

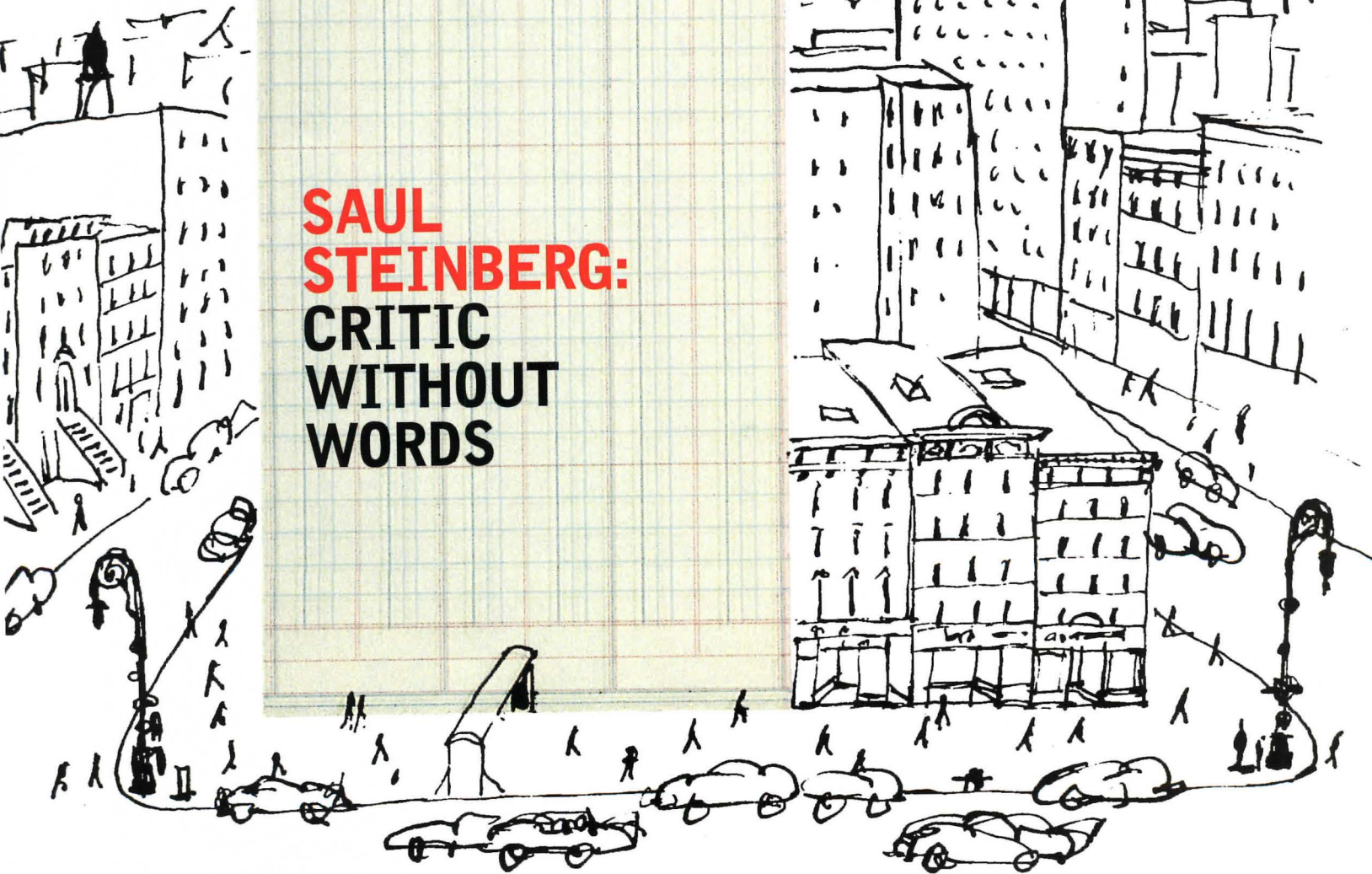
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For the first time since bell-bottoms were in style, the federal government is enjoying a budget surplus—a big one. Some estimates put the take as high as \$2.9 trillion over the next decade. Cooler heads warn the numbers will be smaller, but even naysayers concede that hundreds of billions of dollars is on its way to Washington. The question now, of course, is how to spend it.

This is the stuff that elections are made of, and conveniently, we have one coming soon. Accordingly, schemes for divvying up the

sumer protection suggested that instead of doling out meaningless tax cuts (a one-percent tax cut on a \$50,000 annual income buys a couple of sodas per week), Congress should instead “revitalize our commonwealth by investing in . . . infrastructure.” His editorial identified a wide range of needy recipients, and the numbers are compelling. Nader cites a General Accounting Office report stating that, in 1995, one out of every three schools in the United States needed “extensive repair or replacement,” a fix requiring more than

Invest the federal budget surplus in repairing our national resources.

By Reed Kroloff

spoils are flying. The proposals, however, are sadly uninspired. Republicans imagine trickling—or more accurately, dribbling—the money down to taxpayers in the form of a one-percent income-tax cut, which they promise to repeat for years. Graying Baby Boomer Bill Clinton wants to shore up Medicare and Social Security.

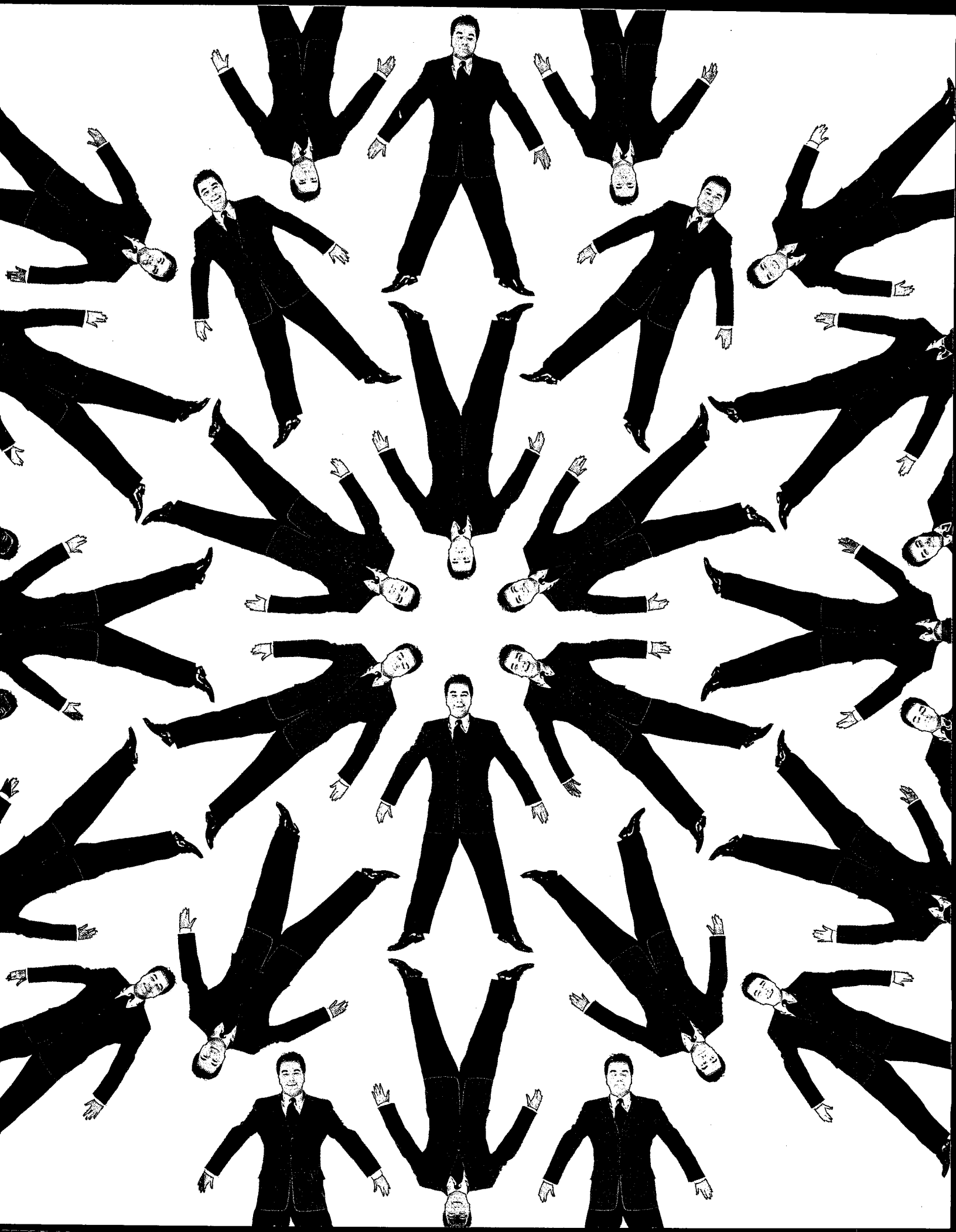
Clinton’s ideas are at least sensible, but neither party has suggested anything visionary. Thirty years ago this past summer, unflinching NASA officials dispatched Apollo 11 to the moon. Despite the social trauma that clouded those days, the sheer, epochal power of the event gave Americans a breathtaking moment of collective pride as Neil Armstrong stepped onto the moon’s surface.

Since then, three decades of fiscal mismanagement have eroded our faith in bold government gestures. The Republican tax plan suggests that where policy is concerned, politicians believe their constituents’ self-interest has supplanted the public’s interests in the common weal, and it may have. Thanks to the budget surplus, we have an opportunity to launch a grand public program, one that can renew both our treasured national resources and public confidence that the government can benefit the many as well as the few.

Ralph Nader has the idea. In a July *Los Angeles Times* editorial, the godfather of con-

\$100 billion. The National Park Service, staggered by millions of new visitors over the last decade, faces crumbling, inadequate facilities, and a funding gap of \$9 billion. The Department of Transportation estimates that it will need that same figure—yearly—simply to maintain public transit systems, let alone improve or expand them. All three of these programs could be fully funded with only a fraction of the conservative surplus projections.

For architects (and allied design professionals), there might even be money in all this, but greed is the motivation of the small-minded. (If it appeals to you, let the Republicans know you support their tax plan, and enjoy your Coke.) I believe we must think larger. For the first time in decades, this nation has the financial wherewithal to secure our national inheritance—the built environment we have allowed to deteriorate in our long season of fiscal neglect. We can scour the pollution from the Grand Canyon, duplicate the success of Grand Central Terminal’s renovation elsewhere, and perhaps most importantly, ensure that school buildings enhance the education of our children, not hinder it. These are proposals all of us can benefit from, individually and collectively, for decades to come. What better way to utilize at least part of our economic windfall than to invest it in our future? ■





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Bucking Convention

Two excellent features in your June 1999 issue hit the nail squarely on the head. The editorial on the AIA convention by Reed Kroloff (page 11) and Eric Adams' outstanding article regarding NCARB (pages 118-122) spoke directly to why these two architectural dinosaurs deserve a speedy and merciful trip to the nearest tar pit. Both put their quest for the almighty dollar above the needs of their members, and have bloated bureaucracies rivaling those in the federal government. The quicker they are put out of their misery, the better for everyone in the profession.

Mark Ethridge Woodward
Modesto, California

The deeper I become involved in the AIA the more I realize reform ideas fall on deaf ears. This year's convention was exceptionally poor. I am on the advisory group for the Committee on Design and we have great difficulty getting design-oriented seminars. A few minutes with some of the AIA leadership will prove their reluctance to change. Beneficial things happen in the PIAs, where member architects meet and discuss issues relevant to our profession, but I think too few people participate because of poor promotion and the cost of the respective PIA conferences.

Windom Kimsey
Via e-mail

I dropped my AIA membership in 1994 because I could no longer find a valid reason to belong. My

dues were astronomical, and the return on this investment was using the AIA initials, wearing a gold pin, and having my ego stroked once in awhile.

I attended conventions and participated as a delegate. However, I was learning less with each successive convention, and the AIA seemed hell-bent on promoting its self-sustaining continuing education program.

Practicing professionals need quality support from their professional organization, not self-serving, no-value conventions!

Bob Elmore
Via e-mail

Dallas Defense

Those of us who hosted the "lackluster" AIA convention in the "uninspiring" city of Dallas in May are somewhat perplexed by Reed Kroloff's view, and we question his math as outlined in his June editorial.

The Dallas AIA Convention and Expo attracted 12,344 attendees (72.4% of the attendance of the previous year's convention, not the half reported). We regret that Kroloff was not inspired by the fifth-fastest-growing city in the country. Obviously the general population doesn't share his lack of inspiration, and they are staking their lives on it.

I was inspired by all three keynote speakers at the convention. I found the topics extremely relevant to societal issues and the role of the architect.

I find the AIA convention is the best venue to remain aware of issues in an increasingly complex world. I think almost any architect would acknowledge the need to revise any program to allow for its continued improvement, but would take issue with Kroloff's call for total reform.

Bob James
President, Dallas AIA
Dallas

Fly Right

Regarding Bradford McKee's piece on the Ronald Reagan Washington National Airport's retail problems (July 1999, page 43), the failure of retail there has

been predicted from the time the new terminal opened. The issue is very simple: the retailers are on the wrong side of security. I fly a lot, and I want to reach my gate quickly—especially now that boarding passes must be picked up at the airport, usually at the gate. After the hassle of getting through security with my briefcase, laptop, and cell phone, why would I put myself through that again to go out and shop?

I understand Cesar Pelli was constrained by a master plan completed years before the advent of the current type of security screening. Other airports have successful retail—on the gate side of security. What can be done? Possibly move security to the building entry and make the whole terminal a secure area. We wouldn't be trapped in the gate areas, and it would sure make getting something to eat easier when our plane is delayed.

Laurin McCracken
CEO, Global Design Alliance
Via e-mail

CORRECTIONS

The Menil Foundation has inherited Dominique and John de Menil's Philip Johnson house (June 1999, page 29), and has initiated restoration. Plans also exist to incorporate it into the Menil Foundation's and the Menil Collection's activities.

The Southern Poverty Law Center (July 1999, pages 46-47) was originally a Hillier Group project, and was completed by Erdy McHenry Architecture after their amicable departure from the firm.

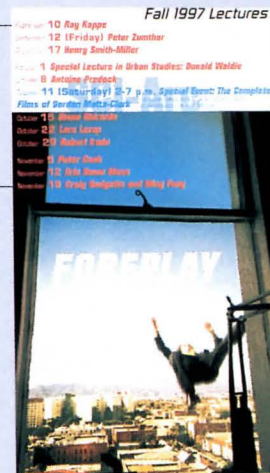
The review of *Technology, Place and Architecture*, edited by Kenneth Frampton (July 1999, pages 115-117), neglected to mention that the book is still available from Rizzoli International.

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exhibitions

city	dates	exhibition	contact
Denver	through October 3	Paper Architecture: Hand Versus Machine at the Denver Art Museum	(303) 640-4433
New Haven, Connecticut	October 25– November 20	The Work of Daniel Libeskind at Yale University's Art & Architecture Building	(203) 432-2292
New York City	September 11– October 9	Aldo Rossi: A Remembrance and Erik Gunnar Asplund: A Tribute at Max Protetch	(212) 633-6999
Pittsburgh	through October 3	Merchant Prince and Master Builder: Edgar J. Kaufmann and Frank Lloyd Wright at the Carnegie Museum of Art	(412) 622-3288
San Francisco	November 12– February 20, 2000	The Architecture of Graphics: Designs for SCI-Arc From the Permanent Collection of Architecture and Design at the San Francisco Museum of Modern Art	(415) 357-4000



Lecture series poster by ReVerb is part of San Francisco Museum of Modern Art's exhibit of SCI-Arc's in-house publications.

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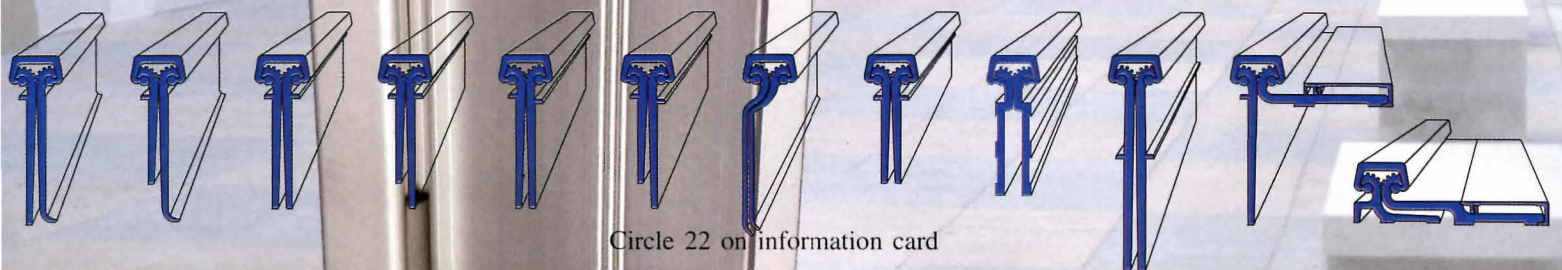
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conferences

city	dates	conference	contact
Charleston, South Carolina	February 13-17, 2000	26th International Making Cities Livable Conference call for papers and invitation to exhibit (deadline: October 15)	(831) 626-9080
Chattanooga, Tennessee	October 14-17	Mainstreaming Green: Sustainable Design for Buildings and Communities Mainstreaming Green conference in Chattanooga uses Cambridge Seven Associates' Tennessee Aquarium to demonstrate increasing pervasiveness of sustainable design.	(202) 626-7449
Kuwait City, Kuwait	October 24-27	The First Arab Architecture/Design Convention and Exposition	(96) (5) 245-0400
Scottsdale, Arizona	November 10-14	Frank Lloyd Wright Building Conservancy Annual Conference	(773) 784-7334
Washington, D.C.	October 28	North American Construction Forecast, presented by the Construction Market Data Group	(800) 283-4699



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competitions

competition	deadline	contact
Milka Bliznakov Prize to recognize research that advances women's contributions to architecture and related design fields	September 13	http://spec.lib.vt.edu/spec/iawa/BlizPrize.html
Architecture for Humanity International Competition for Transitional Housing in Kosovo , sponsored by Christidis Lauster Radu Architects, Alltrom, and the United States Agency for International Development, to benefit War Child	September 27	http://www.archforhumanity.com
Times Square tkts™ Booth Competition , cosponsored by the Van Alen Institute, the Theatre Development Fund, NYC 2000, and <i>Architecture</i>	September 30 (registration)	(212) 924-7000, ext. 18
Martin Luther King, Jr., National Memorial Competition	October 15 (registration)	www.mlkmemorial.org
Milano 2001 Ideas Competition to design a luminous gateway sign in a public plaza that fronts Milan's central train station	December 30	www.arcadata.it



Competition organizers have chosen National Mall site for memorial to honor Martin Luther King, Jr.

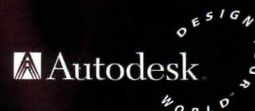
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OPENING

NODS

Polshek to Design Clinton Presidential Library

President Clinton has selected New York City's Polshek Partnership to design the Clinton Presidential Library in Little Rock, Arkansas. The president announced his choice last month in *The Arkansas Times*, Little Rock's weekly newspaper. "The president spent a great deal of his own time working on this," said library president Skip Rutherford.

James Polshek and his partner, Richard Olcott, made the first of two visits to the White House last February. "I was impressed by how knowledgeable the president was," Olcott said. "He's obviously a fan of modern architecture." Polshek's candidacy was no doubt strengthened by his portfolio of museums and educational buildings.

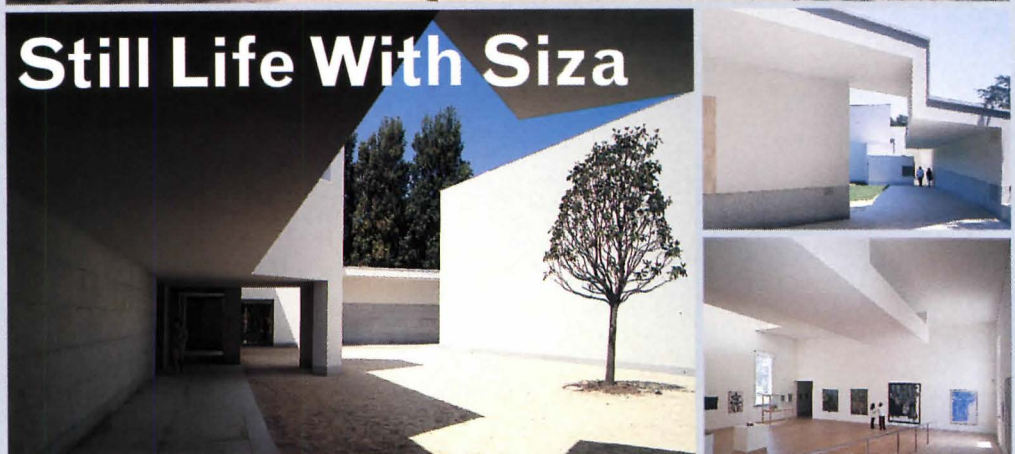
The appointment came after months of speculation that President Clinton would choose Charles Gwathmey of Gwathmey Siegel & Associates, with whom he reportedly dined at the Los Angeles home of DreamWorks partner David Geffen.

Perennial favorite Ralph Appelbaum Associates of New York City will design the museum's exhibits. The firm has previously collaborated with Polshek on the Museum of the City of New York.

The Clinton library, museum, and policy center will be built on a 27-acre riverfront site in downtown Little Rock. The library foundation will need to raise between \$80 million and \$100 million in private donations to build the facility. So far, there is no timetable. "All we have right now is a blank sheet of paper," Polshek said. "It's still too early to talk about a design." *Michael Cannell*



Still Life With Siza



Serralves Museum of Contemporary Art's south facade (top) showcases Siza's signature white modernism. Entrance courtyard (above left and center right) leads visitors past single, sculptural tree and into museum, which features lofty, minimalist exhibition spaces (bottom right).

Álvaro Siza has planted his signature white-stucco modernism into the landscape in the recently completed Serralves Museum of Contemporary Art in his hometown of Porto, Portugal. The 13,000-square-meter building, which opened June 6, includes 4,500 square meters of exhibition space in 14 galleries. A 300-seat auditorium still under construction, a library, museum store, and restaurant round out the complex.

Visitors enter the museum along a slowly descending covered walkway through an angular courtyard containing a solitary tree. The building follows the gentle slope of its site; terraces and long ramps up to the second-floor restaurant pull the landscape into the complex. This effect is heightened by large, eye-level gallery windows that present views of the wooded landscape alongside large contemporary canvases.

Construction of the new facility allows the Serralves Foundation, the museum's owner, to expand beyond the pink stucco 1930s art deco mansion that previously held its exhibitions. Siza's \$28 million building shares the grounds with this mansion, Casa de Serralves, a 44.5-acre park that cascades down a hillside, and a host of service facilities. Serralves serves as a culture test-run for Porto, which, along with Rotterdam, will serve as the European Capital of Culture in 2001. *Samuel W. Barry*

Buzz

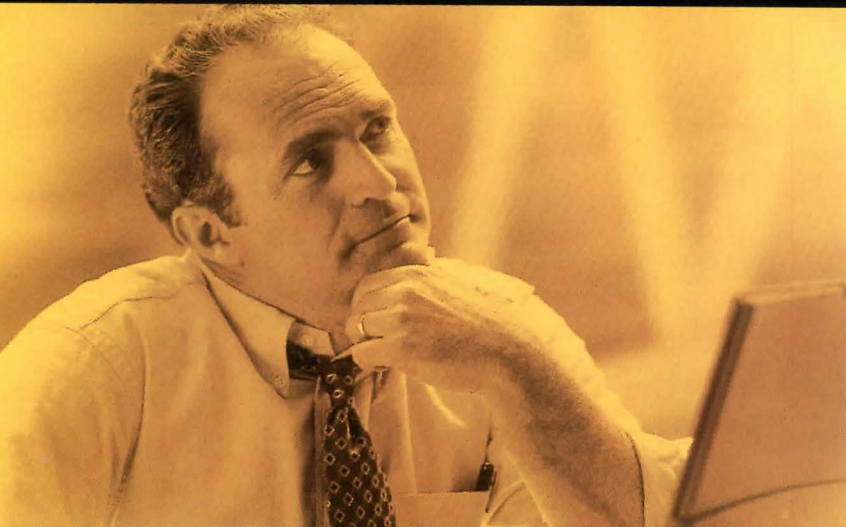
The Historical Society of Washington, D.C., is converting the Carnegie Central Library building into a museum dedicated to the city.

Morphosis is designing a new courthouse for Eugene, Oregon, and the regional headquarters of the **U.S. General Services Administration** in San Francisco.

Oh, bother! A wooden bridge in Ashdon Forest, England—made famous by A.A. Milne's *The Adventures of Christopher Robin* as Winnie the Pooh's favorite bridge—is on the verge of collapse. The **East Sussex County Council** is asking the **Walt Disney Corporation**, who has made untold

brain waves.

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Architects Elizabeth Diller and Ricardo Scofidio tease people's brains for a living. The New York City-based partners recently designed a set of "Vice-Virtue Glasses" that includes a champagne flute with a hypodermic needle for its stem. A cloud of mist will envelop their forthcoming multimedia pavilion, the Blur Building, rising from the waters of Lake Neuchâtel in Switzerland. After 20 years of producing such witty and unsettling work, the duo has just received a promotion. In June, the MacArthur Foundation awarded them one of its famous "genius" fellowships, which comes with a \$200,000 to \$375,000 prize.

NED CRAMER: Congratulations, you're officially geniuses. How does it feel?

ELIZABETH DILLER: Like a big, soft shock absorber has been wedged between you and the world. **NC:** You're the first architects to get a MacArthur fellowship. What do you think that says about your work? **RICARDO**

SCOFIDIO: It's interesting that the MacArthur Foundation decided to acknowledge architecture through a dissident and interdisciplinary practice like ours. **DILLER:** More and more, the Foundation seems to reward work that addresses critical issues in contemporary culture. We're thrilled that our efforts have been recognized as such. **NC:** And the question everyone's dying to ask: What are you going to do with all that money? **SCOFIDIO:** Pay debts, then buy some time and lubricate the way for new work.

millions merchandising poor Pooch to death, to cough up the \$64,000 needed to repair it.

Cambridge, Massachusetts-based **Thompson and Rose Architects** will design the Temple Beth Am in Miami and an amphitheater for symphonic performances at the Cheekwood Botanical Gardens in Nashville.

Wilkes Barre, Pennsylvania-based **Bohlin Cywynski Jackson** beat **Antoine Predock** and **Patkau Architects** for the \$66 million commission to design a new city hall for Seattle.

The 13-member shortlist to design a \$100 million arts district for downtown Madison, Wisconsin, comprises: **Kuwabara, Payne, McKenna and Blumberg** and **Zeidler Roberts**, both of Toronto; **Arata Isozaki** and **Fumihiko Maki**, both of Tokyo; Milan, Italy-based **Gae Aulenti**; **Skidmore, Owings & Merrill**'s Chicago office; **Centerbrook Architects** and **Cesar Pelli & Associates**, both of Connecticut; **Moore Ruble Yudell** of Santa Monica, California; and **Robert A.M. Stern Architects** **Rafael**

APPOINTMENT

Penn State Names Wines Architecture Department Head

The department of architecture and landscape architecture at Pennsylvania State University has named James Wines, president of New York City-based **SITE Environmental Design**, their new department head. Although not a registered architect, Wines will bring his interdisciplinary views of art, architecture, and sustainable design to Penn State's traditional curriculum.

Wines, the designer of the celebrated Best Products stores in the 1960s and 1970s, practically invented the concept of big-box retail that seems commonplace today. Wines is the recipient of fellowships from the National Endowment for the Arts, the American Academy in Rome, and the Graham Foundations. Wines has moved to University Park, Pennsylvania, purchased his first car in more than 35 years, and will welcome his 250 students this month. *Michael J. O'Connor*



BACKLASH

Californians Oppose Restrictive Preservation Methods

The historic-preservation movement may have crested. After several decades of triumphs, an expansion of the criteria for what is historic or valuable and the intense economic pressures on urban neighborhoods is causing citizens to question what they see as increasingly restrictive regulations.

Northern California leads the trend.

The Palo Alto Homeowners Association (PAHA) has raised more than 4,000 signatures to protest recent city planning codes that severely regulate any new construction or renovation on 700 of the town's homes. Craig Woods, PAHA's president, sees it as an "attempt by the planning department to take control of our lives."

The revolt is partly a response to the fear that the preservation movement is moving its sights beyond cozy Victorians to the "lesser" monuments of modern architecture. PAHA's

Woods wants "strict adherence to the National Register criteria," including its 50-year cutoff date. Homeowners in tracts of "Eichler Homes" built in the 1950s are deeply divided about whether their modernist houses should be designated as a historic district.

"It's all because California regulations are so vague," frets Roberta Deering, executive director of the California Preservation Foundation. She points out that the California Environmental Quality Act (CEQA), which mandates historic surveys of redevelopment or urban planning efforts, was amended to include buildings that "may be important for neighborhood planning purposes." "The difficulty is when you move beyond individual landmarks to look at the real value of those structures that help make the texture of the city," says Michael Corbett, an Oakland-based architectural historian

who worked on Palo Alto's historic survey.

In Oakland, City Councilman Ignacio de la Fuente has been arguing for the demolition of the Streamline Moderne Montgomery Ward building. The city wants CEQA standards tightened, and is threatening to opt out of the state's historic-preservation process altogether.

Behind all of this conflict is the reality that home prices in Palo Alto average \$650,000, while older cities such as Oakland are trying to accommodate an influx of people moving back from the suburbs into the historic core. It was easier to argue for historic preservation when nobody wanted to live in old downtown buildings. Now that the monuments have (mostly) been saved, the pressure on our past is so intense it may scrape the patina of history from many an urban fabric. *Aaron Betsky*

RESURRECTION



Viñoly Associates, Tod Williams Billie Tsien Associates, and the **Polshek Partnership**, all of New York City. The district will include a 1,300-seat performance hall, a new theater at the Madison Children's Museum, and other arts facilities.

The **U.S. Department of Commerce** has announced a \$1.2 million grant to jump-start the lagging economy in Los Angeles' South Central neighborhood.

Foster and Partners, LOBB Sports Architecture, and **HOK Sport's** London office are collaborating on a reconfiguration of the 90,000-seat **Wembley Stadium**. They will replace Wembley's signature twin towers with four new steel masts.

Renzo Piano Building Workshop is designing the Nasher Sculpture Center, which will occupy a full city block adjacent to the Dallas Art Museum.

Steven Holl Architects has unveiled a modified-height design for a dormitory for the Massachusetts Institute of Technology on Vassar Street in Cambridge.

New York City's **Jesse Reiser** and **Nanako Umemoto** are among the six recipients of this year's DaimlerChrysler Design Award (née the Chrysler Award for Innovation in Design).

Ford Museum to Rebuild Dymaxion Prototype

It was the Model-T of houses: a low-cost, easily erected and dismantled two-bedroom, 1,000-square-foot structure that could be packed into its shipping carton for the next move. The visionary Dymaxion House, suspended in tension from a central mast to conserve materials, was first conceived by Buckminster Fuller in the 1920s and prototyped in the mid-1940s to house GIs and their families. For decades, the round house with pie-shaped rooms and moveable walls was actually home to original investor William Graham and his family in farm country outside Wichita, Kansas. (The family kept a second prototype handy for spare parts.)

In a perfect match, Graham's house—disused since the 1970s—and its backup have been acquired by the Henry Ford Museum and Greenfield Village in Dearborn, Michigan, which traces the history of innovation in America. The museum has begun re-erecting and restoring the house indoors as part of their 20th-century retrospective. The 18-month project will be finished in early 2001, at a cost of \$800,000.

But why would a house that was meant to go up in days require a year and a half to install? Though structurally sound, the house—a three-dimensional jigsaw puzzle—needs what the museum's Director of Education Strategy William Pretzer calls a "reiterative restoration." That is, the museum will feel its way through the project as the restoration of its 3,000 parts and construction proceed concurrently. "In some cases, the parts were not installed as originally designed by Fuller and we may have to re-create them and others. Our inventory isn't complete. We have to see how it goes together." *Joseph Giovannini*

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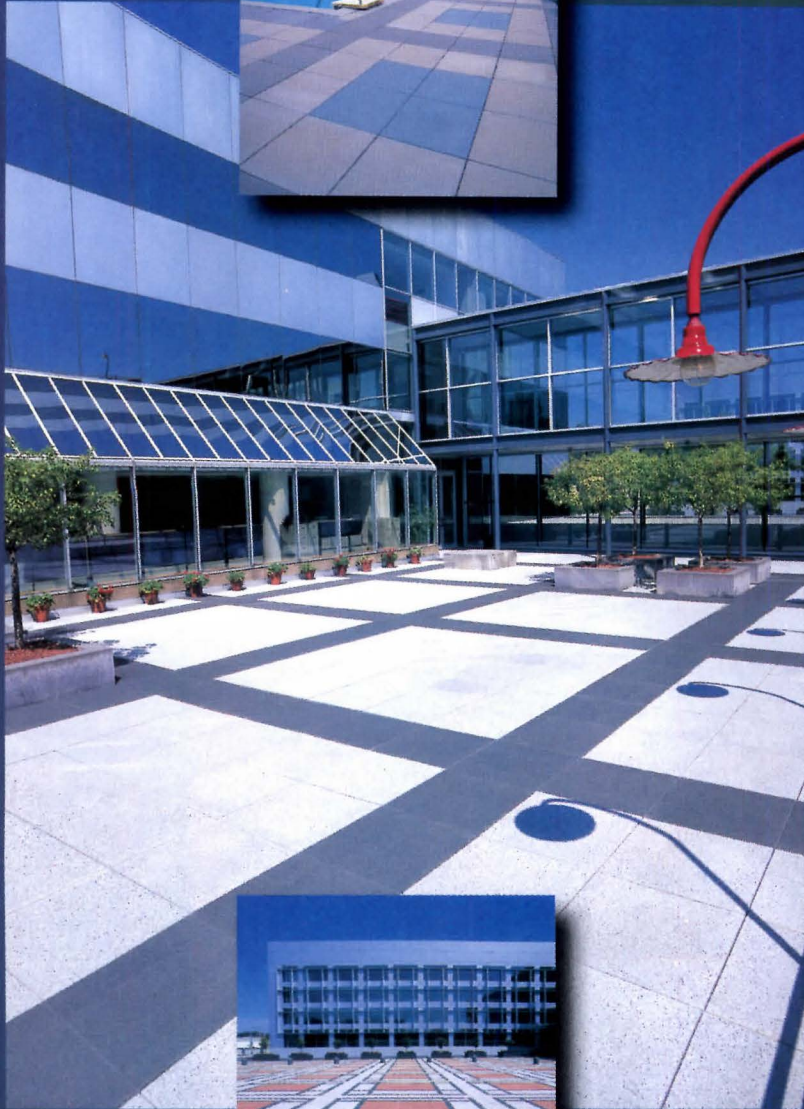
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MUSEUMS

Kipnis Named Wexner Architecture Curator



Ohio State University's Wexner Center for the Arts didn't have to look any further than its own backyard to find

its next curator of architecture. Jeffrey Kipnis, a professor at OSU's Knowlton School of Architecture, received the nod in July, replacing Mark Robbins, who left the Wexner in February to become the design director of the National Endowment for the Arts (*Architecture*, May 1999, pages 61-67).

During his decade at OSU, Kipnis has taught theory and design and published numerous essays of criticism. He is also the founding director of the Graduate Design Program at London's Architectural Association. *M.J.O.*

THE LAW

Mohammad Tavassol, et. al. v. Hewitt Washington & Associates, Architects-Planners, Inc., et. al.

In this decision, the court determined the following: An employee who has a degree in architecture but has not passed the licensing exam is exempt for the overtime provisions of the Fair Labor Standards Act under the professional exemption where the employee is paid a straight salary and where the majority of the employee's work is performed on CAD.

PHOTO: HEWITT WASHINGTON & ASSOCIATES; NEW ORLEANS: KEVIN EITZINGER/ISTOCK

COMMERCIAL ART



Sharp-Dressed Men

If Bob Dole can get an endorsement deal with Viagra, two artists from Houston can certainly hawk Altoids. Taking "commercial art" to a conceptual level, The Art Guys set out to sell themselves as prime advertising space. They embroidered the logos of their paying clients—including Anheiser-Busch, General Motors, and Absolut Vodka—on business suits designed by Todd Oldham, then wore them for a year, appearing at the opening of the new Scottsdale Museum of Contemporary Art, on a runway in Times Square during Fashion Week, and even on CNN. Among those who bought in: Willis, Bricker & Cannady Architects, a Houston firm that won a 1999 P/A Award for their renovation of Jones Plaza in Houston. They liked the fact that the Guys, whose previous stunts include working at a mini-mart for 24 hours, deal with "the real engines behind contemporary urbanism." *Shaila Dewan*

Shaila Dewan is a staff writer and art critic for The Houston Press.

The **Foothills Parks and Recreation District**, which serves Littleton, Colorado, has seen a spontaneous influx of more than 100 proposals for a memorial to honor the 13 victims of an April 20 shooting spree at Columbine High School. Among the ideas: stained glass, 7-foot-tall bronze hands, marble benches, and a waterfall.

The Chicago office of **Skidmore, Owings & Merrill** will design the corporate headquarters for **United Airlines** at **O'Hare International Airport**.

Rumors persist that the **Southern California Institute of Architecture** and the Pasadena, California-based **Art Center College** are considering a merger.

The city of Washington, D.C., is planning memorials to the plights of Japanese-Americans during World War II and to **Mahatma Gandhi**.

Seattle's **LMN Architects** is designing a convention center for kitschy, suddenly-trendy Wildwood, New Jersey.

Siegel Diamond Architects will author a U.S./Canada Port of Entry at the convergence of Sweetwater, Montana, and Coutts, Alberta.

Frank Lloyd Wright disciple firm **Taliesin Architects** has opened two new offices: a second office in Scottsdale, Arizona, and one in Blairsden, California. These join offices in Madison and Spring Green, Wisconsin, and Nashville.

Minneapolis-based **Vincent James Associates** is renovating and adding on to **Tulane University's** student center.

New York City-based architect **George Ranalli** has been named dean of the school of architecture at the **City College of New York**.

The **Pratt Institute** has tapped **Catherine Ingraham**, a granddaughter of **Frank Lloyd Wright**, as the next chair of Pratt's graduate architecture program.



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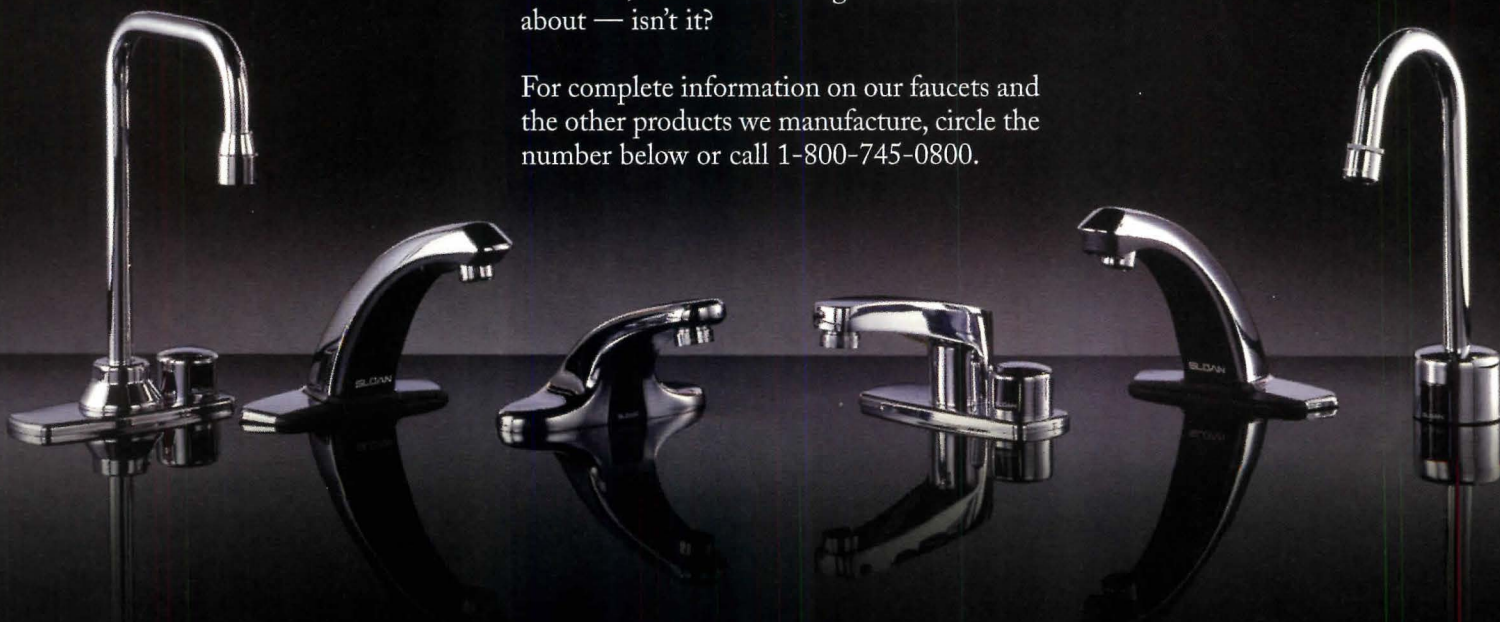
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REAL ESTATE

DreamWorks Disses Playa Vista

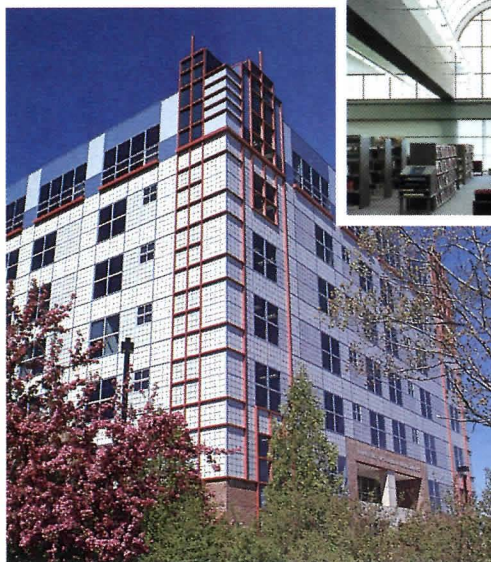
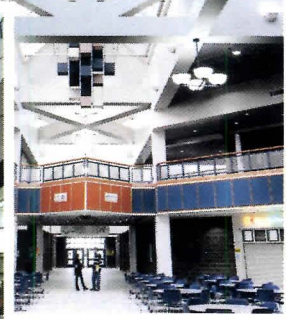
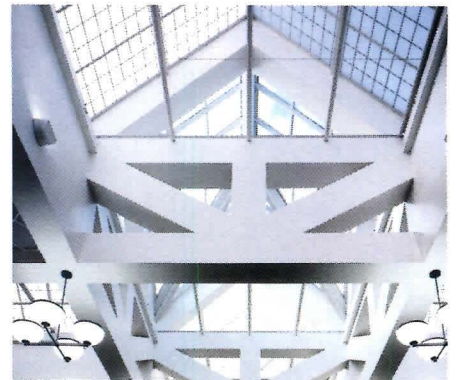
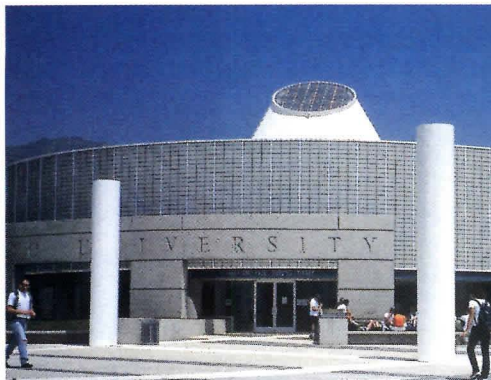
DreamWorks SKG has written itself out of the script for Playa Vista, but the huge, mixed-use mini-city to be built north of Los Angeles International Airport is proceeding on schedule. On July 1, DreamWorks officials withdrew plans to buy 47 of Playa Vista's 1,087 acres and build a headquarters and studio campus. Principals Steven Spielberg, Jeffrey Katzenberg, and David Geffen, who unveiled their dream of creating a fully-equipped studio lot four years ago, cited financing difficulties and rising construction costs as the main reasons for pulling out.

Certainly Playa Vista lost some of its luster for attracting entertainment and technology tenants when DreamWorks walked off the set, but the development's owners suffer no shortage of deep pockets. The soundstages and related film and television facilities originally envisioned for the development's east end will be built and operated by the owners, according to a spokesman for Playa Capital LLC, an international consortium of investors.

Playa Vista's first development phase is fully financed, the spokesman said. In addition to a 3.2 million-square-foot entertainment campus, the first phase includes 3,246 housing units and restoration of marine habitat, freshwater marshlands, and dunes. Preparatory site work for the housing and environmental reclamation is under way. The first residents are expected to cross their thresholds in early 2001.

At build-out, Playa Vista is planned to comprise a total of 13,000 residences, the entertainment campus, more than 1.9 million square feet of commercial space, 600,000 square feet of retail, about 500 acres of parks and community amenities, and 340 acres of restored wetlands. *Ann Jarmusch*

Ann Jarmusch is the architecture critic of The San Diego Union-Tribune.



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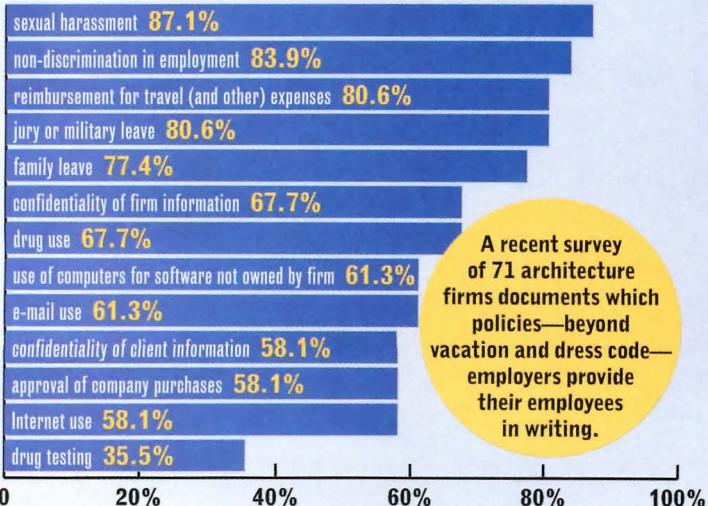
Three years ago, Disney opened its much-ballyhooed Florida town of Celebration, where planners regulate everything from the placement of trash cans to lawn ornaments (*Architecture*, August 1997, pages 114–119; this issue, pages 63–67). In true New Urbanist fashion, Disney tried to engineer a sense of community by emphasizing gab-friendly front porches and a functioning town center. The result is either a saccharine theme-park town or a masterstroke of neo-traditionalism.

Now a Disney defector is poised to build his own version of suburban heaven. Richard Rummell, who headed the Disney subsidiary that developed Celebration, now heads The St. Joe Company, Florida's largest landholder. St. Joe will break ground this fall on a Celebration clone called Southwood, to be built on a tract outside Tallahassee. "There are several ex-Disney guys in the company," says St. Joe Regional President Timothy Edmond, one of Celebration's builders. "We learned a lot there."

So how much of a knock-off will Southwood be? Its small-town atmosphere clearly derives from Celebration. But there are differences: Southwood will have a 20-acre industrial park where many residents are expected to work. While Celebration stands on 4,900 flat acres, Southwood is designed to spread campus-like in stages across 60,000 hilly acres dotted with natural lakes and oak forests. "It could continue to grow for several lifetimes," Edmond says. *Michael Cannell*

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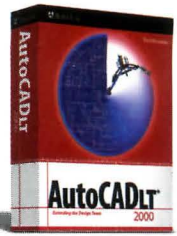
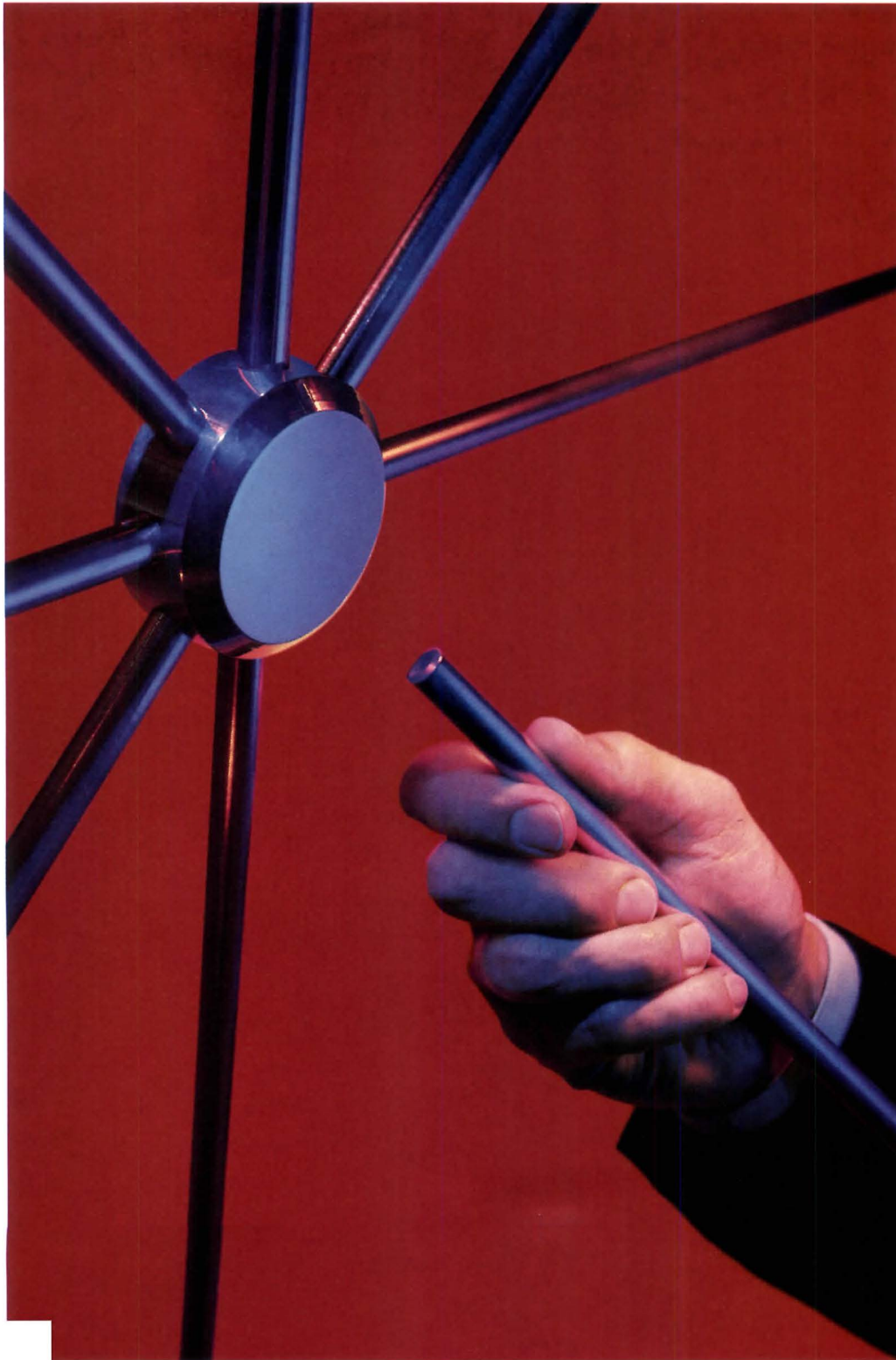
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ON THE HILL

Safety Last on Capitol Hill

Will the office of the Architect of the Capitol (AOC) in Washington, D.C., ever get its act together and stay out of trouble? After five years of battling complaints about its abysmal workplace practices and safety standards, the AOC, headed by architect Alan M. Hantman, is now being hit with reports by Congress' Office of Compliance that it endangered lives, as well as a rough draft of the Declaration of Independence, in an April fire.

A July report by compliance officials—who ensure that Congress follows the same labor, health, and safety laws as private employers—cites the AOC for five “serious” safety violations surrounding an incident in which untrained workers servicing poorly maintained equipment started a blaze in the Madison Building of the Library of Congress.

In recent months, the AOC has been blamed for improperly storing flammable materials in Congressional buildings, failing to control the bacteria that causes Legionnaires' disease, which was found in the water at the Capitol's power plants, and mold found in the walls of a new day-care center.

Congressional leaders share responsibility with the AOC for the slow progress on the RTKL Associates-designed Capitol visitors center. The project became a huge priority after the fatal shootings in 1998 of two Capitol police officers by an insane gunman, yet has been dogged by delays. Current projections call for the completion in 2004. Tourists are advised not to reserve vacation dates for the opening just yet. *Bradford McKee*

FROZEN MUSIC

Composer to Honor D.C. Monuments With Music

In the latest in the millennial onslaught, a New Jersey-based composer who once interpreted Dr. Seuss' *Green Eggs and Ham* in song is attempting to squeeze musical notes from stone. Working with the National Symphony Orchestra (NSO), National Public Radio, the Kennedy Center, arts advocate DC Citypiece, and the Kreeger Museum, Robert Kapilow is writing a symphony dedicated to the nation's “monuments.”

Yes, that's monuments in quotation marks. While D.C. is a city shaped by its pillars of stone and polished granite and marble, Kapilow hopes to broaden the definition to include concepts, events, and people—much like New York City's Landmarks Conservancy has designated such luminaries as socialite Brooke Astor and comic Joan Rivers as “living landmarks.”

Suggestions thus far have included the drumbeats from President Kennedy's funeral procession, an improvisational rap, a poem about graffiti alongside the Beltway, and—oddly enough—the sense of silence that physical monuments impart.

The NSO will perform Kapilow's result at the Kennedy Center in June 2000. To become involved, see www.citypiece.org. *M.J.O.*

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WHAT IF?



Montreal Wants a 'Silophone'

What to do with a stately grain elevator when it suddenly becomes obsolete? Architect Thomas McIntosh and composer Emmanuel Madan didn't see the potential to turn yet another industrial structure into a pedestrian mall or condominium complex. Instead, they see what they call a "silophone," a musical instrument of sorts.

McIntosh visited the grain elevator, abandoned since the 1980s, three years ago in Old Montreal, an historic district on Montreal's east side. Rather than just its architecture, though, he was immediately struck with the space's great acoustics. McIntosh claims that sound reverberates around the elevator's interior for nearly 22 seconds before dissipating.

The invention seems silly, of course. But the plan is more sound than one would imagine. Demolishing the structure will cost \$3 million and bringing it up to code for occupancy could cost more. Nonetheless, when The Canada Council for the Arts granted Quartier Éphémère, the project's sponsor, \$100,000 in millennium funds for the silophone, it shocked some. Member of Parliament Inky Mark, the Reform Party's heritage critic, for one,

has publically denounced the effort.

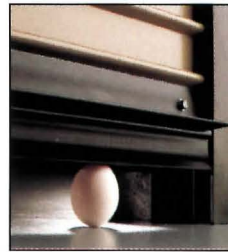
So what or who will "play" this silophone? You might guess the wind, but the designers are thinking much more high-tech. They hope to take the 100 grand and rig the grain elevator with microphones, amplifiers, a Web cam, and speakers linked to a Web site. In this way, visitors

to the site can interactively compose an impromptu masterpiece using nothing more than their keyboard.

McIntosh and Madan are hard at work on this and other projects—including a symphony composed for past-their-prime dot-matrix printers—hoping to debut the silophone next year. *M.J.O.*

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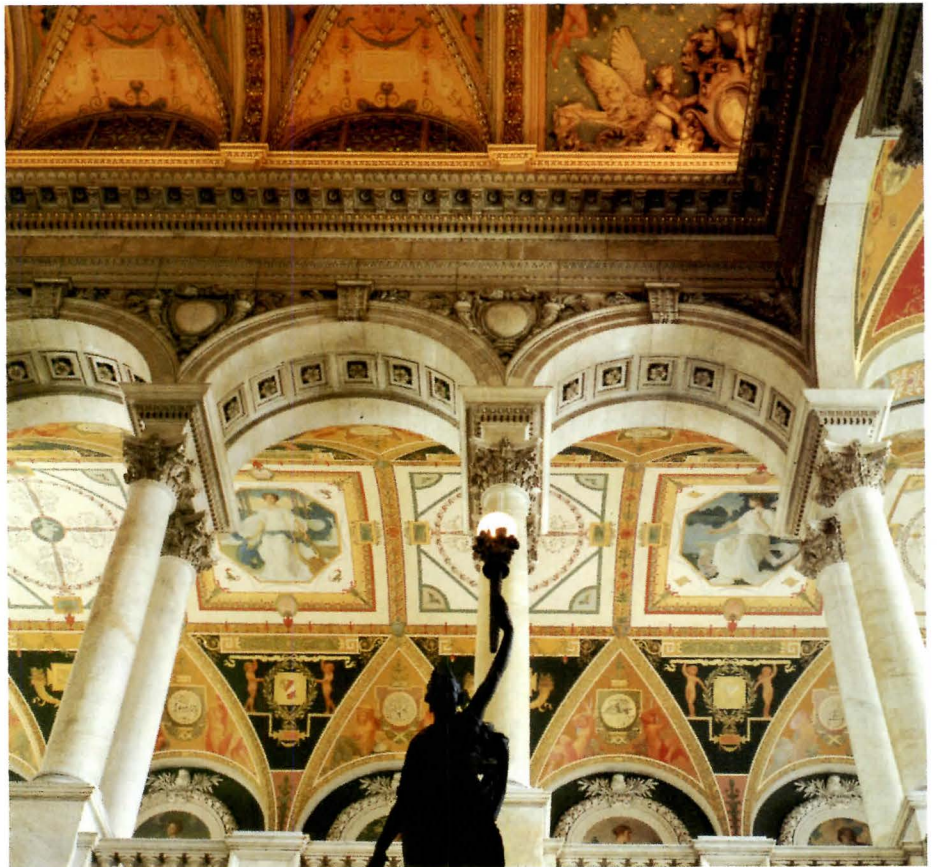
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HOUSING

Nice Housing, If You Can Get It

A new study shows that while the demand for senior-citizen residential development is surging—and will for at least the next 35 years—the people who need it most have the least access to it. The National Investment Center for the Seniors Housing and Care Industries (NIC) has released a study profiling 1,500 adults over 60, which finds that two-thirds of respondents report annual incomes of \$25,000 or less, yet the average fees for seniors housing amount to about \$24,000 a year. Demand for seniors housing, whether nursing homes or independent-living units, is highest for people below that income level: Only 29 percent of those currently in assisted-living environments report incomes above \$25,000.

The study and analysis by NIC seems largely unconcerned with the crunch some seniors may face in trying to afford decent amenities. The group's executive director, Robert G. Kramer, remarks only that "we need to do a better job of educating consumers." But for now, it's trying to educate its investor members: "Nursing homes and assisted-living facilities remain the most popular choices," advises the NIC's Web site. "However, Alzheimer's units appear to be gaining favor." Now there's a hot stock, folks. *B.M.*

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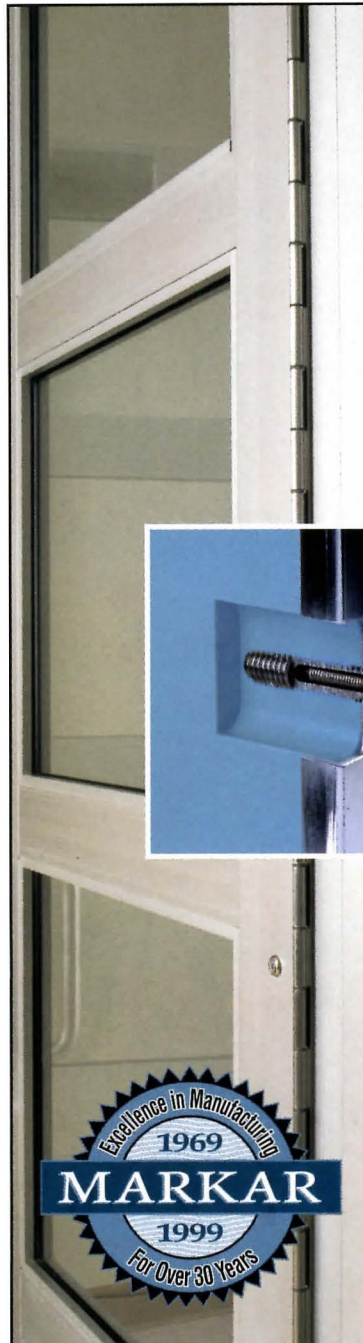
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For the discriminating renter who has the urge to restore a 1930s vision of the future, the National Park Service (NPS) is offering "free" 20-year leases on three houses in the Indiana Dunes National Lakeshore in Beverly Shores, Indiana, 40 miles east of Chicago. Tenants will only have to bear the cost of the restoration work, estimated to be between \$300,000 and \$400,000 per unit. Architects with Historic Landmarks Foundation of Indiana (HLF) and the Indiana Dunes National Lakeshore have prepared restoration documents and will provide tenants with technical assistance throughout their residency.

Originally constructed at the 1933-34 Century of Progress Exposition in Chicago as examples of modern domesticity, the houses were bought by an Indiana developer at the close of the fair and shipped to their current location. They include the Cypress Log Cabin, the Wieboldt-Rostone House (above, at right), and George Fred Keck's House of Tomorrow (above, at left), an iconic 12-sided glass house based on R. Buckminster Fuller's Dymaxion House.

While the National Park Service hopes the House of Tomorrow's original glass walls will be restored, it has contingency plans. "The framed walls have been there since 1935," says NPS historical architect Judith Collins. "They have their own historical significance." *Edward Keegan*



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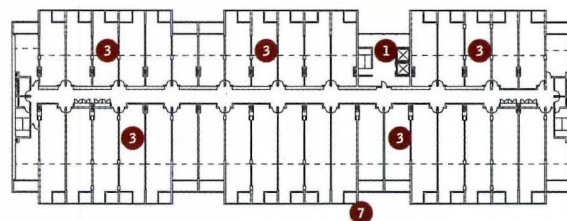
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Square Roots

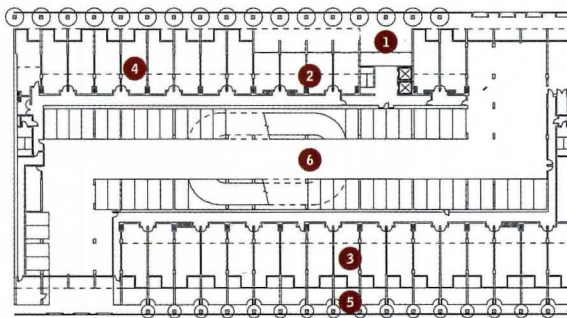
Bay Area architect Stanley Saitowitz's out-of-the-box thinking produces a straightforward rectilinear esthetic.



Yerba Buena Lofts, San Francisco



Seventh-floor plan



First-floor plan 38'/12m

- 1 lobby
- 2 commercial
- 3 lofts
- 4 live-work lofts
- 5 gardens
- 6 parking
- 7 balcony

Stanley Saitowitz Office, Yerba Buena Lofts, San Francisco; Lief House, Napa Valley, California; Oxbow School, Napa, California

Architect Stanley Saitowitz says his latest work isn't about form, but at first glance, a distinct rectilinear esthetic links these three projects. More judicious consideration reveals a rigor in each that stems not from their formal similarity, but from thoughtful responses to program and site.

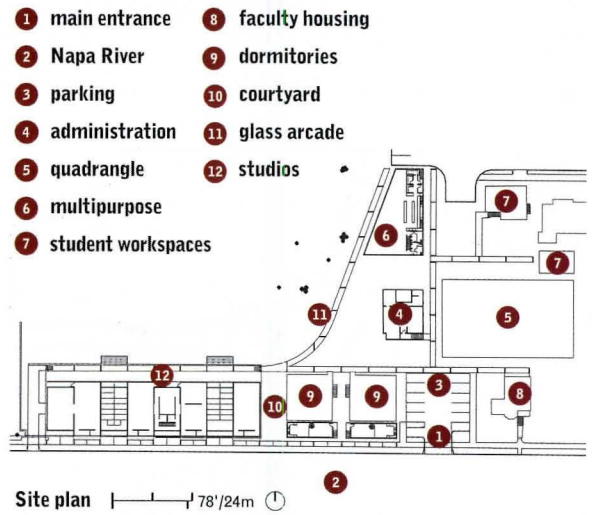
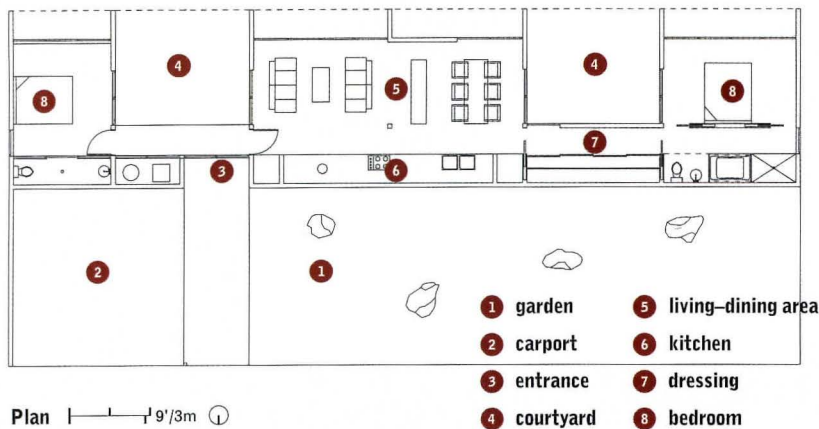
In his adopted hometown of San Francisco, South African-born Saitowitz has gained a reputation for creating innovative loft buildings that squeeze remarkable spaces from the city's notorious cheek-by-jowl density. His latest project in the developing South of Market (SOMA) district is the Yerba Buena Lofts, a 300,000-square-foot building that will contain 196 loft and live-work units, ground-floor commercial space, and four stories of parking.

Saitowitz's use of subtle vernacular cues, including abstracted bay windows, mediates SOMA's transition from a largely industrial and commercial area to one that now supports thriving residential and professional communities. But the loft building's roots are decidedly industrial. Framed in raw post-tensioned concrete that supports glass

Lieff House, Napa Valley, California



Oxbow School, Napa, California



Bay windows and balconies of Yerba Buena Lofts (facing page, top, and bottom left) create **staccato rhythm of concrete, glass, and voids**. Expansive glazing on south facade of caretaker's house (top left) opens all rooms to **valley view**. Monolithic weathered steel-clad (center left) north facade insulates house from adjacent access road. **Glass canopies** direct circulation around Oxbow School's wooded campus (top right). Roll-up doors on studios' southern face (center right) take advantage of **Napa's benign climate**.

and steel infill, the lofts occupy nearly an entire city block, concealing parking within that wraps an interior circulation core. Construction begins in December, anticipating a 2001 move-in date.

In the hills above San Francisco, Saitowitz tucked a compact caretaker's house into a sloping hillside overlooking the Napa Valley (the main house will be built later). The architect clad the 1,200-square-foot, low-slung pavilion in weathered steel to ally the synthetic intrusion with the valley's changing colors. Specifically, its rusty finish obliquely refers to the area's autumnal palette.

The house's southern flank, punctuated by two courtyards, opens maximum glazed expanses to valley views and outdoor living. The monolithic north facade shields a service core of kitchen and bathrooms from the adjacent access road to the 40-acre complex. A clerestory on the north admits daylight that balances the house's dramatic southern exposure. The owners hope to occupy the caretaker's house in the spring.

Down the road from this house, Saitowitz has completed plans for the campus of the Oxbow School, a new Napa-based arts residency program for high-school students. The school's founders have acquired a motley crew of 15 contiguous buildings and sites between Napa's downtown and the Napa River. Saitowitz's brief was to conceive two new buildings and to renovate and cohere the random collection of existing real estate into a welcoming campus.

The architect will install glass arcades to define circulation and a recurring "Oxbow green" color scheme to unify the disparate buildings. He has also designed a studio building for painting, new media, printmaking, and sculpture classes, and a new multipurpose building that will house large meeting and kitchen facilities.

Oxbow will welcome its first class this month. A prolonged approvals process, however, has delayed the construction and therefore the opening of the new buildings until later this year.

Michael J. O'Connor

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Andrew Ross chronicles his sabbatical in Disney's picture-perfect planned community, Celebration. Interview by Cathy Lang Ho



Underwriting the American Dream

*Social critic Andrew Ross' year-long immersion in a New Urbanist town is the subject of his latest book, *The Celebration Chronicles: Life, Liberty, and the Pursuit of Property Value in Disney's New Town* (Ballantine, September 1999). Delving behind the picket fences and pretty facades, Ross, director of the American Studies Department at New York University, provides a detailed account of the financing, construction, sale, and daily life of the newest subdivision of Disney's vast central Florida empire (see "Disney Builds a Town," *Architecture*, August 1997, pages 114–119). Ross is a frequent contributor to *Artforum* and *The Nation*, and the author of numerous books, including *No Respect: Intellectuals and Popular Culture* and *The Chicago Gangster Theory of Life: Nature's Debt to Society*.*

ARCHITECTURE: Tell us about your New Urbanist experience.

ANDREW ROSS: To be blunt, I found the New Urbanist thesis about environmental determinism—that a place's physical layout determines behavior in a community—to be overblown. Of course, certain social formations grew around proximity: You couldn't avoid getting to know your neighbors in Celebration, and there were potlucks, block parties, and so on. But deeper social relationships were more often based on affiliation, with the school or churches or other activities, which didn't necessarily depend on proximity. In addition, people's sense of community was formed more around their experience of hardship and adversity than as a result of the physical advantages of the city plan.

Spanking new and squeaky clean, Celebration is not the model town it appears to be.



Celebrationites spoke often about their desire to realize their dreams—the American dream of owning their own home and living in a safe, small town—to explain their investment in Disney's New Urbanist venture.

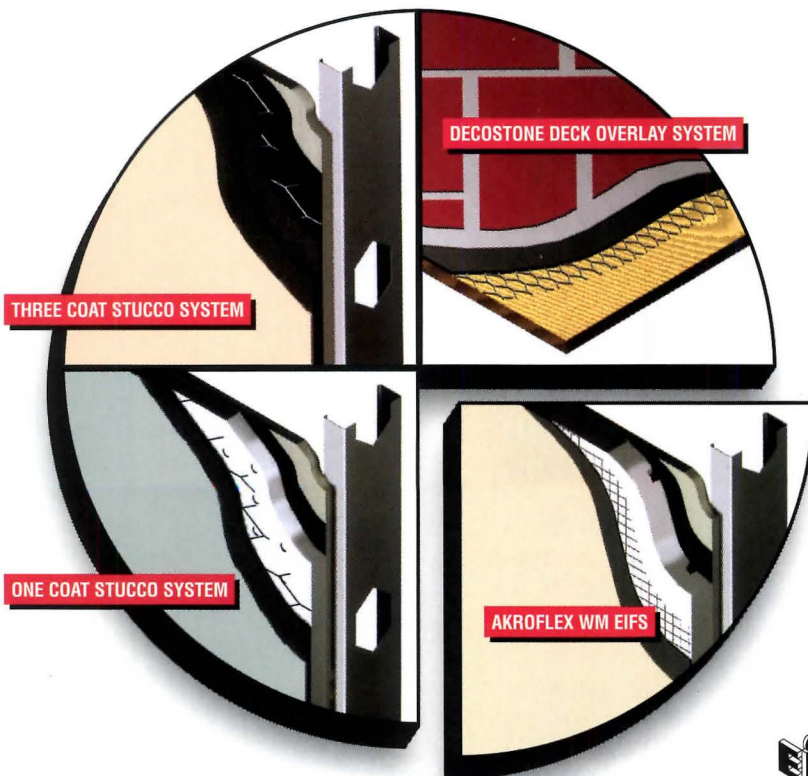
What kind of hardship?

There was a strong pioneer ethos that underscored almost every aspect of the town's activity; with such an ethos comes a sense of sacrifice. Everyone talked about the sacrifices they made to live in Celebration, whether that meant the high cost of the house, the small size of the lots, or the lack of privacy. Add to this the persecution of the media: Residents felt mischaracterized as a "Stepford Wives" lot. Most had a range of problems with Disney, the builders, the school, and the county, where Celebrationites are very much resented. Folks outside Celebration were astonished to hear residents talk so frequently about their hardships, given that this was the highest-income, best-educated community in central Florida. But it's common that people first perceive they belong to a community when they feel it's under threat.

How do most Celebration residents make a living now?

A lot work at home, so the town does show the impact of telecommunications. Many ended up working for Disney, which is not unusual given that it is the biggest employer in the region. There were a fair number of working-class people among the "pioneers," though I don't know how they managed to make ends meet, especially since many Disney jobs are low-paying. Still, Celebration will gradually become less of a mixed-income place because it's been such a commercial success, and the cost of living is rising accordingly.

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So Celebration is a commercial success?

Very much so. From the beginning, houses were selling far more rapidly than expected, and their resale rate is also pretty high.

But the retail core has had a lot of turnover. Does this prove that you need to have people first, before you build the town?

The merchants have had a lot of trouble, yes. Of the whole venture, the biggest gamble was building a retail sector two miles away from the existing tourist strip, in the center of town, with hardly any residents. Only a developer with extremely deep pockets would be able to do that, and in retrospect most folks conceded they were a bit ambitious with the scope of the original retail environment.

Are tourist-shoppers still being bussed in from the other Disney properties, as they were initially?

The merchants wanted that but Disney refused. Strangely enough, it's the only place in central Florida where you cannot buy a Mickey Mouse t-shirt. But people do come to Celebration for boutique shopping and fine dining, which you don't find much of in the area. At the same time, people who live in Celebration—particularly those on a budget, and many of them are—couldn't afford to eat out regularly in town because the restaurants tend to be pricey. For traditional shopping, too, they would have to go elsewhere.

This seems to contradict the point of New Urbanism: Outsiders are driving to Celebration as they would to a destination mall, while locals are driving out of town for more affordable shopping. Some residents did feel that the downtown didn't necessarily belong to them, because the merchants were not catering to their needs.

What do you think was Disney's prime motivation for building Celebration?

Celebration allowed the company to secure environmental permits and package the development plans for its entire land holdings, which totals 28,000 acres, for the next 20 years. One Disney executive told me they created a development zone that's unmatched anywhere in the country. Three new highway interchanges have been approved, which is unprecedented in the federal highway system; interchanges are usually only approved when they're about to be built.

You write in your book about Disney's efforts to distance itself from Celebration. How do residents feel about that, given that Disney's magical name and image was used to sell the place?

To the dismay of residents who banked upon a star, but to the satisfaction of those who want more self-determination, the company quite obviously backed off at some point, recoiling from some sour publicity, not to mention the prospect of liability. But I don't think Disney will ever

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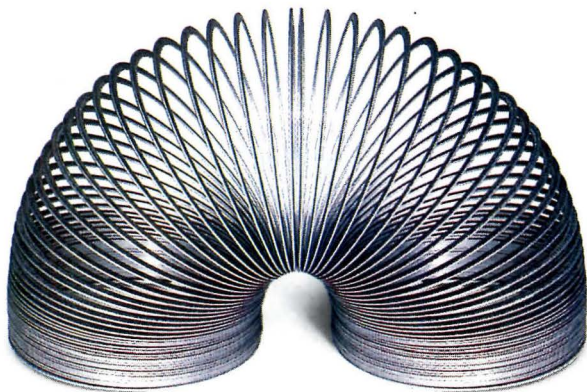
“Many Celebration residents actually prefer the ‘benevolent dictator’ approach. They trust the company’s taste more than the taste of other residents in terms of architectural review and governance.”

be entirely disconnected from Celebration. They will always own land in Celebration, including the streets, sidewalks, central core buildings, the lake, and parks. Eventually, when more than two-thirds of the land is sold, the Community Development Board, homeowners’ association, and other entities will be made up entirely of residents. There’s also a population threshold when residents will have to vote on incorporation. If they decide to incorporate, it will probably become something of a contract city, which is a thin form of government in which most of the agencies in the municipal structure are contracted out. In any scenario, Disney will retain the veto vote, but it’s unlikely the company would ever use it. It would be politically suicidal for it to do so.

Does Celebration feel like a tightly controlled environment?

It doesn’t feel overly restrictive. Like most people who move into planned developments with homeowners’ associations, Celebration residents want community standards—and their property values—kept up. Many people actually prefer the “benevolent dictator” approach, a phrase Walt Disney used to describe himself. They trust the company’s taste more than the taste of other residents in terms of architectural review and governance.

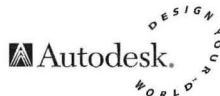
Celebration has a lot of community-reinforcement structures, such as the Disney-sponsored Intranet, the schools, the down-



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town, and other public spaces. How did the community benefit from these structures?

The Intranet was barely developed, despite its hype. The school remained the main reason why most people moved to Celebration, and its main focus—although perhaps not for reasons that Disney intended. The community was galvanized as a result of the problems surrounding it. Many felt that they had been promised a private-school kind of education in a public school, and they were upset that they were not getting it. This contradiction between the expectations maintained and satisfied by the public versus the private realms was absolutely central to everything that happened in Celebration. It raised the question: What happens when you have a giant beneficiary in the marketplace deciding to take responsibility for sponsoring public institutions? It's in tandem with much of what we're seeing lately—the decline of the political will to fund the public realm, and the private sector being asked to step in.

What does this mean for the public realm?

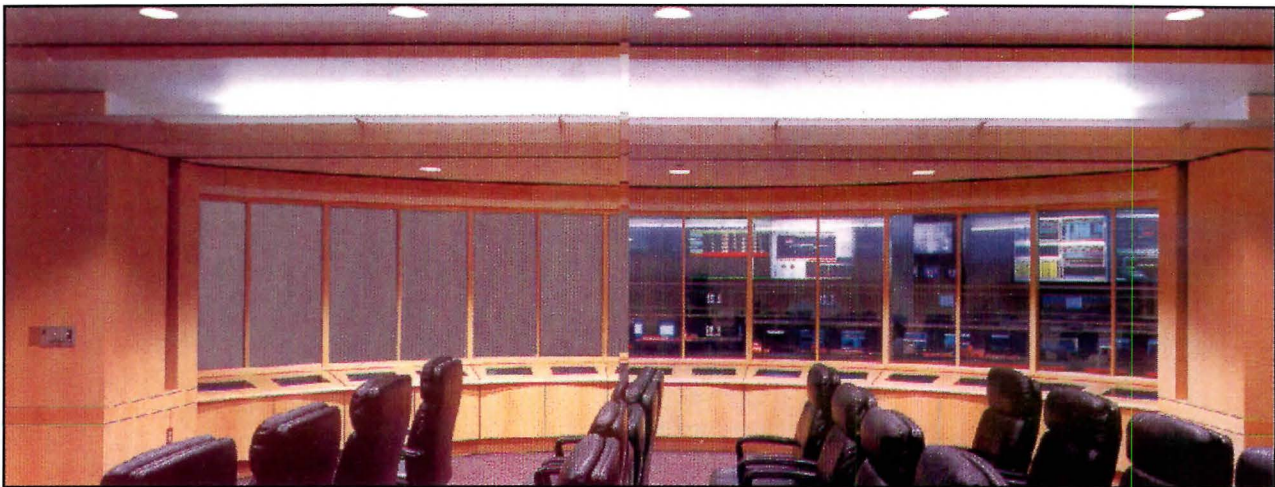
It's potentially dangerous, particularly in a culture where corporations are fly-by-night. You would think that Disney, with its high capital investment on the land, would be the last company that would up and leave. But there isn't a page of corporate history that would lead us to think that could not be the case.

What lesson can we learn from Celebration?

It raises the question about the future of community—whether it is something that is wanted, and will it be advanced only to further the interests of the people who live in a community, or whether the resources and talents in a community will overflow into the region. The challenge for something like Celebration is whether it becomes a community-minded neighbor and player in county and regional affairs. I discovered that Disney had two hands working the land there. On the one hand, it was creating a showcase village that was genteel and environmentally sustainable and pretty and so on. On the other hand, it was recruiting thousands of minimum-wage workers into the region, mostly from Mexico and Puerto Rico, who had little chance of finding affordable shelter in that area. Their presence adds to the suburban and tourist sprawl for which Celebration is intended to be an antidote. So the right hand didn't care what the left hand was doing. This encapsulates a lot of the challenges facing New Urbanism, and urban planning in general.

Would you want to move to another New Urban town?

I have become something of a fellow traveler of New Urbanism. As a social project, certain aspects of it are interesting and worth supporting. However, I draw the line at the willingness to make common cause with private forms of government. ■



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Erosion threatens homes in Saltaire, New York. In last decade, Federal Emergency Management Fund (FEMA) has spent over \$8 billion for damage caused by hurricanes and typhoons alone.



Sand Dollars

How far should we go to protect coastal communities? By Michael Cannell

When the **Cape Hatteras Lighthouse** was built in 1870, it stood half a mile from the water on North Carolina's windswept Outer Banks. But beaches rarely stand still. After more than a century of scouring erosion, waves splashed practically to the spiral-striped beacon's granite base. Ironically, three jetties built to protect the landmark only hastened the ocean's advance. After years of study and debate, engineers finally jacked up the 4,800-ton structure last June and gingerly moved it to a secure new perch 1,500 feet from the oncoming ocean.

The same retreat is occurring, in one form or another, on beaches from San Diego to Cape Cod as advancing waters gnaw away at the nation's vastly overdeveloped waterfronts. In the 1970s and 1980s, nearly half of all U.S. construction was on or near the coastline. More than half of the U.S. population now lives within 50 miles of the beach, with 3,600 more arriving daily.

Architects may come to regret those oceanfront sites. Coastal geologists estimate that 70 to 90 percent of the nation's coastline is eroding as hurricanes, winter storms, and rising sea levels pound away at the coasts. In California alone, dozens of beaches lose one foot of sand each year. In North Carolina, up to four feet per year of beachfront is vanishing.

Meanwhile, meteorologists warn that climate changes may stoke shore-pounding killer storms. Although not yet dignified with full scientific credence, global warming theories have led forecasters to conjure nightmarish scenarios of overheated oceans spawning megastorms packing 250-mile-per-hour winds. Warm seawater is the fuel of hurricanes, and some scientists say an increase of just 1.5 degrees could produce 40 percent more hurricanes.

Property owners want to defend beaches at any price, and the federal government has obliged them for years with an elaborate—and expensive—arsenal of seawalls, breakwaters, artificial reefs, and sand-replenishment projects. Since 1965, the U.S. has spent about \$3.5 billion to pump extra sand on more than 1,300 beaches.

A vocal camp of coastal geologists and environmentalists is now denouncing these efforts as ineffectual, or even harmful to beaches. "Beaches are dynamic landscapes—they move almost like living things to protect themselves against storms and stay out of the way of rising seas," says Cornelia Dean, author of *Against the Tide* (Columbia University Press, 1999), a history of the national campaign to hold back the sea. "But development pins them down, freezing them in place. They can't protect themselves when storms or erosion strike."



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Army Corps of Engineers plans \$60 million beach-rebuilding project for Fire Island National Seashore.

After decades of debate, policymakers—including the White House—are more inclined than ever to let nature take its course. “Once the government starts restoring your beach, you’re on the gravy train forever,” says Duke University geologist Orrin Pilkey, the most outspoken critic of U.S. coastal policy. “But why should we pay for those who are stupid enough to build right next to the beach?”

The prevailing irony is that most anti-erosion efforts only make matters worse by obstructing the cyclical flow of sand. Jetties (also called groins) trap sand on the upcurrent side, thereby widening the beach. But the jetty deprives the downstream side of its usual sand supply, and thus shrinks it ever more. “Jetties always cause problems,” Pilkey says. “Always, always, always.” Seawalls built parallel to the shore to protect waterfront homes also block the natural sand cycle. Through a process geologists call “active degradation,” the deflected waves carry away more sand than they deliver. “If you build a seawall, you’ll eventually see your beach disappear altogether,” Pilkey says.

The sand-stealing effects of hard structures like seawalls and jetties have led Maine, Texas, Oregon, and the Carolinas to ban them since the mid-1980s. Over the last two decades, the U.S. Army Corps of Engineers, the nation’s designated beach-builder, has shifted its efforts to beach replenishment, which requires piping in tons of dredged sand from miles offshore and bulldozing it across the beach and dunes. Money spent on replenishment theoretically saves the government from paying for storm damage, since wider beaches protect homes and businesses. “We repave roads. Why not replace sand?” says Howard Marlowe, a lobbyist for a coalition of coastal states.

Whatever the benefits, beach replenishment comes with sticker shock. The Army Corps of Engineers plans to rebuild a 33-mile stretch of New Jersey coastline at an estimated cost of \$60 million per mile. And there’s no guarantee the new sand will stay intact. In the winter of 1988, just two days after engineers completed a \$50 million beach-nourishment project in Ocean City, Maryland, a huge storm lashed the tourist resort. Much of the newly amassed beach washed out to sea, forcing the town to slurry in another \$10.8 million worth of sand.

The debate is heating up as the Clinton administration attempts to shift the burden from federal taxpayers to local governments by reducing Washington’s share of replenishment costs from 65 to 35 percent. “Encouraging development is not appropriate,” says Brad Campbell, associate director of the White House Council on Environmental Quality. “We’re attempting to invest our resources more rationally.”

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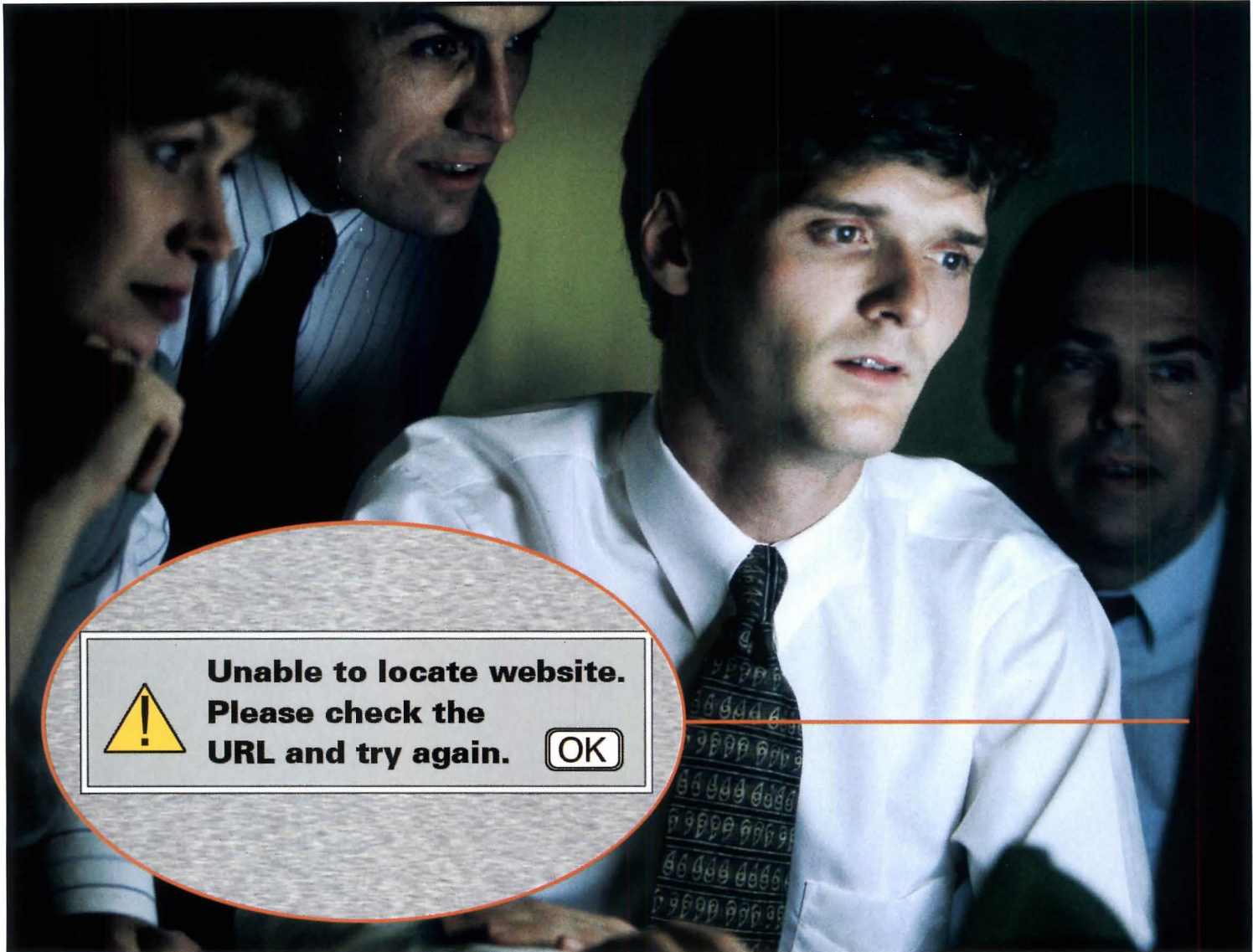
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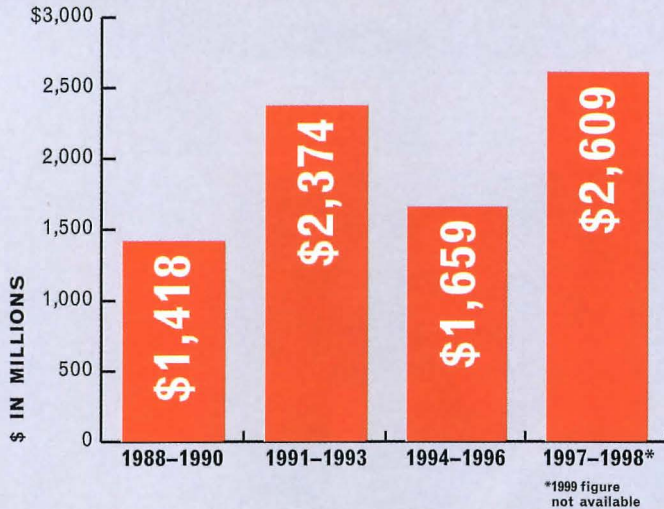
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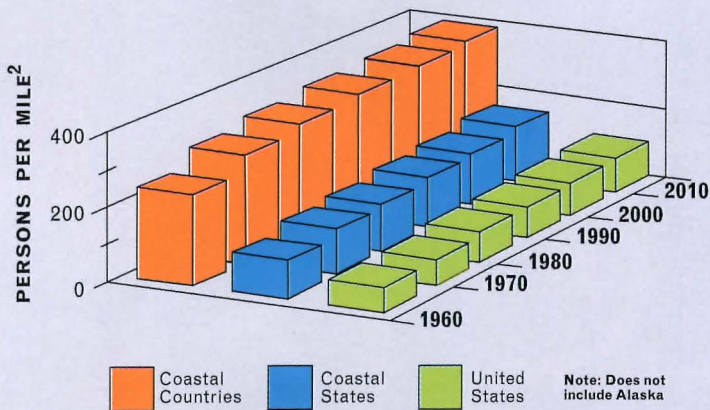
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Claims for assistance from FEMA have climbed (top) as population of U.S. coasts increases (bottom) at rate of 3,600 daily.

Not surprisingly, a bipartisan caucus of coastal legislators is lobbying to kill the Clinton plan, saying beach-related tourism generates more than \$1.3 trillion in spending per year. "Healthy beaches mean a healthy economy," says Sen. Connie Mack (R-Fla.). "I believe coastal preservation is in our national interest."

For the past 30 years, Washington has forced coastal property owners to assume responsibility for disaster costs by requiring them to buy government-subsidized insurance. But the Federal Emergency Management Agency (FEMA) can no longer keep up with payments along overdeveloped, storm-prone beaches. The flood-insurance program had to borrow \$810 million from the U.S. treasury to pay claims submitted in the 1990s, largely because of damage inflicted by hurricanes Hugo and Andrew.

Today FEMA is proposing to substantially raise government insurance rates for policyholders on the Eastern Seaboard and Gulf of Mexico who file repeated claims. By doing so, the agency hopes to "reverse the dismal cycle of loss, recovery, loss," says insurance administrator Jo Ann Howard. "We don't show compassion for people by setting them up through insurance proceeds to suffer the trauma of

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being flooded over and over again." The new rules could go into effect by next year's hurricane season.

Private insurance firms are also recoiling from the coastal market. Ten small insurance companies went bankrupt after Hurricane Andrew racked up \$15.5 billion in damages in 1992. Policy rates for Florida homeowners have rocketed 72 percent since Andrew made landfall south of Miami. The larger firms, including Allstate and Nationwide, are now adding "hurricane deductibles" to coastal policies. Under these new provisions, homeowners lashed by hurricanes would have to pay a flat deductible of \$500 before coverage kicks in for structural or property damage.

Dangerous storms like Andrew may be on the upswing. The construction boom that has transformed the East Coast since the mid-1970s coincided with a 20-year lull in hurricane activity, and the timing may have fostered a dangerous complacency. If a theory advanced by atmospheric scientist William M. Gray of Colorado State University is correct, a prolonged drought in western Africa inhibited hurricane formation throughout the 1970s and 1980s. The dry cycle has ended and a rainy phase is now underway that Gray predicts will return us to the kind of hurricane-rich seasons that pummeled the Eastern Seaboard from the late 1940s through the 1960s.

This month marks the peak of hurricane season. According to Gray, we can expect an unusually active season with Atlantic storms named Arlene, Bret, Cindy, Dennis, and Emily arriving like bombs lobbed from afar. A vague fatalism prevails on fragile barrier-beaches like Cape Hatteras and Fire Island. A direct hit anywhere from Miami to Montauk will only fuel the debate over coastal development and beach erosion. "You can have buildings," Pilkey says, "or you can have beaches. But you can't have both. We're only renting that space from nature." ■

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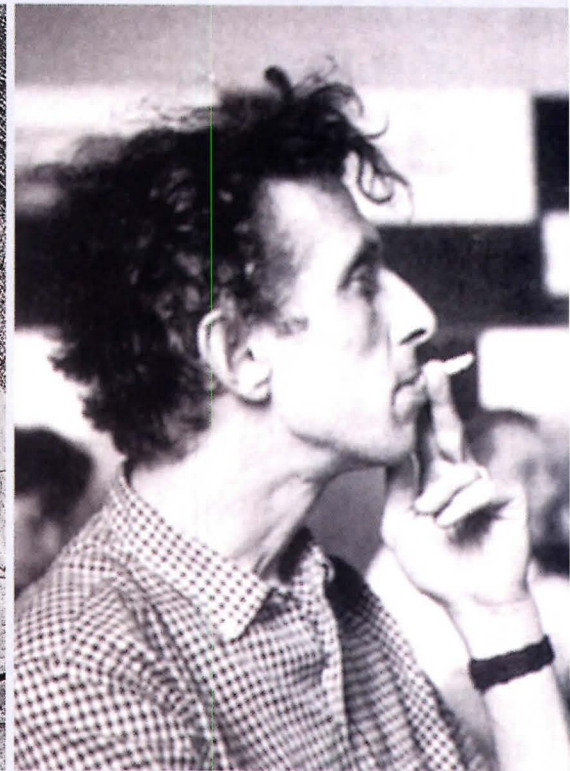


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Rebel With a Cause

Dutch architect Aldo van Eyck restored humanist values to modernist practice. By Liane Lefavre

Dijstraat Playground (before and after, 1954) is one of 734 playgrounds Aldo van Eyck built in Amsterdam. A humane and resourceful approach to postwar reconstruction, his playgrounds combined classical and De Stijl canons of composition. Portrait of van Eyck (right) taken by Peter Smithson, fellow “angry young man,” at Team 10 meeting of 1960 in Bagnols-sur-Cèze, France.

As recently as the 1960s, Aldo van Eyck (1918–1999) was one of the most influential architects in the United States. His design of the Amsterdam Orphanage (1957–60) sparked widespread attention after its publication, first in the Dutch *Forum* in 1959 (under his own editorship from 1959 to 1963), and later in other magazines around the world. Schools embraced the iconoclastic figure: For the next two decades, he was a popular guest at the University of Pennsylvania (where he held the post of Philip Cret Professor until 1982), Washington University, Columbia, Cornell, McGill, Rice, UC-Berkeley, and Harvard (in addition to the Technical University in Delft, Holland).

The orphanage should not have been a sensation. It was the 1950s, after all, when important architects were engaged in “prestige-making” for multinational companies, banks, institutions, and embassies. With few exceptions (such as Louis Kahn’s 1953 Yale Art Gallery), the architectural profession mirrored the culture of corporate boards and pin-striped suits. Buildings like Walter Gropius’ 1963 Pan Am Tower were the order of the day. Van Eyck’s building, on the other hand, was not only modest in scale and minimalist in form and materials, but reflected the personal agenda of a discontent whose pop-cultural equivalents might be Elia Kazan’s *Rebel Without a Cause* or John Osborne’s *Angry Young Man*. In a small but determined manner, the orphanage sought to overturn the mindless formalism prevalent

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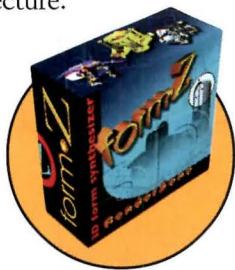


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Van Eyck described his **Hubertus House** (Amsterdam, 1976–78) as “rainbow bouquet;” it was devoted to “inbetweening” the most potentially vulnerable members of society—children—with their single parents (of either sex), and community at large.

at the time and bring humanist values back into architecture. The orphanage was especially significant because it embodied the value of community central to Van Eyck’s humanist approach. He believed firmly in architecture’s capacity to function as a tool for “inbetweening” (a term borrowed from philosopher Martin Buber’s famous 1923 book *I and Thou*)—that is, to bridge people, canons, scales, histories, needs, all. As a result, the distinguishing feature of Van Eyck’s works is not their elevations or material image, but their well-structured plans. The plan, to him, was a work’s most important dimension because it was a means of ensuring that people would meet, and thus build human connections.

Van Eyck’s appearance on the international architecture scene transformed the way people thought and talked about architecture. His “humanist rebel” stance nurtured a new generation of architects, signaling the beginning of a renaissance period for American architecture, when social issues such as sustainability and accessible technology, in addition to community, swept up young professionals. This change of sensitivity was typified by Edward Larrabee Barnes’ Haystack Mountain School (1959–61); Louis Kahn’s Richards Laboratory (1957–60); Sea Ranch by Moore, Lyndon, Turnbull and Whitaker (1963–65); and Venturi and Rauch’s Guild House (1961–65). By no means a lone voice in the wilderness, Van Eyck was one of the founding members during the 1950s of Team 10, a group of architects that included Alison and Peter Smithson, Shadrach Woods, Giancarlo De Carlo, and Jaap Bakema, among others. These figures were united by their critical attitude toward the vacuousness and callousness of 1950s culture and by their commitment to serving the postwar need to create humane habitats through new design techniques. They, too, were immediately absorbed into the American architecture scene, with De Carlo closely associated with MIT, the Smithsons at Yale, Woods at both Yale and Harvard, and Bakema at Harvard and Washington University.

Van Eyck’s rebelliousness dates to the immediate postwar period. At 28, he was among the first of his generation to decry the “mechanistic” approach to the human environment that characterized the approach of the preceding generation. The occasion was no less than the first postwar meeting of the Congrès Internationaux des

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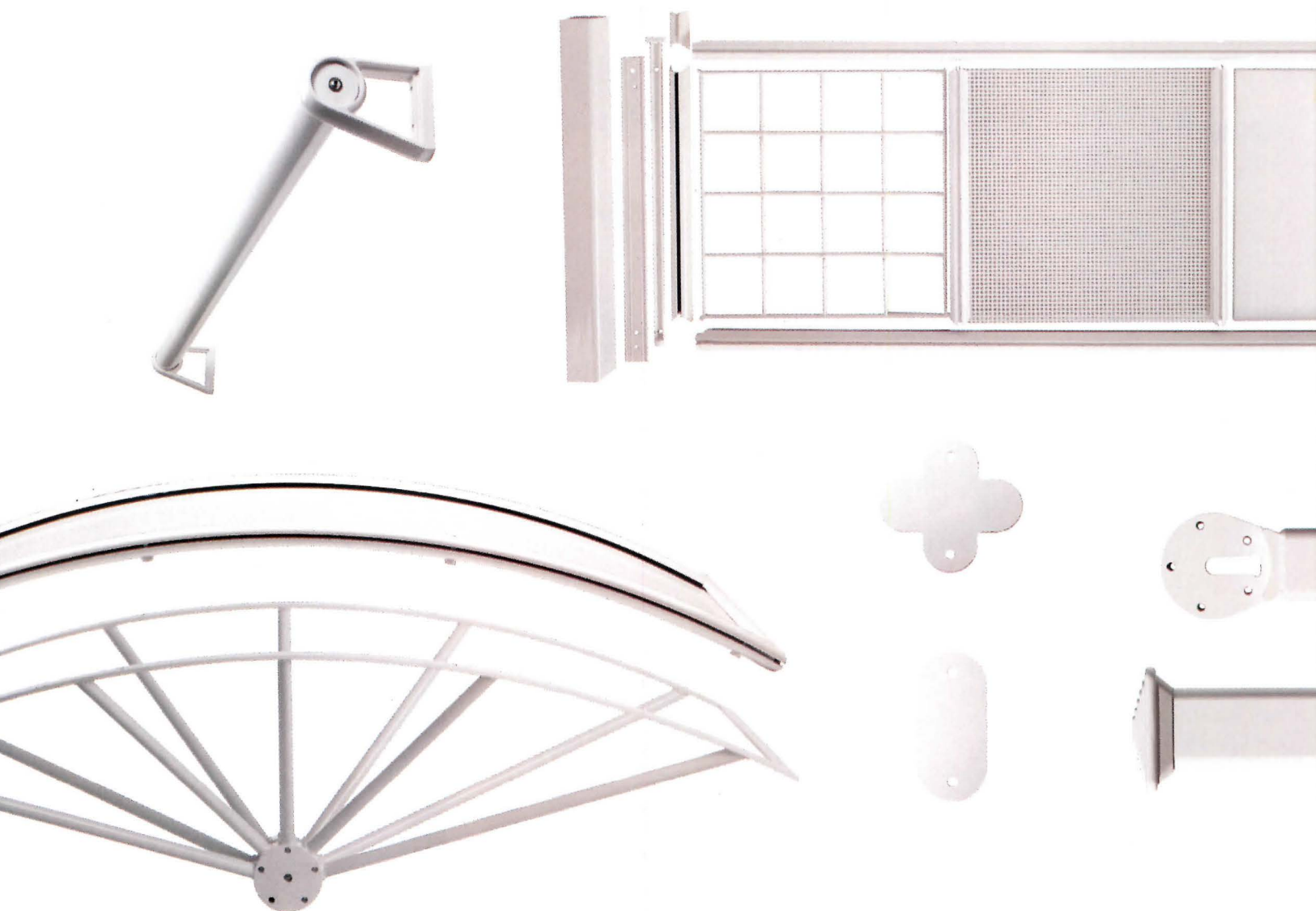
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Architects Moderne (CIAM), held in Bridgewater, England, in 1947, organized by the most prominent members of that generation: Le Corbusier, Gropius, and Sigfried Giedion. Despite his youth, his remarks made a huge impression: He was one of only two participants cited by Giedion in his account of the meeting in his 1951 book *A Decade of New Architecture* (the other was Le Corbusier).

Van Eyck had the chance to put his vision into practice at one of his first jobs, with Amsterdam's municipal planning department. A chief planner, Jacoba Mulder, asked him to design a playground near her house because the children in the neighborhood needed a place to play. This was postwar Amsterdam, a time of bleakness and austerity in all European cities. Working within the constraints of the time, Van Eyck's solution was minimalist, eschewing the high-maintenance components associated with traditional parks. There was no greenery, just basic play furniture: a sandbox, some monkey bars, and a few seats.

At precisely the time when French sociologist Henri Lefebvre was publishing his critique of the bleakness of everyday life in postwar Europe, the idea of small urban playgrounds took Amsterdam by storm. Van Eyck went on to design 734 of them over the next 30 years. It was through these modest works that his search for a humanistic alternative to CIAM modernism first took shape. With the playgrounds, Van Eyck was among the first to consciously conceive of and implement a type of postwar planning that, by the 1960s, came to be known as "incremental" or "infill" strategy. The playgrounds challenged the modernist approach to the city which had ignored minor or abandoned spaces in between buildings in its emphasis on massive, large-scale plans.

Throughout his half-century-long career, Van Eyck received numerous prestigious commissions throughout the Netherlands that allowed him to continue exploring the realm of the "inbetween." The ESTEC complex for the European Space Research and Technology in Noordwyk (1989) and Government Accounting Offices in The Hague (1997) are both rich variations on the classical labyrinth: It's impossible to walk through either of them without getting lost and meeting someone else in the same predicament. The users of both buildings (stereotypically systematic astrophysicists and accountants) actually appreciate that the main goal of their workplaces is not efficiency, but playful eccentricity and chance encounters.

In the 1980s and 1990s, architecture schools, magazines, and professionals increasingly turned their backs on the very values that had invigorated them a short time earlier. But Van Eyck never abandoned his ideals, remaining a humanist rebel all his life. As historian James Ackerman observed, he was unrelenting in his fight, first against the modernists, then against the postmodernists, and later against the post-postmodernists. His later work demonstrates his steady sense of responsibility: For example, his Hubertus House (1976-78), a home for unwed parents and their children, meant to replace traditional models of orphanages, was conceived to be a colorful rainbow, breaching the staid facades surrounding it. Now that community and livability are resurfacing as urgent concerns of our time, Van Eyck may be more relevant than ever before. ■

Liane Lefavre is a researcher at the Technical University of Delft. She has just published, with Alexander Tzonis, Aldo van Eyck, Humanist Rebel: Inbetweening in a Post-War World (Rotterdam: 010 Publishers and London: J. Wiley & Sons, 1999)

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If TV's **Mary Richards** ever returned to downtown Minneapolis, she'd hardly recognize the place. Back in the 1970s, she made a name for the city when, in the opening credits of the "Mary Tyler Moore Show," she threw her hat in the air, proclaiming her delight in moving there—an independent professional woman who might just make it after all.

Today, that sacred hat-tossing spot on Fifth Street and Nicollet Mall is a barren streetscape crossed by skyways that sit on temporary stilts. Two ongoing projects by architect Ellerbe Becket and developer Ryan Companies symbolize everything wrong with downtown Minneapolis—blank walls, parking lots, and the loss of small business.

Ironically, one of these projects is a new headquarters for Target Stores, sponsor and renovator not only of the Washington Monument, but also of the career of Michael Graves, who designed more than 200 household objects for the chain. The store is renowned for its clever ads (and merchandising) that mix high design and bargain culture. So

Off Target

Judging by the blandness of Target's new headquarters on Nicollet Mall, Minneapolis may not make it after all. By Frank Edgerton Martin

why has Target, the house that design built, thrown up a headquarters whose form and concept are strictly bargain-basement?


The headquarters for a design-savvy corporation like Target should be more than a decorated, build-to-suit box. But with a client that expects the design-build process to deliver projects the way retailers develop commodities, the result is going to look mass-produced. Creating a good urban office building is far different than commissioning a high-profile designer to conceive and develop specifications for a teapot to be made in Asia.

One could critique the building's tacked-on metal sunshades and cornice, endless precast panels, and staggered aluminum window mullions. But why bother? We've seen it so many times before: generic corporate modernism on a budget. And where 19th- and early 20th-century buildings once housed messy small cafés and galleries along Nicollet Mall, giving it the fine-grained character so few Midwestern cities possess, there is now a bland employee lobby and an undistinguished restaurant appropriately named Merchants.

Metal detailing can't replace the spontaneity that once existed along Nicollet Mall, truly one of America's great pedestrian esplanades, rich in its architectural texture and variety, and humane in its scale. Urbanity evolves over time, involving the serendipitous connection between human activities and the environments that house them. Unlike housewares, however, urbanity doesn't come out of a box. ■

Frank Edgerton Martin is a Minneapolis-based freelance writer.

Something boring this way comes: Ellerbe's new Target building (above left) foreshadows total eradication of Nicollet Mall's human-scaled urbanity.



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architecture



Around the Edges

Artist Saul Steinberg sketched in the margins, as it were—the margins of mainstream architectural criticism. His cheeky, pointed cartoons could poke as much fun or arouse as much ire about our built environment as the most eloquently penned newspaper column or magazine essay. Steinberg's work eventually found a place in mainstream consciousness in the pages of *The New Yorker*, but his work was born on the edges of convention.

Architects are following the late artist's example, embracing the periphery as an inspiring place to build. Serious designers aren't afraid of scrappy neighborhoods filled with taco stands and parking lots. They draw inspiration from and contribute to the fringes of the mainstream. The edge, as Steinberg realized, is fertile ground.

Drawing by Saul Steinberg from *The Passport*. Random House, New York, 1979

Rear-View Mirror

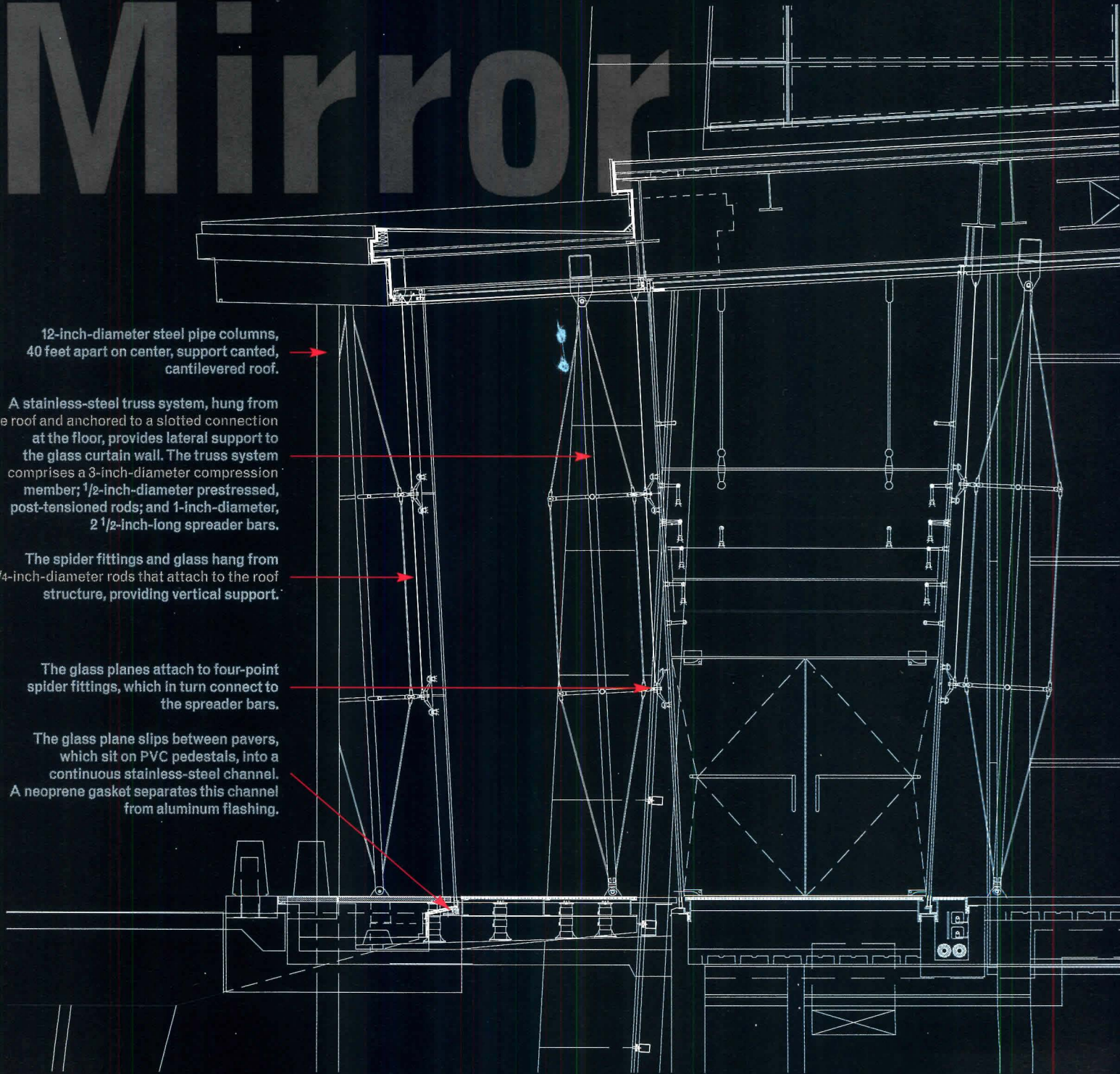
12-inch-diameter steel pipe columns, 40 feet apart on center, support canted, cantilevered roof.

A stainless-steel truss system, hung from the roof and anchored to a slotted connection at the floor, provides lateral support to the glass curtain wall. The truss system comprises a 3-inch-diameter compression member; 1/2-inch-diameter prestressed, post-tensioned rods; and 1-inch-diameter, 2 1/2-inch-long spreader bars.

The spider fittings and glass hang from 1/4-inch-diameter rods that attach to the roof structure, providing vertical support.

The glass planes attach to four-point spider fittings, which in turn connect to the spreader bars.

The glass plane slips between pavers, which sit on PVC pedestals, into a continuous stainless-steel channel. A neoprene gasket separates this channel from aluminum flashing.



Vestibule (facing page, and section, above) along east face of museum is reflective composition of glass planes supported by flexible truss system, designed to deflect 1 1/2 inches.

Smith-Miller + Hawkinson's crystalline addition to the Corning Museum of Glass looks back as it looks forward. By Ned Cramer



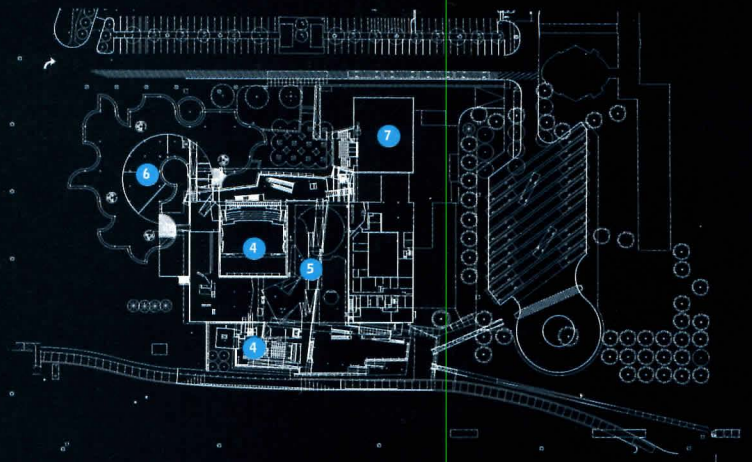
The Corning Museum of Glass in Corning, New York, lies midway on the road between New York City and Niagara Falls, making it, when it opened in 1951, a perfect honeymoon stopover for ex-G.I.s and their brides. Its exhibits extolled the marvels invented, in part or in whole, by the Corning glass company for the couples' new suburban homes: lightbulbs, television, oven-safe cookware. The modern museum designed by Wallace K. Harrison, one of the architects of the United Nations complex in Manhattan, was itself an attraction, a steel-and-glass symbol of standardized construction and progressive corporate benevolence. The museum embodied the hopes of postwar America.

Times change, however. Irony and complexity are now America's watchwords, leaving Harrison's optimistic architecture seeming almost naive. To bring the building up to date, intellectually and physically, Corning hired one of New York City's most progressive firms, Smith-Miller + Hawkinson Architects (SMH). Principals Laurie Hawkinson and Henry Smith-Miller have labored for six years to expand Harrison's original museum from a 68,000-square-foot Miesian box into a 117,000-square-foot architectural expression of contemporary chaos theory and poststructuralist philosophy. "Indeterminacy is a fact of life," Principal Smith-Miller asserts. He explains how he intends the building's new nonlinear circulation, angular surfaces, loosely defined spaces, and irregular plan to mimic the elaborate unpredictability that scientists read into natural systems such as weather, and that philosophers such as Jacques Derrida extrapolate from human behavior.

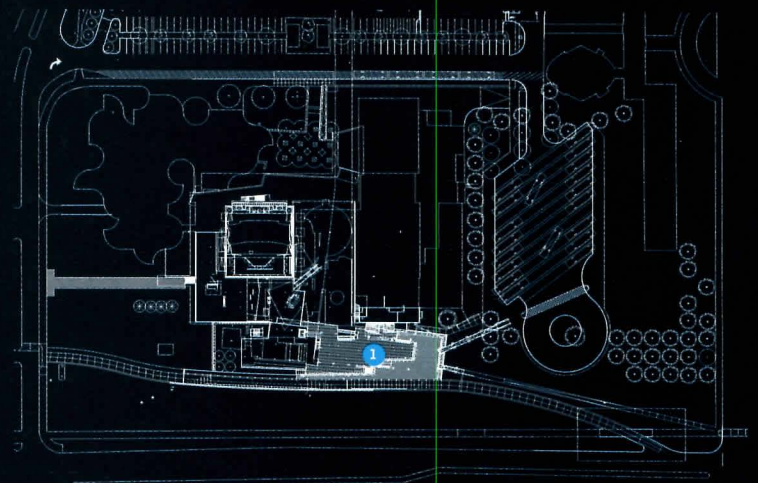
A vast new exhibit hall cuts through the original glass museum, linking two entrances by SMH that flank the east and west sides of the building. SMH completed the west lobby facing the heart of the Corning corporate campus in 1997. A sliver of space hugging Harrison's facade, it barely encroaches upon a courtyard between two existing wings: a muscular, Robinson ventilator-capped factory (1951) to the north that Harrison designed for the manufacture of Steuben glass, and the wonderful amoebic disco-ball of a gallery annex that architect Gunnar Birkerts added to the south in 1981. SMH's narrow, two-story lobby now opens on the ground floor to a large retail area,



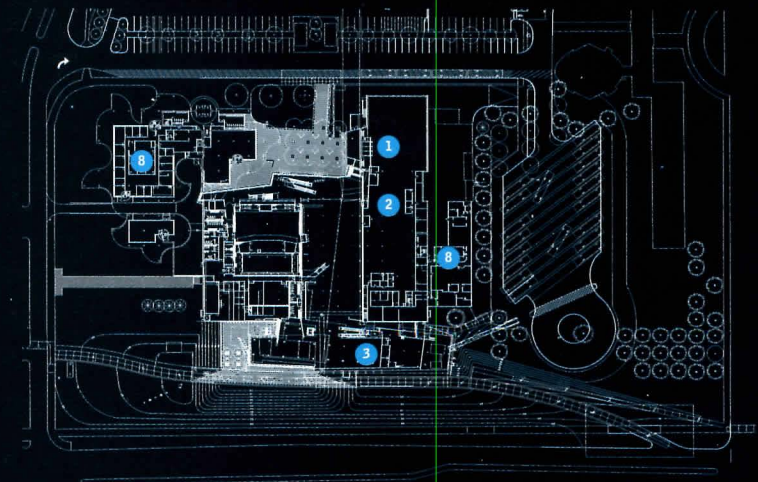
Glass volume encloses theater (above, at left), and connects north to lower entrance pavilion (above, at right). Entrance pavilion, seen from road (top), reciprocates earlier west lobby (center, 1997). Pedestrian ramp (facing page, above right) points to glass-enclosed foyer. Secondary entrance on north face of entrance pavilion (facing page, below) connects with Wallace K. Harrison's original building (at right).



Third-floor plan



Second-floor plan



First-floor plan | 126'/38m

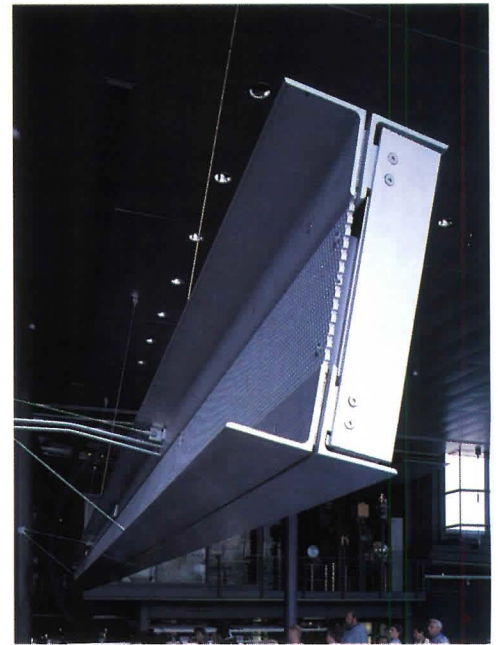
- 1 lobby
- 2 retail
- 3 cafeteria
- 4 theater
- 5 exhibits
- 6 Birkerts' annex
- 7 Steuben factory
- 8 offices

poorly outfitted by Foresight Design, and on the upper level to the exhibit hall, with marginally better displays created by Ralph Applebaum Associates.

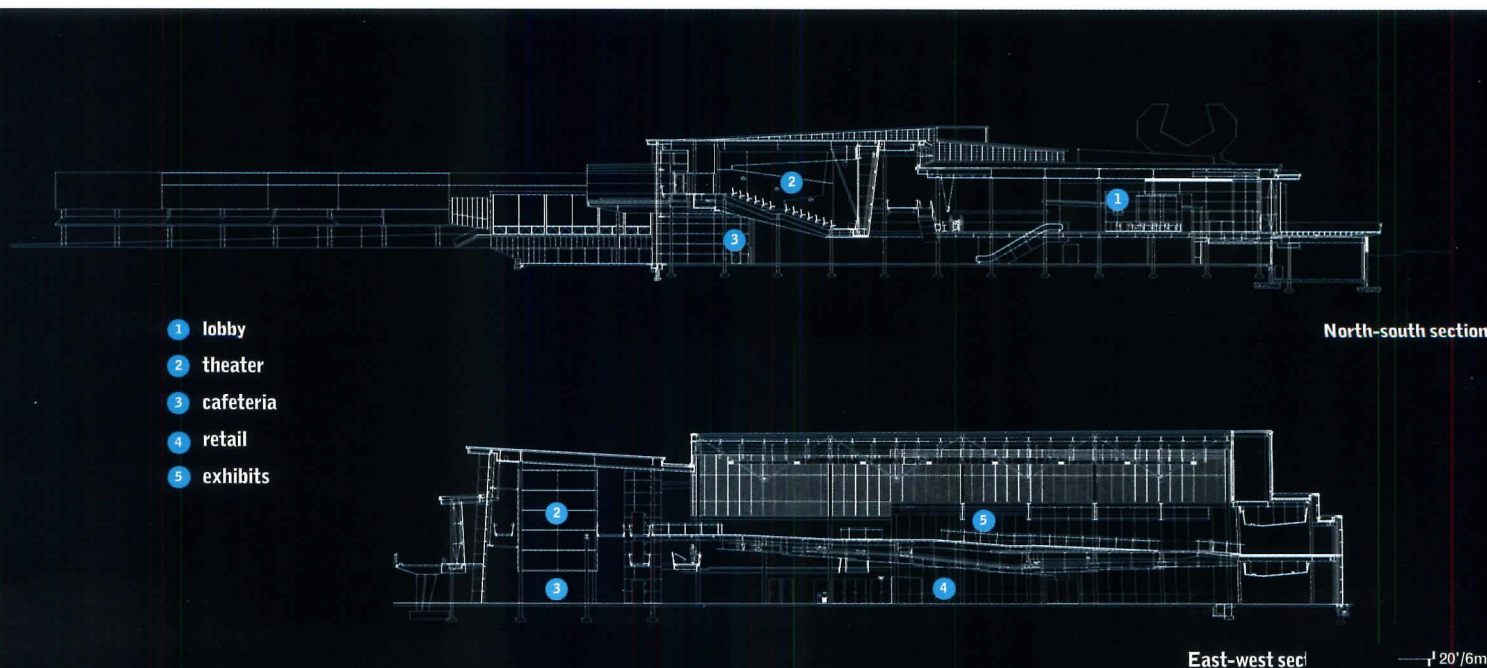
Although the tight site between two existing wings constricted the footprint of the western lobby, SMH had room on the east, along the street leading from the highway into town, to create a more assertively sculptural entrance. Here, a pavilion occupies a level midway between the exhibit hall and retail floor, with tilted metal-and-glass planes that riff Harrison's orthogonal original like a reflection in a fun-house mirror. Another glazed volume by SMH, attached to the south end of the entrance pavilion, encloses an elevated, freestanding theater, accessed by a catwalk. This two-part extension and the exhibit hall behind it opened in June, and it is here that SMH fully realizes its ideas.

Smith-Miller hopes the firm's work at Corning comes across as indeterminate, and to their credit the building's overlapping spaces and tangled structure largely do the trick. Yet the firm's meticulous design process, which somewhat surprisingly relies on pencil drawings and chipboard models as much as the computer, leaves little to chance. A tightly controlled set of architectural circumstances affect visitors' perceptions as they move through the building. An exterior pedestrian ramp provides a picturesque, oblique view of the entrance pavilion's northeast corner, directing people across an open plaza toward the front door. The next step leads to one of a pair of vestibules encased entirely in planes of glass supported by gossamer stainless-steel trusses and rods. It's like being trapped inside a kaleidoscope. In the face of the cutting-edge theories that the building's design supports, such concern for figural and processional experience is almost old-fashioned, even when the effect is deliberately disorienting.

"Where's the glass?" Hawkinson asked on her first visit to the Corning campus, where, surprisingly, given the company's mission, most of the architects before her had produced little more than standard curtain walls. SMH, by contrast, has finally given Corning a legible symbol of its principal product with an up-to-the-minute lesson in architectural glass—of which the two vestibules are the prime example. The museum's vitreous character harks back to the esoteric origins of modernist architecture, yet



Within entrance pavilion (facing page), visitors proceed down escalator (foreground) to shop designed by Foresight Design or to cafeteria. They can also purchase tickets at counter beneath LED (above), then take escalators to theater (background, at left). Ramp from theater (top) leads to exhibits by Ralph Applebaum Associates.







remains accessible to the general public. People who are accustomed to looking through, not at, glass, must contend with the material as an object with its own inherent physical properties. Glass placed on end or at an angle constantly confronts them, heightening their awareness of its color and reflectivity. "There isn't a piece of glass that isn't out of plumb or non-orthogonal in plan," boasts Smith-Miller.

SMH has designed an equally complex structural system: the elaborate truss that helps support the glass enclosing the vestibules as well as the rest of the east lobby; the grid of columns skewed at a 7-degree angle from Harrison's grid (a dimension picked up from the west lobby, where it negotiated the gap between the two wings); the giant exposed king-post trusses in the exhibit hall which open up floor space for Applebaum's displays; and a maze of walkways connecting the different levels. Where different elements overlap, the structure becomes absolutely byzantine in its density, a complete inversion of the standardization and replication that characterize Harrison's work. SMH's use of materials and construction methods is similar to Harrison's and renders the firm's elaboration of the structure ironic, even mannered.

Smith-Miller seems to delight in his criticism of Harrison's midcentury modernism. "Our building is not Miesian," he insists. Smith-Miller's first job out of architecture school was in Harrison's office: now, with Hawkinson, he's finally given the old boss a piece of his mind. ■





Catwalk to theater (facing page, above, at left) runs along glazed exterior wall. At end of movie, screen parts vertically to reveal entrance pavilion beyond. Indoor and outdoor cafeteria seating occupies level under theater (above). Poured-concrete vehicular ramp runs along outside of cafeteria's glazed wall.

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LANDSCAPE ARCHITECT: Quennell Rothschild Associates

ENGINEERS: Ove Arup Partners (structural/MEP); Hunt Engineers & Architects (civil)

CONSULTANTS: Claude Engle Lighting Design (lighting); R.A. Heintges Architects (curtainwall); TriPyramid (tension structure); Associated Construction Consultants (waterproofing)

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HGA's promising young designer, Joan Soranno, takes center stage with a gestural

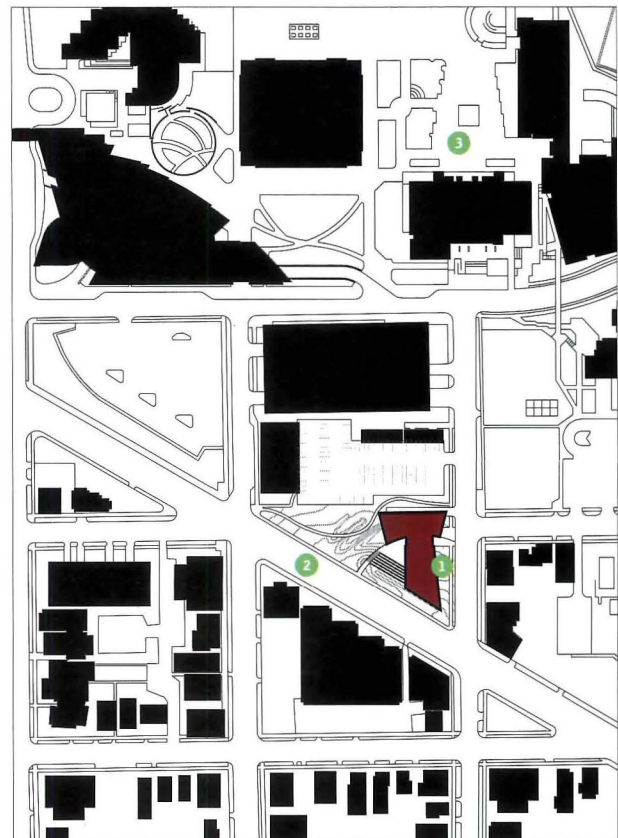
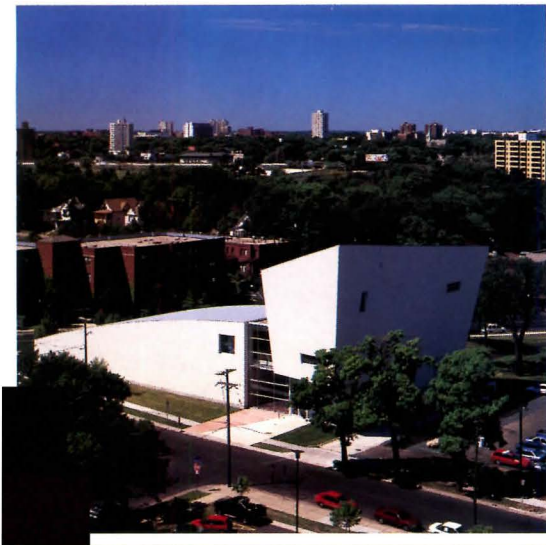


ance center in Minneapolis. **En Pointe** By Ned Cramer



Glazed lobby (facing page and above, center) links two-story volume housing black-box theater (at left) and three-story volume housing rehearsal studios (at right).

Dance center faces residential neighborhood (below) across Riverside Avenue (bottom). Soranno set windows deep into stucco-clad walls (facing page).



- ① dance center
- ② Riverside Avenue
- ③ West Bank campus

Site plan 1"=132'/40m

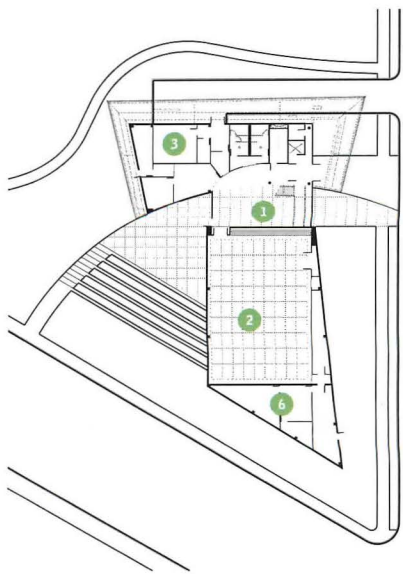
It takes imagination to picture an arts complex fitting into this characterless corner of the University of Minnesota's West Bank campus near downtown Minneapolis. The site is a no-man's-land of parking lots and incidental buildings that bleeds off into a scrappy residential neighborhood to the south. A barren collection of late-modern brick boxes constituting the core of the West Bank blocks the site's northeasterly run to the Mississippi River. Thankfully, the spirit of dance—or, more precisely, the soaring forms of the recently completed first building of *the projected arts complex*, the Barbara Barker Center for Dance—promises to raise this campus Lazarus from the dead.

The building's architect, Joan Soranno, was sensitive to the location's problems from the outset: She distinguished herself in the university's interview process for the dance center through her planning strategy. "Most people proposed orienting the building along Riverside Avenue," she recalls. Soranno pulled back from this busy thoroughfare, which cuts at a diagonal along the southwestern edge of *the triangular site* and separates the campus from the adjoining neighborhood. The 38-year-old partner at local heavyweight Hammel Green and Abrahamson instead chose to focus the main bulk of the

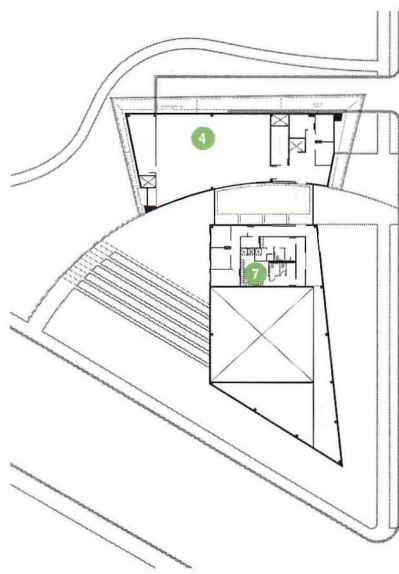
\$3.4 million building north and east toward tremulously beating heart of the West Bank campus.

With only 18,200-square-foot of program to distribute across a 1-acre lot, Soranno opted to build up. Two stacked, 2,100-square-foot rehearsal studios sit on top of the center's ground-floor offices along the northern edge of the site. A glazed double-height lobby links the stucco-clad rehearsal studio block to a black-box theater to the south, which is also clad in cream-colored stucco. In elevating the northern half of the dance center to such heights, Soranno was determined not to neglect the neighborhood across Riverside Avenue. But there was little program left to hold the street edge. Instead, a grass-sloped amphitheater nestles in the L created by the studio and theater wings, serving as a warm-weather amenity for the center's neighbors as well as for dancers. "The building has no back," Soranno asserts.

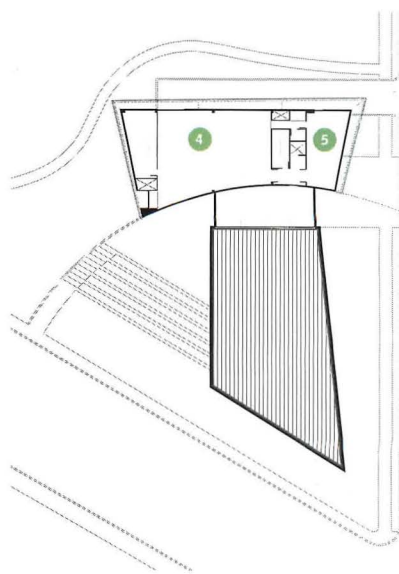
Soranno curves the south side of the rehearsal block, cants its other sides in plan and elevation, and sharply slopes the roof—creating a wedge-shaped form of considerable power and beauty to the east and northeast, where the rest of the art center will rise over *the next five* years. The theater is low-slung, trapezoidal in plan, and arc-roofed, in



First-floor plan | 1"=36"/11m ☰



Second-floor plan



Third-floor plan

- ① lobby
- ② black-box theater
- ③ offices
- ④ rehearsal studio
- ⑤ classroom
- ⑥ backstage
- ⑦ locker room

Debut	Hammel Green and Abrahamson	Minneapolis
		
Partner: Joan Soranno	<p>Though Joan Soranno studied architecture at the University of Notre Dame and grew up in California, New England, and Italy, she has all the makings of a homegrown Minneapolis architect. The offices of James/Snow Architects and Meyer Scherer & Rockcastle (MSR)—the city's undisputed design leaders—served as her training ground. At 38, Soranno is poised to join their ranks with the corporate support of local giant Hammel Green and Abrahamson (HGA), where she made partner in 1995.</p> <p>It's just possible to spot the tip of Soranno's new Barbara Barker Center for Dance from the riverfront galleries of Frank O. Gehry Associates' Weisman Art Museum in Minneapolis, on which Soranno worked with the project's architect of record, MSR. The experience helped whet her appetite for institutional work. She went on to be project designer for the Minnesota Children's Museum (<i>Architecture</i>, November 1996, pages 86–93) under Vincent James and Julie Snow (who have since established separate practices). At HGA, she's currently midway through schematic design on a museum for the University of Alaska in Fairbanks (above).</p>	



Dancers practice in studio (above right) along bar in window overlooking lobby. Giant photographic mural and freestanding steel stair animate lobby (right). Angle between theater wing (facing page, at right) and rehearsal-studio wing (at left) serves as backdrop for amphitheater.

counterpoint to the upward-reaching rehearsal studio block. And while from certain angles the two stuccoed forms play beautifully off one another, more often than not, the dramatic studio block alone begs the spotlight with its precipitous outward-leaning corner.


The corner's stuccoed skin peels away at the base, where the glazed lobby extends beneath the rehearsal studios, to reveal a thick, tilted supporting column. There should be more moments like this one. Soranno maintains that the center takes its shape from the "movement, balance, lift, and extension" of dance. But where a dancer's defiance of gravity takes shape in gorgeous workings of bone, tendon, and sinew, there are few comparable instances in which the center's structure finds visual expression.

Functional necessity allowed the interiors equally few opportunities to shine: The black-box theater is just that—a box. It's the most extreme example of the lack of correspondence between the building's non-orthogonal exterior and its boxier interiors. Carefully framed views of the lobby and downtown Minneapolis ornament the two rehearsal studios, but only tantalizing vestiges of irregular form and structure survive the obligatory installation of practice mirrors and sound-

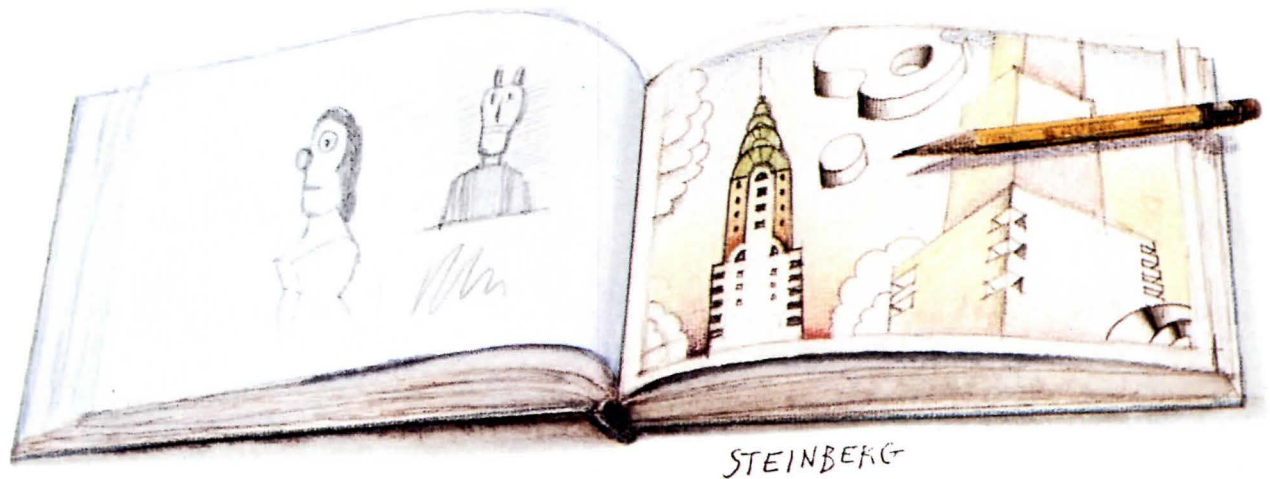
dampening tile ceilings. Two secondary staircases, of all places, reveal the spatial drama otherwise lost in this straightening up. They're happily constricted in the dynamic found spaces between squared-off interior rooms and angled exterior walls.

The beautifully lit and proportioned lobby, which Soranno considers "a void between two solids"—the theater and studio blocks—benefits from a freestanding steel stair that elegantly follows the gentle curve of the studio wing's south wall, as well as from balcony and window openings punched in the walls of the two wings. Ironically, however, for such an otherwise sculptural building, it is a dynamic, two-dimensional artwork covering the lobby's south wall that lends the greatest sense of movement to the space: a suggestively blurred photographic mural of dancers by Soranno's sister, Kathy, a local graphic designer.

"My process is intuitive, not intellectual," Soranno asserts. On the scalding summer day that I visited the building, dancers seemed as conscious of Soranno's spaces as of a skilled new partner: taking position along the ballet bar in the rehearsal studio windows, sunning in the amphitheater, stretching gracefully on the lobby floor. For the most part, Soranno's instincts have served her well. ■



BARBARA BARKER CENTER FOR DANCE, MINNEAPOLIS
CLIENT: University of Minnesota Board of Regents
ARCHITECT: Hammel, Green and Abrahamson, Inc. (HGA), Minneapolis—Gary Reetz (principal-in-charge); Joan M. Soranno (project designer); John Cook (project manager/project architect); Rebekah Ebeling, Nancy Blankford, Stephen James, Dan Groethe, Rich Firkins, Brett Dearing, Danielle Caputo, Kendra Fjerstad (project team) **LANDSCAPE ARCHITECT:** HGA
ENGINEERS: HGA (structural); MMC (mechanical); Parsons Electric (electrical); HGA (civil)
CONSULTANT: Kathy Soranno, Yamamoto Moss (mural)
GENERAL CONTRACTOR: Kraus Anderson
COST: \$3.4 million **PHOTOGRAPHER:** Jeff Goldberg/ESTO



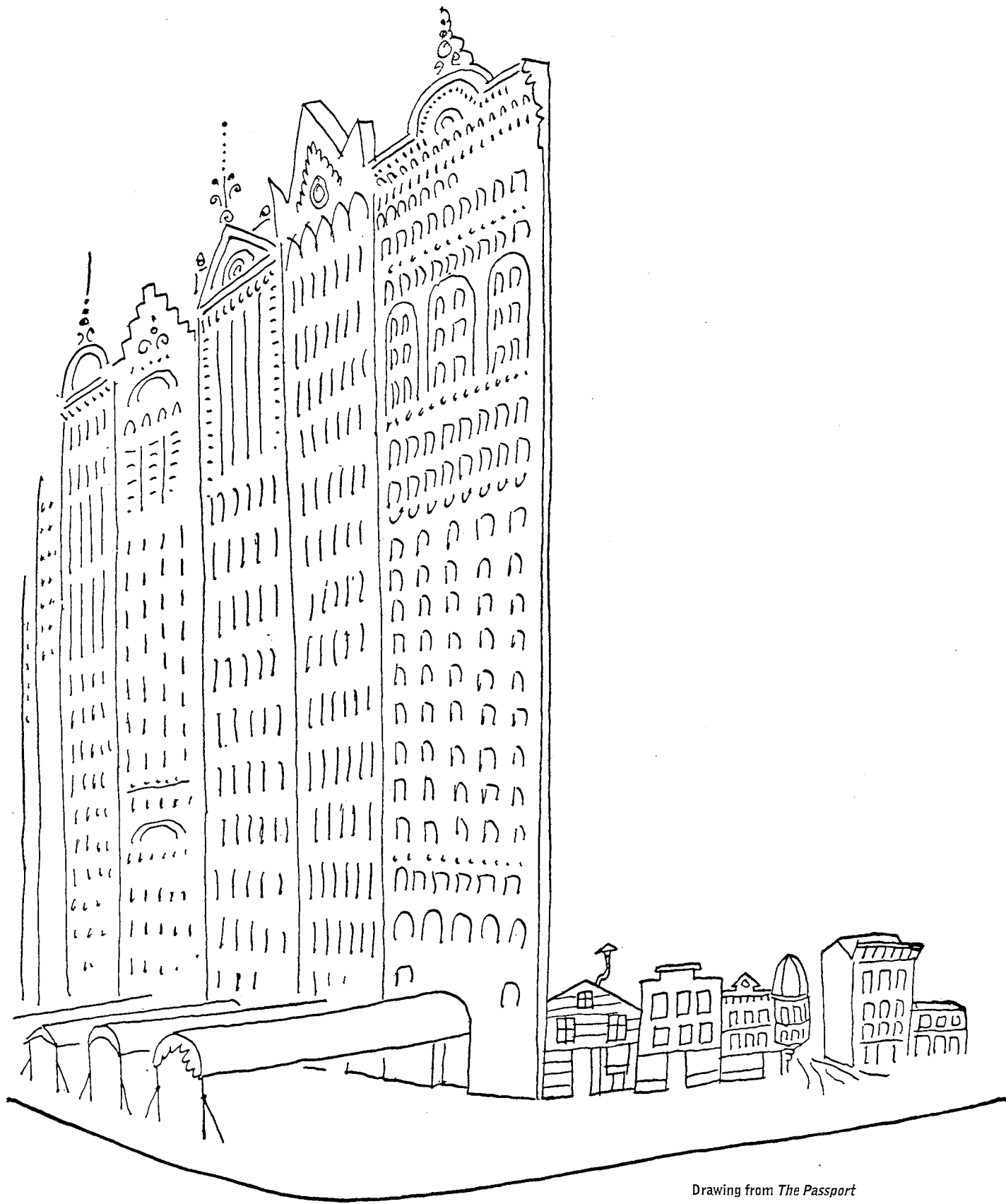
CARTOON CRITIC

Saul Steinberg's drawings were often witty criticisms of contemporary architecture. By Peter Blake

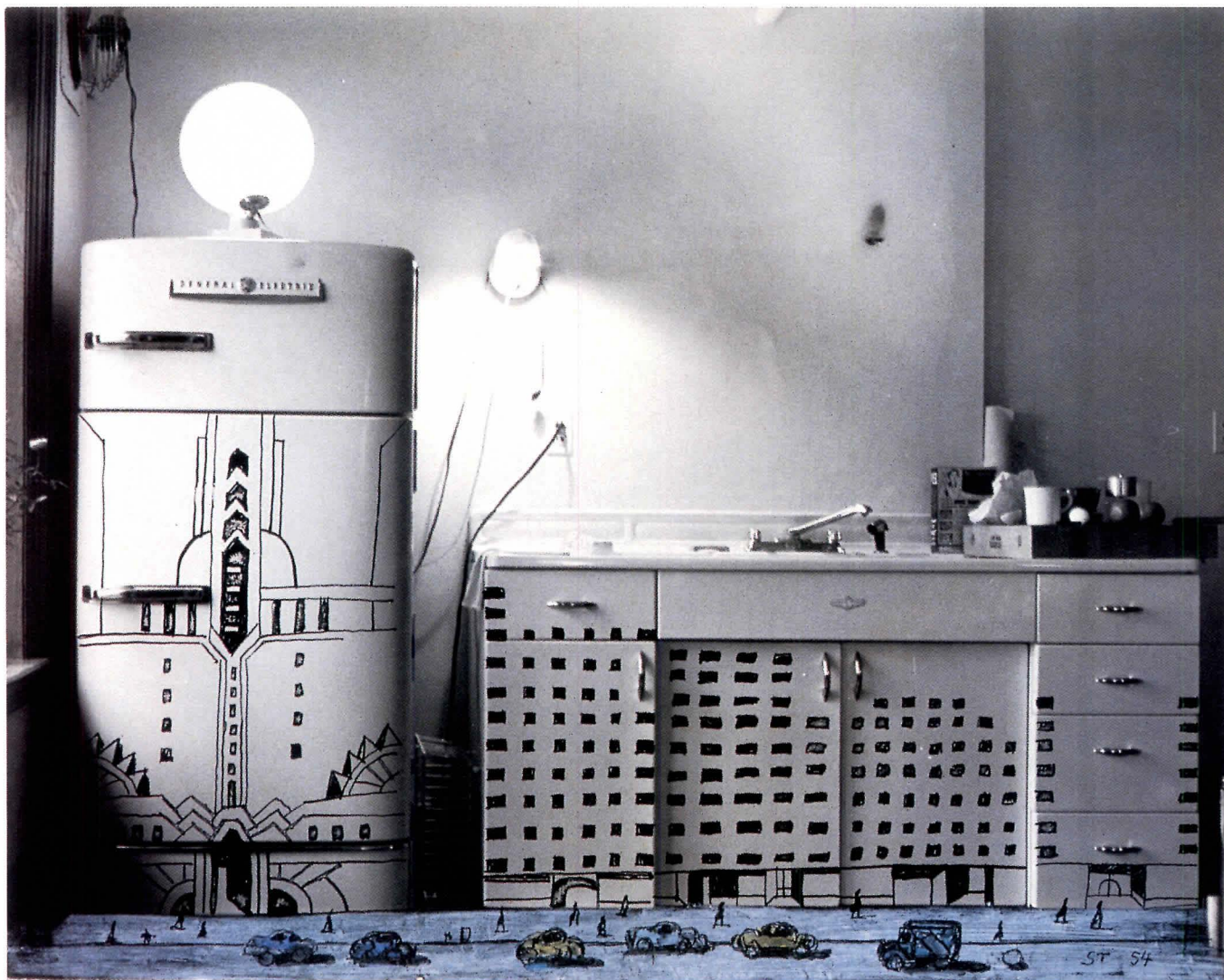
When artist **Saul Steinberg** died on May 12, in New York City, nobody seemed to know exactly how to define him and his work. Most people said he had been a cartoonist; some wrote that he had been an extraordinary draftsman—possibly one of the very best in our century; and some realized he had been a genius. His friend, *New Yorker* art critic Adam Gopnik, wrote, “Saul Steinberg was the greatest artist to be associated with this magazine, and the most original man of his time.”

Those of us who loved him as a dear and irreplaceable friend knew something else about him: Saul had been an architect, of all things! He attended architecture school at Reggio Politecnico in Milan after leaving his native Bucharest, and received a doctoral degree in architecture there in 1940. Among his friends at Politecnico were people like Ernesto Rogers, who continued to visit him many years later in the Hamptons, before it became a fashionable resort for rich twitterati from Hollywood and Manhattan. Those were the days when the Eastern end of Long Island was the outpost of artists like Tino Nivola, Robert Motherwell, William DeKooning, and Jackson Pollock—and a bit later, of the quiet and delightful Saul Steinberg, who preferred to speak with drawings rather than words.

Nearly 20 years ago, in another publication, I wrote that “almost everything that has been said and written about architecture during the past forty years was said much better, much more clearly, much more amusingly, much more incisively and much earlier by this extraordinary artist. . .and without the use of a single word!”



Drawing from *The Passport*
Random House, New York, 1979



Kitchen Street, 1954

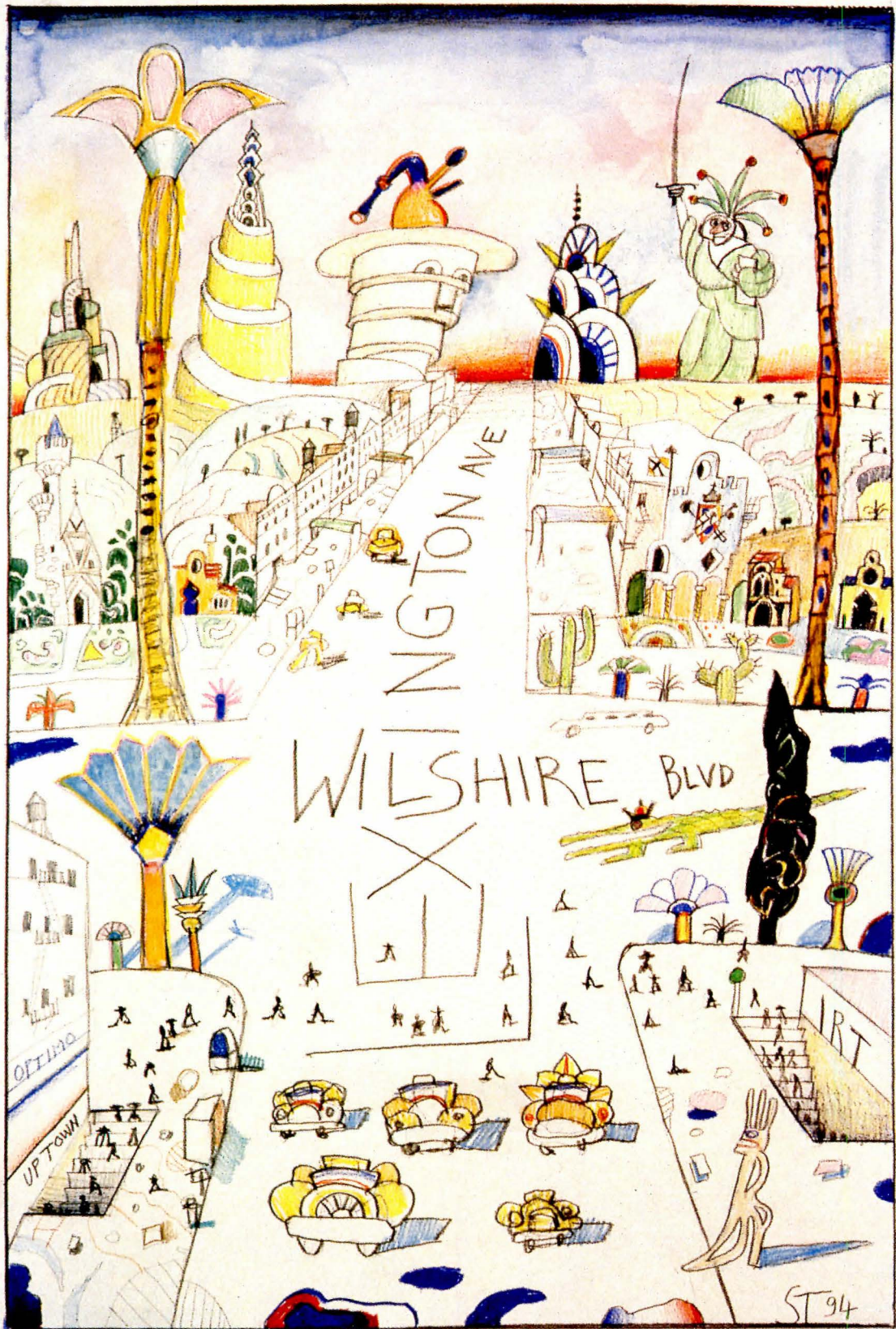
Colored pencil, gouache, and ink on black-and-white photograph

It was clear to me then, and it is even clearer to me today, that Saul was by far the most brilliant architecture critic in the United States in the past half century. His charming drawings anticipated almost everything that would soon be translated into real buildings, often by several decades. He anticipated minimalist, all-glass skyscrapers by close to 20 years; he anticipated false fronts and “decorated sheds” long before Robert Venturi surfaced; and he anticipated buildings in the form of nuts and bolts long before Piano and Rogers came up with their Centre Pompidou. Saul drew up skyscrapers in the form of giant, 19th-century credenzas before Philip Johnson came up with his AT&T Building; and while I cannot find a Bilbao-shaped Steinberg, I am certain Frank Gehry found Saul’s drawings as inspiring as the rest of us did.

Saul’s drawings were precise, to the point, and entirely clear—none of which can be said about current American architecture criticism. When Saul wanted to tell you that a building looked silly, he would draw it to look silly. When he wanted to tell you that a building looked sexy, he would make it look sexy. When he wanted to make it look “postmodern,” he would make it look goofy. There was never any doubt about what he had in mind, and what he had in mind was invariably wonderful.

By the time Saul died, he had completed 85 covers for the *New Yorker* and more than 600 other drawings. These included his most famous cover—the panoramic view of the Western world as seen from, roughly, Ninth Avenue in Manhattan looking due west—a drawing subsequently ripped off by magazines in every major city on earth, including Rome, Vienna, Berlin, Boston, Paris, Florence, and several major Japanese metropolitan centers.

He never built any of his architectural projects, alas, but everyone else did, whether they realized it or not. He enriched our lives as surely as did his more famous architect friends—and he did it with a charm and wit that no one else in our time has matched. As Gopnik concluded in his obituary in the *New Yorker*: “Leaving us, he takes a world away.” But he also left us another one, and a memory to enjoy and to love. ■



Wilshire & Lex, 1994
Crayon, watercolor, and wax on paper

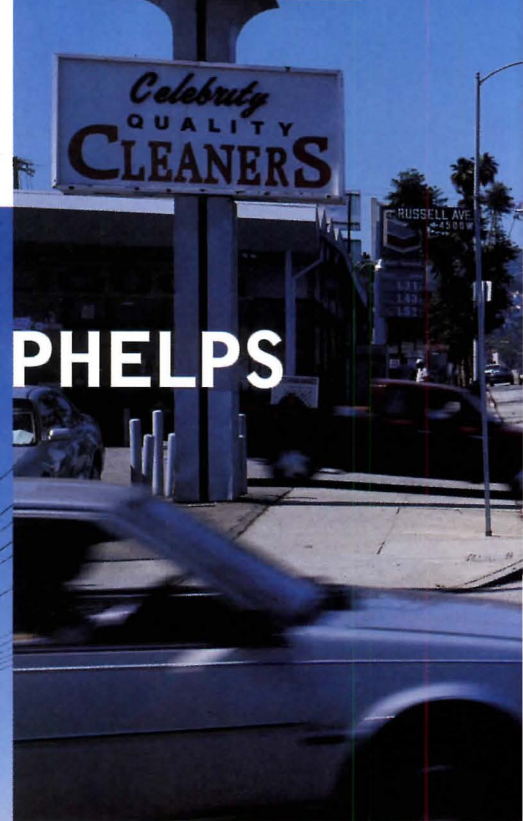
Contradictory and complex forces pulled at the design of the Los Feliz branch of the Los Angeles Public Library, designed by Barton Phelps & Associates. Located on a corner site that is urban along one street and suburban on the other, the scale and iconic message of the 10,000-square-foot, \$2.7 million building needed to be both civic and domestic. Different groups of citizens also demanded that the design acknowledge divergent local architectural traditions—Spanish Colonial as well as modernist (buildings by Rudolph Schindler, Richard Neutra, and Frank Lloyd Wright populate the nearby Los Feliz Hills). Phelps also needed to respect the mixed-income community's well-developed townlike identity within Los Angeles' larger metropolitan sprawl.

Rather than importing and imposing an esthetic or blending contextual influences into an innocuous transitional style, Phelps cultivated the contradictions as cornerstones of a design of multiple scales and personalities. To say the building is two-faced is not a pejorative comment,

DOUBLE

**A PUBLIC LIBRARY IN
LOS ANGELES BY BARTON PHELPS
RECONCILES CONFLICTS
IN SITE AND STYLE.**

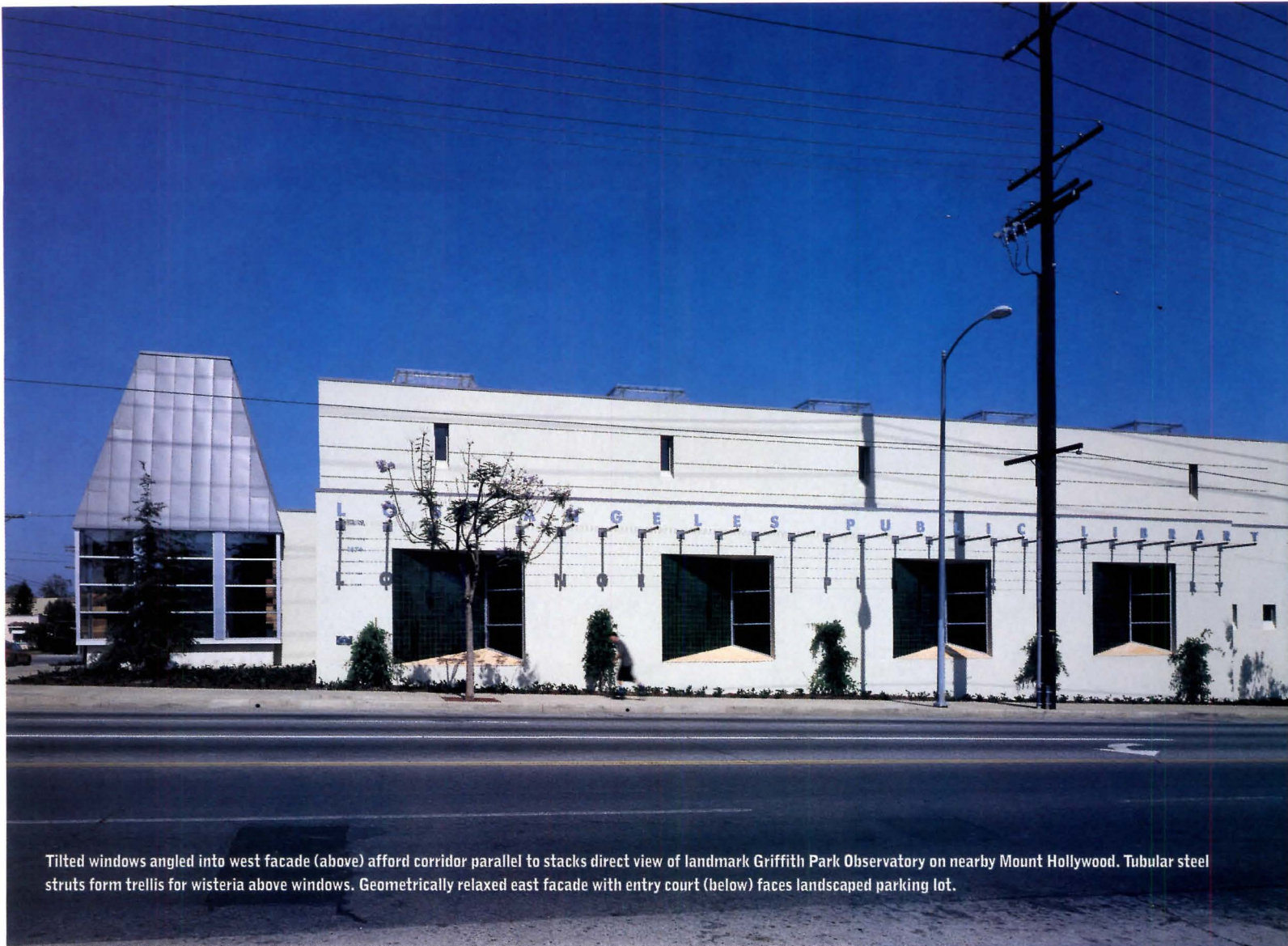
BY JOSEPH GIOVANNINI





IDENTITY

West facade of Los Feliz branch library (above), with stucco-clad cubic concrete masses, acts as street wall facing principal commercial artery of vibrant community. Fronting residential side street, north facade (facing page) with sloping roof is scaled to neighboring houses and to patrons approaching entrance on foot.



Tilted windows angled into west facade (above) afford corridor parallel to stacks direct view of landmark Griffith Park Observatory on nearby Mount Hollywood. Tubular steel struts form trellis for wisteria above windows. Geometrically relaxed east facade with entry court (below) faces landscaped parking lot.

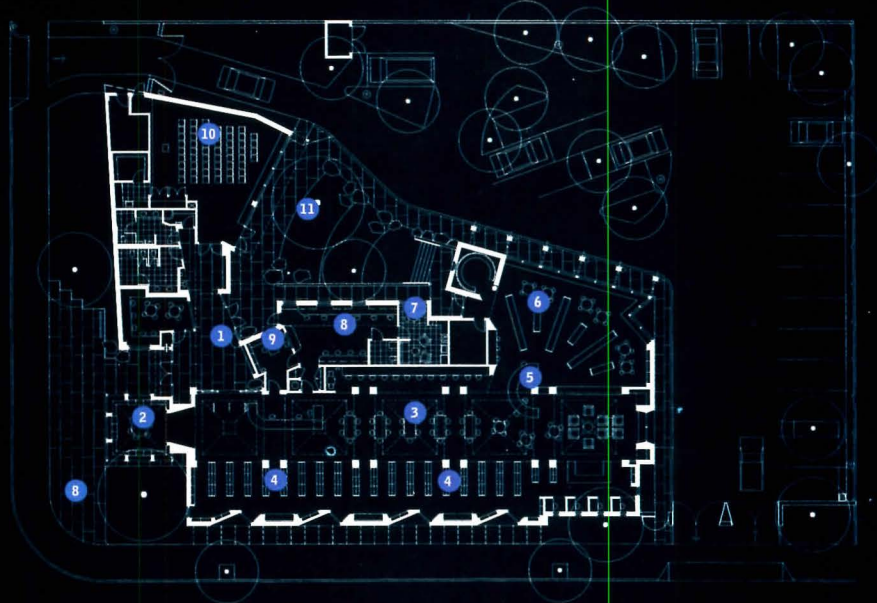
but an appreciation of a Solomonian design approach. The architecture reads differently from various angles because of the multiple contexts acknowledged and sustained in the design's own site-specific responses.

The site, on a corner of Hillhurst Avenue, the main street of this East Hollywood district, needed a building that anchors the south end of a pedestrian strip and carries its street wall. Here the architect planted a long, closed volume that parallels Hillhurst, backed up by a taller volume punctuated by slotted clerestory windows. In the long wall parallel to the street, Phelps carved out angular, oversized windows reminiscent of Marcel Breuer's Whitney Museum in New York City. Near the front corner, the architect placed a glass-enclosed cube topped by a truncated pyramidal roof, which serves as a lantern as well as a fishbowl for the teenagers who gather there. The cube pairs with a tall, angled wall that slopes down to the neighboring houses to form a spatially ingrating entry that gently ushers visitors toward the front door and vestibule.

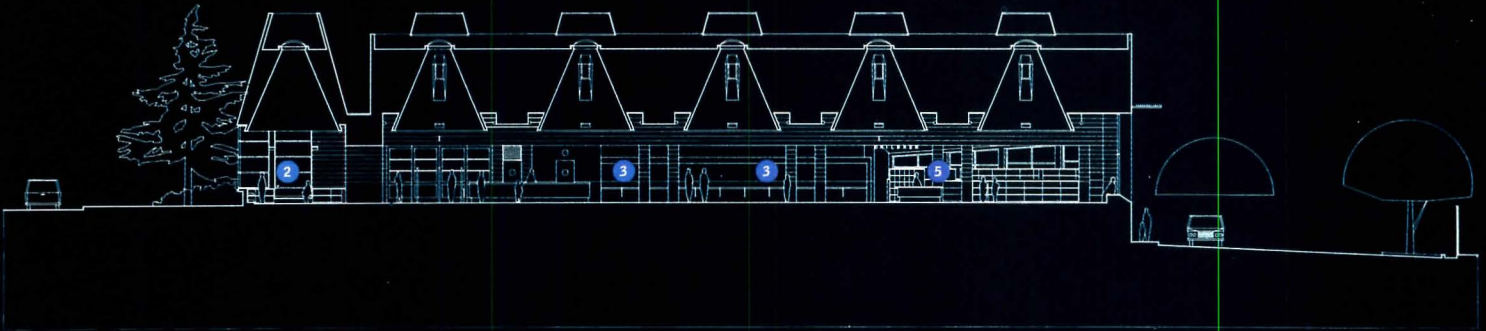
People who drive to the library know the building better from the parking lot, which Phelps designed as a landscaped garden. From this side, patrons encounter the second of the library's two faces: the geometrically relaxed back facade with shed roofs that bring the high volume seen from the street down to a domestic scale. The undecorated walls incorporate the thickness of the area's Spanish Colonial buildings, but they also exhibit the surface abstraction of modernist buildings. Two of the windows are monumentally large, though coyly subdivided. A small garden of decomposed granite borders the parking lot, stepping down like an informal amphitheater. The curved back edge of the amphitheater pairs with the curved glazed wall of a community room to funnel arrivals toward the back door of the library's vestibule.



- 1 entry foyer
- 2 young-adult collection
- 3 reading room
- 4 stacks
- 5 information desk
- 6 children's collection
- 7 staff lounge
- 8 workroom
- 9 librarian's office
- 10 community room
- 11 amphitheater

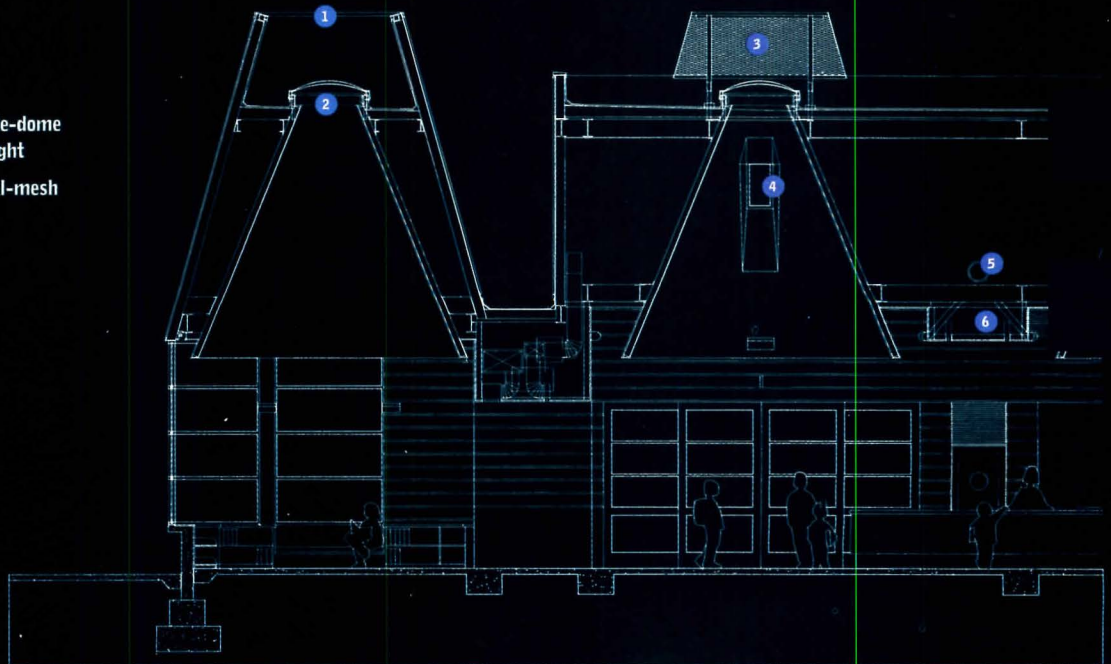


Plan | 1" = 20' / 6m



North-south section | 1" = 13' / 4m

- 1 skylight shade
- 2 insulated double-dome fiberglass skylight
- 3 expanded metal-mesh skylight shade
- 4 window
- 5 HVAC duct
- 6 HVAC plenum



Detail section through skylights



The vestibule serves both back and front entries and leads to the community reading room to the east and the main library to the west. Phelps calls this the “crunch” space, because the loose assembly of forms—the cubic volume on Hillhurst and the shed forms of the back—converge here in a tall and short, wide and narrow room with angled walls and a multilevel ceiling. Rather than starting the library visit with a formal ceremonial space, Phelps introduces the visitor into a room where other parts of the building end and meet. This space is a place of convergence that implies other, more distant reaches of the building.

Nothing in the small, informal entry announces the surprise of a long, basilican reading room that runs from the glass cube at the front to a monumental, oversized window at the back. Phelps moderates the grandeur by paneling the lower register of the space with warm redwood siding. A succession of room-wide pyramidal skylights opens the already tall ceiling to oculi at their peaks. This is what Phelps calls “the space of light,” where people bring their books to read in a luminous hall that imparts a sense of community. Book stacks line one side of the long room, their ends aligning with the columns to form a hybrid colonnade. A run of computers lines a long alcove opposite.

A circular desk two-thirds of the way down the hall fans in one direction to an armchair reading area and study carrels beyond, and in the other direction to the children’s reading room, under a shed roof that brings the height of the central hall down to a friendlier scale for children. In a library where each of the four facades has a different scale and fenestration, all adapted to a specific role, there is a diversity of interior spaces.

With this library, Phelps meets conflicting demands without being literal and without averaging responses into bland compromise. The architect creates a unique assembly of familiar parts and functions that acknowledges the diversity of the community and the site. Exuberant and restrained, generous and disciplined, the building is a seasoned and literate work that knows its place and audience without forgetting the most civilized of its responsibilities—delight. ■

LOS ANGELES PUBLIC LIBRARY, LOS FELIZ BRANCH, LOS ANGELES

CLIENT: Los Angeles Public Library **ARCHITECT:** Barton Phelps & Associates, Los Angeles—Barton Phelps (principal); David Haggarty (project architect); Ron Calvo, Jeanette Fabry, Markku Kari (project team) **LANDSCAPE ARCHITECT:** Bernstein & Lehrer Landscape Architecture **ENGINEERS:** William K. Koh & Associates (structural); Storms & Lowe Consulting Engineers (mechanical, electrical, and plumbing) **CONSULTANTS:** CMS Consultants (specifications); Davis Langdon Adamson (cost); McKay Conant Brook (acoustical); Shiler and Associates (daylighting) **ARTIST:** Joyce Dallal **GENERAL CONTRACTOR:** Ford E.C. **COST:** \$2.7 million **PHOTOGRAPHER:** Tom Bonner



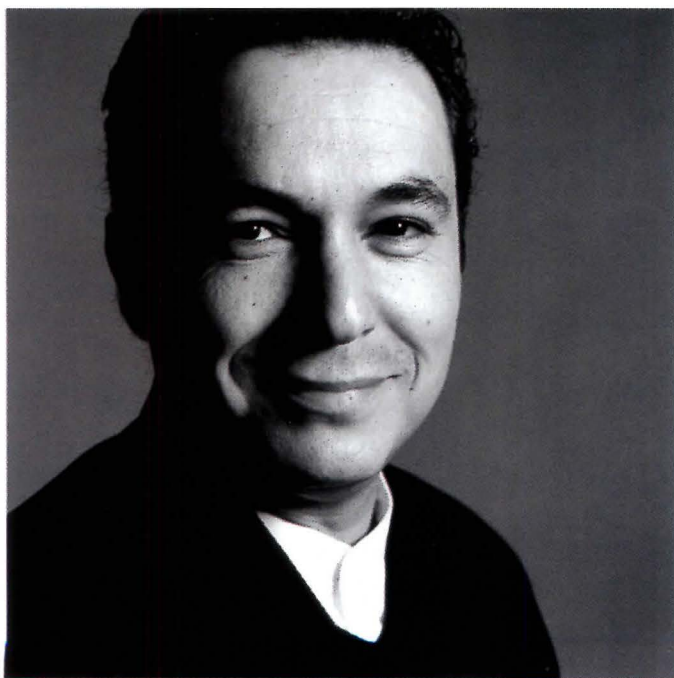
Glass-enclosed cube (below) with truncated pyramidal roof is clad in standing-seam aluminum. It operates as magazine reading room inside and as symbolic lantern for community outside, punctuating its corner location. Clear redwood-sided colonnade integrated with open-access book stacks warms main reading room (facing page), which is crowned by enfilade of five pyramidal skylights.



Portfolio

Dworsky Associates' design director, Mehrdad Yazdani, emerges as a leader in Los Angeles' architecture scene.

By Joseph Giovannini



Though working for corporate firms during his entire career, Iranian-born, Los Angeles-based Mehrdad Yazdani has exhibited an avant-garde intensity rare in the public arena and has succeeded in bringing a design sensibility characteristic of small studios to large, institutional projects. Yazdani, a 39-year-old graduate of the University of Texas at Austin and Harvard GSD, is director of design at the L.A. firm Dworsky Associates, and is at the vanguard of the new generation of talented younger designers attempting to prove that good design is not the exclusive provenance of boutique offices.

His first large project for L.A.'s Department of Water and Power (DWP) in Van Nuys (1987), shows the influence of Michael Graves, his first employer. By the second DWP building (1989), however, Yazdani embarked on a more modernist agenda, breaking the building into parts sensitive to specific site conditions (*Architecture*, July 1996, pages 74–79). Yazdani joined the Santa Monica office of Welton Becket in 1987 as senior designer (it became Ellerbe Becket in 1989). In 1992, he was named design principal at Becket, and in 1994 he moved to Dworsky Associates as design director.

While at Ellerbe Becket, Yazdani headed the design of the Metro Red Line Station at Vermont Avenue and Santa Monica Boulevard, and the Showscan Show of Motion Theater at Universal Studios' City Walk, which features a pleated, fanning facade animated by electronic imagery. Through all of the work, the basic diagram *has remained* extremely clear. Yazdani achieves complexity through sections, distribution of program, and the path of natural light through openings in layered forms. His strategy for public commissions—where budgets and bureaucracy normally work against fine-grained, detail-sensitive concepts—is to create buildings where big decisive strokes carry the design.

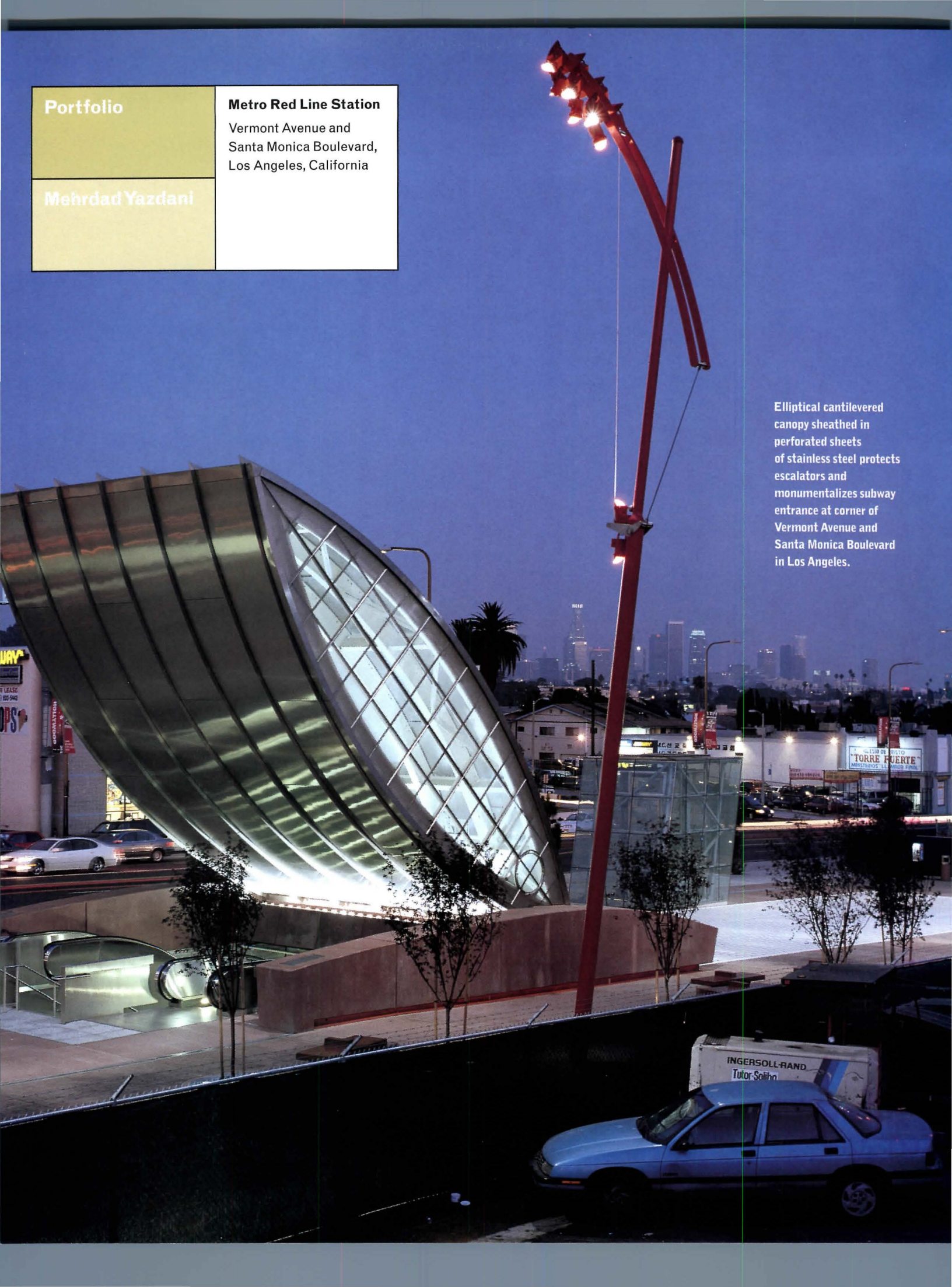
Portfolio


Metro Red Line Station

Vermont Avenue and
Santa Monica Boulevard,
Los Angeles, California

Mehrdad Yazdani

Elliptical cantilevered canopy sheathed in perforated sheets of stainless steel protects escalators and monumentalizes subway entrance at corner of Vermont Avenue and Santa Monica Boulevard in Los Angeles.





Beneath a ceiling of glass pavers, ribbed concrete walls of escalator well (this page) are stenciled with questions about the design process, an artwork created by Robert Millar in collaboration with Yazdani. Reflections on perforated-aluminum ceiling baffles and stainless-steel walls animate mezzanine and subway platform underground (facing page). Retaining walls are matte-finished, fluted concrete.



To Union Station

EXIT

Subway's entrance canopy and glass-sheathed elevator tower (facing page, top) define brick-and-glass-block-paved public plaza. Tensile red light standards (facing page, bottom right and left) illuminate 20,000-square-foot plaza.

Few architectural firms working on subways in Los Angeles survived the design regulations of the Metropolitan Transit Authority (MTA), where a limited range of permitted materials and predetermined underground envelope backed them into milquetoast schemes. As senior project designer with Ellerbe Becket's Los Angeles office, Yazdani worked within the same rules; however, pushing them to their limits, he created a subterranean transit station with a strong and elegant character, and an above-ground plaza that is unique among L.A. stations for its figural monumentality.

Yazdani conceived the subway interior as a concrete tube to be filled with functional elements, "a room carved out of the ground," he says. The largest inserted piece was a football-shaped mezzanine originally intended to float in the middle of the station. When the addition of a second entrance changed the station's overall configuration, he halved the football, placing each piece at either end of the tunnel. "The shape of the mezzanine reinforces the floating notion of an object caught in a box," he suggests.

Yazdani left no interior surface unexamined. To mask the seepage that has caused watermarks in all other Los Angeles subway stations, Yazdani cast corduroy concrete retaining walls with vertical fluting. Massive hypostyle columns, handrails, and interior wall panels are sheathed in brushed stainless

steel, the reflections of which animate the space with staccato visual rhythms. The acoustic ceiling baffles, made of perforated aluminum painted silver-gray, only partially cover the fluorescent light, breaking it into luminous dots and dashes, adding chaotic rhythms to the composition.

The escalator passage between the ground plane and the underground is an almost independent environment. Working with Los Angeles artist Robert Millar, Yazdani allows light to emerge as the primary material. A carpet of glass pavers in the entrance plaza forms a luminous ceiling for the escalator well. Millar exposes colored fluorescent tubes on one side of the concrete beams supporting the pavers; he introduces paintings on the other side. The artist expands discussions with the architect about the station into 10,000 questions, stenciled wall-to-wall in this entry passage. "The text is a fascinating exploration of the design process, and the relationship between art, architecture, and the community," says Yazdani.

Public urban space in Los Angeles is rare, and Yazdani made an attempt to reinforce the civic nature of the 20,000-square-foot top-side plaza through both design and programming. Unfortunately, the MTA did not agree to a row of shops on the long west edge, which would have animated and defined the plaza. But Yazdani's design invites the public into the plaza nonetheless: First, he color-coded the area as a field of red bricks, red lamps, and purple plum trees, then he made the field into a plateau of useful objects. The glass-enclosed elevator cabin leans, and the bench seats angle haphazardly toward the center, while six leaning fire-engine-red light standards seem to dance across the space, cables

suspending the arms. The glass pavers illuminating the escalators below form a stage that defines what Yazdani hopes will become a community performance space.

The great coup is a 30-by-30-foot elliptical entrance canopy that hovers over the escalators. The levitated, perforated stainless-steel object forms a backdrop for the potential performance space and marks the station entrance. The rhetorical device also monumentalizes the entire corner subway station with a gesture midway between billboard and exclamation mark. Illuminated from the inside at night, the canopy becomes a floating lantern, simultaneously high-tech and irrational.

VERMONT/SANTA MONICA/L.A. CITY COLLEGE METRO RAIL STATION, LOS ANGELES

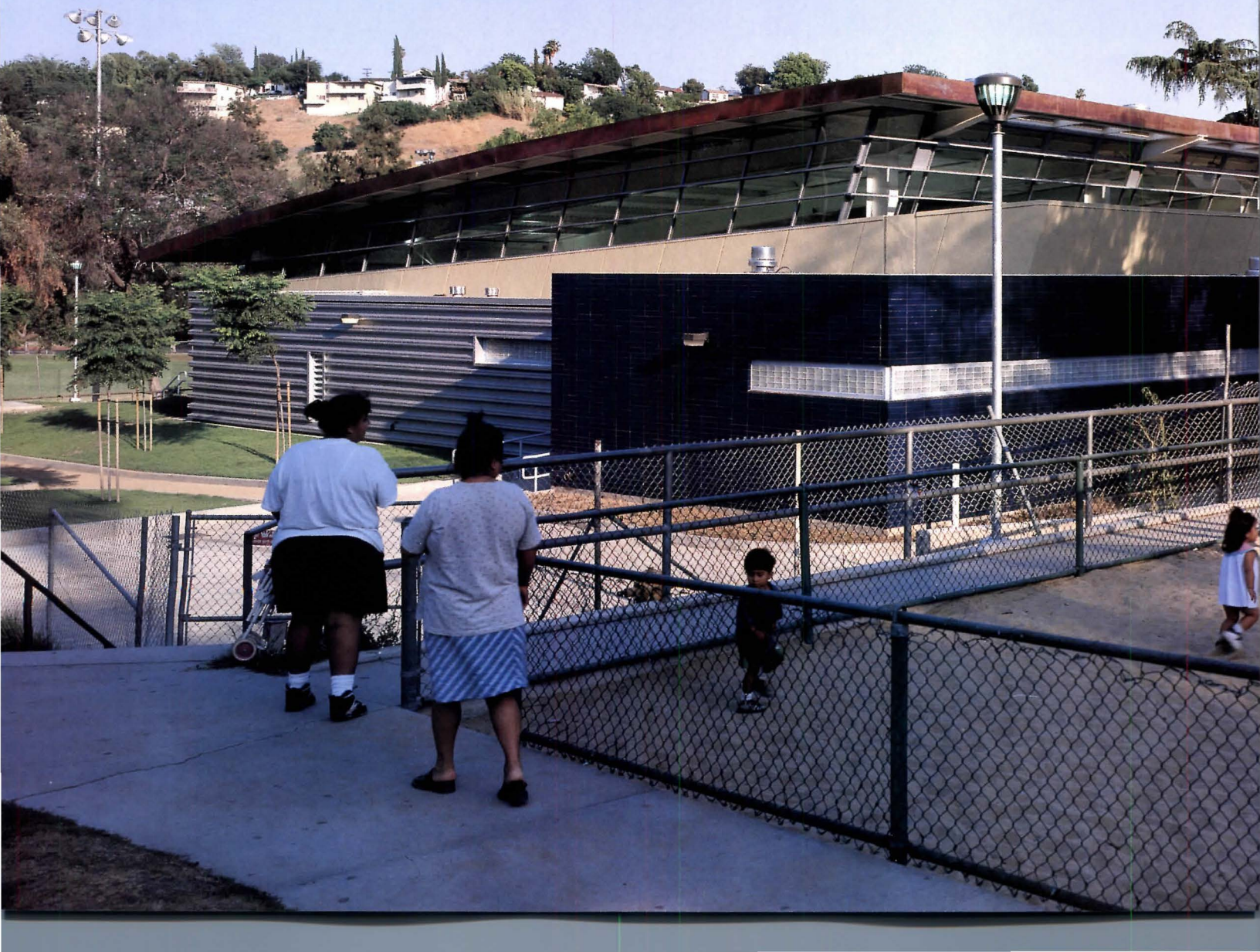
CLIENT: Los Angeles Metropolitan Transportation Authority **ARCHITECT:** Ellerbe Becket, Santa Monica, California—Mehrdad Yazdani (design principal), Louis M. Naidorf (principal-in-charge), Ingnatius Chau, Tom Goffigon (project managers), Craig Booth, Katherine Demetriou, Gary Friar, Jim LeFever, Greg Lombardi, Vernon Pounds, Iris Steinbeck, Yassi Vafai, Andrew Wong (project team)

LANDSCAPE ARCHITECT: Lynn Capouya Associates **ENGINEERS:** Martin & Huang International (structural); STV/Seelye Stevenson Value & Knecht (mechanical, electrical, civil) **CONSULTANTS:** Robert Millar (artist); Fraser (utility planning); Engineering Management Consultant (engineering consultant and project manager)

GENERAL CONTRACTOR: Kewit-Shea, A Joint Venture **COST:** \$58.8 million **PHOTOGRAPHER:** Timothy Hursley



Portfolio	El Sereno Pool and Recreation Center El Sereno, California
Mehrdad Yazdani	





Northwest corner of swimming pavilion (these pages) is layered vertically and horizontally in different materials—glazed brick, glass block, corrugated metal, and stucco—and forms. Low curved block houses services; arching roof echoes surrounding hills.

Few native Angelenos have heard of El Sereno, a quiet residential community of modest stucco, wood-framed houses set among the rolling hills of a virtually hidden valley northeast of downtown Los Angeles. The isolation breeds community identity: When the prospect of a new indoor pool came up for public discussion, there was a big and vociferous turnout at hearings.

Most citizens expected—and favored—a Taco Bell box, but Yazdani maintained that the surrounding hillscape defines the character and beauty of the enclave. He argued that a roof echoing the contours of the hill would minimize the mass of the building, making a transition between the sloping, higher part of the site and the lower playing field. Nature as an argument prevailed over a cliché passing as tradition in the dominantly Hispanic community.

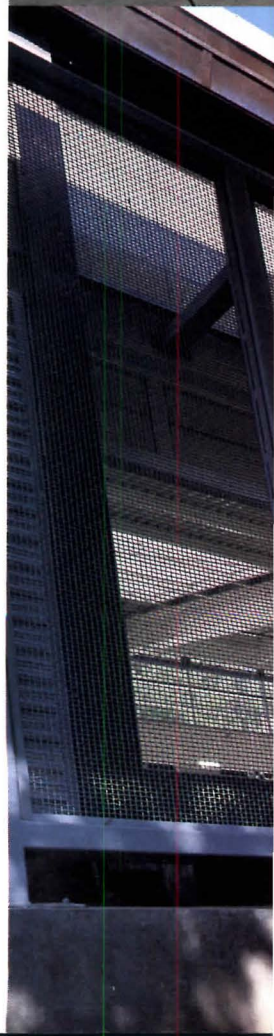
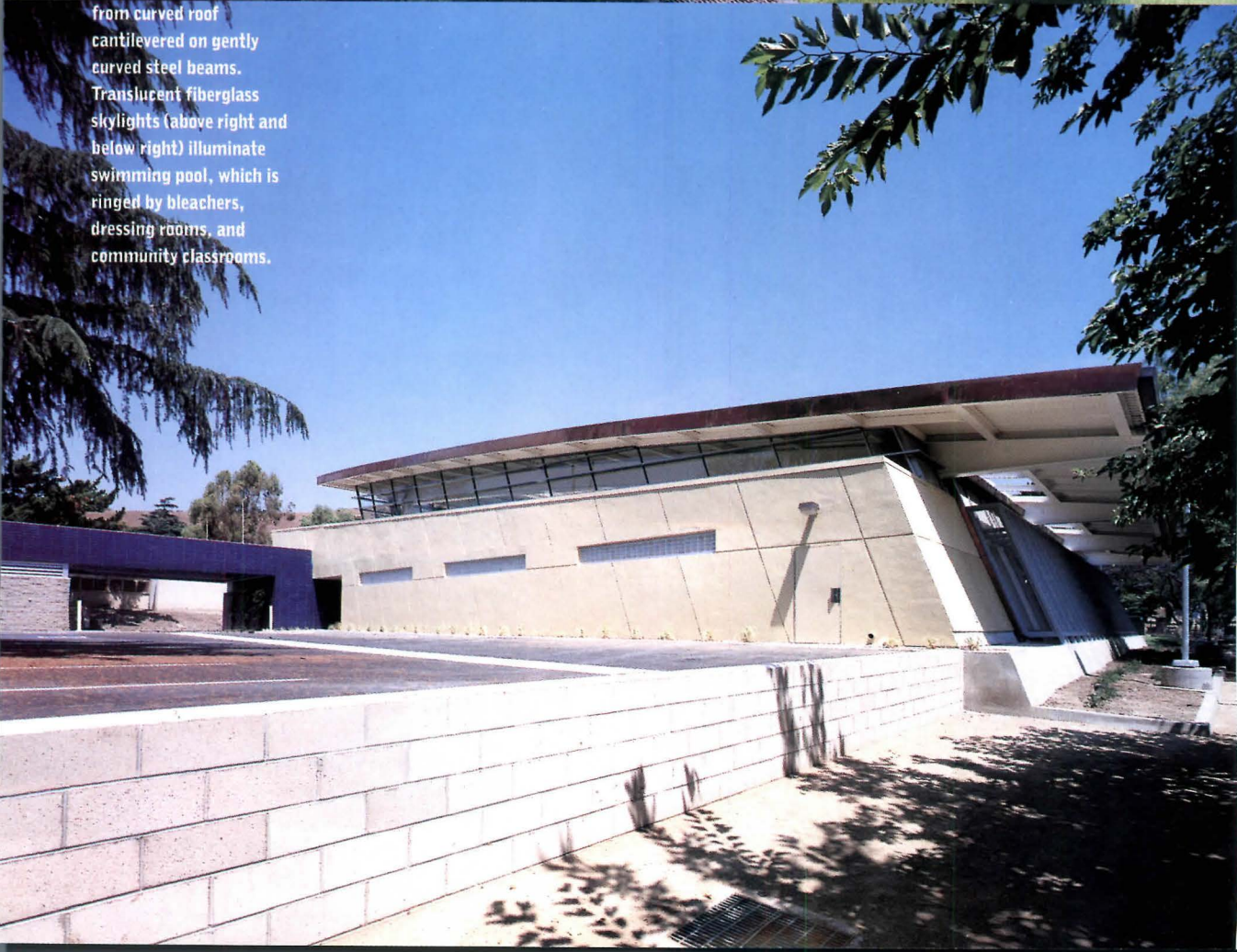
Rather than the zillionth iteration of an image foisted on Southern California at the turn of the century by civic boosters looking for an easily sellable, defining look, the architect created a lithe, athletic building with the posture and musculature of a swimmer about to dive into a race. The parti of the building—a long service bar with dressing rooms, ticket booth, and mechanical room fronting the pool structure—is simple, but Yazdani breaks each section into parts, differentiated by form and materials that are layered front to back, top to bottom. The simplicity becomes complex in the build-up of layers, and the leaning, curved forms activate what would otherwise be an inert and massive volume.

The defining gesture of the building is the gently arched, copper-clad roof that covers the 19,000-square-foot indoor pool. Yazdani bows the long front of the building to draw visitors toward the entry and to reiterate the curving sectional shape of the roof. Many other elements energize the structure: The window mullions lean, as does a steel-framed back wall of wire mesh intended to keep out pool crashers. Buildings that transport outdoor programs to the indoors, like a pool, are often voluminous, but Yazdani's formal vocabulary keeps the forms light in the landscape.

Materials are simple and generic. The far side of the pavilion houses a classroom and mechanical space, and is clad in corrugated



Clerestory windows with canted mullions (above left and below left) separate pavilion's base from curved roof cantilevered on gently curved steel beams. Translucent fiberglass skylights (above right and below right) illuminate swimming pool, which is ringed by bleachers, dressing rooms, and community classrooms.





metal paneling; the near side has bleachers facing the head of the pool, and is walled with concrete block. The garage doors that roll up on the east wall are glazed with acrylic panels. For security reasons, glazing is restricted to three generous skylights, the wall of roll-up windows, and clerestories around the pool area.

By now a veteran of public work, Yazdani knows he cannot expect to build a design based on excellence of detail in a public commission constructed by the lowest bidder, so he picks his battles. With the glazed-brick wall he anticipates graffiti along the entrance facade, and with the wire fence he turns the defensive posture of the building into another layer in his aesthetic of porosity. Rather than fighting for details and finishes, he opts for a building of big, simple gestures made of expensive materials. "There's a certain crudeness," says Yazdani, pointing to the heavy bolts and gutsy metal sections of the fence facade.

What has emerged is what citizens might call a jewel in the rough—a sophisticated, yet tough and self-protective building. Although he has factored the defensive nature of the commission into its design, Yazdani has not designed down to the audience. The architect gave the community something it did not know it needed or wanted, because nothing quite like it has been built anywhere near it. What originally seemed an esthetic risk has emerged as a civic landmark.

RICHARD ALATORRE INDOOR POOL, EL SERENO RECREATION CENTER, LOS ANGELES

CLIENT: Los Angeles Department of Recreation & Parks **ARCHITECT:** Dworsky Associates, Los Angeles—Mehrdad Yazdani (design principal), Steven Ruef (principal-in-charge), Eddie Nishi (project architect), James Braam, Paciencia Castelo, Alan Morishige, Robert Rosenberg, Lamer Walker, Vlody Wasielowski (project team) **LANDSCAPE ARCHITECT:** Calvin R. Abe Associates **ENGINEERS:** Matti Prabhu & Associates (structural); Eli Silon & Associates (mechanical); Patsouras Associates (electrical); Rowley International (pool engineer) **CONSULTANTS:** Iskander Associates (cost estimation); Chew Specifications (specifications) **GENERAL CONTRACTOR:** FTR International **COST:** \$4.1 million **PHOTOGRAPHER:** Timothy Hursley, except as noted

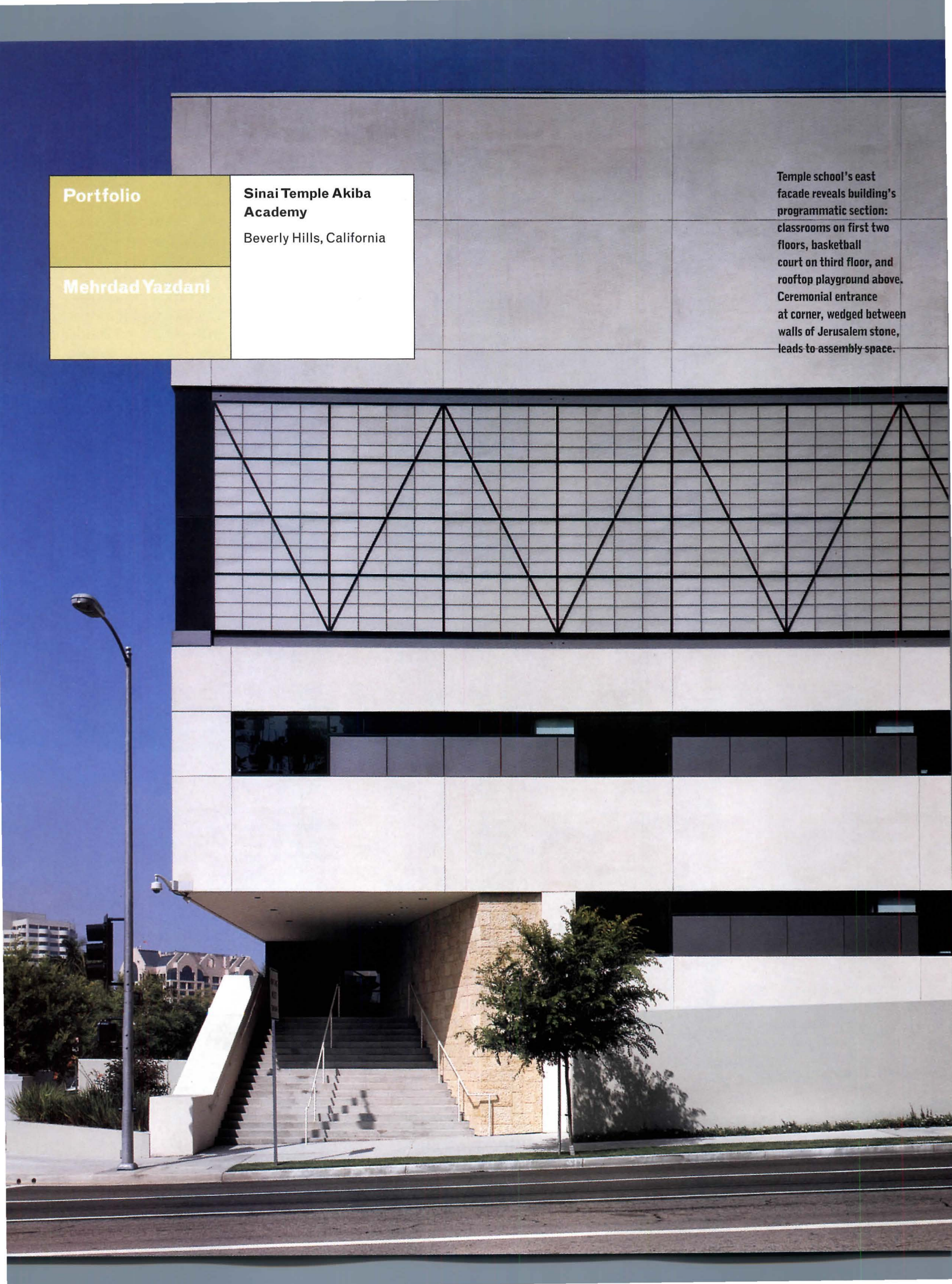
Portfolio

**Sinai Temple Akiba
Academy**

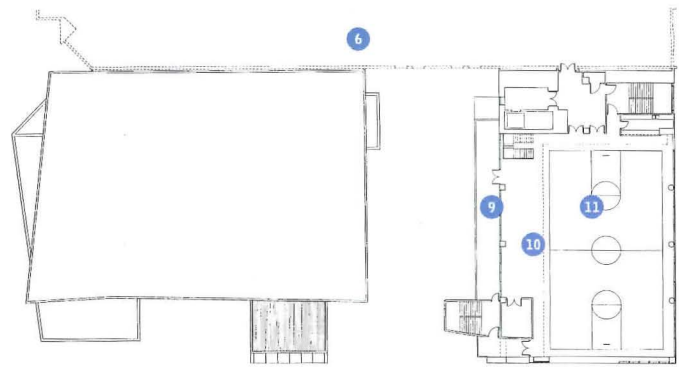
Beverly Hills, California

Mehrdad Yazdani

Temple school's east facade reveals building's programmatic section: classrooms on first two floors, basketball court on third floor, and rooftop playground above. Ceremonial entrance at corner, wedged between walls of Jerusalem stone, leads to assembly space.



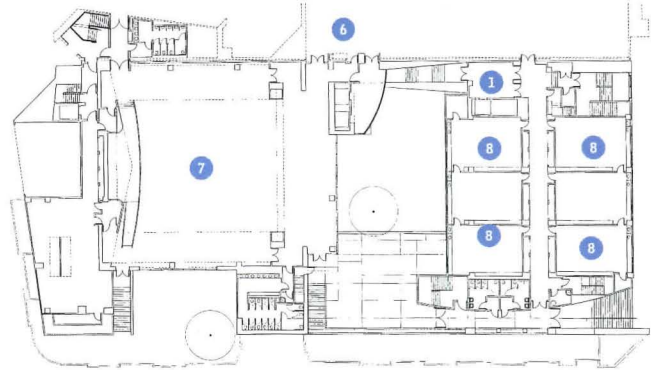
- 1 building entrance
- 2 parking entrance
- 3 preschool classroom
- 4 kindergarten classroom
- 5 play area
- 6 existing building
- 7 banquet hall
- 8 classroom
- 9 outdoor deck
- 10 lunch area
- 11 gym



Third-floor plan

Strong forces based in a contest of wills pressed simultaneously outward and inward on the planned expansion of the Sinai Temple Akiba Academy in Beverly Hills. The school associated with the Wilshire Boulevard temple needed to expand, but occupants of the neighboring high-rises and single-family houses wanted to contain any addition on this transitional site to reduce the mass and limit the daily traffic around the burgeoning school.

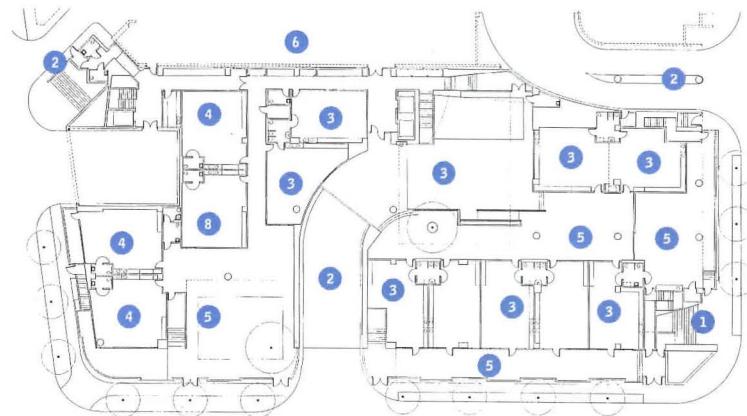
Mehrdad Yazdani was caught between his clients and the community, between the brief and the permit: The mandate was to pack the site with the program while slimming the profile. The program required 60,000 square feet of classrooms, a basketball court, roof playground, exterior courtyard, 150,000 square feet of underground parking for 350 cars, pick-up and drop-off lanes inside, meeting rooms, and a large multipurpose hall serving both the existing temple and the school. The older buildings already monopolized about 60 percent of the Wilshire side of the site, where greater massing was allowed.



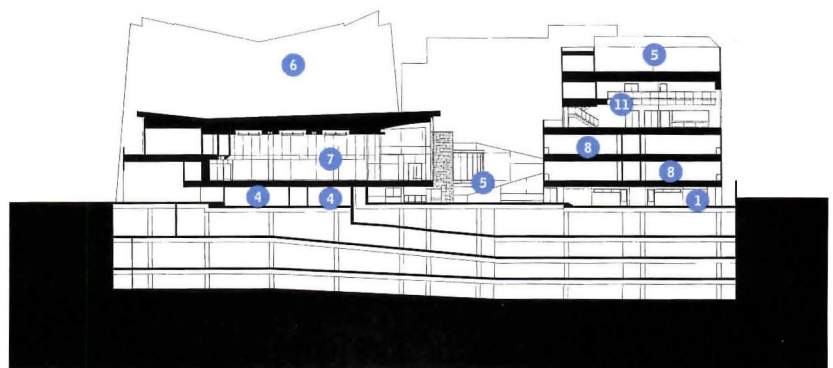
First-floor plan

In the early 1960s, Frank Lloyd Wright disciple Sidney Eisenstadt designed the original temple on Wilshire Boulevard. The architect's asymmetrical spires and angular motifs, though cartoonish, suggested geometries in the addition. The immediate task was to assemble the pieces of the ambitious program into a whole that fit the site, and to strategize the new mass to conceal its bulk. Yazdani also had to create an environment lively enough for children, yet serious enough for the temple's religious functions. The building had to mix messages, or at least achieve a state of interpretive ambiguity.

Yazdani applied the iceberg principle, submerging parking four levels below grade and internalizing the pick-up and drop-off (which in Los Angeles usually means long lines of cars). He stacked the classrooms to the east along busy Beverly Glen Boulevard, then layered the basketball court and rooftop playground above that, forming a 75-foot-high urban edge that liberated the site's west side for lower components, including the multipurpose hall that steps down 45 feet and then 16 feet. The



Ground-floor plan 1/36"/11m



East-west section 1/30"/9m



Densest stacking of program occurs at site's southeast corner (above left) where ribbon of translucent fiberglass panels illuminates interior basketball court. Yazdani's building works itself down to residential scale at southwest corner (above). Glazed multipurpose room or banquet hall, overlooks children's playground in courtyard. Waving mullions of hall contrast with regular horizontal banding of classroom windows and gridded exterior stair tower (at left).

addition wraps around a courtyard that acts as a light well, entrance, and play yard for preschool and kindergarten children. Internal circulation is an intricate three-dimensional system of passages, elevators, and staircases that allows each section to be used separately: School and temple can bypass each other.

Having organized his iceberg, Yazdani broke down the program into overlapping, layered parts. The architect eroded a corner along Beverly Glen with a staircase and entryway of a textured Jerusalem stone that allows visitors access to the hall, which is independent of the school. Differently shaped and sized volumes step down in a cascade of pavilions to the residential western end of the site. Listing, angled, and bent forms dress the volumes, and their dynamism reduces their apparent bulk. The butterfly roof over the multipurpose hall breaks its volume. The architect leans the south-facing volume housing the HVAC equipment, forming an energetic parallelogram. The leading edge of the block of schoolrooms wraps the Jerusalem-stone wall and gestures toward the courtyard playground, tensing the composition, throwing it into gear.

The packed program crowds out the design opportunities inside, but outside Yazdani lightens the otherwise massive ensemble. The architect's vocabulary of angled volumes, tapered forms, and forced perspectives alters the masses so that no part appears overblown or lumpish. The shapes also mate with the spires of the original temple without edging into the temple's narrowly escaped kitsch. With diversified materials and shapes, a building that came close to resembling a bunker emerged as the best of neighbors: light, fleet, and ingratiating. Yazdani kept peace on the street. ■

SINAI TEMPLE EXPANSION, LOS ANGELES

CLIENT: Sinai Temple **ARCHITECT:** Dworsky Associates, Los Angeles—Mehrdad Yazdani (*design principal*), Douglas Dworsky (*principal-in-charge*), Eddie Nishi (*project architect*), Ira Amanowicz, Craig Booth, James Braam, Paciencia Castelo, John Frane, Russell McCarley, Rudolfo Modina, Shamoli Mukherjee, Robert Rosenberg, Cielocita Sacilioc, Reynaldo Sacilioc, Luzviminda Sanes, Vlod Wasielewski (*project team*)

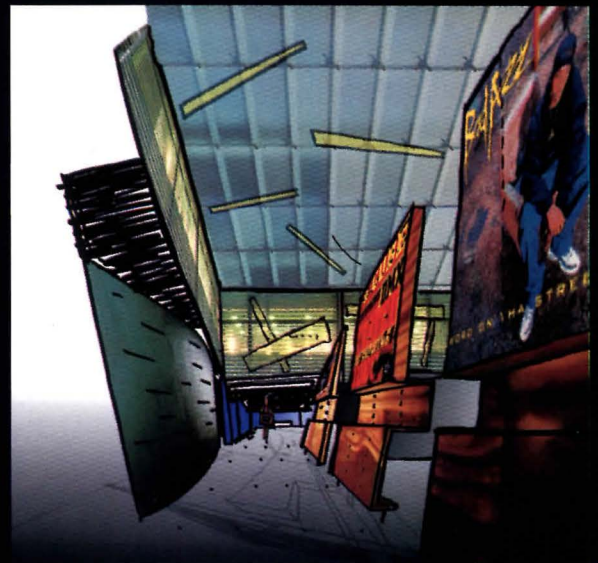
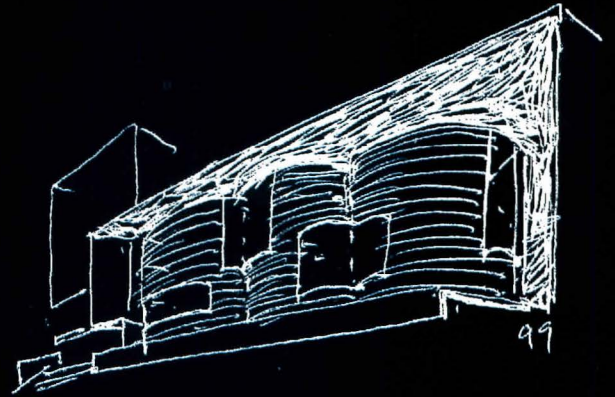
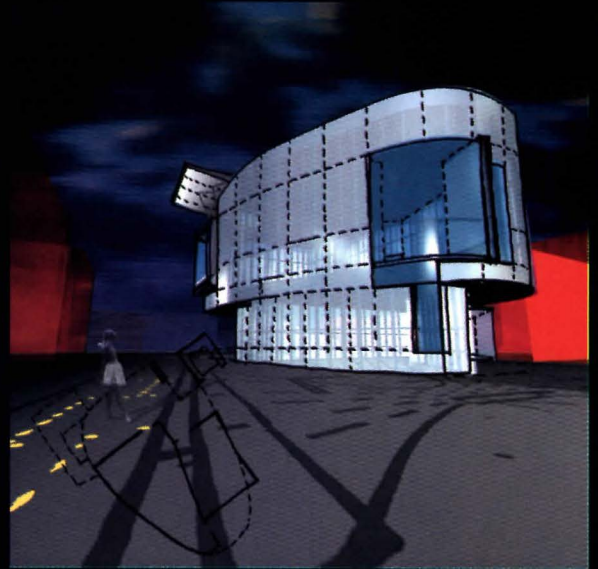
LANDSCAPE ARCHITECT: Melendrez/Babalas Associates

ENGINEERS: Matti Prabhu & Associates (*structural*); Les Rosenberg & Associates (*mechanical*); Norman Cohen & Associates (*electrical*); Psomas (*civil*)

CONSULTANT: Jeffrey Kalban & Associates (*furniture, fixtures, and equipment*) **GENERAL CONTRACTOR:** Tishman Construction Corporation of California **COST:** Withheld at owner's request **PHOTOGRAPHER:** Timothy Hursley

On the Boards

Yazdani is currently designing three new projects in California that explore his fascination with layering and light. The curving mass of a new 10,000-square-foot library for Yeshiva of Los Angeles Girls' School (above right) will create shifted plays of light: Yazdani punches planes of clear glass into a grid of translucent glazed panels that will render the structure an urban lantern. The architect further develops a language of clear and veiled skins in sketches for an 85,000-square-foot dining and student-administration building on the UC-Berkeley campus (center). Finally, a study for the interior of a record company headquarters (below) shows a luminous double-height gallery, crowned by a glass ceiling, in the shell of an old bank building in Los Angeles.



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One of many "Domestic Complexity Maps" prepared by students of Kent Larson and Chris Luebkehan at MIT School of Architecture and Planning as part of the House_n project. Diagrams were developed by Ian Ferguson to study how home activities might be affected by new technologies and approaches to residential design.

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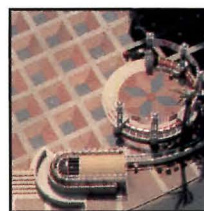
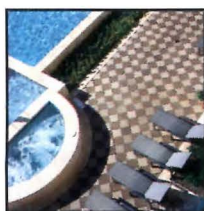
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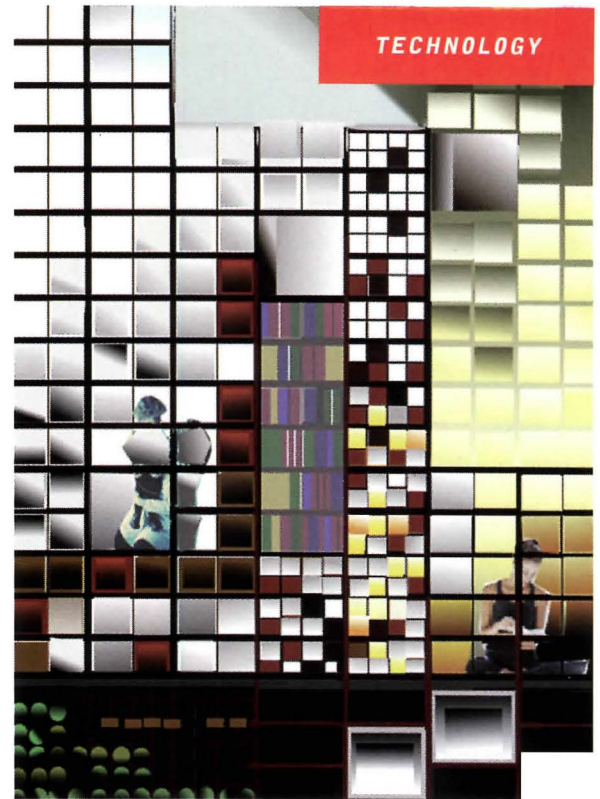
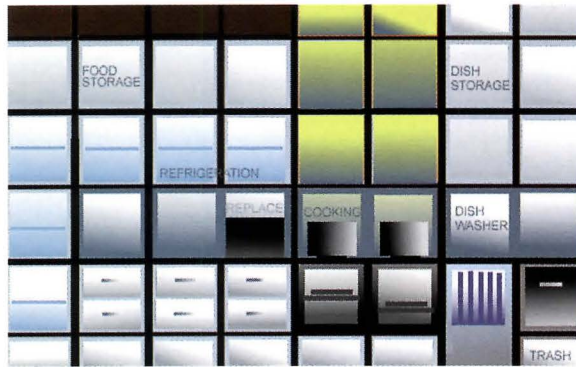
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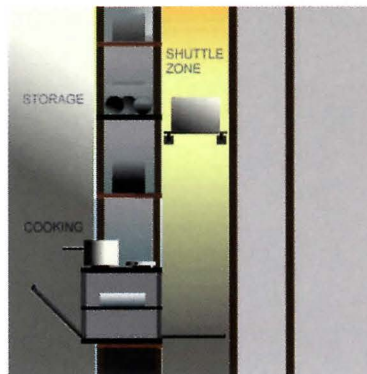
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Home Work



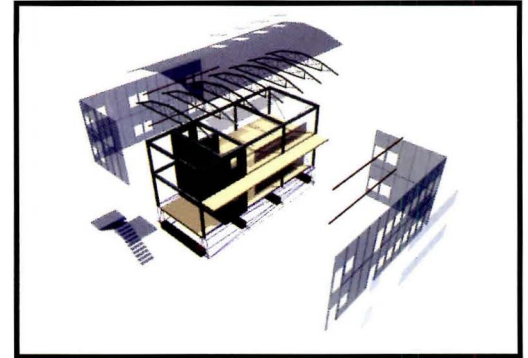
There's no place like home. Most people understand this quaint homily as a tribute to one's private domain, which, in the best of circumstances, is both a congenial environment for domestic communion and a sanctuary from the public realm and the forces of nature. Yet from an economic perspective, homes are just real estate; housing starts provide an important indicator of national economic health in general and the residential building industry in particular. However, between small shifts in consumer trends and the macroeconomics of huge industry, there are design and construction issues that have historically been overlooked. Now, a group of architects and researchers at the Massachusetts Institute of Technology (MIT), who view the residential construction industry as conservative, uninspired, and nearly bereft of design ingenuity, hope to rescue generic middle-class housing from its torpor by elevating it to a subject of legitimate technological and design research.

The Massachusetts Institute of Technology begins House_n, an ambitious three-year project to reinvent the most important building type.
By Sara Hart

Kent Larson and Chris Luebke, professors at the MIT Department of Architecture and Planning, observe that mass-produced residential construction has changed little in either method or materials in the last half century. "This industry is probably the only one in which a worker from 1899 would feel comfortable and capable," contends Luebke, who teaches and researches building technology.

Larson and Luebke are the principal investigators of a three-year research and development project at MIT called "House_n: The MIT Home of the Future." The "n" in the title is an infinite variable, open to experiment, investigation, and exploration unlimited by preconceived notions of what a "house" should be. To that end, Larson and Luebke have created a research methodology that examines social, cultural, economic, and architectural ramifications that radically new technologies will have on shifting demographics. Their goal is to guide the

MIT student Abir Ahmad designed **interior modular wall system** that would take advantage of digital tagging and robotic technologies being developed by MIT Media Lab, School of Engineering, Artificial Intelligence Lab, and House_n sponsors.



House_n innovations include development of **factory-produced building components** (above), shown here as sequence of diagrams by MIT students Ryan Chin and Louie Tak Wing. Other student participants are Abir Ahmad, Katherine Calef, Gregory Demchak, Lucy Fang, Laurie Griffith, Sini Kamppari, Lee Knight, Christopher Mulvey, Junko Nakagawa, Kevin Settlemyre, and Michael Wilcox.

project toward the creation of an integrated system of construction rather than a single design formula.

House_n is an ambitious, collaborative project with a complex organizational structure involving many MIT academic departments and their associated research consortia, such as the renowned MIT Media Laboratory, the Digital Design Laboratory, the Distributed Intelligent Systems Consortium (DISC), and the Center for Advanced Visual Studies. A diverse group of businesses, as well as the Harvard Medical School's Council on Aging, are among those outside the university who will also participate.

Luebkean opened an all-day symposium for sponsors and participants last March at the School of Architecture and Planning with a survey of past "houses of the future." His presentation was a reminder that crackpots and visionaries throughout this century have been preoccupied with the house as a receptacle of utopian

visions and futuristic speculation. Separating the ridiculous from the sublime, both he and Larson recognize and draw inspiration from the early modernist experiments of Le Corbusier, Mies van der Rohe, and J.J.P. Oud in the 1920s; Richard Neutra, Buckminster Fuller, and Frank Lloyd Wright in the 1930s and '40s; and the designers of the Case Study Houses in Los Angeles that began in the mid-1940s. These architects, to varying degrees, believed that by reinventing the concept of home with new building materials and technologies, society could be changed and improved, but few confronted the housing industry as a whole. "Most of yesterday's homes of the future focused on either propagating specific ideological manners of living or specific building technologies," explains Luebkean. "Some of the homes built for world's fairs in the 1930s investigated only specific areas of the housing industry. For the 1931 New York World's Fair, Albert Frey and A.L. Kocher created Aluminaire, a house that incorporated an electric garage-door opener that was activated by the blinking of an automobile's headlights."

Beneficial alliances

House_n's corporate sponsors have the power to propel this project out of the classroom and laboratory and into the marketplace, where all best-laid plans live or die by their performance and acceptance. To date, sponsors include computer manufacturer Compaq; the Salt River Project, an Arizona utility company and the state's largest water supplier; consumer-product giant Proctor & Gamble; wire and cable manufacturer Superior Essex; and architectural and engineering software-maker Bentley Systems. By their high-profile participation in this cutting-edge research, sponsors hope to ensure that they will be at the forefront if or when new markets are created, while MIT benefits from their deep pockets and marketing savvy.

The corporate sponsors are betting that the infrastructure of tomorrow's home will be intrinsically tied to the outside world of goods and services. For example, today's familiar bar-code pricing and inventory system (UPC) is about to be replaced with the next generation of

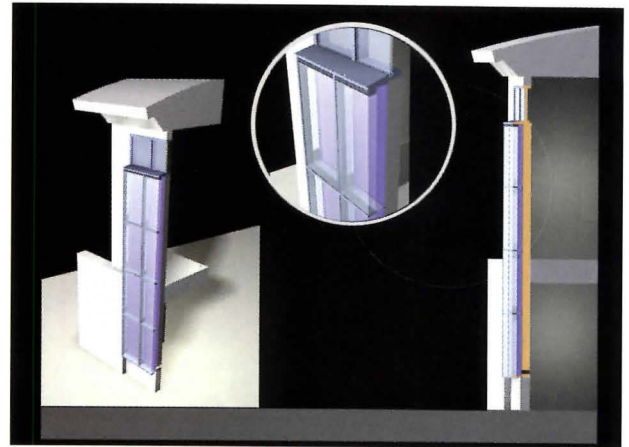


low-cost digital tagging, currently in development by Motorola and MIT's DISC consortium. Unlike the UPC, which identifies limited product information, this new system, using radio frequency communication, will be capable of tagging all physical objects and their properties. Such ubiquitous monitoring through interoperability and connectivity protocols will enable significantly more sophisticated home automation in which products will prompt appliances, such as microwave ovens, to download and follow manufacturers' cooking instructions from the Internet. Embedded sensors will diagnose problems with HVAC equipment and request repairs, and statistical analysis of biological observations, called biometrics, through noninvasive sensors will eventually provide in-home medical care.

Implementation of some of these technologies is not far off. Larson reports that Proctor & Gamble intends to place the new digital tags on all its products when the cost of a tag goes below four cents. "Motorola and MIT researchers are confident that tags can be produced for two to three cents within the next few years," he forecasts. "It is highly likely that most products and food packages entering the home will have unique digital tags sometime in the next decade."

The future of gadgetry

Because building-systems integration is the heart and soul of this project, House_n investigators are not tempted to unleash a new generation of sophisticated,



Mass-produced residential construction has changed little in either method or materials in the last half century.

digital gadgetry into an unprepared market. Simultaneous research and development are underway to embed technologies in building materials, appliances, and environmental controls. A great deal of attention is being paid to the building envelope in an effort to find ways to connect advanced building materials to the digital objects and internal systems within the envelope.

During Luebckeman's research into advanced building envelopes for House_n, he approached Dr. Donald Sadoway, professor of materials chemistry at MIT's Department of Materials Science and Engineering, with a wish list of attributes for a wall component. Luebckeman's research, which employs passive solar strategies, daylighting, and building-system innovations, may reinvent the building envelope by leading to what he calls the energy-producing wall component (EPW). He figured that the set of attributes the EPW required might be found in Sadoway's research on solid-state rechargeable batteries. If a battery could be produced that had the physical characteristics of a potato-chip bag (a multilayered polymer and metal laminate), it could be integrated into an EPW component, with the potential of creating a distributed power source localized in a single wall panel.

Sadoway sees the role of material scientist as inventing materials that possess the attributes a designer wants. He accomplishes this, conceptually, by approaching materials as "bundles of properties." For example, a materials scientist doesn't think of a tabletop as being made of stone or glass but rather as an object with a set of attributes or properties, such as tensile strength and stiffness. "Then, with this set of attributes or specifications, [the scientist] turns to the database and selects the possible candidates for a tabletop. All sorts of new possibilities emerge," he explains. "If the designer specifies a set of attributes that no material currently satisfies, the

Using Autodesk's Lightscape (above left), Professor Chris Luebckeman's students study both **quantity and quality of daylighting** in an exercise to learn design and performance integration. Using AutoCAD 14 and 3D Studio Max, MIT graduate student Kevin Settlemyre depicted prototypical **Energy Producing Wall** component (above right) made of layers of new materials, including thin-film photovoltaics and clear acrylic insulation.

materials scientist invents or discovers a new material with [the desired] attributes.”

Simultaneous investigations are also underway to transfer technologies developed for other industries, such as aerospace, consumer goods, and the military, to House_n research. Aerogel insulation and electrochromic glass, which darkens automatically to reduce heat gain and glare, among many others, are candidates for a variety of layered facade assemblies or what the researchers call “building envelopes with nervous systems.” Aerogel, for instance, has been used by NASA as a superinsulation material in its space shuttles. The lightest synthetic material in existence, researchers hope to produce a transparent version that as a glazing component would allow transmission of light but not heat.

No time like the present

The House_n project, it should be noted, includes the full participation of both undergraduate and graduate students. Much of the program is incorporated into the architecture department’s curriculum, and many graduate students are participating as paid research assistants. Larson envisions a 10- to 15-year program that will con-

tinue to investigate biometric monitoring, household robotics, intelligent objects, new *materials*, and energy-producing systems. The current three-year investigation will culminate in the construction of two prototypes. Desert House will be built in the southwestern U.S. to test energy-producing technologies and other sustainability and building performance issues. The Transgenerational House will be built on the East Coast to test health issues and nascent biometric technologies.

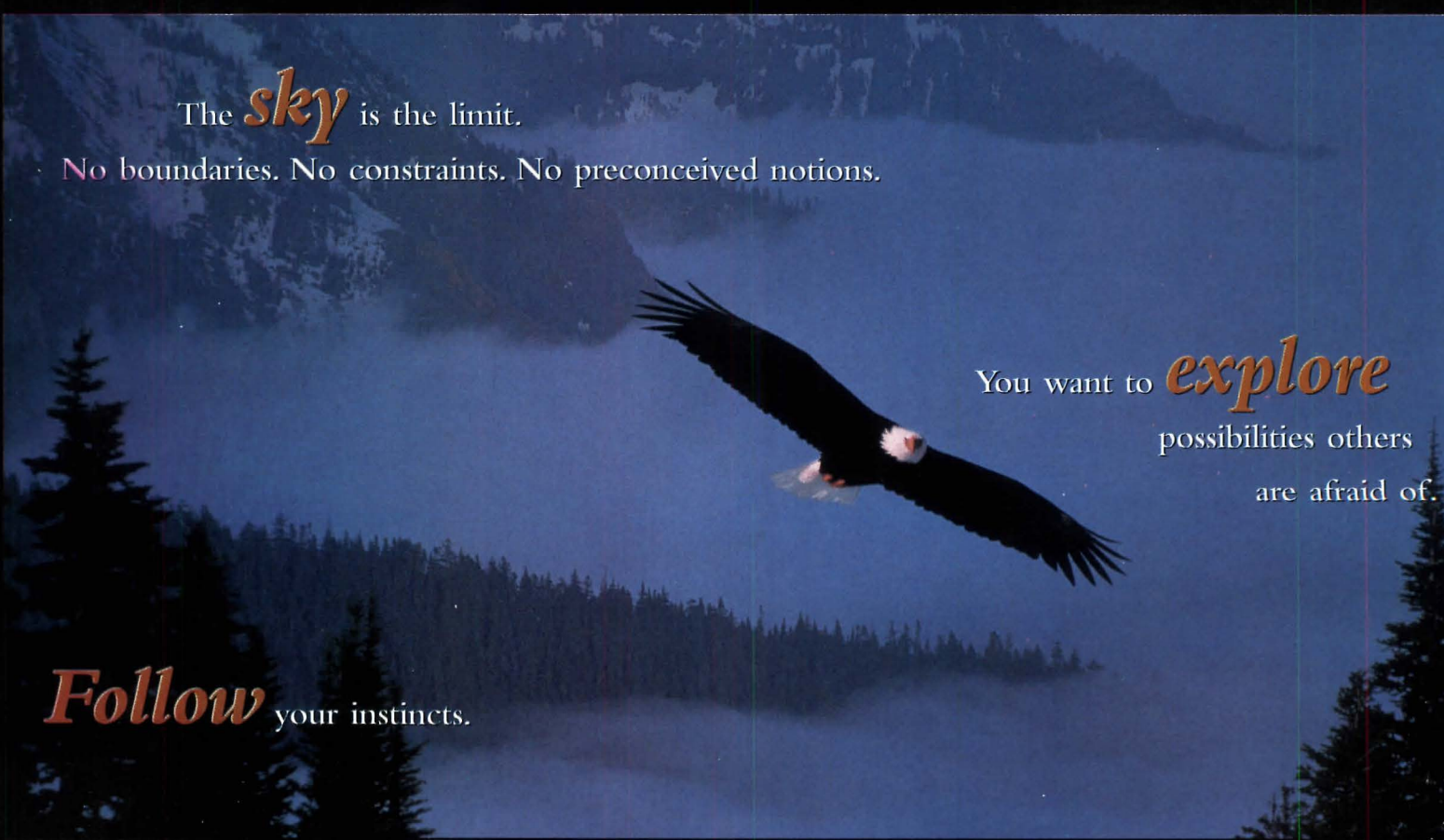
Kent Larson is also director of the Digital Design Laboratory (DDL), where he created exquisitely detailed computer-generated representations of architect Louis Kahn’s unbuilt designs for the meeting house at the Salk Institute for Biological Studies in La Jolla, California (*Architecture*, February 1999, pages 132–137). As designs and proposals emerge from the various research groups, they will be realized in the DDL as digital mock-ups, sometimes using Chroma Key compositing (a technique used in Hollywood in which actors perform in front of a blue screen and a computerized background is added later) to produce hyperrealistic images. Workshops will also be in operation to test full-scale mock-ups made of the materials under consideration for the house prototypes.

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Larson contends that there are economic realities and evolving trends that make House_n a well-timed pursuit. Large residential builders are looking to prefabrication and other industrialized building processes to counter the skilled-labor shortages they've experienced. Beyond simply correcting shortcomings in the industry, there is an important manufacturing development that House_n prototypes will flaunt in hopes of finally awakening a lethargic industry. Larson calls this secret weapon "mass-produced customization." Seemingly paradoxical, it is instead the inevitable result of digitally programmed manufacturing tools that can turnout customized building parts in a highly efficient environment as easily as they turn out identical ones. The House_n prototypes will be built of custom components manufactured in factory millwork shops by CAD-driven machines and require minimal time and labor to assemble on-site. Lock-together panels will be produced in sophisticated millwork shops by CAD-driven machines. Some will be small and light enough to be lifted into place by two workers; others will be lifted into place by a crane and fitted by a small crew. Unlike current prefabricated systems, the next generation of panels, such as EPWs, will have technology packages

Aerogel insulation and electrochromic glass are candidates for a variety of layered facade assemblies or what the researchers call "building envelopes with nervous systems."

embedded in the panels with custom functions preselected via the Internet.

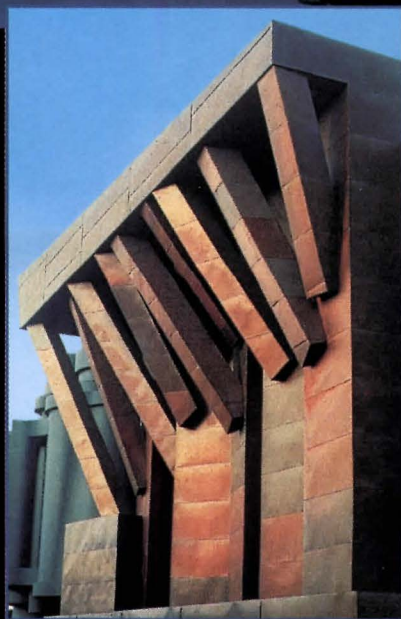
Larson hopes that these investigations and experiments will lead to house-as-product, the result of "integrated design-to-manufacturing techniques," not unlike those used to build aircraft or coffeemakers. Ultimately, he expects to create an open system of production that will deliver high-level design and advanced digital technologies to a wider audience. In the spirit of the century's early futurists who had the vision but not the means, Larson expects House_n to promote the democratization of architecture. ■

Architecture will continue to publish periodic updates of the House_n project.

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Project: TBWA Chiat/Day, Los Angeles
Architect: Frank O. Gehry & Associates



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What Goes Up...

Will you be on the breadlines when the economy comes tumbling down?

By Michael Cannell

Architects, count your blessings, for these are the fleeting days of plenty. Buoyed by the lowest mortgage interest and unemployment rates since the 1960s, home sales and the value of residential construction have soared to record heights. The average architecture firm presides over months of work. Architecture salaries, which lagged inflation at the start of the decade, have risen by more than 17 percent in the last three years, according to surveys conducted by the American Institute of Architects (AIA). Unemployment among architects hovers at 2 percent, the lowest in nine years. Even the Asian economic meltdown of 1997 has proven beneficial by holding down inflation.

What makes the current economic boom so extraordinary is its duration. The last recession ended in March 1991; we're now into our 102nd straight month of good-time growth, surpassing the average boom cycle by some 40 months. Another year and the economic expansion will qualify as the longest of the century. "Conditions couldn't be better," says AIA chief economist Kermit Baker.

The bulls have run for so long that an entire generation of under-30 architects has never known anything but prosperity. "They don't have a clue what can hit them," says RTKL President David Hudson. The hard times that ravaged the design field more than eight years ago grow hazy as they recede in the rearview mirror.

Architects who endured the carnage still wince. No wonder. The recession shut down one-quarter of all U.S. architecture firms, and clobbered the rest. "We're all chastened," notes Mitchell N. Schear, a Washington, D.C., developer who has worked with Pei Cobb Freed and Partners, Skidmore, Owings & Merrill, and Cesar Pelli, among others. "People are less inclined to chase after wild, hare-brained, speculative schemes."





"The consistent theme of this decade is restraint," says Guy Geier, president of The Hillier Group, which has more than doubled its staff since 1991. "We're riding a wave, but we're wary of blowing it and getting too cocky."

This caution is gradually turning to anxiety. The longer the bull market lasts, the more fretfully architects anticipate its inevitable end. Anyone who bothers to consider it knows the bubble will burst—but why, and how?

Unfortunately, calamities defy prediction: There is no crystal ball for crashes. When asked for his forecast, banker J. P. Morgan routinely replied, "The stock market will fluctuate."

Physics 101 states that what goes up, must come down; busts inevitably follow booms. The current spree is no exception—despite claims of an impregnable "new economy" based on super productivity and the ballyhooed

All fall down:

The next bear market will be the 20th since 1900.

Internet economy. "All of us—or almost all of us—are worried about how long this good time can continue," says James O. Jonassen, managing partner of Seattle-based giant NBBJ. "Nobody believes it can last forever. Preparing for the downturn is now a routine part of our business."

Warning signs

Architects are among the first to feel the ebbing of the economic wave because they toil in the conceptual early phase of projects. As a result, they are the economic equivalent of canaries in the mineshaft—a bellwether of trouble to come. "Architecture and planning firms are the first barometers of slowdown," says Michael Buckley, an architect who teaches real-estate development at Columbia University. "They feel the trip lever sooner as fewer and fewer companies commission exploratory work." (By the same logic, architects, along with real-

For his part, Guy Geier of The Hillier Group counts the columns of architecture help-wanted classifieds in the Sunday *New York Times*. "They're my tea leaves," he says. The ads have grown from half a column in the lean years to four full columns now, and they show no sign of diminishing. For Ken Brown, the new president of Skidmore, Owings & Merrill, nothing can replace the old-fashioned office grapevine. "Word of mouth is better than any market intelligence you can obtain from the outside," he says.

The best gauge of all may be residential architects, a sector that historically noses downward six to nine months before other design fields. For that reason, AIA economist Kermit Baker advises practitioners to take their temperature by lunching with a residential designer once a month or so. "They're out there constantly lining up new clients and collecting fresh signals from the econ-

By the time the ugly warning signs of recession



estate agents, are among the first to benefit from the upturn at the far end of a recession.)

Shrewd architects are constantly glancing over their shoulders for hints of weakening conditions. And what tell-tale signs do builders and designers monitor? In addition to the conventional indices—interest rates, employment, and housing starts—they in many cases consult personal indicators. For example, William Toal, chief economist at the Portland Cement Association, an industry group, tracks car sales—the most interest-sensitive of durable goods. Principals at NBBJ carefully tally the number of days it takes clients to pay outstanding invoices. Anything more than 60 days sounds alarms. "A couple months before the Asian downturn, our clients over there were dancing around payments," says NBBJ's Jonassen. "We're beginning to see that now in the U.S." On the other hand, clients plagued by narrow profit margins may simply be delaying payments to squeeze all they can from the system.

omy," he says. "They have access to much better information." What do residential architects report right now? No swoon in sight, Baker reports.

Bubble trouble

However, by the time the ugly warning signs of recession announce themselves, it may be too late to react. That's why strategically minded firms are using today's prosperity to prepare for the worst. "The players who score goals aren't necessarily hockey's fastest skaters," says Phil Pyle, Jr., director of business administration at Bernardon & Associates, a 50-person firm in Kennett Square, Pennsylvania. "The goal scorers are the ones who know where the puck will be."

In the torrid 1980s, Skidmore, Owings & Merrill specialized in glistening corporate towers, only to lay off some 900 employees and close three offices during the commercial real-estate slump of the recessionary 1990s. The blue-chip

firm suffered a harsh comeuppance as free-lending banks abruptly yanked the purse strings closed. The moral of the story: Diversity is the path to survival.

Architecture firms still specialize, of course—they just pick their niches more prudently. And the smart money spreads its specialties around. Even the smallest firms can offer real-estate consulting and facilities planning, services expected to thrive when a bear market forces clients to consolidate instead of build. The amount of non-design work performed by architects nearly doubled between 1990 and 1996, according to the AIA.

Larger firms can diversify by spreading their practice across a range of building types. One route is to seek out institutional clients, like universities and hospitals, which tend to withstand economic swings better than commercial ventures. Unglamorous state projects also resist recessions because legislators allocate capital expendi-

& Associates, a management consultant. Forward-thinking firms scout for creative ways to reduce rental costs in case an abrupt down-tick forces layoffs. Kristin Hill, a principal of Design Management Corp., an office consultant, urges architects to prepare to defray rents by going halves with subtenants. "Even though they may need the entire space right now, architects should be planning to divide it in half without a lot of construction if they have to," she says.

Of course, the key to handling overhead is to stoke the machine with incoming work. "We're not bashful about pursuing small, unglamorous work," says Arthur Gensler, whose 1,800-person firm actually made money and expanded throughout the last recession. "Small projects lead to relationships."

What happens next is anybody's guess. Economies have a way of turning on unpredictable events. This year's

announce themselves, it may be too late to react.



tures for schools, libraries, and airports three to four years in advance. "As the private sector slows down, the public sector tends to push projects because it helps maintain economic activity in lean years," says Hillier's Geier and, sure enough, the firm has added schools and hospitals to its repertoire.

The largest U.S. firms—Hellmuth, Obata & Kassabaum; Gensler; Skidmore, Owings & Merrill; and NBBJ, among others—pursue the largest projects from Warsaw to Singapore. Their global reach is in itself a defense against regional dips. "We're spread around the world, so we feel some measure of protection," says David Hudson of RTKL, which reported \$30 million in overseas billings last year. "As we see one market go down, another goes up."

Overhead expenses caught architects off balance during the last economic quake. Today, rent and utilities account for about 5.5 percent of architecture firms' total costs, up .3 percent since 1977, according to Zweig White

wild card is Y2K. According to one scenario, clients are splurging before uncertainty strikes. More likely, clients in the financial sector will close their wallets until the New Year wobbles have safely subsided. "The attitude is 'Let's hold off and not start anything new for the time being,'" says Guy Geier. "Their facilities people have a lot to deal with, and they don't want any distractions until it's all over." If so, the funds held in reserve may flood the economy next year, kick-starting another growth spurt. "I expect to see some pent-up demand in the second quarter of 2000," Geier says. "The economy could come roaring back all over again."

Whenever it makes its unwelcome arrival, the next bear market will be the 10th since the end of World War II. History suggests it will last about 18 months—a long drought. But then, the average expansion should have ended four years ago. Better book your millennium party now. And make it a good one. ■



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Circle 126 on information card

TENURE-TRACK POSITION CERES AND DEPARTMENT OF ARCHITECTURE BALL STATE UNIVERSITY, MUNCIE, INDIANA

The Center for Energy Research/Education/Service (CERES) and the Department of Architecture are seeking a candidate for a position as Resident Environmental Systems Researcher/Educator beginning January 10, 2000. The successful candidate will be appointed as a staff member in CERES and will hold a tenure-track academic position in the Department of Architecture at rank and salary commensurate with experience. The successful candidate will undertake a half-time research/half-time teaching assignment during the 10 month academic year appointment; summer load for additional teaching and/or research is contingent upon available funding.

The research component will be comprised of energy-related research in the areas of building systems, building design and/or community design. The successful candidate, in fulfilling the research load, will undertake project development and funding solicitation in support of personal research interests and will collaborate with CERES staff in securing funding for research which will utilize the collective expertise of CERES staff, affiliated faculty, and students.

The educational component will be comprised of teaching in the environmental systems technologies area in concert with CERES staff. The content areas covered in the existing environmental systems courses include the traditional subjects required for NAAB accreditation of the Department of Architecture curriculum. New initiatives in modularized teaching—a distribution of environmental control systems teaching across the degree program—are being developed. The successful candidate will be expected to contribute to and participate in this effort. Responsibilities may include teaching architectural design studio.

On-going developments such as the clustered minors in environmentally sustainable practices, the biannual Greening of the Campus conferences, the use of electronic media in the delivery of environmental systems content, and the development and maintenance of the ongoing visiting scholars program represent some of the CERES initiatives structures to link research and education and to foster interdisciplinary energy-related environmental systems research/education/service. The successful candidate will be expected to contribute to the implementation of these initiatives as well as the development of new interdisciplinary programs. Exceptional facilities, abundant technological resources, unique university positioning, substantial indirect support and summer employment options make this opportunity very attractive.

Minimum qualifications: master of architecture by first day of employment. **Preferred qualifications:** registration (license to practice architecture or engineering); experience in teaching, experience in professional practice, and a record of publications and/or appropriate research projects as evidence of scholarly and professional contributions; expertise in a number of areas: solar and/or carbon fuel heating, natural vs. electrical ventilation, air conditioning, natural vs. electrical lighting, water services, fire prevention, egress/elevating, acoustics, energy conservation or building performance; domestic and foreign travel as related to research and professional involvement; professional degree in mechanical or electrical engineering.

Send letter of application; curriculum vitae; three letters of recommendation; and samples of professional, creative and/or academic course work to: Search Committee, Center for Energy Research/Education/Service, Ball State University, Muncie, IN 47306 (Tel: 765-285-1135; Fax: 765-285-5622) Nominations are encouraged. Review of qualifying applications will begin September 15, 1999, and will continue until the position is filled. (www.bsue.edu/ceres) (www.bsue.edu/cap/arch/arch.html)

Ball State University is an equal opportunity, affirmative action employer and is strongly and actively committed to diversity within its community.

Circle 124 on information card

Redesigning Capitalism

Architects are perfectly positioned to help retool the market economy for a more resource-sensitive future.

By Kira L. Gould

When Ray Anderson decided to “green” his carpet-tile company, Interface, he was inspired in part by Paul Hawken’s *Ecology of Commerce* (HarperBusiness, 1993). Anderson’s efforts to limit waste and create resource- and energy-efficient facilities represent a shift toward “natural capitalism,” a business model conceived by Paul Hawken and Hunter and Amory Lovins in *Natural Capitalism* (Little, Brown) due out next month. Hawken, a green-business guru, and the Lovinses, resources analysts at the Rocky Mountain Institute, call their proposal natural capitalism because it suggests an interdependence between the production and consumption of manufactured capital—goods and services—and the sustainability of natural capital—water, air, soil, trees, and other resources.

The authors propose four strategies to help communities and businesses function in ways that value interdependence. First, they suggest something called “radical resource productivity”—squeezing familiar amounts of utility or work from a product or process while using less material and energy. For example, more efficient cars slow resource depletion and reduce pollution. Second, the authors promote redesigning industrial systems to imitate the self-sufficiency and renewal cycles found in biological systems, such as office buildings that reuse wastewater and produce energy with photovoltaic cells, enabling the constant reuse of materials.

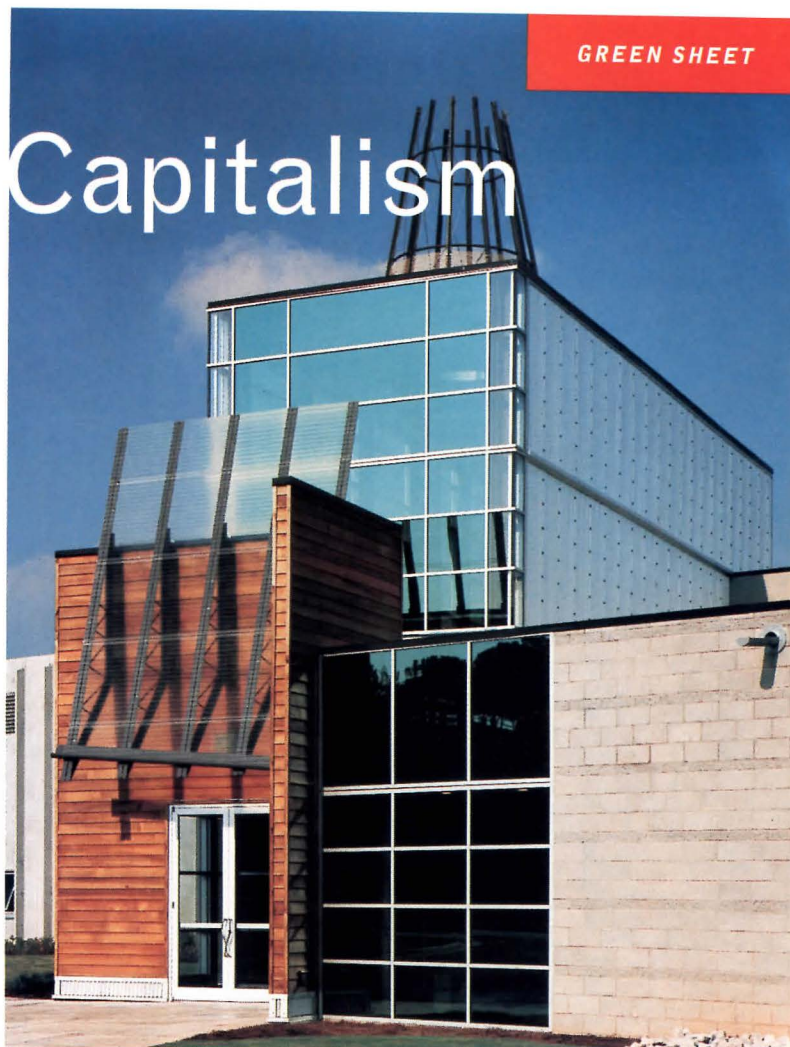
Third, they propose a shift from the acquisition of goods as a measure of affluence to a service-oriented economy. Manufacturers would sell services, not products; equipment would be leased or rented and then returned to the manufacturer for reuse, repair, and recycling. Finally, they suggest that we invest in, rather than exploit, natural capital.

Advocacy books often introduce important concepts without providing specific guidance. *Natural Capitalism* is an exception. For instance, the authors cite Curitiba, Brazil, as an example of a place where farsighted designers found solutions supporting the interdependence

between natural and manufactured capital. A string of the city’s mayors (most of them architects and planners) began an urban rejuvenation program in the 1970s aimed at making the then-crumbling city more livable and the real-estate market more sustainable by creating dozens of parks and open spaces. Public-park maintenance has been a priority ever since, to keep these amenities contributing to strong land and tax values.

In the private sector, Ray Anderson’s experiments with “closing the loop” on the production process are worth noting, too. The loop is closed when waste created by one process is employed as fuel or raw material for another process. Interface and even some of its competitors now offer leasing programs in which consumers exchange worn carpet tiles for new ones, instead of discarding them. For those seeking similar long-term investment strategies, *Natural Capitalism* makes a convincing case that sustainable solutions to the problems caused by industrialization are increasingly business-oriented and financially, as well as environmentally, beneficial to all. ■

Kira L. Gould is a freelance writer living in New York City and an associate with Gould Evans Affiliates.



Carpet-tile manufacturer Interface operates **green plant** designed by Atlanta-based Thompson, Ventulett, Stainback Architects.



On the Barricades

James Marston Fitch reflects on 40 years of preservation. Interview by Michael Cannell

Few professions owe as much to a single man. James Marston Fitch has been the preservation movement's foremost educator, editor, theoretician, critic, historian, and author since the movement's inception. Over the course of more than 40 years, he has evolved from upstart, to guiding spirit, to outspoken elder statesman. As head of the preservation program at Columbia University's Graduate School of Architecture Planning and Preservation through 1977, he trained and inspired a generation of preservationists who now fill the upper ranks of landmarks and conservancy groups around the world. He was an activist academic who bolted the leafy campus like a tweedy superhero to rescue inner-city neighborhoods and misunderstood landmarks long before preservation became the chic cause of the moneyed and influential. He was practically alone, for example, in defending the cast-iron architecture in New York's SoHo district. As director of preservation in the New York firm of Beyer Blinder Belle from 1979 to 1995, he played a critical role in preserving historic buildings at South Street Seaport and Ellis Island, among others.

At 90, Fitch no longer mans the barricades. But he still speaks out in a voice softened only by a courtly Tennessee accent. Early this year, Oxford University Press released the third edition of his 1947 book, American Building: The Environmental Forces That Shape It. Oxford will publish his next book, Architecture of the American People: 1621–2000, next year.

Architecture: Historic preservation is everywhere. It's a household word. Do you feel vindicated?

Fitch: Oh, completely. Modern architecture has displayed all sorts of virtues, including an increased appreciation of

science and technology. But it has also demonstrated a brutal attitude toward history. Like all revolutionary movements, it swept everything out. Fortunately, we're past that phase in this country. Interests seem to skip a generation. Grandchildren are determined to learn from their grandparents, not their parents. Young architects today are more sensitive to historicism than their parents were. They know that landmarks are good for our well-being. They know that "progress" is the biggest threat to the physical world.

Has preservation's success bred complacency?

On the contrary, preservation is one of the vital forces that compels architects today. It has shifted our perspective and understanding of what we're doing. All kinds of new science and technology have fueled the process. For example, paint colors have been of great interest to preservationists for decades. A lot of intelligent people worked on the problem, but they had very little knowledge of how colors failed and how they soiled over time in the real world. Consequently, we spent a lot of time trying to replicate colors that never existed. Science shattered all that. Williamsburg, Virginia, was the first programmed effort to reconstruct a whole palette of colors that would be historically accurate. So now we're dealing with the past in a much more intelligent way. Architects today are much better informed. They know a lot more about art history and archeology than we ever did.

Is there too much preservation, too much nostalgia?

There are so many buildings in this country in need of protective preservation that to worry about doing too much

ames Marston
itch in his
Greenwich Village
partment, where he
continues his
rofilic commentary
n the field
e helped create.



“Interests seem to skip a generation. Grandchildren are determined to learn from their grandparents, not their parents. Young architects today are more sensitive to historicism than their parents were.”

preservation strikes me as ludicrous. On the other hand, there’s certainly too much false historicism. The dominant style among developers is big-roofed buildings and three-car garages designed to look Egyptian or Elizabethan. It’s an incredibly shallow perspective, and it can’t possibly produce viable architecture. A few misguided architects around the fringes are dabbling with subjective historic forms. Some of them are quite talented, and no doubt well-intentioned, but they’re mad as hatters. It’s pathetic what Prince Charles is trying to purvey.

The New Urbanism—friend or foe?

I suppose they’re a foe. But the whole discussion strikes me as so dated. It’s a pretentious name for a form of urban design which actually dates back to men like Clarence S. Stein and Henry Wright who addressed the problems of automobile-free design after World War I. It’s unfortunate that the true innovators haven’t gotten credit.

You argued against protecting the Kodak sign when Grand Central Terminal underwent its recent renovation. Is there no place for colorful cultural relics?

That project was a prisoner of all kinds of contradictions. It could easily have been ruined by bad solutions. In our modern world, there’s fantastic pressure to change, mod-

ify, and alter in favor of somebody’s program of activity. It’s especially true of esthetic matters. Everybody has their own vantage point. That’s the danger of architecture and democracy: Too many people can ruin the broth. There’s always a tendency in discussions like this to imagine some state in which competing pressures balance out. But right now we’re in serious danger of allowing prosperity to have a ruinous effect—especially here in America.

Yes, different integrities can coexist within the same structure. Initially nobody objected to the Kodak sign, but it got to the point where it threatened the visual integrity of the building. We gave them an inch, and they took a mile. Little by little, we all came to agree this was the case.

What’s the next frontier?

Preservation is now an international movement. The new attitude toward the past, which we’ve long since accepted in the West, is spreading all over the world. The past is now open to young architects in regions like Indonesia and Micronesia in a way that it never has been before. It has been 200 years since architects in Brazil and other developing countries have been permitted to deal exclusively with what we now call their indigenous culture. They think their own traditional architecture constitutes the soundest basis for whatever work they do tomorrow. Modern and functional are different sides of the same coin. They can converge—brilliantly, of course, in the case of Japan. This is an area of profound significance that all architects must understand.

Who inherits the preservation movement?

It’s fascinating for me to see how strongly committed the youngest generation has become. They see the issues confronting the physical world in clear holistic terms, and they’re not easily dismayed.

In 1964, I started the first academic program in historic preservation at Columbia University. It was the first in this country, and the second in the world. A similar program started in Turkey the same year. We haven’t developed any especially visible personalities to shepherd this process, but we’ve sure developed a lot of them. ■



PRODUCTS

Systems Thinking

CLOCKWISE FROM TOP LEFT: **Shelter USA** introduces the KES System, a prefabricated wood framing system that combines the advantages of 2-by-4 framing with the open design of post-and-beam construction. Because KES uses prefabricated, pre-cut pieces that are connected by a patented connector, construction time is cut in half and costs are kept within the boundaries of 2-by-4 construction. *Circle 297 on Information Card.* **London-based SCP** introduces Public Seating System, their sleek and versatile response to modular seating. Cantilevered seats and backs are mounted on a square sectional beam with tapered legs. The modular system can be configured in three- to six-seat lengths. Public Seating System is manufactured in beech-faced plywood or structural aluminum; arms and upholstery are also available. *Circle 298 on Information Card.* **Roger Questel**, of Questech Metals, invented in his basement a technique to produce ornate metal designs while bypassing traditional cast-

ing methods. Each design is cast in an original hand-carved mold from proprietary polymers, fillers, ceramic, and metal, then covered with a protective coating. Unlike other metal products, Questech metals are 80 percent lighter than solid metal and can accommodate any relief pattern. Product lines include architectural molding (shown), wall surfacing, flooring, and signage. The Permanent Collection offers copper, brass, nickel silver, bronze, and gunmetal. *Circle 299 on Information Card.* **Sweden-based Ecophon** teamed up with U.S. firm CertainTeed to introduce Ecophon Advantage acoustical ceiling tiles. The ceiling panels are manufactured from resin-bonded glasswool with an NRC value of 0.85. In addition, the panels are water repellent, durable, and insulating. Ecophon Advantage can be installed in a standard T-bar grid system, and is suitable for offices, auditoriums, and large public areas. *Circle 300 on Information Card.*
Compiled by Joelle Byrer

Former architect Jonathan Gregg repainted his landscape, founding an arts colony in the Green Mountains of Vermont. By Andrei Codrescu

Jonathan Gregg is fond of quoting his teacher, Louis Kahn: "Great architecture should always manifest the human spirit." We are standing in a grand room filled with his paintings and art books, overlooking a waterfall on the Gihon River in Johnson, Vermont. Achingly beautiful green hills stretch all the way to Quebec 20 miles away. Gregg is the founder of the Vermont Studio Center (VSC), an art colony that offers solitude, workspaces, and uninterrupted time to 50 painters and sculptors and 12 writers. The studios occupy a half-dozen buildings, and the VSC is in the process of acquiring several more in the tiny town. The slightly utopian, Buddhist-flavored retreat was born of Gregg's existential crisis 16 years ago when a series of personal tragedies caused him to re-evaluate his life. He abandoned a successful architectural practice in New York City, became a Buddhist, and decided to establish a nonacademic grove of artistic learning and practice.

An Architecture of Exchange



At first, there was only one building and an idea. With a little help from his friends and an irrepressible, impish spirit, the former architect started renting studios in town. Budgets were small at first, and the mortgages daunting, but the place had friendly spirits. A decade later, the mortgages were paid off, the buildings were redesigned for the optimum use of light and concentration, and there were students coming from all parts of the world.

Until I came here to spend a week, I had forgotten how essential art is to me. Writers and artists need each other. The relationship is symbiotic. We learn formal approaches to text, and artists learn from us how to talk about their work. But to do this, we need the physical environment that makes it possible, the architecture of exchange. I had missed the golden age of writer-painter friendships in the late 1950s and early 1960s when the likes of poet Frank O'Hara and painter Jackson Pollock hung out at the Cedar Tavern in Greenwich Village. By 1965, when I moved to New York, the famous painters had either drunk themselves to death or had gotten rich and moved to the Hamptons, leaving the (perennially poor) poets to keep up the conversation as well as they could. The urban intimacy of the Village, with its coffeehouses and bookstores, was set up to encourage the next generation.

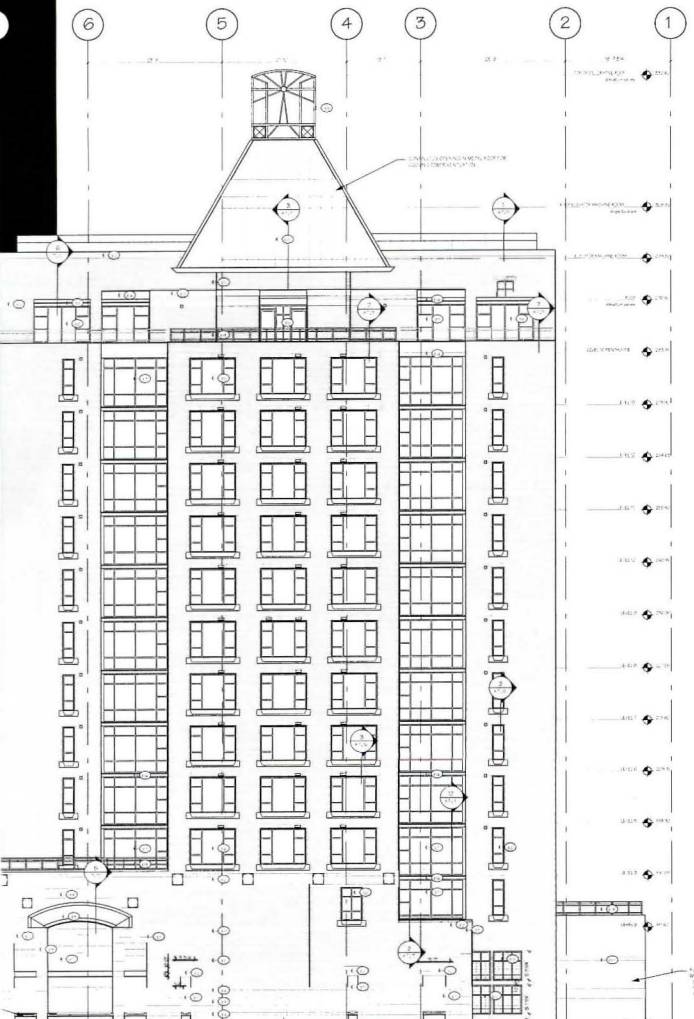
"I wanted to recreate the Cedar Tavern here," Gregg tells me. He has. The artists' studios are designed with a view to existential reflection, but also with a communal purpose. The architecture of exchange is at the heart of it. "The Vermont Studio Center is a 100-year project," Gregg says with a grin. I can see that the prospect makes him happy. At heart, he's still an architect. He knows that what he has built is going to survive him. Furthermore, what he has made is not static, like a monument, but a fluid body of buildings and people interacting in creative ways. ■

Architect Jonathan Gregg's dream of an **arts colony** started small and grew to include a swath of properties in Johnson, Vermont, as seen in the photograph above.



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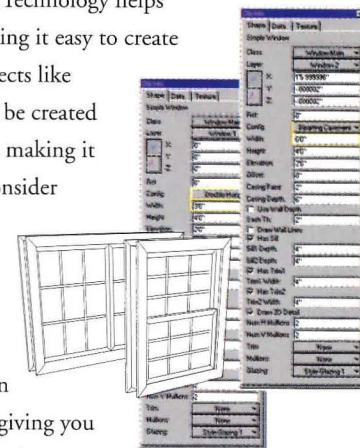


Miké Huggins, Burrows Huggins Architects, Vancouver, Canada

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