THE ARCHITECT'S NEWSPAPER

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FIVE VISIONS UNVEILED TO REINVIGORATE ST. LOUIS ICON

Weiss/Manfredi's plan for activating the East St. Louis side of the new park.

COURTESY WEISS/MANFREDI

ARCH RIVALS

Few structures are as synonymous with their locations as the Jefferson National Expansion Memorial Arch. Designed by Eero Saarinen with a landscape by Dan Kiley and completed in 1965, the Arch is central to the identity of St. Louis. And yet while the glinting form draws a million tourists each year, the structure adds little vitality to the city's downtown.

On August 17, five **continued on page 10**

Green-Wood Cemetery

DAVID GRIDER

BATTLE BREWS OVER SUNSET PARK VIEW CORRIDOR

Minerva's Curse

In an effort to preserve its extraordinary views of New York Harbor, Green-Wood Cemetery, the 478-acre site that holds the highest point in Brooklyn, has hired lawyers to draft a **continued on page 12**

AMAZING GLAZING

AN'S GLASS ISSUE PROFILES FIVE CLEAR-AND-PRESENT STUNNERS. PLUS STATE-OF-THE-ART GLASS PRODUCTS. SEE PAGES 16–21

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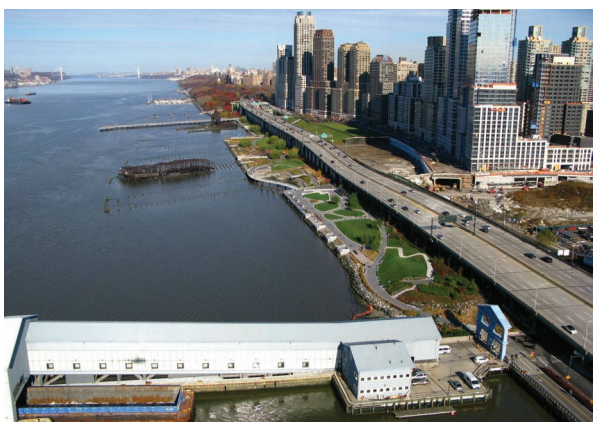

COURTESY THOMAS BALSLEY ASSOCIATES

EXTELL TUNNELS ONWARD IN LONG-AWAITED BID TO BURY WEST SIDE'S MILLER HIGHWAY

MILLER TIME?

In recent years, New Yorkers have seen parkland burgeon along the Hudson River, nowhere more expansively than at Riverside Park South, where boardwalks, overlooks, and marsh grasses wind along the water's edge. But the beauty of this new landscape between 59th and 72nd streets is blighted by an elevated stretch of the West Side Highway that spews noise, fumes, and debris onto the park below.

Unbeknownst to passing rollerbladers, Extell Development, which is completing the new park as part of its Riverside South complex, has quietly been building a whopping chunk of infrastructure to bury this noxious stretch of road: a $60 million tunnel shell between 61st and 65th streets. It is one of the first pieces of a decades-old plan to sink the elevated structure, known as the Miller Highway, and extend the park from Riverside South's dozen-odd new towers to the river in a monumental, 3/4-mile-long public space.

The removal of the highway, which would be topped with park from roughly 61st to 70th streets, has been a dream of planners and community advocates since the project's 1991 masterplan, led by Skidmore, **continued on page 9**

PARKS DEPARTMENT TO RAZE STATEN ISLAND BUNGALOWS

HOPE SINKS

WILLIAM DUGAN

Twice, the Cedar Grove Beach Community has nearly been destroyed. An idyllic stretch on the South Shore of Staten Island with dozens of quaint bungalows, it was almost bulldozed in **continued on page 4**

NEW LATINO MUSEUM SCOUTS FOR SPACE ON NATIONAL MALL

The Forrestal Building

M.V. JANTZEN

MALL SHOOK UP

With the 2004 completion of the National Museum of the American Indian and the forthcoming museum devoted to African American history and culture, it may seem like there's no free space left on the National Mall in Washington, D.C. One more museum is attempting to squeeze in, nevertheless. For the past two years, a Congressional commission has been studying the creation of a National Museum for the **continued on page 6**

MITCHELL/GIURGOLA OPENS UP ROCKEFELLER U.

SEE PAGE 14

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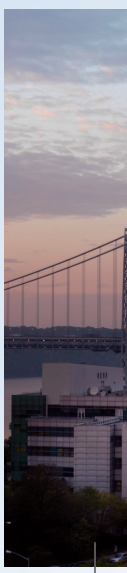

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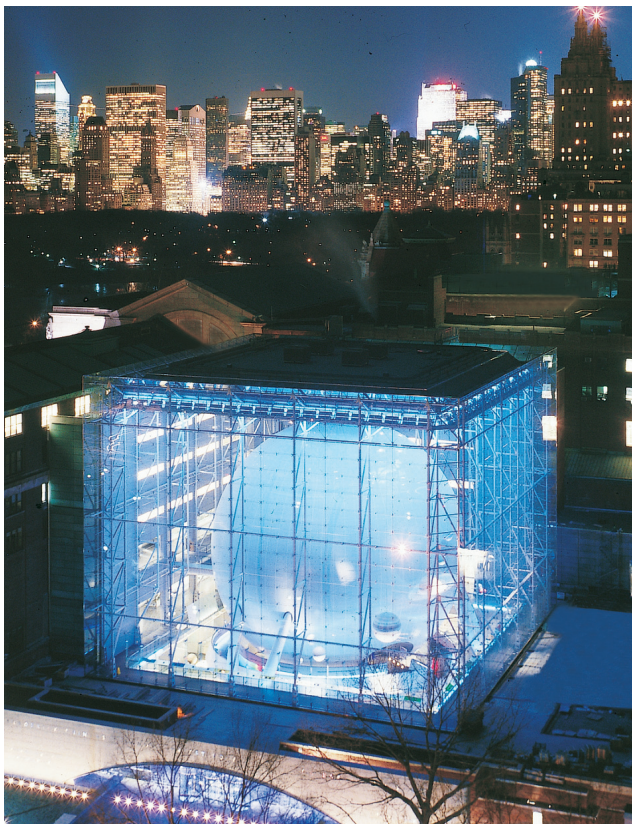

The Rose Center for Earth and Space,
American Museum of Natural History –
Architect: Polshek Partnership Architects LLP

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CHAMPING AT THE CHARTER

Nothing so captures that ineffable New York amalgam of tantalizing opportunity and soul-crushing reality than the Uniform Land-Use Review Procedure—the seven-month-long trial by fire through which any application affecting land use in the city is publicly vetted. An indispensable conduit for community input on projects affecting the sanity of millions of New Yorkers, ULURP is also widely deplored as a frustrating, failed process in dire need of an overhaul.

So hopes were kindled last March, when Mayor Michael R. Bloomberg asked a 15-member commission to review the New York City Charter and draw up any plans they deemed necessary to "increase the efficiency and effectiveness of government." Neighborhood activists, real estate interests, and planning staffers weighed in, urging the commission to look beyond the mayor's pet charter project—rewriting the rules on term limits—and bite off the big challenge of land-use reform.

Those hopes were soon dashed on July 9, when the commission took ULURP off the table, noting in a report that while many thoughtful suggestions were made by the likes of the Pratt Center for Community Development and the Environmental Justice Alliance, they would "significantly implicate important structural issues," and therefore "should be reserved for future consideration."

On the face of it, the commission's decision to punt on ULURP looks like a lack of nerve. Just about everyone agrees that the status quo is a mess. Developers have long complained about what they see as a painfully politicized process that subjects them to a gauntlet of grandstanding community boards, borough presidents, and city councilors on the way to getting a zoning approval. Meanwhile, planners and community advocates have pointed out that while the charter puts long-range planning under the purview of the City Planning Commission, the commission generally acts only when presented with proposed zoning changes by developers or the planning department. The upshot is parcel-by-parcel hostage negotiations over affordable housing quotas or employee wages, rather than a proactive planning framework that takes a comprehensive look at development, infrastructure, and services across the city.

Among the most disheartening land-use failures is the so-called fair share mandate, a pioneering set of criteria approved by voters in 1989 to ensure that all neighborhoods assume the burden of new development. But the Pratt Center has deemed fair-share rules "dangerously broken," pointing out that they only apply to city-owned facilities or those largely funded by the city, leaving privately operated waste-transfer stations, power plants, and the like clustered in poor, non-white precincts of Brooklyn or the Bronx.

In truth, passing the buck on ULURP was probably a smart move. No one needed a rush job of land-use reform—one many feared would be tailored to development interests—hammered out in a matter of months just to get it on the ballot in November. But the groundswell of debate and ideas gathered this summer should be the starting point for a broad-based land-use revamp, ready to roll when the next Charter Revision Commission gets down to work.

JEFF BYLES

HOPE SINKS continued from front page

the 1960s by Robert Moses to make way for an extension of the Belt Parkway. Then, the Great Nor'easter of 1992 destroyed 34 of the 72 houses that once lined the beach.

Now, the Parks Department is intent on finishing the job, having decided to demolish the remaining bungalows to increase public access. The 99-year-old community is dismayed because the city has yet to present any concrete plans for the site.

"These families have been coming here for generations, and now to take it away for no good reason—we can't take it," said William Dugan, a public school principal who stays in House 9 with his children, just like his parents before him.

Dugan has become a spokesperson for the group, fighting for what he sees as an irrational assault from the Parks Department. Dugan points to New Dorp Beach, immediately north of Cedar Grove. Not only has it been closed because the city cannot afford to pay lifeguards to watch the surf, but massive pieces of crenellated concrete litter the border with Cedar Grove—remnants of a former children's hospital it took the city decades to demolish after Moses seized the land. "If it took them 50 years to demolish that hospital, how long is it going to take for them to get around to Cedar Grove?" Dugan said.

Cedar Grove is arguably the last beach community of its kind, certainly the last on Staten Island. The Rockaways and Breezy Point have been winterized into year-round communities, but Cedar Grove remains seasonal, in large part due to an agreement negotiated with the city following Moses' failed highway bid that forbids full-time use.

Residents, who first arrived in tents in 1901 and slowly built up to bungalows over the next three decades, admit that they knew the day would come when they would have to leave, but they see no reason properties that pay $6,000 a year to the Parks Department should be forced out at a time when the city is scrambling for money. The Parks Department intends to use the roughly $2 million it has collected over the years to demolish the houses, while saving a few for concessions, life guards, and other uses, though it has no additional money for developing the beach.

A department spokesperson said plans would be revealed to the community board in the fall, presumably after the September 30 deadline for Cedar Grove residents to move out. In a statement, the department said simply: "While Parks wishes the families well and has been happy to allow them to enjoy some time there, they've been properly informed well in advance of this decision that this would be their last summer at this site." **MATT CHABAN**

LETTERS

THOSE WERE THE DAYS

Your review of Brooklyn Bridge Park (*AN* 13_07.28.2010) mentions the 1971 redesign of Washington Square Park. I agree with your critique of that new park, and hope you will be interested in my recollection of what happened leading up to the 1971 design. Robert Nichols did not participate, beyond a casual look during the process. After the defeat of the Robert Moses proposal to build a road through the park, Community Board 2 created an architects' committee from among the board members. My late husband, Harold Edelman, was on it, as was Nichols. After considerable discussion, it became clear that only our then firm, Edelman and Salzman, had the office capacity to do the job. We did it. Edgar Tafel designed the restrooms. Nichols went off to Vermont to write poetry.

And regarding your review of the new *AIA Guide to New York City* ("Guided By Voices," *AN* 13_07.28.2010), the first guide arrived in time for the national AIA convention in 1952. It was authored by Huson Jackson, who had an office in New York for many years before he relocated to Cambridge to join Sert in founding Sert Jackson. I worked for Jackson for about 10 years. I helped him with the guide. I don't have a copy, nor does the AIA New York chapter.

JUDITH EDELMAN
EDELMAN SULTAN KNOX WOOD ARCHITECTS
NEW YORK

CORRECTIONS

An update on Williamsburg's Domino Sugar site ("Pass the Sugar," *AN* 12_07.07.2010) omitted a credit for the project. While Rafael Viñoly Architects is developing the project's masterplan, Beyer Blinder Belle is designing the adaptive reuse of the refinery complex.

Our report on I.M. Pei's Christian Science Plaza in Boston ("Mirror, Mirror," *AN* 13_07.28.2010) incorrectly identified the landscape architect working on the plaza redesign. The firm is Halvorson Design Partnership.

An article about Dennis Wedlick's Hudson Passive House ("Here Comes the Sun," *AN* 13_07.28.2010) omitted mention of several other projects that aim to be certified by the Passivhaus Institute and could become the first in New York, including the R-House in Syracuse, designed by ARO and Della Valle Bernheimer, a Brooklyn brownstone by Prospect Architecture, and two projects by Loading Dock 5 in Brooklyn.

EAVESDROP> ISADORA MULLION

CONSUMER PORN

On one of the steamiest days of the year, we beat a sweaty path to the Center for Architecture, where **Alexander Lamis** of Robert A.M. Stern Architects and **Lisa Green** of Selldorf Architects coolly chatted with moderator **Donald Albrecht** about their firms' divergent forays into product design. Following displays of neoclassical doorknobs, classical garden urns, and custom-ordered 1960s furnishings by Annabelle's father, **Herbert Selldorf**, the atmosphere turned frosty over the subject of mass marketing. Target, anyone? "It would be wonderful to touch everyone, and not just architects," said Lamis, while Green suppressed a shudder. "That's *not* something we're interested in," she said. "We're focused on products that are needed for architectural practice."

ONE FOSSIL TO ANOTHER

Speaking of diversifying one's practice, Situ Studio may have helped discover the earliest animal life on earth. The Brooklyn-based design and digital fabrication studio collaborated with Princeton professor **Adam Maloof** on a project to analyze some 650-million-year-old fossils found under an Australian glacier. Digitally reconstructing the fossils that are encased in chunks of limestone and automating the process of analyzing them could come in handy if they ever get an interview with **Eli Broad**.

KNOCK KNOCK

This tidbit just in from the 12th International Architecture Biennale now underway in Venice. Approaching the entrance of the main exhibition hall in the Arsenale on opening day, **Aaron Betsky**, the director of the 11th architecture biennale, was refused admittance because he had no ticket. Betsky's protests were met with an implacable shrug indicating, What have you done for us lately?

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THOMAS H. KIEREN/CUSTOMCORPPHOTOG.COM

HARLEM'S HISTORIC P.S. 90 REBORN AS COLLEGIATE GOTHIC CONDOS

HOME SCHOOLED

As one of 14 public schools closed during New York City's financial woes in the 1970s, P.S. 90 has seen its share of hard times. Three decades of neglect brought perforated floors, a compromised rooftop, and a healthy resident pigeon population. The solid masonry construction, however, stood tall, and in 2008, L+M Development Partners acquired the five-story, 104,000-square-foot building for conversion into 75 condominiums—an ambitious undertaking that offers a model of adaptive reuse for Harlem.

Constructed in 1906 on a midblock site on West 148th Street, P.S. 90 is one of several H-plan schools in Harlem designed by Charles B.J. Snyder, whose historically-inspired buildings remain neighborhood landmarks across the city. Working with Curtis + Ginsberg Architects, L+M directed significant effort to restoring a central source of the building's appeal: a majestic, Collegiate Gothic–style facade composed of red brick and limestone, large windows, and terra-cotta detailing. To that end, according to L+M project manager Mentor Haxhija, the team mimicked historic window profiles with new aluminum frame windows, while also working to conceal rooftop penthouses from the street, sacrificing indoor square footage but creating spacious outdoor terraces.

While the 16-inch-thick brick exterior was 99 percent intact, the interior structure was another story. Outdated in terms of today's fire ratings, the original stairways were removed and the stairwells relocated. Most significantly, water damage had left Snyder's efficient, patented floor system with disintegrated metal supports and eroded concrete. Modern concrete slabs completely replaced four floors and half of the first floor—all of which affected interior plans. Architect Mark Ginsberg noted that apartment layouts were already complicated by the school's large original windows, which limited the placement of walls, while the H-plan presented "a number of dead corners that made it hard to divide into apartments."

Although L+M did not pursue a LEED rating, the building reuse incorporates sustainable features such as natural lighting, operable windows, and energy-efficient heat pumps. Light-colored paving materials are used on the rooftop and courtyards, the latter having drought-resistant gardens designed by Starr Whitehouse Landscape Architects. The development also strives to be socially sustainable, with 20 affordable units.

With incentives still available for developing abandoned Harlem properties as condominiums, P.S. 90, with a total development cost of $40.5 million, might become something of a green pioneer. The owner of P.S. 186, another H-plan building just six blocks away, has plans to demolish the structure, but perhaps P.S. 90's revival will prompt it to reconsider.

ELIZABETH A. WATSON

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From post office to a destination for post-office drinks, a 3,500-square-foot ground-floor space at the Empire State Building is now home to The Empire Room, an Art Deco–themed cocktail lounge. Owner Mark Grossich, who has a penchant for merging lounges with landmarks—he also owns the Campbell Apartment in Grand Central Terminal and the World Bar in Trump World Tower—sought to create an upscale cocktail bar that would evoke the feel of a different era, and by his account he's found considerable success: "Everyone who visits says it's the sort of place that seems like it's been around forever," Grossich said. "They like to say we've given the Empire State Building the cocktail lounge that it's always deserved." New York design firm Goodman Charlton completely renovated the former post office space, and worked with a palette of warm colors, rich velvets, mohairs, and embossed leather—the latter featured on the barstools. Rare macassar ebony adorns the walls, and silver leaf adds a special touch to the ceiling. In keeping with the posh '20s vibe, the Empire Room caters to a professional crowd, so be sure to leave your cutoffs or flip-flops (just a few of the dress code's banned articles of clothing) at home before downing a glass of Prohibition Punch. **KATHERINE LINDSTEDT**

MALL SHOOK UP continued from front page

American Latino. And in July, having looked at more than 30 potential sites throughout the District, the commission announced its four top locations for the institution—all of them on the Mall.

Given the cramped quarters of the nation's front yard, the four sites, which the commission intends to recommend to Congress this fall, all pose significant spatial and logistical challenges. The first site, adjacent to the Capitol, presents the smallest footprint of the four: 250,000 square feet, far smaller than the 400,000 square feet the commission has said would be optimal for the museum. In addition, the height of any new structure would be restricted by the 75-foot-tall Botanic Gardens nearby.

The second proposal would house part of the museum in the historic Smithsonian Arts and Industries building, with the rest incorporated on the site of the adjacent Forrestal Building, a Brutalist structure that currently houses the Department of Energy. Although there are not yet any plans to alter or demolish the building, it was included in part because the National Capital Planning Commission (NCPC) has been open about their hopes of seeing something different on the site. "It has been in our mind for a long time," acknowledged Lucy Kempf, a planner with the NCPC. "The building partially blocks the view of the Smithsonian castle, and the view from the castle looking down to the waterfront."

Another adaptive-reuse option would use half of the Whitten Building, a Beaux Arts structure that is home to the Department of Agriculture. The commission is considering

The Department of Agriculture's building is under consideration to house the museum.

WALLY GOBETZ/FLICKR

taking over its west wing and adding a small entry pavilion to the building. However, NCPC planners and others have questioned whether such an adaptation would be appropriate. "Are we really contemplating altering just one wing of this Beaux Arts building, which is highly classical and symmetrical?" asked Judy Feldman, president of the National Coalition to Save Our Mall.

The final site under consideration is next to the Washington Monument and across from the African American museum. Because the parcel can only accommodate 165,000 square feet, the museum would need to house most of its spaces in the Yates building across Independence Avenue, along with an underground annex connecting the two buildings.

Critics have asked the commission to reconsider off-Mall alternatives, given the constraints involved. "It's like they're taking a spot just to get one foot on the Mall," Feldman charged. But the co-chair of the site-selection committee, Luis Cancel, reported that such a location is their constituents' top priority. "That is the response we've gotten from all our public forums," Cancel said. **JULIA GALEF**

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COURTESY BEHNISCH ARCHITEKTEN

Günter Behnisch, 1922–2010

As a U-boat commander in 1945, Günter Behnisch slipped his submarine into Norwegian waters and surrendered, soon finding himself interned at an English prisoner-of-war camp. Two years later, he returned to Germany, although not to his native Saxony, and studied architecture in Stuttgart. Something of the captain must have stayed with him, as he partnered with various architects and assembled a parade of young talents in a studio that enjoyed remarkable success by winning competitions for schools, social centers, sports complexes, and residences.

The dynamic of teamwork was to prove particularly effective in designing public buildings and educational facilities, but it may have done even more by prompting momentous changes in Behnisch's own career. He moved away from an early emphasis on systems building and standardization of components—typically deployed in such large-scale structures as the Technical School in Ulm (1958–63)—toward ever freer, almost impromptu designs for kindergartens, high schools, and community centers. His free-hand approach gained a dramatic character and, in the 1980s, propelled Behnisch to the forefront of European deconstructivism without depriving him of major commissions.

His practice, known as Behnisch & Partner since 1966, built almost exclusively in Germany, but two among its numerous projects gained worldwide attention and enjoy landmark status to this day: the Olympic stadium in Munich (1967–72), for which Frei Otto's collaboration was decisive, and the parliamentary building in Bonn (1987–92). Although both are narrowly purpose-built, they are noteworthy not only for innovative design and structural technology but also for the symbolic nature associated with their enduring presence. A Fullerite approach to tentacular roofs, suspended from just a few steel poles, secures an exhilarating buoyancy for Munich's Olympic Park. They put the colossal arena for the Berlin Olympics of 1936 to shame, whereas the Bonn parliament, with its rustling assembly of mullions, railings, lattices, and light-refracting glass, announced the advent of a new era for German government buildings. Contrasting sharply with resurgent conservatism and confining ideas of normalcy that ultimately won the day in post-unification Berlin, Behnisch's parliament—abandoned almost as soon as it was built for Norman Foster's restyled Reichstag—ranks among the most remarkable buildings in the last decade of the century that began with such promise, sank into ashes at midpoint, and plodded through a mostly dreary postwar reconstruction.

By contrast, the ever-quizzical Behnisch advocated solutions that display improvisation and openness. As he began taking exception to the drive for industrialization, economy, and normative typologies in the 1970s, favoring instead a play of collective imagination and collaborative exploration, he built a reputation for offbeat proposals, generous in their allocation of space, alluring in character, and flexible in use. Pavilion structures form congeries of spaces and generate a feeling of flow as a quasi-natural manifestation of gathering and dispersing in the course of time. This temporal dimension emerges more and more forcefully as it breaks up symmetrical and repetitive groupings and suspends separation between outside and inside. Steel and glass allow for a high degree of transparency, but wood, color, and lighting confer subtle distinctions to depth and circulation. Behnisch held to the view that his was an architecture of specific "situations," created for purposeful activity, not to restrict individual differences and responses.

It may be a coincidence that the purposes of the Olympic Park and the Bonn parliament proved short-lived, despite touching on the highest collective significance, but it is no accident that Behnisch realized them under challenging circumstances and with a daring choice of means, materials, and—not to forget—collaborators. Late in his career, he also worked on large corporate headquarters, such as the North-German Landesbank in Hannover (2002), designed with his son Stefan Behnisch, that rises as a kind of ziggurat over an entire city block and extensive public passageways. In Berlin, Behnisch had to fight for his project for a new seat of the Academy of Arts on Pariser Platz (2005). Rejecting the regimented building policy of the capital, Behnisch managed against all odds to realize an elegant, transparent building in the midst of some of the stodgiest new structures inside the Brandenburg Gate. Frank Gehry's nearby bank subverts the rules imposed by the Berlin design junta, hiding its astonishing boardroom deep inside its courtyard, while Behnisch wanted every passerby to catch a glimpse of an infinitely layered and welcoming academy beckoning with its glazed facade and its surprising stairs, balconies, and alcoves.

Ever the spokesman for the social benefits of the imagination, Behnisch fastened his steely blue eyes on a kind of architecture that had no equivalent in postwar Germany. As he did so, he also salvaged much that threatened to fall by the wayside yet a second time in the midst of frantic reconstruction: Hugo Haering (1882–1958) and Hans Scharoun (1893–1972) come immediately to mind when one looks at Behnisch's enthusiastic handling of stairs, his ingenious ways of turning circulation into an experience, or breaking out of confining schemes. By contrast to his near-contemporary O.M. Ungers (1926–2008), Behnisch believed less in a categorical stake in geometry than in the ever-evolving power of imagination and in a collaborative give-and-take, making the most of his cards but never overplaying his hand.

KURT W. FORSTER TEACHES ARCHITECTURAL HISTORY AT THE YALE SCHOOL OF ARCHITECTURE.

View of section from 61st to 70th streets buried under a new park; Above: Current conditions along the West Side Highway.

MILLER TIME? continued from front page Owings & Merrill and based on a plan by Paul Willen and Daniel Gutman, with landscape design by Thomas Balsley Associates. That plan, devised for the Trump Organization, the original developer of the 77-acre Penn Central railyards site, calls for the highway to be buried below Riverside Boulevard, a new access road that runs west of the towers.

At the time of the project's 1992 approval, it was understood that the highway relocation would ultimately require public transportation funds. But there was a catch: In order to secure certificates of occupancy for the first towers at the north end of the site, the developer had to deliver the waterfront park as called for in the masterplan. So instead of waiting around for public funds—and a public process that could drag on for years—Trump began building Riverside Boulevard and the new park.

Enter Extell, which acquired the remaining undeveloped land from 65th to 59th streets in 2005. To continue building its new towers, Extell needed to build the first section of tunnel—hence its $60 million investment. The developer is also working on an upland section of park stretching north from 65th street to be built atop a southbound portion of tunnel. Final plans for that segment are being completed by Thomas Balsley, who has designed all of the 26-acre waterfront park in a series of complicated maneuvers around the hulking Miller Highway.

"It's a chess game," explained Balsley of the design. "The point is not to build anything that would get ripped out later. So we had to design the upland park and design the waterfront park, knowing what would happen between those two things when we take the highway out of the equation. It was crystal-ball design work."

A prime impediment was the 35-foot elevation change from Riverside Boulevard to the river, at the base of which the highway now runs. Balsley's solution is to split the park into three distinct spatial experiences. On the upland section, a narrow ribbon of landscape overlooks the water. The riverfront segment is more adventurous, with naturalized riparian edges, lush plantings, and a variety of overlooks and coves. Connecting the two is a big, sloping lawn with wooded edges in the tradition of Riverside Park, creating a transition between the community-scaled upland and the more civic-scaled waterfront.

Completion of that middle segment, however, remains contingent on the Miller's re-routing. Though an environmental impact statement for the highway relocation was finished in 2002 by the state Department of Transportation, and the move was subsequently authorized by the Federal Highway Administration, the Miller teardown still awaits engineering and design work, not to mention the estimated $400 million needed for the relocation, a sum certain to require federal assistance. It also remains to be seen how Extell's plans for the southern portion of the site between 59th and 61st streets, where it has proposed a cluster of towers designed by Christian de Portzamparc, might affect the highway's fate.

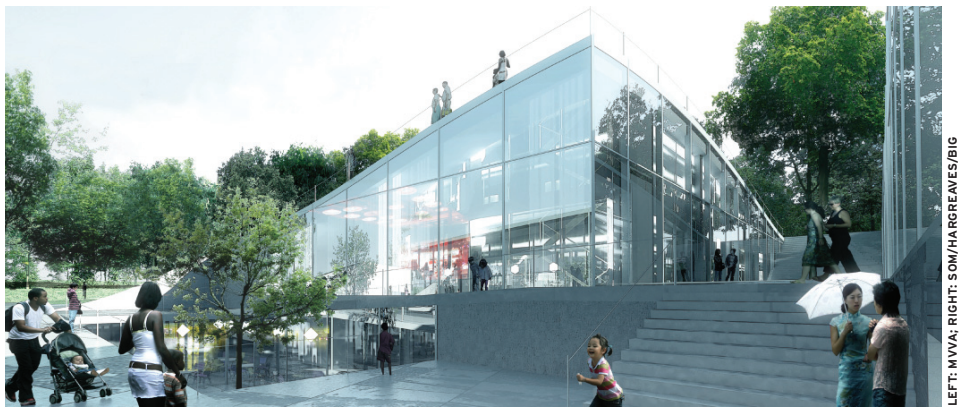
According to Daniel Gutman, the Miller's predicament can be traced to the 1991 agreement between the city, state, developer, and civic groups, which called for the highway to be relocated concurrently with development of the new park. But it never stipulated who would fund the new highway, and the state Department of Transportation takes the position that the road has at least another 30 years of life left in it. "There's no way this highway is going to get moved in the near future unless some other source of funds is found, and so far none is available," Gutman told *AN*.

"I don't know if it will ever happen," said Cheryl Huber, deputy director of New Yorkers for Parks, a member organization of the Riverside South Planning Corporation. "It seems like one of these debates that will possibly go on forever." **JEFF BYLES**

One of the new waterfront paths.

COURTESY THOMAS BALSLEY ASSOCIATES

Michael Van Valkenburgh Associates' plan creates connectivity through ecological restoration. Right: The SOM-led team proposes an undulating series of buildings-as-landscape.



LEFT: MVVA; RIGHT: SOM/HARGREAVES/BIG

ARCH RIVALS continued from front page

competing teams unveiled ambitious plans to re-envision the memorial and grounds as a dynamic urban park, revitalizing both its relationship to the city as well as its cultural, environmental, and educational roles as a national park. The multi-disciplinary teams are led respectively by Michael Van Valkenburgh Associates, Weiss/Manfredi, SOM Chicago with Hargreaves Associates and BIG, Behnisch Architekten, and PWP Landscape Architects with Foster + Partners and Civitas.

The competition spans complex urban sites on both sides of the Mississippi River. In St. Louis, the Arch grounds are currently delimited to the north by the Eads Bridge and parking structures; to the west, by Memorial Drive and I-70; and to the south by the MacArthur Bridge and its approaches. The best place to view the Arch is in neighboring East St. Louis, Illinois, but that waterfront is currently underdeveloped.

The Behnisch-led proposal calls for new structures that would create a ring around the Arch, including a large music venue to the north and a recreational center to the south. Like all the proposals, it calls for bridging I-70 to the Old Courthouse, creating an axis from the Gateway Mall through the Arch. Provocatively, the plan also calls for a sky gondola to transport riders from one side of the river to the other.

The team led by Michael Van Valkenburgh would create a one-block deck over I-70 and eliminate a garage to the north, creating greater connectivity to the city. A parking garage with a rooftop beer garden and ice rink would be built to the south. The most dramatic changes would come to the East St. Louis side, where a new wetland park would be built. Meanwhile, the PWP/Foster/Civitas proposal is most reverential to the original Saarinen/Kiley plan, with extensive attention paid to improving pedestrian conditions at intersections and along surrounding streets.

SOM/Hargreaves/BIG turned their Interstate cap into a sculptural element called the "Magic Carpet," creating enclosed spaces that flank the path toward the Arch. Two buildings-as-landscapes would house bike rentals, exhibition space, and education facilities. The east side of the river includes a large canopied performance venue and a wetland garden.

Finally, Weiss/Manfredi's proposal calls for narrowing Eads Bridge to make room for bike and pedestrian lanes, while overpasses to the south would cover skate and mini-golf parks and a bike rental facility. New "bluffs" on the St. Louis side would become islands accessible by raised paths during flooding. In East St. Louis, a channel carved through the land would allow kayaking and other activities.

Competition stakeholders, including the National Park Service and the cities of St. Louis and East St. Louis, are hoping that this park can better contribute to the vitality of a metropolitan region that is fighting to reverse its decline. "What will come out of this competition is a new definition of what an urban national park can be," said Donald Stastny, the competition manager. The winner will be announced on September 25, and organizers hope construction will be complete by October 28, 2015, the 50th anniversary of the day the keystone section of the Arch was secured in place. **ALAN G. BRAKE**

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MINERVA'S CURSE continued from front page

document that aims to prevent new buildings from blocking the vista. Their plan is due before the City Council this fall, and, if passed, would potentially put the brakes on dense new development in contested areas of Brooklyn including the Red Hook waterfront and Sunset Park.

"By recognizing as official city policy the importance of this view, we will raise the bar," said Ken Fisher, an attorney for the cemetery. The plan, he added, would put pressure on development-friendly city officials, who "will have to justify in public why they are deviating from that policy."

The cemetery's plan, contained in a 197-a document currently under review by local community boards, would protect what it calls the Battle Hill view corridor, a line of sight linking the cemetery and the harbor. Green-Wood argues that such a view is historically significant: Home to such luminaries as Leonard Bernstein and Boss Tweed, the cemetery is built on the site of the Battle of Brooklyn. To commemorate the event, a local businessman named Charles Higgins erected a statue of the goddess Minerva in 1920: She faces New York Harbor and salutes the Statue of Liberty.

Aaron Brashear, co-founder of Concerned Citizens of Greenwood Heights, said that the view corridor linking the two statues has come increasingly under threat since 2003, when Community Board 6 voted to restrict building heights. Since developers could no longer build towers in Park Slope, they headed south to Greenwood Heights, which begins on the south side of 15th Street. "Developers literally moved across the street. I mean literally," Brashear said.

Two years later, Robert Scarano began to develop a site at 23rd Street and 7th Avenue, across the street from the cemetery, knocking down a building that Higgins had once owned, which at various times served as a wire factory, a dairy wholesaler, and a warehouse. The new building, to be approximately 65 feet in height, would have permanently blocked Liberty from Minerva's gaze.

In 2005, after Scarano began construction, the area was rezoned from R6 to R6B, limiting street walls to a height of 40 feet. Scarano appealed to the BSA that the unfinished building should not be subject to the new restrictions, but lost. The site was eventually taken over by Aron Liebovits, who built 11 single-family houses that do not block the view. Still, Brashear, a graphic designer who also serves as the buildings and construction committee chair of Community Board 7, worries that tenants' roof access, available to all but the corner building, will mar the vista.

While a 197-a plan is only an advisory document, the cemetery and local activists hope legislation will eventually be drafted to protect the corridor. Brashear pointed out that the city has protected views in the past. In 1974, city zoning documents were amended to preserve "Special Scenic View Districts," a provision put in place to save the view corridor linking the Brooklyn Heights promenade and Lower Manhattan—still, according to Fisher, the only such protected view in the city.

ANGELA STARITA

AT DEADLINE

WTC NO LONGER A ZERO

It seems the griping about the redevelopment of Ground Zero has turned a corner. On July 7, Douglas Durst beat out four other developers for a stake in 1 World Trade Center. Later that month, Condé Nast announced that it was considering leaving 4 Times Square for 1 World Trade Center, a move that would boost the tower's cachet immensely and bring it its first major tenant. And, after years of wrangling, Silverstein Properties and the Port Authority finally finalized a plan for the redevelopment of Norman Foster's Tower 2 and Richard Rogers' Tower 3 on August 26, though there is still no requirement to build either one for years to come—or until tenants materialize and financing is secured.

FULTON STREET AHEAD

Construction continues on the Fulton Street Transit Center, the federally funded, Grimshaw- and James Carpenter–designed station that ties together a spaghetti of subway lines with a gleaming new entrance. The MTA announced on August 17 that it had completed foundation work on the transit complex and renovation of the neighboring Corbin Building, a slim office structure that had been controversially emptied out to make way for the station. Corbin, as well as much of the transit center's top two floors, will be given over to retail. Construction remains on schedule for a 2014 opening.

HIGH FIVE FOR THE HIGH LINE

The High Line shall stand, uninterrupted to 34th Street, as always planned by Friends of the High Line. The City Council voted in favor of the group's land-use application on July 27, ensuring that all three sections of the linear park, including the segment that loops around Hudson Yards, will remain intact. There had been the possibility that a linear park not on an elevated former railroad trestle could instead encircle the massive West Side development, but this latest action prevents any such swap. Meanwhile, construction continues apace on the second section, though it will not open until summer 2011, due to both fundraising shortfalls and construction costs.

INSIDE JOB AT ATLANTIC YARDS

Dogged development watchdog Norman Oder got a big scoop on his Atlantic Yards Report blog on August 23, when he revealed that Arana Hankin had been named the first official Atlantic Yards project manager at the Empire State Development Corporation. Continuing the agency's shady ways, the 33-year-old Hankin is an aide to Governor David Paterson (who oversees the ESDC) with almost no development experience. To top it all off, the job was not even publicly advertised.

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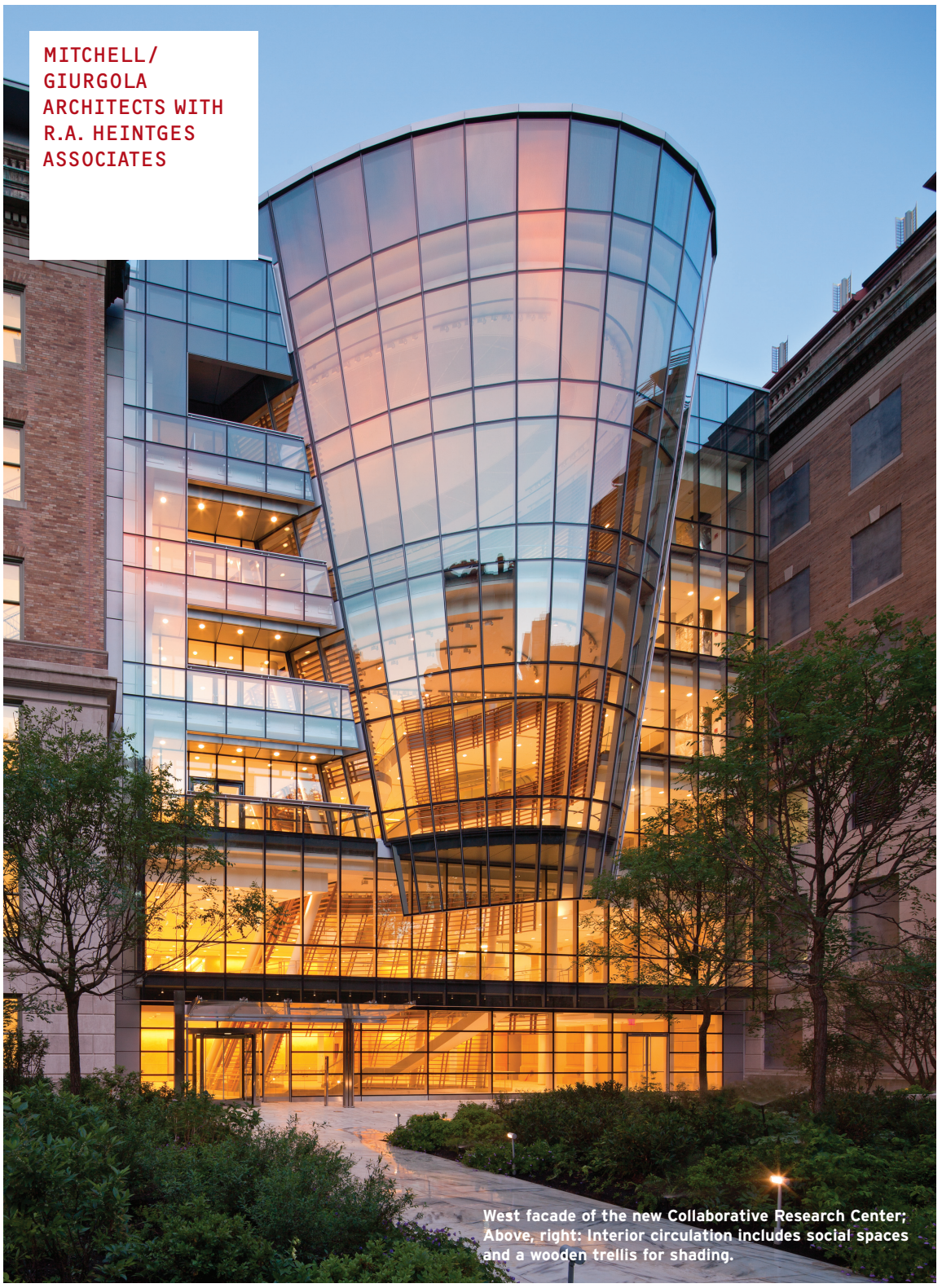
MITCHELL/ GIURGOLA ARCHITECTS WITH R.A. HEINTGES ASSOCIATES



LEFT: ADAM FRIEDBERG; RIGHT: JEFF GOLDBERG/ESTO

West facade of the new Collaborative Research Center; Above, right: Interior circulation includes social spaces and a wooden trellis for shading.

Interdisciplinary collaboration is a defining trait of modern scientific research, and as a consequence, many of the field's hallowed landmarks—places like Fuld and Pupin halls, where the likes of Einstein and Fermi worked in secluded laboratories—have become relics, with limited practical use. For this reason, the Rockefeller University, a biomedical research institution founded by John D. Rockefeller in 1901, strongly considered demolishing two of its aging lab buildings, Flexner and Smith halls, in order to make room for a more modern facility. After all, there was little room for expansion on its Upper East Side campus, and the existing structures, stately neoclassical buildings dating to 1917 and 1930, were poorly suited to contemporary needs. At 62 feet wide, they are rather narrow for today's open-plan labs; their 12- to 13-foot floor-to-floor heights are not ideal for modern mechanical systems; and they promised scant possibility for creating socially conducive space. Mitchell/ Giurgola Architects, however, saw things in a different light.

"While the 80-year-old buildings were very tired, our analysis indicated that they were well suited to adaptive reuse," explained firm partner Paul Broches. Rather than demolish them, the architects recommended refurbishing the buildings for state-of-the-art research. "The existing buildings are 80 feet apart and separated by a sunken parking lot," continued Broches. "Our proposal takes advantage of the gap to make a connector building between them, containing all the amenities needed to facilitate collaborative science." This solution would maintain the historical integrity of the campus while also delivering an admirable environmental benefit by reusing the existing structures.

The 60,000-square-foot connector building, known as the Collaborative Research Center, links the two existing buildings on each of their six above-grade floors and on one subterranean level, which features a 200-seat auditorium buried beneath a public plaza. Framed in cast-in-place concrete, the connector also creates a new main entrance for Flexner and Smith halls and consolidates all of their vertical circulation, freeing up floor plates for open-plan lab space. Each of the connector's upper levels also hosts meeting rooms, bathrooms, pantries, and ample seating areas for eating and getting to know one's fellow scientists. These spaces are arranged around a full-height glazed atrium that provides visual connectivity throughout the elevation of the building. Elliptical in plan and shaped like an inverse cone in section, the atrium serves as an architectural expression of the social vortex that will presumably take place within. While primarily open, it is also rimmed by a wooden trellis that modulates incoming daylight and provides a variety of spaces that range from partial seclusion to full exposure.

Making the connector as transparent as possible was an important concern for Mitchell/Giurgola. All of the campus' buildings feature interstitial spaces that keep light and air moving about in abundance. Here, that was especially important, as the building faces one end of a Dan Kiley–designed promenade that bisects the campus north-to-south. The architects located the elevator core at the eastern edge of the site, and flanked it with glazed walls. The west facade, however, was made completely transparent by cladding it with a structurally glazed, steel-and-aluminum curtain wall. The flat sections of this glass elevation are broken by the protruding ellipsis of the atrium.

R.A. Heintges Associates helped design the wall, which was fabricated in Italy. The flat surfaces are supported from floor to floor—spans of approximately 15 feet—by split aluminum mullions that connect to the concrete floor slabs with visible articulated attachments. These brackets allow for expansion and contraction, and are adjustable to absorb concrete tolerances. The curved portions that follow the elliptical plan of the atrium span two stories, and in one case, three. They rely upon the same bracketing system, but employ steel mullions hung from the roof for extra rigidity against wind loads. All of the high-performance insulated glass units are flat, though on the atrium portions of the facade they were segmented in a way to give the impression of a continuous curving surface.

The existing buildings are being gut-renovated in a two-phase process, during which no scientist will need to move more than once to facilitate construction. Smith Hall, to the north, was completed first. Flexner, to the south, is currently in progress. Each legacy building is receiving new high-performance glazing designed to match the original wooden double-hung windows. They will also feature open-plan labs offering much-needed flexibility, as well as the full complement of contemporary mechanical and ventilation systems threaded primarily through the old vertical circulation shafts—a handy way to work around those cramped floor-to-floor heights. **AARON SEWARD**

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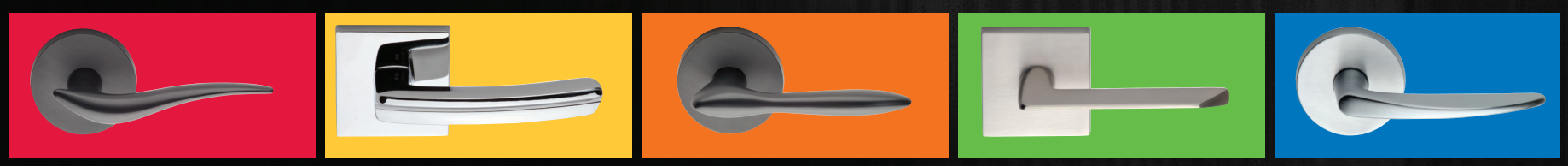


Many architects have taken ultra-transparent glazing to diaphanous levels of refinement, but some are looking in the other direction, probing new dimensions of opacity and performance. Here are five technologically audacious applications from around the world—whether slumped or acid-etched, corrugated or crystalline—that show glass in a different light.

THROUGH THE LOOKING GLASS

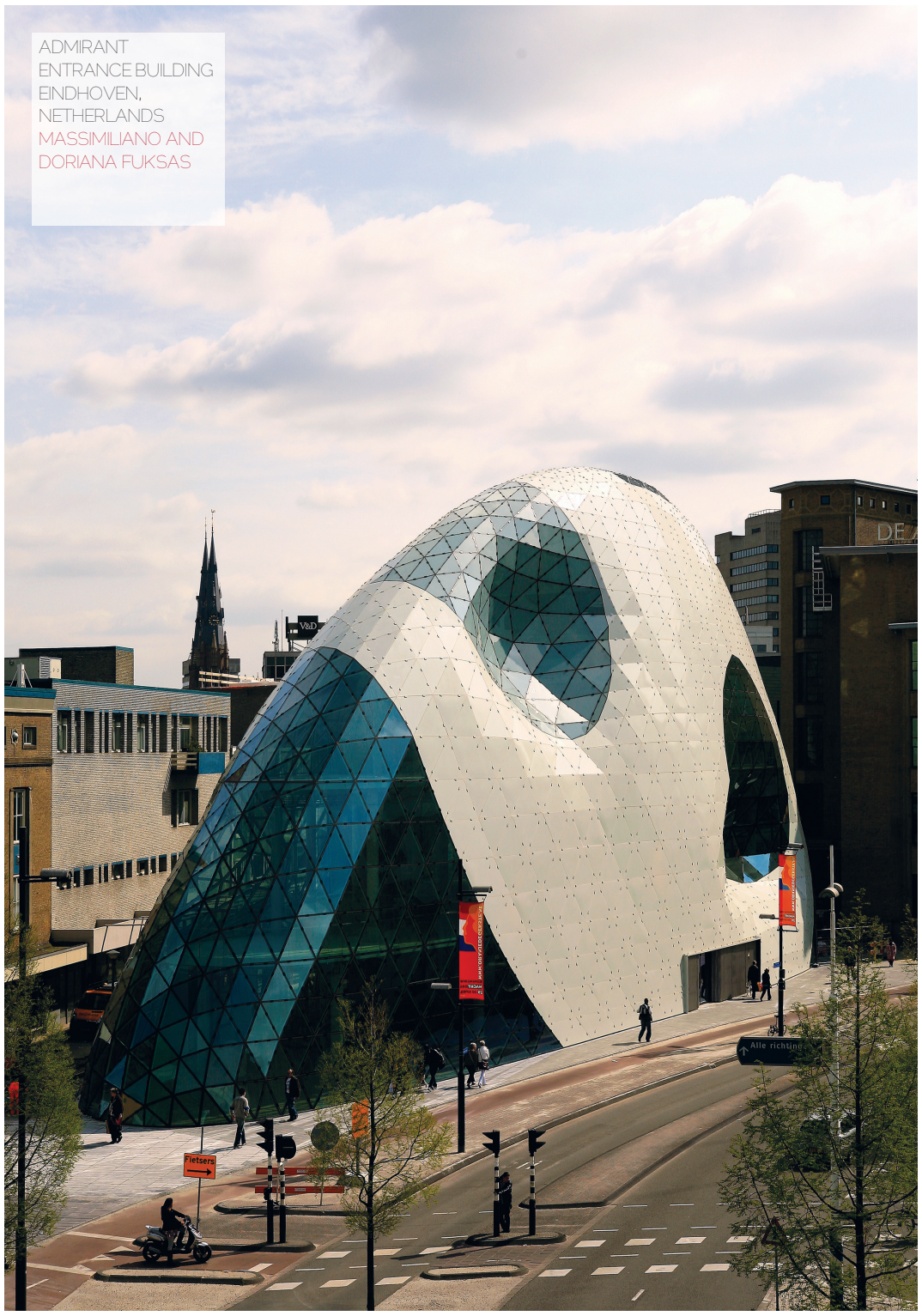
VAKKO HEADQUARTERS ISTANBUL, TURKEY
REX

IWAN BAAN

When asked to design the new headquarters for Vakko, a Turkish fashion and media company, the architects at REX were presented with an old, partially constructed concrete shell and an aggressive timeline to redesign the project. Rather than concealing the building shell—derelict structures like this are common in Turkey, where concrete construction is fast and inexpensive—the architects grew interested in revealing it through the thinnest sheets of glass possible. "We didn't want to hide the adaptive reuse," said REX principal Joshua Prince-Ramus. "This kind of adaptive reuse, of an abandoned, incomplete structure, is really at the forefront of sustainability."

The architects turned to the technique known as slumped glass, by which glass is repeatedly heated and cooled until it falls into a mold and assumes the mold's form. Slumping is typically used to create decorative effects, but REX decided to use it for structural purposes: The glass panels feature an X-shaped impression that gives them vertical and lateral stiffness and strength. At 5 by 10 feet, the 134 panels that wrap the building are a wafer-like 3/16 of an inch thick. They are held in place by four simple pins at the corners.

Before the glass could be heated, however, molds had to be made. Wood composite forms were cut from jigs, and then ceramic molds were made from the impression of the wooden forms. The glass was then heated and cooled over the ceramic molds, using the same techniques used to heat-strengthen glass. The process would have been



ADMIRANT
ENTRANCE BUILDING
EINDHOVEN,
NETHERLANDS
MASSIMILIANO AND
DORIANA FUKSAS

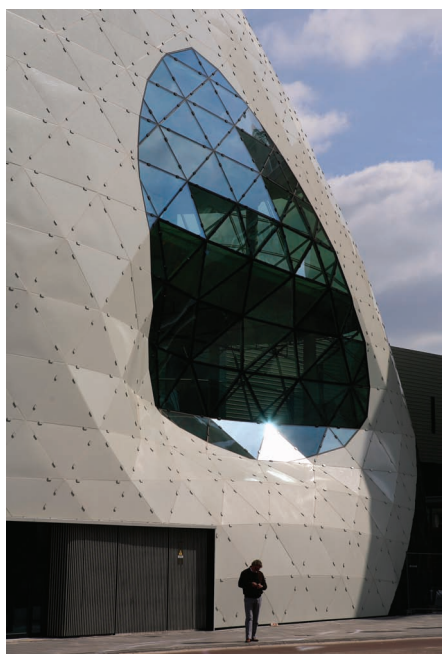
prohibitively expensive in many other places. "Turkey is at that sweet spot in their development where they have all the technology, but labor costs are low and they retain a large and highly skilled class of craftsmen," Prince-Ramus said.

The effect, according to the architects, is something akin to Saran Wrap, with the glass appearing to pucker as if pulled taut. Startlingly clear when viewed straight on, the panes catch light and reflections when viewed from an angle. The facade is distinctive without resorting to heavy-handed branding or the overt decoration common in many prominent buildings for fashion companies. "Our client didn't want a logo on the building," Prince-Ramus said. "But they wanted something memorable."

ALAN G. BRAKE

Facing page, top: Wafer-thin slumped glass reveals the building's frame. **Below, left:** The X-shaped impressions strengthen the panels and reflect light.

Above and right: A smoothly curved building envelope encourages pedestrian activity to flow around it, following the plan Fuksas developed for the city more than ten years ago.



ROB HOEKSTRA

Since World War II bombings destroyed much of it, Eindhoven has worked to rebuild itself as a modern metropolis, developing a masterplan for its central district in 1998 by Studio Fuksas with four main components, including a pedestrian square and shopping mall. The fourth element, the Admirant Entrance Building, a 32,000-square-foot, mixed-use center, was completed this year.

Appearing as the head of a glass beast rising from a sidewalk sea, the Admirant is both a bridge and a border to the square, separating the pedestrian area from the roadway while drawing visitors into the shopping area. Like the firm's FieraMilano in Milan, the building is an investigation into how much glass and steel can be stressed to create an organic shape. The tessellated glass triangles create a "blob" (Fuksas' word) that either conceals or reveals the structure beneath while preserving specific sight lines into, out of, and through the building.

The architects' vision for the building skin determined the size and shape of its concrete floor plates, which stabilize the glass shell horizontally with architecturally exposed connections. Working with Stuttgart-based engineers Knippers Helbig, Fuksas digitally optimized the form into triangular pieces. The shell is composed of welded rectangular hollow steel profiles, which create a slender mesh onto which transparent glass and opaque aluminum sandwich panels are clipped. Custom nodes at the intersection of each panel allow the necessary directional changes in the facade and are especially crucial to creating the complicated geometry around the shell's sunken "eyes." Austria-based Waagner-Biro prefabricated all of the glass and steel components using an automated cutting robot to achieve the ultra-precise measurements so essential because the clear triangular glass units were produced in tandem with the steel profiles. The individual panels, each with an area of about 20 square feet, were assembled in sections before installation, allowing the structure to settle before loose members were welded into place between the sections.

Though the five-story building contains a range of uses—commercial spaces, offices, and mechanical systems—the shape reads as one large gateway to the city's revitalized shopping district. "I try always to hide the performance of the building," Fuksas explained, adding that he was instead aiming to evoke "the quality of the space and the emotion you get when you have a relationship with the building."

JENNIFER K. GORSCHE

SPARKLING HILL RESORT
VERNON, BRITISH COLUMBIA
CANNON DESIGN

DEREK LEPPER PHOTOGRAPHY

Top and center: The centerpiece of the Sparkling Hill Resort is a crystalline facade constructed of 15 triangles of .63-inch-thick glass, held in place by a steel armature.
Above and right: Each triangle is composed of six to seven smaller triangles supported by an innovative triangular cable tension system which gives the facade the strength to support wind loads of up to 94 pounds per square foot.

The design process for British Columbia's new Sparkling Hill Resort began simply: Designers from Swarovski came into the Vancouver offices of Cannon Design, set a large piece of crystal on their desk, and said, "We want it to look something like this."

The partnership between Swarovski and Cannon was orchestrated by Hans-Peter Mayr, an Austrian hospitality entrepreneur who chose the location for the resort at the top of a mountain range in Vernon, British Columbia.

"It's actually a seven-story building, but it doesn't feel like it. It literally is cut into the rock," said Cannon Design architect David Wilkinson. The resort cantilevers away from the ridge, and beneath it, the team blasted into the mountain for parking and support spaces while drilling geothermal wells that provide nearly all the resort's energy needs.

But Sparkling Hill's centerpiece and namesake is its facade, a four-story crystal composed of over 15 facets, angled irregularly to echo the surrounding rock formations. From within, the facade creates an expansive atrium, spanned by a series of catwalks connecting it to each floor of guest rooms, and inviting guests to stand up close to the glass and look out at the mountains and lake below.

The crystal is supported by a complicated frame and cable system, designed by Canada-based Stella Custom Glass Hardware. Steel tubes 8 inches in diameter comprise an armature that holds the panes of glass in place. But with each individual pane being over 15 feet long, additional support was needed to keep them from sagging, and to make them resistant to snow loads, earthquakes, and the exceptionally strong mountain-top winds. "Probably the most unique challenge of the design was how to support the panels of glass in the middle of the triangles," said Roy Lamont, president of Stella Glass. Working with a structural engineer, they devised a unique cable tension system using stainless-steel cables tautly connecting the centers of the glass panels to the major intersections of the catwalks and armature.

The complicated system melts away when viewed from afar, and upon the long approach up the mountain, the effect is simply reflected light. Indeed, the facets are angled to send light in as many directions as possible toward the drive below. "The goal was to create something that signaled from a distance," Wilkinson said. "You can virtually see it from a plane."

JULIA GALEF

LIGHTCATCHER
AT WHATCOM
MUSEUM
BELLINGHAM,
WASHINGTON
OLSON KUNDIG
ARCHITECTS

PHOTOGRAPHS BY BENJAMIN BENSCHNEIDER, EXCEPT BELOW RIGHT: TIM BIES

The Pacific Northwest is known for many things, among them salmon, pine trees, and grunge rock. Sunshine does not often make the list. When designing an expansion of the Whatcom Museum, a showcase of regional art in Bellingham, Washington, Seattle-based Olson Kundig Architects knew that to attract a crowd, a luminescent structure would be essential.

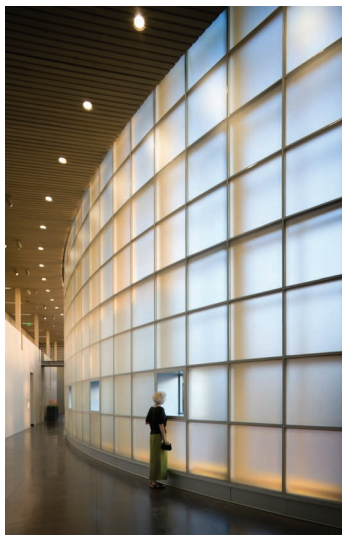
The new, 42,000-square-foot museum is known as the Lightcatcher, for the 180-foot-long, 37-foot-high swooping wall of glass that is the project's signature, a shining concavity that lures visitors into a nexus of art and activity. "It really came from the idea of light and a lack thereof—that this would be a focal point to gather light and gather people," said Olivier Landa, the project manager at Olson Kundig.

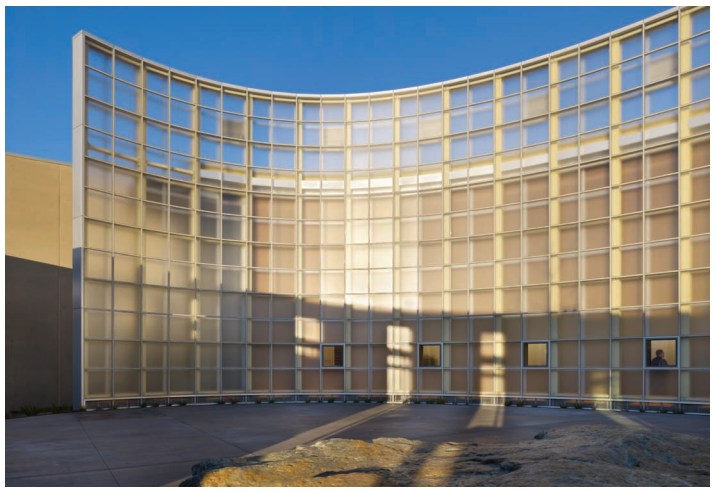
On typically overcast days, the glass wall takes on a silver hue, reflecting the clouds; during the summer, it radiates warmth, shining like a peak of the Northern Cascades. As with most of Olson Kundig's work, the project draws heavily on its surroundings.

To achieve this effect, Olson Kundig employed a complex system of frits and laminates on the two walls of glass that comprise the Lightcatcher. They began with an acid-etched product made by Montreal-based Walker Glass with a translucency that shifts from a nearly transparent ghostliness to an opaque veil. "It's almost like it's alive," principal Jim Olson said, adding that it took a year of mock-ups to create the desired appearance. The etching serves a dual purpose, protecting art from direct light as well as transforming the wall into a canvas, allowing for art installations and films.

Where the glass meets the museum, an agate-tinged frit is employed, which gets progressively denser as visitors travel toward the galleries, allowing their eyes to adjust and shielding the art within. The frit helps the museum glow, both by day and night, when interior lights telegraph activity inside. To create even more of a beacon, white, golden, and salmon-colored lights have been installed within the wall.

The most unique thing about the Lightcatcher, though, is not the way it looks but the way it works, as an integral part of the museum's HVAC system. The two sets of window panes create a 2-foot chimney that traps heat, insulating the building in winter and cooling it in summer, when vents at the top and portholes at the base are opened. **MATT CHABAN**

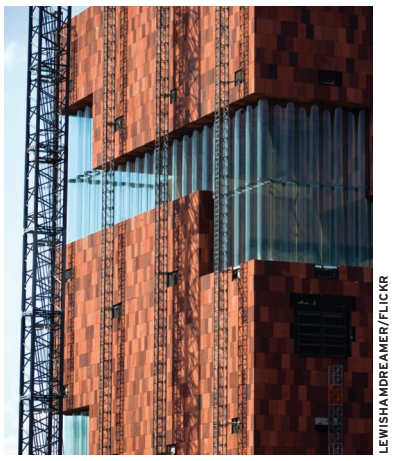




Top and above, left: When not reflecting the sun's rays, the Lightcatcher uses gels to create an inviting atmosphere in the courtyard at night. **Above:** A visitor peers through one of the port-hole windows that doubles as a ventilation hatch. **Left:** The exterior glass is acid-etched to reflect a diffuse light.

MUSEUM
AAN DE STROOM
ANTWERP,
BELGIUM
NEUTELINGS RIEDIJK

SARAH BLEE/COURTESY NEUTELINGS RIEDIJK ARCHITECTS



LEWISHAMDREAMER/FLICKR

BART VAN DAMME/FLICKR

Left: The Museum aan de Stroom's 10-story tower is covered in red Indian sandstone, broken up by full-length windows of corrugated glass.
Top: The 1/2-inch-thick, 18-foot-wide corrugated panels are bolted with steel supports at top and bottom, and joined at the inflection points with silicone.
Above: The corrugation creates a tinted effect when viewed at an angle from the museum's interior.

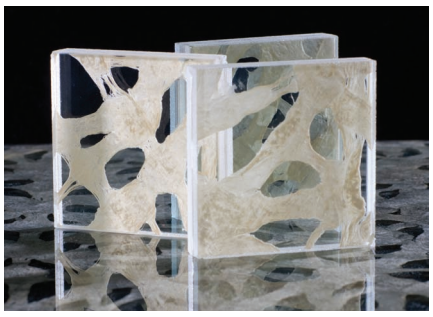
Ascending the escalators that spiral up Antwerp's newly-completed Museum aan de Stroom, galleries displaying artifacts of the city's past alternate with 18-foot-high views onto the city and waterfront. A competition-winning design by Dutch architecture firm Neutelings Riedijk, it comprises ten floors cantilevered out from a central core, each one rotated 90 degrees from the one below. Because many of the exhibitions' contents will be sensitive to the sun, the galleries themselves have no windows, providing a stark contrast to the expansive panoramas on every other floor.

Those views are especially striking through the museum's undulating glass enclosures. After winning the commission ten years ago, Neutelings Riedijk teamed up with glass engineer Rob Nijsse to devise a way of making their oversize panes thin enough to maintain clarity but stable enough to withstand wind, without resorting to metal supports. Their solution was to corrugate the panes, placing float glass in a wavy mold and baking it until it melted into shape.

Although the basic technique for curving glass dates to the 19th century, the unprecedented size of these panes raised a host of new problems. Only one other building had incorporated similar corrugated windows, to Neutelings' knowledge: the 2005 Casa da Musica in Porto, by Rem Koolhaas, who worked with Nijsse as well. But the 18-foot panes in the Museum aan de Stroom were far larger, too large for most ovens to accommodate.

The team solved that problem by renting Europe's largest oven, a 20-footer in Italy, but other difficulties remained. The hardest, according to principal partner Willem van Neutelings, was how to achieve enough precision in the dimensions of the panes to allow them to align perfectly and connect with silicone joints. "It took a lot of calculations and work with the glass industry to make it suitable," Neutelings said.

The thin panes, unmarred by any metal reinforcement, seem to disappear when the museum is glimpsed from far away. When viewed from within the building, the corrugation is obvious. Standing inside the radius of one of the curves appears to create a private viewing chamber, with a much wider panorama than that of a flat window. Alternately, seen from a slant, the glass takes on a greenish tint, turning the window into more of a curtain and making the room feel enclosed. "What you see in the glass depends on your position," Neutelings said. **JG**



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6

NEW GLASS TECHNOLOGY BRINGS CLARITY TO THE MARKET
BY JENNIFER K. GORSCHE

LITE TOUCH

1 IVORY SPIDERWEB WITH BARKSKIN
LIVINGLASS

Livinglass has partnered with hand-pounded bark manufacturer Caba Company to create a new line of decorative glass with a Barkskin interlayer made of the bark of fallen trees. The impact-resistant laminated safety glass panels contain 100 percent recycled glass and resin and are UV, water, and chemical resistant with a Class A, Class 1 fire rating. Panels can be as thin as ½ inch and are available in custom lengths up to 144 inches or custom widths up to 36 inches.
www.livinglass.com

2 PYRAN PLATINUM
SCHOTT

Schott's Pyran Platinum glazing is a transparent glass-ceramic material made without wires or the hazardous heavy metals antimony, arsenic, or barium, which are present in other fire-rated glass-ceramics. At just 3/16 inch thick, it is appropriate for non-impact, safety-rated locations including transoms and windows, while meeting fire-rating requirements, including a hose stream test, for up to 90 minutes. Finished with a nearly invisible microstructure, the glass is produced with a patented process that improves color clarity and eliminates distortion.
www.us.schott.com

3 PRINT
JOEL BERMAN GLASS STUDIOS

Winner of a silver Best of NeoCon architectural products award this year, the Print technique developed by Joel Berman's graphics division allows high-resolution photographs and designs to be printed directly on glass using ceramic frit ink. Images are printed with a minimum resolution of 300 dpi on standard, low-iron, or Berman textured glass up to 59 by 126 inches. Translucent and opaque finishes are available, and glass can be tempered or laminated for a full range of interior applications.
www.jbermanglass.com

4 KRYSTAL KLEAR GLASS
AGC GLASS COMPANY

Krystal Klear is a new family of low-e glass from AGC that has the strength of heavy glass but without the greenish tint visible in some high-iron content panels. Though it can be used as a solar glass, Krystal Klear offers 91 percent light transmission, making it an ideal choice for interior applications. Laminating is available when more strength is needed, and the glass can also be tempered, curved, silkscreened, or insulated.
www.afgglass.com

5 RENOVATE
JE BERKOWITZ

Architectural glass fabricator JE Berkowitz's new Renovate division offers a system that allows single-pane windows to be retrofitted with an interior double-glazed attachment. The system includes iDea Seal weather seals, custom beauty caps, and setting blocks from Lauren Manufacturing and Plastics, as well as a customized Super Spacer TriSeal from Edgetech, which provides a seal between window units. Tests conducted by the company indicate that up to 65 percent energy savings and 7 to 31 LEED points are possible with the system.
www.jeberkowitz.com

6 SPHERE
NATHAN ALLAN

Part of Nathan Allan's Josiah J collection, Sphere is a line of glass shapes that can be affixed to one or both sides of clear and textured cast sheets of glass. The company's artists work with architects and designers to develop the size and layout of the spheres before fabrication begins. Eight colors, seven shapes, and three standard diameters up to 3 inches are available, but the company will also fabricate custom spheres up to 24 inches.
www.nathanallan.com

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SEPTEMBER 2010

SEPTEMBER

WEDNESDAY 8
LECTURES
Beth Osborne, Shelley Poticha, and John Frece
The HUD-DOT-EPA Partnership for Sustainable Communities
12:30 p.m.
National Building Museum
401 F St. NW
Washington, D.C.
www.nbm.org

Lee Epstein, Steven Trinkaus, et al.
Planning for Sustainable Sites
9:00 a.m.
AIA Connecticut
370 James St.
New Haven
www.aiact.org

EXHIBITION OPENING
Suzan Frecon
David Zwirner
519 West 19th St.
www.davidzwirner.com

EVENT
Gardens of Lower Manhattan Tour
6:00 p.m.
Horticultural Society of New York
The British Garden at Hanover Square
www.hsny.org

THURSDAY 9
EXHIBITION OPENINGS
Brasilia
1500 Gallery
511 West 25th St.
www.1500gallery.com

Paul Strand in Mexico
Bronx Museum of the Arts
1040 Grand Concourse, Bronx
www.bronxmuseum.org

Roy Lichtenstein Reflected
Mitchell-Innes & Nash
534 West 26th St.
www.miandn.com

Marcel Broodthaers
Marian Goodman Gallery
24 West 57th St.
www.mariangoodman.com

Jeff Bark
Lucifer Falls
Hasted Hunt
529 West 20th St.
www.hastedhunt.com

Adam Fuss
Home and the World
Cheim & Read
547 West 25th St.
www.cheimread.com

FRIDAY 10
EXHIBITION OPENINGS
Dan Flavin
Paula Cooper Gallery
534 West 21st St.
www.paulacoopergallery.com

Robert Gober, Nan Goldin, Andreas Gursky, et al.
New Work
Matthew Marks Gallery
522 West 22nd St.
www.matthewmarks.com

Sean Raspet
As If Written In
The Kitchen
512 West 19th St.
www.thekitchen.org

SATURDAY 11
EXHIBITION OPENINGS
Gerhard Richter
"Lines Which Do Not Exist"
Claudia Wieser
Poems of the Right Angle
The Drawing Center
35 Wooster St.
www.drawingcenter.org

Pipilotti Rist
Heroes Of Birth
Luhring Augustine
531 West 24th St.
www.luhringaugustine.com

Faith Ringgold
American People, Black Light: Paintings of the 1960s
Neuberger Museum of Art
735 Anderson Hill Rd.
Purchase, NY
www.neuberger.org

WITH THE KIDS
Back to School Design
11:00 a.m.
Center for Architecture
536 LaGuardia Pl.
cfa.aiany.org

SUNDAY 12
LECTURES
Lillian Sarno, Maria Alvarez, et al.
Linking Generations of Women: Gray Panthers, 1970–2010
2:00 p.m.
Brooklyn Museum of Art
200 Eastern Parkway
Brooklyn
www.brooklynmuseum.org

Marianne Eggler
What Was Good Design? MoMA's Message, 1944–56
11:30 a.m.
Museum of Modern Art
11 West 53rd St.
www.moma.org

TUESDAY 14
LECTURE
Neil Denari with Preston Scott Cohen
6:30 p.m.
Harvard Graduate School of Design
48 Quincy St.
Cambridge
www.gsd.harvard.edu

EXHIBITION OPENINGS
Do Ho Suh
A Perfect Home: The Bridge Project
Storefront for Art and Architecture
97 Kenmare St.
www.storefrontnews.org

Appetite
41 Cooper Gallery
Cooper Union
41 Cooper Square
www.cooper.edu

Marc Newson
Transport
Gagosian Gallery
522 West 21st St.
www.gagosian.com

EVENT
LentSpace Curator Tour: Adam Kleinman
12:30 p.m.
LentSpace
6th Ave. and Canal St.
www.lmcc.net

WEDNESDAY 15
LECTURES
Cities for People: An Illustrated Talk with Jan Gehl
6:00 p.m.
Center for Architecture
536 LaGuardia Pl.
cfa.aiany.org

Philip Ursprung
Shifting Ground: Peter Zumthor and the Urbanization of the Alps
6:30 p.m.
Harvard Graduate School of Design
48 Quincy St., Cambridge
www.gsd.harvard.edu

EXHIBITION OPENINGS
Counter Space: Design and the Modern Kitchen
Museum of Modern Art
11 West 53rd St.
www.moma.org

Engine 212: Activist Interiors
Sheila C. Johnson Design Center
66 5th Ave.
www.parsons.edu

EVENT
Windowfarms
1:00 p.m.
LMCC Swing Space
156 William St.
www.lmcc.net

THURSDAY 16
LECTURES
Marc Newson and Alice Rawsthorn
7:00 p.m.
92Y
1395 Lexington Ave.
www.92y.org

Mario Carpo
The Cathedral or the Bazaar? Agency, Indeterminacy, and Digital Form Making
6:30 p.m.
Yale School of Architecture
Paul Rudolph Hall
180 York St., New Haven
www.architecture.yale.edu

Gail Fenske
The Skyscraper & The City: The Woolworth Building & The Making of Modern New York
6:30 p.m.
Bernard and Anne Spitzer School of Architecture
City College of New York
141 Convent Ave. at 135th St.
www.ccny.cuny.edu

EXHIBITION OPENINGS
Painting Brooklyn Stories of Immigration and Survival
Brooklyn Historical Society
128 Pierrepont St., Brooklyn
www.brooklynhistory.org

Jason Bryant
Trilogy
Raandesk Gallery of Art
16 West 23rd St.
www.raandeskgallery.com

John McCracken
New Works in Bronze and Steel
David Zwirner
519 West 19th St.
www.davidzwirner.com

Sarah Sze
Tanya Bonakdar Gallery
521 West 21st St.
www.tanyabonakdargallery.com

The Independent Eye: Contemporary British Art from the Collection of Samuel and Gabrielle Lurie
Yale Center for British Art
1080 Chapel St.
New Haven
ycba.yale.edu

CONFERENCE
East Coast Green
8:00 a.m.
Bally's Atlantic City Hotel & Casino
1900 Pacific Ave.
Atlantic City, NJ
www.aia-nj.org

FILM
Rick Joy: Interludes
(Muffie Dunn, 2009), 22 min.
6:30 p.m.
Center for Architecture
536 LaGuardia Pl.
cfa.aiany.org

FRIDAY 17
EXHIBITION OPENING
Nueva York (1613–1945)
El Museo del Barrio
1230 5th Ave.
www.elmuseo.org

EVENT
LEED For General Contractors and Construction Administration
1:00 p.m.
Design Centre
62 Greene St.
www.arpa-ny.com

SATURDAY 18
EVENT
Researching Your Brooklyn House
2:00 p.m.
Brooklyn Historical Society
128 Pierrepont St.
Brooklyn
www.brooklynhistory.org

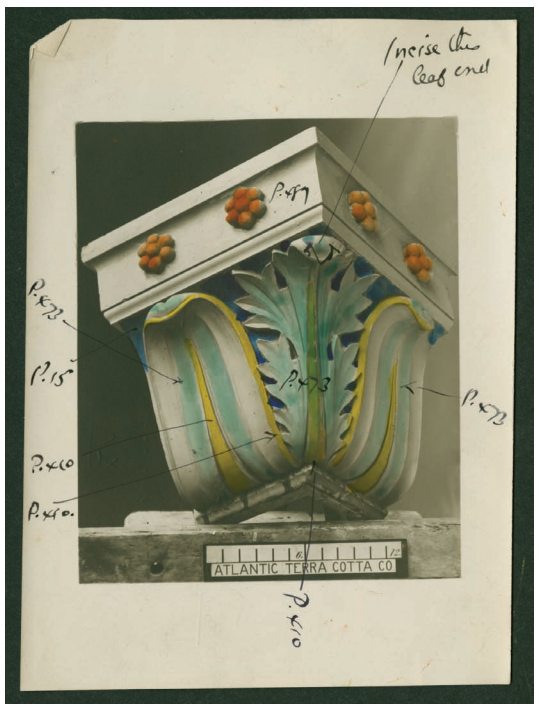
MONDAY 20
LECTURE
Warren Byrd
6:30 p.m.
National Building Museum
401 F St. NW
Washington, D.C.
www.nbm.org

FILM
Ecogram III: Africa, Burning in the Sun
12:30 p.m.
Columbia GSAPP
114 Avery Hall
www.arch.columbia.edu

TUESDAY 21
LECTURE
Eric Nash
Manhattan Skyscrapers
6:30 p.m.
Skyscraper Museum
39 Battery Pl.
www.skyscraper.org

EXHIBITION OPENING
Photographing Woodlawn
Lehman College Art Gallery
250 Bedford Park Blvd. West
Bronx
www.lehman.edu

EVENT
Henry C. Turner Prize: Engineers Without Borders-USA
6:30 p.m.
National Building Museum
401 F St. NW
Washington, D.C.
www.nbm.org



COURTESY UNIVERSITY OF ROCHESTER

CLAUDE BRAGDON AND THE BEAUTIFUL NECESSITY

Rush Rhees Library, University of Rochester
500 Joseph C. Wilson Blvd., Rochester
Through October 16

On display at the University of Rochester's Department of Rare Books & Special Collections, this exhibition offers a comprehensive look at architect and artist Claude Bragdon. Known for civic works like the New York Central Railroad Station and the First Universalist Church in turn-of-the-century Rochester, where he practiced throughout the Progressive Era, Bragdon also designed outdoor song-and-light concerts in Rochester, Syracuse, Buffalo, and New York City between 1915 and 1918. The exhibit, accompanied by a book of the same title, features drawings, paintings, graphic designs, and photographs, including annotated terra-cotta samples for Bragdon's Bevier Memorial Building in Rochester (1910, above). In his later work, Bragdon integrated principles of geometry and musical proportion, and drew on diverse sources including theosophy, ether physics, and P.D. Ouspensky to cap a remarkably varied career.

COURTESY FRAENKEL GALLERY

LEE FRIEDLANDER: AMERICA BY CAR

Whitney Museum of American Art
945 Madison Avenue
Through November 28

In a new show at the Whitney Museum of American Art, veteran photographer Lee Friedlander chronicles over ten years spent on the road, filtered through an eloquent and frequently witty lens. Though his subject material in *Lee Friedlander: America By Car* is ordinary—roadside landscapes, bars, motels, churches, and other everyday Americana—his compositions are not. Friedlander's signature trick is to employ the car itself as the framing device, gazing through the windows and capturing views in the side- and rear-view mirrors. It's a surprisingly versatile trick, generating playful juxtapositions as well as surreal ones: In *Arizona* (2007, above), a field of abandoned cars is anchored to reality by only a glimpse of town visible in the mirror.

Out of India

Chandigarh 1956
Photographs by Ernst Scheidegger
Edited by Stanislaus von Moos
Verlag Scheidegger & Spiess/
Distributed by University of Chicago Press, $75.00

For those who have not been to Chandigarh, and for those who think of Le Corbusier as the conceptual source of all crimes against urbanity, in other words for most people, the photographs by Ernst Scheidegger in *Chandigarh 1956* will come as a revelation. Here is a lowrise, residential town of brick and bougainvillea that owes much to Ebenezer Howard's British Garden City movement and to Albert Mayer, the American planner who admired it, and who was in fact the first commissioned planner of the new capital for the Punjab. When Mayer's architectural partner Matthew Nowicki died in a plane crash early on, Nehru went in search of a new team, which led to a youngish British couple identified with Team 10, Jane Drew and Maxwell Fry, as architects for the bulk of the city and to Le Corbusier in the unavoidable role as guiding design force as well as architect of the monumental Capitol Complex. Le Corbusier in turn brought on his cousin and longtime partner Pierre Jeanneret, who provided design continuity for the place, remaining in Chandigarh for years. The city revealed in the photographs is the city of Jeanneret with Drew and Fry as much as of Le Corbusier, who had only one of his buildings, the High Court, completed in 1956.

The book briefly recounts this history, sheds a bit of light on the relationships among the architectural bedfellows, and selectively explores elements of design process. But the more significant essays deal with the photography of the place and the role of photography in the work of Le Corbusier and in postwar urbanism, Brasília in particular. As Stanislaus von Moos and Verena Nievergelt illuminate, Scheidegger wedded the photojournalism of the Magnum Group, to which he belonged, with a Swiss objectivism based on patient observation. His approach stressed the narrative content of the picture as a source of ethnographic fact and formal structure. Moos contrasts Scheidegger with Lucien Hervé, Le Corbusier's house photographer, whose pictures in the *Oeuvre Complète* have come to define our image of the architecture as black-and-white still lives empty of figures but haunted by the traces of the inhabitants through props of bowler hats and dead fish, like a gentler film noir. One might argue that there is a cagey anthropologist at work in Hervé as well, but Moos' point is well taken: Scheidegger's photographs are bursting with life to the degree that the architecture becomes either a backdrop for action or a foreground for an outsized nature.

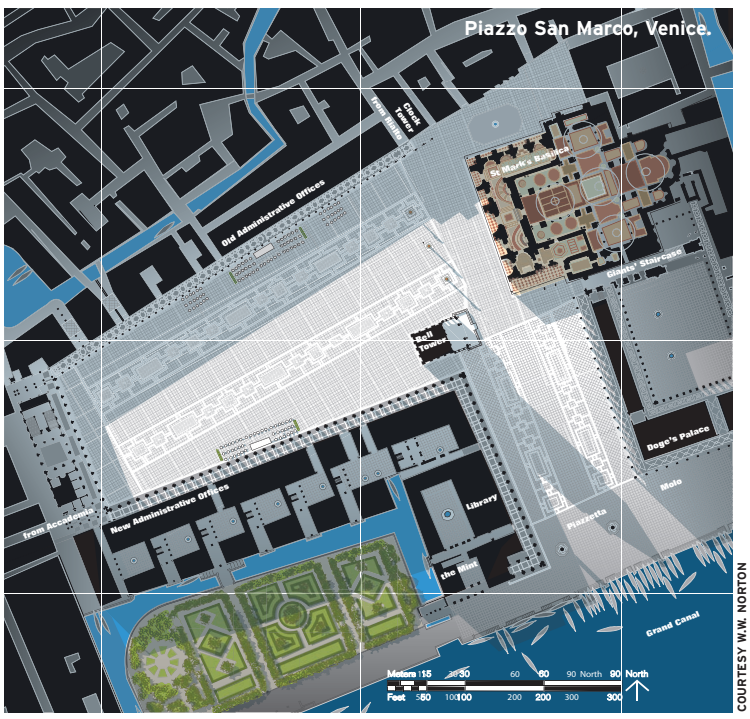
The sheer number of images and their repetitive content give a sense of the state and even pace of a city coming into being. In two shots seemingly taken within moments, a small group of male teachers is seen meeting, and then two women teachers fill the empty chairs—or do we see them leave? In any case, to publish only the photo of the men with chairs, as Scheidegger originally proposed for the slim pamphlet that is reproduced at the end of the book, is to lose the sense of the womens' camaraderie as they take their rightful place in the circle. Some of the differences among shots are subtle: a change of light, the appearance of cow patties on a ledge. The one overwhelming similarity among the plates is that they are all exterior shots. Even the interiors are exteriors: classrooms on the lawns of new schools, breezeways clad only with screens, bazaar stalls in the city arcades, a barbershop under a tree on the road edge. Le Corbusier's High Court fits seamlessly into Scheidegger's conceit of this city as outdoor theater, for it was conceived as a building without an interior, where the courts open directly on the plaza to display democratic justice in action, and the open-air ramp through the vaults is akin to circulation in a Roman ruin.

For those who know Chandigarh, not all of this comes as a surprise. Some of Scheidegger's photographs were indeed included in the *Oeuvre Complète*, where they are recognizable classics. And the city he captured is still very much present, including shantytowns that originally housed the construction (now migrant) workers, the kitsch (now postmodern) houses of the free zones, the street barbers, the bicycles, and the bougainvillea.

Above: Le Corbusier's Secretariat building under construction; Below: Entry space in Jane Drew's High Secondary School.

DEBORAH GANS IS THE PRINCIPAL OF GANS STUDIO IN NEW YORK.

ERNST SCHEIDEGGER/NEUE ZÜRCHER ZEITUNG



COURTESY W.W. NORTON

MAP QUEST

Great Public Squares
Robert F. Gatje
W.W. Norton & Company, $65.00

Robert Gatje has written a book that makes you want to get on a plane and revisit every historic square you have ever seen—and then go to the ones you've missed in slightly out-of-the-way places like Rhodes, Nancy, and Halifax.

Wonderful colored maps, inspired by the Nolli Map of Rome, help you understand solid and void, distinguish parterres from pavement, grasp street patterns, and, in some cases, identify significant works of architecture. Clusters of photographs and occasional monochromatic historic prints enable you to experience the squares (which are rarely square) in elevation. Measurements let you sense the size and scale of each square described and compare them to one another. Brief, clear, and informative text provides just enough historical information for context.

Gatje is a New York architect, a former partner of Marcel Breuer and Richard Meier, and author of *Marcel Breuer: A Memoir* (Monacelli Press, 2000). This is a book only an architect could have written—with careful observations, measurements, materials, orientation, and alterations emphasized. And though at roughly 11 by 11 inches and 224 pages it is a big, beautiful coffee table book likely to stimulate conversation with visitors, it would be great to have in some small portable form as well. I wish maps like Gatje's existed for all squares.

The only thing missing—and adding it would have obscured its argument—is use, or what goes on inside these urban spaces. Most of the wonderful Italian piazzas in the book are surrounded by some combination of institutions and residences, or have people living on nearby streets. Many have hotels in the vicinity or tourists wandering around. Also, of course, Italians pass through their piazzas, stop for drinks, and dine there. This is the behavior American planners overlooked (or wished for) in the 1960s and '70s, when they tried to plant plazas in city centers devoted solely to commerce.

The effort is still underway, as shown in the last project covered, Pioneer Courthouse Square in Portland, Oregon, begun in 1981. Although it is a good example of its type in a reasonably pedestrian-friendly city, it is surrounded by office towers, department stores, and a courthouse, so it is a very different kind of place than an Italian piazza—or New York City's Union, Washington, and Madison squares. It is an anomaly in a book with inhabited urban spaces as, frankly, is the one local example included—the dazzling Rockefeller Center Plaza. I understand completely why he chose these squares, as they bring some geographical and temporal balance to the book. But surrounded by tall buildings in commercial areas, they don't quite fit. Their inclusion, though, makes me think he should now write a book on American public spaces from New England greens to recent urban interventions of the Portland type, because the American story is a very different one. American cities, except maybe our own, have been designed "to make cars happy," as Andrés Duany has so aptly put it. And squares need people on foot, as Gatje points out time and again when assessing squares like the Place Vendôme in Paris, where cars have been allowed to intrude.

Without quite saying so, I think he proves that a successful urban public space needs people who live around it—or at least stay around it in apartments, villas, and hotels, as is the case in Venice. Union Square has been remarkably transformed in the last 30 years, not only by the much-touted Greenmarket but by the significant increase in the number of people who live on it or its edges, and the shops and restaurants that serve them.

Besides inspiring wanderlust, this book, which concentrates on European plazas (only four of the 40 are in the U.S.), has made me think more critically about what can be done to make American cities more livable. That is no mean accomplishment.

HISTORIAN JAYNE MERKEL WRITES FOR *AD* AND *ARCHITECTURAL RECORD*, AMONG OTHER PUBLICATIONS. SHE LIVES IN THE MIDDLE OF THE GREATEST CLUSTER OF PUBLIC SQUARES IN AMERICA–WASHINGTON, UNION, STUYVESANT, AND MADISON SQUARES.

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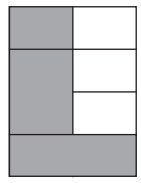

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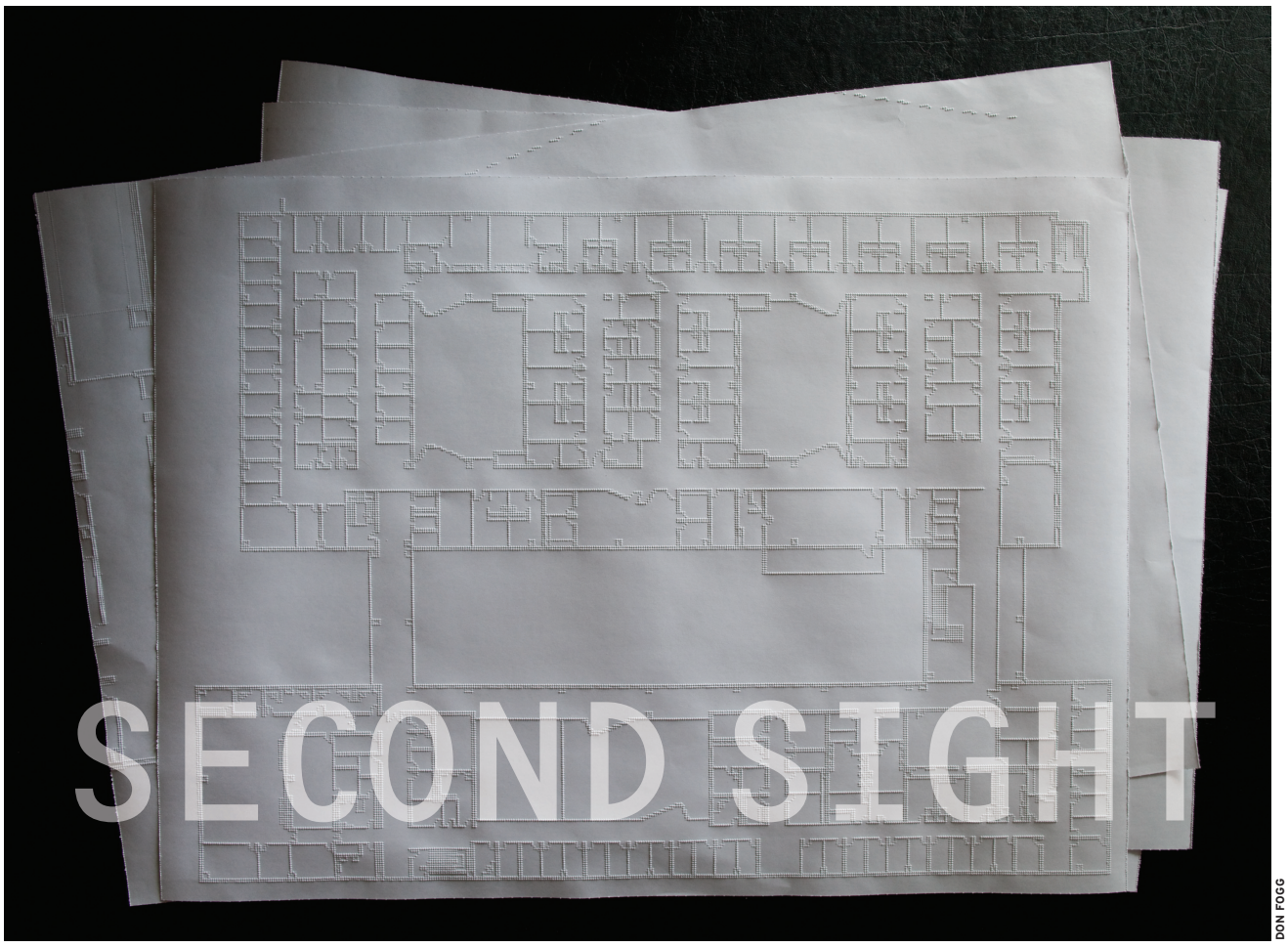
SECOND SIGHT



DON FOGG

Left: An embossed plan from a large-format printer used by Downey.

In 2008, surgery to treat a brain tumor left San Francisco–based architect Chris Downey blind at the age of 45. Soon after returning to work, Downey's loss of sight proved an unexpected strength, leading to a niche as a specialty consultant on projects for those with sensory impairments. Veteran real estate and architecture writer/editor Peter Slatin, who has experienced a gradual loss of sight since his teens and is now almost completely blind, recently spoke to Downey about his approach to the world of practice, his design tools, and the full sensory experience of architecture.

How did you get here? What kinds of projects were you involved in before you lost your sight, and what was your role?
At the start of January 2008, I joined Michelle Kaufmann Designs (MKD) as the managing principal. MKD was a design/build company specializing in green, prefabricated, modular homes. My role was broad, including design direction, firm management, and client relations. The work was all residential, primarily single-family. Two and a half months into the new job, I reported for surgery to remove a brain tumor that was discovered a month earlier.

The surgery left you without sight. What projects have you worked on since you resumed practicing?
I resumed work exactly one month after losing my sight. It was a little crazy, as I had not started any of the rehabilitation training for sight loss, and there I was back in the office. But the leadership and staff were all incredibly encouraging and supportive. Eventually, the rehabilitation services started, including the orientation and mobility skills that I needed and the computer skills that I needed to engage in our technology-driven profession. It was all coming together late that fall when the economy tanked. As layoffs mounted, I too had to go in December 2008.

Starting 2009 unemployed as an architect who had been blind for less than ten months was not particularly auspicious. Within a month, however, I was connected with the Design Partnership in San Francisco, which was working on a Polytrauma and Blind Rehabilitation Center for the Department of Veterans Affairs in Palo Alto, together with SmithGroup out of San Francisco. The project was in design development, yet the client and the team were becoming aware that they really didn't understand how space and architecture would be experienced and managed by users who would not see the building. When I showed up as a newly blinded architect with 20 years of experience, there seemed an opportunity to bridge that gap. The fact that I was a rookie at being blind was even better, as I was not that far removed from the experience of the veterans who were dealing with their new vision loss.

The project quickly illuminated a spectrum of practice where my blindness could be harnessed as a strength. I started to focus my professional interest on projects for the blind such as schools, service providers, and rehabilitation centers. Along with the continuing VA project, I'm working with Starkweather Bondy Architecture in Oakland on an expansion of the Guide Dogs for the Blind school in San Rafael, California. I'm also consulting with Magnusson Architecture and Planning in New York for the renovation of the Associated Blind Housing project, a 220-unit residential building on West 23rd Street in Manhattan.

I'm also exploring work on other project types that can be difficult for blind users, such as transit centers, airports, and museums. These places can be made accessible in ways that are not simply a band-aid or an applied adaptation. At cultural and science centers, accessibility codes have removed barriers to independent physical entry and mobility, yet for the blind that simply gets us into the space, where we are free to roam around. Little has been done to provide further guidance to those with sensory impairments.

What are your new tools? And how many of your old tools are still usable?
Everyone assumes that architects draw and that it is a very visual profession. I tend to disagree. Architecture is first and foremost a creative endeavor. We think, we consider, we research, we study, and we take it into form via tools like drawing and modeling. If you can't see the paper or the monitor before you, how else can architectural design be created? Most of us walk down the street relying heavily on our sight, yet those with visual impairments find non-visual techniques for getting around. The same is true with most other things, including architecture.

I do still draw occasionally by drawing on a raised line drawing kit. It consists of a rubber clipboard with thin mylar. As you draw with an inkless Teflon-tip pen, the line raises behind the stroke. The challenge is that it does not provide a way to sketch on top of another image. This took a while to figure out. But I have been working with a large-format embossing printer that provides a tactile form of the drawing by converting the linework into a series of dots. It even creates line weights. The drawings do need to be slightly simplified, as too much graphic information easily results in lost time and confusion.

Reading a drawing with your fingers is a totally different process than seeing it with your eyes. With sight, you immediately see the whole and you drill deeper into the detail. When reading with my fingers, I read from the detail toward the full image. It took a while to make this work, as I needed to create the neurological connections between fingertips and brain. To do this, I started to study Braille, which it was important for me to learn anyway.

In the summer of 2009, I participated as a mentor in a program for blind high-school students from around the country at the University of Maryland, sponsored by the National Federation of the Blind. One of the tools they worked with was a product called Wikki Stix, which are just thin wax sticks that you can easily bend, curve, or stick together. I now use them to sketch on top of the embossed plots. I can generate all sorts of options by just peeling off sections and trying again.

How has your understanding of space, light, and materials changed? And has being blind changed your approach to design?
Becoming a fully actualized blind person doesn't happen overnight. It is commonly understood that 80 percent of the architectural interface is through vision. When sight is lost, the mind starts to rely more heavily on the remaining senses. In my case, I also lost all sense of smell, so it's down to acoustics and touch, as well as muscle memory and other more subtle sensory cues.

I rely on a cane for mobility and not a dog, in part because I appreciate the acoustic feedback of space. The cane helps me discover things around me. Quite often when walking through town, people try to steer me around obstacles yet that's exactly what I'm looking for. If I don't hit it with my cane, how do I know where I am? You quickly learn to catalogue a lot of stuff and it becomes quite surprising when you realize that you know exactly where you are with a simple tap of an object or a wall with a cane. You can often tell how high a ceiling is by listening for the reverberation of a tap or a clap off the ceiling or the bounceback off a distant wall. These aren't supersensory levels but rather the product of the mind not overwhelmed with visual inputs. The brain simply processes the same impulses with a different bias.

Light, however, is a very poetic part of architecture that brings space to life. The rules and the calculations are all the same, and I still build mental models using images from 45 years of sight.

Materials have taken on new significance for me. Traditionally, material palettes are developed for their visual composition. I now like to expand choices to a textural, tactile palette. I like to think of the front-door handle as the handshake of the building—the feel of the grip speaks volume. Handrails at the stair or ramp are the same. There are so many places in a building that are meant for touch, yet architects are so inundated with drawings and production that they can forget what it's really like to inhabit a building. With all the technological development around us, architecture remains a full sensory experience. You can't get it on your iPhone or on the web. Perhaps that makes it nostalgic—or perhaps it actually makes it more vital and alive.

PETER SLATIN IS ASSOCIATE PUBLISHER AND EDITORIAL DIRECTOR AT REAL CAPITAL ANALYTICS, A COMMERCIAL REAL ESTATE RESEARCH FIRM.

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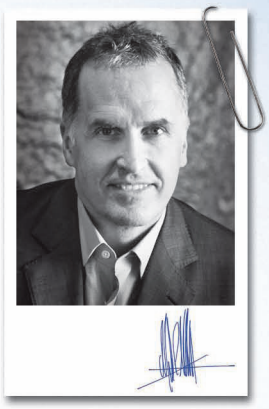

Mark Sexton, FAIA, Partner, Krueck + Sexton Architects, Chicago, Illinois

The Spertus Institute was a challenging project. It is designed with 726 pieces of glass fabricated in 556 unique shapes, including parallelograms that tilt in two directions. The integrity of the design relied on the absolute flatness of the glass, so we used 50% thicker exterior panels to reduce roller wave. We wanted a very neutral, low-reflective look but with high-performance numbers—especially in UV transmittance. Other companies just can't fabricate glass with this level of complexity. We worked with Viracon from the very beginning of the concept. When you only have one material to work with, you better be confident about how it's engineered and fabricated. At the end of the day, Viracon is just as concerned about the quality of the product as they are about the quality of the process.

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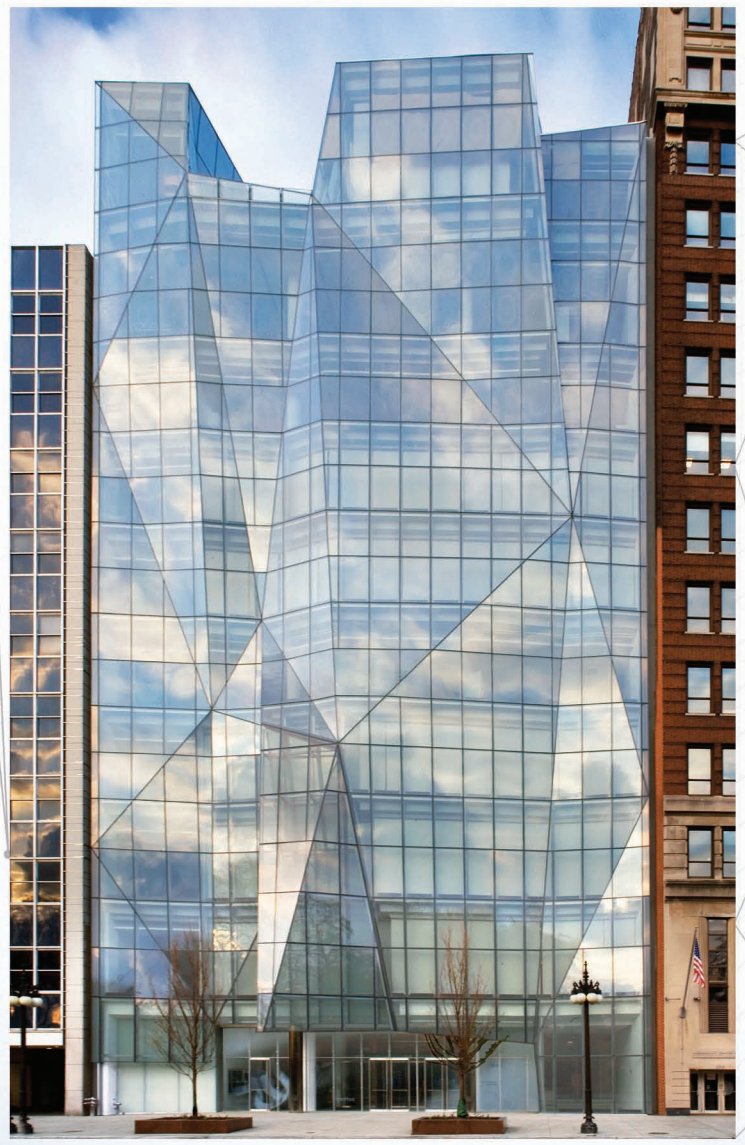

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Chicago, Illinois
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Photographer:
William Zbaren