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Marco Brambilla



Hilary Lewis



Chris Buck



Marc Peter Keane

London-based photographer **Hélène Binet** has shot the work of a worldwide cast of architects, including Zaha Hadid, Daniel Libeskind, and Ben van Berkel. She contributes regularly to such design publications as *Archis*, *Abitare*, and *A+U*. Last March, Binet accompanied technology editor Sara Hart to document Herzog & de Meuron's new Tate Modern, London (page 146). A security guard escorted the party throughout the eight-hour shoot because art was being hung in the galleries. Nevertheless, Binet never broke her concentration.

Marco Brambilla wears many hats. After earning his B.A. in chemical engineering in 1981, he directed award-winning commercials. More recently, Brambilla directed two feature films, *Demolition Man* (1993) and *Excess Baggage* (1996). In the past two years, he has shown work in several photography exhibits and been featured in a variety of publications, from *Harper's Bazaar* to *The New Yorker*. Brambilla shot architect Rem Koolhaas under a scaffolding outside the Gramercy Park Hotel—Koolhaas' "home away from home in New York" (page 116).

Photographer **Chris Buck** has shot notable figures, ranging from presidential hopeful George W. Bush, to architect Philip Johnson, to serial killer Joel Rifkin, with whom he discussed sex and murder. This month, he shot GSA chief architect Ed Feiner (page 114) for our power list. "He had the coolest glasses," Buck says of his subject. Following the shoot, Buck showed Feiner a small portfolio of his work. After seeing the photos—which include provocative images—Feiner cried in mock astonishment, "I'll get fired!" To see more of Buck's work, visit www.chrisbuck.com.

Originally from the United States, landscape architect **Marc Peter Keane** has lived in Kyoto, Japan, for the past 15 years building gardens for corporate, religious, and residential clients. As an adjunct professor at the Kyoto University of Art, he teaches a design workshop, educating Japanese students about their native landscape. Keane's book *Japanese Garden Design* was published in 1997 by Charles E. Tuttle Company. For this issue, Keane writes about the destruction of Kyoto's architectural heritage (page 75).

Hilary Lewis is a writer, architectural historian, and urban planning consultant in New York City. She coauthored *Philip Johnson: The Architect in His Own Words* (Rizzoli, 1994) with John O'Connor, which won the AIA's International Architecture Book Award in 1995. Lewis is now collaborating with Johnson on a new book. In this issue, she describes Johnson's New Canaan, Connecticut, compound (page 162), where, once a week, the two work together, seated in the Glass House at a table Johnson designed. "It's his favorite place to work, facing his study and the valley," Lewis says. "It's magnificent."

Brooklyn-based **Philip Nobel** contributes to *The New York Times* and *Metropolis*, among other publications. After attending Columbia architecture school, he opted to write about architecture rather than practice it. Nobel has written frequently about power and personality in the profession, as he does on pages 116, 119, and 122. "In writing about architects, I try to find an excuse to talk about power relations. This [issue] allowed me to do that outright."





Architects Wield More Power and Influence Than They Think.

By Reed Kroloff

Architects routinely bemoan their lack of power, and for good reason: These days, architects are rarely in charge. But it doesn't have to be that way. Let me offer a little parable.

Shortly after becoming dean of Arizona State University's College of Architecture and Environmental Design in 1987, John Meunier decided that improving architecture—and by extension, the fortune of architects—in his adopted state meant improving consumer awareness. For that, he decided, the city needed an architecture critic.

Never mind that the local newspaper, the *Arizona Republic*, showed no interest. Never mind that the writer he had in mind, his young assistant dean (guess who?), had no experience. Meunier simply pestered the paper's editors until they committed to some ink.

My debut was a screaming attack on my pet architectural peeve: the city's ubiquitous, red-tile-roofed, quasi-Mediterranean-style houses. In just a few words, I dismissed half the homes in Phoenix as "spray-on Spanish," suggesting they threatened to swamp the place in a "sea of red tile." Not surprisingly, most local developers—whose advertising kept the newspaper in clover—didn't agree. Nor did hundreds of homeowners who had happily bought into the new communities. Letters rained down on the editor.

What followed was surprising. First, I wasn't dismissed. The paper loved the dustup, because letters prove subscribers are readers. The *Republic* ordered

more stories. Second, the phrase "sea of red tile" entered the local lexicon, in papers, and on TV and radio. The *Republic* even went on to publish a year-long, front-page series questioning the sacred notion that all growth is good. John Meunier's vision of architecture (or at least building) as a topic of public debate had come about.

Sort of. A year later, while shopping for a retirement home, my uncle Paul entered the sales office of a new development, and there, hanging on the wall, was a framed copy of the red tile article. Paul asked why the story was there. "Because," the saleswoman gushed, "we don't use red-tile roofs here at El Pueblo Grande de las Brisas Contento en los Arboledos Verdes Ranch." "Oh?" inquired my uncle. "What do you use instead?" She replied enthusiastically, "We use *brown* tile."

Okay, so I didn't save the world. But even in defeat, I acquired a certain authority, or power. I didn't end the tyranny of tile, but I at least prompted homeowners to recognize that their design decisions had broader implications. Small victory to be sure, but within it lies a larger truth: Architects (and occasionally critics) can make people see and understand the world differently. That is a powerful and enduring gift. Over a century ago, Frank Lloyd Wright revolutionized the American house; we still live with the essential elements of his vision today. Only the bay sizes have changed since Mies van der Rohe's mid-century codification of the office block. Recently, Frank Gehry's Guggenheim Bilbao reconfirmed good architecture's cultural and financial firepower.

Yes, Gehry, Mies, and Wright are giants, and their continuing authority reflects that. But many others—some great designers, some not—have translated their visions into positions of power as well. In so doing, they have changed the profession, and sometimes the world. That's what our Power List (page 114) is about. It is stocked with players at the top of today's game, men and women who convincingly demonstrate that architects can still call the shots, both inside the profession and out.

Over the past several decades, architects have felt themselves sliding toward the margins. No doubt today's splintered marketplace leaves them struggling to secure firm purchase. But architects come to the table with an inestimable advantage: vision. That gives them more power than they know. ■

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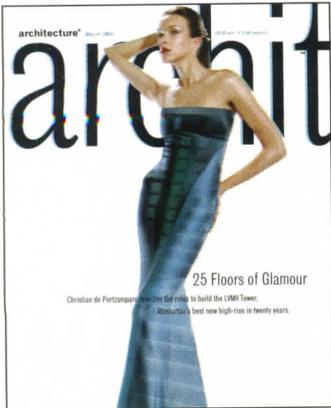
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Join the Club

Bradford McKee's review (March 2000, page 68) of the struggle between architects and designers was informative and thought provoking. However, when he suggests "if interior designers are so unhappy with their lot, they can always become architects," I became infuriated. I suggest they go back to school, get a degree in interior design, practice for several years (as is required), pass the National Council for Interior Design Qualifications minimum standards test, register with their state, and practice interior design. Many of my colleagues who are architects have done this because Alabama does have a title act for interior designers. Architects must recognize that interior designers

have specialized training, knowledge, and expertise. It has been my experience that most architects do not have this training and are typically the first to admit it.

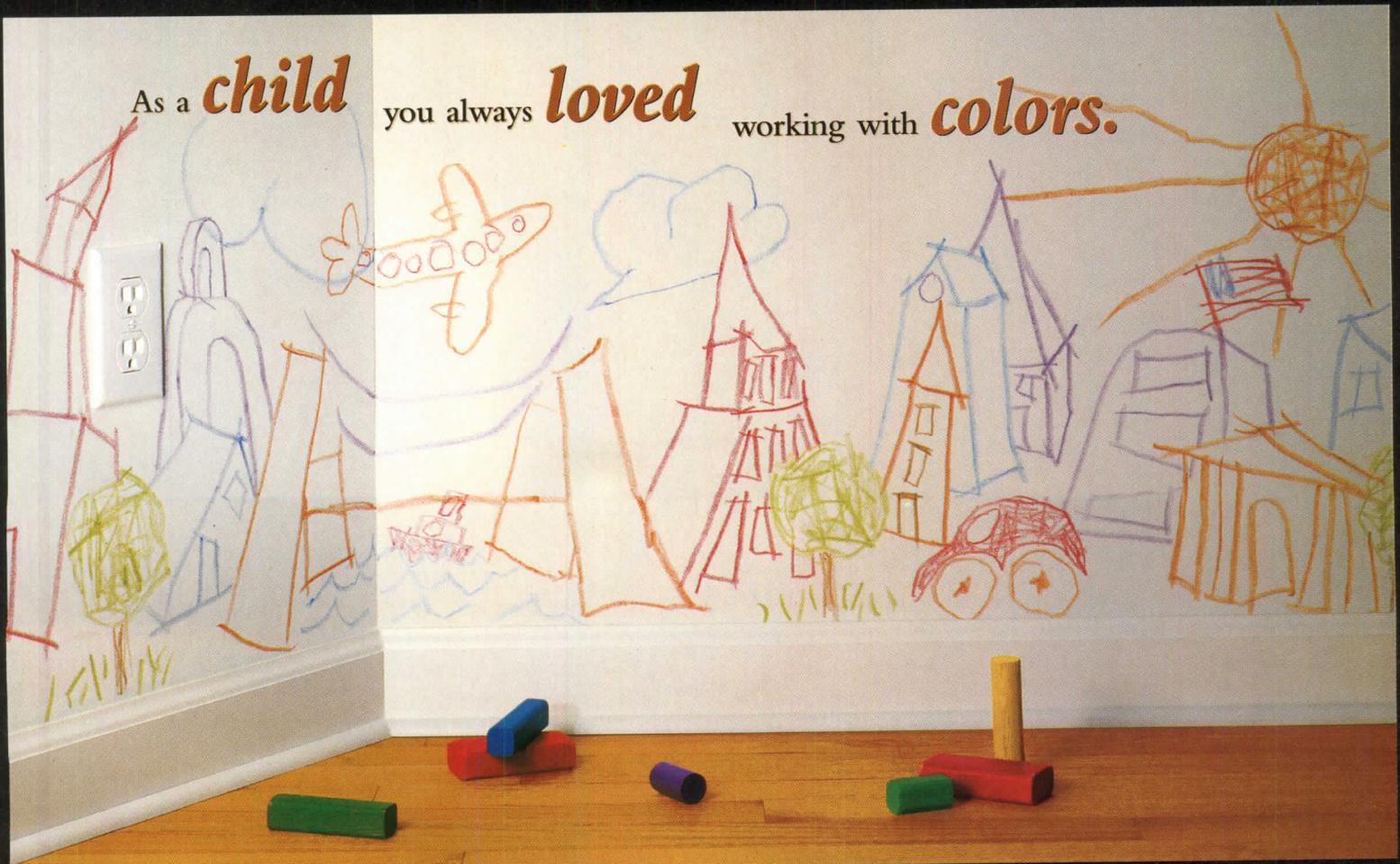
What's next, Mr. McKee, architects wanting to be structural engineers and mechanical engineers because too much market share is going to another profession? The old saying, "if you can't beat 'em, join 'em," applies nicely in this case.

Steven Smith
Birmingham, Alabama

Why expend so much energy on defining carefully crafted slots in which to place ourselves? Surely, no one really believes that "public health and welfare" are what each state's registration laws are promoting. Isn't it really just a tax on

certain professions? Isn't a license to practice architecture or interior design much like a driver's license: A privilege, certainly, requiring certain qualifications, but easily renewed and available to all with fairly minimum requirements. And like a driver's license, it certainly doesn't separate good practitioners from bad—however that might be defined.

In our practice, the harsh laws of the marketplace define very clearly whether we are able to continue our business and practice as professionals. And those are the laws that motivate us to find and train the best staff to do what our clients ask. I would like the professional organizations to promote the idea that design is a valuable process in many arenas and not confuse the marketplace about who



really knows better how to specify a chair, or detail a grab bar, or understand flashing, or develop a real estate strategy.

Larry Lander
Houston

Urban Renewal

I was consistently misquoted in Aaron Betsky's article "There Goes the Neighborhood" (March 2000, page 150). On behalf of the many people whose hard work brought about The Arboretum in Santa Monica, I feel that I should respond to what I characterize as a mean and fictional article.

In 1984, Santa Monica revised its general plan. This process was public and many local architects participated. One key concern was that 4,000,000 square feet of office

space had been developed in the previous seven years and this pressure to develop office space was not going to change under the existing land-use regulations. The planners concluded that a portion of the industrial Olympic Corridor should be rezoned for mid-rise garden office buildings due to its freeway access, large parcels, and adjacency to a planned light-rail line. Other areas that had seen an increase in commercial development at the expense of the surrounding neighborhoods were downzoned to discourage further large-scale development.

Mr. Betsky paints a picture of a neighborhood being destroyed. This is simply not so. There were no low-rent residential buildings; the Beverly Hills dump formerly occupied one site. The Arboretum

site was occupied by the telephone company's storage and maintenance yards. The industrial neighborhood surrounding the "Special Office District" has transformed in recent years as entertainment and technology companies have replaced the light-industrial uses. They have had a tremendous impact on the residential neighborhood to the north since older industrial buildings have limited parking, which has forced employees to go farther into the residential neighborhood to park. This is the same sort of intrusion that brought about the creation of the "Special Office District" in the first place, but I guess it doesn't make as interesting a story as Mr. Betsky's fictional one.

David Forbes
Santa Monica, California

Dior's a Bore?

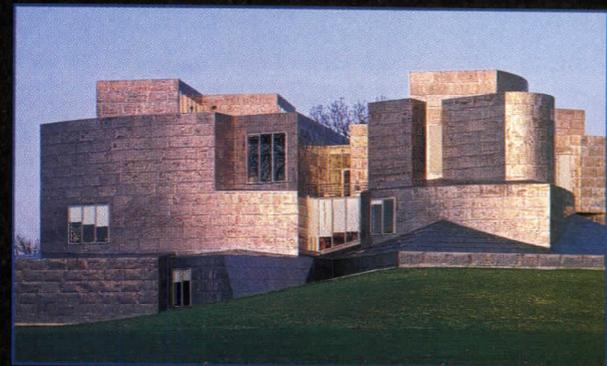
I'm all for "feminine forms," for relaxing the masculine in architecture (especially *skyscrapers*). But look how it's celebrated here: in the most visually prominent spot in the magazine—the March cover—as a plasticized fashion model cutting curves against a white background. The feature conveys its message with the most blatant female-beauty stereotype you can find. Any distinctions between fashion statement and fashionable architecture are lost right on the cover: The woman's a cold building; the building's a cold woman. I'm tired of seeing those images plastered about (at least you expect them in *Glamour*).

Lauren Woodward
Seattle

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Civano Revisited

I was pleased that *Architecture* chose to cover Civano in its March 2000 issue (page 74). I was very disappointed by the coverage. Civano architects are struggling to engage production-housing builders in an architecture of a regionally expressive language. Additionally, Civano's town plan should have been credited to Moule & Polyzoides, Duany Plater-Zyberk, and Wayne Moody-Community Builders.

Housing at Civano was studied in site plan; four different types are being built in varied densities and have significant architectural interest beyond the typical cracker-box house. Our office designed a community center building of a character and architectural ambition

unheard of for the suburbs. The construction materials and the environmental devices being used are of deep interest everywhere, particularly the Southwest.

The profound lesson of Civano is that the form and style of green design is diverse, not singular. Not noticing or promoting this understanding of architecture in our time is our collective loss. With few exceptions, the avant-gardist wing of the architectural profession and the academic establishment that supports it have scorned popular concerns and taste. They have offered nothing to our society other than narcissistic arguments about their self-importance.

Stefanos Polyzoides
Moule & Polyzoides
Pasadena, California

Sound Advice

I enjoyed reading Aaron Betsky's review of Arata Isozaki's new Center of Science and Industry (February 2000, page 70) in Columbus, Ohio, but I felt that his critique of the museum's exhibit spaces was off the mark. He mentioned that the exhibition spaces paid little heed to the architecture and that the internal galleries should have responded better to the architecture so he and other architecture followers could better appreciate the building. I wonder if Betsky looked into COSI's mission. Most science centers are focused on the community, on learning and teaching. It is important for a community-based entity such as this to incorporate inspiring architecture when possible, but the galleries

themselves should be left to the expertise of the exhibit designers and content developers. COSI adds great value to the city of Columbus, both in terms of informal science learning as well as an amazing building.

Betsky apparently spent little time experiencing the galleries' interactive exhibits, and more time visualizing the relationship of those exhibits to Isozaki's building. As a designer for the Tech Museum in San Jose, I experienced firsthand the relationship with various Redevelopment Agency architects such as yourself, who had "museum" experience but no experience dealing with the content and medium of a science/technology center. It's very easy for designers to distance themselves from the content and worry only about the



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architecture being interrupted by pesky exhibits.

My advice for the next time Betsky visits one of the new breed of science centers that incorporate bold architecture into their identity: Relax from your set assumptions and enjoy the experiences by interacting, not just looking.

Dan Wodarczyk
The Tech Museum of Innovation
San Jose, California

Aaron Betsky responds:

My advice to you would be to read my article as it was written, which was from the perspective of somebody looking for an architecture that could have an active, and perhaps transformative effect. I am very happy to enjoy the sorts of educational entertainments you offer, and am suitably impressed

by the skill with which they are assembled, but have this hopelessly romantic belief that architecture can do something more than this. As I said in the article, I realize that COSI's mandate left little room for such an architecture, and only lamented that. I wish you the best of luck serving your public and educating us all in the mysteries and wonders of science.

Texas-Sized Debate

I've always said there's no point to being stupid unless you show it. There is no question who can claim that title as regards the Blanton Museum fiasco at the University of Texas (January 2000, pages 13 and 154). The regents obviously had "head up and locked." One of the most inspiring museums I have

ever had the good fortune to visit years ago was the Louisiana Museum in Denmark. The design by Herzog & de Meuron brought back sweet memories of that museum. Texas loses.

James M. Wehler
Barre, Vermont

CORRECTIONS

The credits with our story about the LVMH Tower (March 2000, page 90) list Philip Toussaint as a member of the project team. He is a project architect with The Hillier Group.

The bottom left cookie jar in "Get Your Hands Caught in These," (March 2000, page 39) should have been titled "Innovative Technology," and is the design of Laurinda Spear of Miami's Arquitectonica.

The bottom row of photos in our AIA National Honor Awards story

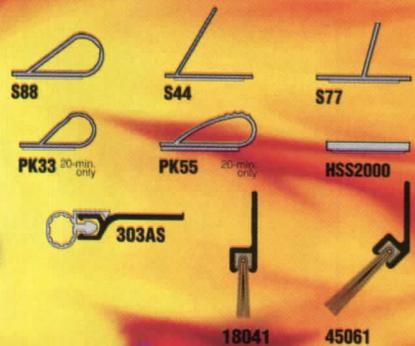
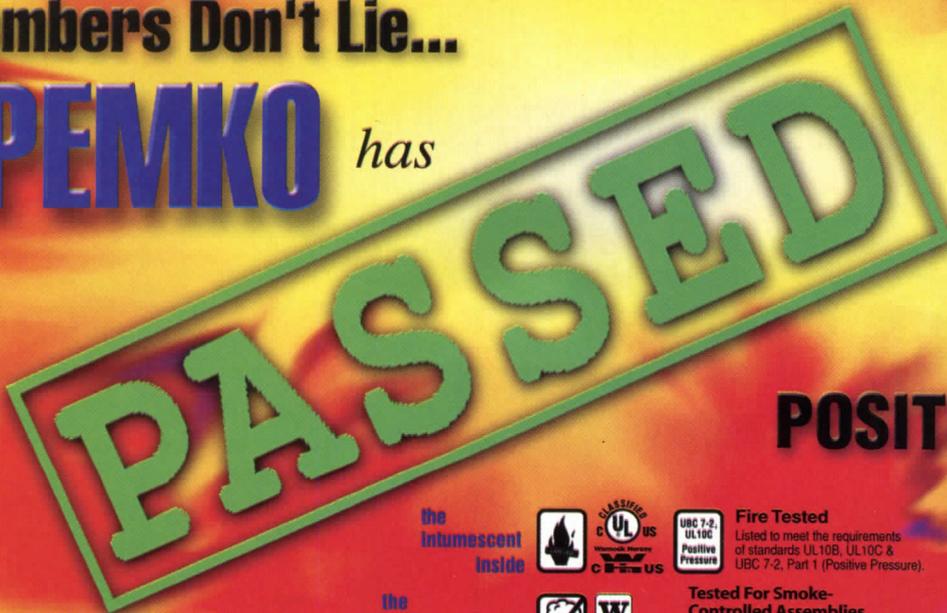
(March 2000, page 35) should have read: Women's Memorial and Education Center, Arlington National Cemetery, Arlington, Virginia (bottom left); Helmut Lang Flagship Retail Boutique, New York City, Gluckman Mayner Architects (bottom right). The St. Jean Vianney Catholic Church Sanctuary by Trahan Architects and Cesar Pelli and Associates' Kuala Lumpur City Centre, although award-winners, were not pictured.

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news

**Guggenheim Shows
Gehry Design for
New York City Branch**

p. 39

Kingdome Come

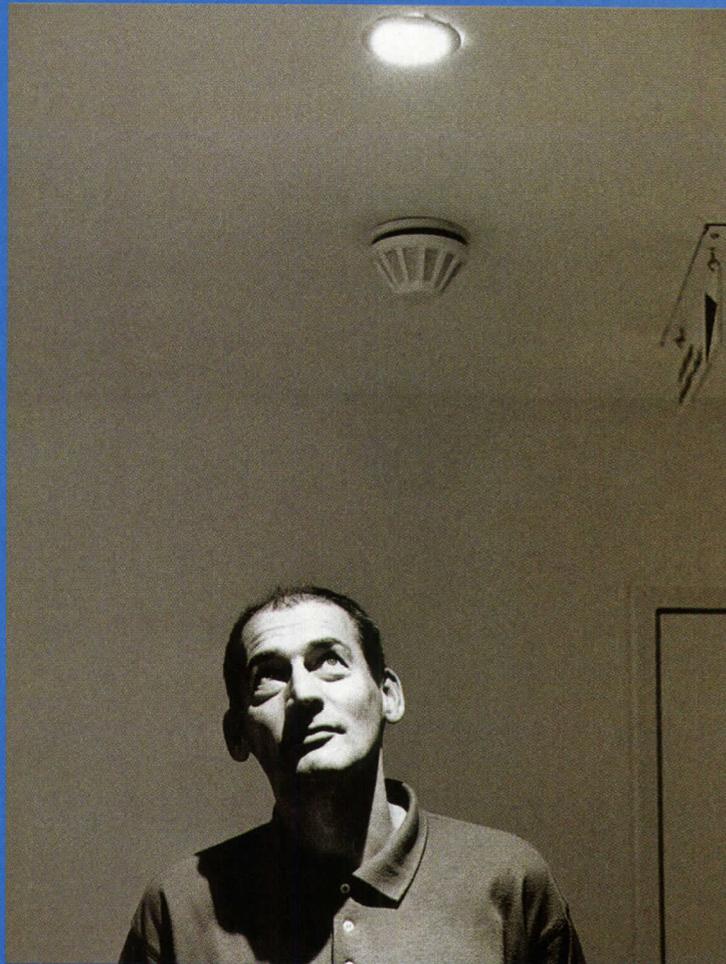
p. 43

**Otis Unveils First New
Elevator Technology
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p. 44

**Tribute:
James Marston Fitch
1909–2000**

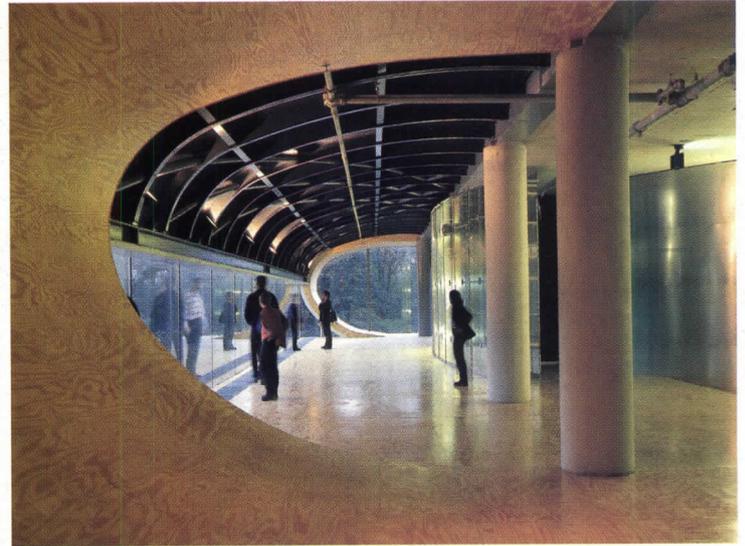
p. 48



Koolhaas Wins Pritzker Prize

Award Last month, in an announcement that must have surprised even the Dutch iconoclast, Rem Koolhaas was named the 23rd Pritzker laureate. The avant-garde provocateur, whose unconventional architectural views have long challenged the profession, will be inducted into the heart of the establishment this May when he receives a bronze medallion and a \$100,000 grant at a ceremony in the Jerusalem Archaeological Park.

Son of a screenwriter and film-school director, the 56-year-old Koolhaas graduated from London's Architectural Association in 1972 and spent his postgraduate years immersed in research at Peter



Projects by Rem Koolhaas, 2000 Pritzker Prize Laureate: Villa dall'Ava, Paris, 1991 (top left); Educatorium, Utrecht, the Netherlands, 1997 (top right); Kunsthall, Rotterdam, the Netherlands, 1992 (bottom left); Nexus Housing, Fukuoka, Japan, 1991 (bottom right).

Eisenman's Institute for Architecture and Urban Studies in New York City. In 1978, he published the results of those years of study, achieving early fame as an urban theorist with *Delirious New York, A Retroactive Manifesto for Manhattan*, a filmic thesis that drew on Coney Island to explain Manhattan's vitality. New York City was not a skyline to Koolhaas but an energy matrix, and skyscrapers were not objects but archipelagoes of activity that blurred the distinction between urban design and architecture in what Koolhaas termed the culture of congestion.

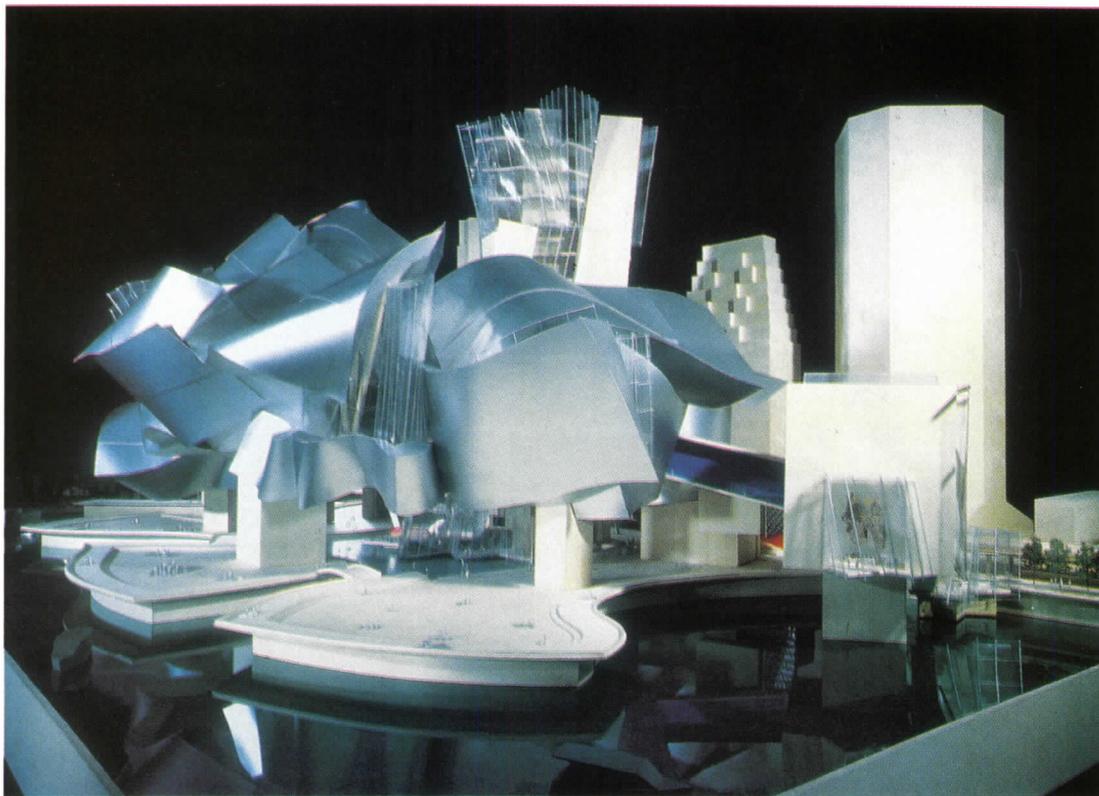
In the mid-1980s, Koolhaas returned to the Netherlands and established a Rotterdam-based practice, where he slowly built a body of work. In 1987, he completed the Netherlands Dance Theater in The Hague, a low-budget, straightforward building whose primary colors and forms define active public spaces inside. His modernism referenced 1950s architecture, which had fallen from consciousness during the postmodernist 1980s. In 1994, he planned a vast new mixed-use complex in Lille, France, a regional transportation node in which he orchestrated existing and new infrastructure to generate a new section of the city. His design for Congrexpo, a vast convention center and exhibition hall within the Lille complex, features many details that differentiated his concept of localized space from the universal space of such classical modernists

as Mies Van der Rohe. Built with expedient materials, such as corrugated polyester and plywood siding, the design walks a fine line between sophistication and kitsch.

Koolhaas has regularly urbanized the interiors of his buildings. In a winning proposal for a University of Paris library near the Seine, Koolhaas ramped the floors to form a continuous, book-lined Parisian avenue. In an unrealized proposal for the Center for Art and Media Technology in Karlsruhe, Germany, Koolhaas conjured Manhattan's urban intensity by gathering all the exchanges of a city in a tall atrium lined with stairs, elevators, balconies, and bridges.

An architect's architect who eschews formalist design, he has liberated himself from what he calls "the ball and chain" that ties designers to the usual concerns about composition, scale, proportion, and details. In a second manifesto published in 1995, *S,M,L,XL*, Koolhaas broached "bigness" as a concept for a new architecture and urbanism.

Koolhaas has distinguished himself as an educator and writer who has bridged the gap between theory and practice. As well known for his books as his buildings, the Dutchman is a complex and inspirational figure for the profession, and an unusual and daring choice for the Pritzker committee. *Joseph Giovanni*



Guggenheim Shows Gehry Design For New York City Branch

Finally... In late April, the exhibition *Project for a New Guggenheim Museum in New York City* opened at the art museum's Frank Lloyd Wright-designed main building on Fifth Avenue. Despite a controversial 1992 expansion by Gwathmey Siegel, the 1959 landmark is short on space; the exhibition makes public the museum's dream of building a new outpost for post-World War II art on a waterfront site just below the Brooklyn Bridge in Lower Manhattan. The older works will stay uptown.

What everybody already knows is the name of the architect who designed the proposed annex: Frank Gehry. Rumors about his involvement have been flying for years; recent visitors to his Santa Monica studio could catch glimpses of enormous study models for the "top secret" project. The Guggenheim's wheeler-dealer director, Thomas Krens, has hinted at replicating the Bilbao Effect in cities from Sao Paulo, Brazil, to Sydney, Australia, but no possible location tantalizes more than New York City, where Wright set such a towering precedent.

Gehry's design is, not surprisingly, a swirl of titanium—like a gigantic tidal wave from the Atlantic—housing three levels of galleries. However, unless Krens can muster enough financial and political support to get the project built, Gehry's design may prove to be just another Guggenheim mirage. *Ned Cramer*

Buzz

In the wake of a scathing report by **U.S. Secretary of Transportation Rodney Slater's** office of \$1.4 billion in cost overruns on Boston's Central Artery/Tunnel project (April 2000, page 23), Massachusetts Turnpike Authority Chairman **James J. Kerasiotes** has resigned.

When EXPO 2000 begins on June 1 in Hannover, Germany, it will be the first world's fair ever without U.S. participation. After years of trying, pavilion planners were unable to raise the \$40 million needed in private donations to build the **Barkow and Leibinger**-designed structure. The United States, unlike most other countries, prohibits the use of public funds for such events.

The shortlist to design a \$62.5 million addition to the Denver Art Museum comprises: **Steven Holl Architects** of New York City; Tokyo's **Arata Isozaki & Associates**; Berlin-based **Daniel Libeskind Studio**; **Venturi, Scott Brown and Associates** of Philadelphia; and Santa Monica, California-based **Morphosis**.

The city of Austin, Texas, has selected **Antoine Predock** to design a new \$34 million city hall. Predock will also design a \$96 million addition to the Larkins Hall Recreation Center at Ohio State University in Columbus.

Among the 10 newly elected honorary members of the American Institute of Architects' College of Fellows is London-based architect **Zaha Hadid**.

The Library of Congress celebrated its 200th birthday last month. The

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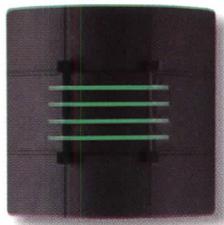
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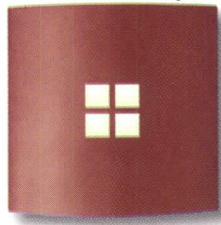
add color to the front window with an internal gel filter



overlay panel in brushed stainless steel with a perforated center



add backlit acrylic ribs and a gel filter



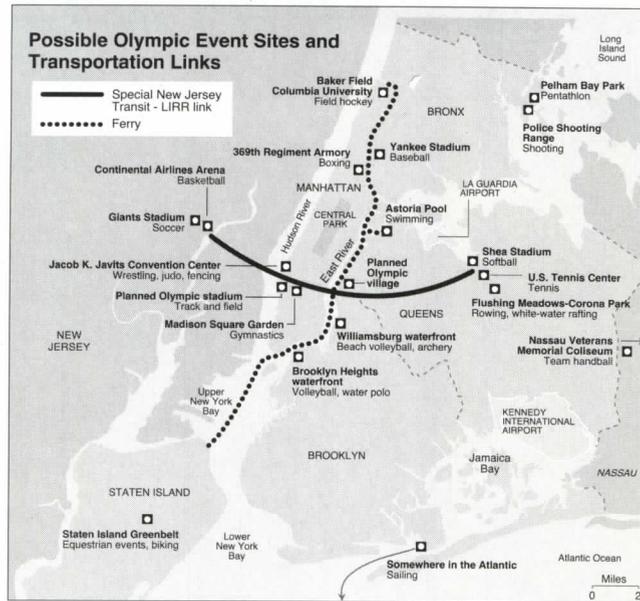
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NYC Bids For 2012 Olympics



The Games

New York has joined the list of American cities vying for the 2012 Olympics. Since 1984, when Los Angeles proved that the games can goose local economies and get some much-needed infrastructure projects built, cities have been scrambling (and in Salt Lake City, engaging in some shady behavior) to curry favor with the selection committee. So far, Cincinnati, Dallas, Houston, Los Angeles, San Francisco, Tampa, and a team consisting of Washington, D.C., and Baltimore are also candidates.

Daniel Doctoroff, a money manager who is the driving force behind NYC 2012 (the organization putting together the city's bid), argues that New York City is better than the other contenders because most of the necessary facilities are already in place. That may well be true, but one of the plan's most important elements—a stadium for both the opening ceremonies and the track and field events—doesn't yet exist, and has already generated plenty of speculation. The spot favored by the planners at NYC 2012 (and Mayor Rudolph Giuliani) is the area covered by the Metropolitan Transit Authority

rail yards between 30th and 34th Streets on Manhattan's West Side. This is the site for the first International Foundation for the Canadian Centre for Architecture (IFCCA) Prize Competition (October 1999, page 63). Peter Eisenman (with collaborators Skidmore, Owings & Merrill) won the \$100,000 prize with a proposal that included many of the program that planners say is central to the New York bid: an expanded convention center, a new Madison Square Garden, and a stadium.

NYC 2012 must submit a comprehensive plan to the United States Olympic Committee by December 15 of this year, everything from plans for an East River ferry to water polo facilities. Already, though, Olympic planners have hired 17 architecture firms—including Tod Williams & Billie Tsien, Hardy Holzman Pfeiffer Associates, and Rafael Viñoly Architects—to draw up plans for facilities ranging from arenas and pools to the Olympic Village. According to Alexander Garvin, chief planner for NYC 2012, Eisenman is not among the 17. Says Garvin, "We're not interested in ideas; we're interested in getting things built." *Anne Guiney*

Web Commerce

Five Top Builders Ally to Launch Home Sales Website

A consortium of five of the country's largest new homebuilders has formed a company to sell their wares on the Web. Together, they already sell more than 100,000 homes a year; they're hoping this new venture will increase that number substantially.

Of course, selling real estate on the Internet is not a new concept. But until now, there hasn't been a unified front in the real estate industry's war on the Web. The alliance of Miami's Lennar; Kaufman & Broad Home of Los Angeles; Centex of Dallas; D.R. Horton of Arlington, Texas; and Bloomfield Hills, Michigan-based Pulte will launch an as-yet-unnamed website that will list available properties in markets nationwide. Other plans for the site include a shop for home-related services and products, including home security, pest control, furniture, and repair contacts for the home's appliances.

The \$2.5 million venture gives each company an approximately equal stake in the website, based on their annual revenue and unit sales. The site will come online by the end of this year; the companies' preliminary plans include an IPO for the website at some point in the future. *Mickey O'Connor*

library was founded when, on April 24, 1800, **President John Adams** appropriated \$5,000 to purchase "such books as may be necessary for the use of Congress."

The shortlist to design a new architectural museum and informational center at the Rhode Island School of Design comprises Finland's **Heikkinen-Komonen Architects**, New York City-based **Steven Holl Architects**, **Rem Koolhaas' Office for Metropolitan Architecture**, and Spain's **Rafael Moneo**.

Kohn Pedersen Fox's London office is designing a \$95 million mixed-use development that includes a 200-room hotel, housing, and two 25,000-square-meter commercial office buildings on the banks of the Vltava River in Prague, The Czech Republic.

Love seats for love handles: Although most building codes recognize 18 inches as the minimum required width of auditorium or theater seating, New York City transit officials report that the nation's backsides are exceeding that measurement. As a result, recent additions to the subway will accommodate the nation's growing bottom line. Ditto for the renovated Central City, Colorado, Opera House, the new Conesco Field in Indianapolis, and your friendly neighborhood General Cinema theater.

The city of Denver has selected hometown favorites **Fentress Bradburn Architects** (they also designed the airport) to author a \$276 million, 1 million-square-foot expansion to the city's convention center.

Condé Nast will launch a 185,000-copy monthly run of *Architectural*



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Kaleidoscope is designed by Robert Chipman, ASLA; Brian Kane, IDSA; and Arno Yurk, AIA, IDSA. Kaleidoscope design is patent pending. Landscape Forms supports the Landscape Architecture Foundation at the Second Century level.



Kingdome Come

Going Down Like the fossilized remains of a gigantic sand dollar, what is left of Seattle's Kingdome poses for a dramatic portrait before being hauled off to the dump. On March 26, a 20-second controlled implosion brought down the 24-year-old stadium. For two months prior, workers stripped bare the stadium's concrete frame, removing roofing, insulation, HVAC, exterior ramps, and seating to simplify the carefully choreographed implosion. Demolition experts fitted the ghostly shell of the stadium's dome—the largest concrete dome in the world, spanning 660 feet—with explosives and a chain-link mesh along its structural ribs, columns, and perimeter tension ring to keep the resultant debris field contained. After the 50,000 tons of debris is cleared from the site, two years of construction will begin on a new \$425 million, Ellerbe Becket–designed stadium for pro football's Seahawks—and the proposed host site of a future World Cup soccer tournament. *M.O.*

Digest en español, a Spanish-language edition of their interior design pub, beginning this month.

A group of 150 **Habitat for Humanity** volunteers in Auckland, New Zealand, set a world record when they completed construction on a four-bedroom house in just three hours, 44 minutes, and 59 seconds, shattering the old record by almost 55 minutes.

The Columbia University School of Journalism and Harvard University's Nieman Foundation have awarded a J. Anthony Lukas Prize for excellence in nonfiction writing (and \$10,000) to **Witold Rybczynski** for *Clearing the Distance: Frederick Law Olmsted and America in the Nineteenth Century*.

The University and city of Chicago are collaborating to fund a \$20 million master plan to convert the **Frederick Law Olmsted**–designed Midway Plaisance into new gardens, pedestrian walks, and a public ice-skating rink.

New York City–based **Cahners Business Information**, publisher of *Variety*, *Interior Design*, and *Building Design & Construction*, has agreed to pay nearly \$300 million to purchase the Norcross, Georgia–based **CMD** (Construction Market Data) **Group**. CMD also publishes construction trade publications and provides regional service directories and data to the industry.

Commonwealth of Pennsylvania **Governor Tom Ridge** has declared May 2000 "Architects' Month" in conjunction with Philadelphia's hosting of the American Institute of Architects' National Convention and Expo between May 4 and 6.

Federal officials have approved the petition by New York state's **St. Regis Mohawk tribe** to open a casino in the Catskill Mountains. The group plans to develop 30 acres now occupied by the Monticello Raceway horse track.

More than 1,600 design teams have entered the competition to design a memorial on Washington, D.C.'s National Mall. King's widow, **Coretta Scott King**, will announce the winner of the competition next month.

The National Trust for Historic Preservation has formed a strategic alliance with **ERA Real Estate**, one of the nation's largest real estate agencies, to train realtors in recognizing the characteristics of an historic property.

The competitors for the commission to design a national Quebecois library in Montreal include **Peter Eisenman**, **Frank Gehry**, and 2000 Pritzker Prize-winner **Rem Koolhaas** of Office for Metropolitan Architecture.

The foundation started by Microsoft chairman **Bill Gates** and his wife, **Melinda**, has given \$10 million to help complete the **RTKL Associates**-designed, \$265 million Capitol Hill Visitor Center. Foundation officials stressed that the donation has been in the pipeline for months and is unrelated to the U.S. Justice Department's antitrust suit against Microsoft.

Skidmore, Owings & Merrill's Chicago office will oversee a \$50 million renovation and 167,000-square-foot expansion of that city's **Daniel Burnham**-designed Field Museum of Natural History.

Wendy Evans Joseph, former senior designer in **I.M. Pei's** office, will



Otis Unveils First Elevator Technology in More Than a Century

Going Up! Otis Elevator Company, the industry pioneer since the dawn of the skyscraper, announced its first major technological breakthrough in more than 150 years. A new lifting system, called Gen2, replaces standard woven-steel cables—in use since the late 1800s—with flat, polyurethane-sleeved steel belts. Despite their meager 1-inch width and 1/10-inch thickness, studies have proven Gen2's belts to be several times stronger, quieter, lighter, and more durable than cables. Further, the slimmer lifting belts and the smaller mechanical systems that drive them eliminate the need for a dependent elevator room. Thus far, Gen2 is only suitable for low- and mid-rise buildings, and will be available globally next year. *M.O.*

Computers

Intern Develops IDP Hours Tracking Software

Six months into his internship at Miami's M.C. Harry & Associates, Michael C. Noll realized how difficult it was to keep track of his Intern Development Program (IDP) hours within the confines of the program's complicated system. In the interest of expediting the process, he created a Microsoft Excel spreadsheet to track his hours by required subject areas. Two-and-a-half years later, Noll claims it has allowed him to finish his internship more swiftly, concentrating his work only in those areas where he needed the hours. Although initially Noll designed the spreadsheet for his own use, he has decided to market the program (available for a mere \$20) on his website: www.m3concepts.com. *Sarah Palmer*

design a national jazz museum in New York City's historic Harlem neighborhood.

Excavations currently under way for an addition at the **Hewlett-Packard** (HP) headquarters in Palo Alto, California, have yielded an unusual discovery: an unopened case of 1940 Lucky Lager beer. Company officials speculate that HP founders **William Hewlett** and **David Packard** placed the brews there as a type of time capsule. As corporate archivist **Karen Lewis** surmised, "They wanted to remember that this is who we are—we are real people, we drink beer."

Newlyweds **Barbra Streisand** and **James Brolin** have won the right to raze one of the three homes on their

Banter



Rosa Leaves NBM To Head Up Heinz

Joseph Rosa recently left the Washington, D.C.-based National Building Museum to assume the curatorial helm of the Carnegie Museum of Art's Heinz Architectural Center in Pittsburgh. Edward Keegan spoke to him about his plans for the center:

How do you plan to raise the profile of the Heinz Center?

My role is to take it up a notch. We are looking to curate shows that will be larger than our 4,500-square-foot space—and would go into the other galleries. We're also looking at the possibility of collaborating with other departments of the museum—contemporary art, video, and other media in which there's a natural affinity for architecture.

What will your first show be?

[Curator] Tracy Meyers and I are working on an exhibit that opens in November that examines the museum's permanent collection. People will see the new space and some recent acquisitions with some earlier drawings that are our favorites—things that nobody would expect to be in our collection.

For example?

We have drawings by Herzog & de Meuron and Neil Denari, a photomontage by Jean Nouvel. But my favorite is a very early William Lescaze rendering for a competition house for G.I. Joe. The kind of stuff that makes you say, "I have to have this."

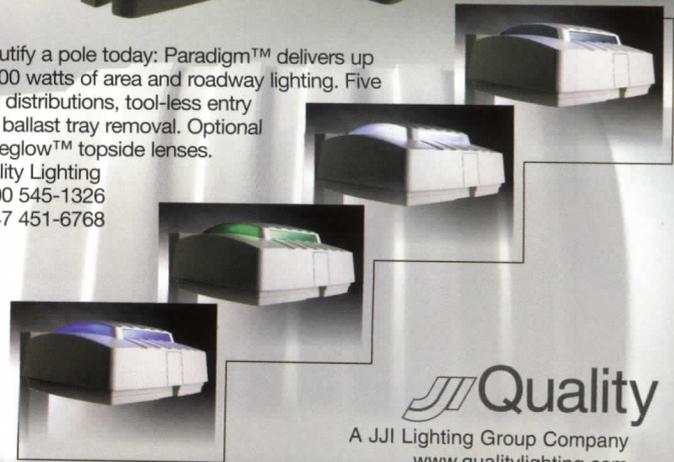
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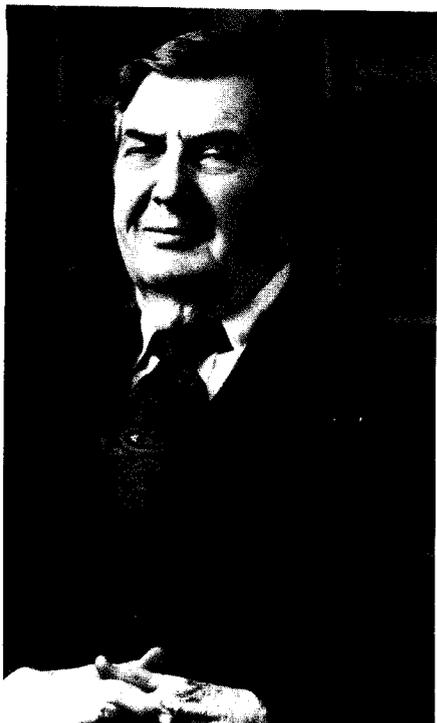


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James Marston Fitch 1909–2000



Tribute Architect, historian, and preservationist James Marston Fitch (at left, in 1988) died on April 10 at his home in Manhattan. Fitch was the founder of Columbia University's graduate program in historic preservation in 1964 and the former director of historic preservation at New York City-based Beyer Blinder Belle Architects & Planners (BBB).

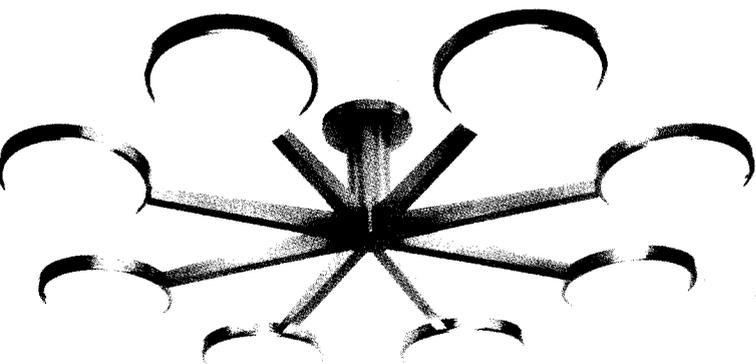
A native of Chattanooga, Tennessee, the Great Depression interrupted Fitch's architectural studies at Tulane University, which he attempted to continue at firms in Tennessee, the Tennessee Planning Authority, and the Federal Housing Administration in Washington, D.C. Working as a meteorologist in the U.S. Air Force during World War II led to an interest in how climate affects architecture, a phenomenon he later wrote about in *American Building: The Environmental Forces That Shape It* (1946).

In 1954, despite a successful career writing for *Architectural Record*, *Architectural Forum*, and *House Beautiful*, he joined the architecture faculty at Columbia. Over the next decade, Fitch formed Columbia's preservation degree program—the first of its kind in the United States—which has graduated nearly 1,000 students over the past 35 years. As BBB's director of historic preservation, he was instrumental in the restoration of such Gotham landmarks as Ellis Island and the mighty Grand Central Terminal.

Oxford University Press recently published his last book, *Architecture and the American People: 1621–2000*. John H. Stubbs

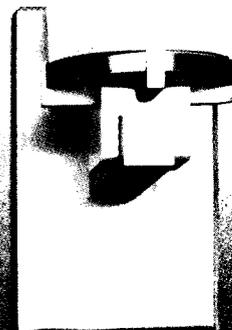
John H. Stubbs, a former student of Fitch's, is the vice president of the World Monuments Fund in New York City. See Architecture's recent interview with Fitch (September 1999, page 144).

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Hadid Shows Her Moves



Dance London-based architect Zaha Hadid has officially reversed the curse. With three key museum commissions in Rome; Wolfsburg, Germany; and Cincinnati under way, she has returned to a longstanding passion: exploring nonbuilding architectural connections with other disciplines. She recently flirted with the pop music world, designing the sets for the Pet Shop Boys' latest tour. Next up: choreography.

Working with the Belgian dance troupe Charleroi Danses (who has also worked with 2000 P/A Award-winners Diller + Scofidio), Hadid crafted a fluid series of stage sets, costumes, and media projections to complement choreographer Frederique Flamand's narrative of the rhythms of a city. Called *Metapolis*, the piece will have shows in Belgium, Italy, Spain, and France through March of next year. *M.O.*

news

3-acre Malibu, California, compound to build a 5,900-square-foot barnlike structure to store Streisand's collection of Hollywood memorabilia.

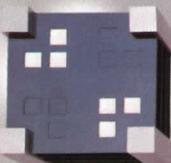
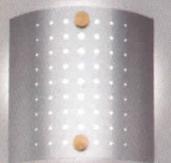
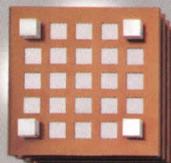
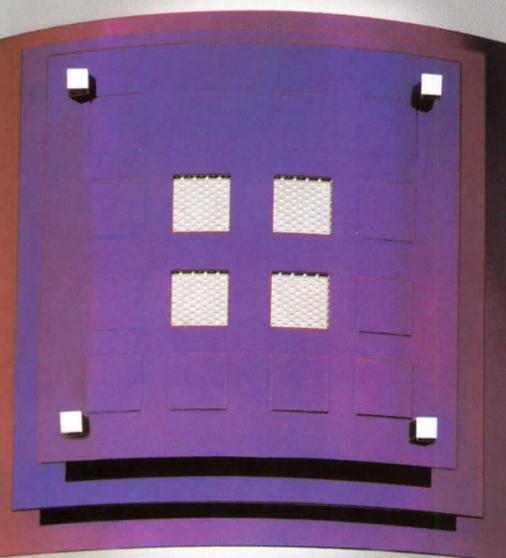
Michael Graves will design a 42,000-square-foot Museum of the Shenandoah Valley on the grounds of the Glen Burnie historic house in Winchester, Virginia.

Frank Gehry & Associates has been retained by the **Connecticut Historical Society** and Trinity College to design a 115,000-square-foot Connecticut History Center in Hartford.

The Vatican has approved the first step in the process toward the beatification of Barcelona architect **Antoni Gaudí**.

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The Pain of Preservation

Preservation Five years after a terrorist's bomb eradicated the front third of the Murrah Building in Oklahoma City—killing 168 and damaging more than 300 buildings—much of the north downtown area has been transformed, thanks to federal redevelopment funds and local initiative. But the eight-story, 120,000-square-foot YMCA building, the only local

example of the International Style, hasn't changed since the blast: windows boarded up and facades scarred from flying debris.

The current owner, contractor-turned-developer Gene Maule, bought the YMCA for \$50,000 shortly after the bombing and had planned to renovate it, but couldn't put a deal together. Despite seeming the concerned caretaker, Maule turned down a \$110,000 offer by the city's Urban Renewal Authority for the building, which lies within an urban renewal district. Instead, he will sell to an unnamed buyer who, he says, will tear it down to make way for parking to serve the new national memorial commemorating the victims of the bombing, which was scheduled to be dedicated on April 19. Maule's transfer of the building could render moot a plan submitted to the Urban Renewal Authority by local architect James Loftis, who wants to renovate the YMCA as a low- to moderate-income apartment building and art gallery.

All of this has led Preservation Oklahoma to place the YMCA on its "most endangered" list. Robert Erwin, the organization's executive director, believes the biggest challenge the building faces is that local residents have a hard time accepting a modernist building as historic. "It's a hard sell because people think of architecturally and historically significant buildings as something from the 19th century or before," Erwin says. "They're going to have a hard time swallowing the idea of this International Style building being significant." *Steven Litt*

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Sprawl Watch

Sprawl Hinders Food Production

Researchers at NASA's Goddard Space Center have just discovered another reason why urban sprawl is bad, bad, bad: It can dramatically reduce land's potential to grow food. The most straightforward reason—that any given piece of land that has asphalt or concrete or a building on it can't be used to grow wheat or soy or tomatoes—is not the only one. Agricultural areas typically are located on the outskirts of towns and cities, right in the path of sprawl. Further, agricultural land is usually level and clear, and often has access to a water supply. And because of the financial pressures on farms, they are generally the first to sell.

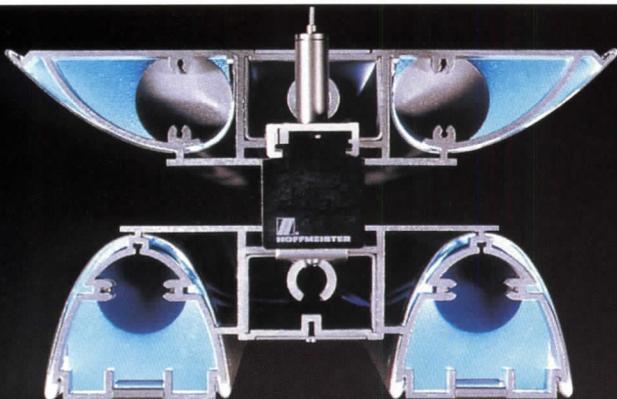
The Goddard team was specifically interested in finding out whether sprawl affects photosynthesis, the process whereby plants extract carbon dioxide from the air and convert it into nutrients to grow. They studied 12 American cities—including notorious sprawlers Los Angeles, Phoenix, and Atlanta—to figure out exactly how much their growth disrupts this process. Researchers looked at satellite data measuring the "greenness" of a non-urbanized area, or how much plant life the land surface can support, and then compared it with the green level of the adjacent city and its suburbs. The findings provide a clear picture of exactly how sprawl can be ecologically destructive: In some areas, the density of buildings has retarded this process by up to 20 days per year. It is as if the growing season were slashed by three weeks.

Before anti-sprawl advocates add this study to their arsenal, however, they should consider another of the Goddard team's findings: The hallmark of suburbia—the well-watered green lawn—can actually increase the photosynthetic potential of some regions. Semi-arid landscapes, like that of Los Angeles, don't have a very high greenness index to start with, but can be raised with such human interventions as gardens and landscaping. *A.G.*

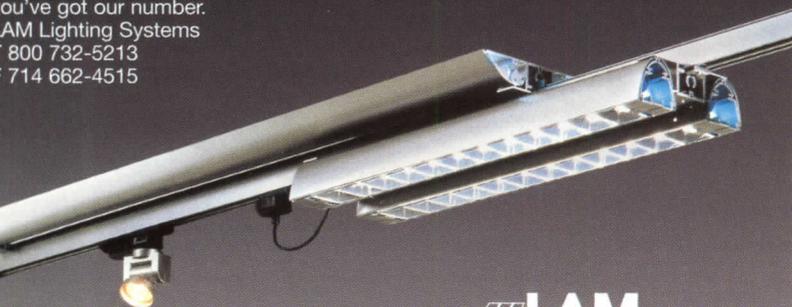
This year's winners of the DuPont Benedictus Awards for Innovation in Architectural Laminated Glass will receive a special award: a sculpture designed by renowned glass artist **James Carpenter**.

Santa Monica, California-based **Johnson Fain Partners** will design a 326,000-square-foot Oklahoma Native American Museum & Cultural Center complex in Oklahoma City. The complex will comprise a museum and interpretive center, a Native American arts center, a tribal meeting center, a powwow and performance arena, and a culture and communications center.

The Vietnamese government has announced that it plans to convert a 1,000-mile stretch of the Ho Chi Minh Trail into a two-lane national



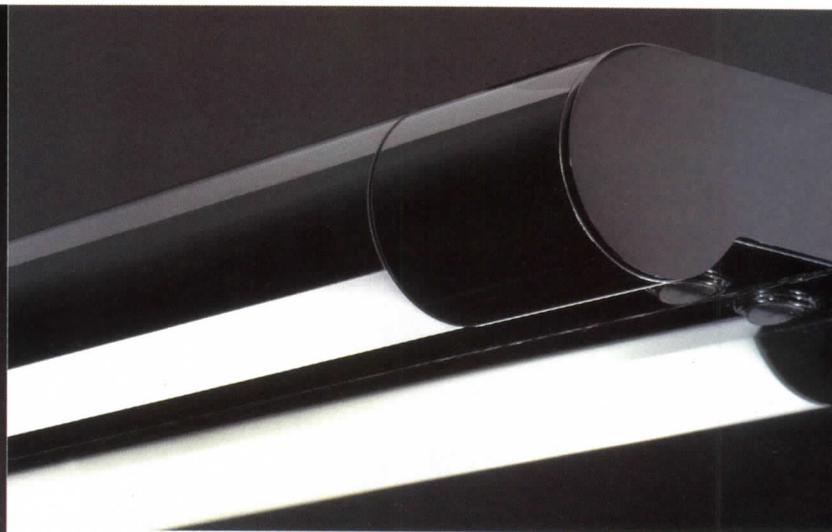
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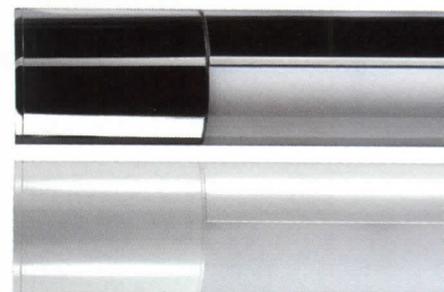
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The Exam

Architect Registration Examination Pass Rates by Division

Last year, candidates' pass rates improved in eight of the nine divisions of the Architect Registration Examination (ARE) over candidates who took the exam in 1998.

Multiple-Choice Divisions	1998	1999
Pre-Design	63	69
General Structures	71	74
Lateral Forces	81	86
Mechanical & Electrical Systems	80	85
Materials & Methods	88	89
Construction Documents & Services	82	84
Graphic Divisions		
Site Planning	71	72
Building Planning	70	69
Building Technology	72	75

The List

15 Most Expensive Markets

In today's global economy, a U.S.-centric practitioner may be surprised to learn that office space in Midtown Manhattan is a relative bargain. The Apple placed 12th in a survey by real estate research firm CB Richard Ellis that ranked the world's 15 most expensive office markets.

City / Market	Annual Occupancy Costs Per Square Foot
Tokyo Inner Central	\$146.87
London West End	\$131.94
Tokyo Outer Central	\$130.55
London City	\$104.59
Mumbai, India	\$ 76.04
Hong Kong	\$ 70.34
Moscow	\$ 67.22
Seoul, Korea	\$ 63.22
Paris	\$ 62.57
Frankfurt	\$ 60.72
Edinburgh	\$ 57.92
New York City Midtown	\$ 56.14
Birmingham, England	\$ 53.90
Manchester, England	\$ 53.02
Glasgow	\$ 52.20

SOURCE: NATIONAL COUNCIL OF ARCHITECTURAL REGISTRATION BOARDS (FAR LEFT); SOURCE: CB RICHARD ELLIS (LEFT)

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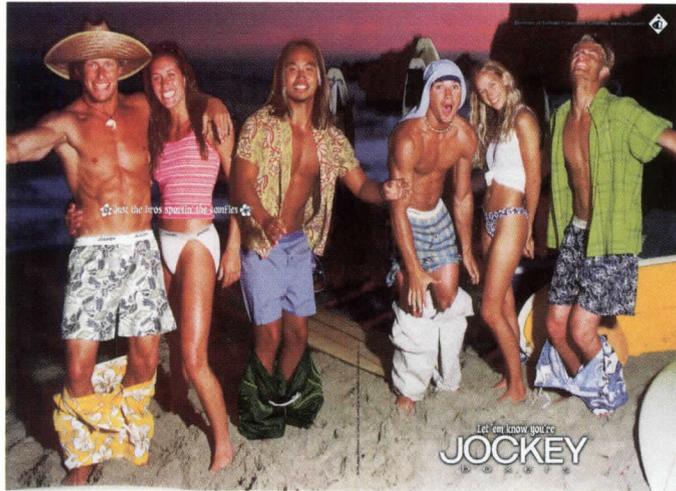
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Jockey Taps Architects To Hawk Skivvies



Architectural Models The Jockey underwear company's latest ad campaign features print ads and billboards of real people from varying walks of life—professional surfers (above), firefighters, and Broadway actors, to name a few—in their undies. Now you can add architects to that distinguished list. Grey Advertising is currently assembling a crew of designers to pose in Jockey's new Metroscape line of boxer shorts, which feature abstracted references to the Big Apple's built environment. They'll be shooting the selected architects this month atop an under-construction Manhattan tower. Look for the supermodels this fall. *M.O.*

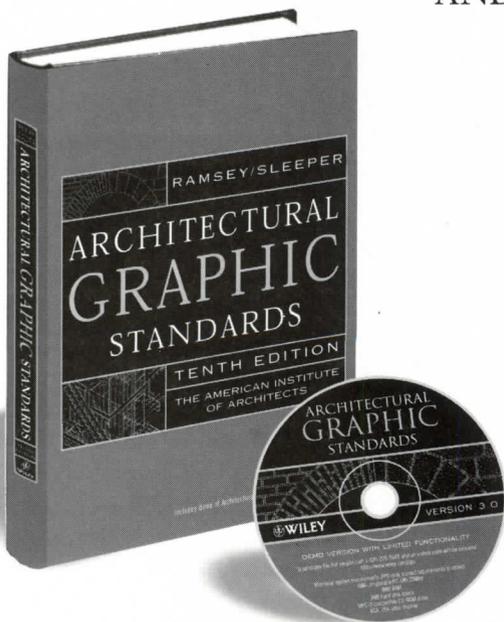
highway. During the Vietnam War, the Vietcong used the trail as the main north-south supply route.

After an arduous preservation struggle, the final home of poet **William Butler Yeats**, an 18th-century farmhouse, in Dublin, has been saved from the wrecking ball.

Portland, Oregon-based **BOORA Architects** was selected to design two California campus buildings: a new 75,000-square-foot medical education facility at the **Stanford University School of Medicine** and a 25,000-square-foot music/education building at Scripps College in Claremont.

OBITUARY: Illustrator **Edward Gorey**, 75.

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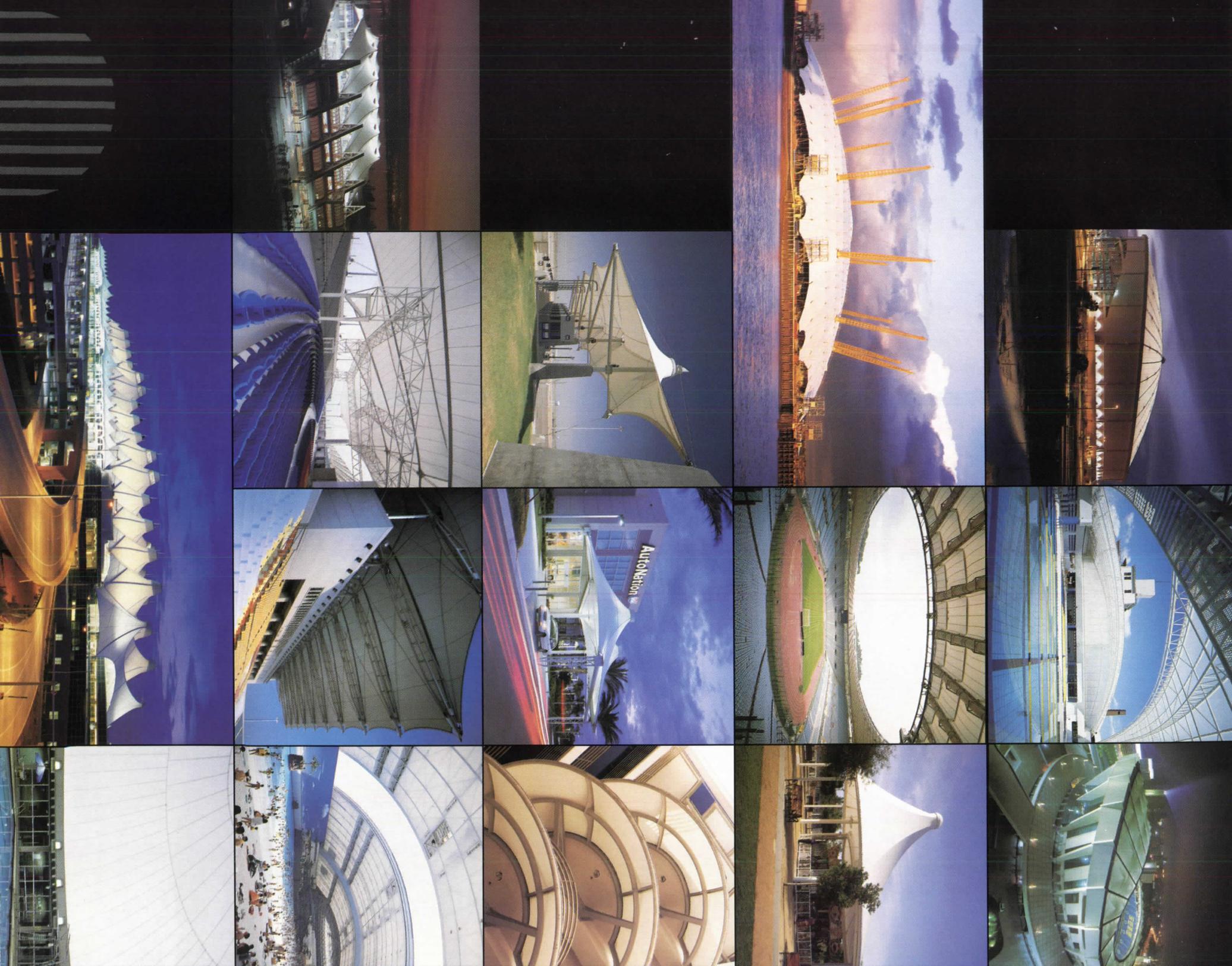
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Calendar

Exhibitions

Chicago

Bilbao: The Transformation of a City at the Art Institute of Chicago through July 16 (312) 443-3600

Many Shades of Green

at Archeworks May 14–August 15 (312) 867-7254

Los Angeles

Millennium Models at the Pacific Design Center through June 1 (310) 208-5756

Making a Prince's Museum: Drawings for the Late 18th-Century Redecoration of the

Villa Borghese in Rome at the J. Paul Getty Museum June 17–September 10 www.getty.edu

At the End of the Century: One Hundred Years of Architecture at the Museum of Contemporary Art through September 24 (213) 621-2766

Montreal

Shaping the Great City: Modern Architecture in Central Europe, 1890–1937 at the Canadian Centre for Architecture May 24–October 15 (514) 939-7000

New York City

The New York Century World Capital Home Town, 1900–2000 at the Museum of the City of New York through July 9 (212) 534-1672

Shigeru Ban: A Paper Arch at the Museum of Modern Art through August 1 (212) 708-9400

National Design Triennial: Design Culture Now at the Cooper-Hewitt, National Design Museum through August 6 (212) 849-8400

Kahn's Modern Monuments at the Museum of Modern Art through August 22 (212) 708-9400

A Century of Design, Part II: 1925–1950 at the Metropolitan Museum of Art May 9–October 29 (212) 535-7710

Philadelphia

Rome in the 18th Century at the Philadelphia Museum of Art through May 28 (215) 684-7860

San Francisco

Sol LeWitt: A Retrospective at the San Francisco Museum of Modern Art through May 21 (415) 357-4000

Design Afoot: Athletic Shoes

1995–2000 at the San Francisco Museum of Modern Art July 15–October 17 (415) 357-4000

Washington, D.C.

Ralph Rapson: Sixty Years of Modernism at the Octagon Museum through May 28 (202) 638-3221

The Corner Store at the National Building Museum through July 31 (202) 272-2448

The Triumph of the Baroque: Architecture in Europe 1600–1750 at the National Gallery of Art May 21–October 9 www.nga.gov

Conferences

EnvironDesign4: Choices Denver May 18–20 www.enviromdesign.com

A/E/C Systems Washington, D.C. June 5–8 www.aecsystems.com

Reinventing Space: Beyond the Boundaries of the 20th Century Jerusalem June 11–14 www.jersemar.org.il

NeoCon 2000 Chicago, June 12–14 www.merchandisemart.com/neocon

The 50th International Design Conference Aspen, Colorado June 14–17 www.idca.org

53rd Annual Meeting of the Society of Architectural Historians Miami June 14–18 www.sah.org

Congress for New Urbanism 2000 Portland, Oregon June 15–18 www.cnu.org



A Way of Life: An Apprenticeship with Frank Lloyd Wright, 1948–49 is a first-person account by Lois Davidson Gottlieb of her two-year fellowship at Frank Lloyd Wright's Taliesin compounds in Spring Green, Wisconsin, and Scottsdale, Arizona. Only 20 when she arrived, Gottlieb learned to draft and build at Wright's side, gaining unprecedented access to the man behind the often-misunderstood genius. Among the 55 color photographs by Gottlieb in the exhibit is this portrait of Wright and his wife, Olgivanna, tiptoeing through the flora of Taliesin in the spring of 1948. At the Octagon Museum in Washington, D.C., through June 23 (202) 638-3221.

Construction Specifications Institute Atlanta June 22–25 www.csinet.org

27th International Making Cities Livable Conference Vienna July 4–8 www.livablecities.org

Preserving the Recent Past Philadelphia, October 11–13 (202) 343-6011

Uniting the Useful with the Beautiful: The Architecture of the Arts and Crafts Movement Pattee, Iowa, October 19–21 (212) 889-3580

Competitions

District of Columbia Millennium Gate Design Competition sponsored by the University of Notre Dame School of Architecture; deadline May 12 www.nd.edu/~arch/millgate.html

9th Annual Ermanno Piano Scholarship for a six-month internship at the Renzo Piano Building Workshop in Genoa, Italy; deadline May 31 www.rpwf.org

Frate Sole Foundation International Prize for Sacred Architecture carries a 300 million-lire (approx. \$190,000) prize; deadline May 31 fax (39) (0382) 301-413

Monument to the Third Millennium Design Competition sponsored by the government of Puerto Rico; deadline June 16 www.monumentcompetition.com

Palos Verdes Art Center International Architectural Design Competition deadline July 1 www.pvartcenter.org

The James Marston Fitch Charitable Foundation Mid-Career Grants of up to \$10,000; deadline September 1 (212) 777-7800

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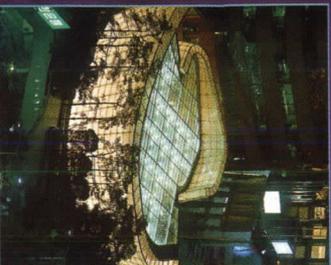
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THE JURY



Brian Carter — Is a professor and Chair of the Architecture Program at the University of Michigan. Carter joined the University from Arup Associates in London, England, where he worked in multi-disciplinary teams on a range of award-winning architectural projects. In addition to his professional experience, Carter has taught at the University of Bristol, the University of California-Berkeley, the Royal Academy of Copenhagen, and the Rhode Island School of Design, and his writings on architecture have been published in numerous international books and journals.



Tim Macfarlane — Is the Creative Design Partner of Dewhurst Macfarlane and Partners, and is an internationally recognized structural engineer who works closely with clients and architects in the field of structural glass. Before forming his own practice, Macfarlane worked for Charles Weiss and Partners, Arenco Consulting Engineers and Alan Baxter Associates in London. Recent projects in which Macfarlane led the practice in innovating structural glass include The Tokyo International Forum, Samsung Headquarters Building and the Glass pavilion to Broadfield House Glass Museum.



Julie Vandenberg Snow — Julie Snow's studio practice in Minneapolis, Minnesota, Julie Snow Architects, Inc., has won numerous awards and established a reputation for design excellence in a broad base of project types. In addition to her professional career, Snow teaches graduate architecture design studios at the University of Minnesota's College of Architecture, and Landscape Architecture as an adjunct Associate Professor.

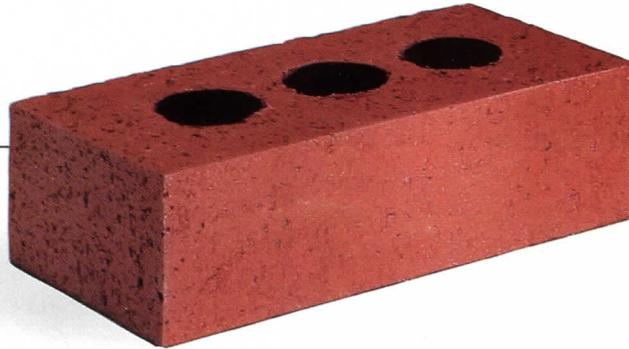
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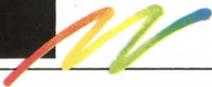


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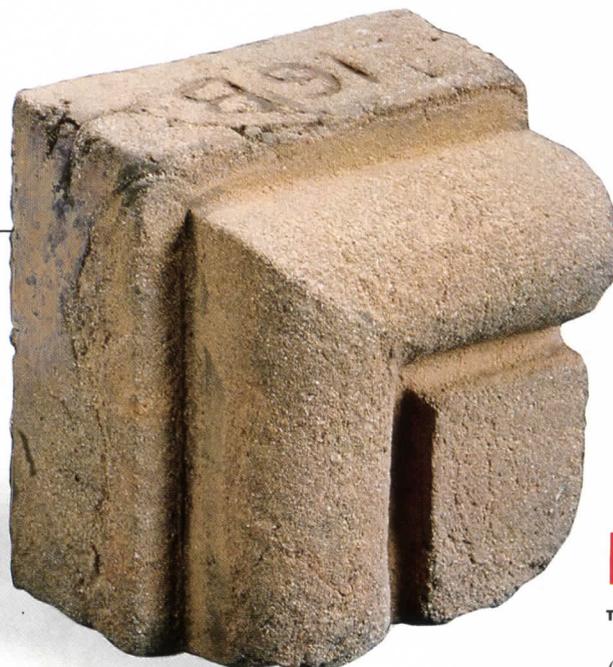
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On the Boards

Perkins & Will,
Skybridge at One North
Halsted Condominium Tower,
Chicago, Illinois

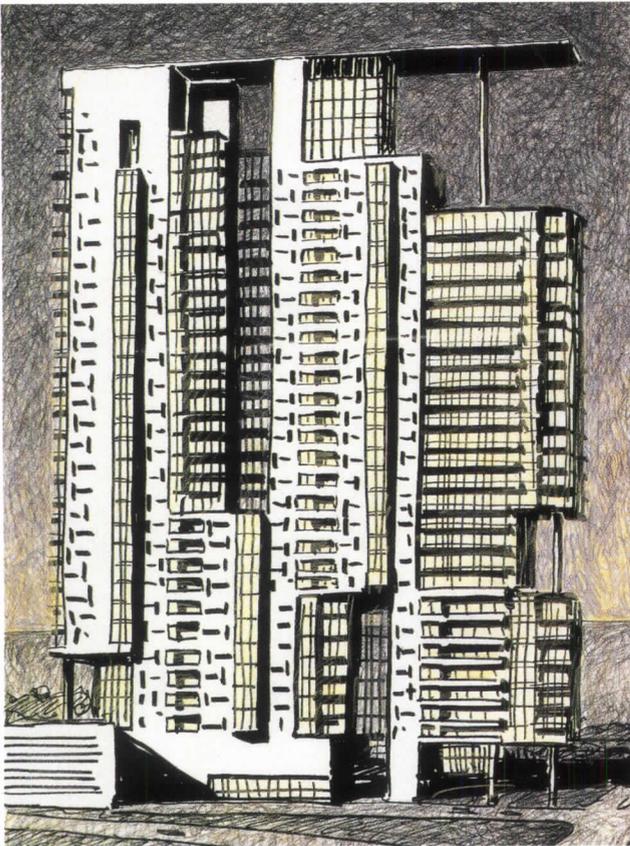
Gentrification works in funny ways—while rents rise and the latté shops move into the Chicago neighborhood of Greektown, there is still no supermarket. When ground breaks this spring on a 39-story condominium tower designed by Perkins & Will, however, not only will the once-rundown district's tony new character be solidified, but locals will also have a place to shop for groceries.

While there are other high-rises near the 237-unit building—the Sears Tower is only six blocks away—Perkins & Will felt it was important to make a gesture to its low-lying neighbors. The tower sits on a plinth that houses the supermarket at the street level

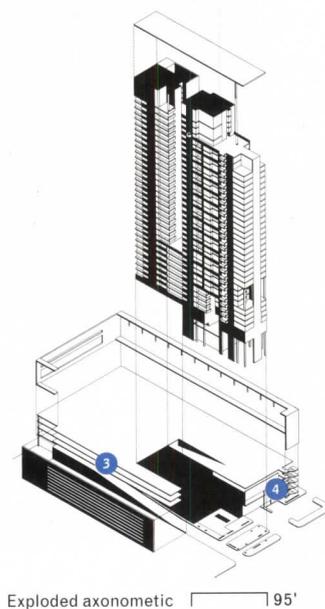
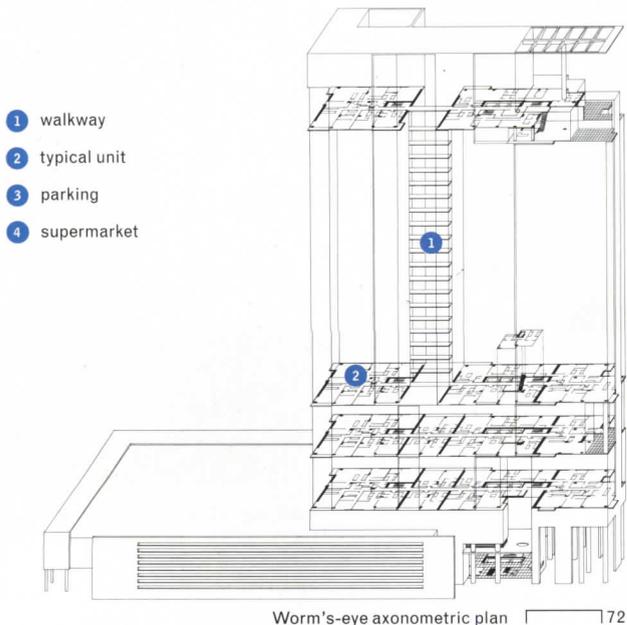
and four levels of parking above. As the building rises above that solid base, its massing begins to pull apart. Long vertical stacks of windows and terraces project out and break up the tower's surface. Perhaps the most overt tactic is a 30-foot notch in the floor plates, which is glazed on both sides to make a walkway between the northern and southern ends. This transparent slot suggested the building's name, the Skybridge. The result looks like a series of tall and slender towers instead of one monolithic slab. That familiar slab form is suggested, though, by a large canopy that extends out over the shorter elements and completes the rectangle.

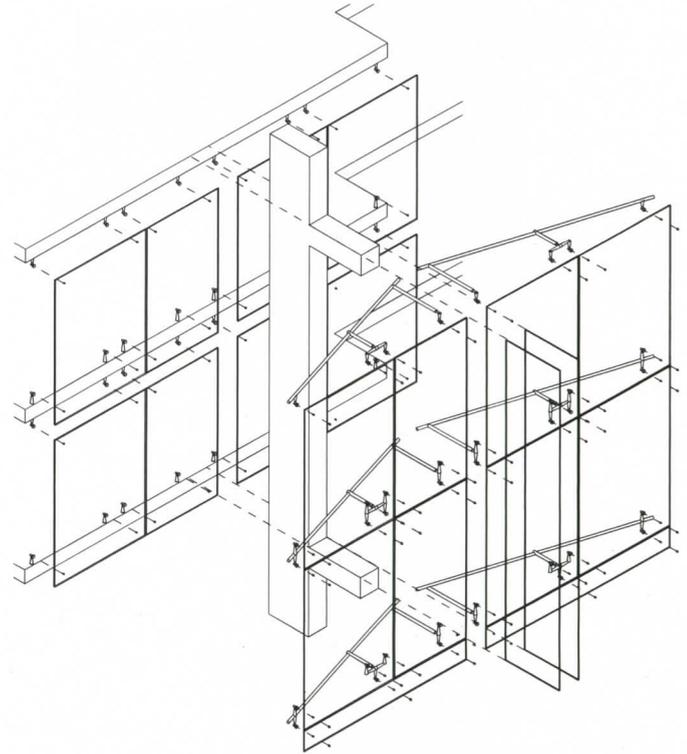
Valerio Dewalt Train,
33 East Main Office Building,
Madison, Wisconsin

If it is true that buildings look more exciting while they are still under construction, Valerio Dewalt Train is making an effort to preserve that thrill for as long as possible. The Chicago-based firm's design for a nine-story office tower in Madison, Wisconsin, across the street from Cass Gilbert's State Capitol Building (1904), is clad in a double layer of glass that seems like a grudging concession to the requirement of closing the building to the weather. The structure is still clearly visible against the skin, and even comes through it. The green-tinged panels are affixed to the concrete frame with spider brackets and stainless-



Architect Perkins & Will broke up the massing of its 39-story condominium tower (above) in an effort to minimize its impact on Chicago's Greektown neighborhood.

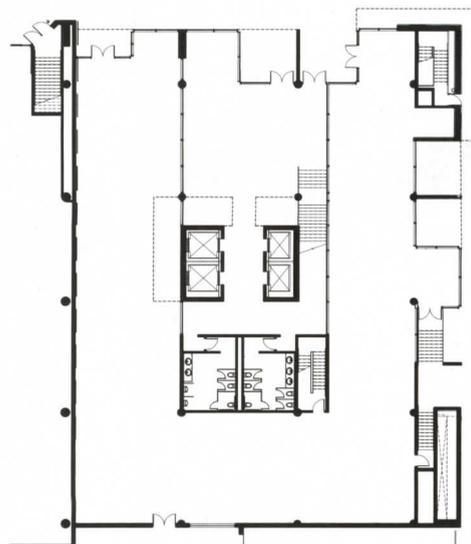




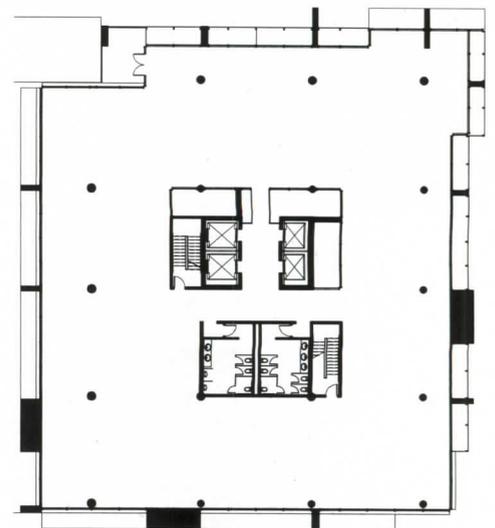
Exploded axonometric

On the upper floor of Valerio Dewalt Train's office building (top left) in Madison, Wisconsin, the columns are pulled in from the edge of the floor plate (bottom right) so that the skin takes on primary importance. The mullionless bracket system (top right) allows the double layer of glass that clads the building to reveal the structural framework.

steel struts. Floor slabs and verticals pierce the glass and create an irregular gridded pattern, which makes the building seem more intricate and layered than the straightforward box it is. The double skin has an important functional purpose as well: It regulates heat gain and thus adheres to Wisconsin's strict energy code. A layer of air between the two low-e panels insulates the interior against the sun's heat and lessens the need for air conditioning. The 135,000-square-foot structure, which sits above five levels of underground parking, is due to go into construction this September. *Anne Guiney*



First-floor plan 16' ^

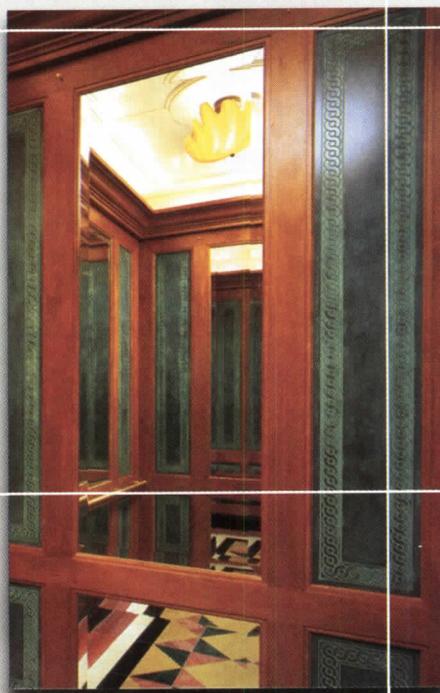


Fourth-floor plan

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practice

“Graduates of our universities allow America to be smothered by what Ansel Adams used to call urban acne.”

Politics p. 79

“Architects in firms around the country felt stabs of envy as they watched the IPO frenzy of the past two years.”

Business p. 82



Turning Kyoto Into Kindling

Marc Peter Keane mourns the runaway destruction of the city's historic wooden neighborhoods.

Preservation A residential lot in the middle of Kyoto stands shrouded in blue vinyl sheets, the ubiquitous color of construction in Japan. A revving diesel engine throbs from within, followed by a series of dull thuds and the sickening peal of splitting wood. The din continues for half an hour, then falls silent. A large flap of blue vinyl pulls back, allowing a small dump truck brimming with neatly stacked fragments of lumber to edge onto the street. Inside the cloaked construction site sits a large-tracked demolition vehicle. Its worn metal claw rests atop a haphazard mound of clay, roof tiles, and splintered beams. Behind the vehicle looms a partial house, its interior rooms halved as in an architect's cross-section. The front half just departed in the truck for the dump. The rest will follow shortly.

Kyoto's dwindling machiya (above) are increasingly engulfed by large-scale modern developments. Their traditional facades contain fine grillwork of wood and earthen plaster.



This pitiful sight is, sadly, common in Kyoto as the city's architectural heritage suffers the preservation equivalent of genocide. A survey conducted by Kyoto University shows that 50,000 wooden structures were torn down between 1978 and 1988 alone—an average of 13 demolitions a day, every day, for 10 full years. While more recent data is unavailable, that figure has by now most likely doubled to 100,000. It is all but impossible to find a stretch of street with its original facades intact.

Most victims were the elegant one- or two-story townhouses called *machiya* which, until the 1950s, blanketed Kyoto end to end, making it one of the finest examples in the world of a city built of wood. *Machiya* are

A traditional Japanese garden (above), with its stepping stones, lantern, and water basin for tea ceremonies, separates the *machiya*'s residential space from the back storehouse. The sitting room (facing page) is used as a social gathering place and a bedroom for the family patriarch.

very much an architecture of the townsfolk, and the story of the *machiya* is their story. Twelve hundred years ago, when Kyoto first arose as the imperial capital of Heian, the nobles lived in grand estates known to us from ancient scroll paintings. The townsfolk lived in hovels. By the early middle ages, however, the aristocracy gave way to the military samurai class, and shortly thereafter the townsfolk—the craftsmen who manufactured all manner of goods, and the merchants who sold them—began



A survey shows that 50,000 wooden structures were torn down between 1978 and 1988 alone—an average of 13 demolitions a day, every day, for 10 full years.

to make their own mark on the city. With their newfound wealth and social status, they developed a particular kind of architecture that suited their lifestyle, a form of architecture that developed into the machiya we know today.

Machiya typically contain both homes and workspaces arranged along a narrow lot. Dimensions vary according to the family's status; a typical site measures 33 feet along the street and 100 feet in depth. In

the classic form, a one-and-a-half-story building (*omote-ya*) used exclusively for business—usually a craft studio or sales shop—faces the street. It is typically followed in succession by a small garden, the owner's two-story residence (*omoya*), a second garden, and finally a thick-walled, fireproof storehouse positioned at the rear of the site. As with all traditional Japanese architecture, dimensions are based on the length of a tatami mat, which measures about six feet long. By the 1800s,



Workers begin demolition of a 70-year-old machiya by stripping away its tile roof and the underlying layer of clay. Chainsaws are used to sever beams and rafters. A backhoe collapses the remaining structure. A truck hauls the debris to a site south of Kyoto where entire houses are incinerated. Preservationists have saved some machiya by converting them into shops, restaurants, and galleries (facing page).

the craftsmen who built the machiya had honed their tools and techniques to elegant refinement; their creations were veritable poems in wood and clay. They employed as many as 20 different kinds of wood, each with its own particular use. The post-and-beam structures fit together with exquisite joinery caulked by interlaced bamboo, straw, and plastered clay. The selection of materials, the efficiency of space, and the precise fabrication surpassed all forms of machiya that had come before.

A visitor to Kyoto today, however, will find only fragmented remains of these precious buildings. Many stand isolated in the shadows of tall apartment buildings; others lie hidden behind false facades. In some cases, a block of machiya, or part of a block, remains intact, but unal-

tered traditional neighborhoods are now rare. Their tragic plight begs the question: Why does a city with a 1,200-year history and a reputation as a cultural capital rush to abandon its cultural heritage? The most obvious answer is economic; Kyoto land prices are astronomical. Japan is slightly smaller than California, and while 70 percent of the land is too mountainous to build on, its population is fully half that of the United States. As a result, its cities are densely populated.

As Japan redeveloped after World War II, competition for urban land sent real-estate prices skyrocketing. By the mid-1980s, at the height of Japan's bubble economy, land in central Kyoto sold for more than \$1,500 per square foot. Even the smallest plots fetched millions of dollars. Naturally, many residents gave in to temptation by selling their land or

developing it themselves. Of course, the ancient wooden structures didn't figure into the redevelopment plans.

Residents who opted to stay on in their old homes at some point faced Japan's insurmountable inheritance tax: When the head of the family died (usually the eldest male family member), his descendants had to pay a tax on his estate, which was largely based on the value of the land. With inheritance tax rates as high as 70 percent, ordinary families suddenly owed the government millions of dollars in taxes. In most cases, the only option was to sell or develop the land.

The disappearance of the machiya is also a cultural phenomenon. After the devastating losses suffered during World War II, Japan reconstructed itself on a model of modernity and efficiency. The new attitude was to discard the old and adopt the new: Western ways were perceived as better, stronger, more fashionable—the wave of the future. Once-cherished cultural objects were discarded as artifacts of a flawed past. Naturally, the machiya fell by the wayside, along with their furnishings. An undetermined wealth of fine traditional furniture was hauled away in garbage trucks and burned.

When a machiya is torn down, a way of life goes with it. Dozen of trades rely on their construction and maintenance, *continued on page 213*



Politics

The GSD Goes to The Hill

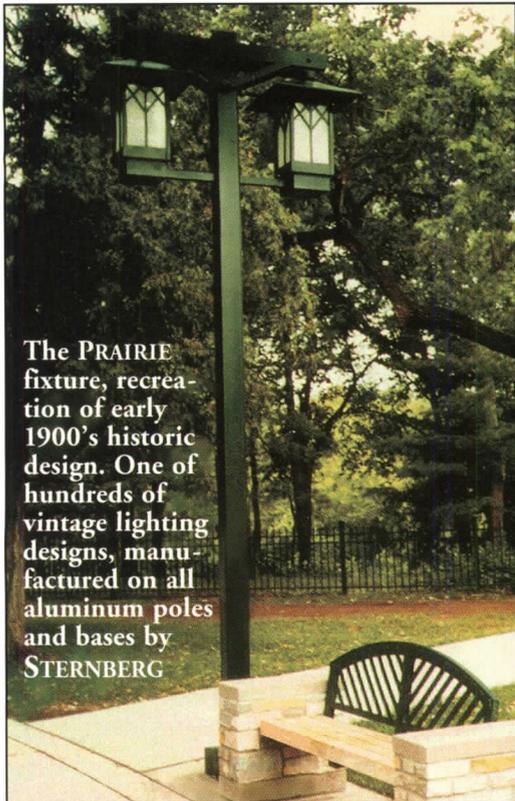
Academics love to prattle on about problems caused by sprawl, but are they doing enough to combat them? At least one politician says no. A California lawmaker recently urged the Harvard Graduate School of Design (GSD) to come down from its ivory tower and “mobilize” in a nationwide campaign to fight sprawl on the local level.

“Everything ugly about America has been done by people who graduated from your university,” Rep. Sam Farr (D-CA) told a group of Harvard design professors convened at a Capitol Hill luncheon last March. “The graduates of our best universities have allowed America to be smothered by what Ansel Adams called ‘suburban acne.’ The GSD and other design schools need to mobilize across the country.”

Farr’s comments came at a Harvard-initiated forum called “Congressional Initiative for Livable Communities,” a yearlong series of meetings between congressional legislators and GSD professors. The goal is to help lawmakers develop policies to fight sprawl and preserve open space by drawing on the GSD’s expertise. “This is an issue near and dear to the GSD,” said Nicolas Retsinas, director of Harvard’s Joint Center for Housing Studies. “It’s increasingly dear to members of Congress, as well. So this is a nice marriage, a convergence of interest.”

Retsinas warned lawmakers that the U.S. population is expected to double over the next century. To make matters worse, the number of households is growing faster than the population. At the same time, buyers are demanding bigger houses. The median size for a new home in 1998 was 2,200 square feet, compared with 1,500 square feet in 1971. California alone will need 250,000 new housing units a year (totaling 550 million square feet, equal to more than 500 regional shopping malls) as its population increases by 18 million by 2025. “No growth is not an option,” Retsinas warned.

In the forum’s most sharply worded address, Farr exhorted attending faculty to adopt a more militant stance toward sprawl-related problems on the state and local level, where land-use decisions are most effective. “I think you’ve spent too much time in that ivory tower,” he said. “You need to use your academic strength throughout the country to get engaged and upgrade the skills of local politicians so that we don’t lose our cultural heritage to fast food and box stores. Architects’ professional abilities and the political decision making are light years apart. You’re watching our communities being destroyed without saying anything.” *Michael Cannell*

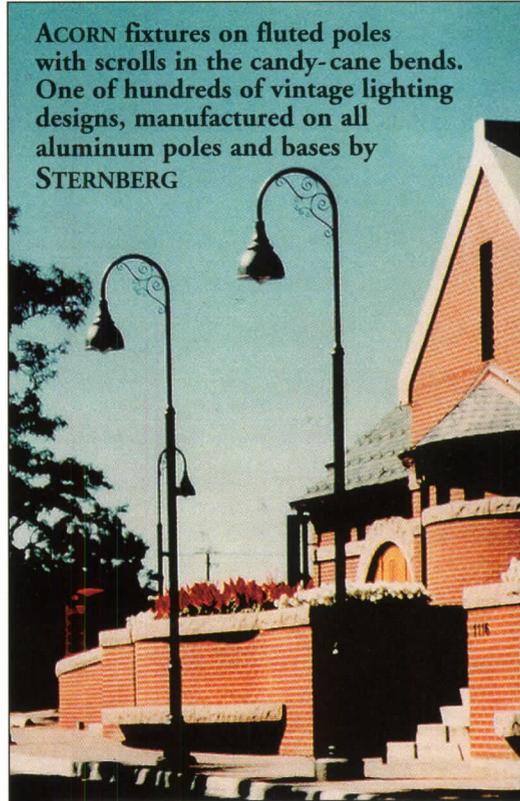


The PRAIRIE fixture, recreation of early 1900's historic design. One of hundreds of vintage lighting designs, manufactured on all aluminum poles and bases by STERNBERG

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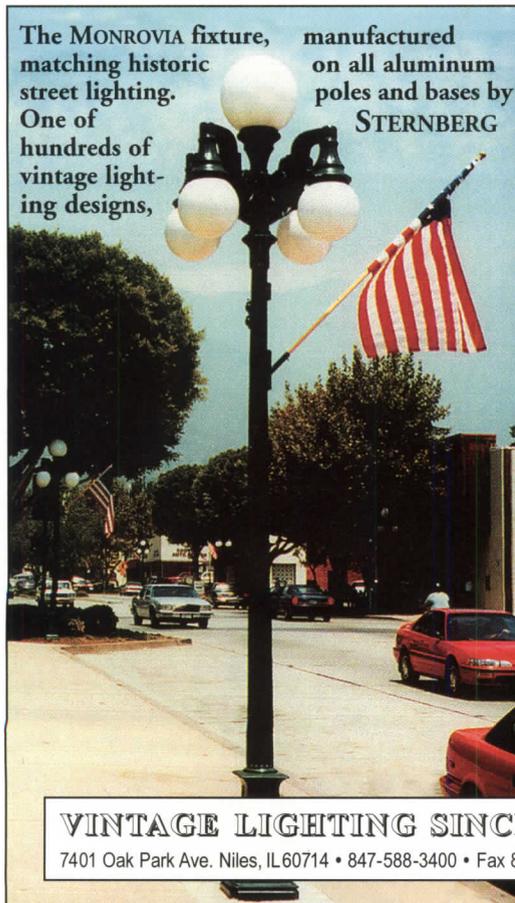


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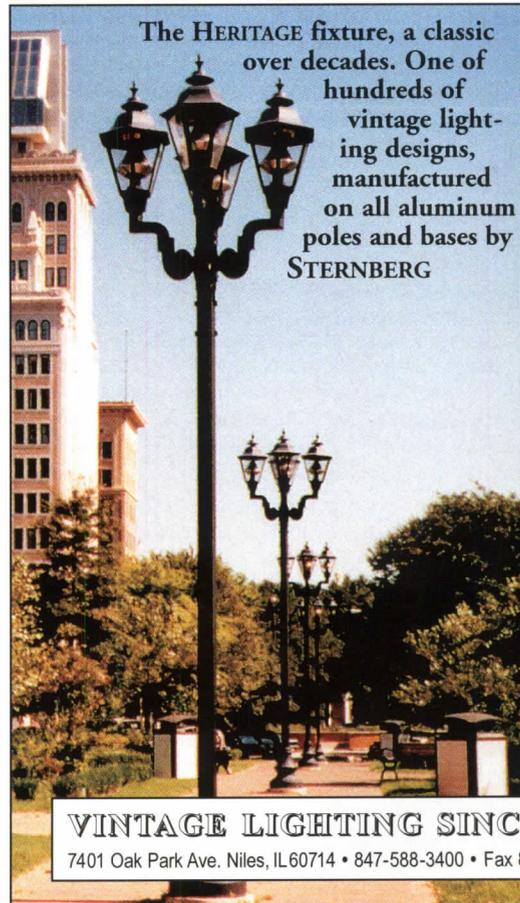


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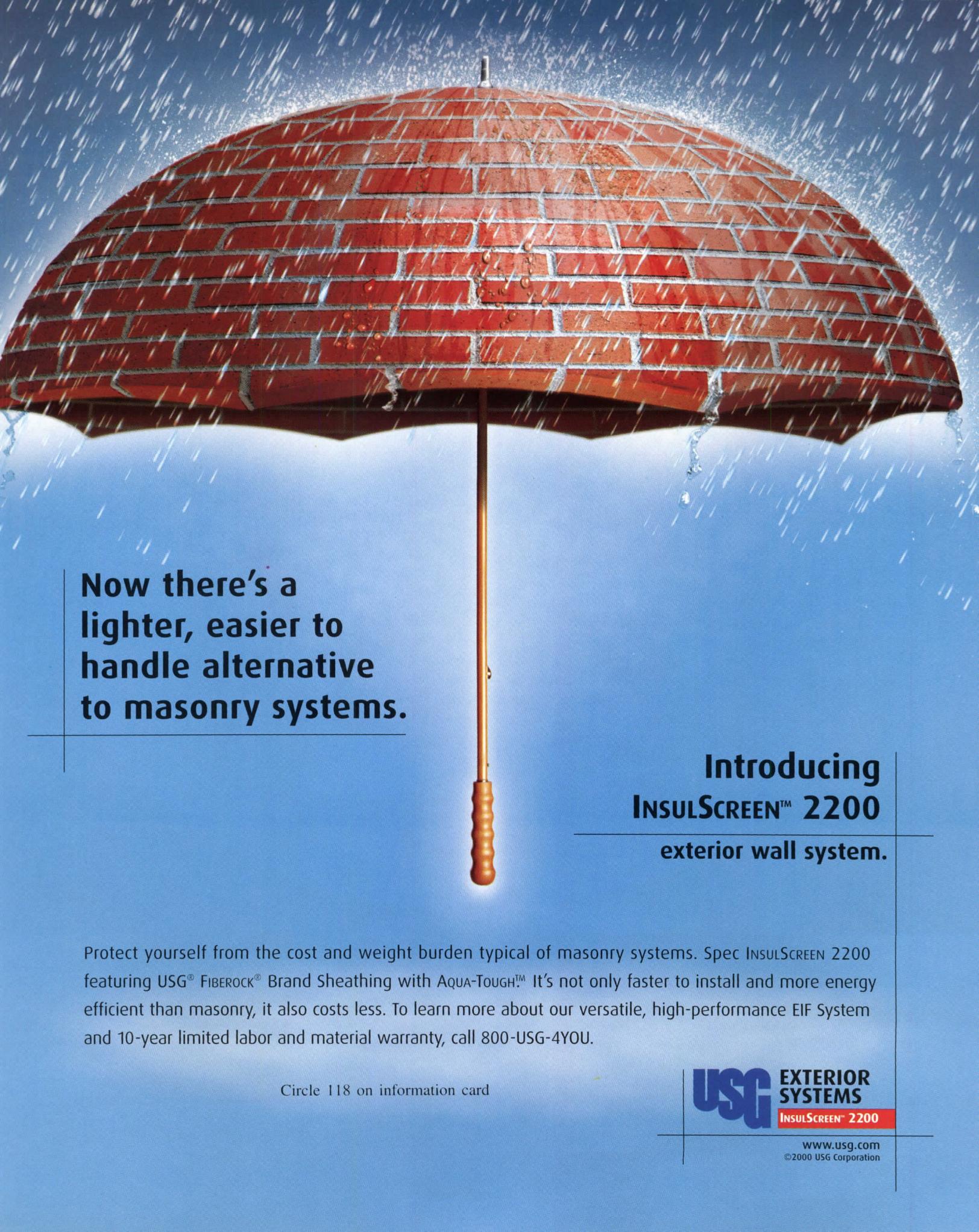


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Easy Money

Most architects are missing the IPO party.

Christopher Hawthorne talks bottom line with one firm that got in.

Business The setting is a conference room inside a shiny new office building that looks out over a cluster of shiny new office buildings. The subject is the initial public offering and all of the jargon-filled topics that go along with it, from price-to-earning ratios to economies of scale to the latest heroes of the dot-com revolution.

But the speakers are not 28-year-olds with thick-framed glasses, unruly hair, and a knack for Java script, nor the ever more casually dressed investment bankers who arrange their stock offerings. Instead they're the top brass—two men in their fifties, another in his forties, each one highly presentable in a carefully knotted necktie—of HLM Design, which manages architectural and engineering practices around the country. And the location is not a Silicon Valley office park but a tower in downtown Charlotte, North Carolina, where HLM is based.

HLM has been a public company since its June 1998 IPO. Modest compared with a tech-world stock offering, HLM raised \$7.2 million by selling 1.2 million shares. That capital has mostly been spent paying down debt and funding expansion; since going public, HLM has acquired firms in London, San Francisco, and Dallas, and now employs 370 people in a dozen cities (up from 246 two years ago).

Though a few of the country's largest engineering and construction firms have held IPOs, no other architecture or A/E firm has followed HLM into the public market, and none appear likely to do so any time soon. *That fact, at least at first glance, is puzzling:* Certainly architects in firms around the country have felt stabs of envy as they watched the IPO frenzy of the past two years.

The most stubborn reason, according to most analysts, that architects have had to sit out the Wall Street gold rush is a simple lack of investor interest. This is an era, after all, in which brick-and-mortar retailers—those that still operate in the physical instead of the digital world—are routinely disparaged by Wall Street analysts and their technology-obsessed clients. And that means architecture and building firms, the ones responsible for arranging those bricks and that mortar

in the first place, could hardly be less trendy.

"For the average investor, I'd say we're 31st on any list of the top 30 opportunities," says Mark Zweig of Zweig White & Associates, a Massachusetts-based consultant to A/E firms. "The architecture business is cyclical and doesn't produce enough revenue, at least not on a consistent basis. Investors like the possibility for really extraordinary growth, and our industry just doesn't provide enough of that."

Dan Winey, managing principal of Gensler San Francisco, is equally pessimistic: "Wall Street doesn't have a high regard for the professional services industry in general. There is not a lot of economies of scale to be exploited there." HLM's principals, not surprisingly, offer a decidedly different take. Joseph Harris, its CEO, suggests that the absence of other publicly traded architecture firms has more to do with a shortage of financial smarts and aggressiveness than a collective cold shoulder from investors. He suggests firms are reluctant to undergo the close financial scrutiny that an IPO brings. "There's a fundamental lack of understanding of business in architecture," he says pointedly.

Robert Ludden, a vice president at HLM, adds that most architects continue to harbor an old-school disdain for even the most basic kind of advertising and marketing. And as anyone with even a passing interest in Wall Street can tell you, self-promotion is the *sine qua non* of a successful IPO these days. "Publicity is foreign to the culture of architecture," he says. "That attitude comes from the blue-blazer crowd that ruled for so long."

HLM certainly showed no reticence when it prepared to go public. Harris has worked steadily and conspicuously to bring HLM back near the prominence it enjoyed in the late 1980s, when it employed more than 650 people from a base in Iowa City, Iowa, and had a significant health-care practice. He took over the firm in 1994, and relocated it to Charlotte in 1996. Harris, as it turns out, has some IPO experience. As a principal in Clark, Tribble, Harris and Li, another Charlotte firm, he spearheaded an unusual move to offer stock on the London Stock Exchange in 1986.





Label

Bonus Bonanza

The numbers are in, and they're very, very good. Bonuses for A/E firm principals jumped 50 percent in the past two years, according to a survey conducted by Zweig White & Associates, a Massachusetts-based management consultancy. The percentage of principals receiving bonuses climbed to 83 percent last year, up 8 percent from 1998. The average bonus was \$30,000, a \$10,000 increase from 1997.

"It may not be in the same league as Internet stock options," says Mick Morrissey,

senior vice president of Zweig White, "but these are still boom times for architects."

Morrissey says bonuses have grown in proportion to the economy's unprecedented 120-month expansion. "A lot of firms are successful in spite of themselves," he says. "If you look across the broad spectrum of architecture firms, many don't have good business management practices. And even they're thriving in the current climate."

But don't expect bonuses to continue upward forever. Zweig White already reports some anecdotal evidence of softening in the coming year as low unemployment undercuts productivity. "The problem is that many firms are unwilling or unable to hire new people," Morrissey says, "and staffs are getting overworked and burned out."

Bill Heavey

That sale reaped \$5.8 million, but the firm disbanded in 1991 after a nasty power struggle.

By the end of 1997, the domestic IPO market was heating up, and all kinds of businesses never before considered large enough to go public, from tiny software companies to ambitious engineering firms, were pulling off successful stock offerings. Harris noticed that a number of micro-cap companies—firms whose shares trade for just a few dollars, and whose market value is usually less than \$100 million—were joining the IPO parade. "At first we weren't sure we could go to market as a small architectural firm," Harris says. "But as we pursued it we found

This is an era in which brick-and-mortar retailers—those that still operate in the physical world—are routinely disparaged by Wall Street.

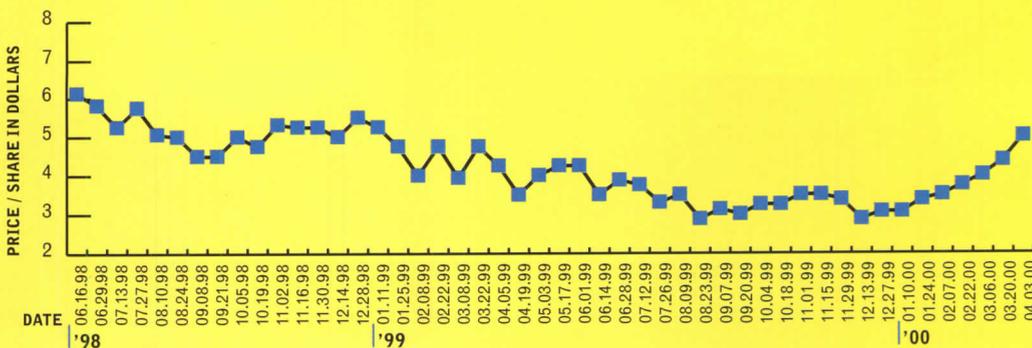
that we could access capital through the public market. And because that's where the most money is, we think that's the place to be."

In advance of its 1998 offering, HLM began a campaign to recast its image. Rather than a single firm with branch offices, HLM calls itself a "manager" of architectural design, engineering, and planning firms, all of which operate under the HLM name. "When they went public they went out of their way to claim that they were not a design company," says Jerry Guerra, vice president at Zweig White & Associates. "They put that strategy in place for the public market. It's all about attracting investors. To say you're a design firm is a lot less attractive than to say you manage A/E firms."

When the time came for its IPO, HLM benefited from good fortune. As the summer of 1998 neared, the market's flirtation with micro-cap companies was already coming to an end. "We were among the last of the micro-caps to get out there," says Harris. It would be difficult today, he admits, for HLM to repeat its offering at the same terms.

Waning interest in micro-caps hurt HLM as *continued on page 223*

Making a Comeback? HLM share price since its mid-1998 IPO



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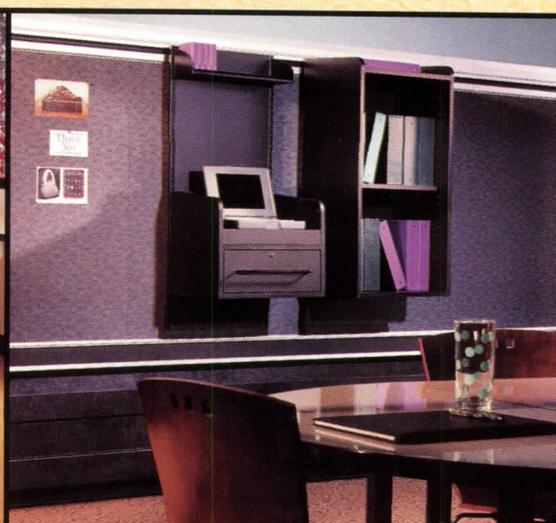
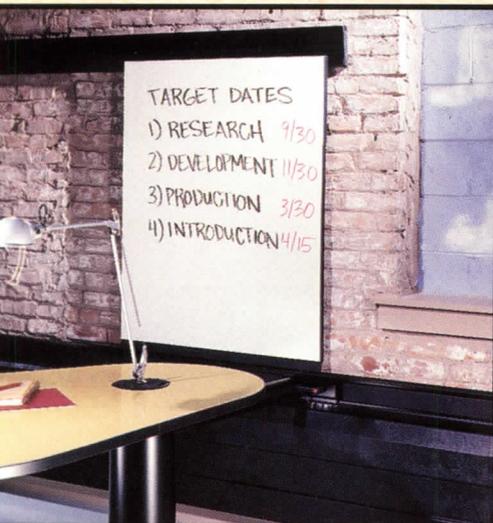
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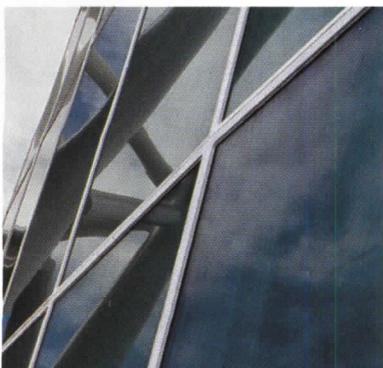
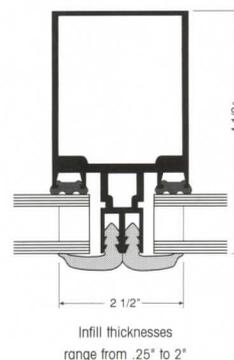
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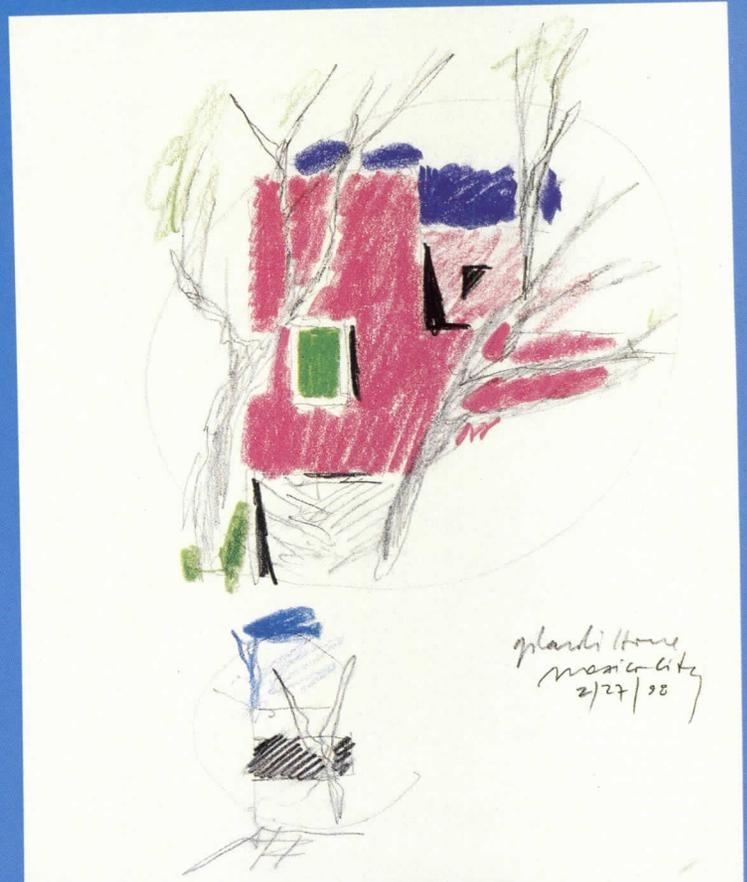
WINDOWS
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 ENTRANCES
 STOREFRONTS

culture

Robert Gonzalez
on Urban Aquarium
p. 98

Richard Ingersoll
on the Triumph of the Baroque
p. 102

Ned Cramer
on Architecture Couture
p. 108



Pilgrim's Progress

Architecture's devotees are compulsive about traveling to the sacred sites of the profession. **Robert Harbison** ponders the architect's path to enlightenment.

Essay Architects, architectural historians, and amateurs of architecture might be the nearest thing in our secular world to medieval pilgrims. Art has slowly been usurping the place of religion for a hundred years now, and architecture lends itself much more than painting to the mechanism of pilgrimage—the more or less difficult journey to a sacred spot—through its attachment to a place. So those with a theo-

Houston architect Carlos Jimenez sketched Luis Barragan's Gilardi House (1977) while traveling in Mexico City in 1994.

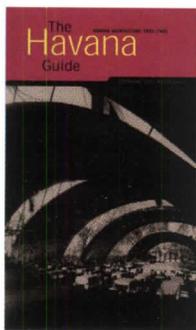
Bibliofile

Architect-pilgrims are loathe to miss a single shrine. These guidebooks will help.



A Guide to Recent Architecture, Ellipsis

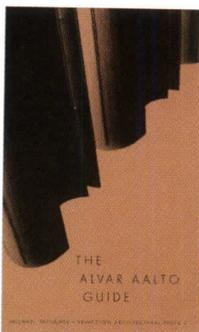
The format of Ellipses' city guidebooks—a pocket-friendly 2-by-2 inches square—might be the basis of their fetish status. The series covers more than 20 cities, including Athens, Lisbon, Moscow, and Prague. Notable for including only works from the past 10 years, the descriptions of buildings (accompanied by black-and-white photos) are informed, though the lack of maps is confounding.



Architecture + Design, The Understanding Business Press

With well-labeled maps, these slim guides pick out attractions and arrange them by proximity, anticipating what would appeal most to the architecture tourist, from

old and new landmarks to chic design boutiques to well-appointed restaurants. It's best feature is its use of different colors to denote the accessibility of each site. Series editor Michael Webb wrote the first book, on Los Angeles; Mitchell Schwarzer presents a more sober guide to San Francisco; and Marisa Bartolucci shares an eclectic range of insider-designer's secrets of New York City.



Architecture Guides, Princeton Architectural Press

Princeton's guidebooks compile the extant, visible buildings of such masters as Le Corbusier, Alvar Aalto, and Frank Lloyd Wright. The books include intelligent introductions with key biographical details, black-and-white photographs, floor plans and sharp capsule histories. Princeton also publishes guides to places, so far including Japan and, most recently, Havana. Historian Eduardo Luis Rodríguez focuses on modernist masterpieces, which are usually overlooked in guidebooks preoccupied with the city's colonial patrimony.

retical, aesthetic, or lay interest in architecture often find themselves undertaking journeys to architecture's holy sites. To outsiders, there is hardly a more curious cult than these individuals who crave visiting buildings for what appears to be no other reason than to look at them and experience their spaces not as inmate, patient, resident, worker, or worshiper, but simply as observer. There must be more to it than this.

Most of us don't like the implication that our ideas and actions are not our own, that we are in thrall to something outside ourselves, like the spirit of a dead architect. But even medieval pilgrimages served a wide variety of unspoken purposes. Chaucer presents his troupe moving toward Canterbury as akin to the sap rising in trees. When spring comes, restlessness increases and people set off on quests. Recently Frank Gehry's Guggenheim Museum in Bilbao has exerted an attraction of supernatural strength on all kinds of people, most of them not architects. If anyone had predicted the scale of this rush to Bilbao before the titanium cladding had been fixed to the building, you would have said he was dreaming. It is still not easy to understand the flood. The dazzling silver surfaces, the strangeness of the forms violating sober architectural convention, and a dull setting that lets the new piece stand out—perhaps these all contribute. It seems to work in Gehry's favor that there is no immediate competition. The inconvenience of its location somehow makes it even more attractive.

There are parallels between modern architectural touchstones and the great sites of Christian pilgrimage, like Santiago de Compostela, which is not far from Bilbao and was much more remote in its heyday than it is now. (Santiago's status as a popular pilgrimage site might soon be renewed with the construction of Peter Eisenman's latest architectural apparition, an immense cultural center to be built over the next six years.) Key visions have appeared to children and peasants in fields near obscure villages or towns, as in Lourdes or Vierzehnheiligen or a recent one in rural Romania. These foci seem more effective because there is nothing near them and, like Bilbao, their notoriety is sudden.

The idea of the goal is the key, which one can obtain from a guidebook or a friend or an art history course. Most of us have a prejudice against goals that are too famous or too easy, preferring to search out really unheard-of sites in relatively unheard-of regions. Perhaps the best trip I ever took was a three-week circuit in the southern Indian state of Karnataka, a name which few people recognize, where I visited architectural sites without equal, whose names mean nothing to anyone. For a while we traveled with a lively couple from Washington who knew the names of the dynasties that built the monuments—Hoysala, Early and Late Chalukya—and recognized all the gods. Clearly we all relished the *recherché* nature of our quest, which took place not in some secret library but in the hubbub of Indian villages connected by atrocious Indian roads.

Even if devout architectural pilgrims are similarly susceptible to the pull of a powerful site, it does not mean their experiences are the same. I know someone who traveled from Tasmania specially to visit the Guggenheim in Bilbao, and when she got there took one cursory stroll around it and felt no need for a second look. Two other architects I know who visited La Tourette at the same time brought back conflicting



To outsiders, there is hardly a more curious cult than the architecture pilgrims who crave visiting buildings for no other reason than to look at them and experience their spaces, not as inmate, patient, resident, or worker, but simply as observer.

reports. One, who stayed in a monk's cell, which he sketched devotedly, came home raving about the spirituality of the complex. The other, impelled by his gut feeling that this was not a Corb building, researched the role of frequent Corb collaborator Iannis Xenakis in the design and concluded that La Tourette should be reattributed and taken off the list of obligatory stops for architectural tourists.

I remember a visit of my own to the Maison Laroche in Paris. This house has a key place in Corb's career for its way of exploding interior space to landscape scale by means of such devices as ramps and gently curving walls. But that day for some reason my attention gravitated to locks, light switches, and door handles. It was the equivalent of stand-

ing in front of the gorgeously dressed corpse of a saint and noticing only the state of the fingernails or other small signs of decay.

Everyone surely remembers visiting a key place on the architectural pilgrim's map and forgetting an important shrine. The first time I went to Vienna I had not heard of Adolf Loos. In the closed world of modern architecture the main beacons are agreed, but for most of the world Barcelona does not raise thoughts of Mies van der Rohe and Prague does not summon up Jozef Plecnik. Perhaps the gems of modern architecture

Michael Graves (above) sketching in Rome in 1961, while he was a recipient of the Prix de Rome. The legendary prize continues the tradition of the Grand Tour, once a requisite of the gentleman architect's education.

Even if devout architectural pilgrims are similarly susceptible to the pull of a powerful site, it does not mean their experiences are the same.

are more appealing to the architectural tourist because they do not stick out like the Eiffel Tower. The Maison de Verre, one of the most startling buildings of the century, is inconspicuous to the casual passerby.

There are bound to be all kinds of anomalies: overrated monuments that make you wonder if visiting anything can ever be worthwhile; little-known sites that burst on you with the force of a tempest; world-famous others that justify every grandiose claim ever made for them; buildings or places that transport you to a higher plane; sites so hard to find or located in such unappealing places or so spoiled by fences, crowds, or postcard stalls that you just want to leave. In another class entirely, however, are the places that make all the inconvenience of travel seem worthwhile. They always catch you off guard, no matter how much you have seen or read about them. What you like best is something no report has mentioned and no image has managed to convey.

The two Greek temples in strange proximity to each other at Paestum are one of the great spatial experiences of the world, but I took a very nonnormative view of them and enjoyed above all many little irregularities within basically regular schemes—how chipped and worn and rotted these large pieces of stone were, how tufted with plants and nested in by birds. They had become facts of nature and well-ordered landscapes, their original functions left entirely behind. It was the same with the big temple at Karnak, Egypt, with its long, irregular chain of spaces cleansed of indications of use but completely covered in stories—or at least images which one suspected told the same story over and over, like an Islamic building peppered over with the name of God. I was struck by the resemblance between these deserted ruins and the monuments of early modernism that strove



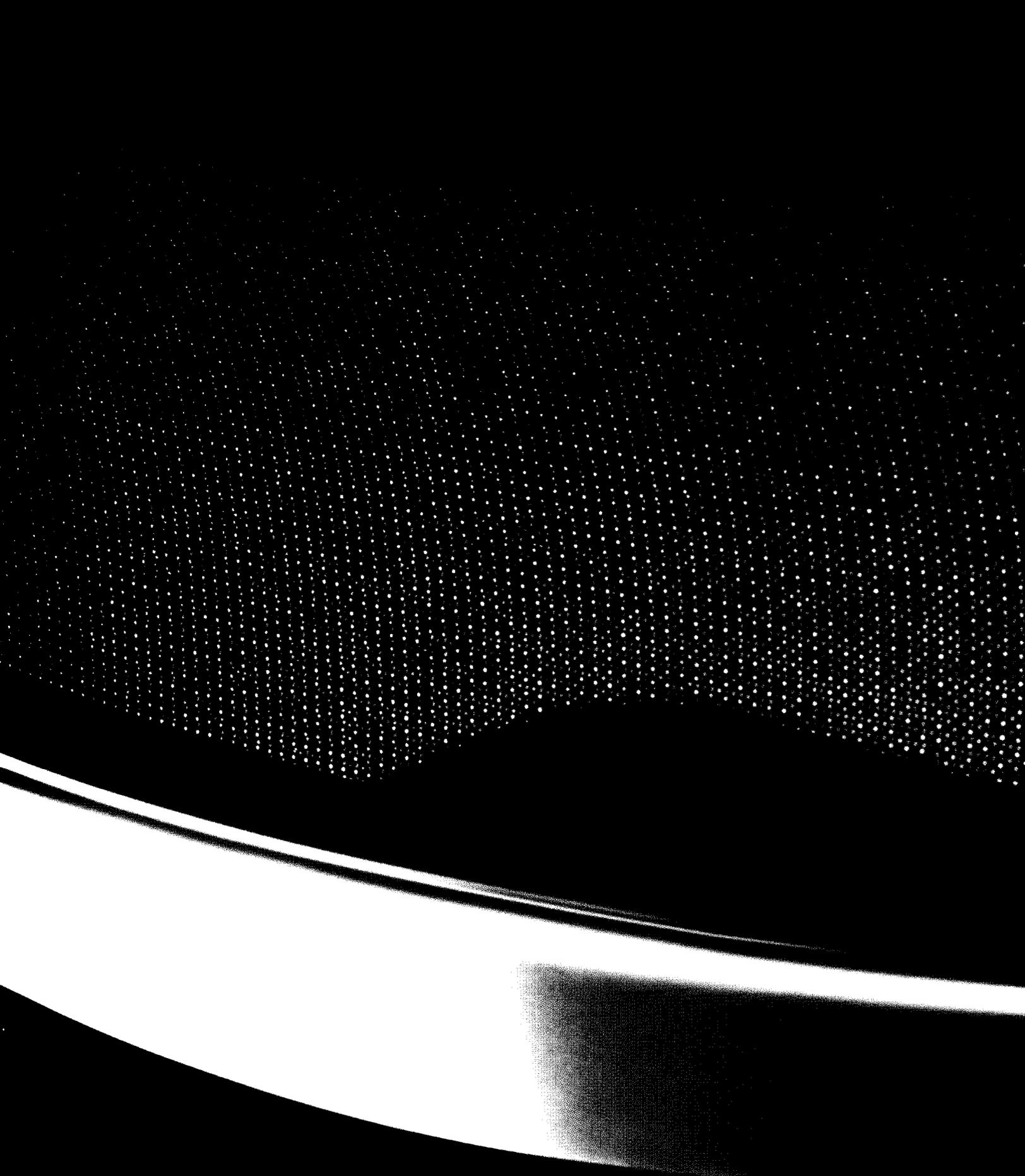
Daniel Burnham's 1896 watercolor of Algiers (top), and Louis Kahn's 1959 ink sketch of the interior of Le Corbusier's Ronchamp Chapel (bottom).

for pure spatial experiences.

The Barcelona Pavilion is the most notorious instance, nearest to a functionless space or spatial construction that has transcended function and become a locus of contemplation. The last time I was there (and you cannot really be there of course, because it is a replica) it had been converted—oh, the sacrilege!—into a site for contemporary art installations, which I took at first for leftover supplies from a reception the night before: lots of bottles of mineral water, towels, and printed notices. Those who enjoyed the joke liked seeing the sacred space defaced, while, to my shame, I was offended—the response of the true believer.

I remember a long search in East Berlin for Mies' monument to the Communist martyrs Karl Liebknecht and Rosa Luxemburg, destroyed by the Nazis but reputed by Berliners to have been recently resurrected. This journey took us to some strange locations, and in one of them we met a man who knew exactly what we were talking about. He was on a first-name basis with Rosa and Karl and had marched there every year on the same day in May. We followed his instructions and came to an immense work in clinker brick—Mies' memorial was modest in scale—clearly a place that could accommodate lots of functionaries and lots of populace, an inflated replacement for Mies, projected by the victorious Workers' State. The censor in me rose to say it was a work of no artistic value, but the journey to a false destination was itself real.

What drives the elaborate engine of these pilgrimages? How much of them is the collector's instinct, amassing impressions or sensations instead of things? How important is the physical record one brings away—sketches, photos, notes? I hate *continued on page 219*



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Can architecture transform social and political life? Chileans were shocked at the sight of a glass house, inhabited by a young woman, installed on a vacant lot in downtown Santiago. The provocative project addresses the conservatism of Chilean society, and the social and economic suppression of women in particular, which deepened during under Augusto Pinochet's dictatorship.



For Sale: Life-size Aquarium

A glass house in Chile sparks controversy. **Robert Gonzalez** reports that its architects intended much more than a peep show.

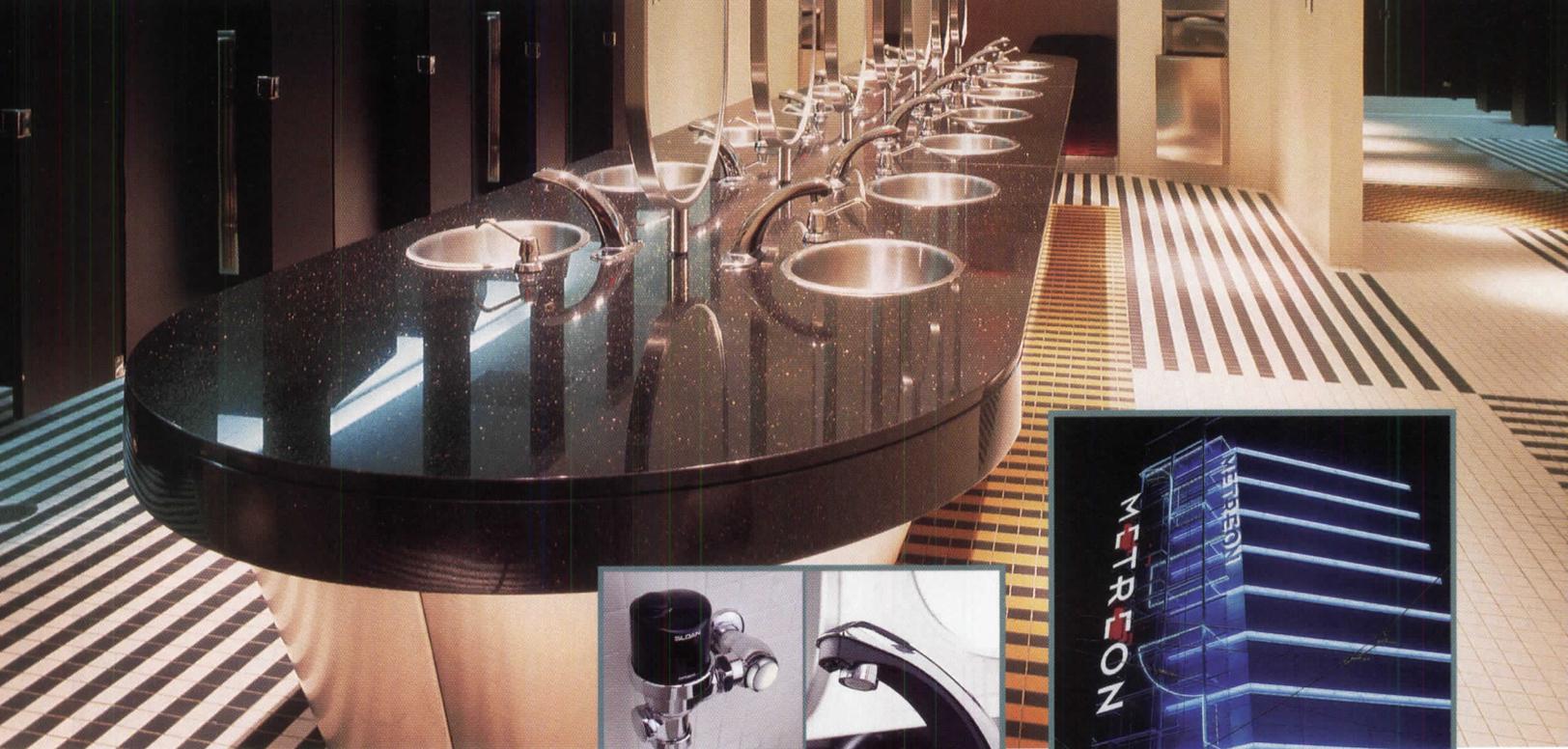
City In post-dictatorship Chile, a number of “resistance art” projects are attempting to deal with the conservatism that escalated during Augusto Pinochet’s regime (1973–1990). A recent experimental project in Santiago that was meant to address women’s oppressed roles in Chilean society, however, left citizens bewildered with its mixed messages. When a glass house inhabited by a young woman appeared in a vacant downtown lot, across from a church and down the street from the presidential palace, controversy erupted.

The architects behind the work, Arturo Torres and Jorge Christie, asked Daniela Tobar to lead her normal, daily life in what they called the Nautilus Project. Tobar’s routine use of the bathroom drew voyeuristic crowds and howling criticism that the architects never imagined. When the house was dismantled on February 14, cutting short its intended two-month installation, Tobar had already moved out, following the attack of a Santiago woman who was mistaken for her. Death threats also sent the architects into hiding.

The Nautilus Project was funded in part by FONDART, a government art agency. Says Torres, the project was intended to challenge Chilean society’s “troubled relationship with sex and nudity,” which he attributes to an oppressive, hypocritical society and Catholicism’s institutional hold on the country’s moral structure. But to some, “Daniela.cam” come-to-life seemed to be only another form of exploitation. The architects might have avoided critics’ claims of superficial display of female nudity if their references had been less obtuse: Nautilus was named after a notorious, seedy Santiago cabaret where nude models perform in a large-scale aquarium before audiences kept in darkness to protect their anonymity; but this connection was never made known.

The Nautilus Project is a far stretch from the glass dwellings of modern architectural discourse, such as Mies’ or Philip Johnson’s iconic examples. The project is more of the genre of conceptual artist Dan Graham’s *Alteration of a Suburban House* (1978), in which he replaced the facade of a conventional ranch house with transparent glass; still, this did not disclose the private section of the house.

Disillusioned, the architects want to put the whole event behind them. The Nautilus Project can be retested elsewhere for \$20,000. For interested parties, the 12.5-square-meter house collapses neatly into a 2.5-cubic-meter box (live model not included). **Robert Gonzalez** ■



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The Triumph of the Baroque

The baroque was architecture's original crowd-pleaser. **Richard Ingersoll** delights in a movement meant to dazzle and impress.

Review “Baroque” originated as a pejorative term, used by Enlightenment critics during the late-18th century to dispense with an architectural tendency considered embarrassingly decorative. With its multiplication of columns and pilasters, frames within frames, swirling cartouches, and undulating elevations, baroque architecture abandoned the rational rules of Renaissance classicism to appeal to the emotions. Despite its autocratic patronage, however, the baroque was inclusive, pluralistic, permissive, and sensualist—qualities that led rationalist critic Francesco Milizia to denounce it in 1797 as “the ultimate of bizarre: it is the ridiculous carried to extremes.” A grandiose synthesis of painting, sculpture, architecture, and urbanism, the new theatrical approach to dressing buildings and urban spaces spread over the 17th and 18th centuries from papal Rome to the rest of Europe, becoming the style most favored by other absolutist regimes. The dazzle of its gilded and foliated surfaces seemed ideally suited for creating luminous stages and charismatic centers showcasing the divine rights of kings.

The sensual pleasure and convoluted redundancy of the material in the exhibition *The Triumph of the Baroque: Architecture in Europe 1600–1750* fit its subject well. Organized by Henry Millon with backing from Italian automaker Fiat's Palazzo Grassi Foundation, the exhibition debuted last year at the newly restored Stupinigi Hunting Castle, an immense, lobster-shaped pleasure dome on the outskirts of Turin, designed in 1729 by Filippo Juvarra. The vast side wings of Stupinigi served as splendid gallery space for over 600 drawings, paintings, and models. A slightly reduced version of the exhibition opens this month at Millon's home institution, the National Gallery of Art in Washington, D.C., a city whose plan is America's greatest contribution to the baroque tradition.



Francesco Bartolomeo Rastrelli's painted and gilded wooden model for the Smol'ny monastery complex in St. Petersburg, Russia (1748–1756). Parts of the complex were never built, such as the six-tier bell tower, which was to rise above the convent behind it and be the tallest structure in the city.

Like most of the works it contains, the exhibition abounds in theatrical effects, favoring oblique views, surprising shifts of scale, and dramatic lighting. Visitors encounter at the outset of the exhibition a series of freshly made $\frac{5}{8}$ -scale plaster models that invoke the Roman origins of the baroque, a style based on the juxtaposition of curvilinear volumes, the playful corruption of classical elements, the biomorphic use of sculptural decoration, and the clever interpenetration of light and shade. In response to the hyperactive ceremonial life of the court, the baroque of papal Rome transformed the city's fabric into a series of magnificent theaters. The new plaster “backdrops” re-create some of the great works of mid-17th-century Rome, such as Francesco Borromini's warped facade of San Carlino alle Quattro Fontane and Pietro da Cortona's *tempietto* porch for Santa Maria della Pace. This appropriately theatrical introduction is *continued on page 227*

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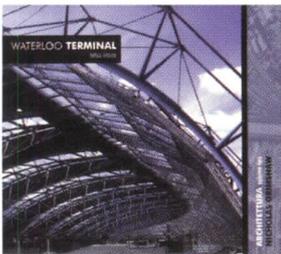
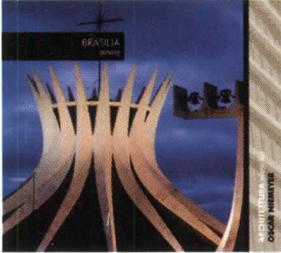
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Media

Architectural Soundtracks

If one listens carefully to a skyscraper, one can hear the deep groans of twisting steel and the distant humming of machinery. Every structure, built or natural, has its own set of sounds, whether the creaking of floorboards or a glacier screaming its advance. Lara Lee, through her record label, Caipirinha, embraces the distinct “music” of buildings and environments, commissioning composers to create soundtracks inspired by noted design works. The intimate relationship between music and architecture goes far beyond physics, acoustics, and sound’s dependence on space. For instance, Le Corbusier’s pavilion for the Philips Corporation in the 1958 Brussels World’s Fair

was an architectural interpretation of a musical composition by Edgar Varèse.

Conversely, Lee’s productions attempt to translate architecture into music, working ultimately, like Le Corbusier’s lyrical pavilion, to bring an artistic piece from one medium into another.

The fourth CD in Caipirinha’s “Architettura” series is German electronic-music artist Panacea’s *Brasília*, in which he interprets Oscar Niemeyer’s stylized modern capital of Brazil. (Previous albums include interpretations of Toyo Ito’s Tower of Wind by Savvas Ysatis and Taylor Deupree, Norman Foster’s Waterloo Terminal by Tetsu Inoue, and Itsuko Hasegawa’s Museum of Fruit by David Toop.) The music of *Brasília* sounds industrial and, in its pulsing anti-melodies, one can almost hear the decay of this capital city, its thousands of empty apartments shuddering. Like the sprawl of Brasília’s boulevards—bereft of sidewalks and uncolored by vibrant street life—Panacea’s music seems similarly artificial, untouched by human hands. Brasília has been called utopian, perfect, and impossible. Its musical counterpart is similarly open-ended, an homage to the unfinished experiment that is its muse. *Sarah Palmer*

Unfashionable Fashion

What’s behind Rei Kawakubo’s conceptualist clothing for Comme des Garçons? Ned Cramer bares all.

Kudos

The Harvard Graduate School of Design has just named Rei Kawakubo, the Japanese fashion designer behind the French-named label Comme des Garçons, as the third recipient of its annual Excellence in Design Award. She follows French interior designer Philippe Starck and U.S. theater designer and producer Robert Wilson all picks that reflect the GSD’s praiseworthy intention of promoting relationships between its own fields of study—architecture, landscape, urban planning—and design disciplines traditionally held to be secondary, or even frivolous.

Kawakubo doesn’t make the kind of clothes that Sharon Stone, or Cher for that matter, would wear to the Oscars. She approaches her craft conceptually, with a suspicion of trends and conventions of beauty that would make her designs more digestible. A maverick, Kawakubo aligns herself as much, if not more, with the world of contemporary art as with the fashion industry, pointedly locating her New York City boutique in the gallery district of West Chelsea rather than a traditional high-end shopping area like Madison Avenue or Soho.

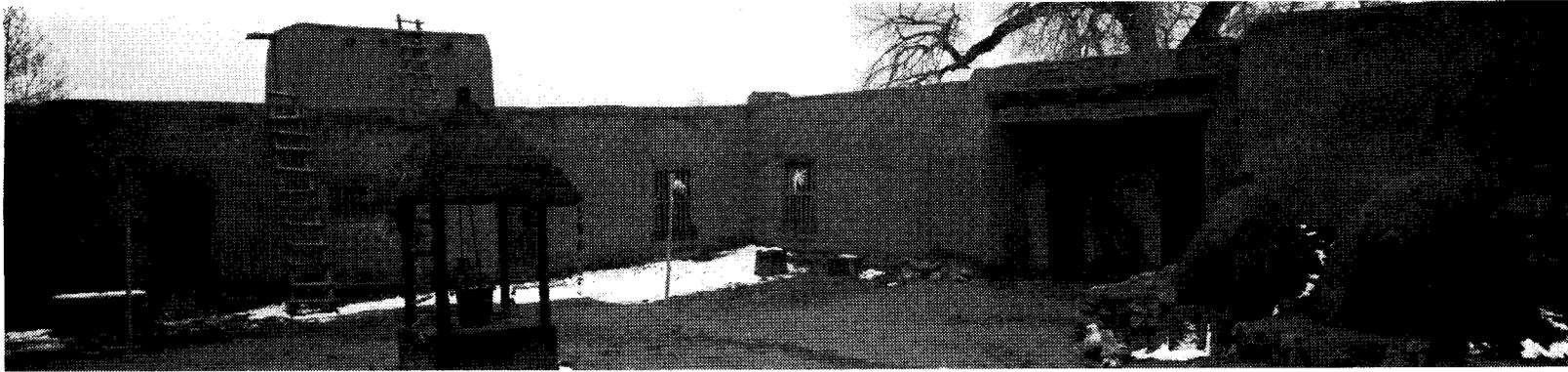
A steel tube with runway lights embedded in the floor leads from the threshold inside, where freestanding white-enameled walls snake through the space. It’s easy to mistake the space for an avant-garde art installation, and in a sense it is one. British architect Future Systems designed the entryway, but Kawakubo is responsible for everything else—for almost every aspect of her label’s visual identity, in fact. By the time you register that you’re in a shop, not a gallery, Kawakubo’s sculptural interior design has established museum-quality expectations. The clothes occupy the space like another layer of installation, and the salespeople move about in her outfits like performers.

If Kawakubo’s interior design resembles art, her clothes are akin to architecture. She uses structure, materials, and typology the way an architect would, except that her structure is thread and the human body, her materials are fabrics, and her typologies are shirts and dresses. She overturns people’s assumptions about what they wear with a mannerist’s sense of intellectual play. Witness the jacket with the seams on the outside, and padded so they stand up—to celebrate clothing’s typically hidden construction. The dress with a padded hump on the back confounds the expectation that clothing is meant to flatter the body. Kawakubo isn’t afraid of complexity or contradiction, to make objects that seem ugly or absurd, and above all, to make people think. ■



Rei Kawakubo's Comme des Garçons Manhattan store, in the Chelsea art district, could easily be mistaken for one of its gallery neighbors. Colorful shoes sit on the floor like a sculpture installation. Harvard recently gave Kawakubo its third annual Excellence in Design Award; her work will be on exhibit in Cambridge, Massachusetts, through May 31.

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architecture

POWER

If the architectural field were a Shakespearean drama, the subjects of this month's power registry would be its leading protagonists—a cast replete with mysterious stranger and moneyed matriarch, court jester and dealmaker. In drafting our list of the profession's most powerful figures, we struggled mightily to parse power from mere influence. Technology chieftains and newsprint pundits, among others, fell by the wayside.

What is power, anyway? Does it rest with the bully pulpit or the bully? The corner office or its occupant? Do we look for it in Harvard's institutional sway or its charismatic chairman? Does power make the figure, or does the figure make the power? These are power's delicate balances.

Power emanates from places in equally complex ways. We therefore also offer a catalog of power destinations, from the home of the most commanding architect of all (a literal seat of power) to a power station (a literal source of power) reborn as an art gallery, from a government center to the website branch of the world's widest-reaching museum.

Power is the intangible currency of any profession. But how much is real and how much pantomime? We introduce you now to our power play.

The Power List

Ed Feiner: The Federal Presence

By Bradford McKee

Who is that buzz-cut, cowboy-booted maverick striding about the country with \$10 billion to blow on a massive makeover of federal architecture? Unmistakably, it's none other than Edward A. Feiner, who has served as the government's chief architect in the U.S. General Services Administration (GSA) since 1996. Surely there are people more powerful than Feiner in the realm where federal bureaucracy and architecture collide; GSA commissioner Robert A. Peck, a longtime champion of architects, sets the agency's priorities, and the fickle Congress gives Feiner his allowance. But no one has ever been more influential in advocacy for progressive, humane design in the civic sphere. As Feiner's right-hand GSA associate Marilyn Farley puts it, "Ed's the mouth."

Feiner's ascension to chief architect and tastemaker extraordinaire put him in charge of more than 250 million square feet of federal properties, not to mention the millions more he'd eventually order up. But for a guy of his advanced tastes, Feiner had a problem: Before he arrived, the federal government had earned itself an awful reputation as a client that no self-respecting design firm would go near. After all, why would architects jump through bureaucratic hoops of fire to design public buildings that resembled the worst corporate bunkers?

Suffice it to say that Feiner needed several years to reheat architects' interest in working for Uncle Sam. He joined the GSA in 1981, having previously worked as director of the U.S. Navy's master planning program. In 1990, his office at the GSA launched a design awards program to recognize outstanding federal architecture, hoping to inspire federal employees and taxpayers alike to appreciate fine architecture in the public sector. Unfortunately, at that time there weren't many new projects worthy of blue ribbons, which prompted what would become Feiner's star turn: GSA's Design Excellence Program.

In 1991, Feiner quietly began reforming the way his office and its 11 regional bureaus selected architects and engineers for federal contracts. He changed the qualification procedure so that talent mattered more than previous government experience. He convened peer-review panels of distinguished practitioners, academics, and federal agency employees to critique and help steer architect selection and design development. And in an initial spate of new federal courthouses, the judges themselves were invited to join the process. Before we knew it, the GSA had courthouses on the boards designed by Pei Cobb Freed & Partners; Robert A.M. Stern; Kohn Pedersen Fox Associates; Skidmore, Owings & Merrill; Kallman McKinnell and Wood; Mehrdad Yazdani of Dworsky Associates; Richard Meier; and now even Morphosis. By sheer force of personality and persuasion, Feiner made civic architecture fashionable again.

The GSA, ultimately, is subject to the vagaries of the federal budget. After getting \$5 billion in projects under way through 1998, Feiner received almost nothing from Congress in 1999. Yet its fiscal year 2000 budget contains \$418 million for new construction and \$800 million for repairs and alterations, which includes new annexes to existing buildings.

If, God forbid, the entire Design Excellence program were to shut down tomorrow, Feiner will still have left a legacy extending well beyond the numerous city-center blocks he has helped to revive from Charleston, West Virginia, to Las Vegas, Nevada, with compelling new buildings. He will have helped restore the notion that government is and should be a leader in the building arts and a steward of the urban environment.

Photograph by Chris Buck

Rem Koolhaas: The Philosopher King

By Philip Nobel

Rem Koolhaas is the only foreign architect working today who commands the awe and respect usually reserved for the canonic European masters of modern architecture. In that exotic otherness rests his allure. He is a stranger.

For all his enigmatic qualities, the flying Dutchman is omnipresent—and therein lies his power. He is seemingly everywhere at once, spinning all media. As a skilled storyteller, he held a funhouse mirror to the pandemonium of Manhattan in his inventive *Delirious New York* (1978), and to the larger world—and his place in it—in his tumescent best-seller *S,M,L,XL* (1995). As a theorist, he offers subversive commentary on architecture's role in our supercharged, media-besotted culture. Unlike other European observers of the American scene, however, he is not arcane; nor does he find fault by reflex. His writing describes an America that feels like the real thing. As a teacher at Harvard and elsewhere, he makes other campus discourse look dull. Now, having pocketed this year's Pritzker Prize, his words assume even greater weight.

Koolhaas is an almighty talker, but he's also a builder. By age 56, he has already amassed a prodigious—and prodigiously varied—body of work, encompassing every scale of the human experience, from an intimate Soho gallery to a \$10 billion plan to build an airport on a man-made island six miles off the Dutch coast. His buildings, ripe experiments in materiality and context, soaked but not drowned in historical quips, open themselves admirably to admirers with and without expertise. No wonder he's been mimicked by everyone from the tropical pop of early *Arquitectonica* to a rising generation of Dutch protégés.

Finally, after softening the ground for decades with a barrage of images and ideas, Koolhaas is storming the American beach. New York already has a theater by Koolhaas and Gluckman Mayner, and it will soon have a boutique hotel by Koolhaas and Herzog & de Meuron. Seattle is moving forward, against some local resistance, with a Koolhaas-designed public library, and his student center on the campus of the Illinois Institute of Technology in Chicago, also initially resisted, broke ground in March.

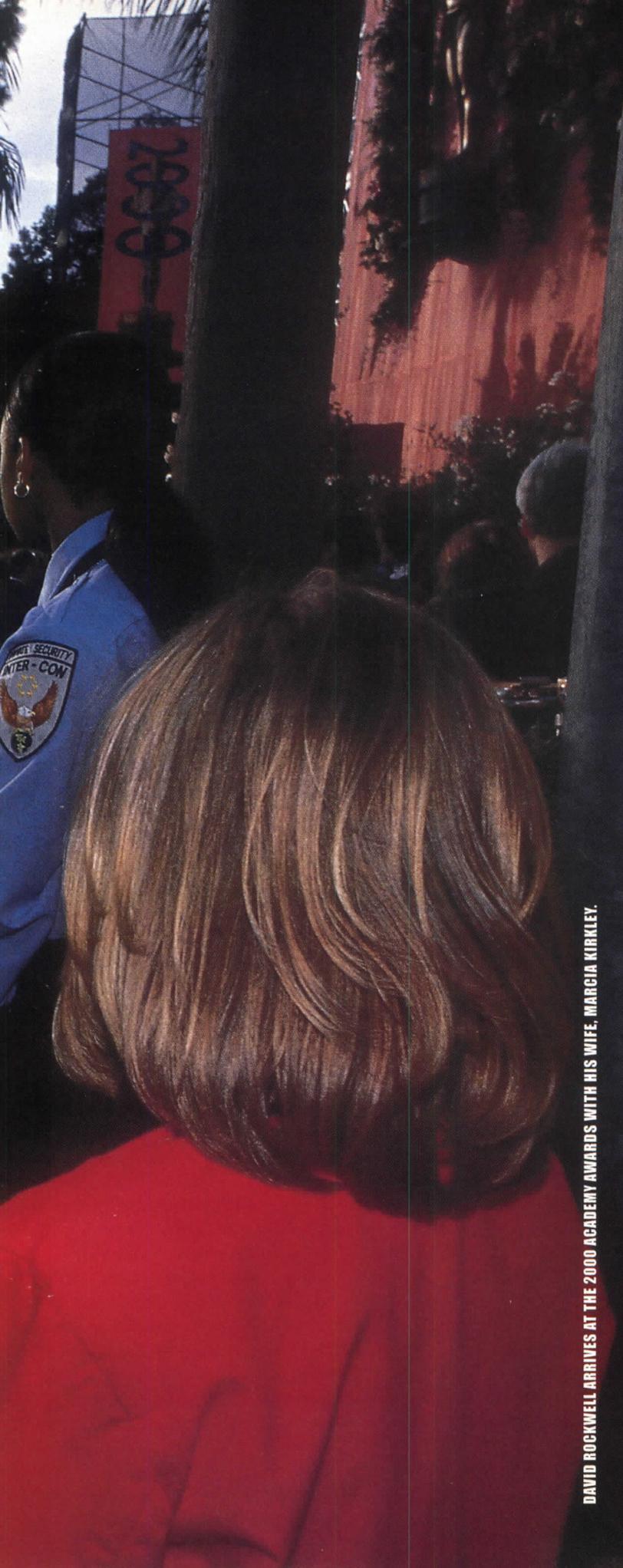
We should welcome him; he plays the Big Architect game with far more flair than his rivals. Last year, at a sort of *salon des refusés* for the also-rans in the Museum of Modern Art's expansion competition, he stood at the podium in his signature sleek gray suit—legs pegged, lapels hideously small on his tall frame—dramatically lit, his arms akimbo and his jaw set tight, and silenced the hall by announcing that architecture-as-spectacle—a genre the forum was meant to criticize—is, in fact, the only game in town. It was pure Roark.

Photograph by Marco Brambilla

STRANGER IN A STRANGE LAND: REM KOOLHAAS ON THE STREETS OF NEW YORK.







DAVID ROCKWELL ARRIVES AT THE 2000 ACADEMY AWARDS WITH HIS WIFE, MARCIA KIRKLEY.

CORBIS-SYGMA

David Rockwell: The Crowd-Pleaser

By Philip Nobel

The great legacy of the public-relations failure of modern architecture in the past century (see: Pruitt-Igoe, Downtown Anywhere, or the work of Paul Rudolph's High Solipsist period) is the pressure it put on many architects to cater to popular taste. Some of the rhetoric surrounding the flowering of postmodern classicism, and more recently New Urbanism, has made this point: People like what they know, and if they know a thing it must be good. Instead of flat tops, grille facades, blind stair towers, and inscrutable ornament, why not work with images one's clients will understand? Why not give the people what they want?

Enter David Rockwell, master crowd-pleaser. Where some architects have dabbled in tepid allusion to bring the American public back to the architectural fold, Rockwell has hit them where they live—the rush of television, the glamour of movies: lights, camera, action. Since the early 1990s, David Rockwell's 150-person Rockwellgroup has nearly cornered the market in spectacle architecture. Beyond the restaurant interiors that made his name—over 30 Planet Hollywood locations and such New York themescenes as Nobu, Payard, and Vong—Rockwell has shrewdly pioneered a formula that allows name-brand architects to participate in the creation of our entertainment-driven commerce. His work with Sony, Coca-Cola, and Disney has helped put the public face on those companies. His W Hotel in New York has taken the boutique formula to the masses. The cherry on top of his star-driven work will be the new theater Rockwellgroup has designed for the Academy Awards, to be completed in the fall of 2001. And regular folks, hungry for what he offers, will soon be able to bring the Rockwell magic home: a new line of home furnishings, including chairs and tables, will be available from Forms + Surfaces in 2001.

For better or for worse, Rockwell's commercial vision is now shaping the everyday landscape—and his profession. For better, he has reversed architecture's usual roles: He calls the shots; clients compete for his attention. Is there another architect in the country who could, as Rockwell once did, decline a call from Michael Ovitz? "Tell Michael I'll call him back." He must be doing something right.

There is, on the other hand, plenty to question in Rockwell's designs—some of those spaces are a touch busy, no?—but it always pays to keep an eye on the mutability of taste. For someone growing up today in the suburbs and vacationing in Orlando, Las Vegas, or Times Square, Rockwell feels a lot like home. And in that cartoon world, where excess reigns, he is king.

Photograph by Axel Koester

Jorge Silvetti: Big Man on Campus

By Christopher Hawthorne

Maybe you never noticed it needed the help. After all, for decades it looked as though the launch given Harvard's Graduate School of Design (GSD) by Walter Gropius and Marcel Breuer in the 1930s and '40s, and the legions of their disciples in modernism who followed, had stamped Harvard as eternally hip.

But by a half-century later, the school had lost some of its

famous cachet. It seemed the most promising students were heading off to Princeton to study with Michael Graves, or Cornell (Cornell!) to sit at the feet of Colin Rowe. As postmodern theory began to hold more and more sway, the GSD began to hold less.

But Jorge Silvetti, who took over from Mack Scogin in 1995, has brought back the swagger. He's done so by aggressively recruiting new teaching talent, dangling the legendary Harvard name as a lure. He's attracted such marquee names as Peter Zumthor, but he's also used foresight that would make a baseball scout proud to stock Harvard with dynamic younger faculty like

Office dA principals Monica Ponce de Leon and Nader Tehrani. Columbia's quick rise under Bernard Tschumi has kept the GSD's comeback from becoming an absolute victory, but few would argue with the assertion that Harvard has regained its perch at the top.

Outsiders may have been surprised at the choice of Silvetti as Scogin's replacement, but few at Harvard were. Silvetti, who joined the Harvard faculty in 1975, was arguably the most powerful figure at the GSD as early as a decade ago. Now, colleagues say, he enjoys almost free rein to hire faculty and has wrung far more money from Harvard than his pre-

decessors ever did. Unlike his predecessors Rafael Moneo and Scogin, each of whom served a single five-year stint, Silvetti was re-upped at the end of his first term, which ended this year.

Silvetti's off-campus achievements are no less ambitious. He first made his name as a theorist and continues to be an influential writer, especially on the city. He's been a member of the jury for the Pritzker Prize since 1996, most recently as its only practicing architect. (Along with his post as Harvard chair, that double duty is a little like editing the *New York Times* and, in your spare time, handing out the Pulitzers.) And, with fellow Argentine Rodolfo Machado, he runs a practice in Cambridge with a roster of monster projects under way, including the Mission Bay Development for the University of California at San Francisco, a 63-acre master plan for the Getty Villa in Malibu, and a much-anticipated Harvard dorm.

But it's as chair that Silvetti has really found his calling. The 58-year-old Silvetti gets his way, according to those who've watched in him in full politico mode, by combining silky Old World charm with a knack for backroom persuasion. He hasn't won everybody over: Harvard students routinely complain that he warms only to people he thinks might later provide a favor. And while his allies call his openness to new ideas "childlike," detractors prefer "childish." Silvetti certainly isn't averse to throwing his weight around behind closed doors. Natural politician that he is, though, Silvetti's outbursts are usually well timed—and always a means to an end.

Photograph by Paula Lerner

TOO COOL FOR CAMBRIDGE: JORGE SILVETTI ON THE STEPS OF HARVARD'S WEIDNER LIBRARY.



PAIGE RENSE REIGNS OVER THE LAND OF DREAMS FROM HER LOS ANGELES OFFICE.



Paige Rense: The Shelter Queen

By Bradford McKee

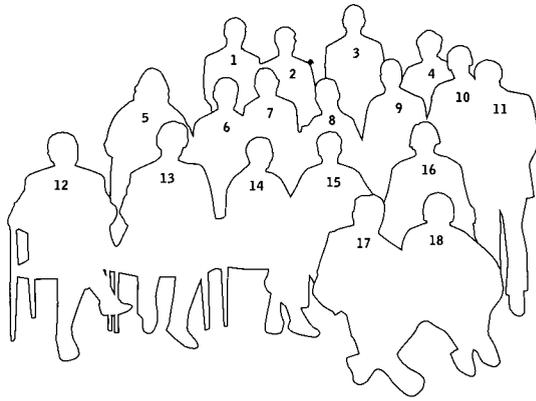
Kneel and kiss her ring: Paige Rense is Queen of the House, and Her Highness can quickly send your career soaring to aristocratic heights. Architects know that if Editor-in-Chief Rense picks their high-end habitats to appear in the marzipan pages of *Architectural Digest*, the Condé Nast coffee-table title she has edited for 30 years, their phones will ring off the hook. All species of exiled baronesses and Nasdaq-tracking starstoppers are bound to call for help with a little piece of heaven in Sun Valley or Silicon Valley—or the Loire Valley. But handle her with care, for if you cross Rense, she can keep you and your butternut-clad boudoirs forever trolling the little regional magazines, desperate for attention.

Rense was a housewife in Thousand Oaks, California, in the 1960s, before she joined *Digest*—starting out as an associate editor, but swiftly rising to editor when her predecessor was shot to death in a bungled burglary attempt. *Digest* was then just another third-rate shelter periodical. Rense has turned it into one of the media world's best-known—and most profitable—franchises. She did it with the then-peculiar notion that consumers don't want to see themselves reflected in the magazines they read—they want to see something better, richer, sexier. Los Angeles offered Rense the perfect power base to cultivate a thousand celebrity relationships and exploit them on her pages.

Rense is less your traditional editor armed with a Ticonderoga pencil than a silk-suited multitasker for the rich and shameless. She's part real-estate doyenne (in the March 2000 issue, you can browse the jaundiced parlors of poet James Russell Lowell's 1828 Beacon Hill townhouse—a steal for \$2.65 million, at least compared with the \$6.95 million Miami Beach museum piece designed by Carlos Zapata shown just below it); part auctioneer (antiques shopping in Sydney!); part psychotherapist for compulsive collectors (“I have such a large collection of chairs,” confesses photographer Victor Skrebneski, “I can't stop buying them”). While newsstand emulators ebb and flow, Rense drives *Digest* on like an unstoppable, advertising-stuffed, decorating juggernaut. “She's an autocrat,” one former contributor says. “She knows where the money is, and she demands complete loyalty.”

In her spare time, the editrix turns her life into, er, art. Doubleday published her 1997 roman à clef, *Manor House*, a saucy little mystery centered around the murder of the flamboyant bisexual editor of a famous—you get one guess—design magazine. The detective on the case, one Pierpont Tree (she does have an ear for names), observes that “murder among the rich is almost always about money,” and, as a corollary, “only the poor murder for love.” In no small way, the propulsive plot mirrors the unsolved slaughter of her predecessor, former *AD* editor Bradley Little. *The New York Observer* reported that the film rights to *Manor House* were sold to producer Douglas Cramer, whose house had recently been featured in—that's right—*Architectural Digest*, conveying Rense's art back into life, love, and money.

Photograph by Bernd Auers



- 1 Charles Gwathmey
- 2 Terence Riley
- 3 David Childs
- 4 Frank O. Gehry
- 5 Zaha Hadid
- 6 Robert A.M. Stern
- 7 Hans Hollein
- 8 Stanley Tigerman
- 9 Henry N. Cobb
- 10 Rem Koolhaas
- 11 Kevin Roche
- 12 Michael Graves
- 13 Arata Isozaki
- 14 Philip Johnson
- 15 Phyllis Lambert
- 16 Richard Meier
- 17 Peter Eisenman
- 18 Jaquelin Robertson

Johnson & Sons: The New Yorkers

By Philip Nobel

Perhaps no collection of architectural power players is more feared than that loose group of leading lights that we will call "The New Yorkers." In the popular imagination, and sometimes in life, they knight the young, they make taste like it's going out of style, they hog column-inches with their ideas, and they steal the spotlight when their words become work. Who are these men—yes, mostly men—who from their positions on the Manhattan grid exert such a lopsided pull on our world?

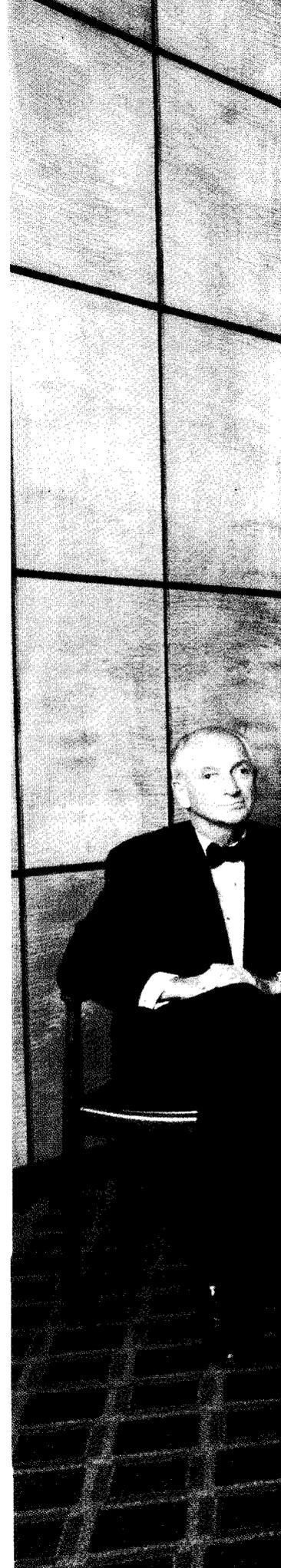
The easy answer is that they are the protégés of Philip Johnson, who famously convenes some of them now and then at The Century Association on West 43rd Street for an evening of back-scratching and good graces. Johnson's extra-architectural talent—his unmatched ability to rally his troops while absorbing their innovations—needs little introduction. He has tacked through changes in the profession, sometimes making his own wind, for an amazing 70-odd years now, and as he pushes 945 there is no sign that he plans to sail off over the horizon. But, though his tongue is still razor sharp, he has slowed some; some of his "kids" are growing into his shoes. The most successful follow Johnson's proven model: Build, sure, but don't forget that persona is also a product of design. The core of the group begins with the old New York Five: Peter Eisenman, Charles Gwathmey, and Richard Meier, minus John Hejduk (defection) and Michael Graves (apostasy); Eisenman, a *macher* after the master's heart, was even named the next Philip Johnson by *New York* magazine in 1998. Robert A.M. Stern, who first came into Johnson's orbit as a student at the Yale School of Architecture (and now he runs it) is also often mentioned as a dean-apparent.

But the Johnson Family has no lock; in the best helter-skelter spirit of the city there is a profusion of other strivers who have helped, at different scales, extend the long arm of New York architecture. Skimming the surface, these include David Childs of SOM, influential hometown favorites Hugh Hardy and Jim Polshek, and, two by two, the ever-insurgent Henry Smith-Miller and Laurie Hawkinson, Tod Williams and Billie Tsien, and Elizabeth Diller and Ric Scofidio—who, after winning a MacArthur Fellowship last year, are architecture's only independently certified geniuses.

So there is a good chance that the next raja could come from outside Johnson's fold, but it is less likely that they will come from outside New York. The strength of the New York scene is that all parties are thrown together into the same if-you-can-make-it-there crucible. Were one to chart the connections between them it would make a skein like a viper's nest. Spheres overlap; there is no one in this group who does not habitually owe favors to or receive favors from at least two of the others, and the full tally of who worked for, fought, championed, taught, pissed off (slept with?), or bought whom is beyond all calculation. It may not be pretty, but it's damn effective; rubbing shoulders, making deals, telling lies—for these things, New York is the best place in the world.

Photograph by Timothy Greenfield-Sanders

THE DONS OF NEW YORK'S ARCHITECTURAL MAFIA—PLUS A FEW IN LAWS—POST FOR A FAMILY PORTRAIT AT THE FOUR SEASONS ON PHILIP JOHNSON'S 90TH BIRTHDAY.





Andrés Duany: The Evangelist

By Christopher Hawthorne

Hold on, smarty-pants. Before you go off on your rant against Andrés Duany and the New Urbanist movement he cofounded in 1993, condemning it for promoting a white-bread, retrograde nostalgia, consider one stubborn piece of information: More than half of all Americans now live in suburban developments built after World War II. Add the fact that most of them are fundamentally dissatisfied with their sprawling townscapes and their molasses highways, and you've got the ingredients for a potent political-architectural campaign.

Which is exactly where the 50-year-old Duany comes in. Whatever the blind spots in his approach or the compromises he's made—and there are plenty of both—his calls for walkable neighborhoods and mixed-use development show a careful understanding of the vague malaise that hovers over cul-de-sacs everywhere. The crusading Duany, in other words, feels the suburbanites' pain.

His broad appeal is helped by the fact that the principles he first tested out two decades ago at a Florida village called Seaside are so pliant. With the right kind of spin, they can attract everyone from dedicated leftists (with their anti-sprawl, anti-car rhetoric) to reactionary conservatives (with their hosannas to small-town family values). By now Duany, along with his wife and partner, Elizabeth Plater-Zyberk, dean of the architecture school at the University of Miami, has planted himself right at the four corners of the development landscape—the point where the government, media, architectural academy, and building industry meet.

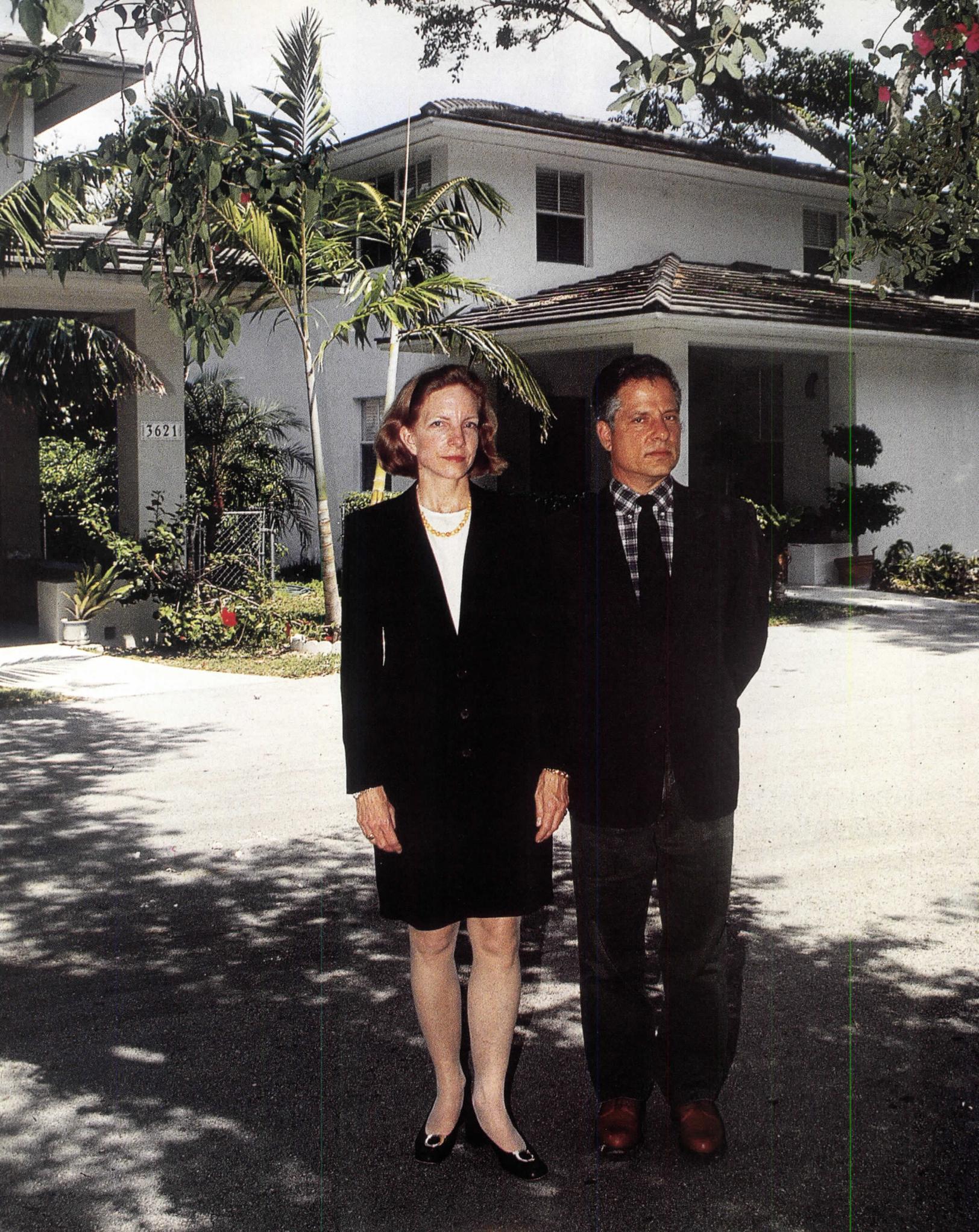
He has done so with a style that's simply relentless. He bombards the staffs of newspapers and magazines (including this one) with hectoring letters and e-mails. He's a constant presence at conferences (where if he's not on the panel, he can be counted on to pop up with the first question) and on the lecture circuit. He shamelessly courts politicians. He and his New Urbanist cohorts produce one expensively packaged manifesto after another; his latest, published in March and written with his wife and Jeff Speck, is called *Suburban Nation*.

For all of that, he is routinely condemned as a tireless self-promoter. "Duany has the plausible smoothness and well-kept good looks of a TV evangelist," Rowan Moore sniffed in London's *Evening Standard*. "He appears the soul of reason and betrays only the slightest signs—the intolerance of a difficult question, his too-perfect coiffure, the humorless sincerity of his tone—that he is a fanatic underneath."

Moore, saying that as if it might wound poor Andrés, forgets a couple of things. One: Duany's enthusiasm is absolutely unsinkable. Two: What succeeds in America if not coiffed fanaticism? Anyway, consider the results. He's converted the nation's biggest residential builder, Pulte Homes, to his cause. He counts among his political allies the mayors of several of America's fastest-growing cities, as well as the past two secretaries of Housing and Urban Development, Henry Cisneros and Andrew Cuomo. Indeed, HUD's latest housing policy, called HOPE VI, is a something of a joint work with the Duany crew; its documents carry the Congress for the New Urbanism's official seal. And to listen to Al Gore's calls for "livable communities" is to hear Duany's unmistakable echo.

The anti-Duany rhetoric, much of which flows from halls of ivy, reveals as much about the academy's own neuroses about being permanently ineffectual than about the shortcomings of New Urbanism. What makes Duany threatening is that he has carved out a space for himself not only where the juiciest action is, but also where it promises to be for an awfully long time.

Photograph by Carlos Morales





JOAN OF ARCHITECTURE: PHYLLIS LAMBERT AT THE CANADIAN CENTRE FOR ARCHITECTURE IN MONTREAL.

Phyllis Lambert: The Patron Saint

By Bradford McKee

Design doyenne Phyllis Lambert long ago ditched the surname—Bronfman—that connotes the enormous wealth and power of her *bloodline* in the third generation of the Seagram dynasty (“I like the anonymity,” she told *Forward* in 1997), but everyone in architecture knows who she is. Lambert, an architect, is the founder and bully on the pulpit of the Canadian Centre for Architecture (CCA) in Montreal, the most complete architecture museum and scholarly research center in North America,

with more than 150,000 objects in its collection worth some \$75 million. Philip Johnson calls her “the most important lady in architecture.” Brendan Gill referred to her as a “fiery particle.” Others, who have felt the strength of her passion and the heat of her temper have dubbed her “Joan of Architecture.” She is such an infinitely demanding diva that her own brother, Seagram chairman Edgar M. Bronfman, once said, “I wouldn’t like to work for her.”

But who cares? Look at what she’s done. Lambert, now 73, made her first big mark in architecture at age 27, when, as a globe-trotting Vassar girl, she bulldozed her father Samuel Bronfman’s plans for a dumb box in which to house

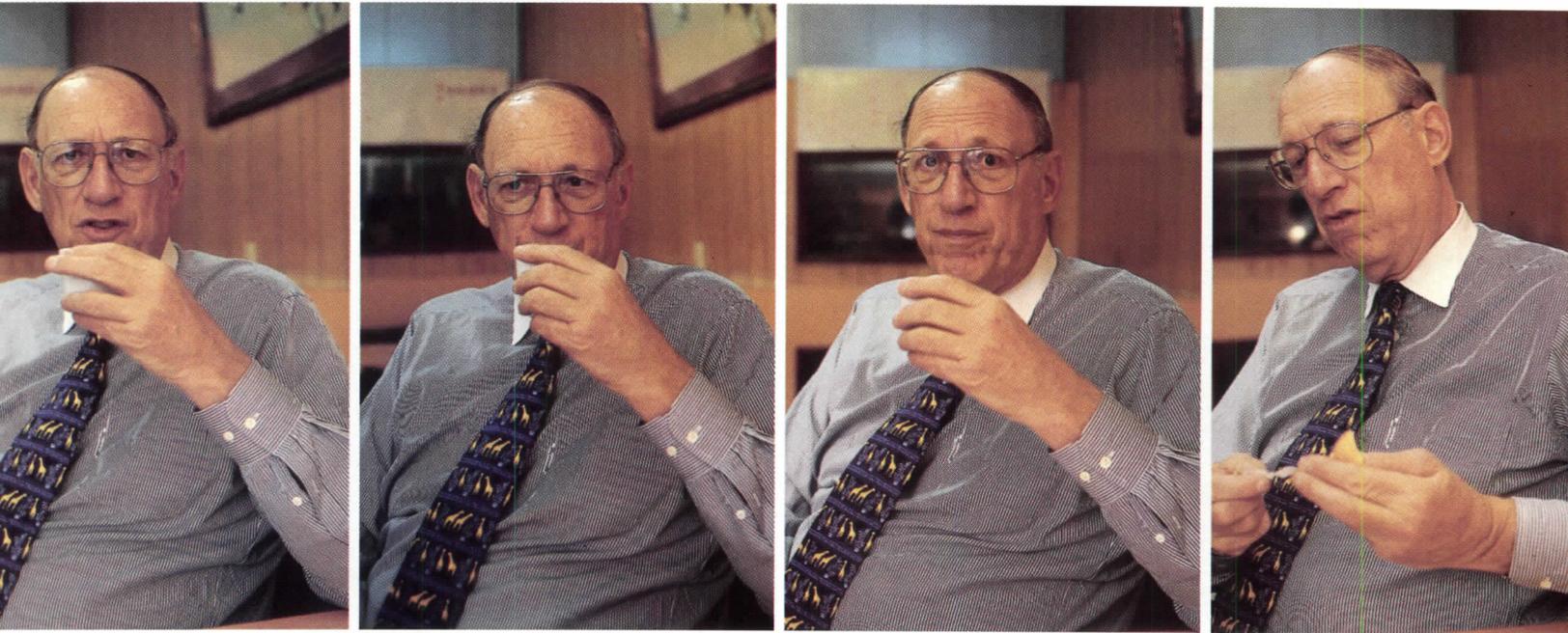
his whiskey empire—she told him she would go to Europe and never come back if he built it. She persuaded him to put her in charge of the project, and she went out and hired Mies van der Rohe, for God’s sake, to erect the Seagram Building on Park Avenue in 1958. With that stubborn masterstroke, Lambert positioned herself to preside over a landmark marriage of modernism and corporate American symbolism.

She has remained in charge of the debate among the architectural intelligentsia ever since her famous collaboration with Mies. The CCA simply culminates a life spent playing kingmaker in the salon of alpha-guy architects she has assembled around her—the

roster starts with Johnson and the New York Five, particularly Peter Eisenman, whose work she championed in a milestone CCA exhibition in 1994. Back and forth with this coterie, Lambert germinates ideas about the future of cities and proposes her questions curatorially. CCA’s shows in recent years have prompted critical debate about the urban civilization by reconsidering the American lawn, Disney’s architecture, New York’s West Side, and 18th-century Montreal.

Two years ago, Lambert named a new director for CCA, Kurt W. Forster, and she is currently curating what will be the magnum exhibition of her life, *Mies in America*, which will open at CCA in summer 2001. The Mies show will bring Lambert’s vision full circle, but no one expects her to come to a close. As an activist, educator, and think-out-loud public philosopher, Lambert is a paradigm of what money can do when it’s steered by good sense. She did not become Phyllis the Formidable because she’s rich and powerful, but because she has never expected anyone to work harder than she does on architecture’s behalf.

Photograph by Gabor Szilasi



Art Gensler: The Boss

By Bradford McKee

Nobody ever accused M. Arthur Gensler, Jr., of being a brilliant designer, but he has designed a brilliant company in Gensler. It's the pride of the Large Firm Roundtable, possibly the most competitive firm in architecture—but only by coincidence anymore, because “architecture” and/or “interiors” doesn't quite sum up what the firm does. It has, in 35 years, become a superstore of design, broadly interpreted. Gensler will not only build you a building or break out some office space for you. It will also create your brand, manage your assets, design your product, identify your corporation, and make you money and some for itself in the process. Gensler could probably wash and fold your laundry with the same aplomb.

It's also not quite adequate to call Art Gensler “powerful.” The Brooklyn-born chairman and CEO does, as he says, count the cash on Friday nights, but he has pushed off his, let's say, “authority” to his 1,900 employees in 22 offices. He winds them up, and off they go! By creating an enterprise in which nearly every employee can feel like an entrepreneur, Gensler has done for his firm what Herb Kelleher has done for Southwest Airlines. Bickerers be damned, the most cynical thing you could say about it is that he has created a workplace that reminds people constantly that they are in this business because they like it, because it's a fun place to work.

Hence the low turnover—there are a lot of lifers at Gensler. It helps stability, too, that Gensler's employees own about one-third of the company; the partners own the rest. The receptionists, Gensler says, get the first bonus, and he gets the last. All that good will buys him extraordinary productivity. Art Gensler says that the firm needs to generate \$1 million in fees per day. (It didn't, quite, in 1998, when it had a total gross revenue worldwide of \$227 million on \$2 billion worth of work.) And while you wouldn't say the work pushes the outer limits of formal inquiry, clients—most of whom are commercial, institutional, or industrial—seem to like it just fine.

After all, Gensler knows (because he reads 200 pounds worth of business publications every month), clients will only use their new spaces, images, and identities for so long, whether it's the San Diego airport or a roadside McDonald's. There is, like it or not, an infinite market out there for that stuff. We're not living in a terribly stoical culture. Gensler is poised to serve up essentially plastic solutions to essentially plastic problems.

It's ingeniously postmodern of him to have created such a business for the wireless age—sober and reality-minded. No architect in practice has understood the way he has the metaphysics of the changing business and political landscape in which architects operate. And unlike so many of his competitors, who find their management and finances to be a source of shame, Gensler isn't afraid to tell you anything about his company. He's got advice to spare, brothers and sisters, and you'd be well advised to listen up.

Photograph by Ed Kashi

Frank Gehry: The Master

By Michael Cannell

Advisory to politicians and culture swells everywhere: When Frank Gehry comes to town, nothing is ever the same again.

We all know the miracle of Bilbao, once an industrial wasteland of shuttered shipyards and deposed steel plants. Debt-choked and desperate, city padres bet \$100 million that Gehry could blow the dust off the Spanish rust belt. His Guggenheim outpost delivered like a force of nature, single-handedly sucking \$160 million in tourist dollars into the battered Basque economy in its first year—enough to create 3,800 jobs. “Normally, you couldn’t say that a single building saved a city,” said Commerce Minister Josu Jon Imaz. “But this building—it’s magic.”

Gehry’s titanium masterpiece galvanized the culture world’s psyche. It also renewed faith in the power of architecture. Suddenly every copycat city wanted to excite its economy with a sexy art museum. Every discounted borough dreamed of its own pilgrimage point. Urgent message to architects everywhere: Get down on your knees and kiss Gehry’s heavy-metal for making architects look like the municipal rescue squad.

Bilbao also benefited Gehry. During design, Guggenheim director Thomas Krens prodded Gehry to extend himself, to risk all, to dare to outdo Frank Lloyd Wright himself. Commentators later encouraged that lofty comparison: Had Gehry perhaps surpassed the other Frank as the century’s great architectural master?

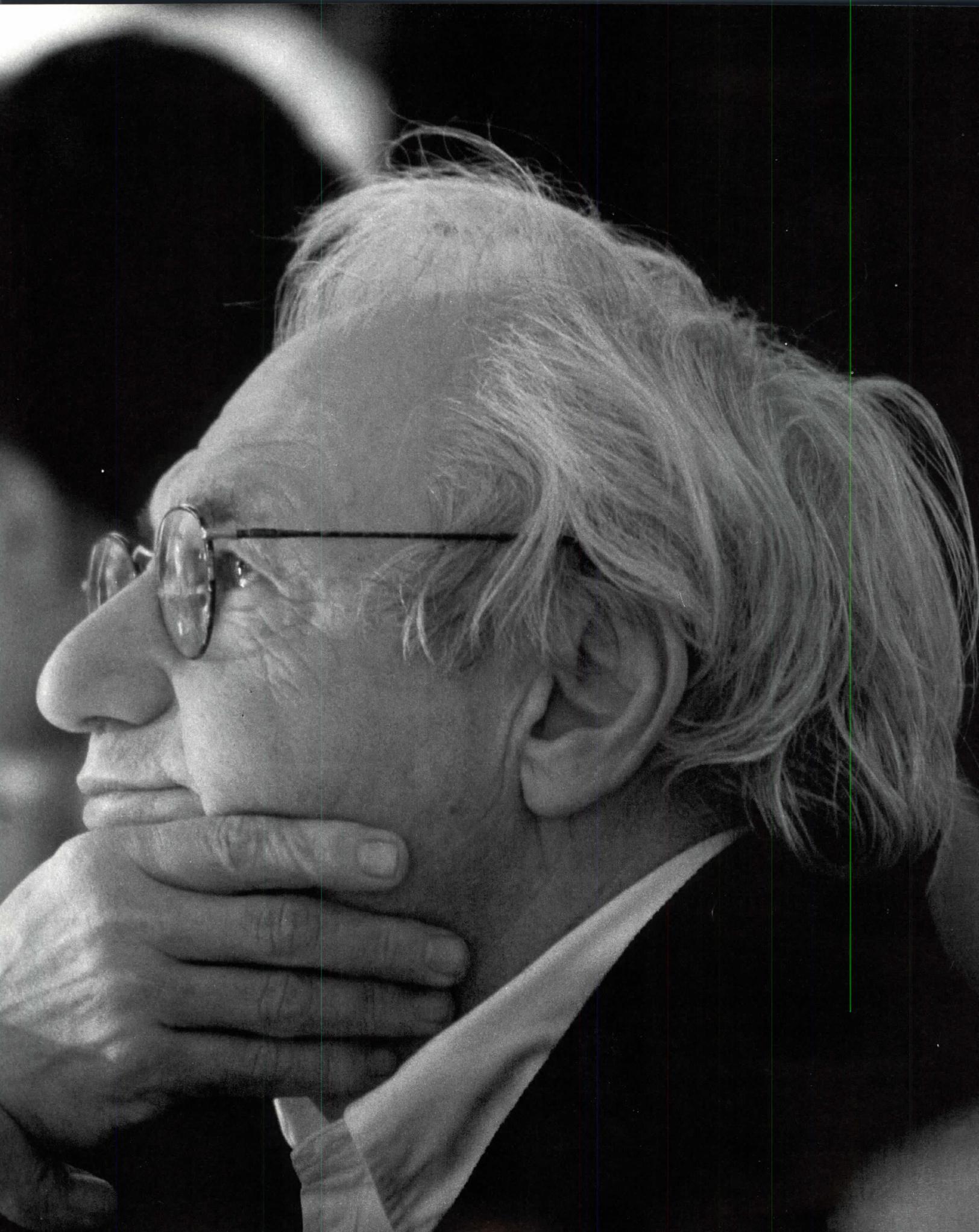
If architecture kept an official status registry of all living practitioners, Gehry would surely top the list. His celebrity now transcends his profession. American Express cast him in its ad campaign. Maria Carey vamped outside his Bilbao in a video; the TV character Frasier haughtily pooh-poohed the design. His lectures always sell out. He lingers among the aisles to sign autographs for adoring design students. “They treat me like a movie star,” he says.

Gehry may be *Vanity Fair* famous, but he does not project a power personality. He cultivates instead the persona of an unassuming Toronto transplant—the anti-Eisenman—shambling about his Santa Monica office in rumpled clothes and mussed white hair. His power resides instead in his inexhaustible inventiveness and varied inspirations: Among other things, he helped incite architecture’s digital revolution and showed the way to a nonorthogonal world.

At a time in life when most people ease toward retirement, Gehry, at 71, just renewed his office lease for another 10 years. His upcoming work—the Disney Concert Hall and the redevelopment of Panama’s canal zone, among others—will be the most discussed designs of the coming years. “When everyone is ready for the ending,” Gehry once wrote, “I’m ready to begin.”

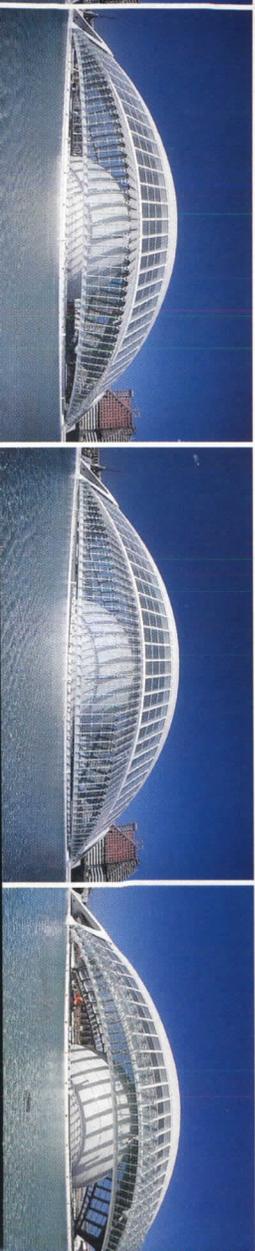
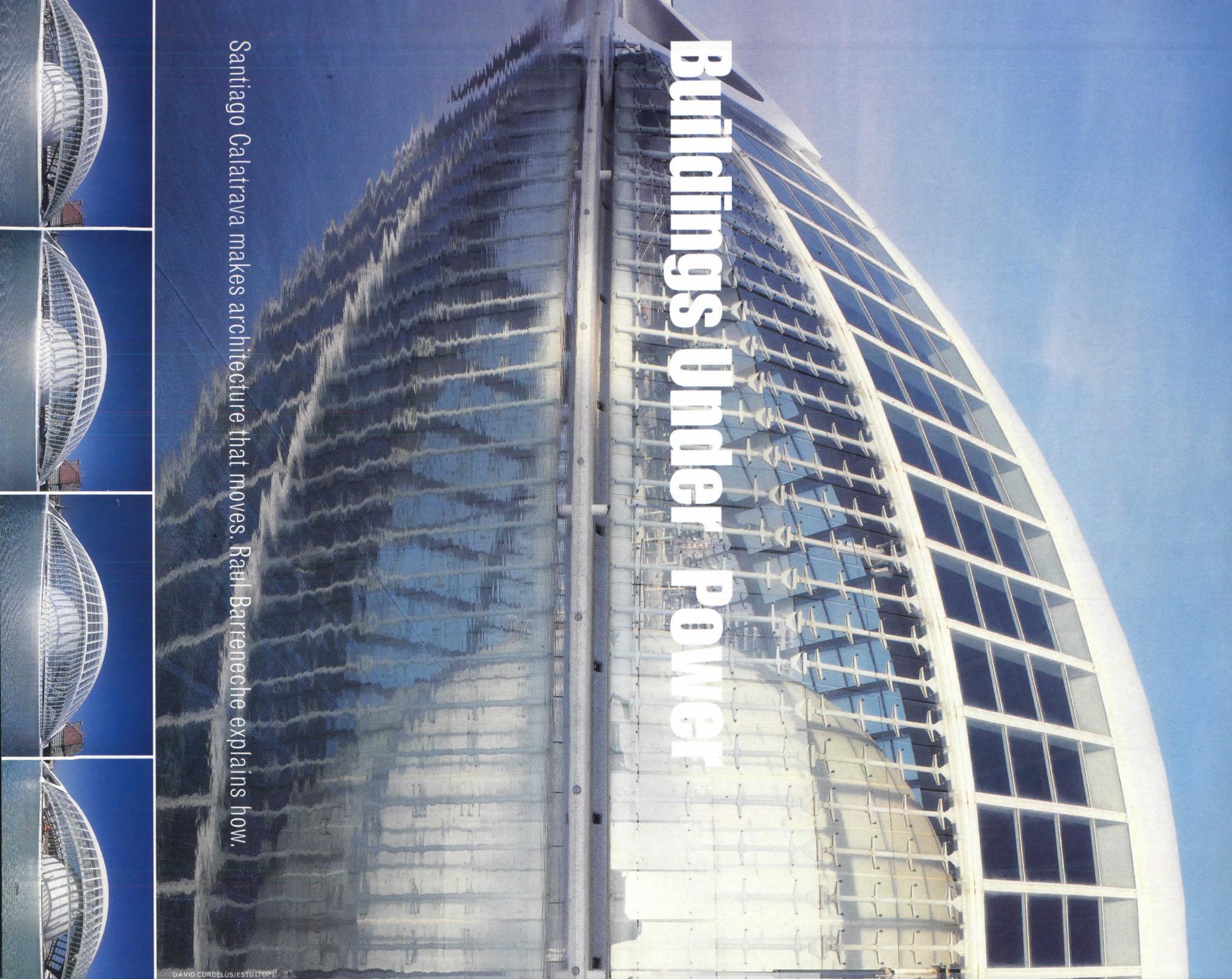
Photograph by Thomas Mayer

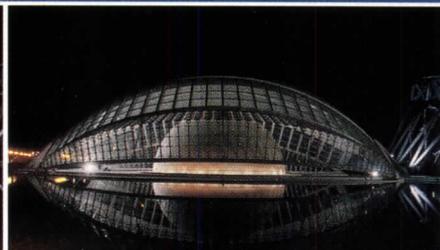
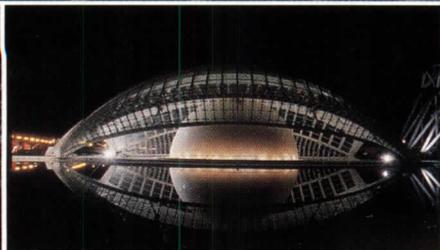
UNCLE FRANK, EVERYBODY'S FAVORITE ARCHITECT, ATTENDING A CONFERENCE AT A BORDEAUX HOTEL.



Buildings Under Power

Santiago Calatrava makes architecture that moves. Raul Barreneche explains how.





Valencia, on Spain's Mediterranean coast, is the country's great producer of citrus fruit and rice. While its climate is largely benevolent, seasonal rains threaten the region that gave the world paella. When the Turia River, which winds through the city, overflowed its banks in 1957, the Valencianos decided to reroute it. Diverting the Turia solved Valencia's flooding troubles, but its riverbed left an unsightly brown gash through the city's stately fabric.

Valencia has spent the past 40 years transforming the dry riverbed into a continuous swath of parkland. To fill in the park's unfinished easternmost end, where the river once flared out en route to Valencia's port, the city commissioned a sprawling 87-acre "City of Arts and Sciences" (CAS), designed by native son Santiago Calatrava. The complex contains three expressive, monumental concrete structures by Calatrava—a planetarium, a science museum, and an opera house—as well as an oceanographic park filled with nautical structures engineered by the late Spanish-born virtuoso Felix Candela.

Ironically, Calatrava's master plan brings water back to the dry riverbed: He set the park's structures on an aquatic plinth, a shallow reflecting pool that extends the entire length of the site. The opera house (still under construction) terminates the western end of the site, the ocular planetarium and the science museum fill the center two-thirds, and Candela's still-unfinished open-air aquarium completes the eastern end. Axial paths connect the disparate elements across the water-filled basin, giving visitors the potent sensation of walking on narrow pontoons across a river.

The first completed CAS structure is the wildly popular planetarium, called *l'Hemisfèric* in the local Catalan, which shelters a spherical IMAX theater beneath an enormous elliptical cage. Visitors enter the planetarium underground, through a sunken gallery that leads to the base of the theater. The vaultlike, exposed-concrete gallery houses ticket booths, a restaurant, and gift shop. There's also a staircase that leads up to the soaring space beneath the planetarium's elliptical shell.

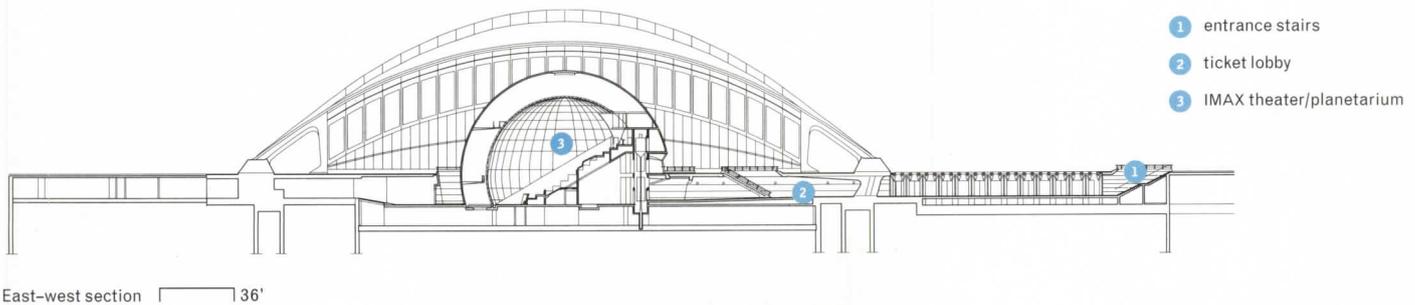
Though the program is simple, the building's mechanics are complex. Running along the center of the exterior shell is an enormous

poured-in-place concrete arch spanning 90 meters, with shallower arches placed parallel on each side. Fixed glass skylights span each of the side arches; beneath those, a bonelike cage of steel ribs, controlled by pneumatic struts, can open and close like an eyelid, revealing the sunken, tile-encrusted orb of the IMAX to the outdoors.

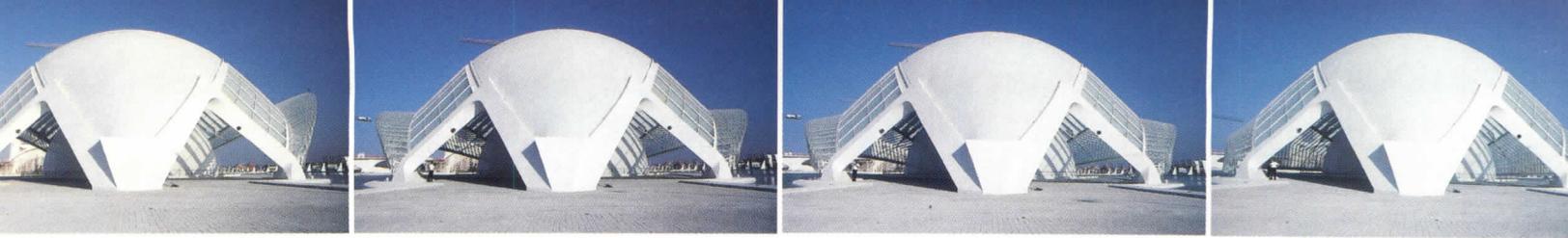
The allusion to a blinking eye is impossible to miss. Calatrava's building becomes an icon of the Enlightenment—Claude-Nicolas Ledoux's engraving of his theater at Besançon held in a Newtonian eye, or Louis Etienne Boullée's design for a "temple of reason"—writ large and in concrete. The architect admits a "longtime obsession to make a building like an eye, which through several trials in sculpture led to the basis of the Lyon Airport Station [1994]." While Ledoux and Boullée found power in the simplicity of platonic solids, particularly the sphere, Calatrava's impulses come from nature: the structures of animal skeletons, feathers, crustacean shells, and the human body.

L'Hemisfèric also embodies another of Calatrava's fascinations: architecture that moves. "There are principles to be found in nature that are appropriate for building, [including] the capacity of organisms to change shape, grow, and move," explains Calatrava. "Movement has been a source of inspiration for me." Scattered about his home and studio on Zürich's stately Hochgasse (he also maintains offices in Paris and Valencia) are moving metal sculptures designed by the architect. They vividly recall Harry Bertoia's clusters of steel rods that clang together and sway when touched. In Valencia, these movable follies are extended to a monumental scale—though to a questionable purpose: Why spend so much effort to enclose a vast, empty space that's bypassed in the building's entry sequence?

Calatrava's sinewy concrete forms border on the overwrought in the CAS, though the Hémisfèric is decidedly more serene. It is comforting to learn that his structural extravaganzas are rooted not in high-tech machinery or trendy digital gymnastics, but in organic sources: leaves, feathers, vertebrae, even eyeballs. There is an inherent power in Calatrava's forms; his work in Valencia could be even more forceful if it were less frenetic, and its movable parts more purposeful. ■

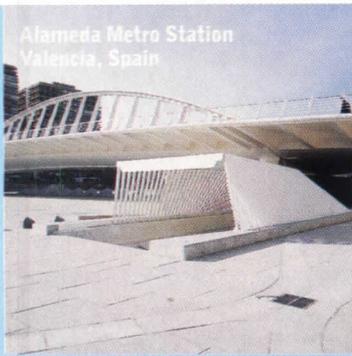


Section (above) shows how the 30-meter-diameter sphere of the IMAX theater is partially buried beneath the enclosure's soaring concrete arches. Visitors enter from the east, descending into a subterranean ticket lobby before entering the theater, which doubles as a planetarium; stairs outside the orb lead to the plaza level, beneath the giant vault. Seen from the west end, the jointed glass shells enclosing the planetarium's sides (facing page, top, left to right) open and close in stages, as its jointed frame flexes. The eye-shaped planetarium appears to float in a shallow reflecting pool (facing page). At rear is the prehistoric-skeletal frame of the Calatrava-designed science museum.

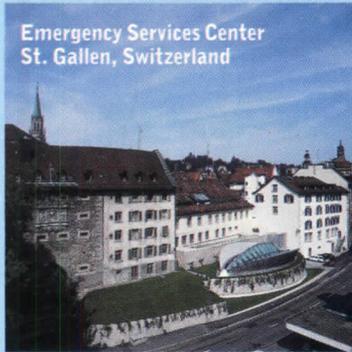
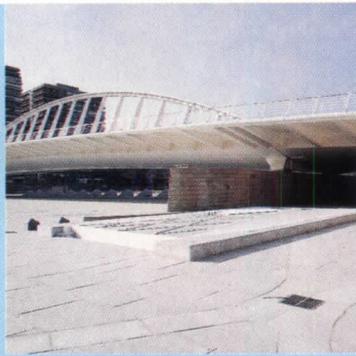


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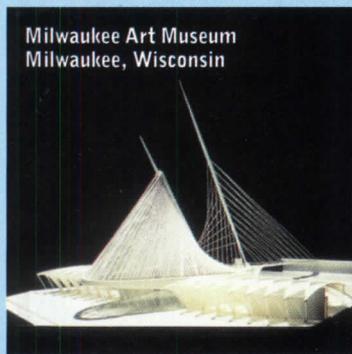




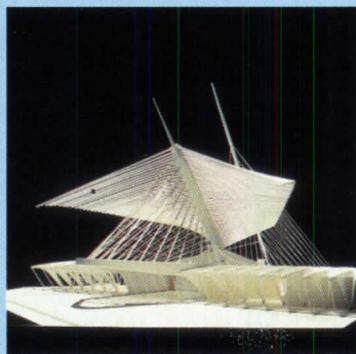
Alameda Metro Station
Valencia, Spain



Emergency Services Center
St. Gallen, Switzerland



Milwaukee Art Museum
Milwaukee, Wisconsin



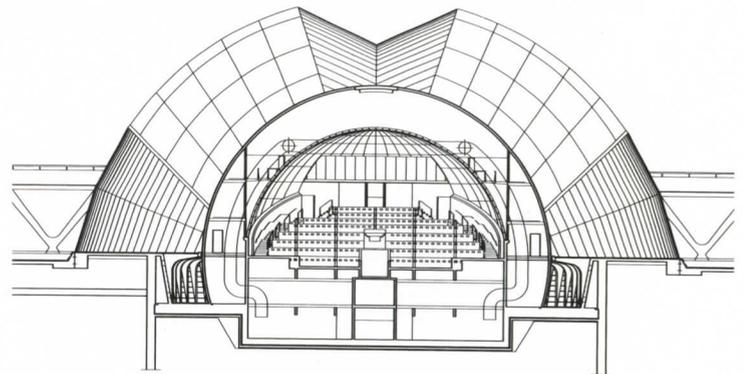
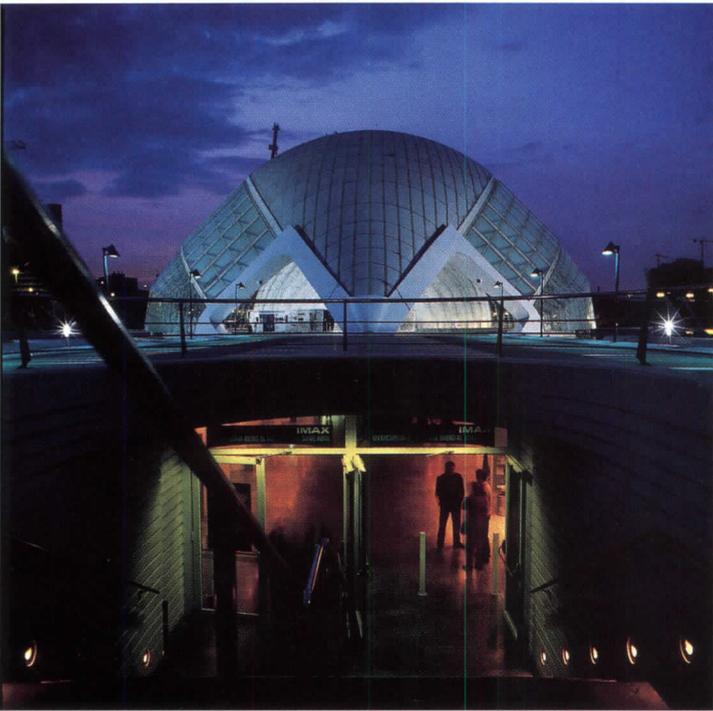
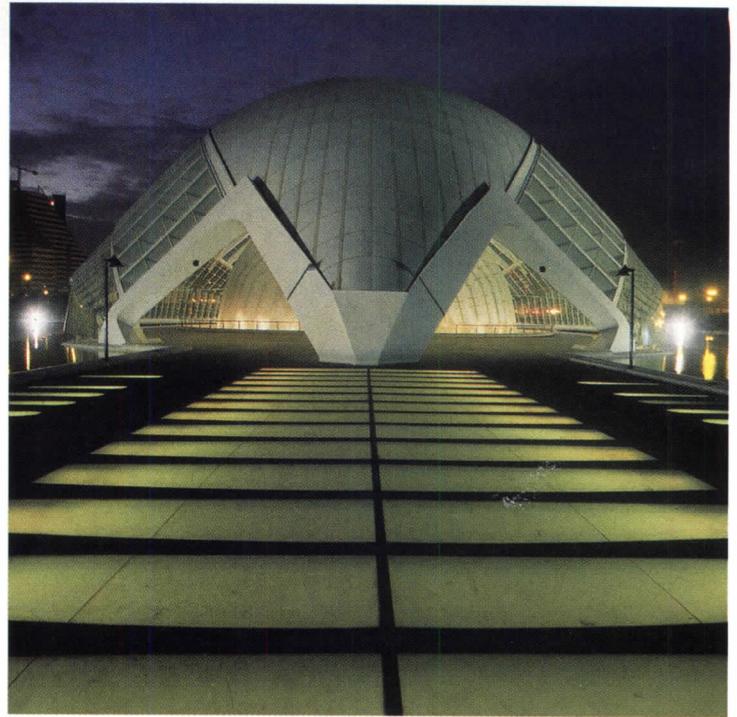
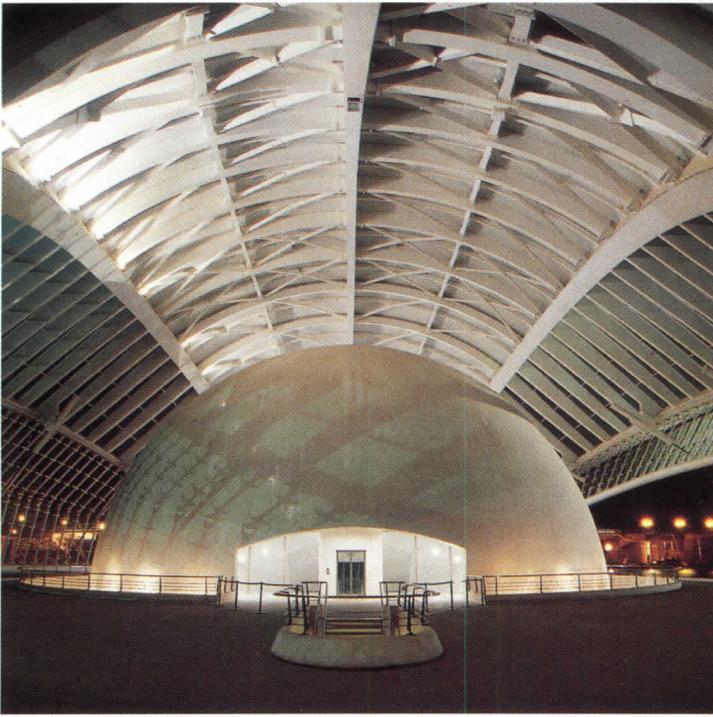
Moveable Feast

They fold and unfold, spread and glide. Never merely mechanical contrivances, Santiago Calatrava's kinetic building parts have moved with purpose since his 1981 doctoral thesis espoused his commitment to the rules of nature, specifically those that govern the capacity of organisms to change, grow, and, especially, move. His thesis, *On the Foldability of Space*, was also a scientific examination of the many ways three-dimensional space frames can be folded into two dimensions and then one by using rigid rods and movable joints. Much of his work has followed this method, as exemplified in these three projects.

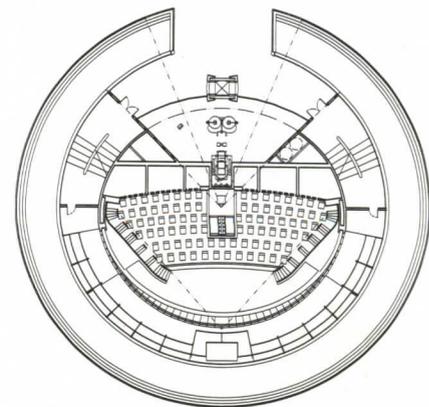
The entrances to the Alameda Metro Station (1991–96) in Valencia, Spain, are marked by a long translucent roof that erupts into plaza below a Calatrava-designed bridge connecting Old Valencia with the university. Escalators at the entrances (first row), leading from the plaza to the subterranean station, are covered by steel canopies, which are actually doors. When they're open, they provide a canopy to mark the entrances, but they can be lowered by hydraulically driven rods, to rest flush with the pavers, thus sealing the station.

The Emergency Services Center (1988–98) in St. Gallen, Switzerland, burrows into a site dominated by several historically significant ecclesiastic buildings. Despite an apparent deference to its authoritative neighbors, this diminutive structure (second row) is conspicuous nonetheless for the elliptical form of its roof, which is made of nothing less than armored glass slats, seven centimeters thick and weighing close to two metric tons. This is Calatrava's first movable roof-covering using slats and a mechanical hoist system. The brise-soleil is moved hydraulically up the outside of the structure by telescoping cylinders.

Although the technology improves, Calatrava never strays from his commitment to the geometries and metaphors of nature. His addition to Eero Saarinen's Milwaukee Art Museum (1957), begun in 1994 and slated for completion by the end of 2000, stretches along 440 feet of Lake Michigan shoreline. The expansion will add 125,000 square feet to the museum's current 160,000 square feet and includes a 300-seat auditorium, a lake-view restaurant, parking, and a new museum store. The focus of the addition will be the brise-soleil over a glass-enclosed reception hall. It will be a 90-foot-tall, transparent, arched structure made of finlike carbon-fiber louvers, which can be raised or lowered to control both light and heat. When extended, this sunscreen will appear as a giant bird poised to take flight over Lake Michigan. *Sara Hart*



Section through IMAX theater



IMAX theater plan 18' <

The IMAX theater's spherical exterior (top left) is clad in Gaudiesque fragments of shattered tiles—an important Valencian industry. The structural concrete and steel shell creates a weblike vault above the planetarium. A door at the theater's rear and a staircase lead visitors up from the subterranean lobby to the open esplanade beneath the planetarium's roof. A set of stairs (above left) descends into the vaulted concrete lobby from an axial path that splices the CAS in half. Translucent glass panels embedded in the path (top right) allow light into the underground spaces and demarcate the axis through the center of the planetarium.



L'HEMISFÈRIC VALENCIA, SPAIN

CLIENT: Generalitat Valenciana (City of the Arts and Sciences)

ARCHITECT: Santiago Calatrava, Zürich—Santiago Calatrava (principal-in-charge)

LANDSCAPE ARCHITECT: Santiago Calatrava

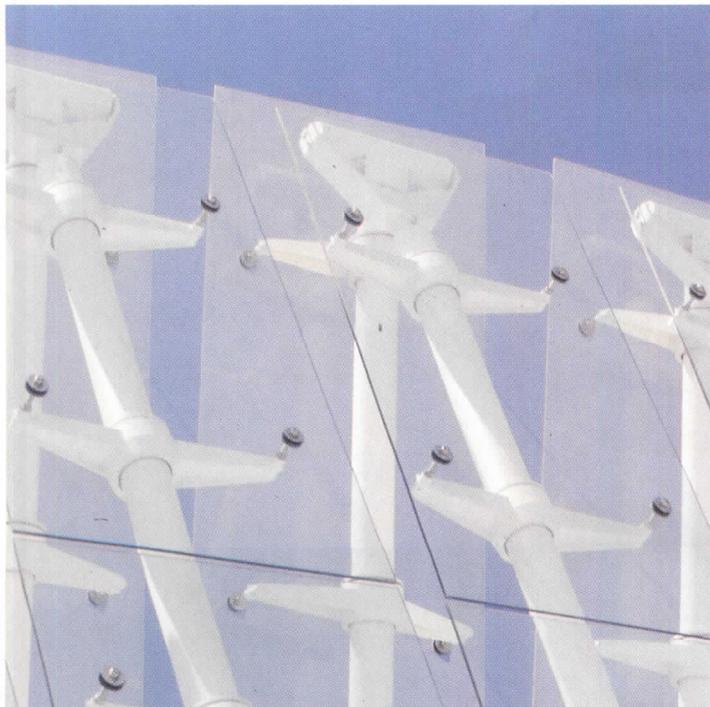
ENGINEERS: Santiago Calatrava (structural, civil); Aguilera Engineering (mechanical, electrical)

GENERAL CONTRACTOR: Ute Planetario

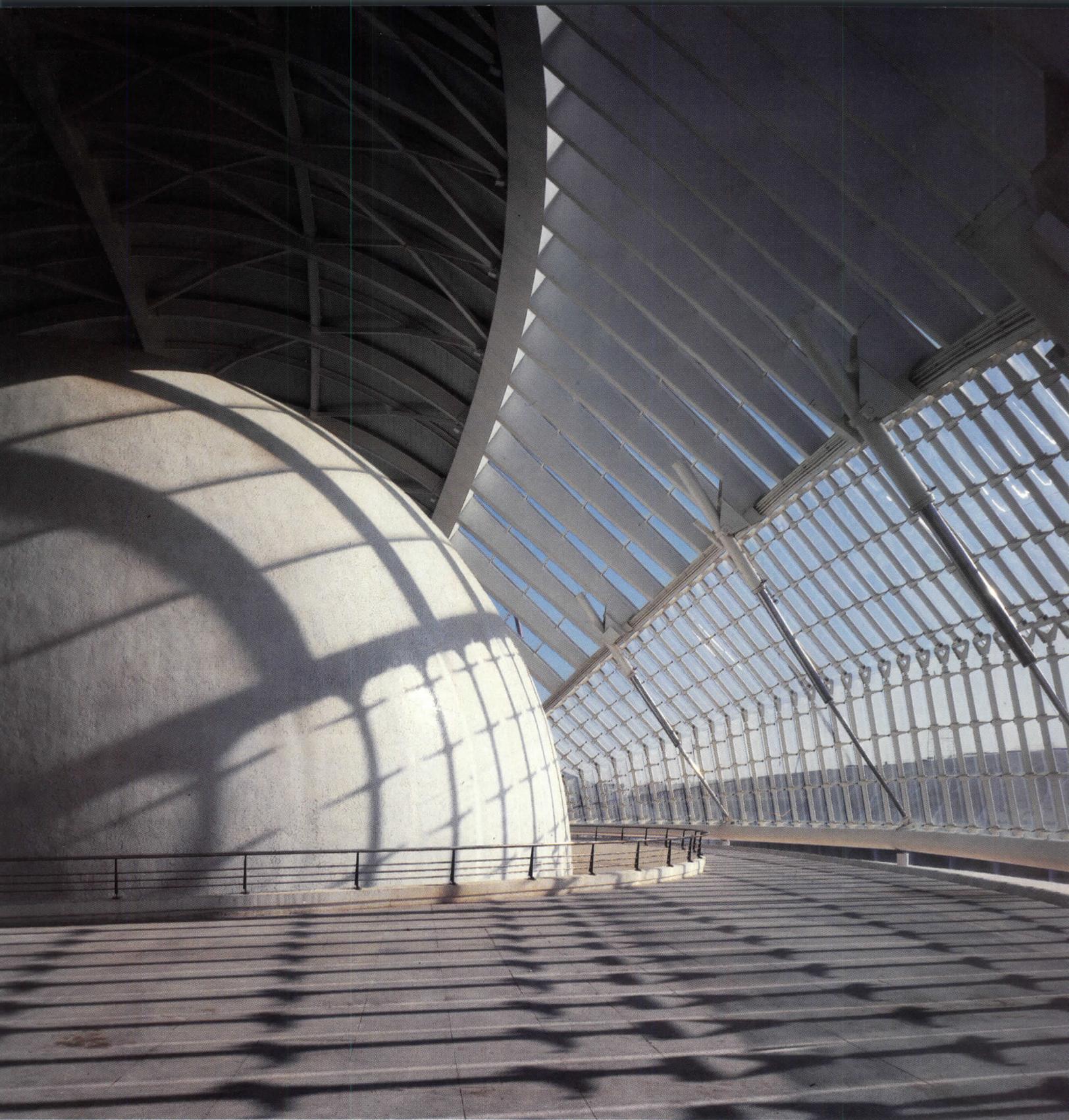
COST: \$17.2 million

PHOTOGRAPHER: Sergio Belinchon, except as noted

“There are principles in nature that are appropriate for buildings: the optimal use of material and the capacity of organisms to change shape, to grow, and to move. Movement has been an inspiration for me.”



The planetarium resembles an eyeball submerged in the reflecting pool extending the length of Valencia's sprawling CAS (top left). Behind the planetarium is Calatrava's soon-to-be-completed science museum, which continues the architect's fascination with expressive, anatomically derived structural forms. The planetarium's movable, glazed enclosure (above left and right) comprises rows of steel tubes—resembling finger bones—to which glass sheets are fixed. Telescoping struts lift and lower the glass skin, folding it outward as it rises (facing page, bottom left to right). The latticelike structure casts patterned shadows across the vast, open space around the sunken IMAX theater (facing page, top).



Power Outage

The world doesn't seem to care that Robert Venturi and Denise Scott Brown just completed one of their largest works ever. Ned Cramer thinks it should.



Architecture is a fashion industry. Just ask Robert Venturi and Denise Scott Brown. Had their latest big project, an 866,000-square-foot regional capitol building in Toulouse, France, been completed a decade ago, it would have been all over the magazines and debated in the schools. Not today. The postmodern costume ball has been over for years, and the profession, still hung over, blames its own misbehavior on the hosts. Death shields Aldo Rossi, James Stirling, and Charles Moore from finger-pointing; commercial success has moved Michael Graves and Robert Stern out of range; and many others on the po-mo A-list have conveniently rewritten their own histories.

That leaves Venturi and Scott Brown, who are sweaty in their scapegoat's fleece. Public attacks against them have been few (architecture is a gentleman's profession, for better or worse), but the couple is hurt and somewhat bewildered by the critical silent treatment they've been getting instead. After all, Venturi and Scott Brown might argue, the postmodern movement was never theirs to control, merely to influence, and despite the sometimes questionable quality of their imitators' work, the quality of their own designs has rarely faltered.

Its character hasn't either. Venturi and Scott Brown are nothing if not dogmatists, and the tenor of their argument, and

of their architecture, hasn't changed substantially since 1966, when Venturi derailed the runaway modernist train with the treatise *Complexity and Contradiction in Architecture*. His latest book, the 1996 *Iconography and Electronics Upon a Generic Architecture* (which contains essays coauthored by Scott Brown), reaffirms the faith of Venturi, Scott Brown and Associates (VSBA) in the application of symbols to generic shed structures, but does admit a new, computer-age medium of application: the LED.

Political dramas and refusals to compromise have thwarted VSBA's attempts to put this recently advanced theory to practice, notably in the giant electronic-screen facades of the Gateway Visitor Center in Philadelphia and of the second scheme for the Whitehall Ferry Terminal in New York City. But proof that the firm's ideas remain pertinent can be still found in the same source they cited in the 1960s and '70s: popular culture. The Strip-side neon signs that Venturi and Scott Brown promoted in their 1972 book *Learning from Las Vegas* (written with longtime associate Steve Izenour) have developed into the electronic billboards of The New 42nd Street in New York City, and VSBA has kept up with the changes. Compare renderings of the firm's second Whitehall Terminal



Venturi, Scott Brown and Associates' provincial capital (above) is essentially two buildings of long, nearly regular office blocks linked by a pair of glazed, five-story bridges. The capital sits at the center of a generous site on the edge of the historic center of Toulouse (facing page). From an expansive lawn, the bowed west front faces the 17th-century Canal du Midi (at right), which cuts across southern France from the Mediterranean to the Atlantic. An assembly hall projects from the building's east facade (at left), facing a major avenue into the heart of the city. Several old row houses still line the avenue on the edge of the site, partially maintaining the traditional street edge.

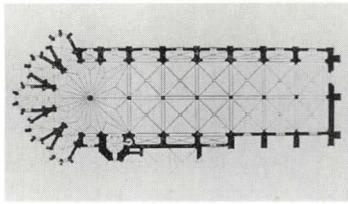


fig 1
Church of the Jacobins, Toulouse

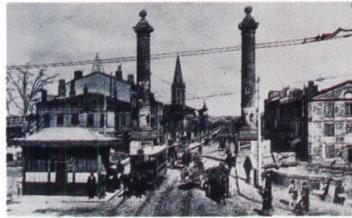


fig 2
19th-century gateway
to Toulouse

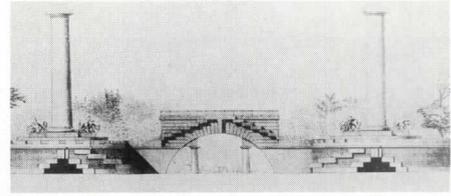


fig 3
Bourneville Gateway Project,
Claude-Nicolas Ledoux



fig 4
Lambay Castle, Ireland,
Edwin Lutyens



fig 5
Cathedral, Murcia, Spain



fig 6
Vanna Venturi House



fig 7
Renaissance Toulouse mansion

Like all of VSBA's work, the Toulouse regional capitol refers to a range of architectural precedents (above) that range from the firm's own past work, to buildings from the canon of architectural history, to local monuments.

scheme with ABC's pixilated banner in Times Square (December 1999, page 72, or any *Good Morning America* broadcast). They're startlingly similar, though the terminal's isolation at the tip of Lower Manhattan—like a dislocated fragment of Times Square—gives it brilliant comedic timing.

The Toulouse capitol is funny too, but with a dry, Gallic wit, easy on the wisecracks and fireworks. It doesn't take an expert to get the punch of Frank Gehry's Guggenheim Museum in Bilbao; the capitol is less outspoken, with a complex layering of historical references that demands effort before yielding up any rewards. It's the difference, to borrow an expression from art critic Dave Hickey (who got it from artist Edward Ruscha), between people responding with a "Wow! Huh?" and a "Huh? Wow!" Being familiar with Venturi and Scott Brown's written and built work helps you get from "huh" to "wow"; so does a ready familiarity with architectural history. Seeing the building and its context in person couldn't hurt, either.

Venturi first visited Toulouse in his youth and fell in love with the city straightaway; the plan of a local gothic church appears in *Complexity* (fig 1). It's just one of the city's many great buildings and places—the most famous being the Romanesque St. Sernin basilica—with their delightfully provincial interpretations of prevailing architectural styles, all built of a rich red brick. The same material clads the capitol, one of VSBA's many insiders' jokes. Here's another:

The capitol is basically made up of two long parallel blocks, and the sequence of three external spaces between them looks back in spirit to the public courtyard of Toulouse's 18th-century Palais du Conseil. Think of the spaces as a variation on the Uffizi in Florence. The flattened columns on the capitol's principal facade replicate the scale and silhouette of a gateway to the city that once stood near the site (fig 2); remember the illustration in *Complexity* of Claude-Nicolas Ledoux's gateway to the chateau of Bourneville (fig 3).

Indeed, it is possible, walking around the capitol, to identify much of the repertoire of complexities and contradictions that Venturi catalogued in his landmark book and has employed throughout his career. The off-axis doorway at the capitol's main entrance comes in part from the work of Edwin Lutyens (fig 4); the split pediment on the north facade from the baroque age (fig 5), via Luigi Moretti's postwar apartment building in Rome, among other sources; variations on both appear in one of Venturi's seminal early works, the 1962 house for his mother (fig 6). For a fan such as myself, the experience of identifying the references is sheer pleasure—a rewarding intellectual challenge that I've taken up before with other VSBA projects, but one that remains engaging because each building involves a fresh place and purpose.

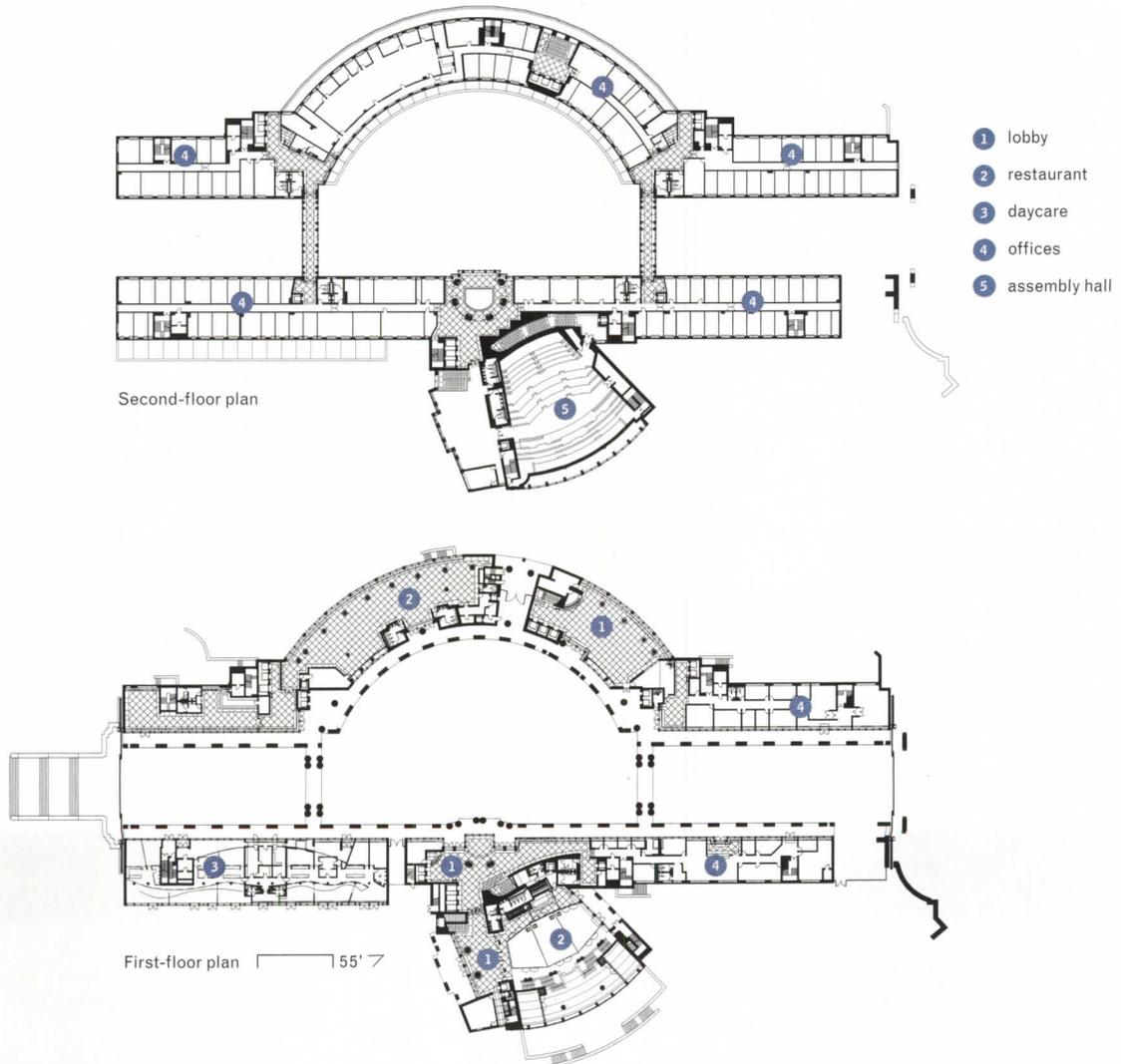
Not everybody is amused. The avant-garde especially, in its renewed relationship with modernism and abstraction, thinks



The flattened columns on the capitol's north front (top), as well as its split pediment, present a monumental face to a bridge that leads from city suburbs, across the historic Canal du Midi, to the city center. Traditional Toulouse brick, trimmed with limestone, clads the capitol's sequence of internal courtyards; the ratio of brick to limestone inverts on the external facades (above), presenting a more formal face to the city (fig 7).



The glazed exterior of the assembly hall (above) appears from behind a row house (at left) that has survived on the edge of the site; Venturi and Scott Brown revel in such casual adjacencies of monumental and everyday buildings, which occur throughout older European cities. Arcs traverse the gridded glass facade, a reference to the region's rainbow logo. The facade is actually blank; only recessed clerestories admit daylight into the hall within.





The pointedly simple south facade (above) backs up to traditional red-tile-roofed row houses. As on the north side of the building, the streetlike space between the wings echoes the form and original purpose of the Uffizi in Florence. Instead of framing a view of the Arno River, however, the two identical glazed bridges (above and top left) between the wings bound a central courtyard. Another expanse of glass (top right) marks the entrance to the assembly hall in the central courtyard. At the base, VSBA parodies its own signature center column by doubling it.



In typical VSBA fashion, the door to the principal entrance hall (above left) is located not on axis, but to one side. The semicircular hall rises the building's full height; its faceted walls (at top) stem from Czech cubism—in a strikingly plastic departure from VSBA's typically planar work. False windows in the assembly hall (above right) recall the exterior mullion pattern and open onto a wall decorated with a cloud pattern.

it has left Venturi and Scott Brown behind. The couple's early work was a giant step for architecture—not forward exactly, but not back either, as many believe. Venturi substituted the inexorable progression of modernism, the avant-garde's addiction to advancement, with an intricate and necessary game of Mother-May-I that moves between the past, present, and future—but that, regardless of direction, holds its ground in the here and now. Many of VSBA's colleagues are playing a similar game, though neither party may be willing to admit it.

In an interview in this issue (page 153), Swiss hypermodernist Jacques Herzog says of his firm's newly completed Tate Modern in London, "We wanted to create a new entity composed of old and new elements.... It is neither old nor new; it is, I hope, contemporary." Like Herzog & de Meuron's Tate, VSBA's Toulouse capitol captures the spirit of an age that cannot escape the past or avoid the future. While Herzog & de Meuron smoothes out distinctions between past and future, VSBA plays up the tension.

Even in plan, the space between the Toulouse capitol's two long blocks borrows the dimensions of a traditional Toulousian boulevard and strategically links two neighborhoods, the building as a whole sits at the center of a superblock, surrounded by a green suburban lawn. This contradiction is layered, because VSBA lobbied (with some success) for the preservation of surviving row houses on the site's perimeter, partially preserving the street edge. Venturi and Scott Brown celebrate the complexity of time; sadly, their contemporaries only see them looking back.

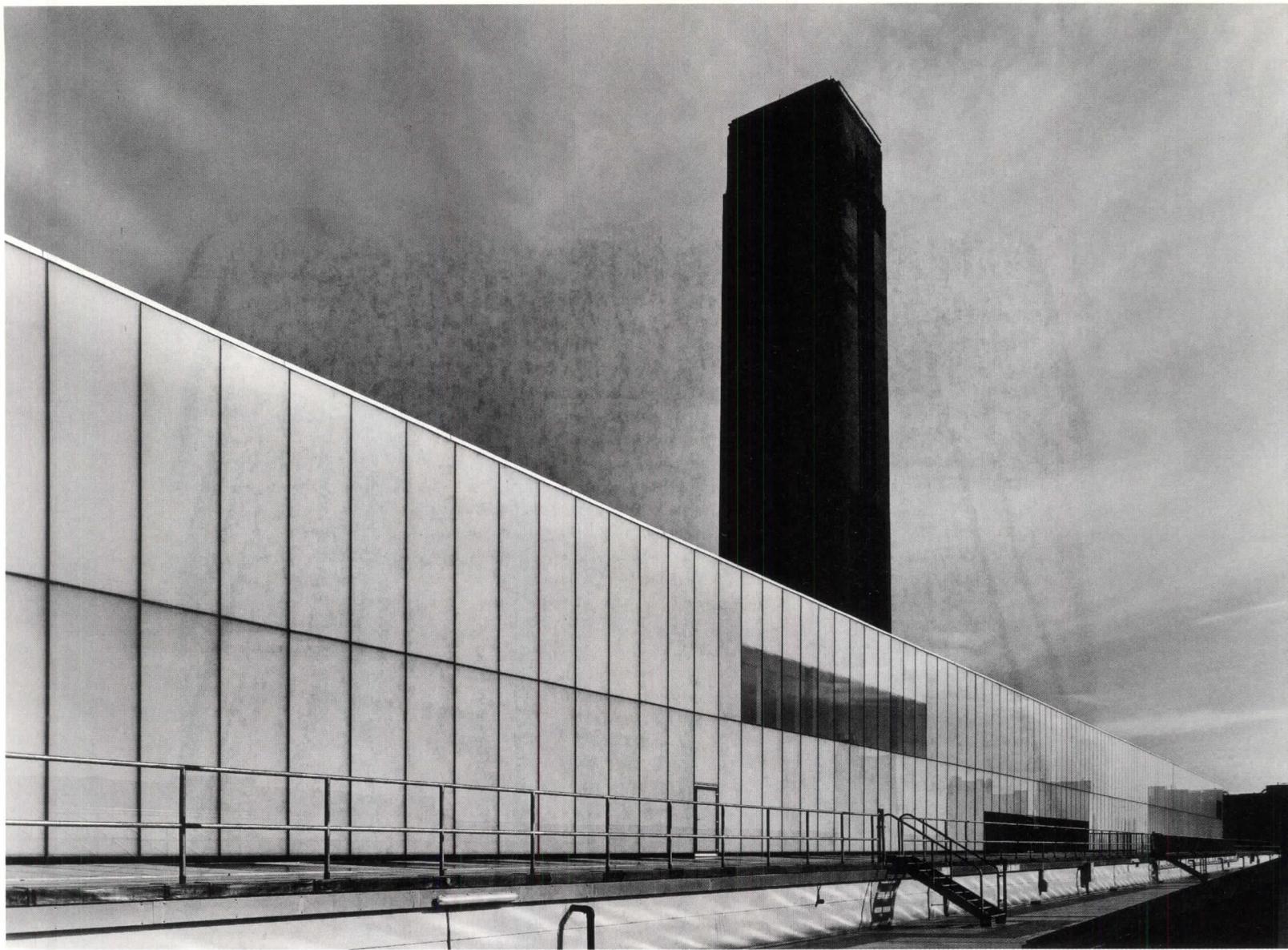
So if you seek proof of Venturi and Scott Brown's contemporary relevance, Toulouse may not be the most obvious place to look. The building's comparative conservatism must not only be considered as a reflection of its historical physical context, it must also be considered within the context of VSBA's entire oeuvre. It is the subtle differences, the splendid variations on and careful developments of a lives-long theme, that lend their buildings value. ■

TOULOUSE PROVINCIAL CAPITOL BUILDING TOULOUSE, FRANCE

CLIENT: Conseil Général de la Haute-Garonne, Toulouse, France **ARCHITECT:** Venturi, Scott Brown and Associates, Philadelphia—Robert Venturi, Denise Scott Brown (principals-in-charge); David Vaughan (project director); John Bastian (project manager); Hidenao Abe, Catherine Bird, Jason Brody, Laura Campbell, John Chase, Heather Clark, Ronald Evitts, John Folan, John Forney, Ion Ghika, Joseph Herrin, Daniel Horowitz, John Hunter, Timothy Kearney, Jeffrey Krieger, Eva Lew, Susan Lockwood, Nathalie Peeters, Alex Stolyarik, Brian Wurst (project team) **ASSOCIATE ARCHITECTS:** Hermet-Blanc-Delagause-Mommens/Atelier A4, Toulouse, France—Daniel Hermet, Françoise Blanc (principals-in-charge); Véronique Delagausie, Muriel Mommens, Patrick Pinel, Murielle Piriou, Eric Taveau, Stéphane Gachet, Dominique Herisson (project team); Anderson/Schwartz Architects, New York City—Frederic Schwartz (principal-in-charge); Paul Cali (project team) **LANDSCAPE ARCHITECT:** Arcadi, Toulouse, France **ENGINEERS:** Séchaud & Bossuyt, BEFS (structural, electrical, mechanical) **CONSULTANTS:** Tisseyre & Associates (acoustics); Cabinet Berthon (lighting) **COST:** \$80 million **PHOTOGRAPHER:** Matt Wargo, except as noted

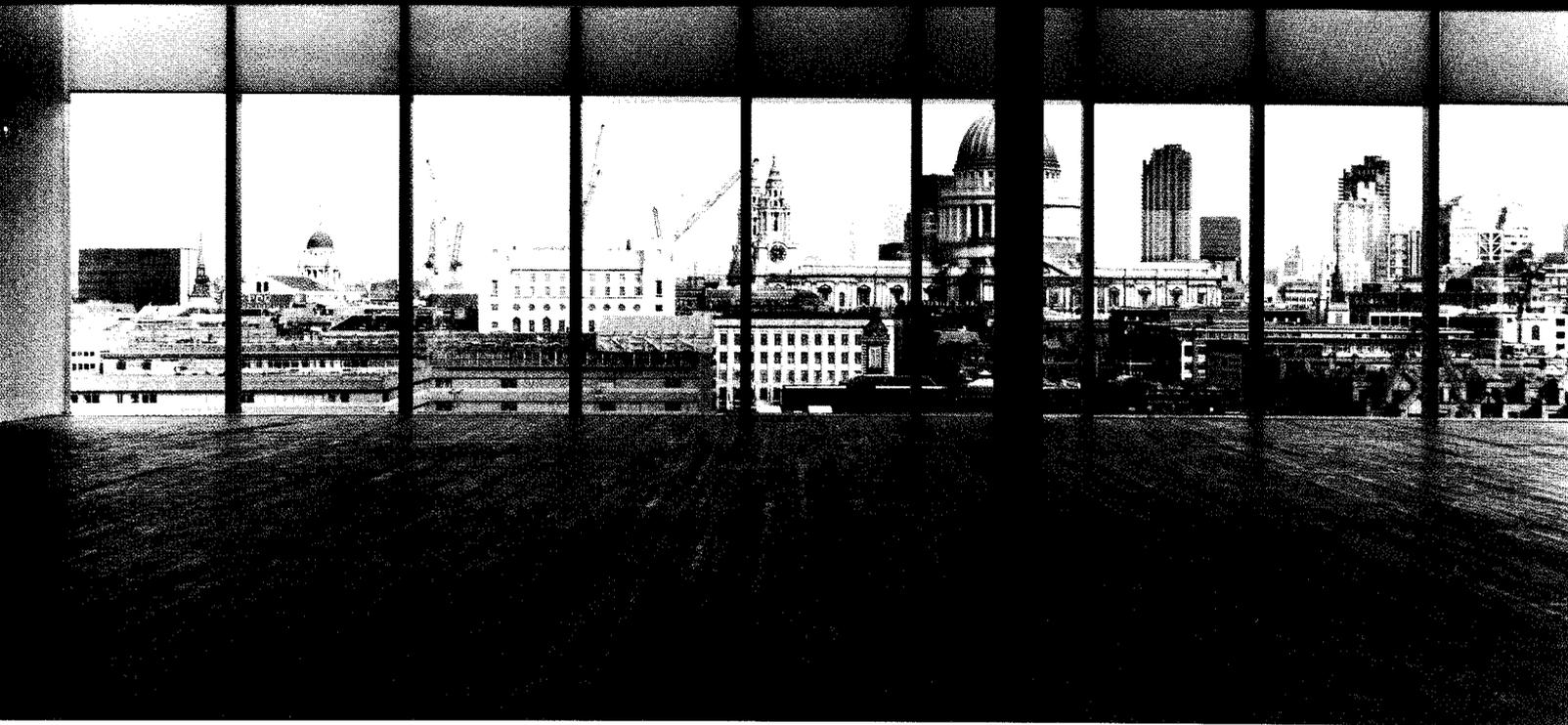


Arcades (above) line the public passage between the two wings. Above, the windows' fat mullions evoke the fenestration of a Renaissance mansion in Toulouse (*fig 7*). The blank limestone surface at the rear of the column (at right) exemplifies how VSBA flattens iconography and ornament.



Power Station

Nina Rappaport talks with Jacques Herzog about his firm's transformation of an abandoned London power station into the Tate Modern, while Sara Hart gets under the building's seamless surfaces.



The new Tate Modern, London glows in the dark, inside and out. Fueled by many thousand points of light, the two-story “light beam” that runs 500 feet across the museum’s roof will signal the home of one of the world’s most important modern art collections when it opens this month.

By 1992, the Tate’s three primary venues could contain neither its expanding collection of 20th-century art nor the swelling crowds drawn to it, so the trustees went in search of a central London site on which to erect a new building. Two years later, they were offered an option on Bankside Power Station, a massive brick-clad steel structure sprawling ponderously across 650 feet of coveted real estate on the south bank of the River Thames, directly across from St. Paul’s Cathedral. Designed by Sir Giles Gilbert Scott, architect of university libraries at Oxford and Cambridge and designer of the famous red British telephone box, the station was built in two phases between 1947 and 1963. Except for a small electrical substation still in operation in the rear of the building, the 370,000-square-foot, oil-fired plant had languished unoccupied on its 8.5-acre site since 1981.

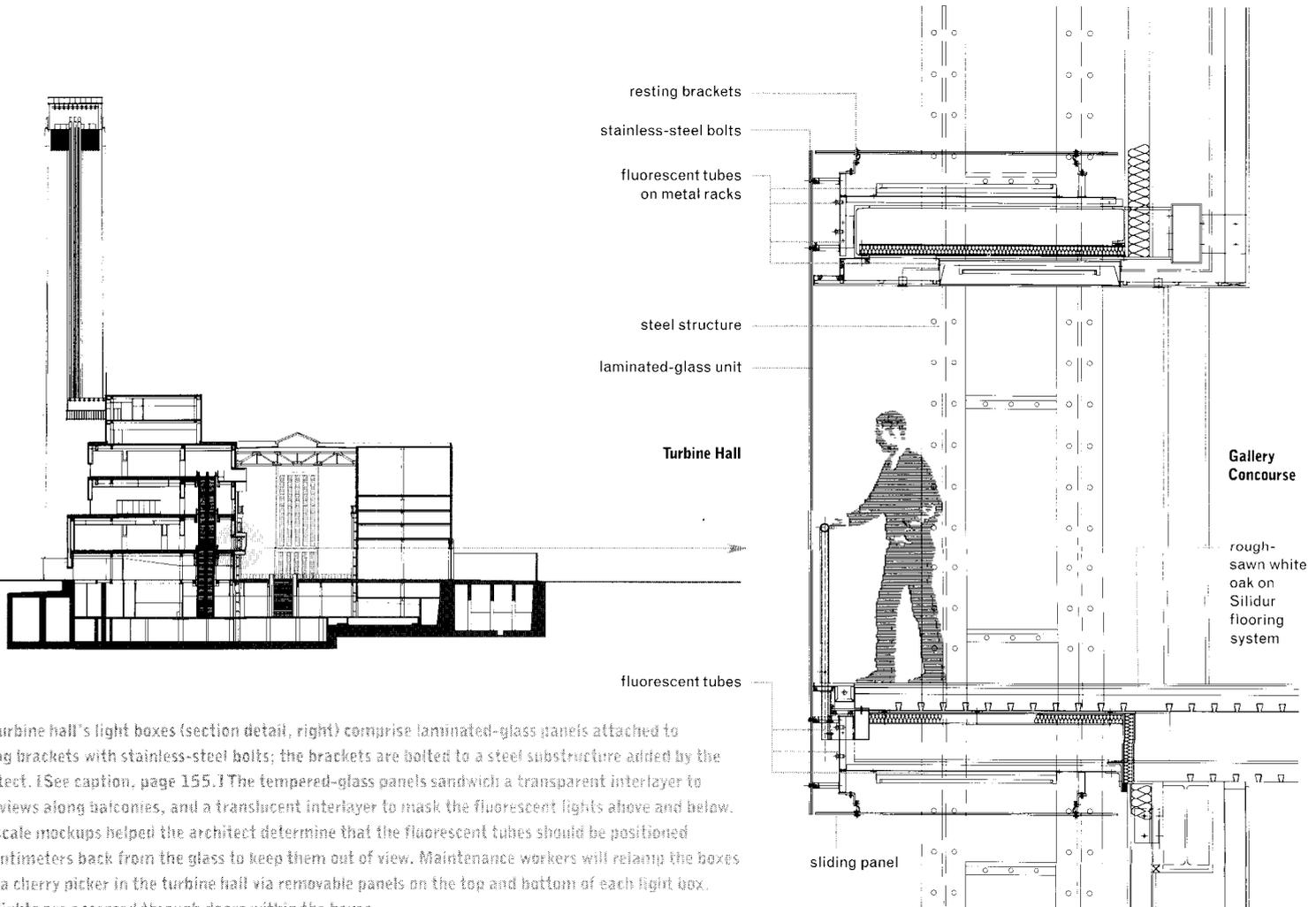
In 1994, the Tate sponsored an international design competition for the conversion of Bankside, which drew 148 entries from around the world. The Swiss architecture firm Herzog & de Meuron won the design competition, its most complex commission to date, with a scheme that uses light to transform the dim cavernous shell of the station into a remarkable stage where art prevails. This legerdemain resides in the firm’s signature minimalist detailing, which *Architecture* now reveals for the first time in any publication, along with an exclusive interview with Jacques Herzog. *Sara Hart*

Swiss architect Herzog & de Meuron envisioned “a huge body of light” hovering above the heavy brick structure of Sir Giles Gilbert Scott’s Bankside Power Station. The two-story glass structure they added atop the station serves as a skylight for upper-level galleries during the day. At night, lights within the beam turn it into a beacon. An as-yet-unfinished restaurant (above) on the top floor of the light beam offers patrons a spectacular view of St. Paul’s Cathedral across the River Thames.

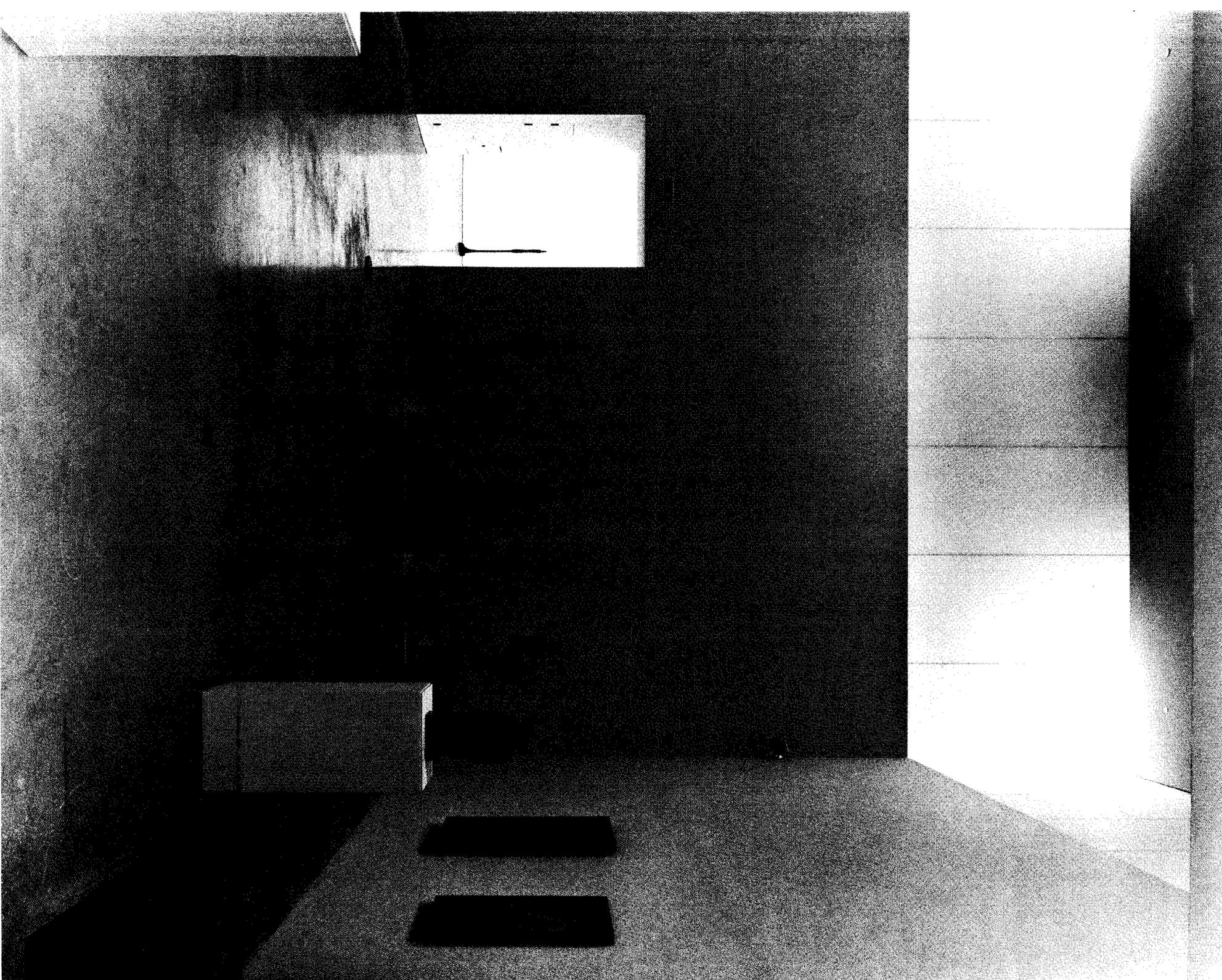


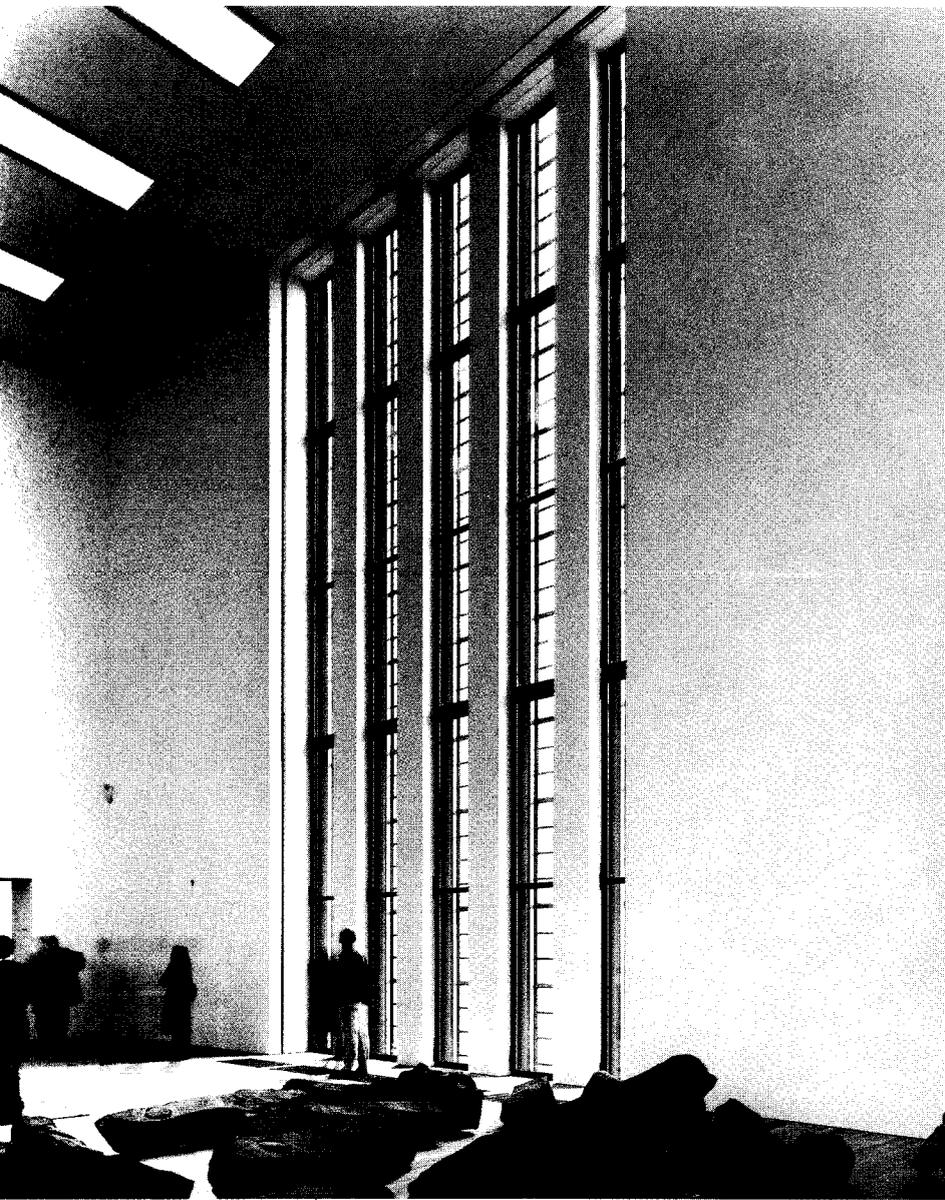


Herzog & de Meuron lowered the 500-foot-long floor of the power station's former turbine hall, and added a skylight 100 feet above to create a vast new lobby. Visitors descend a ramp from ground level to enter through the building's west facade. Three levels of galleries flank the north side of the hall; a switching station still occupies the south side. Four glazed balconies, glowing with 2,800 fluorescent tube lights, project into the space from upper-level concourses outside the galleries. Herzog & de Meuron retained an original gantry crane, which moves the length of the hall for use during construction and for the installation of large-scale art. The architect left white oak floors unfinished in the galleries and concourses (left), counting on visitor-created footpaths and wear to maintain the industrial feel of the space.

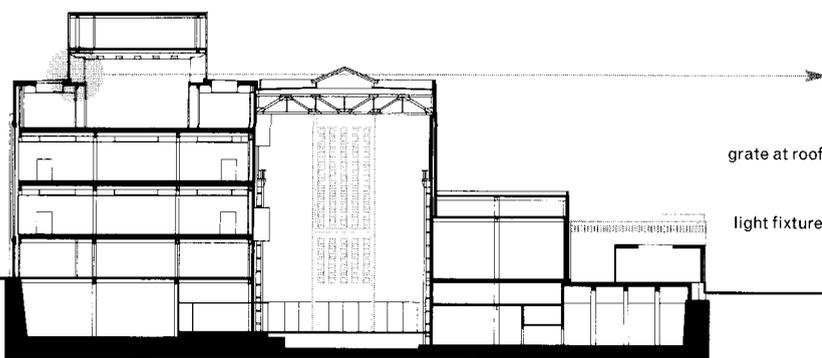


The turbine hall's light boxes (section detail, right) comprise laminated-glass panels attached to resting brackets with stainless-steel bolts; the brackets are bolted to a steel substructure added by the architect. [See caption, page 155.] The tempered-glass panels sandwich a transparent interlayer to open views along balconies, and a translucent interlayer to mask the fluorescent lights above and below. Full-scale mockups helped the architect determine that the fluorescent tubes should be positioned 23 centimeters back from the glass to keep them out of view. Maintenance workers will relamp the boxes from a cherry picker in the turbine hall via removable panels on the top and bottom of each light box. Side lights are accessed through doors within the boxes.

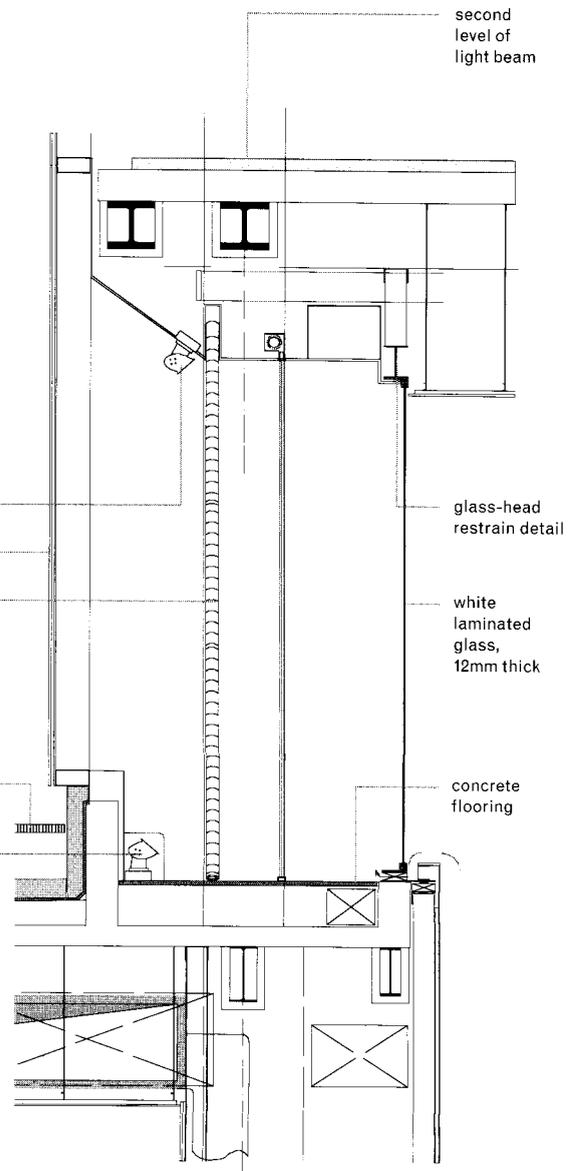




Gallery spaces vary in size and proportion, but all are at least 5 meters tall. A double-height gallery (left) incorporates Scott's original, 12-meter tall cathedral windows; to filter artwork-damaging light and heat, the architect added an second, inner layer of insulating windows. Two other double-height galleries, at the east (facing page) and west ends of the building, extend 9 meters from the fifth floor into the first level of the light beam (see building section below).



The architect performed a sleight-of-hand maneuver within the light beam to control the daylight that enters the galleries, where it acts as a clerestory. Two walls of white laminated, low-iron glass separate a 2-meter passageway (sectional detail, right) that contains photovoltaic-sensitive blackout blinds and louvered shutters. Artificial lighting between the exterior layer of glass and the louvered shutters makes the light beam glow brightly to the outside world.





NINA RAPPAPORT: HOW DOES THE TATE RELATE TO THE WORK AND PHILOSOPHY OF HERZOG & DE MEURON?

JACQUES HERZOG: We realized very soon that the Power Station is not beautiful, but it is real and stands in front of you like a rock. You can't fight the building, or make it invisible. So we decided to transform it by other means, in a softer way.

The way we place something, we reveal the quality of what is already there. This is the strategy in the Tate—the way you walk into or through something makes you aware of it. The ramp into the turbine hall does that, and the light beam does it with the tower. It is not a dialectic approach like Carlo Scarpa, where he pushes sharp metal against the old walls. We wanted to create a new entity composed of old and new elements.

YOU ACHIEVE THE MAXIMUM EFFECT WITH LIGHT AND MINIMAL FORM.

We use light like a family, or a language, throughout the building. The light box on top and the glass boxes inside are mostly immaterialized; ideally, they are only light. The boxes [in the turbine hall] are in front of the steel structure, physical, glowing. They cut through the steel, cut away the dominance of steel and the all-too-powerful verticality of the turbine hall. This was very important because you see the boxes mostly from an angle and you wouldn't see anything new if they didn't come to the front. It has to do with perception and orientation as you walk through the building. We reveal things that are already there, turn them into our own architecture, instead of always designing something ourselves.

HOW DOES YOUR TRANSFORMATION OF THE TATE RELATE TO YOUR PAST WORK WITH ARTISTS AND MUSEUMS?

The Goetz Gallery in Munich and Remy Zaugg's studio are in a way prototypes for gallery spaces at the Tate. You can't always reinvent and do new things. Big museums with different kinds of art are more successful with our neutral approach to galleries than with hundreds of gallery types.

WHAT WAS YOUR CONCEPT FOR LIGHTING THE GALLERIES?

In every gallery we have a subtle mixture of natural and artificial light. I like daylight from the sides more than daylight from the top—which is really a 19th- and early-20th-century idea and is overestimated by architects. We used a flush skylight that we had developed for Zaugg's Studio. It goes well with the building. We wanted everything to be connected. The galleries are connected to the walls and the windows so that spaces look as though they had always been there. But there is not one floor level that was there before; all the levels are new.

THE WOOD FLOORS ARE BEING LEFT UNFINISHED.

The floor is the most outstanding element. The Power Station is a huge, almost brutal building. To have something that is so soft and sensual is not normal; it is abnormal. There is something archaic about it, when you place a Picasso in such a simple space with a wooden floor and view of London. This wooden floor is really rooted.

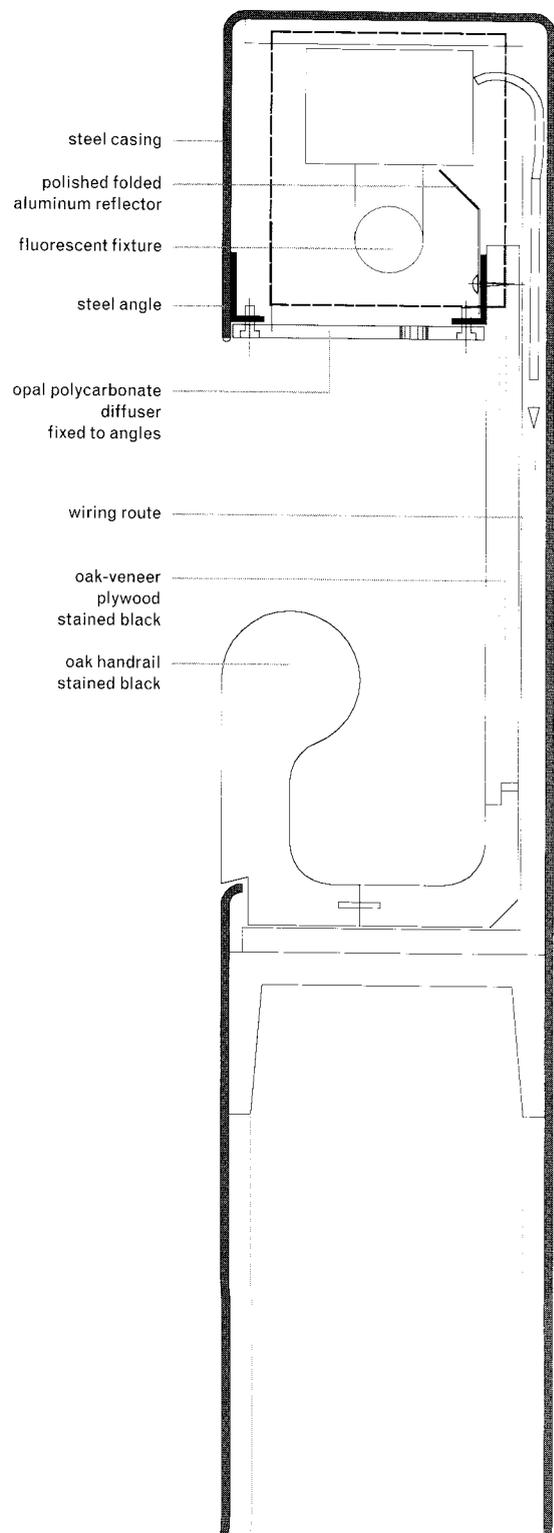
IT COMES BACK TO THE NATURAL.

To the most evident and normal things that people like and have, which are our senses. The building is so big and has so many impressive spaces, but it doesn't make you fly away. It has elements to root you and hold you back, so that not only are the size and the proportions of the spaces varied, the materials also have unexpected tactile qualities.

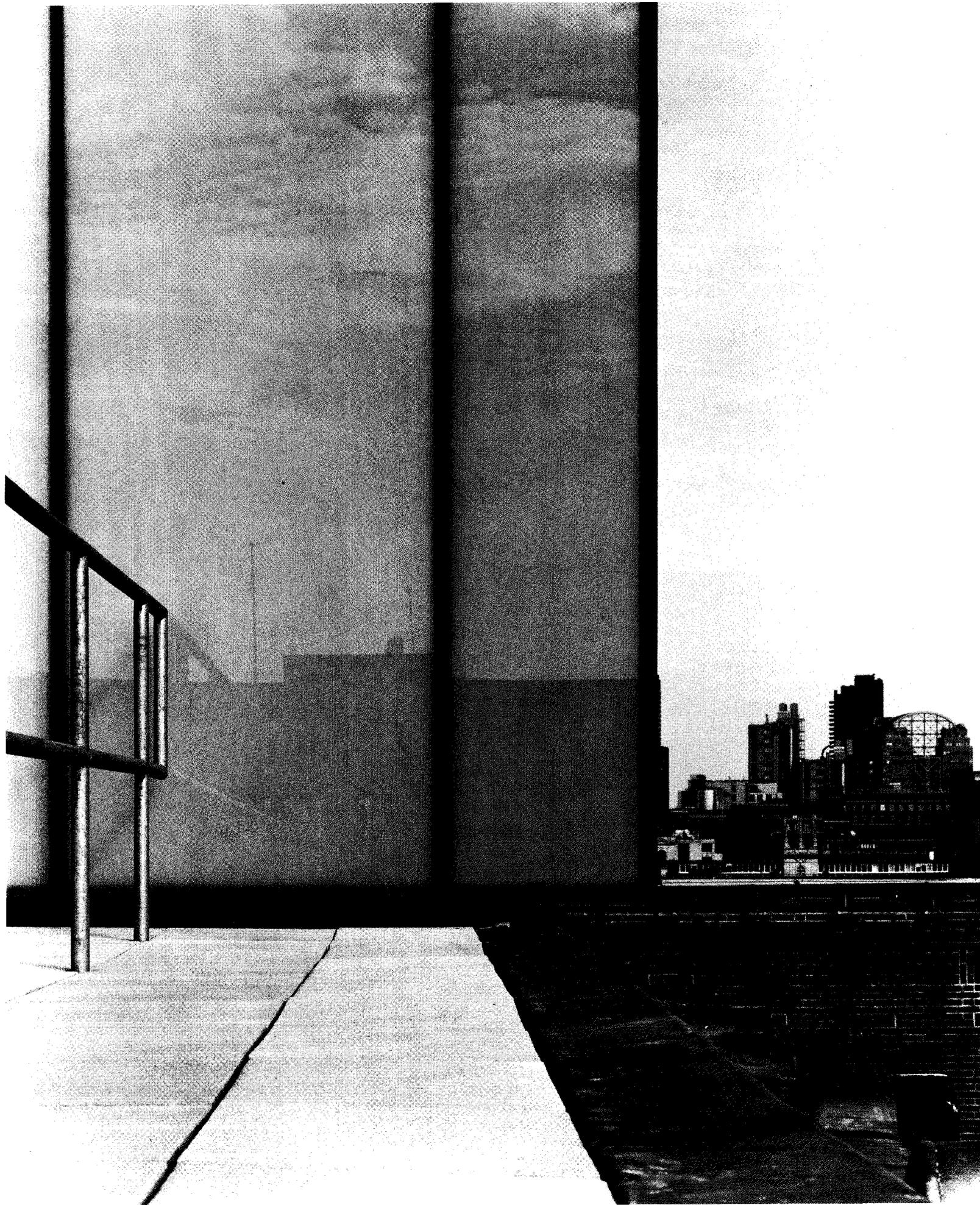
LIKE THE HANDRAIL OF THE MAIN STAIR WITH ITS HANDHOLD SLOT. YOU WANT TO ENCOURAGE PEOPLE TO TOUCH THE BUILDING.

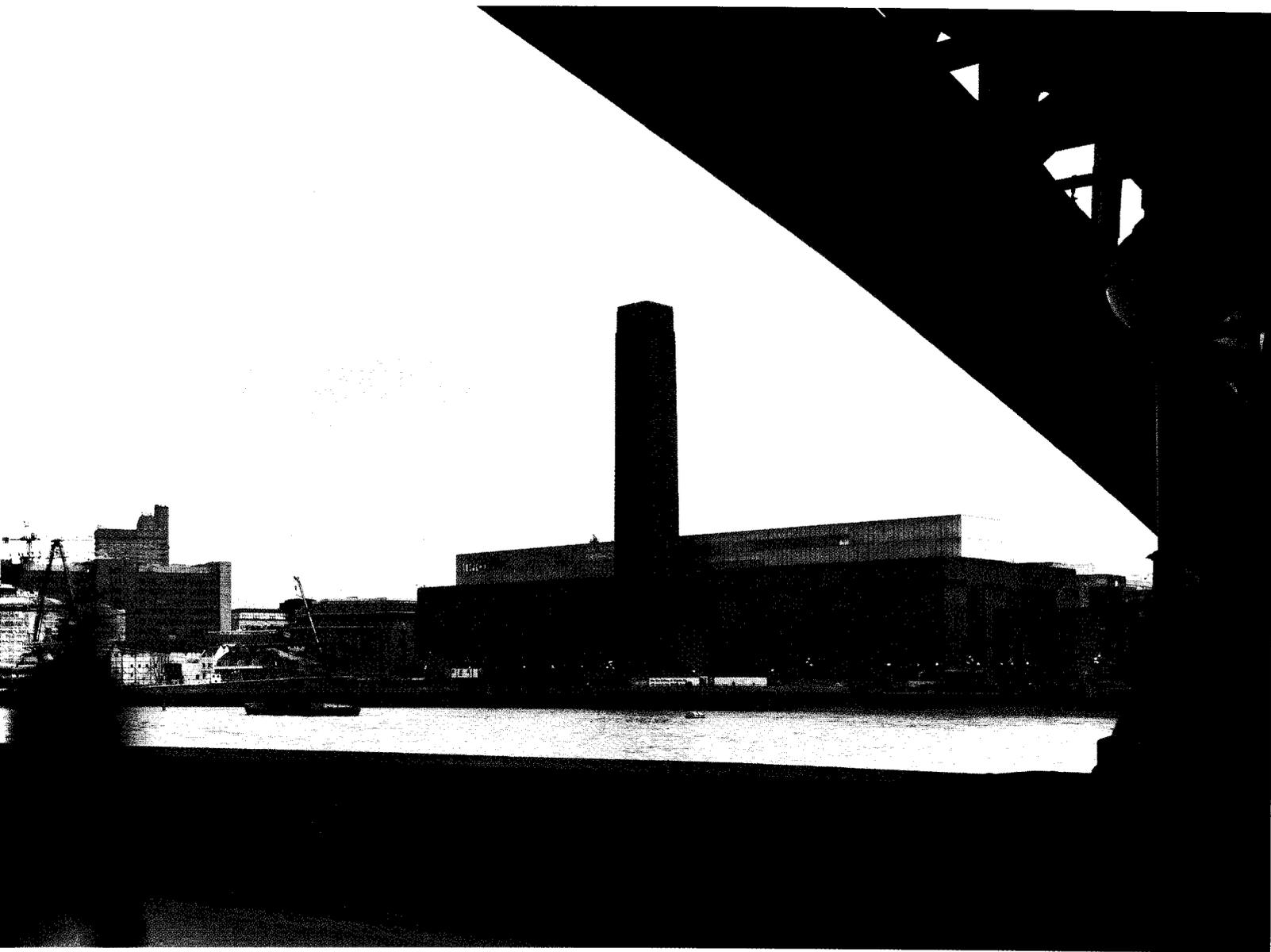
Exactly. When you touch the black-stained wooden handrail, it is not cold steel. It is not back to the natural; it is back to your self. You stand, you sit, you touch, you look, you smell. It is neither old nor new; it is, I hope, contemporary. The bigger cities are, the bigger museums are, the more we have to be basic. This is what we tried to be. This is why Herzog & de Meuron's work is not about style; it is about how people live today.

A steel-faced staircase (facing page) connects the three levels of galleries.



A slot of space cut into the side of the stair doubles as light source and handrail (detail section, above). The architects tucked fluorescent tubes under the lip of the metal. The black-stained wooden handrail, like the rough-hewn floors, lends visitors a reassuring moment of tactility.



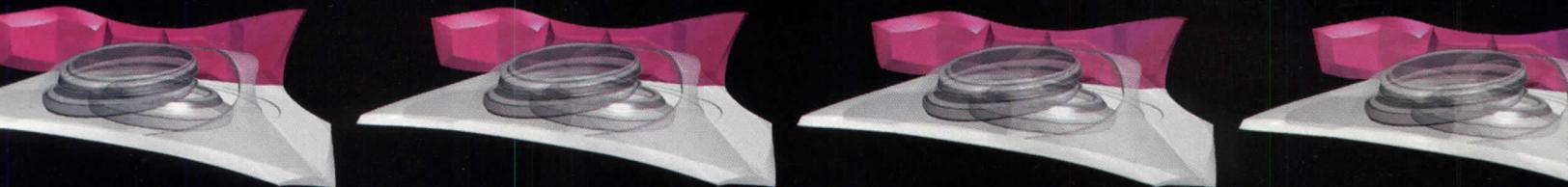


TATE MODERN, LONDON. CLIENT: Tate Gallery, London **ARCHITECT:** Herzog & de Meuron, Basel, Switzerland—Jacques Herzog, Pierre de Meuron, Harry Gugger, Christine Binswanger (partners-in-charge); Michael Casey, Thomas Baldauf, Ed Burton, Victoria Castro, Emanuel Christ, Peter Cookson, Adam Firth, Nik Graber, Konstantin Karagiannis, Angelika Krestas, Patrik Linggi, Yvonne Rudolf, Juan Salgado, Vicky Thornton, Hernan Vierro, Kristen Whittle, Camillo Zanardini, Irina Davidovici, Liam Dewar, Catherine Fierens, Matthias Gnehm, José Ojeda Marlos, Filipa Mourao (design team) **ASSOCIATE ARCHITECT:** Shepard Robson, London **LANDSCAPE ARCHITECT:** Kienast Vogt Partner **ENGINEER:** Ove Arup Partners, London (structural, electrical, climate control design, sanitary planning) **CONSULTANT:** Davis Langdon & Everst (cost) **CONSTRUCTION MANAGEMENT:** Schal **COST:** \$211.5 million **PHOTOGRAPHER:** H  l  ne Binet.

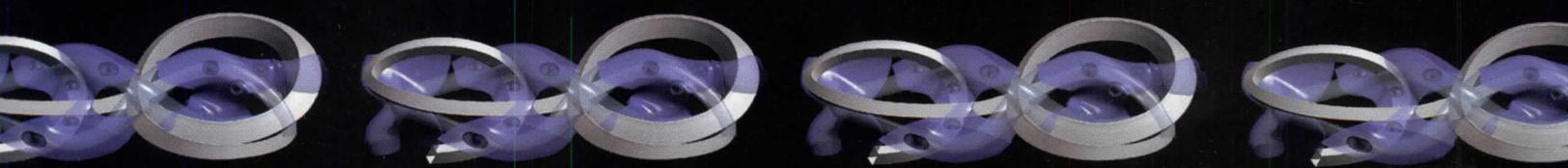
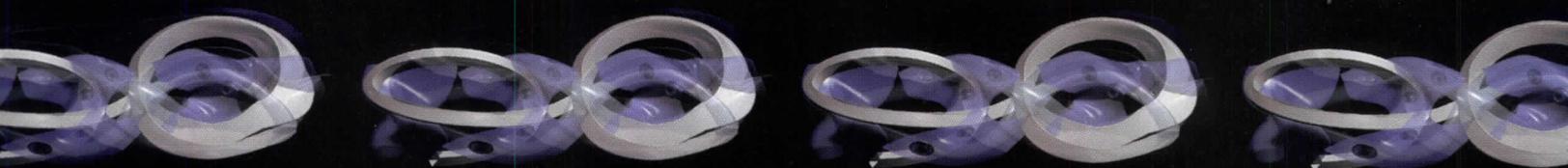
The light beam (opposite) is wider than the structure of the building, so its weight is carried on a transfer beam supported by a new 10-by-10-meter structural steel frame, added within the original shell so that the station's brick-clad steel perimeter frame (above) now carries only its own weight. The Millennium Bridge, designed by Norman Foster and Partners with sculptor Anthony Caro, currently under construction, will provide a five-minute pedestrian crossing between the Tate Modern and St. Paul's Cathedral on the opposite bank of the Thames.



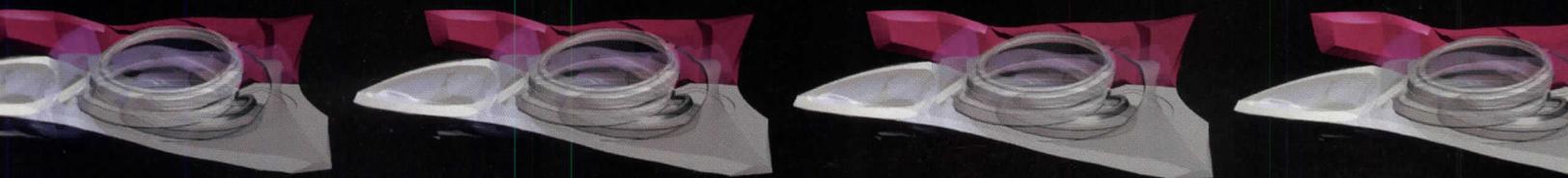
Cancel that trip to Bilbao—the next branch of the Guggenheim is being



built on the Internet. **Computer Power** By Cathy Lang Ho



The first impression of the Guggenheim Virtual Museum is a morphing object that alternates among profiles of its three basic "areas." At the top is the Plaza, which corresponds to the museum's public functions; the pink Cybermedia Wall is a constantly changing billboard of current events and exhibitions; the spiraling Entry Ring brings users to such places as the public information office or museum shop. The roller-coaster profile corresponds to Venues, which links to other Guggenheim sites in the world. The interlocking rings embedded with cells, or Azones (art zones), correspond to Galleries, where the art is shown.



Though much has been made of the marriage of computers and architecture, the computer is still used chiefly as a facilitator—a tool to help conceptualize or produce a final object. But what of an autonomous digital architecture—an architecture that is conceived of, rendered, built, and exists and is experienced solely on the computer?

The Guggenheim Museum, global art juggernaut and builder of two of the world's most progressive architectural monuments, is now busily developing its most radical facility yet. It has pledged the equivalent of a real building's budget to create the Guggenheim Virtual Museum (GVM), launched this month, on a laptop near you. Wagering that the New York-based architecture firm Asymptote can do for it in virtual space what Frank Gehry's Bilbao did in the physical world, the Guggenheim's commitment is not only costly but long-term: Its design and construction will be ongoing, given the fluid nature of the medium. (The Bothen Foundation funded the first phase.)

Putting its latest addition on the Internet is the logical next step for a museum which, like most of its fraternity, is in an expansionist phase, fueled by unprecedented levels of attendance, growing collections, and the pressure to build membership, donor base, and revenue. At this stage, virtual sites are most valuable for boosting exposure; they are just the latest stage in the evolution of museums as both exhibitor and exhibitionist.

But rather than upstage the art (as many museums of late have been accused of doing), the GVM was motivated by the Guggenheim's interest in producing a setting that would be most aptly suited to the artwork: Like many museums, the Guggenheim has been steadily building its collection of new-media art, which includes work that is not only generated by but exists only in digital, video, or film form. It plans on commissioning works especially for the GVM, site-specific installations, so to speak. Just as modern art developed in tandem with modern museums—their scale, form, and intent a response and reaction to the “white cube” of modern architecture—so surely will new-media art evolve dramatically with the institution of digital museums.

For the GVM, Asymptote principals Lise-Anne Couture and Hani Rashid attempt, in the modernist tradition, to bridge a building's form and its use—but radically. Explains Rashid, “We wondered, wouldn't it be great if you could understand how a building works just by looking at it? Or, if you knew you wanted to get to a particular place in a building, and you could just rotate the building, so that the location comes to you?”

The intelligence of the GVM resides in its shape, which morphs constantly. A blob in form, the GVM nevertheless has structure, which is the basis of its navigation. The architecture changes according to how it's used. The first view a visitor gets of the building is not one but three elevations, one melding continuously into the next: “The Plaza” connects to the museum's service areas and public functions; “Venues” links to other Guggenheim presences in the world, from Bilbao to New

York to Venice; and “Galleries” leads users to the artwork. Users drag a bar across the pulsating objects that represent the three major sections of the building and just click to enter.

The GVM moves beyond the wire-frame models and fly-throughs that have until now been the basis of virtual architecture. Its design attempts to simulate the viewer's experience of real-world—or what Rashid distinguishes as “first reality”—architecture, which relies on, among other things, the user's sense of spatial progression, with a perception of destinations as well as memory of where one has been. Surfing websites, by contrast, is an undefined, indeterminate journey; users don't perceive them as “places” because they never have a sense of where they're going or where they'll end up. A haptic sense will never truly exist in the 2D realm, but Asymptote's GVM attains a physical spatiality that brings it closer to an architectural experience than has been accomplished so far in virtual space.

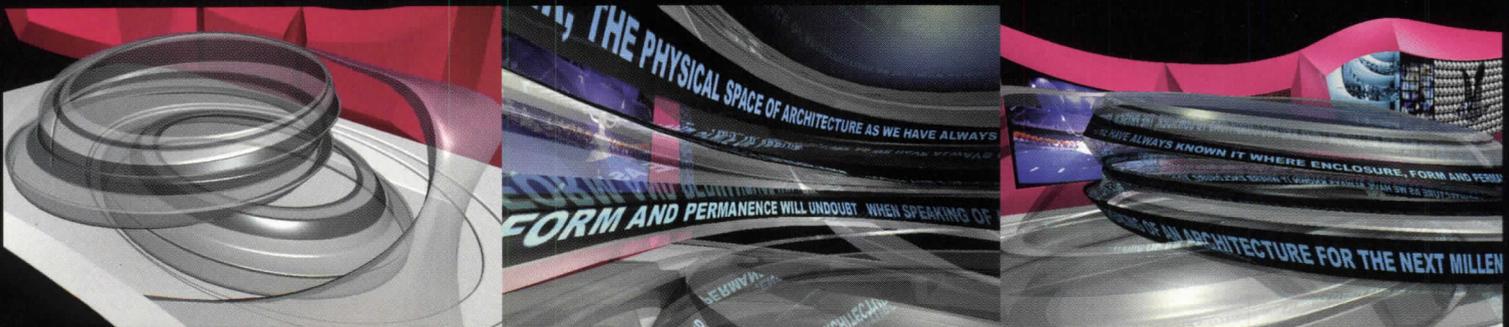
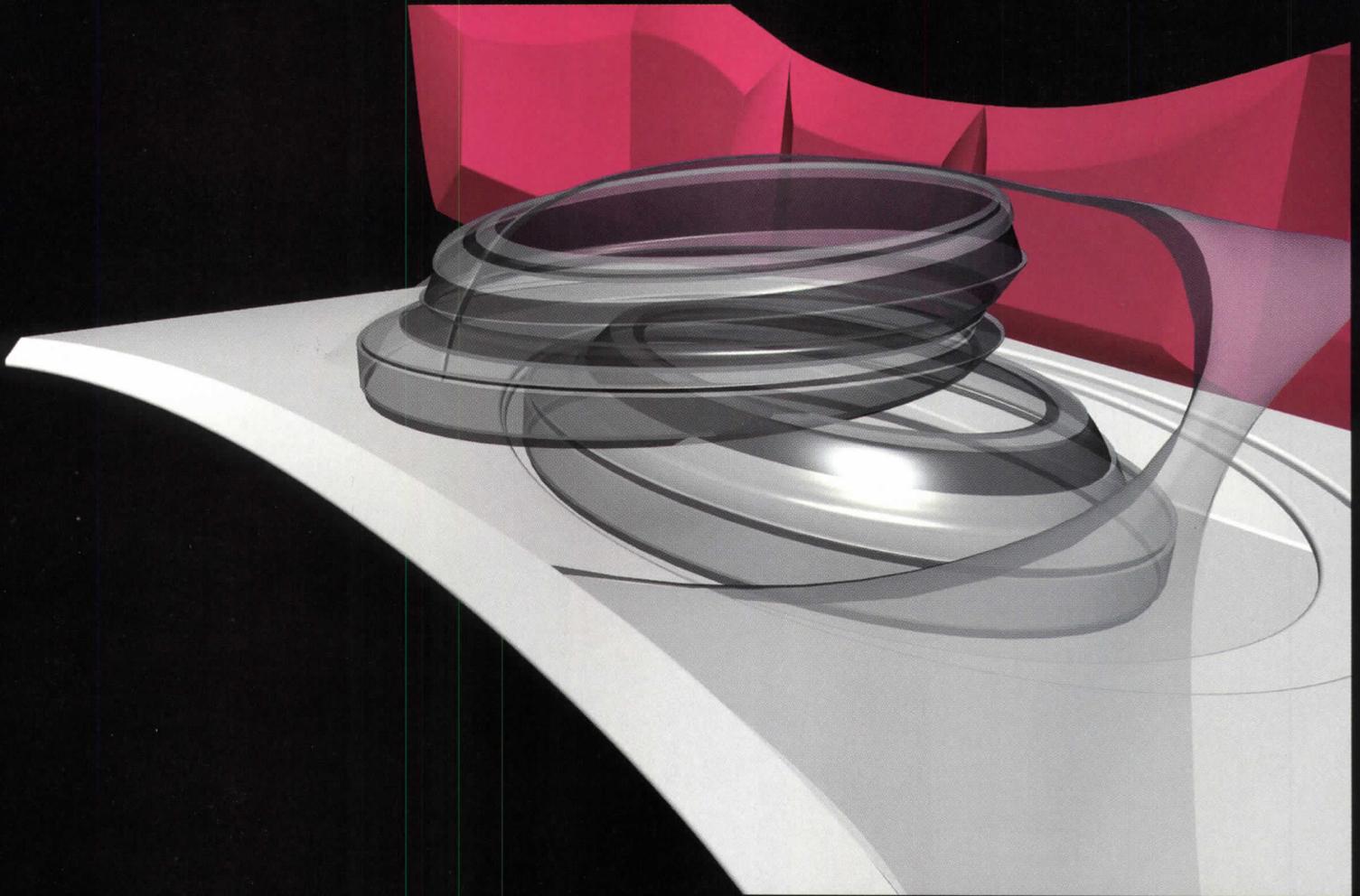
A trickier question than navigation is that of the virtual museum's impact on art and its reception and production. While viewers of digital exhibitions might have more independence, clicking out their own trajectories through the GVM, the curator's role is diminished, their knowledgeable groupings and frameworks erased. Moreover, it is disturbingly unclear where Asymptote's work ends and the artist's begins, because the media generating the architecture and the media representing the artwork are the same. The issues plaguing art in the age of digital reproduction have extended beyond Walter Benjamin's concerns about aura, to encompass ideas about authorial intent, context, ownership, copyright, and more.

But most contemporary art is increasingly based in new media, as artists—always trying to get beyond the conventional—are finding traditional media and installations too old-fashioned, too slow, too

The Guggenheim is wagering that the GVM will do for it in virtual space what Gehry's Bilbao did in the physical world.

inappropriate for the modern mediatized age. Likewise, traditional architecture can begin to appear archaic: Rashid observes, “Bilbao is really an old-fashioned building, built with old-fashioned techniques.” Art's expanded accessibility through technology harkens to André Malraux's championing of the more *democratic* “museum without walls.” Rashid argues, “The GVM can bring us back to the original purpose of art, before there was so much preoccupation with markets and audiences and buyers: to be about experience.” The same ambition could apply to architecture. ■

Each of the GVM's three main sections can be rotated and penetrated to reveal a variety of other elevations, which in turn correspond to a host of other “spaces,” or functions. When a scroll bar passes across the Venues profile (facing page, top half), for example, users are offered various paths to other Guggenheim sites in the world (Venice, Bilbao, New York), each represented by a unique elevation (facing page, bottom half). Click on one and see the latest exhibition set in Frank Lloyd Wright's spirals; click another and vicariously attend an opening at Guggenheim's Venetian palace; or click yet another and sit in on a symposium on Basque art in Bilbao. (The museum and Asymptote are currently scouting spots to install webcams.)

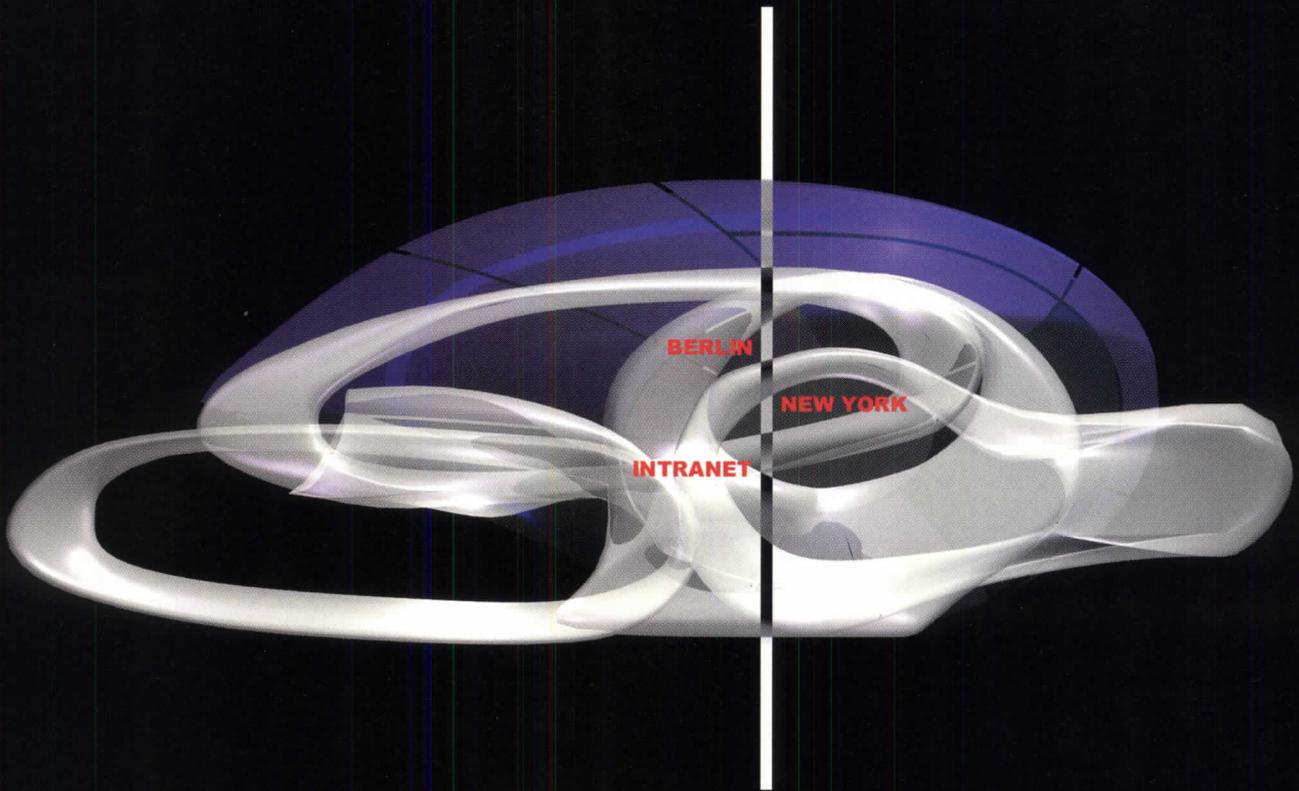


GUGGENHEIM VIRTUAL MUSEUM, THE WORLD WIDE WEB AND THE GUGGENHEIM SOHO CENTER FOR ART AND TECHNOLOGY, NEW YORK CITY

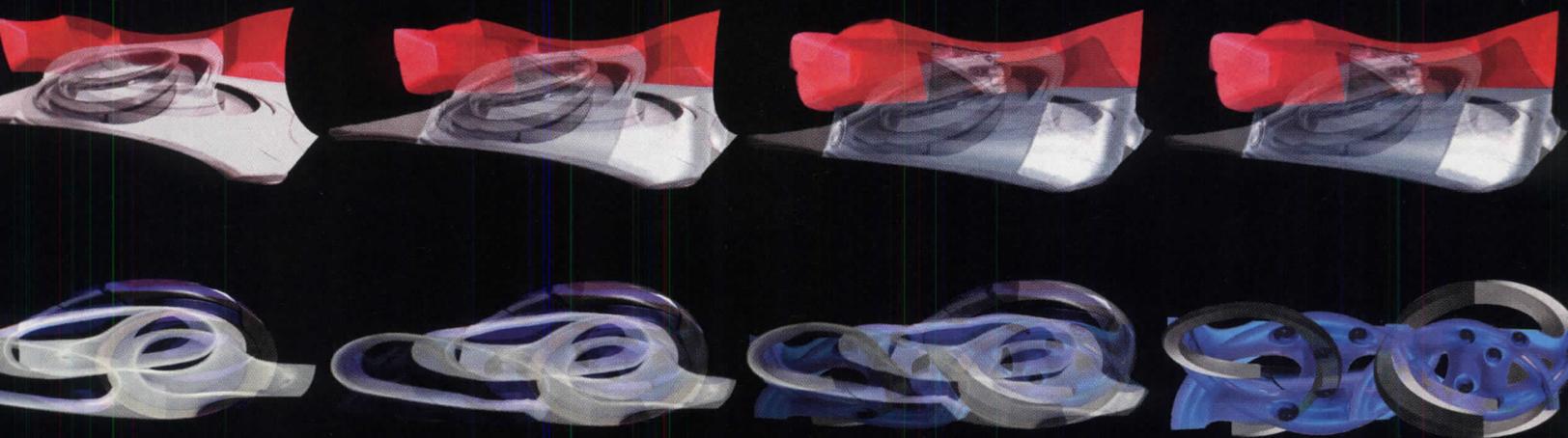
CLIENT: The Solomon R. Guggenheim Museum, New York City—Thomas Krens (director); Mathew Drutt (associate curator of research) **ARCHITECT:** Asymptote, New York City—Lise-Anne Couture, Hani Rashid (principals); John Cleater (project architect); Noboru Ota, Florian Pfeifer, David Serero (design team)

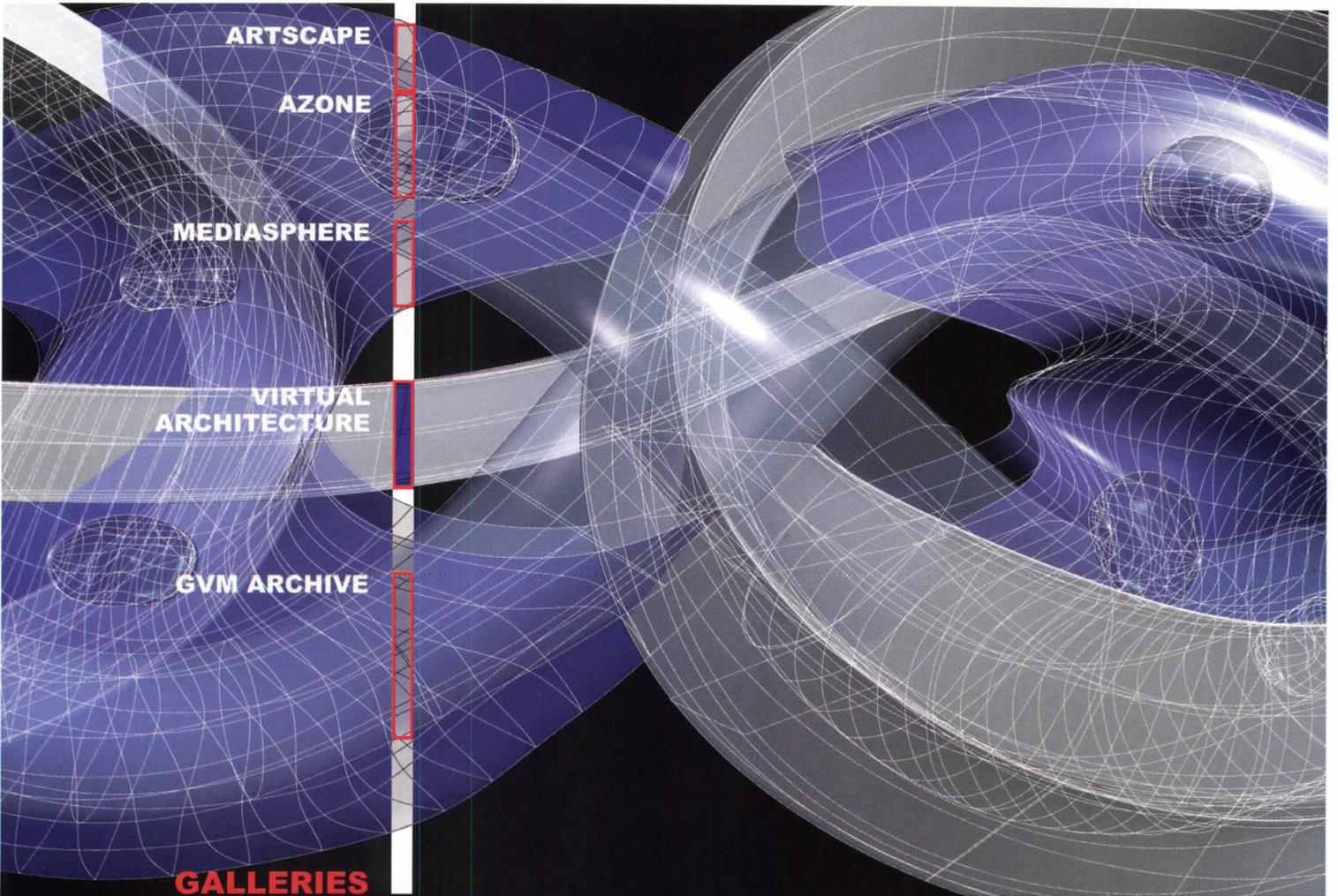
COST: Withheld at client's request

The GVM makes references to Frank Lloyd Wright's and Frank Gehry's Guggenheim buildings. The Plaza (above) has a similarly spiraling atrium ramp, which, once entered, surrounds the user with information about current events at all the Guggenheims (notice Matthew Barney stills and real-time views of Guggenheim New York flying by on the pink Cybermedia Wall).



> ATRIUM > VENUES

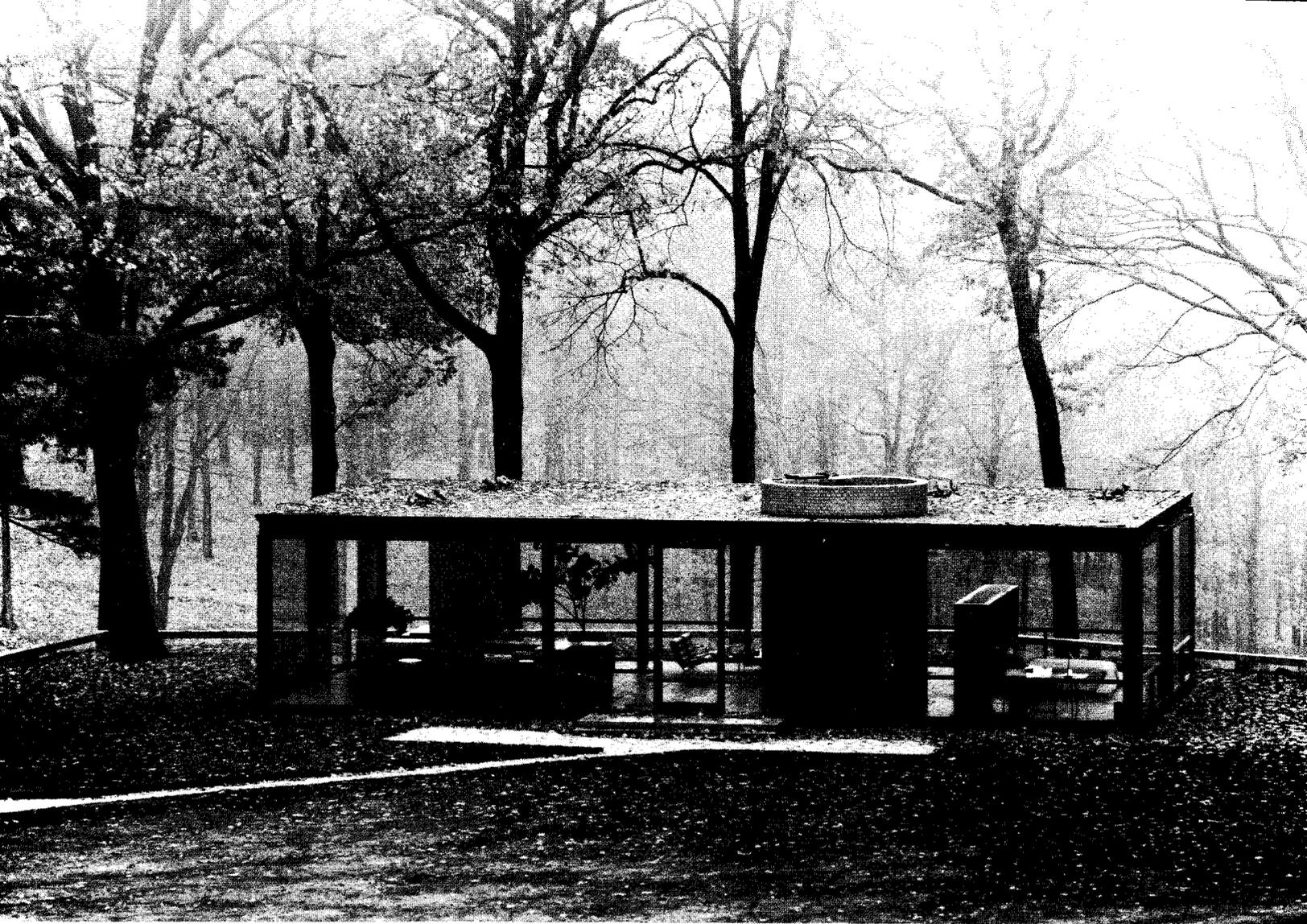




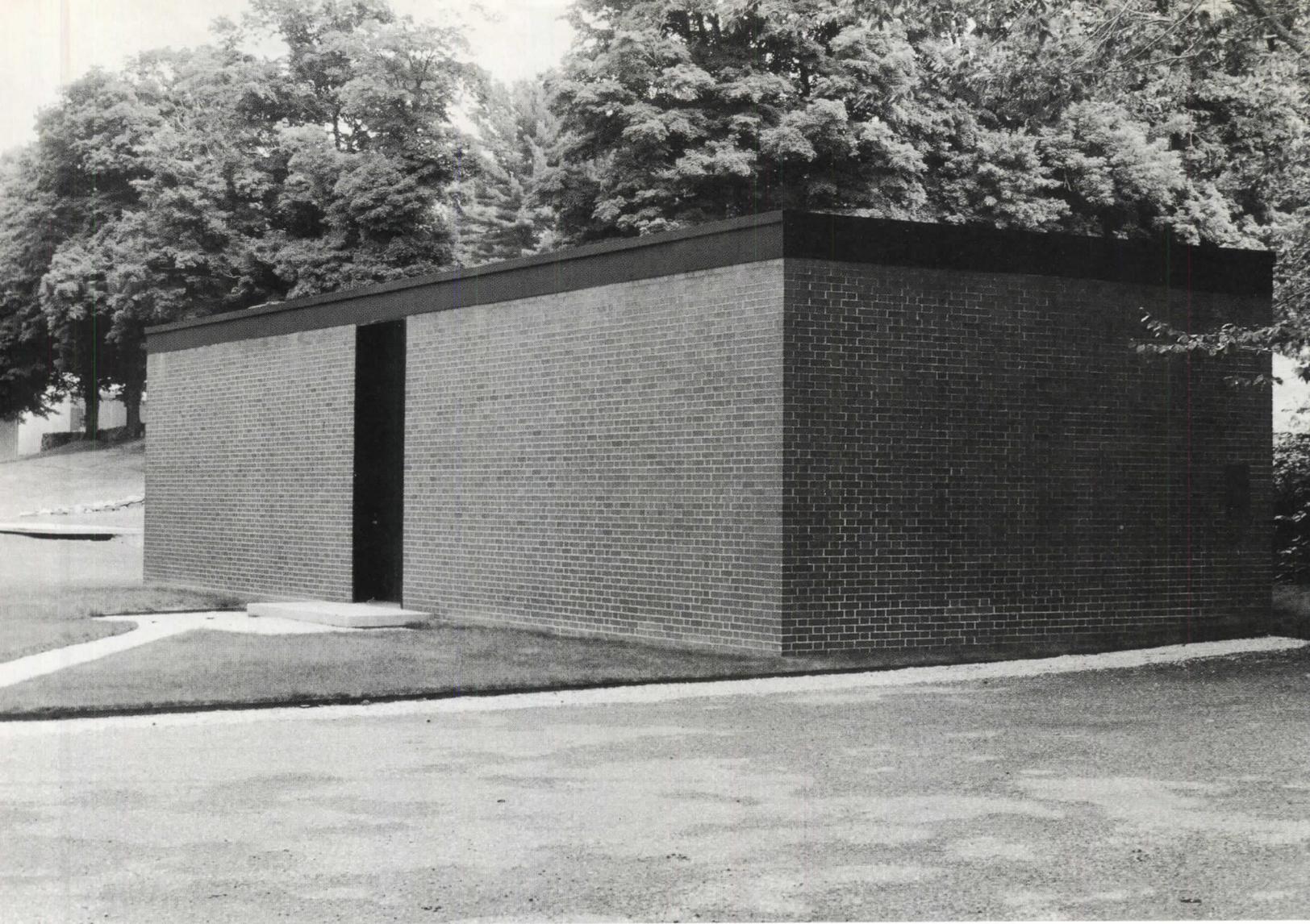
Unlike most museums' Web presences, which amount to slide shows of artwork accompanied by text, GVM's site adopts an architectural model. From the Gallery profile (above, at top), guests move deeper into the simulated museum to reach the artwork, categorized in this branch as Archives, Mediasphere, and more. Each of these programs is linked to a specific spot on the swirling architecture, each with its own perspective. Clicking an Azone (art zones, which appear as discrete cells) leads to artwork. For instance, an Azone begins as a floating object akin to a room (at bottom), which unfurls to reveal the final artwork (in this case, by Nam June Paik).

The Seat of Power

Over the past few years, photographer Michael Moran has been documenting Philip Johnson's spread in New Canaan, Connecticut, for a lavish new book. Printed privately, in a run of only 2,000 copies, it's a collector's item. Several of Moran's photographs appear on the following pages, showing each of the 10 pavilions Johnson has designed and built on the property. The architect's biographer, Hilary Lewis, leads a tour that reveals the pavilions' long-overlooked relationship to the landscape.



The Glass House, 1949 The Glass House is best understood from within, as the point of origin for surveying the surrounding landscape. It sits well down the slope of the property, invisible from the road, on a ledge that gives out onto a pond and woods beyond. Since the pavilion was completed in 1949, its Miesian structure and decor have stayed true to their original design. Almost all the furniture was designed by Ludwig Mies van der Rohe, and first used in the New York City apartment Mies designed for Johnson in 1930. A painting attributed to Poussin graces the central seating area. The image is, not surprisingly, a landscape.



The Guest House, 1949 (interior remodeled 1953) The Guest House (or Brick House) was designed at the same time as the Glass House, and actually completed a few months earlier; a grassy court links them as a single composition. Both are 56 feet long; however, the *Guest House* is only about half as deep as the Glass House. Johnson transformed the Guest House's interior in 1953. A narrow corridor connects a bedroom, reading room, and bathroom. Sleek white vaults decorate the bedroom; they are based on the breakfast room of the John Soane House in London, and are harbingers of elements later found at Lincoln Center. The bathroom was renovated in the 1980s in thickly veined black marble.

The Pavilion, 1962 The Pavilion sits just off the shore of a man-made pond. Johnson claims he built it to study the famous Renaissance problem of how to handle corner columns. It is also a trial for a prefabricated process he employed in later projects. When the pavilion was new, Johnson hosted picnics there for guests who were willing to leap across a bit of water to its small-scale "rooms," which originally were separated by internal canals (now dry). Only six feet tall, it is a monument that requires most grown men to stoop.

The Glass House is one of the most famous houses in America. But because its equally well-known architect and owner, Philip Johnson, still lives there, few people have the chance to see it firsthand. Instead, the public knows it through images that show the house apart from its setting; this can be misleading, because the house forms the nucleus of a 40-acre landscaped complex that contains many other structures. Michael Moran's photographs present the Glass House in this greater context, and demonstrate that neither part—the house nor its surroundings—would make sense alone.

Johnson himself refers to the property and the house interchangeably as the Glass House; when asked about the main materials of the Glass House, he speaks of the trees. He purchased a five-acre lot in 1946, and from the start, his goal was a combined work of architecture and landscape, not just a paean to Ludwig Mies van der Rohe and the International Style. Johnson describes the house as a “viewing platform”—like a bandstand in a midwestern park. Its central purpose is to give its occupant a vantage point from which to survey the surroundings, which have grown over the years to 40 acres.

Stone walls from the 18th and 19th centuries allow almost no view of the property from the road; they also form a loose grid within the property itself. The rural character of these walls is hardly what one would associate with a Miesian glass box, but according to Johnson they form the basic framework for the property's layout. A curving drive begins at the entrance gate; it offers a series of views of several different pavilions on the estate, culminating in the Glass House and the Guest House. The procession recalls such 18th-century English gardens as Stourhead.

The 10 individual structures shown here are all chapters in Johnson's long personal architectural history: his essential classicism, appreciation of Miesian crispness, and experiments with postmodernism and deconstructivism. The Glass House itself is merely 1,800 square feet; Da Monsta (or visitor pavilion) is about half that. But the ideas behind each are bigger—clear studies in Johnson's salient thoughts at the time of building.

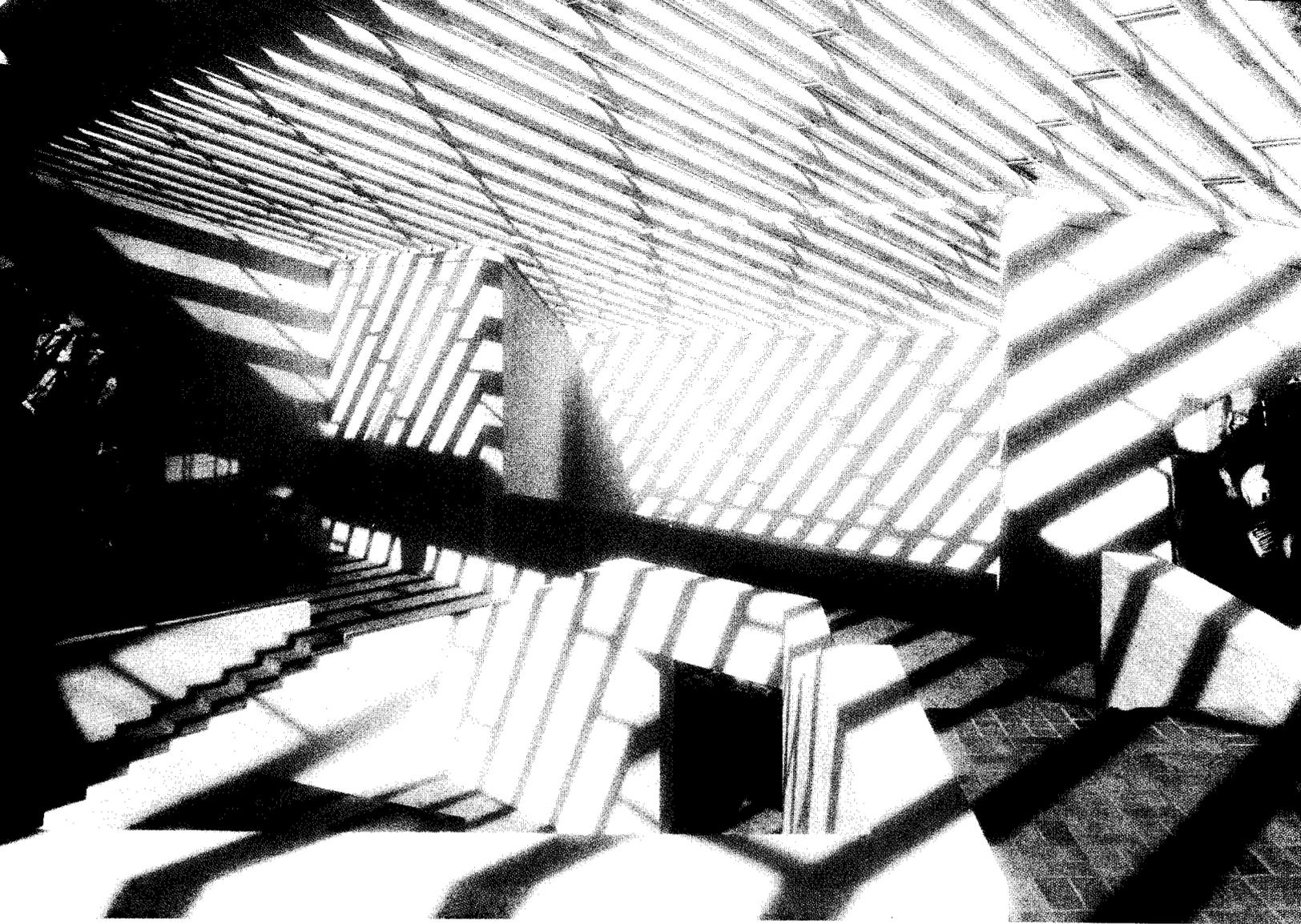
Johnson's experiments at the property continue. For years he has been altering the acreage's appearance through landscaping (in particular by cutting back trees to create new vistas) and recently (in close collaboration with color consultants Donald Kaufman and Taffy Dahl) he has painted some of the pavilions unexpected new colors. Less frequently, he chooses to add new structures and is still considering doing so. Until the property opens to the public, through the National Trust for Historic Preservation, it will remain a work in progress.





The Painting Gallery, 1965 Johnson designed the painting gallery to house his collection of modern paintings—including important works by Jasper Johns, Andy Warhol, Willem de Kooning, and James Rosenquist—most of which he has already given to the Museum of Modern Art. Today, works by Frank Stella, Warhol, Robert Rauschenberg, and Cindy Sherman, among others, hang in the gallery. The exterior is a grass-covered mound, topped by a low parapet, with a monumental stone entrance. The parapet traces the painting gallery's interior plan: circles of various diameters, each of which has a rotating "poster-rack" mechanism for displaying art; only two paintings per rack can be viewed at once.

The Sculpture Gallery, 1970 Johnson's inspiration for the Sculpture Gallery was in part the Greek islands, where, he says, "every street is a staircase to somewhere." The plan is a pentagon of two grids set at 45-degree angles to each other. Staircases spiral down past a cave-like series of bays, which contain sculptures by artists including Michael Heizer, Frank Stella, Dan Flavin, John Chamberlain, and Robert Morris. Johnson describes the procession through the building in terms of a dog sniffing first around the perimeter of a circle, and then working his way into its center where he curls up and lies down.



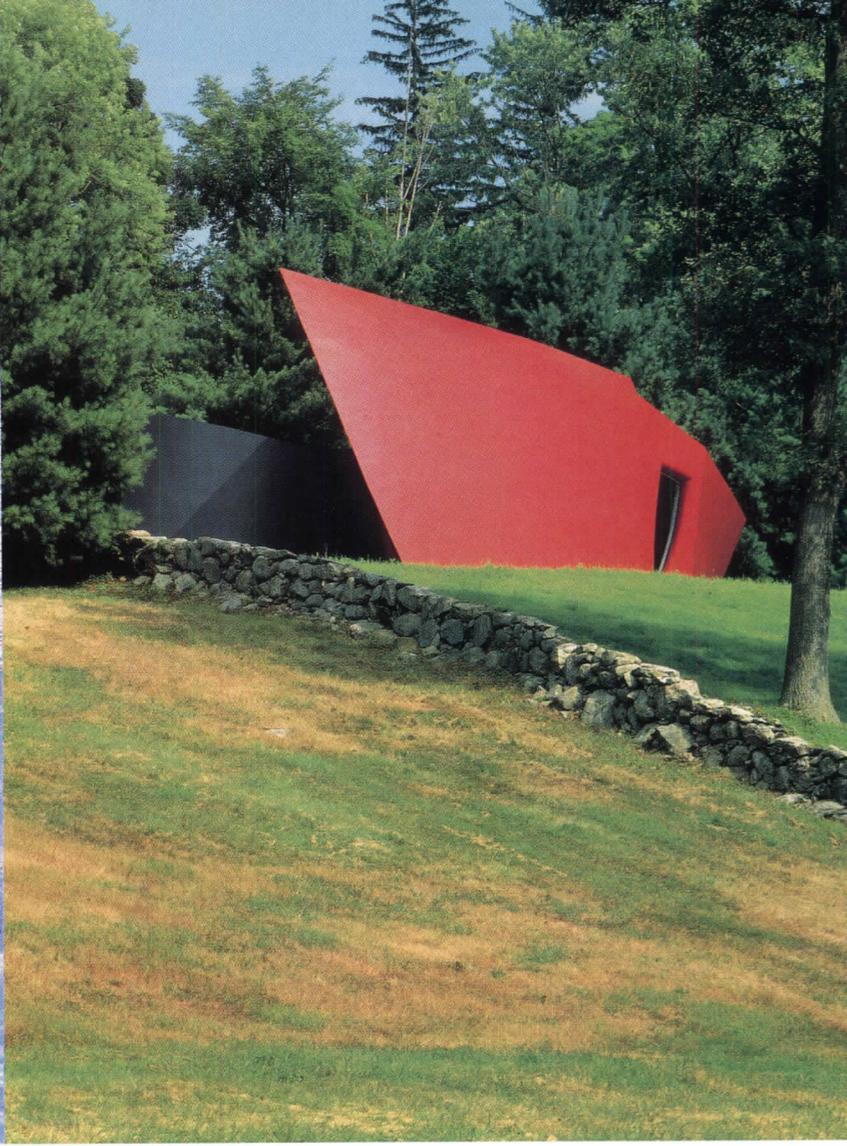


Entrance Gate, 1981 The entrance to the property is ceremonial, but modest: a modern, abstract reference to a medieval gate. A system of pulleys lowers and raises a metal beam. When lowered, the beam prevents vehicles from entering the driveway; however, the gate appears more as a marker of where to begin a journey than as an obstruction—Johnson's latest pavilion, Da Monsta, is just behind it and to the left. The gate has recently been painted a plum-brown color.



The Study, 1980 This little structure is a one-room workspace and library, located a short walk (through a field of tall grass) from the Glass House. When first completed, the Study's stucco exterior was a bright white, but recently Johnson has painted it a smooth butterscotch color, which he is reluctant to give a name: "It's an emotion, not a color," he claims. The interior walls are lined with cases nearby brimming with books on architecture; Johnson likes to sit and read in an interior niche, facing a small window that looks out at the nearby Ghost House.

The Ghost House, 1984 The Ghost House is an ode to Frank Gehry's admiration for chain link and to Robert Venturi's iconic design methodology. Johnson describes the folly as "the spirit of a classical house." He built it on an existing stone foundation at the height of his interest in post-modernism. A slit down the center of the pavilion is large enough for a person to pass through, but small enough to prevent deer from nuzzling their way in and eating the springtime flowers that sprout from the protected ground.



The Kirstein Tower, 1985 Johnson says he used dominoes to work out this study in concrete block. Johnson named the tower, recently painted an icy green, for his friend of many years, Lincoln Kirstein, a poet who founded of the New York City Ballet and was a patron of the New York State Theater (which Johnson designed). The tower is a winding stairway to nowhere, with sufficiently high risers to make the average climber somewhat uncomfortable. Johnson likes the idea of architecture that is both unsettling and witty, a combination he describes as “safe danger.” At the top of the tower is an inscription, the content of which Johnson will not reveal to anyone who has not made the ascent.

Da Monsta, 1995 Johnson is a friend and supporter of both Frank Gehry and Peter Eisenman, whose influence seems clear in the non-Euclidean form of Da Monsta. (This building will serve as a visitor pavilion when the property opens to the public.) Johnson, however, claims that his original inspiration was the design for a museum in Dresden by his friend Frank Stella. Johnson also cites German Expressionist artist Hermann Finsterlin. This building is the closest to Johnson’s current thinking about sculpture and form—what he calls the “structured warp”—which is a long way from the International Style of the Glass House.



A Tale of Two Water Closet Technologies



by Joseph M. Smaul, P.E.

It was while working as the head of plumbing engineering and overseeing the HVAC for hotels on the East Coast that I became involved with pressurized water closets. We just finished a 600-room facility and we were preparing to go to work on the next 400-room project, when a letter crossed my desk from the major fixture manufacturer for the new project. This fixture manufacturer — who was different from the one we used on the 600-room hotel — suggested that we do not use gravity-flushing closets in the hotel we were engineering. Instead, the manufacturer recommended his line of pressure-assist water closets for a variety of reasons.

The question immediately arose in my mind: why? If pressure-assist is the standard for hotels, why didn't the other manufacturer for the 600-room hotel recommend it?

I was assigned the task by the principals of my company to find out what this was all about, so I called the head of maintenance engineering at the 600-room hotel where we had specified and had 1.6 gravity-flush water closets installed. I asked him how these gravity units were working out.

I still recall how matter-of-fact he was when he calmly said, "I'm really glad you called. We get about 75 to 100 calls a week to unclog these toilets. It has become pretty routine now. I think ever since they limited the water usage to 1.6 gallons per flush, that's when the problems started. We leave plungers right in the rooms now, so we don't have to be carrying them down the halls in front of the guests. I guess there isn't much we can do about it!"

I was looking at the other manufacturer's letter that recommended pressure toilets on my new project as I listened to his comments. He continued, saying, "We are experiencing tremendous guest dissatisfaction over this clogging, double flushing, and poor performance. But say, I've heard of something that might be worth investigating as long as I have you on the phone. I think they call it pressure toilets. Can you find out if there's anything to this? I've called the fixture manufacturer, too, and they said they are looking into the situation for us. There might not be anything we can do except live with it."

I said I would see what I could do, and hung up the phone. I then called the original manufacturer we used at the 600-room hotel. It turned out that he was already well aware of the clogging problems at the hotel...that he was in the process of re-engineering his fixture, and that he would step up and resolve the situation for the maintenance engineer's and my own satisfaction.

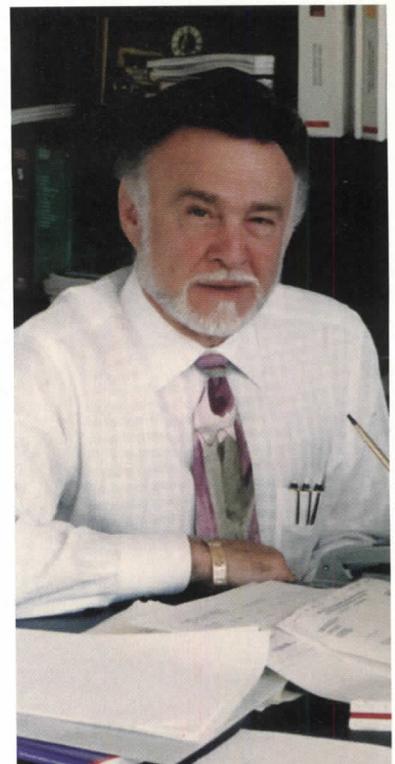
I decided I needed more information before I made our final recommendation between gravity and pressure-assist, so I researched further by calling maintenance engineers around Las Vegas hotels. I found out that they were either installing pressure-assist, or replacing gravity with pressure-assist. One of the casinos actually took out ALL of their gravity toilets and replaced them with pressure-assist! Since they started using pressure, they were able to reduce their service factor on toilets to zero.

I asked around some more, and I heard from people who bought new homes that were disgusted with the 1.6 gravity because of flushing two or three times. Then I remembered that my own relative had a closet off the den with 1.6 gravity that even the kids were not allowed to use because of performance problems. They actually have to go upstairs to the second level toilets.

Well, all of this made our decision easy, and we recommended pressure-assist toilets.

But I also came upon something from my study that was truly amazing: it didn't matter which fixture manufacturer was specified for pressure-assist toilets. All the manufacturers were using the same pressure-assist technology in their pressure-assist fixtures. That technology? Sloan's **FLUSHMATE**® pressure-assist operating system.

Of course, you can't make a statement that for all conditions, pressure-assist works best. However, if performance is the criteria, fixtures with Sloan's **FLUSHMATE**® pressure-assist operating system do, in fact, work the best.



About Joseph Smaul, P.E.

With 44 years of experience, including the first 13 as a pipefitter, Joe Smaul has done it all — from running his own mechanical design contracting company for 16 years to doing consulting engineering for some of the most well-known engineering firms. He has patented energy conservation systems in office systems, and is a member of and frequent speaker at major trade associations in the United States. He is currently doing engineering work at Marvin Waxmam Consulting Engineers in Glenside, PA. To contact, or for more information on Sloan **FLUSHMATE**, call: 1-800-875-9116.



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