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## JANUARY 2002

## 25 NEWS

Ando gets AIA Gold; hiring slows down; San Francisco goes solar; DPZ receives Scully Prize; and more.

EDITED BY SARA MOSS

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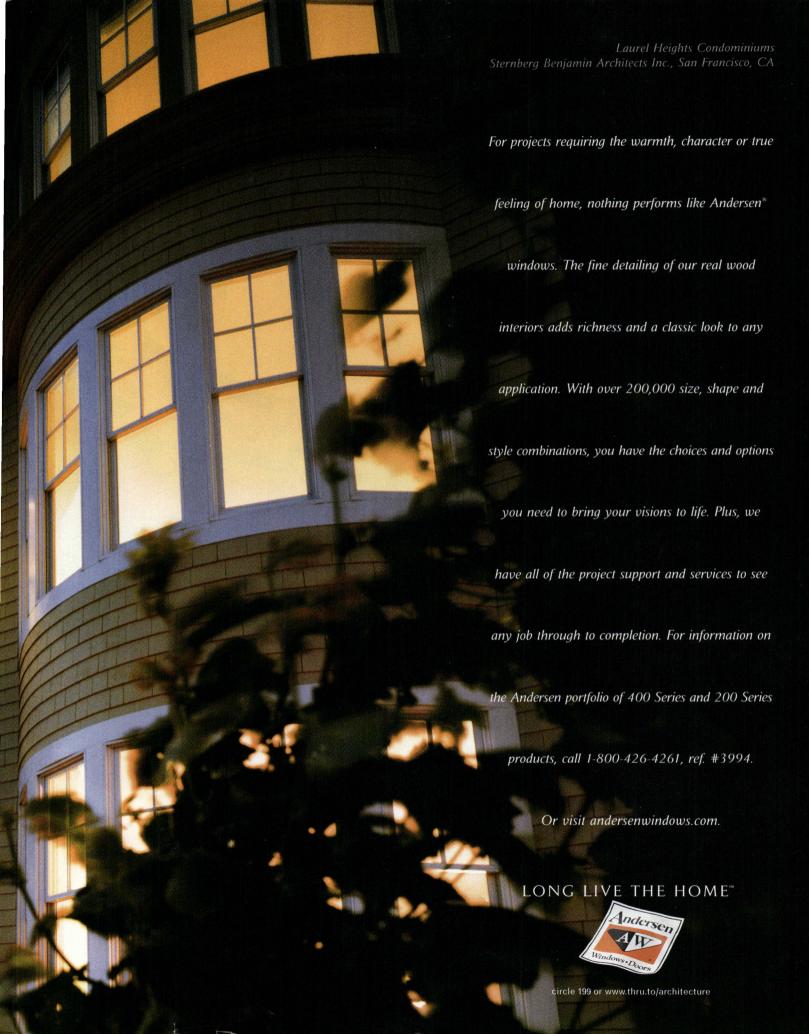
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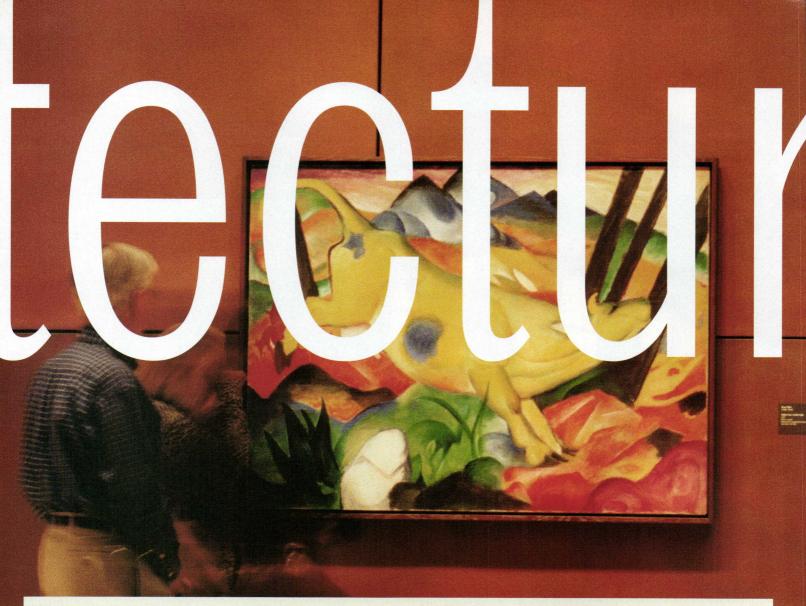
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## FEBRUARY 2002

## 21 NEWS

Samuel Mockbee dies at 57; Congress passes brownfields bill; school survey ranks architecture programs; Boston's Big Dig in trouble—again; and more. EDITED BY SARA MOSS

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EDITED BY ERIC FREDERICKSEN AND SARA MOSS

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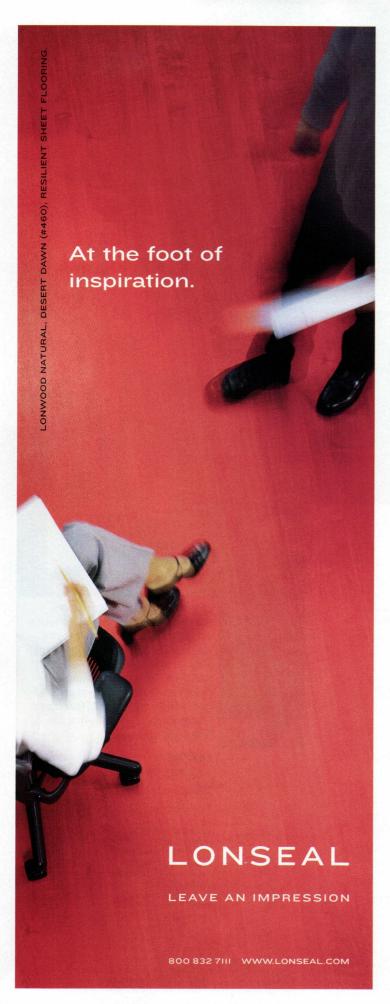
A sign in a hallway of the Venetian in Las Vegas (cover), points the way to the Guggenheim Hermitage Museum (these pages)—one of two Rem Koolhaas–designed Guggenheim venues that opened in the casino this past December. Photographs by Katharina Bosse. See story, page 46.

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David Rockwell goes to the Oscars
The destruction of public housing

## Volume 91 Number 02

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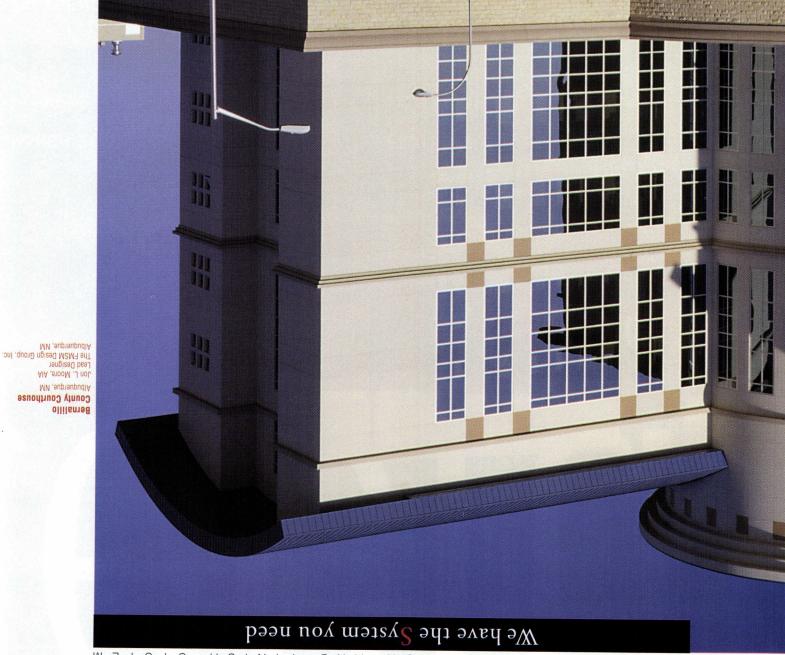
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your style? Build a warehouse.

88 HOLLYWOOD BABYLON

An 8.7-acre Los Angeles entertainment complex, the future venue for

Oscar night, tries to revive the spirit of Tinseltown. BY NED CRAMER



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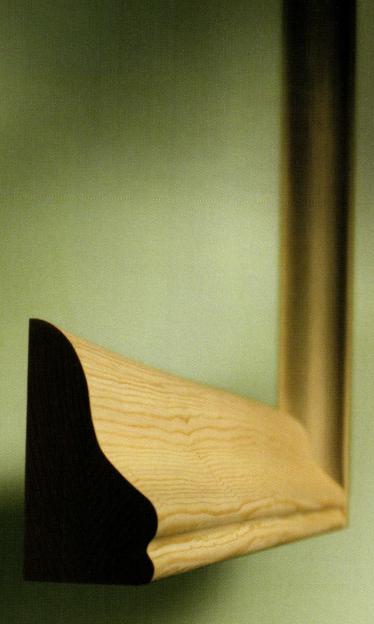
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APRIL 2002

## 25 NEWS

Early SITE work jeopardized; the NAHB makes MADE Homes; Diller + Scofidio wins Eyebeam; Dryvit loses out in lawsuit; and more. EDITED BY SARA MOSS

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Design gets emotional; Case Study Houses hit the coffee table; and a camera that listens; plus exhibitions, conferences, and competitions. EDITED BY ERIC FREDERICKSEN

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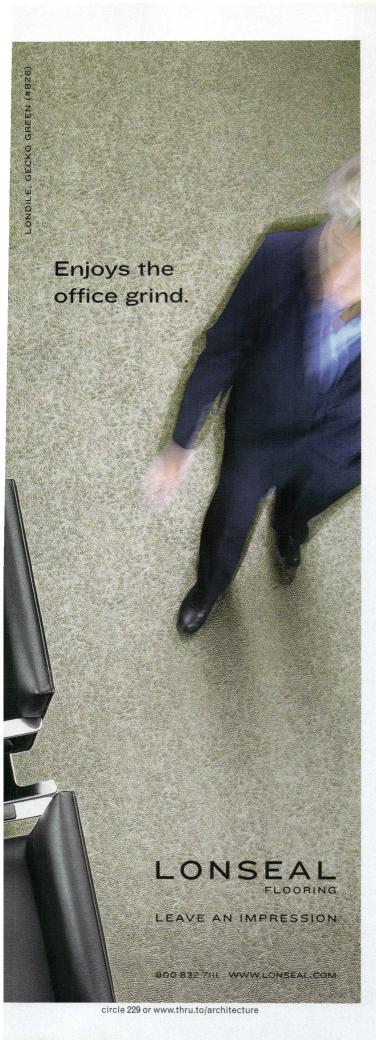
By acquiring Revit, software giant Autodesk is rounding out its portfolio, and wiping out a competitor.
BY JACOB WARD

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They already love your work, but don't think skateboarders are easy to please.

BY ERIC FREDERICKSEN

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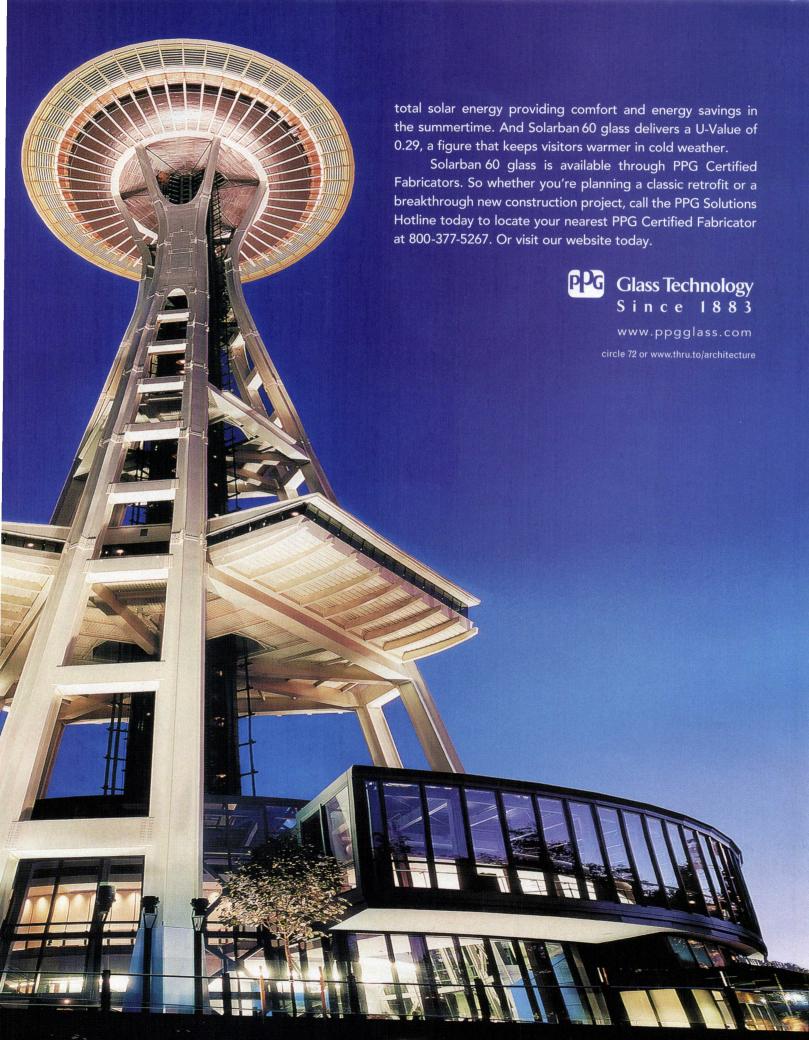
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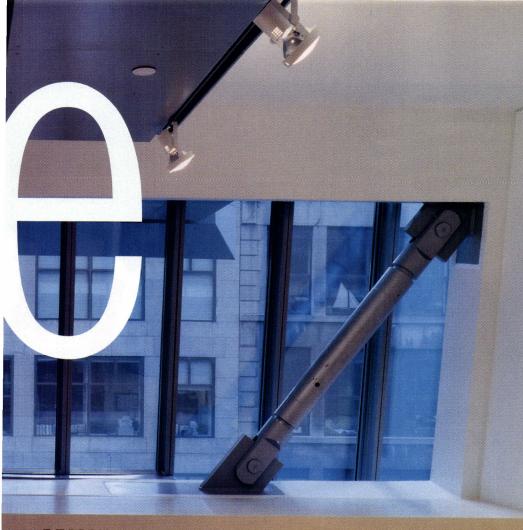
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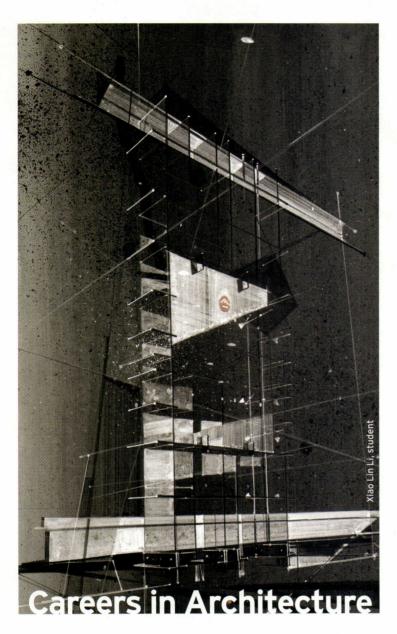
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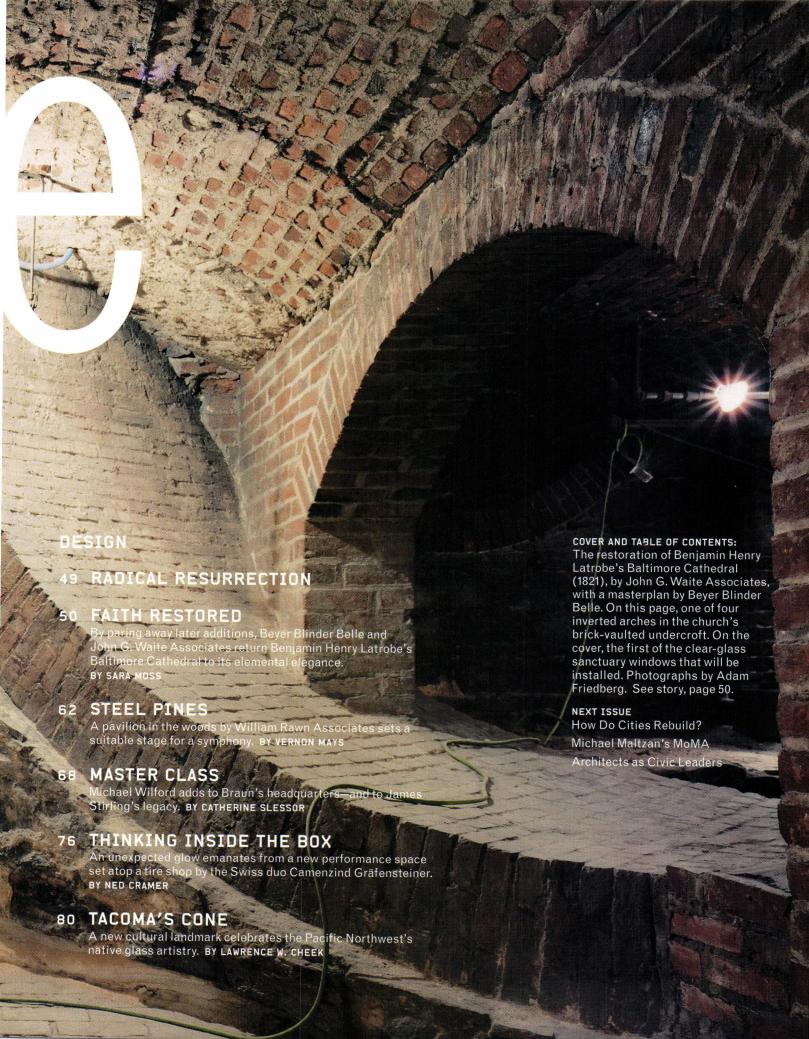
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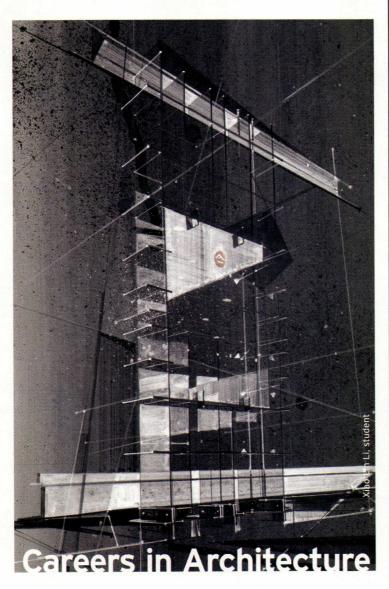
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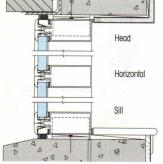
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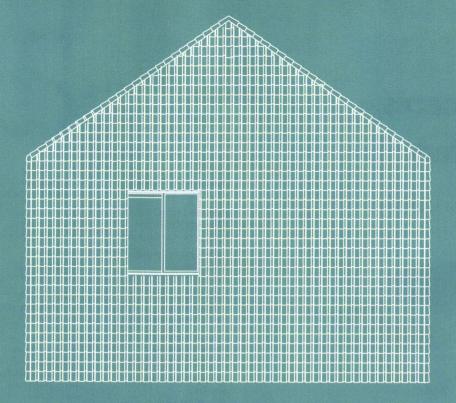
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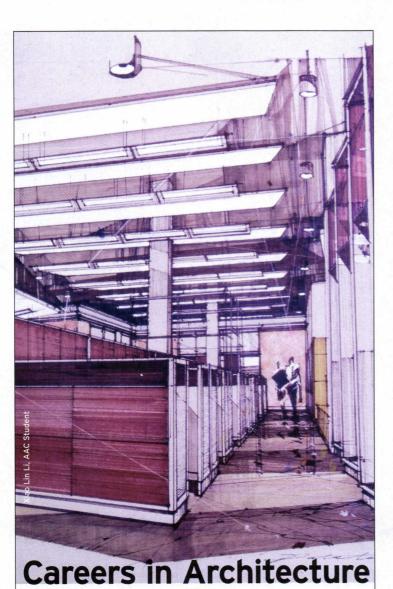
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# >editorial



BY REED KROLOFF

# PRESIDENT BUSH, HELPING CITIES CAN HELP THE **ECONOMY**

Without a doubt, the last four months have been the busiest in George W. Bush's life. Nearly every commentator has observed that the events of September 11 crystallized for the president a sense of purpose that he previously lacked. And indeed he has never seemed so focused as since that terrible day.

Military campaigns demand enormous attention. But at the risk of sounding unpatriotic, the business of government is bigger than the war on terrorism. It's January 10: Do you know where your secretary of Housing and Urban Development (HUD) is? Do you know who he is?

After a full year in office, President Bush has yet to articulate a coherent policy on housing or urban design. Granted, housing policy is not traditionally a Republican core issue: Who remembers Carla Hills, Samuel Pierce, and Jack Kemp in their roles as HUD secretary in the Ford, Reagan, and Bush père administrations, respectively? Based on his spectacularly low profile, current office holder Mel Martinez is likely to prove even less memorable.

The current state of affairs is simply inexcusable, particularly in light of the economy's slide into recession on Bush's watch. It would take a visionary president indeed to propose an economic recovery program based solely on housing and urban design policy, and few (even among his supporters) accuse George W. Bush of harboring visionary tendencies.

On the other hand, it doesn't take a Nobel Prize in economics to recognize the multiplier effect of federal construction investments: Whether you call it priming the pump or pork-barrel politics, the billions of dollars injected into the economy by the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 and its successor, NEXTEA, of 1997, created tens of thousands of jobs, increased tax revenues (people pay more taxes when they are employed, and collaterally when they are employing), and, oh yes, brought the country improvements in mass transit, infrastructure, and a host of other public works.

Unfortunately, the Bush administration, along with the likeminded House of Representatives, seems to understand only two words where economic policy is concerned: tax cut. The so-called Economic Stimulus Act passed by the House in October is so obviously a truckload of campaign kickbacks that even Republican analysts winced in embarrassment. The primary provision of the legislation-repealing the corporate alternative minimum tax, retroactive to 1987-encourages neither consumer spending nor corporate investment. It simply lines the pockets of wealthy political contributors.

This administration—and this country-would be much better served by policies that put cities at the center of any economic recovery effort. Rather than hand corporations a multibillion-dollar windfall in taxes they have already paid (and charged indirectly to consumers in the form of higher prices), why not invest that money in urban improvement projects that will bring new jobs, new spending, and new tax revenues to the treasury? What about using federal funds to promote renewable energy resources, which would not only boost the domestic economy, but also reduce the trade deficit and ease our addiction to foreign oil? Or, if it makes the president feel better, the money could even be directed toward homeland security projects.

There are many options, almost all of them preferable to the inattention of the White House, or the cronyism of the House Republican leadership. It's a shame this profession hasn't taken a more activist role in offering alternatives, but there's no time like the New Year to start putting such resolutions in place.

This month, Architecture debuts some significant changes. Most obvious is a new graphic design for the front of the magazine. We've also created several new sections and reorganized others to make navigating the magazine easier and, we hope, more enjoyable. Please let us know what you think. And happy New Year!

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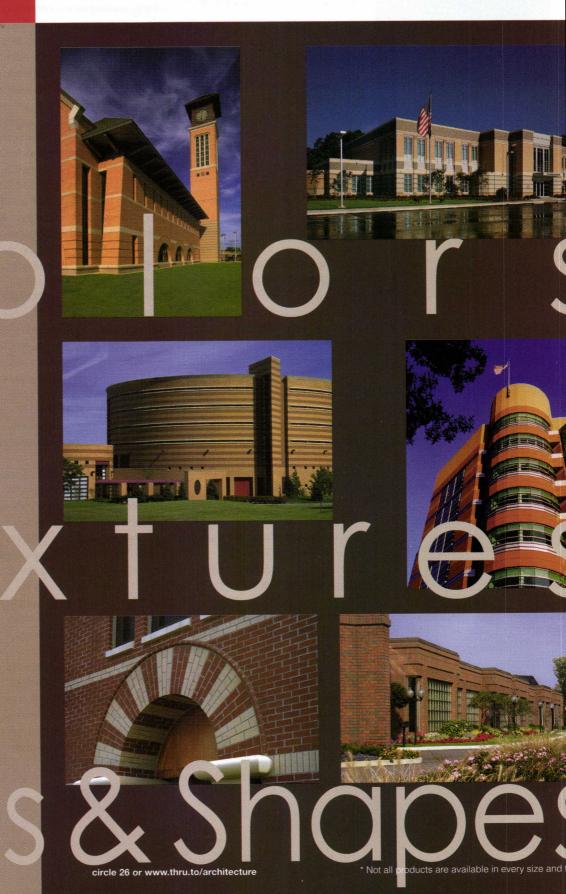
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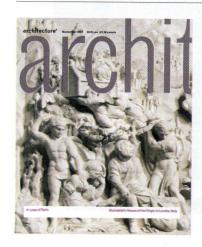
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# >letters



#### **AIA GONE ASTRAY**

Your article on the AIA in the October issue was a fascinating read (page 51). As the former group publisher of *Architecture* from 1982–88 and EVP-CEO of the AIA from 1988 to early 1994, I have some observations and reactions to offer. The actual story of the AIA is more complex and interesting than you suggest.

The capital expenditures made during 1990–93 were investments to improve the AIA library facilities, restore the Octagon, update the office interiors, and improve the technology systems of the Institute. These expenditures were covered by reserves largely derived from licensing fees that *Architecture* paid to the AIA. During those years, the AIA managed to live within its budgets despite the deep recession.

Your suggestion that reserves were depleted because of unexpected budget overruns is incorrect. In fact, in 1993, the AIA was named one of America's bestrun associations by Booz-Allen Hamilton's Center for Innovation.

When Daniel Burnham declared that architects should "make no little plans" I doubt that he anticipated the dot-com revolution and AECDirect. That

adventure was certainly well intentioned, if poorly timed.
Nonetheless, my view is that the current AIA management has dealt effectively with the fallout, negotiated satisfactory settlements, and has already made great strikes toward restoring the financial reserves of the Institute. I believe we don't need an AIA that is afraid of making mistakes—but an Institute that is willing to take appropriate risks to help shape the future of the profession.

The AIA has the potential to become one of America's most indispensable and respected organizations. My time at the AIA was enormously rewarding, and I encourage today's leaders and those of the next generation to energetically and actively support the promise and mission of the AIA. James P. Cramer Chairman, Greenway Consulting; Editor, DesignIntelligence; Editor, Almanac of Architecture & Design Atlanta

I enjoyed Bradford McKee's article on the AIA's latest financial debacle. I don't think we'll see anything similar in *Architectural Record*.

I had a number of dealings with Fred DeLuca, who was actually the "mastermind" behind AECDirect. When I asked him how the Web site would be able to compete with other construction industry sites already in place, he responded that "his" site would be the only one with Masterspec and the AIA documents. I am in the software business, so the interesting thing to me about his boast was that neither of those products is now configured for Web delivery. In other words, Fred had no idea how Web delivery of these products was going to occur-but he managed to convince a lot of reasonably intelligent people that it could

and would be done in fairly short order. Unfortunately, there were contractual and technical issues that prevented either of these unique intellectual properties from finding their way to AECDirect.

How has Norm Koonce managed to evade his responsibility for this fiasco? Mr. McKee quotes Mr. Koonce denying any knowledge or responsibility for various aspects of AECDirect, but he was not only AIA's CEO at the time AECDirect was formed, he was also chairman of AECDirect's 10-person board of directors, with five other AIA board members! Robert Paul Dean President, Building Systems Design Atlanta

#### KEEP AMES FREE AND CLEAR

I thank Elizabeth Padjen for her informative article on the ongoing controversy to expand Easton's H. H. Richardson's Ames Free Library (November 2001, page 45). I would like to add just a couple of clarifications. Since 1996, a coalition of men and women from many different walks of life have fought to preserve the integrity of Richardson's library, one of the most important buildings in American architectural history. Nonetheless, we have all agreed that the Richardson building should be renovated and restored and remain a vital part of town life. What we have strenuously objected to over the years is the proposed extensive and invasive expansion project on this site which would add other structures, roads, lights, and a large asphalt parking lot-all in the heart of an historic district which features the collaborative work of Richardson and Olmsted.

Several years ago, our coalition successfully thwarted an egregiously inappropriate plan to

expand the national landmark building. We forced a complete overhaul of the design of the planned addition, and, today, we are satisfied that the current Schwartz/Silver plan, which is pending, will be far less aesthetically damaging. Even so, there remains the serious risk of blasting and excavation on the site and the eyesore of paving over a large part of a lovely surrounding wooded landscape to make way for a 60-space-plus parking lot. Although we remain convinced that expansion at another site (such as adapting an elegant 1896 Georgian Revival school just 100 yards away) would have been a better alternative, if the current plan finally does get the go-ahead, we can rest easy that we have done our part to protect the integrity of this remarkable building and site.

Richard Capobianco Professor, Stonehill College North Easton, Massachusetts

#### CORRECTION:

The Las Vegas monorail system was planned by Gensler; the firm also designed the stations (October 2001, page 37).

The Smart Code ( November 2001, page 48) is not a Congress for the New Urbanism building code. It was created by Duany Plater-Zyberk architects. A CNU code is forthcoming.

Nabih Youssef & Associates was the structural engineer for both the ABC Building and its bridge (November 2001, page 80).

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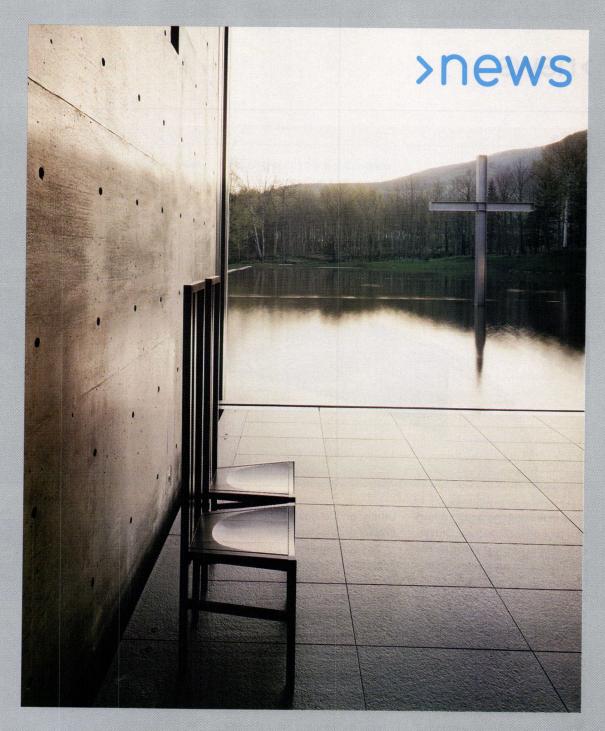
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# Ando Wins AIA Gold

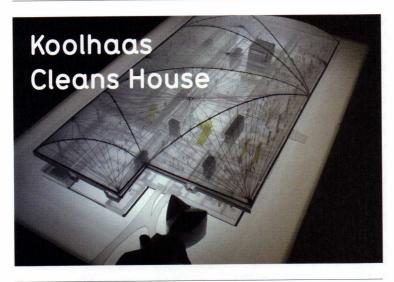
> LAURELS For many, 2001 was truly an annus horribilis, to borrow a phrase from Queen Elizabeth II. Not for Japanese architect Tadao Ando. His 2001 was a breakthrough year in a quietly distinguished career spanning more than three decades. Ando's Pulitzer Foundation for the Arts in St. Louis

(December 2001, page 84) opened in October, while construction continues on his expansion of the Modern Art Museum of Ft. Worth, due to open in November. He also won three plum commissions: a new building for the Clark Art Institute in Williamstown, Massachusetts; the Pinault

Foundation Contemporary Art
Museum in Paris; and the Calder
Museum in Philadelphia. And to
finish 2001 with a flourish, the AIA
designated Ando its 59th Gold
Medalist in December. Ando will
receive the award officially on
March 1 at the American
Architectural Foundation's annual
Accent on Architecture gala in
Washington, D.C.

Compared to other organizations, the AIA seems behind the

#### >news



> DESIGN The week before unveiling his long-awaited Prada store in New York, Rem Koolhaas scored a major victory by being chosen to design the \$200 million overhaul of the Los Angeles County Museum of Art. Beating out finalist Jean Nouvel, Koolhaas won with a radical proposal to either demolish or reconfigure all but two buildings on the motley LACMA campus.

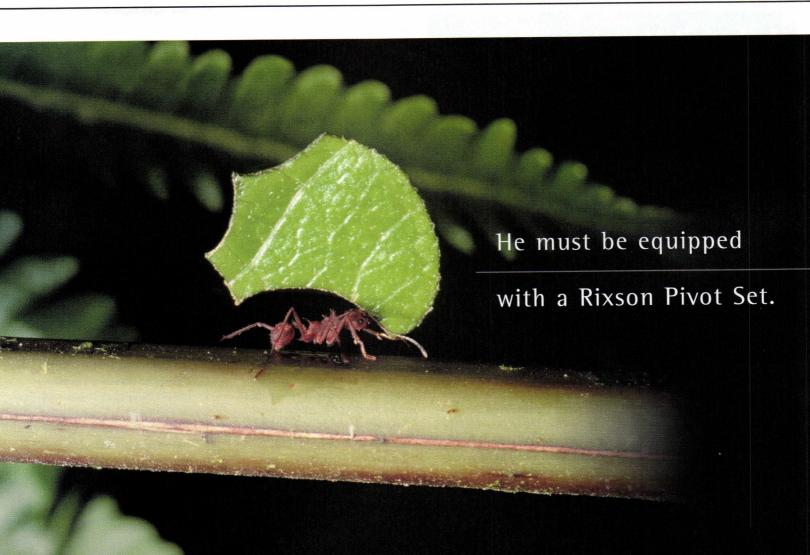
Slated for demolition are three buildings by William Pereira from the 1960s, and an addition by Hardy Holzman Pfeiffer Associates from 1986. The underground base of these buildings will remain as offices, and provide a foundation for three new levels of galleries above. A semitransparent roof will cover the new galleries and much of the campus, creating a more cohesive presence for the museum.

Koolhaas isn't concerned about the legacy of the structures he plans to demolish. "Each of these buildings has already been sacrificed in terms of their original context," he told <u>Architecture</u>. "So you

cannot simply say that you are getting rid of the heritage, because it has already disappeared."

The LACMA commission comes on the heels of the English High Court decision clearing Koolhaas of plagiarism charges brought by former employee Gareth Pearce, who claimed OMA's 1992 Rotterdam Kunsthal copied his graduate thesis project. Koolhaas fought three rounds of court battles, refusing settlement offers. The struggle cost \$600,000 in legal fees. He is considering a countersuit against Pearce or England's Legal Services Commission, which provided funding for the trials and was primarily responsible for allowing the case to proceed.

ANDREW YANG



# openda

## California Greenin'

> POWER On November 6, San
Francisco voters approved
Proposition B, permitting the
municipal Public Utilities
Commission to issue as much as
\$100 million in bonds over the next
five years to finance solar and
wind turbine power facilities,
producing 25 percent of the city
government's needs.

According to Ed Smeloff, the commission's assistant general manager for power policy, the group is identifying potential projects for rooftop photovoltaics, like the Moscone Convention

Center and several parking structures. Three-fourths of the energy target will be wind-generated, and may also be produced on reservoir properties, some outside of the city limits. Nevertheless, the bill aims to make San Francisco the most solar city in the nation.

Although Proposition B monies may also be used to place solar shades on existing city buildings, another voter-approved proposition promises further integration of photovoltaic cells in new construction. The measure gives private residents and businesses access to bonds similar to those of Proposition B, and is the basis for "establishing a solar agency in San Francisco that would buy photovoltaics in volume and make

solar reasonably priced," says Tom Ammiano, president of the city's Board of Supervisors.

The measures permit only projects in which capital and operating costs are competitive with traditional fuel sources. But opponents claim that the referenda will foster reckless spending.

"Thankfully, it's not like myself or others disapprove of the ideology or the service," says Gail Neira, a member of the San Francisco Republican Party Central Committee, "but these issues give taxpayers no resources to penalize those who are poor managers of our funds." The propositions passed with 73 percent and 54 percent of the vote, respectively. DAVID SOKOL

#### BUZZ

York); third prize: Lynn Hsu and Bradley Shanks (Cambridge).

For the first time, the Whitney
Biennial will include architecture: the work of Lebbeus
Woods, Lauretta Vinciarelli,
and the Rural Studio are on the
2002 list.

Rick Mather (London) will work with SMBW Architects (Richmond) to plan and design the \$79 million renovation and expansion of the Virginia Museum of Fine Arts.

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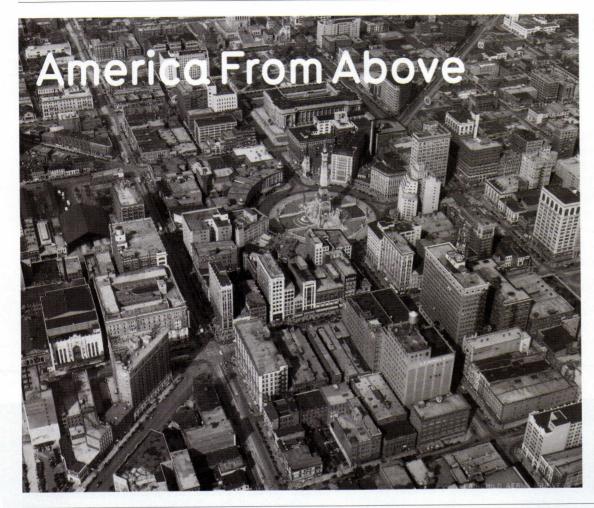
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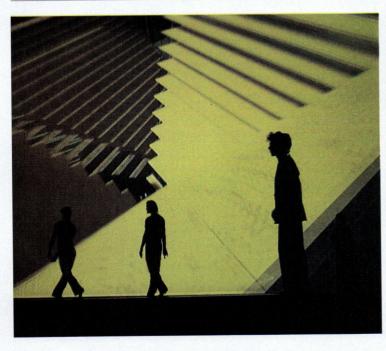
# >agenda



#### > BOOK

"CITIES FROM THE SKY"
BY THOMAS J. CAMPANELLA
PRINCETON ARCHITECTURAL
PRESS

Between the late 1920s and the early 1950s, the Fairchild Aerial Survey Company photographed what seems like every notable human settlement in the United States, judging by the wealth of images included in this oversized coffee-table book. Much of the company's work was simple surveying, but their more subjective photography, author Thomas Campanella claims, "rivals the best of Andreas Feininger, Berenice Abbott, or Margaret Bourke-White." He exaggerates only slightly. Surprising you with the beauty of 1930s Indianapolis (left), recording the industrial bravura of the great Western dams, or tracing the lines of pre-interstate parkways, Fairchild's photographers documented a country poised between a rural past and a suburban future—at the apex of American optimism. ERIC FREDERICKSEN



# Dancing About Architecture

STAGE

"MANYFACTS"
SCAPINO BALLET
WITH STAGE DESIGNS BY
WINY MAAS
ROTTERDAMSE SCHOUWBURG
ROTTERDAM, THE NETHERLANDS
JANUARY 9-12

When Ed Wubbe visited Meta City Data Town, an exhibition by Dutch architect Winy Maas of MVRDV, he had what might seem an atypical reaction: He wanted to dance. But Wubbe is the artistic director of

Rotterdam's Scapino Ballet, which is now performing his ballet based on Maas's idea of a massive city constituted entirely of information. Asked to provide the ballet's stage design, the architect was inspired to do some choreography of his own. Working with digital graphic designers Wieland & Gouwers, Maas used Maya animation software to project statistics as fields of cubes, spikes, opalescent blobs, and spongy vegetation on three 12-foot-high screens. The result is a tour de force of choreography: dancers dancing next to dancing data, gracefully coming together in a cautionary ballet about overpopulation, pollution, and junk culture. LIANE LEFAIVRE



# Memento Mori

> OBJECT

SEPT 11 MEMORIAL SET
BOYM DESIGN / WWW.BOYM.COM/THEEND

On September 11, shortly after the collapse of the twin towers, Constantin Boym staggered into his Chinatown studio. Boym Design, which he runs with his wife Laurene Leon Boym, is known for a series of cast bonded-metal miniatures of notorious crime scenes called the Buildings of Disaster. "The phone rang, and it was someone asking for one of the World Trade Centers," he says. "I yelled at the guy, 'How dare you! Today, of all days!"

That phone call would be the first of many requests, which were both puzzling and impossible to fulfill: Boym had conceived of the buildings as part of a limited edition of souvenirs for the millennium, and had stopped production last December. The miniatures were not meant as commemorative objects, but as commentary on the way anonymous buildings are transformed by the glare of media overexposure. But Boym's detachment evaporated quickly. As he describes it, the turning point was the next day, when a man requesting a model of the Trade Center asked that it be shipped to his house because his office had been destroyed. "It changed my attitude," he says. "Before, it was a comment on architecture. But it wasn't possible to be a commentator anymore, I had to step in."

Boym then decided to produce more of the original Trade Center models, and after many requests, to cast a new September 11 set that also includes the Pentagon. Proceeds go to the September 11th Fund, administered by the United Way. The new edition captures a moment never actually seen, even though it suggests the one burnt into our collective retinas: the towers notched where the planes hit them, but without the billowing smoke and fire. Boym says he steered clear of a second iconic image, the exoskeletal fragment that remained standing: "To show it after destruction would not be right. An empty site commemorating a building—architecturally or emotionally, it is not right."



## **Embassy Suites**

> BOOK

"BUILDING THE COLD WAR: HILTON INTERNATIONAL HOTELS AND MODERN ARCHITECTURE" BY ANNABEL JANE WHARTON UNIVERSITY OF CHICAGO PRESS

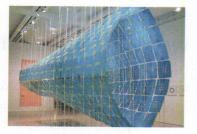
In the 1950s, Hilton International Hotels were as much a symbol of America's can-do attitude as Coca-Cola. Annabel Jane Wharton, an art historian at Duke University, makes the case that Hiltons not only introduced modern architecture to many countries, but also served as Cold War propaganda tools. Like U.S. embassy com-

pounds, Hiltons were a passport to a "little America," in the words of the hotelier Conrad Hilton.

In designing these outposts of the Pax Americana, American modernists like Gordon Bunshaft, Welton Becket, and Charles Luckman framed exotic scenery through plate-glass windows, while providing tableaus of the Western lifestyle to outsiders. In one particularly telling advertisement, an ultrawhite Hilton stands out against Istanbul's mist-enshrouded Blue Mosque, as if to signal a new chapter in the ancient city's history.

Hilton's game plan was as explicit as the State Department's: "In Istanbul and Baghdad, we are pushing close to the Iron Curtain. We are in Cairo because it is the center of the Moslem world and holds the key to Africa and the Middle East.... We are in Berlin because Germany holds the key to containment of Europe." For a time, it seemed like America could lead the world by building a city on a hilltop, or even just a modern hotel.

ERIC NASH



# Changing Room

> EXHIBIT

EXPERIMENTAL DESIGN AWARD / SAN FRANCISCO MUSEUM OF MODERN ART / THROUGH FEBRUARY 5

Shoring up San Francisco's self-image as a locus for innovative thought, the first annual Experimental Design Awards were given to Bay Area architect Thom Faulders, product designer Donald Fortescue, and graphic design team Post Tool on November 9 at the San Francisco Museum of Art. Faulders shows his chops in the current exhibition of work by award-winners with Particle Reflex, an experiment in topology that creates mutable space via a pliant skin. A suspended tube of acrylic panels connected by urethane straps waves softly in the ambient air currents, perpetually deforming while changing not a bit. **EF** 

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# >agenda

#### **EXHIBITIONS**

#### > BOSTON

Cosmé Tura: Painting and Design in Renaissance Ferrara paintings, drawings, tapestries, and metalwork by the 15th-century Italian artist, at the Isabella Stewart Gardner Museum, opens January 30 (617) 278-5129



> CHICAGO Modern Trains and Splendid Stations: Architecture and Design for the 21st Century new unbuilt train stations in the U.S., Europe, and Japan at the Art Institute of Chicago, through July 28 (312) 443-3600

#### > COLUMBUS, OHIO

Mood River an installation of a "river" of everyday objects at the Wexner Center for the Arts, opens February 3 (614) 292-3535

#### > DALLAS

Art Deco and Streamlined Modern: Design 1920-1940 the second of a three-part series about 20thcentury design, includes French furniture and German household objects alongside American art deco pieces at the Dallas Museum of Art, through April 1 (214) 922-1200

#### > DENVER

U.S. Design: 1975-2000 architecture, graphic, and industrial design at the Denver Art Museum, opens February 23 (720) 865-5000

#### > LOS ANGELES

Manfredi Nicoletti: Architecture as a Metaphor of Nature proposals for sustainable bioclimatic buildings and images of nature, at the Italian Cultural Institute, opens January 18 (310) 443-3250

Exploding Landscape: Naples and Vesuvius on the Grand Tour; Rome on the Grand Tour and Drawing Italy in the Age of the Grand Tour overlapping exhibitions of sketchbooks, prints, maps, and vedute of Italy from the 18th century at the Getty Center, through March 24 (310) 440-7300

#### > MIAMI BEACH

Aluminum by Design: From Jewelry to Jets at Wolfsonian-Florida International University, through April 7 (305) 531-1001

#### > MONTREAL

Floor Play: An Installation by MEDIUM two tilting rooms joined by a pivot create a full-scale seesaw at the Canadian Centre for Architecture, through March 3 (514) 939-7026

#### > NEW YORK

New York September 11, by Magnum Photographers at the New-York Historical Society, through February 25 (212) 873-3400

Benjamin Brecknell Turner: Rural England through a Victorian Lens photographs of the English landscape and towns from the 1850s at the Metropolitan Museum of Art, opens January 23 (212) 535-7710

Skin: Surface and Structure in Contemporary Design architecture, furniture, products, and fashion that explore the use of surfaces at the Cooper Hewitt, National Design Museum, opens February 12 (212) 849-8400

#### > PALO ALTO, CALIFORNIA

Men at Work: Paintings by Kristina **Branch** oil sketches of construction sites by a Stanford professor of art at the Iris & Gerald B. Cantor Center for Visual Arts, Stanford University. through February 10 (650) 723-4177



#### American Modern, 1925-1940: Design for a New Age surveys the development of an American industrial design aesthetic between

> PHILADELPHIA

the two world wars, at the Pennsylvania Academy of Fine Arts, opens January 12 (215) 972-7600



#### > PITTSBURGH

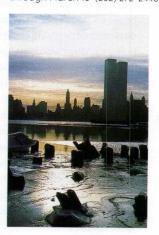
Dream Street: W. Eugene Smith's Pittsburgh Photographs through February 10 and Architecture + Water at the Heinz Architectural Center. Carnegie Museum of Art, opens February 9 (412) 622-3131

#### > ROTTERDAM

The Major Projects: Dutch Architecture Policy in Perspective 10 projects commissioned by the Dutch government in 2000 at the Netherlands Architecture Institute. opens February 17 (31) 10-440-1200

#### > WASHINGTON, D.C.

Twin Towers Remembered photographs by Camilo José Vergara of the World Trade Center taken over the past 30 years-and published by Princeton Architectural Press in a book of the same nameat the National Building Museum, through March 10 (202) 272-2448



#### CONFERENCES

Clicks and Bricks: Challenges in the Digital Age the annual NASCUP (North Atlantic Society of College and University Planning) conference at Alfred Lerner Hall, Columbia University, New York, March 13-15 www.ccsu.edu/planning/nascup

Beyond Sprawl: New Domestic Topographies at the Southern California Institute of Architecture, Los Angeles, March 23 www.sciare.edu

National Green Building Conference at the Westin Hotel, Seattle, March 24-26 www.nahbrc.org/gbc2002

EnvironDesign6: Sustainability in Action at the Seattle Convention Center, April 3-5 www.environdesign.com

#### COMPETITIONS

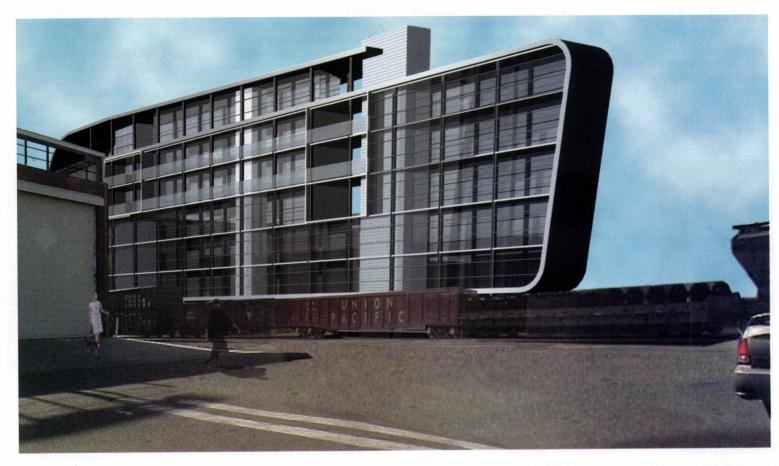
The Bloomington, Indiana, Percent for the Arts program invites design submissions for public bus shelters on a gateway thoroughfare into the city. Entry deadline February 15 BloomingtonArt@aol.com

The Architectural League of New York is seeking entries for its 2001-2002 Young Architects Competition; this year's theme is "Material Process." Submission deadline February 20 (212) 753-1722 www.archleague.org

AIA Architectural Photography Competition 2001, sponsored by AIA St. Louis and open to all architects registered in the United States. Registration and submission deadline March 1 (314) 231-4252

The Journal of Architectural Education is calling for submissions of teaching and design work that address the issue of surface. Registration and submission deadline March 1 www.flashgun.com/JAE

# >on the boards



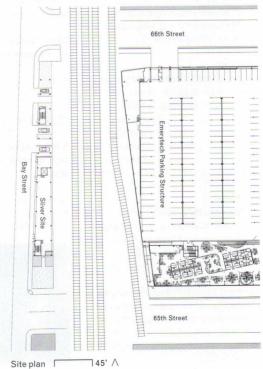
#### > KAVA MASSIH ARCHITECTS SLIVER BUILDING EMERYVILLE, CALIFORNIA

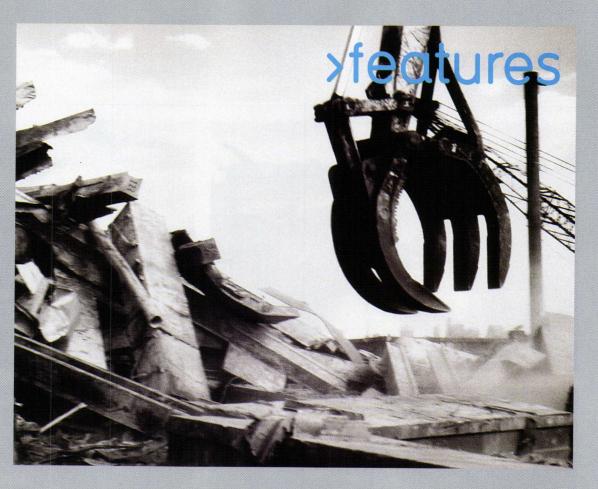
In the process of redeveloping an old valve factory in Emeryville, California, into the Emerytech office building, Kava Massih, principal of the eponymous Berkeley-based firm, realized that there would be a long, thin stretch of leftover land on the site, with no obvious use. The 300-foot-by-33-foot lot is bordered on one side by active train tracks. Nevertheless, Massih managed to convince Hal Davis, developer of Emerytech, that the site could indeed accommodate a new building, albeit one with startling dimensions. The resulting project, scheduled to go into contruction next fall, has been dubbed the Sliver, and is a mixed-use, seven-story, 46,000-square-foot, \$9.2 million building that makes a virtue of its awkward little slice of the neighborhood.

When a site is 33 feet wide at one end and only 16 feet wide at the other, the

resulting floor plates can't afford to get too cluttered. Sliver accordingly has an open plan punctuated every 20 feet lengthwise by the piers of a steel moment frame. The long east and west façades are clad entirely in glass, while a wrapper of stainless steel panels that begins on the roof curves downward to cover the thin northern and southern elevations. Massih describes this contrast between opacity and transparency as a device to accentuate the thinness of the building. Sliver's ground floor only fills about 20 percent of the overall footprint, leaving a view clear across the street so that pedestrians can dodge traffic—both automotive and rail. It will house a café or retail store. The next three floors are designated for commercial uses, while the top three hold residential units. Terraces inset into the residential floors provide an outdoor perch for residents, who one can only assume will be train buffs, since some 40 rumble by every day.

ANNE GUINEY





# A New Era

Now that the unimaginable has happened, can anyone plan for it in the future?

BY JACOB WARD / PHOTOS: NINA BERMAN

SECURITY The remains of the World Trade Center take a circuitous route as they are carried away from ground zero. After being loaded into open-backed tractor trailers, most of the crumpled steel and concrete is trucked south on Greenwich Street, off through Brooklyn, onto the Verrazano Narrows Bridge, and finally toward an apocalyptic sorting area within the Fresh Kills Landfill on Staten Island.

Some of the steel removed from the site takes a different route, however. Larger building fragments are diverted to recycling facilities in the region. One of them, the Hugo Neu facility in Jersey City, New Jersey, recycles the towers into industrial-grade metal. The long steel beams are cut into pieces, scrubbed of their burn marks, cleaned of stray concrete, and then sold, at a few cents a pound, to steel companies in countries such as China, Japan, and Turkey.

But in one corner of Hugo Neu's vast scrap yard, before the steel is exported, a group of recyclers has been asked to sort through the enormous beams, piece by piece. Every so often, the cry goes up that this or that bit of steel is worth saving, and the process is halted to retrieve a segment of the building from the line.

These recyclers report by phone to Professor Abolhassan Astaneh-Asl, a structural engineer in the school of engineering at the University of California at Berkeley. Professor Astaneh is one of four specialists in the nation granted funding from the National Science Foundation to perform an autopsy on the towers' remains—he applied for his grant on September 12, and the foundation approved it on the 14th. He has made a career studying steel under duress, and he has examined some of the most significant domestic steel-frame collapses of the 20th century (most notably the San Francisco-Oakland Bay Bridge, which lost a section of its span during the 1989 Loma Prieta earthquake).

"All of the steel from the towers is twisted and mangled—there isn't a straight piece in the whole scrap yard," says Professor Astaneh. He trains the recyclers to look for particular shapes in the hope that he can save and study the sections of

## >features









the buildings that were hit and burnt, and then collapsed. "If you see something with a very nice mathematical curve—a sinusoidal wave shape, or a perfectly curved shape—that's vital," he says. "When you compress a piece of steel and buckle it, it creates an absolutely mathematical curve. If you just drop it from a height, it won't get that curve. It's just mangled."

Professor Astaneh fervently believes that engineers and architects can account for the threat of explosion and collapse in their design. He hopes that his work for the National Science Foundation will serve to teach architects and structural engineers new lessons about disaster planning. In the past, he and his students have developed building systems that can survive catastrophe. Among those systems are shear walls composed of lightweight concrete panels bolted to a steel frame, which can safely absorb explosive blasts. And in a Berkeley engineering lab, Astaneh and his team tested a new prestressed steel cable system for reinforcing concrete floors. The team tore a structural column out of a full-scale replica of a soon-to-be-built federal courthouse and applied 190,000 pounds of pressure per

Piles of mangled steel from the World Trade Center site arrive each day at the Hugo Neu recycling facility in New Jersey. Workers clean and cut each piece into segments for sale to foreign metal companies, but pieces deemed significant to the investigation are marked for study and set aside for Professor Abolhassan Astaneh-Asl.

square inch to the floor—the simulated effect of a bomb blast. The cables held the damaged concrete in place without collapse. Astaneh spoke to the press about his experiment while standing confidently under the weakened plate.

Such improvements save lives and add little to the cost of buildings, Astaneh claims, and he believes that through careful study, structural engineers and architects can plan for future threats to a building's integrity.

But many design professionals are wondering whether the challenges of the post–World Trade Center era may be beyond the scope of anyone's skills: One can prepare on a nationwide scale for predictable dangers like snow loads, wind, and flooding. But terrorism is a shifting, evolving threat.

Traditionally, the considerations of the architect (the vision and minutiae of design) differ from those of the engineer (the structural formulae of fighting gravity).









But the Trade Center disaster has drawn those considerations closer together, and has made each profession more mindful of the other.

"It's the responsibility of the architect to be not only fully aware of the building's requirements and goals, but to consider engineering's issues throughout the process," says David Childs, principal of Skidmore, Owings, & Merrill and one of the architects working to replace the towers for private developer Larry Silverstein. "You can't just wait for the engineer to point out the codes. We have to find ways to make buildings safer."

Those engineers who study disasters like the WTC have long considered the world to be full of uncontrollable dangers. Dr. W. Gene Corley, a senior vice president at Construction Technologies Laboratories in Skokie, Illinois, is leading the Federal Emergency Management Agency's investigation into the Trade Center collapse.

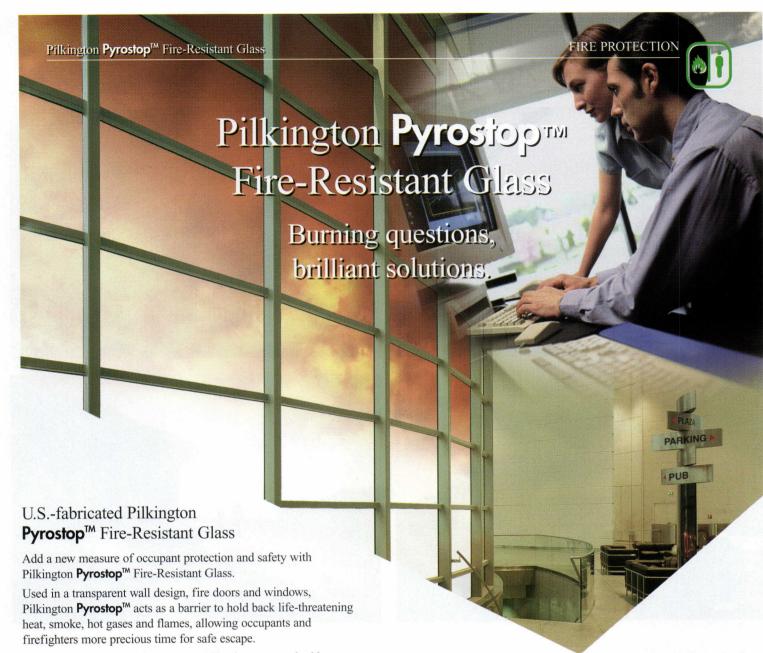
"If there is a frustrating part to being a structural engineer," Corley says, "it's that there are much bigger planes than a 767 already built, and there will be more in the future, and there's a limit to what you can do for any given building."

The twin towers' collapse has prompted a lot of conversation about steel construction, but in the biggest previous domestic disaster, the 1995 bombing of the Murrah Federal Building in Oklahoma City, the structure in question was concrete. Corley was the principal investigator for FEMA on the bombing. He says that in Oklahoma City "our findings suggested that there were details that could be changed in construction of buildings of that type that would reduce the amount of structural collapse for a similar incident."

The lessons of a disaster, however, do not necessarily take

hold immediately in the real estate and design community, Corley says. "In the case of the Oklahoma City building, the need for better structural redundancy was known at the time, and there was good acceptance that our building codes needed updating," he says. The building was up to code and met all construction standards. Instead, it is the codes and standards, Corley suggests, that may need revamping.

Others disagree. "Absolute safety is not in any code," says William Tangye, CEO of the International Code Council, the largest code-making entity in



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the country. "We couldn't suffer 6,000 fire deaths a year if it were. Implicit in all code requirements is a risk."

Tangye argues that a publicpolicy debate needs to establish "how much risk we're able to suffer as a society. Only then can we create responsive technical standards." Once that acceptable risk level has been established, he says, new code thinking can be implemented. For office buildings, for instance, Tangye suggests that a new, dynamic coding system might allow designers to trade requirements in one code area for extra compliance in another. "A performance option might be to make the structural capabilities of the elevator improve egress, and waive the minimum number of exits," he says.

Building codes have long engaged in a delicate balancing act between the concerns of safety engineers and the budgetary concerns of those who pay for design and construction. But that balance has been thrown off in the past. Before September 11, some engineers argued that certain precautions were being overdone, at excessive cost to the building owners. In June of 2001, the American Institute of Steel Construction announced the release of a new study that the institute claimed had debunked certain fire-protection myths.

Written by two structural engineers, the report argued that engineers had been overspecifying fire protection for steel-framed buildings, and the AISC wrote that "a review of fire data shows no evidence of any collapses due to structural failure during a fire in a modern structural steel-framed high-rise building in the U.S." The report concluded, in part, that "the least stiff" steel beam connec-

Professor Astaneh at the Hugo Neu scrapyard.

tion "is adequate to develop restrained assembly performance under uncontrolled fire exposure." The overspecification, the AISC wrote, had resulted in a 25 to 50 percent addition in fire protection, which added approximately 25 cents per square foot to the cost of construction. That may have been the prevailing view at the time, and all evidence may have supported it, but the idea is unconscionable now.

When considering how to systematize new design and engineering standards, perhaps buildings of symbolic importance will be segregated from everyday buildings. Certainly, government agencies have already begun to make such a distinction, both as a client and as a regulatory watchdog.

"The [proposed New York] stock exchange is the number-one worry of the United States government right now," says Childs. "The designs I've seen for it involve 1-foot-thick steel walls, and no windows. Streets would be closed, with guard stations everywhere."

No matter what structural refinements may grow out of the Trade Center collapse, security planning will certainly be a significant area of change in architectural practice. The tragedy of developing new methods of security is that those developments usually chase disaster, rather than predate it. Place bollards outside a building to discourage car bombs, and someone can walk past them and inside with explosives in a briefcase. Install metal detectors in the lobby and someone may opt to pour poisons into the HVAC system. Move those to the roof, install armed guards at the door, reinforce the building, and there still



"All of the steel from the towers is twisted and mangled—there isn't a straight piece in the whole scrap yard."

remains a list of theoretical dangers too long to plan for.

Airline security has evolved in the same way-something terrible happens, and subsequent designs and procedures seek to prevent it in the future. Precautions like allowing only ticketed passengers into boarding areas, matching passengers to checked bags, and, now, reinforcing cockpit doors are reactive developments, and as it becomes harder and harder to hijack or bomb a plane, only the most inventive and daring criminal methods are left. Can architects reasonably hope for better? Will designers always be one step behind the malevolent invention of those who would use buildings as weaponry?

The word "security" is typically associated with the prevention of disaster, but according to Richard

Chace, executive director of the Security Industry Association, which consults to the real estate and design community on security matters, security is also a matter of what he calls "emergency mitigation." "Nothing could have prevented what happened to the World Trade Center," he says. But once it did happen, the design of the building could have facilitated a better lifesaving reaction to the event. "In the 1993 bombing, the equipment of the building"-such as communications and smokecontainment systems-"wasn't designed for easy evacuation. They managed to put in some speaker systems and smoke hoods afterward but that wasn't necessarily for the best—the speaker systems were used to keep some people in the building" on September 11.

Instead, Chace says, buildings

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should have systems for monitoring what he calls "event activity." "Fire systems should have an access control, and an automated reader can keep a log of how many people go into an identified fire area," he says. "You can monitor who goes in, who comes out."

And for keeping a building secure, Chace offers a long list of design examples, which change by building type. "A pharmaceutical plant needs different security from other types of buildings," he offers. "There, you'd need access-control devices, card readers, biometric sensors, holding vaults, waiting areas designed to be somewhat labyrinthine to keep people going through checkpoints before reaching sensitive areas." The issue, Chace says, is that before now tenants and building owners were not thinking actively about security. Now that consideration will be front and center.

Architects' ideas about security are already changing.

During a visit to New York in late September, British architect
Richard Rogers found himself considering designs for egress.

"Means of escape from buildings should be a big consideration
now," he says. "Elevators saved people in the World Trade
Center, and I believe fire escape systems will be reconsidered:
Having fire lifts to bring people out and to bring firemen to
affected floors; rethinking the notion of safety zones."

Unfortunately, design tends to respond to market forces as much as anything else, even in the area of security. "Security depends on the standard of the owners of those buildings," says FEMA's Corley. "If the owner doesn't believe their building will be a target, the designer has no reason to adjust their security standards."

Already, the market forces that drive such adjustments are reacting to the post–World Trade Center era. "You know how often a big hurricane is likely to hit, and a hurricane today is very much like a hurricane 25 years ago," financier Warren Buffett told the New York Times a month after the disaster. Buffett, whose umbrella company, Berkshire Hathaway, owns several insurance companies, was struggling to prepare for a new world of disaster planning. "Terrorism today is not at all like terrorism 25 years ago. And now you've got something where the nature of the risk, the power to inflict damage, has gone up

The tragedy of developing new methods of security is that those developments usually chase disaster, rather than predate it.

a factor of who knows what—10, 50? You can't price for that."

"Our insurance industry is going to drive change" in the design and construction industry, says the Security Industry Association's Richard Chace. "The insurance industry is liable for large-scale payouts for system failure." In turn, he believes that the insurance industry will drive building owners to implement new engineering and safety standards.

But those building owners will have no reason to build in an expensive insurance environment until tenants are willing to absorb those added costs. And that will only happen when tenants consider added security imperative in leased commercial space.

Ron Klemencic is chief executive of Skilling Ward Magnusson Barkshire, the engineering firm founded by the twin towers' co-engineer, John Skilling. In its time, the firm has created a wide variety of tall buildings—from the Society Tower in Cleveland and One American Plaza in San Diego to dozens of high-rise buildings throughout Asia.

"Tenants go for a category of touch-and-feel security," says Klemencic. "When you have to show ID to get into a building, when loading docks are subject to inspection, that's the sort of thing that make tenants feel better." But Klemencic feels that tenants are most often unaware of what constitutes real security improvements—moving fire control stations into secure locations and out of the main lobby, for example, and connecting emergency lighting to battery power, rather than hard-wiring it.

"If the tenants feel it's a benefit, they'll demand security and won't sign leases in buildings that don't have it," says Klemencic. "It all depends on the thoughtfulness of tenants when it comes to safety and security, and they'll pay more attention to that in the future."

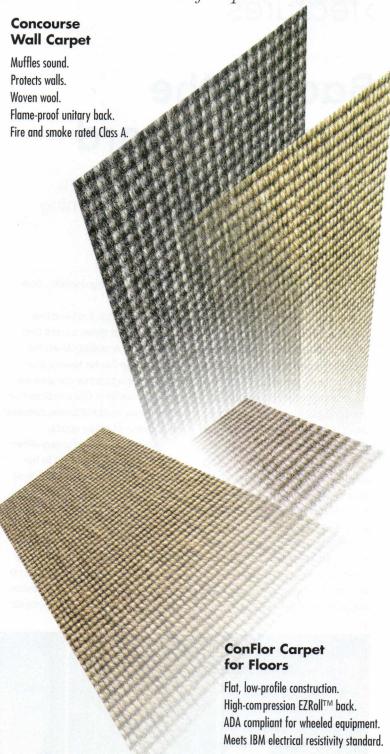
In this new era of disaster, everyone involved in the financing, design, and construction of buildings will now be scrambling to educate themselves about the risks we face. Insurers will be looking to better distribute risk, tenants will be looking to avoid it, and architects will be called upon, if not to eradicate it, to at least mitigate it. Once that risk has become imprinted on the collective consciousness, market forces will then bring new design ideas into the real world.

Until that happens, Professor Astaneh will continue to study the remains of the twin towers. "We have 300,000 tons of steel ahead of us," he says.

He speaks reverently about each new steel beam brought under his gaze, and one wishes that the architects, engineers, insurance underwriters, and developers sorting out their role in this new era could watch him work. Astaneh is one of the few to have seen the new benchmark of destructive force firsthand, and when he describes it, the effect is chilling. "The other day I found a piece that has almost a perfect semicircle cut out of it," he says. "It's probably where the engine hit the column. It looks like a bullet hole, except something six feet in diameter has passed through it."

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# Back to the Drawing Board

In the midst of rebuilding Manhattan, architects and developers are learning new lessons about each other.

BY ANDREW RICE

> DEVELOPMENT Douglas Durst, a third-generation real estate developer, thinks he has an answer to the economic crisis facing New York in the wake of the World Trade Center disaster. It begins with a piece of land. Granted, it's not much to look at, a collection of low-lying buildings right on 42nd Street near Times Square. But give him a little time, a little money and (this has always been the sticking point) a major tenant, and Durst says he can turn the assemblage into a 50-story skyscraper. He's done it before. In 1994, he built the Condé Nast Tower right next door, kicking off Times Square's office building renaissance. For his encore, Durst has already picked out an architect, Fox & Fowle, and

a fancy-sounding address, One Bryant Park.

Not long ago, it looked like tragedy might make Durst's One Bryant Park a reality. When the World Trade Center towers collapsed, he and other developers all over New York City predicted an emergency building boom, sparked by the loss of office space.

Marilyn Taylor has a very different view—literally. Sitting in her offices on the 25th floor of 14 Wall Street, one can almost remember the Manhattan that used to be.
J. P. Morgan once kept a penthouse apartment a few floors above. From the windows above her desk, Taylor, an architect and the new chairwoman of Skidmore, Owings & Merrill, can look out and

see what she loves about New York's financial district—the riotous mix of old and new edifices, unconstrained by the Midtown grid.

Almost from the moment the World Trade Center collapsed, Taylor has been thinking about what comes next—how the city should rebuild, rejuvenate, and remember. In this respect, she's like many architects who have met this crisis by channeling their energies toward creating a better city. In time-honored fashion, they've bestowed upon the city a bewildering array of committees with ambitious-sounding names and little real power.

Taylor, however, has clout. She serves on the board of the city's chamber of commerce, and after the World Trade Center attacks, helped form the New York City Infrastructure Task Force, an ad hoc coalition of business, labor, and civic leaders who pledge to "advocate a vision for the rebuilding of New York." In her professional life, she's part of the SOM

team that Larry Silverstein, the developer who leased the World Trade Center from the Port Authority, has hired to develop a new site plan. More than any single person, architect or otherwise, she bridges the diverse interests—political, business, and civic—that meet at the World Trade Center site.

"For me," Taylor says, "the paramount objective here is to get design positioned at the table when decisions about the city are made."

Durst and Taylor represent two worlds—developer and architect—whose ideas on how to make cities are shaped very differently and, as a result, often lead to widely divergent positions. But in a post—World Trade Center New York, the two camps are finding themselves drawn together, almost inexorably, in a way they've never been before.

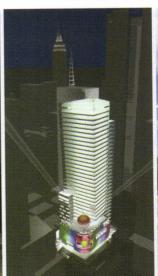
"The new element," says Bruce Mosler, the president of U.S.
Operations of the Cushman and Wakefield real estate brokerage, in the week after the attacks, "is that millions of square feet of

Glossy renderings alone won't get these Midtown edifices built in the current economic climate. In various states of development limbo are (left to right) the Hearst Tower, designed by Foster and Partners for Tishman Speyer; Times Square Tower by SOM for Boston Properties; 505 Fifth Avenue, by Kohn Pederson Fox for LCOR; 11 Times Square by Fox & Fowle for Milstein; and 20 Times Square, by SOM for Vornado Realty Trust and the Lawrence Ruben Company.











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tenants are looking for a home." After September 11, New York public officials sprang to action to prevent businesses from fleeing to the suburbs of New Jersey, Connecticut, and New York's Long Island and Westchester County. The city set aside land on the Hudson River for a temporary concrete factory. Officials at New York's state development agency compiled lists of ready-to-go office projects, some in unlikely spots in Brooklyn and Queens. There was talk of offering rebuilding subsidies to displaced businesses, and of sweeping away developers' regulatory headaches. Disaster would bequeath the city a new skyline.

A few months later, though, there are no wrecking balls swinging along 42nd Street, the market for concrete looks quite dim, and that new skyline seems destined to rise only in developers' imaginations. With the exception of one small office building in downtown Brooklyn, none of the development projects that seemed so certain in the dark days after September 11 are any closer to breaking ground than they were on September 10. "Maybe in New Jersey," Durst sighs, ruefully.

The optimistic predictions of a post–September 11 building boom were based on assumptions about the laws of supply and demand. More than 12 million square feet of top–quality Manhattan office space—the equivalent of the entire Cincinnati office market—were vaporized. Several other large office buildings were damaged

and left temporarily uninhabitable. Companies were homeless. Therefore, it seemed, new offices would have to be built.

As it turns out, there was much less demand for office space and far more supply than anyone realized. After the World Trade Center fell, companies flooded the sublease market with empty office space. The economy had already headed south, and layoffs were far deeper than estimated. Companies that had been hoarding office space for planned expansions suddenly decided not to wait for a sunny day. In one particularly dramatic case, Morgan Stanley sold an entire brand-new 32-story office tower in Times Sauare to Lehman Brothers, which had been displaced from an office building adjacent to the World Trade Center.

By the end of September, almost all of the companies displaced by the World Trade Center disaster had made plans to rehouse themselves that didn't involve building. As layoffs mount—there were 79,000 in October in New York City—the chances of an office-building boom only become grimmer. And now there is actually more sublease space on the market than there was the day before the terrorist attacks.

"In the near term, I don't see a need for any new development," says Peter F. Korpacz, director of the Global Strategic Real Estate Research Group at PricewaterhouseCoopers.

How long will this situation last?

No one knows, but some in New York's real estate community who know well the cycle of boom and bust have revived and adapted an old recession motto: "Stay alive," they say, "until 2005."

To understand why development froze in the city this autumn, one has to understand how the developers think. From an early age, developers learn a few basic lessons: (1) One empty building can ruin even the most successful portfolio of properties; (2) in most cities, speculative development has been dead since the 1980sbanks typically won't lend money for an office building unless a corporation has leased at least half the building; and (3) it is economically safer to sit on an empty lot and ride out a recession than to build for the patriotic heck of it.

But the situation in New York is no textbook case. The social forces unleashed by the attack on the city are skewing the economic strategies that might otherwise govern the situation. And now Marilyn Taylor and developers like Douglas Durst may find themselves wearing the same shoes.

Enter John Zuccotti and Larry Silverstein. As a former deputy mayor during the fiscal crisis of the 1970s, Zuccotti has seen the city learn lessons from hard times before. Now, as chairman of Brookfield Financial Properties, which owns the World Financial Center and other office buildings near ground zero, he will be leading the charge to quickly rebuild the property and amenities of Lower Manhattan. Silverstein made millions buying and building in the city's financial district, and mere weeks before the World Trade Center fell, he paid \$3.2 billion for a 99-year lease on the property.

Both of these men have found themselves transformed by the

event. "We didn't need this kind of urban renewal," says Zuccotti. "But the fact of the matter is, we have to face what these villainous people did to us, and turn around and think of it as opportunity." Zuccotti is thinking of things that are normally the purview of urban planners. He says he wants the money channeled toward improving transportation and cultural amenities downtown.

Speaking at a <u>Commercial</u>
<u>Property News</u> luncheon for real
estate developers in November,
Silverstein began his remarks talking about tenancy and ground
rent, but soon words like "urban
landscape" and "contextualize"
were popping into his speech.

"We've brought on a team of unexcelled professional talent to determine what we will propose to the Port Authority," Silverstein said. He praised SOM for the work they're doing, and he seems to be an avid architecture student.

"West Street literally divides the World Financial Center and Battery Park City from the rest of the city. Can't we bring it below grade? And can't we reimpose the grid from before the towers? It was beautiful," he gushed.

Silverstein's lawyers have told him that if he simply rebuilds the property exactly as it was, no building permissions will be necessary. "But he found that the original plan wasn't very nice," says David Childs, principal of SOM, who is working, along with Taylor and architect Alex Cooper, on Silverstein's new plans. "He's very receptive to ideas of change."

Taylor, Childs, and Cooper have converted their client into an urbanist—at least superficially.

Beneath all the platitudes, there are cold calculations. Everyone from the mayor to the Planning Commission to the Port Authority

It is in Silverstein's interest to appear as if he's acting in the public's.

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of New York and New Jersey will want to have their say on the World Trade Center project before it's done, and opposition from any one of them could lead to costly delays. It is in Silverstein's interest to appear as if he's acting in the public's. And so, at least for now, the architects have room to work.

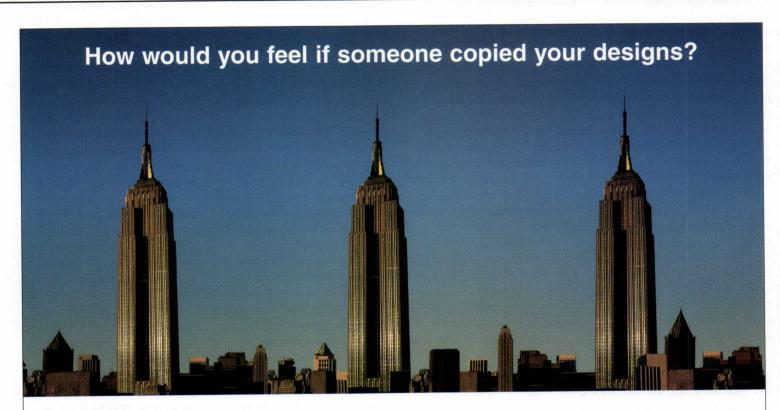
But neither Silverstein nor
Zuccotti will ignore the bottom line.
Silverstein is embroiled in a multibillion-dollar dispute with his insurers. He argues that two crashes
into two buildings constitutes two
separate events, and he therefore
believes he's owed twice the
\$3.5 billion the policy pays. If he
receives the full amount he wants,
he talks of a performing arts center
and a museum. But when asked

what he would do if he doesn't receive the insurance money he's asking for, those plans disappear. "Could we rebuild the twin towers with half the settlement? Yes," he said at the November luncheon. "Could we do a performing arts center, or a museum, if we got half the money? No."

"I hope the economics do work out," says Childs. He seems to have found a fan in Silverstein, and yet he is also learning much about the way Silverstein thinks. "He's a real advocate of mixed-use development, and getting places for cultural events, and I think he'd love to do that. His intentions are right, but at the end of the day, for a developer it has to make economic sense."

The insurance money, along with the billions in emergency aid promised to New York by the federal government, will go a long way toward determining what kind of New York is built, and already constituencies ranging from developers to environmental and civic groups (the "goo-goos," as they are called by developers) are jockeying to determine how it will be spent. A new public authority, the Lower Manhattan Redevelopment Corporation, appointed by New York's mayor and governor, is headed by a former investment banker and deputy secretary of state, John C. Whitehead. The board is heavy on financial leaders and government officials. If federal funding helps the city kickstart amenities that will draw in prospective tenants, developers may be willing to take risks on projects that otherwise might remain frozen. "The lead really has to come from the government agencies," says Zuccotti.

New York developers have a tradition, at least in their own minds, of being civic minded. Ask any big developer in New York and they'll tell you how they stuck around during the 1970s fiscal crisis—when bankers and insurers were abandoning the city. Neither Zuccotti nor Silverstein are simply acting like money men. In hiring planners to create a well-considered redevelopment strategy, their role is a civic as well as financial one. As a result, the stakes are



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high. Their work has to be a source of civic pride, and it has to be politically saleable.

Most big commercial tenants who choose to stay in New York will, if they have their druthers, head to Midtown. Wall Street hasn't been the city's real financial center for years, and its appeal has mostly been based on prestige, not geography. This means it's more important than ever to make downtown, with its dark skyscraper canyons and lack of supermarkets, more appealing. "We really want this to be a successful place...well planned, well designed and magnetic," says Robert Yaro, the executive director of the Regional Plan Association. So the plan, he says, "has to be not just fast, but good."

Suddenly, design is at the table, just as Taylor wanted. "We have a chance now to tie river to river, tie Broadway to the Hudson," she says. Taylor sees an opportunity to not just rebuild what was lost, but to bring lower Manhattan's urban planning into the future. "We have a chance to heal these things that a superblock with its plinth... completely frustrated because they were products of thinking of another time."

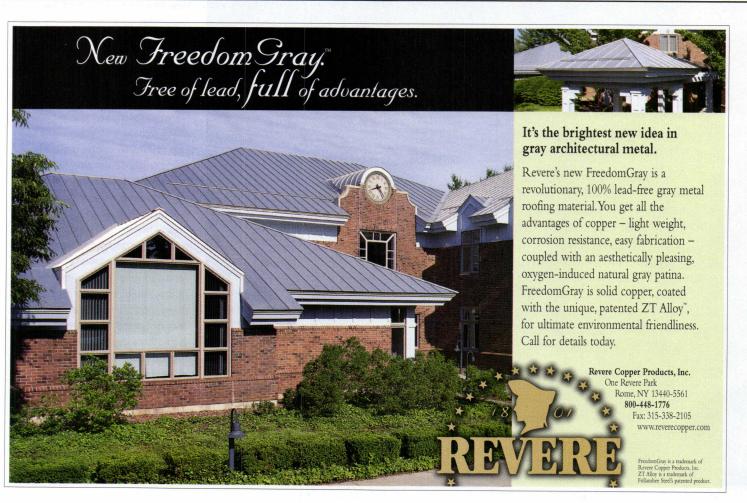
With four years of slow market conditions anticipated, developers in New York suddenly have the free time to begin thinking beyond the boundaries of their properties and their profession. That's time to think about things like prestige, nostalgia, and political influence.

But the risk for developers in building before the market is ready is enormous. Even before September 11, New York was headed for deep financial trouble. The city depends heavily on the financial sector for tax revenues, and big layoffs on Wall Street were pushing the city toward a fiscal crisis. Since the attacks, companies that saw their headquarters displaced by the attacks, like Morgan Stanley and Dow Jones, may move substantial numbers of their employees to the suburbs. In another time, the defection of even one of those big corporations would make for front-page news. Now the blows come on an almost daily basis.

But out of this deluge of tenants

and the inevitable fighting between the coalitions proposing plans for Lower Manhattan, new lessons are being taught. Architects have learned that no matter how clear or piercing a vision they propose, developers won't risk being left holding the bag, but that at the right time enormous influence can be had. And developers in New York are suddenly interested in learning to reinvent the city from an architectural standpoint. Planners and designers like Taylor and Childs have shown that it's possible to redefine the role of the architect by teaching developers to speak goo-goo. R

ANDREW RICE IS A REPORTER FOR THE NEW YORK OBSERVER.



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#### Can a fragment of the twin towers commemorate the disaster?

BY ERIC FREDERICKSEN

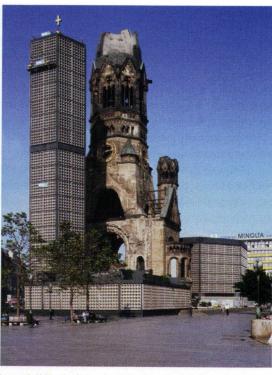
> MEMORIAL With a very American alacrity, artists and architects began to propose September 11 memorials within a week of the atrocity. Before a single U.S. bomber had crossed into Afghan airspace, symbolic gestures aimed toward "closure" were leaving drawing boards across New York City and the rest of America. Towers of Light, a temporary memorial proposed by artists Julian LaVerdiere and Paul Myoda graced the cover of the New York Times Magazine for September 23. At the opposite end of the aesthetic spectrum, the architecture firm Franck Lohsen McCrery of Washington and New York and the Scottish monumental sculptor Alexander Stoddart were commissioned within days of the attacks by the quarterly City Journal to design a rebuilt World Trade Center site, for which they proposed a central sunken greensward surrounded by monumental sculptures: allegorical figures of history and memory facing a firefighter and a policeman.

But among the many proposals for a permanent memorial, one idea quickly found widespread support: preserving the shattered 15-story remnant of the south tower, so memorable as a backdrop to photography of the noble rescue and recovery effort. Understood as a ruin amid the garden of a future memorial park, the notion of saving the fragment has ample precedent, but the idea has several risks. It elevates architecture above human lives, and makes a showpiece of

something that was turned into an instrument of death. It collectivizes deaths in a time and place where the individual is paramount. And it flirts with aestheticizing mass murder. In an early endorsement of the idea published in the New York Times, the Metropolitan Museum of Art's director, Philippe de Montebello, called the ruin "a masterpiece." Does that make the murderers conceptual artists, as critic Philip Nobel cuttingly asked? When Times architecture critic Herbert Muschamp compared the ruin to the work of Frank Gehry and clothing designer Issey Miyake, he did little to establish the seriousness of the preservation idea. Better, subtler arguments can be made, but the central guestion-Why?-remains unanswered.

The idea of the ruin is powerfully associated with 18th-century England, and commentary on the current idea has tended to examine it first in light of that era. A gloomy national tenor found many of England's most prosperous and secure citizens luxuriating in the melancholic pleasures of ruins: Gothic abbeys at home, classical temples abroad, or, when an actual ruin was not at hand, sham ruins constructed as garden follies. The English rapture over ruins proceeded from image to reality, inspired by the neoclassical landscapes of popular painters Claude Lorraine and Salvator Rosa, and Giovanni Battista Piranesi's vedute of Roman ruins. Gothic novelists and romantic poets used ruin imagery to rhapsodize the decline and fall of earlier civilizations and envision the future destruction of their own, as in a sonnet by Horace Smith (a variation on the theme of Percy Shelley's famous "Ozymandias") where the poet, looking at a ruined sculpture in the Egyptian desert, imagines





Hiroshima's A-Bomb Dome (left), one of the few buildings to survive the August 6, 1945, attack, stands within Kenzo Tange's Peace Park. At the Kaiser Wilhelm Gedachtniskirche in Berlin, Egon Eiermann's pavilions and bell tower surround the shell of the 19th-century Romanesque church, destroyed by Allied bombers.

a hunter in a "wilderness / Where once London stood.... He meets some fragment huge, and stops to guess / What wonderful, but unrecorded race / Once dwelt in that annihilated place." The 18thcentury imagination had to bridge a cultural or temporal distance to access ruins: Though engaged in near-continuous warfare, warlike England fought no battles on its own soil in that century. It is hard to imagine English painters, poets, and architects enraptured by destruction visited upon their own culture.

In the 20th century, ruins have sparked sensations far beyond the poetic melancholy and awe of the sublime that defined their 18th-century attraction and remain their most noted associations.

The aftermath of World War II left three particularly famous ruins which, accompanied by modern additions, strongly evoke that war's

depredations. The "A-Bomb Dome" in Hiroshima, a battered shell of an exhibition hall that somehow stood though the bomb exploded directly above it, is a centerpiece of Kenzo Tange's 1955 memorial park devoted to the horrors of atomic warfare. In Berlin, West German architect Egon Eiermann was convinced to build his new Kaiser Wilhelm Gedachtniskirche around the bombed 19th-century church's surviving tower, rather than razing it. And in Coventry, England, the ruins of the original 11th-century St. Michael's cathedral, destroyed in the Blitz, are a powerful counterpoint to and basis for Basil Spence's modern, yet contextual, cathedral. Current church dean John Irvine describes the walk from ruin to new cathedral as "the walk from Good Friday to Easter, from the ravages of human self-destruction to the glorious hope of resurrection." Through

their new additions and their continuity of purpose, these churches commemorate not, as an 18th-century English critic once wrote of classical ruins, "the triumph of barbarity over taste," but rather the triumph of civilization over barbarism.

Well-known works from the more recent past suggest that the idea of a ruin can be powerfully conveyed without a literal ruin's presence. Daniel Libeskind's Jewish Museum in Berlin derives its form from the shape of a shattered Star of David. Some 400,000 people visited the Jewish Museum as a vacant building—the state. of course, of a ruin. But unlike a sham ruin in an English garden. Libeskind's building does not sentimentalize or naturalize violence, moldering away wreathed in ivy; it is conceived directly from the destruction. Recently reopened with exhibits that record 2,000 years of German Jewish history,

## >features

the building evokes the murder and dispersal of the German Jews, and thus the destruction of the culture that gave meaning to these artifacts. This is not a poetic reverie over time's passage; the building refuses to make sense of the Holocaust.

The question of preserving the ruin of the south tower will probably be settled less through aesthetic and philosophical debate than through politics and logistics. Architect Bart Voorsanger, who is advising the Port Authority of New York and New Jersey on what objects and building fragments might be saved from the wreckage for use in memorials or archives, points out that the fraament almost certainly cannot stand through the entire cleanup and reconstruction work, which extends seven stories beneath the street. And tidy disassembly, storage, and rebuilding would be a highly expensive and difficult proposition: Each structural column weighs some 1,700 pounds per linear foot. As for politics, early polls of those directly affected by the attacks—families of victims and downtown community organizations—show a marked distaste for the whole idea. Ray Gastil of the Van Alen Institute, working to create a framework for the memorial building process, says, "Of the ones we've spoken to, the overwhelming majority is absolutely opposed to using a ruin."

While many in New York's design community have spoken in favor of preserving the ruin, they may not be in a position to decide. In the wake of the muchlauded process that created the memorial to the Oklahoma City bombing (which was led by a 350-person team dominated by families of the dead), the design

process in New York will very likely have powerful citizen involvement. That will mark a major shift in our reckoning with the atrocity. We first saw the ruin as a backdrop to heroism, with rescue workers as figures in that landscape. Images of firefighters and rescue workers pushing past exhaustion to save those they could and respectfully disinter those they couldn't first pushed the ruin into popular consciousness.

The role individual mourning has played in the creation and use of recent memorials will be strongly influential here. In the temporary tributes at Columbine High School, and in the gifts left at Maya Lin's Vietnam Veterans Memorial, mourners personalized and democratized grief and memory. The inexorable regularity of Lin's sunken black-granite wall-which can be read as an unearthed ruin-is complicated by the individual offerings placed by the names of fallen soldiers. Group memory and personal tribute interminale. In New York, we find parallels in the missing persons posters clustered at multiple locations around Manhattan, widely referred to as the catastrophe's first true memorial. The posters established the magnitude of lost life while recognizing the victims as individuals in a way the ruin of the south tower never could. The NYPD's approach to the attack, which involved booking each death as an individual homicide. and the short biographies of victims published daily in the New York Times echo this sentiment. This modern form of public, individual grief over collective death is a more potent signpost toward a World Trade Center memorial than any simple ruin.

## The Specialist

Charles Harper does a job no architect would envy.

BY JACOB WARD / PHOTO: JONATHAN WORTH

> REBUILDING On April 10, 1979, the city of Wichita Falls, Texas, was hit by a tornado. Wichita Falls sits in the rolling plains section of Texas, part of what meteorologists call "Tornado Alley." The city, roughly 13 miles long and about a mile and a half wide, had felt its share of windstorms before. This tornado, however, was a multivortex F-4: a mile across, and impossibly ferocious.

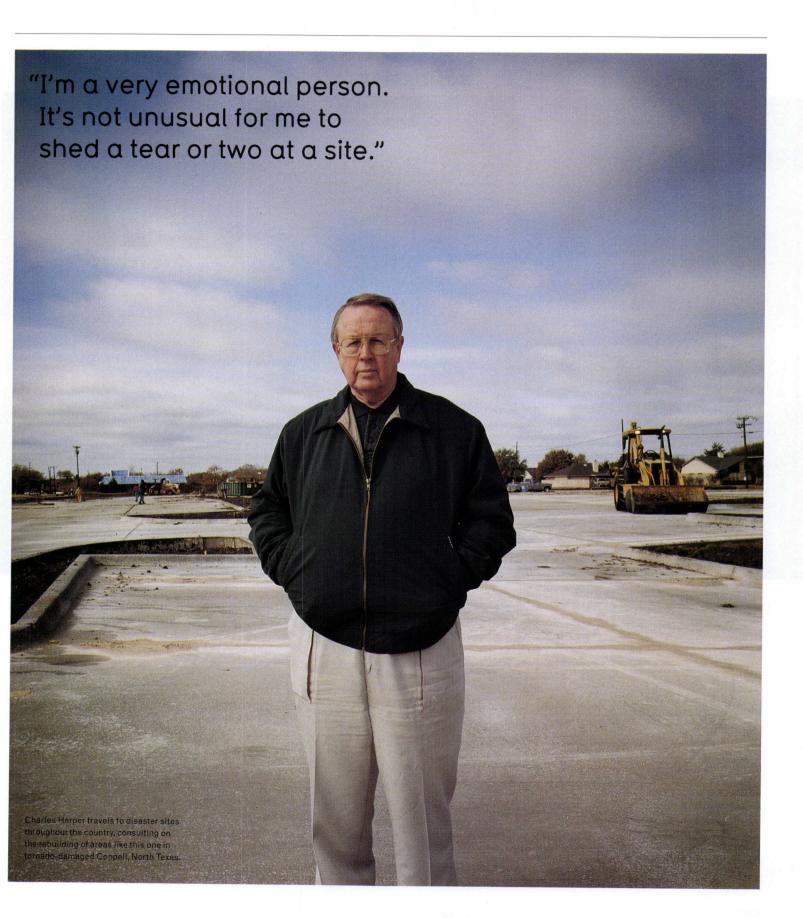
"We call it Terrible Tuesday," says Charles Harper, an architect and one-time mayor of Wichita Falls. Twenty-five thousand people lost their homes that day, and nearly 50 people were killed. Harper had some experience with disaster-relief work before Terrible Tuesday. After responding to a string of disasters, culminating in a three-day hurricane that battered Corpus Christi in 1970, he was called upon to create a disaster program within the Texas Society of Architects. But the Wichita Falls tornado was the worst sort of crash course in devastation. Harper and a team of 15 architects sorted through the rubble of thousands of homes, assessing damage, fighting with insurance adjusters, and generally trying to put the city back on its feet.

Since then, Harper, now the chair of the AIA's national disaster response team, has embarked on a terribly challenging second career. When not running a practice in Wichita Falls, "I go to about three or four major disasters a year," he says, ticking off his recent visits. "There was the Oklahoma City tornado last year, this last week was a tornado in Cordell, Oklahoma, and there was that flood in Houston." Harper receives no pay—the AIA compensates him only for his airfare. In exchange, Harper travels to affected areas and trains local architects to act as damage inspectors. "I show them how brick falls off, how a 2-by-4 can break through trusses, how the roof is about to fall," he explains.

Harper divides the aftermath of a disaster into five stages: the emergency stage, which ends when the dead are buried; the restoration period, when the economy gets going again; two phases of reconstruction, in which buildings and related urban projects are replaced; and finally the creation of a memorial, typically five years afterward.

In 30 years of responding to disasters, Harper has learned more than anyone would ever want about the psychological damage a disaster does to the inhabitants of a city. "People are always traumatized, and they do things they wouldn't naturally do," he explains. "We find that murders and rapes and child abuse and all the other bad things people do—that all quadruples, typically."

These days, Harper prefers to travel with his wife in their motor home rather than fly, and he finds it important to take long weekends and recuperate. "I'm a very emotional person. It's not unusual for me to shed a tear or two at a site," he says. In September, "after a FEMA [Federal Emergency Management Agency] meeting near the Pentagon, the other folks were all going down to the crash site, and I had to say no." And although he's been in regular contact with the state and city AIA presidents in New York, he says, "If I had gone to the site, I would have just broken down."





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## architecture

## Architecture Again

By Raul A. Barreneche

After 49 years, there is still no authoritative definition of what the P/A Awards are truly about. Each year's jurors must interpret for themselves what it means to judge the awards relative to any other architectural design prize. Last year's jury wrestled with the guestion of whether the P/A Awards are about innovation, provocation, or a survey of the current state of the architecture world-and never definitively settled the score. This year, juror Gregg Pasquarelli described the program as a kind of design weather forecast, a first look at "the fronts and storms that are going to come through and what solutions are being developed now in good, smart-thinking offices."

Pasquarelli is right to suggest that the program augurs trends that will soon become part of the broader architectural discourse. Think back to the 1979 awards, when Michael Graves's Moorehead-Fargo bridge foretold postmodernism's impending hegemony, or to the 1997 program, when a citation for the Korean Presbyterian Church of New York thrust the budding "blob" movement into the professional mainstream. But the P/A Awards are also a powerful barometer of current conditions. They reveal as much about what architects are pondering in the present-and about the current state of the world-as the directions they will follow in the future.

The jurors of the 49th Annual P/A Awards finished their review of 565 projects (a record in the five years since this magazine inherited the P/A Awards from Progressive Architecture) with a strong impression that "this is a really good time for architecture," in Pasquarelli's words. He and his colleagues were pleased to find so many competent projects of a variety of scales and types-even a large number of public commissions—as well as a discernable lack of a dominant formal or philosophical ideology. "People don't seem to care whether they are making a blob or a box," observed

Terence Riley. "I'm glad there are more than two choices. I think the work this year suggests that architecture is moving confidently into new directions." Pasquarelli echoed Riley's embrace of pluralism: "The work was about ideas and strategies and looking for innovative ways to execute things, not stylistically, not according to a paradigm or pedagogy. but in the spirit of good work," he suggested.

For German architect Regine Leibinger, that spirit of doing good work was evidenced by a return to basic problem solving-in short, a return to the fundamentals of architecture. "It seems like the projects tried to deal with architecture again. [Architects] are thinking the plans through, they're thinking about materials and social aspects." Architect Ming Fung agreed with Leibinger's pronouncement, suggesting that digital technology has made form-making too easy. "I may be too optimistic in saying so, but architects seem to be rejecting such superficiality and instead asking meaningful questions and addressing real issues," she says. "Many entries challenged codes, redefined programs for new lifestyles, and pushed the construction industry into looking for new ways to work with materials."

Indeed, such challenges to the methods and making of architecture seem to be the embodiment of the P/A Awards' spirit, a potent mix of pragmatism and progressive thinking. This "return to architecture" does not signify a retreat from innovation. On the contrary, the winners present fresh takes on longstanding design problems, innovative solutions firmly grounded in reality by their responses to complex programs, difficult sites, and tight budgets.

This interest in problem solving may have taken its most surprising form in a strongly renewed attention to the public realm: Four publicly funded projects earned kudos this year. The Chicago elementary school by Marble Fairbanks Architects, which received one of four awards, was also the winner of a design competition sponsored in part by

the National Endowment for the Arts Design Program, headed by 48th P/A Awards juror Mark Robbins. The strong message that such an honor sends to the federal government cannot be overstated. It bodes well for both the profession and the country that some of the very best architecture being designed in North America is for the public realm. And it should dispel the perceived dichotomy between public building and design excellence that American architects accept as an intransigent status quo. In light of the events of September 11, such renewed civic pride may seem appropriately patriotic.

Sadly, this year's awards bear the indelible imprint of that tragic day. Originally, the jurors were to have convened at Architecture's editorial offices in downtown Manhattan on September 14-15. But with downtown ordered off-limits by Mayor Giuliani, the airlines all but grounded, and the world's thoughts turned to graver matters, the jury was postponed. Efforts to reconvene smoothly proved logistically impossible, and in the end. three of the five original jurors had to be replaced. Filling in were peers who had either graciously declined past invitations to serve on P/A juries (most because they were entering projects) or were already on Architecture's radar as future jurors: Hsin-Ming Fung, Regine Leibinger, and Gregg Pasquarelli (see jury bios, page 56). They and Terence Riley and Rick Joy finally convened at Architecture's offices on September 29-30, while smoke still wafted from the rubble of the World Trade Center two dozen blocks away.

Though they continue to resist definition, the P/A Awards say much about the past, present, and future of design. They build upon a strong tradition of innovative, progressive architecture; they also reflect our current preoccupations and preferences, or lack thereof, and keep an eye to the future. In the end, however-as evidenced by this year's return to almost Vitruvian fundamentals-the P/A Awards are about nothing if not architecture.



## Gregg Pasquarelli

Before studying at Columbia University, from which he graduated with a Master of Architecture in 1994, Gregg Pasquarelli received an undergraduate degree in finance from Villanova University. Pasquarelli later joined the New York office of Greg Lynn Form, where he was designer and project architect on such commissions as the 1997 P/A Award-winning Korean Presbyterian Church of New York (October 1999, page 88). He cofounded New York-based SHoP/Sharples Holden Pasquarelli in 1997; the firm has already received the Academy Award in Architecture from the American Academy of Arts and Letters and was featured by the Architectural League of New York as one of its annual "Emerging Voices" in 2001. Among SHoP's current projects are a 25-story residential tower in Brooklyn; a new building for Columbia University's School of the Arts; a small waterfront park in Greenport, New York; a Manhattan gallery and showroom for furniture designer Dakota Jackson; and the Museum of Sex in New York City, another P/A Award winner (1999). Pasquarelli currently teaches design at Columbia University, where he has been on the faculty since 1996.

## Regine Leibinger

Regine Leibinger has been a partner, with Frank Barkow, of Barkow Leibinger Architects in Berlin since they founded the firm in 1993. Leibinger received a diploma from the Technical University Berlin and a Master of Architecture from Harvard University's Graduate School of Design. She has taught and lectured at the GSD, the Architectural Association in London, and the Hochschule für Bildende Kunst in Hamburg, Germany, among other institutions.

Leibinger's practice and academic research has focused on buildings for industry. Among the firm's completed industrial projects are a factory in Stuttgart (June 1999, page 106), a customer and technology center in Connecticut (March 2000, page 116), and an "innovation center" in Switzerland, all designed for the German laser manufacturer Trumpf. Among the firm's other projects are a biosphere for the 2001 German Garden Show in Potsdam (December 2001, page 52) and an office building in Stuttgart.

Barkow Leibinger has received a Connecticut AIA award for its Trumpf technology center and was part of a team, along with Douglas Gauthier, honored for the design of two schools in Berlin in the 1998 P/A Awards program.

Photos: Graham MacIndoe



## Terence Riley

Terence Riley has been chief curator of Architecture and Design at the Museum of Modern Art in New York since 1992. Before joining the museum, Riley was director of the Arthur Ross Architecture Galleries at Columbia University. He holds an undergraduate architecture degree from Notre Dame University and a Master of Architecture from Columbia University, where he has been an adjunct faculty member since 1987. Riley also maintains a New York-based practice, Keenen/Riley Architects, with John Keenen.

During his tenure at MoMA, Riley has organized large retrospectives such as Frank Lloyd Wright: Architect (1998) and last summer's Mies in Berlin, cocurated with Barry Bergdoll, as well as thematic surveys like Light Construction (1995) and The Un-Private House (1999). Riley has also curated smaller exhibitions, such as Rethinking the Modern: Three Proposals for the Museum of Modern Art, about the museum's upcoming \$650 million expansion, to be designed by Japanese minimalist Yoshio Taniquchi.

## Hsin-Ming Fung (JURY CHAIR)

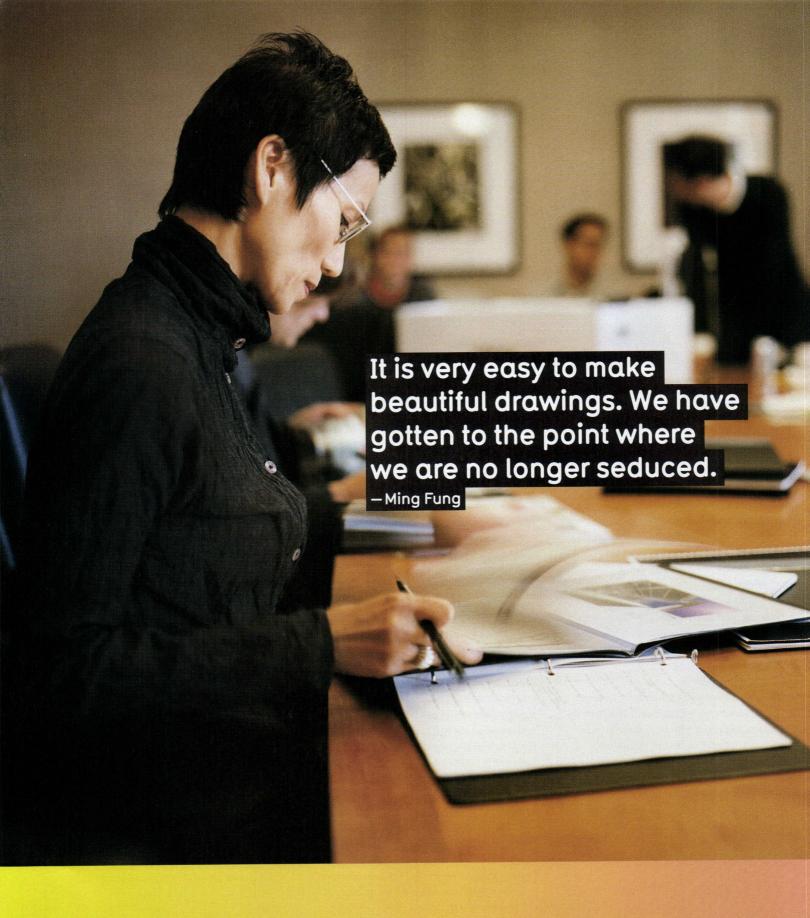
Hsin-Ming Fung is cofounder and principal, with Craig Hodgetts, of the Los Angelesbased firm Hodgetts + Fung Design Associates. She received her Master of Architecture from the University of California, Los Angeles in 1980. Since the firm's founding in 1984, Hodgetts + Fung has received accolades for its playful, sometimes unconventional designs, including the Towell Library at UCLA; the American Cinematheque in Hollywood: and the student pavilion for Arts Center College in Pasadena. Among the honors Hodgetts + Fung has received are the American Academy of Arts and Letters' Architecture Award in 1994; the Chrysler Award for Innovation in Design in 1996: and national honor awards from the American Institute of Architects. Fung herself received the National Endowment for the Arts' coveted Rome Prize for Advanced Fellowship (1991) and served as a juror for the Presidential Design Awards in 1999. In the same year, former President Bill Clinton appointed her to the National Arts Council.

Fung is currently director of graduate studies and professor at the School of Environmental Design at California State Polytechnic University in Pomona. She has taught and lectured at universities across the country and in Europe, including Ohio State University and Yale University.

## Rick Joy

Tucson-based architect Rick Joy was a carpenter and musician in Maine before studying architecture at the University of Arizona, from which he received a Bachelor of Architecture in 1990. Joy worked for three years in the Phoenix office of architect Will Bruder as part of the design team on the Phoenix Central Library (October 1995, page 56) before establishing his own firm, Rick Joy Architect, in Tucson in 1993. Joy's focus is creating architecture that is "regionally sympathetic and well grounded in the context and community of its place." Among his built projects are the Convent Avenue Studios and Palmer/Rose Residence (December 1998, page 90), both in Tucson, and the Tyler Residence in Tubac, Arizona. Exhibitions featuring Joy's work have been on view in New York, Austin, Washington, D.C., London's Royal Institute of British Architects gallery, the GA Gallery in Tokyo, and Copenhagen's Danish Design Center.

Joy has received honors from the Architectural League of New York, where he was one of the annual Emerging Voices in 2000; I.D. magazine; and the Arizona chapter of the AIA. He has lectured around the country and held visiting professorships at the University of Arizona and at the GSD.



Awards



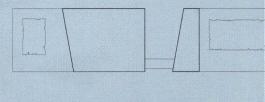
- 60 Vincent James Associates
- 64 Johnston Marklee
- 68 Marble Fairbanks Architects
- 72 Office dA

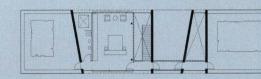
SITE: Seventeen acres in southwestern Michigan, located on a densely forested bluff overlooking the eastern shore of Lake Michigan.

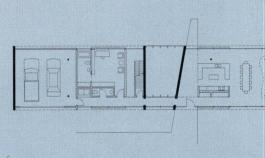
PROGRAM: A 10,000-square-foot house to be shared equally by fraternal twin brothers, one married with children, the other single.

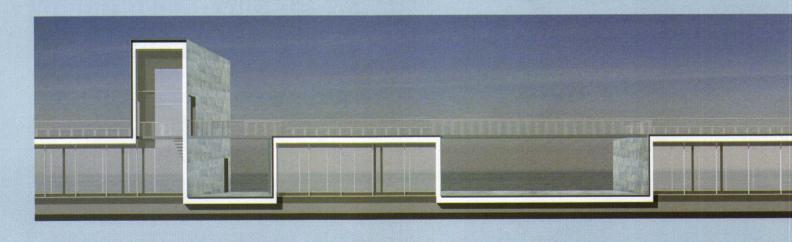
SOLUTION: The project is conceived as two houses within the same long, thin bar placed parallel to the bluff to maximize lakefront views. Each brother's private quarters-including an open kitchen/dining/living area, bedrooms, and particular spaces, such as a playroom, study, and media room—are located at the far ends of the bar. At the center are shared social and recreational spaces. The thin footprint of the structure, only one room deep, allows simultaneous views of both water and forest.

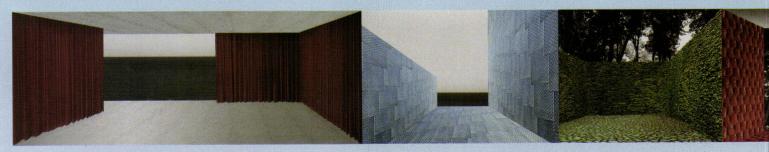
The architect treated the roof of the house as a folding and unfolding ribbon that defines internal and external spaces of varying heights. Flexible interiors within these spatial folds are defined either as "naked spaces" where the concrete-and-steel structure remains exposed, or "lined spaces" that are clad with various materials that may change as the owners' needs change over their lifetimes.

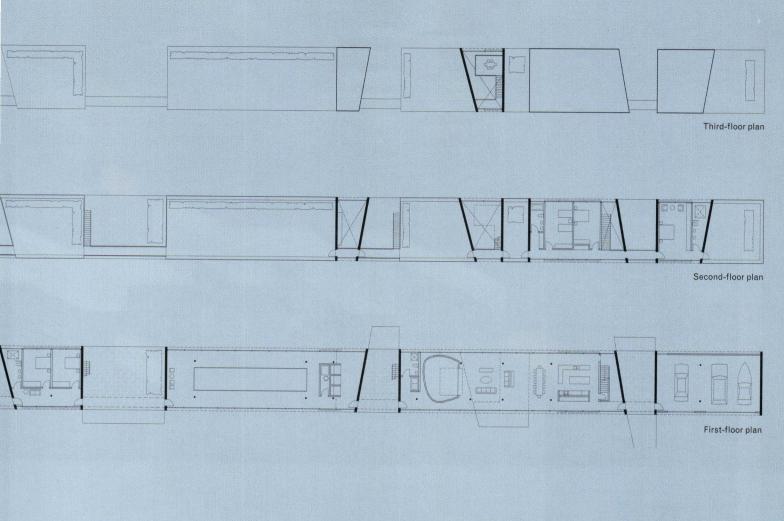




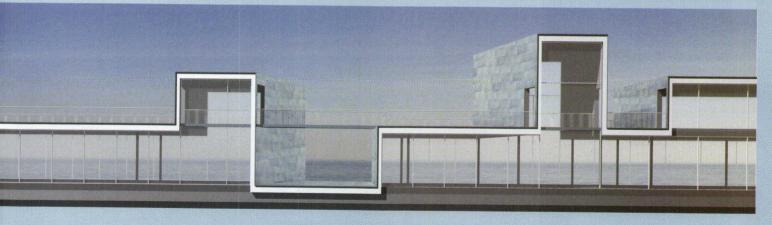




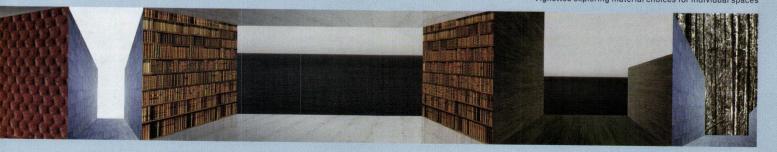


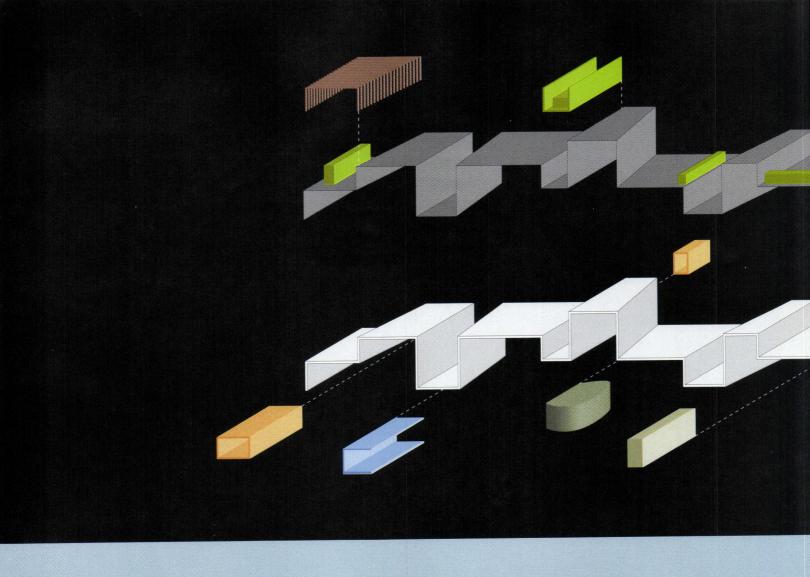


Southeast façade, showing steel cladding on a post-tensioned concrete structure

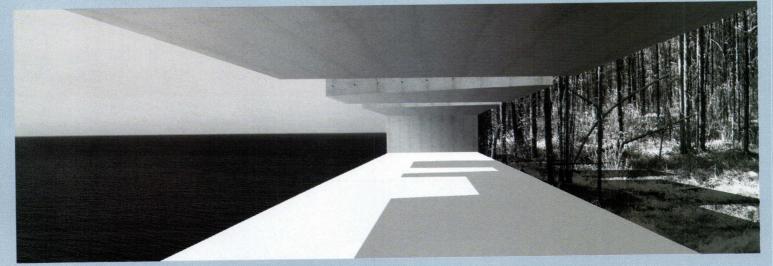


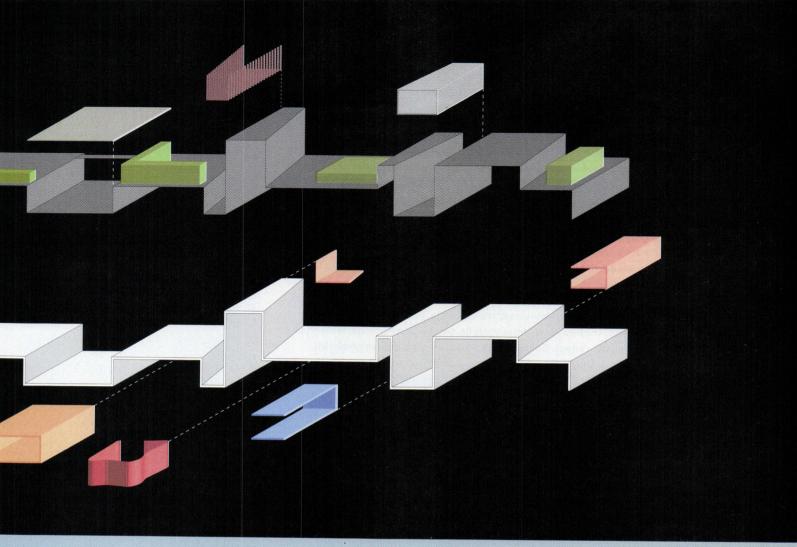
Vignettes exploring material choices for individual spaces





View of concrete structure looking northeast





Exploded axonometric of armature and linings

**REGINE LEIBINGER:** It's an incredibly strong idea. But I think it has one weak point: the circulation.

**GREGG PASQUARELLI:** The transverse circulation is a problem.

RICK JOY: I think it's the strongest part. The decision to lace the transverse circulation through the rooms preserves the dichotomy of the experiences in the spaces. Traveling the length of the building is the best physical experience. A more formally defined corridor would diminish this very important aspect of the scheme.

**TERENCE RILEY:** It hits such a home run in terms of polemics it almost doesn't need anything else. It's like when you're lying on a carpet and you spend half the time rubbing it against the grain to make the fluff go up, and the other half laying it down. You're either going with the grain or against the grain; and the grain is so strong.

MING FUNG: I'm attracted to the notion that this is a glass box turned upside down with walls that underlay it. The section is really beautiful. And the way the house frames different views reminds me of the Salk Institute.

RL: I think the houses we award should look new, have something visionary, and should be something that we've never seen before. Sectionally and in plan, this house does that—and does it very smartly.

## LONGITUDINAL HOUSE(S), EAST SHORE OF LAKE MICHIGAN, MICHIGAN

CLIENT: Withheld at owner's request ARCHITECT: Vincent James Associates, Minneapolis—Vincent James, Jennifer Yoos, Andrew Dull, Karen Lu (collaborators); Nathan Knutson (project manager); Donovan Nelson, Carl Gauley, Steven Philippi, Christopher Weigscheid, Lev Bereznycky, Dzenita Hadziomerovic (design team) ENGINEERS: Betker and Associates (structural) COST: Withheld at owner's request

## Johnston Marklee

SITE: A sloping hillside lot in Los Angeles measuring approximately 60 feet by 75 feet. The parcel sits on the western slope of Santa Monica Canyon, with views to the east and south. PROGRAM: A 3,300-square-foot, two-bedroom house to be built by a local developer.

SOLUTION: The architect's goals were to minimize contact with the terrain and to maximize the building volume allowed by the Los Angeles Hillside Ordinance. The ordinance limits the buildable height above grade to 36 feet at any given point along the slope, and dictates a maximum overall height of 48 feet from the lowest point of the house to the highest. When horizontal setbacks are accounted for, the result is a buildable footprint of 1,800 square feet but the height restrictions prevent that footprint from being built on a single level.

Instead of a stepped building whose dimensions fall within this restrictive zoning envelope, the form of the house is the physical manifestation of the envelope. The result is an angular, elongated box with three levels. The entry level from the hillside contains a garage, kitchen, and living-dining room overlooking the canyon. Below is a floor with single bedroom and bath; above is another bedroom with a study overlooking the living-dining room.

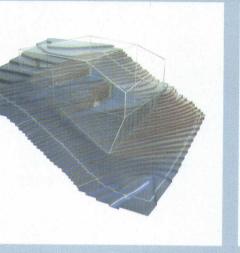
TERENCE RILEY: The ingenuous thing about this project is that it starts with the dumb zoning diagram—what's allowed to be built on the site, the setbacks, and things like that—and makes it architectonic. And then doing this outrageous thing of having the house actually lean up the hill so that it almost gets over the hill to get the views in the opposite direction through cavelike openings. It's a weird reversal of the Case Study houses.

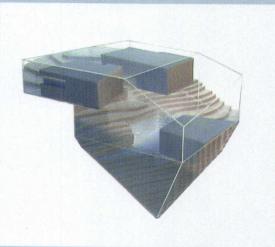
GREGG PASQUARELLI: The zoning envelope is an exoskeleton and the space is hung from that. REGINE LEIBINGER: I think the complexity of this project and the way it's presented is very strong. Look at the model: You see clearly the idea of defining the whole volume by the zoning. TR: I think to get an award you have to be successful on multiple levels. I feel this project is

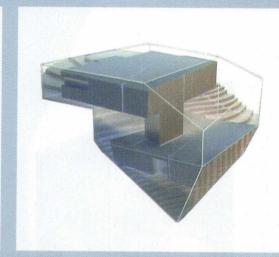
MING FUNG: I like the simple solution to the hillside height restrictions. It's clever because it takes one idea and exploits it to its fullest. In a way, it's a dumb box redefined by a configured envelope. It will be interesting to see how the skin will be applied—let's hope it's not stucco. RICK JOY: Like so many of the projects we've seen, the exterior formal aspects are beautiful and clearly presented. But I want to know what's going on inside. What are my experiences going to be like after it's built and the neighbors stop complaining?

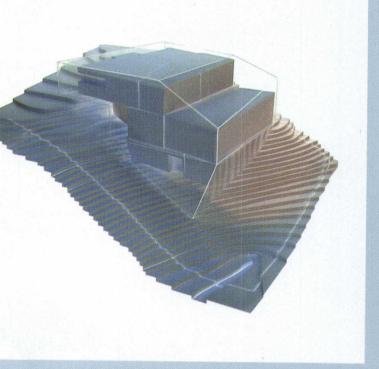
## HILL HOUSE, PACIFIC PALISADES, CALIFORNIA

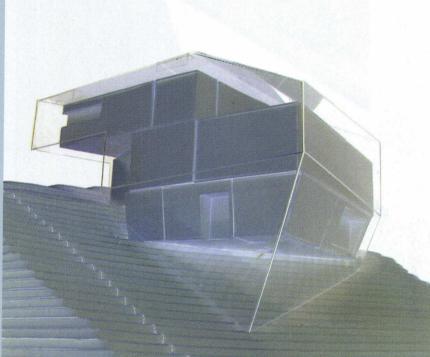
CLIENT: Steven and Lorraine Snipper, Pacific Palisades, California ARCHITECT: Johnston Marklee, Los Angeles-Mark Lee, Sharon Johnston (principals); Mark Rea Baker (project architect); Michelle Cintron, Anton Schneider, Seoung An (project team); Jeff Adams, Joanna Hankamer, Lars Holt, Anne Rosenberg, Charlotte von Moos, Karina White (project assistants) ENGINEERS: William Koh and Associates (structural); CC & R (civil) cost: Withheld at owner's request



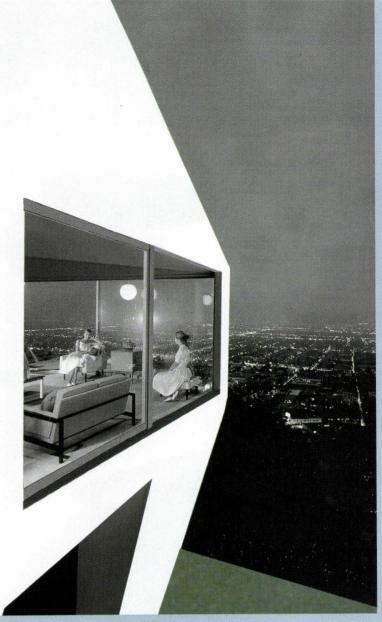




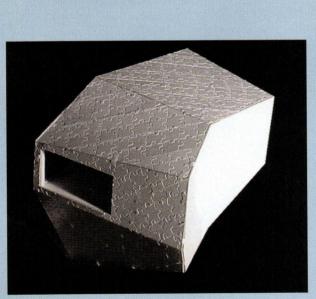




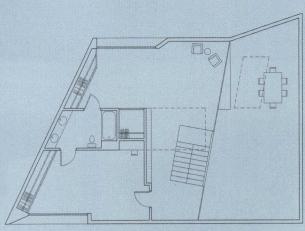
Modified maximum zoning envelope (top left) with addition of individual programmatic components (all others)



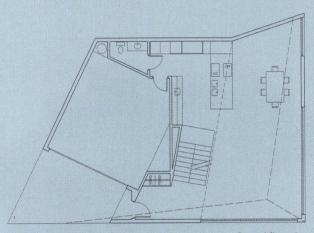
Collage incorporating Julius Shulman photograph



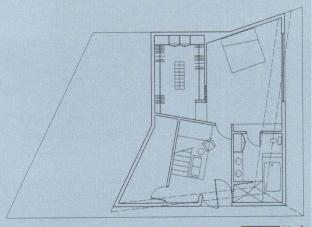
Cladding study model



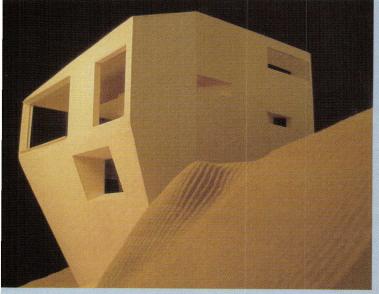
Third-floor plan



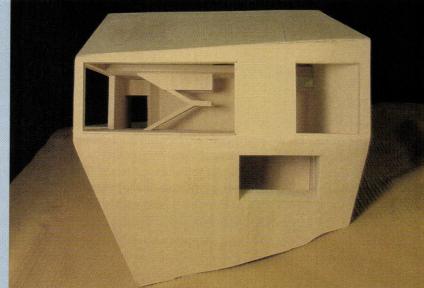
Second-floor plan



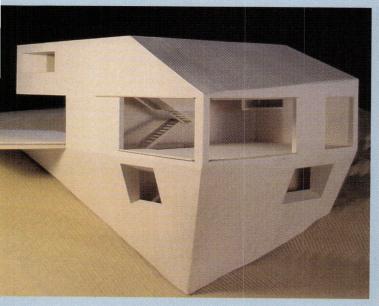
First-floor plan



View from northeast



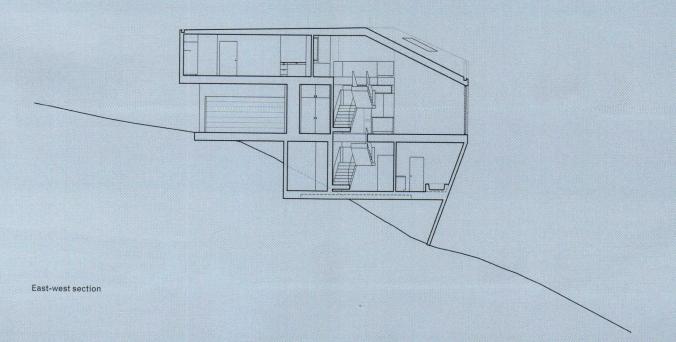
View from east



View from southeast



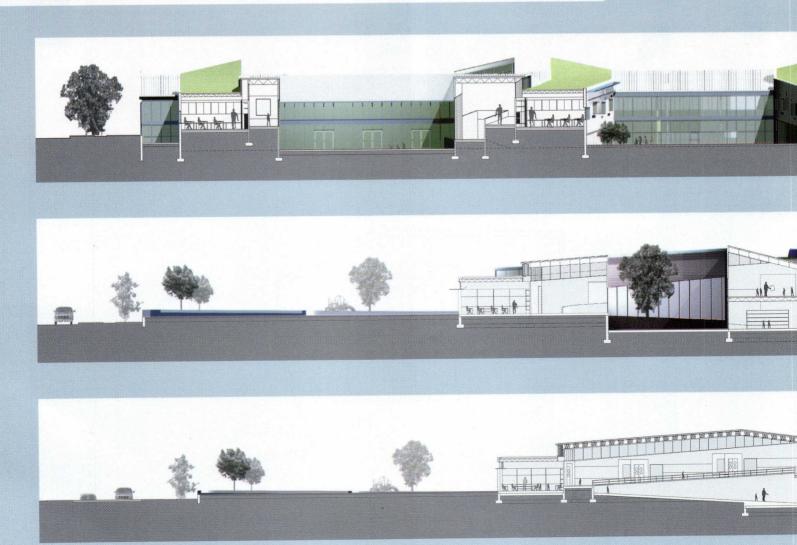
View from northwest



SITE: A parcel near the intersection of State and 103rd streets, in Chicago's South Side neighborhood. PROGRAM: A 120,000-square-foot elementary school for 900 students, 25 percent of whom are disabled. The design is part of a competition sponsored by the Chicago Public Schools, the Mayor's Office for People With Disabilities, Business & Professional People for the Public Interest, Leadership for Quality Education, the Small Schools Coalition, and the National Endowment for the Arts.

SOLUTION: The competition brief called for combining "the latest in design innovation with emerging educational philosophies." The brief also emphasized a design based on smaller school types, which would maintain feasible budgets and universal access in a flexible, functional design, and display sensitivity to the urban neighborhood. The architects responded with a scheme of four interlocking, semiautonomous "schools" that have their own identity and flexibility while still being integral parts of the larger institution. Each schoolwithin-a-school has separate classrooms, courtyards, play areas, and flexible "generative areas," as well as spaces it shares with the other units, such as a library, cafeteria, science labs, art studios, and health services. An interior street—referred to by the architects as a bootstrap to the community—joins the four Ushaped wings. A series of interwoven, wheelchair-friendly ramps is the primary circulation system within each individual branch of the two-story school.

The school building is subtly integrated into the landscape of the site. The plan intersperses sloping grassy areas and hard-surfaced play areas, exploratory gardens of water and sand, and community gardens at the edge of the site that engage the surrounding neighborhood. The steel and masonry structures feature low-E glass curtain walls, photovoltaic skylights, and planted roofs.





Model of landscape and building interior, looking east

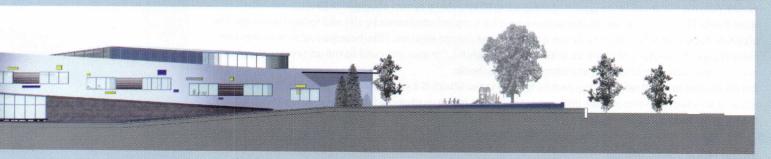


Model of landscape and building exterior, looking east

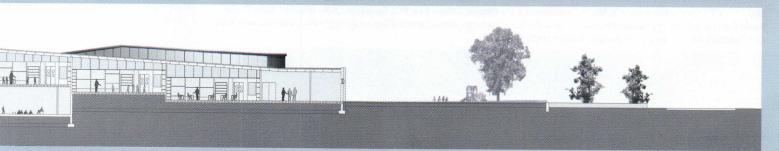
East-west section through circulation ramps and classrooms



North-south section through library and generative space



North-south section through circulation ramps







Exterior perspective of music garden

Perspective of interior street

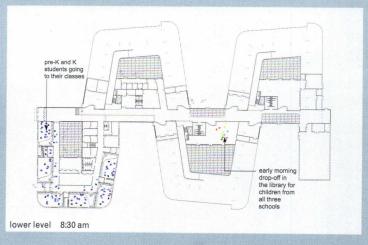
TERENCE RILEY: At a time when so many school districts are trying to re-create the little red schoolhouse, this is an important step toward creating urban schools that are extensions of the city themselves. REGINE LEIBINGER: We've seen a lot of projects that deal with architecture and landscape, but not one like this. In this project, neither architecture nor landscape is favored—you can best see that in the section. The modesty of the program and scope is contrasted by the inventive formal solution. This project is extraordinary because of its economy of means, its credibility, and its potential as a prototype. It was clearly one of the best. RICK JOY: I want to give it an award in part to encourage other architects to take on projects like this and work this hard. I like that the design represents a rigorous and deeply thoughtful effort to make a great school experience. It's not mired in the typical nostalgia trip about what a school should look like.

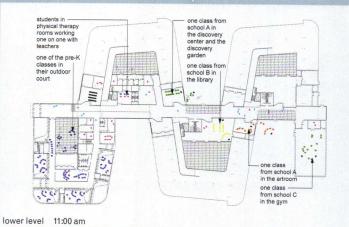
MING FUNG: This is quite a remarkable achievement for a project sponsored by city and federal agencies. The provision for universal access has driven a very creative design solution. I like how the roofs transform into many things. It's playful and at the same time very thoughtful. I'm also intrigued by the patterns in the plan and the innovative way of looking at a new model for schools.

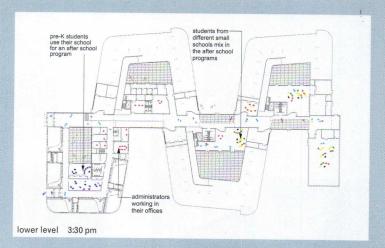
GREGG PASQUARELLI: It refers to the past by looking to the effect of a small school on a child's education rather than using the symbol of the little red schoolhouse. It's so much more intelligent than the revivalist buildings littering our communities.

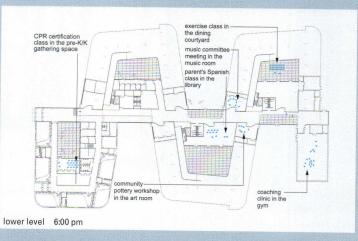
### CHICAGO PUBLIC SCHOOL, CHICAGO

CLIENT: Chicago Public Schools—Jeanne Nowaczawski (Office of Small Schools, Chicago Public Schools) ARCHITECT: Marble Fairbanks Architects, New York City-Scott Marble, Karen Fairbanks (partners-in-charge); Todd Rouhe, Jake Nishimura, Benjamin Hummitzsch, Maud Cassaignau, Lars Fischer, Danny Sze, Phil Speranza, Julia Mandell, Mike Russo, Kevin Finn (design team) ENGINEERS: Ove Arup & Partners (structural/mechanical/electrical/civil/HVAC) CONSULTANT: Kiss and Cathcart Architecture (sustainable design) cost: \$21 million

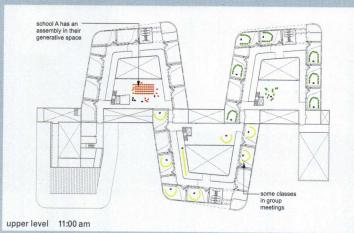


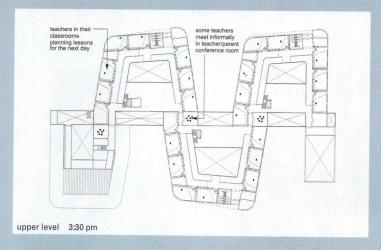


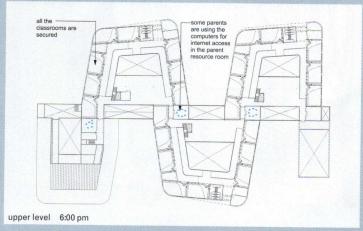
















Entrance courtyard



Passage from viewing courtyard to entrance courtyard





East façade and viewing courtyard through a stand of trees



Viewing courtyard

SITE: Tongxian, China, a rural village 30 miles from Beijing that is home to over 200 artists. The site itself is divided into two parts by an existing brick wall. To the east of the wall is an allée of trees; to the west is a barren field crossed by high-voltage electrical lines. PROGRAM: An arts center for a consortium of local artists, critics, and agents (the clients). The first phase of the three-phase project will see the construction of a single building containing a gallery, studio spaces, offices, and housing for visiting artists. The second and third phases will add buildings for a bar and dining hall, theater, media center, spa, suites for visitors from galleries in the United States and Europe (where work by many of Tongxian's artists is currently shown), and additional housing for resident artists.

**SOLUTION:** The first-phase building flanks the existing brick wall to reinforce the buffer between the disparate landscapes. The architects cut an opening into the wall and placed the new main public courtyard to the west of it, framing a view of the trees. The courtyard is one in a densely packed series of enclosed and semi-enclosed outdoor spaces connected by alleyways. These spatial arrangements allude to the cloistered urban fabric of the Tongxian village.

The building's organization responds to the client's seemingly contradictory request to create maximum interaction among the institution's artists-in-residence while guaranteeing them maximum privacy. Interpenetrating volumes and glazed doors along adjacent spaces juxtapose and visually link public and private functions; sliding screens behind the doors and discretely placed internal courtyards ensure privacy.

The architects describe the main building as a brick monolith shrink-wrapped or vacuum-formed into a shape determined not by traditional spatial typologies, but by responses to apparently secondary exigencies: for instance, the residual spaces beneath stairs, joints between walls and roofs, and slopes for drainage. As the designers explain, "One can interpret the entire building as having undergone a rigorous diet, its bodily mass having been suctioned to a critical minimum—its sculpting, its poetics the result of fine-tuned but mundane architectural tasks." The swells and contractions in the distinctive brick exterior are the result of manipulating the Flemish bond patterns (by eliminating or reducing the header bricks). As they expand and contract, these seemingly malleable walls create a direct relationship between the exterior and interior.

GREGG PASQUARELLI: This project makes me want to be an architect.

MING FUNG: It's so inventive. They take a normal material and treat it in a completely new way, not only formally, in the skin, but also in the plan.

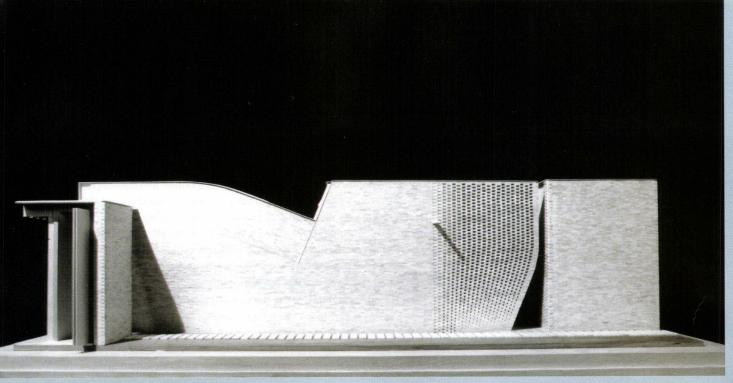
REGINE LEIBINGER: The same thing happens in the plan and in the section.

GP: We're so often forced to use brick as a symbol. Here they're really pushing the boundaries of what masonry can do structurally.

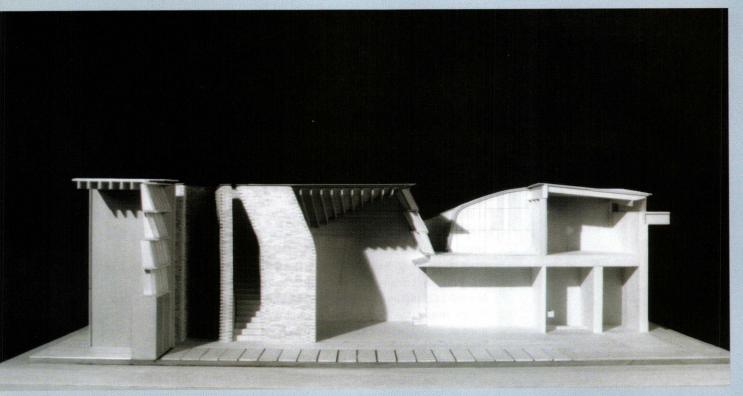
TERENCE RILEY: I think it's very architectonic. It makes you realize that the architectonic isn't about technical issues at all; it's about visual issues. The DNA of the bricks has been changed, but they still come together in an odd but beautifully crafted way.

GP: The DNA has been recombined to make a new organism, in a sense, out of the same brick. Look at the shift in the way the brick is used: The roof turns down and almost makes a lintel or a corbel-yet it's still part of a bearing wall. It's incredibly elegant.

RICK JOY: I agree, the brick patterning in the larger fields and undulating surfaces are quite elegant. At the edges however, the elegance turns into clumsiness: The bricks are either cut or ground and then capped to achieve the broader formal strokes. I'd like to see the modular integrity of the bricks held sacred.



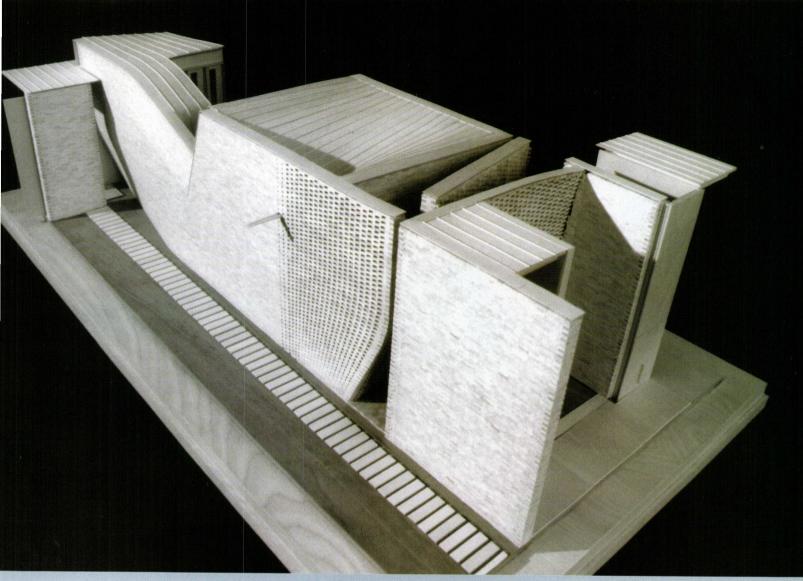
Sectional model showing façade of entrance courtyard



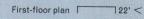
 $Sectional\ model\ showing\ central\ artist's\ studio\ and\ kitchen, with\ bedroom\ and\ private\ courtyard\ above$ 

### TONGXIAN ART, TONGXIAN, CHINA

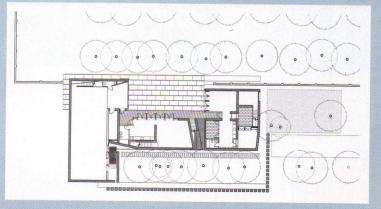
CLIENT: Tongxian Art—Jack Tilton (director) ARCHITECT: Office dA, Boston—Mónica Ponce de León, Nader Tehrani (principals); Jeff Asanza, Timothy Clark (coordinators); Hansy Luz Better, Christine Mueller, Chris Orsega, Tali Buchler, Achille Rossini, Abeer Seikaly, Kristen Giannattasio, Chris Arner, Hamad Al-Sultan, Albert Garcia, Hadijanto Jojo (project team) cost: \$500,000

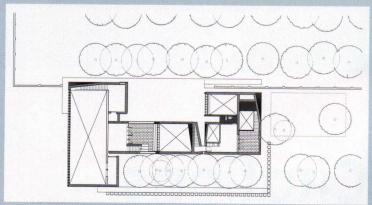


Sectional model showing deflections in roof



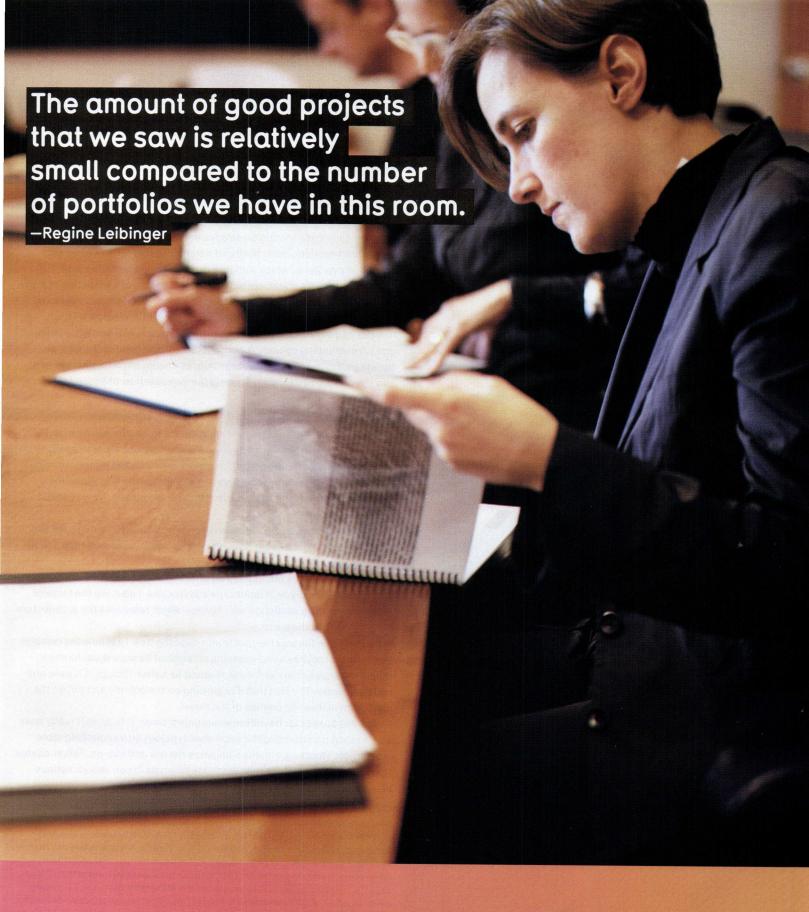






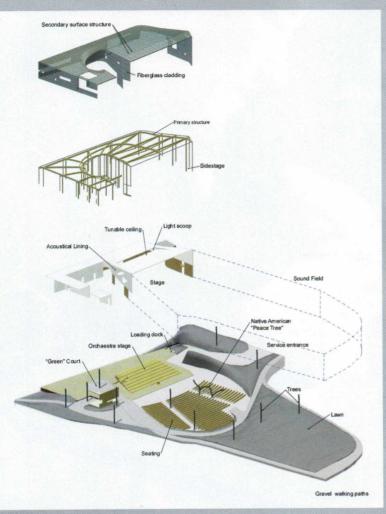


## Citations



- 78 Hanrahan + Meyers
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- 88 Darren Petrucci
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- 92 SR + T Architects



Exploded axonometric of building components

SITE: Libbey Park in Ojai, California, the summer home of the Los Angeles Philharmonic since 1966.

PROGRAM: A new band shell for outdoor performances of the philharmonic, to replace an outdated structure built in 1957.

SOLUTION: The project is simple: a shell structure atop a small stage, with fixed audience seating on an adjacent lawn. The canopy structure will have a hard acoustic inner shell and a translucent outer shell, like skin stretched over bone, which will glow during evening performances.

The new shell's alignment with the lawn will improve acoustics over the sound quality provided by the existing shell. As sound projects outward from beneath the band shell, its reach out into the landscape will be marked by a series of discreet objects: a bench, a wall fragment, a boulder, and a freestanding column. A curving, grassy courtyard to the east of the stage, around which backstage spaces are organized, scoops sound into the offstage areas and suggests the invisible flow of sound taking on built form.

REGINE LEIBINGER: What at first sight seems to be a formal approach an image-based project—is actually driven by functional parameters. The requirements for the acoustics make the formal and material choices legible. What is less convincing are the elements-the bench and the column—that are meant to bind it to the outer landscape. They're static and self-referential.

MING FUNG: It's humorous, because the shape seems to be extruded like a musical instrument—a big horn blowing sound into the audience. I think the glowing shell could be quite magical.

TERENCE RILEY: This project has an uncanny way of inserting itself into the site. It's a terrific piece of landscape architecture. I also like the tectonic implications—skin stretched over bones—which refocuses the architecture from the form to the surface.

RICK JOY: I like the way the roof form wraps the tree. I assume the complex shape of the roof has some meaning in terms of its acoustical function. If that's the case, it works for me. It would be better, though, if it were one material stroke. The fact that it is glowing on the outside and not on the inside diminishes the poetics of the move.

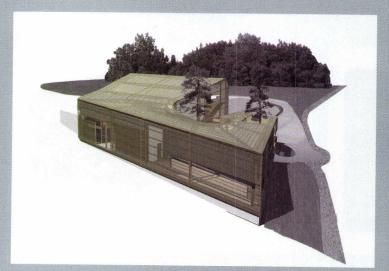
GREGG PASQUARELLI: Its anthropomorphism aside, this project really does a nice job of transforming the band shell typology into something more interesting. The design finally eliminates the box and clip-on, Teflon-coated fiberglass shell pavilions that dominate this type. It can absorb various elements, engage the landscape, and have fun doing so.

## OJAI LIBBEY BOWL OUTDOOR AMPHITHEATER, OJAI, CALIFORNIA

CLIENT: Ojai Festival, Ojai, California—Jaqueline Saunders (executive director) ARCHITECT: Hanrahan + Meyers, Architects, New York City—Victoria Meyers, Thomas Hanrahan (partners in charge of design); Rhett Russo (project manager); Sam Leung (project assistant); Jason Holmes (project assistant) ASSOCIATE ARCHITECT: David Bury Co. Architects, Ojai, California LANDSCAPE ARCHITECT: Burton and Company, Santa Monica, California ENGINEERS: Nagata Acoustics (acoustical) COST: \$4.2 million



View looking south toward stage

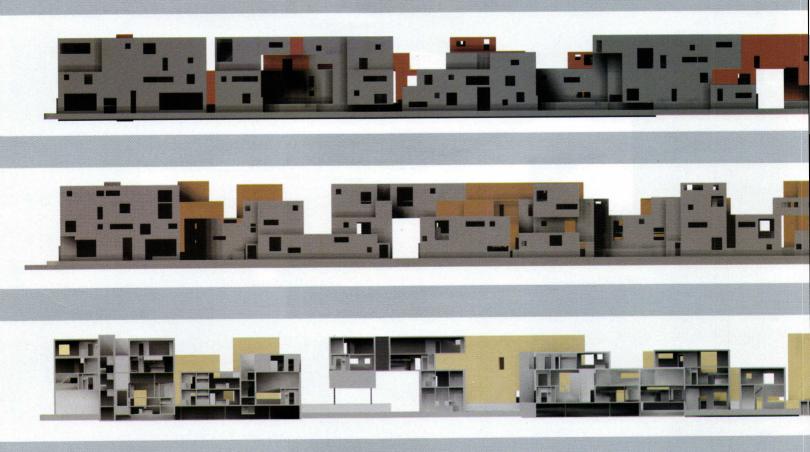


Rear, south façade

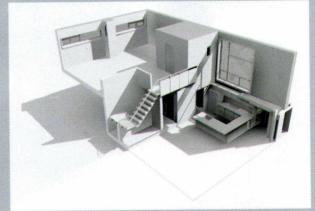


Aerial view from the northeast

# **Brian Healy Architects**





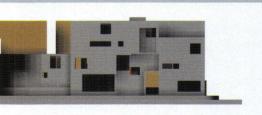


Site plan A

Two-bedroom townhouse type A



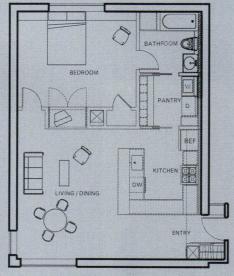
North façade



South façade



East-west section



One-bedroom flat

SITE: A 3-acre parcel on the Near West Side of Chicago, in the middle of the ABLA community, a 95-acre complex of four distinct public housing developments built between 1937 and 1962. The site is located north of the recently renovated Robert Brooks Homes and near the University of Illinois at Chicago, the growing Illinois Medical District, and the city's Little Italy neighborhood.

**PROGRAM:** A city block full of low-rise walk-up housing, containing an equal and integrated mix of public housing units, affordable housing units, and market-rate properties. The clients, the City of Chicago and the Chicago Housing Authority, asked that all units be physically indistinguishable from one another, and for a density of 28 to 38 units per acre. Funding for the project is from two HOPE VI grants to ABLA.

**SOLUTION:** The project is a hybrid of townhouses and apartments based on a 25-foot module (the width of individual building lots in traditional Chicago city blocks), which tries to create an intimate scale missing from the larger housing developments surrounding the site. The brick-clad buildings are arranged in two parallel rows separated by an alley that leads to on-grade and submerged parking; overlooking the alley is a series of raised private terraces and a communal playground area. Small street-level commercial and retail spaces mark the corners of the site.

GREGG PASQUARELLI: What's annoying about so many contemporary urban development schemes is that they're so suburban, and that the principles of New Urbanism are inevitably intertwined with certain stylistic preferences. What I liked about this project is that it's very urban. I can accept the fact that it's low-rise, the fact that it's less dense. I like the fact that somebody's arguing for urban architecture in this New Urbanism environment. And thank god that Chicago is building something without little peaked roofs.

REGINE LEIBINGER: The brick exteriors could be easily in Cambridge, Massachusetts.

TERENCE RILEY: It doesn't make a bold new statement about housing. It is, in fact, New
Urbanism without the usual stylistic appliqué. The units are very nice, but they're a bit timid.

MING FUNG: I think the units are quite handsome. My problem is also that it's not a new
type of housing. There's no new proposition here.

**RICK JOY:** One of my pet peeves is entering right into the living room in those little apartments. It is not a great experience.

**GP:** Instead of New Urbanism, I'd call it "Better Urbanism," because it's raising the notch one level. It is a little bit Steven Holl meets the Prairie Style. But I can live with that. **TR:** It's trying to build courts and courtyards as community spaces. It's not a new vision of a new city; it's an old city that's trying to fix the tears in the fabric. And by nature that's

GP: So you're arguing that this is a contextual response?

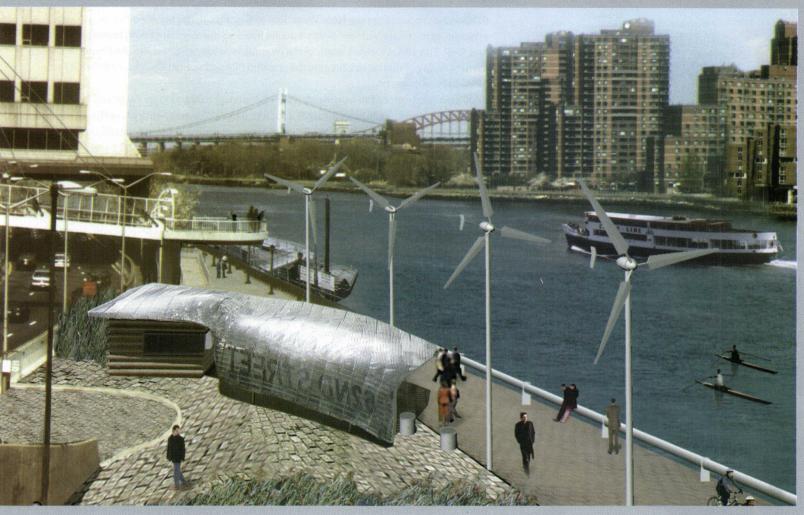
TR: It's totally contingent upon a preestablished vision of urbanism: a Chicago block de-densified to the limit that you can still call it urban. The goal is to keep the vision of a traditional urban fabric.

going to be a conservative solution, because what it's really trying to do is restoration.

## CHICAGO'S DESIGN COMPETITION FOR MIXED-INCOME HOUSING: AN INITIATIVE TO REDEFINE PUBLIC HOUSING, CHICAGO

CLIENT: Chicago Housing Authority—Denise Arnold (competition director); Ralph Lerner (competition advisor) ARCHITECT: Brian Healy Architects, Boston—Brian Healy (principal); Elizabeth Whittaker, Andrew Powell; Edward Palushock; Rosemary Olson; Paxton Sheldahl; Lee Peters (design team) COST: \$17,870,000

# Kennedy & Violich Architecture East / Harlem River Ferry Landings

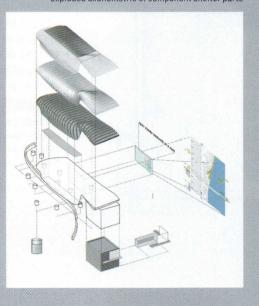


The 62nd Street ferry landing

Interior of the 62nd Street shelter



Exploded axonometric of component shelter parts



SITE: Several locations along the East Side of Manhattan and the Bronx, part of a developing ferry corridor along the East and Harlem rivers. PROGRAM: The publicly funded structural rehabilitation and upgrading of existing piers for commuter ferries, and the addition of new passenger shelters and other amenities.

SOLUTION: Among the goals of the design are creating a civic presence for New York's largely underutilized waterfronts and encouraging a variety of public uses. Each shelter incorporates standard elements that can be manipulated to respond to particular conditions of wind, view, and orientation. The curving roof canopies, digitally manufactured and shop-built to allow flexibility and maintain lower costs, are clad in perforated and reflective metal and include power-generating photovoltaic panels. The shelters integrate electronic signage and community message boards with ferry arrival and departure times and weather. Landscape elements incorporate bumpers and barges with indigenous riparian plants.

GREGG PASQUARELLI: It's an interesting premise. They have almost no budget and they have to make a kit of parts that would adapt to every single site. And they seem to have done it in a fairly intelligent way. TERENCE RILEY: I think this is a really smart project and there's a lot to it. REGINE LEIBINGER: I have difficulty getting it into the drawer of urban design. It reminds me of Bernard Tschumi's project for Parc de La Villette—those little red pavilions. This project has a tiny scale. It's nice that you can actually apply it to an urban fabric, but to me, it has absolutely nothing to do with urban design.

TR: I think it's really well done. The shelters have the ability to absorb influences at local scales, yet have a consistency at the urban scale. GP: These objects would become part of the infrastructure; they would be recognizable yet wouldn't be standard.

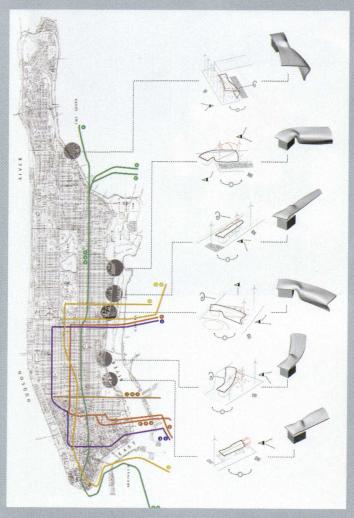
TR: Suddenly, these become clearly recognized objects, as clear as a bus stop or subway entrance.

MING FUNG: It's back to Hector Guimard's Metro stations in Paris. GP: But these, instead of being stylistic, are performative: The form is result of the way they inhabit the site. They have an image, but change. MF: For once, somebody took a project of this scale seriously. RICK JOY: I appreciate the form—it's beautiful. But why is it different than a bus stop?

GP: Because it's a kit of parts that can change. It's leaning towards the idea of mass customization. One would expect the city to throw standard bus shelters onto the piers. This is what we're hoping the government is going to support instead, and the kind of project we hope architects can produce.

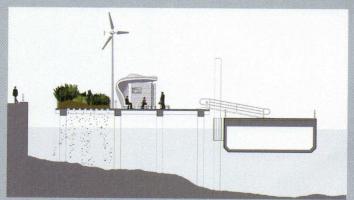
## EAST / HARLEM RIVER FERRY LANDINGS, NEW YORK CITY

CLIENT: New York Economic Development Corporation; New York City Department of Transportation; New York City Parks Department—Paul Januszewski (director of waterfront transportation, NYEDC) ARCHITECT: Kennedy & Violich Architecture, Boston-Sheila Kennedy, J. Frano Violich (principals); Lou Boza, Eric Olsen (project designers); Veit Kugel, Anthony Piermarini, Cecilia Tham, Tim Whitehill (project team) LANDSCAPE ARCHITECT: Workshop: Ken Smith Landscape Architecture, New York ENGINEER: McLaren Engineering Group (marine/structural) cost: Not yet available



Ferry-landing sites

Section of typical pier





Conceptual model

SITE: A midblock lot in San Francisco measuring 27 feet by 75 feet. Surrounding the site are light industrial buildings, some converted into live-work lofts, and a few new live-work buildings.

PROGRAM: Two units of live-work space: one 2,600-square-foot unit, one 2,300-square-foot unit. Also 1,100 square feet of shared spaced, including a parking garage, pool and terrace, and service area.

**SOLUTION:** The architects tried to maximize the amount of square footage they could "squeeze" into such a tiny lot. They pushed both of the party walls inward from the lot lines to create slots through which light and air can penetrate into the interior. On one side is a staircase leading from an entry court at ground level to the two live-work units distributed throughout several levels. The other slot, which does not extend the full height of the building, contains an outdoor deck and swimming pool; internal spaces are cantilevered over the pool. Squeezed into the remaining space is a fluid, complex arrangement of interlocking volumes given over to separate live-work and shared spaces. From the street, it is impossible to determine the boundary of each unit.

MING FUNG: I think this project uses the program in a very interesting way. At first glance, it's a simple rectangular box, but the section is very complicated. If you look through the section, you'll see how the architect was able to accommodate moving people up and down, providing work space and living space—the two almost overlapping each other—and a swimming pool. TERENCE RILEY: I like the fact it's not a party-wall building. You begin to set back in both directions, so that you get more spatial variety than you would get in a town house or row house. In a sense, it's a strategy that could be modified for whatever site conditions you had; you could build these on other dense, narrow sites. And it's possible that you could even have rows of these buildings.

GREGG PASQUARELLI: It's almost like a dumbbell plan turned into section. It's not only a party-wall house; you start to get negatives and voids working through vertically and horizontally, which is a very nice thing. Something that all of us who are doing renovations in New York grapple with all the time: How do you get light into the center room?

TR: You could say that this is old news too, but it does represent certain shifts in the whole idea of privacy and public space.

RICK JOY: And shifts in the construct of family.

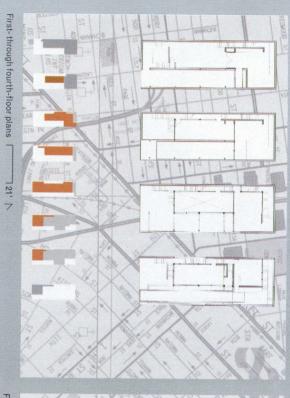
TR: Party walls guaranteed privacy, lining up families behind the façade. This is much freer in concept.

GP: I think you have to see it as a strategy, and as a strategy, it's very strong. This could adapt to many different cities. It's an urban topology with a lot of power.

RJ: It could have more power for me, however, if the architects synthesized their great lifestyle-inspired ideas with the real making of a building. I'm missing indications of material and structure that would help me imagine the qualities of the spaces more effectively.

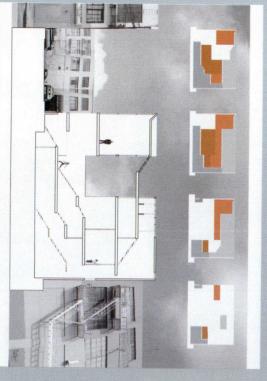
### 49 GRACE STREET (SQUEEZE PLAY), SAN FRANCISCO

CLIENT: Nicholas and Peggy Bartsch ARCHITECT: Loom, Berkeley, California— Raveevarn Choksombatchai, Ralph Nelson, Antje Steinmuller, Chenglong Tsai (design team); Aimee Chang (assistant); Nicola Probst (site photography) COST: \$1.5 million



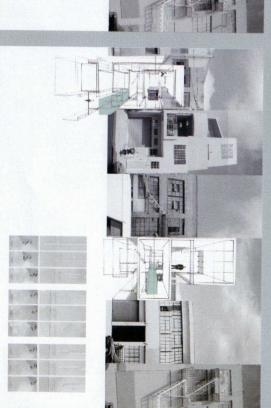
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Fifth-floor through roof plans



North-south section







Axonometric



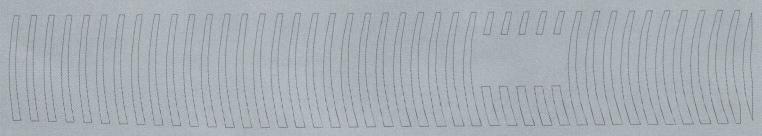
Interior view of living space



View into and along entry wall and bedroom



View from bedroom into shower and out to landscape



Individual pieces of compound curving wall of bedroom enclosure

SITE: A rural, wooded area of Columbia County in upstate New York. The house is set against a hedgerow dividing two adjoining 40-acre agricultural plots.

PROGRAM: A one-bedroom retreat for a photographer who resides in New York City.

SOLUTION: The design began with an appreciation of themes in the client's photography, which documents the discordant relationship between the landscape and containers such as industrial and commercial "box" buildings, box cars, and truck trailers. The house takes as its starting point the separation between the rural landscape and the building's simple volume.

The exterior is a boxy enclosure constructed of pouredin-place concrete covered with ferro-cement fiberboard panels. The panels' blazing orange color sets the house apart from the landscape in the way a hunter's bright orange vest or cap distinguishes him or her in the wild. Within the box is a curving partition wall, visible through a large rectangular opening cut into one of the exterior walls, which encloses the partially submerged bedroomthe only distinctly articulated space within the open, loftlike house. This curved interior wall will be prefabricated with a computer numerically controlled milling machine that cuts custom components directly from computer files, according to techniques developed by the architect. Sandwiched between the bedroom partition and the exterior concrete wall is the shower, seductively revealed to the outside through a window opening.

REGINE LEIBINGER: This project is unique. I've never seen anything like it before.

RICK JOY: It's a simple program, a simple form with soft, sensual human space.

GREGG PASQUARELLI: The interior is done with CNC milling so that you can get a difference all the way across the exterior. The ribs are fabricated individually, so that you can mass-produce difference on the interior, while the exterior is standard construction, poured-in-place concrete. You have an exterior box and a fabricated, differentiated interior box. It's the play of those two that set up slots to look in and out of the building.

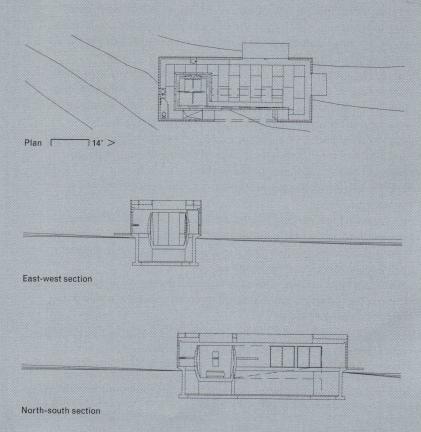
RJ: I've been looking for architects who have a big idea and then synthesize that idea into the makings of a house. And this project seems to do that.

#### HOUSE FOR A PHOTOGRAPHER, GHENT, NEW YORK

CLIENT: Victoria Sambunaris, Ghent, New York ARCHITECT: William E. Massie, White Sulphur Springs, Montana—William E. Massie (principal); William E. Massie, Travis Growney, Eric Schaefer (project team) ENGINEER: Troy Holland (mechanical/electrical/ HVAC) GENERAL CONTRACTOR: William E. Massie COST: Withheld at owner's request



House in existing landscape



SITE: A decaying, 2.5-mile stretch of Scottsdale Road, Scottsdale, Arizona's main north-south artery, bounded by Earll and McKellips Roads. The corridor is presently a mix of strip shopping centers, auto dealerships, fast-food restaurants, and detached housing. PROGRAM: A study of the redevelopment of the corridor commissioned by the City of Scottsdale Urban Design Studio.

SOLUTION: The strategy follows existing development patterns and looks to the public realm to connect disparate parts. As the designer explains, "Rather than attempting to 'fix' a master plan within the constantly changing realm of the commercial strip, [the strategy] embraces change as a positive force in the city, and attempts to locate typological consistencies that can move with and withstand modifications and alterations."

The designer proposed a "kit of ideas" to turn existing infrastructure into useful public spaces and integrate commercial and residential areas into a pedestrian- and business-friendly district. He identified existing rights-of-way, including service alleys and minor cross streets, as public property that could connect the strip and the neighborhood, and designed a set of pedestrian amenities for these rights-of-way, including shaded rest areas, lighting, and landscaping. He also proposed a new typology for the strip: live-work buildings that would attract small business owners in search of affordable housing.

GREGG PASQUARELLI: This is an interesting and smart take on urban design. It's looking at strategies for reclaiming the urban wasteland, the strip mall parking lot. This is something that has to be done. There are huge voids in our cities and we have to come up with ways of reattaching these things.

RICK JOY: By all indications the designer initiated this study by himself. I think as design professionals we could do much more of that. Waiting for bureaucrats to identify these needs and then solicit our help will take forever. I commend the designer for taking the initiative.

MING FUNG: What I liked about this project was that, knowing Scottsdale and that it's a very hot climate, it takes a lot of negotiating between asphalt, parking, and how wide the streets are.

GP: What's absolutely beautiful about this project is its complete unsexiness.

RJ: I agree. I think the landscape elements are the most compelling parts of it, but when I get to the proposed buildings, I'm not so convinced. Living above a strip mall doesn't sound so appealing, but living nearby and walking to work could be quite nice.

TERENCE RILEY: I think that the jury's general positive feeling about this project comes from how it identifies urban strategies rather than a specific design solution.

GLUE (GENERIC LANDSCAPES URBAN ENVIRONMENTS), SCOTTSDALE, ARIZONA CLIENT: City of Scottsdale Urban Design Studio, Scottsdale, Arizona, with Arizona State University School of Architecture, Tempe, Arizona—Connie Padian (Urban Design Studio) ARCHITECT: Darren Petrucci, Scottsdale, Arizona-Darren Petrucci (project designer and principal); Katie Gwin, Steven Knudsen, Marianna Athanasiadou, Micah Stanley, Alison Franta, Jeff Kershaw, Matt Winquist, Joby Dutton (project team) cost: Withheld at owner's request



Diagram of block usage



Kit of pedestrian amenities



Redevelopment proposal for a back alley



Strip mall: Before



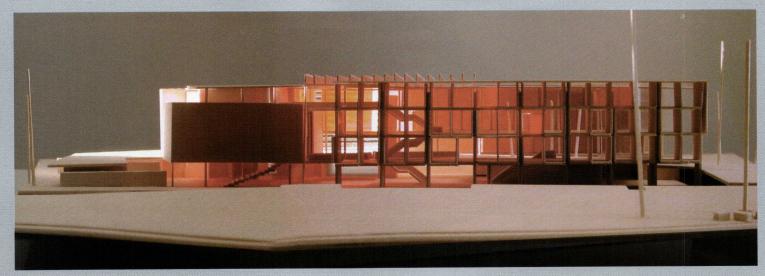
Minor cross street: Before



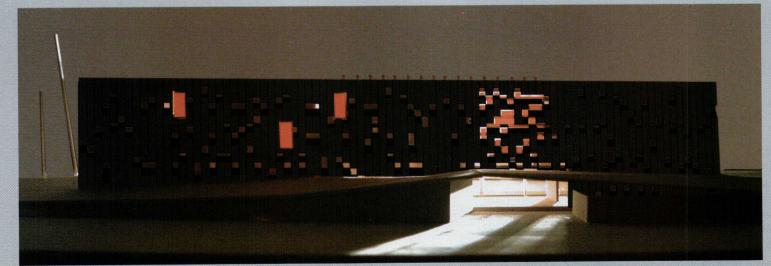
After



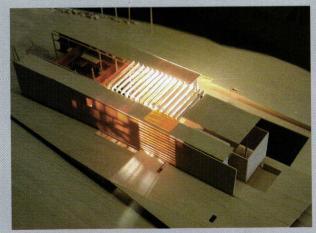
After



North façade



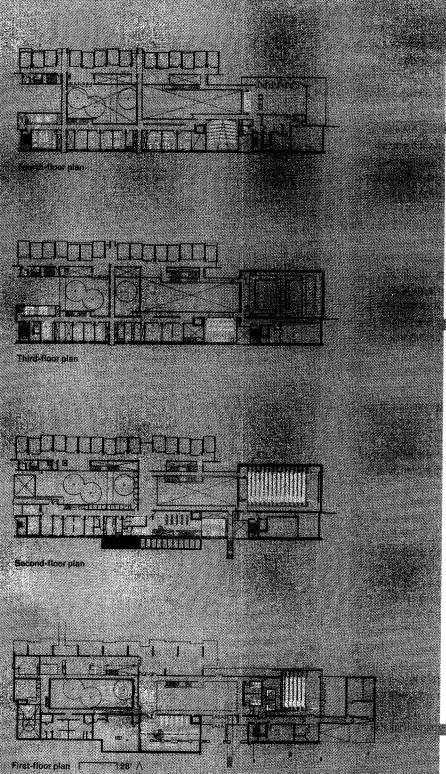
South façade



View from above



Main hall and courtyard



SITE: The shore of Silver Lake in the Canadian province of Ontario, located between the edge of downtown Waterloo and the southern boundary of Waterloo Park, the city's main park. PROGRAM: A private research center for theoretical physics.

**SOLUTION:** The building is a long bar organized around two multistory voids: a large entry hall and a landscaped internal courtyard. Flanking the two spaces are rows of offices and meeting rooms, as well as a library, theater, fitness area, lounge, and cafeteria. Interior pedestrian bridges cross over the garden courtyard, connecting two wings of offices.

The institute's north elevation is a straightforward, gridded-glass curtain wall visible from Waterloo Park across a reflecting pool. The south façade is more enigmatic as a stone wall dotted with large and small windows that create a seemingly random pattern of glowing blips at night.

TERENCE RILEY: I think this is a rather rich project.

MING FUNG: I think the plan is very well thought out

MING FUNG: I think the plan is very well thought out in terms of having an internal garden that all the offices look down into. It's a building that looks inside and turns its back to the outside. GREGG PASQUARELLI: I think the interior garden works really well and the circulation down the middle is successful. It's setting up two different programs, an internal/external relationship. And I like that the two materials on the two façades set up two different external relationships, and then it does the same thing on the inside.

**TR:** I disagree slightly. I think that the one façade, the enigmatic façade, is a slight failure of nerve. It's just a little bit too earnest. I think the other side is brilliant.

**REGINE LEIBINGER:** The elevation where the offices are poking in and out is the nicest part of the project.

**MF:** It's a beautiful façade. This model doesn't do it justice because we look at it and we think it's flat, but in reality it's more sculpted.

RICK JOY: There's a lot of attention given to the façades. The elevation with the pixelized display of windows doesn't work for me. Le Corbusier did it really well in Ronchamps, and others do it with apparently random openings that capture views in a certain way, but here it's just purely decorative. Maybe there's some meaning that has to do with physics, or math. But I don't see it.

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## PERIMETER INSTITUTE FOR THEORETICAL PHYSICS, WATERLOO, ONTARIO, CANADA

CLIENT: Perimeter Institute for Theoretical Physics ARCHITECT: Saucier + Perrotte Architects, Montreal—Gilles Saucier (design architect); Andre Perrotte (project architect); Christian Hébert, Jean-Louis Léger, Sudhir Suri, Anna Bendix, Nathalie Cloutier, Maxime-Alexis Frappier (project team) ENGINEERS: Blackwell Engineering (structural); Crossey Engineering (mechanical/electrical); Stantec Consultant (civil) COST: \$8.9 million

SITE: An industrial area of lower Manhattan filled with low- and mid-rise loft buildings and parking garages.

PROGRAM: An 11-story, 35,000-square-foot multifamily residential building with 20 live-work lofts and commercial space on the street.

SOLUTION: The design combines the development rights of two lots: an empty parcel at 22 Renwick Street and the air rights above 20 Renwick Street, an existing five-story residential building. The top six floors of the new live-work loft building cantilever over the neighboring structure, the roof of which will become a garden accessible from the fifth floor of the new tower.

The new building includes a mix of single-floor and duplex units, as well as private and shared balconies and roof decks along its 11-story height. The faceted portion of the exterior follows the angular lines of the zoning envelope instead of replicating the stacked, wedding-cake setbacks typical of older New York City buildings.

The tubular steel-and-concrete-framed building incorporates a number of energy-efficient elements: The exterior is a high-tech double-glazed skin composed of channel glass and insulated, argon-filled windows, and the roof is crowned by photovoltaic panels that generate solar power. As a result, the project qualifies for "green" building tax credits.

TERENCE RILEY: It's beautiful and it's pushing a lot of edges.

GREGG PASQUARELLI: Have you seen the additions that have gone onto buildings in New York in the last real estate boom?

REGINE LEIBINGER: They're terrible.

GP: People just throw horrible boxes on the top of every building. Here's someone who's integrating two buildings, using an air rights transfer, doing a cantilever, and making elegant little shared and private balconies.

TR: This is an absolutely specific response to the ever-increasing complexity of zoning, ownership rules, et cetera. I think that, in its own way, the idea of a building that begins to move laterally is really astounding.

GP: New York has been combating the way that air rights transfers are being used, and this is an example of those transfers being used in a new and interesting way. They're taking the air rights but not just shifting them onto one site or the other, or knocking buildings down and combining them. Something else interesting about this project is the outdoor space. Private outdoor space in a New York City high-rise is incredibly valuable; here you have different kinds that sort of inhabit the façade. You have semi-shared, semi-public, and private terraces that inhabit the leftover space between the zoning envelope and the building itself.

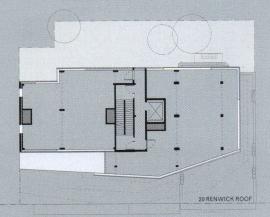
RICK JOY: The idea of building that kind of humanizing space into a high-rise apartment building sounds good to me. The presentation materials don't give us much indication of what those spaces will really be like.

MING FUNG: I think the model is very misleading, because you look at it as if it's

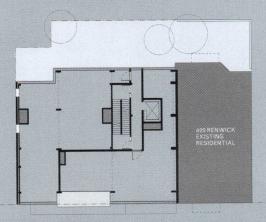
RL: And as a solid box, which is it not. There are little balconies in the pockets.

#### 20 + 22 RENWICK, NEW YORK CITY

CLIENT: Latent Productions and V + F Gangi—Salvatore Perry (development strategy) ARCHITECT: SR + T Architects, New York City—Karla Maria Rothstein, Joel E. Towers (principals); Eunjeong Seong, Brett Snyder, J. Christopher Whitelaw (project team) cost: \$7.8 million



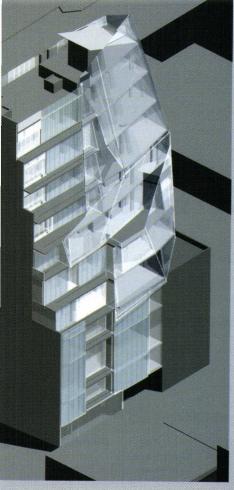
Sixth-through eleventh-floor plan



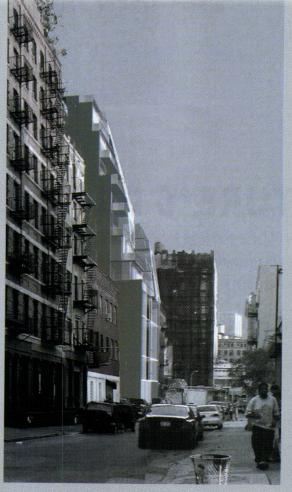
Second-through fifth-floor plan



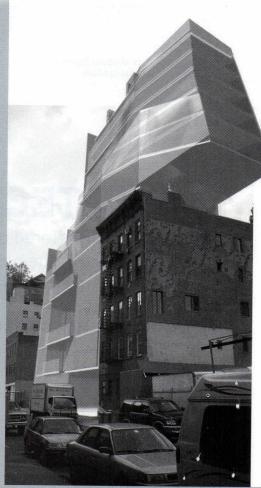
714' ∧ First-floor plan |



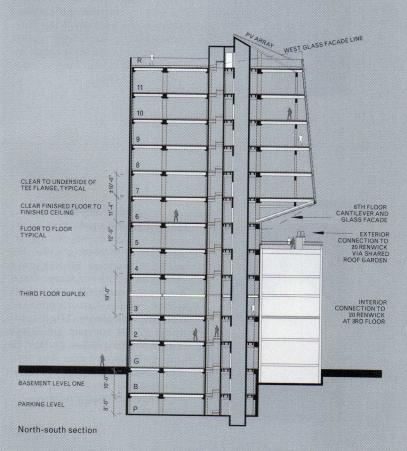


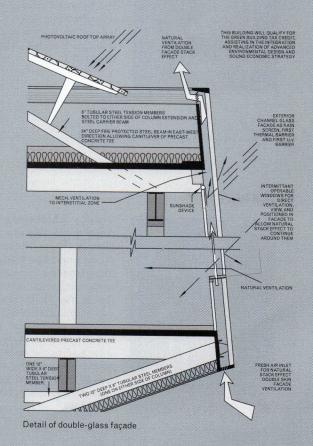


View from north along Renwick Street



View from south along Renwick Street





# ARCHITECTURE'S PRODUCT REVIEW

The literature offered on these pages (with rare exception) are free for the asking.

Simply fill out one of the postage paid reader service cards located on page 96 in this issue, circle the appropriate numbers and drop it in the mail.

For immediate product information visit us on the web at www.thru.to/architecture

### **Armstrong Commercial Floors**



### Perspectives Vinyl Flooring

Armstrong's new Perspectives vinyl flooring features exciting new visuals influenced by metal and concrete. Available in both sheet and tile, the abstract designs in the new high performance line reflect current trends in commercial interiors. The balanced color range and tone steps facilitate color combinations for custom designs and for area-to-area color and design coordination. Circle 61.

### FAAC International, Inc.



Invisible Swing Gate Operators—FAAC is the world's largest specialized manufacturer of hydraulic operators for swing, slide and barrier gate systems. The Model 760 hydraulic swing gate operator is designed specifically for inground installation for residential and light commercial applications. Its power and total invisibility make the 760 ideal for large, ornate gates. Call 1-800-221-8278 for a complete FAAC product brochure or visit www.faacusa.com.

Circle 103.

#### **Eurocobble®**



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Circle 101.

#### **Eurotex**



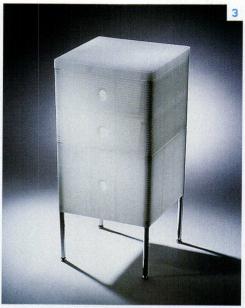
Eurotex Wall Carpet - Wall carpet muffles sound and reduces operating costs by protecting walls. No tearing or scuffing. Studies prove savings vs. painted surfaces. Class A rated for resistance to flame and smoke. (From Top) Concourse flatweave in wool/nylon blend; Lanai woven wool in compact, articulated texture; Tretford ribbed surface, 52 colors. Rolls and cuts may ship within 24 hours. Contact Eurotex. Tel 800.523.0731, fax 215.423.0940, e-mail speceurotex@prodigy.net.

## >specifications product gallery





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#### 1 REALLY SMART WALLS

KI introduces Genius, full-height movable walls for offices and storefronts with quiet, smart architectural detailing. Available with flush or recessed ceiling options, Genius combines a substantial feel with the flexibility to reconfigure spaces as needed. Genius also has power and data options for keeping cords out of sight, as well as integrated furniture slotting for hangable components.

#### 2 VERTICAL FABRIC

Knoll Textiles introduces new patterns in its Imago Collection. Designed by Suzanne Tick, Imago is a hard surfacing material made of delicate Knoll fabrics captured in engineered resin, and has vertical and horizontal applications from shelving to space dividers. Imago surfaces can be cut, drilled, or bent using light heat. The new Limelight, Ozone, and Mirage patterns are some of the collection's 10 designs that come in many colors.

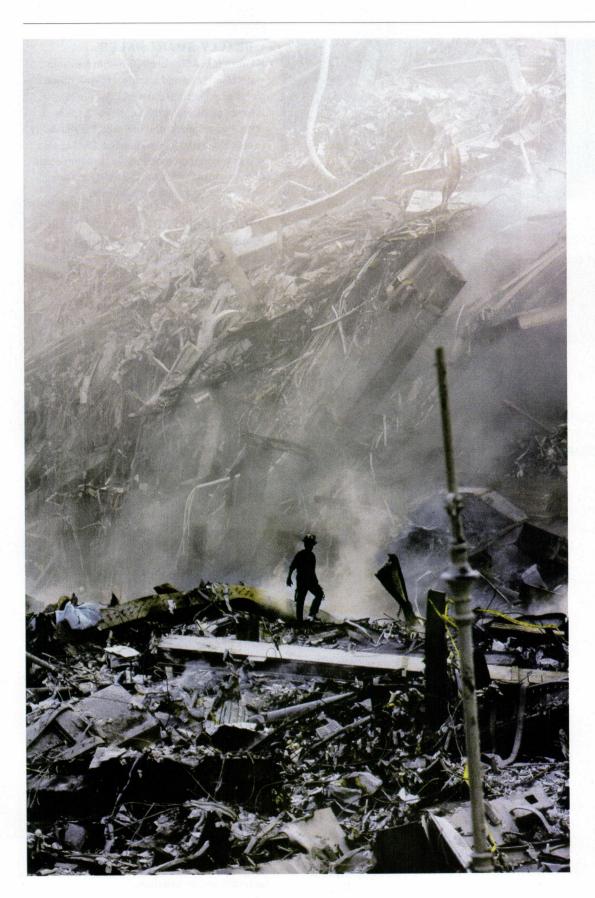
#### **3 CLEARLY CABINETRY**

Philippe Starck's new modular cabinet for **Duravit**, the **Jelly Cube**, combines flexibility with seductive design. Internal ribs allow drawers and shelves to be hung at any level, doors to be hung on either side, and cubes to be added to the top for increased storage, all with no tools. The basic unit measures 17 3/4 inches square by 12 1/2 inches high.

#### **4 LA CONCRETE**

Recently used on the façade of Christian de Portzamparc's new French Embassy in Berlin, **Ductal (4A)** is a revolutionary new concrete from **LaFarge**. Made from reactive powder concrete mixed with metallic fibers, Ductal is stronger than ordinary concrete, requires far less reinforcement, and is thus much lighter. Its fiber-concrete mix also allows it to be much thinner and more efficient with raw materials.

Also new from Lafarge is **Agilia** (4B), a self-leveling concrete that can be poured from a single source for up to 800 feet and set without vibration. Easier and faster to install on site, Agilia's ultrafine particles achieve an unparalleled smoothness when set. Lafarge is also the first building-products company to form a partnership with the World Wildlife Fund to reduce their CO<sub>2</sub> emissions in manufacturing and distribution.



#### PHOTO: STEVE MCCURRY

On the evening of September 10, 2001, Magnum Photos, a cooperative group of the world's most respected photojournalists, gathered in New York City for its monthly member's meeting. The following morning these photographers began their day reeling along with the rest of us from the terror heaved upon this great city. Yet unlike those of us who ran north unable to look over our shoulders, or wandered the streets feeling helpless and useless, they each grabbed whatever equipment was available and leapt to greet the chaos. Like the doctors who raced to downtown hospitals in scrubs and like the firemen who stormed up the twin towers' stairs, they did their job instinctively. And whether you were reading the Times Square ticker on that terrifying morning, or listening to the radio far away, the reality remains unbelievable. This is precisely why photographs like this are so important. They offer a most personal memoir of the most public experience. They remind us, even inform us, not just of what we saw, but of how we felt. Like a scrapbook of memory and experience, each picture distills and defines feelings that were too overwhelming to comprehend at the time. They may be difficult to look at, but it is easy to see that when the world confuses us, photographs do not lie.

ALEXANDRA BREZ

NEW YORK SEPTEMBER 11, BY MAGNUM PHOTOGRAPHERS (POWERHOUSE BOOKS), **EXHIBITION AT NEW-YORK** HISTORICAL SOCIETY THROUGH FEBRUARY 25, 2002



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