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# JACOBY

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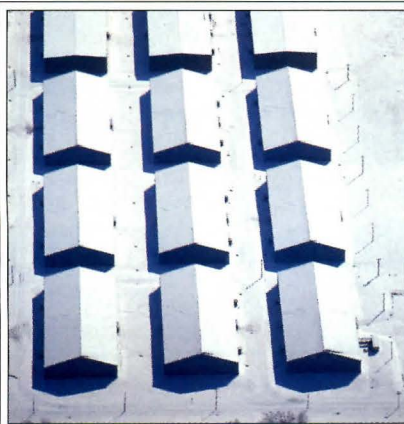
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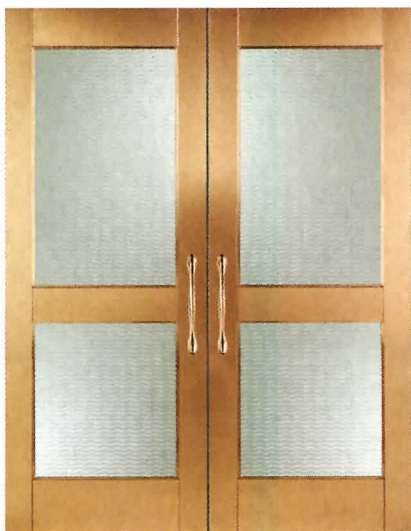
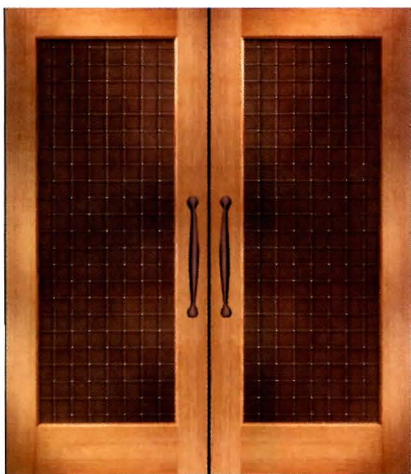
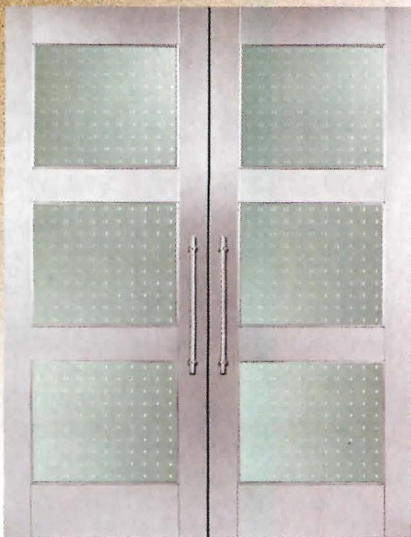
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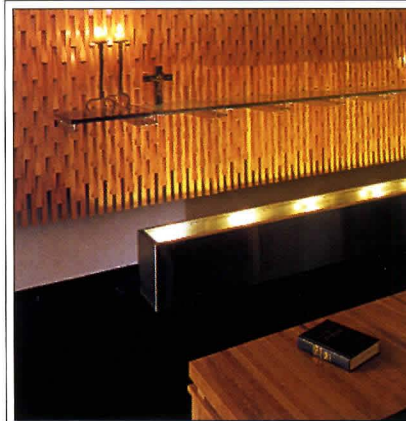
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A small meeting house (cover and facing page) designed by Tony Fretton for a non-profit institution in rural England reflects its context without being slavish to historic style or ornament. Photographs on the cover and facing page by Hélène Binet. Photographs above, left to right: courtesy Rotterdam Architecture Biennale; Adam Friedberg; Neil Alexander.

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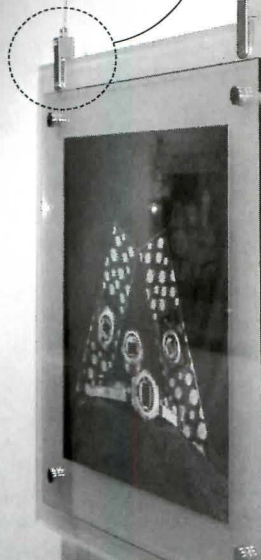
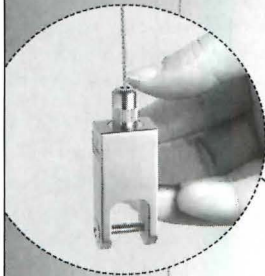
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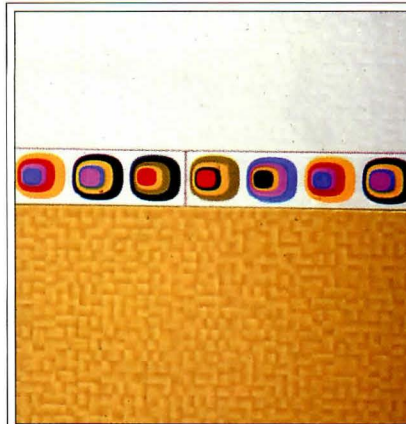
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Architecture as intellectual pursuit flows from head to hand in Jørn Utzon's self-portrait. His family's first house on Majorca, named Can Lis and built in the early 1970s, rises from the top of a cliff above the Mediterranean (drawings on cover and photo on facing page). Photograph on facing page: Jørn Utzon; above left: Man Ray; above middle: Grant Mudford; above right: Roland Halbe.

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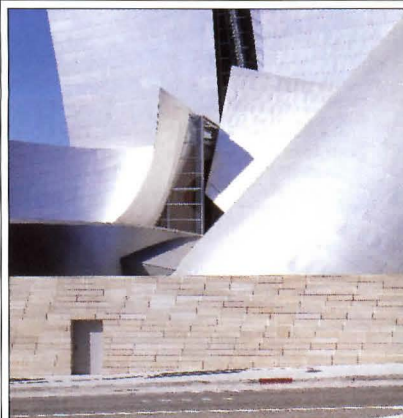
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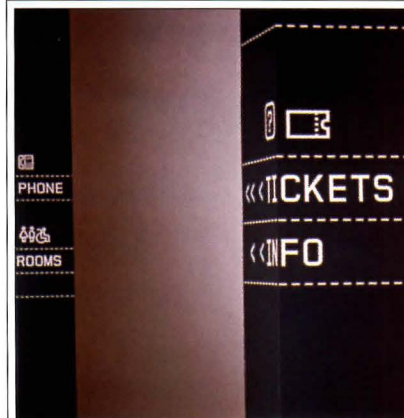
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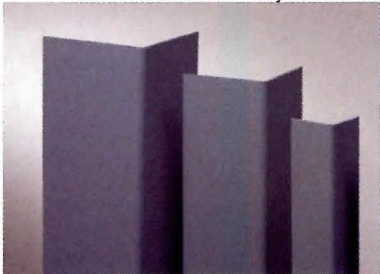
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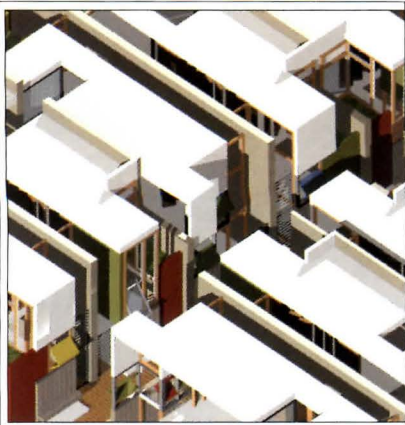
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As Harvey Pekar's *American Splendor* comic strip hit the big screen this summer, *Architecture's* Home of the Year jurors hit the project binders, searching for this year's crop of winners (cover), including Saia Barbaresse Topouzanov's *Maison Goulet* (facing page). Photographs: Marc Cramer (facing page and top, right). Illustrations: Pablo Raimondi.

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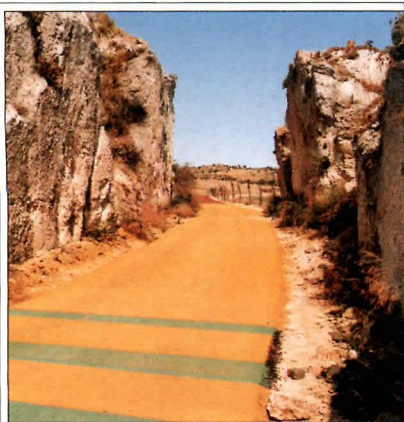
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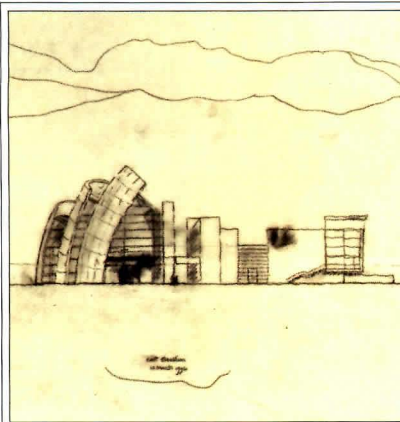
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Rem Koolhaas freshens up the curtain wall at IIT's McCormick Tribune Campus Center, where a stainless-steel-clad tube encases an elevated train track (cover). A giant portrait of Mies (facing page) and other school founders dominate the building's welcome center. Photographs on cover and facing page: Floto + Warner; above left: Salvatore Gozzo; above middle: Richard Meier & Partners; above right: Robert Canfield.

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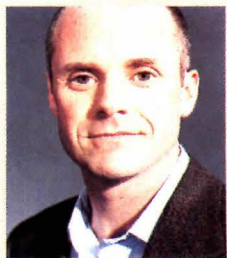
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BY C.C. SULLIVAN

# FLASHBACK: 1972

*A war nobody was sure about and a faltering economy made daily headlines. Laws on discrimination and the environment were hotly debated, and the future of the space program was a point of public discussion.* No, it's not a futuristic look back at today's headlines: the year was 1972; Don McLean's "American Pie" was a chart-topper, and big afros and bell-bottoms were in fashion. Then, it was stagflation, not a burst bubble. It was Vietnam, not Iraq. Two moonwalks, not a tragic accident, put NASA in the news. The Clean Water Act and Title IX were being enacted, not rolled back.

Although our circumstances have changed dramatically, the movements and motivations begun a generation ago still inform the solutions for our built environment today. And as the issues that defined our country in 1972 again make headlines, architects find in their reemergence a time for reflection on the politics of design.

## FROM AEROSPACE TO ARCHITECTURE

Thirty years ago, the last Apollo missions offered a triumphant end to a program that started with a devastating launch-pad accident claiming three lives; today, Americans listen closely as NASA pieces together the reasons for another such tragedy. Yet, in the intervening years, dramatic advances have come. Space flight has become a familiar occurrence, and we've reaped a tremendous benefit for architectural expression. Aerospace research has given our structures reinforced plastics, novel metals and composites, and new types of adhesive and mechanical connections. (NASA-funded research on integrated actuators and sensors might one day improve seismic and blast resistance, too.) Special ceramics, plastics, and high-strength glass formulations have enriched our palette of materials. Even the challenge of sustaining life in space has led to new directions in photovoltaics, heat exchange, fire safety, and closed-loop resource recovery that offer great promise for earthly application.

A few architects have returned the favor, designing new types of habitats that help keep astronauts from getting depressed, anxious, or stressed. Programs like Johnson Engineering's Habitability Design Center could produce valuable results, but funding is scarce; if we're banking on a future in space, we need to accelerate design research. On the other hand, there are fundamental questions about reaching for the heavens. When it costs about a million dollars to get a single pound of payload into low earth orbit—and when the costs of keeping

astronauts safe seem to many out of proportion with the benefits of their missions—we must revisit the long-term aims of projects like the Space Station. Today, as in 1972, our immediate challenges are considerable enough to keep us occupied on earth.

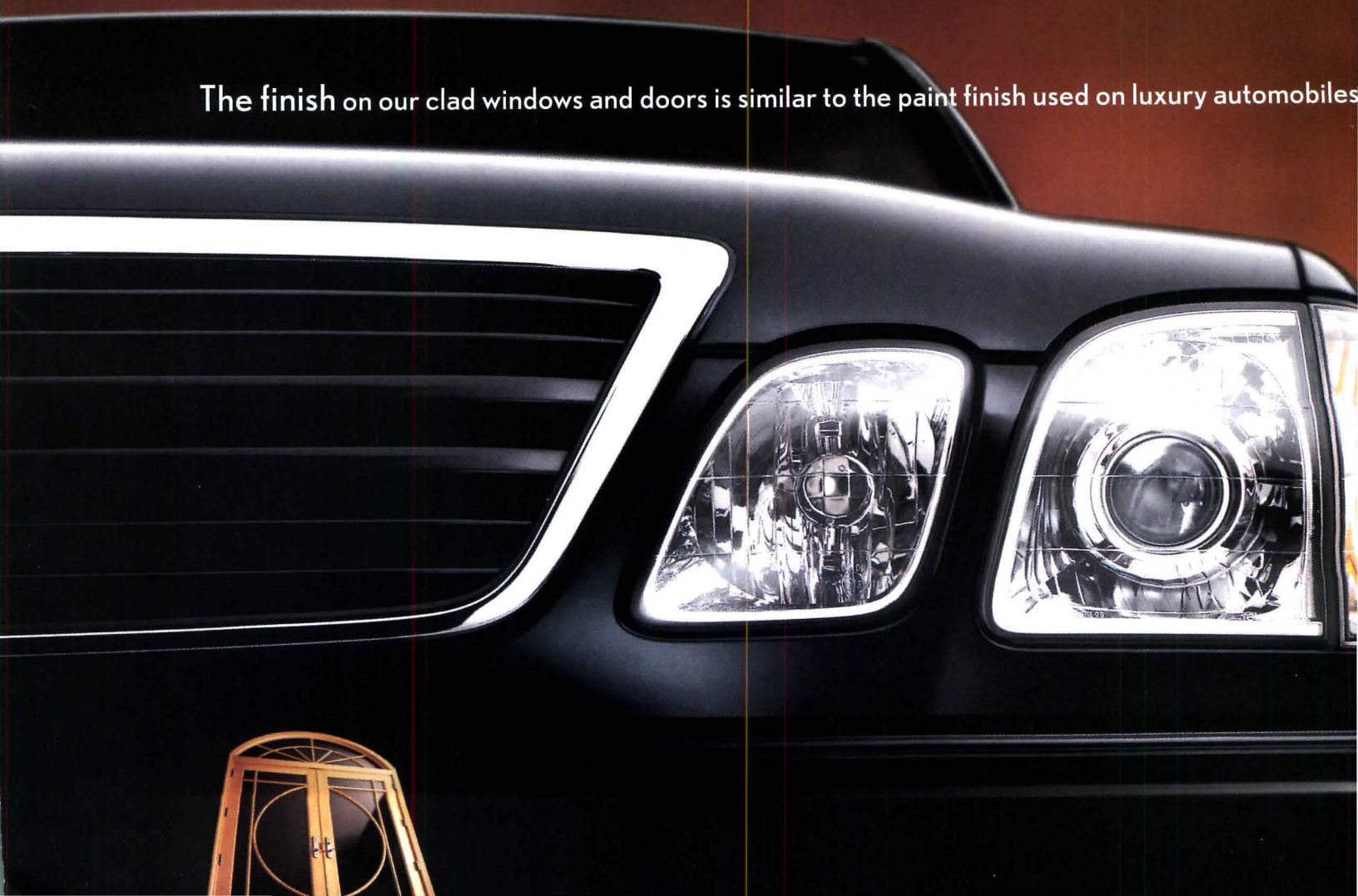
## TITLE IX AND SCHOOL DESIGN

One such challenge is the decades-old body of laws intended to afford equality of access and opportunity for all Americans. In addition to recent rulings on affirmative action, there is the possibility of major changes to Title IX, the landmark 1972 legislation that bans sex discrimination in schools. A presidential "Commission on Opportunity in Athletics"—which includes several outspoken opponents of Title IX—will soon propose ways to amend the regulations.

Some architects are wondering how changes to the laws may affect their work for federally funded universities and K-12 schools. The idea of "equivalent, but not identical" facilities for men and women students has become an underlying precept of campus planning and designs for athletic facilities, housing, and other school buildings and services. While the law is associated with athletic programs, it has also helped quadruple the number of women earning college and graduate degrees. Architects steeped in school projects now take the intentions of Title IX for granted, and the law has paved the way for other sensible changes in the design of public buildings. The so-called "potty parity" rules, for example, have been adopted by states and federal agencies in recent years to determine the ratio of public toilets available for men and women in stadiums, movie theaters, and convention centers. (In mid-January, South Carolina became the latest state to consider bathroom rights: If passed, the legislation will require all state projects "to have twice as many toilets for women as for men.")

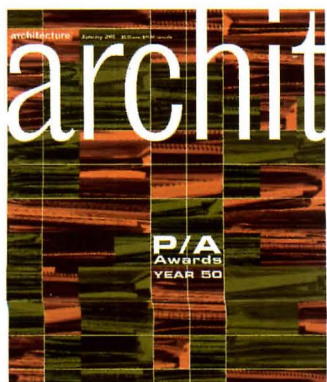
While potty parity has been embraced widely—in part, because it reflects realities of use—Title IX may soon be diluted to the point of uselessness. The big issue is proportionality of opportunity: Schools satisfy the law if their programs serve about the same percentages of males and females as total student enrollment. Before our national leaders roll back Title IX, they should look beyond the commission's findings and demonstrate that the playing fields are level. While our schools offer more to women than they did in 1972, gender equity is still an issue worth fighting for. ■

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## > letters



### CYBERFANTASIES

Once again, the P/A Awards (January 2003, page 57) are disappointing because the winning architects depict their projects and ideas in ways that can't be built and are merely computer-modeling daydreams that belong in picture frames rather than on job sites. While I cherish what the computer has done for the profession, in this age of digital cameras, Photoshop, and other graphic programs, we have to step back and take a more honest approach.

Jake Brillhart  
New Orleans

### GOLD STANDARD

Having read about Samuel Mockbee and the Alabama community housing project, I marvel at the practical creativity of his designs and his sensitive outreach in restoring dignity to a community. It would seem the AIA does not value common material, unlovely people, and forgotten land (January 2003, page 19). Mockbee's work qualifies as "gold" of another level.

Deborah Willis  
Albuquerque

### BUNSHAFT'S LEGACY

It was with great interest that I read "A Paragon Preserved," regarding the Lever Brothers building on Park Avenue (December 2002, page 60). My first day of work at Skidmore, Owings & Merrill was Gordon Bunshaft's last, but the longer I worked there, the more I grew to appreciate the quality and diversity of his work. I was also struck by how Bunshaft had

Lever Brothers give its final approval: He had prepared pages and pages of documents to convince the company to go with his design, and just before he flew to London for their meeting, he reduced all of his reasons to a single page, which he placed on the table in front of them as soon as he entered. They liked what they read on that page and told him to go ahead. I've often emulated this wise and clever approach in my own successful business.

Hans Clausen  
Sarasota, Florida

### THE NEA RESPONDS

Regarding "Backpedaling at the NEA, Again" (December 2002, page 26): The NEA's New Public Works was an excellent program focusing on design competitions. The NEA still supports competitions through the funding categories of Access, Creativity, and Heritage and Preservation. Since October 2002, the NEA has awarded \$600,000 to design projects, and will continue to make substantial awards throughout the year. Also, the NEA still funds the Mayors' Institute on City Design and Your Town—programs that have helped alter cities and rural communities through informed planning. The NEA has been recruiting for a talented director of design who will examine the design field and recommend new initiatives to the chairman.

Robert Frankel  
Director, Museums and Visual Arts  
National Endowment for the Arts  
Washington, D.C.

### CORRECTIONS

Due to an editing error, the biography of Jane Cee for the 50th Annual P/A Awards (January 2003, page 56) suggested that she earned five P/A Awards or citations herself on behalf of Holt Hinshaw Pfau Jones; the awards were won by the firm, and Cee served as a senior designer on the project teams. Credits for the Scoville-Turgel Residence (January 2003, page 66) omitted Yvonne Lau, project designer, and project team members Franka Diehnett and Nora Gordon.

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## And the Winner Is ...

> **REBUILDING** By now, if the Lower Manhattan Development Corporation and the Port Authority of New York and New Jersey have stuck to their proposed schedule, one of the schemes above has been scrapped. What remains to be seen are the repercussions of selecting either the lattice-work towers designed by Think—a team led by architects Rafael Viñoly and Frederic Schwartz, both of New York City, Japanese architect Shigeru Ban, and New York City-based landscape architect Ken Smith—or the jagged glass constructions of Berlin-based Studio Daniel Libeskind. The politics are murky, the stakeholders many, and the market demand for space feeble. What exactly will come of this much-anticipated final choice is an unknown. **JULIA MANDELL**

## Which Schools Would You Choose?

> **EDUCATION** There is a never-ending debate about the effectiveness of design education in this country. Every year the Design Futures Council, a design think-tank, releases a survey judging architecture schools from a practitioner's point of view. This year's survey asked 148 principals of private-practice architecture and engineering firms, with an employee total between the firms of 22,967, which schools they felt had best prepared their employees. The top ten schools for 2003 were:

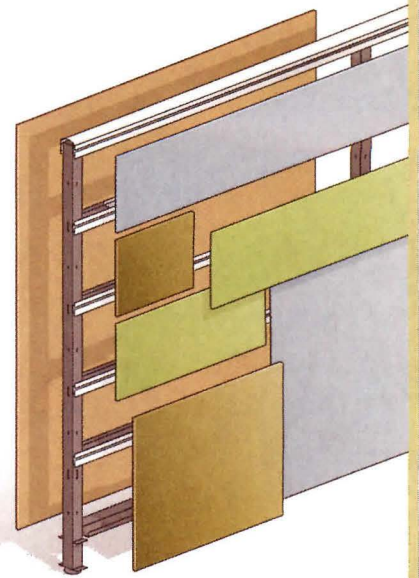
- Harvard University
- California Polytechnic State University, San Luis Obispo
- University of Cincinnati
- Cornell University
- Yale University
- University of Texas at Austin
- Kansas State University
- University of Michigan
- University of Pennsylvania
- Columbia University

The survey is published in the Design Futures Council's newsletter, *DesignIntelligence*, and in the Almanac of Architecture & Design. **JM**

### BUZZ

The AIA has announced a new batch of awards. Young Architect Award recipients were Lisa Chronister, Paul Mankins, Paul Neuhaus, Ronald Todd Ray, and Paul Woolford. Institute Honors for Collaborative Achievement were awarded to Kathryn H. Anthony, professor, School of Architecture, University of Illinois, Champaign-Urbana; Hervé Descottes, lighting designer and cofounder of Halie Light and L'Observatoire International; Gilbert Gorski, an architectural illustrator; Jayne Merkel, architectural writer and editor; J. Irwin Miller, design advocate, businessman, and philanthropist; New York, New Visions, a collaborative partnership created to assist with the rebuilding of Lower Manhattan in the aftermath of September 11; Joan Ockman, professor, Columbia University Graduate School of Architecture, Planning and Preservation; Martin Puryear, a sculptor; and the Robin Hood Foundation, a nonprofit organization established to fight poverty. The institute has named eight Honorary Members: Louise H. "Polly" Flansburgh, Terrance R. Flynn, Tina M. Gobbel, Jon D. Magnusson, Richard Moe, Marvin Rand, Robert H. Schuller, and Tallman Trask III.

The Royal Institute of British Architects has awarded Rafael Moneo the 2003 Royal Gold Medal for lifetime achievement.



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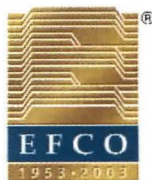
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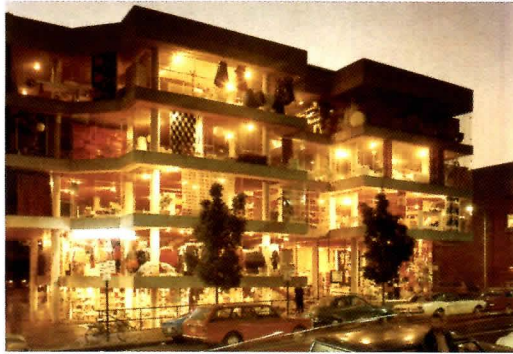
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# Thompson's Jewel Box Stands the Test of Time

> **LAURELS** Called "a glass vitrine at the scale of architecture" by critic Robert Campbell, Benjamin Thompson & Associates' Design Research Headquarters building has earned the 2003 AIA Twenty-five Year Award. In addition to the Cambridge, Massachusetts, project that Thompson designed in 1953 to house his retail furnishings venture, the AIA has recognized 31 projects with National Honor Awards in



architecture, interiors, and urban design, which will be handed out in May at the institute's national convention, to be held this year in San Diego. **JM**

## 2003 AIA Honor Awards for Architecture

### MUSEUM OF AMERICAN FOLK ART [5]

Tod Williams Billie Tsien Associates  
New York City

### SIMMONS HALL

Steven Holl Architects  
Cambridge, Massachusetts

### COLORADO COURT

Pugh + Scarpa Architecture  
Santa Monica, California

### 3RD & BENTON/7TH & GRANDVIEW PRIMARY CENTERS

Rios Associates  
Los Angeles

### BOO1 "TANGO" HOUSING

Moore Ruble Yudell Architects & Planners  
Malmö, Sweden

### HOWARD HOUSE [3]

Brian MacKay-Lyons Architecture  
Nova Scotia, Canada

### U.S. COURTHOUSE & FEDERAL BUILDING [2]

Richard Meier and Partners  
Central Islip, New York

### ROUEN CONCERT HALL [7]

Bernard Tschumi Architects  
Rouen, France

### DIAMOND RANCH HIGH SCHOOL

Morphosis  
Pomona, California

### WILL ROGERS WORLD AIRPORT SNOW BARN [1]

Elliott + Associates Architects  
Oklahoma City

### BOSTON PUBLIC LIBRARY, ALLSTON BRANCH [6]

Machado and Silvetti Associates  
Allston, Massachusetts

### HERITAGE HEALTH AND HOUSING HEADQUARTERS

Caples Jefferson Architects  
New York City

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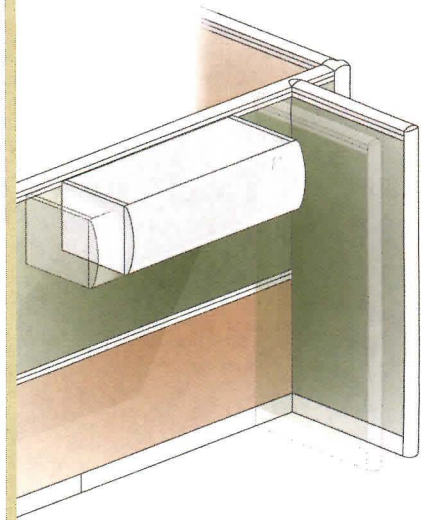
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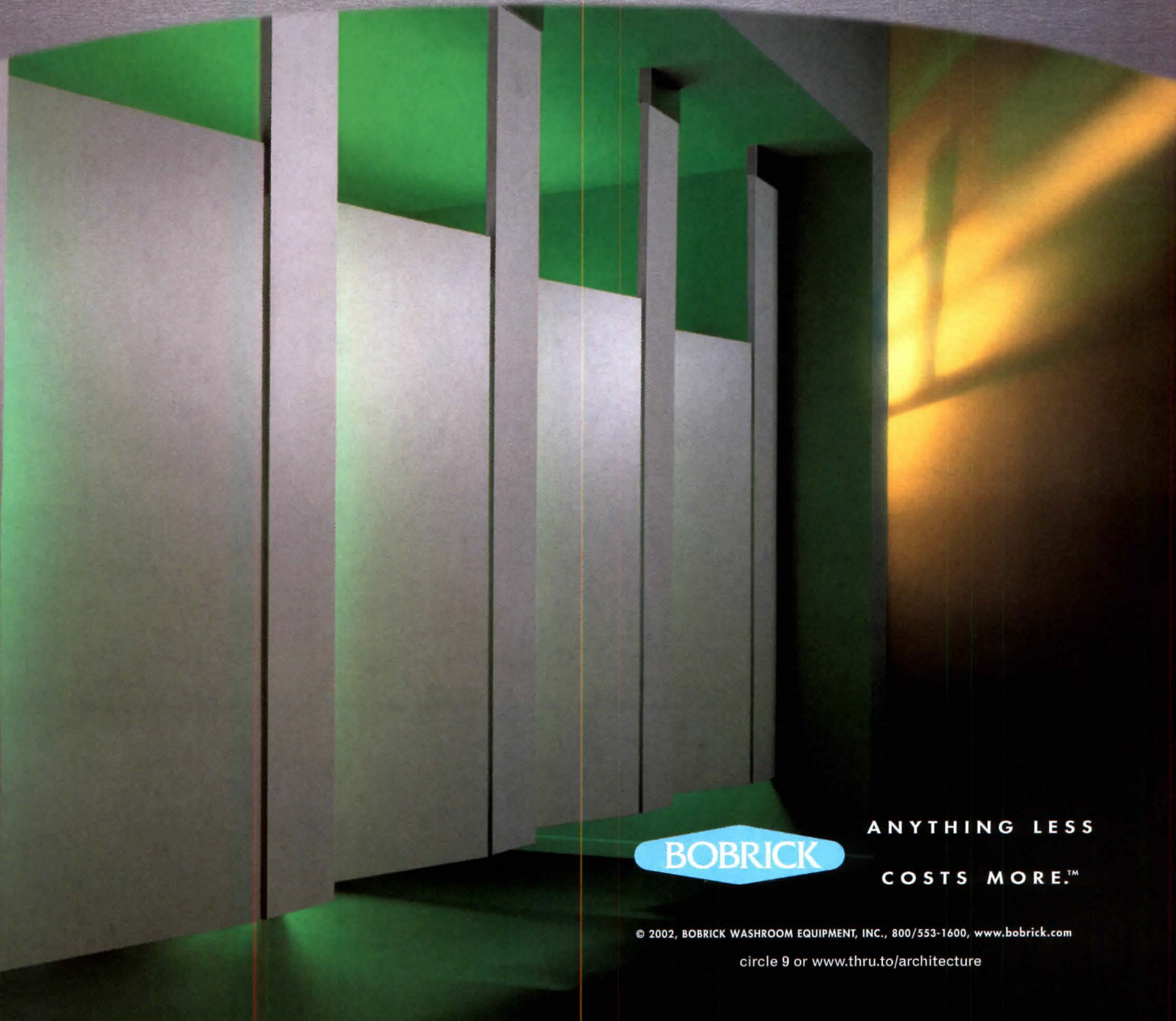
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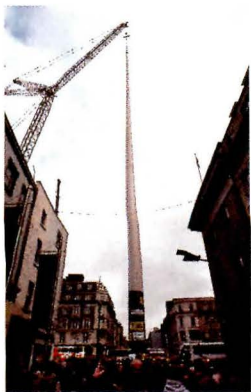
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## A Spiky Story

> **MONUMENT** Triumphant over four years of controversy and construction delays, the \$4.9 million, 394-foot-high Millennium Spire finally looms over Dublin's skyline, at twice the height of the city's tallest building. The Ian Ritchie-designed monument is intended as the first step in rejuvenating Dublin's historic O'Connell Street. **ANNA HOLTZMAN**

## The Extranet Paradox

> **TECHNOLOGY** If anything has failed architecture firms of late, it's the class of Web-based collaboration tools called extranets. Widely hailed a few years ago, these products and services have cost architects time, money, and legal expense while doing little to change the way projects are delivered. Most of them didn't outlive the Internet bubble either; the offerings have dwindled from almost 400 unique Web applications to a mere handful.

But if that's true, then why are more architects than ever investing in Web-based workflow? (A new survey by *Architecture* shows that a third of small firms use the Internet for project administration; the number grows to over 40 percent for large firms.) Three reasons explain this paradox: First is its convenience and acceptance; "Web enablement is *sina qua non* for architects today," says Joel Orr, editor of *Extranet News*. "You can't get along without it." Second, many clients require use of an extranet system for their projects. Third, and yet another paradox, extranets appear to be going away.

Huh? That's right: "Extranets will no longer exist as a separate product category in three years," Orr explains, "but instead will be absorbed into the programs they support." As a result, architects will share more data online, but they won't need a separate program to do so. Even software makers agree: Amar Hanspal, a senior director with Autodesk, predicts that Web-based tools that give owner-operators a "single view of all their projects" will be the only extranet products with a viable niche.

For architects, says Dr. Spiro N. Pollalis, a professor at Harvard's Graduate School of Design, there is "a much bigger proliferation of proprietary systems—a shift from extranets to ad hoc solutions created inside the company." Too many extranets, he says, were "tools designed for digitized paper shuffling, not embracing the digital design process." **C.C. SULLIVAN**

## BUZZ

A master plan by **Albert Speer Jr.**, son and namesake of Hitler's preferred architect, for the 2008 Olympic facilities in Beijing has become the subject of controversy in Germany, provoked by what some view as similarities between the son's design for Beijing and the father's visions for Nazi Berlin.

**Leo A. Daly**, the largest privately held architecture/engineering firm in the United States, has acquired the Minneapolis-based, 90-person **Setter Leach & Lindstrom**.

**Robert Newsom** has been named AIA California Council President.

The late **Antonio Gaudí** has a proposal for the World Trade Center Memorial competition. A group of his devotees has entered a 1908 project for a futuristic hotel designed by the Catalan architect that is rumored to have been originally slated for the Lower Manhattan site.

Now's your chance: **Richard Neutra's** 1959 Henry Singleton House in Los Angeles is on the market for the first time, listed at \$7 million, as is one of **Gregory Ain's** 1948 houses for the Advanced Development Company in Venice, California, at an undisclosed price.

**Skidmore, Owings & Merrill** has been selected to design a new NATO headquarters building in Brussels.



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## Beau Jest

> EXHIBITION

"TATIRAMA" / NETHERLANDS ARCHITECTURE INSTITUTE / ROTTERDAM / THROUGH APRIL 27

The Rotterdam Film Festival is on, and as it does every year, the Netherlands Architecture Institute presents a film-related exhibition. This year the institute spotlights filmmaker and actor Jacques Tati, famous for his tongue-in-

cheek jabs at postwar modernist urban architecture. Jacques Lagrange, Tati's regular set designer from 1953 until the filmmaker's death, was instrumental in creating Tati's iconic film images, although he remains virtually unknown to the public. Exhibited are his drawings and models including a 1-to-10-scale model of the Villa Arpel, the architectural climax of Tati and Lagrange's oeuvre, from the film "Mon Oncle" (above). With its hilarious gimmicks and gadgets, it has become an icon of modernist architecture. The exhibition, curated by the French Institute of Architecture, also purports to reveal Tati's hidden admiration for modernism, but thankfully, the curators fail to soften the refreshing satire in his work. **LIANE LEFAIVRE**

## Close Encounters

> FILM

"DIVINE INTERVENTION" / DIRECTED BY ELIA SULEIMAN / AVATAR FILMS

Architecture is meant to serve the people who inhabit and encounter it. *Divine Intervention*, the work of Palestinian filmmaker Elia Suleiman, is an excellent reminder of this, as it gleefully records how people interact within the parameters of the built environment. The film, a strange and stinging ode to the current Palestinian experience, is a series of highly original and darkly comic scenarios, almost all hinging on some aspect of their setting, from unfriendly neighbors in Nazareth to the politics of navigating the military checkpoint between Ramallah and Jerusalem. The people in Suleiman's film are by turns inscrutable and mean-spirited, and through their silent altercations, spatial and social dynamics are illuminated in truly unforgettable ways. **JULIA MANDELL**





## > agenda



## Bringing Down the House

> FILM

"LUSTRON: THE HOUSE AMERICA'S BEEN WAITING FOR" / PRODUCED BY ED MOORE, BILL KUBOTA, AND BILL FEREHAWK / WWW.LUSTRON.ORG / KDN VIDEOWORKS

In 1948, Chicago inventor Carl Stradlund launched a revolution in home building

intended to solve the post-World War II housing crisis: a mass-production company called Lustron that was hailed as the General Motors of the housing industry. Stradlund had invented an all-steel house—also called the Lustron, short for “luster-on-steel”—that could be manufactured in the manner of automobile assembly-line production. The houses came in 3,000 pieces that were loaded onto one custom-made truck, delivered to the new owner's plot, and assembled in three days using screws and wrenches rather than hammers and nails. The final product, made entirely of porcelain-enameled steel, required little in the way of maintenance (no re-painting, no re-roofing), was affordable and high quality, and promised a vision of the future for a generation longing to leave its past behind.

In their documentary *Lustron: The House America's Been Waiting For*, producers Ed Moore, Bill Kubota, and Bill Ferehawk uncover the unlikely history of Lustron. The company collapsed after less than five years and 2,500 houses, mired in political controversy and maligned by a fickle press—but not before winning the confidence and financial support of the federal government and rising to the forefront, however briefly, of America's national consciousness. **ANNA HOLTZMAN**

## Space Fright

> BOOK

"REPPRESSED SPACES: THE POETICS OF AGORAPHOBIA" / BY PAUL CARTER / REAKTION BOOKS

A twentieth-century German art historian once explained “the urge to abstraction in art and architecture by presupposing a primary agoraphobia,” relays British academic Paul Carter in *Repressed Spaces: The Poetics of Agoraphobia*.

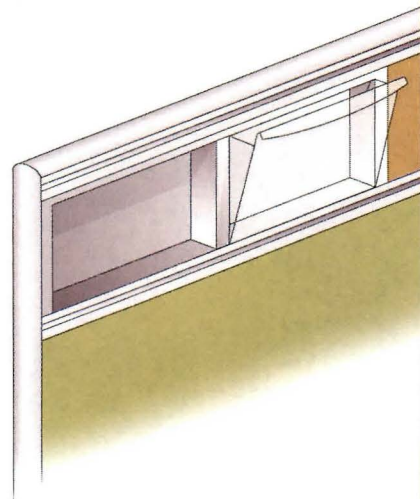
This scholarly investigation into the origins of the fear of open space prods its subject from a surprisingly diverse array of angles, ranging from architectural theory to



psychological doctrine. Starting with a conversation between Freud and a student, Carter fluidly weaves together anecdotes, conversations, and academic cross-references. His eclectic tour of

our collective societal neurosis stretches from the classical era to the present day, positing that, while detractors of the modern city have attempted to link the root of agoraphobia to poor city planning, this disorder actually extends much further back.

**ANNA HOLTZMAN**



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## > agenda



## City Paper

> PERIODICAL

"THE NEXT AMERICAN CITY" /

[WWW.AMERICANCITY.ORG](http://WWW.AMERICANCITY.ORG)

What will our cities and suburbs look like in 2033? What long-term effects will come of such movements as smart growth and New Urbanism? Seth Brown and Adam Gordon, founders and, respectively, publisher and chief editor of the just-launched magazine, *The Next American City*, dedicate their new venture to finding out. The premier issue takes a hard look at smart growth, with reports from downtown Los Angeles, Dhaka, Bangladesh, and Denver's Elitch Gardens. Other articles consider the attraction of the suburbs for some Americans (but not others), the implications of explosive growth in third-world cities, and the failures of workforce development in Baltimore. Connecting their main theme to allied disciplines, Gordon includes a surprising interview with Connecticut architect and academic Kent Bloomer, a proponent of architectural ornament and public art in cities, as well as an extensive review of Richard Florida's new book, *The Rise of the Creative Class*. For what is ostensibly a

journal about city planning, the purview is broad enough to interest architects and, for that matter, social workers. The final result is a panoptic review of city issues that "emerges out of the knowledge that cities cannot be frozen in time and have to grow and change," according to architectural critic Paul Goldberger, an advisor to the magazine. **C.C. SULLIVAN**

**THE NEXT  
AMERICAN  
CITY**

premiere issue / spring 2003  
the future of smart growth



## EXHIBITIONS

### CAMBRIDGE, MASSACHUSETTS

**Households** artist and architect Mark Robbins, the former director of design for the National Endowment for the Arts, exhibits his naturalistic photographs of people in domestic settings, sponsored by the Radcliffe Institute for Advanced Study, at Harvard University, March 3-21. (617) 495-8600



**Large Parks: New Perspectives** a look at directions in contemporary landscape practice, from sustainable design to the rehabilitation of brownfields, at the Harvard Graduate School of Design, March 31-May 26. (617) 495-4731

### BOSTON

**Building a Vision: Diller + Scofidio in Boston** an exhibition on the design and development of the New York City architecture firm's new waterfront museum for the Institute of Contemporary Art (ICA), which was unveiled last September, at ICA, through April 27. (617) 266-5152

### CHICAGO

**Invisible City: Planning for Chicago's Future** this exhibition illustrates and critiques three urban planning efforts that will dramatically affect Chicago in the coming decades, at the Chicago Architecture Foundation, through April 27. (312) 922-3432

### FRANKFURT

**The Undiscovered Richard Meier: The Architect as Designer and Artist** a range of Meier-designed furniture and products, from light fixtures to a piano, at the Museum for Applied Art, Frankfurt, March 5-May 18. (49) 69-212-340-37

### HELSINKI

**The Alessi Workshop** a cooperative exhibition by students at the University of Art and Design Helsinki and Italian industrial design company Alessi, at the Design Forum Finland, March 14-April 6. (358) 962-9290

### LONDON

**Art Deco 1910-1939** the deco period is rediscovered through its art, architecture, and design, at the Victoria and Albert Museum, March 27-July 20. (44) 20-7942-2000

### NEW YORK CITY

**Between Worlds—Kabul/New York, 2001: Photographs by Anthony Suau** a show juxtaposing photographs of New York City after the September 11 attacks with images of Kabul, Afghanistan, following the withdrawal of the Taliban, at the Museum of the City of New York, through April 13. (212) 534-1672



**The Swiss Section** a look at the innovative Swiss approach to designing cities, space, and infrastructure, at Van Alen Institute, March 19-April 23. (212) 924-7000

### PITTSBURGH

**Windshield: Richard Neutra's House for the John Nicholas Brown Family**, at the Carnegie Museum of Art, March 1-May 11. (412) 622-3131

### PRINCETON, NEW JERSEY

**Structural Art and Education: The Swiss Tradition** the role of aesthetics in structural design is explored

through the work of four Swiss engineers, at the Princeton University Art Museum, March 8-June 15. (609) 258-3788



### PROVIDENCE, RHODE ISLAND

**Zig-Zag Chairs and Wobbly Mirrors: Twentieth-Century Furniture** this exhibit compares and contrasts mass-produced and handmade furniture from the past century, at the Rhode Island School of Design Museum, through April 20. (401) 454-6500

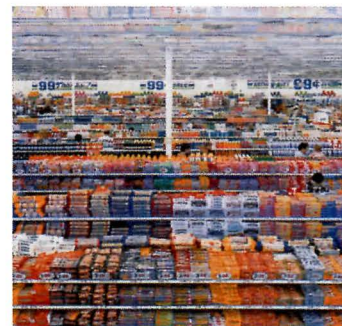
### ROTTERDAM

**Reality Machines** work by Dutch architects, designers, and photographers that puts an ironic spin on elements of everyday life, at the Netherlands Architecture Institute, through April 21. (31) 10-440-1200



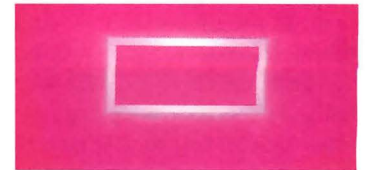
### SAN FRANCISCO

**Andreas Gursky** the first American retrospective of the German photographer known for his large-scale, boldly abstract, and often digitally altered images, organized by the New York MoMA, at SFMOMA, through June 1. (415) 357-4000



### SEATTLE

**James Turrell: Skyspace and New Work** Turrell is known for his installations using light and space; this show will preview his new permanent work for the Henry's sculpture garden, at the Henry Art Gallery, March 21-October 5. (206) 543-2280



### VITORIA-GASTEIZ, SPAIN

**The Work of Charles and Ray Eames: A Legacy of Invention** this show explores the breadth of work by the American design duo, at ARTIUM, through May 11. (34) 945-20-90-00

### WASHINGTON, D.C.

**Picture This: Windows on the American Home** an exhibition on the role windows play in the architecture and culture of the American home, at the National Building Museum, March 29-August 11. (202) 272-2448

## CONFERENCES

The annual **CSI Show** displays a wide array of commercial building products, and offers a range of continuing education programs, at McCormick Place, Chicago, April 9-11. [www.thecsishow.com](http://www.thecsishow.com)

Learn about sustainable design and business practices at **Environ Design 7**, an event sponsored by *IS* and *green@work* magazines, at the Hilton Washington, Washington, D.C., April 30-May 2. [www.environdesign.com](http://www.environdesign.com)

## COMPETITIONS

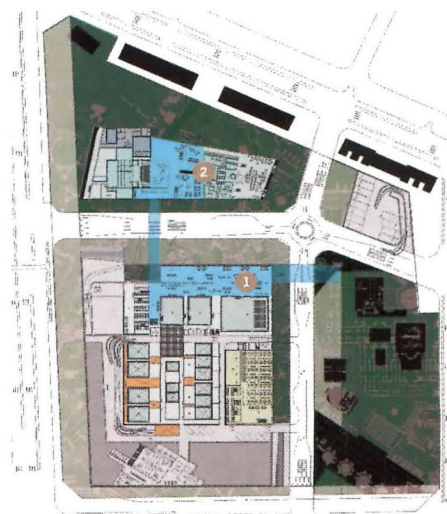
The 12th annual **Unbuilt Architecture Design Awards** program is sponsored by the Boston Society of Architects, and is open to architects and educators from around the world. Deadline July 15. [www.architects.org](http://www.architects.org)

# >on the boards

## OFFICE FOR METROPOLITAN ARCHITECTURE / CCTV / BEIJING

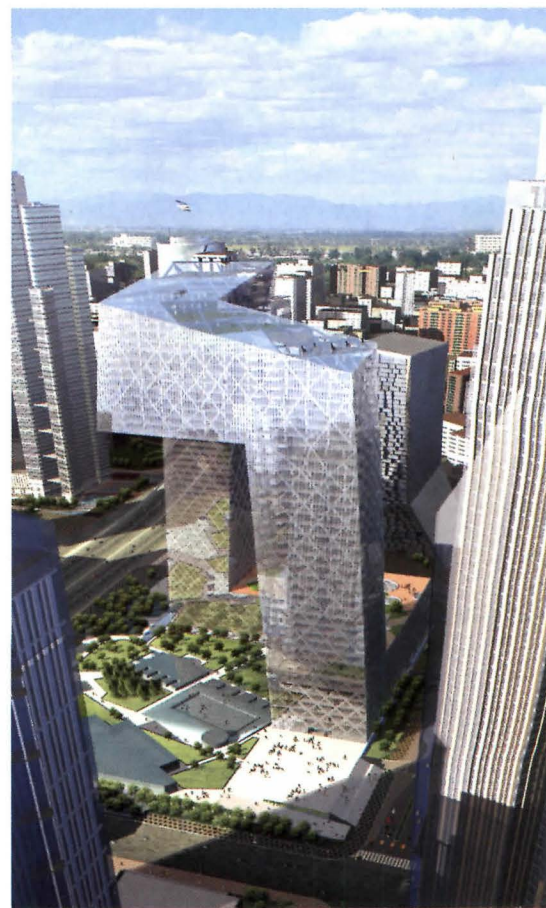
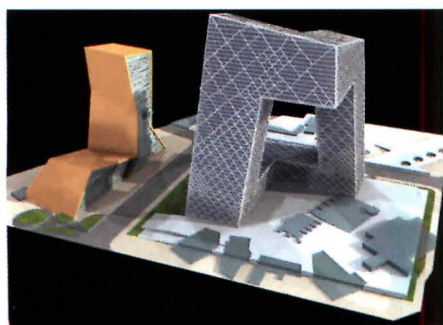
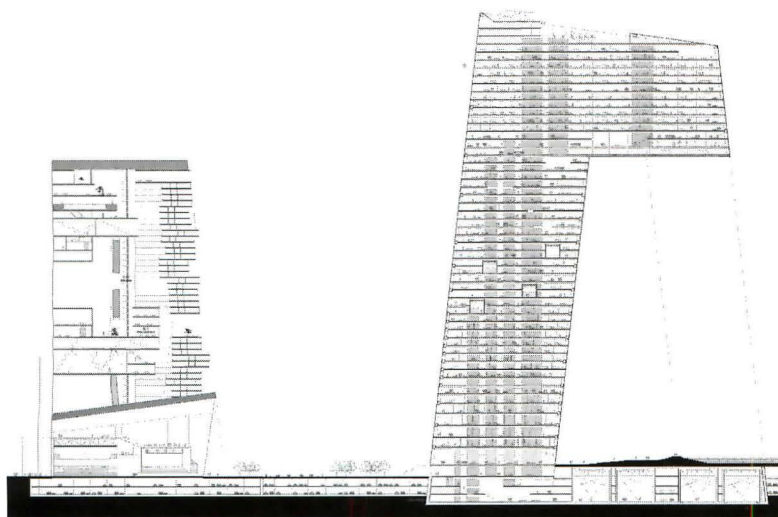
When Beijing welcomes the world with the opening of the Olympic Games in 2008, the year will also mark the completion of a major new profile on the skyline of the city's new central business district: the headquarters of Central Chinese Television (CCTV). Designed by Rem Koolhaas and Ole Scheeren of Holland's Office for Metropolitan Architecture (OMA) with an engineering team from Arup led by Cecil Balmond, the competition-winning scheme calls for two towers on a 25-acre site that hug the ground as much as they rise above it. The taller of the two buildings, which will house the CCTV headquarters in 4.3 million square feet of space, reaches 755 feet into the sky, but it is no conventional

highrise. A giant framing device or "window" onto the city center, the tower is a continuous loop, with two vertical and two horizontal bars clad in an irregular gridded skin of metal and glass. Its form reflects its program, which encompasses the entire process of television production in a sequence of interconnected activities. Visible through this massive window will be the site's companion tower, housing the 1.25 million-square-foot Television Cultural Center. Shaped like an urban mountain, the smaller tower will hold a hotel, a visitors center, a theater, and exhibition spaces. On ground level, the CCTV complex—realized in collaboration with the East China Architecture & Design Institute of Shanghai—meets the city with public entertainment facilities and production studios, all in a park setting. **ABBY BUSSEL**



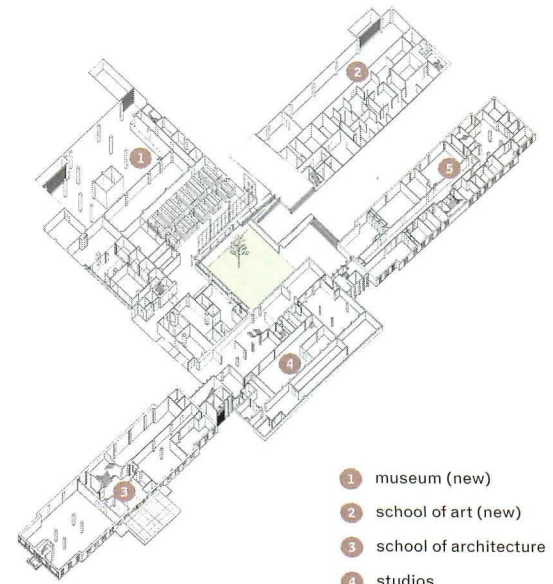
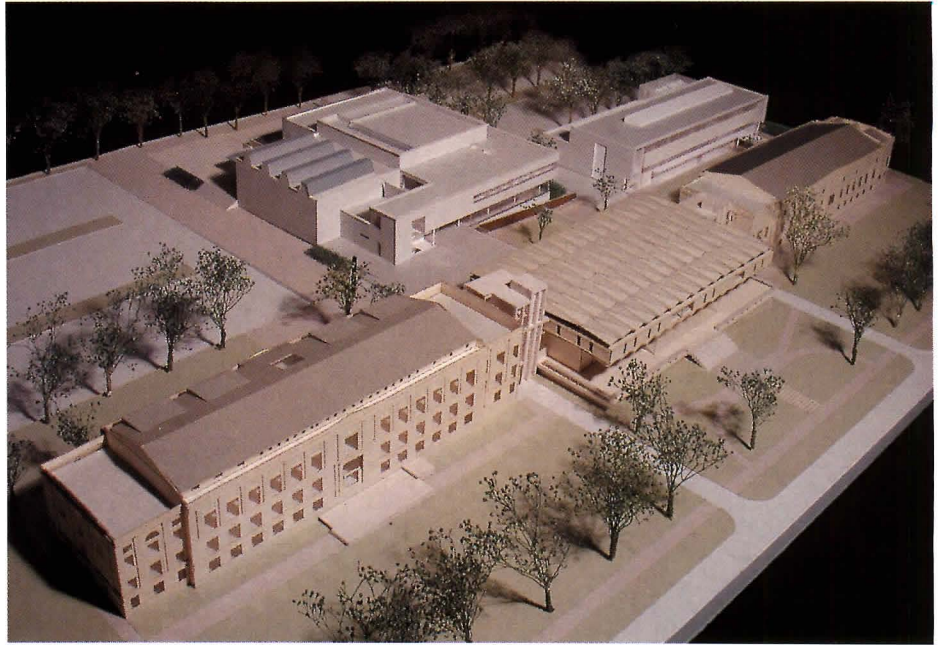
Site plan 123' ^

- 1 CCTV headquarters
- 2 Television Cultural Center



**MAKI & ASSOCIATES / SAM FOX ARTS CENTER / ST. LOUIS**

Refreshed and expanded arts facilities are in the works at Washington University. To support new opportunities for research and interdisciplinary studies, the university is linking three academic units (the School of Architecture, the School of Art, and the Department of Art History and Archeology) with the Gallery of Art and the Art & Architecture Library. Together, three renovated buildings and two new ones will form the Sam Fox Arts Center, an umbrella organization named for a local civic leader and philanthropist. Located at the south-east end of the school's Hilltop Campus, the center marks not only a new era for the arts at the university, but the return of Japanese architect Fumihiko Maki to its campus, where he designed Steinberg Hall in the late 1950s. Designed by Maki with architect of record Shah Kawasaki Architects, the art center will include two new limestone-clad buildings: an art museum and a second building for the art school. Plazas, courtyards, and green spaces connect the five-building complex, which, in addition to the new buildings, includes the renovation of Steinberg Hall and two Beaux Arts-style structures. The new 65,000-square-foot, three-story museum will sit immediately north of Steinberg, the latter's glazed north wall opening directly onto the rectilinear composition of the new museum's main façade. A site just east of the museum is earmarked for the new art-school building, a 38,000-square-foot, three-level facility for graduate studios and ceramics, sculpture, and painting studios. While two of the three buildings slated for renovation have been completed, the remainder of the project will start when funding is secured. **ABBY BUSSEL**



- 1 museum (new)
- 2 school of art (new)
- 3 school of architecture
- 4 studios
- 5 school of art

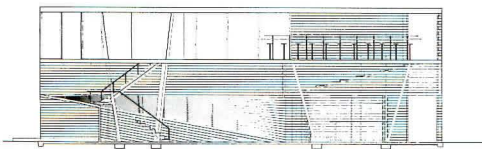
Ground-level axonometric 45'



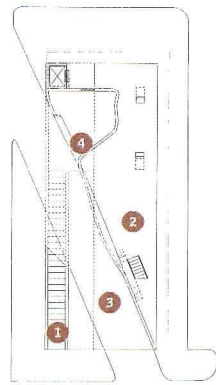
# > on the boards

## Bypass Building

- 1 sidewalk entry
- 2 plaza
- 3 drive-through route
- 4 drive-through information counter

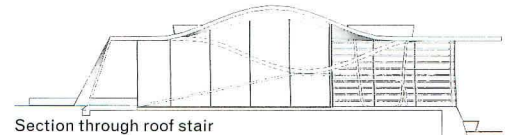


Section through café

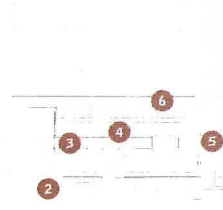


Ground-floor plan | 20' <

## Canal Building

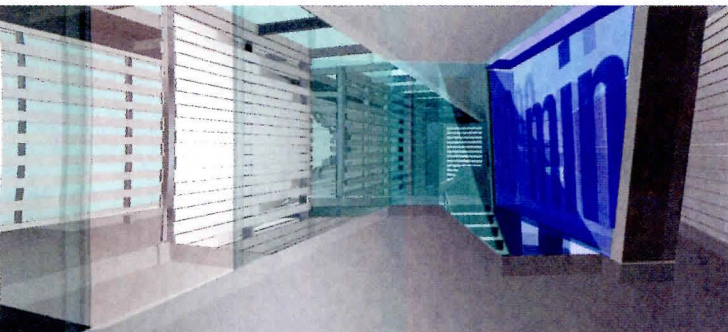
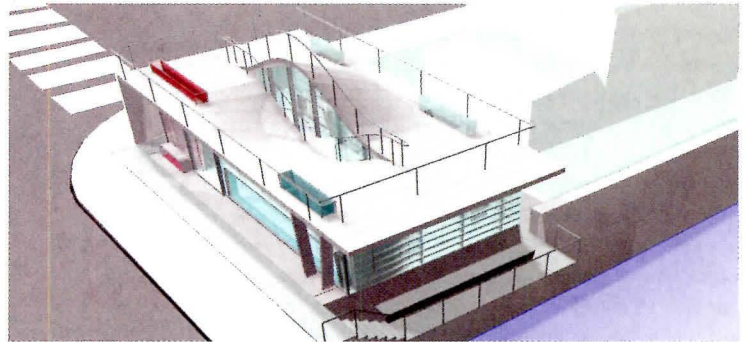


Section through roof stair



Ground-floor plan | 18' V

- 1 canal
- 2 entry
- 3 ramp to roof
- 4 laptop terminal area
- 5 seating
- 6 exterior ramp



### STUDIO SUMO / JOSAI INTERNATIONAL UNIVERSITY / TOGANE, CHIBA-KEN, JAPAN

Two information buildings, one for students and another for visitors, define pivotal sites on the campus of a trilingual university in Togane, a Tokyo suburb. Acting as “sites of public interface,” the new projects at Josai International University are slated for parcels set a half mile apart at opposite ends of the campus, which sits between two major transportation routes: a bypass road and a commuter rail line. Designed by New York City-based Studio Sumo, the buildings provide information about the university and a place to rest or have a snack; each is guided by its context and the mode by which its users arrive. The 4,000-square-foot “bypass” building, which sits on a commercial strip at the main entrance to the university, will

primarily serve those arriving by car, while the 1,200-square-foot “canal” building, located along an irrigation canal in a residential neighborhood, will serve students and faculty arriving by train. A drive-through lane in the bypass building allows visitors to pick up information without leaving their cars; its walk-up information booth, café, and exhibition about the school are open to the public. The canal site offers vending machines, a newsstand, a counter wired for laptops, and computers linked to university databases and event calendars, as well as a rooftop garden. A shared palette of glass, metal, and concrete imbues the buildings with a common goal: to promote and support the university community in a country where private higher education is a competitive business. Billboard buildings like these play a vital role in communicating the institution’s assets. **ABBY BUSSEL**

# Neomod and Short-Term Memory Loss

BY DUO DICKINSON

Kevin Roche's New Haven (Connecticut) Coliseum is going to be torn down, its unforgettable topsy-turvy garage-over-auditorium dynamism slated for the dumpster. Why? Despite its celebrated status as part of the "Model City Program" initiated by Richard C. Lee, the city's mayor from 1954 to 1970, the megastructural statement proved that style cannot overcome substantive misfits. A bleak interior and structurally compromised concrete parking decks have long kept crowds away despite millions of dollars spent trying to undo the project's multiple problems. The 1972 auditorium got in the way of its use. Along with its adjacent Knights of Columbus Tower (Roche Dinkeloo, 1969) and other modernist "object buildings" flecked across this little New England city, the coliseum found its place by rejecting its context.

This is just the latest in a list of buildings that, owing to their abstracted outlook, are doomed to future cultural, environmental, and financial irrelevance. A rejectionist posture is at the heart of modernism's appeal; for some practitioners, the dismissal of history, context, and program is somehow alluring.

For over a decade, there has been a celebration of the latest wave of context-free design: the "neomod" movement. Where once po-mo trim bits and fluffy colors abounded, nary a muntin is seen. Professional credibility seems to hinge on an adherence to neomodern orthodoxy: Most architects lauded by "those in the know" are part of a

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A rejectionist posture is at the heart of modernism's appeal.

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new generation promoting modernist aesthetics, leaving everything else that's built—casinos, theme parks, and the like—to be celebrated only in the mainstream press.

The danger of this outcome is not aesthetic; it is attitudinal. Modernism—new or otherwise—follows a rulebook written by architects, rather than by those who end up living, working, and playing in the buildings we design. Much of what is now hailed as the future of architecture merely revives the arrogance of the past—a mindset that

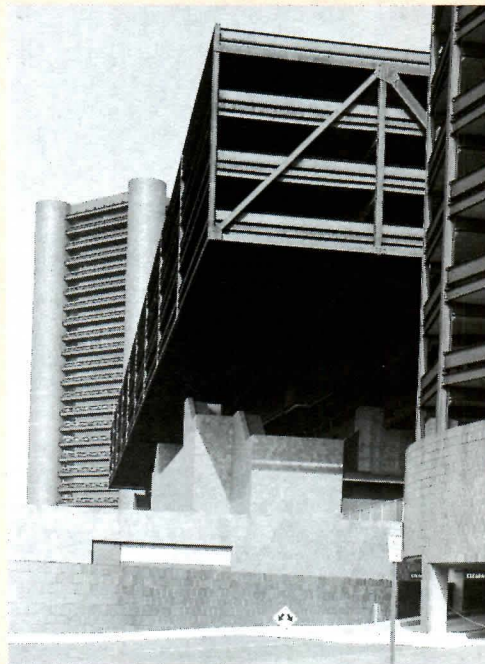
spawned buildings conceived as occupied sculpture and that was openly contemptuous of the values of contemporary culture. It is ironic that, though the New Haven Coliseum and others of its ilk, from Philadelphia's Southwark Plaza to Chicago's Cabrini Green, failed because their designs ignored human scale and use patterns in favor of a "grand design," their intellectual genesis is again preeminent in our profession. As these projects prove, there is no way to explain away design without context.

In its infancy, modernism did prove that the emperor had no clothes. It showed the absurd lengths to which historic conventions hamstrung buildings into silly preconceived stylistic notions, and it offered an empowering message of innovation. As with labor unions during the early twentieth century, early modernism addressed undeniable problems with clearly evident truths (e.g., form follows function).

But just as twenty-first-century labor unions have lost the moral outrage of the likes of Eugene V. Debs fighting for an eight-hour workday, neomodernism has become, all too often, just another surface detailing technique, devoid of moral underpinnings. What has evolved from that old-time modernism is a fashion-designer aesthetic enhanced with pumped-up cyberimagery. Such sexiness is compelling, but does it sustain interest and live well beside, around, and with us over the long haul? Do those criteria even matter to the profession, the academy, or the professional press?

Moreover, why are we so focused on this work to the exclusion of subtler, more contextual gestures? My sense is that our memories are too short and our souls are too lazy. It is hard to remember the screaming failures of housing projects like the recently departed Robert Taylor Homes in Chicago once they've been replaced with human-scaled homes. It takes time to understand the values of those who will use what we design, and it takes focus to study and reflect the history and culture of our buildings' sites.

A building built with fine-arts sensibilities to the exclusion of weatherability, affordability, or usefulness has a brief list of design criteria to talk about. Form and materials that are intentionally distilled to scaleless abstraction have no "moral"



The New Haven Coliseum, with its heroic double cantilevers, is slated for demolition.

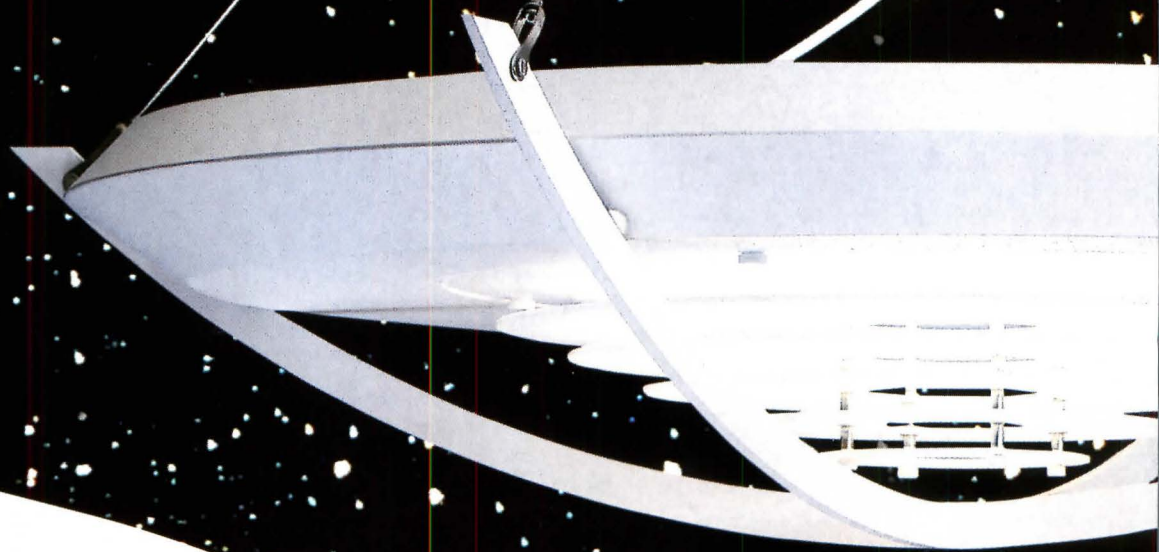
imperative to shed water or resist rot. Art lives in its own world, where success is self-determined.

Beyond rarefied in-house arguments between design philosophies, promoting the rejectionist posture of modernism as our profession's Truth once again puts architects in the now classic position of elites respected by a shrinking few. As with all professions in which success is often self-defining, it is wise in this time of apparent consensus to pause and rethink the criteria for laudatory recognition. At a time when image is everything, it's crucial that we recognize the inheritance of so much of the last generation of modernist work: dysfunctional buildings built for a brief celebratory presence that sentence their occupants to the abidingly irreparable "out years."

Will New Haven miss its coliseum? Architects will, at least. ■

DUO DICKINSON IS AN ARCHITECT AND AUTHOR BASED IN MADISON, CONNECTICUT. HIS NEXT BOOK, *THE HOUSE YOU BUILD*, WILL BE PUBLISHED BY TAUNTON PRESS THIS FALL.

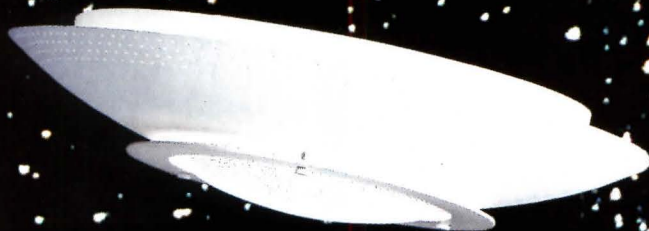
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> **DEVELOPMENT** "Have I ever seen a city so grand?" wrote American civic leader and traveler Richard Henry Dana Jr. in 1859 when he first laid eyes on Havana. The city's five centuries of architectural and urban heritage drape around Havana Bay and unfold along 20 miles of coastline, little changed since the revolution, New Year's Day 1959. Cuba's revolutionary leaders quickly came to regard Havana as an overdeveloped capital of an underdeveloped country. In an attempt to redress this imbalance, they directed new projects away from Havana toward the many neglected regions of the island. Today, after this 40-year hiatus in urban development, Havana's historic grandeur faces the challenges of change as new infusions of capital affect the shape of the city.

Tourism and related international trade are becoming the foundations of Cuba's post-Soviet-era economy. From a mere 340,000 visitors in 1990, tourism grew to 1.8 million in 2001 and is estimated to hit 12 million by 2010, assuming the economic blockade is lifted. While limited joint ventures were first initiated in 1982, foreign investment did not become significant until after 1992, when provisions were made for repatriation of profits, and most significantly after 1995 with "Law No. 77," which allows enterprises to be wholly owned by foreigners. Real estate development has been the main arena of investment activity, and by all accounts it has been a bumpy road. The lack of consistent regulations to govern zoning, land use, permitting, titles, and other development procedures has created challenges for foreigners and Cubans alike.

With the city on the verge of change, now is a good moment to examine post-Soviet development in Havana. Two models demonstrate diverse poles of current activity: regressive planning in and around the Monte Barreto section of the Miramar district, and some



Tour buses frame the fortress El Morro across Havana Bay. Today, buses ring the historic center as fortifications once did.

# City on the Verge

Tourism is growing and a possible end to the U.S. blockade looms; is Havana prepared for a development boom? BY JOHN A. LOOMIS

thoughtful, urbanistic development in and around Old Havana.

## BUSINESS AS USUAL

In Monte Barreto, a large oceanfront enclave set apart from the rest of the city, the commercial anchor of new development is the Miramar Trade Center located on Tercera Avenue, the main coastline road. The complex, which will provide 1.8 million square feet of rentable office space, is financed by Israeli capital and designed by Canadian architects. Recently completed, two imposing office blocks confront the street with layered limestone and glass façades. Unfortunately, the identity of the architects is not publicly acknowledged; given the U.S.

economic blockade, doing so would jeopardize the Canadians' opportunities to work on projects in the States.

Across the avenue, hotels block access and views to the ocean. One new hotel, the Melia Habana, a project of the Spanish Melia hotel chain by Cuban architect Abel García, is a neobrutalist concrete mass, its presence softened only by plantings. Another, designed by Cuban architect Roberto Caballero and developed by the Cuban state corporation Gaviota, is the Hotel Panorama; despite its name, the hotel takes little advantage of the site's splendid ocean views. Its mirrored glass skin presents a mean, shiny façade.

Monte Barreto's greatest weakness is not its impoverished architecture, but its urban design, especially along Tercera Avenue, where massive hotels and office buildings loom over large, undeveloped spaces in between. This is automobile urbanism with no provision for pedestrian life; remarkably, the magnificent oceanfront remains undeveloped. The urbanity that is characteristic of Havana is lacking here. In Monte Barreto, critical urban design decisions were made by civil engineers, not design professionals. And while the Dirección Provincial de Planificación Física—the city's planning department—was ostensibly responsible for urban design, real responsibility

>practice



Typical of the unplanned development in Monte Barreto, the Hotel Panorama (left) turns its back on the city's most valuable asset, the waterfront. In contrast, the city's 1909 commercial exchange building (right) in Old Havana was restored for \$13 million to become office space. Financed by the Spanish bank Grupo Argentaria, it is an example of the successful projects being undertaken by the Office of the Historian of the City of Havana.

for this disastrous situation lies with higher authorities. The fact that there are few constructive opportunities for plan review makes matters even worse. Monte Barreto is an example of everything Havana should not be doing.

## ENTREPRENEURIAL SPIRIT

The polar opposite of Monte Barreto's pattern of development stands in and around Old Havana in projects managed by the Oficina del Historiador de la Ciudad de La Habana (OHCH), directed by Eusebio Leal Spengler. Due to a unique set of historical circumstances, the OHCH—typically referred to by its English name, the Office of the Historian of the City of Havana—operates outside of the centralized state structure and has the autonomy to enter directly into agreements with foreign investors to develop its enterprises, so it can avoid the layers of bureaucracy typical elsewhere. As the parent organization of Habaguanex and Fénix, two for-profit companies that develop and manage tourism ventures and real estate, respectively, the OHCH has built a reputation as a successful socialist entrepreneur. Habaguanex and Fénix are able to attract foreign invest-

ment to restore historic buildings in Habana Vieja for tourism and related services—sources of hard currency. Profits are reinvested to restore more buildings and create more services. Profits also support schools, medical clinics, and housing for the elderly. By any means of assessment, the OHCH has created a decentralized development model that has become Cuba's greatest success story.

The core of OHCH work is a series of restored small- to medium-sized hotels, several of which are located in palaces that housed Havana's nobility in the eighteenth century. In the commercial arena, the OHCH, with funding from a Spanish investor, restored the city's stately 1909 commercial exchange, converting it into market-rate office space in 1996. The OHCH's successes have been mitigated by only a few disappointments. The 1998 Hotel Parque Central, sited within the OHCH's area of responsibility, but ultimately beyond its control, was an urban design disaster. The Parque Central was a joint venture between a Cuban company, Cubanacan S.A., and the Dutch chain Golden Tulip Hotel; local architect Jorgé Luis Jorgé

designed the hotel with architect Ives Piveta representing the Dutch. Located on one of the most important sites in the city on the north side of Havana's Central Park, Parque Central makes an awkward attempt at contextualist design that parodies Havana's urban typology. However, promising designs are currently on the boards for an addition to the hotel by Spanish architect Carlos Langdon, with Havana-based consulting architects José Antonio Choy and Julia León Lacher designing the façades.

Because of the OHCH's proven ability to create an environment in which tourist activities coexist with the daily lives of local residents, its mandate has been extended to the restoration of buildings lining 14 blocks of Havana's famous Malecon, with financing and assistance coming from Spain. Moreover, there is talk of applying this mandate to other parts of the city, such as the La Rampa commercial district in the city's Vedado section.

## WEATHERING THE STORM

Learning from these two development models, Havana's first prior-

ity should be the recovery of the much-deteriorated existing city. While Havana has miraculously avoided the destructive forces of major hurricanes for many years, that could quickly change. Forty years of deferred maintenance have left the city vulnerable, and today Havana experiences two building collapses every three days. Far more important than any design issue is providing new roofs and weatherproofing. For now, investment should be concentrated not on new developments like Monte Barreto, but spread throughout the city—with special attention focused on sites in Central Havana and La Rampa that are appropriate for commercial activities—to create an economic ripple effect that would resonate throughout adjoining blocks.

However, even this will not be enough to stem the increasing rate of deterioration. The benefits of decentralization should be expanded, providing low-interest government loans to homeowners and residents throughout Havana, empowering them to perform much-needed renovations themselves under the guidance of their municipality's community architect.

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## THE AMERICANS ARE COMING

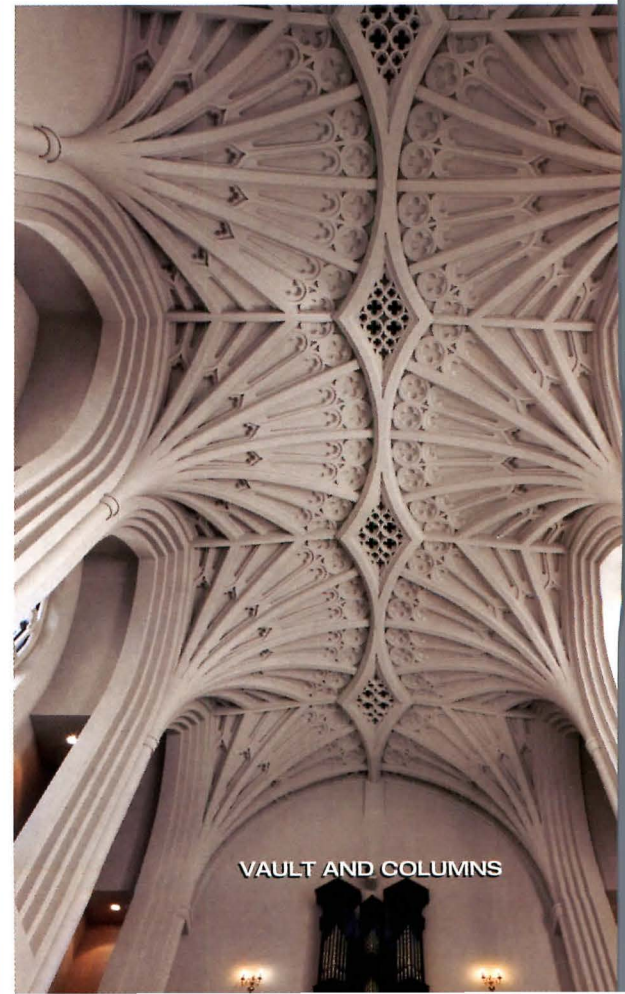
Despite the blockade, there is increasing concern for the architectural future of Havana in the United States. This past June, the Association of Collegiate Schools of Architecture held a conference in Havana titled "Architecture, Culture, and the Challenges of Globalization: Havana/La Habana." In recent years, many North American architecture schools have run design studios using the city as an urban design laboratory. Most recently, a studio focused on La Rampa was conducted at Harvard University by architect Lee Cott. The New York City-based philanthropic group, J.M. Kaplan Fund, is supporting Cuban and Cuban-American architects and planners working to protect outstanding twentieth-century architecture in Havana. The fund is now designing a bilingual website that will catalog almost all of the city's major modern structures.

Architects and urban designers Andrés Duany and Sonia R. Cháo, with the support of the Kaplan Fund, are conducting a study of Vedado and Miramar along the Rio Almendares. In another initiative by Duany and Cháo, seminal texts on architecture, urbanism, and preservation are being translated into Spanish and distributed to Cuban practitioners. A new San Francisco-based organization, Urbanists International, which offers urban design consulting services to cities in developing countries, is planning a conference and exhibit in Havana in June 2003 titled "Preserving the Integrity of Cities: Protecting a Post-U.S. Embargo Cuba." Also in Havana, in October 2003, the Congress for the New Urbanism will hold a symposium on appropriate development practices and models for the city.

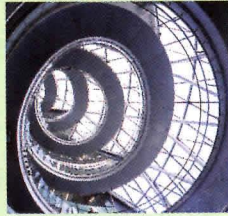
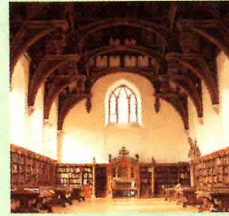
Despite its architectural deterioration,

Havana has an enviously sound urban structure. This should be reinforced, built upon, and used as a guide for the future. That does not mean that there is no place for contemporary architecture, despite many recent unsatisfactory experiences. The city should enter the world of contemporary design with the same vigor that it has entered the world of contemporary visual arts. However, it should enter profoundly mindful of its urban legacy. Given Havana's many lessons in good urbanism, there is no excuse for an impoverished urban landscape in the future of this "city so grand." ■

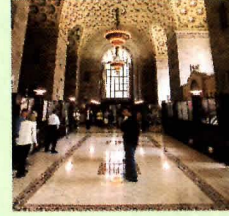
**JOHN A. LOOMIS IS AN ARCHITECT AND A VISITING ASSOCIATE PROFESSOR IN DESIGN AT STANFORD UNIVERSITY. HE IS THE AUTHOR OF *REVOLUTION OF FORMS: CUBA'S FORGOTTEN ART SCHOOLS* (PRINCETON ARCHITECTURAL PRESS, 1999).**



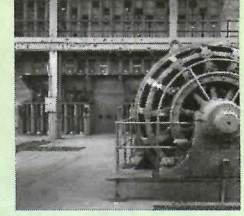
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NEW YORK CITY



# Come On In

With its inaugural "Open House," New York joins a list of international cities offering an intimate look at their architectural secrets.

BY EMILIE W. SOMMERHOFF

> **HERITAGE** Architect Scott Lauer happened to be living in London for five of the city's ten Open Houses, an annual weekend event since 1993 that celebrates London's architectural and built environment. "Leading up to London Open House, I noticed editorials and articles about design and architecture, prompted by the

event. There was suddenly a mainstream focus on architecture." For Lauer, it was inspiring to see these topics received by the public, not just the design community. In August 2001, hoping to cultivate this enthusiasm across the Atlantic, Lauer decided to initiate the event in another architecturally worthy city: his hometown of New York.

Open House events around the world provide access to an eclectic mix of sites, "each with a story to tell," says Open House New York's executive director Scott Lauer. Attendee numbers at these events have been impressive, suggesting a growing public interest in architecture, design, and the city's built environment.

While still in the planning stages, the inaugural Open House New York (OHNY) weekend will make accessible to the public normally inaccessible, yet architecturally noteworthy, sites around the city during the weekend of October 11. The roster of visitable venues will represent several architectural periods, a roundup of functions (from power plant to private residence), and a cross-section of socioeconomic and cultural diversity from the city's five boroughs. In line with the "Open House" philosophy of

"architecture for everyone," admittance to buildings will be free. Currently, Lauer—who heartily deserves his title as OHNY's full-time executive director—is shooting for 50 sites and "tens of thousands" of visits.

If London's event is any indication, Lauer is right to expect impressive numbers. Organizers of London Open House logged around 20,000 visits in 1993, doubling that number by 1994; last year, the city opened 550 sites and recorded 360,000 visits in one weekend. "That is why we say it is the biggest architectural



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exhibition in the country," says director Victoria Thornton. Equally as significant as the high attendee numbers is the number of cities hosting public celebrations of architecture. Glasgow's effort, Doors Open Days, which many consider to be the first such event, started in 1990; it has since escalated into a Scotland-wide activity that spans the month of September. Glasgow inspired Doors Open Toronto, a similar weekend celebration of Toronto's architecture that started in 2000, and by last year had grown to include 123 sites and almost 140,000 visits. Chicago's Great Places & Spaces was launched in 1999; Sydney, Australia, initiated Sydney Open in 1998. Even little Lowell, Massachusetts, hosted an architecture appreciation weekend last year.

These numbers suggest the Open House effort has ignited a movement with greater potential: The public is paying attention to issues the design profession has long struggled to popularize, and who knows where this interest could lead. Over 100,000 people, for example, have visited the exhibited plans for the World Trade Center site, according to the Lower Manhattan Development Corporation. "The stars are aligning," laughs Lauer.

### SOMETHING FOR EVERYONE

Like most nonprofits, Open House events survive on a shoestring, depending on financial sponsors and a troupe of committed building owners and volunteers. Tight finances, however, have hardly dampened the Open House movement; if anything, the sparse funding seems to feed the purity of intention—on the part of organizers, building owners, and visitors alike. "This is as grassroots as it gets in the best possible way," says Lauer.

Open House planners across the board—in most cases, architecture, design, or preservation enthusiasts—seem a little astonished, even giddy, about the groundswell of participating citizens and sister cities. But the reason for its success is simple: The event offers many things to many people.

For the design community, it is an opportunity to spread the gospel of architecture in a fun, straightforward way. "Why shouldn't everyone enjoy architecture, not just architects," asks Thornton. "And the best way to have a dialogue about architecture is to actually experience it." Karen Black, manager with Toronto's Culture Division, which runs Doors Open Toronto, saw the event as a chance to "get people, who haven't normally been interested in the city's history, involved."

For the public, the appeal of the Open House experience is multifold. The event is free. It also satisfies a primal curiosity: Who doesn't think about peeking through a neighbor's window? "The unfamiliar becomes welcoming," says Jane

# >practice



French, project manager for Doors Open Toronto, who also believes that "being educated about your city is an investment in the future of the city and for all of us that live in cities." Planners primarily market this weekend celebration to local residents, who recognize the event as an opportunity to rediscover their surroundings. "We are taking back the streets of London for Londoners," notes Thornton. "It isn't about tourism for us." Indeed, tourism and economic development seem to fall lower on the list of expectations, in part because organizers find impact in these areas hard to quantify.

The hoped-for outcome of Open House events, of course, is that the public will become advocates of the built environment. French points to the three A's that drive her organization: free access to heighten awareness and create advocacy. "If Doors Open shows people what exists and gets them excited, maybe they'll be more militant about not losing buildings that are worth saving and care more about what is going up," she says.

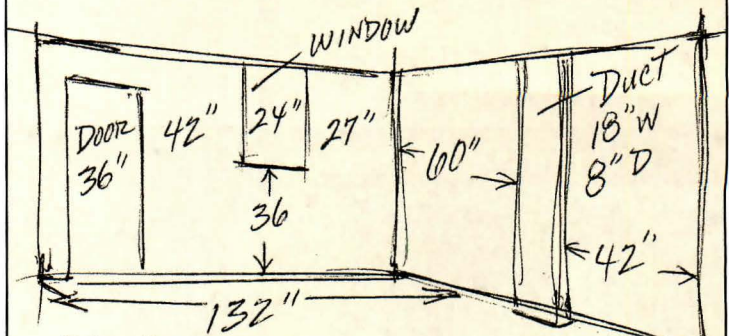
## NEW YORK ON PARADE

Lauer faces a daunting task over the next few months. The list of sites for OHNY has yet to be finalized, though many are under consideration, and funding remains a challenge. But these are only logistical glitches; the real material Lauer needs to build the event is interest, and evidence suggests this is in large supply.

"This event is tapping one of New York's extraordinary strengths—its creativity," notes Gifford Miller, New York City council speaker. A similar, if smaller, one-day effort hosted by the Downtown Alliance ran for four nonconsecutive years in the 1990s, with a solid response. However, the termination of this event—as well as the gradual demise of Designer's Saturday in the late 1990s—left New York without an outlet for an organized public celebration of architecture and design. Lauer hopes OHNY will begin to fill the void.

This should not be too hard, given the support that has been offered so far. People are contributing time (Lauer has over 80 active volunteers) and the buildings in which they live and work—not to mention a growing list of reasons for the value of OHNY. Konrad Milster, chief engineer at Pratt Institute's power plant in Brooklyn since 1965, is happy to open his impressive 1888 facility to the public. "Anything that boosts people's knowledge of what's behind the scenes is important, because people today take mechanical services for granted." While not architecturally motivated per se, his is as good a reason as any to go inside and take an appreciative look. ■

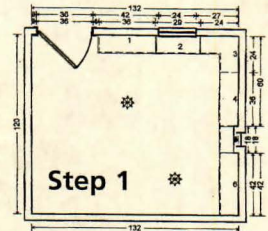
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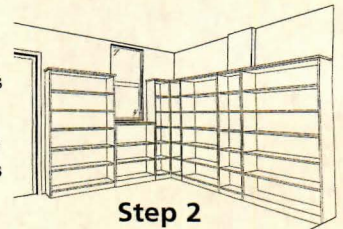
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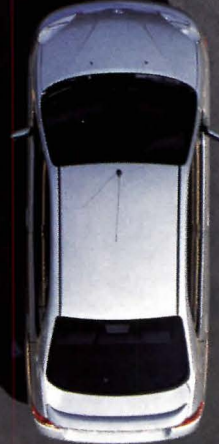
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# Report Card

As continuing education becomes the norm across the country, how is it scoring with its students? **BY BAY BROWN**



**> LICENSING** For registered architects, this year's vast continuing education curriculum includes an exhibition on reconstructing cities after disaster hits, a four-day trip to learn about marble in Italy, and the online course "Killer Molds and Other Visitations from the Future." The latter will get you the much sought after Health, Safety, and Welfare (HSW) credits.

It has been seven years since the AIA required continuing education for members. In 1995, only three state licensing boards made it a prerequisite for licensure. (Iowa was the first, in 1978.) Today, 26 states require continuing education and 10 more are soon to institute it. Why are architects being sent back to school en masse? And are they happy about it?

Ten years ago, nearly all other professions were requiring continuing education and with conflicting demands among states, according to Thom Lowther, director of continuing education for the AIA. The institute felt it was time architects join the other professions, but hoped they might be in a position to shape requirements so that there would be more uniformity and less confusion from state to state. They also wanted

to ensure that dues-paying AIA members would become more professionally marketable by virtue of having a "better education," adds Lowther.

If additional education is to be required of architects, the National Council of Architectural Registration Boards, (NCARB), the federation of state boards in the United States, seems a more likely watchdog organization. After all, NCARB is the entity that sets the standards for architectural registration including developing and requiring both the Architect Registration Examination and the Intern Development Program. Additionally, NCARB has coordinated cross-registration among states since 1920.

Instead, with no direct connection to architectural registration—and on top of collecting membership dues—the AIA charges "AIA Providers," companies and organizations whose educational standards are sanctioned by the institute, to offer courses in addition to those the AIA itself offers. But rather than having a streamlined system, each state has different requirements, which often differ from the AIA's. To many architects, these discrepancies and the actual main-

tenance of credits, or "learning units," cause considerable consternation.

Salvatore J. Poulton, a principal with Gileau-Poulton Architects & Associates, a small firm in Woodbridge, Virginia, says that he and his partner have considered hiring someone just to manage the firm's continuing education requirements. "As a practicing architect, all I can say is that continuing education happens every day on the job," says Poulton. "Like everything else nationally, this seems to benefit large firms that are doing everything in house. The system is too cumbersome, requiring time, hassle, and the costs for classes, seminars, and hotels." Architects particularly bridle at the financial outlay, since their average income is more modest than that of other professions with similar education requirements.

For many, the system seems to be less about professional enrichment and enhancing public health, safety, and welfare than it is about the creation of a new market for seminar-givers and the advertising of building systems, materials, and equipment. The experience of Fred Peccini of Peccini Architecture in Mt. Pleasant, South Carolina, is a case in point. After he obtained his architectural registration, he earned a master's degree in construction science and management, but his graduate study did not qualify under the AIA's parameters, so he could not derive any continuing education credit for it. "This program gave me the tools to be successful in my architectural practice and made me a better architect," says Peccini. "However, if I sit through an hour-long presentation on paint, for example, I receive one learning unit for it."

## STATES' RIGHTS

California is a critical holdout among the states. In 2001, the California Architects Board conducted a comprehensive proficiency survey of architects, building officials, contractors, clients, developers, engineers, landscape architects, and forensic, insurance, and legal professionals through focus groups and other research. It determined that the data simply was not there to require continuing education for licensure. Further, no constituency has asked the board to require continuing education. "If other states were to show a marked increase in the quality of the profession, we would reconsider," says the board's executive officer, Douglas McCauley.

One New York City architect, who works for a

large firm and prefers not to be named, agrees that there is a fundamental problem of quality and consistency. He has taken self-study courses offered by NCARB, which have rigorous exam components but do not qualify for HSW credits. In contrast, his firm invites manufacturers and distributors in to give lunch presentations that often do qualify. For this architect, there is nothing rigorous about the catered lunches, which are often tarted-up marketing presentations. He believes his peers will keep abreast of change and pursue continuing education on their own if they want to stay competitive.

## ORDERED CHAOS

In New York State, which has the highest concentration of registered architects in the country with 16,000, administrative confusion has left the profession particularly flustered of late. According to William Martin, executive secretary of the Office of the State Board for Architecture, New York

decided to make continuing education a requirement of licensure because the national AIA was requiring it of its members, and the New York State AIA lobbied for the legislation, which became effective in 2000. The argument was that it would "provide a degree of assurance that architects' training is current for the protection of the health, safety, and welfare of the public," Martin says, although he offers no particular data indicating why there would necessarily be such cause and effect.

The state board requires 36 credits every three years; 24 of them must be HSW credits, but the AIA and the state don't always agree on which courses should count for the 12 non-HSW credits. The AIA considers business seminars eligible for credit, but the state does not. "AIA-approved courses are very diverse; some may be about running a business, which serves a purpose that is very different from our goal," Martin explains, citing examples of courses on marketing or

designing a benefits package. In order to insure an AIA-approved course will earn credit in New York State, one has to propose such a course and wait for a committee to determine if it is valid. Incidents of practitioners having their credits rejected by the state led the AIA's Lowther to recommend late last year that New York architects only take HSW courses.

Having the AIA be the de facto pacesetter for continuing education, while it simultaneously charges both credit providers for the opportunity to offer programs and architects for taking the institute's own courses, presents more than just an apparent conflict. As the entity endowed with setting the standards for registration and the federation to which state boards belong, NCARB might be better suited for establishing requirements. For a profession that prides itself on control and precision, when it comes to continuing education, there's plenty of administrative inconsistency for architects to gripe about. ■

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# Let There Be Light

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God may have made lighting a top priority when creating the world in the Book of Genesis, but that isn't always the case when it comes to human construction budgets. "With a lot of projects, it appears that lighting is an afterthought, not getting the value it should get, and I come from an architecture [background]," says Veit Mueller, president of Highland, New York-based **Selux Corporation**, an exterior/interior lighting fixture manufacturer known for its well-designed optical systems. "I always thought it was extremely important because you can change the use of any space by lighting it properly—or not."

Electrical systems come in at about five to 10 percent of a construction budget, say experts, with five to 10 percent of that being lighting. Despite this tiny fraction, it's often the last phase in the construction cycle and the first to get slashed in any cutbacks. "I think sometimes architects' hands are tied," says Paige Ebeyer, national sales director for **Bruck Lighting Systems**, an innovator of low voltage

track and cable systems based in Costa Mesa, California. "I ask why lighting is always the thing that gets cut when it can play such an important role in the overall aesthetic, and they don't know why. We always sound like we're on a soapbox when we say lighting can make or break a project, but you can use inexpensive materials elsewhere and make it look so much more with proper lighting." What is easy to understand are the challenges architects face in reconciling the science behind illumination with their natural inclination toward appealing aesthetics, all the while meeting the demands of changing technologies, stringent energy codes, and environmental concerns.

**on the cutting edge** Among those new technologies are developments in lamps, and with them come opportunities for fixture manufacturers to adapt these components to new designs. The most anticipated lamp technology is the light-emitting diode or LED. Expectations run high because of its key features: energy efficiency and long life. "Other

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- > Architectural Area Lighting
- > The Brass Light Gallery

lamps depend on heating something to produce light. With LEDs, you pass current through it and directly convert electricity to light, so it's a potentially far more efficient process," says Chips Chipalkatti, director of North America lamp modules for **Osram Opto Semiconductors**, a division of **Osram Sylvania**, the world's second largest lamp and materials manufacturer, headquartered in Danvers, Massachusetts.

Still in its relative infancy and being tinkered with by many companies, LED technology is famously showcased at the Jefferson Memorial in Washington, D.C., which underwent a relamping a couple of years ago. LED strips were used along the ledge to subtly highlight Jefferson's words. The area had been too high to be properly illuminated with existing light sources before the advent of LEDs. "This lighting gives the marble a luminous glow and that fits in with the low-key approach of the Park Service," says Chipalkatti.

LEDs typically produce colored light, a feature that will eventually find its way into commercial advertising and signage applications as well as ambient lighting, according to Chipalkatti. Some fixture manufacturers report an increasing interest in the use of color outdoors for both commercial and residential projects. Ronald Naus, vice president of sales and marketing for Madera, California's **B-K Lighting**, an outdoor architectural and landscape fixture manufacturer, attributes the trend to theatrical designers turned commercial lighting designers. "They love color, but it's hard to do outdoors. You need a fixture that can hold up being kicked, being on 10 to 12 hours a night, under rain, snow, dirt," says Naus. "Color is an emerging science, but we have a way to go before we can do it well."

Kathleen Romfoe, product manager at **Phoenix Products Company** in Milwaukee, Wisconsin, also notes this color trend whether for temporary or permanent displays. The equipment used in theatrical productions and theme parks is being adapted for other uses, she says. "Companies like ours are working with others to make this work."

## Starry Skies

With the help of La Mirada, California's **Architectural Area Lighting**, the Philadelphia Eagles new football stadium will be environmentally friendly on at least one count: dark skies. The movement known as dark skies aims to reduce the amount of light spillover and glare that pollutes the night skies. "It's a result of a number of things," says **B-K Lighting's** Ronald Naus. "High-density urban areas, self-illuminated signs, inefficient fixtures, bad design, and poor placement of those fixtures." Some of it is unavoidable. We need light at night for safety and security reasons. But minimizing it has been the goal of many manufacturers who are building better quality fixtures that control the light using optical systems, and designers who understand how to place them. One advantage of the new LED technology is that its light source is a directional beam, unlike other sources, which can throw light in every direction. "This directional beam," says **Osram Sylvania's** Chipalkatti, "allows you to aim light in the direction you want it, minimizing stray light."

Architectural Area Lighting clinched the Eagles stadium job with their Flex full cutoff fixture, also featured on the **International Dark-Sky Association** Web site ([www.darksky.org](http://www.darksky.org)). According to marketing manager April Ruedaflores, the fixture's design appealed to the stadium decision makers as well. At the **Selux Corporation**, combating light pollution and using alternate energy sources combine for a new solar-powered outdoor fixture. "It's extremely energy efficient," says Selux's Veit Mueller. "And it's designed to be a full cutoff fixture to satisfy dark skies."

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**lamp trends** **Sentry Electric** in Freeport, New York, a producer of decorative outdoor lighting that has graced the campuses of Yale, Fordham, and Berkeley, has heeded the calls of clients asking about induction lamps, another recent lamp technology. "Customers have come to us asking about it," says Shepard Kay, vice president of engineering at Sentry. "It's a long-life lamp, 100,000 hours, instant on, producing white light. We've done some projects and installations with it. We've designed it to work within the majority of our product line."

Ceramic metal halide lamps utilizing ceramic arc tube technology have also become more commonplace. In addition to having a longer life than quartz metal halide, these lamps offer a compact size and better color rendering that is particularly advantageous for retailers. "In a metal halide lamp, the light tends to be blue; ceramic metal halide is a softer, truer light. It's almost becoming the standard on many projects and that's moved to the outdoor arena," says **Phoenix's** Romfoe. "It's preferred because it accents exterior finishes better." Phoenix has lit the Los Angeles and San Francisco City Halls, the latter with ceramic metal halide lamps.

**fluorescent lights: no joke anymore** Fluorescent lighting has attained workhorse status in the lighting marketplace, especially in the commercial and institutional sector. Some inroads have been made in the residential arena, despite the lingering negative reputation fluorescents have in the minds of some. "People hated it because they looked sickly," says Jon Steele, marketing manager for Los Angeles-based **Prudential Lighting**, which specializes in architectural fluorescent lighting. "You'd buy a sweater you thought was purple; go outside and it was red." The older generation of unflattering large tube diameter fluorescent lamps has given way to light sources that render objects in a more naturalistic way and avoid other familiar problems. Fluorescents have distinct advantages, says Paul Duane, vice president of new products and marketing at Hanson, Massachusetts-based **Litecontrol**, a designer of architectural fluorescent lighting systems. "It's an energy leader. There's no other system that can compete with it on a watts per square foot basis, on a quality basis, and a color basis," he says. "And with different kinds of designs and ballast technology today, you really don't have starting problems or flickering, buzzing, or limitations on controls." Word is getting around, says Prudential's Steele. "Many lighting designers are doing great jobs producing wonderfully lit spaces using fluorescents,

**Light Show**

Sometimes the demands of lighting a particular space require technological knowledge outside the normal design purview. Take university and college athletic facilities, for instance. According to Geoffrey Marlow, vice president of sales and marketing for the **SPI Lighting Group** in Mequon, Wisconsin, digital cinematography is driving the need for higher foot-candles or the amount of light in a space. "So if you are the University of Michigan and want to be considered by ESPN for televised games, you'd better have the requisite lighting or they'll go elsewhere," says Marlow. SPI recently outfitted a Georgia Tech auditorium with an indirect lighting system that increased foot-candle measurements.





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### Lighting Considerations

- Look long term, beyond the installed cost of a system.
- Gauge the quality of a fixture.
- Evaluate the performance of the light source.

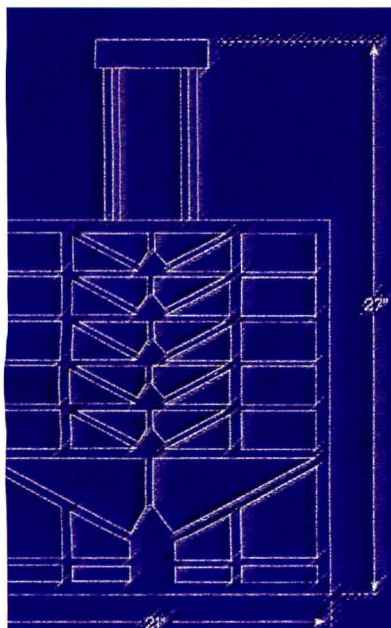
interweaving different lamp sources for the energy we require with the look we desire." In addition to interior applications, **Selux's** Veit Mueller sees compact fluorescent lamps coming to outdoor fixtures in this country, as is already the case in Europe.

Compact fluorescent lamps like the T5 have been one of the fastest growing light sources. Its smaller profile has spurred design possibilities and new space applications. "The scale of the fixtures can be reduced," says Dennis E.C. McKee, director of special projects and corporate affairs for **Bartco Lighting** in Huntington Beach, California. "Architectural details or construction around the fixture can be of a lighter scale." The development of new ballasts has added to the T5's versatility in the way of emergency lighting applications, thanks to battery backup ballasts, and in the important area of light management. Says McKee: "We're seeing

accelerating growth in daylight harvesting, where fixtures used in conjunction with natural light and the use of photo sensors and computer software can maintain light levels throughout the course of the day depending on sunlight. The fluorescent fixtures during the day can be dimmed quite low and if the skies become overcast or the sun goes down, the light level can be increased."

This dimming capability is a natural fit for restaurants, hotel public spaces, and meeting rooms. It has also piqued the interest of residential owners concerned about energy costs. Steve Koch, director of account development at Santa Ana, California-based **Birchwood Lighting**, creator of the award-winning "Sydney," a curvy cove lighting system, is also seeing the migration of fluorescent lighting systems to high-end residences, particularly with their new "Ashley" product line of shadow-free cove lighting. Residences are an interesting subject, he says: "There's lots of leeway because of the ways designers can create a specific mood the homeowner is looking for depending on environment."

**marrying art and technology** Balancing technological requirements and client mandates for innovative fixtures and special effects have some manufacturers rising to the challenge. **Unilight**, a Montreal-based company that produces decorative lighting for the hospitality industry, recently worked on the Mandarin Oriental hotel due to open later this year at the new AOL Time Warner Centre in New York. Their assignment: making ballroom fixtures that combined crystal and fiber optics. "That was fairly new for us," says Michael Holy, Unilight's president. "We've worked with fiber optics in the past, but it's been more the exception than the norm. Here the challenge was finding a fastener to fasten the fiber optics to the tip of each piece of crystal to give it the desired effect, a subtle light sparkle. Our engineering department had to do some research and development to accomplish that."



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Page 54, from left to right:

1. Children's Museum of Atlanta/Bruck Lighting Systems
2. Sydney Lighting System/Birchwood Lighting
3. Brass Light Gallery
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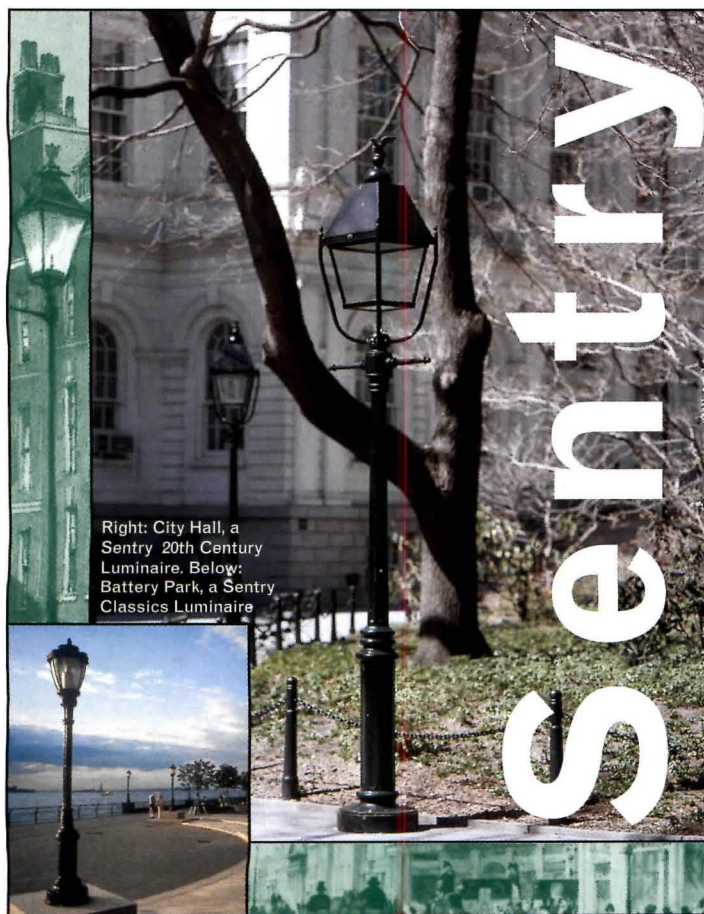
Thinking creatively also helped when the company handled much of the decorative lighting at the Mohegan Sun casino and hotel in Uncasville, Connecticut. The client had in mind large fixtures made of Murano glass, but the design of the fixture and budget didn't permit the actual use of the Italian glass. Unilight improvised, devising an alternative that cost less and mimicked the effect of the glass. The result was a unique light diffuser. "We are always looking for new materials and finishes," says Holy. "I've found designers are looking for different metal finishes, whether painted or plated. Polished brass, pewter, or brushed aluminum finishes have been popular for a couple of years now."

In Milwaukee, Wisconsin, Stephen Kaniewski and his staff at the **Brass Light Gallery** are enthusiastically

bringing a decorative architectural element to performance lighting in commercial and residential applications using compact fluorescents or metal halide lamps wrapped in art glass shades that are rooted in historical design. "Architects mention how difficult it is to find decorative, stylistic energy efficient lighting, and that's what we do," says Kaniewski, the Brass Light Gallery's founder and president. His aesthetics have been embraced in unlikely markets such as assisted living facilities and veterans' hospitals. "They don't want to buy Williamsburg sconces with incandescent bulbs and hurricane shades. That's been done forever," he says. "They want a warm, decorative look with energy value. Developers and owners are realizing that's needed in these places."

**By Karen Gines**

## A SPECIAL SECTION



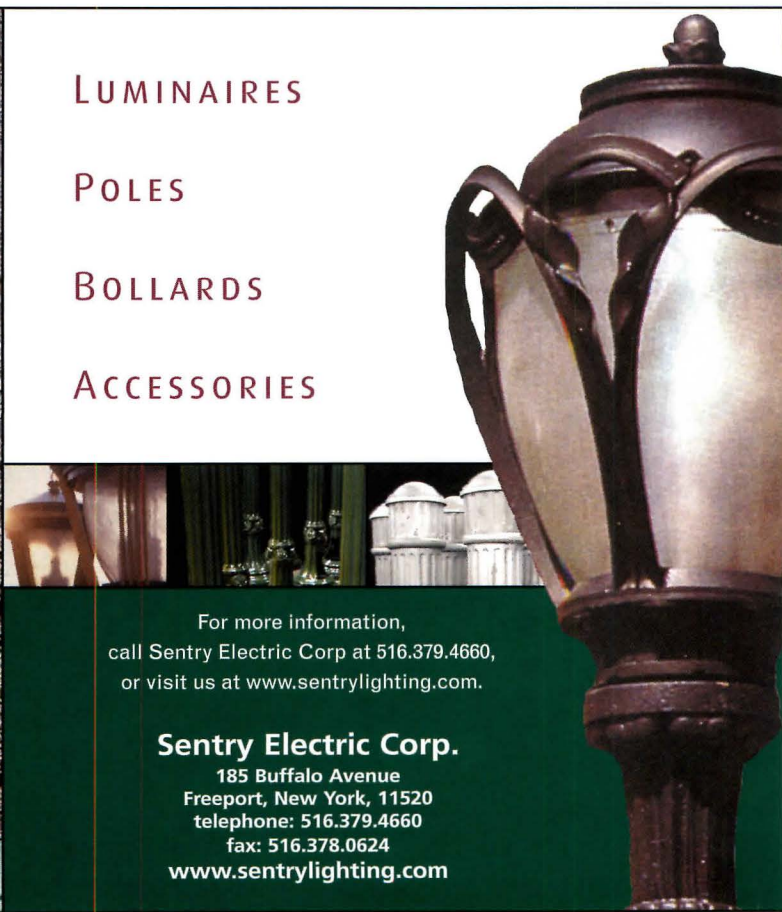
Right: City Hall, a Sentry 20th Century Luminaire. Below: Battery Park, a Sentry Classics Luminaire

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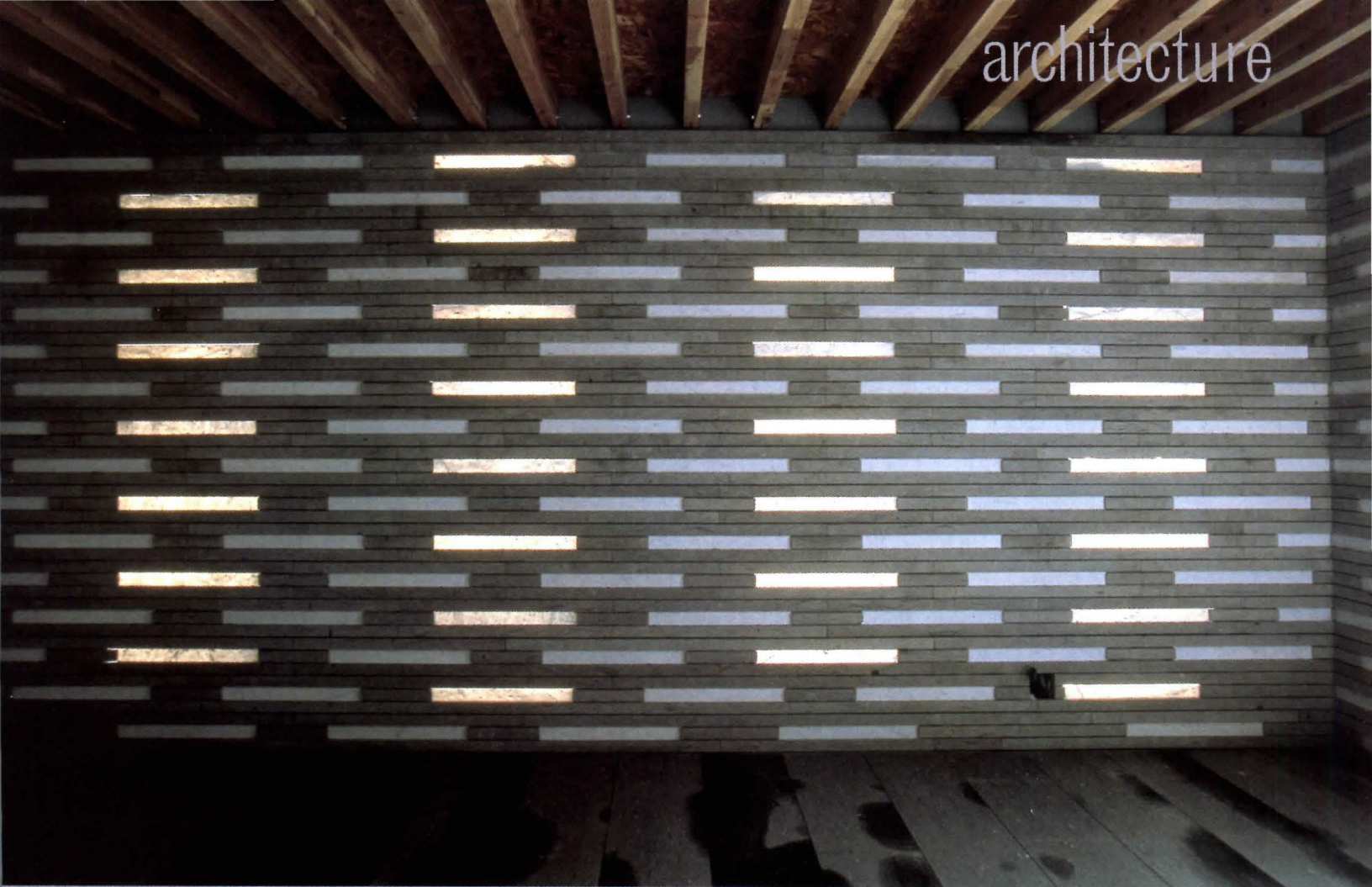


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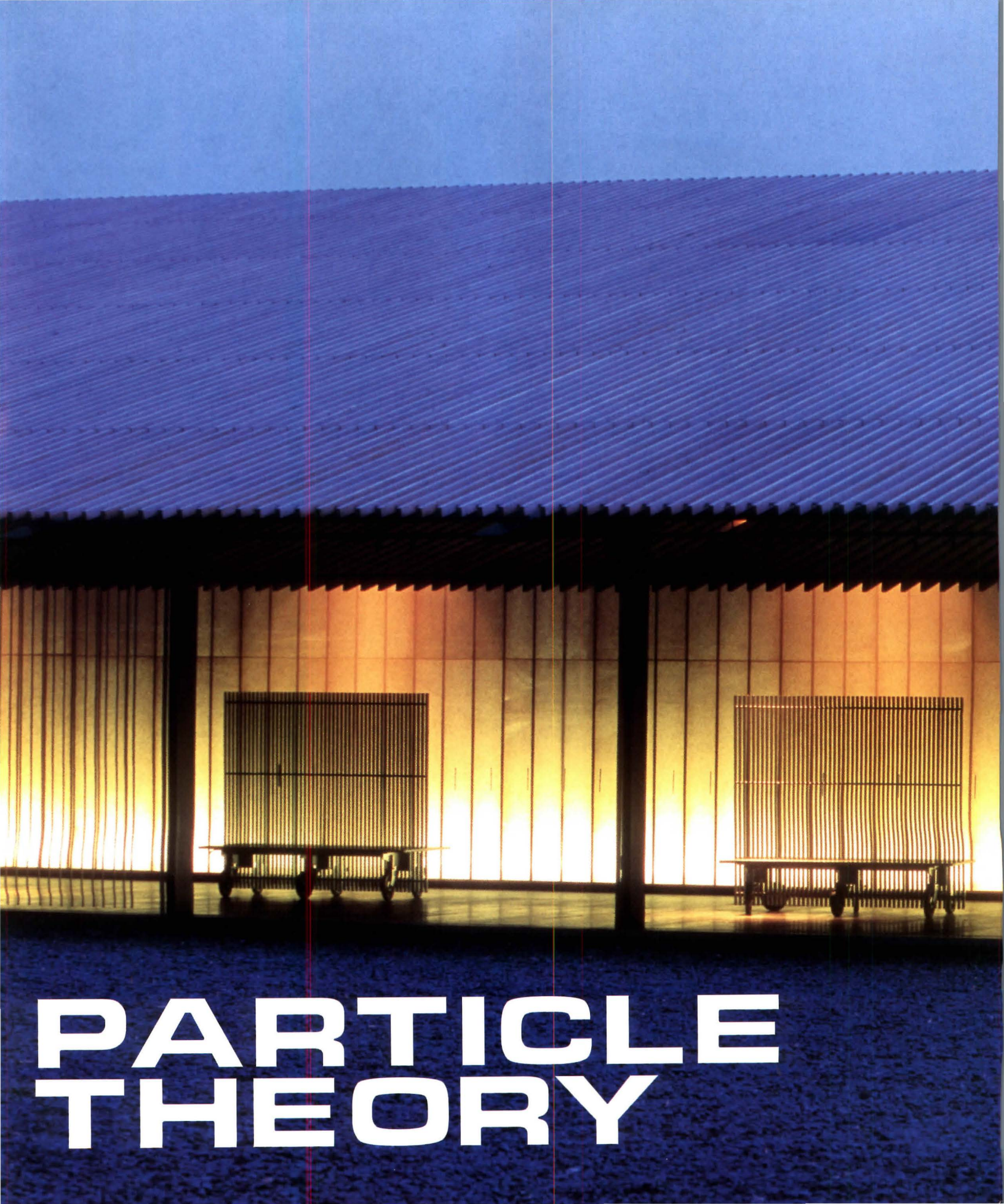
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# THE LOOK OF LIGHT

At the Stone Museum in Nasu, Japan, a series of interconnected structures—some old, others new—appear to float above a large reflecting pool. The heaviness of stone construction evaporates in the hands of architect Kengo Kuma, whose efforts to make architecture disappear are finding application in rural Japanese towns. At the museum (page 70), which was built for a stone supplier, Kuma renders walls porous by stacking slats of gray stone and white marble, leaving a geometric pattern of openings between layers. This watery precinct becomes a field of louvered stone planes that emit small horizontal bands of sun deep inside the galleries and ancillary spaces of the museum.

Employing a range of materials, the architect crafts luminous spaces that change character, even dematerialize, depending on the angle of view. Layers of cedar slats, handmade paper, dark stone, and silvery aluminum produce an ethereal glow at the Hiroshige Museum (page 66), for example, while straw adhered to aluminum-mesh panels shimmers at the Nasu Museum (page 72). By leveraging the physical properties of building materials, Kuma finds architectural expression through his own interpretation of particle physics.



# PARTICLE THEORY



## Kengo Kuma's mastery of natural materials dematerializes three Japanese museums.

By Michael Webb

A visiting scholar at New York City's Columbia University in the mid-1980s, Kengo Kuma returned home in 1987 to establish his first office in Tokyo—just before Japan's bubble economy started to collapse. Throughout the 1980s, the dizzying ascent of land prices fueled a speculative frenzy that found expression in architectural extravaganzas of vast size or strained ingenuity. Show was valued above substance. A venerable Kyoto textile company invited Shin Takamatsu to create an eye-catching headquarters building, and when he asked for the program, they told him to focus on the architecture and let them worry about how they would use it. Kuma himself jumped on the merry-go-round and designed the jaw-dropping M2 building, a giant Corinthian column emerging from a postmodern collage of classical fragments, beside a Tokyo freeway. But, over the past decade, this boyish-looking 48 year old has disciplined his architecture in order to carry his practice through a seemingly endless recession.

Big-city commissions have disappeared and work must now be sought in remote country towns. The government continues to subsidize rural projects, but architects need to win local support to achieve credibility. Three recently completed museums in the Tochigi prefecture, about 90 miles north of the capital, show how well Kuma has responded to this challenge, creating on a modest budget institutions that are rigorous, poetic, and precisely matched to need. "All my buildings are experiments," he explains. "I try to listen as carefully as possible to the site and consider how best to respond to it. Consistency is not so important."

But one theme that is consistent is Kuma's skill at heightening our awareness of materials, while dematerializing his structures. In projects as diverse as a wooden Noh stage, a glass house, a steel and concrete parking structure, and the museums, he strives to give his buildings the qualities of a rainbow, composed of shimmering particles, more illusion than object, that change as you look at them. "Without particlizing materials, we cannot appreciate them as materials, nor feel their vibrancy," he once wrote. "The central focus of my designs is the selection of particles and the determination of their size and details." Like so much contemporary Japanese architecture, his work employs the latest technologies to reinterpret traditional aesthetic concerns: the interplay of light and shadow, openness and mass, nature and the manmade. Often, however, he uses the simplest of means to achieve striking effects.

For an urban architect to master the simplicity and directness of rural buildings—using contemporary materials and techniques—is a remarkable achievement in itself. But Kuma has gone further, infusing plain shelters with the spirit of place, appropriating historic buildings and the landscape and bringing the artifacts back to life by fusing old with new. He mingles the ethereal and the earthy, the enduring and the evanescent, to thrilling effect.

There is an easy assurance to Kuma's varied buildings, the sense that he is in control of all the elements. Though he may never realize such visionary projects as his subterranean art museum (in which visitors ride an "art vehicle" with computer-controlled seats, "scanning" the art works at a desired speed), it is important that he still dares to dream even as he continues to add to his portfolio of refined and inventive built work. ■

**MICHAEL WEBB IS THE AUTHOR OF 21 BOOKS, MOST ON ARCHITECTURE AND DESIGN, AND WRITES ON THOSE SUBJECTS FOR THE *NEW YORK TIMES*, *DOMUS*, *ARCHITECTURAL REVIEW*, AND OTHER PUBLICATIONS.**

## MUSEUM OF ANDO HIROSHIGE, BATOH, JAPAN

Ando Hiroshige (1797-1858) was one of the great masters of the Japanese wood-block print, and there is an affinity between the artist's sharp, expressive line and Kuma's precise, meticulously detailed complex. The Hiroshige Museum's restrained palette of wood, paper, dark stone, and silvery aluminum complements the colors of the prints, which glow as brightly as when they were new. Kuma has designed a steel-framed shed of cedar slats, treated to resist fire and decay, which is layered and dematerialized by intersecting pierced screens. "The design concept was to subdivide the architecture as much as possible and treat it as a cloud of particles floating in the natural landscape," he explains.

The shallow pitched roof flows seamlessly out of the walls, which are solid or shaded by a projecting canopy on three sides and fully glazed to the north. A broad public walkway cuts through one end of the building, dividing the gift shop and café from the rest of the museum and providing access to an adjacent bamboo grove. The simplicity and openness of the shed provide a symbol of shelter, and spacious concourses serve as a protective shield for the two main galleries in which the light-sensitive prints are shown. This layering of space around an inner shrine is characteristic of Japanese temples.

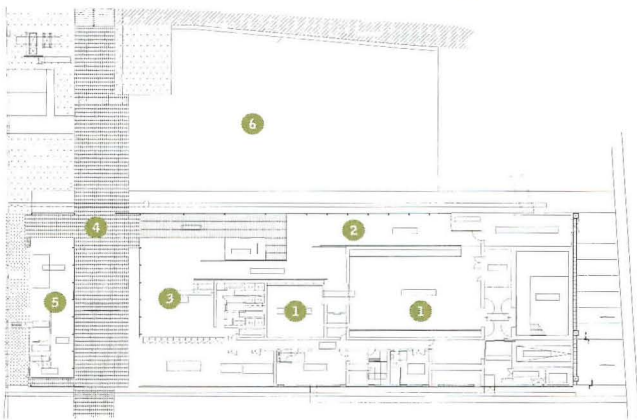
Kuma worked closely with a local woodcutter, but the product of their collaboration is closer to the buildings of Swiss architect Peter Zumthor in its sharp-edged geometries than to traditional Japanese architecture. Within the concourses, wood grids dissolve into overlapping reflections and patterns, and the inner walls and posts are wrapped in *washi* (handmade Japanese paper) to give them a soft texture. In addition, the architect designed wheeled, double-sided benches with backs of aluminum rods—which are also suspended over the windows.

## MUSEUM OF ANDO HIROSHIGE, BATOH, TOCHIGI, JAPAN

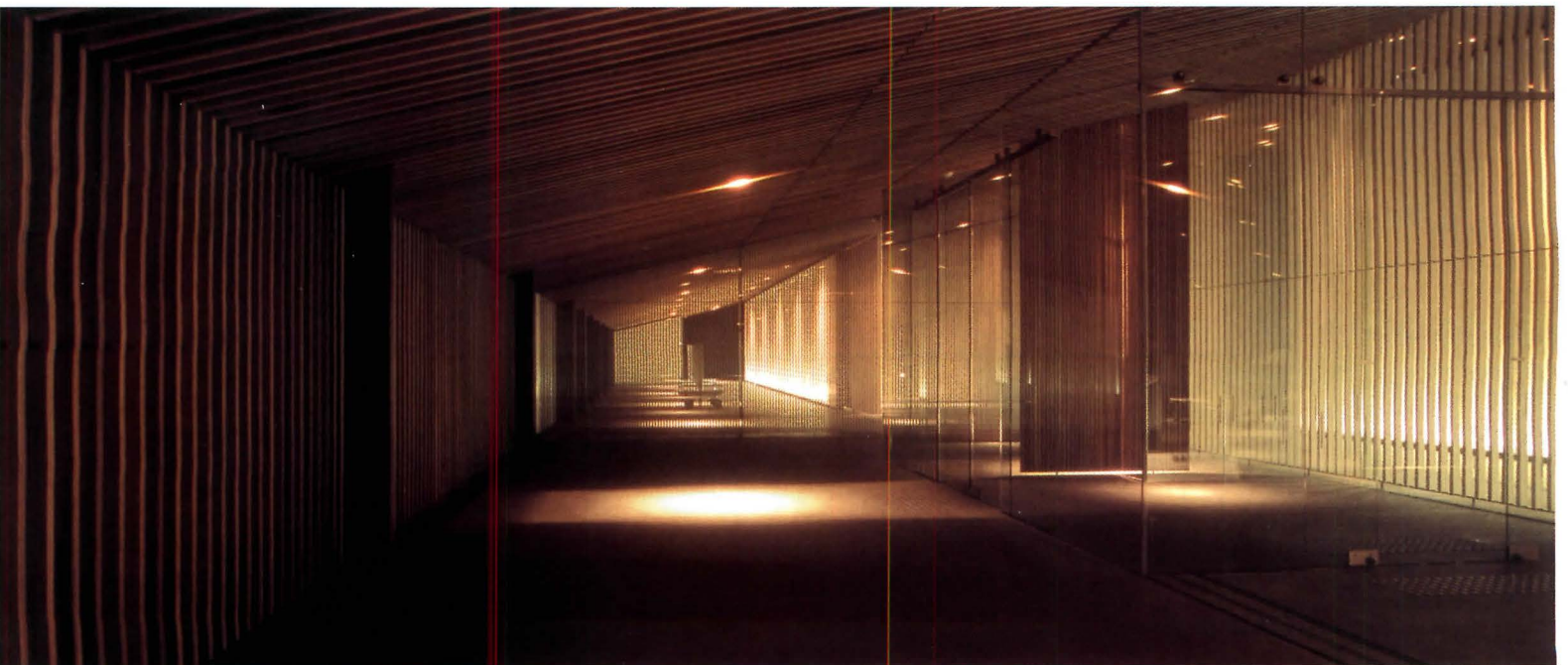
**CLIENT:** Tochigi prefecture, Town Planning Commission **ARCHITECT:** Kengo Kuma & Associates—Kengo Kuma, Shoji Oshio, Susumu Yasukouchi, Toshio Yada, Yoshinori Sakano, Keita Goto, Ryusuke Fujieda (project team) **ASSOCIATE ARCHITECT:** Ando Architecture Design Office **ENGINEERS:** Aoki Structural Engineers (structural); P.T. Morimura & Associates (mechanical) **LIGHTING DESIGNER:** Kilt Planning Office, Matsushita Electric Works **GENERAL CONTRACTOR:** Obayashi **AREA:** 7,200 square feet

PHOTOGRAPHS BY MITSUMASA FUJITSUKA

- 1 exhibition space
- 2 open gallery
- 3 entrance hall
- 4 open-air walkway
- 5 café and shop
- 6 courtyard



Floor plan 40' / 12m





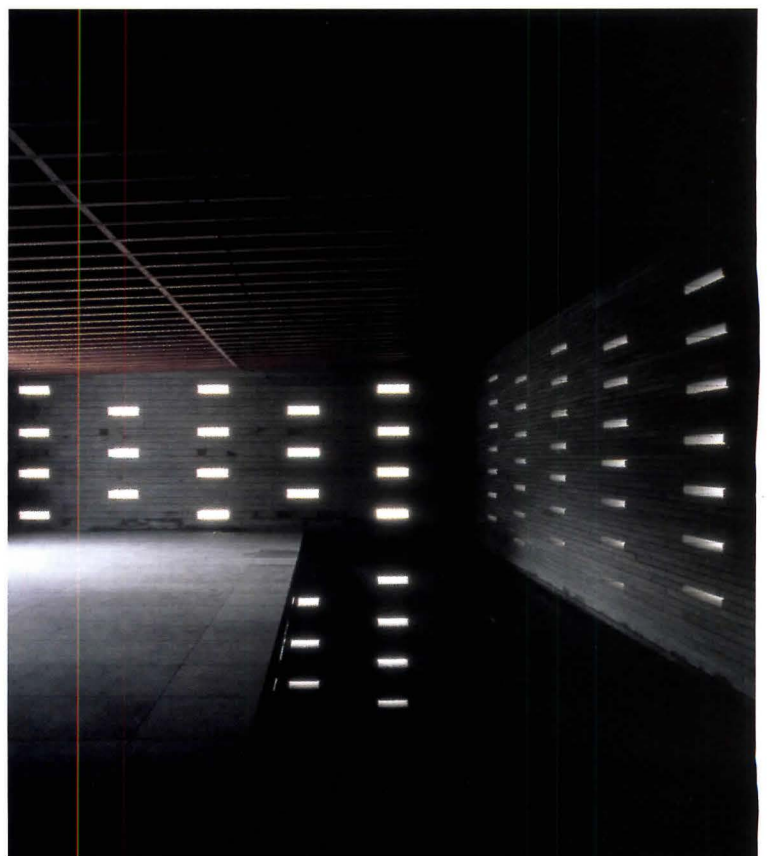
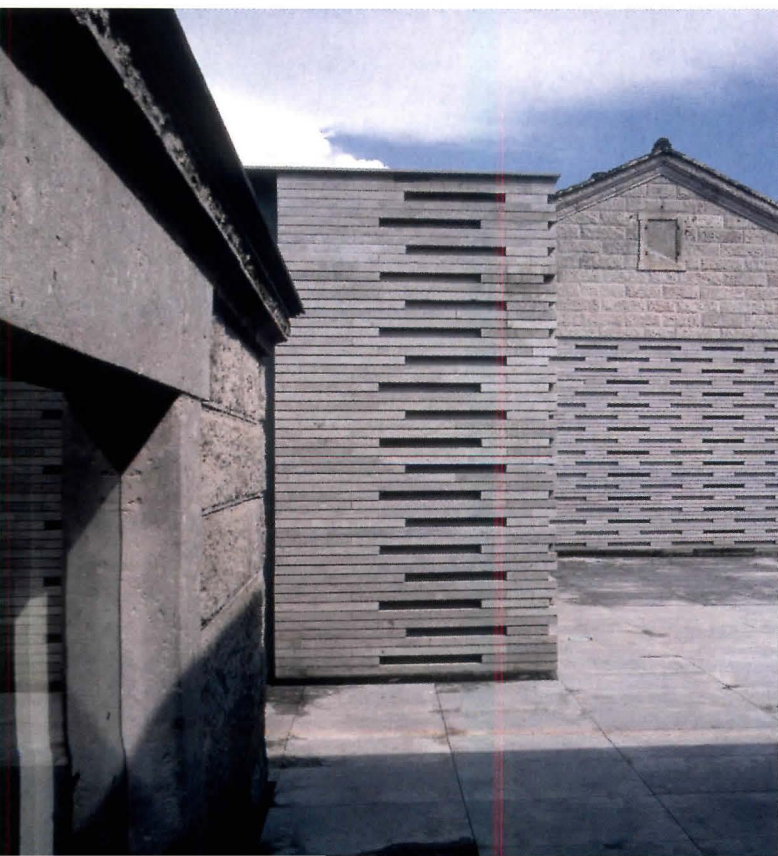


Kuma designed a simple steel-framed shed using understated, natural materials—wood, paper, stone, and aluminum—for a museum dedicated to the nineteenth-century Japanese artist Ando Hiroshige's woodblock prints. The Japanese cedar louvers on the roof and walls (preceding pages and above) were fireproofed using a recently developed infrared-burning method, which also helped preserve the natural character of the wood. Inside the museum, cedar latticework and washi-wrapped walls interact with light to create multiple levels of texture and pattern (facing page). Even the café (below), which is separated from the exhibition space by an open-air walkway, participates in the material layering.





Several new buildings and a pair of renovated 1930s rice warehouses organized around a large reflecting pool (above) form the Stone Museum commissioned by the Shirai Stone Company. Kuma inserted frames of yamizosugi wood to reinforce the stone walls of the older structures. The new buildings, which use ashino stone from a nearby quarry, become light and translucent by alternating layers of stone with very thin slabs of white marble (below, left and right).



## STONE MUSEUM, NASU, JAPAN

Nobuo Shirai, president of the Shirai Sekizai stone-cutting company, wanted more than a showroom for his products, so he entrusted Kuma with creating a complex that celebrates the process of excavating and finishing stone and the uses to which it can be put. The museum is located on the main street of a small provincial town, very close to the firm's quarry, and is built of ashino stone, which Frank Lloyd Wright used for his Imperial Hotel in Tokyo. Kuma announced his intention of turning "stone, a massive material, into a cloud-like substance by transforming it into particles." Though he has achieved something of this goal in the interplay of stone and reflecting-pool water, and in the filtering of light into several of the interiors, the overall impression is quite different: a plaza as austere and surreal as those imagined by the painter Giorgio de Chirico.

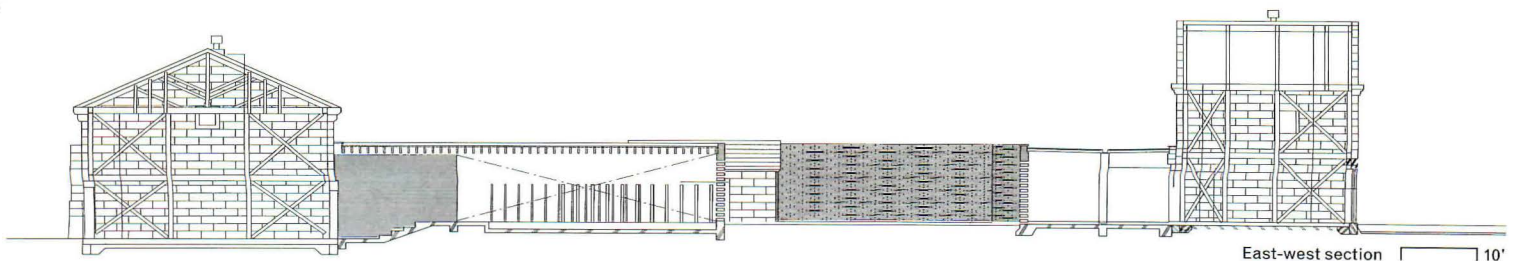
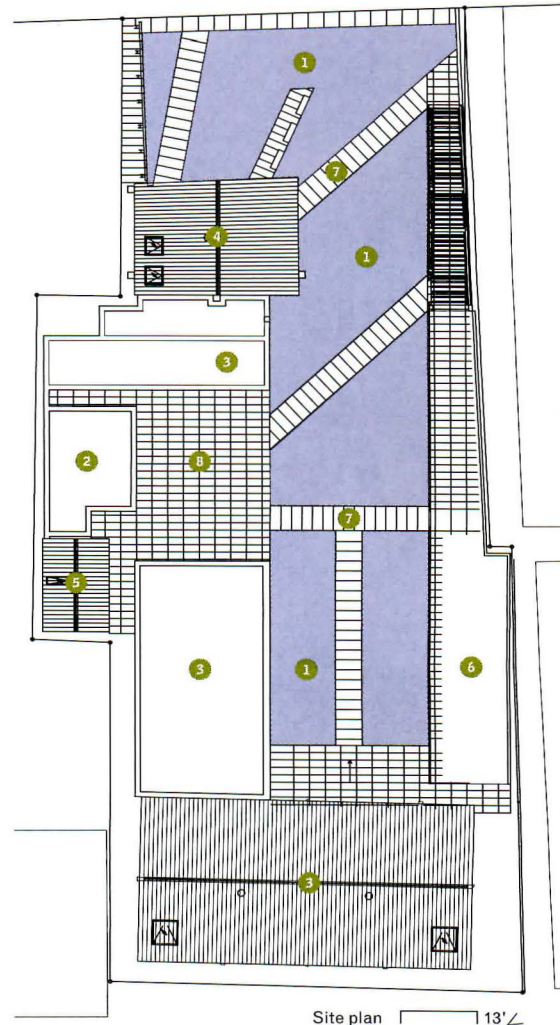
Kuma also remodeled two stone-built *kura* (rice warehouses) that remained on the site, which once belonged to a farm, and created a linked sequence of old and new buildings around a shallow pool crisscrossed by walkways. The smaller of the two *kura* serves as an entrance pavilion that contains the now-requisite shop and café, with a terrace jutting at an angle into the moat. Exhibits on local geology and the ways stone is cut and employed are housed in a new pavilion that is illuminated by sunlight filtered through horizontal stone louvers. Beyond is the larger *kura*, reinforced from within by a massive frame of yamizosugi wood as sculptural in its form as any of the artwork displayed inside. A second gallery, this *kura* receives natural light from slots in the masonry filled with thin, translucent sections of white Italian marble. Completing the circuit is a freestanding tea-ceremony room with slender columns of different colored stone that frames a raised tatami area and walls covered with the same washi used in the Hiroshige Museum.

## STONE MUSEUM, NASU, TOCHIGI, JAPAN

**CLIENT:** Shirai Stone Company **ARCHITECT:** Kengo Kuma & Associates—Kengo Kuma, Keita Goto **ENGINEERS:** K. Nakata & Associates (structural); M.I. Consultant (mechanical) **LIGHTING DESIGNER:** Koizumi Electrics **STONE SUPPLIER:** Shirai Stone Company **GENERAL CONTRACTOR/SUPPLIER:** Ishihara Construction **AREA:** 1,750 square feet

**PHOTOGRAPHS BY MITSUMASA FUJITSUKA**

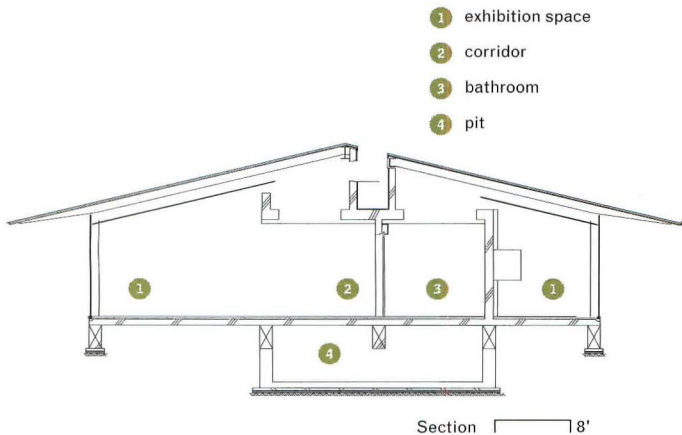
- 1 reflecting pool
- 2 exhibition space
- 3 gallery
- 4 entrance hall
- 5 tea-ceremony room
- 6 library
- 7 bridge
- 8 plaza



## NASU HISTORY MUSEUM, NASU, JAPAN

A short uphill walk from the Stone Museum at the edge of town is a municipal project that was a natural outcome of the Shirai commission. The site is idyllic, especially in the spring when the hillside is a mass of flowering cherry trees. One enters the museum through a reconstruction of a traditional fortified gate past a massive white plaster kura. The new structure might easily have become a historical pastiche; instead, Kuma has taken his cues from farm buildings in this still-rural region, designing a long and low steel-framed shed that is even more reticent and ground-hugging than the Hiroshige Museum. Ornamental logs are attached to a section of the shallow-pitched roof in a direct reference to the local vernacular.

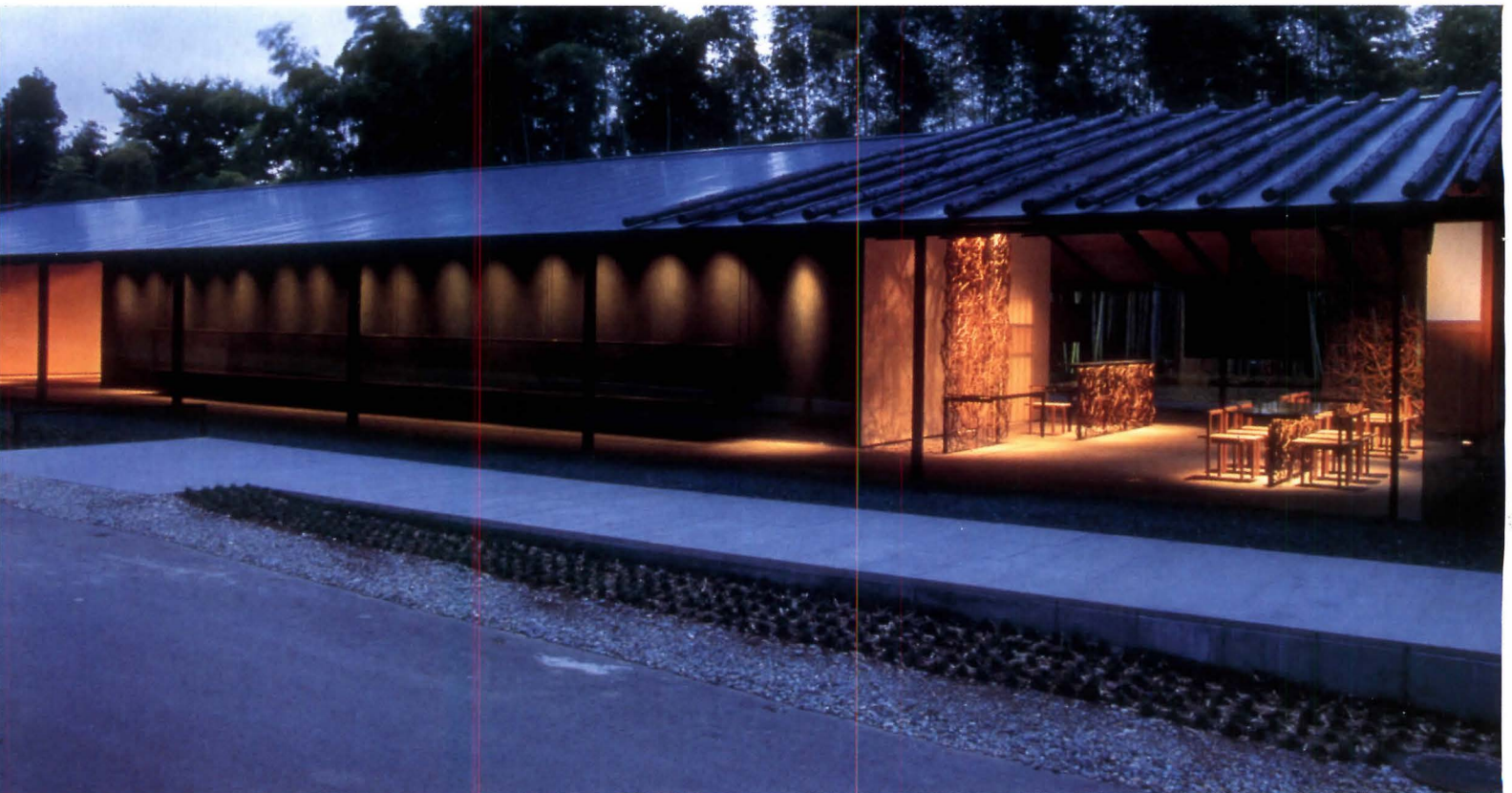
The exhibits comprise farm implements, local ceramics, and samurai armor—historical artifacts that work well in the open structure, since they are not harmed by natural light and actually gain interest from exposure to the local countryside. The skylights are screened with panels of a newly developed building material, rice straw compressed over aluminum mesh. Similar panels slide, like shoji screens, along the glass walls to protect the interior from direct sun. These turn the interior into a kind of lantern, bathed in a soft glow that flatters the objects, which are displayed in vitrines down the center of the building, with circulation around the periphery. The lobby is walled with glass on three sides, and nature is brought inside in the form of curly arrowroot that frames the sales desk and café.



## NASU HISTORY MUSEUM, NASU, TOCHIGI, JAPAN

**CLIENT:** Tochigi prefecture, Town Planning Commission **ARCHITECT:** Kengo Kuma & Associates—Kengo Kuma, Shoji Oshio, Susumu Yasukouchi, Kenji Miyahara, Santa Oono, Yoshinori Sakano (project team) **ASSOCIATE ARCHITECT:** Ando Architecture Design Office **ENGINEERS:** K. Nakata & Associates (structural); P.T. Morimura & Associates (mechanical) **LIGHTING DESIGNER:** Light Field Architecture **GENERAL CONTRACTOR:** Kawada Industries **AREA:** 1,900 square feet

PHOTOGRAPHS BY MITSUMASA FUJITSUKA





Down the road from the Stone Museum, the Nasu History Museum again demonstrates Kuma's adeptness in applying natural materials. Semitransparent panels made of rice straw adhered to aluminum mesh provide shade from direct sunlight (below). Vines collected from the local countryside provide a backdrop for the entry hall (above); ornamental logs attached to the roof also reference the local vernacular (facing page).





# URBAN COORDINATES

A CONCERT HALL CONNECTS PAST AND PRESENT IN LEÓN, SPAIN.

By Amanda Schachter





The concert hall façade (above) looks onto the city through multiple perspectives, its hollowed-out windows framing views of the public plaza (preceding pages) and the historic

When Madrid architects Luis Moreno Mansilla and Emilio Tuñón Alvarez embarked on the competition for the *Auditorio Ciudad de León*, a new concert hall for this central Spanish regional capital, they made a conscious decision not to visit the site. They began, as with all the competitions they enter, by drawing the city in its entirety, honing their understanding of León through an abstract, global reflection on its urban fabric.

They found that León, long a key resting point along a pilgrims' route known as the *Camino de Santiago*, evolved around two monuments: a clean-lined Gothic cathedral that towers above the medieval town center, and the low-rise, ornate Renaissance *Hostal San Marcos*, once a monastery that lodged pilgrims and now a luxury hotel across a wide plaza from the concert hall site. Their winning design, completed last fall, splits the 90,000-square-foot building into a small museum and a





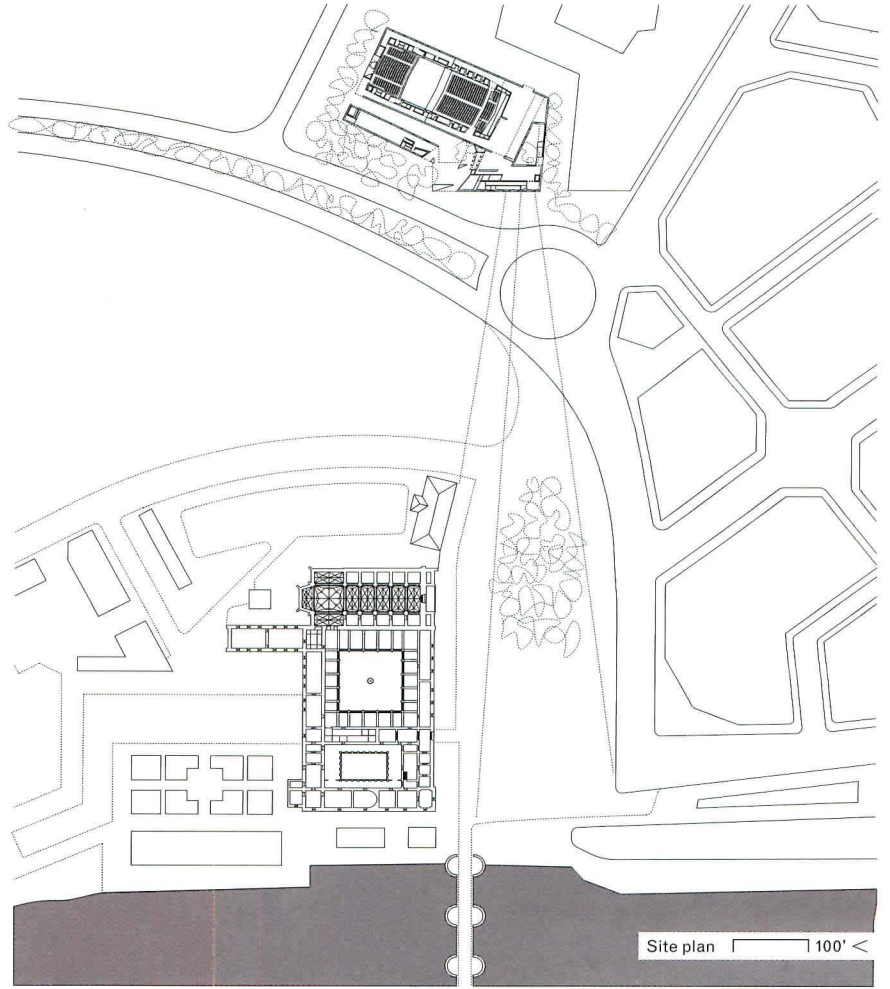
*Hostal San Marcos, a former monastery completed in 1530. The entrance is marked by a rectangular plane, half solid and half void (above left).*

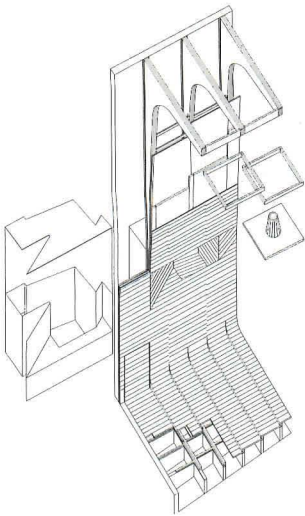
1,200-seat concert hall to spatially synthesize the cathedral and the former monastery. The museum's compressed wall of windows faces the plaza at right angles to the monastery's main façade; the auditorium's tall, rectangular container, tucked behind the museum, sits on axis with the more distant cathedral.

Mansilla and Tuñón enjoy working with only a few gestures in each project in order to bring out and multiply their inherent possibilities. At

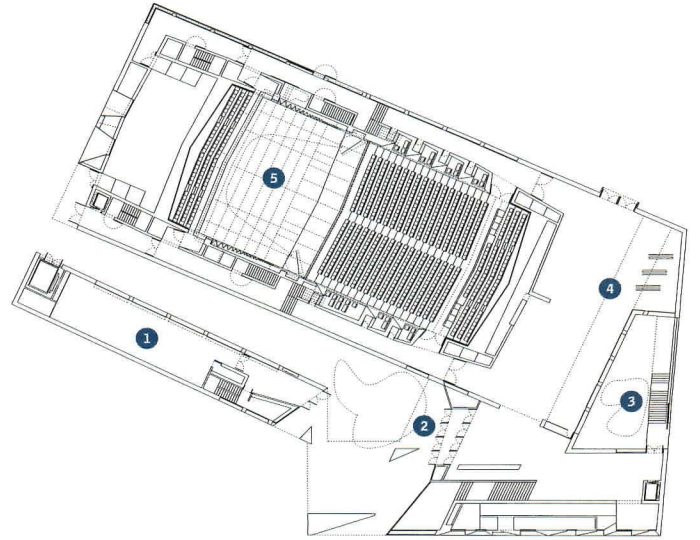
the concert hall, formal elements respond to their counterparts: From the city's two monuments come the smooth, white concrete museum and pitted, off-white travertine auditorium. Inside, the two white exteriors give way to light-wood floors that transform seamlessly into 3-foot-high wainscoting of the same material; the interior concrete walls, formed with textured planks, echo the tactility of the wainscoting and flooring. The building's abstracted exterior cloaks the intimate artistry

The windows of a circulation ramp (below) make an object of the cityscape beyond, an example of the architects' efforts to both literally and figuratively link the building to the history and architecture of León. The irregular composition creates a patchwork of light and shadow. In contrast, rows of square, window-like loge boxes (facing page) establish a regularized rhythm for concertgoers, who are otherwise wrapped in a cocoon of wengé wood, worlds away from the cacophony outside. The lounge area at the intermediate level of the auditorium captures light from an interior court (bottom).

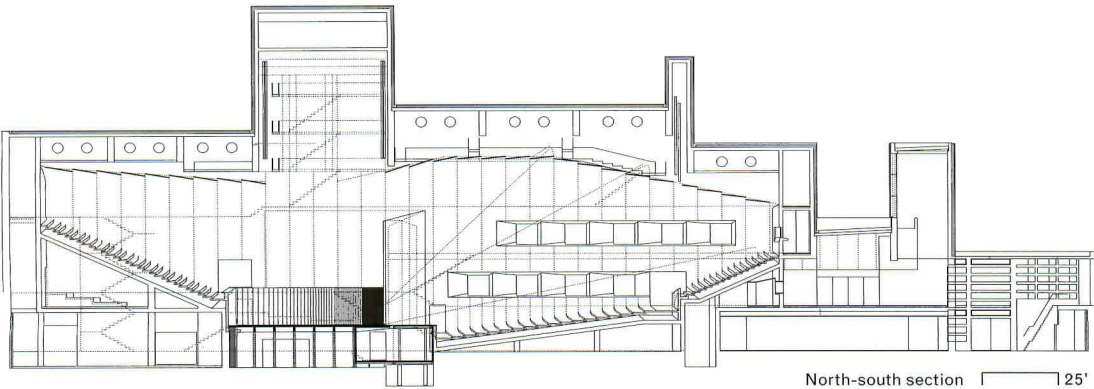




Auditorium wall assembly



Ground-floor plan 130'



North-south section 25'

- 1 tickets
- 2 entrance
- 3 courtyard
- 4 lounge
- 5 auditorium



inside: Within the main performance hall, dark wengé wood fluidly covers every surface, its richly grained finish lining the interior in a taut series of narrow acoustic ribs that conceal the room's corners.

The façade of faux-recessed windows is divided into five horizontal bands, increasing in height from bottom to top; the vertical divisions alternate between odd and even numbers. Seven glazed cubbyholes at the top become eight in the lower band; then nine and ten; then return to seven. From the plaza, the window-wall stands like a tipped-up backdrop, a stage for the age-old debate about whether solid or void should occupy the center of the visual field.

Together, the windows of the museum's façade serve as an all-seeing eye that studies the city, while the monolithic auditorium volume stands behind it as a destination, hiding its substantial girth and the sensuality of its interior. Through a pilgrimage, visitors arrive at a clearer understanding of the city, and how to navigate its unseen coordinates. The concert hall is inscribed onto León as legibly as the drawing investigation that propelled its design. ■

AMANDA SCHACHTER PRACTICES ARCHITECTURE IN MADRID.

**AUDITORIO CIUDAD DE LEÓN, LEÓN, SPAIN**

**CLIENT:** City Council of León **ARCHITECT:** Mansilla + Tuñón, Architects, Madrid—Luis M. Mansilla and Emilio Tuñón Alvarez (principals); Andres Regueiro, Matilde Peralta, Fernando García Pino, Jaime Gimeno, María Linares (project team) **ENGINEERS:** Gogaite (structural); JG & Asociados (M/E/P); Santiago Hernán, Juan Carlos Corona (civil); Higinio (acoustic) **GENERAL CONTRACTOR:** Auditorio de León **AREA:** 98,000 square feet **COST:** \$18.3 million

PHOTOGRAPHS BY ROLAND HALBE

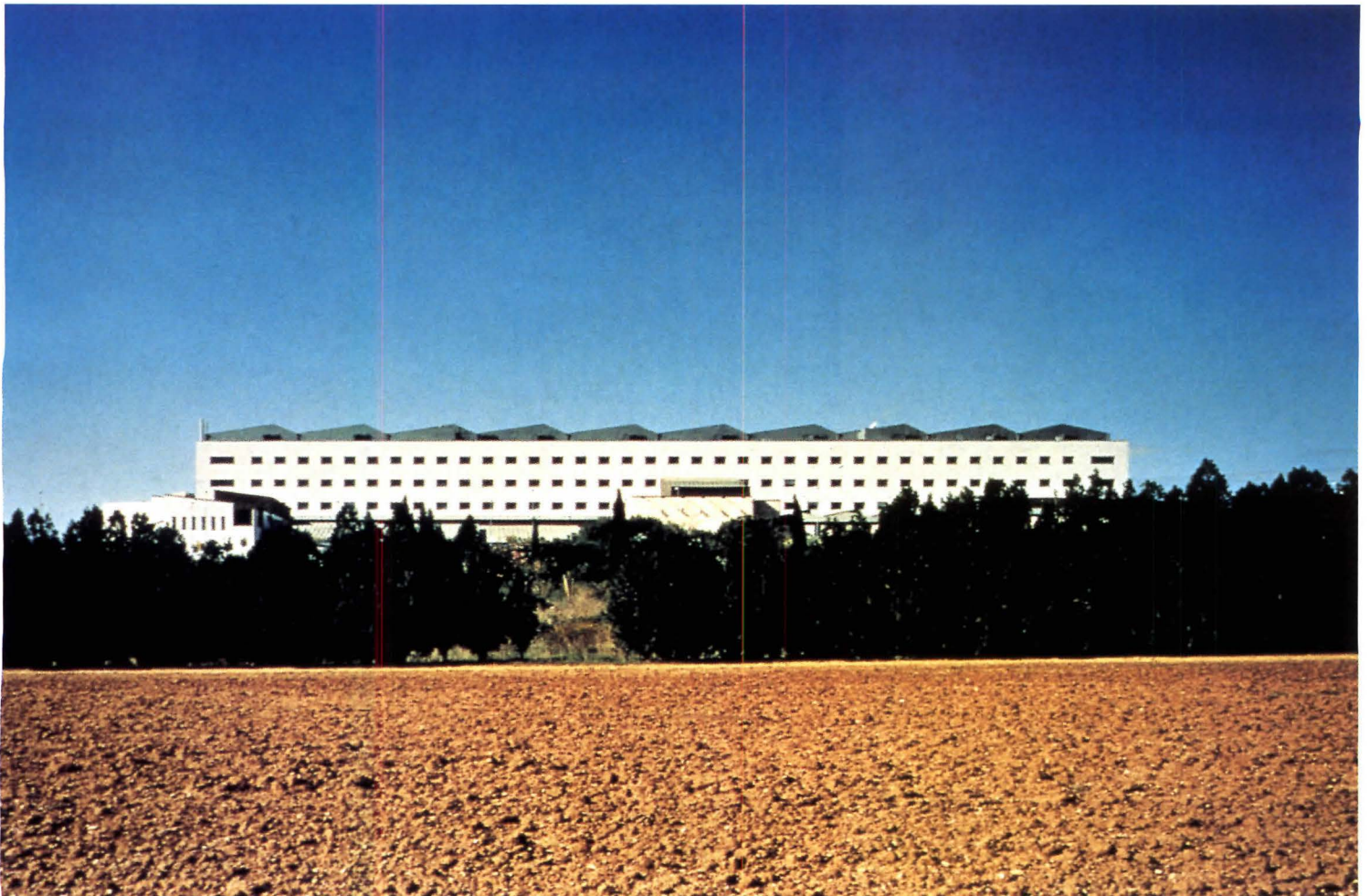
The concert hall speaks to its context with controlled variation. While the main façade is heavily fenestrated (facing page), its windows eyeing the public plaza that it fronts, the box containing the auditorium (below) is essentially mute, but for selective openings in exterior walls. Where window gives way to wall, surfaces become more tactile, evidenced in the travertine that covers the large hall.





# A Machine for Curing

ÁNGEL FERNÁNDEZ ALBA BRINGS CLARITY TO THE COMPLEX PROGRAM OF A LARGE MALLORCAN HOSPITAL. BY ANTÓN CAPITEL



In some of the many hospitals designed by Ángel Fernández Alba, one might say, upon observing the plans, that they defer chiefly to the site; this is very clear in one design whose outline delineates half a block of Barcelona's nineteenth-century grid; or the hospital for Lanzarote in the Canary Islands, which also has a strong urban imprint. In other cases, the site allows the program to be arranged in a way suggested by the project's geometry.

In some situations, however, such as Manacor Hospital in Mallorca, the matter takes a turn for the extreme: The site, while irregular, is but a frame that encloses the footprint. The plan, free and at ease on the flat and expansive surface of the earth, has to count on organizing principles other than those offered by the landscape; thus, it manifests itself in a more abstract and geometric way that is less connected with the *informal* or *organic* calling that Alba generally follows in organizing the programs of his hospitals.

This preference could be one of the clearest ways to turn a large hospital into architecture; that is, to be able to contain these dilated functional machines within the boundaries of what can still be recognized as architectonic discipline—boundaries that hospitals tend to exceed because of their nature and size. It seems that Alba's primary effort consists of adequately accommodating this large machine and, at the same time, ensuring that it remains within specified limits.

#### ORDER AND IRREGULARITY

For the hospital in Manacor, the capital city of this Balearic Island, the layout allowed by the site's freedom is articulated with a decisive design concept: a longitudinal guideline that arranges the program in systematic parallel bands. These bands allow most of the functions to be placed in a highly ordered central zone, both letting the hospital's components react formally as they approach the edges of the parcel, and taking advantage of the site's irregularities to express its functions in unusual and picturesque forms. The varied volumes counteract the orthogonal and parallel organization invited by the landscape conditions. The approach drives the plan as much as the massing on a dual course that contributes equally to the freedom and picturesqueness of its unusual features and to the ordered, rectilinear condition evidenced in the main ward pavilion, in which a robust rectangular volume faithfully adheres to a preselected ordering principle.

On one hand, it makes sense for a complex program to comply with the dictates of a uniform, systematic geometry; on the other hand, the very diversity of a healthcare program suggests that it may be more logical to respect that diversity, gaining in the process the requisite volumetric variety. The hospital is thus a stable, studied, and voluntary interplay between uniformity and variety, order and disorder, clarity and complexity. The result manifests an understanding that the functions can be organized and enclosed in straightforward containers, but that they also require or invite specific, unequal, and distinct forms. And this simultaneity of intention becomes a design principle.

Underlying all this is a determination to remain true to European organic tradition, as is seen in a few of Alba's intentionally Aaltoesque gestures that, given their visibility, take on the importance of a proclamation. In this project, the architect's organic leanings are supported not only through allusions to Alvar Aalto, but even more intensely through the hospital's dual condition—through the belief that architecture need not be coherent, continuous, and unitary, but instead incorporate two divergent natures.

As with its Nordic reference point, this double nature of the diverse and the picturesque makes the building express itself—while accepting

its rationalist origins—without seeking simplification. The sweeping form of the main ward, for example, is almost obsessively counteracted by multiple hues and contours—starting with the repetitive, metallic green, and asymmetric roof forms that crown it, announcing a new family of metals and textures that emerge again elsewhere.

#### HISTORICAL ROOTS

The references to Aalto are the clearest and most intense—literally as well as conceptually. The building is full of skylights, ceilings, stairways, and details and treatments that recall the Finnish master, although many of them Alba incorporates in his own way. But there are many other influences, too. The references are not citations of authority or educated allusions, but rather strictly architectonic resources—an appropriation that Alba's enthusiastic sensibility enjoys and incorporates in a layered and nuanced manner.

Thus, one finds in the building certain accents from fellow Madrid architect Juan Navarro Baldeweg that ascribe a general influence more than any particularly concrete element. One can also see the aura of Álvaro Siza in some external volumes, as well as a certain allegiance to the decorative and linguistic restraint of Adolf Loos, who like Siza is part of a tradition of rationalism that is not overwrought, yet has a certain formal richness.

While these influences may be diluted and unspecific, there is another—the work of Rafael Moneo—that is as literal as that of Aalto: the use of spherical metallic domes, which are square in plan over the operating theaters in the surgical area are similar to those Moneo employed on a different scale, at the Atocha train station in Madrid. (This form also has been seen in the fifteenth-century architecture of John Soane and in the contemporary work of Navarro Baldeweg.) Another very literal allusion is found in the profile of the radiology wing, which is almost identical in plan to Aalto's Mount Angel Abbey Library. While this is a more direct appropriation of form than the domes, which are abstracted and traditional, both references speak to the architect's ardent belief in architecture as collective discovery, a cultural effort that surpasses periods and personalities, rather than as *private invention*.

#### AN UNCOMMON OUTCOME

Alba's private effort is apparent in architectonically qualifying and adding value to an ensemble that is varied and almost chaotic, yet also ordered. His insistence on presenting the hospital machine as form—to turn it into architecture—is systematic and rational yet unable to impose order, frustrating any attempt at simplification or idealism.

The building's textures demonstrate Alba's refusal to offer unity in a conventional way: They change obsessively, while maintaining a certain continuity. This is most clearly seen in the entrance volume. There, a rough limestone texture, distinct although not conflicting with the white brick behind it, is the costume of a character with an almost blind countenance standing in front of a different character that is covered with eyes; this is the clearest summary of a picturesque, narrative, and episodic architecture, almost as complex as a city.

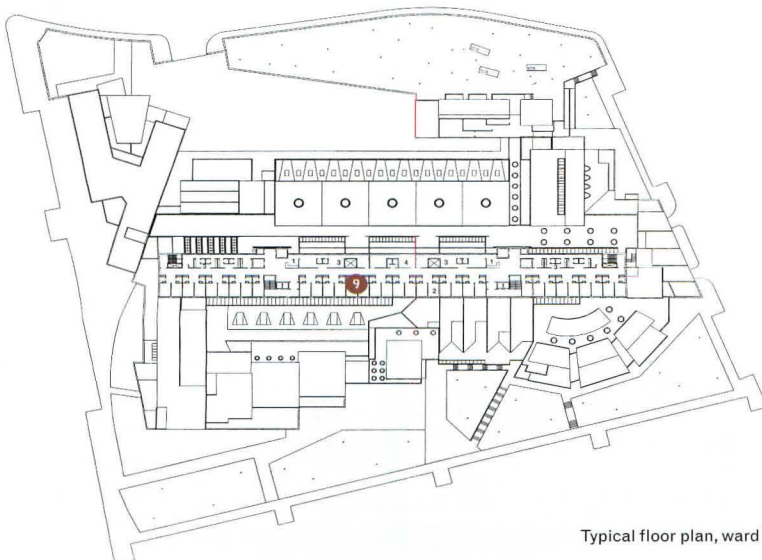
Rationalism and diversity, or rationalism and a lack of simplicity, convert this hospital into an uncommon edifice. It is often the unfashionable condition, that refusal to serve the clichés of the moment, that makes Alba's architecture especially alluring. ■

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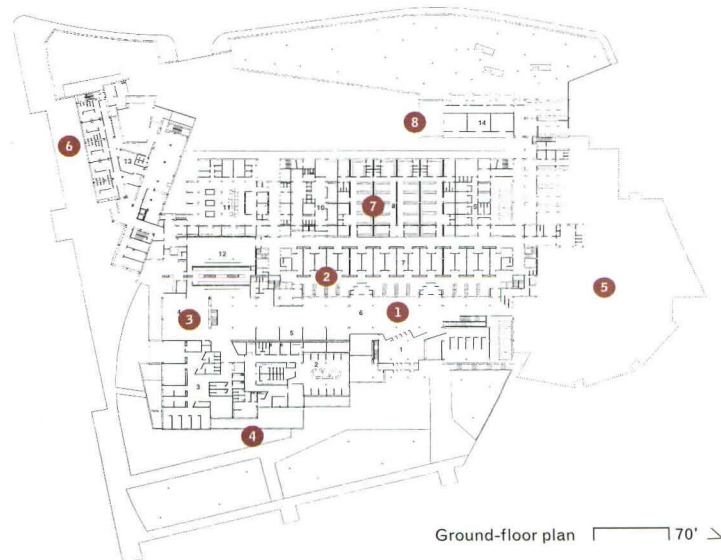


A varied expression enlivens the hospital's roofscape, from the main ward's zinc sawtooth to the copper dormers and zinc slopes over the radiology and public areas.

- |                   |                  |                 |
|-------------------|------------------|-----------------|
| 1 entry/lobby     | 4 rehabilitation | 7 laboratories  |
| 2 outpatient area | 5 radiology      | 8 morgue        |
| 3 cafeteria       | 6 offices        | 9 patient rooms |

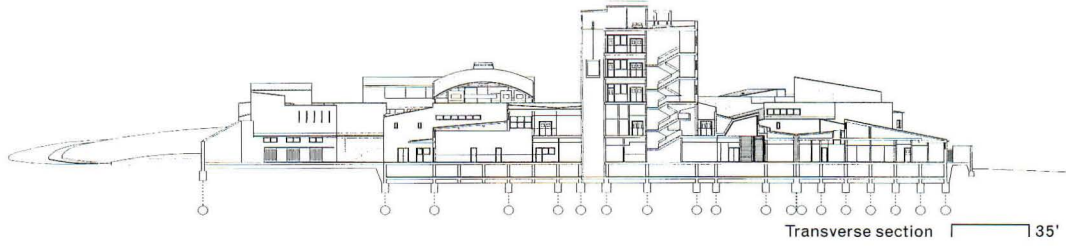


Typical floor plan, ward

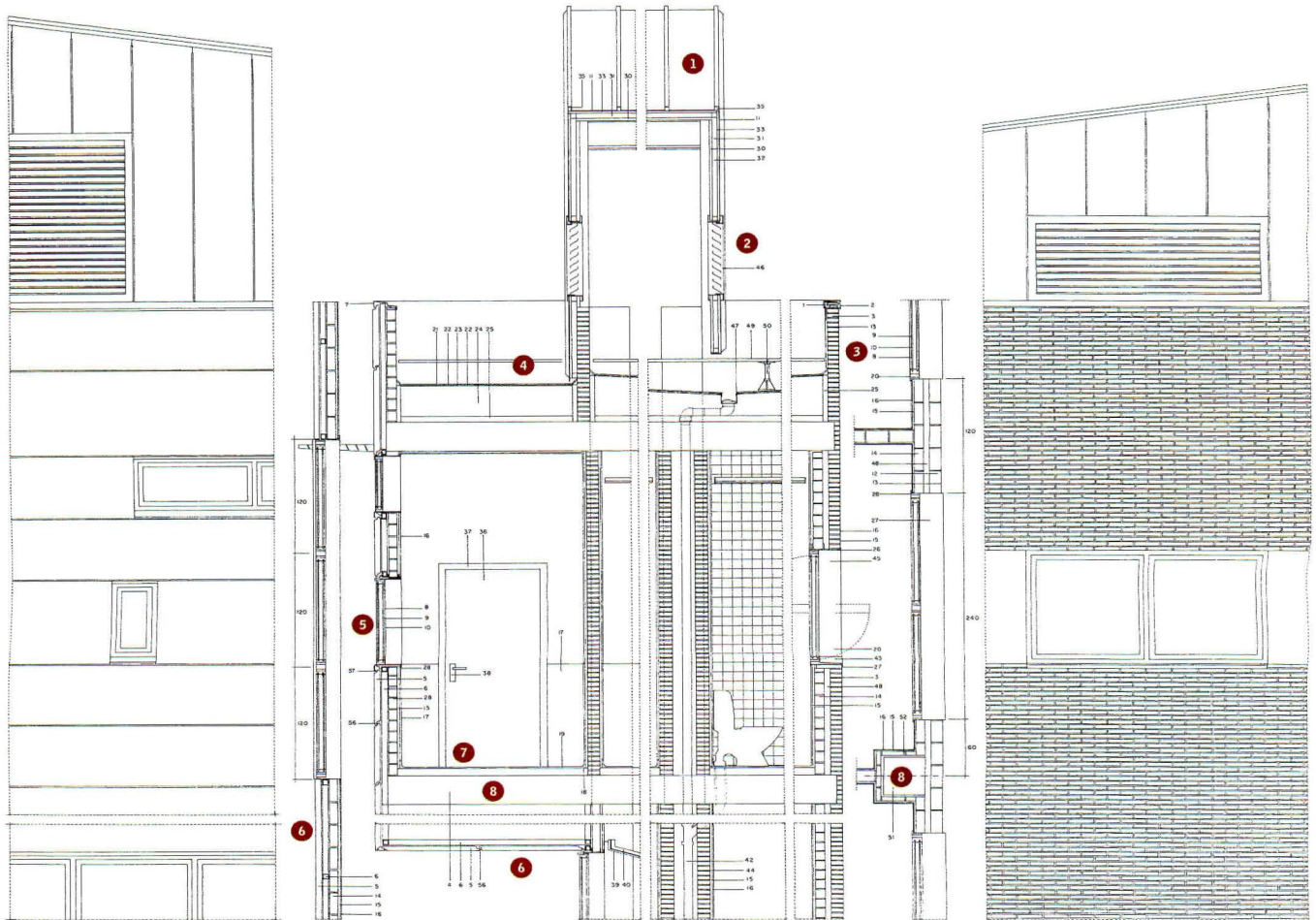


Ground-floor plan 170' >





- 1 standing-seam zinc roof
- 2 stainless-steel louver
- 3 glazed brick
- 4 single-ply roofing
- 5 double-glazed aluminum tilt window
- 6 composite metal cladding
- 7 epoxy-resin flooring
- 8 concrete slab (section)/column (plan)



Typical details, main ward | 2.5'



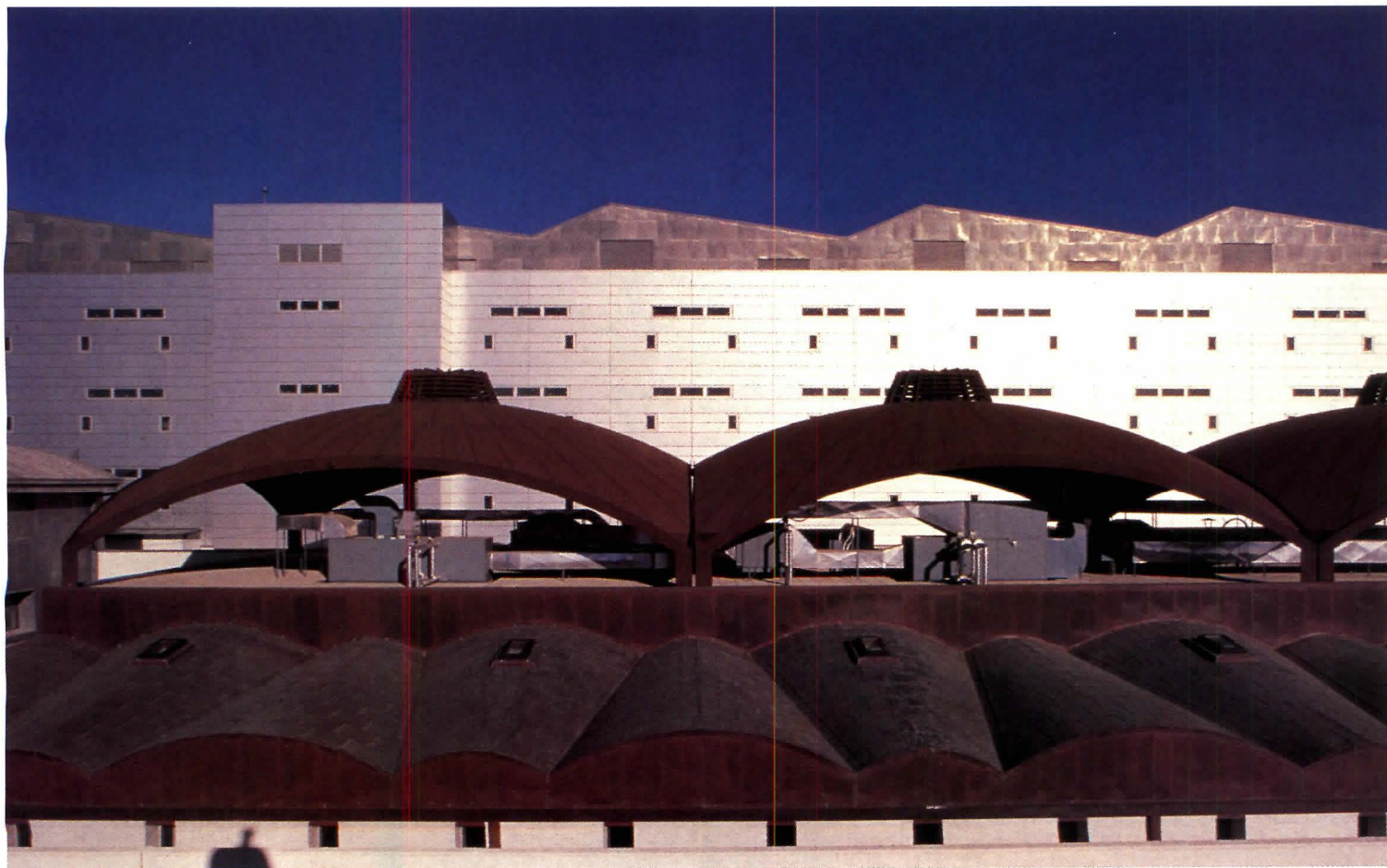
At the main entrance (left and below), an unfenestrated façade of limestone cladding and a fieldstone wall contrast with the glazed white brick, repetitive punched-out windows, and copper and zinc accents that predominate elsewhere. The limestone façade extends northward to the radiology wing (below).



A detail of the east façade shows the unrelenting geometry of the main ward mass contrasting with the varied expression below of copper cladding and zinc-copper standing-seam roofing (right). At the west elevation, new forms and fenestration patterns emerge in composite metal cladding, glazed brick, copper, and steel (below).



The main entrance courtyard frames an original tree with xeriscape (right). The ward block's west façade takes on a high-tech sheen with computer-punchcard fenestration, in contrast with the steel domes and barrel vaults in the foreground (below).



**MANACOR HOSPITAL, MANACOR, PALMA DE MALLORCA**

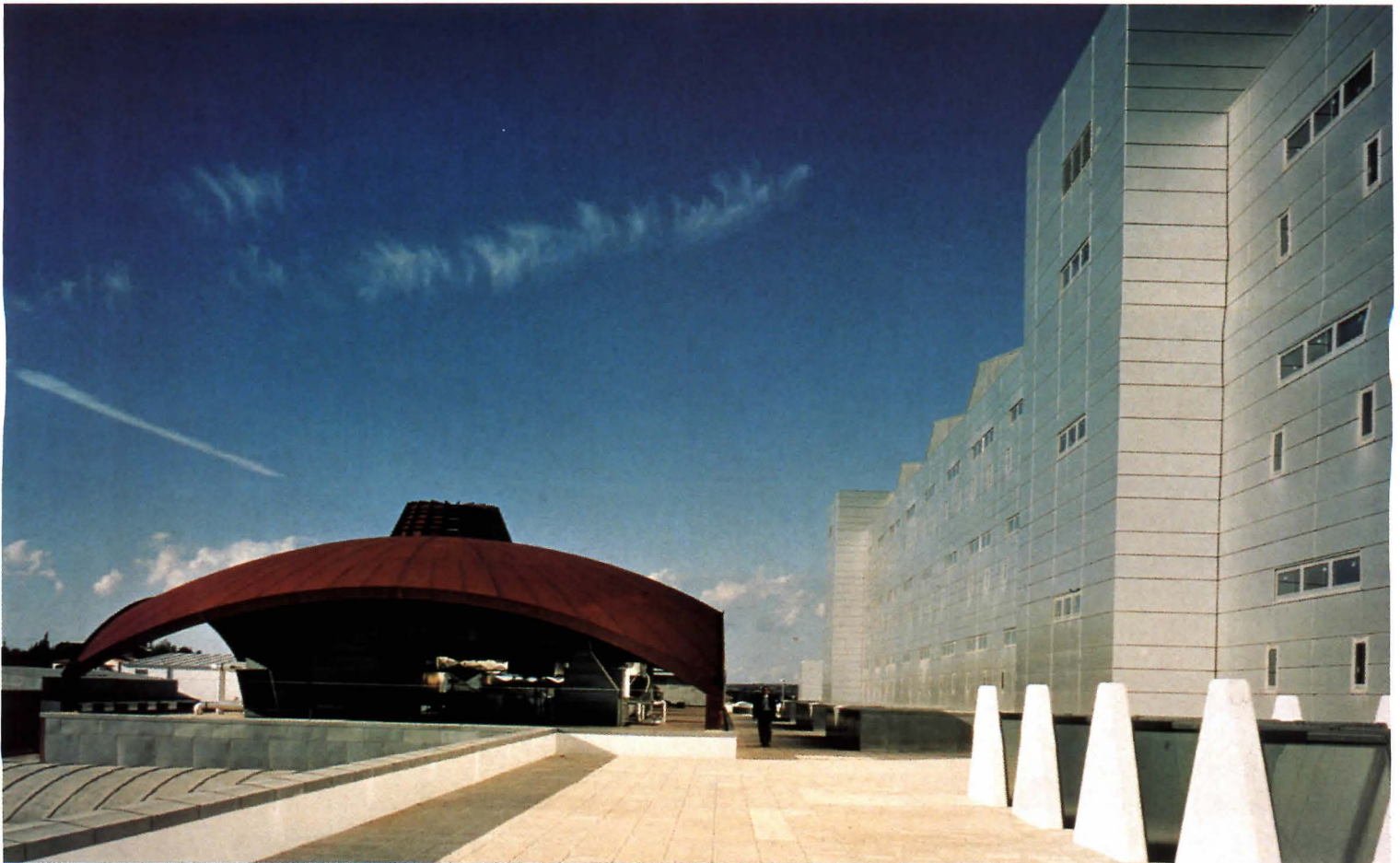
**CLIENT:** Insalud (Ministry of Health), Madrid **ARCHITECT:** Ángel Fernández Alba and Fernando Cruz Alonso, Madrid--Ángel Fernández Alba (principal); Soledad Del Pino Iglesias, Ilse Wolff, Fernando Quesada, Alicia Montero, Rafael Pérez (project team) **INTERIOR ARCHITECT:** Ángel Fernández Alba and Soledad Del Pino Iglesias **LANDSCAPE ARCHITECT:** Soledad Del Pino Iglesias **ENGINEERS:** Gogaite (structural); Energy Systems (M/E/P); Pablo Fernández Alba (civil) **CONSULTANTS:** Erco (lighting) **GENERAL CONTRACTOR:** Ferrovial **CONSTRUCTION MANAGER:** Elías Benítez **AREA:** 250,000 square feet **COST:** \$26 million

**PHOTOGRAPHS BY AKE LINDMAN AND MATTI PYYKKO**

**SPECIFICATIONS**

**CLADDING:** H.H. Robertson **METAL ROOFING:** Cooper Zinc **ALUMINUM FRAMING/FLASHING:** Ruberoid **GLASS:** Cristalería Española **METAL DOORS:** Cimesa; Dacin **LOCKSETS/HINGES:** Dorma **DEMOUNTABLE PARTITIONS:** Hunter Douglas **PAINTS/STAINS:** Wenceslao **WALLCOVERINGS:** Rivasol **INSULATION:** Porexpan **DOWNLIGHTS:** Erco **EXTERIOR LIGHTING:** Bega **ELEVATORS/ESCALATORS:** Thyssen

The roof of the operating-theater unit reveals a paved terrace, skylights for the staff cafeteria, and steel domes housing rooftop mechanical systems. Silvery composite metal panels emphasize the linearity and order of the ward block (below).





# BOOK LEAVES

IN A LIBRARY IN MAPLE VALLEY, WASHINGTON,  
NATURE IS HEARD ABOVE READERS' WHISPERS. BY ANNA HOLTZMAN





The library's central courtyard contains a circular moss pool, to which rainwater is funneled by the roof's single drainpipe (preceding pages). In the evening, the library's wooden shingles fade into the surrounding trees, while the building's transparent glass corners glow through the foliage (above). Architects Cutler and Johnston painstakingly sited the library in an existing forest, finally settling on a U-shaped plan that required felling only 12 trees (facing page, top right); library visitors, surrounded by windows, have the experience of reading in the woods (facing page, top left). The building's soaring ceilings are made of prefabricated trusses, and its wraparound windows are adhered to a standard framing system (facing page, bottom).

When the city of Maple Valley, a rapidly developing suburb just southeast of Seattle, commissioned Jim Cutler to design its library, the client “expected me to clearcut the site and build a monument that was going to be [the city’s] beacon to the twenty-first century,” says the Seattle-based architect. Instead, Cutler proposed a modest wood building that would not overpower the almost-two-acre plot of natural forest allotted for the library, staying true to his belief that architecture should work in harmony with the living systems surrounding it. To make his case, he conducted a presentation among the site’s 150 or so third-growth trees, seating his clients in the forest’s natural understory of low-lying vegetation so that they might connect with the land. “It worked like a charm,” he says: Only one member of the client group objected to the library being hidden from the road by foliage.

“All of our work is, if not technically green, emotionally green,” says Cutler, who collaborated on the library with Ray Johnston of Johnston Architects. “If you connect people emotionally with the place, they will protect it.” But he cautions that “trying to do this philosophical, romantic thing within a budget” is not easy. To keep construction costs for the Maple Valley project to a minimum, the architects used inexpensive materials and prefabricated elements so that resources could be concentrated on configuring the plan to spare as many trees as possible. The U-shaped footprint that the architects settled on required that only 12 trees be removed, and instead of clearing land for a parking lot, they

hired an arborist to plot individual parking spaces among the trees.

The library’s modest proportions are offset by high ceilings and tremendous window spans. For the expression of the structure, Cutler drew on his training in Louis Kahn’s studio, where he learned the dictum “All is revealed.” The building is held up by exposed, wraparound wood framing on standard 24-inch centers. There are no rough openings aside from the doors: Windows are adhered to the surface of the framing grid and held in place with aluminum storefront. The ceiling is formed by exposed prefabricated steel trusses with a standard 40-foot span.

A foundation stem wall wraps around the building to prevent the wood framing from touching the ground and incurring moisture rot. A slab is cut away from the wall at the library’s entrance, revealing a sectional view of aggregate that contrasts with the concrete’s smooth, board-formed exterior texture. Cedar shingles sheathe the library’s shear walls and echo the site’s cedar trees. By exposing structure and relating materials to the site, Cutler lets “all of the materials tell their story.”

A large metal drainage pipe forms a focal point in the building’s central court, channeling rainwater from the 14,000-square-foot roof into a circular gravel pool, with stepped edges intended to catch organic debris and foster a moss bed. The water spout and moss pool will serve as a visual demonstration of the building’s interaction with nature—that is, if Cutler and Johnston can convince the zealous grounds crew to stop clearing the pool of moss. ■

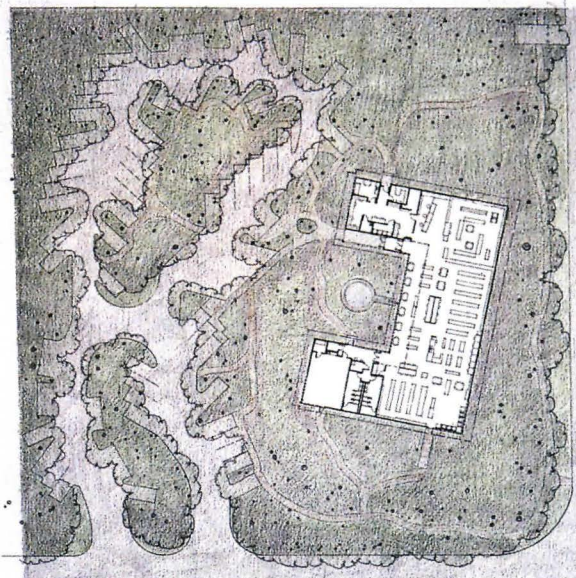




**MAPLE VALLEY LIBRARY, MAPLE VALLEY, WASHINGTON**

**CLIENT:** King County Library System **ARCHITECTS:** Cutler Anderson Architects and Johnston Architects, Seattle—James Cutler, Ray Johnston (principals); Marc Pevoto, David Cinamon (project managers)  
**INTERIOR DESIGNER/ARCHITECT:** NB Design, Seattle—Nancy Burfiend **LANDSCAPE ARCHITECT:** Swift & Company **ENGINEERS:** Swenson Say Faget (structural); McGowan Broz Engineers (M/E/P); SvR Design (civil) **CONSULTANTS:** Jim Barbarinis (arborist); Ray Wetherholt (roofing); Patrick Tilley, McGowan Broz Engineers (lighting) **GENERAL CONTRACTOR:** R. Miller Construction **SUBCONTRACTORS:** Crescent Sheet Metal; Prometco (steel fabrication); Perkins Glass; Holmes Electric; Technical Furniture Systems  
**CONSTRUCTION MANAGER:** Lonnie Crabtree **AREA:** 10,200 square feet **COST:** \$1.9 million

**PHOTOGRAPHS BY ART GRICE**



**SPECIFICATIONS:**

**STRUCTURAL SYSTEM:** Trus-Joist  
**MacMillan CURTAIN WALL:** Kawneer  
**WOOD DOORS:** Eggers Industries  
**LOCKSETS:** Corbin-Russwin **HINGES:** Stanley  
**CEILING SYSTEMS:** Armstrong  
**ACOUSTIC PANELS:** Pacific Wood Systems  
**PAINTS/STAINS:** Benjamin Moore; Masterchem Industries  
**WALL COVERINGS:** Maharam  
**FLOORING:** Marmoleum; Pacific Mat  
**CARPET:** Interface  
**FURNISHINGS:** Haworth; KI; Kasparians; Coriander Wood Design; ICF; Versteel; Tallman & Company; Herman Miller; Estey; Community  
**LIGHTING:** Columbia; Ledalite; LSI; Prescolite; Kim Lighting; Canlet  
**PLUMBING FIXTURES:** Chicago; Elkay; Kohler; Zurn





# IN THE SISTERHOOD

Sororities that once shared a  
residential tower at Arizona State now have  
rooms of their own.

By Bay Brown



Ancient Greek architecture may be the paradigm of innovation, but when American college campuses adopted the “Greek” system, fraternity and sorority houses became bastions of architectural conservatism, typically dripping with neoclassical ornamentation.

Going against the norm is the new sorority complex on the Tempe campus of Arizona State University (ASU). Designed by Gould Evans Architects, the project combines classical urbanism with an architectural image that bucks tradition. It also represents the first phase of a 10-year master plan to better integrate the residential south campus with the academic main campus.

Much of ASU was constructed in the early 1900s in a collegiate neoclassical style with red and buff brick buildings laid out on a grid. Midcentury modern structures were built in a second wave of construction. While the fraternities at ASU have their own houses, all 12 of the university’s sororities occupied a nondescript high-rise dormitory before the new complex was completed. When the sororities clamored for new quarters, the university set aside 12 acres for the sorority sisters.

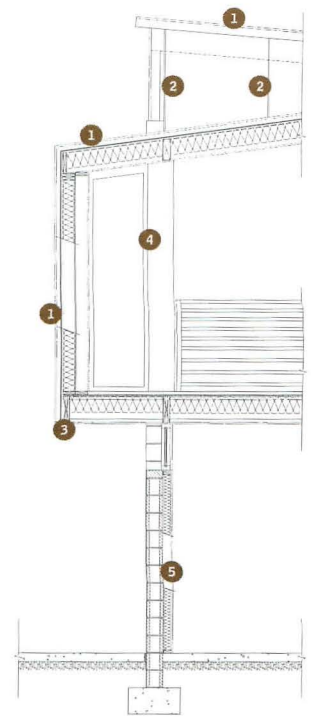
On receiving the commission, Gould Evans met with the project’s future users to determine what form the new sorority buildings should take. According to *design principal Jay Silverberg*, the resounding answer was that the women wanted a complex that would create a sense of togetherness among the sororities, but provide each with its own house.

To foster a sense of community, it was critical that the women be close to the ground plane, says Silverberg, explaining the rationale for limiting the buildings to two stories. Housing just over 400 sisters, Adelphi Commons, which he describes as an “urban village,” holds 12 connected courtyard houses organized along both sides of a pedestrian street paved with red-granite aggregate. A section of the promenade widens into a large lawn; at its center, the sororities share a community building where the women can hold large-scale events.

Unlike traditional Greek houses with their columns and pediments, the ASU sorority residences do not have central, symbol-laden entrances. Similar to an Italian palazzo, the street façades, with steel and glass boxes atop a wall of polished concrete block, project an image of strength. Each house is entered through a discrete sliding door set flush with the fenced courtyards, the main organizing element off which bedroom suites and a double-height chapter room—the center of social activity—are arranged. While Gould Evans designed all interior spaces, it left the chapter rooms unfinished, so that each sorority could have an opportunity to express its own style. The courtyards provide an outdoor space for the women that is both public and private, a place to socialize as well as study.

Through its material, scale, and engagement with the outdoors, Adelphi Commons is not only a compelling iteration of regional modernism, but a giant step forward in the architecture of Greek life. At ASU, the sororities are both autonomous entities and part of a larger community. ■



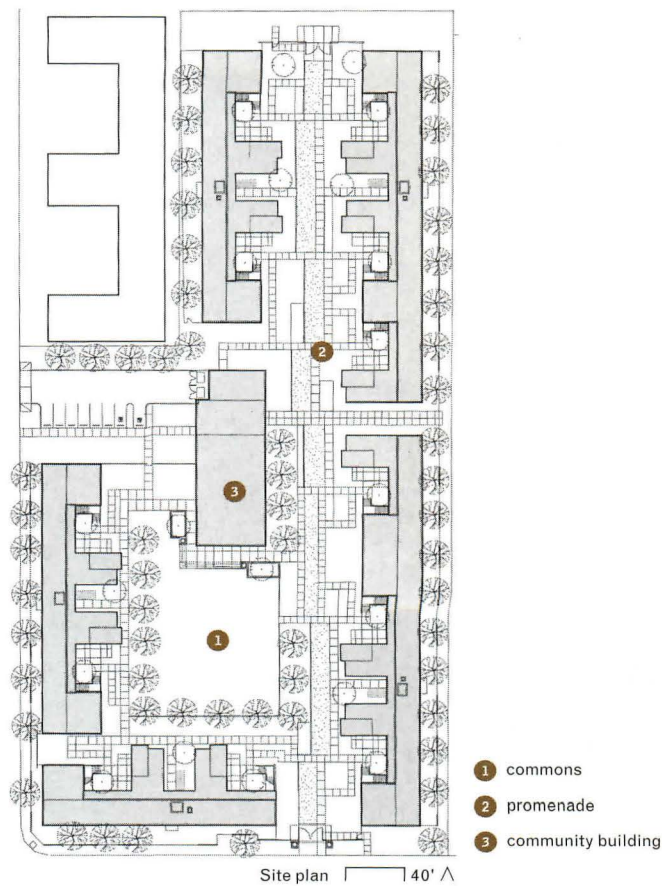


Chapter-room wall section 4.5'

- 1 metal roof system
- 2 butt glazing
- 3 metal soffit
- 4 anodized-aluminum window system
- 5 ground-surface concrete block



Rough surfaces appropriate to desert life—red aggregate paving on the promenade and concrete block walls (previous pages)—are softened by still-young native plantings along Arizona State University’s sorority row. Common areas are in abundance in Gould Evans’s design for the complex. In addition to the promenade that forms the precinct’s main spine, students can gather on the green (above), in the private courtyard (top) provided to each sorority, and in the double-height chapter room (facing page) of each house.



**ADELPHI COMMONS, ARIZONA STATE UNIVERSITY,  
TEMPE, ARIZONA**

**CLIENT:** Arizona State University Department of Residential Life **OWNER:** Century Project Management Partnership **ARCHITECT:** Gould Evans, Phoenix—Trudi G. Hummel (managing principal); Jay R. Silverberg (design principal); Ron L. Geren (project manager); Jose D. Pombo, John D. Dimmel (project designers); Tamara C. Shroll (interiors/graphics); Shawn L. Croissant (technical support) **ENGINEERS:** Rudow & Berry (structural); Bridgers & Paxton (M/E/P); Evans Kuhn & Associates (civil) **GENERAL CONTRACTOR:** Swinerton & Walberg **LANDSCAPE ARCHITECT:** Ten Eyck Landscape Architects **AREA:** 85,000 square feet **COST:** \$7 million

**PHOTOGRAPHS BY BILL TIMMERMAN**

**SPECIFICATIONS**

**MASONRY:** Superlite Block **EIFS:** Senergy **WOOD DOORS:** Weyerhaeuser **ACOUSTICAL CEILINGS:** USG Interiors **DEMOUNTABLE PARTITIONS:** Hufcor **PAINTS/STAINS:** ICI-Dulux **PLASTIC LAMINATE:** Formica **FLOOR AND WALL TILE:** Dal-Tile **CARPET:** Shaw **BEDROOM FURNITURE:** Southwest Contract **DOWNLIGHTS/EXTERIOR LIGHTING:** Lithonia Lighting **ELEVATORS:** Schindler **PLUMBING:** Delta; Gerber; Redondo; Lasco

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## HIGHLIGHTED PRODUCTS

**STEEL FABRICATION**—Dennis Luedeman

**STOREFRONT**—Eclipse Systems; Wilson Partitions

**DECORATIVE GLAZING**—Bendheim

**PLASTIC LAMINATES**—Abet Laminati

**WOOD PANELS**—Howard Manufacturing

**RESIN PANELS**—Knoll Textiles

**WOOD DOORS**—Marshfield

**HARDWARE**—Schlage

**ROLLER BLINDS**—MechoShade

**HUNG CEILINGS**—BPB America

**VINYL TILE FLOORING**—Armstrong

**CARPET TILE**—Interface

**CORK TILE**—Ipcork

**PINBOARD**—Forbo

**FURNISHINGS**—Knoll; Herman Miller

**TASK LIGHTING**—Pablo

**LIGHTING CALCULATIONS**—Cal Lighting



# Light, Air, and Steel

> FOUGERON ARCHITECTURE / PLANNED PARENTHOOD GOLDEN GATE / SAN FRANCISCO

Architect Anne Fougeron's first task was easy: to convince the directors of Planned Parenthood Golden Gate, a provider of reproductive health services, that their clinics and work environments should be healthy, friendly, and uplifting. The second task was a bit harder: reconciling the San Francisco-based organization's need for stringent security measures and patient privacy without making the facilities seem like occupied zones. The prospect of attack on the group's clinics is real, so project specs typically include bulletproof storefronts, steel-plate-lined walls,

and video-surveillance equipment.

Motivated by the well-publicized murder of a doctor at a Boston-area clinic, Fougeron began volunteering with the group eight years ago, and her work quickly grew into providing pro bono services for security planning and other architectural upgrades for the nonprofit's facilities in the Bay Area. She understood her clients' mission well, and when they started a recent capital campaign, the architect's subtle yet inspiring designs became a linchpin of the campaign's success.

In her work, Fougeron takes

care not to let security concerns or regulatory demands dictate design solutions. "We refuse to let the clinics look like prisons," she explains. "At other clinics, the first thing you see is a metal detector. Security should be invisible, not omnipresent." She also faults many healthcare designs for tending toward the "antiseptic, in shades of gray and mauve." Her use of bright finishes, unexpected forms, and daylight is very distinct.

Fougeron's palette includes raw steel and woods, sandblasted and clear glazed walls, as well as bright plastics and rice-paper

# >specifications healthcare interiors



## CALL CENTER, SAN MATEO, CALIFORNIA

**ARCHITECT:** Fougeron Architecture, San Francisco—Anne Fougeron (principal); Michael Pierry, Ryan Murphy, Anne Tipp Tierney (project team) **ENGINEERS:** Jon Brody (structural); Dan Dodt (electrical) **CONSULTANTS:** Charles M. Salter (acoustic); Henry Chan (energy codes) **GENERAL CONTRACTOR:** Jetton Construction **CONSTRUCTION MANAGER:** Blair Buchanan **AREA:** 5,000 square feet **COST:** \$750,000

PHOTOGRAPHS BY  
MATTHEW MILLMAN



Spare, rectilinear organization and a confluence of colors, textures, and custom assemblies mark Fougeron's work for Planned Parenthood. A call center (above left, bottom and top) is accented with bright plastic laminates, decorative glazing, and partitions of steel and perforated wood (see detail, page 102). For the Eastmont Clinic, Fougeron specified

laminates. In each project, she introduces ample light and air through skylights and a medley of half-height, slatted, and perforated custom partitions, some with colored glass or acrylic panels. Workstations and waiting areas are also customized, with elegant and often evocative detailing in straightforward materials. (Fougeron develops her custom steel work with San Francisco-based artist and fabricator Dennis Luedeman.) The designs respond to Planned Parenthood's need for welcoming spaces, but also durable surfaces and assemblies to limit maintenance costs and bolster its investment. An exposed

steel plate near a reception area, for example, provides both bullet-resistant refuge and an attractive, robust kickplate.

### EASTMONT MALL

Fougeron's first major foray into clinic design was about four years ago at Eastmont Mall in Oakland, California, a dingy shopping center trying to recast itself as a medical center. Inserting a storefront of subtly hued translucent glass, the architect created a luminous presence—a "beacon," says Fougeron—that shields occupants from prying eyes while confirming their presence with backlit silhouettes. Inside, she developed a

unique, sensuous idiom that would carry through her work for Planned Parenthood.

In the waiting area, a decorative canopy and screens of steel and glass divide the space into a zone for adults and another for children to play. Large skylights with dramatically canted shafts draw daylight into the interior, and continuous steel clerestory along the corridors help distribute the glow. Steel accents and signage contrast with cork flooring and a curved red wall with a built-in wood bench.

### EDDY STREET OFFICES

For a remodeling of the group's 6,700-square-foot regional head-

quarters in San Francisco, Fougeron replaced typically dreary and too-tall padded workstations with her own custom steel versions, clad with thin wood slats and sprouting angled, illuminated canopies of steel and frosted acrylic from their spines. As at the Eastmont clinic, steel banding, internal clerestory, and brightly painted planes and volumes enliven what was a monotonous, deep floor plate with low hung ceilings. Perimeter offices have glass partitions for visibility and light.

The custom workstations and "light canopies" cost a little less than the original off-the-shelf office systems, notes Fougeron, and their



## EASTMONT CLINIC, OAKLAND, CALIFORNIA

**ARCHITECT:** Fougeron Architecture, San Francisco—Anne Fougeron (principal); Todd Aranaz (project team) **ENGINEERS:** Endres Ware (structural); Hansen & Slaughter (electrical) **GENERAL CONTRACTOR:** South Bay Construction **AREA:** 5,800 square feet **COST:** \$525,000

PHOTOGRAPHS BY RICHARD BARNES



## EDDY STREET OFFICES, SAN FRANCISCO

**ARCHITECT:** Fougeron Architecture, San Francisco—Anne Fougeron (principal); Todd Aranaz, Vivian Dwyer (project team) **GENERAL CONTRACTOR:** Jetton Construction **CONSTRUCTION MANAGER:** Blair Buchanan **AREA:** 6,700 square feet **COST:** \$800,000

PHOTOGRAPHS BY  
MATTHEW MILLMAN



Jacobsen chairs and an Eames table set against a backdrop of frosted storefront, pinboard, cork tiles, and vinyl flooring (facing page, right and above left). Headquarters offices feature custom workstations with slatted wood and acrylic “light canopies” (see detail, page 102), as well as resin panels and glass walls (above center and right).

maintenance needs will be comparable. Yet, she says, “the steel and wood slats are materials that people might touch and relate to how they feel. Metaphorically, the glass walls serve to reiterate that this is a very open organization.”

### CALL CENTER

Extending these themes to an acoustically sensitive environment—a call center in San Mateo, California—required Fougeron to tweak her style to suit functional needs. While call centers must deaden noise, the architect and client still preferred spatial openness to facilitate employee communication. For a program incor-

porating private offices, shared workstations, and a conference room, she developed a clever system of partitions and **work surfaces** (with signature canopies recalling the one in the Eastmont clinic waiting area) clad with **perforated wood partitions** and **acoustical batting**. Carpeting and acoustical ceilings further reduce sound transmission, countering the effects of translucent and transparent glass panels and other hard surfaces, such as a decorative panel fit with a custom bench.

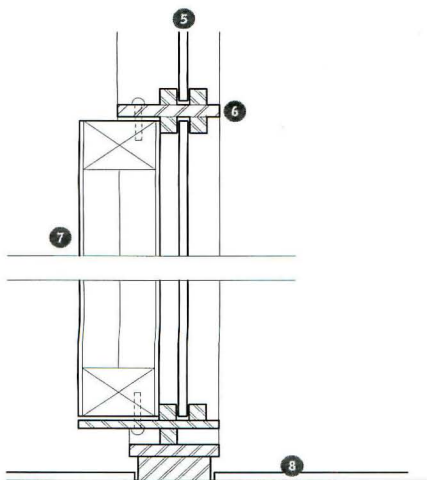
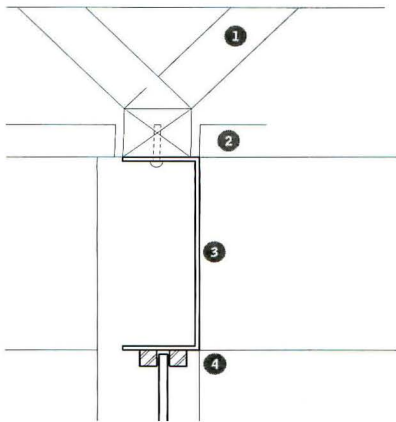
With their skylights, custom officing systems, premium materials, and sculptural detailing, all of these

spaces are lush and inviting. Behind the walls, the projects clear the basic technical hurdles for healthcare clinics in the Bay Area: **seismic reinforcement**, bulletproof armor, security systems, and high-end HVAC and plumbing. Yet, Fougeron’s work shows that high quality and budget-mindedness are not mutually exclusive: She meets fairly modest project cost estimates with robust and almost entirely customized solutions. The San Mateo call center came in at \$150 per square foot, the most expensive of the three projects; the administrative offices at the Eddy Street location and the clinic at the Eastmont Mall penciled out at \$120 and \$90

per square foot, respectively.

Fougeron’s approach matches well with Planned Parenthood’s facility strategy: build for the long run and own the buildings where possible. Still, she notes, “as much as they can expend money for a clinic remodel, once they build the thing, they have extremely tight maintenance budgets. So the investment they make matters.” Both designer and client are convinced that both employees and patients gain from this philosophy. “Design is a democratic tool,” Fougeron concludes. “We should provide the best environment possible regardless of program.”  
**C.C. SULLIVAN**

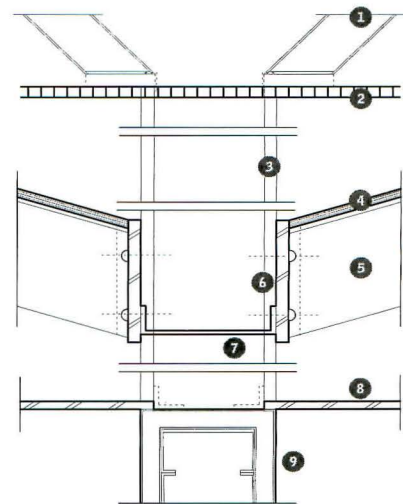
# > specifications healthcare interiors



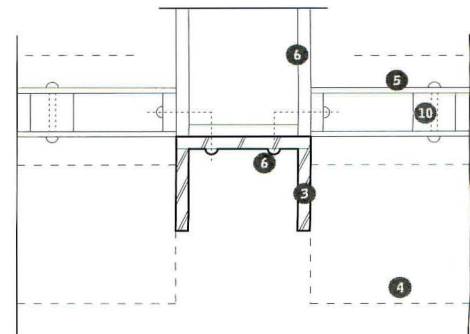
Typical details at ceiling and floor 2"

- 1 metal stud
- 2 ceiling tile
- 3 bent metal
- 4 3/8-inch-by-3/8-inch steel glass stop
- 5 glass clerestory
- 6 3/8-inch steel frame
- 7 perforated wood panel
- 8 carpet tile

Two custom assemblies show how Fougeron—with fabricator Dennis Luedeman—develops cost-effective furniture and partitions. A section through the conference-room wall at the San Mateo call center shows the use of steel, glass, and perforated wood paneling (left). The “light canopies” built into workstation spines at the Eddy Street offices employ a custom steel frame and acrylic panels (right).



Detail at workstation canopy connection 2"



Canopy support (plan) 2"

- 1 conduit tied to structure
- 2 acoustic tile ceiling
- 3 3-inch-by-3/8-inch cold-rolled steel
- 4 frosted acrylic panel
- 5 14-gauge brake-formed bracket
- 6 4-inch-by-3/8-inch steel
- 7 16-gauge brake-formed cover
- 8 1/4-inch hot-rolled steel shelf
- 9 painted 5/8-inch gypsum board
- 10 steel spacer

## Highlights

RANDY BURKETT / GATEWAY ARCH / ST. LOUIS

Illuminating architect Eero Saarinen's 1965 Gateway Arch in St. Louis proved a lesson in diplomacy, patience, and the importance of technological advance. Approached by the Gateway Foundation, a philanthropic organization that funds civic projects, lighting designer Randy Burkett quickly realized he faced a multitude of challenges. Preservationists resisted the plan, protesting that darkness had been the architect's original intent. Others opposed lighting the structure merely out of allegiance to the familiar: The monument had stood unlit for its nearly 35-year history. Meanwhile, the National Park Service doubted a lighting scheme was possible, even if it were desirable. Finally, concerns about light pollution and disorienting migratory birds topped the list of hurdles.

A reel of 1965 television footage proved that the preservationists were in the dark. "Early on we uncovered some archival footage of the team attempting mockups just prior to opening," says St. Louis-based Burkett. "You can see they were using equipment that was state of the art at the time, but it just wasn't powerful enough to project light" to the crown of the 630-foot-high monument. A surviving member of the original project team further confirmed Saarinen's intentions for the structure. "He very matter-of-factly said they would have lit it if they felt it were possible," recalls Burkett.

In addition to technological challenges, the original team had been thwarted by the reflectivity of the monument's new stainless-steel skin. "It was like lighting a mirror," says Burkett. Several decades, however, had seasoned the surface of the arch. "It has a more brushed appearance, more textured, and because of that, it reflects light in a more forgiving manner." The years had also brought new equipment, capable not only of lighting the monument but of addressing concerns about light pollution and disoriented birds.

### THE RIGHT EQUIPMENT

The situation required a lamp powerful enough to reach the monument's height and the ability to precisely control the beam's focus on the delicate shape of the arch. Burkett chose the

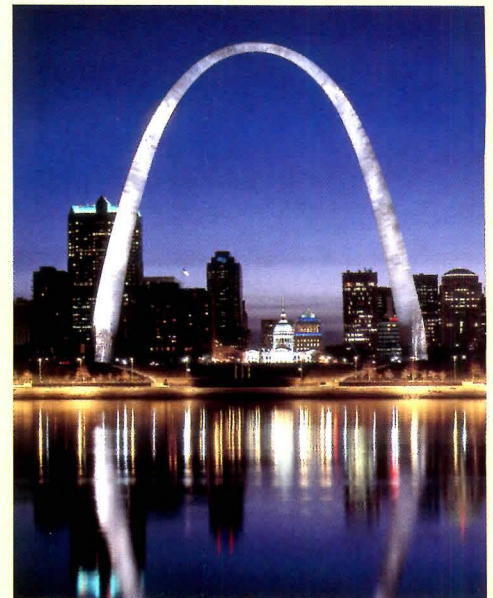
same source recently used in the March 2002 "Tribute in Light" on the World Trade Center site: xenon. (The St. Louis icon, however, took a 3,000-watt lamp, compared to the 7,000-watt spotlights specified for the symbolic replacement of the destroyed skyscrapers.) In addition to its powerful beam, xenon's blue cast flatters the arch's stainless-steel surface.

The lamps are also very compact; pairing the fist-sized source with a reflector "the size of a small garbage can" helped Burkett achieve a focus concentrated enough to illuminate the structure without spill light, which contributes to light pollution; this is particularly impressive at the arch's apex, which is only 10 feet wide. Manipulating the placement of the lamp within the reflector enabled 20 different beam distributions for the 44 light fixtures. Custom lenses also helped control beam delivery, taking, for example, a tight beam and elongating it.

The project team's innovation extended beyond lighting equipment. The 44 fixtures sit inside four subterranean chambers, which required the standard metal-grating covers typically seen on sidewalks for pedestrian safety; wherever there is a light source, however, Burkett used a special high-transmission, high-strength alloy grating. The thinner material allows 5 percent greater light output, which with the powerful xenon lamps, translates to thousands of candlepower.

To satisfy the concerns of the Audubon Society and the federal Fish and Wildlife Department about the safety of migratory birds, the designer specified an instrument normally used in the aviation industry: a ceilometer. The mechanism measures particulates in the atmosphere—fog, low clouds, heavy rain, or snow—which deflect light and distort objects, confusing the flight path of birds. When the ceilometer's laser detects a predetermined level of diffusion it shuts down the lights; Burkett estimates this happens about 12 times a year. Since the Mississippi River, on which the arch sits, is a primary migratory corridor, the monument is kept completely dark for 10 days in both the spring and fall.

Unveiled in November 2001, the arch's new treatment provides an alter ego for Saarinen's iconic structure—a nightlife. The monument, easily recognizable by its daytime countenance, now has a nighttime character equally as impressive. **EMILIE W. SOMMERHOFF**



JEFFERSON NATIONAL EXPANSION MEMORIAL  
GATEWAY ARCH, ST. LOUIS

CLIENT: Gateway Foundation ARCHITECT: Eero Saarinen LIGHTING DESIGNER: Randy Burkett Lighting Design—Randy Burkett, Susan Jennings, Ronald Kurtz (project team) ENGINEER: EDM Engineers GENERAL CONTRACTOR: McGrath ELECTRICAL CONTRACTOR: Kaiser Electric COST: \$2 million

PHOTOGRAPHS BY DEBBIE FRANKE

### HIGHLIGHTED PRODUCTS:

CEILOMETER—Vaisala  
LIGHT FIXTURES—Synrolite  
LIGHTING CONTROLS—Synrolite  
XENON LAMPS—Ushio

# >specifications coatings and finishes

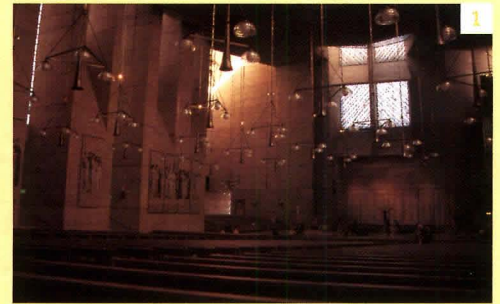
For finished surfaces, color and effect perform best when they are integral to materiality. For the Our Lady of the Angels Cathedral in Los Angeles (1), for example, Rafael Moneo chose an "integrally colored concrete" using pigment supplied by Davis Colors (www.daviscolors.com). About 8 pounds of the "mission adobe" iron-oxide pigments were added to each cubic yard of concrete, making this one of the largest such projects. (Tinted concrete has a long history: Wright used it for the 1964 Grady Gammage Auditorium at Arizona State University, as did Tod Williams/Billie Tsien for the 1996 expansion of the Phoenix Art Museum.)

For interiors, roughened finishes such as polished plaster offer integral color and texture. RTKL, for example, employed red, gray, and white plaster mixes with *spatulata* finishes from Armourcoat (www.armourcoat.com) for its studio in Dallas (2). The hand-trowelled mix includes polished lime stucco, aged slaked

lime, and stone aggregates colored with natural pigments. Other coatings offer new color palettes: PPG Industries (www.ppg.com) has a Fallingwater-inspired line with Cherokee red, light ochre, and lava gray.

In addition to aesthetic flourishes, new coating products address diverse performance attributes. An "optically active" coating from NCP (www.ncpcoatings.com) reveals structural or material imperfections under a special UV light. For stain resistance, Benjamin Moore (www.benjaminmoore.com) offers Moorcraft Super Spec, a stain-blocking alkyd-based primer that seals porous surfaces. The Cementrate acrylic concrete stains from Master Builders (www.masterbuilders.com) minimize dirt and surface discoloration.

For information on these coatings and finishes, circle 250 on page 113.



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# ON STEEL

**GETTING STARTED** "In 1968, I was lucky enough to get a job at SOM in Chicago. They were just finishing the Hancock, which is an incredible steel structure. Beginning my second week in Chicago, I worked with Bruce Graham and Fazlur Khan, and I really started to understand steel through their teaching. They were incredible people with visions of buildings and structures."

*Lucien Lagrange. Principal. Lucien Lagrange Architects. Born in France, he moved to Montreal in 1959. He interned at Skidmore, Owings & Merrill, tasted Chicago, and couldn't stay away. Now one of the most creative classic designers Chicago has ever seen, he is busy leaving his imprint on the City with Big Shoulders, designing with steel.*

**DESIGN** "You have to understand structure. You have to feel in your body how the structure behaves. You have to think one way about concrete, and then another about steel. There are elements of a structure which are similar; but with tall buildings, you have to understand how – and why – they stand up. You almost have to feel the structure yourself. Once you do that, you'll find that steel behaves very differently than concrete. Steel allows you more flexibility than concrete."

**WORK** "You have to get emotional, otherwise a project becomes just a job. You have to have passion for your work."

**VALUE** "Efficiency lends value, and steel is highly efficient. Steel offers longer spans than concrete and steel sections have narrower profiles than their concrete equivalents. Therefore, steel lends itself to utilizing the ceiling space to run mechanicals through members, which typically results in higher ceilings. The span capabilities allow us to create setbacks in the building more easily, and these are used for balconies and terraces, which add value to the building."

**COMMITMENT** "During the design phase, we changed from a concrete structure to a steel structure. After this decision was made, my client wanted me to resign. I was moving too slow. I said, 'You cannot fire me. You don't understand the complexity of steel. Later on, if you want to fire me, you can. But I have to finish what I started.' He didn't fire me. Steel is different. It puts a different layer of complexity on the project that you do not have with concrete. With steel, it's more of a challenge, and you must make a commitment in order to succeed. I understand steel, but how do you really explain it? I was convinced in the end that my client would get a better building because of my belief in steel and my principles."

**CREATIVITY** "If you want to be creative, use steel. Steel requires a bit more work from the designer, because you have to put together a ceiling, exterior wall... more pieces come together. When concrete is up, you're almost done. The opportunities for building transparency presented by steel structures are exceptional. This transparency lends an ephemeral quality to the buildings."

**FLEXIBILITY** "There's a lot you can create with steel because it's steel. Steel is more straightforward. You can mold concrete, for example. But steel comes in pre-designed pieces, out of the mill. At Erie on the Park, a gentlemen bought two units on top of each other and wanted to connect them. We put a stairway next to the exterior wall. That would have been impossible in concrete. When you design a condo building structured in concrete, you have to deal with interior columns in the units. Because we used steel for Erie on the Park, the advantage was we didn't have any interior columns. We had full design freedom, with clear, open space from the core to the exterior wall."

**TEAMWORK** "A creative structural engineer is an integral member of the team when designing with steel. At 175 W. Jackson, we wanted to do something more creative than simply span the space with a large member as we inserted a skylight into an atrium. Our vision was to have the glass appear to float freely above a poetic, light, minimal structure. This could only be done in steel, and our structural engineer helped us realize our vision."

**DETAILS** "Designing with steel requires that we pay more attention to details. The integration of the structure with the enclosure, the placement and integration of the glazing, the mechanical coordination – this all requires thoughtful and judicious detailing to execute the building."

**CLIENTS** "You have to challenge your clients. That's what designing – especially in steel – allows you to do. Convince the client to do it. They will get excited about getting a better building. They'll make more money. Our clients make money through our designs."

**STEEL** "When you start with steel, it's very different. In my mind, when I look at steel, it creates a different emotion. It's exciting because it relates to tall structures, light material. When you think of concrete, you think about shape, heaviness. Intuitively, one usually doesn't relate high-rises with concrete. Steel makes you feel you can build as high as you want because it's light and strong. You can express the structure and it becomes part of your statement. There's so much emotion attached to doing a steel building. It's like a mechanical set...you build up in pieces, and it's exhilarating to follow the forces of the building to the ground. Major buildings – if not the major building of this century – can only be done in steel."

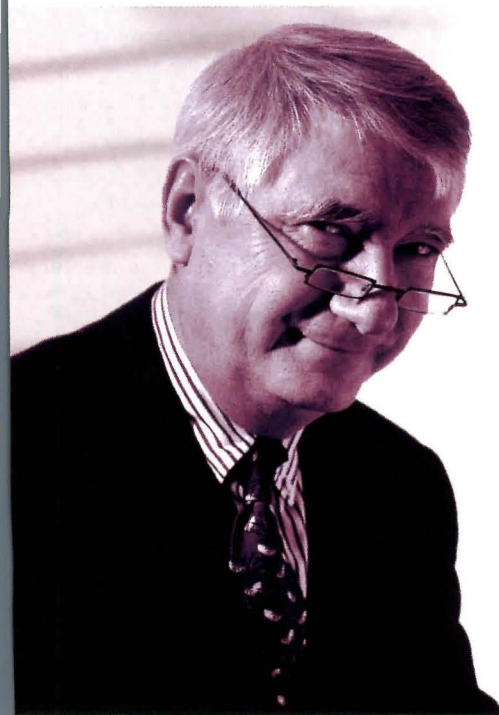


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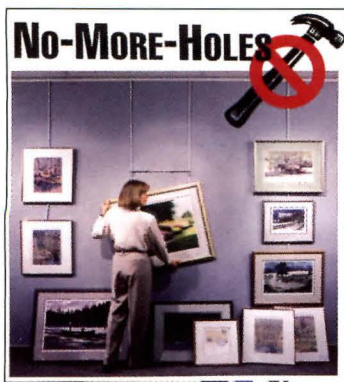
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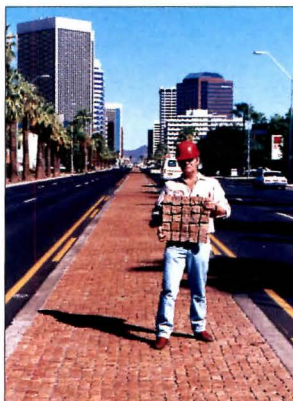
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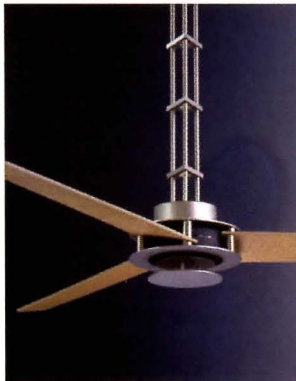
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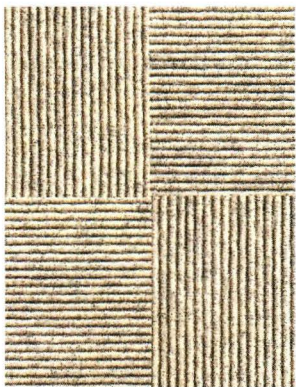
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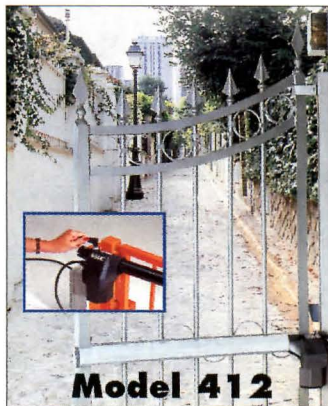
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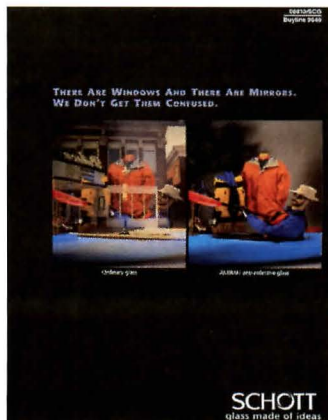
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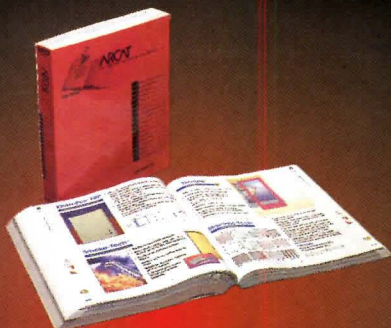


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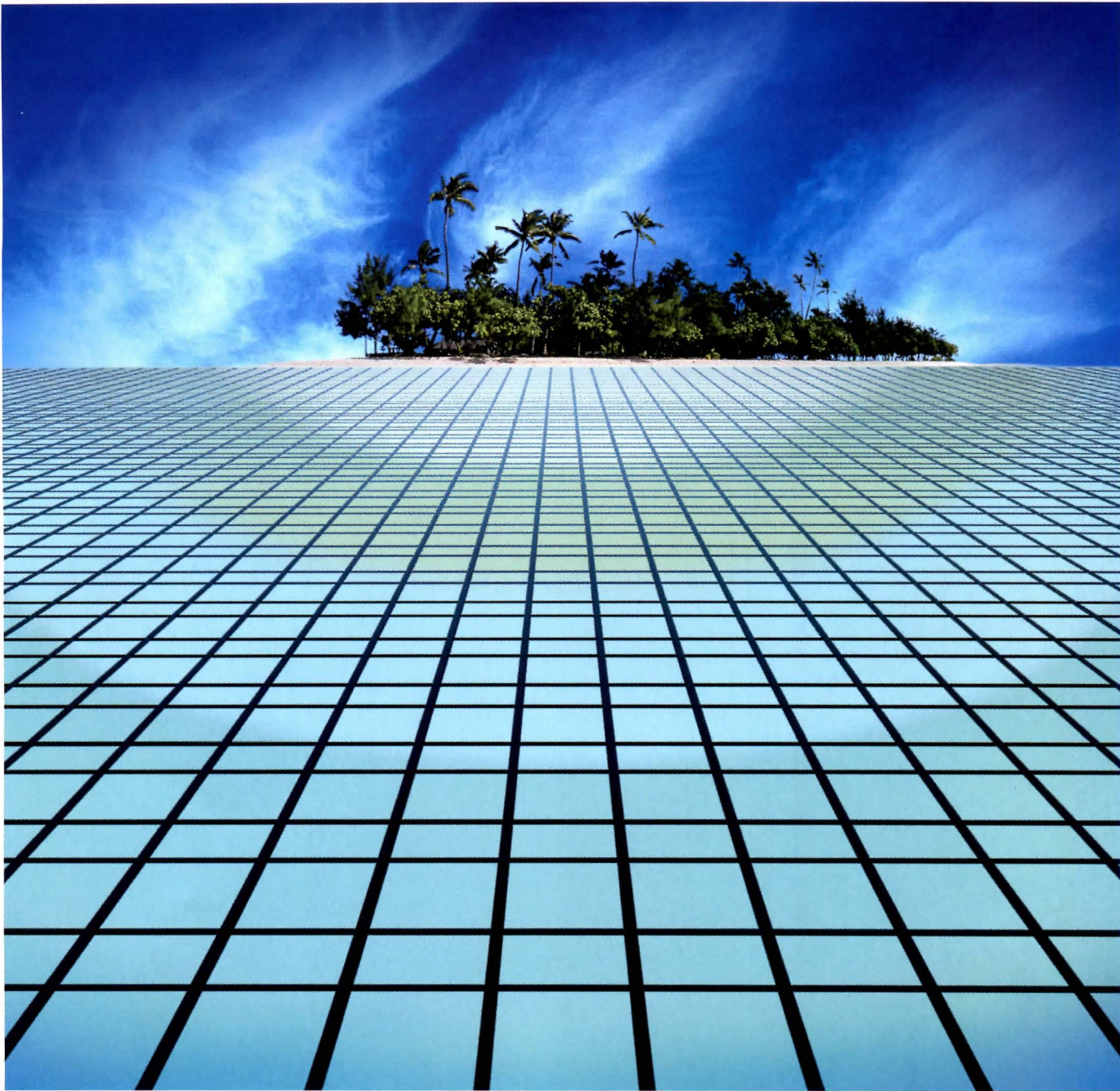
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