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Send an Architect to Congress

By Reed Kroloff

Jane Frederick is facing an uphill climb. She'd like to represent the Second District of South Carolina in the U.S. House of Representatives. Standing in her way is 15-term Republican stalwart Floyd Spence, 72, powerful chair of the House Armed Services Committee. Unseating an incumbent is always hard. Beating one who has been repeatedly reelected—and controls billions of dollars in defense spending—is next to impossible.

No one knows that better than 41-year-old Frederick, a Democrat. She lost to Spence two years ago in his first contested campaign since 1990, and it wasn't even close. Rather than disappear humiliated, Frederick has returned to challenge Spence again, with a stronger, better financed campaign and the name recognition she earned during her last try. She's still a long shot, but this time the race is definitely worth watching.

For architects, it's a must-see, as Jane Frederick is one of us, an architect. She runs a nine-person general practice with her husband and a third partner in Beaufort, halfway between Savannah and Charleston.

Frederick's campaign materials call for middle class tax relief, campaign reform, and protecting Social Security and Medicare. Pretty standard stuff. But the architect starts to emerge when she talks about education. Rather than offering boilerplate about class size or vouchers, Frederick warns voters that nearly 80 percent of South Carolina's schools are in need of significant repair or replacement. In other words, she suggests that without a suitable physical environment, no amount of teacher testing will rescue our failing schools. When Frederick talks about creating a better quality of life for the district, her mes-

sage is about sprawl and the need to make intelligent planning decisions. Again, the rhetoric is based in the physical: Without a better built environment, our communities can never achieve their potential.

Of course, better physical planning is not a panacea for the nation's ills, and Frederick's ideas aren't exactly novel. But by addressing voters in these terms, she brings architecture back into the national political dialogue, and that makes her significant.

Bully for Jane Frederick, and bully for the American Institute of Architect's (AIA) political action committee, ArchiPAC, for supporting her with a \$5,000 primary donation (that's the maximum a PAC can donate: \$5,000 in a primary, \$5,000 more in a general election). ArchiPAC is also underwriting fundraising events for Frederick this fall. (For more information, contact Frederick at: www.janefrederickforcongress.com.)

This is exactly the kind of thing AIA should spend its (your) money on—building the profession's political profile—rather than shipping its bloated board of directors on all-expenses-paid junkets. Ten-thousand dollars can make a huge difference in an election like Frederick's, where neither candidate raised more than \$500,000 last time. If AIA cut its 48-member board in half, or simply asked them to pay their own freight occasionally, the Institute could support 20 Jane Fredericks. Imagine having 20 architects in Congress when issues like infrastructure planning, education funding, and the ADA come up. Talk about opportunities to improve the built environment (to say nothing of the health and status of the profession).

None of that will happen anytime soon, as Frederick is the only architect running for national office this year. That's a shame: Jane Frederick laughs about all the people who say, "I'm voting for you because you're not a lawyer." Wouldn't it be nice if they said they were voting for her because she is an architect?

Here's an idea. AIA should convert its Leadership Institute (Frederick is an alum) into a political training course designed specifically to groom architect-politicians. We have wonderful teachers ready, all architects who have entered public service: Richard Swett, U.S. Ambassador to Denmark; Harvey Gantt, former mayor of Charlotte, North Carolina; and, we hope, Jane Frederick. In the meantime, support the candidates who support us. And please vote on November 2. ■

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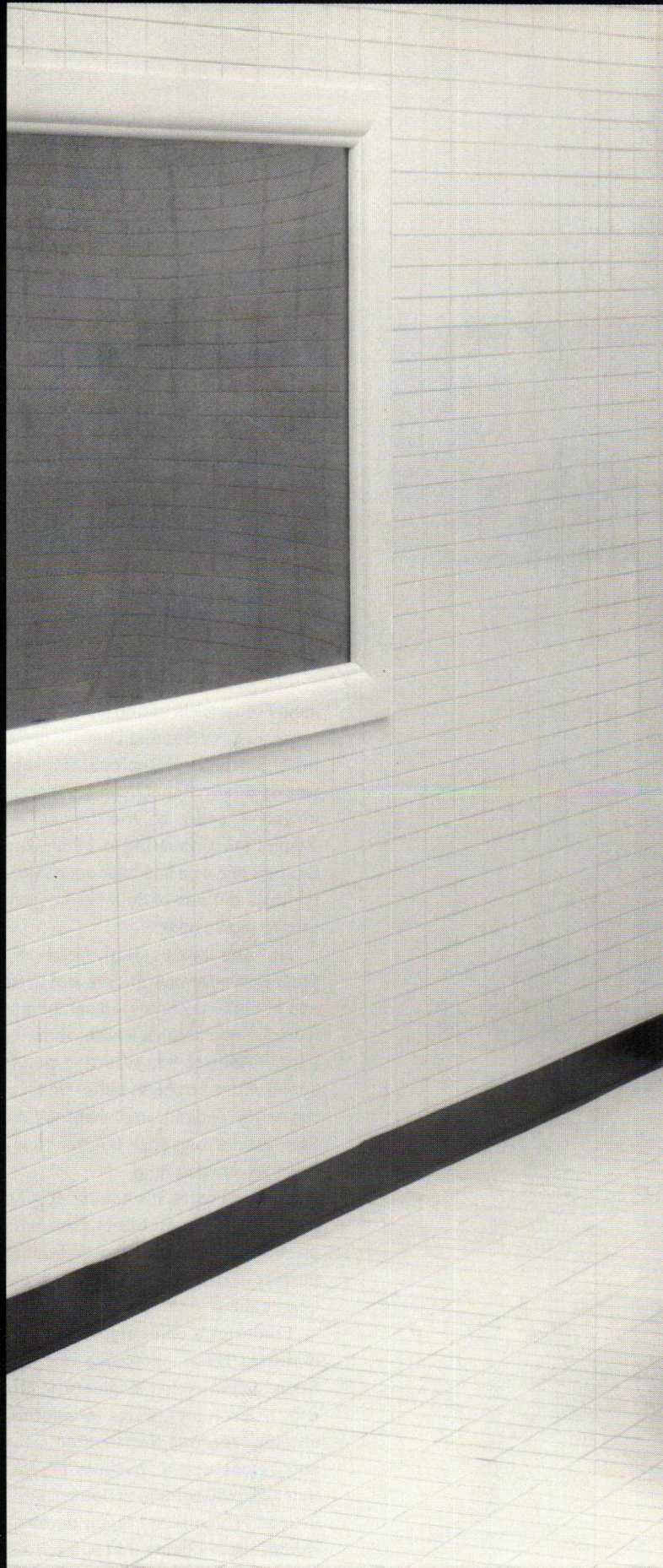
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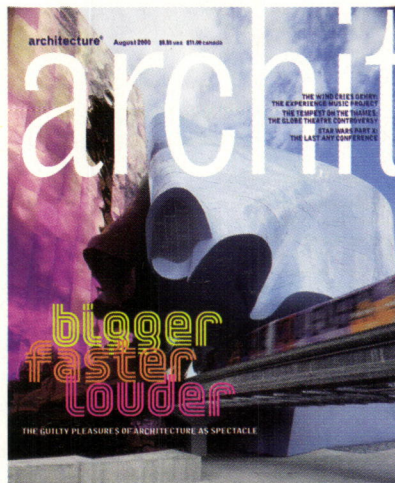
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The Finest Finish

Circle 19 on information card

letters



The Hejduk Epoch

From 1954 through 1959 as a student of architecture at The University of Texas, I sat quietly, without distinction, absorbing the lessons of John Hejduk, Colin Rowe, Bernhard Hoesli, John Shaw, Wener Seligmann, Robert Slusky, Blake Alexander, et al.

John Hejduk "peeled my eyes," and for the past 30 years of private practice, I find myself constantly aware of his presence as I search for the "idea" in each new project. The passing of John Hejduk is the passing of an epoch in the annals of the education of an architect.

In February of this year I received a note from John congratulating me on my work, and a copy of his book *Lines: No Fire Could Burn*. I am indeed fortunate to have known John Hejduk.

Jerry C. Viniegra
Principal,
Viniegra & Viniegra Architecture
Los Angeles

Loving the Box

July 2000 is a great issue—extremely readable, beautiful design, with incredibly sumptuous full two-page photographic spreads. Of course, it helps that I genuinely like those minimalist boxes (although I gather from Aaron Betsky's critique that he isn't particularly enthusiastic about them). The fictional Edith Farnsworth memoir was fun to read, and the Douglas Cardinal novella was

stranger than fiction. I hope you will stay with this format.

Finally, a U.S. architecture periodical that can compete with Europe and Japan! Congratulations.

Craig W. Hartman
Senior Partner,
Skidmore Owings & Merrill
San Francisco

Forging the NMAI

There is a difference between an original work of art and a forgery. In copying my signature work the Smithsonian Institution has lost the very essence of the original design for the National Museum of the American Indian, and has produced an inferior and compromised version of my architecture at more expense to the American public. No spin by the Smithsonian Institution will ever justify this sad legacy for the last site on the Mall in your nation's capital.

For a detailed account of the story of the National Museum of the American Indian please visit our Web site at www.djcaarchitect.com.

Douglas J. Cardinal
Principal,
Douglas J. Cardinal Architect
Ottawa, Ontario

CORRECTIONS

Anne Miliello designed the lights of the 42nd Street Studios (August, page 31).

The architects of The Venetian (August, page 68) should have been cited as "A Collaboration Between TSA of Nevada, LLP and WAT&G Inc., Nevada." The first set of initials is for The Stubbins Associates, not Tate & Snyder.

The name of the hotel mentioned in News (July, page 49) is the Otesaga.

WE WANT TO HEAR FROM YOU!

Send your letters to the editor to: *Architecture*, 770 Broadway, New York, NY 10003. Or fax to: 646/654-5817. Or e-mail us at: info@architecturemag.com. Include your name, address, and daytime phone number. Letters may be edited for clarity or length.

The 48th Annual P/A Awards

Deadline: December 1, 2000

Jury

Deborah Berke
Deborah Berke Architect,
New York

Brad Cloepfil
Allied Works Architecture,
Portland, Oregon

Nathalie de Vries
MVRDV, Rotterdam

Hani Rashid
Asymptote, New York

Mark Robbins
Director of Design, National Endowment
for the Arts, Washington, D.C.



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48th Annual P/A Awards

Deadline: December 1, 2000

Please complete and submit all parts intact with each entry (SEE ITEM 15 FOR INSTRUCTIONS). Photocopies of this form may be used.

ENTRANT

CONTACT NAME

ADDRESS

PHONE NUMBER

FAX NUMBER

E-MAIL ADDRESS

PROJECT NAME

PROJECT LOCATION

CLIENT

CLIENT PHONE NUMBER

ENTRY NUMBER (FOR ARCHITECTURE USE ONLY)

Fee CHECK ONE

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Category CHECK ONE, SEE ITEM 17

CM CU ED GV HM HR
 HS I RC RL UD

I certify that the parties credited executed the submitted project and that it meets all eligibility requirements (1-6). I understand that *Architecture* may disqualify any entry that fails to meet submission requirements (9-20). If this entry wins an award or citation in the 47th Annual P/A Awards, I grant *Architecture* sole first publication rights to the project during construction or when fully complete, the choice of which is at *Architecture's* discretion (7-8). Signer must be authorized to represent those credited.

SIGNATURE

NAME (TYPED OR PRINTED)

Architecture will feature the winning entries in its April 2001 issue, as well as in seminars in several locations, and *Architecture* will provide information on winning entries to local and national media.

Eligibility

1 Who Can Enter

Architects and other design professionals practicing in the U.S., Canada, or Mexico may enter one or more submissions. Proposals may be for any location, but work must have been directed and substantially executed in offices in those three countries.

2 Real Projects

All entries must have been commissioned for compensation by clients with the authority and the intention to carry out the submitted proposal. A project designed for a competition is eligible if it is the one proposal the competition's sponsor intends to build.

3 Architectural Design Entries

Architectural design entries may only include works of architecture scheduled to be completed after May 1, 2001. Indicate the anticipated completion date on the Project Facts Page (see item 10). Prototypes are acceptable if commissioned by a client.

4 Urban Design Entries

Urban design entries must have been accepted by a client who intends to base future development on them. Please include implementation plans and an anticipated time frame with your submission.

5 Verification of Client

The jury's decision to evaluate any submission will be contingent upon *Architecture's* verification that it meets all eligibility requirements. *Architecture* will contact the clients of projects selected for recognition. *Architecture* reserves final decision on eligibility and accepts no liability in that regard.

6 Providing Additional Materials

If the submission should win, the entrant agrees to make available further information and publication-worthy graphic material as needed by *Architecture*.

Winning Entries

7 Publication

Winners of P/A design awards or citations in any year grant *Architecture* first publication rights for their projects while under construction or when complete or substantially complete (at *Architecture's* discretion). Publication may not coincide with building completion, but *Architecture* retains first publication rights to the project for up to one year.

8 Award

P/A design award- and citation-winners will be announced first at a celebration in New York

City in early April 2001. Winning projects will be exhibited at that event, and may subsequently travel as a curated exhibition. Winners may be asked to submit a summary presentation for exhibition and travel purposes.

Submission Requirements

9 Binders

Entries must consist of legibly reproduced graphic material accompanied by adequate explanatory text in English. All entry material must be firmly bound in binders no larger than 17 inches in one dimension only, to a maximum of 11 by 17 inches (9 by 12 inches preferred). Avoid fragile bindings. Supplementary documents, such as research reports or urban design appendices, may be bound separately as part of the same entry. Slides should be submitted only as supplementary material. Videocassettes, CD-ROMs, models, and any unbound material in boxes, sleeves, etc., will not be considered.

10 Project Facts Page

To ensure clear communication to the jury, the first page of each entry binder must list project facts under the following headings: Location, Site Characteristics, Zoning Constraints, Type of Client, Program, Construction Systems, Funding, and Schedule. This information must include square footage, cost, and specific materials where possible. All project facts should fit on one page.

11 Documenting the Process

Entries should document the design process, as well as its result. *Architecture* encourages entrants to include copies of preliminary sketches, alternative preliminary schemes, information on context, precedents for the design, and excerpts from working drawings.

12 Research Behind Projects

We encourage including records of any research performed in support of an architecture or urban design project that is otherwise eligible.

13 No Original Drawings

Please do not send original drawings; *Architecture* accepts no liability for submittals.

14 Anonymity

To maintain anonymity in judging, no names of entrants or collaborating parties may appear on any part of the submission except on entry forms. Credits may be concealed by tape or other simple means. Do not conceal identity or location of projects.

15 Entry Forms

Each submission must be accompanied by a signed entry form. Reproductions of the form are acceptable. Complete the entire form and insert it intact into an unsealed envelope attached to the binder's back cover.

16 Photocopy

Please enclose one bound set of 8 1/2-by-11-inch photocopies of your entry. The first two pages should be copies of your entry form and the Project Facts Page, in that order. Secure the photocopies inside the back cover of your binder.

17 Entry Categories

Identify each submission on its entry form as one of the following:

CM COMMERCIAL
CU CULTURAL
ED EDUCATIONAL
GV GOVERNMENTAL
HM MULTIFAMILY HOUSING
HR HEALTH-RELATED
HS SINGLE-FAMILY HOUSE
I INDUSTRIAL
RC RECREATIONAL
RL RELIGIOUS
UD URBAN DESIGN

Mixed facilities should be classified by the largest function. There is no "miscellaneous" category.

18 Entry Fees

An entry fee must accompany each submission. The fee is \$100 for *Architecture* subscribers; nonsubscribers can submit an entry for \$135, which includes a one-year subscription to *Architecture*. Each entry after the initial entry is \$100. Make check or money order payable to *Architecture*. Canadian and Mexican entrants must send drafts in U.S. dollars. Fee must be inserted in unsealed envelope with entry form (see item 15).

19 Return of Entries

Architecture will return entries ONLY if they are accompanied by a self-addressed, stamped envelope. *Architecture* assumes no liability for loss or damage.

20 Entry Deadline

Deadline for sending entries is December 1, 2000. All entries must show a postage date as evidence of being in the carrier's hands by December 1. Hand-delivered entries must arrive at *Architecture's* editorial office (address below) by 5 p.m. on December 1. To ensure timely receipt, *Architecture* recommends using a carrier that guarantees delivery within a few days.

Address entries to:
Awards Editor
Architecture
770 Broadway
New York, NY 10003

Deadline:
December 1, 2000
Strictly Enforced

Seagram For Sale

p. 29

MLK Memorial Design Unveiled

p. 33

Is Bilbao Rusting?

p. 34

Disney Loses \$240M Judgment

p. 36



Why Is Richard Rogers Smiling?

The architect grins and bears his rep with the British press.

Banter The British press has in recent months attempted to characterize Richard Rogers as a carping old crank. Never mind that his complaints are valid. Consider: He watched in horror as developers filled his Millennium Dome, an austere technical marvel, with ersatz, touristy junk. He suffered through insensitive renovations of the Centre Pompidou in Paris (1976, codesigned with Renzo Piano). And as Prime Minister Tony Blair's chief advisor on cities, he has gone head to head with Parliament itself—not to mention

the Windsors. Andrew Blum spoke to Lord Rogers from his London office about "Cool Britannia," his socialist tendencies, and the \$150,000 Praemium Imperiale award he received from the Japan Art Association in July.

What are you planning to do with the money?

It's wonderful to have such a prestigious prize. I think we'll give it to charity. Usually, you get a golf club or something, so it's nice to have a lump of money to do something with.



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Circle 31 on information card

What do you think of the recent renovations of the Centre Pompidou?

It's a real bureaucratic lack of vision. Renzo [Piano] and I were both involved in the design, but I left at a point when it had basically been agreed upon. Unfortunately, the design was then changed, and I think appalling mistakes were made. It looks great from the outside: The piazza looks better than it ever has. On the other hand, the very basic concepts—for instance the façade of the building as a vertical extension of the piazza—they're going to change because they put a great big elevator and staircase in the middle of the building. Most visitors now ascend from the inside so it becomes a traditional building.

What does "Cool Britannia" mean to you?

The big change has been from an industrial society to a society based on brains—from brawn to brains, shall we say.

You accompanied Queen Elizabeth II to the opening of the Millennium Dome. What was that like?

Well, I disliked riding with the Queen. It was fine, you know, what can I say?

Do you think the Dome is a success?

Building it was fantastic, a great opportunity. It was below budget and on time. It's the largest enclosure with the least material. That was a challenge, and it worked out well. What hasn't worked out is the number of people that want to see its contents, much fewer than they expected.

You're closer to power now. Do you miss fighting against public opinion?

Oh, yes. But, you know, public opinion is a continuous battle.



Seagram For Sale

Real Estate Mies van der Rohe had it right: Less is more—\$350 million more. That's the minimum the Seagram Building is expected to fetch now that its current owner, the \$300 billion TIAA-CREF financial services organization, has put Mies's Manhattan masterpiece up for sale.

The New York real estate community is frothing at the mouth, given Seagram's unique combination of location, prestige, and—lest they forget—architecture. "It has a unique elegance to it," gushed one broker close to the sale. "And the fact that this building was selected by Herb Muschamp of *The New York Times* as the best building of the millennium—yeah, that helps!"

The 38-story tower, built in 1959, also includes the Four Seasons, the Philip Johnson-designed landmark power canteen, as well as The Brasserie, Liz Diller and Ric Scofidio's more recent star performance. The sale will not affect the building's landmark status or any of the current leases, officials at TIAA said.

There's a certain irony to the building's record-breaking \$350 million price tag. When it opened, its broad plaza of pink Vermont granite drew ridicule—all that empty space, out there on Park Avenue! But, points out Museum of Modern Art architecture curator Terence Riley, who is currently planning a Mies exhibit for the spring, "It just shows that in certain instances, listening to architects makes more sense than listening to real estate developers." *Andrew Blum*

Andrew Blum has written about architecture for Metropolis.

Buzz

Frank Gehry and the creators of the Apple iMac computer are the first recipients of National Design Awards from the **Cooper-Hewitt National Design Museum**. The museum also bestowed two "American Originals" awards to **Morris Lapidus** and—posthumously—to **John Hejduk**.

Louisiana State University received a \$500,000 grant from the **National Science Foundation** to found a new curriculum in hurricane engineering.

Ove Arup, the engineering firm responsible for London's Millennium Bridge (August 2000, page 33), has a new project on their hands: the Bioform, a brassiere that replaces the traditional underwire system with plastic cups. Arup used computer modeling to test the stress and stretch a typical bra endures and invented the molded plastic cups to—we kid you not—"spread the load."

Daniel Libeskind is considering litigation against Melbourne, Australia-based firm **Ashton Raggatt McDougall** (ARM) for copyright infringement. It seems that ARM, known for "sampling" well-known architectural works as a rapper might borrow a riff from a song, collaged the floor plan from Libeskind's Jewish Museum in Berlin into their design of the Gallery of Aboriginal Australia. You'll recall that this isn't the first time Libeskind has cried foul: He also claimed that **Peter Eisenman's** Berlin Holocaust memorial closely resembled his design for Hoffmann Gardens at the Berlin Museum.

The **Los Angeles Philharmonic Association** has decided to raze the

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Circle 33 on information card

Sprawl at the Polls: How Will You Vote?

As alarm over urban sprawl deepens, voters are confronting sprawl-related issues at the polls. Dozens of ballot measures dealing with open space will go before voters this Election Day. Here is a sampling of some that seem broad in scope and others that address tiny machinations of the legislative and regulatory process. Each one, however, carries its share of hysterical rhetoric on either side of the debate. *Bradford McKee*

Where?	What?	Why?	All in Favor?	Opposed?	Inflammatory Quote
Arizona	Proposition 202	Allows local governments to impose urban growth boundaries; require fees from developers to cover the cost of public works; create referenda to decide on major changes to a county's general plan	Citizens for Growth Management, with help from the Sierra Club	The Arizona Chamber of Commerce and the state chapter of the AFL-CIO, as well as big banks and developers	"[If the measure succeeds], Arizona will be saddled with California-style housing prices at New York-style densities." —Arizonans for Responsible Planning
Alameda County, California	Save Agriculture and Open Space Lands Initiative	Enacts urban growth boundaries around several cities and condenses development within those boundaries	Sierra Club San Francisco Bay chapter; Greenbelt Alliance; Citizens for Open Space	Tri-Valley Business Council, which developed a ballot initiative of its own that anti-sprawl activists say does little to change current planning policies for the better	"Vision 2010 [nickname of the business council's counterinitiative] would facilitate the wholesale urbanization of North Livermore, under the guise of preserving agriculture and open space." —Citizens for Open Space
Colorado	Responsible Growth Initiative	Requires cities and counties to submit development plans to voters; disclose the environmental and economic impact of new development; and allow development only where localities can afford it	Colorado Public Interest Research Group and Coloradans for Responsible Growth	The Colorado Association of Home Builders, among others	"No sooner does our economy get back on its feet [than] the no-growthers come back out of the woodwork to again try to destroy it." —Steve Schuck, The Schuck Corporation
Missouri	Save Our Scenery 2000 Initiative	Stops new billboard construction on highways; stops billboard companies from clear cutting trees along highways; prohibits replacing existing billboards, and allows governments to regulate billboards	The Missouri Municipal League, Missouri League of Women Voters; American Institute of Architects—Missouri, and the Missouri Audubon Council	Major outdoor advertising companies	"We look forward to you [sic] joining us in the belief that a drive through Missouri should be more than a ride through the Yellow Pages." —Coalition in Support of Save Our Scenery
Ohio	State Issue 1	Gives the State of Ohio the authority to issue \$400 million in bonds for conservation of brownfield sites and to preserve open space, watersheds, and develop recreation areas	An act of the General Assembly of Ohio	At least two Ohio legislators	"The States should not be given the authority to issue new debt for a program that is a token attempt at conservation and revitalization." —Senator Lynn R. Wachtman (R) and Representative Bill Taylor (R)
Oregon	Measure 2	Allows lawmakers to review or overturn rules adopted by state regulatory bodies. Known as a "takings" initiative, as it requires authorities to pay property owners if regulations devalue their properties	Oregonians in Action	1,000 Friends of Oregon, a grassroots smart-growth outfit	"The Daily Astorian called a similar 1998 measure 'the Frankenstein of ballot measures.'" —1,000 Friends of Oregon

Hollywood Bowl (long razed by musicians for its poor acoustics) to make way for an \$18 million replacement designed by **Hodgetts + Fung**.

The shortlist to design a new 422,000-square-foot, \$79 million Washington, D.C., headquarters for the **Bureau of Alcohol, Tobacco, and Firearms** comprises **Moshe Safdie and Associates**, **Shalom Baranes Associates**, **Pei Cobb Freed & Partners**, and **Rafael Viñoly Associates**.

At the urging of **Prince Charles**, the **Royal Institute of British Architects** has stepped up its minority recruitment efforts in memory of **Stephen Lawrence**, a black teenager murdered in a 1993 racist attack at a London bus stop. In other royal news, **Prince William** will pursue a degree in art history and architecture at **St. Andrews University** in Edinburgh, Scotland.

The shortlist to design a major renovation and addition at the **Wadsworth Atheneum** in Hartford comprises **Brad Cloepfil**, **Zaha Hadid**, **Morphosis**, and **van Berkel + Bos**. **Maya Lin** has already been chosen by the museum to design a new façade and landscaping.

Harvard University tapped Austrian architect **Hans Hollein** to design a four-story, mixed-use building in Cambridge, Massachusetts, that houses ground-floor retail and three floors of library services.

Art conservationists are claiming that the oak floors of the **Tate Modern Gallery** may actually be damaging the museum's contents. Because architects **Herzog & de Meuron** specified that the floors remain untreated,

Tijuana Defies Its Reputation

Preservation The 111-year-old city of Tijuana, Mexico, is more than just a border party town, its sole purpose to ply debauched Americans with casinos and cheap tequila. The city, located less than 20 miles from San Diego, has been providing alternative lifestyles to its puritanical northern neighbors since Prohibition, with legalized gambling, prostitution, and a lenient drinking age. United for Tijuana, a local preservation group, wants the world to see the city's historic architecture instead. Even on Avenida Revolución (right), the main tourist drag, there are serious architectural specimens, although many are buried by awnings and signs, or ignored by unromantic entrepreneurs.

Unfortunately, preserving Tijuana's past is an uphill battle. Few of Tijuana's leaders or residents are native to the city, and therefore do not have sentimental ties to its history, or an interest in preserving it. However, preservationists' cries aren't falling on deaf ears. Mexico's National Anthropology and History Institute is assisting in United for Tijuana's effort to survey and catalogue 160 buildings downtown.

The city's architectural identity crisis (there is no singular Tijuana



style) makes preservation difficult. Tijuana's architectural influences are a patchwork of building styles—Spanish- and Moorish-influenced structures, corporate office boxes, and impoverished shantytowns—as one might expect in a border city. Preservationists hope to encourage preservation with tax breaks or other advantages. Until then, architecture's advocates can only hope. *Sarah Palmer*

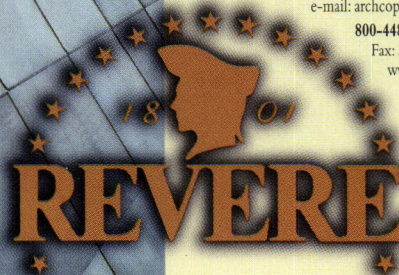
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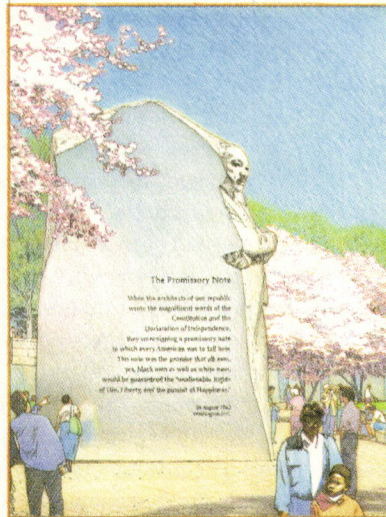
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MLK Memorial Design Unveiled

Design On September 13, federal officials selected a scheme by San Francisco's ROMA Design Group to be the Washington, D.C. Martin Luther King, Jr. National Memorial. Chosen from more than 900 entries, ROMA's design will be the first memorial to an African-American on the National Mall.

The memorial will occupy a triangular parcel along the edge of the Tidal Basin between the Lincoln Memorial and the Washington Monument. A 15-foot-tall semicircular stone wall borders the northern end of the site. Twenty-four niches in the wall commemorate other martyrs of the civil rights movement, including four girls killed in the 1963 bombing of a Birmingham, Alabama, church and Medgar Evers, the Mississippi civil rights leader. A stand of cherry trees will bloom each year around the time of Dr. King's death. (He was assassinated in Memphis in April 1968.) Dr. King's likeness is carved into a stone sculpture, called the "stone of hope," that faces the Jefferson Memorial across the basin. ROMA Design President Boris Dramov emphasizes that his firm's design "is about life and positive social change."

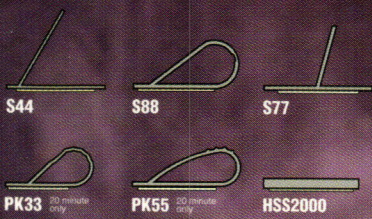
ROMA's design must still be approved by three federal commissions and the National Park Service. Congress plans to dedicate the memorial in 2003. *Mickey O'Connor*



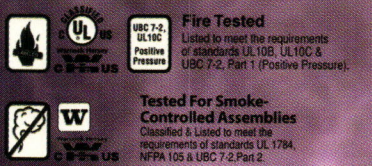
they could produce acidic oak dust, known to corrode some types of metals and ceramics.

The **Advisory Council on Historic Preservation**, which is advising **Interior Secretary Bruce Babbitt**, and the **National Park Service** have added their voices to the howl and cry chorus that is railing against **Friedrich St. Florian's** design for a World War II memorial on the National Mall in Washington, D.C. In other memorial news, the **National Capital Memorial Commission** rejected a proposal to build a structure to honor former **President Ronald Reagan**.

The **U.S. General Services Administration** has selected the joint venture of **Morphosis** and **Einhorn Yaffee Prescott** to design



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Is Bilbao Rusting?

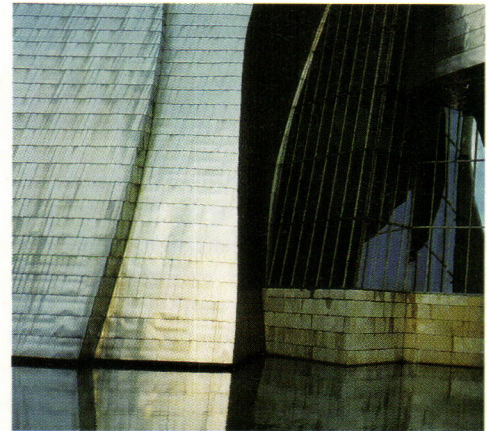
Design Three years after the Guggenheim Museum in Bilbao, Spain, opened to universal acclaim, shots have been fired across its titanium-sheathed bow from an unlikely source: the *Philadelphia Inquirer*. In August, Andrea Gerlin, a London-based correspondent for the paper, reported that the building's innovative metal skin was rusting. (Repeated attempts to contact Gerlin were unsuccessful, and her colleagues at the *Inquirer* refused comment.)

The front-page story details a finger-pointing duel between the Basque museum officials and the American-based metal fabricators. But it may be much ado about dirt—not rust or other deterioration. It seems the only real

problem with the building's skin went unreported by Gerlin: The exterior was never cleaned following construction. "Polyurethane roofing material poured over the side and left some streaks," explains architect Frank Gehry. "We begged them to clean it and they haven't."

Photos dating from the building's opening reveal that such staining has always been present. Guggenheim spokesperson Nerea Abasolo suggests that "you can see a small stain here and there as the result of the environmental dirt.

"Titanium is immune to corrosion," explains Gary Nemchock, the architecture and design consultant to Denver-based Timet, who fabricated the panels for the museum. "What we have here is a very old, industrial city and its dirt." Nemchock is working with Gehry and the Guggenheim to develop solvents to remove both the polyurethane and the dirt—without altering the light-reflecting qualities



Spilled polyurethane and Bilbao's industry have comingled, dulling and streaking the Guggenheim's luminous shell.

of the material. The Guggenheim's Abasolo maintains that "we have a cleaning schedule," though she won't confirm its planned date. *Edward Keegan*

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Sunday in the Park with Sprawl

Sprawl Watch The private land conservancy National Park Trust (NPT) recently sounded the alarm on sprawl's attack on America's state parks in a report titled "Legacy: The Crisis in Our Parks." The study, released in August, includes a state-by-state ranking of those parks most at risk and a look at the critical issues that surround the threats they face.

The report further explains that, although state parks by definition are thought to be protected from

private development, often their technical boundaries may surround large areas of privately owned, developable land that can potentially destroy a park from within. Another hidden danger is the accumulation of buildings at a park's edges, like these mobile homes at the Etowah Indian Mounds State Park in Cartersville, Georgia (above). The NPT has mailed the survey to all state park directors as part of a grass-roots awareness campaign. *E.K.*

a 200,000-square-foot, \$51 million building for the **National Oceanic and Atmospheric Administration** at the Suitland Federal Center in Suitland, Maryland.

New York Governor George Pataki has announced plans for a \$40 million performing arts and music center that will include a 4,000-seat indoor theater and a 15,000 outdoor seats on a 37-acre site at **Max Yasgur's** farm in Bethel, New York, where the storied Woodstock concert took place in 1969.

The **National Endowment for the Arts** has awarded up to \$50,000 each to 10 organizations to fund public architecture competitions, including the **Seattle Art Museum**; the **Black History Museum**; the **Municipal Art Society**; **Booker T. Washington High School**; the **Pittsburgh**



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Disney Loses \$240M Judgment to Canadian Architect, Partner

An Orlando, Florida, jury has ruled that the Walt Disney Company must pay \$240 million in damages to a Canadian architect and his partner for theft of trade secrets, breaking an implied contract, and breaching a confidential relationship. At issue was a proposal that Canadian architect Edward Russell and former professional baseball umpire Nicholas Stracick pitched to Disney in 1987 for a sports complex that they say inspired Disney's 150-acre Wide World of Sports theme park. All Pro Sports Camps, the company Russell and Stracick formed to promote the sports complex idea, had originally sued Disney for more than \$1 billion.

The suit was over ideas, not specific architectural designs. The jury, which deliberated for 12 hours, was instructed by the judge to ignore the site plan, architecture, and business plan, which he said were not directly copied from All Pro.

Russell and other All Pro representatives met with Disney executives in September 1987 and turned over plans for a sports complex and hotel which were never returned. In 1989, then-Disney executive Todd Mansfield wrote a letter to Wilson saying that Disney's "plate is full and consequently cannot entertain such proposals for some time in the future." Four years later,

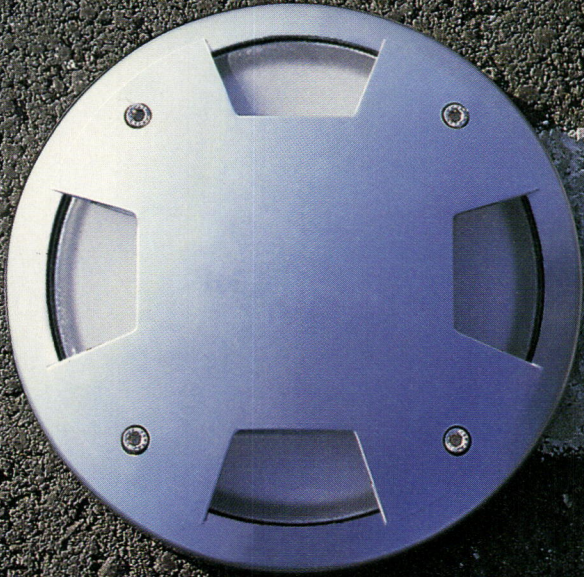
Disney announced plans for the Wide World of Sports complex. The theme park, which opened in 1997, is expected to attract a million visitors this year.

The five-week trial included Disney lawyers playing hardball, alleging among other things that Russell tried to bribe Pete Wilson, a Walt Disney World golf pro, to pave the way with Disney executives. All Pro's attorneys, led by O.J. Simpson "dream team" lawyer Johnnie Cochran, countered that copies of the plans—which Disney denied keeping—were found in Disney's files during the discovery period of the trial.

Russell, whose other projects have included the Military Electronics Research and Development Center in San Diego and Armco Canada's headquarters, cited more than 80 similarities between Disney's Wide World of Sports and the proposal that he and Stracick presented in 1987, including a major league baseball field, a moderately-priced hotel, and badminton facilities. "It was my work," he said. "It was my baby." Disney plans to appeal the jury's decision. *Liz Seymour*

Greensboro, North Carolina-based Liz Seymour has contributed to Elle Décor, Metropolitan Home, Southern Accents, and The New York Times.

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Stiltville's Last Resort

Farewell In late August, Linda Canzanelli, superintendent of Biscayne National Park in Miami, closed the book on a longstanding preservation battle when she evicted the seven remaining renters from Stiltville, the community of ramshackle stilted houses that have sat in the Biscayne Bay since the 1930s (July 1999, pages 108-113). Canzanelli claimed a preservation victory, insisting that the houses will be reprogrammed for public use, perhaps as an environmental education center. However, she also emphasized that her organization will not repair or rebuild any structures damaged by weather, essentially dooming them to ruin with the next stiff breeze. Renters have until December 1 to evacuate. *M.O.*



NEWS

Children's Museum; and the **Tucson-Pima Arts Council**.

Buffalo-based, 500-person **Cannon Design** and L.A.'s 60-person **Dworsky Associates** have announced their intention to merge. The firm's West Coast office will be known as **Cannon Dworsky**.

The **Meadows School of the Arts** at **Southern Methodist University** in Dallas has announced that its 2000 Algur H. Meadows Award (and a cash prize of \$50,000) will go to **Santiago Calatrava**. The Spanish architect is currently working on a proposal for bridges for the city's Trinity River Corridor Project.

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Maui Passes Native Materials Building Codes



New codes will alleviate westernization of Hawaiian construction, in which new development (background) supplants such traditional buildings as the Piihana Heiau Paukukalo (foreground).

Preservation In August, the Maui, Hawaii, County Council passed an indigenous-architecture bill that will establish building codes for traditional construction materials and techniques. "This bill opens up a whole new chapter of architecture in Hawaii," says J. Kalani English, the Maui councilman who introduced the bill. "Now architects and builders have the choice to use either Western or traditional materials, and hopefully some of the native building styles, now almost extinct, will be brought back into use."

The toll that Western construction standards have taken on Hawaii's native architecture is severe. Maui's Unified Building Code, for example, regulates the use of Western materials but ignores most native ones, such as Hawaiian grasses and palm and coconut leaves. Codes introduced in the 1920s and 1930s rendered such materials illegal for construction without a special exemption from the county.

The most common traditional building type is a thatched, A-frame structure built on a stone foundation. Native Hawaiians argue that these buildings are stronger in extreme weather conditions—such as hurricanes—than Western equivalents, as they allow the wind to pass through them. The bill specifies that traditional materials must be treated with flame-retardant coatings and undergo various stress tests before implementation.

English claims that reintroducing native construction techniques will benefit natives and tourists alike. "We promote these native structures, then people come and the architecture is all Western. Hopefully now that will change." *S.P.*

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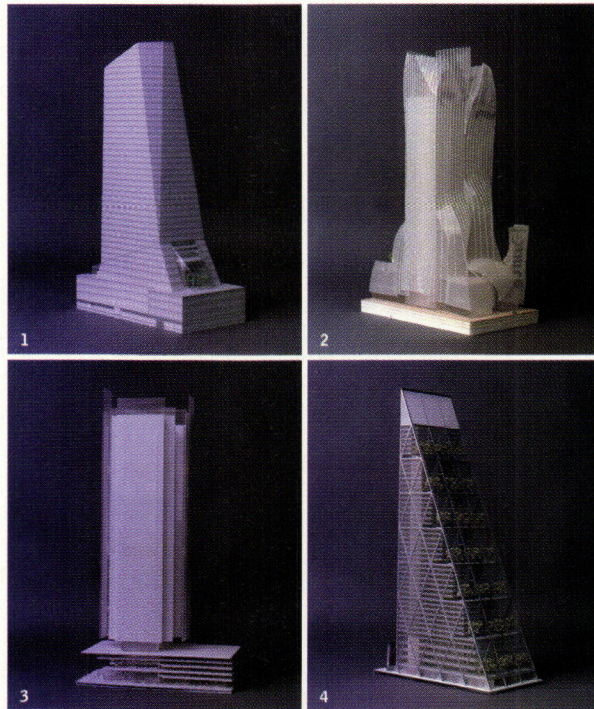
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New York Times Shows Shortlisted Schemes

Design

- 1 Cesar Pelli & Associates submitted a faceted volume with a dramatically sloping roof that features two tree-filled atriums.
- 2 The team of Frank O. Gehry & Associates and Skidmore, Owings & Merrill responded with a tower that reflects Gehry's signature amorphous forms.
- 3 Italian architect Renzo Piano crafted an austere, rectangular tower clad in layered glass planes.
- 4 London's Norman Foster created a triangular block that tapers to a point, its entire Eighth Avenue façade dotted with urban gardens.

The Gray Lady is planning to select an architect this month. *M.O.*



selected **Hardy Holzman Pfeiffer Associates** to oversee a \$105 million rehabilitation of the state's legislative building, which was built in 1928 and features the world's fourth-tallest dome (after the **U.S. Capitol**, **St. Paul's Cathedral** in London, and **St. Peter's Cathedral** in Rome).

The owners of the land on which the **Millennium Dome** sits are hinting that they may demolish the 1 million-square-foot building by the year's end since its post-millennial incarnation has turned out to be a financial fiasco.

OBITUARY: Hideo Sasaki, founder of Sasaki Associates and former chair of Harvard GSD's architecture department, 80.

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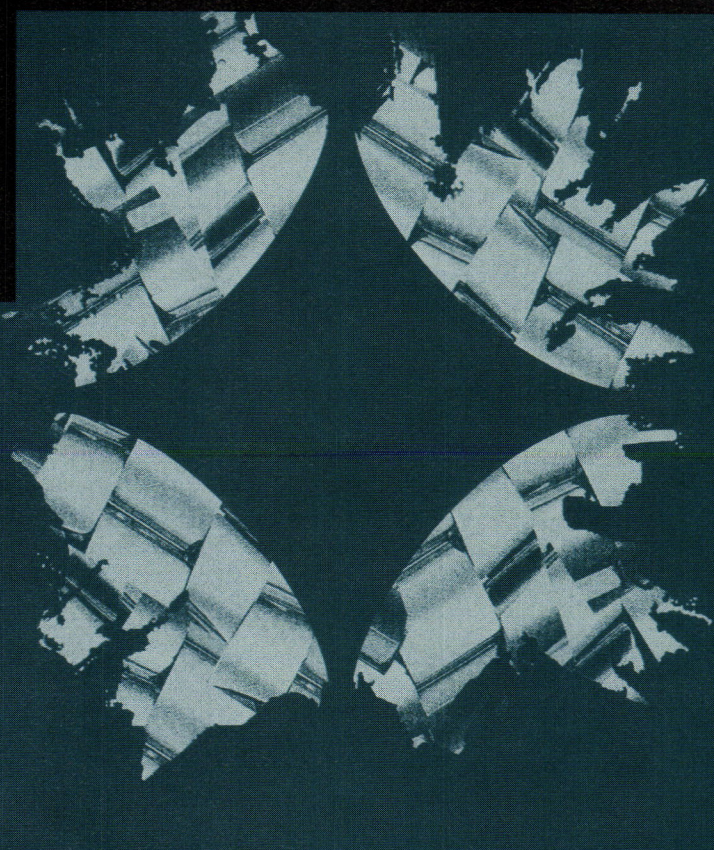
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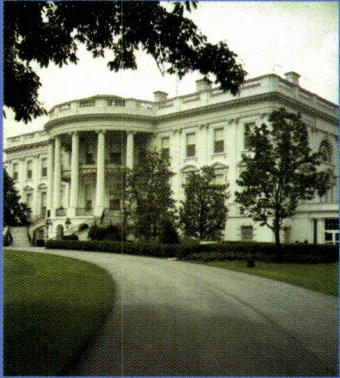
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White House Celebrates Bicentennial

On Inauguration Day, 1829, 20,000 well-wishers stormed the White House to party with newly elected President Andrew Jackson. (Although contemporary inaugurations are mostly private affairs, they used to be open to the public.) In the melee that followed, security staff had to fill wash-tubs placed on the White House lawn with whiskey and orange juice to lure the mud-tracking revelers from the Commander in Chief's new digs. This, and countless other colorful tales, are part of the history of America's house, the White House, which turns 200 next month.

President Washington selected Irish-born architect James Hoban's design for the presidential residence from nine finalists. Although the founding father oversaw construction of "President's House," he never lived in it. Rather, second presidential couple John and Abigail Adams were the first to move in—in November 1800. *M.O.*



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Skyscrapers: The New Millennium at the Art Institute of Chicago through January 15, 2001 (312) 443-3600

London

Buckminster Fuller: Your Private Sky at the Design Museum through October 15
www.designmuseum.org

Los Angeles

Live Dangerously The work of UCLA faculty including Dana Cuff, Greg Lynn, Thom Mayne, and Anthony Vidler, at the UCLA Hammer Museum; October 9 through January 7, 2001
www.hammer.ucla.edu

Weil am Rhein, Germany

Luis Barragán: The Quiet Revolution at the Vitra Design Museum through October 29 (49) 7621 7023720
info@design-museum.de

Montreal

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

New York City

Samuel Mockbee: The Architecture of the Black Water River at Max Protetch Gallery through October 21 (212) 633-6999

The Opulent Eye of Alexander Girard at the Smithsonian Cooper-Hewitt, National Design Museum through March 18, 2001 (212) 849-8400

Masterpieces from the Vitra Design Museum: Furnishing the Modern Era opens October 10 at the Smithsonian Cooper-Hewitt, National Design Museum (212) 849-8400

Newark, New Jersey

The Language of Michael Graves: Architecture and Product Design at the New Jersey Institute of Technology; October 19 through November 19 (973) 596-5566

Pittsburgh

Aluminum by Design: Jewelry to Jets at the Carnegie Museum of Art; October 28 through February 11, 2001 (412) 622-3118

Rotterdam

Towards Totalscape: Contemporary Japanese Architecture, Urban Design, and Landscape Architecture at the Netherlands Architecture Institute; October 21 through January 14, 2001 www.nai.nl

Washington, D.C.

Monuments, Mills, and Missile Sites: Thirty Years of the Historic American Engineering Record at the National Building Museum; October 26 through April 29, 2001 (202) 272-2448

Conferences

Structures for Inclusion: Designing for the 98% Without Architects at Princeton University; October 7 (717) 337-1447

Structure and Meaning in Human Settlements A conference held by the Departments of Architecture and Anthropology at the University of Pennsylvania; October 20-21
www.upenn.edu/gsfajarch/news/human_settle.htm

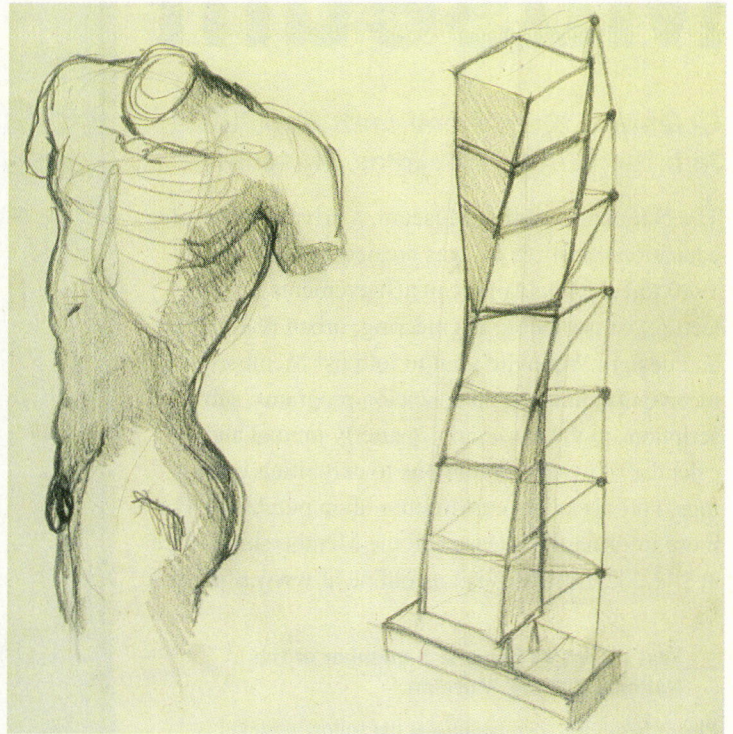
Saving America's Treasures in the 21st Century: National Preservation Conference Los Angeles; October 31-November 5 (800) 944-6847

Building Virginia 2000 Richmond; November 2-3 (804) 644-3041
phassard@aiva.org

Computers for Construction 2000 Anaheim, California; November 6-9 (800) 451-1196

Vertical City: New Challenges for 21st Century Mega-Cities Madrid; November 7-10 (34) 91 366 61 70
wpa@tsai.es

International Preservation Trades Workshop Harrisburg, Pennsylvania; November 13-15
www.ptn.org



The Spanish architect Santiago Calatrava has made a signature out of his approach to structure: The soaring white arcs that mark a bridge, canopy, or building as his are also what make his designs beautiful. These structures simultaneously expose and humanize the physical calculations behind them, and lead many onlookers to imagine the bones of a massive creature left to bleach in the sun. The upcoming retrospective **Santiago Calatrava: Artist, Architect, and Engineer** at the Palazzo Strozzi in Florence features models, photos, drawings, sculptures and sketches that reveal (like the one above, for a high-rise in Malmö, Sweden) the interplay of the organic and the tectonic in his work. Piazza degli Strozzi 1, Florence, Italy; (39) 05 5239 8563.

Build Boston Boston; November 14-16 (617) 951-1433 ext. 221

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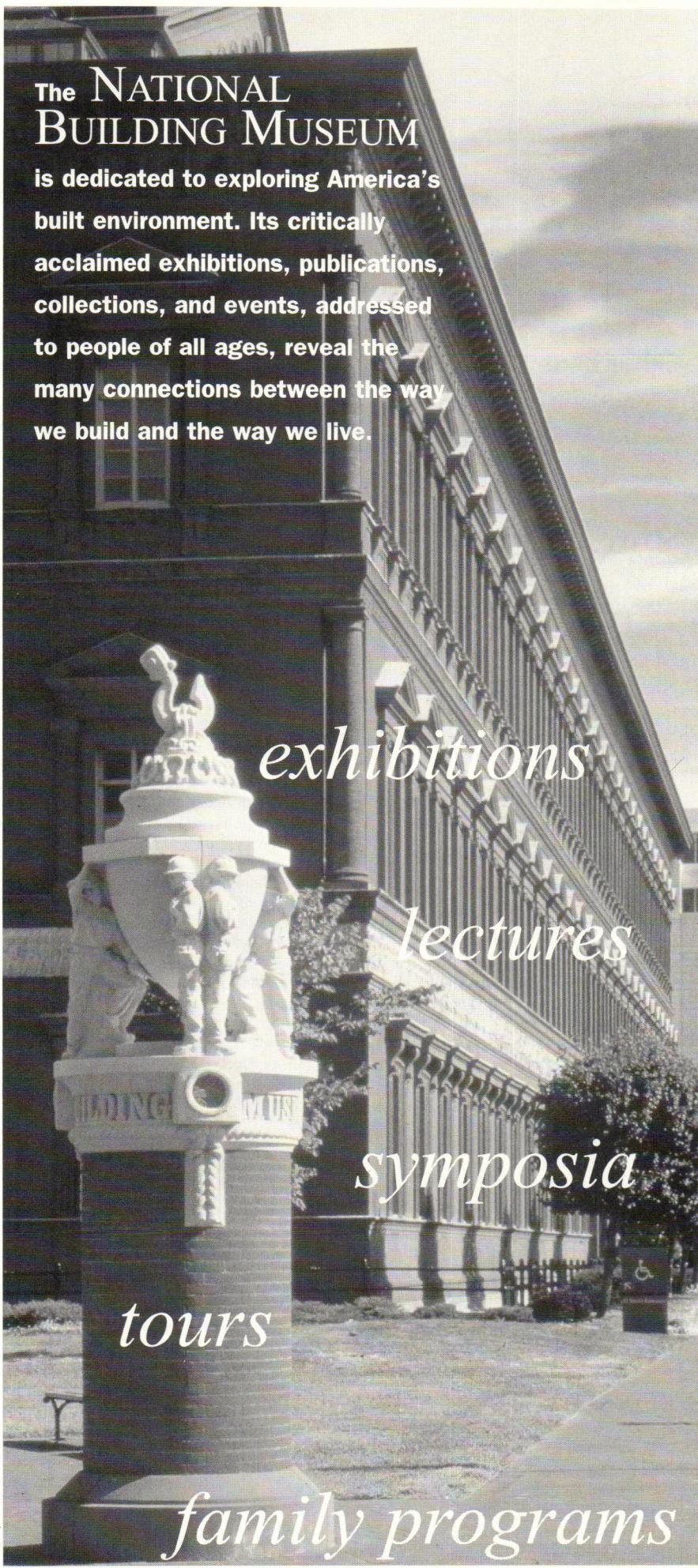
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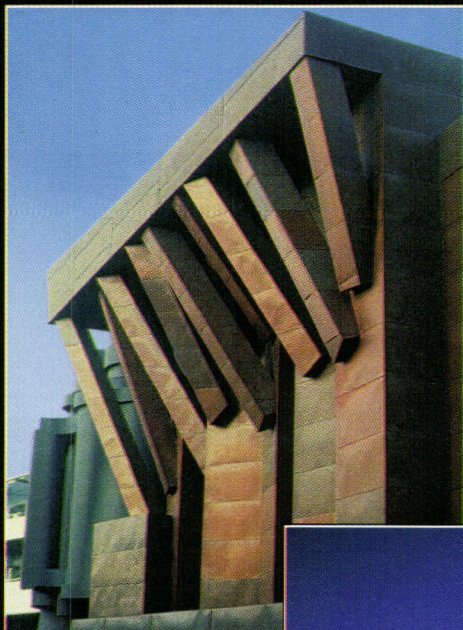
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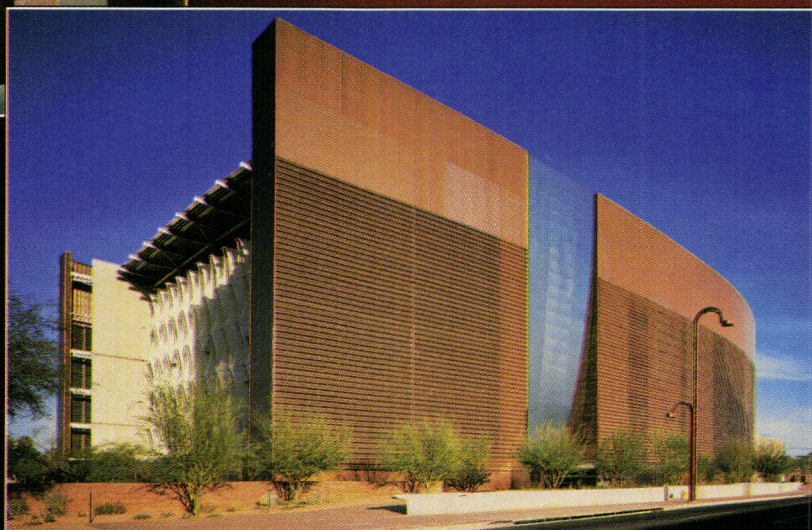
Designing with copper?



Omnicom Group, Venice, Calif.
Frank O. Gehry & Associates



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Hammel Green and Abrahamson, Inc.



Phoenix Central Library, Phoenix, Ariz.
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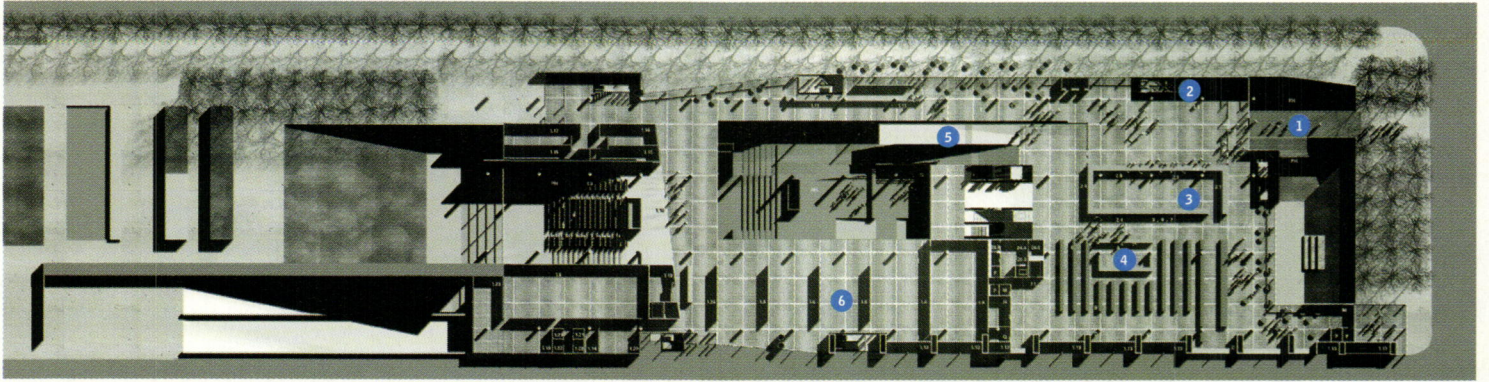


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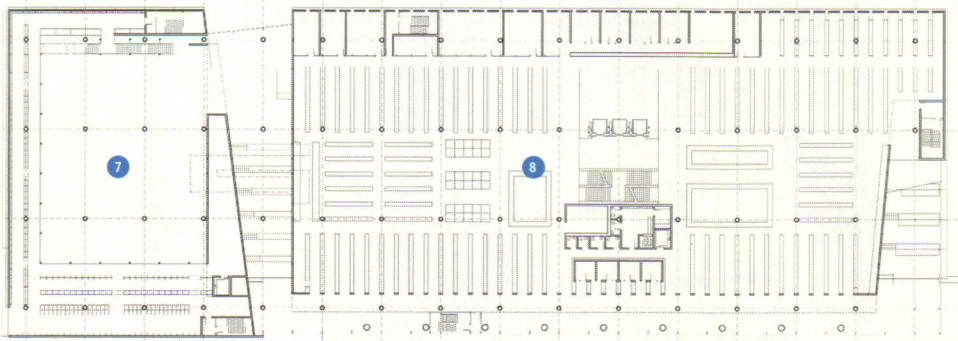
Patkau Architects (with Croft-Pelletier and Gilles Guité), Central Library of Quebec, Montreal, Canada

Like many other cultural institutions, libraries are diversifying in an effort to keep pace with the changing interests of their users. This raises a question about the purposes new libraries should serve: Are they more important for their traditional role as quiet, scholarly, respites? Or should they engage the noisier cultural life of the city at large? "You shouldn't have to choose," says Patricia Patkau, of Patkau Architects in Vancouver. The firm she

leads with her husband John and partner Michael Cunningham recently beat out rivals such as Zaha Hadid and Christian de Portzamparc in a competition to design a new building for Quebec's Grande Bibliothèque, the central library in Montreal. Patkau Architects has developed a plan that is open and permeable on the first two levels—cafés, a theater, a used bookstore, a 24-hour library, and a direct link to a bustling Metro station lure passersby.



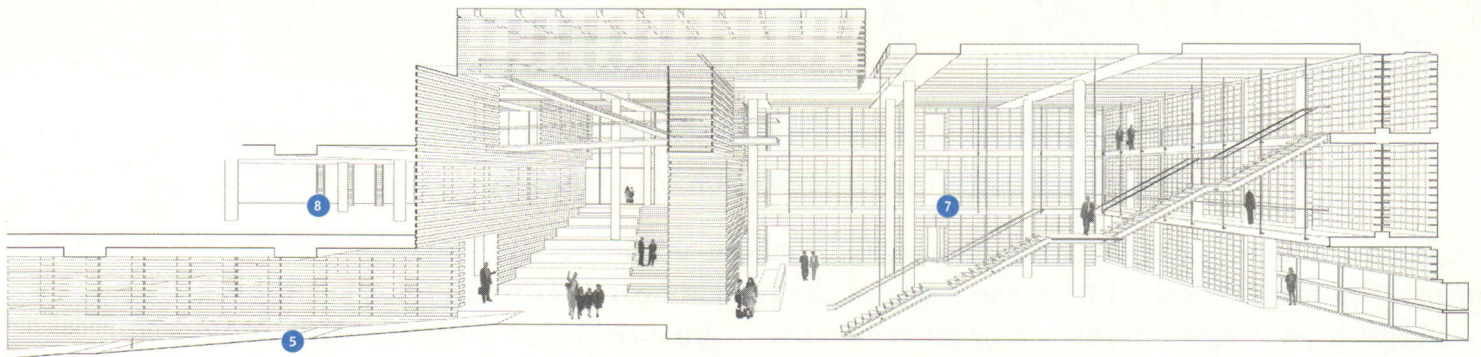
Ground-floor plan 17' <



Typical floor plan 15' <

- | | |
|-----------------------|---------------------|
| 1 main entry | 5 ramp |
| 2 entrance from metro | 6 exhibition space |
| 3 circulation desk | 7 Quebec collection |
| 4 24-hour library | 8 main collection |

Public spaces for the main collection (perspective, below, and plan, left) are located in the wedge-shaped space between the two “wooden rooms.” The library’s skin (facing page) is made of copper shingles that do not always lie flat: They may be tilted out at an angle to let light penetrate into a reading area, or be set flush against the wall to block sun from light-sensitive material.



Perspective

But on its upper floors, the library becomes more cloistered and contemplative.

Beginning on the second level, the rectangular plan of the 330,000-square-foot library is physically and programmatically separated into two distinct “wooden rooms.” One is the triple-height Quebec Collection—a research facility akin to the Library of Congress—and the other, larger space houses the traditional stacks of the main collection. The two large

boxes read as freestanding rooms within the overall copper-clad container, and the wedge-shaped space between them serves as the reading area for the main collection. Patrons can access all floors quickly and efficiently via a set of elevators adjacent to the circulation desk. Or, they can meander along a route that begins as a ramp on the busy ground floor, passes between the two “wooden rooms,” and terminates in a top-floor reading room over-

looking the city. This circuitous loop up through the building forges a compromise between the two competing ideas about the library’s responsibilities to the public realm: It is a tangible link between the lively and urbane lower floors and the inward-looking ones above. Patkau Architects has allowed Montrealers to have it both ways. Construction on the \$45 million building is scheduled to begin in spring of 2001. *Anne Guiney*

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practice

“We’ve found that giving employees the right to be playful and childlike allows genius to bubble to the top.”
Business, page 60

“The larger design firms like Gensler and HOK are prepared to pay substantial money for extranets. But increasingly, owners are becoming our customers rather than architects.”
Computers, page 66



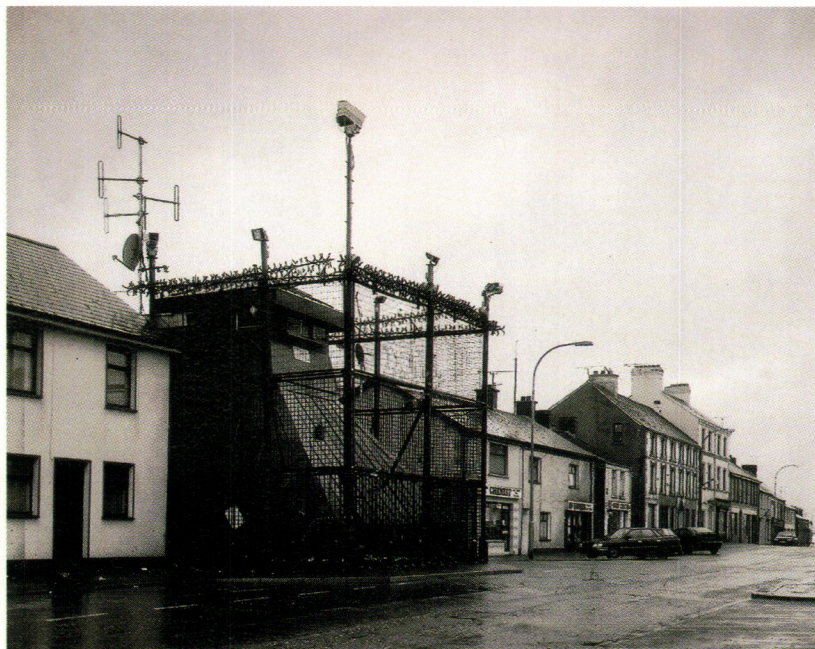
Laying Down Arms

With a fragile Northern Ireland truce intact, the British army has begun dismantling its watchtowers. **Michael Cannell** wonders if they should be left as monuments to 30 years of terror.

Preservation The Irish have been slaughtering each other for generations. Out of this long nightmare of bombs and snipers has evolved an array of security structures carefully adapted to the region’s particular brand of street war. Police stations and strategically placed surveillance towers stand menacingly behind bomb-proof metal walls, barbed-wire anti-rocket mesh, and controlled entry systems. These “sangers” (a Punjabi military word which entered the English lexicon during the British Raj era) are equipped with underground bunkers where soldiers can wait out armed uprisings for months. Video enhancing equipment allows them to see for miles. When land travel is too dangerous, as is often the case, soldiers come and go by helicopter. Two towers—Golf Two Zero and Golf Three Zero—were built in 1986 specifically to watch the home of a single IRA commander. “The surveillance towers are literally our eyes and ears,” a British security source told *The Times* of London. “Without them, soldiers would be dangerously exposed.”

The sangers are uncompromising in their brutal devotion to security; They stand like high-tech fortresses rising incongruously among grassy

The Borucki Sanger in the town of Crossmaglen was named for James Borucki, a 19-year-old British soldier blown up in 1976 by a radio controlled IRA bomb hidden in a bicycle basket.

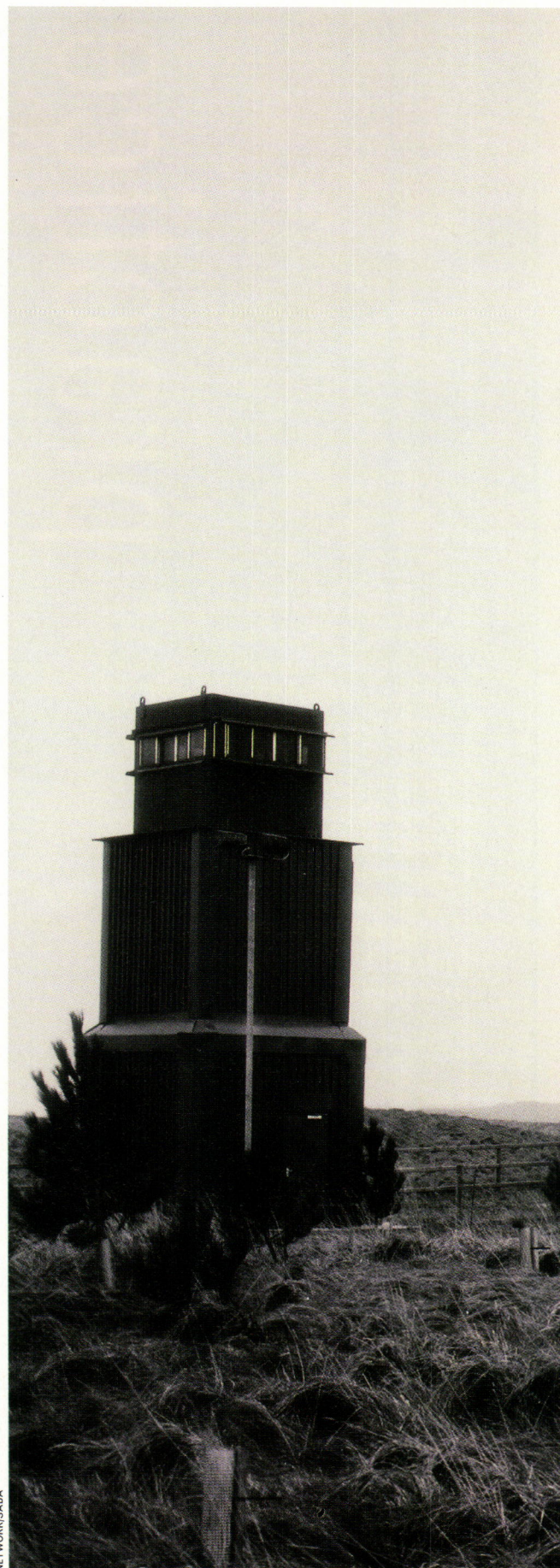


fields and picturesque cobblestone streets patrolled by children and elderly women returning home with groceries. The only one that has made any concession to its surroundings is an observation post by the walls of Derry oddly clad in sandstone paving.

The sangers have become permanent fixtures in the landscape—and consciousness—of Northern Ireland, even though they materialized as temporary security measures. Today they may be on their way out, as the 1998 peace initiative, known as the Good Friday Agreement, brings a fragile truce to the troubled streets of Northern Ireland. Armored cars no longer prowl the streets, parking restrictions have eased and roadblocks have all but disappeared. The British have responded to IRA concessions by reducing its military presence. They began last July by demolishing a huge observation post in the central square of South Armagh, the epicenter of resistance to British rule known as “bandit country.” The work was conducted under the eyes of crouching British snipers carrying automatic rifles. On the edge of town, a newly erected sign declared “*Tiocfaidh ar la*,” Irish for “Our day will come.”

As more sangers come down, something like nostalgia has set in. There has been talk of preserving some as reminders of the region’s long history of terror and blood. Ivan Barr, a Sinn Fein leader in the town of Strabane, has campaigned to have a checkpoint known as the camel’s hump reopened as a tourist attraction. The British have so far refused, saying the interiors themselves would give away classified security secrets. If the peace holds, all of them will disappear. ■

The Mountpottinger Police Station in East Belfast (above) was a favorite target for kids throwing paint bombs. A row of British Army watchtowers (right) command the landscape at Magilligan Point, 26 miles from Londonderry. The nearby army base was used in 1971 to detain IRA suspects without trial.




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What Has Your Firm Done For You Lately?

As architectural unemployment hits historic lows, managers scramble to keep staffs happy. **Mickey O'Connor** samples the perks.

Business Happy days are here for now. The longest period of prosperity in U.S. history—115 months and counting—has spawned unprecedented career opportunities for architects. It's an architect's market in a field facing too much work and not enough workers.

Between 1996 and 1998, the number of architecture jobs jumped from 94,000 to 99,162, according to the U.S. Department of Labor. Within the next eight years, that number is expected to increase by another 20 percent. At the same time, unemployment in the field seems to have reached an all-time low. Kermit Baker, the American Institute of Architects' chief economist, reports that desperate firms often ask him where to recruit. "And the answer is nowhere," he says. "There isn't any area where there are qualified folks who aren't working. Firms have gone from saying, 'We'd like to have another architect' to 'We have 10 openings we can't fill.'"

"We've got 20 positions open in the D.C. office," concurs R. Douglas Smith, Ellerbe Becket's recruiting director, "even more in Minnesota, 10 in Kansas City, then there's San Francisco, Phoenix..."

The easiest way to fill seats, of course, is to raise salaries, and in general, architecture firms have done just that. A recent industry-wide salary study by Orinda, California-based pollster Guidelines (September 2000, page 35) found a nearly across-the-board 10 percent hike over the last two years. "The discomfort zone between what employees want and what firms are willing to pay has narrowed," says Marjanne Pearson, principal of Pearson Egan Nakazawa, a practice consultancy for architects. Within the last six months, she estimates that firms have adjusted their fee structures to compensate for these higher salaries.

But money isn't everything: Firms are anteing up other benefits—from the sublime to the ridiculous—to make people want to enlist, and stay with, their operation. The Institute of Management & Administration reports that almost half of the nearly 200 architecture firms they surveyed supplement compensation and benefits with intangibles like office social events, flex-time scheduling, a casual dress code, telecommuting, even a pet-friendly environment.

The expectation of cushy perks, previously unheard of in the austere (read: masochistic) architecture culture, is creating a new breed of

prospective employees who have known only prosperity. Tales of signing bonuses, torturous hiring negotiations, and an overall rise in job-market savvy are rife in the industry.

In the meantime, each new offer letter or indulgent firm policy raises the stakes for all. "If you don't keep up [with the competition], you're going to lose people," warns Smith. There are, nonetheless, a few firms that distinguish themselves from the masses. For the most part, they all have generous family-leave policies, sponsor admirable continuing-education programs, and embrace an employee's individuality and unique contributions with a touchy-feeliness not often seen in architecture.

But headhunting is a crafty game, and today, the aforementioned perks are the rule (sometimes even the law) rather than the exception. Merely keeping up with the Joneses (and Skidmores and Pedersens and Hilliers) is no longer enough. The firms profiled below have seen the industry's bet and raised it. They've found what advertising wonks call a "point of distinction," something uniquely theirs to offer a prospective employee.

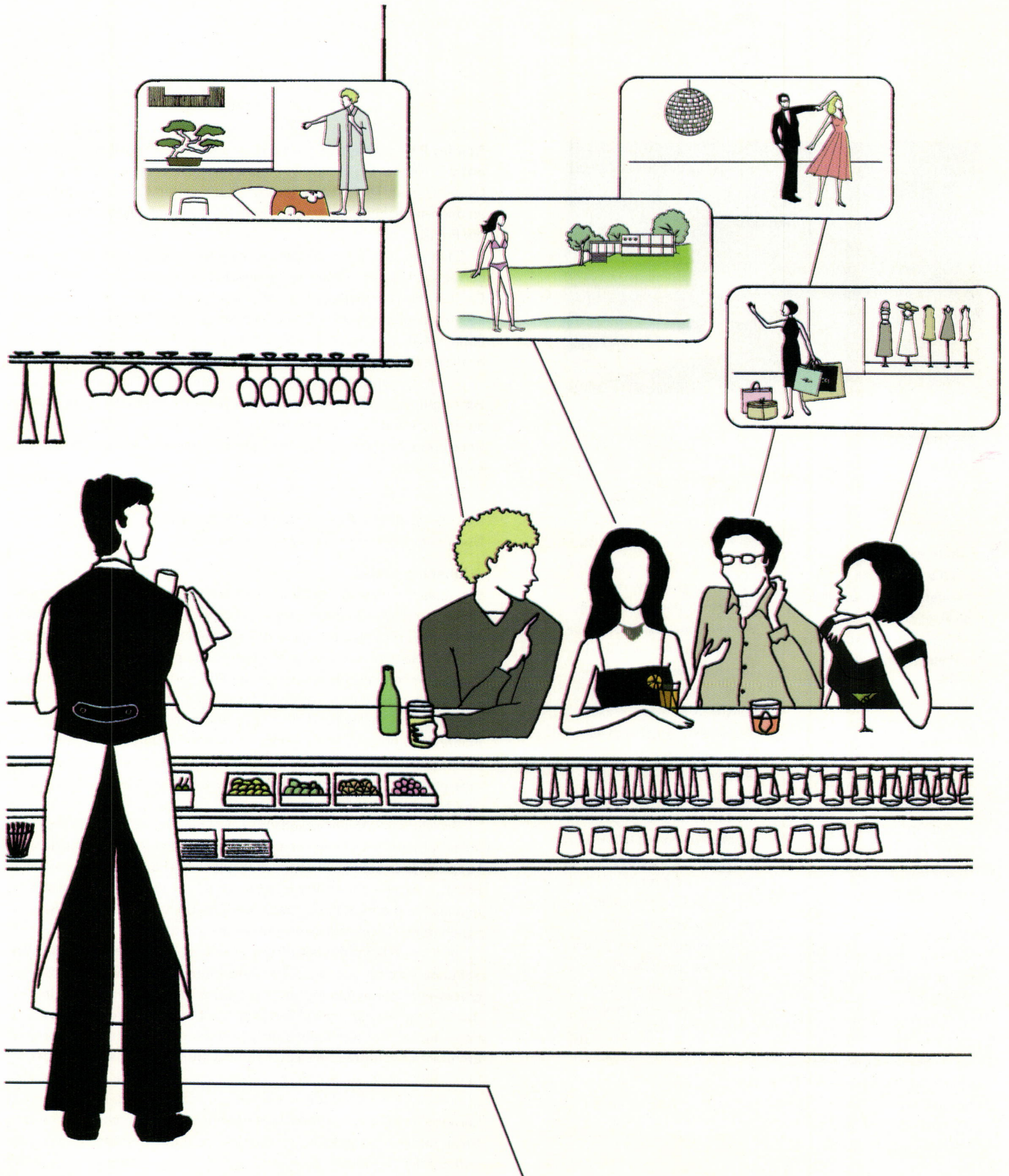
Distinguishing themselves from the pack, however, is more than mere one-upmanship. Recruiting and retention lie at the heart of any robust 21st-century corporation. Without a fulfilled, hardy employee roster, deadlines are missed—and next time, the commission may go to the other guy. "Once you can't finish your work," laughs Baker, "you panic—and you start thinking about crazier and crazier offers." Yeah, crazy like a fox: The six firms we've selected to profile here are also among the most profitable. It's by no means a comprehensive list, just idea candy for those firms who haven't yet realized that keeping one's employees happy keeps one's bottom line healthy as well.

BOORA Architects, Portland, Oregon

Number of employees: **108** Turnover rate: **13%**

A summer share

Every firm allots vacation time, but how many provide a destination? In 1995, the principals of BOORA Architects in Portland built a firm-owned vacation home to reward their hardworking staff. Principal





Business

Early Rising

Confronted with economic extinction, the arid town of Early, Texas took a leap of faith four years ago—right into the arms of a high-tech, 21st-century business model: the incubator.

Today this central Texas community of 2,380 boasts a thriving economy. Created with revenue from a half-cent sales tax, Early's Small Business Incubator Facility (SBIF) offers start-up ventures clerical support, financial advice, and temporary housing in an 18,000-square-foot-building furnished with computers and copiers. The incubator has already spawned 14 new businesses and lured \$4.5 million in investments and loans. A ceramic tile factory opening this fall will add 35 new jobs.

In fact, the incubator has created so many jobs that Early now faces a housing crunch that threatens to inhibit further growth. "We overshot the mark on job creation and it's come back to bite us,"

says SBIF executive director Quincy Ellis. "We have almost no affordable housing."

In response, SBIF has assumed the role of housing developer in conjunction with two of its tenants—Technology I, a mortgage broker that offers low interest, no-down-payment, no-closing-cost loans to workers, and Steel Tech Builders, which erects 1,200- to 1,800-square-foot houses for between \$70,000 and \$90,000. Steel Tech has built 14 homes so far, with at least another 14 on the way. Steel Tech's houses look like conventional brick-façade, ranch-style homes (above), but they're framed with steel recycled from cars, and insulated and sealed with polyurethane foam. "Insurance rates are cheaper," Ellis says, "because the houses are stronger, fire-resistant, and impervious to termites." *Sam Barry*

Stanley Boles designed the 1,800-square-foot, three-bedroom hide-away in Neskowin, about two hours west of Portland on the central Oregon coast. The "beach house," as it's called around the office, is an open-plan, multilevel retreat with wraparound decks that overlook the Pacific.

Each year, BOORA employees with a year or more of tenure (there are currently 91) enter a lottery to apportion days spent at the beach house. Each of the 11 principals typically receives 12 days a year; mid-level architects might receive five; administrative staffers get two or three apiece. Aside from a nominal fee for a cleaning service, the house is available to employees free of charge.

The house initially cost \$400,000, but Managing Principal Patrick C. Harrington says it's been worth it. "Although it was never thought of as an investment," he explains, "it has definitely paid dividends." Recruiting, he points out, is a lot easier when you're the firm with the beach house.

Everton Oglesby Askew Architects, Nashville

Number of employees: **29** Turnover rate: **7.5%**

A killer internship


We mean the good kind of killer. True, architecture's mandatory three-year internship is a notoriously tedious rite of passage. Not so for Nick Dryden. During his internship at Everton Oglesby Askew Architects (EOA) in Nashville, the then-24-year-old helped design and build the firm's new headquarters, a retrofitted 1874 porticoed church. Dryden, a 1995 graduate of the University of Tennessee, acted as the de facto project architect throughout all stages of the 13,000-square-foot, nine-month-long project. The young architect had studied client relations, but never thought he'd be using it so soon: "Here I was, having client meetings with three architects, who were also my bosses," he recalls. "It was a challenge."

So, why him? Dryden asked his bosses the same question. "They told me that they often hand over a small project to an intern as a little test. I guess it goes along with their whole attitude about education." Which is? "It has been our philosophy to throw [interns] into the fire pretty quickly," explains Askew. "Why relegate them to elevations or door schedules if there's something else they do better?"

And what if they get burnt? "You can get burnt on every project. We set people up for success." EOA helps interns excel with structured, closely monitored mentoring. "That's the partner's responsibility. We give interns enough rope..." But they don't want to be responsible for a hanging. So far they've put safety first: Four of the firm's five project architects are former interns; their nine current interns are at work on several small-scale projects—including a bank and a school master plan—under the tutelage of the firm elders. In 1998, the Internship Development Program, the AIA's national clearinghouse for architectural internship programs, recognized EOA's program with its Outstanding Firm Award.

continued on page 137

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Net Effect

More than 150 Internet firms are jockeying for control of the \$100 million extranet business revolutionizing construction management. **Andrew Cocke** previews the shake-out.

Computers Venice wasn't built in a day. Far from it. It took The Stubbins Associates of Cambridge, Massachusetts, more than two years to complete the \$3 billion Venetian hotel and casino that opened in last year in Las Vegas (August, page 68). With its replicas of the Grand Canal, Doge's Palace, and the Campanile, a hotel of this magnitude (some 50 separate offices contributed to design and construction) could have easily dragged on for years. But the architects managed to meet a punishing schedule by employing an extranet, a high-tech tool revolutionizing architectural practice. "We could never have done it otherwise," says associate Chris Leary. "It's not just that it saved us time. It's an entirely different paradigm. I don't even know how to make the comparison."

Today's extranets are private computer networks run across the public Internet. Unlike intranets, or local area networks hardwired within the boundaries of a single company, extranets extend from one office to the next. Easily accessed with a standard Internet connection, they allow architects, engineers, contractors, and subcontractors to stay connected while saving on conference calls, bundles of blueprints sent by overnight mail, and endless travel. The Stubbins Associates, for example, zapped CAD drawings to engineers as often as five times a day. Extranets speed the building process, reduce litigation by creating a virtual paper trail, and promote communication by allowing all the players to view CAD drawings, update schedules, and hold on-line conferences. Even the most complex blueprints can be changed or approved on the spot.

By 2004, some \$141 billion of the construction industry's overall business will be conducted on-line, according to Forrester Research, an e-commerce analyst. More than 150 vendors are swarming like sharks around the \$100 million extranet business. There's more than revenue at stake: Whoever prevails will exercise disproportionate control over the \$3.6 trillion architecture, engineering, and construction industries. "We firmly believe this is a winner-takes-all play," Bidcom founder Daryl Magana told *Red Herring* magazine. "The opportunity is to create an industry standard, and that requires gaining 70 percent of the market."

Extranets were the only game in town at last June's AEC Systems

trade show in Washington, D.C. Carnival-barking extranet marketers assaulted visitors at every turn. From e-Builder's coveted booth close to the entrance of the convention hall, cofounder and CEO Jonathan Antevy earnestly told attendees that his company alone allowed real-time collaboration—a claim duplicated by nearly every vendor on the floor. Meanwhile, Bentley Systems hawked its new Viecon extranet with vague platitudes, flashy videos, and lots of prizes. It's not surprising. With precious few unique features to distinguish any of the extranets from the herd, marketers used whatever gimmicks they could.

For architects, the battle for domination holds grave consequences. While every extranet company claims to make all players equal partners in the construction process, in reality the products reflect their manufacturers' biases. Bidcom, for example, is backed by GE Capital's real estate division and Gerald Hines' development company. While it incorporates tools for architects, it would more likely be the product of choice for big construction clients. In fact, both Trammell Crow and Hines use it. So architects—who have grumbled for years about the CAD industry standard—might not like living in a Bidcom world.

The construction industry is much larger and more profitable than architecture. It's not surprising, then, that most extranets are adding features useful to contractors (Webcams on construction sites, RFI tracking) while disregarding architects' needs (videoconferencing, redlining on-line). Contractors have also embraced extranets more readily than architects. "The extranet is stronger among contractors because efficiency is more directly tied to their payment," says industry guru Joel Orr, editor emeritus of *Extranet World*.

The good news for architects is that Buzzsaw, the architect-friendly Autodesk spinoff, is an industry contender with 15,000 projects now under management. Autodesk's AutoCAD software—widely used by architects—makes it easy to integrate design and architectural drawings into the Buzzsaw site. "Given our deep roots with Autodesk, we are committed to architects and engineers and we know that they are at the headwaters of the whole process," says Buzzsaw cofounder Anne Bonaparte. But will Buzzsaw's allegiance hold up over time?

In most cases, architects pay upwards of \$1,000 a month per project



Cephren chairman Jas Dhillon predicts that within a year one extranet product will dominate 80 percent of the market.

for extranet hosting and collaboration on a subscription basis, determined either by the project's size, the number of users, or some combination of the two. Even Buzzsaw, which has generated considerable interest with its free hosting for projects that consume less than 100 megabytes (enough to store a handful of drawings) charges a considerable fee for projects of even moderate size.

Architects might assume that thriving e-commerce on extranet sites will eventually reduce the need for subscription fees. Think again. Ian Howell, Cephren's vice president of product management, predicts that as owners come to value extranets for bringing efficiency and accountability to the hurly-burly building process, prices for collaboration tools will inevitably rise. And that price increase presents a hardship for architects. "The larger design firms like Gensler and HOK are prepared to pay substantial money because it's a proven return on investment," Howell says. "But it's difficult for smaller architecture firms. Increasingly, owners are becoming our customers rather than architects and engineers." The cost of extranets may be a bitter pill for architects already burdened by precariously thin profit margins. But if architects pass the cost along to clients, they will lose proprietary control over what site they use and, more importantly, what's on those sites.



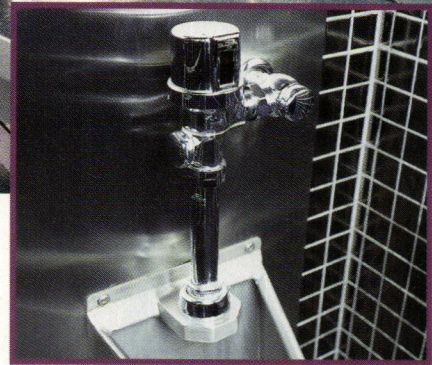
Buzzsaw cofounder Anne Bonaparte hopes her firm's association with AutoCad software will make it the extranet of choice among architects.

As a result, architects are increasingly forced to complicate their offices by running different extranet systems imposed by various clients. "Each one represents a separate area into which you have to go look for your stuff," says Cesar Pelli associate-principal Phillip Bernstein. "It's part of the proliferation of messaging options that's making life more complicated rather than less."

Analysts expect only a handful of the more than 150 extranet companies (backed by \$1 billion in venture capital) to survive the coming year or so. Bidcom is a likely survivor because of its deep-pocket real estate support. Buzzsaw should also fly. Bentley System's Viecon has an established base among the 300,000 users of Bentley's Microstation, the second most prevalent drafting program. A share of the spoils will also go to Cephren (formed in January by the merger of eBricks and Blueline On-line). Add to the list general-use extranets like e-Room which according to Joel Orr are becoming increasingly sophisticated. Though there may not yet be a clear choice among the extranets, the field is quickly narrowing. One thing is clear: These companies have seen the future and it's on-line. "It's more of an evolution than a revolution," says Cephren chairman Jas Dhillon. "I see confusion in the short run, clarity in the long run." ■



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Cathy Lang Ho
on Car Sharing
p. 76

Andrei Codrescu
on Spacing Out
p. 80

Sarah Palmer
on Station Domination
p. 84



Rubble-Rousing

What began as a subway expansion project became the world's largest archaeological excavation. **Alexander Tzonis** and **Alkistis Rodi** dig up the dirt on the Athens Metro.

City The new Attiki (Athens) Metro is both a crowd-mover and a memory machine. More than a subway system, this project also constitutes the largest archaeological excavation ever achieved under a modern city. While no one was surprised that the project unearthed so many ancient finds—settlements in the area date as far back as 3,000 B.C.—the confrontation between the antique and modern worlds posed many unforeseen challenges to what was already the country's most ambitious public works project.

Though Athens was one of the earliest cities in Europe to develop an urban rail transportation system (launched in 1869, electrified in 1904), the city failed to expand it adequately to keep pace with a growing population. In the postwar era, Athens was still a picturesque, provincial

Every layer of excavated earth has brought Athens closer to preserving its past, present, and future. Subway construction sites have become archaeological digs where ancient civilizations meet modern attempts to make the city more livable today.



Planners and politicians envisioned the Athens subway expansion as a way to amend the city's problems, both above and below ground.

city—free of the traffic and pollution that was already emerging in other European capitals. But by the 1970s, Athens too was suffering from the ills of rapid urbanization: Millions of people overcrowded the historic city and its suburbs, and pollution from traffic had become so noxious that many statues, friezes, and other relics had to be removed (with copies installed in their place) to stave off deterioration. Still, plans to expand the Metro remained unrealized, perhaps due in part to reluctance to add chaos to an already chaotic urban condition. For the city to win its bid for the 2004 Olympics, however, it needed to substantially improve its public transportation network. In 1987, the expansion of the Metro finally became the city's priority. Construction began in 1991, and the first of the new stations opened earlier this year. (The European Union subsidized a good share of the total construction, which was contracted at \$1.9 billion to the American firm Bechtel.)

Athens' reputation as one of the world's most urbanistically and environmentally unfriendly capitals can be blamed on its hasty modernization, which blighted historic buildings, traditional neighborhoods, and public places. The subway's expansion could have been yet another disruption, bringing new urban disasters. But Athens' planners and politicians instead envisioned the Metro as a way to amend the city's problems, both above and below ground. Alleviating congestion and pol-

lution were clear goals, but these would have to go hand in hand with preserving the city's heritage.

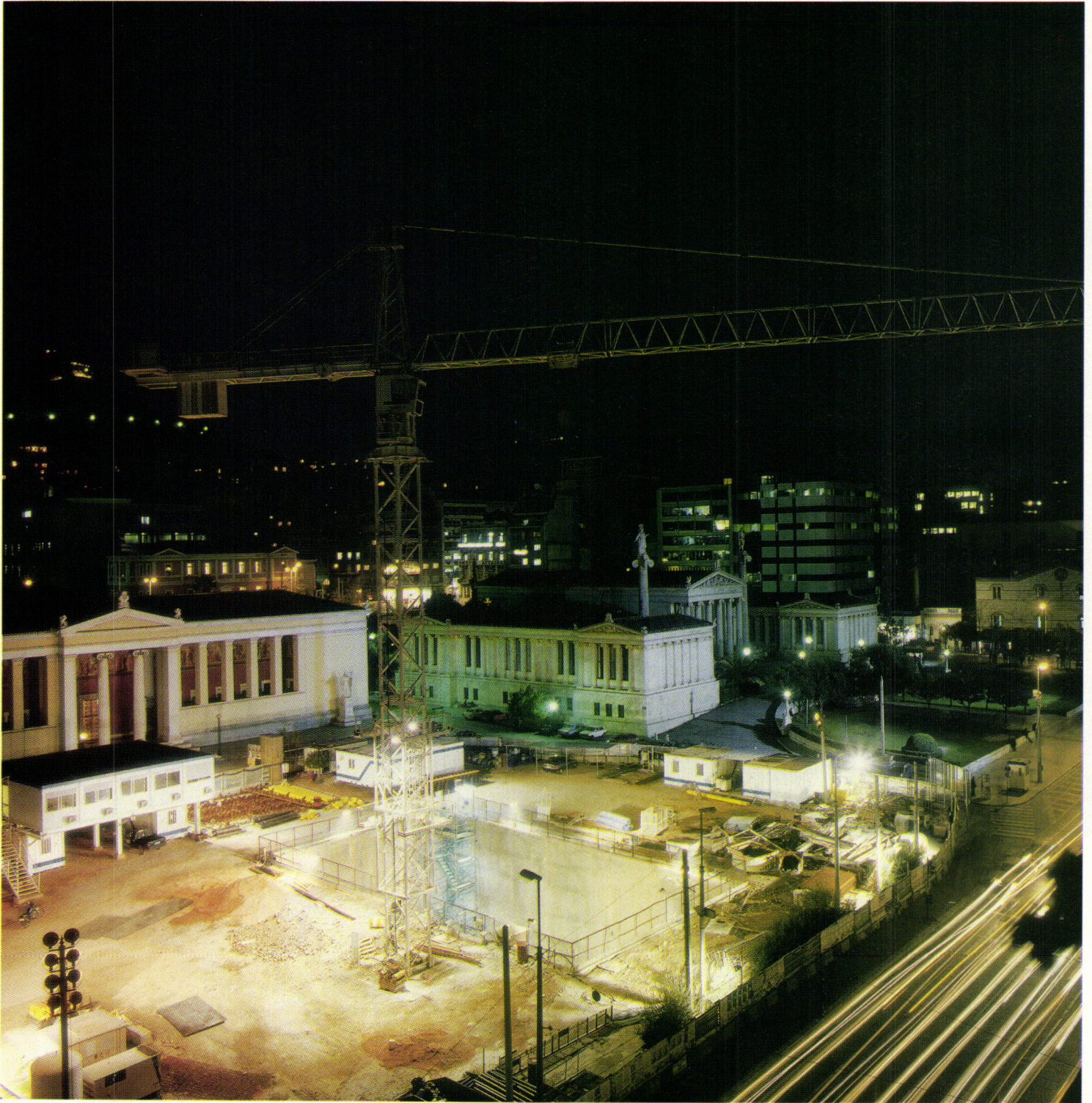
Archaeologists and historians were brought in from the outset, alongside engineers and urban planners, to advise on the vast project. The multidisciplinary collaboration is significant because the diverse participants' goals would appear to be in conflict: Engineers are pressed to be efficient and accomplish work on time. Meanwhile, archaeologists are preoccupied with the painstaking study and preservation of fragile artifacts. Naturally, disputes have arisen. The most contentious incident occurred in 1996 when the subway route, for economic expedience, had to pass beneath the famous site of Kerameikos, an ancient cemetery renowned for its stelae and sculptured funerary monuments. When digging got too close to the classical necropolis, archaeologists rejected the proposed route, afraid that valuable objects would be destroyed. The clash, which initially took place inside the planning committees, soon reached the press and was heatedly played out in public. In the end, the archaeologists won the battle. The route was shifted despite added costs and delays. In another instance, however, when the route confronted remnants of a Roman wall, it was the engineers' turn to dictate policy. The wall was deemed culturally less significant, and the cost too great, to divert the route. As a result part of the wall is gone forever.

Despite losses and disagreements, archaeologists have conceded that the Metro has created unique opportunities for their work that would not have occurred otherwise. The dig yielded materials that have broadened their understanding of Athens' past: One excavation produced documentation of the plague that raged through the crowded city during the Peloponnesian War in the fifth century, killing a large part of the population, including the famous orator Pericles. The discovery of a dog's grave—surrounded by everyday objects lacking any religious or ritualistic connotations—provides valuable insight into Athenians' beliefs during antiquity. And as construction continues to extend outside the city's center, scholars are now reconsidering the boundaries of the ancient settlements.

The excavation of the Athens Metro produced an added, unanticipated challenge: how to display the wealth of archaeological finds. The Ministry of the Environment, Physical Planning, and Public Works decided to build stations that would double as galleries for antiquities as well as contemporary art. In the Evangelismos station for example, ruins of the aqueduct, cemetery, workshops and the sewage system constructed by Pisistratos at the end of sixth century B.C. are found next to a newly commissioned sculpture by Chryssa, a Greek-American artist known for her neon light installations.

More than a chain of mini-museums, the Attiki Metro is a series of unique places that enhance collective memory. On a daily basis, riders encounter fragments of a bygone life in a genuine context. The relics are not exhibited in the detached atmosphere of institutional buildings, but remain underground in the tunnels in which they were found. Their presence accentuates the identities of their stations and enriches the meaning of their locales.

continued on page 141



Together, engineers and archaeologists working on the Athens subway specified a depth of 65 feet for some tunnels, to ensure that the new construction and the ancient settlements would not collide.



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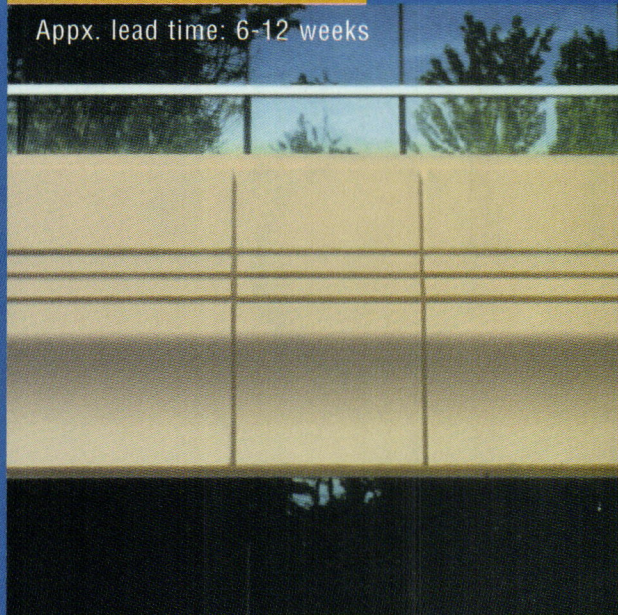
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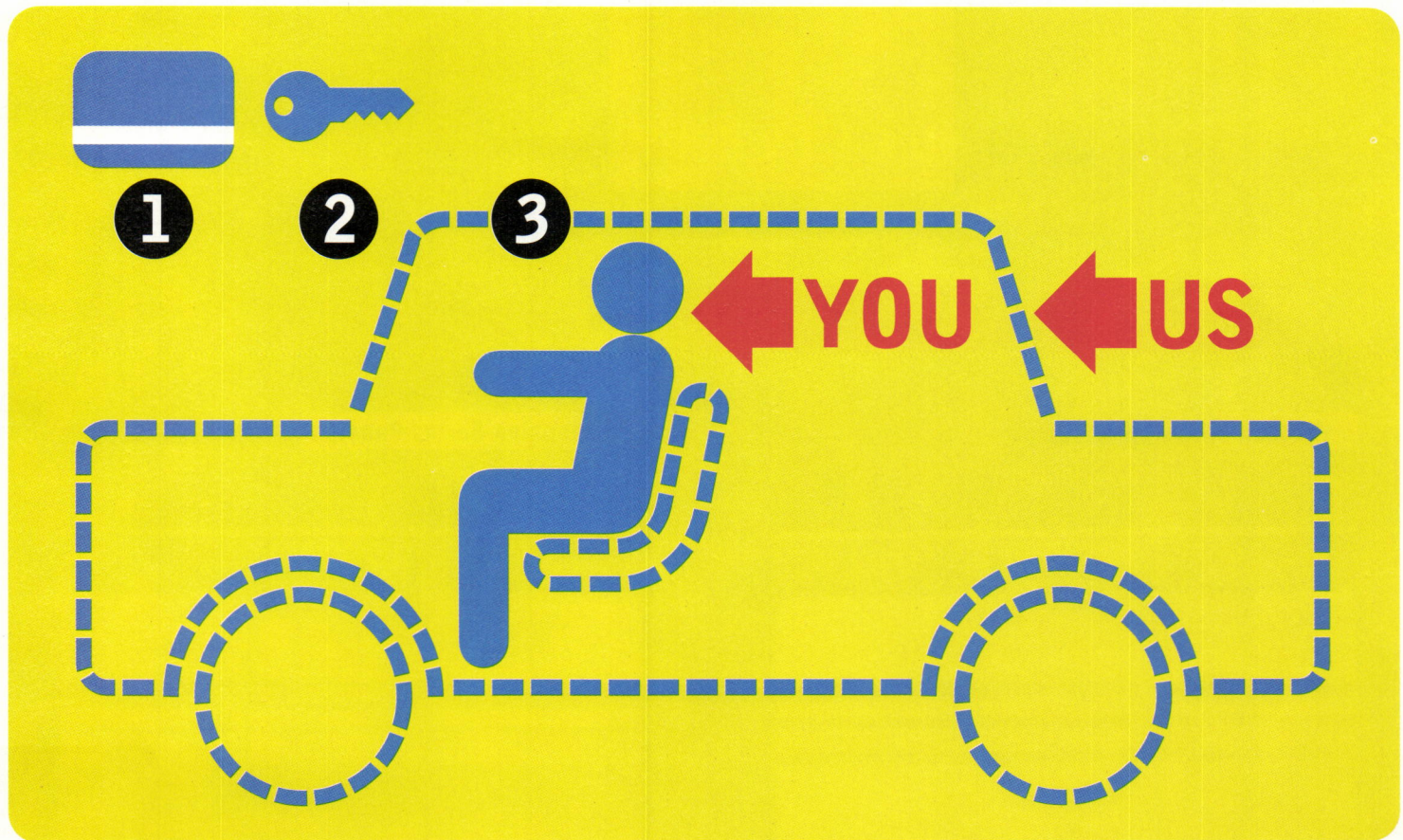
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Pooled Cars

Car-sharing programs have thrived in Europe for years. **Cathy Lang Ho** examines what it will take to get auto-loving Americans to share their precious wheels.

Green Links Private property is hot-wired into the American psyche. Compound that with our penchant for independent mobility, and you have a car-crazed country that owns 200 million cars, drives 4 trillion miles a day, and spends \$100 billion yearly on federal, state, and local highway projects. Yet at the same time, we curse the results of this auto-centricity: gridlock, pollution, and the destruction of community. Perhaps as a result, several cities across the U.S. are experimenting with something most Americans would consider radical: car sharing.

Car sharing is comparable to the Danish bike-sharing program, whereby citizens help themselves to easily identifiable public bicycles (brightly painted yellow), taking and leaving them around town as needed. This freewheeling program alleviates traffic by adding an alternative, low-impact layer of public transportation. Likewise, car sharing is fueled by the idea that private car ownership might not be as indispensable to our lives as we think it is, given that over 90 percent of all car trips are under 10 miles, and that cars spend an average of 23 hours a day unused. With the growing cost of gas, insurance, and maintenance, not to mention worsening traffic and horrendous parking, Americans might just be ready for car sharing—something that has been popular in many European cities for years now. (More than 150,000 people in 450 European cities are driving this way.)

Car sharing basically works like this: After paying an initial membership fee or deposit, users have access to fleets of cars parked at strategic locations, like train stations or central plazas, or they can make reservations in advance to ensure that a car is waiting for them where they want it, when they want it. Users typically pay a flat hourly rate and mileage charges. Members of Mobility CarSharing in Switzerland, acknowledged as the world's leading car-sharing program, pay an annual membership fee of about \$200, then an hourly rate of \$2 (from 7 a.m. to 11 p.m., free in off-hours) plus about 50 cents per kilometer; gasoline, parking fees, and comprehensive insurance are included. There are added benefits for different types of memberships (companies get group rates, as do users from the same household), and special rates for weekends and holidays. In the program, 36,000 people share 14,000 cars, which are available at 800 locations. Since its founding in 1987, Mobility CarSharing's membership has grown about 50 percent per year up until 1996, and continues to grow by about 25 percent per year. Like many of the world's car-sharing programs, Mobility CarSharing partners with government transportation providers and energy agencies.

"Mobility CarSharing begins where the efficient public transportation ends," asserts company brochures. Susan Shaheen, a post-doctoral researcher at CalTRANS and U.C. Berkeley's research group Partners for

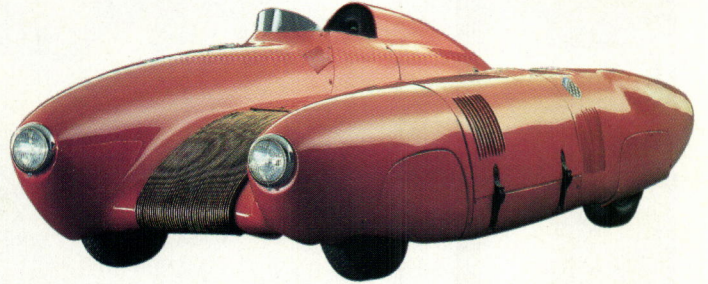
Advanced Transit and Highways (PATH), developed and studied a 10-month demo program, CarLink, in the San Francisco Bay Area, which is also intimately linked with public transportation. (CarLink received local and state grants, and support from Honda, Lawrence Livermore National Laboratory, and the regional rapid rail system, Bay Area Rapid Transit, or BART, which donated parking spots and free advertising in its stations. Its working program will launch next year.) A typical scenario would work like this: A member drives a shared car to her local train station in the morning, and back home in the evening. During the day, the same car can be used by other members to get to work or run errands. Meanwhile, the first member arrives at her destination, and finds another shared car at the station, which she drives to work. During the day, her colleagues or other program members can use the car to go to business or personal appointments.

“The idea is not to replace cars with cars,” states Shaheen, “but to make more efficient use of the cars that are already out on the road and occupying parking spaces, and to get people using public transit who ordinarily wouldn’t use it.” A study by the Swiss Office for Energy Affairs indicates that car owners who switch to car sharing reduce their driving by as much as 50 percent. Not only do people drive less frequently, but they also use public transit more, and are less inclined to buy new cars or even sell the cars they do own. The same study reports that each shared vehicle replaces four to eight privately owned cars.

Not all of these programs in the world, however, are linked to public transit. Car-sharing programs come in many different flavors, adapting to the locale and the needs of the population. Because many European cities have more comprehensive daily commuting networks, users might be more inclined to use car sharing just for weekend trips. In American cities, people might find car sharing handy for occasional use, like for big shopping trips once or twice a month, or to pick up friends at the airport.

Moreover, to attract users, programs in different cities emphasize varying benefits. New programs in Portland and Seattle—like many of their European counterparts—all have strong environmental directives, given their close ties to government transit agencies and alternative energy interests. Car sharing in Boulder is a nonprofit, grassroots coop. Meanwhile, a recently funded Chicago program aims to serve low-income communities. Variations of car-sharing programs have also been tested in smaller, manageable environments, like universities, large apartment complexes, and even new towns. In Singapore, a high-rise development started a program for its residents and became oversubscribed immediately, no doubt due to the high cost of private car ownership there.

The idea keeps evolving: Germany’s nationwide program, Stattauto, launched in 1988, has recently added a new program, CashCar, in which private car owners register their cars and earn money by allowing them to be shared. So, for example, people who travel often on business or whose cars sit unused for most of the day can loan them to Stattauto, for shared-use by others. The company then pays the car owners a percentage of the money their cars earn. *continued on page 142*



Bibliofile

Automobiles by Architects, by Ivan Margolius (John Wiley-Academy Editions, 2000)

That ultimate modern machine, the automobile, has always fascinated architects. In *Automobiles by Architects*, author and architect Ivan Margolius examines the intimate relationship between the two, winding through their many technological and aesthetic interchanges.

An architect’s training, Margolius believes, is well-suited to resolving the problems of car design. His extensive documentation of architect-designed cars seems to back him up. Among others, Sir Edward Lutyens, Adolf Loos, Josef Hoffmann, Le Corbusier, Frank Lloyd Wright, Richard Neutra, Gio Ponti, Carlo Mollino (a design of his is pictured above), Walter Gropius, and Norman Foster all turned their talents to this realm of industrial design. The motivation seems clear: Cars, the ultimate mass-market good, epitomize many values that architects hope to achieve in their buildings. The exploration of new technologies and materi-

als and the economies of scale of a factory system could propel architecture, just as easily as automobiles, to the cutting edge. The book shares the interesting tidbit, for instance, that in 1999 Ove Arup acquired an automotive design company, Design Research, with the hope of using its technology to develop prefabricated building systems.

The book includes many renderings of car designs, which are charming, revealing, and often drawn in the architects’ own hand. But they would have been complemented nicely by drawings of buildings by the same architects, to enable readers to see influences in one direction or another. The author’s written analyses, too, could have gone deeper into how architects’ car designs relate to their architectural practice. But his vast references (from Behrens to Banham to Barthes) make up, in part, for the incompleteness of the case studies, providing a lively picture of how pivotal the auto has been to not just design, but also mass culture. *Cathy Lang Ho*

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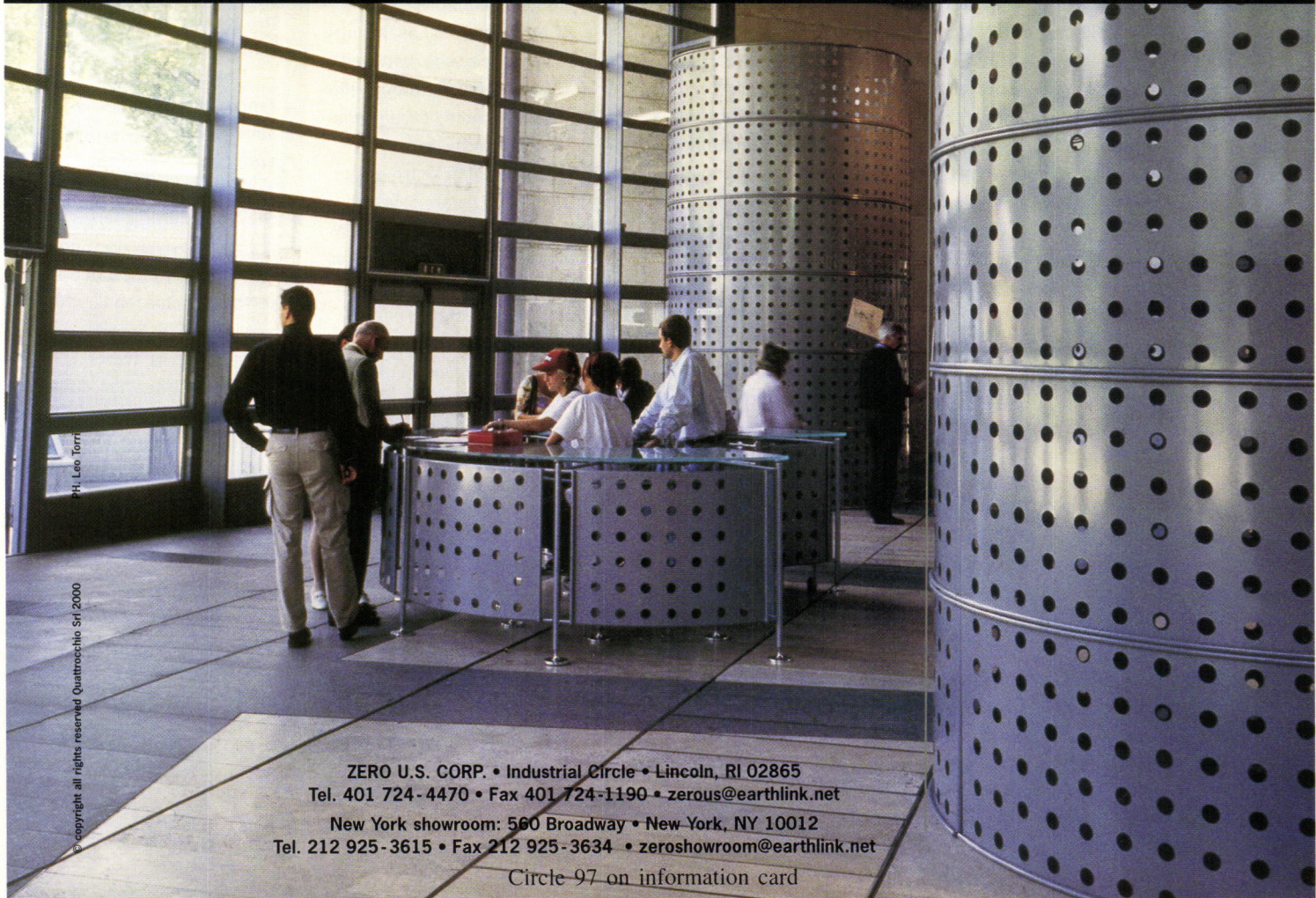
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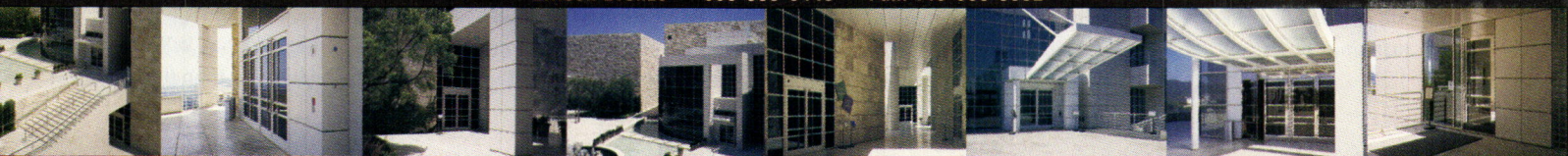


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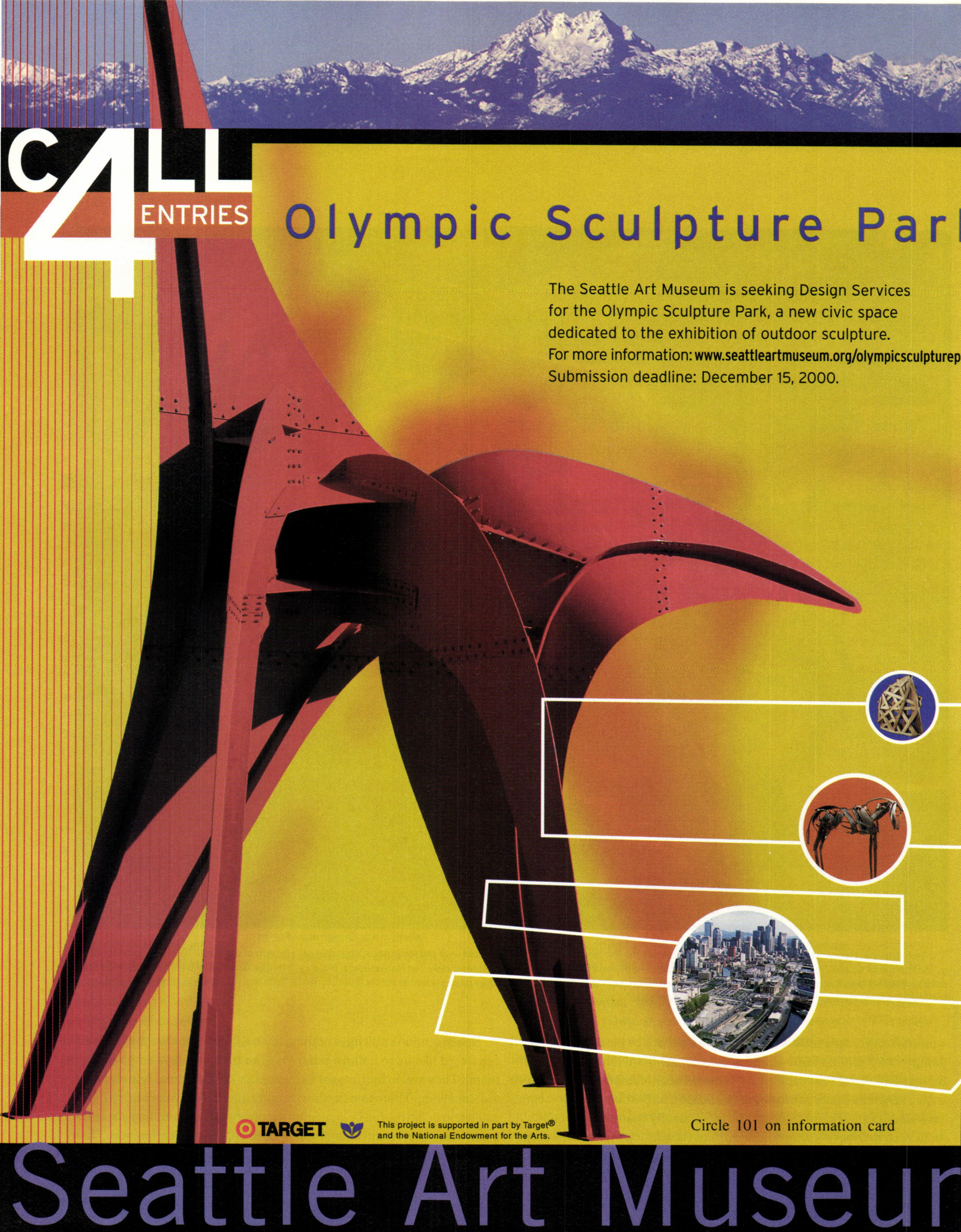
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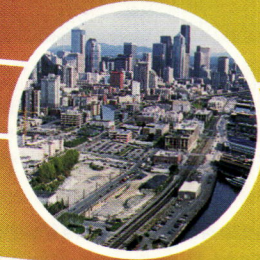
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Olympic Sculpture Park

The Seattle Art Museum is seeking Design Services for the Olympic Sculpture Park, a new civic space dedicated to the exhibition of outdoor sculpture. For more information: www.seattleartmuseum.org/olympicsculpture Submission deadline: December 15, 2000.



This project is supported in part by Target® and the National Endowment for the Arts.

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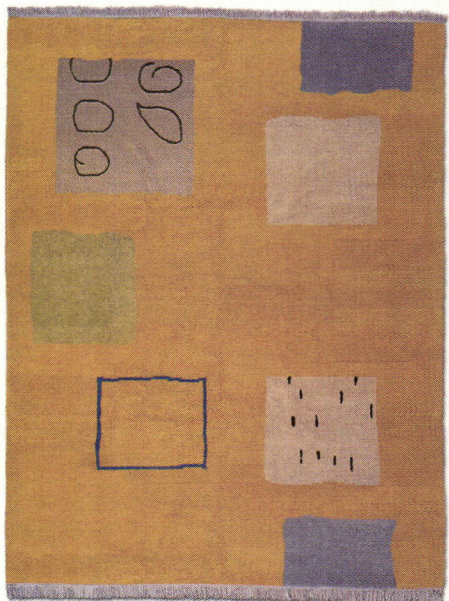
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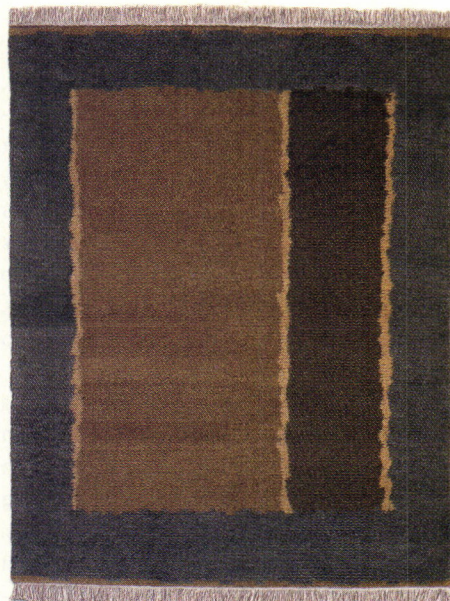
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It's a Jungle Out There

In a world saturated with advertising, what more can companies do to attract our attention? Sarah Palmer delves into the latest strategy: Station Domination.

Public Eye The world has become one big 3-D commercial. Everywhere we go, we are surrounded by advertisements, slogans, banners, logos—seductive images and cunning catchphrases that flood our homes and plaster our streetscapes, aiming to fill every cranny of empty space, like air in a vacuum. Those with something to sell (and that's everyone) see all surfaces as potential billboards, whether as small as a hotel key or as large as the side of a building. The competition—to be more ubiquitous than Coke, more recognizable than the Nike swoosh, sexier than Calvin Klein, louder than WWF—only forces advertising to become more extreme.

Advertisers bent on achieving total consumer saturation may find a solution in the “Station Domination” packages offered by CBS television subsidiary Transportation Display Inc. (TDI), which has contracts with most of the major cities in the United States to coordinate advertising on buses, trains, subways, as well as terminals and roadside billboards. TDI is now selling entire train stations to single advertisers, who are then free to use the space as they see fit. In addition to more traditional surfaces (walls, billboards), advertisers can exploit ceilings, floors, stair risers, columns, even garbage cans in their quest to, as the TDI brochure urges, “bombard consumers. . . throughout their commute.”

Companies like Microsoft and *The New York Times* have taken over stations in San Francisco and Manhattan respectively. Advertisers spend from \$30,000 per station per month in smaller cities, to \$500,000 in cities like New York (a major moneymaker for the local transit authorities; TDI takes a nominal percentage), reaching millions of passengers—a relative bargain compared to the dollars-per-viewer spent for 30-second Superbowl commercials.

Advances in graphics technology are to thank for these environmental enhancements. The office products company 3M has developed an electrostatic printing technique, Scotchprint Graphics, that allows photographic images to be printed on a special graphic film which is easily applied to surfaces. In TDI's most extreme Station Domination campaign yet, 3M's commercial graphics division transformed a San Francisco Bay Area Rapid Transit (BART) station into a tropical jungle, with nearly every surface layered with actual-scale and real-perspective views of dense foliage and wild animals. It's an ad for 3M's own graphic



Looking up through the tree canopy, one can almost imagine sinking into the mud. Animals peek out from the foliage and the columns of trees. No, this isn't the Museum of Natural History; it's San Francisco's Powell Street BART Station, where 3M has created a virtual jungle—leaving few surfaces uncovered—to demonstrate its new graphics technology.

services and products, targeted at other potential advertisers.

Beyond inflating posters to wallpaper-size, Station Domination makes advertising spatial, or “the visual equivalent of surround sound,” as TDI trumpets. “The creative teams at advertising agencies are having to translate what they do from 2-D to 3-D,” notes Brigg Hyland of TDI, bringing them closer to the realm of interior or environmental design.

The idea of total, titillating environments is hardly unfamiliar territory, but there's a difference between stepping into a Planet Hollywood and a subway station—or a civic park or a residential neighborhood, for that matter. Is no place immune from advertising? Mobile billboards cruise through our streets while ghostly ads are projected onto buildings (often without tenants' consent) throughout the night. When San Francisco was in the process of acquiring new street furniture, citizens protested (to no avail) the idea of advertisements blanketing benches and other public amenities. Similarly, years ago, New York City entertained the idea of selling advertising on the fences, garbage cans, and other surfaces in Central Park, to alleviate its budget pressures. Citizens howled at the prospect of seeing their havens polluted by commercial messages. We may identify ourselves otherwise, but corporations are intent on reminding us at every turn that we are, above all, consumers—a demographic, a buyer, a spender, an audience, a test group, a market share. Truth be told, we've acquiesced to these roles. “Your commute brought to you by. . .” Would anyone resist such a message if the tokens were free? ■

architecture



Slow Motion Speed is seductive. But like all addictions, the present caffeinated rate of travel and communication has its side effects, as well as some alarming withdrawal symptoms; think about your reaction the last time a flight was delayed. Unlike airplanes, the Internet, or television, buildings by their very nature sit still. But movement invariably surrounds them: Some designs happily go nowhere, fast, as when the reflective glass façade of the Chelsea Car Wash takes a ride with passing taxicabs. Others enjoy a range of motion more easy to encompass, such as the steps of a hiker across Jürg Conzett's Alpine footbridge. And certain wise designs, such as Tod Williams Billie Tsien and Associates' natatorium, actually promote architecture's static condition as an antidote to our accelerating culture.

To prevent cars from overtaking the historic hilltop town of Toledo, Spain, so famously memorialized in oils by El Greco, architects José Antonio Martínez Lapeña and Elías Torres Tur designed a system of escalators (above) that dramatizes the act of arrival on foot.



Chelsea Carwash New York City

Cybul & Cybul Architects and Christopher K. Grabé





The Chelsea Carwash's 202-foot façade (above) is a simple tube-steel-and-glass armature attached to the abandoned New York Central Line freight tracks. The glass behaves like a billboard: The Carwash advertises its services by making them clearly visible from the street, and attracts attention with the reflection of the Hudson's afternoon light. The glass sheets are affixed to the steel structure (facing page) with patch plates. Front and rear plates (with neoprene disks) clamp the glass into place and are bolted to the tube steel.

CHELSEA CARWASH, NEW YORK CITY

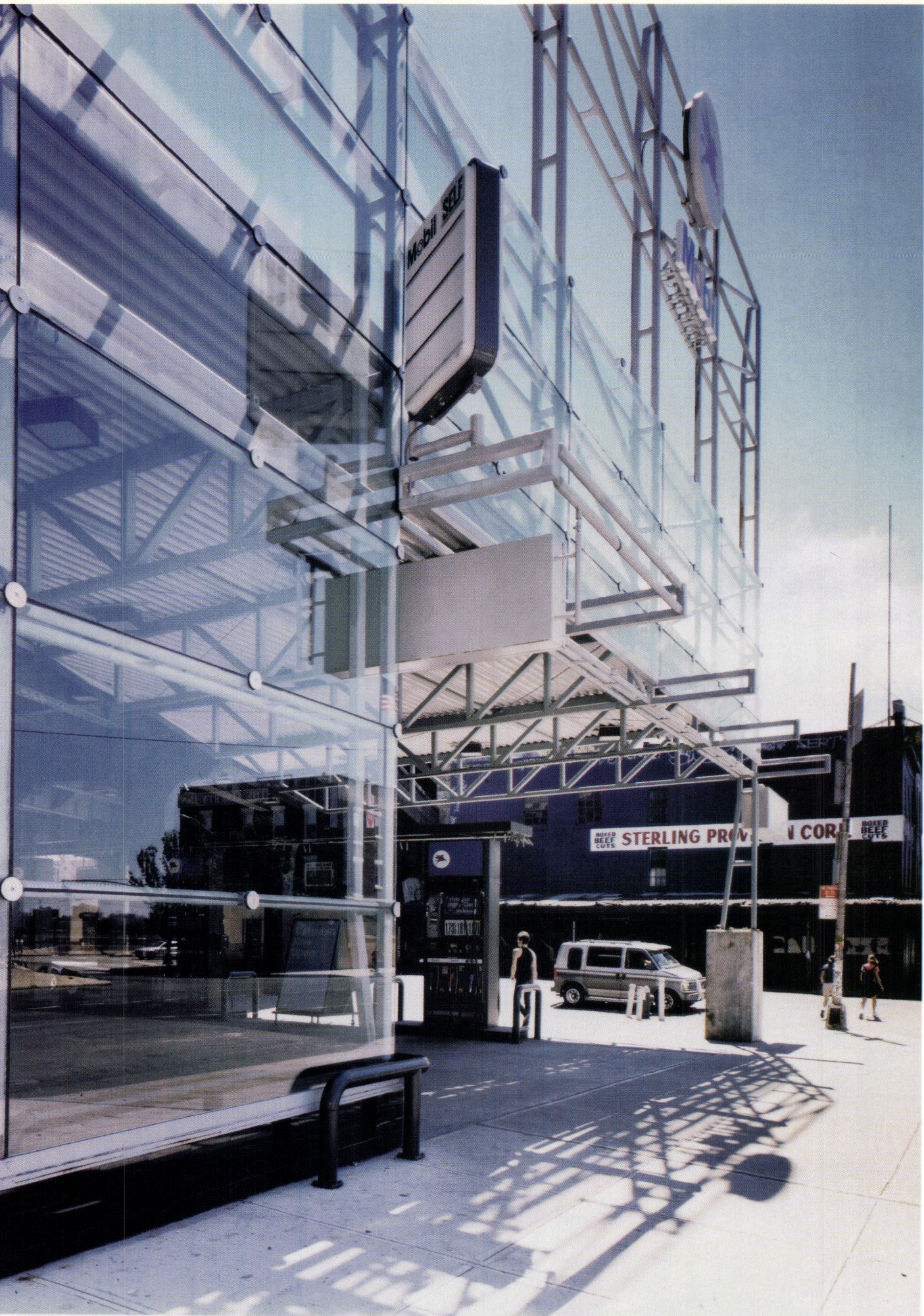
CLIENT: Erez Schternlicht, New York City **ARCHITECT:** Cybul & Cybul Architects, New York City—Martin Cybul (partner-in-charge); Oliver Wilhelm, Jim Perotta (project architects); Humberto Morales (project manager); John Artuso, Malik Nait Doud; John Kisswany, Stewart Sansevere **DESIGN ARCHITECT (FAÇADE):** Christopher K. Grabé, New York City **ENGINEERS:** Thor Engineers (structural); Gleit Engineering (mechanical); ASI, Advanced Structures Incorporated (glass wall) **GENERAL CONTRACTOR:** Icon Maintenance & Development **COST:** Withheld at client's request **PHOTOGRAPHER:** Raimund Koch

By Anne Guiney

The abandoned New York Central Railroad line on Manhattan's West Side invariably evokes curiosity from those passing by or under it. The elevated platform, a hulking profile poised 20 feet above street level, used to carry trains laden with goods that had arrived at at one of the Hudson's piers and were bound for a freight terminal at 30th Street. The tracks passed right through factories so that freight could go to the production floor without ever hitting the street. However, the once-busy piers are now crumbling into the Hudson, and the elevated has been abandoned for decades. Grass grows on its surface, so that from the upper floors of nearby buildings one has the improbable view of a thin stretch of green snaking in and out of abandoned factories. At the corner of 14th Street and 10th Avenue, however, where the track cuts diagonally across the block, the obsolete structure is once again functional. The new Chelsea Carwash uses the elevated opportunistically as both a sheltering roof and a support for a glass façade that announces the stations services to cars speeding by.

For years, employees of the Saks Fifth Avenue warehouse next door had commandeered the irregular space under the elevated for a parking

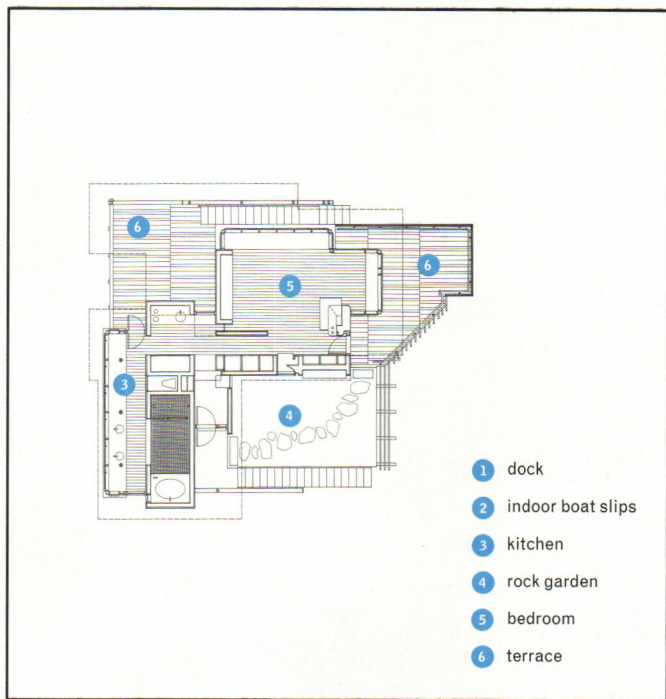
lot. When Erez Schternlicht bought the building in 1996 to turn it into photography studios and retail space, he and his partners wanted to make better use of the lot, and decided to put in a service station. The program is straightforward, and no different from its anonymous highway brethren: There is a mini-mart, lube station, car wash, and several gas pumps. But unlike them, the Chelsea Carwash manages to transform a mundane lube job or fill-up into an aesthetic experience. Its services are tucked under the shelter of the viaduct, which essentially was left open to the street. A welded tube-steel scaffold is attached to the elevated line, as support for a 202-foot long curtain wall that separates the car wash from the street. The glass only comes down to the sidewalk at the block's southern corner; for much of the way it is a horizontal band running along the elevated's bed. The steel-and-glass armature becomes more of a transparent billboard than a wall, and its architect Christopher Grabé collaborated with graphic designers to develop signage that will eventually cover the scaffolding's upper level. However, regular billboards don't even seem necessary to attract attention to what is going on inside. The glassy skin over the dark steel is a more arresting sight than any blinking neon wonder. ■



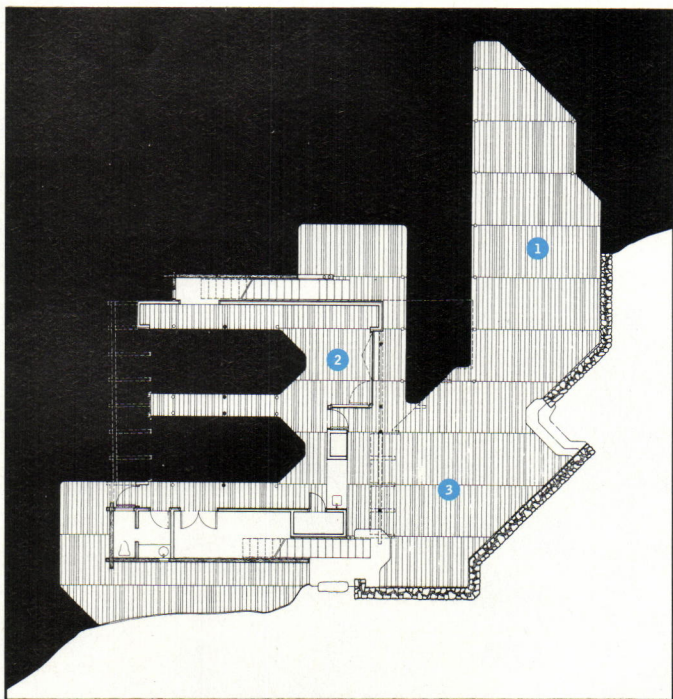


Muskoka Boathouse Lake Muskoka, Ontario, Canada
Shim-Sutcliffe Architects





Second-floor plan



First-floor plan 12' <

By Raul A. Barreneche

Lake Muskoka, about a two-hour drive north of Toronto, is the heart of Canada's cottage country. Since the mid-1800s, Canadians—and a fair share of Americans, too—have vacationed along the large lake, which is studded with tiny islands and ringed by thickly wooded peninsulas framing shallow, rocky coves. In many ways, Muskoka's easy-going lifestyle has changed little since vacationers first retreated to its shores. Visitors fiercely guard the area's old-fashioned charms: They still relax in bare-bones cabins, chug across the lake aboard vintage steamers, and cruise its waters in a type of small wooden craft locals call a "Muskoka boat." To

Toronto architect Brigitte Shim, these sensuous, highly polished, and precisely engineered vessels—built of waxed mahogany with light inlays and fitted with what look like the steering wheels of old roadsters—are "like floating violins, built for show and for cruising." The boats, still built in local marinas, loom large in Muskoka's rich local lore.

Shim and partner Howard Sutcliffe grew up with the Muskoka traditions, and so were at the ready when a Toronto financier hired them to design a boathouse on his property, on the lake's southwestern shore. The parcel included a large waterfront home built in the 1970s and a 100-year-old cottage that the client uses to entertain his children, grandchildren, and other guests. Like many of the boathouses in Muskoka, the program called for indoor and outdoor boat slips with a sleeping cabin above, hovering over the water.

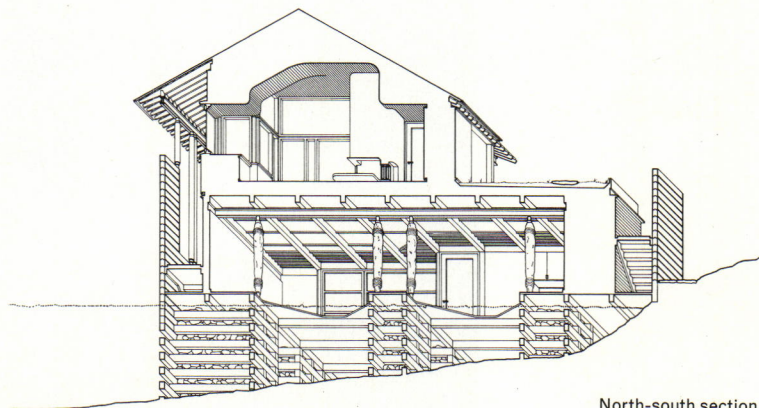
The architects sited the new 2,300-square-foot boathouse (the winner of a 1999 P/A Award; see April 1999 issue, page 94) downhill from the existing structures, and connected it with a wooden staircase to paths crossing the site's well-worn granite outcroppings. They marked a new waterside precinct with a low stone wall that frames a wooden dock surrounding the boathouse.

Shim and Sutcliffe set the dock and two-story boathouse atop a series of submerged wooden cribs filled with granite ballast, a tried-and-true Muskoka construction technique (see drawing, facing page). Building these aquatic foundations started in winter: Workers cut through the solid crust of ice atop the lake with chainsaws, dropped empty "crates" of wooden timbers into the water, and filled them with chunks of local granite; after the stones settled, construction began atop the foundations the next spring. The water exerts a steadying force similar to that of soil on land-based structures. "It's tenuous, but it works," says Sutcliffe of the process. "It's how you typically build in Muskoka." He and Shim exaggerated this indigenous building technique by extending the cribs of salvaged Douglas fir timbers from underwater, so that the foundations become the base of the boathouse's east and west walls. "A lot of people here build without understanding this ongoing vernacular construction," says Shim. "We're being explicit about it."

The boathouse's program is simple. The first floor contains two indoor boat slips (a kind of aquatic garage); storage space for canoes, paddles, life jackets, and wet suits; a small bathroom with a shower; and an open-air kitchenette to serve boaters coming back from a tour or guests lounging on the dock. An exterior wooden staircase leads past a rooftop rock garden—"a slice of landscape lifted up off the ground," according to Sutcliffe—to a separate, private compound upstairs that



The boathouse's dockside south elevation (above) reveals its programmatic split personality: workaday boat storage and open kitchenette at the base, and highly polished private sleeping cabin above. From the lake (right), boats drive into indoor slips sheltered behind wood-framed garage doors with translucent fiberglass panels; above the boat slips are a covered porch (at left) and the bathroom and dressing area (at right). The painted Douglas fir timbers enclosing the ground floor are literal extensions of the wooden cribs comprising the underwater foundations (below).



North-south section





A Japanese-inspired rooftop rock garden (above) greets visitors as they arrive at the second-floor sleeping cabin. A built-in hutch for firewood on the cabin's west face adds another texture to the exterior palette of Douglas fir and other woods. Shim-Sutcliffe peeled back a small corner of the zinc-shingled roof to reveal its wooden joists and let afternoon sun filter onto the terrace beneath. Accessed from the bedroom, the terrace (right) boasts a polished curved-wood railing inspired by the decks of yachts. Visible at lower left is part of a ground-floor colonnade of wooden timbers skewered on steel posts—the building's only fussy moment.



includes a tiny vestibule, a compact kitchen, a bedroom with a sitting area, a covered lakeside porch, and a large bathroom and dressing area.

Despite the simplicity of its program, the boathouse is a beguilingly complex and sophisticated little structure. Like the sleek, wooden Muskoka boats cruising the surrounding waters, the wooden house is sensuous and finely crafted down to the last joint. Spatially, too, the building takes cues from its nautical heritage. As Shim suggests, “there’s a particular place for everything, like on a boat. All the furniture fits into the walls, allowing the house to feel more spacious than it might otherwise.” In the bedroom, the building’s dominant horizontal language gives way to a curved fireplace and sinuous wooden ceiling profiles reminiscent of ship hulls or tarpaulin boat covers.

As on its exterior, the building’s inside is a mix of rich woods, which the architects selected for their ability to absorb the stresses of the crib foundation’s uneven settling on the lakebed. Shim and Sutcliffe created warm textures with mahogany cupboards and floor-to-ceiling closets, walls of birch plywood and honey-colored Douglas fir, and oak floors painted a thick, buttery yellow that lets the grain show through ever so slightly.

This flooring, standard fare in old Muskoka cottages, underscores a recurring theme throughout the boathouse: the purposeful juxtaposition of the ordinary and the extraordinary. Alongside the mahogany, the otherwise common flooring is suddenly ennobled. Shim and Sutcliffe custom designed almost every fitting, from door pulls and window cranks to handrails and light fixtures. (They crafted one porch light from a giant mason jar, fitted with custom bronze castings and suspended from the ceiling with stainless steel rods.) But the architects also added ordinary details, like laboratory shower fixtures and off-the-shelf ceramic Japanese bowls that they turned into sink basins—all of which work seamlessly with the expensive, custom elements. “The house feels luxurious, but also not,” explains Shim. “You appreciate the luxurious parts because of the simple ones; they enhance each other.”

The architects are mindful that the boathouse is still an earthbound building, its nautical overtures aside. To wit, they orchestrated axial hallways so that each path terminates in a lakefront vista at one end and a view of the woods on the other. Bands of custom mahogany-framed windows along the dressing area on the north side and the bedroom on the east give these spaces the feel of breezy porches on a lakeside summer retreat.

Shim-Sutcliffe never truly define their building’s character; they leave it as an assemblage of seeming contradictions—a sophisticated hut, a rustic cabin, and a polished boat—that draws from the traditional and the modern. They’ve scrutinized the thorny architectural question of past and present and proclaimed that “modern and the vernacular are not mutually exclusive,” in Shim’s words. Indeed, their boathouse is a careful, intelligent mix of local tradition and the modernist spirit of invention that adds a new tale to the lore of Lake Muskoka. ■

Raul A. Barreneche, a former senior editor of Architecture, writes regularly for The New York Times, Metropolitan Home, and other publications. He is also writing and editing books for Edizioni Press and Universe|Rizzoli.



The long, narrow dressing area (top) adjoining the bathroom (at right) offers a peek at Lake Muskoka, beyond the porch. A strip of custom mahogany windows behind the sinks (at left) creates a sense of enclosure against the expansive lake. The curved profile of the bedroom’s wooden ceiling (center) has nautical overtones; as on a ship, the shelves, the bed and the desk that runs the length of the windows are embedded into the walls. At the bedroom’s south end (bottom), a window-wall opens onto views of the shore. The architects custom designed the curved fireplace flue with an ornamental steel frame.

The boathouse's lakefront north face (below) encapsulates its dual nature as an open-and-closed, modern-yet-traditional structure. The west elevation (right) shows Shim-Sutcliffe's varied palette of woods: thin Douglas fir battens at the top; warm Jatoba planks—a flooring material used here as a wall surface—beneath; mahogany window frames; and, wrapping the base, reclaimed fir timbers painted gray. The architects also designed the rustic canoe rack behind the house (foreground).

MUSKOKA BOATHOUSE

CLIENT: Shanitha Kachan and Gerald Sheff; Muskoka, Canada **ARCHITECT:** Shim-Sutcliffe Architects, Toronto—Brigitte Shim and Howard Sutcliffe (principals); Donald Chong, Jason-Emery Groen (presentation drawings); James Song (model building), Andrew Chatham, John O'Conner (project assistants) **ENGINEERS:** Atkins + Van Groll Engineering (structural), Toews Systems Design (mechanical) **CONSULTANTS:** List Planning (planning), Suzanne Powadiuk Design (lighting) **GENERAL CONTRACTOR:** Judges Contracting—Wayne Judges (principal); Tom Montgomery (site supervisor) **MILLWORK:** Radiant City Millwork—Steve Bugler (principal) **CUSTOM FABRICATION:** Takashi Sakamoto **COST:** Withheld at client's request **PHOTOGRAPHER:** Edward Burtynsky







Science City at Union Station Kansas City, Missouri
Ehrenkrantz Eckstut & Kuhn Architects/SmithGroup





Jarvis Hunt of Chicago, a nephew of Richard Morris Hunt, designed the original, beaux-arts Union Station (facing page), which opened in 1914. The station's arched south front faces Kansas City's 1926 World War I memorial, an early art deco column capped with an "eternal" flame. The station's spectacular, coffer-ceilinged grand hall (top) incorporates a restaurant (top, at right) and information booth. The concourse (bottom) originally led to train tracks; today, it opens onto Science City's gift shop.

By Lawrence W. Cheek

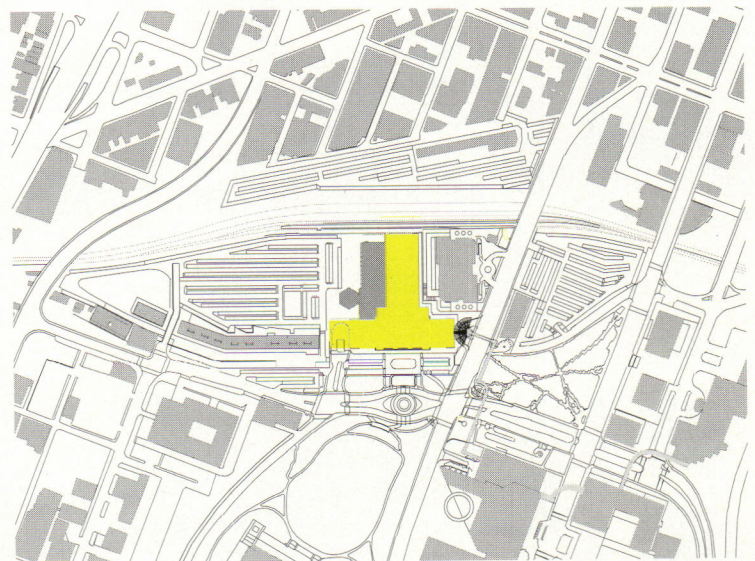
Nature, that sly vamp, orchestrated the perfect launch for the audaciously complicated and expensive rehab of Kansas City's once-great beaux-arts train station. On an April weekend in 1994 the Union Station Assistance Corp. (USAC), a not-for-profit with a mandate to somehow save the boarded-up, 670,000-square-foot derelict, staged an open house. It started raining, but 3,000 Kansas Citians determinedly waited outside for their turn. Andy Scott, USAC's executive director, phoned Mayor Emanuel Cleaver and said, "You've gotta see this!" Cleaver hurried over to work the sopping crowd. And when they finally got inside they enjoyed still more rain percolating through the ceiling—a drippy exclamation mark affirming the urgency to do something, quick.

For a project so ambitious, five years seems blindingly quick—and how Kansas City did it could be an inspiration for every community.

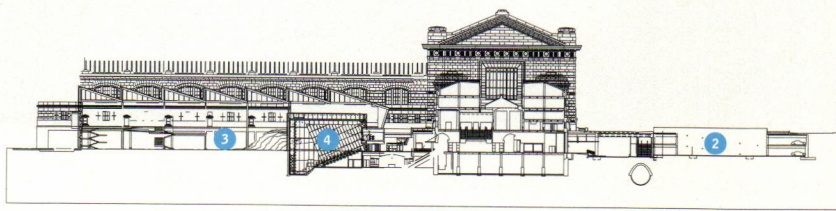
This building had a history of high aspirations. The original architect, Jarvis Hunt of Chicago (a nephew of Richard Morris Hunt), presented plans in 1907 that he knew would cost nearly twice the railroads' budgeted \$2 million. Even after pruning its size and ornamentation, it would be the third-largest train station in North America, trailing only New York City's Grand Central Terminal and Pennsylvania Station. When it opened for business in 1914, the construction cost of \$10.6 million far exceeded even Hunt's fudge.

For four decades, Kansas City thrived as the Midwest's transportation hub, vindicating Hunt's chutzpah. Then, inevitably, came decline and ignominy. By 1984, Amtrak had cocooned the last vestiges of its operation in a tumorlike polyester tent inside the Grand Hall, to save on heating and deflect the indoor rain. Five years later, the station was abandoned and left to a lawyers' scuffle, its Canadian owners unable to fulfill their contract to renovate it.

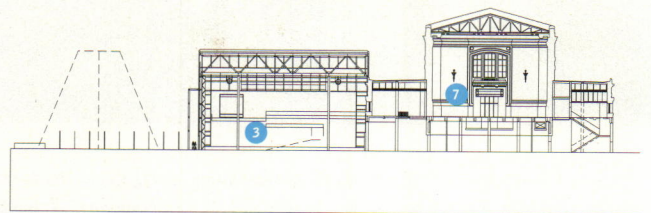
USAC surveyed a total of 30,000 visitors on that 1994 weekend, and they gave some clear directions. Kansas Citians wanted a working train station again, and they did not want a casino or a shopping mall stuffed into it (as in St. Louis's historic station). With only six Amtrak trains a day still rolling in, however, Kansas City hardly needed such a vast facility; the building would have to be adapted to an assortment of uses. Science City, a children's adventure wing of the Kansas City Museum, was dragged into the project against its president's will—he wanted a \$60 million freestanding museum on another site, and Union Station appeared to offer only higher costs and more headaches. But folding a



Site plan 1

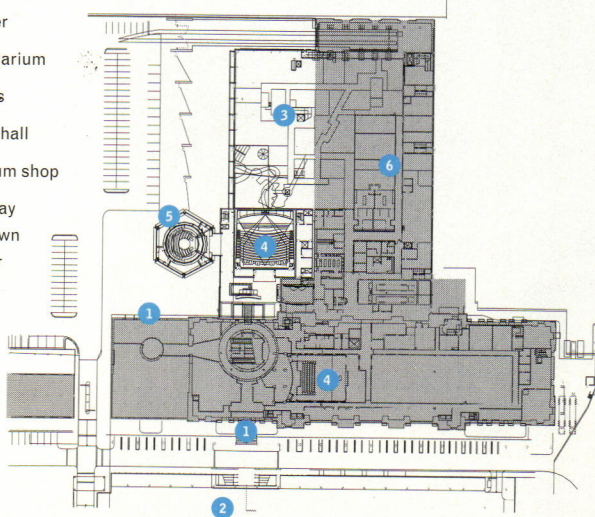


North-south section 71'

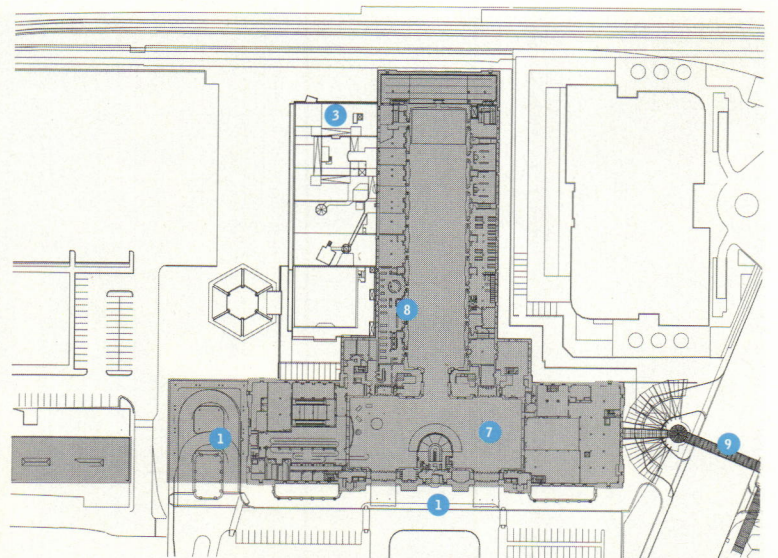


East-west section

- 1 entrance
- 2 garage
- 3 exhibits
- 4 theater
- 5 planetarium
- 6 offices
- 7 grand hall
- 8 museum shop
- 9 walkway to Crown Center



Ground-floor plan 91'



Entrance-floor plan



The Science City addition sits at the rear of the station, along the west side of Hunt's 1914 concourse. The addition's sawtooth roof (above) admits north light to the exhibition spaces within; the profile abstractly echoes the sheds that originally covered the rail platforms (facing page, top), extending from the concourse. A six-sided pavilion (below, foreground), clad in zinc panels, houses a planetarium. The last, southern serration, behind the planetarium, slopes farther down than the others, to enclose a large-screen theater.



museum into the restoration of a civic treasure attracted donations of \$50 million from three local foundations and convinced voters in four counties, three in Missouri and one in Kansas, to agree to a one-eighth cent sales tax increase—the first-ever bistate tax levy in the country.

“That’s how much people cared about this building, its memories, the experiences they’d had here,” says USAC’s Scott. “I know it’s an overused term, but this really was the soul of Kansas City.”

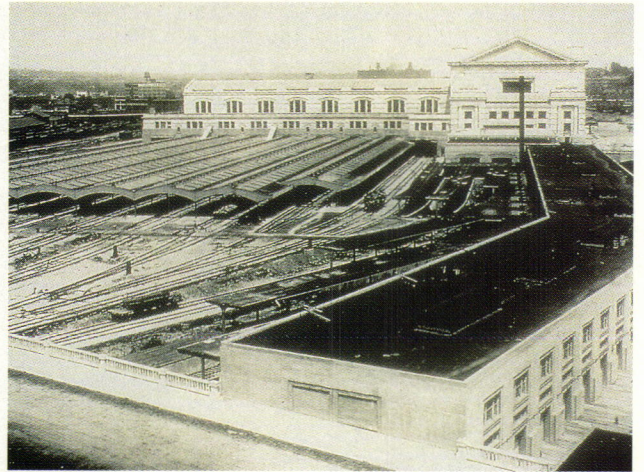
The renovation posed a panoply of problems to the architects who joint-ventured on the job, led by SmithGroup of Washington, D.C. and Ehrenkrantz Eckstut & Kuhn of New York. Water from cracked gutters and leaky tiles had corroded the steel structure, necessitating replacement and reinforcement. The 96-foot-high ceiling in the Grand Hall, a polychromatic pageant of plaster eggs, rosettes, braids, and garlands, turned out to have been dimensioned by eyeball 80 years back, so the replacement ornaments had to be replicated one by one, precisely repeating the mistakes of the original.

The museum’s requirements for daylight and space wouldn’t allow the obvious adaptive solution of simply slipping the museum into the station’s existing profile. Led by David Greenbaum, SmithGroup designed a 250,000-square-foot addition to nestle deferentially between and under the north and west wings of the station. Greenbaum calls it a “shed,” whose lean efficiency was driven by the budget, but this description doesn’t do justice to a very slick concept. Rather than resonate with the station’s beaux-arts classicism, Greenbaum abstracted the triangular forms of the steel sheds (long ago demolished) that used to shelter the trains parked behind the station, and displayed them as a sawtooth roofline. The corrugated aluminum cladding of the addition echoes old boxcars, and its very profile suggests the shape and proportions of an engine speeding past the station. All this is subtle enough that it never derails into the realm of kitsch, yet obvious enough that it’s not just a wicked architects’ in-joke.

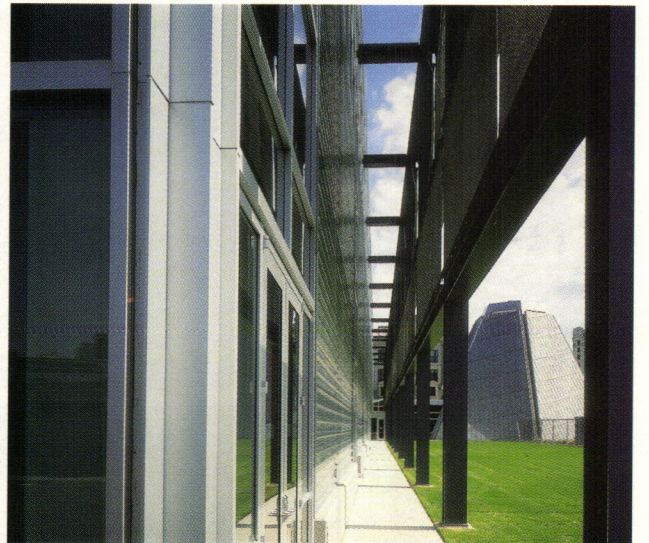
Inside, the museum is organized as a three-level “city” of some 50 interactive exhibits, such as a crime lab, a heliport, and a miniature golf course that slyly illustrates assorted principles of physics. Some parents have been disappointed that it’s not a conventional science museum with a more literal emphasis on learning. Attendance fell short of projections for the first six months and ran up a \$1.6 million deficit. Science City President David Ucko says it’s a stage set where children become players, and “they may not realize the implications for days, weeks, or years after they leave.” The museum’s motto is “A New Adventure Every Time,” and the shed design, lavish with skylights and clerestories, helps fulfill the promise: The mood of the indoor city shifts with the seasons and weather.

Complementing the museum is a lineup of grownup attractions grafted onto and under the station: a “theater district,” with a live-stage theater, an iWERK extreme-screen cinema, and a planetarium. There are half a dozen restaurants, a couple of bars, a handful of stores—and for those who must have a mall, a new elevated glass walkway to the shops of Crown Center two blocks away. A revival of a working train station is still a possibility: Scott hopes to move the Amtrak operations, feeble though they are, back in from a nearby building, and eventually Union Station may also become a node for a commuter rail system.

But the most visionary design decision in this entire \$250 million project may have been the one to channel all the museum and shop traffic through the restored Grand Hall, Jarvis Hunt’s monumental community living room. As a textbook beaux-arts exercise, it dutifully illustrates classical rationality and formality, but at the emotional level it is literally breathtaking, celebrating human achievement in a way that few other public spaces in America can manage. ■



The Science City addition abstracts the modern, industrial vocabulary of the original train sheds (above) in detail as well as overall form. A screen wall (below, top) of I-beams and metal mesh shades the exhibition spaces. Outside the passageway between the planetarium and the exhibit spaces (bottom), river rocks fill a gap between the building and the exterior pavement.



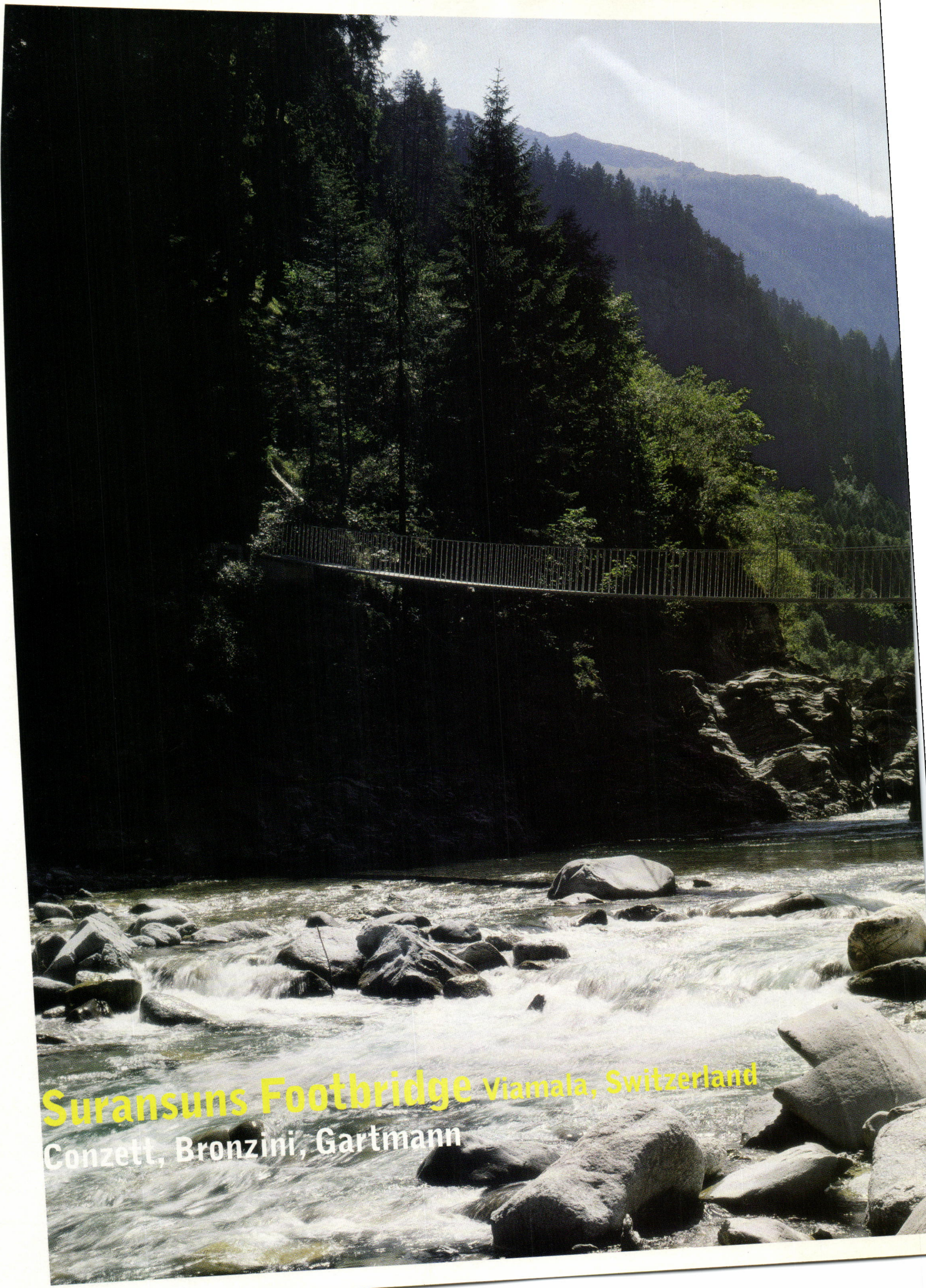


A light-well joins the south side of the addition (top, at right) to the original station (left). Along its east flank (bottom, at right), the addition butts more directly up against the old station. The new shed form (facing page) houses a variety of spaces for educational activities.

SCIENCE CITY AT UNION STATION, KANSAS CITY, MISSOURI

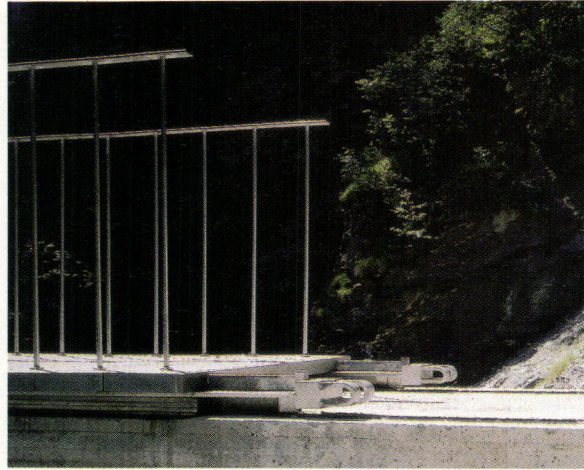
CLIENT: Union Station Assistance Corporation, Kansas City, Missouri **ARCHITECT:** Ehrenkrantz Eckstut & Kuhn / SmithGroup (formerly Keyes Condon Florence), A Joint Venture, Washington, D.C.—Colden Florence (principal-in-charge); Stan Eckstut (principal-in-charge mixed-use/intermodal); Denis Glen Kuhn (principal-in-charge preservation/adaptive use); Mark Maves (managing principal); Peter David Cavaluzzi (design principal mixed-use/intermodal); David Greenbaum (design principal museum); Bora Popovic (design architect lead museum); Elsa Santoyo (project manager preservation); Nancy McCoy (design architect preservation); Quentin Munier (design architect mixed-use/intermodal); Hilary Bertsch (design architect mixed-use/intermodal); Kishi Michiko (design architect mixed-use/intermodal); John Lavoie (design architect preservation/adaptive use); Tam Nguyen (design architect museum); Jane Lin (design architect museum); Muge Le Croix (design architect museum); Willie Fischer (design architect intermodal); Greg Meila (design architect intermodal); Sue Kim (design architect intermodal/museum); Warren Wick (design architect museum); Cheryl Brown (interior design); Joann Eckstut (interior design); Jan Kalinowski (models) **ARCHITECT OF RECORD:** Union Station Architects (USA)—HNTB Corporation, Berkeley Nelson Immenschuh McDowell (BNIM), CDFM2 Architecture, Rafael Architects **LANDSCAPE DESIGN:** Olin Partnership, S.L. Bruce Associates **ENGINEERS:** SEA/YAS (structural), SBGA (M/E/P); Boyd Brown Stude (civil) **CONSULTANTS:** Rolf Jensen & Associates (code/life safety); HGA (large format theater); Presentation Planning (A/V); Harris Productions (theater); Hayden McKay (daylighting/artificial lighting); Claude R. Engle (consultant); Cerami, Jaffe Holden Scarborough (acoustical); Persohn Hahn (elevator/escalator); Peter Muller (exterior wall/skylight); Economic Research Associates (retail/mixed-use programming); SAKO & Associates (security); Oehrlein and Associates (historic preservation); Douglas Galligher Associates (exhibition/graphic design) **GENERAL CONTRACTOR:** Dunn Malco **COST:** \$250 million **PHOTOGRAPHER:** Peter Aaron /ESTO, except as noted





Suransuns Footbridge Viamala, Switzerland
Conzett, Bronzini, Gartmann





The Suransuns footbridge hovers above the rocky banks of the Hinterrhein (top left and right, and facing page), linking the ancient Via Mala hiking path to a larger network of trails. The steel ribbons which give the bridge its strength run beneath the granite pavers and terminate in tensioners anchored into landside concrete abutments (bottom left and right).

By **Nina Rappaport**

The Viamala gorge around Switzerland's Hinterrhein river takes its name from the Roman road that once ran alongside it. The name—loosely, “treacherous way”—makes sense when one considers how difficult travel must have been through the rocky and vertiginous alpine ravines. While the road has long since disappeared, a series of hiking paths has grown up alongside its route. These have none of the storied regularity of their ancient ancestor, but modernity has brought improvements. There is now a footbridge over the Hinterrhein: the Pünt da Suransuns, designed by Jürg Conzett with his partners Gianfranco Bronzini and Patrick Gartmann. Where hikers once had to find a narrow spot in the ravine and clamber over river stones to make a crossing, the Suransuns provides an easier—and extraordinarily elegant—passage to the other side. Its engineers, who often work with architects such as Peter Zumthor and Gigon + Guyer, selected the smoothest terrain for the narrow walkway, which drapes like a rope slung from the higher embankment of the river to the other side some 130 feet away.

At first glance, the Suransuns appears to be a traditional suspension span. But look closely. Its handrails—from which the footpath would normally be hung—end startlingly before the bridge does. This sleight of hand is made possible by an elegant structural system called a stress ribbon, that vests the suspension within the footpath itself. In this case, two pairs of parallel steel ribbons run like tracks beneath the edges of the bridge's Andeer granite treads. The ribbons terminate in tensioners anchored into landside concrete abutments. The stress ribbons are then sandwiched between transverse steel plates and the granite footpath slabs, which are held in place with aluminum joints. When the system is tuned, the stress ribbons and the pavers act together as a single suspension system, and the stiffness and weight of the stone resist swaying. Minimal stainless steel vertical rods tie the steel plates to the granite slabs and to the thin stainless steel handrail above. The system is beautifully simple and impossibly thin. Yet there it hangs, suspending not only Swiss hikers, but our own belief in the forces of gravity. ■

SURANSUNS FOOTBRIDGE, VIAMALA, SWITZERLAND

CLIENT: Verein KulturRaum, Viamala, Switzerland **ENGINEERS:** Conzett, Bronzini Gartmann; Chur, Switzerland—Jürg Conzett (principal); Fredric Benesch, Guido Lauber (collaborators) **CONSULTANTS:** Romei (steelwork); Granitwerke Andeer, A. Conrad (stonework); Baugéologie Chur (geologist) **COST:** Withheld at client's request **PHOTOGRAPHER:** Christian Richters





Trailers Photographs by Victoria Sambunaris





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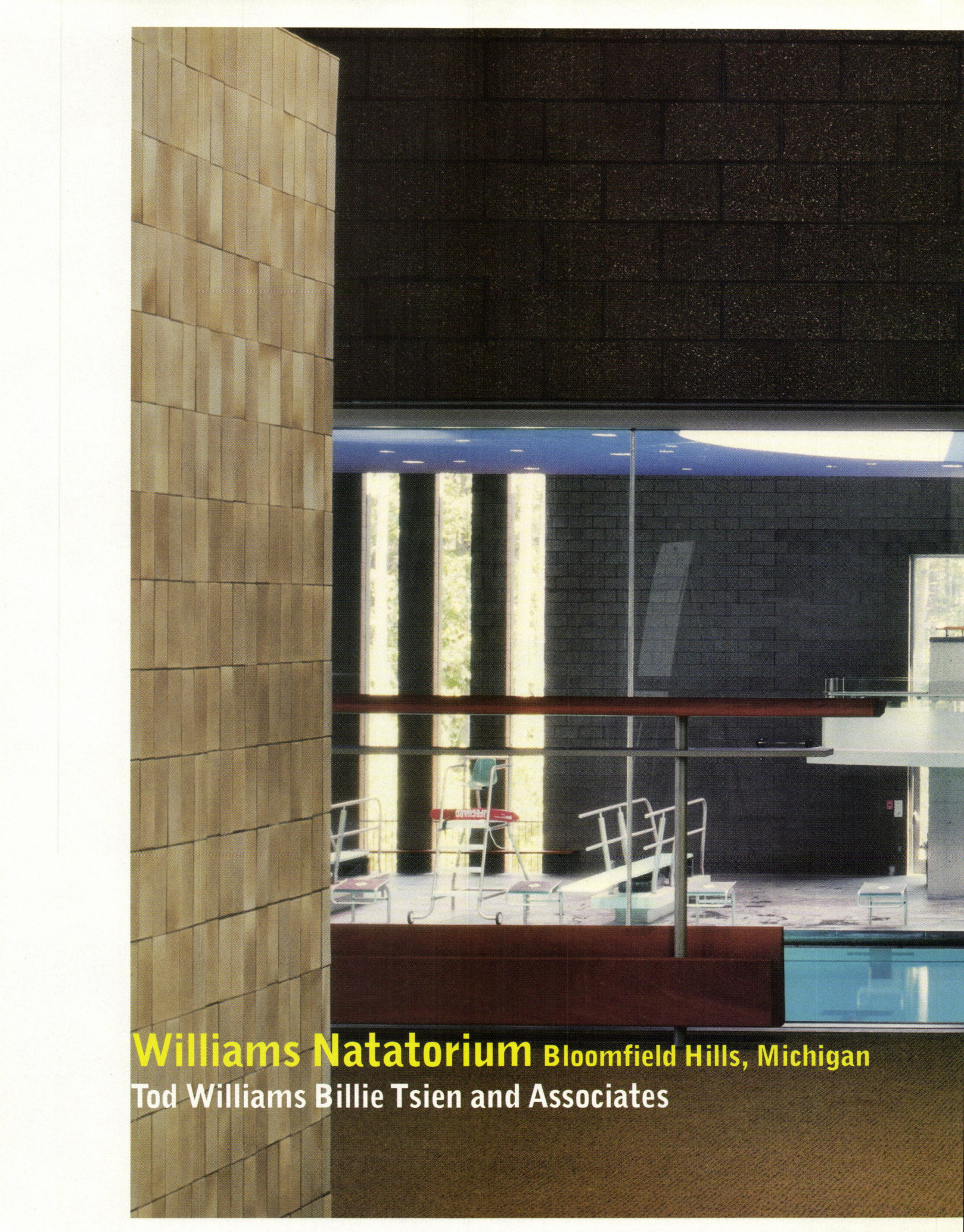
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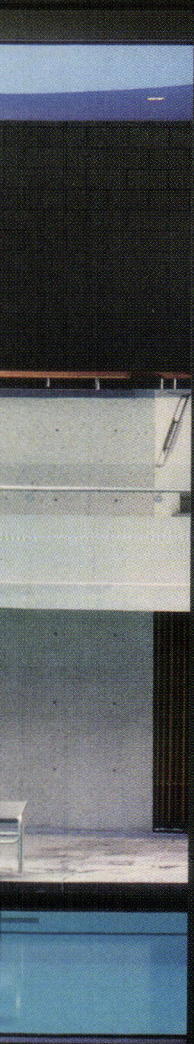


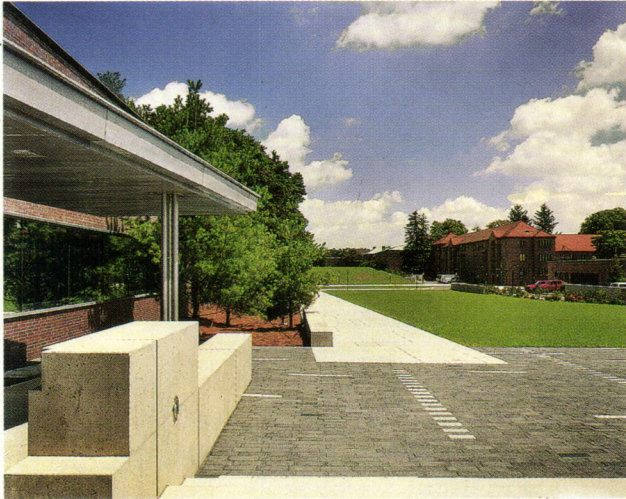
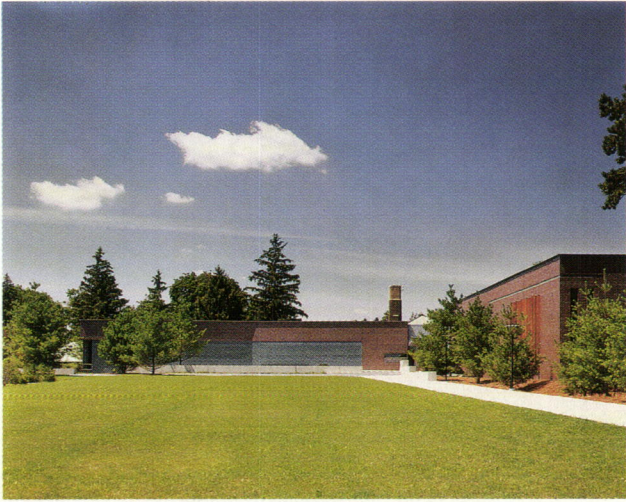


Photographer Victoria Sambunaris first encountered a truck terminal in 1998 as she drove around New Jersey, lost in the rain. “Those trucks were so solid and architectural, so beautifully orange,” she recalls. Sambunaris used to shoot pristine landscapes and dying mill towns in upstate New York and Maine until her focus shifted to the structures that litter American suburbia. “I started thinking about the trucks, how they connect to the corporate parks and cul-de-sacs I was photographing,” she says. “I realized that all these things are intertwined—the office parks, the housing developments, the industrial parks—all laced together across the country by trucks.” Sambunaris continues to shoot truck containers along with her other work, in Pennsylvania and more recently in Texas. “They’re stripped of all luxury,” she explains. “The way they sit in the landscape is painterly, beautiful. To me, they’re like monuments—monuments of the road.” *Sarah Palmer*



Williams Natatorium Bloomfield Hills, Michigan
Tod Williams Billie Tsien and Associates

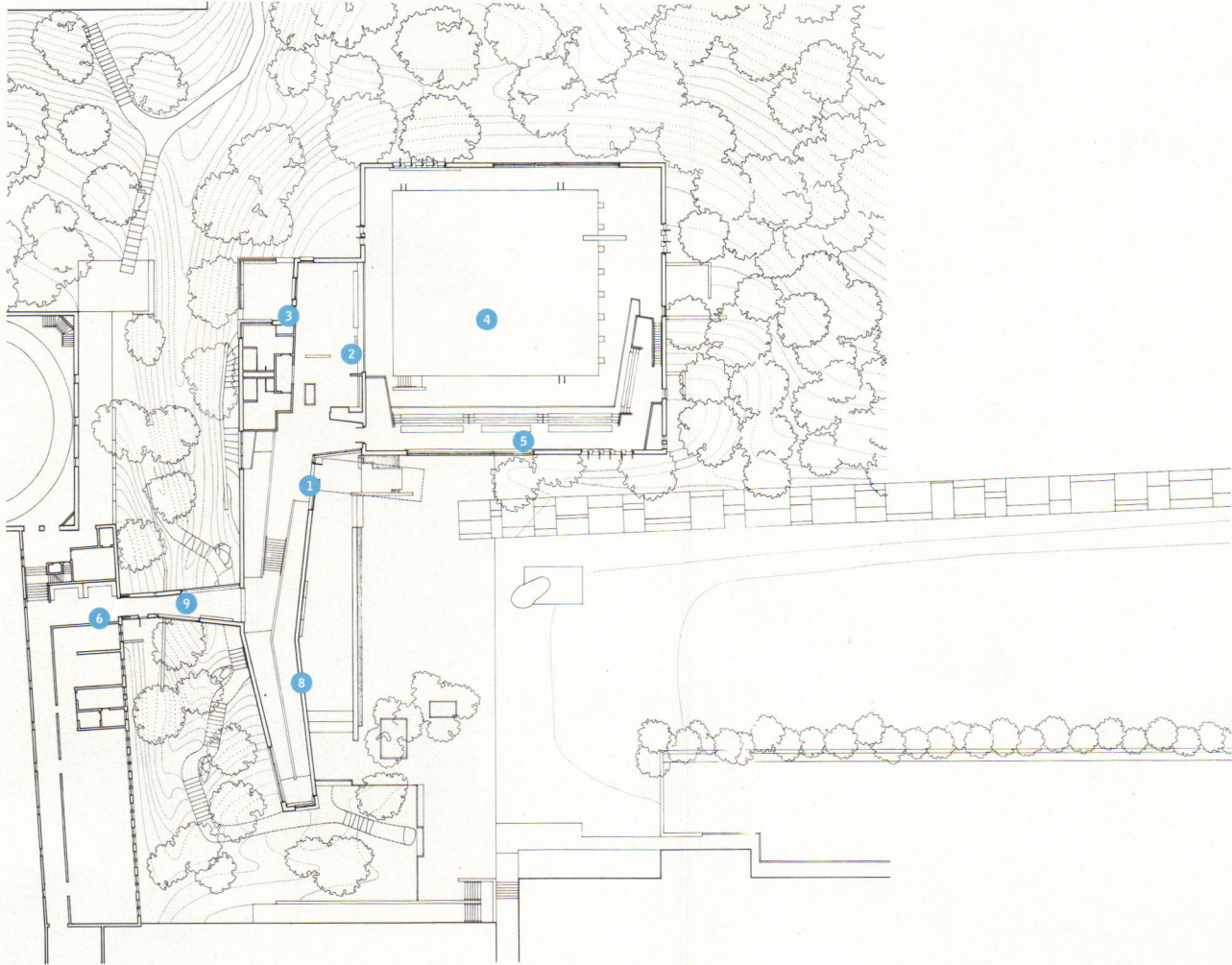




In the design for the natatorium at Cranbrook, architects Tod Williams and Billie Tsien find beauty in the pragmatics of a sports facility. In a lounge next to the lobby, they juxtapose a trophy case with a view of the pool beyond (preceding page). A narrow wing housing a stair and ramp, with its field of brilliant blue-glazed bricks, terminates one of Cranbrook's principal axes (top). The natatorium faces Eliel Saarinen's boys' school dormitory (center, at right) across the line of the axis, to form a three-faced quadrangle. Williams and Tsien intend the natatorium, which is largely clad in rust-colored brick, to recede visually behind the pine trees planted before it (bottom). A low, lead-coated copper canopy marks the building's entrance (right).







Plan 25' ^

- 1 lobby
- 2 lounge
- 3 terrace
- 4 pool
- 5 seating
- 6 old gymnasium
- 7 locker room
- 8 ramp
- 9 bridge

By Ned Cramer

Walter Pater, the original genius of the Victorian aesthetic movement, maintained that the truest understanding of the arts, of all things beautiful, derives from an individual's unique impressions, rather than some overarching theory or abstract philosophy. In the genealogy of British letters, Pater was the wayward son of moralist John Ruskin and the intellectual father of Oscar Wilde, who called Pater's influential collection of essays, *The Renaissance: Studies in Art and Poetry*, "my golden book." Detroit newspaper magnate George Booth was another a child of aestheticism, if less decadent; over the library mantel of Cranbrook, his country house in Bloomfield Hills, Michigan, as part of an allegorical relief of artists and craftsmen, appears a line by one of Pater's favorite poets, Walter Savage Landor: "Nature I love[d], and, next to Nature, Art..."

True to these words, in the years between the two world wars Booth founded on his manicured estate a graduate art academy, a public art museum and science center, and a confederation of prep schools (where even today students earn marks for their aptitude at the loom and the potter's wheel). Booth was as much an anglophile as an aesthete; he intended Cranbrook to recall, in form as well as name, his ancestral hometown in Kent, and invited a group of émigré European artists and artisans under the leadership of master architect Eliel Saarinen (Eero's father) to realize his vision. Saarinen complied from the outset, with the cut of a stone, the profile of a roof, or the pattern of a rug, and in so doing, added something of his own native Finland as well. Over the years, Saarinen introduced to Cranbrook, in varied measure, evocations of the

Orient, the antique, the Middle Ages, and other times and places even less specific, so that no one building too closely resembles another. Yet, in the spirit of Pater's definition of aesthetics, all would resonate with some scant-remembered experience or knowledge.

Cranbrook has lately outgrown the physical limits of Saarinen's legacy, and commissioned additions from notable modernists whose approach in one way or another sympathizes with their predecessors: Peter Rose built a new wing at the lower school in 1996; Steven Holl expanded the science museum two years ago (March 1999, page 80); fundraising is underway for Rafael Moneo's art academy studio wing. And now, Tod Williams Billie Tsien and Associates of New York City have completed an indoor swimming pool that may prove the most sympathetic addition of them all.

This is due in part to the 15 years Williams spent in study at the Cranbrook boys' school, graduating in 1961. Pater, in his short story, "The Child in the House," noted how his thesis of individual art appreciation manifests itself in the earliest, developmental stages of life: "How insignificant, at the moment, seem the influences of the sensible things which are tossed and fall and lie about us... in the environment of early childhood," he wrote. "How indelibly, as we afterwards discover, they affect us..." With Tsien, his wife and partner, Williams demonstrates the effects of his youthful environment not through imitation, nor through a willful assertion of his own vision—"I don't just want beauty to be in my eye," he asserts—but through a self-effacing respect for the institution's inherited beauty.

The natatorium, then, is modest: a 21,000-square-foot annex to Saarinen's boys' school gymnasium, a low red-brick building of 1930 that gently terminated an important campus axis. Williams and Tsien sited the principal bulk of the natatorium, a 102-by-108-foot box housing the pool proper, to one side of the line, opposite the boys' school dormitory and classroom complex; they buried it part-way into the slope of a hill and wrapped it in a rust-colored brick that will in time visually recede behind stands of spindly pine trees. A 126-foot-long, tail-like extension, enclosing a ramp and stair, instead confronts Saarinen's axis, and deflects as though from the force of the impact; an inset rectangle of translucent glazed bricks signals with blue brilliance the wing's prominent position and hints at its purpose. The rest of the main façade is equally reticent, with just a few other fields and stripes of glazed brick, in green as well as blue; a row of thin vertical openings in the walls, with substantial, steel-framed mahogany shutters; and an elegant little entrance canopy of lead-coated copper, at the joint between the pool block and the bent wing.

Another protrusion of lead-coated copper, a bridge, connects the natatorium to Saarinen's gymnasium, over a new, thickly planted gully that Williams hopes students will use as a path from the boy's school to playing fields beyond the natatorium. But in linking these two areas of the campus, the gully separates the gym from the pool; a terrace might have provided a more social connection in all four directions. It is an odd physical disassociation with a building that Williams and Tsien otherwise treat with considerable reverence. For if these architects took any direct inspiration from the glories of Cranbrook, it is to be found, with delightful counterintuition, in the plain character of Saarinen's gymnasium, with its steam pipes and buff-colored tiles, its splintery benches and clanging locker doors. Williams and Tsien find poetry in such ordinary stuff; they lend ritual profundity to the routine act of swimming with a succession of sensitive details deployed against a retiring interior backdrop of reddish-brown concrete blocks. Tsien describes the process of discovering these moments, and comprehending them as parts of a whole, as a "slow release"—an opportunity to "slow down and smell the roses in a world that's moving ever faster."

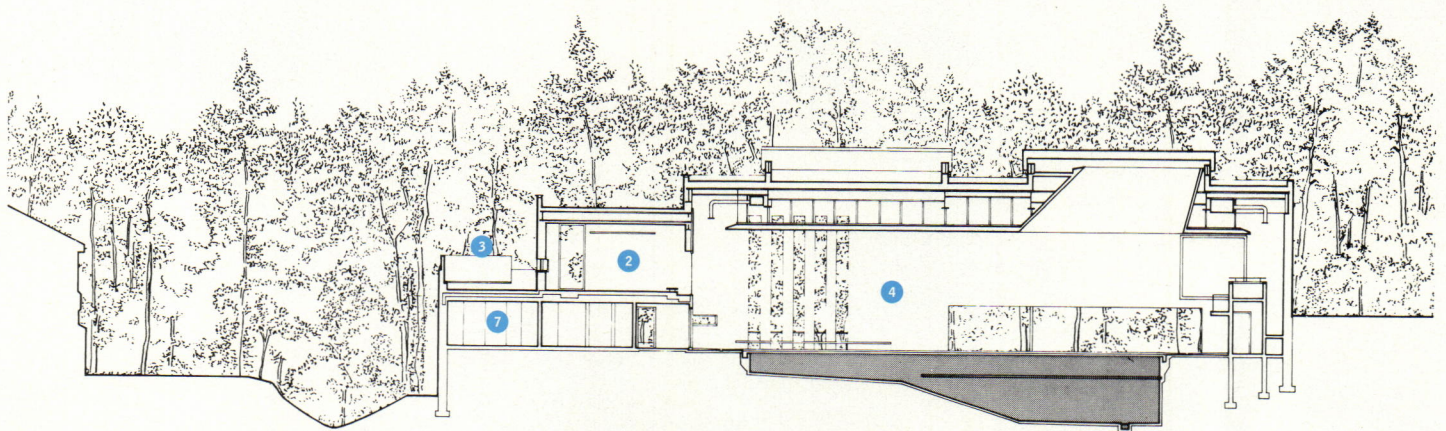
Around the edge of every public pool appear words announcing its depth. "3 FEET 6 INCHES/4 FEET/NO DIVING/5 FEET/10 FEET 9 INCHES..." read the signs at the natatorium. Cut by water jet into Italian slate, these statements become a pragmatic litany, with no less gravity than the name of a Roman statesman carved on a temple pediment. The lane markers, comparably, are not painted on a concrete surface, they are thick lines of black glass tile set against an expanse of light-gray tiles that glitters with

the water's every undulation. Even the stainless steel tubing of the standard pool ladders is a point of pride for the architects, who employ it with conviction throughout the building—in conjunction with custom mahogany rails or, in a lounge next to the pool, to support a simple, clinical seat, exceptional only for its solitary placement facing a window.

Indeed, much of the beauty of the natatorium is borrowed from its surroundings, from framed views of buildings and landscape fixed precisely at the eye-level of someone standing, or seated, or swimming. The rows of shuttered vertical openings, which repeat on three sides of the pool, are like Chinese scroll paintings, revealing thin strips of delicately bent pine trees. On warm days the shutters stand open and the winds carry the clear scent of the pines across the water. Two long, horizontal windows pointedly expose the building's steel-frame structure; the bare I-beams blend visually with tree trunks beyond the glass, implying that both bear equal weight in the building's design. The architects treat other light sources as luminous sculptures of sandblasted glass: There is a faceted clerestory above the ramp, and an orthogonal shaft of skylight that cuts through the lounge to a locker room below.

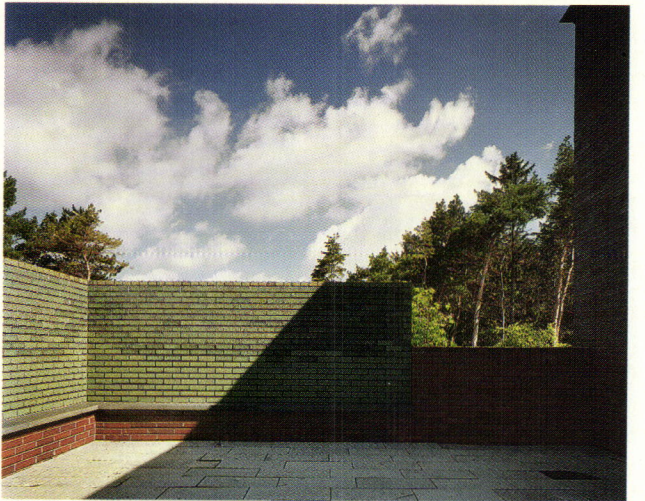
Amid the quiet overall abstraction of the natatorium's design, the pool's great azure ceiling comes conspicuously close to willful beauty, and to figuration on the order of Saarinen's historical forms and details. Recessed metal-halide lamps and two deep, round skylights puncture this stucco firmament with astrological import; it hangs low, 22 feet over the surface of the water, like a clear winter's night on Lake Michigan. Williams and Tsien, in the end, are modernists. By nature they clearly favor the potential beauty of a building's materials and construction, its surroundings, its very purpose—rich sources for Saarinen as well, who after all straddled the generational divide between tradition and modernism. But it would be wrong to deny the architects their moment of exuberance: The celestial ceiling is only more effective for being exceptional.

Saarinen, then, would have approved, and so too would Pater, whose aesthetical definition of beauty did not apply simply to artwork, or to a building's time-bound ornament, but to all worthy aspects of human existence, extraordinary and everyday alike. "Let us begin with that which is without—our physical life," he enjoined in the conclusion of *The Renaissance*. "Fix upon it in one of its more exquisite intervals, the moment, for instance, of delicious recoil from the flood of water in summer heat." This statement serves equally well to sum up the genius of the natatorium. To relish such an experience was, for Pater, the point of a life well lived—a dedication, and a moment, that Tod Williams Billie Tsien and Associates fulfill at Cranbrook. ■

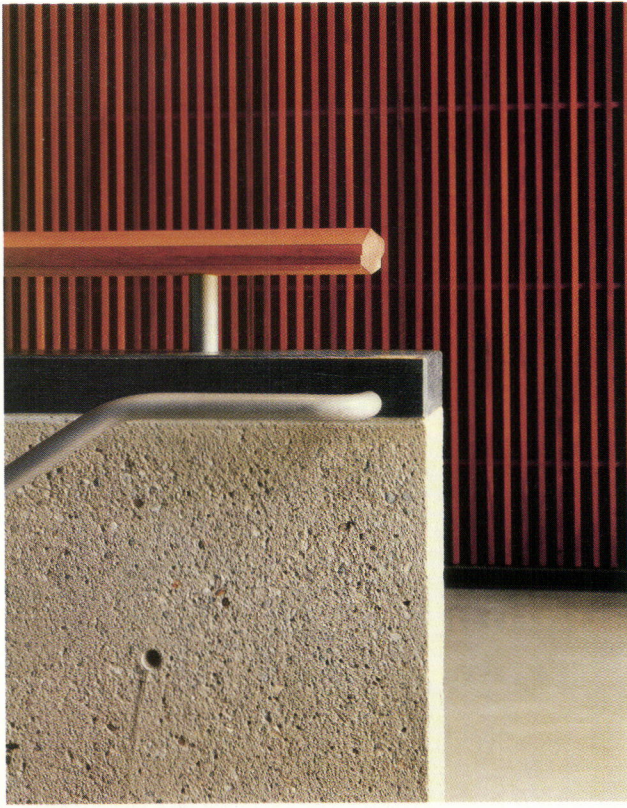


East-west section 14'





A lead-coated copper bridge links the natatorium to Saarinen's gymnasium across a naturally planted gully (left). A path wraps around the side of the new building (top), leading through the gully to playing fields beyond. At the rear of the natatorium (center), thin vertical openings with steel-framed mahogany shutters echo the spindly legs of surrounding pine trees. As on this terrace (bottom) outside the lounge, windows and other openings in the natatorium's façades frame views of the surrounding buildings and landscape.



Williams and Tsien's details are careful, but rarely precious, components in compositions of balanced asymmetry. A railing (top) and the columns of the entrance canopy (bottom) combine custom mahogany millwork with simple metal tubing. A clerestory of faceted, sandblasted glass illuminates the wing containing the stair and ramp (right, at left); at the top of the stair, the sandblasted-glass shaft of a skylight separates the lobby from the lounge beyond.







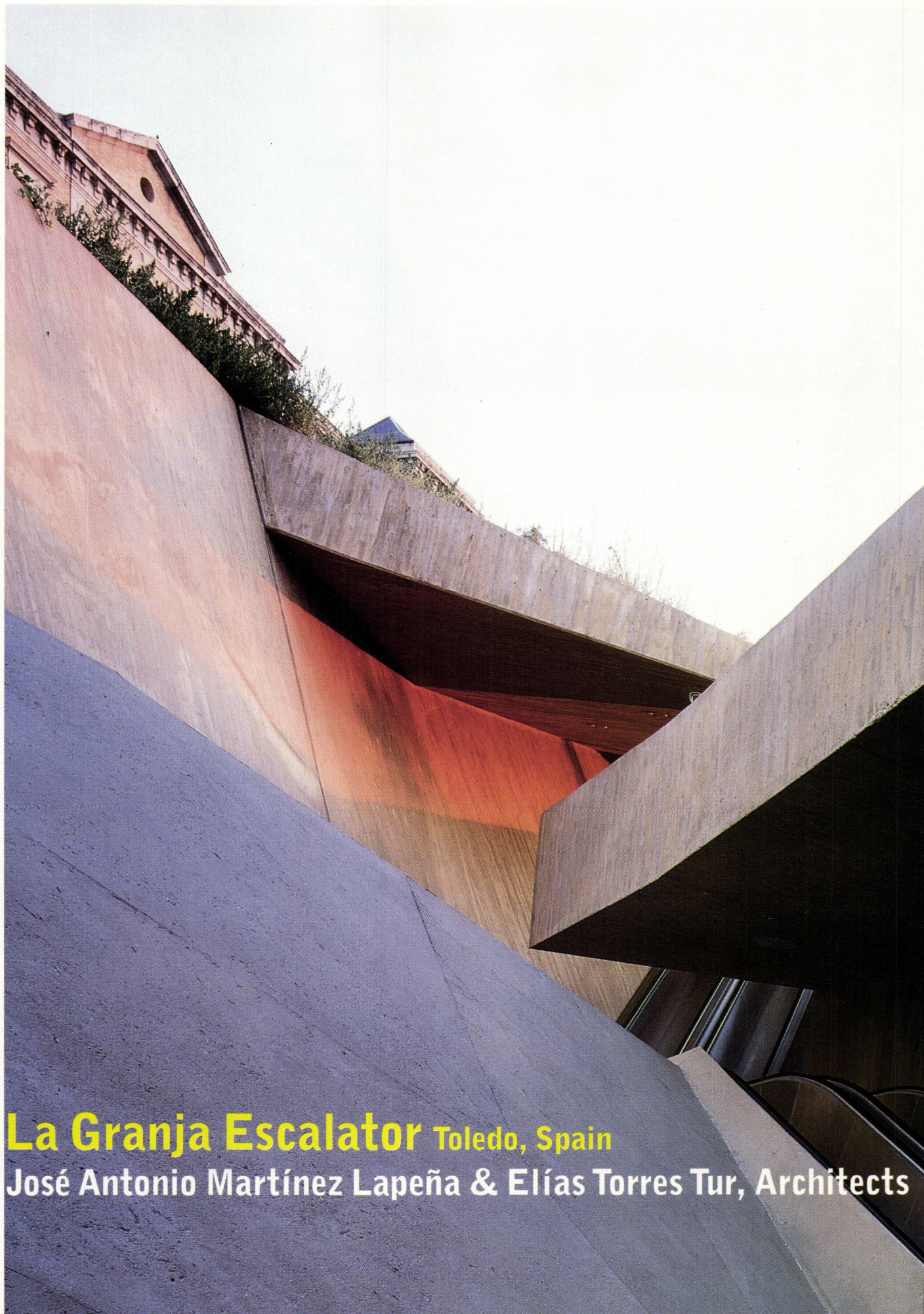
A concrete balcony wraps one side of the pool (above), with benches for spectators (below left). A window in the lounge also overlooks the pool (below right). Two great, round skylights puncture the azure ceiling of the pool (facing page); they are surrounded with small metal-halide lights. The architects specified the lights in three sizes and wattages, the smallest and dimmest of which align with the pool lanes. During competitions the other brighter lights switch off, so that swimmers doing the backstroke have a kind of celestial guide.

WILLIAMS NATATORIUM, BLOOMFIELD HILLS, MICHIGAN

CLIENT: Cranbrook Educational Community, Bloomfield Hills, Michigan—Robert Gavin (president); Arlyce Seibert (director of schools); Kevin Stansbury (project manager) **ARCHITECT:** Tod Williams Billie Tsien and Associates, New York City—Tod Williams, Billie Tsien (partners-in-charge), Martin Finio (project architect); Kyra Clarkson, Leslie Hanson, Vivian Wang **LANDSCAPE ARCHITECT:** Peter Osler **ENGINEERS:** Ed Messina, Bryan Falconer-Severud Associates (structural); Ambrosino DePinto and Schmeider—Dominic DePinto, Dennis Michel (mechanical/electrical/HVAC); Johnson Johnson and Roy (civil); Kevin Stansbury—Cranbrook Project Manager (other) **CONSULTANTS:** Rick Shaver, Edison Price (lighting) **GENERAL CONTRACTOR:** Hechristman Company **COST:** Withheld at client's request **PHOTOGRAPHER:** Michael Moran



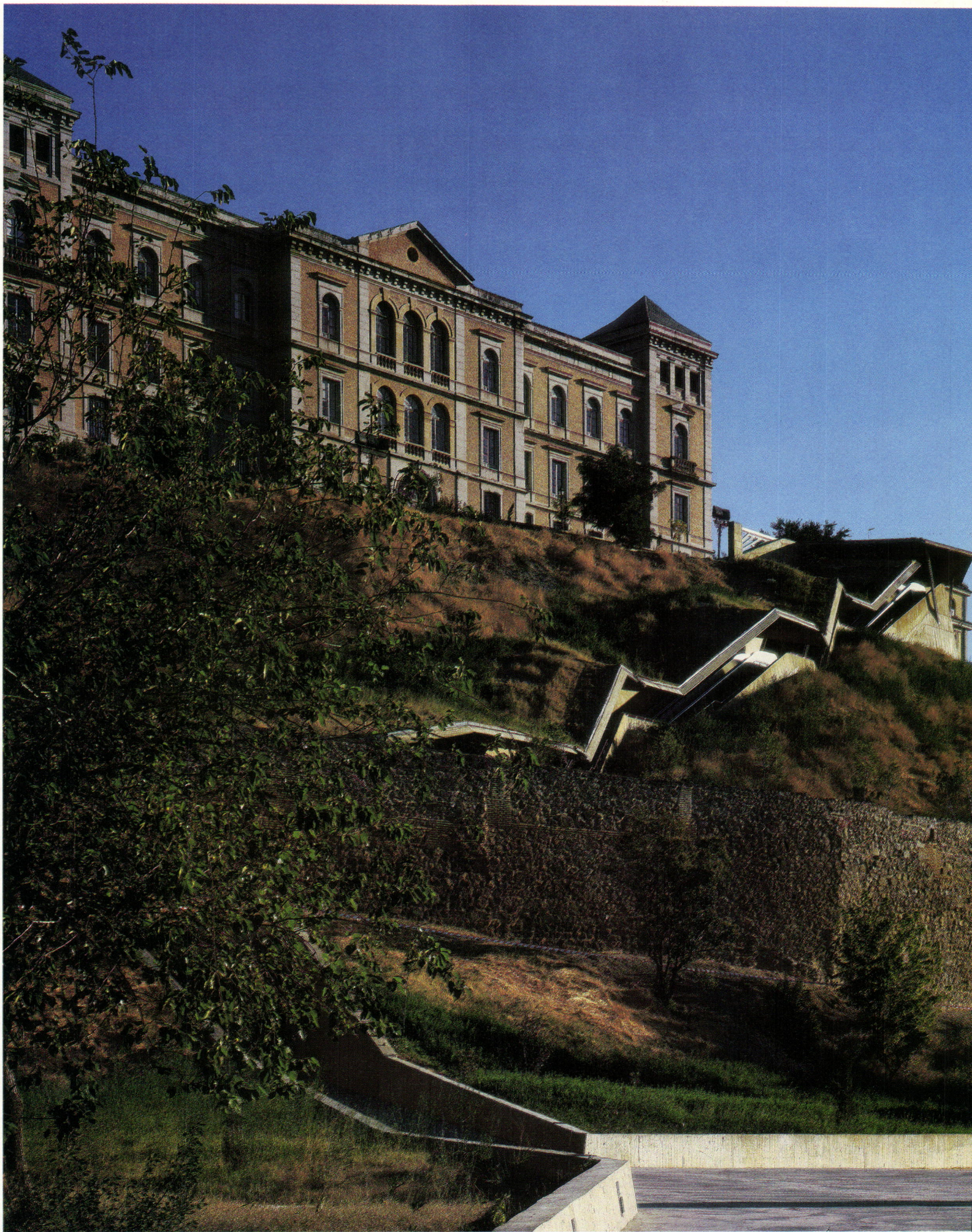


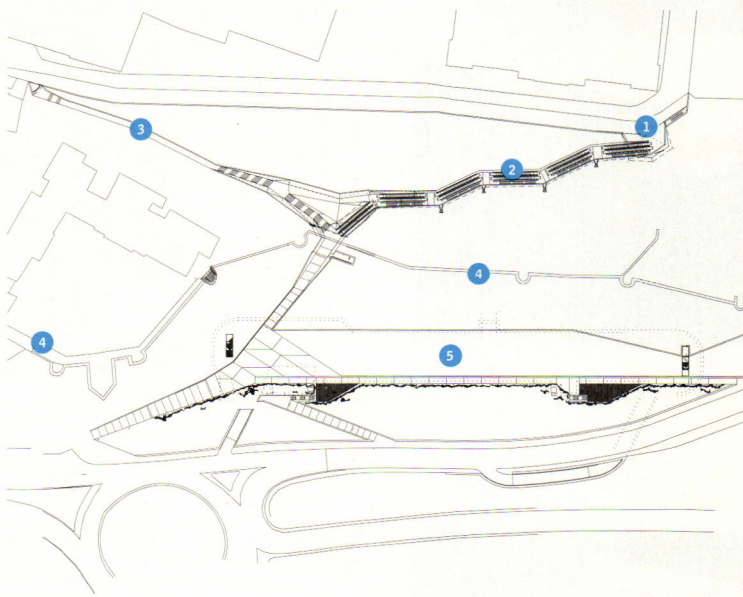


La Granja Escalator Toledo, Spain

José Antonio Martínez Lapeña & Elías Torres Tur, Architects







Site plan 21' ↙

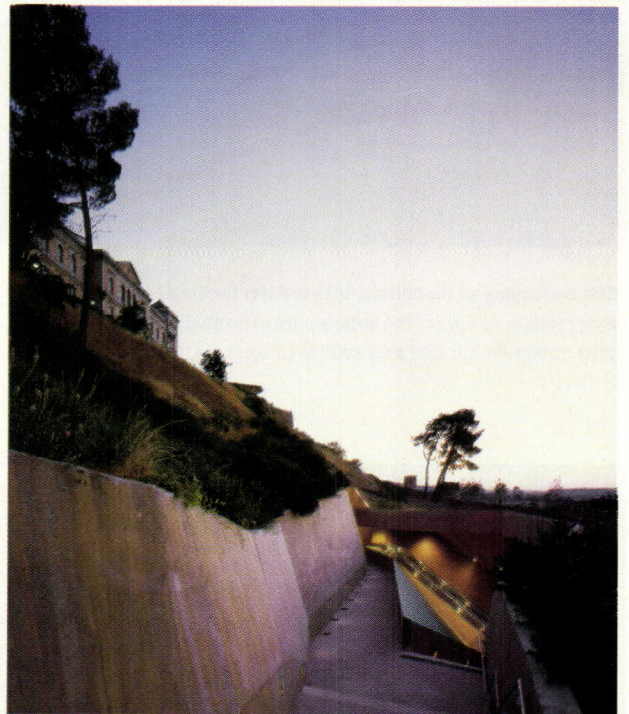
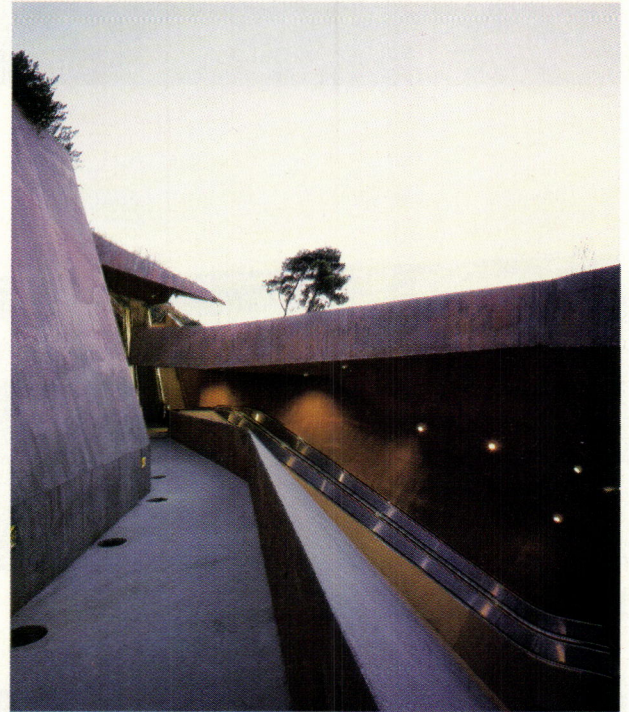
- 1 balcony and gate
- 2 escalator
- 3 footpath
- 4 medieval ramparts
- 5 underground parking

By Paloma Acuña

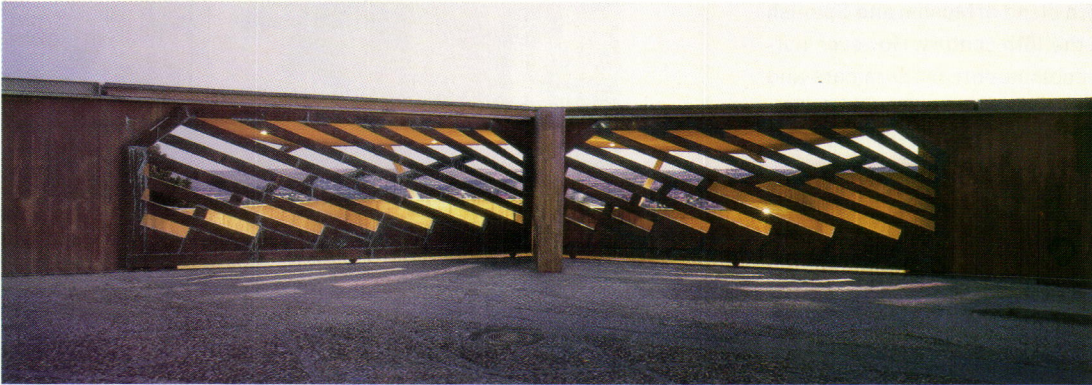
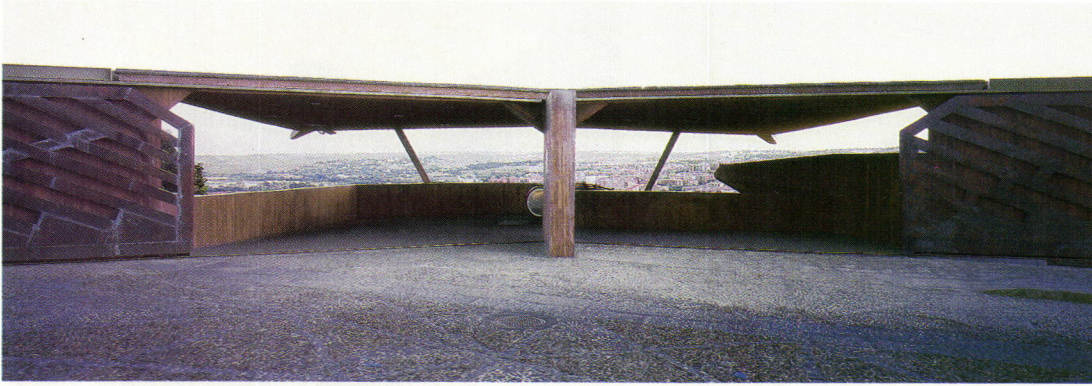
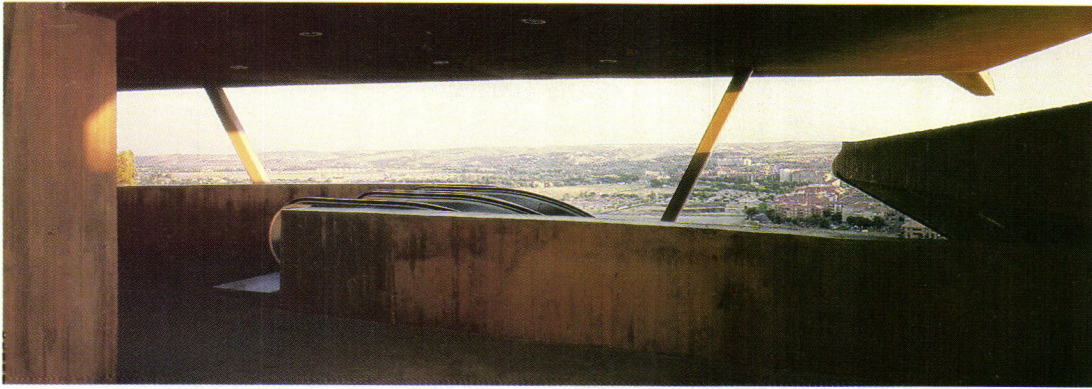
For those who are familiar with the peculiarities of the Toledan temperament, the decision to build an escalator up the hillside that distinguishes the medieval center of Toledo is more surprising than actually seeing the project complete. Toledans have always been extremely reluctant to build contemporary architecture within their historic precinct, and will only willingly accept imitations that recreate the original *Mudéjar* style, a blend of Muslim and Spanish elements that was prevalent until the 16th century. However, narrow and twisted streets do not easily accommodate modern cars and trucks, and in a city with a steady flow of tourist traffic, something had to change. To complicate matters, Toledo sits on a rocky outcropping some 100 feet above the Castilian plain, and is girded by medieval ramparts with only a few gates admitting cars. The solution developed by a local conservation group and the city planners is a network of parking garages on the low-lying outskirts, with pedestrian access links back up to the center. The first of these, designed by José Antonio Martínez Lapeña and Elías Torres Tur, opened last July, and is a masterful fusing of the sensibilities of the old city with the requirements of modern-day Toledo.

The work of these Catalan architects has been described as having an undeniably "Mediterranean accent": Martínez Lapeña and Torres's architecture is an open one that exploits the play of light and shadow, and intermingles indoors and out. In the austere rock of ochre and gray Toledo, however, they have tucked their project into the terrain and hidden it amid the vegetation. The escalator is not shy, however: From the very first sketches, it looked as if a flash of lightning had left a scar on the craggy hillside just below the 16th century Puerta de la Bisagra. Its six sections zigzag upward and terminate in a balcony overlooking the valley. Angular concrete retaining walls fold over to shelter passengers from the weather, and allow the hill's greenery to almost swallow the escalator.

At points throughout the planning and design process, the more conservation-minded of the citizenry mounted ferocious opposition to both the idea of the escalator and its unabashedly modern approach. Now, a few months after its inauguration, the staircase is as fully integrated into the daily habits of Toledans as it is into the skyline of the city. Residents quickly adjusted to it, and tourists are grateful for a respite from the long and steep walk up. Modernity has entered this medieval place not piece by piece, as generally happens in historic contexts, but footstep by contemporary footstep. ■




Martínez Lapeña and Torres's outdoor escalator in Toledo, Spain, is slotted into the steep slope between the medieval walls and the city proper (facing page). The escalator is broken into six segments (see plan) so that riders won't experience an unsettling feeling of vertigo when looking down its expanse, and so that it follows the topography of the hillside.

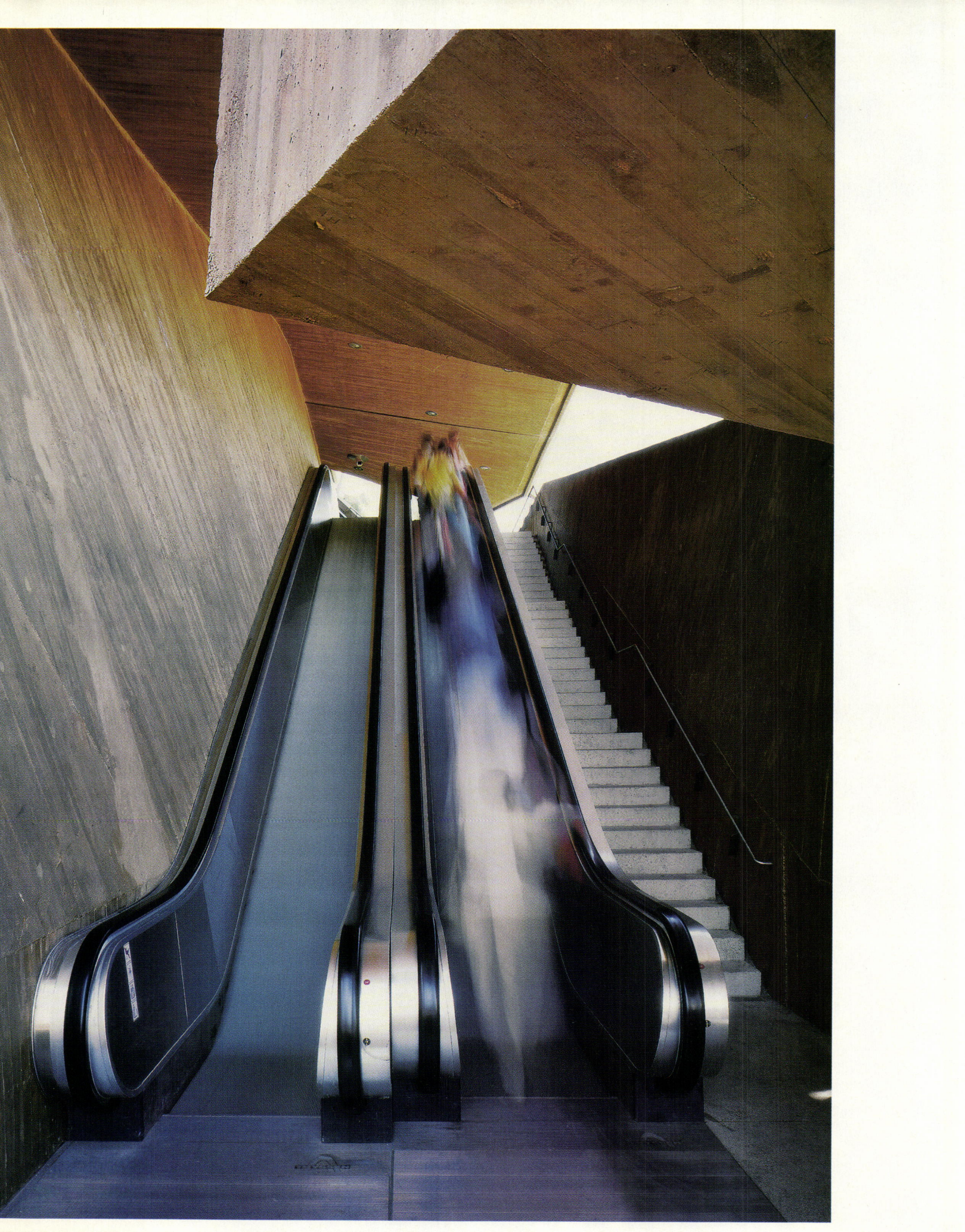


LA GRANJA ESCALATOR, TOLEDO, SPAIN

CLIENT: The city of Toledo, Spain **ARCHITECT:** José Antonio Martínez Lapeña & Elías Torres Tur, Architects, Barcelona, Spain—José Antonio Martínez Lapeña, Elías Torres Tur (principals); Victor Argilaga, Josep Bailestero, Nuria Bordas, Guillem Bosch, Marta Delso, Sylvia Felipe, Marisa Garcia, Sandrine Larramendy, Sandra Martínez, Forrest Murphy, Thomas Noel, Alexa Nurnberger, Perler Olivier, Alicia Reiber, Marc Tomas, Iñigo Ugarte, Ferrán Vizoso (personnel) **ASSOCIATE ARCHITECT:** Juan Carlos Corona Ruiz, Santiago E. Hernan Martin (technical) **LANDSCAPE ARCHITECT:** Martínez Lapeña-Torres **ENGINEER:** Gerardo Rodriguez (static) **GENERAL CONTRACTOR:** Nesco Entrecanales Copertas, S.A. **COST:** \$5,000,000 **PHOTOGRAPHER:** David Cardelús

After zigzagging up the hillside, the escalator terminates in a sheltered balcony (top) which looks out over the Tajo river valley and the newer sections of Toledo. The large bronze gates that close off the balcony at nighttime (center and bottom) are suggestive of the nine gates in the medieval walls that once controlled access to the city.

<p>Debut</p>	<p>José Antonio Martínez Lapeña & Elías Torres Tur, Architects</p>	<p>Barcelona, Spain</p>
 <p>Principals: Elías Torres Tur, José Antonio Martínez Lapeña</p>	<p>José Antonio Martínez Lapeña and Elías Torres Tur started their Barcelona practice in 1968. The two have done several projects which, in their skillful incorporation of a modern idiom into a historic context, are precedents for the escalator in Toledo: additions and restorations to Bellver Castle in Palma de Mallorca, a public space within the medieval walls of the same city, and the ramps leading up to Castelldefells Castle in Barcelona. Martínez Lapeña and Torres are currently working on a seaside health center and spa in Gijón and a major renovation to the Castle of Ibiza. They are the subject of several monographs, including issues of the journals <i>El Croquis</i> and <i>Quaderns</i>. Torres has frequently taught in the United States at architecture schools, including UCLA and Harvard.</p>	





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What Has Your Firm Done For You Lately?

continued from page 62

Gensler, San Francisco
Number of employees: **2,253**
Turnover rate: **11%**

Deep pockets

"The value of any design firm walks out the door every night," says Ed Friedrich, president of San Francisco-based Gensler. So how does Friedrich keep his "assets" happy? Among other things, free money. In 1967—years before many companies and almost all architecture firms—CEO and founder M. Arthur Gensler, Jr., used \$35,000 of the company's profits to seed a profit-sharing plan; it has since matured to a value of more than \$50 million.

Profit-sharing plans are common. But how many consistently outperform their firm's 401(k) plan—not to mention the Standard & Poor's Index, as Gensler's has each year over the last decade? A private financial manager commits the capital to a changing combination of market investments and the firm's own privately held stock; a committee of Gensler execs advises the manager. The best part: Employees don't put in a cent; the firm contributes on their behalf. On average over the life of the plan, annual disbursements have been equal to 10 percent of an employee's salary. (On top of that, Gensler budgets two annual bonuses—firmwide—at one-month's pay each.)

All this at a firm that already pays competitive wages. Imagine: An architect earning \$3,000 monthly can hypothetically expect an additional \$10,200 in annual compensation (two \$3,000 bonuses, which are then included in computing a \$4,200 profit-sharing disbursement). Maybe that's why Arthur Andersen named Gensler one of their 1998 Best Business Practices—the first architecture firm so honored.

Hellmuth, Obata & Kassabaum, St. Louis
Number of employees: **1,836**
Turnover rate: **20%**

Cash prizes

Architects at megafirm Hellmuth, Obata & Kassabaum (HOK) are part of a large,

well-oiled machine. The sheer size of the company can overshadow individual achievements. To motivate the little guy and promote design quality at all levels of the firm's 26 domestic and overseas offices, HOK founding partner and chairman Gyo Obata initiated the semiregular Obata Award.

The in-house design competition, evaluated by an independent jury of one (full disclosure: Reed Kroloff, *Architecture's* editor-in-chief, judged last year's contest), usually attracts 100 or so entries from among HOK's satellites. The design teams responsible for the best built and unbuilt projects in three categories (architecture, interiors, and planning and landscape) receive discretionary cash awards of up to \$2,500.

Principal Joe Spear recalls that when his team won the Obata Award in 1992 for their design of Baltimore's Camden Yards, they used their winnings to endow a library of design books and publications in HOK's Kansas City office. "We thought about having a party," he remembers. "But we didn't need to win a contest to have a party; we already do that." Other winners have included a small-scale headquarters for the CATO Institute think tank in Washington, D.C., and a university medical center at Northwestern University in Illinois.

Obata sees the friendly intramural rivalry as a way to connect far-flung offices. "Communication among all those offices is difficult," he says. "This [award] allows designers to see and learn from their peers' expertise." At the completion of each awards cycle, which are held sporadically, organizers box up the competition boards and send them on a global tour of HOK's offices so entrants can size up their opponents and plan better for next time.

The Lauck Group, Dallas
Number of employees: **78**
Turnover rate: **7.7%**

Prom night

Picture this: It's 4:00 on a Friday afternoon; the studio at the Lauck Group in Dallas is draped in crepe paper. People are dressed in formalwear—ruffled-blouse, fat-bowtie formalwear—and are slow-dancing around the office. Is that a mirror ball I see, casting a nostalgic light? What on earth is going on here? *continued on page 138*

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What Has Your Firm Done For You Lately?

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It's prom night, of course, just one of the ways that the Lauck Group keeps things light. "We encourage tomfoolery," deadpans Judy Pantello, a Lauck principal who counts the nurturing of firm culture among her explicitly stated job description—a rarity in architecture firms. "We've found that giving [employees] the right to be playful and childlike allows genius to bubble to the top." She admits that reliving prom night is not everyone's idea of fun, emphasizing that such "cultural" activities

are completely voluntary. "People participate in different ways," she reports. During a recent scavenger hunt, for example, more reserved employees took photos while the office hams performed loony stunts for the camera.

Prom night, according to Pantello, was an employee-organized, firm-sanctioned affair. That's the way they do business; the phrase "zany, fun-filled environment" literally appears in the firm's official mission statement. But, Pantello reports, the firm's joie de vivre has translated into serious profitability: In 1999 alone, The Lauck Group posted nearly \$6 million in billings. "People that work well and play well together produce, perform, create, innovate," she reports. "And why not

have fun while you're doing it?"

Mithun, Seattle

Number of employees: **165**

Turnover rate: **17%**

The Grand Tour

Many architects travel for their jobs, but rarely do they have time to visit, say, Le Corbusier's Ronchamp chapel (nearly five hours from Paris) or Frank Lloyd Wright's Fallingwater (about two hours from Pittsburgh). In 1988, Seattle's Mithun solved that problem by sponsoring (and paying for) study tours for its staff. "Architects love to travel and see what other architects do," says chief operating officer Bruce Williams. "We don't often have the opportunity to do that and still practice."

Staffers with at least seven years of seniority (there are currently 65) are invited; most accept. So far, the firm has sponsored biennial trips to such places as Spain, Germany, and France. And although Brown describes the trips as strict edification, the firm has chosen destinations where they are currently working or hope to work. For example, an aggressive growth strategy in Asian markets led to the firm's 1997 trip to Japan.

Travelers follow a prearranged itinerary that highlights the region's period architecture, but are also given free time for sight-seeing and shopping. Each staffer records their impressions in a sketchbook journal, which the firm later compiles into a book and distributes to staffers. ■

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Rubble-Rousing

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Still, by and large, Athens' new stations (like those in most of the world's subway systems) have architecturally undistinguished, entrances and interiors. Given city planners' ambitions to use the metro to improve city life, it's surprising that the construction of new stations was not accompanied by the creation of new street-level public places or plazas. Apart from simple signs, nothing architectural indicates the presence of significant public services. The entrances and interiors of the new stations are neutral at best, reductive at worst, paling in comparison to the

poetic turn-of-the-century stations at Thesion and Monastiraki, whose mystique and aura inspired Giorgio de Chirico's early paintings.

The monotony and sterility of the stations is partly due to the decision of the Minister of Environment, Physical Planning and Public Works, Kostas Laliotis, to specify only "monumental and chic" materials, mostly marble of the kind one would find in the lobbies of high-end Athens apartment buildings. The idea is that the luxuriousness of the materials will discourage vandalism; interestingly, six months after the inauguration of the Metro, those theories seem to have been proven right. The underground areas have remained remarkably clean and calm, in contrast to the litter-

strewn Athens outside.

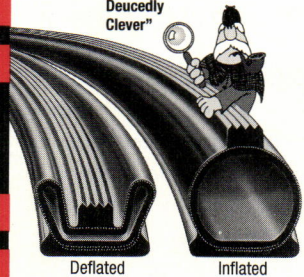
The stations are also free of any commercial activity, a departure from the global trend of transit stations resembling shopping malls. One might argue that this is a missed opportunity, for the city could have developed multifunctional centers in these cool, controlled environments. But for now, the Metro serves a deeper need: it is a serene haven from the overload of action above. The city accomplished more than diverting its population of 4 million from the path of 1.4 million vehicles and the pollution they produce; it found a way to fit the subway into the city spatially, socially, and historically.

In less than a decade, Greek construction crews moved 6 million cubic meters of Athenian

earth to build eight miles of track linking 14 stations, while archaeologists unearthed more than 30,000 artifacts. (Work will continue for another year; the system will eventually span 161 miles, serving 22 stations.) Knowledge from the texts of Herodotus, chronicler of antiquity, was combined with the technology of Georadar, an instrument that scans and photographs the earth (by sending radar energy underground and reading reflections) to find the objects hidden below. Together, history and technology were applied to trace an old world—and to integrate it with the new. "Though the project should have been done years ago," remarked Greek President Konstantinos Stefanopoulos, "only now could it have been done this way." ■

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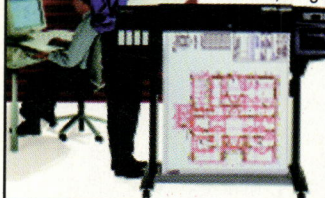
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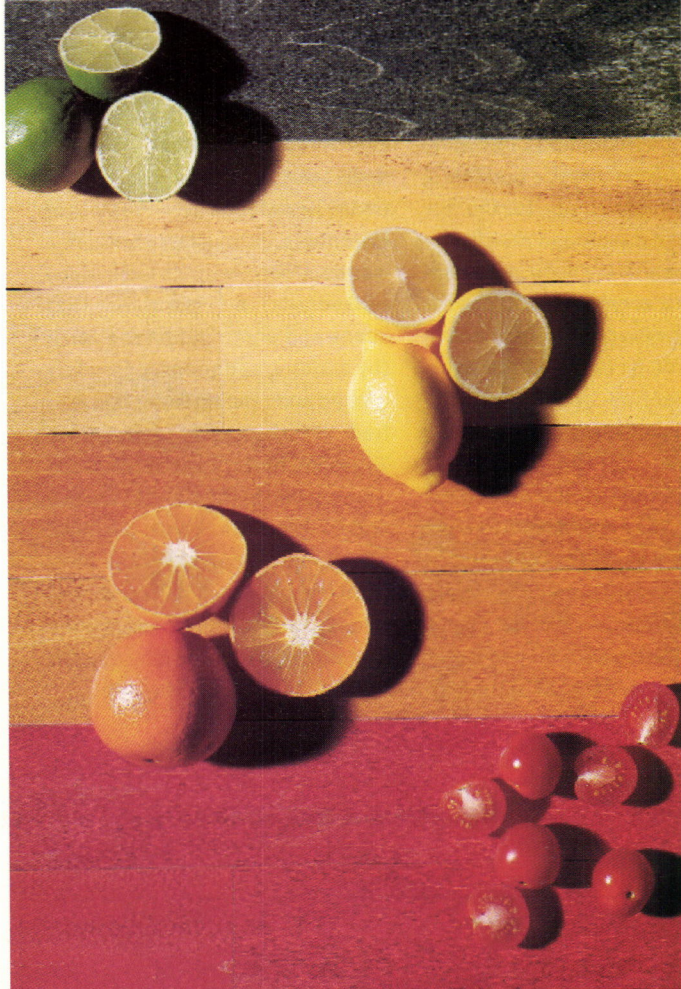
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Pooled Cars

continued from page 77

One motivation for CashCar, according to Stattauto (a play on words; *statt* sounds like *stadt*, or city, but actually means "instead"), is "to get the traditional auto-lover in the car-sharing system."

A significant aspect of car sharing's success depends on its ease of use: Users want to arrive at a train station, spot their car, get in, and drive away. Most services have been developing easy interface procedures, like smart cards that eliminate the need for keys and paperwork, allowing drivers to simply swipe their cards and drive. The use of the car is recorded electronically, logged into members' records, and charged to them like a monthly phone bill. New technology, like GPS (Global Positioning System), can monitor the location of vehicles up to the minute. Meanwhile, research in Japan is being done on developing auto-driving functions which will enable cars to drive themselves to meet users. With such sophisticated technology, there's no reason why car-sharing programs everywhere eventually can't be linked. There are already collaborations among car-sharing programs across Europe, where members from one country can use programs in the next.

According to surveys, people's primary motivation for joining car-sharing programs are economic (for anyone who drives less than 7,000 to 10,000 miles a year, it's cheaper than owning a car). But in some places, users are equally motivated by ecological concerns. Germans love their cars as much as Americans, but a survey of Stattauto's members shows that a large percentage of its users are sensitive to traffic and environmental problems. It's too early to tell what will change Americans' attitude toward their cars, but Robin Chase, cofounder and CEO of Zipcar in Boston, is banking on cost benefits over ecology. Launched only four months ago, Zipcar is an entrepreneurial, rather than environmental or social, model. Says Chase, "We're the first to bring car sharing to the East Coast, and the first to take a business approach." Catering mostly to city-dwellers who don't drive much, Zipcar is about 220 members strong, and gaining about 20 per week, mostly by word of mouth. After a refundable deposit of \$300, members pay \$4.50 an hour and 40 cents a mile.

If car-sharing proves to be moneymaking, big corporations are likely to join the race. Already, Hertz is experimenting with the concept in Northern California, in conjunction with BART. It makes cars available at the end station in Fremont; for about \$300 per month, users can drive them home at night, and use them on the weekends. If these programs succeed, it might prove what we've always suspected: What Americans won't do for love, they'll certainly do for money. ■



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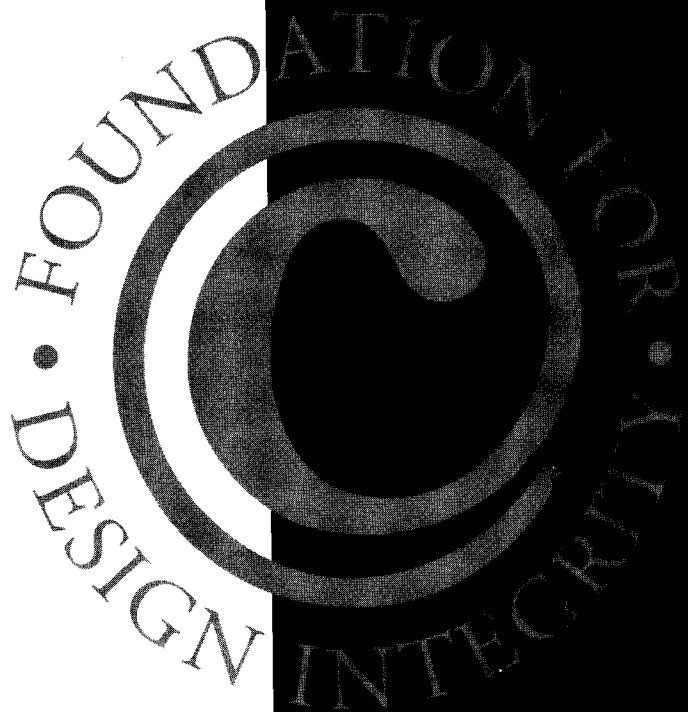
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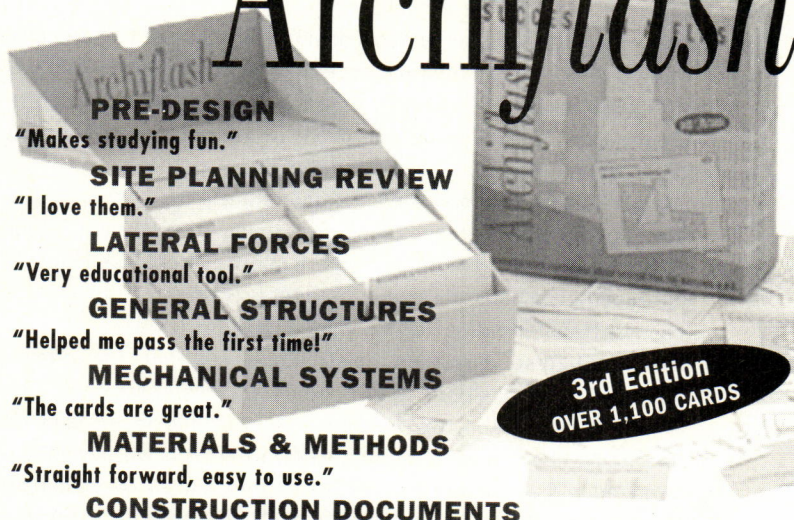
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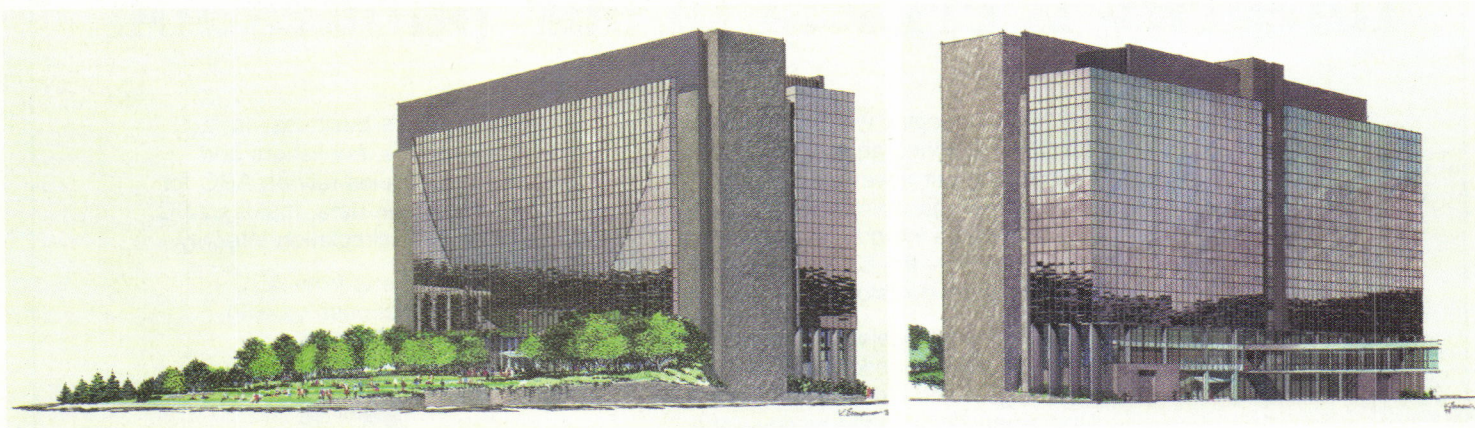


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Icing an Icon

Architecture's newest contributing editor, **Thomas Fisher**, fears that Gunnar Birkerts' signature Federal Reserve Bank in Minneapolis is being bumped off by a clumsy addition.

Minneapolis' Federal Reserve Bank, designed by Gunnar Birkerts and completed in 1972, has a face you never forget. The offset, reflective-glass façade reveals the building's soul: a daring suspension structure that spans a sloping granite-clad plaza and whose floors are supported by cables slung between two cores at either end. As a last hurrah of the structural chutzpah that prevailed in architecture in the 1950s and 60s, the building's apparent lightness and transparency belied the high security of the Federal Reserve Bank in an era of civil unrest. While it was never breached by bank robbers or student protesters, it has met its match in its transformation into a commercial office building.

The Federal Reserve vacated the structure a few years ago in favor of a larger complex designed by Kohn Pedersen Fox Associates. FRM Associates of Henderson, Nevada, purchased the building and decided to turn it into office space. As Marquette Plaza, the tower will have office floors added to the back of the original structure, and a park placed on the former plaza. Both were designed by the Minneapolis firm of Walsh Bishop Associates. Birkerts originally planned for the vertical expansion of the 11-story building with a near-mirror image of the suspension structure: a catenary arch would support six additional floors. But no one consulted Birkerts. Instead, the developers wanted more than the existing 12,500 square feet per floor, so the architects added a structure to the back that flanks the original elevator core, creating floor plates of more than 25,000 square feet. This addition matches the height of the original office building and echoes its glazing patterns, but the

new load-bearing frame negates the suspension structure it is attached to, while the widened floor plates reduce office workers' proximity to windows, one of the strengths of Birkerts' design.

Other lapses occur at the plaza level. The view under the building is key to understanding its suspended structure, and to their credit, the architects wanted to enclose the lobby in glass and keep it free of visual obstructions. To maximize rental space, however, the developers called for the insertion of a mezzanine which blocks the view and defies the nature of the building. It is like putting columns under a suspension bridge.

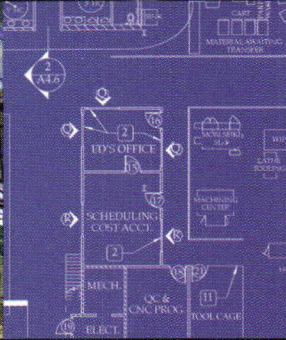
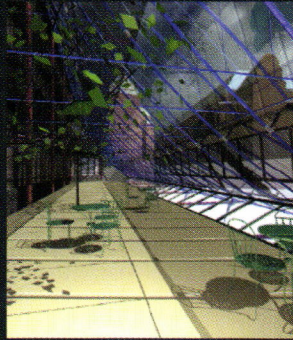
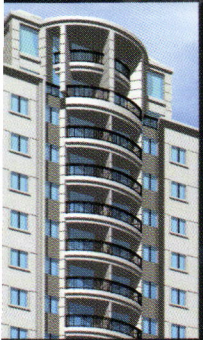
The plaza itself will undergo the greatest transformation. The original sloped space was stark, with a couple of sculptures and trees planted along its edge, and was rarely used. But the developers and landscape architect have gone too far toward the other extreme. They have designed an English landscape in a space worthy of a European piazza. While the arc of a new lawn will echo the catenary curve in the building's façade, the mounding up of topsoil and the planting of a forest of trees and ground cover seem bizarrely out of place on the elevated plinth, like thick green icing on pound cake.

No building can stay frozen in time. But if we shouldn't put this building on ice, neither should we ice it. ■

Thomas Fisher is dean of the College of Architecture and Landscape Architecture at the University of Minnesota. He was formerly the editorial director of Progressive Architecture.

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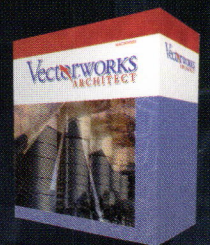
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