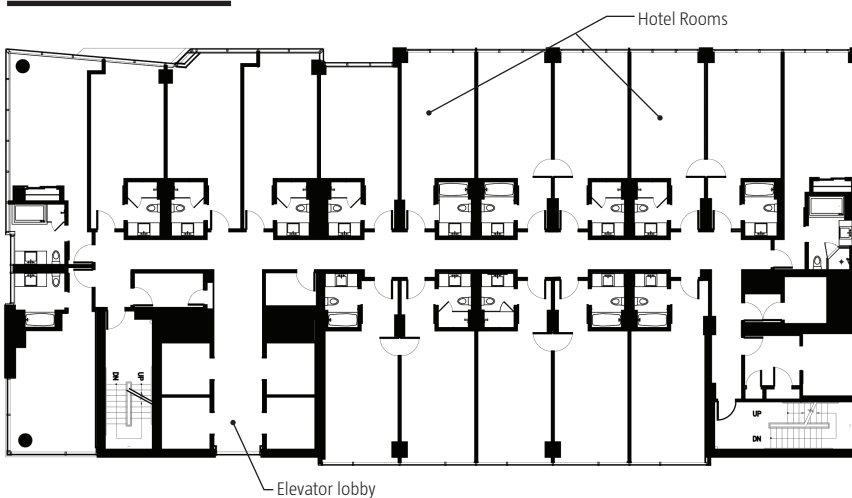




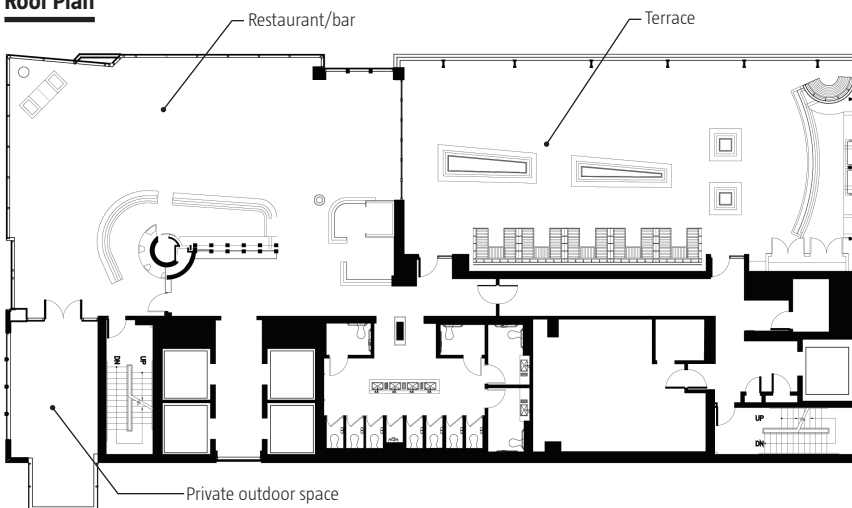
## Ground Floor Plan



## Typical Room Floor Plan



## Roof Plan



0 10 20 N →

## Project Credits

**Project** the Wit, a Doubletree Hotel

**Client** Scott Greenberg/ECD Co.

**Architect** Koo and Associates, Chicago—Jackie Koo (principal in charge of design and construction); Tim Weber (project architect); Damian Petrescu, Zenovia Toloudi, Isabela Gould, Dan Rappel, Christopher Berenfeld, Sabine Kollwitz, Karen Dunsford (project team)

**Interior Designer** Cheryl Rowley Design

**Design/Build Mechanical Engineer**

**of Record** AMS Mechanical Systems; Building Systems Engineering

**Structural Engineer** Halvorson & Partners

**Design/Build Electrical Engineer**

JMS Electrical—Donald Kash

**Civil Engineer** Terra Engineering

**Geotechnical Engineer** Ground Engineering Consultants

**Construction Manager/**

**General Contractor** James McHugh Construction Co.

**Landscape Architect** Daniel Weinbach and Partners

**Lighting Designer** Lightswitch Architectural

**Acoustical Engineer** Shiner and Associates (preliminary design);

Threshold Acoustics (construction)

**Size** 250,000 square feet

## Materials & Sources

**Acoustical System** Newmat newmatusa.com

**Carpet** Tai Ping taipingcarpets.com; Aqua Carpet

**Ceilings** Armstrong (Optima ceiling tiles) armstrong.com

**Concrete** James McHugh Construction Co. mchughconstruction.com

**Fabrics and Finishes** Valley Forge valleyforge.com; Fabricut fabricut.com;

S. Harris & Co. sharris.com;

Kneidler-Fauchere; Osborne & Little osborneandlittle.com

**Flooring** Porcelanosa porcelanosa-usa.com; Atlas Concorde atlasconcorde.it

**Glass** Viracon (glass supplier) viracon.com; Saflex (Vanceva colored

laminated interlayer) saflex.com

**HVAC** McQuay mcquay.com;

ClimateMaster climatemaster.com

**Lighting Control Systems** Lutron lutron.com

**Lighting** Lightolier lightolier.com; Juno

Lighting Group junolightinggroup.com;

Winona Lighting winonalighting.com;

Challenger Lighting challengerlighting

.com; Visual Lighting Technologies (fiber optics for screen) visual-lighting.com

**Plumbing and Water System** Kohler

Plumbing Fixtures kohler.com; Toto USA

(Aquia III Dual Flush Toilet) totousa.com

**Windows and Curtain Wall** Trainor

trainorglass.com; Kawneer kawneer

.com, Nanawall nanawall.com

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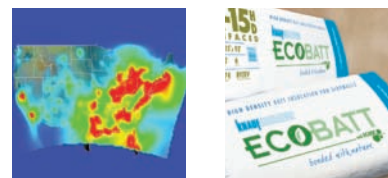
Kevin Gurney, PhD  
Project Director, the HESTIA Project  
IPCC Member Co-recipient of 2007 Nobel Peace Prize

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→BUILDING  
1 2 ③



# COOPER SQUARE HOTEL

NEW YORK  
CARLOS ZAPATA STUDIO

---

TEXT BY JOHN GENDALL  
PHOTOS COURTESY COOPER SQUARE HOTEL

**THE STORY OF** New York architecture is, in many ways, the story of the city's complex zoning laws and formidable market demands. Cooper Square Hotel, a new 145-room hotel designed by local architect Carlos Zapata and completed last year, is no exception. Klaus Ortlieb, the well-pedigreed hotelier whose résumé includes the Beverly Hills Hotel and the Mondrian, transitioned from a successful launch of his most recent project—the Hotel on Rivington, on Manhattan's Lower East Side—to this new hotel in the storied Cooper Square neighborhood.

Part of Manhattan's East Village, the birthplace of punk rock and the famously gritty home of hippies, beatniks, and artists-on-the-edge, the neighborhood has, for decades, been decidedly counterculture. Now, however, this is beginning to change. The Cooper Union, one of the neighborhood's incubators of cultural vanguards, continues to anchor the square, but with the recent Morphosis-designed academic building, a Gwathmey Siegel condominium tower, a planned Fumihiko Maki office tower, and the Zapata-designed hotel, the square is in the midst of a reinvention.

Ortlieb's company, MK Hotels, originally acquired five lots, purchasing the corner lot and taking out a 150-year lease on four already built-up lots that flank it. He convinced the bar to the north to rebuild, but, to the south, two longtime residents of a four-story tenement building refused to leave ("They're our hotel's Eloise—only much older," Ortlieb says).

So Zapata was tasked with negotiating not only the neighborhood's cultural mosaic, but also a complex footprint involving an amalgam of existing buildings and their residual interstitial spaces. Zapata squeezed the glass-and-steel tower in between the bar and tenement, allowing it to bulge outward as it rises above neighboring volumes, giving it a dynamic sculptural form. He incorporated the tenement into the composition, which mitigates the impact of the tower as perceived from the street and creates a spirited tension between old and new from the hotel's outdoor spaces.

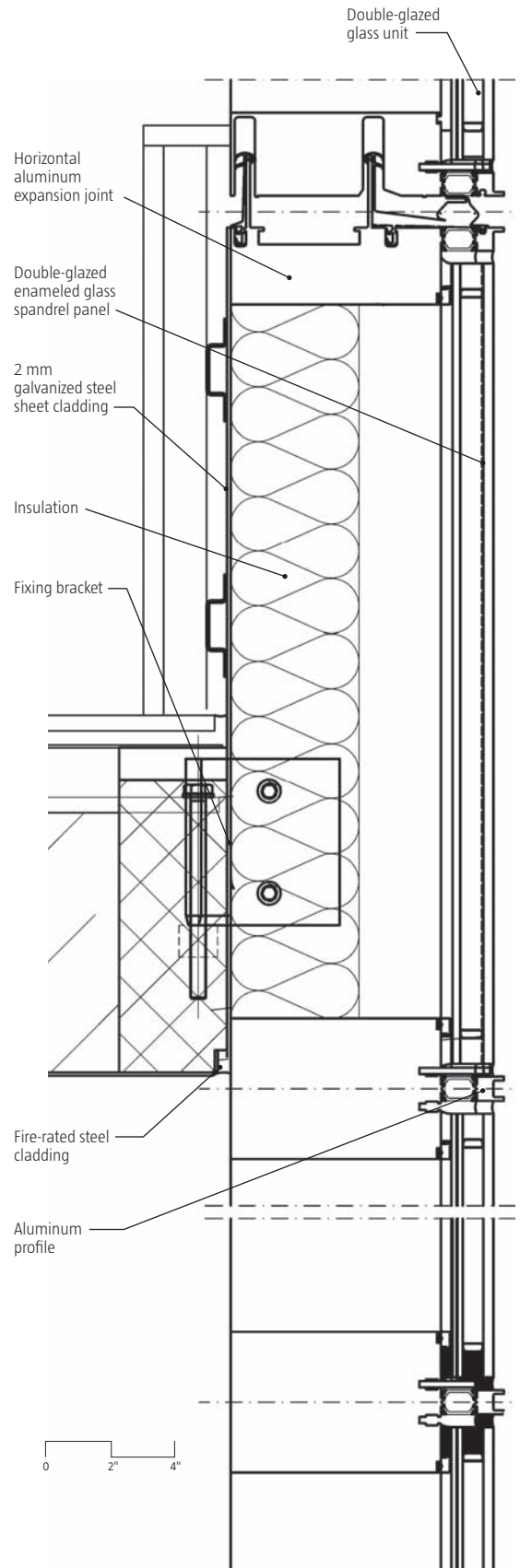
"The hotel is like a tree," says Zapata, "since we planted it at the base, and we allow it to grow as it goes higher." On the penthouse level, a single suite features 360-degree views and a terrace that wraps around three of its four sides. This 1,600-square-foot outdoor space hangs over the bar and garden—and the elderly Eloises.

Zapata clad the building in an aluminum and fritted glass curtain wall. "The client didn't want a dark building, so we looked first at glass," he explains, "but I didn't want any green tint in the glass because of the connotations [of] other commercial building types." As a solution, the architect called for fritted glass, which gives the tower its milky white color. Unlike most frit patterns, Cooper Square's runs vertically to accentuate the tower's height and to manipulate the voyeurism/exhibitionism of the hotel's guests and neighbors.

If the hotel's volume is light and readable, the inside tells a different story. Antonio Citterio, the noted Milan-based designer, oversaw the hotel's interiors and generated a warm atmosphere by coupling graphic patterns with traditional elements. A boldly abstracted foliage pattern covers the lobby and elevator walls, for example, and custom-designed furniture underscores the hotel's contemporary aesthetic. Dark woods and slate subdue these moves. Corridors are narrow and dimly lit, and in the lower, public floors, they connect the different areas—lobby, restaurant, bar, terrace—in a series of byzantine circulations meant to encourage an interaction with the space. A garden, designed by Nathan Browning, stitches the spaces together.

"It is important to have the courtyard in the back," Zapata says. He cites not only the opportunity to walk around the building to experience its different components, but also the relationship to the neighborhood's architectural legacy. "It's very common in the East Village to have a garden in the back. I recognize that we have a taller building, but the form—building and garden—is inspired by the East Village."

### Curtain Wall Spandrel Section







**1.** Designed by Antonio Citterio & Partners, the hotel lobby contrasts natural materials such as warm wood paneling and slate floors with bold, graphic elements. An abstract foliage pattern can be seen on lobby and elevator walls, and an eclectic modern aesthetic is achieved by pairing sleek custom furniture with Oriental rugs.

**2.** The lobby bar was designed to be a destination in and of itself. The bar proper is clad in stone panels and wood, with inset, mirrored, and uplit shelves for displaying the liquor bottles. The space connects to the restaurant, Faustina.

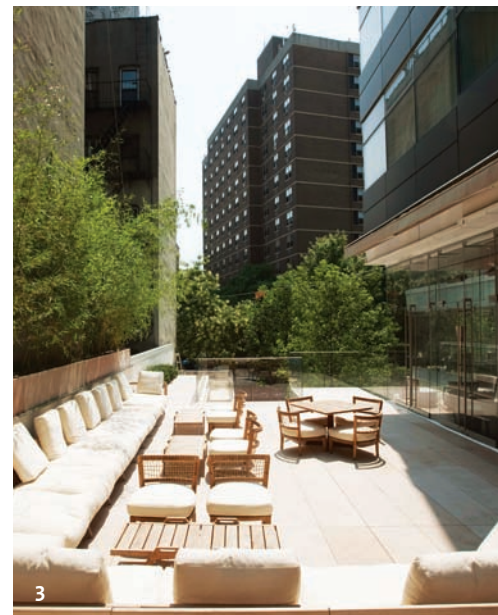
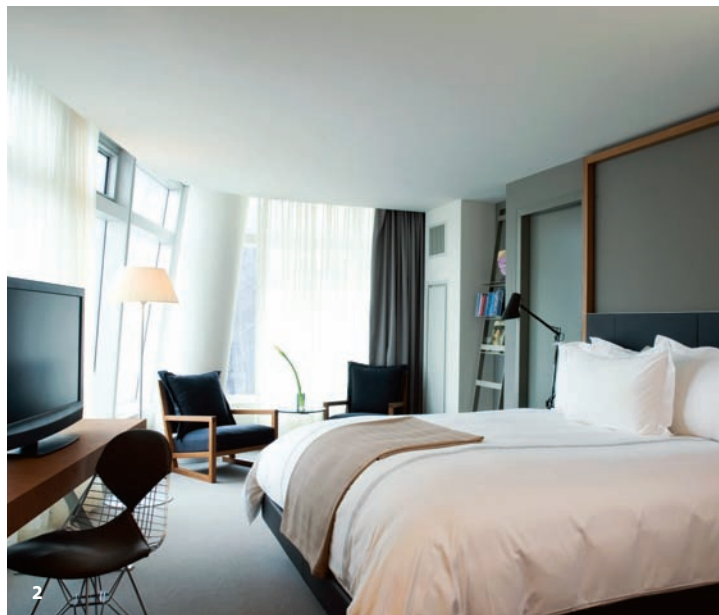




1. The second floor bar provides a more casual place for guests to linger. Departing from the dark tones of the ground floor spaces, Citterio here turned to lighter woods and a metal paneling system for the walls and built-in bookshelves. Client Klaus Ortlieb, a bibliophile, wanted to include books as part of the décor in an effort to create what he calls a “homey” environment. And books there are—in the lobby library, guest rooms, and even the upstairs bar (shown here).

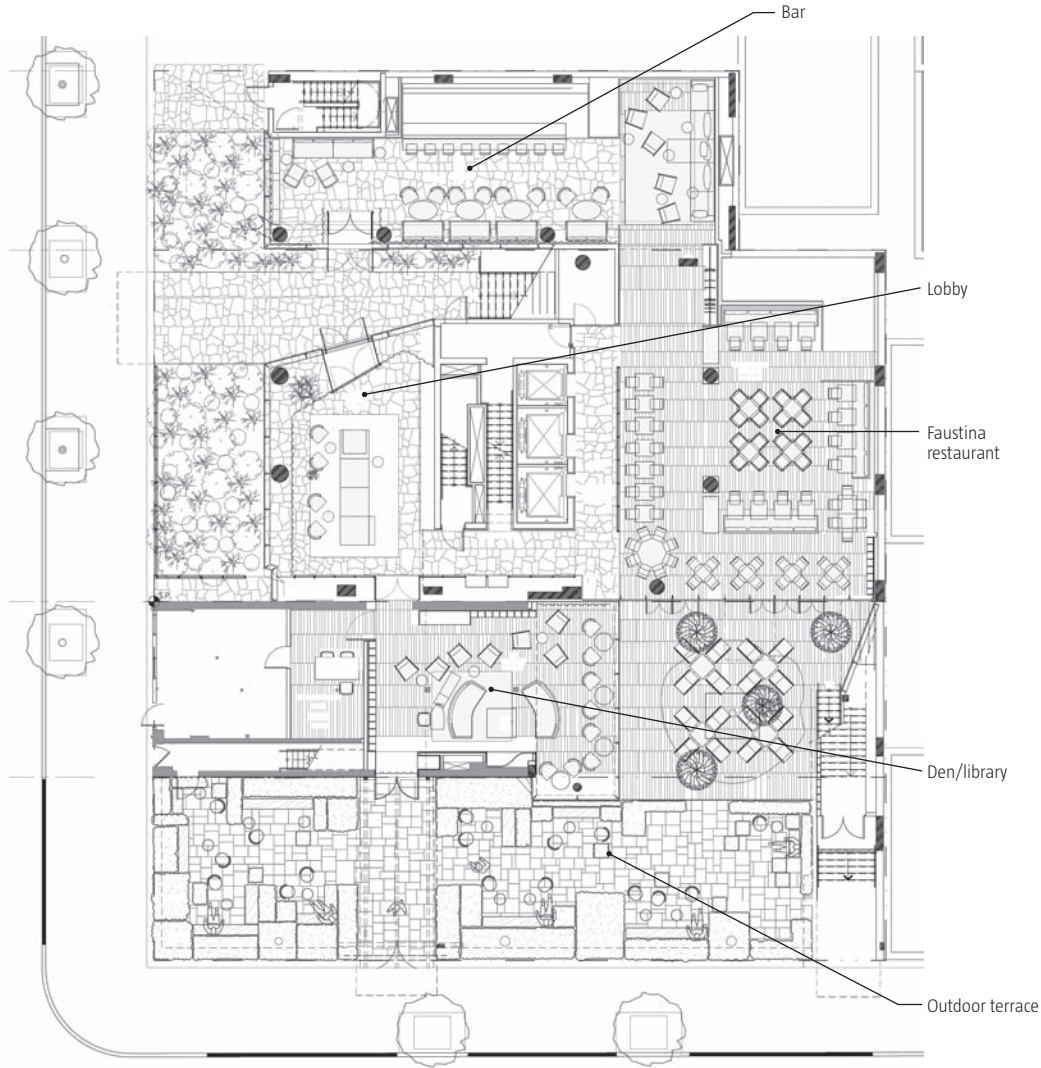
2. Each guest room features a unique footprint defined by the curved profile of the tower. The clerestory-level lites in the curtain wall are more heavily fritted to help mitigate glare in the rooms when the sun is at its peak. The canted form of a support column is echoed in a ladder bookshelf, holding more of Ortlieb’s beloved volumes.

3. The terrace off the second floor bar creates an outdoor space where guests can relax above the hubbub of the Manhattan streetscape. The site’s odd shape and Zapata’s attempts to lessen the building’s impact at ground level resulted in a series of interstitial spaces, like this one, that Zapata was able to reclaim and turn into public zones.





**Ground Floor Plan**



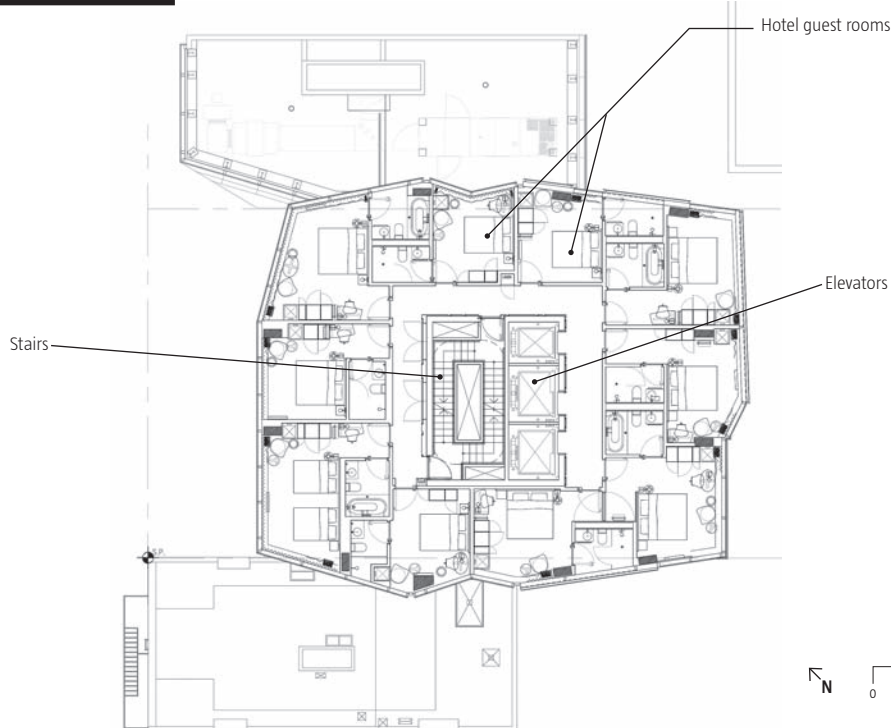
**Project Credits**

**Project** The Cooper Square Hotel, New York  
**Client/Owner** A private group of investors  
**Hotel Operator** MK Hotels  
**Design Architect** Carlos Zapata Studio, New York  
**Architect of Record** Perkins Eastman  
**Interior Designer** Antonio Citterio & Partners  
**Mechanical Engineer** Ambrosino Depinto & Schmeider  
**Structural Engineer** Leslie E. Robertson Associates  
**Electrical Engineer** Ambrosino Depinto & Schmeider  
**Civil and Geotechnical Engineer** Langan Engineering  
**Construction Manager** F. J. Sciamè Construction Co.  
**Landscape Architect** Nathan Browning, Island Planning Corp.

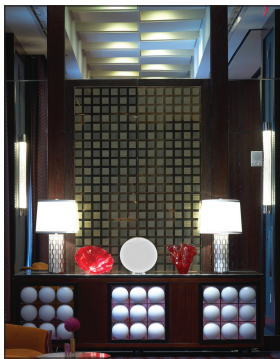
**Materials & Sources**

**Furniture** B&B Italia [beitalia.it](http://beitalia.it); Flexform [flexformusa.com](http://flexformusa.com); Herman Miller (Eames furniture) [hermanmiller.com](http://hermanmiller.com); John Houshmand (outdoor furniture) [johnhoushmand.com](http://johnhoushmand.com)  
**Lighting** Marcel Wanders (Zeppelin lobby chandelier) [marcelwanders.com](http://marcelwanders.com); Santa & Cole (TMM floor lamp in typical guest room, Diana floor lamp in suites) [santacole.com](http://santacole.com); Flos (Kelvin F floor lamp in suites, Hertz vanity fixture) [flos.com](http://flos.com); Viabizzuno (Cubo shower fixture) [viabizzuno.com](http://viabizzuno.com)  
**Masonry and Stone** Palmalisa Zantedeschi (Italian black slate at entrance, lobby, and ground floor bar) [palmalisazantedeschi.it](http://palmalisazantedeschi.it)  
**Windows, Curtain Wall, Doors** Josef Gartner (curtain wall) [josef-gartner.de](http://josef-gartner.de)

**Typical Guest Floor Plan**



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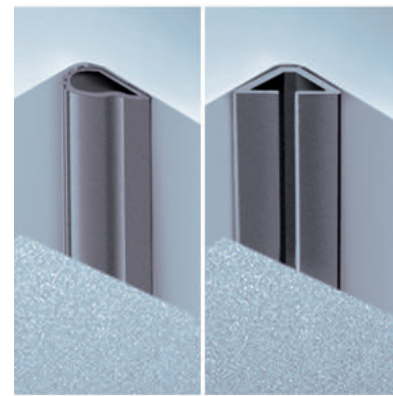
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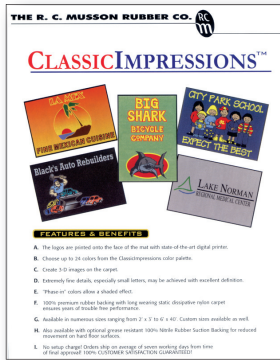
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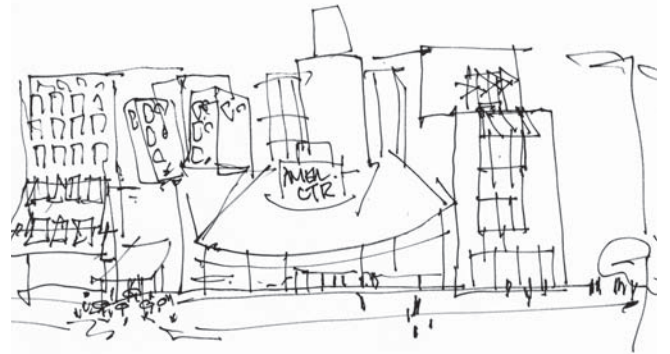
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→1992 P/A AWARD

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**SINCE 2005, FRANK GEHRY'S** only building in Paris has been home to France's national library/museum/theater celebrating the history of film. But Gehry was commissioned by a different organization, which occupied the structure only briefly.

In 1991, the American Center in Paris, a decade-old cultural institution, saw an opportunity for a more prominent presence. The old wine-market district at Bercy was being redeveloped for a variety of uses including a new public park, and a prime site was made available for the American Center. By commissioning Gehry, then a rising star, the client meant to add its architectural stamp to a city that already boasted iconic works by Piano and Rogers, Pei, Tschumi, and Nouvel.

Gehry's design visibly displayed a theater block, an exhibition volume, stacks of offices, and artist-in-

residence quarters. Sculptural as it was, his proposal respected the urban context in its scale, its limestone cladding, and the way it hugged its property lines. The broad curve of its lobby, facing the park, was mandated by the city. French critics called the design "too Parisian;" it was not the bold Gehry for which they had hoped.

After opening in 1994 with shaky funding, the American Center closed in 1996, and for the next nine years, the structure stood empty. Before it could house the Cinémathèque Française, internal changes were needed—to provide storage for collections, for instance, rather than rehearsal studios, and while these changes were not carried out by Gehry, he did help to select local firm l'Atelier de l'Île. But the exterior and key public interiors are virtually unchanged, and the building serves its new program as if designed for it. □



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