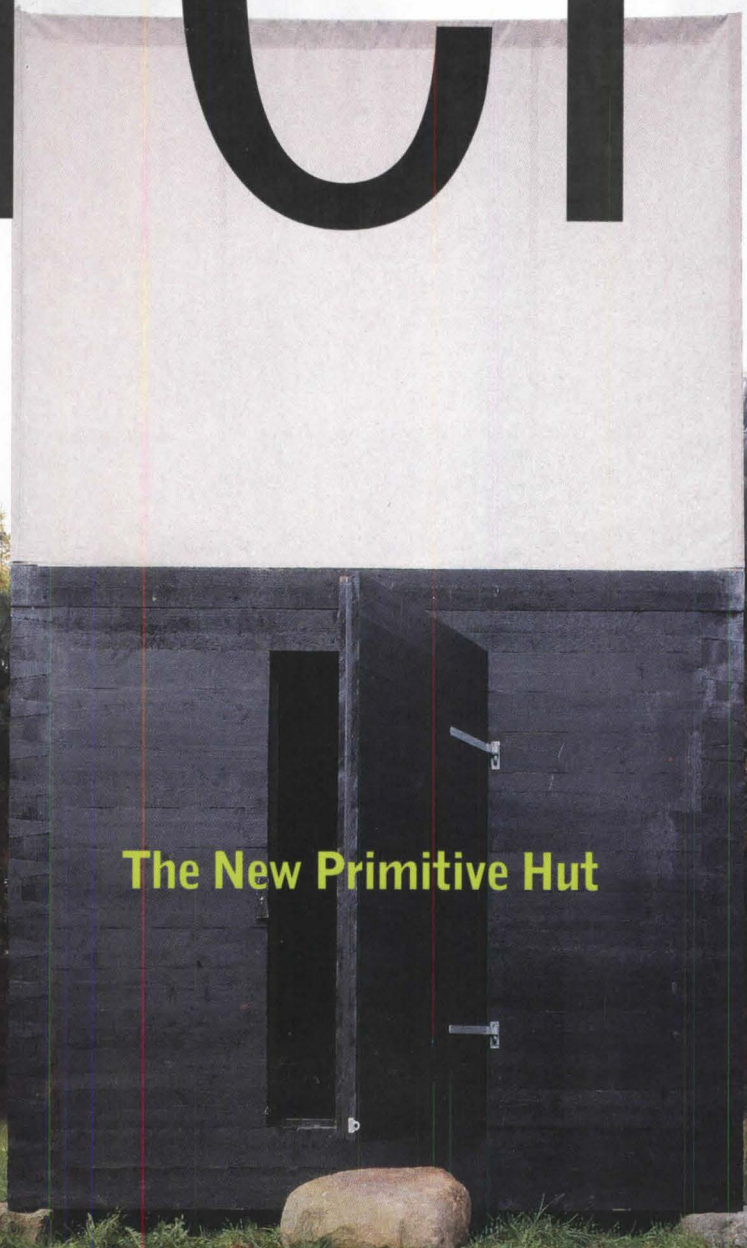


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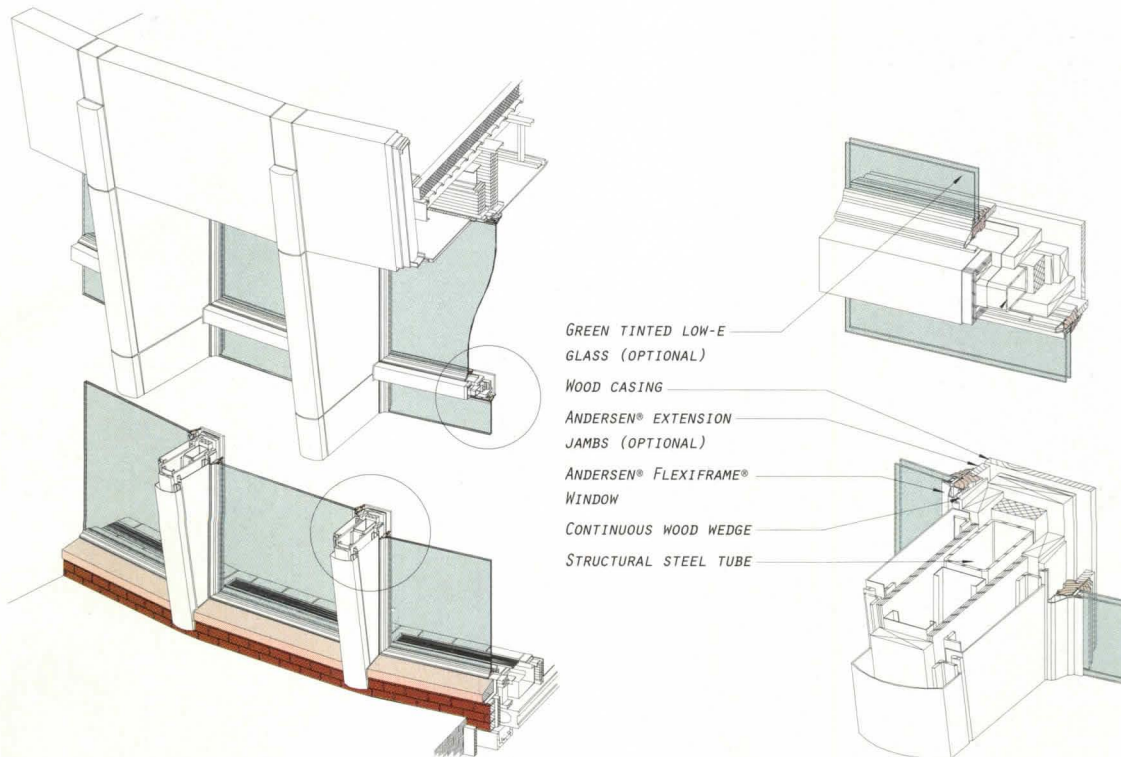


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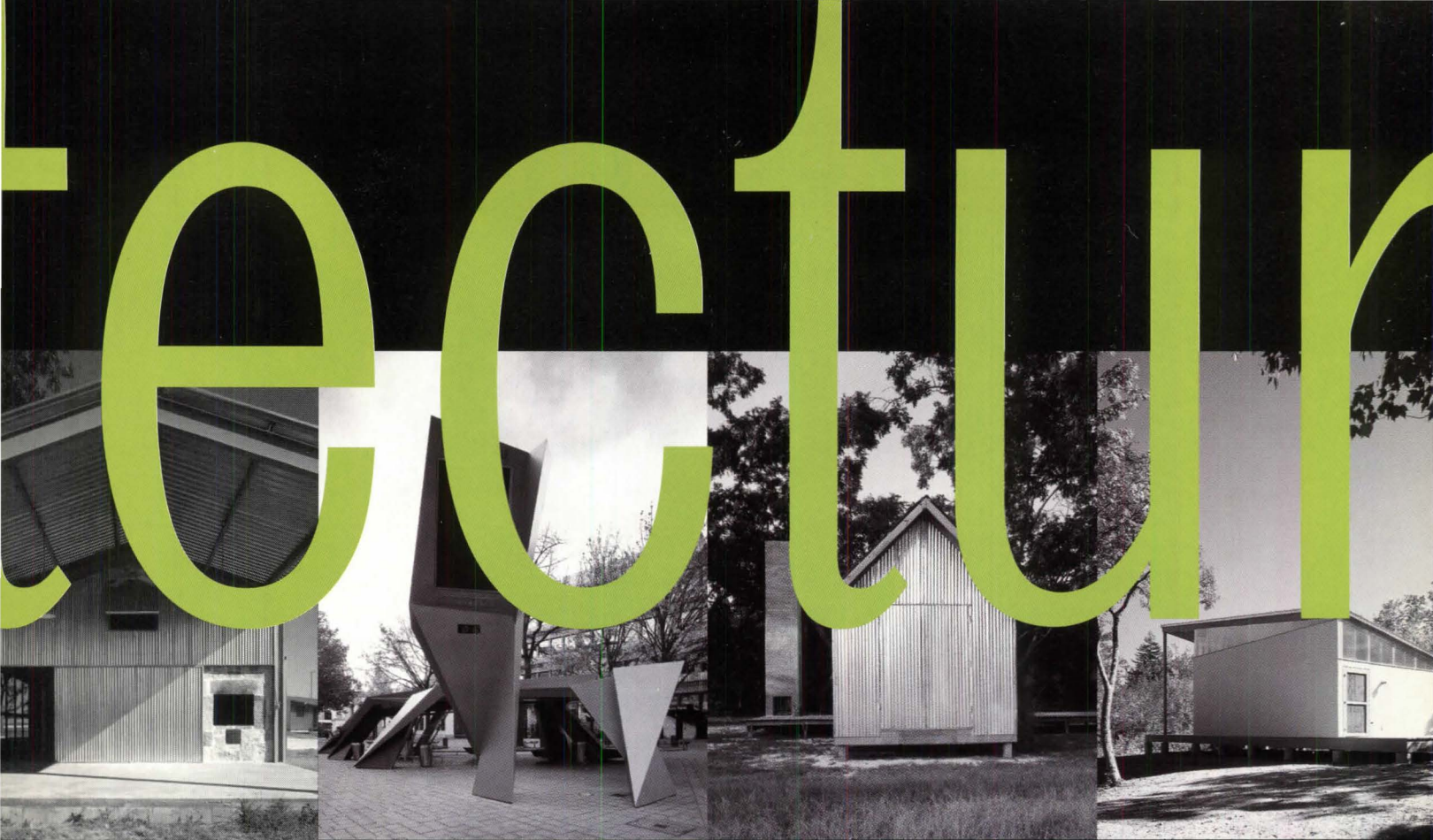


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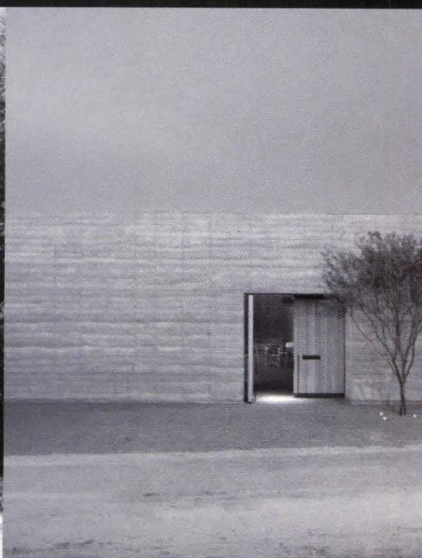
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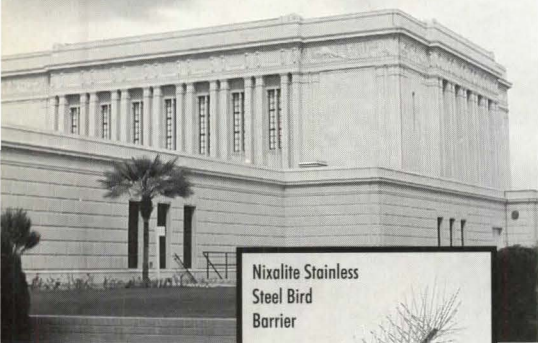
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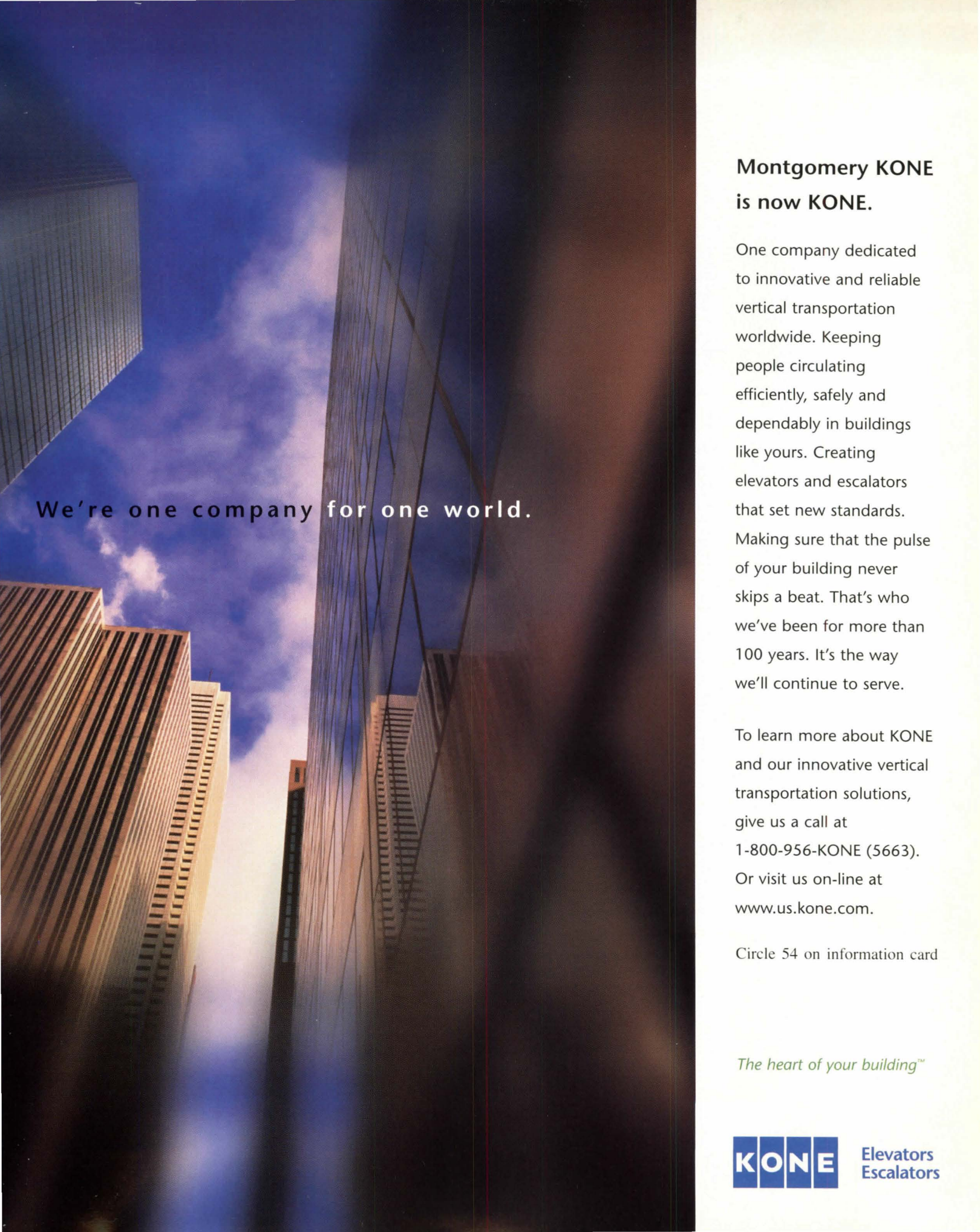
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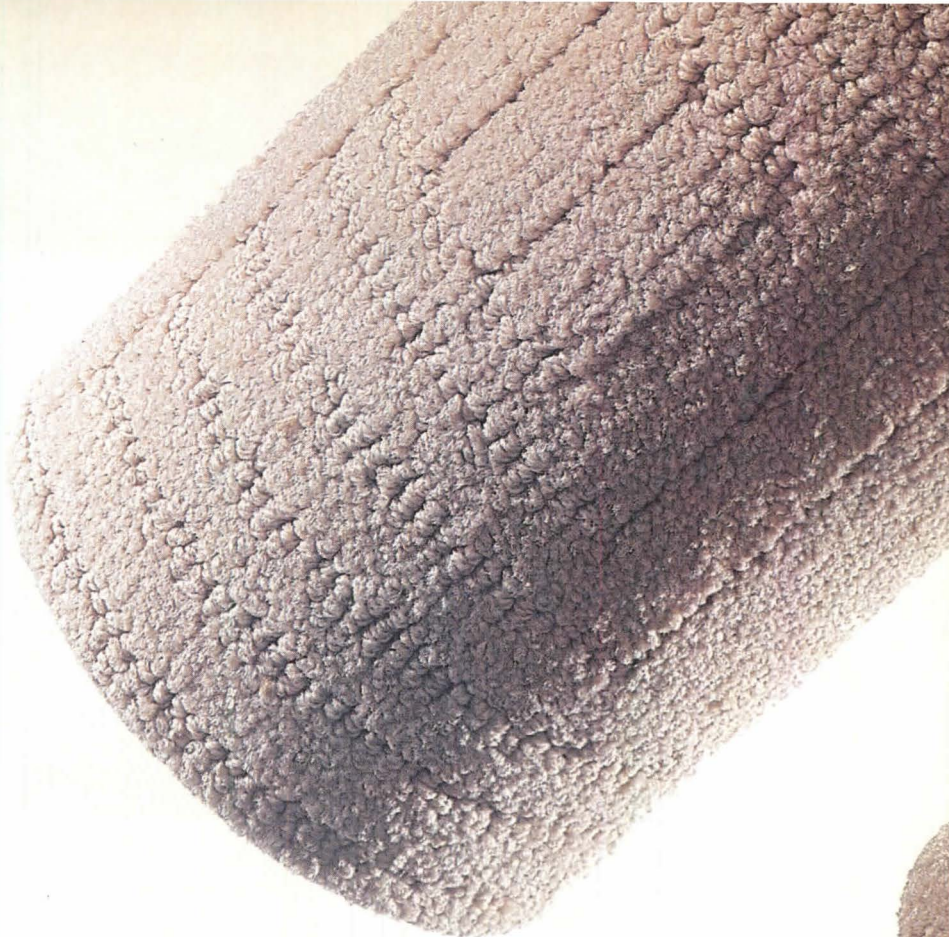
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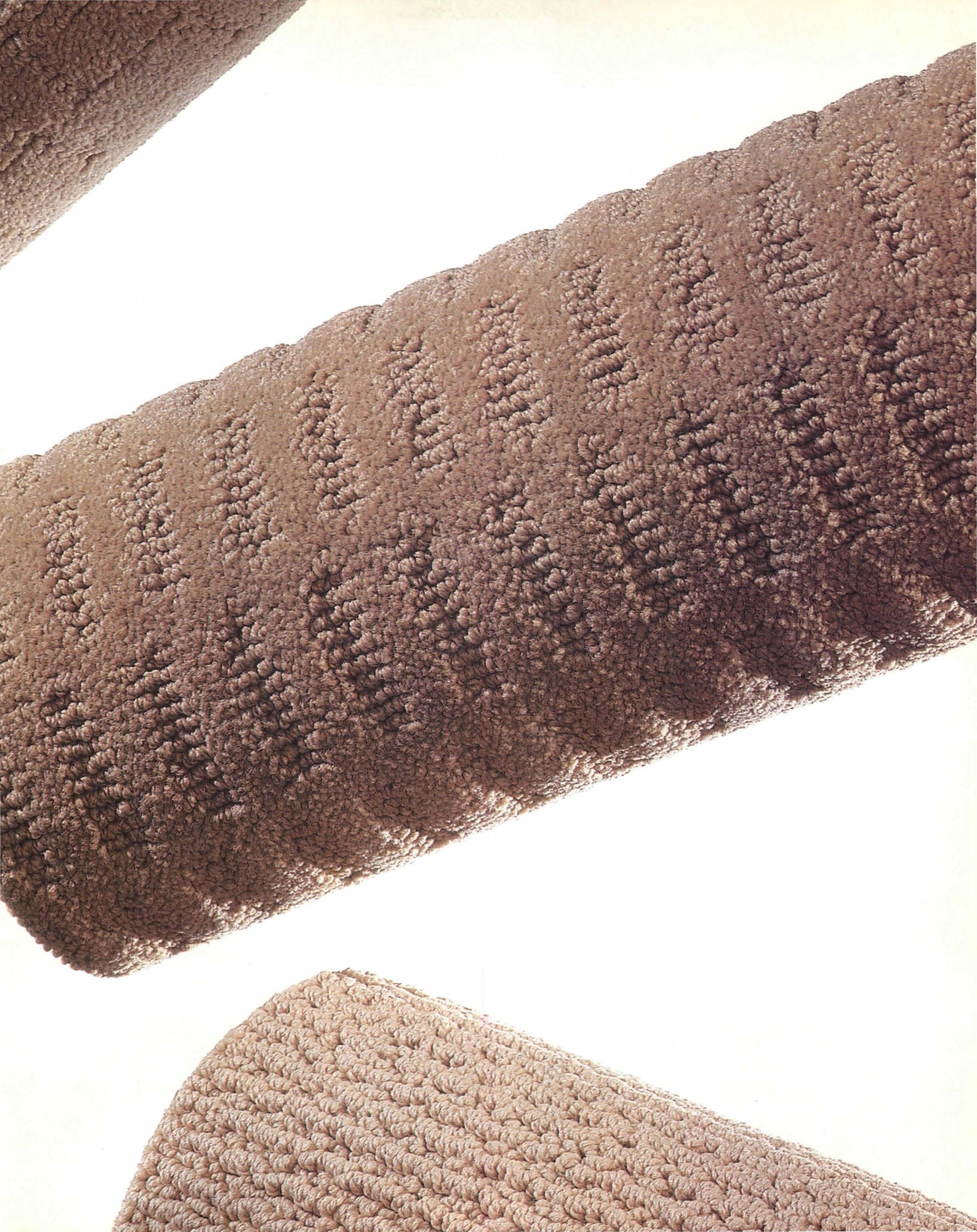
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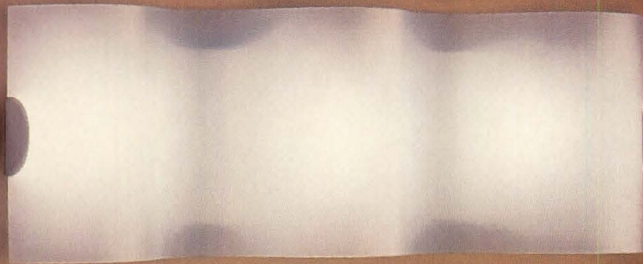


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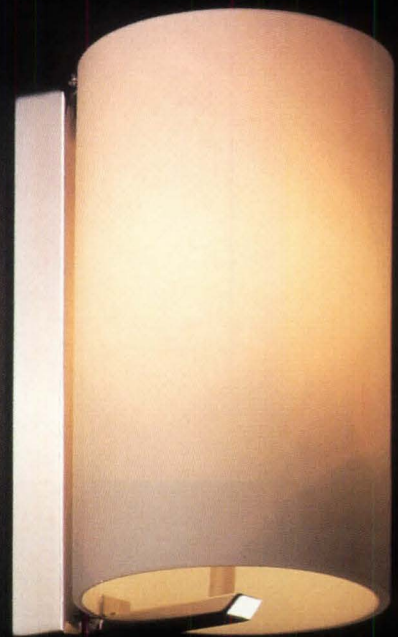


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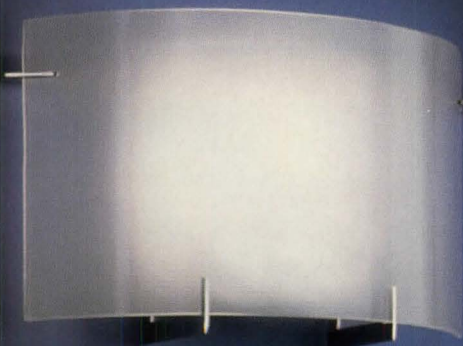
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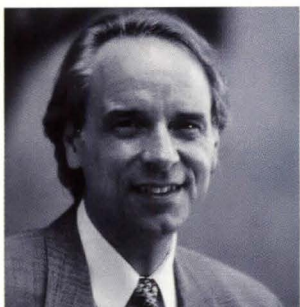
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Steve Pyke



Joan Ockman



Lawrence W. Speck



Liane Lefaivre

Timothy Hursley, an architectural photographer based in Little Rock, Arkansas, has spent many hours driving back roads of the Deep South in search of vernacular oddities. For this issue, he shot the Zachary House (page 68), noting, "Even if I had run across it by accident, I would have stopped to explore."

Liane Lefaivre is a researcher at the Technical University of Delft, as well as the author of *Aldo van Eyck, Humanist Rebel*. In this issue she tests the buoyancy of Parisian inflatables (page 54) and interviews British architectural legend Peter Smithson (page 51).

Joan Ockman, who rifles through the current crop of design journals in this month's "Paper Architecture" (page 59), is an architectural history professor and director of the Buell Center for the Study of American Architecture at Columbia University. Her most recent book is *Architecture Culture 1943–1968: A Documentary Anthology*.

Steve Pyke, whose portrait of Peter Smithson accompanies our interview (page 51), has photographed many religious and political leaders, prominent figures in the arts and popular culture, as well as the homeless and dispossessed.

Christian Richters, the prolific German photographer who shot our cover, was too busy waiting for clear skies over Copenhagen to send a portrait of himself. He works frequently with *Architecture* and for architects throughout Europe.

Joseph Rykwert is a Paul Philippe Cret Professor Emeritus at the University of Pennsylvania. His *On Adam's House in Paradise: The Idea of the Primitive Hut in Architectural History* is regarded as the definitive 20th-century text on the subject, as are his studies on Abbé Laugier (page 65).

Lawrence W. Speck appears in *Architecture* this month as both writer and subject. He hails Rhotenberry Wellen's new primitive hut (page 90) and the renovation of Alvar Aalto's Baker House at MIT (page 39), and is hailed (pages 13 and 154) for his resignation as the dean of the University of Texas School of Architecture over the university's treatment of Swiss architect Herzog & de Meuron.

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How Not to Fire an Architect

By Reed Kroloff

It would be easy to paint the University of Texas Board of Regents as a shortsighted, xenophobic pack of yahoos, but they've already done that themselves: Witness the drama that unfolded in Austin, Texas, at the end of last year (see Protest, page 154).

The *Reader's Digest* version goes like this: The University hired Swiss modernists Herzog & de Meuron to design the new \$70 million Blanton Art Museum. When the firm submitted one of its signature minimalist compositions, a subcommittee of the regents balked, directing the architects to come up with something more literally related to the campus' Mediterranean-inspired neoclassical tradition. After a second rejection, along with bullying by a nasty little regent named Tony Sanchez, the architects walked. Architecture School dean Lawrence Speck, who had guided the selection committee and advised the regents, then resigned to protest the mistreatment of the architects. When it was all over, the university was left with no architect, no dean, and no building.

Instead, it had an expensive lesson in why universities and other institutional clients must have clear, consistent hiring and management processes in place before they attempt to retain professional design services (for signature and secondary buildings alike). At Texas, a well-intentioned and otherwise thorough selection process was sabotaged by one regent determined to have things his way—and the process, and his fellow regents be damned. Not only is this unethical, it is ignorant and costly.

The role of the regents poses other thorny questions. Who exactly is the owner here: the university president, the museum director, the regents? Who has final say over the design? What are the rights of the architect? Of course the regents represent the legal owner, the state. But given that their mission is

to guide general policy, not micromanage, advisory boards like the regents must vest their authority—and trust—in individuals who have the time, energy, incentive, and qualifications to stay closely involved. In order to avoid the second-guessing that sank the Blanton, institutional clients must also establish a clear chain of command for the design process in advance. Further, it is only logical that the entity closest to the project, in this case the museum director, should have the strongest voice in design decision-making.

Lawrence Speck is the hero in all of this, the only one willing to put his money where his mouth is in representing the rights of architects, in this case the right to defend one's professional honor, the right to stand up and say, "You can only push us so far." Speck had nothing to gain personally—and everything to lose—from his resignation; this was a decision made on behalf of the profession. Architects everywhere owe him a debt of gratitude.

Architecture continues to evolve

You may have noticed that this month's *Architecture* is different: We've reorganized our departments and our design well is thicker. These changes continue our effort, introduced in my editorial last month, to tell a richer story about architecture while making the magazine more user-friendly.

To that end, we've divided *Architecture* into four clear-cut sections: News, Practice, Culture, and Design. Culture is a new section focusing on the people, places, and ideas that create architectural culture and connect it to society at large. Design increases by about a dozen pages each month, to bring you more coverage of the best new buildings—more than any other U.S. design magazine. Beginning next month, we end the defenseless split between design and technology by enriching our features with technical analysis and larger, more detailed drawings. Practice will add business and politics to our technical coverage of how buildings get built. The expanded News section is now home to our popular On the Boards and Calendar listings. Finally, take note of our new Contributors page; with writing and photography this good, you'll want to know whose work you're seeing. These are significant changes and more are coming. Stay with us. I promise an *Architecture* like you've never seen before. ■



Washington Hall, center stage for theatre and cultural events at Notre Dame. Built in 1881, this modern Gothic structure was named by Father Sorin himself, Notre Dame's founder, in honor of his great hero, George Washington.

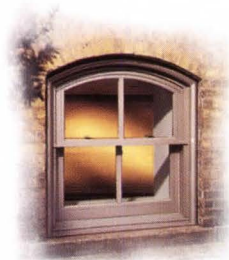
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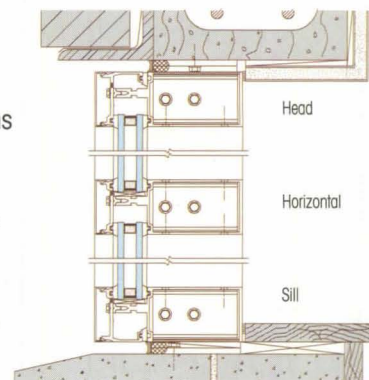
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Feel the Burn

With respect to “Physical Fitness” (November 1999, page 54), I was depressed by Ned Cramer’s critique of Angelil/Graham/Pfenniger/Scholl Architecture’s master plan for Adidas. Might there be more going on than met his eye? If not, might one comment directly on that shallowness in the face of other more serious attempts to work with amorphous forms? Cramer notes in a caption, without further critical comment, that the forms were adopted from sculptures by Marco Ganz in order to expedite the competition entry. Is the adoption of forms acceptable now, or is it a problem worthy of lawsuits?

Should we ever simply take a designer’s word without a grain of salt? Even Ben van Berkel, who has devoted many hours to the exploration of parametric design, and has come close to embracing the plausible ugliness this approach can deliver, has been known to use a metaphor in describing a project. This shouldn’t give a critic license to accept the metaphor as the generator of the scheme.

Anders Nereim
Chicago

Green Acres

Thank you for Reed Kroloff’s exact and timely October editorial (page 11). I had an opportunity to wander the monument core in Washington, D.C., and remembered

there were plans for a World War II memorial somewhere on its great axis. Walking from the Washington Monument toward the Lincoln Memorial, I realized the site, in fact, was at the eastern edge of the reflecting pool. What havoc that structure would cause both esthetically and spiritually!

I found acres of green lawn, quiet space, and only handfuls of people walking, sitting in the grass, dozing on a bench. I sat down and enjoyed an hour of sun and retreat. I think there could be no greater memorial than the absence of building another one. It’s time for the NCPC to reconsider its impact on the permanence of these beautiful and gracious spaces.

John E. van Duyl
Kensington, California

Out of Context

As a Los Angeles resident, Joseph Giovannini (September 1999, pages 110–115) knows that the residential neighborhood surrounding the new Los Feliz Library was settled in the first decades of this century and consists of block after block of Craftsman bungalows and small Spanish Colonial apartment buildings. To say that the nearby Los Feliz Hills are “populated” by original modernist buildings is like saying that a haystack is populated by needles.

The “contradictory and complex forces” pulling at the library’s design are entirely in the mind of architect Barton Phelps, who insisted on designing a modernist building in a traditional context. The contradictions would have disappeared if Phelps had listened to the local community’s request: a civic building which contributed to an important “main street” of the community and stylistically blended with the nearby houses. Phelps could have selected a Craftsman or Spanish Colonial style, which would have symbolized the cultural continuity represented by a library.

Architects and critics have been brainwashed by modernist dogma to reject our Western

culture as expressed in traditional architecture. The only context they notice and respond to is the detritus of modernism represented by the cheap strip malls that have invaded the Hillhurst commercial blocks like weeds since World War II.

Michael Mekeel
Offenhauser/Mekeel Architects
West Hollywood, California

My Kind of Town

I am very familiar with the Evangelical Lutheran Good Samaritan Society and the Jerstad Center addition by Julie Snow Architects in Sioux Falls, South Dakota. It’s a nice project, but an obvious fact surfaced immediately when I read Ned Cramer’s “Plain Spoken” (October 1999, pages 100–105). If he visited the project at all, he did not step 50 feet beyond the property lines to investigate the city. He did however, spend nearly half the article describing the area of Sioux Falls as “spawning,” “threatening to cover the Great Plains,” and an “uneventful part of the country.”

Architecture should spend its pages on intelligent investigative reviews, not tearing down the infrastructure and backdrop through which good buildings are born and live out their lives.

Stacey McMahan
Sioux Falls, South Dakota

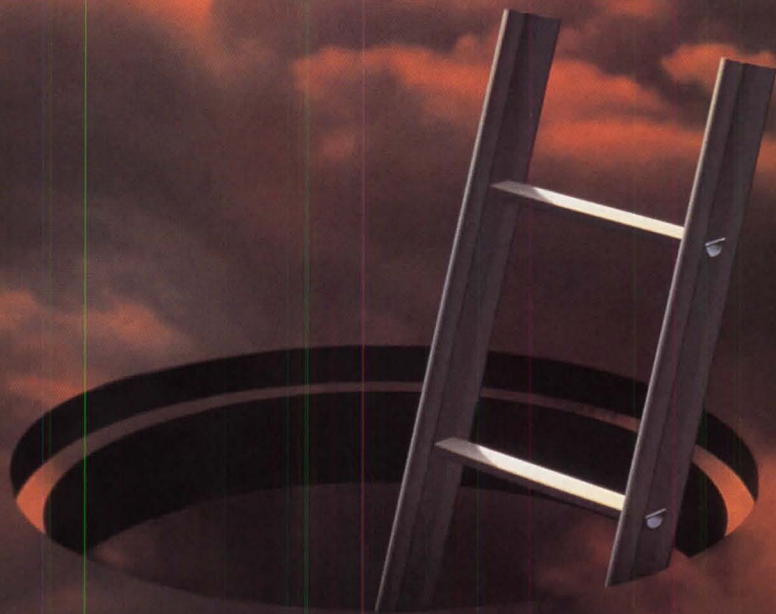
CORRECTION

Architect Bernard Tschumi worked in association with Gruzen Samton Architects on the design of the new Alfred Lerner Hall at Columbia University in New York City (December 1999, page 40).

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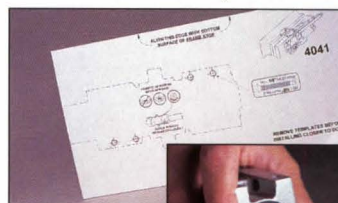
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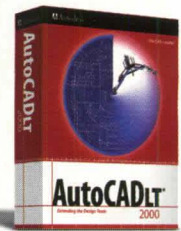
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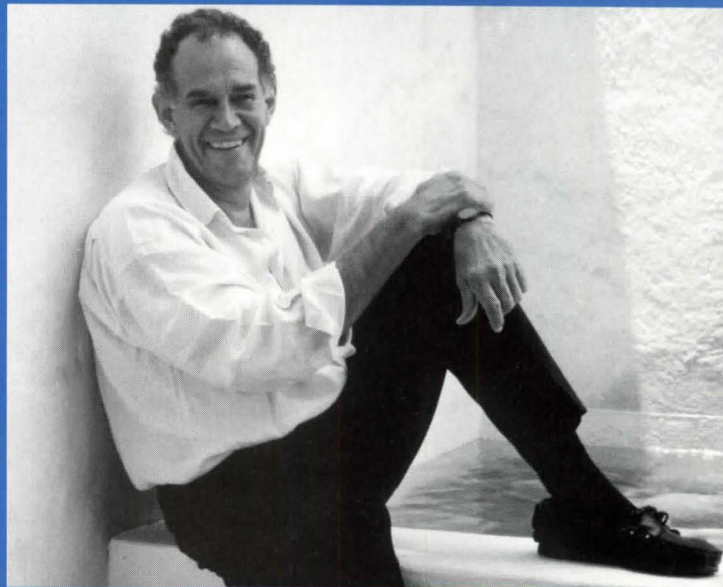


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Legorreta's Gold Tops AIA Honors

**Gensler Named Firm of the Year; Meier's
Smith House Wins 25 Year Award**

Awards The American Institute of Architects (AIA) has selected Ricardo Legorreta to receive its highest honor, the 2000 AIA Gold Medal award. As the 57th AIA Gold Medalist, Legorreta's name will join such past winners as Le Corbusier, Louis Kahn, I.M. Pei, and last year's recipient, Frank Gehry (January 1999, page 23), chiseled into a granite wall in the lobby of the AIA's Washington, D.C., headquarters.

Legorreta studied at the Universidad Nacional Autonoma de Mexico and founded his firm, Legorreta Arquitectos, in 1959. Legorreta integrates Mexico's regional architectural traditions of rich color, dramatic light and shade, and bold geometry. His Camino Real Hotel in Cancun (1975) updates the country's ancient pyramids with a minimalist, modernist eye. His first stateside commission was a residence for actor Ricardo Montalban in the Hollywood Hills.

The architect has since designed nearly 100 buildings, including the Catholic cathedral for Managua, Nicaragua, and the main public library for San Antonio, Texas. His office is currently at work on San Francisco's Mexican Museum and a Hispanic cultural arts center in Dallas.

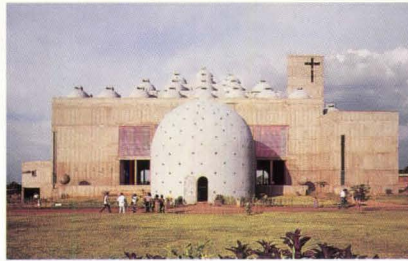


Megafirm Gensler is the recipient of the 2000 AIA Architecture Firm Award. The firm, founded in 1956 by namesake Arthur Gensler and two partners, pioneered the field of corporate interiors, and has since grown to be one of the world's largest full-service architectural practices, boasting 16 offices and 1,700 employees. Its recent projects include major airport commissions—San Francisco (1980) and San Diego (1998)—and the interiors of the sustainable design laboratory that is The Gap's San Francisco headquarters (completed in 1997 with green guru William McDonough).

By 1990, Gensler had active projects in every state and, by 1991, international work contributed 10 percent of the firm's revenues. In 1997, Arthur Andersen selected Gensler as the first architecture firm to win its prestigious Enterprise Award for Best Business Practices. Indeed, Gensler is likely being honored as much for its business acumen as its practice's success. The firm was one of the first in architecture to establish a comprehensive employee profit-sharing plan, which has grown from an initial investment of \$35,000 in 1967 to a current value of \$50 million.

Richard Meier's Smith House in Darien, Connecticut, is this year's winner of the AIA's 25 Year Award, only the sixth house to be so honored in the award's 31-year history. Built in 1965 on a 1½-acre site overlooking the Long Island Sound, the house epitomizes the New York City—and Los Angeles-based architect's pristine early work: white solids jostling and sliding among glazed voids. It received awards from AIA local and national chapters upon its completion in 1968.

The AIA will present the Gold Medal, the Firm Award, and the 25 Year Award to the winners at their gala Accent on Architecture ceremony later this month in Washington, D.C. *Michael J. O'Connor*



2000 AIA Gold Medalist Ricardo Legorreta: The main library for San Antonio (far left) demonstrates the architect's signature Mexican regionalism that integrates bold color, dramatic light and shadow, and abstract geometry. For the overscaled Catholic cathedral in Managua, Nicaragua (at left, top and bottom), Legorreta reconsidered and fractalized the church's expected use of domes, and enriches the raw concrete shell with vibrant pinks, reds, and yellows.



2000 AIA 25 Year Award Winner, Smith House, Darien, Connecticut, Richard Meier: Smith House's stark whiteness contrasts with its forestlike setting along the northern coast of the Long Island Sound. Extensive glazing opens nearly the entire south facade to ocean views.

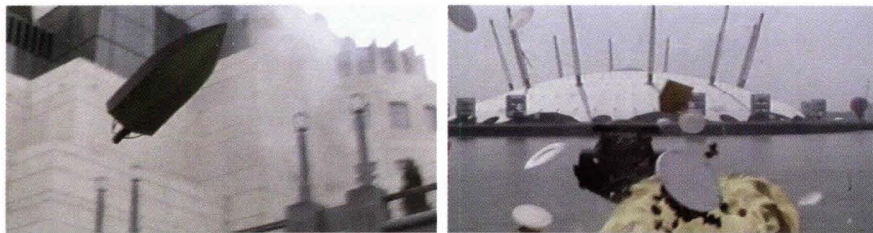


2000 AIA Firm of the Year Award, Gensler: Although Gensler got its start designing corporate interiors such as those for the Philip Johnson-designed Penzoil headquarters in Houston (left), the firm now offers a full range of architectural services. For the Armstrong World Industries headquarters (far left), Gensler combined its expertise in site planning, architectural design, interiors, and space planning.

007's Designs on Design

Cameo Roles Any real James Bond fan knows that the best part of his movies is the pre-titles opening action sequence. To open *The World Is Not Enough*, the 19th outing for 007, Bond (played by Pierce Brosnan) meets with a corrupt banker whose office must have the best view in Bilbao. As the secret agent makes a hasty exit, a familiar metallic glint can be seen in the background. The camera pulls back dramatically, revealing sweeping views of Frank Gehry's Guggenheim Museum.

Back in London, Bond makes another quick departure, this time propelling himself via souped-up speedboat out the side of Terry Farrell's MI-6 London headquarters, much to Q's chagrin. Tooling down the Thames, Bond makes an unscheduled detour directly through a fashionable trattoria, sending tiramisu and cappuccino a-flying as he speeds off in the shadow of Richard Rogers' Millennium Dome. A few moments later, having wrecked the speedboat, Bond finds himself hanging from a hot-air balloon (it's a long story). His only means of escape: using the dome as the world's largest (and most expensive) trampoline to break his fall. Talk about shaken (if not exactly stirred)! *M.J.O.*



Bond launches a speedboat from Terry Farrell's MI-6 headquarters (far left), wrecking a Thames-side restaurant (left), with Richard Rogers' Millennium Dome in the distance.

New OSHA Regs May Hamstring Builders

The construction industry will get a reprieve of at least a couple of years from proposed federal ergonomic rules being developed by the Occupational Safety and Health Administration (OSHA). Nonetheless, say their advocates in Washington, D.C., contractors are mad as heck about them.

On November 22, OSHA officials released proposed rules, eight years in the making, for ergonomic safety in the workplace. The rules are open to public comment until February 1. Yet the head of the Associated General Contractors (AGC) says the rules are too ambiguous, will be too costly to implement, and that the time frame for comment—about 60 days—is too brief. AGC executive vice president and CEO Stephen E. Sandherr argues that OSHA should wait to propose ergonomic standards at least until an independent study of musculoskeletal disorders in progress at the National Academy of Sciences is completed. (The study is expected within months.)

OSHA's proposed rules would affect nearly 27 million workers at 1.9 million worksites

throughout industry. They would aim to reduce injuries caused by overexertion and repetitive motion, such as back sprains and carpal tunnel syndrome. Covered employers would have to start an "ergonomics program," which means having someone on staff take charge of ergonomics, providing information to employees on hazards, watching out for signs of injuries, and launching an employee reporting protocol.

Charles N. Jeffress, the assistant labor secretary who oversees OSHA, stressed the "flexibility" of the proposed rules. One feature is a "quick fix" alternative to full prevention programs: Fix the hazard, and, if the correction works, "no further action is necessary." Construction firms will not be covered by a specific rule of their own for at least two years.

The government says the rules would save employers \$9 billion a year in workers' compensation claims and other costs. But the AGC is having none of it, saying the law's vagueness would take years for businesses to figure out and cost "billions of dollars to accomplish." *Bradford McKee*

Buzz

A building boom in New Canaan, Connecticut, is galvanizing a modernist preservation movement. In addition to **Philip Johnson's** iconic Glass House, New Canaan boasts houses by **Eliot Noyes**, **Marcel Breuer**, and **John Johansen**.

French president **Jacques Chirac** has tapped architect **Jean Nouvel** to design a new museum of primitive arts near the Eiffel Tower along the Left Bank of the Seine River in Paris.

When you wish upon a star: After nearly 12 years of activism, **Frank Gehry's** Disney Concert Hall in Los Angeles is back on. Organizers symbolically broke ground again on the now \$224 million project early last month.

His Highness the Aga Khan, who funds a triennial prize to recognize architectural excellence in the Islamic world, has donated \$2.5 million to **Harvard's Graduate School of Design** to endow a professorship in landscape architecture and urbanism in Islamic societies.

The National Park Service has designated **Georgia O'Keeffe's** Abiquiu, New Mexico, home and studio a National Historic Landmark.

Score one for big-box: In March, **Borders Books and Music** will, in the words of one opponent, "slither into" Santa Cruz, California, converting what was meant to be a four-tenant commercial building of small, locally owned businesses into a one-tenant megastore. But small-business owners and their supporters—a wily bunch, from the sounds of it—have declared war,

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Job Sweet Job

Where To Work?

Real-estate forecasters at Cushman & Wakefield have pinpointed the 20 best cities in which to work, based on the job market, crime, cost of living, education, and the availability and price of real estate.

- 1 New York City
- 2 Atlanta
- 3 Chicago
- 4 Boston
- 5 Los Angeles
- 6 Phoenix
- 7 Washington, D.C.
- 8 San Francisco
- 9 San Diego
- 10 Minneapolis/
St. Paul
- 11 Miami
- 12 Seattle
- 13 Denver
- 14 Dallas
- 15 Philadelphia
- 16 Nashville
- 17 Tampa/
St. Petersburg
- 18 Orlando
- 19 Portland, Oregon
- 20 Houston



He'll Take Manhattan—Again

Under The Bridge After a seven-year absence, Terence Conran, the founding father of lifestyle retailing, is back in Manhattan. On December 8, the British design and restaurant mogul christened the sprawling, 23,000-square-foot Terence Conran Shop alongside New York City's venerable Queensboro Bridge. The sleek glass pavilion housing the design-savvy furniture and housewares store is the first piece to open in the Bridgemarket complex, designed by Conran's in-house architecture firm and New York's Hardy Holzman Pfeiffer Associates (HHPA).

Coming this month are a high-end supermarket and a Conran-run restaurant and club, all housed under the soaring, cathedral-like vaults beneath the Henry Hornbostel-designed 1908 bridge. The vaults of the long-abandoned open-air farmer's market are clad in the curved tiles developed a century ago by Spanish-born engineer Rafael Guastavino—hence the name of Conran's restaurant and club, Guastavino's. *Raul A. Barreneche*

AIA to Launch For-Profit Website

By April, the Internet's cornucopian offerings will include a business primer designed specifically for architects. The Digital Building Network (DBN), as it's tentatively called, has been under development by a 12-person staff at the American Institute of Architects' (AIA) Washington, D.C., headquarters for more than a year. The completed version will dispense a range of business services, from legal advice to specification guidelines. "Technology can increase efficiency and save money," says Amy d'Oliveira, the AIA's manager of new media marketing. "We want to show our members ways of doing that." DBN will operate independently of the AIA's existing site (www.aiaonline.com).

In a departure from past practice, the AIA is launching DBN as a semi-autonomous, for-profit subsidiary, with hopes that the site will earn revenue from advertising and product sales. But architects who already pay AIA dues may be surprised—and disappointed—to find that some portions of the DBN site will be available by subscription only, or accessed on a pay-as-you-go basis.

The profit-minded initiative signals a new and surprising budget-consciousness at the historically profligate AIA as it undergoes a general management shakeup this month. AIA brass declines to say where the anticipated profits might go, nor will it divulge DBN's budget. *Michael Cannell*

vowing to populate the sidewalk outside the new Borders with the homeless, rock musicians, and Hare Krishnas (those tambourines!) until they leave.

The Pritzker Family is developing a parcel of land in Boston's Seaport district for three residential buildings, three office towers, two hotels, and a contemporary art museum on the Fan Pier...and a partridge in a pear tree. The next question: Which of the winners of their eponymous prize will they tap for the plum commissions?

New York City-based architect **Annabelle Selldorf** is renovating a Carrère & Hastings-designed building in the heart of Fifth Avenue's Museum Mile for **Neue Galerie**, a venue for German and Austrian art. Art dealer **Serge Sabarsky** and billionaire **Ronald S. Lauder** are the project's financial backers.

Hellmuth, Obata & Kassabaum is designing a \$115 million museum and presidential library complex in Springfield, Illinois, dedicated to the life and works of former **president Abraham Lincoln**. Also in Springfield, **Pei Cobb Freed & Partners** and exhibit designer **Ralph Appelbaum** are collaborating on an Illinois State Museum.

At the end of December, city officials in Tokyo submitted a shortlist of a different sort to Japan's prime minister: two choices for the location of a new national capital to replace Tokyo, which is considered too prone to earthquakes. The front-runners are the Abukama-Nasu and the Tonou-Nishimikawa regions.

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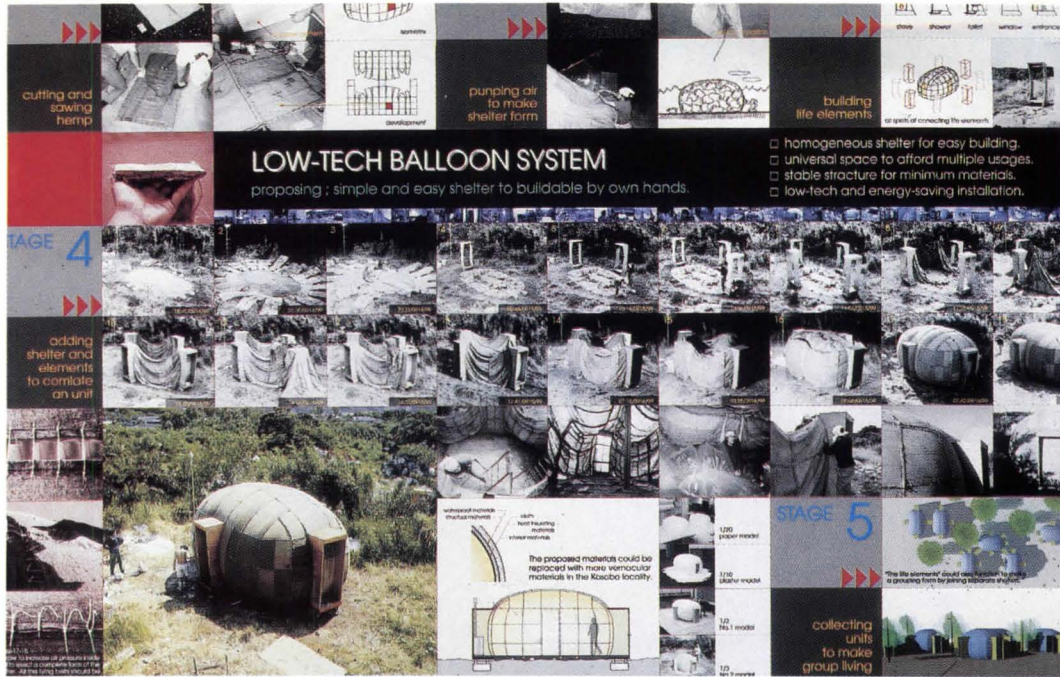
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Rank and File

Wouldn't You Rather Be a Piano Tuner?

A new career resource guide, *The Jobs Rated Almanac*, comprehensively ranks 250 careers based on income, stress, physical demands, potential growth, job security, and work environment. While computer-related jobs dominate the top 10, architect nestles in between registered nurse (#143) and fashion model (#145).

1	website manager
8	industrial designer
26	urban/regional planner
60	attorney
77	architectural drafter
86	dentist
102	Catholic priest
116	college professor
124	stockbroker
126	piano tuner
136	waiter/waitress
140	rabbi
144	architect
146	cosmetologist
149	photographer
154	janitor
168	bus driver
179	bartender
180	astronaut
191	travel agent
199	artist
205	NBA basketball player
216	firefighter
218	actor
227	welder
228	butcher
229	president of the U.S.
243	taxi driver
246	cowboy
248	fisherman
249	lumberjack



Addressing Kosovo's Housing Crisis

Competition Last fall, humanitarian organization War Child and New York City-based Christidis Lauster Radu Architects sponsored Architecture for Humanity, an international open competition to design temporary housing for Kosovo's 800,000 homeless refugees. From 205 entries, the jury, which included "human rights advocate" Bianca Jagger and architects Tod Williams and Billie Tsien, selected 10 unranked finalists in November. After quick showings at New York City's Van Alen Institute and selected locations in Europe, the winners will be exhibited at the United States Agency for International Development's Washington, D.C., headquarters. Finalists included Japanese architect Shigeru Ban, famous for his constructions of paper tubes to shelter homeless earthquake victims in Kobe, Japan (October 1996, pages 104-109). Tokyo-based Techno Craft (above) designed a hemp-clad structure that is erected by inflation and anchored with a mortar sealant coating. *Sarah Palmer*

campus for **California State University** on the Channel Islands.

That's entertainment: Chicago's **VOA** is working on a \$15 million "family entertainment center" in Bogota, Colombia; an "urban entertainment center" in Costa de Montemar, Chile; and a "resort and entertainment complex" in Rio Quente, Brazil.

Architect **Frederick Fisher** left his heart in Los Angeles. In a new magazine advertisement for the Los Angeles Convention & Visitors Bureau, Fisher rhapsodizes about seeing a picture of the then-new LAX Theme Building in a newspaper in his native Cleveland when he was 14. "[I] was so intrigued with its modern expression," he says, "that I made a model of it."

Callison Architecture is designing Sinclair Landing, a \$200 million mixed-use development in Bremerton, Washington.

San Francisco's **Esherick Homsey Dodge & Davis** is designing the Gulf of Maine Aquarium for Portland, Maine.

The cable network **A&E** recently debuted **House Beautiful**, the television show. Starring **Donna Hanover** (a.k.a. Mrs. **Rudolph Giuliani**), the show promises to profile well-known architects and interior designers. It's on Sundays at 8:00 a.m.

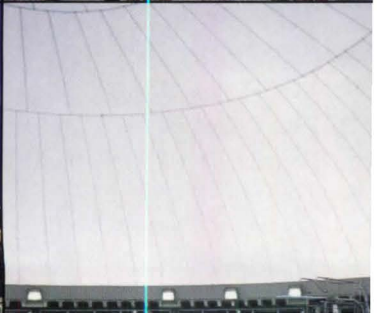
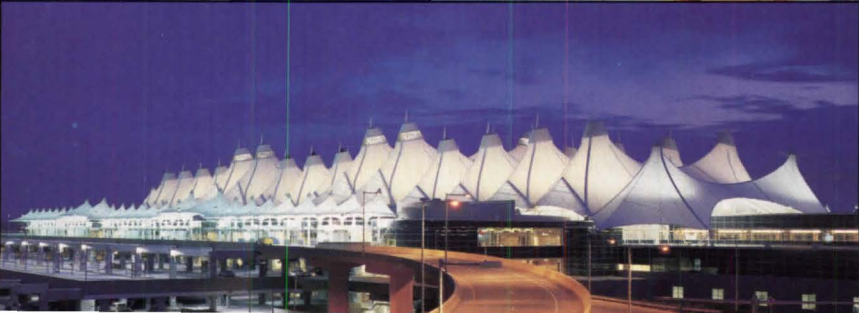
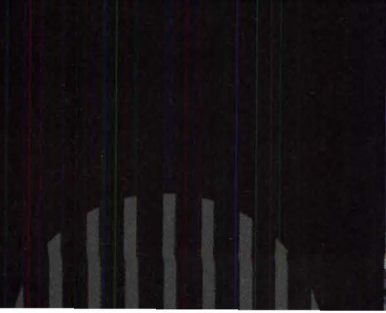
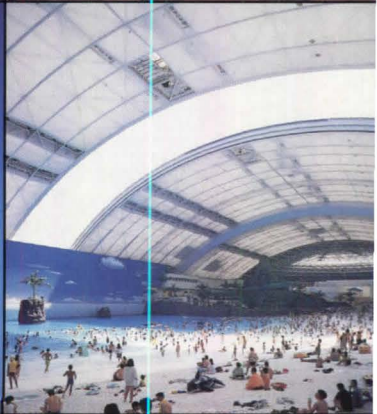
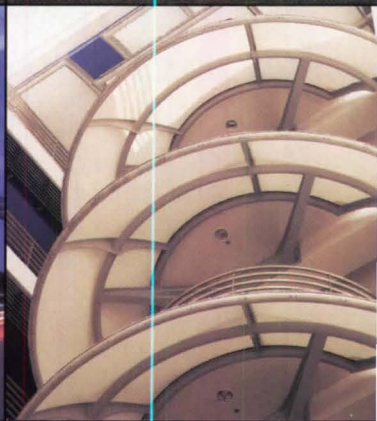
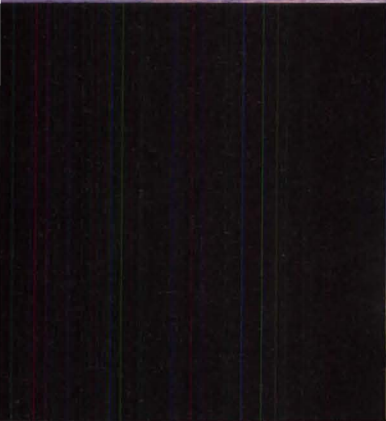
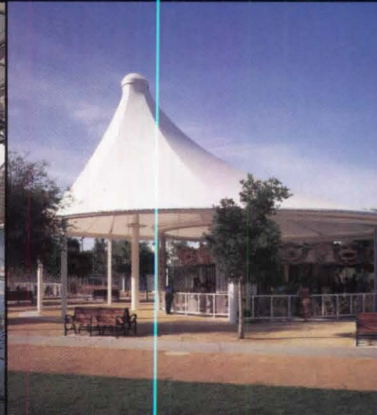
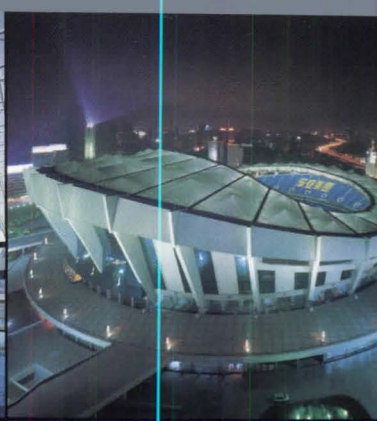
Kohn Pedersen Fox (KPF) is designing a \$30 million harborside residential complex and marina in Jersey City, New Jersey. KPF and Ratio Architects are collaborating on a campus building for Indiana and Purdue Universities in Columbus, Indiana.

Spring Green, Wisconsin-based **Taliesin Architects** is beginning a



National Parks Service to Raze Neutra-Designed Visitors Center

Following nearly two years of contentious debate, the National Parks Service has reaffirmed its decision to level the Richard Neutra-designed pavilion (1962) at the Gettysburg National Military Park in Gettysburg, Pennsylvania (January 1998, page 59). Although eligible for the National Register of Historic Places, federal officials ruled that the pavilion, which houses a protected cyclorama painting depicting Pickett's Charge, was sited on a major battlefield and had to be moved. With plans in the works for a new, revenue-generating visitors center, the Neutra pavilion's days were probably numbered anyway. *M.J.O.*



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French Government Purchases E.1027



Progress After nearly six months of hard work by preservationists in the U.S. and abroad, French government officials have raised the funds to purchase E.1027, the seaside villa in Roquebrune, Cap Martin, France, designed by Eileen Gray with Romanian architect Jean Badovici (1929). The house, one of three designed by Gray, had been left to rot several years ago after the murder of its last owner (May 1999, page 43). A young French architect, Renaud Barrès, will restore the villa under the supervision of France's chief architect in charge of historic monuments.

As E.1027 sits adjacent a small cabin and hostel built by Le Corbusier, Roquebrune hopes to merge the two sites to create a modern architecture research center. Peter Adam, author of *Eileen Gray Architect/Designer* (1987), hopes to donate his private collection of Gray's work, 19 furniture prototypes and a large archive of original drawings, for display in the restored house. The fate of eight Corb-painted wall murals (1937-1939) inside E.1027 has not been decided. Done without Gray's consent, Adam contends that "Eileen hated them." He and Barrès feel quite strongly that the murals should be removed and displayed elsewhere, returning the house to its original state. *Susanna Sirefman* New York City-based architect Susanna Sirefman is the author of *New York: A Guide to Recent Architecture (Ellipsis, 1997)*.

Risky Business

Estimated Economic Risk Markets for 2000

Where should you work overseas this year? The Economist Intelligence Unit has ranked the riskiest global economic markets based on such factors as political stability, monetary and fiscal policy, current account balances, and debt. The study found that, in this order, Africa, Eastern Europe, Latin America, and the Middle East have the highest average risk throughout a region.

- | | |
|-------------|-----------------|
| 1 Russia | 11 South Africa |
| 2 Indonesia | 12 Mexico |
| 3 Pakistan | 13 China |
| 4 Romania | 14 Hungary |
| 5 Brazil | 15 India |
| 6 Turkey | 16 Philippines |
| 7 Venezuela | 17 Thailand |
| 8 Bolivia | 18 Egypt |
| 9 Argentina | 19 Greece |
| 10 Colombia | 20 Israel |

EILEEN GRAY / COURTESY PETER ADAM (LEFT); RENAUD BARRÈS (RIGHT)

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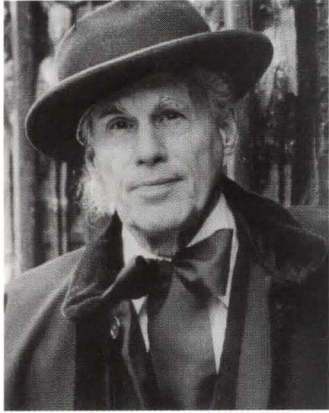
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A Conversation with 'Frank Lloyd Wright'



Banter Lyman Shepard has been performing as Frank Lloyd Wright at functions in the Chicago area over the past 25 years. Shepard, an Oak Park, Illinois-based retired historian, is a Wright scholar and vigorous defender of his ideas.

EDWARD KEEGAN: Is it appropriate to compare Gehry's Guggenheim to yours?

LYMAN SHEPARD (as FRANK LLOYD WRIGHT): Yes, but I did it first. He's taking off on my ideas, but he is good.

Gehry is sometimes referred to as "the other Frank." Is he your artistic equal?

I would quibble with that. He hasn't done as much as I did. Of course, he has a few years left, I'm sure.

Many of your buildings are falling apart with age. There's a big truss holding up Fallingwater. How do you feel about that?

Every building and every

person needs propping up once you get past 50.

Which is the worst loss of all your buildings?

The Imperial Hotel. It was a beautiful expression of a period of time in my life.

Mr. Wright, you sound almost nostalgic!

At times I am. But I am always looking to the future. It doesn't have to be like it is today—pieces of steel and glass are just thrown up. There's no feeling there. My buildings have feeling. They still remind me of Beethoven and I've always thought of us as equals.

For more information, call Lyman Shepard at (708) 848-2075.

NEWS

\$25 million restoration of—surprise!—**Frank Lloyd Wright's** Taliesin compound in Spring Green.

Los Angeles' **Johnson Fain Partners** is designing a biological sciences research building at the **University of California-Riverside**.

RTKL Associates is designing a new headquarters for the Hubei Stock Exchange in Hubei, China.

Philanthropist **Gloria Kaufman** donated \$18 million—the largest contribution to a collegiate dance program—to the **University of California, Los Angeles** to fund a **Moore Ruble Yudell**-designed renovation of the university's dance building.

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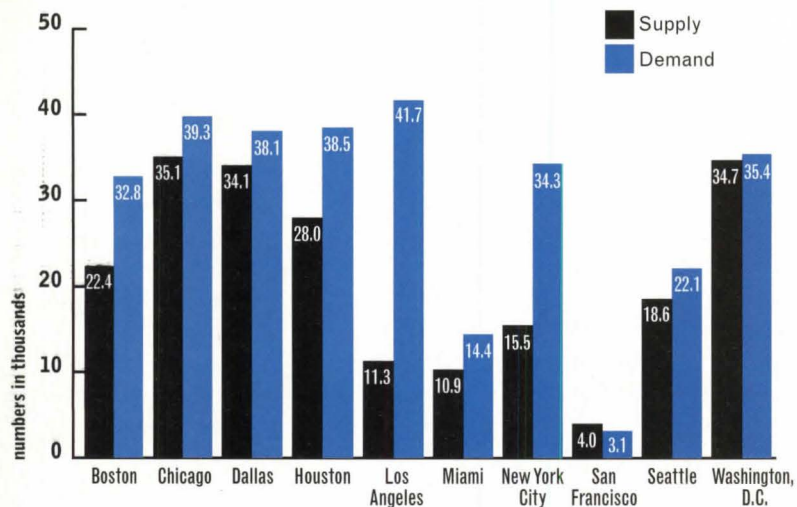
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Housing

Wanted: A Place in the City

It's tough to find an apartment in the big city—any of them—nowadays. A new report from New York State comptroller H. Carl McCall traces the widening gap between the number of new housing units currently in 10 major real estate markets and the overwhelming demand for said housing.



HOK's George Hellmuth, 92

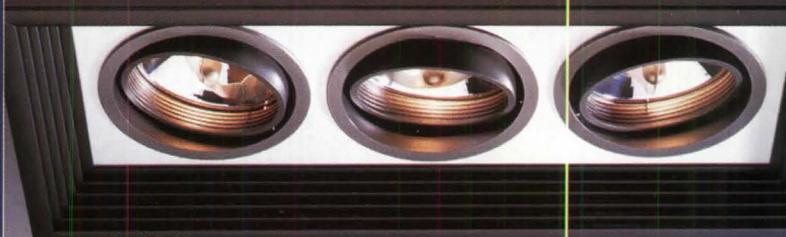
Tribute Architect George Hellmuth, cofounder of Hellmuth, Obata + Kassabaum (HOK), died on November 5 at the age of 92. Hellmuth was born in St. Louis, the son of a prominent local architect, and established HOK in 1955 with Gyo Obata and the late George Kassabaum. Thanks in large part to Hellmuth's business acumen, the firm grew to be one of the world's largest, currently employing more than 1,600 people in 26 offices. Hellmuth retired as HOK's chairman in 1986, and established ceramics company Hellmuth & Dunn with partner Kate Dunn. He is survived by his wife and five children; son George W. is an architect in HOK's Washington, D.C., office. *Ned Cramer*

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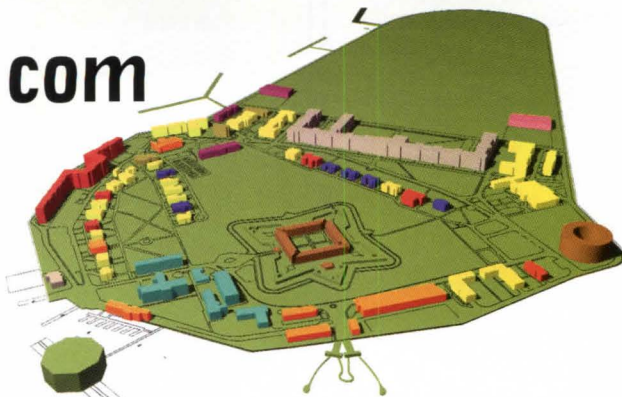
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What If? Could New York City's Governors Island be the next silicon hotspot? The city has been debating what to do with the 150-acre island located just a short ferry ride south of Wall Street ever since the Coast Guard abandoned it in 1997. Mayor Rudolph Giuliani has talked up proposals for a casino and conference center. Now an e-commerce journalist named William Tucker is advancing an alternative scheme to convert the former base into Information Island, a water-bound digital campus for 2,500 computer students and 80 or so high-tech startups. "New York lacks a world-class engineering think tank to support its Silicon Alley economy," Tucker says. "But where do you put it? It's hard to build even a parking garage here. One day it just hit me: Governors Island is the place."

State and city officials are receptive to the idea of a high-tech business incubator, despite Tucker's lack of funding and real-estate experience. His nonprofit organization, the Governors Island Computer Science and Information Technology Research Center, will submit a business plan and economic feasibility study by March. "It's immensely complicated," Tucker concedes. "It's almost as difficult as bringing the Dodgers back to Brooklyn. But you can go a long way on a good idea." M.C.



Proposal for the digital information center on Governors Island includes research laboratories (yellow), film studios (purple), a high school (pink), housing (red), and offices (light and dark blue).

news

AIA Firm of the Year **Gensler** has received the commission to master plan and design a new 200,000-square-foot, \$61.5 million airport terminal complex in Liverpool, England.

Skidmore, Owings & Merrill's Chicago office has received the commission to renovate a downtown Austin, Texas, convention facility into the new Long Center for Performing Arts.

DMJM is designing a 300,000-square-foot headquarters for the **Rand Corporation** in Santa Monica, California.

OBITUARY: Maynard Lyndon, designer of modernist schools, including UCLA's Bunche Hall, 92.

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Calendar

Exhibitions

Chicago

Wheel People at the Chicago Architecture Foundation through March 12 (312) 922-3432

Glasgow

Identity Crisis: The 90s Defined at the Lighthouse through February 13 (44) (141) 287-7346

Los Angeles

At the End of the Century: One Hundred Years of Architecture at the Museum of Contemporary Art April 16–September 24 (213) 621-2766

Montreal

Cedric Price: Mean Time at the Canadian Centre for Architecture through February 27 (514) 939-7000

Triumphs of the Baroque: Architecture in Europe, 1600–1750 at the Montreal Museum of Fine Arts through April 9 (514) 285-1600

En chantier: The Collections of the CCA, 1989–1999 at the Canadian Centre for Architecture through April 30 (514) 939-7000

Visions and Views: The Architecture of Borromini in the Photographs of Edward Burtynsky at the Canadian Centre for Architecture; March 8–May 7 (514) 939-7000

New York City

Forgotten Gateway: The Abandoned Buildings of Ellis Island at the Museum of the City of New York through February 13 (212) 534-1672

ModernStarts: Places at the Museum of Modern Art through March 14 (212) 708-9750

Berlin Metropolis: Jews and the New Culture, 1890–1918 at the Jewish Museum through April 23 (212) 423-3271

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

Pittsburgh

The Pritzker Architecture Prize, 1979–1999 at the Carnegie Museum of Art through February 27 (412) 622-3288

San Francisco

The Architecture of Graphics: Designs for SCI-Arc from the Permanent Collection of Architecture and Design at the San Francisco Museum of Modern Art through February 20 (415) 357-4000

Sol LeWitt: A Retrospective at the San Francisco Museum of Modern Art; February 20–May 21 (415) 357-4000

Washington, D.C.

The Corner Store at the National Building Museum through March 6 (202) 272-2448

Reimagining the Suburbs: Smart Growth and Choices for Change at the National Building Museum through March 26 (202) 272-2448

See the U.S.A.: Automobile Travel and the American Landscape at the National Building Museum through May 7 (202) 272-2448

Frank Lloyd Wright: Windows of the Darwin D. Martin House at the National Building Museum February 18–August 20 (202) 272-2448

The White House in Miniature at the National Building Museum March 29–September 17 (202) 272-2448

Reinvigorating the Cities: Smart Growth and Choices for Change at the National Building Museum April 19–September 6 (202) 272-2448



In Washington, D.C.: Take a drive by the roadside motels, diners, and gas stations of the National Building Museum's "See the U.S.A.: Automobile Travel and the American Landscape." The exhibit features vintage maps and photographs, travel brochures, antique gas pumps, and a 1926 Ford Model-T Roadster. Contemporary artistic interpretations bring the theme into the present: Donald Jacot renders the enormous fiberglass dinosaurs that lord over the Wheel Inn in Cabazon, California. "Visit our Dinostore," announces the banner in the background.

Conferences

26th International Making Cities Livable Conference
Charleston, South Carolina
February 13–17 (831) 626-9080

2000 National Planning Conference
sponsored by the American Planning Association
New York City; April 15–19
(202) 872-0611

Hospitality Design 2000 Expo and Conference Las Vegas
April 27–29 www.hdexpo.com

AIA 2000 National Convention and Exposition Philadelphia
May 4–6 (202) 626-7395

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

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

Construction Specifications Institute Atlanta
June 21–25 www.csinet.org

Competitions

Best of Home 2000 Awards
sponsored by the Assisted Living Federation of America
deadline February 8 (703) 691-8100

Ceramic Tiles of Italy
for projects completed before February 28 that use Italian ceramic tiles in innovative commercial and residential settings; \$20,000 prize
deadline March 15 (212) 980-1500

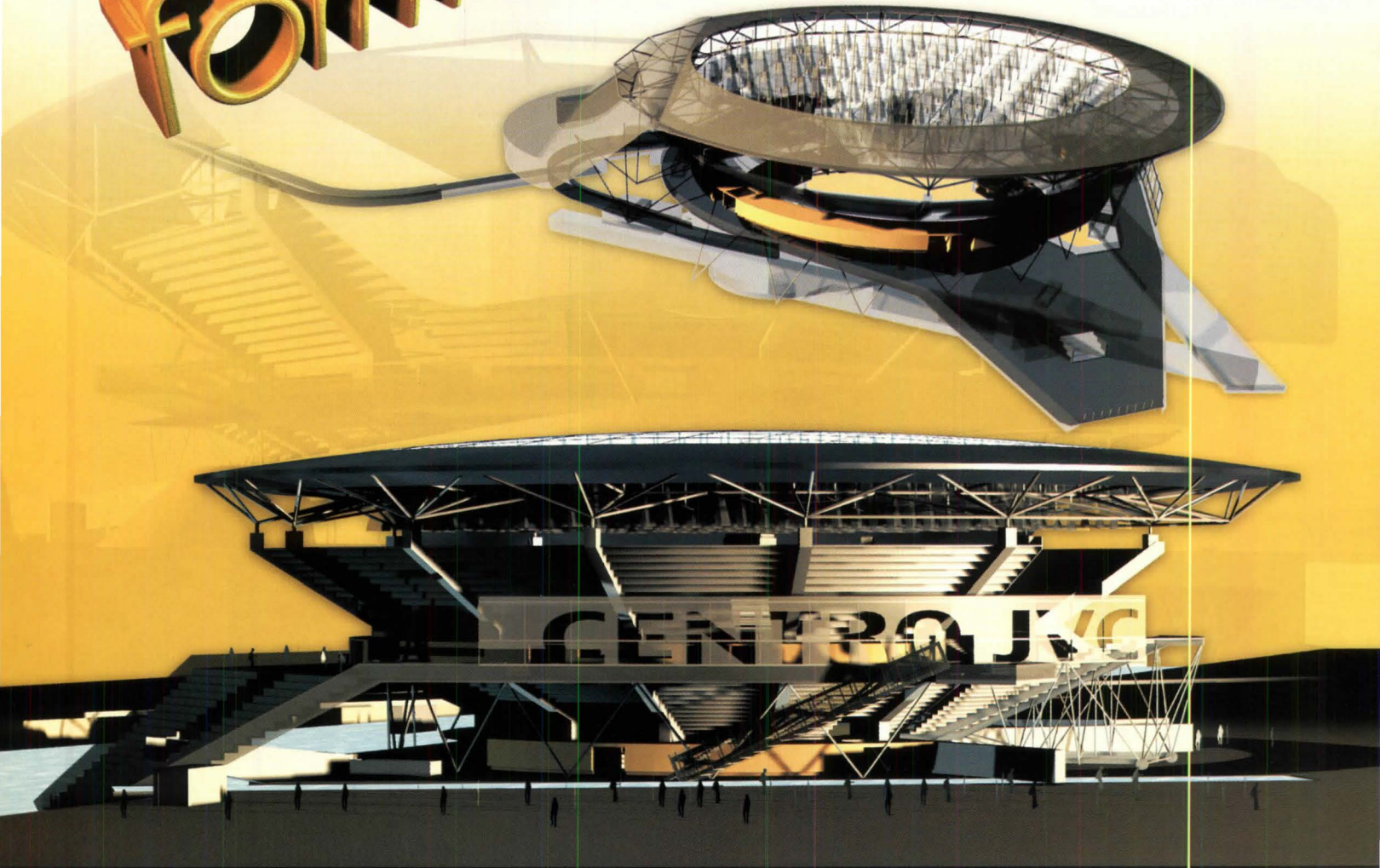
Martin Luther King, Jr. National Memorial Project
registration deadline April 1
(410) 554-0040, ext. 110

Frate Sole Foundation International Prize for Sacred Architecture 300 million-lire prize
deadline May 31
fax (39) (0382) 301-413

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

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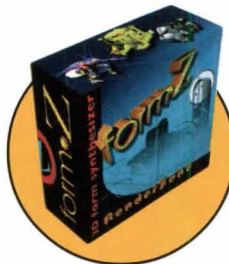


A multi-use stadium located in Guadalajara, Mexico, by Morphosis, Santa Monica, California. All modeling and rendering by Ung Joo Scott Lee.

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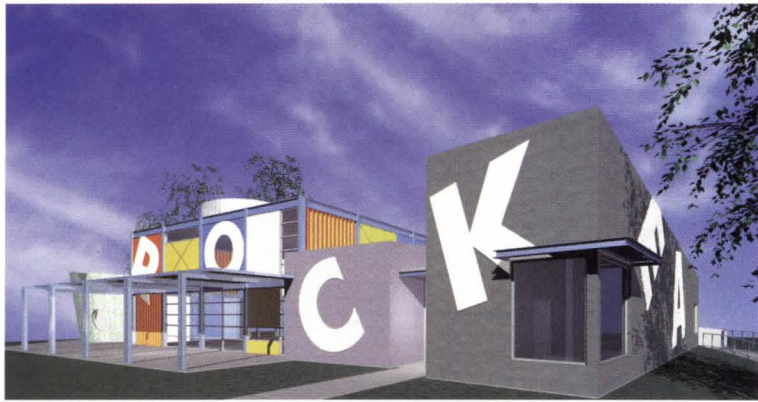
Thom Mayne, Principal of **Morphosis**: "One of the most significant benefits derived from the integration of computer technology in the design studio is the ability to create both presentation material and construction documents out of the same epigenetic material. The 3D model utilizing **form•Z** is the initial departure point of the design process. A continual refinement of the 3D model both informs the design and brings another level of precision and coherence to the project. It's a tool which assists us greatly with the issues of simultaneity, which might be seen as the consistently singular issue of the 20th century."

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Large-scale letters spelling the name of Eagle Rock Park dance around the building's crisply detailed facades (above and top). A deep overhanging canopy on the east facade (top, at left) shelters an outdoor play area. A small entrance between the splayed office wings (above) leads to a reception area.

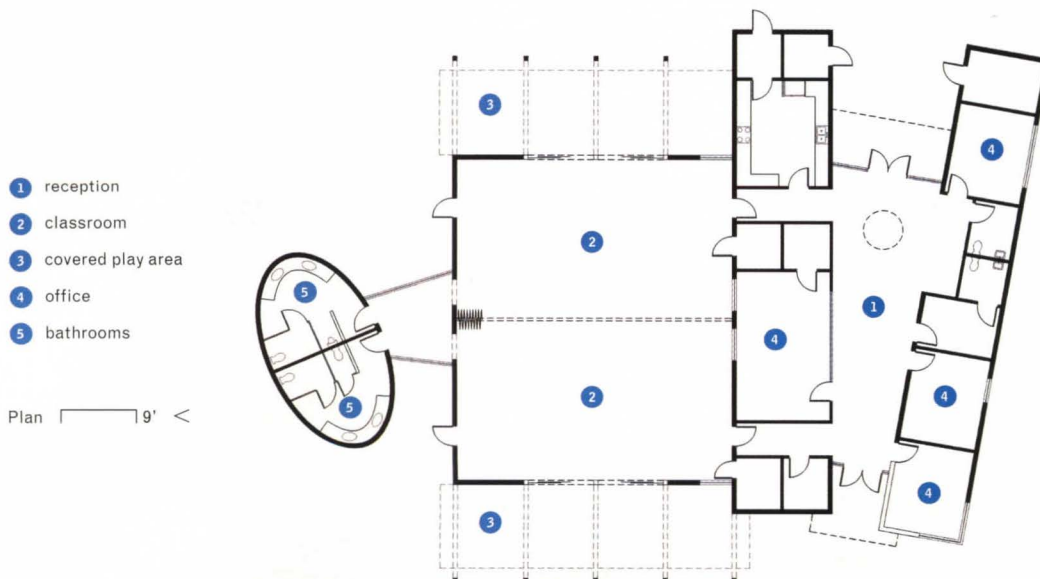
On the Boards

Kanner Architects, Eagle Rock Child-Care Center
Los Angeles, California

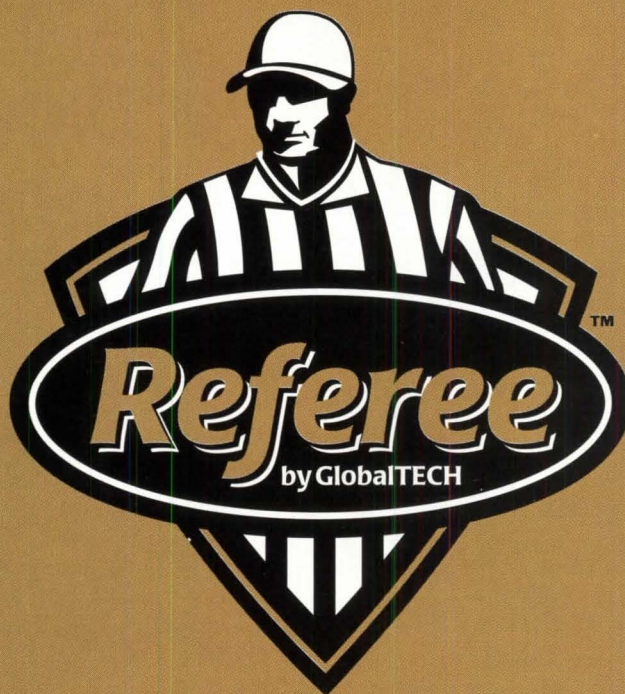
Los Angeles-based Kanner Architects are best known for their embrace of L.A.'s exuberant Googie-style architecture. In projects from multifamily housing to drive-through burger joints (May 1998, pages 108–111), Kanner captures the giddy energy of the city's ersatz roadside treasures. The firm's newest commission, a 5,000-square-foot child-care center for the Los Angeles Department of Recreation and Parks, takes its inspiration from a more serious but no less authentic local landmark: a 1953 gymnasium in Eagle Rock Community Park designed by Richard Neutra. This vintage gym

opened to the outdoors by raising large wall panels on a cable pulley system. Neutra added to the building's sense of lightness by detailing it with thin steel columns, cantilevered roofs, and wraparound windows.

Kanner's scheme is a playful ensemble of brightly colored forms that draw on Neutra's steel detailing. A simple box contains a pair of classrooms within an exposed steel frame and colorful corrugated-metal infill panels—a nod to the iconic Eames House—that open like those in Neutra's neighboring gym. Large overhangs on the front and back of the box shelter play areas; giant letters spelling the name "Eagle Rock" are painted around the building's perimeter. Two concrete boxes sheltering offices, storage rooms, a kitchen, and conference room are attached to the south side of the classroom block. To the north is a freestanding, mosaic-tiled elliptical drum dotted with bubble-shaped windows—a Kanner trademark—containing bathrooms. Construction should start this spring.
Raul A. Barreneche



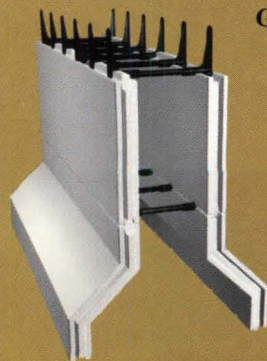
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practice

“There is no such thing as a merger. One party always ends up more powerful.”
from ‘Acquiring Minds’
Business p. 44

“Even firms devoted to Autodesk often had a copy of ArchiCAD running on a machine hidden away in a corner.” from ‘Advantage Graphisoft’
Computers p. 48



Back to School

Fifty years later, Alvar Aalto's Baker House still celebrates student life. **Lawrence W. Speck** visits a campus landmark.

Preservation In 1959, a decade after Alvar Aalto's Baker House opened on the MIT campus, Steen Eiler Rasmussen wrote enthusiastically of it in his landmark book, *Experiencing Architecture*, “The entire design is based on the functions of the building....For these young people Aalto has created a building which entirely avoids the stereotyped rooms and anthill atmosphere of old-fashioned dormitories, and the students love it.” Famous for its wavy south facade and curious north-facade stair, Baker House is better known at MIT for the interactive life it promotes among students. “The great idea behind Baker House is sociability,” says undergraduate dean Rosiland Williams.

In the 1940s, Aalto proclaimed himself committed to an architecture that was “functional mainly from the human point of view.” He saw housing in particular as an opportunity to address “problems in the humanitarian and psychological fields.” Baker House became a deliberate

Baker House was hugely popular with students when it opened in 1949.



Fifty years of wear and tear have taken their toll on Baker House, as evidenced by these photographs. Loading dock refurbishment includes a new roof raised high enough to accommodate trailer trucks (1) and replacement of wood-frame strip windows (2).

Plaza stones were removed so that an underlying waterproofing system could be installed (3). Rectangular panels of dark gray slate are anchored with bronze fasteners to the entrance wall (4) and its roof canopy. The restoration team replaced the flashing and fabricated the new fasteners. Deteriorated doors and windows are to be replaced throughout the building (5).

The unique oval mullions of Brazilian pine in the upper level of the dining pavilion suffered extensive damage. The restoration team refinished them with varnish and applied faux finish over epoxy fillings (6).

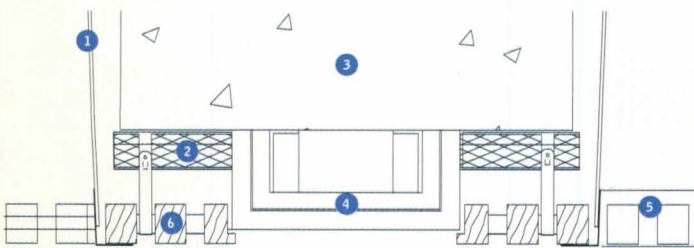
embodiment of those intentions, with configurations of student rooms, small group lounges, general circulation routes, and larger common rooms all carefully orchestrated to promote casual student encounters and personal interaction. The building has worked magnificently for 50 years; it is consistently among the most popular dorms on campus despite periods of egregious physical neglect.

So how does one restore a building that is at least as much about life as it is about form? The question is particularly thorny in the current postmodern era, in which building imagery (be it classical or modernist) dominates our definition of architecture, and “functionalism” (a term Aalto bandied about generously) has virtually dropped from the contemporary lexicon. Fortunately David Fixler, director of historic preservation at Perry Dean Rogers & Partners and leader of the Baker House restoration team, is one of a cadre of preservationists who advocate preservation of our experience of the building as a useful defense against objectification of modern architecture. Fixler views Aalto’s dormitory as an architecture that “demands to be used, to acquire the patina of age—in effect, to generate history.”

The top-to-bottom renovation of Baker House, which culminated in a rededication ceremony last October, has breathed new life into a still-vital organism rather than mothballing a hallowed artifact. In the two-phase renovation, which took place in the summers of 1998 and 1999, Fixler’s team took important steps to preserve and extend the life of Baker House for generations of undergraduates to come.

First, the restoration team decided to retain the original student-room configurations, even though the room sizes and relationships are considered outdated by today’s student-housing standards. Virtually every single, double, triple, and quadruple room was kept intact, although the notion of four freshmen bunking together in close quarters went the way of the slide rule long ago. In Baker House, triples and quads still make sense as initiation sites for the broad socialization crucial to the building’s overall concept. Though even the most adamant fan of Baker House as a building artifact would have forgiven a few partition changes, the life of the building would not have been the same if its quirky but thoughtful room mix had been normalized.

Second, Fixler and his cohorts removed the 1962 bedroom additions on the upper floors. Critical lounge space regained its original function,



Dining room wood-slat ceiling detail 3"

- 1 existing galvanized skylight core
- 2 acoustic blanket
- 3 concrete-encased steel beam
- 4 plaster-faced soffit assembly
- 5 new aluminum closure ring
- 6 slat ceiling



and floors four, five, and six, which are farther away from ground-floor common areas, are again duly compensated with more generous local lounges, as Aalto intended.

Third, the architects researched documents locally and in Finland to identify features of the original design that had been changed or left unexecuted. A roof terrace, omitted for budget reasons in late design stages, had clearly been important to Aalto. He sometimes considered the building unfinished because of its absence. The restoration fulfills Aalto's intentions by adding a large terrace complete with a pergola.

The architectural team's focus on preserving the building's social and functional aspects did not distract them from attending to issues of technology and form. Their greatest challenge may have been the comprehensive upgrading of building systems and technical accoutrements in a reinforced-concrete structure with clay-tile interior partitions and minimal floor-to-floor heights. The decision to air-condition lower-floor public spaces required ingenious weaving of ductwork in

The upper-level dining pavilion is Baker House's communal center. The skylights were reglazed, and a wood-slat ceiling based on Aalto's original design was installed.

Fast Friends

Baker House and I both turned 50 this year. We first met in our late teens. I was a green Texas boy who had driven my 1964 Ford Mustang for three long days to embark on a college career at MIT. I slept in Baker House my first night in Cambridge. It would eventually play a big role in influencing me to study architecture. That first night, I stayed in a triple on the west end of the fourth floor. I was thrilled.

Baker House and I became fast friends. It taught me as much as I learned in any class or from any professor. In the late 1960s almost every architectural precedent was subject to questioning. Mies, Corbusier, and Gropius—gods a few years earlier—were now being blamed for everything bad about banal, dogma-driven modernism. Historical architecture was not yet “interesting.” Sometimes it seemed like there was no good architecture around to learn from—except Baker House. It taught the value of modesty and simplicity.

I did my thesis on student housing, and Baker House became a silent (but powerful) member of my thesis committee. After graduation, the MIT administration hired me to do a two-year study of their housing system. Baker House monopolized the study. I went to Finland and looked at all the design drawings while they were still kept in Aalto's sweet little office in Munkeniemi.

The lessons from those Cambridge days have stuck with me. When some sexy new trend crops up, Baker House's robust straightforwardness reminds me that there are basic architectural virtues, such as site response and functionalism, that transcend the flash and pizzazz of the moment.

Buildings like Baker House are architecture's true teachers. One of the best things a professor can do is introduce students to many good mentors and hope a long-term friendship results. *L.S.*



History

Mount Angel Abbey: A Library for the Spirit

Father Jeremy Driscoll was a seminary student at Mount Angel Abbey when the Alvar Aalto library was finished in 1970; he helped shelve its books for the first time. Later, cocooned in the carrels to study and work, he always felt a sense of tremendous peace. "I realized the building was like a big frame around my work," says Father Jeremy, now a monk, scholar, and poet at the abbey. "It taught me how beautiful my work is."

This rural Benedictine monastery, founded in 1882, crowns an Oregon hill 40 miles south of Portland. The building started with an unlikely letter to Aalto in 1963 from Father Barnabus Reasoner, then the library director. Father Barnabus asked for a building "that will fill our needs in a beautiful and intelligent way," and Aalto, who had an affinity for libraries (he designed four in Finland), agreed. Besides

Baker House, it would be Aalto's only building in the United States.

From the outside, the squat, expressionless buff-brick front elevation hardly promises beauty; the library could be just another of those stale 1960s boxes that infest campuses everywhere. But inside, it bursts into a dramatic and artful interior landscape that cascades down the hill. A long skylight in a curving well lures indirect light and spills it onto two levels and a mezzanine. On a typically drippy Oregon day, scholars swear it's brighter inside than out.

Everywhere there are dialogues between straight lines and sensuous curves, an obvious metaphor for the reconciliation of rational modernism with humanity. The distilled palette is white, black, and pale birch, without so much as a potted plant or view of the countryside. But the monks in their black robes are a part of the design; their movements and the shifting weather constantly rearrange the composition.

Aalto believed that since reading a book "requires a strange kind of concentration," architecture should strive to eliminate all distractions. Aalto did this, but he didn't stop there. Mount Angel's understated grace and quiet intelligence form the perfect frame for a monk's work, a library for the spirit. *Lawrence W. Cheek*

ceilings to minimize intrusion on the spaces below. In the dining hall, for example, a series of fan coil units, new lighting, acoustical treatment, and sprinkler piping were required in a conspicuous ceiling above the open stairwell. Fortunately, Fixler's team found drawings made during the project's construction documents phase that showed an accessible, open wood-slat ceiling that could conceal the required systems.

Code changes since 1949 necessitated modifications to accommodate more stringent accessibility and safety requirements. The architects sensitively inserted an entrance ramp where a precast planter had been placed in the 1980s. They altered railings in the dining hall's landmark open stairway to comply with current height and opening-size requirements. The new rail design incorporates elements of drawings done by Aalto as late as February 1949, interpreted by Fixler's team in conversations with Olav Hammerstrom, an Aalto assistant who managed the Baker project in the latter stages of construction.

Fixler confesses his team "took some liberties" in a few areas. Perhaps a bit overzealous in their research, they studied Aalto's contemporaneous work in Finland, speculating about how the motifs of that period might have been used in Baker House. Aalto, however, is not an architect whose work is easily extrapolated or predicted. Baker House is, in fact, very different from Aalto's European work. Its finishes, in particular, are simpler and tougher with an almost Shaker economy of means. Álvaro Siza, perhaps Aalto's closest contemporary counterpart, concluded after a recent visit to the dormitory, "You have no doubt: This is an American building. But you have no doubt: This is also an Aalto building." Where the renovation architects incorporate the vertical tubular tiles Aalto later used in his European projects, or the custom light fixtures produced with the Louis Poulsen Company in Denmark, the restoration seems to stray from the bold, plain-spoken American feel of the original building.

But this is quibbling. For the most part, Baker House has been returned to the remarkable state of getting everything just right. This building, which steadfastly refused to pretend it was old but never wore its newness with pretension, is now an historic monument and canonic work of modern architecture. "It is not what a building is like on opening day, but 30 years later that counts," Aalto famously remarked. That sentiment is certainly validated here, as Baker House emerges from restoration primed and ready for its second half-century. ■

MIT BAKER HOUSE RENOVATION/RESTORATION CAMBRIDGE, MASSACHUSETTS

CLIENT: MIT, Cambridge, Massachusetts **ARCHITECT:** Perry Dean Rogers & Partners: Architects, Boston—Charles F. Rogers II (principal-in-charge); David Fixler (project manager, director of historic preservation); Jeffrey Fishbein (project architect); Ana Gabby, Kari Silloway, Jennifer Tucker, David Coe (project team) **ENGINEERS:** LeMessurier Consultants (structural); GZA Environmental (geotechnical) **CONSULTANTS:** Building Conservation Associates (architectural conservators); TKA Lighting Design (lighting); Acentech (acoustics); Richard White (specifications); Paul David Pearson, The Alvar Aalto Foundation (Aalto source) **GENERAL CONTRACTOR:** Kennedy & Rossi

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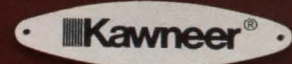
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practice

Acquiring Minds

Architects are learning the art of the deal. Elizabeth Padjen listens in on the negotiations.

Business In 1997, 18 years after founding an architecture firm in Cambridge, Massachusetts, Martha Ondras faced a dilemma. Three key staffers had left her 25-person office—trusted employees she had assumed would one day take over her practice. She could, of course, groom new candidates. But she was increasingly disenchanted with her prospects. “I was looking for financial stability,” she recalls. “I also wanted to get away from daily management responsibilities and do corporate and institutional projects with a stronger peer group.” She could go after bigger projects herself, but that would take time. Alternatively, she considered merging with a smaller or similar-sized firm.

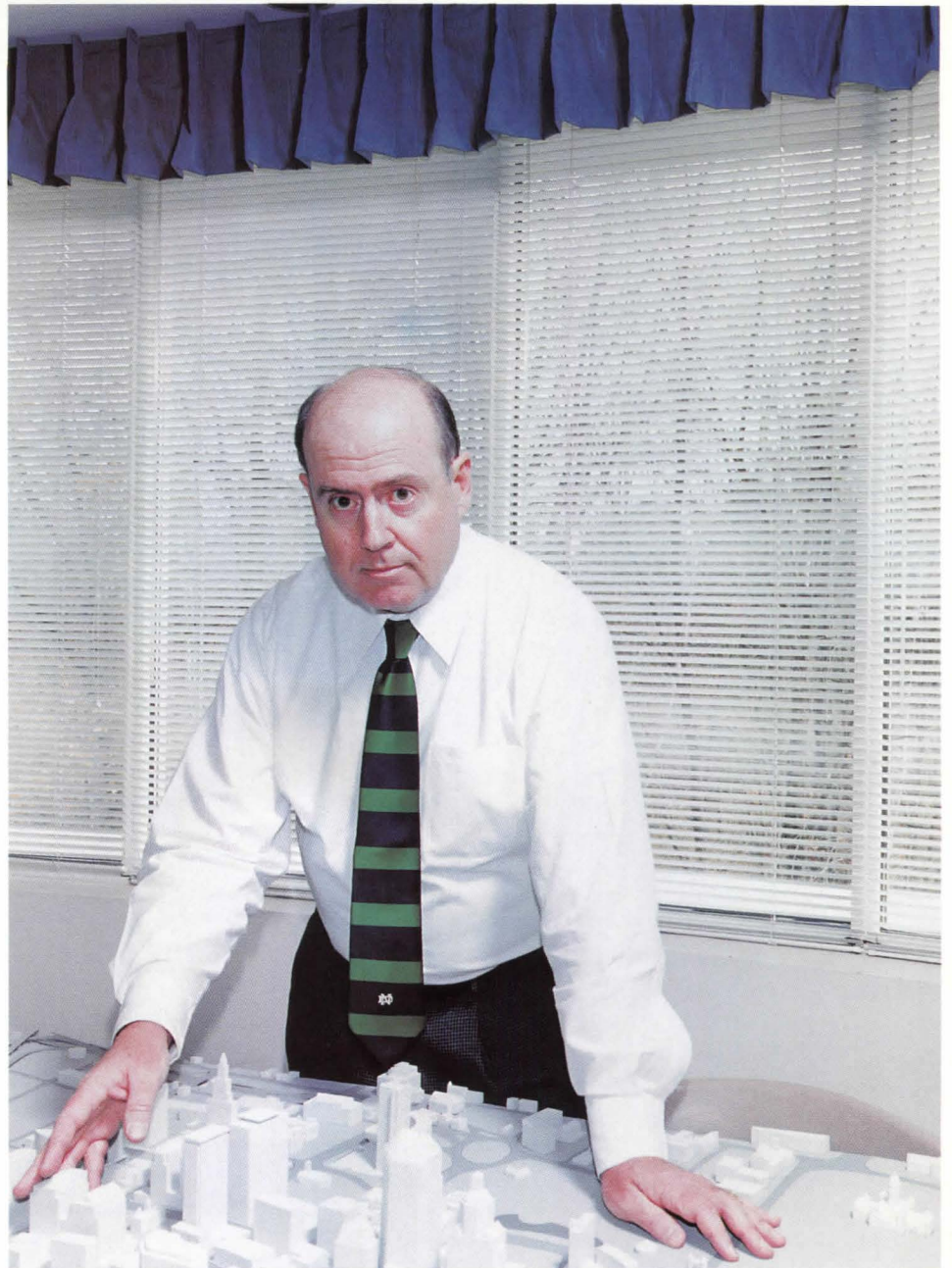
In the end, Ondras decided that only a large firm could offer what she needed. In 1998, she sold Ondras Associates Architects to S/L/A/M Collaborative, then a 125-person firm with offices in Connecticut and Atlanta. Now a partner in S/L/A/M, Ondras directs the Cambridge office.

After selling her practice, Martha Ondras (near right) led the Cambridge, Massachusetts, branch of S/L/A/M Collaborative. She reports to president James McManus (far right), based in the firm's home office in Glastonbury, Connecticut.



“It doesn't look any different,” she notes. “It's the same office and the same people. But instead of working on \$10 million projects, we're working on \$30 million projects.”

Ondras isn't the only architect in a buying-and-selling mood. Mergers and acquisitions (M&A) have moved from the corporate world to the design professions in a big way. Seventy percent of architecture firms surveyed by management consultancy Zweig White & Associates say they are contemplating a merger or acquisition within the next five years. “Since 1994, when we started tracking these deals, we've seen continued acceleration in the rate of activity,” notes Michael Morrissey, senior vice president of Zweig White. As Martha Ondras has demonstrated, you don't have to be one of the big boys to play the M&A game: Small firms, with fewer than 50 employees and less than \$5 million in revenue, are increasingly the targets of choice because they are easy to acquire.



Protective tactics

M&As used to be the prerogative of the Fortune 500. The last recession changed that. Even amid today's continuing prosperity, memories of hard times have driven design firms to develop tactics for protecting themselves against economic downturns (September 1999, pages 138–141). Many principals have concluded that M&As are the most effective inoculation against trouble because they provide immediate growth and market diversity. In other words, they help cultivate a broader client base and greater geographic reach as safeguards against economic uncertainty. "Two-thirds of the deals we see occur across state lines," notes Morrissey, "and they are always done to support growth."

A merger or acquisition can also provide new clients and new building specialties. Albany-based Einhorn Yaffee Prescott (EYP), now a 500-person firm with six offices, has acquired three firms. "We never said,

'Let's get bigger,'" says principal Steven Einhorn. "Our focus has been on our client base, not on growth as a goal." Founded in Albany, New York, in 1973 with a specialty in restoration, EYP first bought a six-person engineering firm in 1982 to distinguish itself from the competition and provide a wider range of services to the institutional market. In 1993, it acquired a 50-person firm with a strong corporate and telecommunications client list. It later added an eight-person firm specializing in the financial-services industry.

Demographics play a part, as well. Some of the baby boomers laid off during the recessionary late 1980s and early 1990s started their own offices. A decade later, they are pondering retirement and planning for future ownership. Some view M&As as a way of ensuring continuity. "In the old days, when principals retired, they closed the doors," says Hugh Hochberg, a partner of The Coxe Group, a Seattle-based consulting firm.



Practice

Pentagon Smashes Procurement Procedures

When it comes to negotiating contracts, the Pentagon's reputation has been less than sterling. Remember the \$640 toilet seats and \$76 screws?

Now, however, like a government PR executive's dream come true, a decorated Vietnam vet named Walker Lee Evey intends to make Americans forget those stories by turning the procurement system into a model of efficiency. And he has as large a showcase project as anybody could hope for: He's managing the renovation of the Pentagon, a \$1.18 billion project that began in 1993 with a wall-smashing ceremony (above) and won't end until at least 2010.

The Pentagon opened in 1943 and went half a century without a major overhaul. The massive building, which covers 6.5 million square feet on five floors and a basement level, has been slowly but steadily deteriorating. What's more, asbestos remains hidden behind some walls, the wiring system is tangled and overloaded, and three measly passenger elevators serve 29,000 employees. Evey, who worked on contracts for the

Department of Energy and the Air Force and was a lead negotiator for NASA's space station and space shuttle deals, was tapped in 1997 to oversee the Pentagon renovation. At that point, the Pentagon was using the traditional design-bid-build system, of which Evey has never been a fan. "The tendency is to go for the lowest bid," he says, "but that rarely turns out to be the best value. I've had contractors admit to me freely that they bid jobs below cost, then try to make up the difference later. In that environment it's in their interest to find problems, and you're at odds with them from the minute they walk onto the job site."

Evey has introduced a more qualitative procurement system, which puts the highest priority on a firm's project history. He and his staff offer selected firms a contract that includes an award fee system and an incentive feature. The award fee system names goals for the project's quality and pays contractors who achieve them. The incentive program allows builders to share in any savings they achieve, and requires them to pay half of overruns up to 10 percent, and all extra costs above that figure. "It's a trial-and-error process, certainly, and we're learning as we go along," Evey says, "but it seems to be working so far."

Christopher Hawthorne

"Now, both principals and staff are interested in the sustainability of firms and more thought is given to evolution." Nevertheless, many firms are forced into a sale because they fail to develop a transition plan.

The recession forced widespread layoffs in large firms, which eventually led to the current dearth of middle-management talent across the profession. As a result, many offices are struggling to find qualified candidates to direct projects or assume ownership roles. Firms are also turning to M&As to solve current staffing problems.

The money trail

Architects who view the sale of their firms as a get-rich-quick scheme court disappointment. "Sellers usually have an overinflated idea of their value," observes Zweig White's Morrissey. "Most deals happen only after the selling firm has already been to the altar once or twice, and they've learned their real value."

Typically, the selling partners receive their firm's book value (assets minus liabilities) in cash—paid out of earnings over three to five years—which presents minimal risk to the buyer. Alternatively, the deal could

"Architects don't get rich by selling out. They're only trading uncertainty for uncertainty."

include stock in the acquiring firm based on third-party valuations. "Architects don't get rich by selling out," says Frank Stasiowski, chief executive officer of PSMJ Resources, a consulting firm based in Newton, Massachusetts. "They're only trading uncertainty for certainty."

"From a money standpoint, it was a flatline," reports a principal who recently sold his prestigious East Coast practice. "We received a guaranteed salary and bonus for the next five years, based on our previous five-year performance."

Further, hopeful shoppers and sellers rarely anticipate the hidden costs of doing a deal. Consultant fees for scouting and evaluating candidates, structuring finances, and advising on governance can total from \$25,000 to \$50,000. Legal fees alone range from \$5,000 to more than \$50,000, depending on the deal's complexity.

Risky business

M&As are a risky business, and the risks don't end with the handshake. Long after a deal is signed, resentments can build over a host of issues: valuations, control, undisclosed staff weaknesses, management styles, client relationships that evaporate with new personnel. "There is no such thing as a merger," asserts Wilson Pollock, principal of ADD, Inc., in Cambridge, Massachusetts. "One party always ends up as the powerful one."

Pollock advocates instead a "cold start"—a satellite office built from scratch by an existing office. "Any acquisition comes with its own baggage," he warns. "The investment is greater, *continued on page 140*

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Advantage Graphisoft

Steven S. Ross reports on the CAD battles, where ArchiCAD 6.5 gains ground.

Computers Autodesk may have won most of the CAD battles, but the war isn't over. Even firms totally devoted to Autodesk a few years ago often had a copy of Bentley's Microstation Triforma or Graphisoft's ArchiCAD running on a machine hidden away in the corner. Why? Because when it came right down to it, it was easier to draw and visualize in those packages than in AutoCAD itself.

A lot has happened since then. AutoCAD has gotten better, for one thing, with its Architectural Desktop continuing to evolve. Bentley and Graphisoft got better, too. Now Graphisoft has plugged the last major hole in its offensive line: Drawings in version 6.5 (which began shipping in November) can now be referenced to other drawings. This is vital for large offices doing large projects since these days even single floors of a large building can't be easily represented in one drawing; there's almost always too much detail about lighting, HVAC, or facilities-management issues.

Further, ArchiCAD 6.5 practically begs to be used for large projects. Large offices have standard details and construction notes; it's easier

to reference them, usually, than to copy them into separate drawings. Aside from the time savings, referenced files can be updated globally. With ArchiCAD 6.5, a project team can plan an entire development, work together on the production drawings for a specific building, model the details in 3D, render the scene to create a photolike image for the client, create an animated QuickTime VR walk-through, and even plot the whole project on paper.

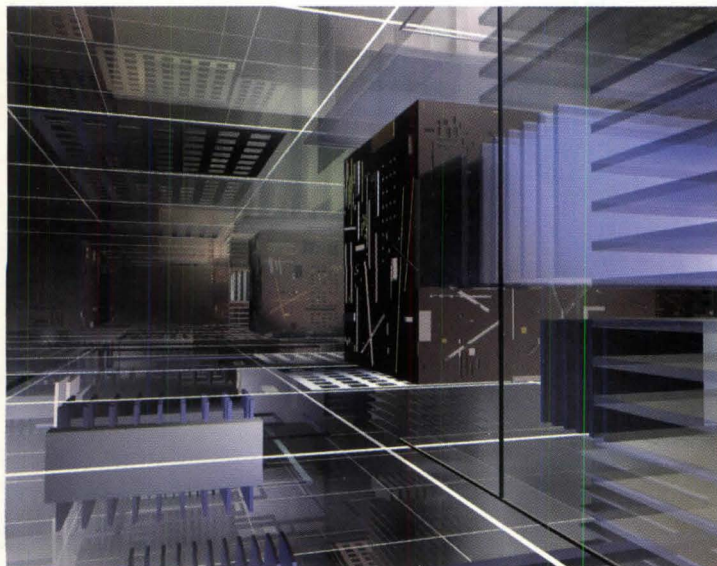
ArchiCAD's simplest and most appealing trait is that drawing with it is easy. Editing can be done in 3D, but most designers will choose to draw using the 2D "floor plan worksheet," because it's similar to manual drafting methods. The software automatically converts the 2D lines to 3D "smart objects" (June 1999, pages 129-131). It is often assumed that object technology is an Autodesk innovation, but "object" orientation was built into ArchiCAD from the very beginning in 1985, giving Graphisoft bragging rights as the first software manufacturer to provide this feature. However, not until the last couple of years has hardware computing power caught up with software potential.

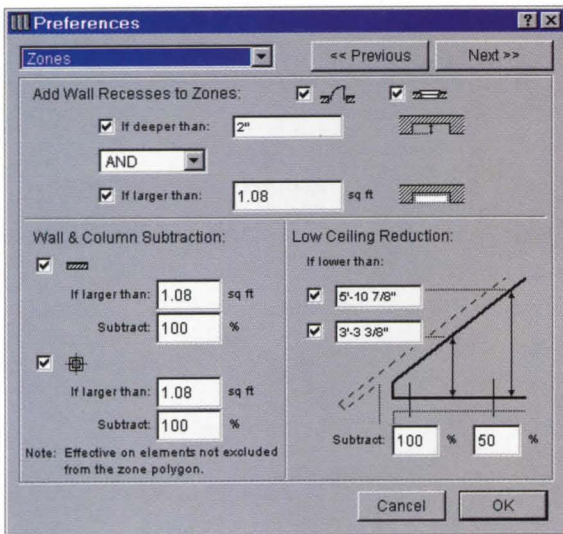
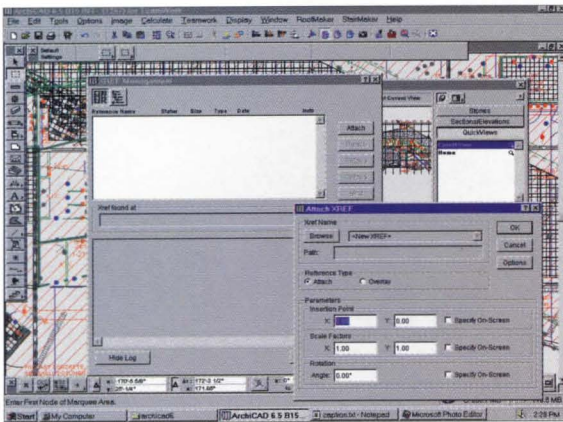
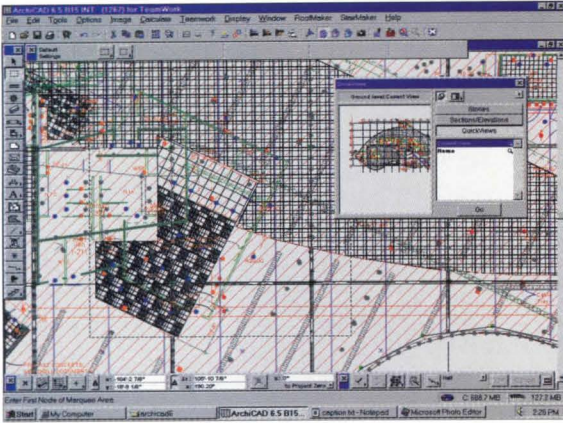
A "teamwork" feature allows an unlimited number of project collaborators to sign in and control different "workspaces" in the same project file and work on them simultaneously. A workspace can be a layer, story, or any arbitrary area in the drawing. After signing in, a network connection is not required. The system locks others out of the individual's workspace, allowing him or her to work off-line without compromising the project's update safeguards. Once reconnected, any team member on the network can see any other members' modifications.

One of the most important breakthroughs for Graphisoft is ArchiCAD 6.5's ability to create the equivalent of AutoCAD's XREF drawings, where one drawing is linked to others for reference; this process is called "hotlinking." Hotlinks can be made between drawings, to a complete project, or to a "module" (a set of construction elements placed on the floor plan). Several levels of links can be nested within one another—i.e., a referenced (linked) file can contain references of its own, but the first level can only be updated from the host file itself. If there's a modification to be made at the bottom level of a hierarchy, all the files above it must be opened. For example, if an open drawing is linked to another drawing, this second drawing must be opened separately in order to modify it; it can't be opened and revised as a referenced file. While this appears to be a shortcoming, the restriction is actually preferred by many system administrators because it allows a user to revise a detail, for instance, while the floor plan to which the detail is hotlinked is worked on by another user. Otherwise, the detail and all other referenced drawings would be inaccessible as long as one user had the floor plan open.

ArchiCAD is so data-oriented that every construction element has a unique, automatically generated identification number that is retained throughout the life of the project and can be used in data lists. This makes it easier to create data files that can be used for bills of material, facilities management, and other data-heavy chores. There's a "calculate" menu that allows data to be viewed along

continued on page 141





The screen grab (top) shows all the gridlines, which guide placement of new entities into the drawing; they're the rough functional equivalent of "construction lines" in AutoCAD. Users can attach "reference" files to the drawing (middle), which explain elements of the design. In the dialog box (bottom), the user can tell ArchiCAD to add or subtract specific drawing areas to floor plan "zones."

Peter Bach and Péter Hadadi of Technical University of Budapest won first prize in the professional category at the annual Graphisoft Design Competition with their version (facing page) of this year's theme, "The Cheap Hotel," from William Gibson's sci-fi novel, *Neuromancer*.



Computers

Acadia '99

The medium may be more the message than ever, if ACADIA '99 (Association for Computer-Aided Design in Architecture), which took place last October in Salt Lake City, is any indication. Attendees actually saw how digital media may one day render the message—the designed and constructed environment—obsolete.

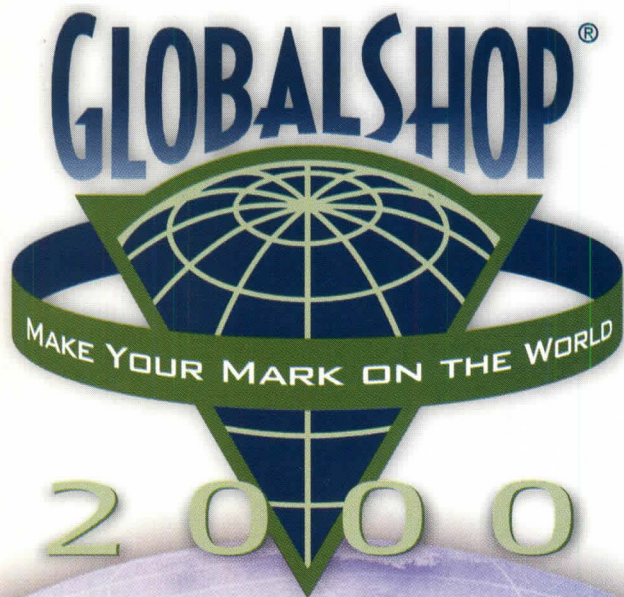
Founded in 1981 by architectural academics to encourage CAD software development, ACADIA has since evolved into a more critical organization that initiates research and examines the creative role computer technology plays in architectural education and practice. At this year's conference, hosted by the University of Utah's School of Architecture, the presentations focused on the theme "Media and Architecture." Media—the interactive, digital tools of architectural representation—now allow architects to create environments so rich and realistic that one can experience them as an ends unto themselves rather than merely sophisticated renderings of an environment not yet realized.

For instance, Guillermo Vasquez de Valasco and David Hutchison of Texas A&M's College of Architecture presented the Infinity Room, an experiment in collaborative design between remote participants. The Infinity Room allows Texas students to communicate live with colleagues in Mexico using a network of video cameras, projectors, and screens. Whereas conventional videoconferencing shows only the correspondents' heads, the Infinity Room projects full body images. Texas students "see" their Mexican counterparts as if they were actually in Texas, and vice versa. Since the viewers are present in each other's space, both parties perceive an overlap of spaces. This produces a hybrid of physical space and cyberspace—or cybrid—where both parties coexist.

Although Valasco and Hutchison designed the Infinity Room specifically for architectural education, its implications are far-reaching. As architectural media become more spatial and interactive, they will offer spatial experiences eerily close to the real thing. This virtual reality offers architects opportunities far beyond the documentation of mere physical projects. It may, in fact, redefine the nature of the discipline altogether. *Peter Anders*

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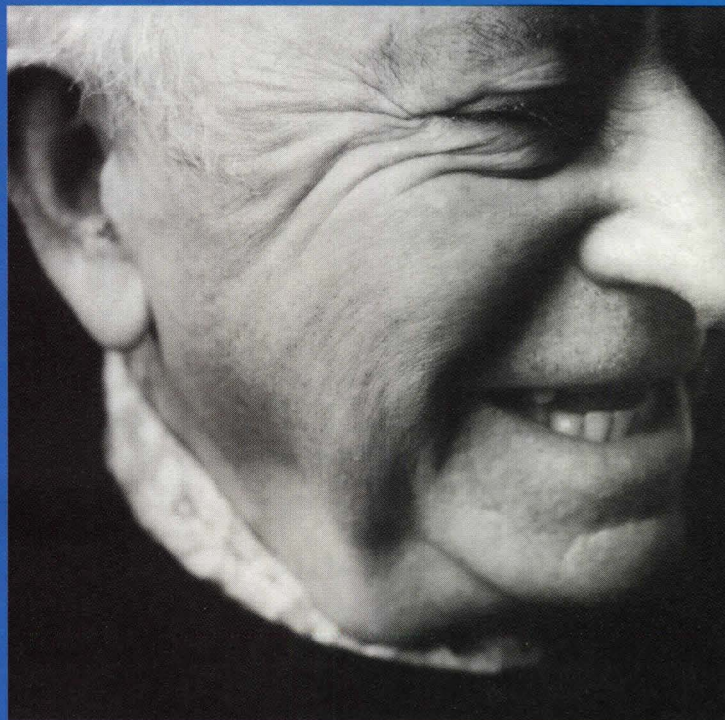
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Peter Smithson After the Rebellion

British architects Alison and Peter Smithson fought the range wars of Brutalism and the critique of 1950s modernism. **Liane Lefavre** asks whether the battle was won or lost.

Interview Husband-and-wife team Alison and Peter Smithson were remarkably multifaceted: As architects, they were credited by Reyner Banham for initiating the neo-Brutalist movement with their steel-framed Secondary School in Hunstanton (1954). As polemicists, they were founders of Team Ten, with Aldo van Eyck, Jaap Bakema, Shadrach Woods, and Giancarlo de Carlo, who converged at the meeting of CIAM in Otterlo in 1959 and incited its demise in their zeal to renovate prewar modernism with a new humanist spirit. As writers, they produced numerous articles, the *Team Ten Primer* (1961), and the classic *Ordinariness and Light* (1970). As educators, first at the Architectural Association and later at Harvard University, they inspired whole gen-

erations of architects, from Archigram to Enric Miralles. Finally, as urban designers, their Golden Lane and Frankfurt Hauptstadt plan in the mid 1960s typified their ideas about enhancing community. Since Alison's death in 1993, Peter Smithson has continued to be active as an architect, furniture designer, and lecturer. The first volume of a 1,500-page, three-volume work, encompassing their entire oeuvre, will be published later this year by Monacelli Press.



The Independent Group (from left: Peter Smithson, Eduardo Paolozzi, Alison Smithson, Nigel Henderson) in the catalog for the exhibition *This is Tomorrow*, which the group organized with *House of the Future*, in London, 1956. The shows prefigured pop art and the countercultural lifestyle experiments of the 1960s.

Liane Lefaivre: Tell us about the influence of American culture on your work. Your *House of the Future*, exhibited at the Daily Mail Ideal Home Exhibition in 1956, has been remembered as a play on idealized American domestic life.

Peter Smithson: The piece expressed a lot of the ideas in an article we wrote, "But Today We Collect Ads." We were fascinated at the time by American advertising and consumer culture. Alison had known all about the perfection of American advertising from the very austere wartime period when she was a girl. During the war she was evacuated from Newcastle and stayed with her grandmother in Edinburg. Her grandmother's cousin in New England would send American magazines and Alison, who was 13 or 14, was absolutely bowled over by the quality and excellence of the advertising. It changed her life. It didn't dawn on her until much later, but it was embedded in her. It was similar for Andy Warhol: Before he became an artist he worked as an advertising artist for a shoe company, so he [had the] capacity to render glamorously whatever material he was given, and he could switch to all kinds of imagery. Nobody here had that kind of skill then. It was a specific American capacity and she found it thrilling. It carried the vision of an entirely new way of life, open to change.

You and Alison were famously associated with neo-Brutalism by Reyner Banham. Was there an American influence too?

Mies—the American Mies, that is—was a direct influence, around 1949, before we did the *House of the Future*. The Mies I liked then, and now, was the architect of the first building at IIT [Illinois Institute of Technology]—the standard, industrial one, the Minerals and Metals Research Building, which is a different kettle of fish from the other buildings at IIT, such as Crown Hall. That was the input into our School at Hunstanton, and into Brutalism. I saw the building for the first time in 1949, in a catalog on Mies by Philip Johnson [for a show at the Museum of Modern Art in 1947]. I was from the industrial belt in the north of England—County Durham near Newcastle—which is perhaps why it struck a chord in me. I subsequently based my student thesis on it—adapting the steel work to English standards, then, eventually, rolled it over, so to speak, into Hunstanton, that first Brutalist building.

Were there any influences on your work from other visual arts?

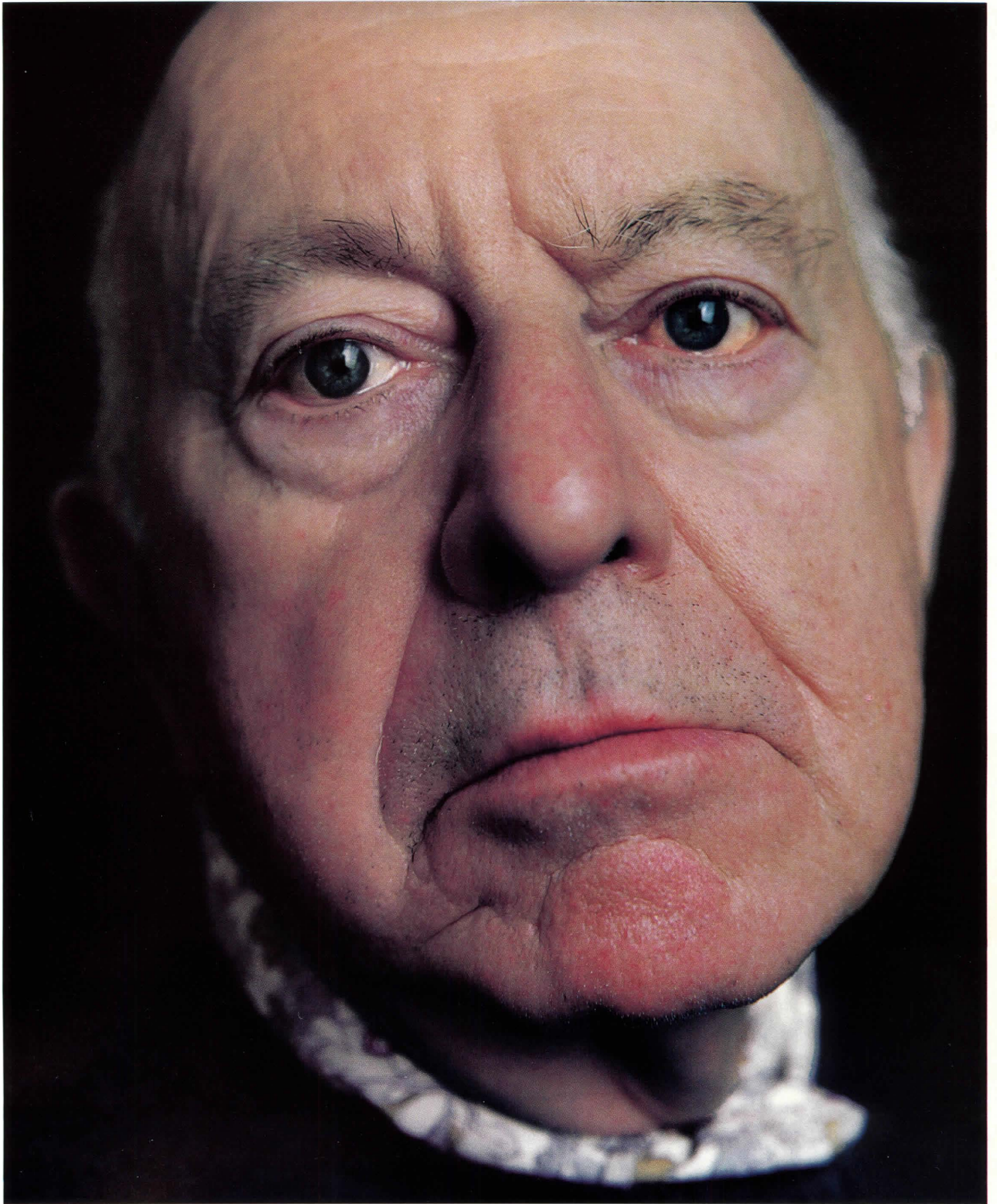
Jackson Pollock was a tremendous influence, and a revelation. We saw [his work] for the first time in 1949. The experience was a knock-out. It meant you could have a discipline that was outside solid geometry, [a shift from] an esthetic that was based on geometry to one that had an ordering which was different. It made my own intellectual switch possible. Pollock was perceived then as an utterly brainless person. Well of course, that was right! But being stupid, you might say, is the passport to being able to do good work. You can be stupid in the good sense of the term, you know. If you aren't stupid, then you're just like everyone else. Louis Kahn was considered very stupid in the same way. Did you know that? Yes. But what that meant is that he was very acute.

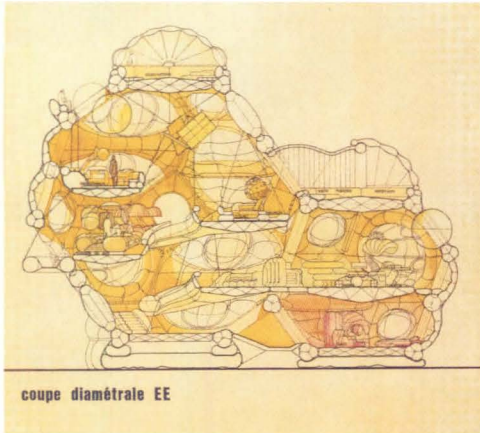
You and Alison were responsible for bringing Kahn to Europe. Were you influenced by him too?

Yes. But we weren't touched by his architecture. He hadn't yet built any of his exceptional buildings, the ones at Yale. We were fascinated by his Philadelphia Downtown Plan of 1953. You know, that single drawing with all the twiddles on it. It's the most marvelous thing he ever did! It's a representation of a city based entirely on patterns of movement, of people, not just cars—and it tried to integrate the two into a harmonious manner.

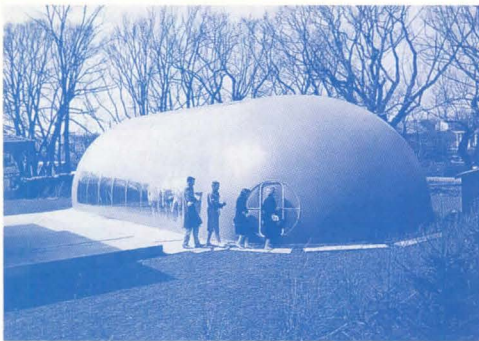
We found Kahn's Downtown Plan in Yale's *Perspecta* magazine. I don't remember who gave it to us. There was a lot of coming and going in those days. In a way, the postwar period was a repeat of the 1920s: Americans were coming to Europe in search of high art. You could say the roots of pop were the reverse: The machine object, that is, the input from mass culture or popular art, was coming from America to England at the same time America was sending its young architects to find out what was happening here in Europe. That's a fantastic thought, isn't it? We were all kind of bumping into each other at cross-purposes mid-Atlantic.

Those [American] architects weren't concerned at all with the way we were integrating the richness of their culture into ours. They came here with the thinking, like Hemingway and *continued on page 143*





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Air Apparent

To Paris architects in 1968, inflatables were the ideal agitprop, **Liane Lefaivre** discovers.

The Inflatable Moment: Pneumatics and Protest in '68

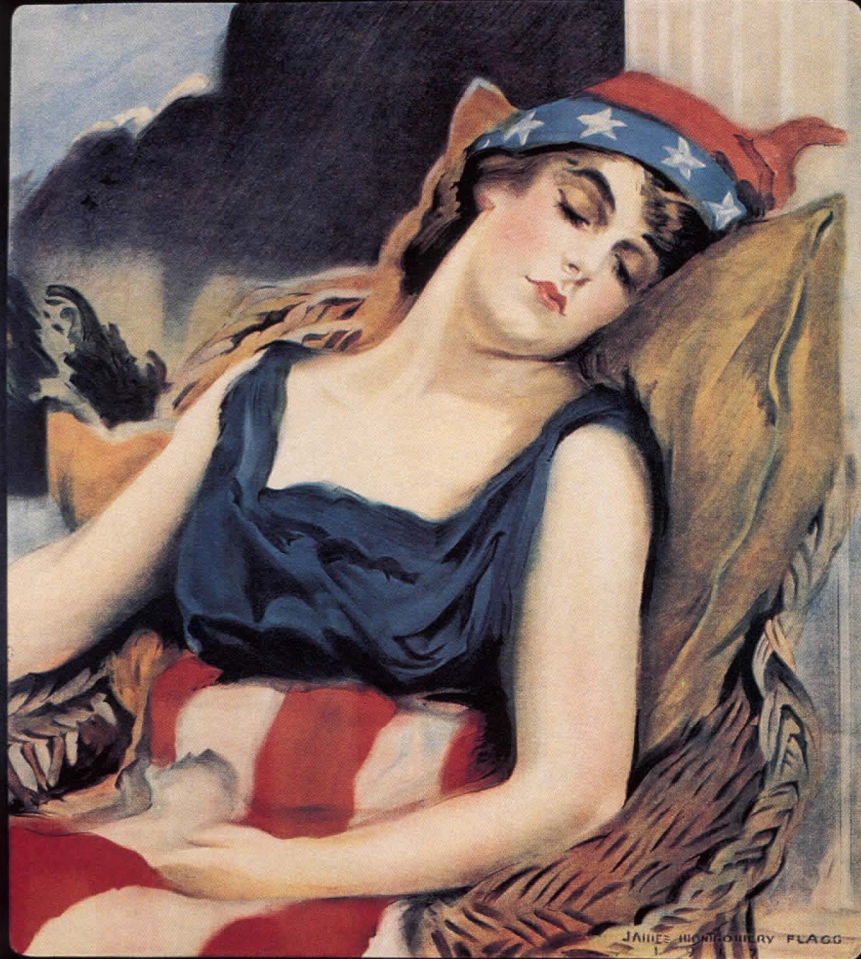
Edited by Marc Dessauce (Princeton Architectural Press)

Review Inflatables have long been the stuff of fantasy: In the 17th century, Cyrano de Bergerac dreamed of an air-filled belt that would transport him to the moon. In the 18th century, Etienne Montgolfier created a spectacle with his *globe aerostatique*, a hot-air balloon that floated above Versailles, mesmerizing the king and a crowd of thousands. And when the French Michelin brothers patented the inner tube in the late 19th century, they offered the buoyant Michelin Man as a symbol for newfound independent mobility.

The fascination with objects that could gain and lose shape with the power and nothingness of air seized architects, designers, and artists with particular force in the 1960s. The lushly illustrated exhibition catalog, *The Inflatable Moment: Pneumatics and Protest in '68*, edited by Marc Dessauce, recalls the moment when inflatables were infused with a bracing dose of *esprit révolutionnaire*. In 1968 in Paris, three relatively unknown architects—Jean Aubert, Jean Paul Jungmann, Alain Stinco—and their group Utopie found in pneumatics the energy and movement

Clockwise from top left: Jean Paul Jungmann's *Dyodon Experimental Pneumatic Dwelling* (1967); inflatable house at *Structures Gonflables* exhibition (1968, Paris); swimming pool cover by Walter Bird and Birdair Structures (1957, Buffalo).

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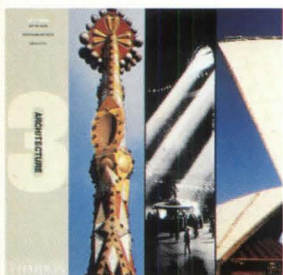
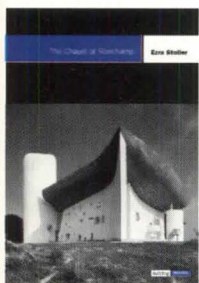
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Phaidon's "Architecture in Detail" series was one of the first—and remains one of the best—of the now-ubiquitous single-building monographs. It set the standard for what this type of book should be: informative but not repetitive; with useful technical drawings and working details, and clear, critical essays explicating program and process, context and character. The series' 60-plus titles range from the canonical (Bauhaus Dessau, Kimbell Art Museum) to the contemporary (Richard Meier's Getty Center).

Phaidon's new series, "Architecture 3," draws from "Architecture in Detail," merging three existing volumes according to their related significance. With new introductions, these intelligently themed compilations include *Lost Masterpieces* (Crystal Palace, Palais des Machines,

and Penn Station); *City Icons* (Sagrada Familia, Grand Central Terminal, and Sydney Opera House); plus *California Contemporary Houses*, *Twentieth-Century Art Museums*, and others. Three books for the price of one.

Another new series is Princeton Architectural Press' "Building Blocks," which showcases the photographs of Ezra Stoller. The series includes *The TWA Terminal* (Eero Saarinen, 1962), *United Nations* (Wallace K. Harrison, 1950), *Yale Art + Architecture Building* (Paul Rudolph, 1963), and *Chapel at Ronchamp* (Le Corbusier, 1954), with the Salk Institute, Taliesin, and others forthcoming.

These books are telling, not only about their subjects (shown in lush duotones), but also about how modern architecture came to be perceived by historians, architects, and the public. Stoller's carefully constructed, elegiac views made his subjects timeless. He was not just a recorder of but an accomplice to the modern architectural project. Now retired, Stoller's comments preface each volume, describing his experience of the work and of the architects he was effectively memorializing. *Cathy Lang Ho*

Architecture 3, Phaidon, each volume 180 pp., \$19.95.

Building Blocks, Princeton Architectural Press, each volume 96 pp., \$19.95.

that would convey their political rebellion with full doses of technopop cultural exuberance. (The exhibition appeared at New York's Architectural League in 1998.)

For the Utopie group, which also included sociologist Jean Baudrillard and philosopher Henri Lefebvre, pneumatics expressed the hope to free architecture from the weight of its traditions through totally industrialized, flexible, mobile, impermanent buildings. Utopie applied the revolutionary dictum "all that is solid melts into air" to everything from furniture to bathrooms. They were part of—and drew from—an intellectual climate that included Buckminster Fuller, British pop architects Archigram, not to mention the space-age explorations of the American military, and the critiques of the everyday by Lefebvre and Guy Debord. Pneumatic structures and objects offered an animated critique of the

Objects that could gain and lose shape with the power and nothingness of air seized the imagination of architects in Paris in 1968.

inert, of the present; as enchanting as a child's balloon, they were a lively means of "passage into a perfected future," writes Dessauce.

The exhibition and catalog valuably place the Utopie group in the context of pneumatic experimentation that preceded and succeeded them; summoning such design classics as Zanotta's clear red plastic *Blow Chair* (1967, now in full revival); and an early Frank Lloyd Wright scheme, the Rubber Village Fiberthin Airhouse for the U.S. Rubber Co., unveiled at the 1957 New York International Home Building Exhibition. Other work infused with the same *esprit* include that of Cedric Price, Walter Pichler, Hans Hollein, and Coop Himmelb(l)au.

The works of Aubert, Stinco, and Jungmann were polemic and playful, no doubt, but what set them apart from the other feverish forays into the inflatable was their rigorous constructability. They were designed to go up, not just come down. Stinco's *Itinerant Exhibition Hall for Objects of Everyday Life* was an application of German engineer Frei Otto's soap-bubble experiments. Aubert planned the workings of his dome-shaped *Traveling Theater for 5,000 Spectators* down to the 31 trucks required to transport it. Perhaps this insistence on tying utopian projects to real building practice explains why the 1960s spirit has, to a certain extent, been kept alive in France. The willingness to experiment with new materials and technologies, combined with the search for lightness, remains evident in the work of Jean Nouvel, Jacques Ferrier, and Finn Geipel et Nicolas Michelin.

The Inflatable Moment transports us to a world that seems remote, particularly after the waves of technophobia that engulfed architecture, first with postmodernism in the 1970s, then with deconstruction in the 1980s. Dessauce's exhibition and catalog are delightful reminders of what can happen when architects combine social spirit and inventiveness with new materials and technology. ■

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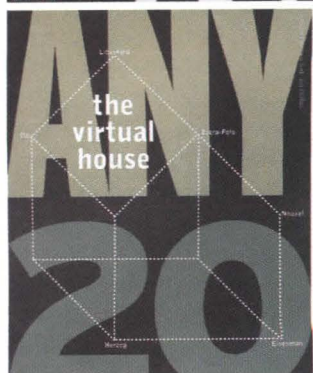
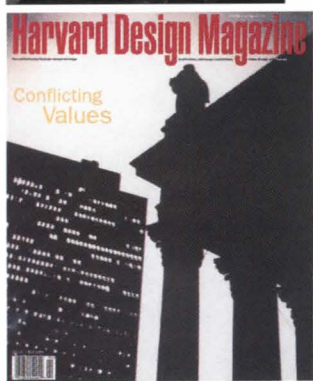
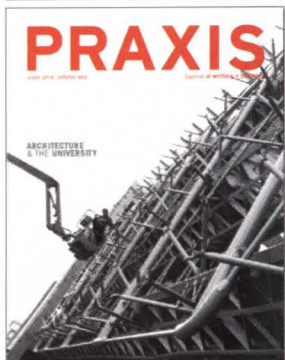
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Alphabet City This independent mixes culture, theory, and politics. **ANY** Rumor has it, the cliquish critical tabloid will cease publication this year.

Assemblage The intellectual heir of *Oppositions* is winding down after 14 years.

Aula Latin American issues are the focus of this bilingual biannual.

Center This high-end collegiate journal is Texas-based but national in scope.

Design Book Review Independent since 1983, this literary journal has moved to the California College of Arts and Crafts.

Grey Room *Assemblage's* anointed successor will have a scholarly bent.

Harvard Design Magazine This quarterly made the leap from house organ to lively general publication.

Perspecta The granddaddy of all student publications is now in its 50th year at Yale.

Praxis: Writing + Building Newcomer edited by Columbia grads attempts to bridge the academy and the profession.

Rumble This new endeavor will explore design and material culture.

Paper Architecture

What would architecture be without its discourse? **Joan Ockman** scans the current crop of journals.

Media Five years ago, as a result of both recession economics and the advent of Web publications, the “little” or specialized architectural magazine and the academic architectural journal seemed to be endangered species. Suddenly, paper periodicals are proliferating again. While two of the most notable editorial boards of recent years are preparing to pass the baton, others are being revamped and reinvigorated. Some interesting newcomers have also appeared on the scene.

Assemblage, one of the most intellectually distinguished journals to survive the roller-coaster years of postmodernism, has decided to close shop after issue 41, due in April. Founded in 1986 by Harvard professor Michael Hays and modeled to some extent on another tendentious little magazine, *Oppositions* (published from 1973 to 1984), *Assemblage* will have, in its editors' judgment, fulfilled its historical mission. Hays makes that mission and *Assemblage's* genealogy explicit in two anthologies he recently edited, *Oppositions Reader* (Princeton Architectural Press, 1998) and *Architecture Theory Since 1968* (MIT Press, 1998). *Assemblage's* anointed successor is *Grey Room*, to debut near the end of 2000, also published by MIT Press. Edited by Branden Joseph and Felicity Scott (both at Harvard) and Reinhold Martin (at Columbia), *Grey Room* is aimed at the same academic readership as *Assemblage* and *Oppositions*. However, its scholarly purview has been updated to include not just architecture and art but also “media technologies.” Despite its drab title—intended to suggest the discursive space between the “white cube” of the art gallery and the “black box” of contemporary technology—and the unfortunate decision to exclude design projects from its content (a regular feature of *Assemblage*), *Grey Room* promises to be intellectually rigorous and on the cutting edge of critical debate.

Likewise winding down is *ANY*. Directed by Cynthia Davidson since its inception in 1991, the *ANY* editorial program has produced a large-format “critical tabloid” and a series of volumes based on annual conferences, with titles based on words prefixed by “any.” Rumor has it that one more issue of the tabloid will follow the double issue on Manfredo Tafuri (number 25/26), appearing this month. Meanwhile, as the Situationists said, the avant-garde never gives up. Davidson is in the process of putting together a new venture, *continued on page 149*



City

Urban Outfitters

Paris' *pissoirs* put JCDecaux on the map—or rather, on many maps: In 1981 French president Jacques Chirac requested the company, whose bus shelters he admired, do something about the city's unsightly, unseemly public toilets. JCDecaux began as a billboard company 35 years ago and had branched into bus shelters, which it manufactured and gave to cities in order to sell the shelters' surfaces for advertising.

Its solution to the *pissoir* problem was an elegant design that enhanced—without disrupting—the streetscape, using technology (automated flushing, materials that resist vandalism) that addressed what had made street furniture difficult for cities to maintain. Not surprisingly, JCDecaux is now the world's largest supplier of street furniture, with 160,000 pieces—including kiosks, newsstands, street lights, trash bins, telephone booths, and more—placed in over 1,200 cities.

Street furniture can do more than fulfill a city's obligation to provide amenities that help the public use and understand cities easily and comfortably. It can also promote an identity or improve an image, which is why JCDecaux frequently teams with well-known designers, from Philippe Starck to James Polshek, to develop its lines of "microarchitecture."

JCDecaux's two top-selling lines are Sir Norman Foster's and its in-house line, Heritage. But as one city after another acquires the same or similar street appointments (note San Francisco, pictured above, opted for the Euro-nostalgia of the Heritage line), the cities may begin to lose their individuality. The subsequent advertising invasion has also led to citizen resentment and protest.

Still, cities need street furniture and few can afford the high design level and quality that JCDecaux and other manufacturers offer without acquiescing to the advertising trade-off. But cities can—and some do—ask for custom designs that are attuned to their specific character and needs. Already pressured in many ways into images of global sameness, cities may preserve their unique personalities by being as attentive to their street details as they are to their architecture.

Cathy Lang Ho

My World Is Your Oyster

Richard Ingersoll surveys how tourism is changing civic life.

City The tiny city-state republic of San Marino, located near the Adriatic coast in central Italy, has a population of 25,000, yet only 10 families reside in its historic hilltown. How? The power and pressure of tourism has transformed the republic's historic urban center into little more than an image of what it once was. It now receives 3 million tourists per year, while the majority of the citizens reside in American-style single-family houses in the sprawl that consumes the surrounding valleys. The myth of citizenship in San Marino, which is made visible through annual civic rituals enacted in the "historic" public spaces of the town (most of the buildings were given false medieval facades during the late 19th century), has become little more than a marketing strategy to generate a consumable image. In the Tourist City at the end of the millennium, the distinction between "real" and simulated environments is only a matter of degrees.

During the 1990s tourism allegedly surpassed petroleum, an industry with which it is intimately linked, as the world's greatest generator of revenue. According to the United Nation's World Tourist Organization, half the planet's 7 billion inhabitants currently can be classified as tourists, and of those, one-fifth travel abroad. One in nine jobs in the world is tourism-related. Such statistics add substance to political thinker Francis Fukuyama's infamous polemic on "the end of history," given that tourist consumption of historic places tends to isolate their inhabitants from the continuing historical realities of daily life. The metamorphosis of civic reality into a marketable image has been defined by John Urry in *The Tourist Gaze* (Sage, 1990) as the "tourist bubble"—a safe, passive, usually ethnocentric experience of the environment that necessarily reshapes a place to conform to the "universal" needs of the tourist trade.

Tourism has become an inescapable urban force, in part because its economic returns are so stupendous. Still, its civic and human effects can generate less optimism. While local unskilled labor can be grateful



for new service jobs (though often without benefits or union protection), local economies do not necessarily thrive. Multinational companies from airlines to hotel chains, to entertainment corporations, to food franchises, to travel operators are the prime beneficiaries of this flourishing trade, grossing up to 70 percent of tourist expenditures.

Whether municipalities—which guarantee infrastructure, public services, and maintenance—gain much from tourism, however, remains a sticky question: Do the indirect revenues received through visitors' expenditures cover the burden of water provision, sewage disposal, and public transportation incurred by these well-fed transients? Sometimes. Many tourist cities, such as San Francisco, have for decades imposed a hotel tax to help finance public services. In 1997, the city of Florence began to charge tour buses a nominal tax for the maintenance of public transportation. Venice, which, as an island, would be as easy to control as a theme park, will soon institute a system of entry tickets to the city in order to control its exceptional number of visitors, this year numbering about 13 million.

However, when, as in many cases, the tourist bubble inflates to encompass an entire city, civic consciousness—including citizens' ability to influence and participate in a shared civic life—is inevitably suffocated. Indeed, the startling reduction of urban residents in the historic centers of many European cities, like San Marino, is a direct result of the rise of tourism. (The populations of Venice, Florence, and Rome have all declined by over 50 percent—a rate of depopulation comparable only to that caused by the Black Death.) Great metropolises with dynamic demographics, such as London or Tokyo, are better able to absorb the tourist bubble without losing the productivity, variety, and conflicts that generate an evolving condition of civic identity. Tourist ghettos, on the other hand, such as Paris' Beaubourg or Manhattan's recently improved Times Square, are the dubious triumphs of publicly sponsored "urban renewal" programs, favoring the *herding instinct* of tourists while inadvertently exacerbating civic displacement.

With half the world already a tourist, there is a need for more creative ways of integrating tourist bubbles into a city's variegated fabric with-



Art

Uncommon Ground

New York City-based Dia Center for the Arts' recent acquisition of *Spiral Jetty* by Robert Smithson (1970)—a 1,500-foot-long, 15-foot-wide basalt installation coiling into Utah's Great Salt Lake—will ensure the preservation and accessibility of this cornerstone of the Land Art movement. An outgrowth of the countercultural impulses of the 1960s, conceptual artists began using the natural environment as their studio, canvas, and medium, challenging the “validating” frame of traditional art galleries and museums. The temporality and site-specificity of earthworks also expressed artists' unwillingness to produce art as a commodity.

Smithson intended *Spiral Jetty* to appear and disappear as the lake rose and dropped, showing the impact of nature's cycles on even the largest of human constructions. But *Spiral Jetty* was built at a time when the lake level was unusually low, so it has been submerged for most of its

existence. Before the artist died in a plane crash in 1973, he contemplated adding more local basalt rocks to lift the sculpture, but this was never done.

Under the auspices of Dia, *Spiral Jetty's* landmark status will be not only historical, but physical as well—perhaps more physical than Smithson (who once said, “One's mind and the earth are in a constant state of erosion”) ever intended. Dia will restore and maintain the sculpture, and is currently evaluating whether to elevate it. It plans to facilitate visits to it as well, along the lines of how it administers Walter de Maria's *Lightning Field* (1977, New Mexico), which is immensely popular with architects. Visits to the *Lightning Field*, which Dia helped build and now owns, are controlled through an application process and a loosely structured itinerary wherein small groups of people are shuttled to the site and housed by Dia, to minimize human impact on the work.

“Nature is never finished,” Smithson wrote in 1972. Dia, leading guardian of the Land Art movement's fragile legacy, understands this sentiment well, as it endeavors to save *Spiral Jetty* while respecting its intentions.

Cathy Lang Ho



Tourist ghettos favor the herding instinct of tourists while inadvertently exacerbating civic displacement.

out damaging the equilibrium and authenticity of its daily life. The planning of Barcelona during the 1980s under the guidance of Oriol Bohigas provides a compelling alternative with its program to “sanitize the center and monumentalize the edge.” The city's infrastructural improvements and cultural investments reached not only the historic center but many peripheral districts. The new freeways, subways, parks, libraries, and sports complexes were designed with a competitive sense of style, while their programmatic and geographic diversity redistributed the flow of tourists, inspiring civic identity in districts that had been negligible as urban resources.

Aside from pursuing equitable methods of distributing the profits of tourism and paying for the public services consumed by it, it is crucial for municipalities to ensure the survival of the urban realm in the face of the unpredictable but ineluctable invasion of mass tourism. Whether genuine, historic, tourist-attracting places or places interested in generating tourist attractions, cities must recognize that their own social viability depends on the protection of variety. With each investment in tourist promotion—including historic preservation, new museums, airports, malls, stadiums, and convention centers—politicians, sociologists, and designers must promote policies that offer equal incentives for the production of goods and services that balance, or even pose a healthy conflict to, the goods and services that cater only to tourists. Otherwise, the tourist bubble will blow over what remains of *civic life*, replacing its social functions while preserving its historic forms. ■

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The Primitive Hut

From *An Essay on Architecture* By Marc-Antoine Laugier



It is the same in architecture as in all other arts: Its principles are founded on simple nature, and nature's process clearly indicates its rules. Let us look at man in his primitive state...without any aid or guidance other than his natural instincts. He is in need of a place to rest. On the banks of a quietly flowing brook he notices a stretch of grass; its fresh greenness is pleasing to his eyes, its tender down invites him; he is drawn there and, stretched out at

leisure on this sparkling carpet, he thinks of nothing else but enjoying the gift of nature; he lacks nothing, he does not wish for anything. But soon the scorching heat of the sun forces him to look for shelter. A nearby forest draws him to its cooling

A Brief History By Joseph Rykwert

"Let us not lose sight of the little hut." That is the essence of Abbé Laugier's message, and this issue of *Architecture* shows we have heard his admonitions. Since Laugier published his *Essai sur l'architecture* in 1753, and long before, the "little hut" has been the backdrop for disputes about the first principles of architecture and building. The hut turns out to be an odd little construction. Laugier, who devised it, was an amateur (as he calls himself), a Jesuit man of letters with a reputation as an overzealous preacher, with views on many matters (music, for example, and Venetian politics) besides architecture.

His *Essai* was a polemic at a time of great change. The lush, flowing, and "naturalistic" manner, known at the time as the

rocaille (and later as rococo), celebrated a freedom from the style associated with the reign of the "Great King," Louis XIV, and was in turn frozen solid by a new passion for antiquity. But some, Laugier included, felt this passion was too concerned with detail and neglected the original and true principles of ancient architecture. Those principles had to be sought beyond history, in human nature itself.

A new figure improvised by philosophers to help their musings on the origins of society and of law—the noble savage—could be summoned to help. Laugier has this primitive man (the gender is explicit) reclining, wanting nothing, on a green meadow beside a riverbank. But one might ask, How did he get

shade; he runs to find a refuge in its depth, and there he is content. But suddenly mists are rising, swirling round and growing denser, until thick clouds cover the skies; soon, torrential rain pours down on this delightful forest. The savage, in his leafy shelter, does not know how to protect himself from the uncomfortable damp that penetrates everywhere; he creeps into a nearby cave and, finding it dry, praises himself for his discovery. But soon the darkness and foul air surrounding him make his stay unbearable again. He leaves and is resolved to make good by his ingenuity the careless neglect of nature. He wants to make himself a dwelling that protects but does not bury him. Some fallen branches in the forest are the right material for his purpose; he chooses four of the strongest, raises them upright and arranges them in a square; across their top he lays four other branches; on these he hoists from two sides yet another row of branches which, inclining towards each other, meet at their highest point. He then covers this kind of roof with leaves so closely packed that neither sun nor rain can penetrate. Thus, man is housed. Admittedly, the cold and heat will make him feel uncomfortable in this house which is open on all sides but soon he will fill in the space between two posts and feel secure.

Such is the course of simple nature; by imitating the natural process, art was born. All the splendors of architecture ever conceived have been modeled on the

there? How had he satisfied his previous needs? Such questions will be left begging, for the figure is meant to be the original human—not the ancestor of any tribe or nation, but of the idea of “man,” of humanity proper. His progress from meadow to forest, from forest to cave is intended not as an historical account but a conceptual one. His inherent humanity has also led him to imitate nature. That first hut, according to Laugier, reconciles the advantages of the two natural models of shelter—the forest and the cave—but avoids their disadvantages. All art is born from this first synthesis and this first imitation of nature.

Laugier’s readers would have read other stories about the first human dwellings. The most famous was that of Vitruvius, written 1,800 years earlier, which provided a legendary account

of the origin of building for generations of architects. But it was too prolix for the 18th-century reader, too digressive. The architects of his own time, Laugier felt, had to be reminded of the kernel of the legend. He thought the primitive hut taught a timeless, primary, and ultimate lesson.

The clarity of the type is stunning: a structure of posts supporting a double-pitched roof over some kind of beam or cornice. It is the true type of all building, even if the spaces between the posts must be filled in to satisfy the demands of comfort. Walls, doors, windows, and everything else are licenses, expressions of indulgence or caprice. But only this primal type can produce beauty in architecture. It has been the model for builders through the ages, one to which they would need to return over and over again, as they had done through-

little rustic hut I have just described. It is by approaching the simplicity of this first model that fundamental mistakes are avoided and true perfection is achieved. The pieces of wood set upright have given us the idea of the column, the pieces placed horizontally on the top of them the idea of the entablature, the inclining pieces forming the roof the idea of the pediment. This is what all masters of art have recognized. But take note of this: Never has a principle been more fertile in its effect. From now on it is easy to distinguish between the parts which are essential to the composition of architectural Order and those which have been introduced by necessity or have been added by caprice. The parts that are essential are the cause of beauty, the parts introduced by necessity cause every license, the parts added by caprice cause every fault. This calls for an explanation; I shall try to be as clear as possible.

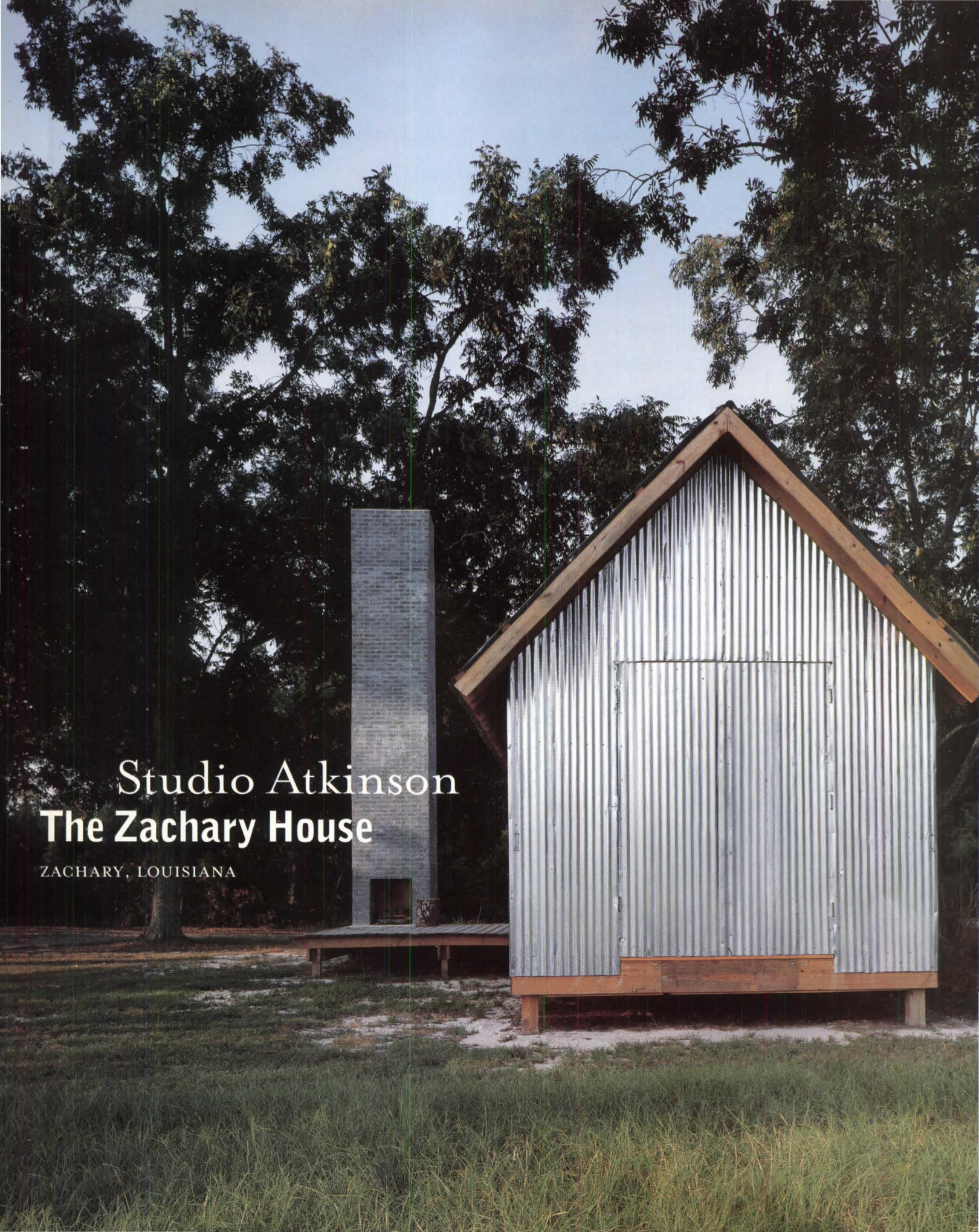
Let us never lose sight of our little rustic hut. I can only see columns, a ceiling or entablature, and a pointed roof forming at both ends what is called a pediment. So far there is no vault, still less an arch, no pedestals, no attic, not even a door or a window. I therefore come to this conclusion: In an architectural Order only the column, the entablature, and the pediment may form an essential part of its composition. If each of these parts is suitably placed and suitably formed, nothing else need be added to make the work perfect. (Courtesy Hennessey + Ingalls)

out history. "Never," Laugier asserted, "has a principle been more fertile in its effect."

The whole apparatus of classicism—orders, columns, entablatures, and the pediments they carried—were merely emulations of the type. Anyone who compromised the columns, or set a pediment over the central part of a wide building (as many architects of the time did) offended the type. Having been so pithily set out by Laugier, the principle proved to be more fertile after him than it had been in previous centuries.

The notional priority of the point-support system was reasserted half a century after Laugier's *Essai* by Jean-Nicolas-Louis Durand in his lectures at the École Polytechnique, first published in 1802 and often reprinted in the 30 years following. They became one of the most important

sources for 19th-century architects. Durand explicitly rejects the model of the primitive hut, as he did any metaphoric reference in architecture. Yet he remained dogmatic about the primacy of the column as a structural element. There are therefore more freestanding columns screening 19th- and even 20th-century public buildings in Paris, London, Washington, and Calcutta than there had ever been before Laugier and Durand. The principle has insinuated itself—slightly modified—into the Five Points, which Le Corbusier made the rule of a new architecture in 1926. Without the pilotis as the essential structural element, there could not have been a free plan. The principle has turned out to be much more fruitful than Laugier ever could have supposed, and in ways he could not have foreseen. ■



Studio Atkinson
The Zachary House

ZACHARY, LOUISIANA



Designer Stephen Atkinson refined the basic dogtrot type into a house for his parents (left), increasing the roof's pitch, cladding the walls and roof in corrugated galvanized metal, and keeping the wall openings to a minimum. Shutters in the south (top) and north (above) facades conceal glazed double doors.

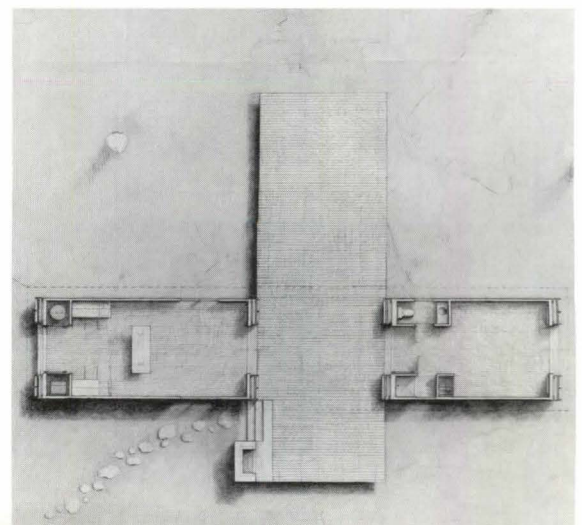
BY NED CRAMER

More than halfway through Laugier's *Essai sur l'architecture*, well past the celebrated opening passage about the primitive hut, is another, related intellectual gem: a section called "On How to Observe *Bienséance* in Buildings." It's about architectural propriety, or, as Laugier himself put it, the imperative that "a building is neither more nor less magnificent than is appropriate to its purpose." The French invented etiquette, after all, and they expect it to be followed in architecture as in human interaction.

Southerners share this fascination with manners—where else in America do kids still address their parents as "ma'am" and "sir?"—which may explain a decorous little house outside Zachary, Louisiana. The designer, 32-year-old Stephen Atkinson, grew up in nearby Baton Rouge, and designed the project—his first in independent practice—as a country retreat for his parents. Atkinson wisely

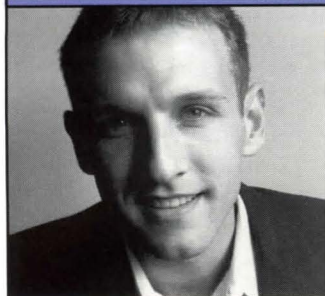


Atkinson's modified dogtrot plan comprises a kitchen and living area and a bedroom, divided by a deck (above). A freestanding, concrete-brick fireplace (facing page, at left) rises among a stand of pecan trees. Double doors lead from the deck to the living room, with its built-in table (facing page), and to the bedroom. Atkinson's father, a retired dentist, built the wood-framed house with the help of friends.



Plan 9' >



Debut	Studio Atkinson	Boston
	<p>Stephen Atkinson has been a designer in the Boston office of Machado and Silvetti Associates since his graduation from Harvard University's Graduate School of Design in 1993. In addition to teaching architectural studios at schools in and around Boston, Atkinson has been building his private practice. The Zachary House is his first completed project; he has recently finished construction drawings on a chapel for a Catholic parish in Alamogordo, New Mexico. Recently, he received an award from the ar+d Emerging Architecture competition sponsored by <i>Architectural Review</i>.</p> <p>Principal: Stephen Atkinson</p>	



THE ZACHARY HOUSE
ZACHARY, LOUISIANA

CLIENT: John and Brenda Atkinson
ARCHITECT: Studio Atkinson, Cambridge, Massachusetts—Stephen Atkinson, Thomas Lehmann (project team); John Atkinson, Bill Roe, Emmerine Womack, Major Clark (construction team)
COST: \$45,000
PHOTOGRAPHER: Timothy Hursley

determined to keep the design simple. “Young architects tend to go overboard with their first project,” he says. “I wanted to avoid that.”

Atkinson accordingly used a humble residential type—the dogtrot—that’s common throughout the South, thanks to its straightforward wood-frame construction and the clarity of its layout: two rooms bisected by a breezeway. He carefully adapted the dogtrot’s limited repertoire of parts, as circumstances and his intellect require.

Atkinson extended the breezeway between the two rooms into a long deck perpendicular to the house. A tall, freestanding masonry chimney on one side of the deck acts as a foil to the low house, and marks the adjacent stairs. The designer also increased the typically shallow pitch of the dogtrot roof to 45 degrees, giving the house’s north and south faces the immediacy of a child’s drawing.

Corrugated metal clads not only the roof, which is usual in a dogtrot, but the exterior walls, where local builders prefer wood siding. This strongly relates the house to farm outbuildings, which regularly feature corrugated siding. The windows are floor-to-ceiling strips of corrugated, translucent fiberglass on the outside that blend with the metal, and flat plexiglass panels on the interior, that blend with the gypsum-board finish. The only other openings in the house are four sets of glazed double doors, symmetrically located at each end of the two rooms. Corrugated-metal shutters can be closed, flush to the wall, to conceal the doors.

By encouraging material consistency, keeping openings in the walls to a minimum, and simplifying the building’s form, Atkinson makes the building seem more monolithic. In fact, the house’s form is so totemic, so familiar, that it seems to have a personality, albeit an empathetic rather than emotive one. Its mood relies on climatic and seasonal changes, and reflects the impressions of the person looking at it.

Despite the deftness and subtlety of the alterations of the dogtrot type, some locals have taken a dislike to the house; here the question of propriety gets interesting. According to Atkinson, they don’t understand why a doctor would choose to live in a house that’s a combination of a poor man’s shack and a barn, and they worry that it’s a condescending parody. The designer intended no harm by transforming a workaday model into high architecture.

Atkinson’s exceptional house exemplifies a problem endemic to modern architecture: The architects’ beloved vernacular is not a blank slate. The laypeople who build dogtrots and barns are far from noble savages living in a cultural vacuum, and these buildings are imbued with meaning for them. Atkinson has equally strong feelings. As a child, he spent many summer nights on this property, in just such a shed, and his love of the type is written all over the new house. It’s a shame not everyone reads it the same way. ■



The house sits at one edge of a large, grassy field (above and facing page, bottom), against a row of pines. Translucent panels help illuminate the living room (facing page, top); the double doors and shutters can be opened to create a vista through the house.

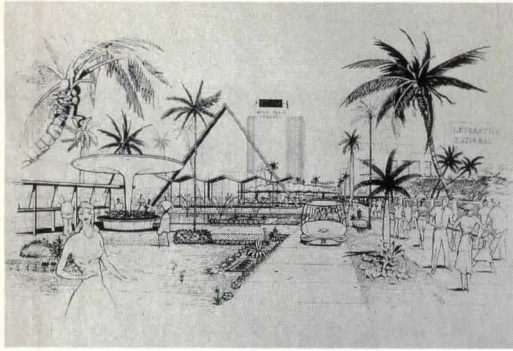
Zapata's pavilion
points to the future,
breaking through
the aspic just as
the surrounding
buildings did in
their heyday.

Reflecting pools flank Carlos Zapata's gateway structure (above) at the west end of Lincoln Road in Miami Beach. An enclosure of tilted sheets of glass (facing page) will eventually house information for tourists. The structural columns and cables are visible through the glass.



Wood and Zapata
Lincoln Road Gateway Structure

MIAMI BEACH



Zapata's pavilion is a contemporary version of the shelters (left top and bottom) built along Lincoln Road during its 1960s heyday by legendary Miami Beach architect Morris Lapidus. The new building's dramatically arced roof (above) cantilevers toward the street through two traffic lights. A portion of the glass enclosure rises from one of the two pools around the pavilion (facing page, right and far right).

BY JOSEPH GIOVANNINI

Sometimes the earnest restoration of an historic district amounts to urbanism smothered in sentimentality, even on a vibrant art deco and moderne street like Miami Beach's Lincoln Road. At the west end of that famous pedestrian mall, Carlos Zapata of the Boston firm Wood and Zapata has just completed a visitor's pavilion that points to the future, breaking through the aspic just as the surrounding buildings did in their heyday from the 1930s through the 1950s.

Not yet outfitted with booths and automated information machines, the glass-and-metal-clad structure, which has a profile midway between a surfboard and the Concorde, seems tethered to the ground rather than supported by it. "It's like a wing about to take flight," says Zapata. A glass enclosure leans toward a shallow reflecting pool, while a fountain of water sandwiched between leaning planes of glass trails in the structure's wake.

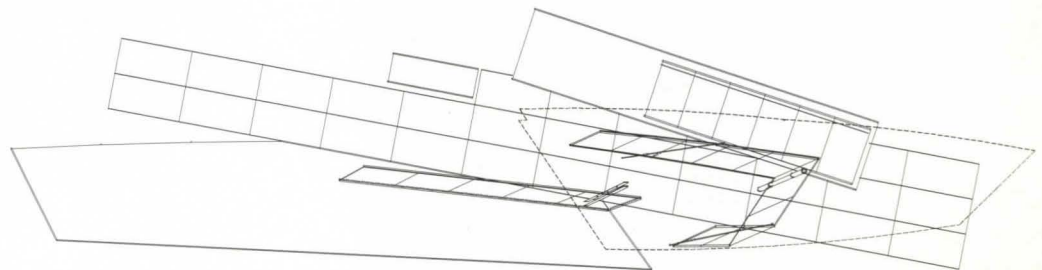
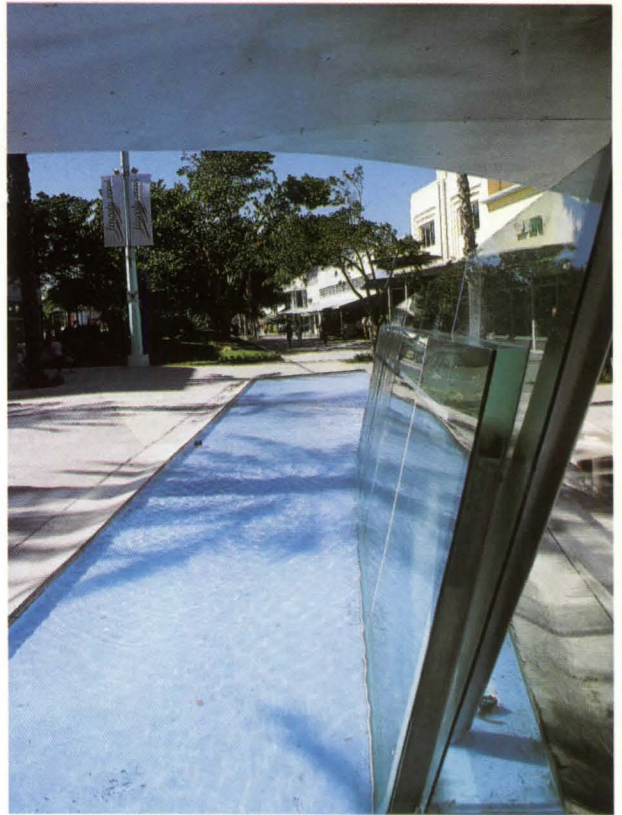
Zapata achieves a maximum effect with a minimum of means: The dynamically shaped, radically cantilevered roof—a grid of steel and aluminum ribs—is part of a tensegrity structure of columns and cables acting together in compression and tension. Two columns support a spine

within the roof, while two tensor cables anchored in the ground stabilize it laterally and prevent the wind from lifting it. The science of the structure is artful; its complexity manifests itself as coordinated simplicity.

Zapata's pavilion seems caught in a force field that draws the building and stretches its parts, making it list in the direction of motion. Tilted in two directions, the design breaks through a static urban corner with a gesture that posits dynamism as its fundamental thesis. Zapata has updated the primitive hut with notions of movement and change.

The implied movement gives the pavilion an athletic physicality that cues an empathetic response in passers-by, inviting them to lean into its physics like spectators "feeling into" a runner's effort to cross the finish line. With a glass base that dissolves in its own reflections, the building has no apparent mass. The roof's arc and tapered edge deny its actual heft. Not the least of Zapata's accomplishments is his mastery at detailing the roof and glass edges into a seamless whole.

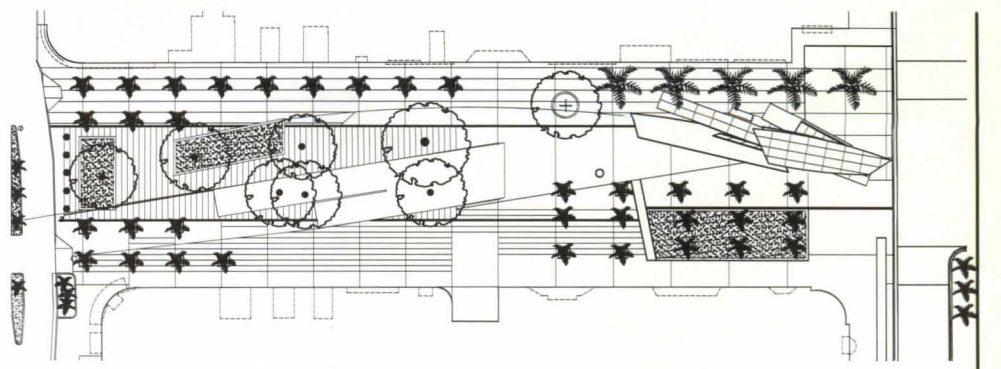
Though small, the pavilion is extremely sophisticated structurally, esthetically, and conceptually. And in its position between stoplights at the beginning of Lincoln Road, it succeeds in its immediate charge as the lead building in a district that risks lapsing into the smugness of a chic, historical style. ■



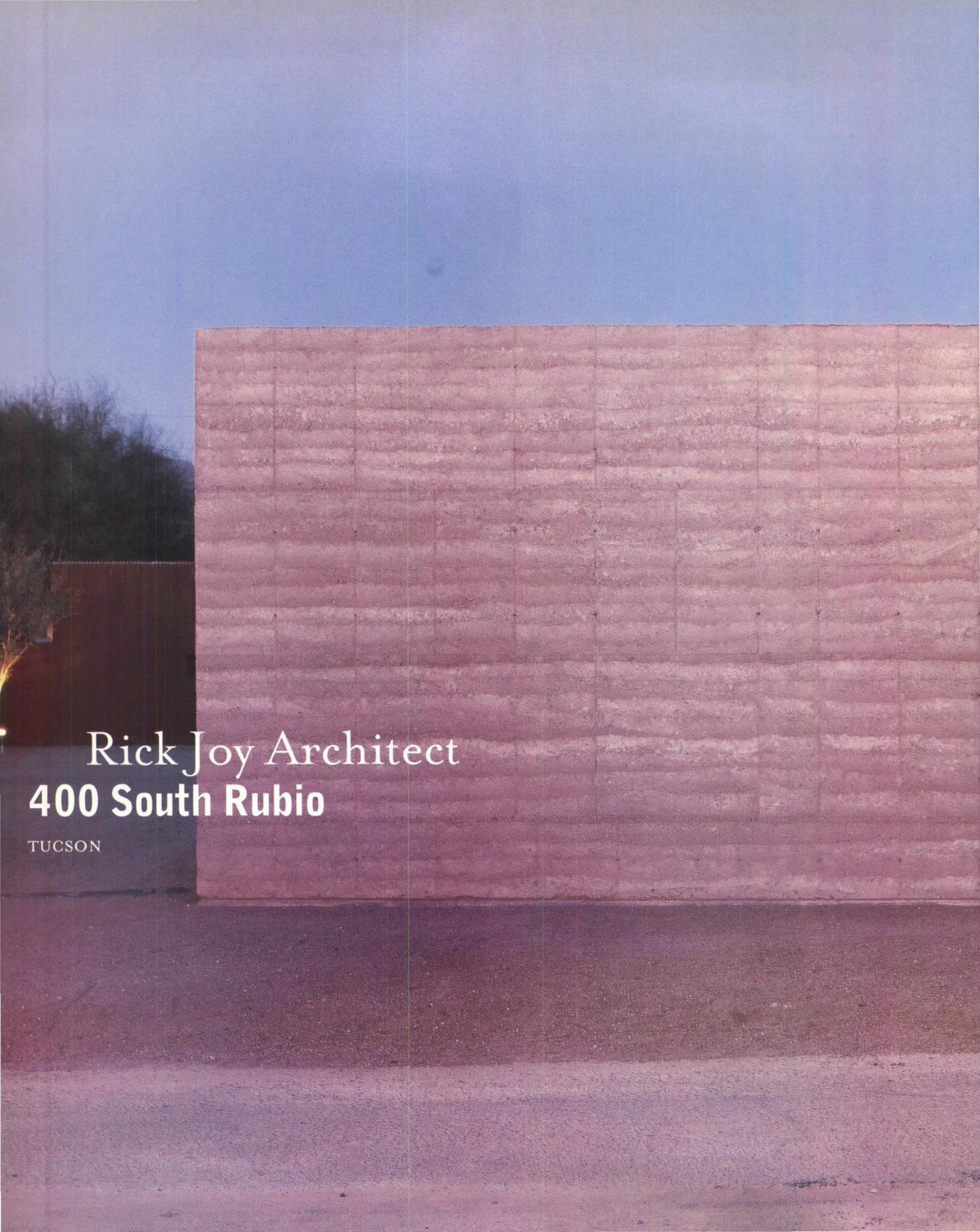
Plan 19' ^

**LINCOLN ROAD GATEWAY STRUCTURE
MIAMI BEACH**

CLIENT: City of Miami Beach
ARCHITECT: Wood and Zapata, Boston—
 Carlos Zapata, Benjamin Wood
 (principals-in-charge); Anthony
 Montalto, Rolando Mendoza, Fred
 Botelho (design team)
ENGINEERS: William Faschan, Leslie E.
 Robertson Associates (structural)
GENERAL CONTRACTOR: S.I. Nicholas
COST: Withheld at owner's request
PHOTOGRAPHER: Laura Paresky



Site plan 31' ^



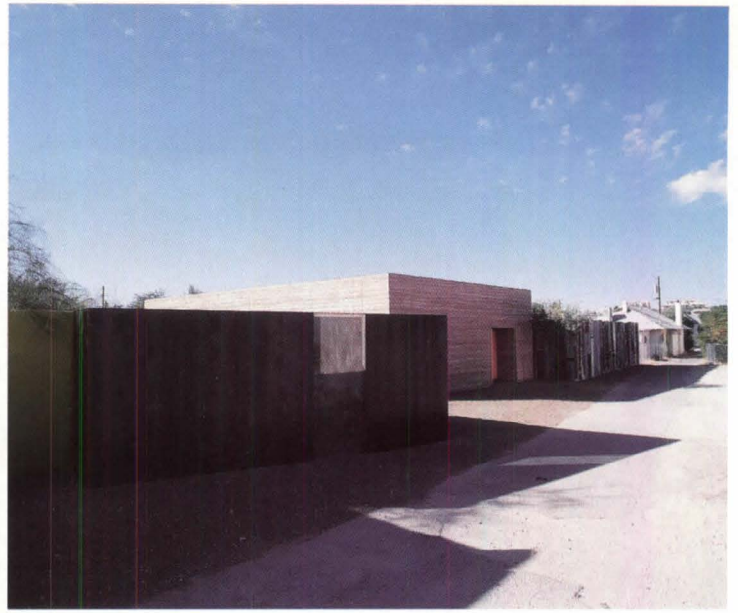
Rick Joy Architect
400 South Rubio

TUCSON

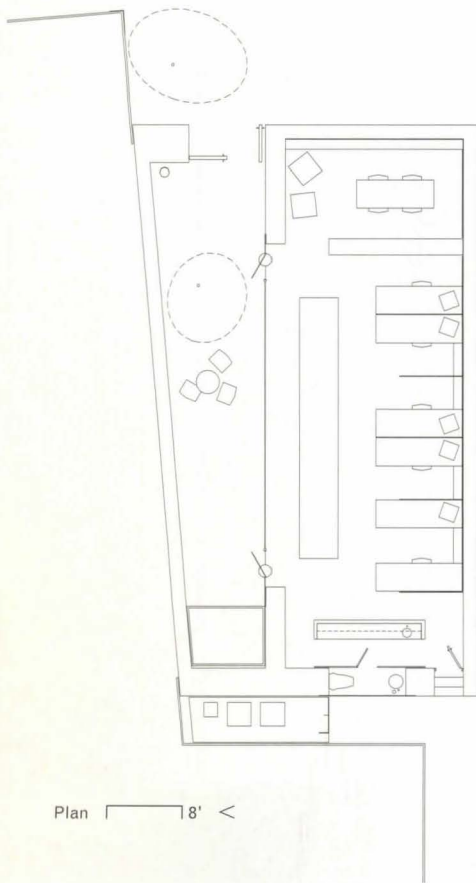
Joy's search for the origins of a new desert architecture draws on the straightforward building traditions of Hispanic and indigenous cultures.



Joy's studio (these pages) presents itself as a monolithic block of rammed earth in Tucson, Arizona's sometimes ramshackle Barrio Viejo. A deep opening in the east-facing street facade leads to an entrance courtyard.



The studio's massing respects the scale and rhythm of the street (above right). A small door in the rear, west facade (above left) opens directly into the studio (facing page). A skylight illuminates the studio's east wall (background). Joy, a former cabinetmaker, designed the workstations, table, and shelves.

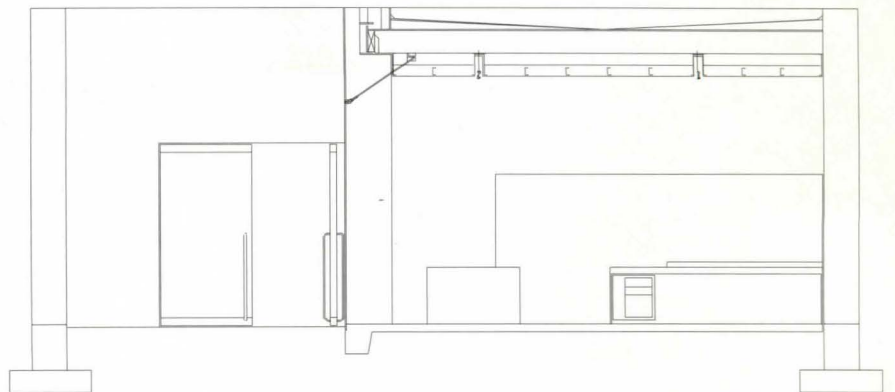


BY MAX UNDERWOOD

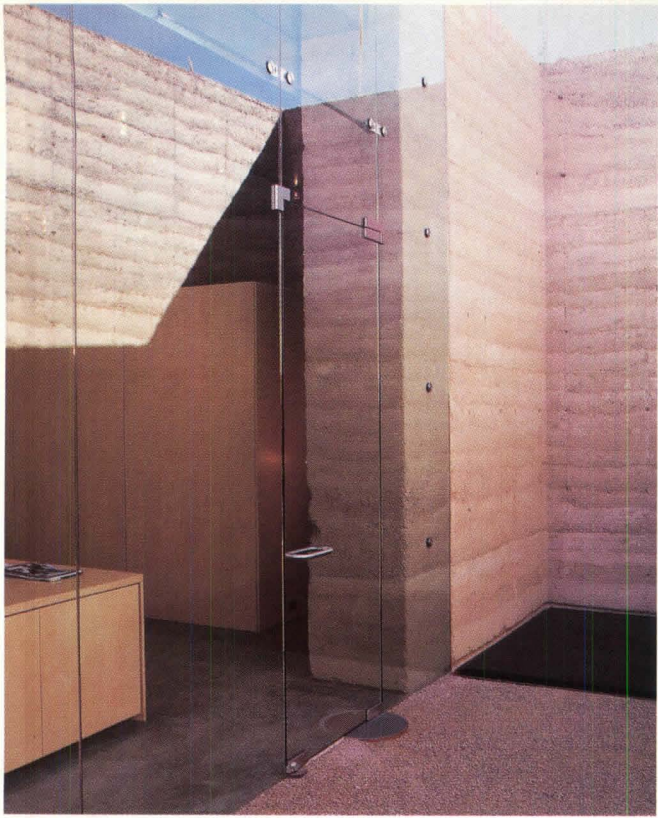
Two things immediately strike visitors to Rick Joy's recently completed studio in Tucson, Arizona's Barrio Viejo. First, there is the physical presence of the Sonoran desert, with its intense sunlight and surreal native vegetation, the lack of water, and the dry mosaic of fractured earth that constitutes the desert floor. There is also a deeply committed architect who continues to search for the generative origins of a contemporary architecture derived from the essences of his place and time.

In the 18th century, Laugier searched for the origins of architecture in his *Essai sur l'architecture*. Joy's search for the origins of a new desert architecture is equally penetrating and multifaceted, drawing on the straightforward building traditions of indigenous and Hispanic cultures that have inhabited the Southwest for centuries. At their core, these traditions embody a logic about how to build in and live harmoniously with this harsh environment. The modest buildings of present-day Barrio Viejo are constructed of materials salvaged from the agricultural hinterland and the desert. Along its narrow streets and pedestrian-scaled blocks, a typical structure has thick bearing walls of adobe that support a wood-framed roof covered in corrugated metal. Colorfully painted, handcrafted doors and windows accent the simple palate.

Joy's studio has been reduced to similar essentials. It consists of one enclosed volume surrounded by 14-foot-high rammed-earth walls that rise from the boundaries of the small site. The volume is divided longitudinally by a glass window wall that creates an interior studio to the south and an exterior courtyard to the north. The entrance to the courtyard is located beneath a lone mesquite tree, through a pair of rough-hewn, Douglas fir plank-and-steel gates that extend the Barrio's artisanal traditions. As a design-build architect who entered the profession after 12 years as a musician, carpenter, and cabinetmaker in Maine, Joy possesses a rare understanding of the nature, capacity, and potential of each material he employs. His details combine ordinary



North-south section 3'



Sheets of tempered glass, braced by stainless-steel supports (below left), divide the exterior courtyard (facing page) from the studio. Where the glass joins the rammed earth (above left) with custom, capped stainless-steel bolts, a slight recess in the wall allows the outside surface of the glass to be flush-fitted.



materials and fine craftsmanship in extraordinary ways, generating the intimacy and serenity that pervade each project.

The interior courtyard is a place of repose, where the body and mind unconsciously slow. Perception shifts and a sensory tuning-in occurs. Decomposed granite crunches underfoot, water trickles in the sunken black-steel basin, the mesquite tree casts lacy shadows upon the sunlit earthen wall, and the sky is framed overhead, all of which lead to a series of encounters with light. As Joy notes, "Tucson's environment is defined by its extraordinary light, contributing to a uniquely sensual experience of place." Moving through the courtyard, reflections of sky, wall, tree, and gravel are visible in the enormous glass surface that defines the courtyard. The wall's taunt surface is achieved by flush-recessing the butt-glazed tempered glass into the rammed-earth walls and ground, and bracing it with elegant, internal stainless-steel supports. To enter the studio, visitors pass through one of two pivoting glass panels within the large reflective surface. The light captured on the glass surface is immediately altered by the door's movement, thus marking the threshold.

**RUBIO ALLEY STUDIO
TUCSON**

CLIENT: Sienna Funding Corporation
ARCHITECT: Rick Joy Architect, Tucson—
 Rick Joy, Andy Tinucci, Chelsea
 Grassinger (design team)
BUILDERS: Rick Joy Architect, Quentin
 Branch, Rammed Earth Solar Homes
COST: \$125,000
PHOTOGRAPHER: James McGoon

Inside the space, Joy's subtle and highly refined use of ordinary materials—rammed earth, steel-troweled concrete, galvanized sheet-metal, and maple plywood—combine in tranquil harmony. A long narrow skylight traces the east wall, and, combined with reflected light from the earthen walls of the courtyard, fills the studio with a soft, ambient glow. It is an ever-changing light that reveals its beauty slowly over time of day, throughout the year.

This studio is not about inventing new digital forms, hyperprograms, or derivative modern styles. Rather, it is the product of Joy's patient search for the generative origins of a new desert architecture. The essence of his design is perception itself. Joy's building provides a counterpoint to our culture's proliferating visual clutter. ■

Max Underwood is a principal in the architecture firm of Underwood + Crisp, and a professor of architecture at Arizona State University.

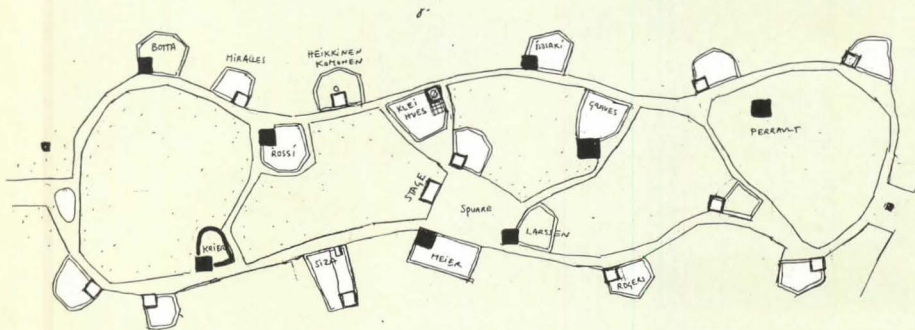


In an echo of the famous Kolbe statue that punctuated Ludwig Mies van der Rohe's Barcelona Pavilion, a solitary mesquite tree (above) rises from the courtyard's decomposed-grite groundcover.

Kolonihaven

The Architecture Park

COPENHAGEN



BY CATHERINE SLESSOR
PHOTOGRAPHS BY CHRISTIAN RICHTERS

In the unlikely setting of an old orchard in a Copenhagen suburb, a unique architectural experiment is taking place. Inspired by Denmark's cherished custom of the *kolonihavehus* (literally translated as "garden-colony house"), a group of internationally renowned architects are creating contemporary versions of such traditional summer cottages. These modern primitive huts embody idiosyncratic approaches to the fundamental provision of shelter, but also elevate the tradition of the garden cottage to a more expressive and consciously architectural level. Dotted among the plum and cherry trees will be a diverse range of structures by such architects as Richard Meier, Enric Miralles, and Arata Isozaki, all working at an unusually small and intimate scale.

The project is the brainchild of Danish-born architect Kirsten Kiser, who has spent most of her career in the United States. Formerly the owner of an architectural gallery in Los Angeles, Kiser returned to Copenhagen in the mid 1990s. The city was designated the European cultural capital for 1996 and Kiser was eager to make a contribution. An earlier exhibition of lifeguard towers at her California gallery prompted Kiser to reflect on the innovation and novelty of folly-like structures, and especially the fanciful garden-colony houses built on allotments or gardens (*kolonihaven*) outside Danish cities.

While they constitute a *unique* type of vernacular architecture, *kolonihaven* also express an important aspect of Danish social life. The allot-

ments of several hundred adjoining plots were first created in the 1880s, when the government offered them for rent to urban factory workers. Accessible by bus or bicycle, the plots gave workers—many of whom had migrated to the city from the countryside—a place where they could garden and socialize with neighbors and enjoy outdoor life. At first, tenants built simple toolsheds, but these basic structures gradually expanded and blossomed into small summer cottages. Responding to the romantic 19th-century garden movement, enterprising individuals added towers, spires, and porches to their little havens and painted them in vivid colors. Today there are some 60,000 allotments in Denmark, and more are planned.

Using her extensive contacts, Kiser invited a group of international architects to visit Vennelyst, an historic *kolonihaven* near Copenhagen. Afterward, each produced a design for a prototypical 65-square-foot pavilion. Backed by financial support from the Danish Ministry of Culture and municipal authorities, Kiser secured a site in Vallensbaek, in the southern suburbs of Copenhagen. Over time, 14 structures will be constructed there, according to a plan by Leon Krier. A portal by Danish architect Søren Robert Lund will mark the entrance.

Danish firms are donating materials and the project has attracted enthusiastic public support. Kiser plans to expand the initiative by commissioning younger architects to participate, thereby expressing the sense of organic growth and evolution that has characterized the *kolonihaven* throughout their history. Like the many thousands before them, these newest *kolonihavehus* are as varied as their creators. ■

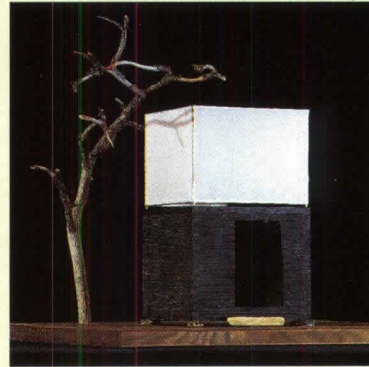






The Park in Progress

Five *kolonihavehus* have been built: those by Heikkinen-Komonen, Josef Paul Kleihues, Dominique Perrault, Mario Botta, and Ralph Erskine. A gateway by Søren Robert Lund and another *kolonihavehus* by Henning Larsen are under construction. For an update on the park, visit Kiser's website: www.arcspace.com.



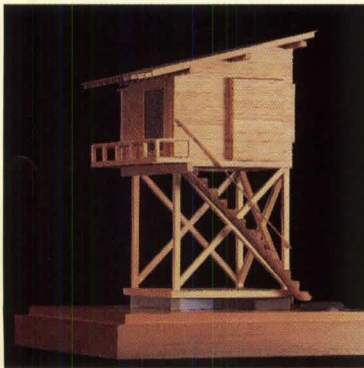
HEIKKINEN-KOMONEN

Finnish partners Mikko Heikkinen and Markku Komonen explore the polarity between darkness and light with a windowless, black-stained timber box supporting walls of white canvas. Inside, on the ground floor, is a moss-covered bed frame and a stairway to a roof terrace. Trees cast shadows on the canvas enclosure, which frames the sky. As Heikkinen explains, "You have opposite architectural sensations; first you're in darkness and dreams, then in light."



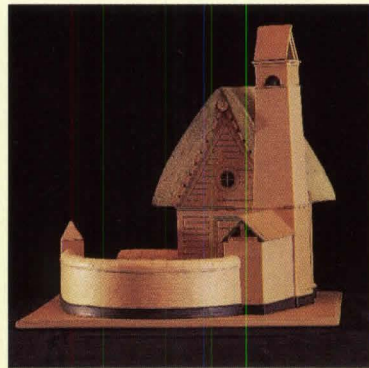
JOSEF PAUL KLEIHUES

Inspired by the plain forms and historical use of color in vernacular garden houses, Josef Paul Kleihues has designed an exact cube measuring 8 feet wide, deep, and high. The compact box is topped by an angular fin, which moves to indicate wind direction. Kleihues envisages the pavilion as a place to retreat and read in the summer.



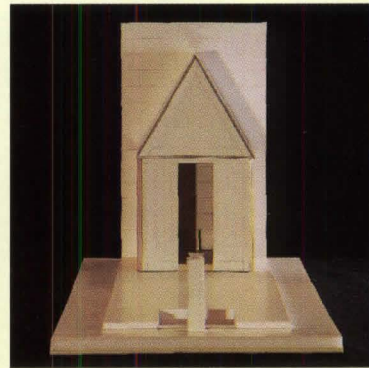
ARATA ISOZAKI

Arata Isozaki's elevated lookout tower creates a tranquil haven for meditation and reflection in the Japanese tradition. "My *kolonihavehus* is a place where you can be alone—a place to read, write, and think," Isozaki explains.



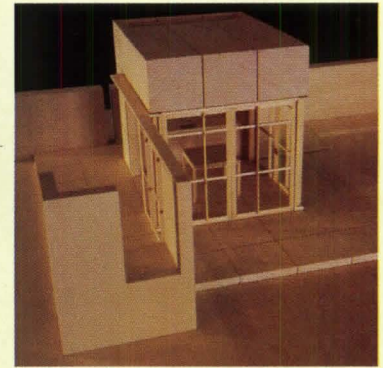
LEON KRIER

German architect and planner Leon Krier's thatched cottage paraphrases traditional architecture with irony and veiled humor. "My aim was to design a real *kolonihavehus* with a bit of the fantasy and the exotic that these small houses symbolize," he says.



ÁLVARO SIZA

Portuguese architect Álvaro Siza has designed a characteristically minimal—and striking—composition combining elemental forms and raw materials: A gabled timber structure is backed by a monumental wall of solid granite.



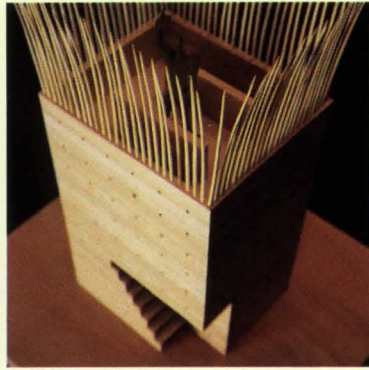
RICHARD MEIER

Richard Meier's austere gridded cube has a private patio and garden enclosed by a simple wall of native stone. Sliding glass-panel walls lend, according to Meier, "freedom of movement from inside to outside."



DOMINIQUE PERRAULT

French architect Dominique Perrault used the program as an intellectual vehicle to explore and redefine the relationship between outdoors and indoors, man and nature. Four panes of clear glass enclose a small plot of land and a tree, alluding to the notion of parceling up and defining territory. "This little plot of land with its tree is a treasure," explains Perrault. "The shell of glass captures nature that man both owns and shares."



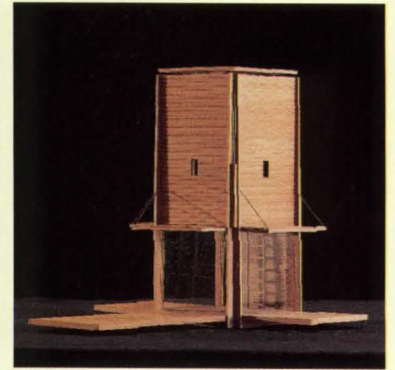
MARIO BOTTA

Mario Botta responds to the quest for privacy by proposing a fortress-like house, with small openings that admit light in a controlled, yet poetic way. A wall of vertical bamboo stalks that gently sway in the wind encloses the roof terrace.



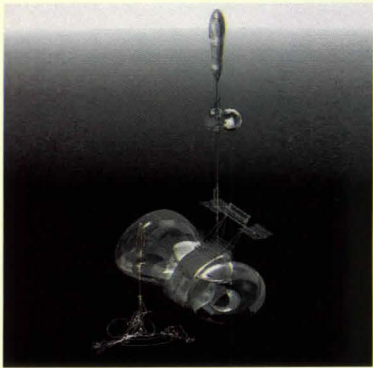
RALPH ERSKINE

Swedish architect Ralph Erskine's tower is made of thin timber slats fixed to a robust frame. On a platform at the top of the tower, a small flowering tree grows up through a central table. Erskine describes the project as "a small tower to satisfy our childish pleasure of climbing trees, or our adult joy in getting to the top, floating above the park in the middle of the leafy canopy."



HENNING LARSEN

Danish architect Henning Larsen has designed a rustic meditation tower elevated on stilts. Layers of folding screens regulate light and air. "The house follows the rhythm of the day," he explains. "It slowly opens with the seasons."



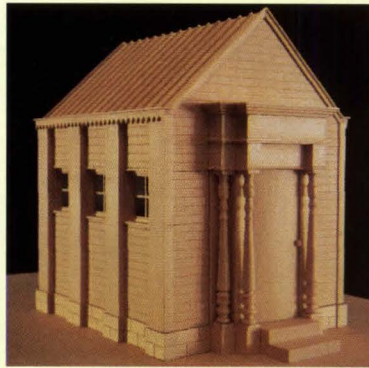
RICHARD ROGERS

In a typically high-tech response to the program, British architect Richard Rogers has designed a lightweight, self-supporting, bubble-like pod capable of adapting to a wide range of site and climatic conditions.



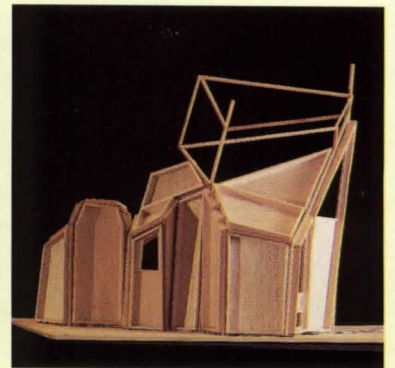
MICHAEL GRAVES

Michael Graves' geometric composition of an interlocking cube, cylinder, and gabled portico reflects the domestic character of many existing garden-colony houses. "I wanted to investigate the idea of miniature in architecture without forsaking human scale," he says.



ALDO ROSSI

"For me, a *kolonihavehus* is a simple little house built with ordinary materials," said the late Aldo Rossi. His painted-timber house sits on a plinth of dark gray stone. Four columns of unpainted Danish oak mark the entrance.



ENRIC MIRALLES

Spanish architect Enric Miralles proposes an organic cluster of volumes that physically fold around inhabitants. Miralles describes his project as "a miniature stone in a bonsai landscape; it is a rock in an artificial landscape of sand."



Rhotenberry Wellen Architects
Becky's Birthday

TOM GREEN COUNTY, TEXAS

As Laugier's hut contrasted with the excess of its rococo context, so this modest ranch shelter provides an antidote to the intemperance of contemporary architecture.



Becky's Birthday (these pages), a ranch shelter in West Texas, was built using a standard 16-by-24-foot steel frame, a type known colloquially as a "Butler Building." Wellen filled in two of the five bays as a living space, using a combination of wood-framed screens and corrugated metal.




The house sits among other ranch buildings on one side of a clearing in the scruffy West Texas landscape (above). A stand of pecan trees helps shade the mostly metal house (below).

**RANCH SHELTER, FLYING B RANCH
(INFORMALLY, BECKY'S BIRTHDAY)
TOM GREEN COUNTY, TEXAS**

OWNERS: Becky and Rex Cotten
ARCHITECT: Rhotenberry Wellen
*Architects, Midland, Texas—Mark
T. Wellen (partner-in-charge);
James R. Rhotenberry, Jr.
(consulting partner); Robert W.
Reed (project manager)*
GENERAL CONTRACTOR: Rafter C
Construction
COST: Withheld at owners' request
PHOTOGRAPHER: Hester + Hardaway



Debut	Rhotenberry Wellen Architects	Midland, Texas
 <p data-bbox="407 416 1581 594">Mark T. Wellen and James R. Rhotenberry, Jr., cofounders of Rhotenberry Wellen Architects, met in the mid 1970s while they were students at the Texas Tech University School of Architecture. Both went on to serve internships in the Midland, Texas, office of legendary regional modernist Frank Welch. Rhotenberry left in 1978 to pursue graduate studies as the Charles G. Runnel Fellow at the University of Illinois; Wellen continued to work with Welch until opening his own practice in 1983. Rhotenberry and Wellen merged their Midland-based practices in 1988.</p> <p data-bbox="407 600 1581 635">Principals: Mark T. Wellen and James R. Rhotenberry, Jr.</p>		

BY LAWRENCE W. SPECK

Plagued by an acceleration of excess and bombast, architecture periodically needs a course correction, a return to what is fundamental and authentic. Just as Marc-Antoine Laugier's primitive hut contrasted with the excess of its rococo context, so a modest, elegant ranch shelter near Garden City, in West Texas, provides an antidote to the intemperance of contemporary architecture. Designed by Rhotenberry Wellen Architects, it stands as a basic response to the circumstances that bred it.

The client, Becky Reynolds Cotton, grew up nearby, part of a prominent West Texas landowning family. She purchased the 14,000-acre Flying B Ranch in the mid 1990s to consolidate her holdings in the area. Cotton asked architect Mark Wellen, whom she had known for 20 years, to design a shelter for the property where she could stay while doing business in the district. Wellen's first scheme occupied the most luscious site on the ranch—hard beside a spring-fed creek and a spectacular pecan tree. Complications of the flood plain and extremely high foundation costs moved both client and architect to reject the scheme. The original dramatic, but troublesome site was replaced by an amenable clearing 100 yards away, adjacent to a compound of existing ranch buildings and a fine cluster of pecan trees.

The simpler site evoked a more modest design response. Wellen decided against using a San Antonio or Midland contractor in favor of a local builder who had never worked with an architect. He based his design on a standard 16-by-24-foot steel bay system commonly used for barns and sheds, repeated five times. The two bays to the north and one to the south are open; Wellen enclosed the other two with sliding corrugated-metal panels and screens. A sleeping loft perches above the kitchen and bathroom, which line the north wall; a fieldstone fireplace occupies the southeast corner.

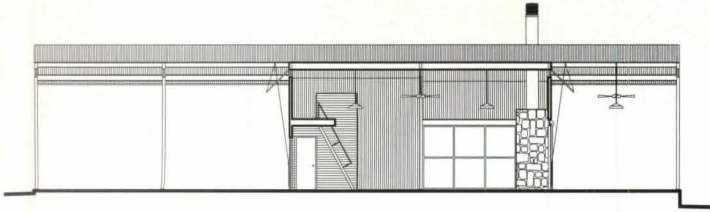
Wellen produced a sketchy set of drawings and initiated a process of good-natured wrestling with the contractor over details, coaxing quality

design from the project through on-site decisions and hard-nosed bargaining. Wellen salvaged wood for the interior partitions from a little one-room building on the ranch where Cotton grew up. He left weathered red paint on the antique pine, and assembled the boards in the most straightforward way possible. Recycled stone came from an old smokehouse and was laid, with coaching from the architect, by the contractor's regular mason. The corrugated galvanized-metal skin is a staple on Texas ranches; it will dull over time to a matte gray and rust in 20 to 30 years, which is what the architect intends.

The building occupies its site and the larger landscape with ease and confidence. In summer, pecan trees to the west block the hot afternoon sun, and prevailing southeast breezes cool the house when the large sliding walls are open. The generous south-facing porch looks across a meadow to a creek beyond, catching the sun in the cold West Texas winter and protecting its occupants from bitter north winds. Clearly a working ranch building, the shelter is comfortably compatible with the preexisting structures around it.

The poetic authenticity of this little "hut" nestled in a powerful landscape has a heritage its architect quickly acknowledges. Wellen's mentor, Frank Welch, was a pioneer of fine modern design in West Texas a generation ago. His exquisite Birthday House (1964), now sadly altered beyond recognition, inspired this project, which Wellen calls Becky's Birthday as an homage. Welch and Wellen share a tough, real tradition of modernism that is less about modern forms than about modern life. It embraces industrialization, prefabrication, and straightforward building methods. It makes magic out of practical considerations of sun, wind, and climatic orientation. It revels in an appreciation of everyday things akin to Le Corbusier's reverence for the common wine bottle.

Laugier's hut is often singled out as the beginning of a modern sensibility, which in the mid 20th century became a style. To its credit, this West Texas hut recalls the sensibility more than the style, and reminds us how rich and responsive modernism can be. ■



North-south section 10'

The house's south-facing bay (right), with its ceiling fan and stone fireplace, serves as a porch. Sliding screens and corrugated-metal partitions open to prevailing breezes (center). A sleeping loft sits above the kitchen and a bathroom is tucked behind it (bottom).





Rather than compete with the glitz of Times Square, ARO envisioned a subtly glowing hut in the dense sparkle of the urban forest.

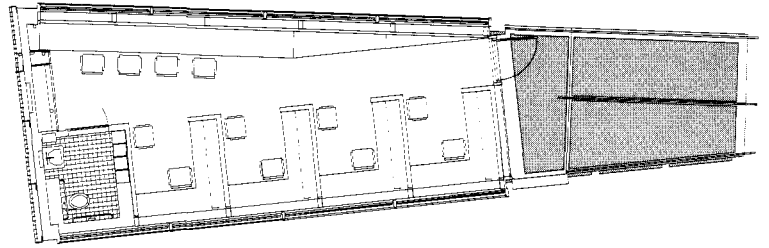


The we're here! GMA moves to Times Square

SEPHORA

This advertisement features a photograph of two news anchors, a man and a woman, smiling. The text above them reads "The we're here! GMA moves to Times Square". Below the photo is a sign for "SEPHORA".

The new Armed Forces Recruiting Station stands on a traffic island amid the bustle of Times Square.



Plan 5' >

Armed Forces Recruiting Station Architecture Research Office

NEW YORK CITY

BY NINA RAPPAPORT

The four branches of the United States Armed Services recruit more troops at their shared Times Square station than any other location. So when engineer Parsons Brinckerhoff Quade and Douglas hired New York City-based Architecture Research Office (ARO) in 1998 as design consultants to replace the existing 1946 station, a lot was riding on the young firm. Rather than compete with the glitz of Times Square, ARO envisioned a subtly glowing hut in the dense sparkle of the urban forest.

The design of the \$1.25 million station, which opened for business last September, was guided by numerous constraints. The 520-square-foot building had to fit within the former pavilion's envelope, because the site, at the south side of the bow tie that makes up the "square" of Times Square, is a traffic island that leaves no room to expand. Thus ARO could barely modify the proportions of the original station, resulting in a one-room, glass-and-steel pavilion 18 feet high, 33 feet long, 11 feet wide at its north entrance end, and 18 feet wide at the south. The city's Metropolitan Transportation Authority required a ventilation gap above the subway grating that covers most of the traffic island, so the building's exposed frame sits one foot above the ground on the concrete walls of the subway shaft. Bureaucratic approvals became a choreography between numerous federal, state, and city agencies: "We had 40 meetings in three months and couldn't even fit all the approving bodies onto the site," recalls project architect Alan Bruton. "Moreover, it was one of the fastest projects the office has done—only three months from design to completion of the construction document set." The success of the project lies in the way ARO used the singular image of the American flag as

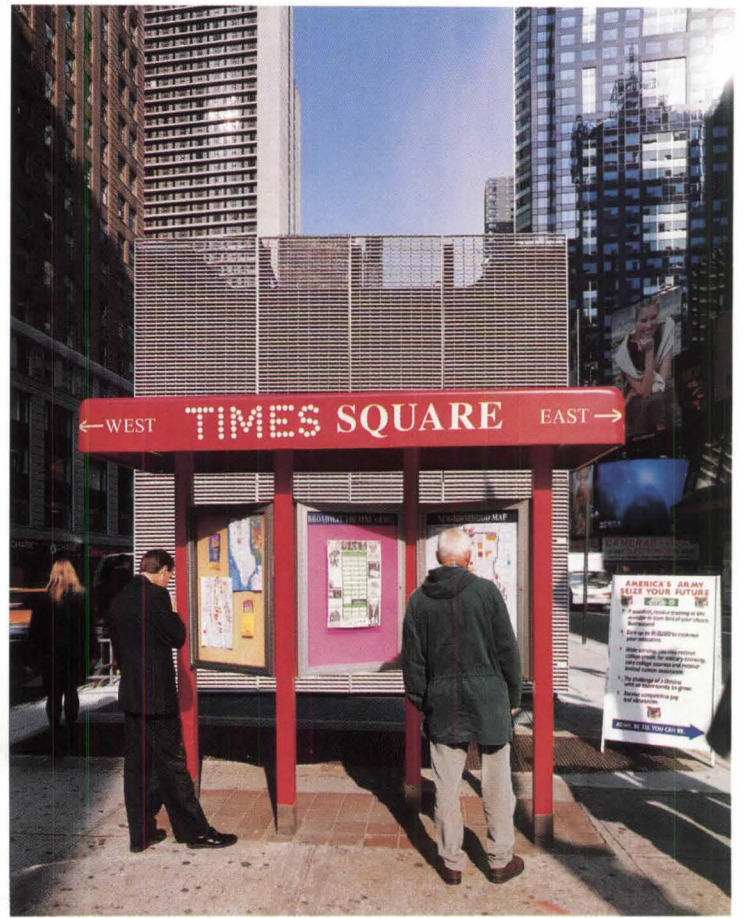
identification, rather than cloaking the building in the clangorous visuals that are the norm these days in Times Square. ARO made the flag integral to the building, rather than an addition to the exterior, by placing bands of fluorescent lights wrapped in red, white, and blue 3M reflective gels—an alternative to more costly and widespread neon—into the window walls of the west and east facades.

The narrow north facade displays changeable images on an interior shade, and above, six video monitors show the military's advertisements. The back facade of the building floats as a textured surface—a vertical subway ventilation grate—hung with circular armed forces emblems.

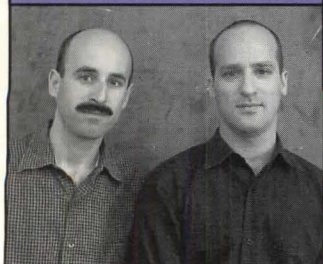
The striking parabolic form of the ceiling, like the underside of a ship's hull, dominates the interior. Four distinct desk areas accommodate the Army, Navy, Air Force, and Marine recruiters, who periodically rotate seats for the most prominent position by the door. According to ARO partner Stephen Cassell, "It was like designing bedrooms for four siblings—no preferences." The interior is like a stainless-steel cage, with vertical window mullions on a different grid than the structural bay.

The building is a mini-crossroads within Times Square—itsself billed as "the crossroads of the world"—from its camouflage-painted roof that's already popular for photo shoots, to a trap door that leads to the subway, to panels in the south facade that house the control system for the broadcast of the New Year's Eve ball-drop. Nonetheless, the building stands like a sentinel amid the tumult, a modest abstraction absorbing sensory overload rather than fighting for attention. ■

New York City-based Nina Rappaport is editor of the Yale School of Architecture magazine, Constructs.



Uncle Sam and a grid of video monitors (facing page) invite potential recruits into the station. Army, Navy, Air Force, and Marine recruiters periodically change workstations (above left), so that no one has a monopoly over the prime, door-side seat. Fluorescent flag lights span the width of the glazing between mullions, and structural columns form a separate grid on the interior. Tourists (above right) consult a notice board behind the station's south facade, which is hung with metal grating.

Debut	Architecture Research Office	New York City
	<p>The cofounders of New York City-based Architecture Research Office, Adam Yarinsky and Stephen Cassell, met in the early 1980s, while architecture students at Princeton University. After graduation, Cassell joined the office of Steven Holl, where Yarinsky also went to work after a stint in the office of Deborah Berke (<i>Architecture</i>, this issue, page 116). They established ARO in 1993 and are currently developing a range of projects, including a department-store installation prototype for cosmetics company Biotherme, houses in New Jersey and Colorado, and an office interior in Soho.</p> <p>Principals: Adam Yarinsky and Stephen Cassell</p>	

Budweiser



ARMY
NAVY
AIR FORCE
MARINES



communications
communications

US ARMED FORCES
RECRUITING STATION

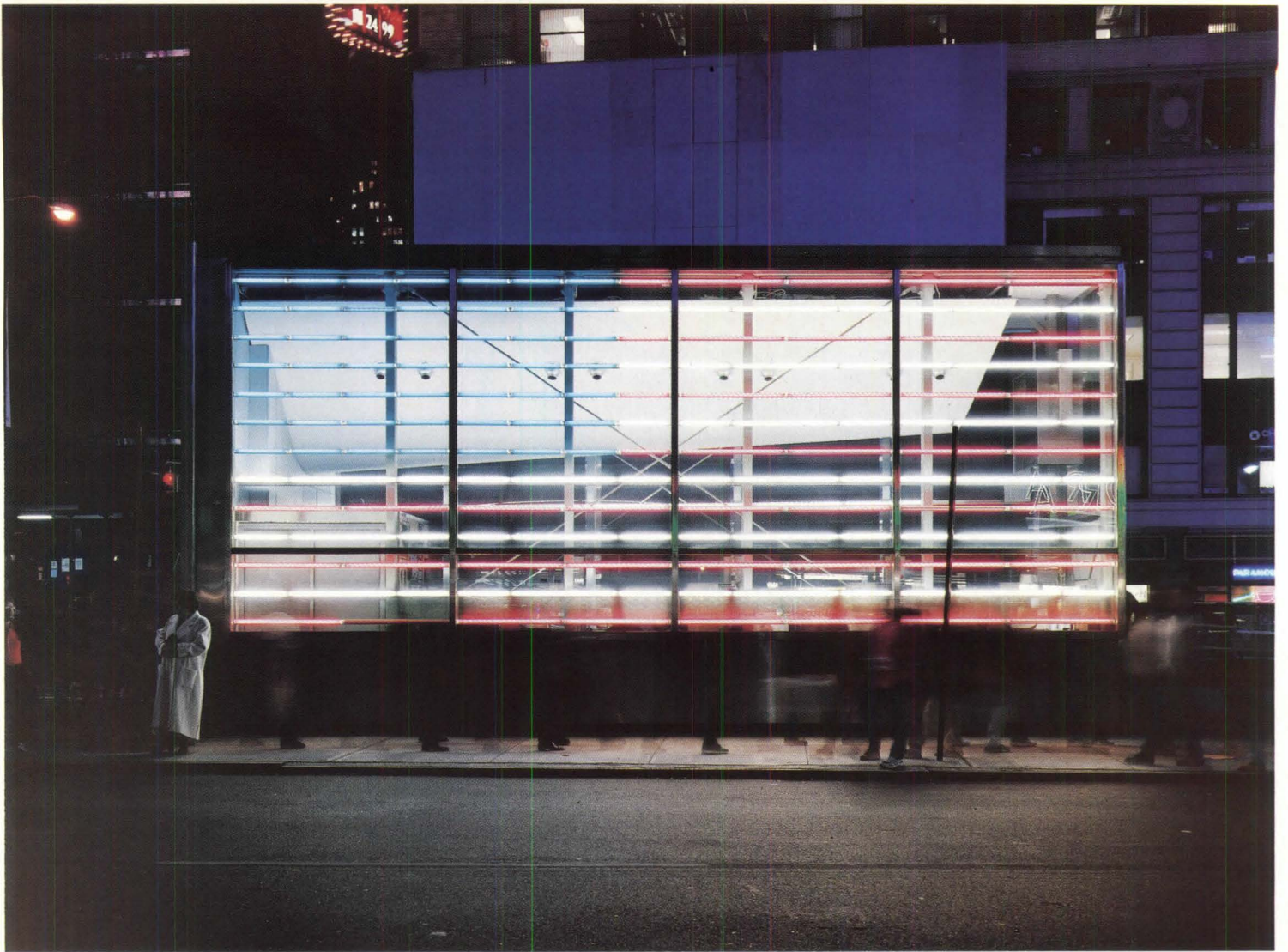


TOE BOXED

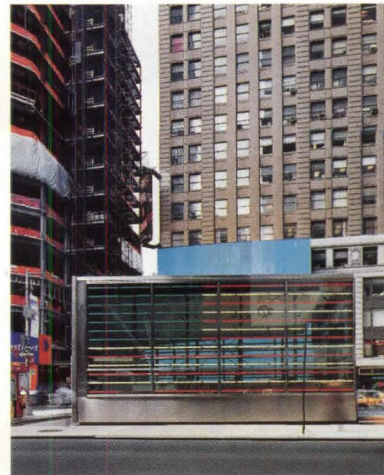
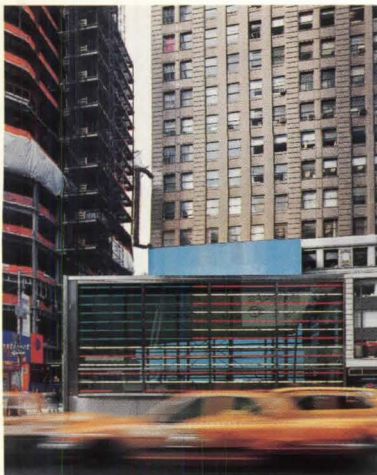
S. OCHS ST
43 ST

ONE WAY





The recruiting station changes its character throughout the day as traffic, sunlight, the lights inside the building, the glare of Times Square, and the glow of the fluorescent flags vary in intensity (above and below). Viewed at certain times, from certain angles, the building can also blend into the overall intensity of its surroundings (facing page).





nissin
NISSIN FOODS

Budweiser
New York Time
17 : 03 : 23

Budweiser

Panasonic

Pokémon
THE MOVIE
NOVEMBER 12

NEW YORK POLICE DEPT

TDK
AUDIO AND VIDEO CASSETTES
AS SERIOUS AS YOU CAN GET

**ARMED FORCES RECRUITING STATION
NEW YORK CITY**

CLIENT: United States Department of Defense, Joint Recruiting Forces Committee

ARCHITECT: Architecture Research Office, New York City—Stephen Cassell, Adam Yarinsky (partners); Alan Bruton (project architect); Heather Roberge, Scott Abrahams, Eric Ajemian (project team)

ENGINEER: Parsons Brinckerhoff Quade and Douglas (structural, electrical, mechanical, plumbing)

CONSULTANTS: United States Army Corps of Engineers, New York District (construction management); George Valkai (stainless steel); Shawn Fleming Electrical and Consulting (electrical); Video Visions (video.array)

GENERAL CONTRACTOR: Element Construction

COST: \$1,250,000

PHOTOGRAPHER: David Joseph

JOE BOXER
Cab a ni
100% of the fares from the Chevy Venture - JOE BOXER cab goes on ConceptCare for breast cancer research. Want to help? That's easy—we call 1-888-GM-CCURE

Help stamp out breast cancer!

edEx
Federal

Debut

Marlon Blackwell

Fayetteville, Arkansas



Within a few years of his 1991 graduation from Syracuse University's architecture program, Blackwell was included in the 1995 publication *40 Under 40*, and named as an "Emerging Voice" by the Architectural League of New York. He is currently an associate professor of architecture at the University of Arkansas in Fayetteville. Blackwell has practiced for firms in Lafayette, Louisiana, and Boston.



Marlon Blackwell HoneyHouse

CASHIERS, NORTH CAROLINA

BY VERNON MAYS

Frustration plagued Marlon Blackwell as he began what seemed a simple enough task: designing a hybrid carport and honey-processing shed for a 70-year-old amateur beekeeper in the North Carolina mountains. Striving for a solution inspired by bees, Blackwell felt his own first efforts had the distinct feeling of caricature: “Everything kept coming out so zoomorphic.”

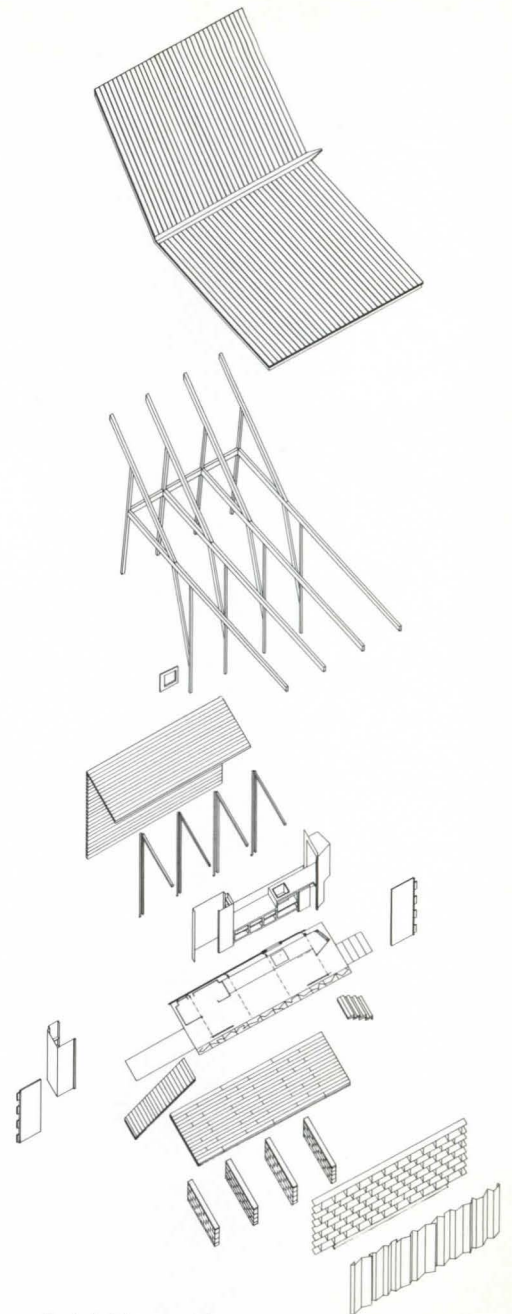
Determined to find a departure point that was meaningful to the building’s purpose without slipping into hackneyed imagery, Blackwell created a whimsical structure that, in its purity of concept and search for archetypes, owes a debt to Laugier’s primitive hut. What engaged him, in the end, was not the physical characteristics of bees, but an appreciation for how synthetic structures such as beehives superimpose a rational order on nature’s way of making honey. Hence the 480-square-foot building’s primary architectural feature—a one-foot-thick steel-framed wall infilled with clear angled glass—is Blackwell’s take on regenerative systems that are cellular, polyrhythmic, and three-dimensional.

Within the wall’s cells, intersecting planes of steel and clear glass form a series of open-sided terrariums that capture nature fleetingly in their grasp. Acutely angled corners become havens for spiders, scoops to catch swirling leaves, and receptacles for tiny pools of rainwater. Viewed from outside, the wall serves up an ever-changing display of light, shadows, and reflections from the surrounding forest.

Layered atop Blackwell’s preoccupation with wall-as-diaphragm is his concept of the building itself as a framework or container, a figurative container of activity as well as the literal container of a car. Building components were shipped to the site on a flatbed truck for assembly. By necessity, the boxlike component of the building took on the scale and proportions of a shipping container, reinforcing the metaphor.

The 8-by-24-foot utilitarian box is a single workspace containing a counter for honey-processing equipment, shelving for display, and an area for storing garden tools. Four concrete-block piers lift the steel-and-wood structure off the ground to protect its contents from vermin and insects, while allowing surface runoff to flow beneath it across the sloped lot. Tucked beneath the cover of a gull-wing roof, Blackwell’s little shed is a deceptively simple blend of function, geometry, adaptability, and economy. Which, after all, is nature’s way. ■

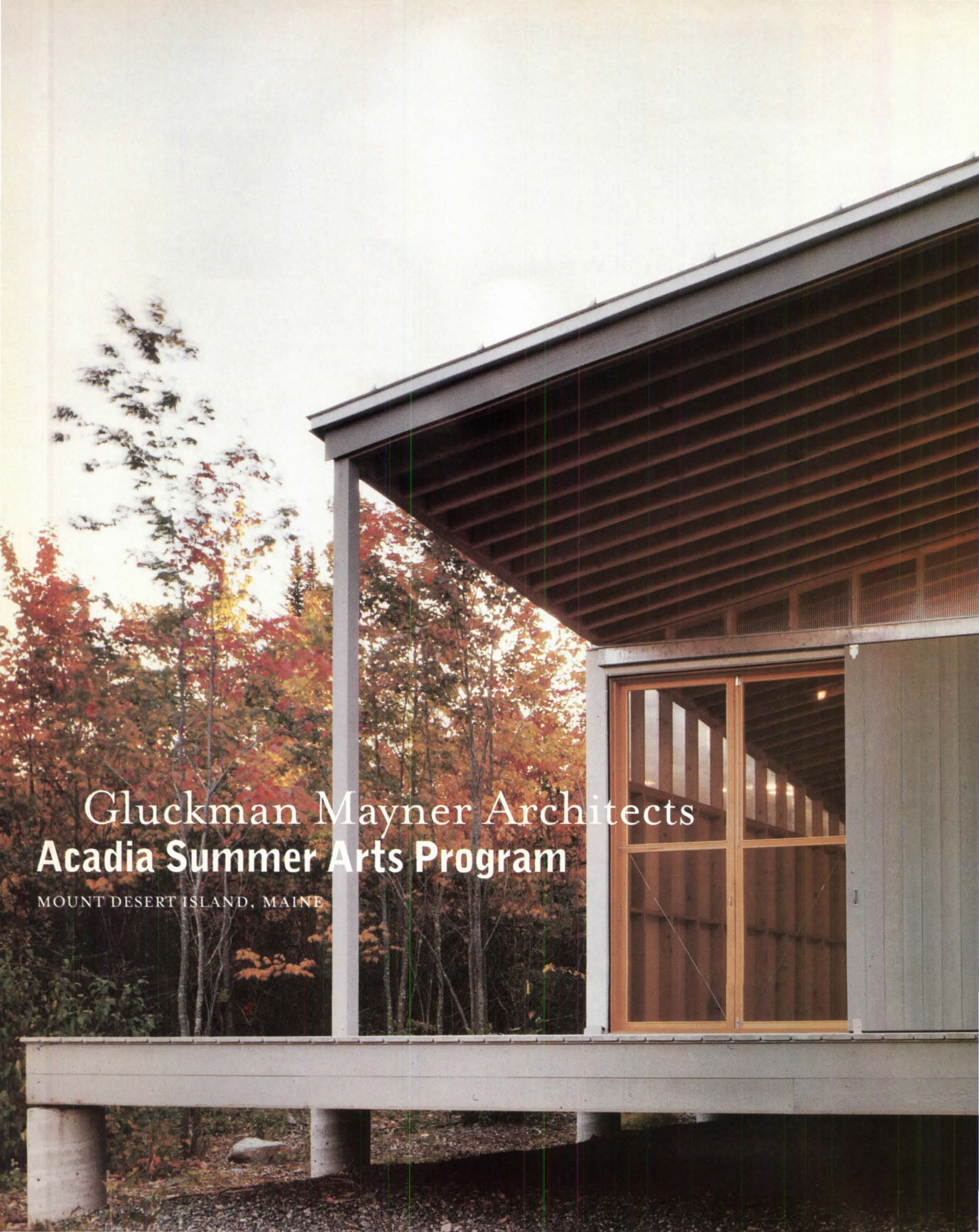
Marlon Blackwell designed the HoneyHouse with two principal components: The gull-wing roof of the carport shelters a small shed for processing honey (facing page). Angled pieces of glass in the shed’s steel-framed wall filter sunlight (facing page, inset).



Exploded Axonometric

A HONEYHOUSE FOR JUNE MOORE CASHIERS, NORTH CAROLINA

CLIENT: June Moore
ARCHITECT: Marlon Blackwell, architect, Fayetteville, Arkansas—Marlon Blackwell (project designer); Meryati Johari-Blackwell, Dianne Meek, Phil Hadfield (assistants)
ENGINEER: Joe Looney (structural)
CONTRACTOR: Razorback Ironworks + Pat Meek
COST: \$40,000
RENDERERS: Katie Bennett, Jason Wright
PHOTOGRAPHER: Richard Johnson



Gluckman Mayner Architects
Acadia Summer Arts Program

MOUNT DESERT ISLAND, MAINE



BY PHILIP ARCIDI

An artist's studio all but asks out loud to be a modern building. No program puts a higher premium on simple, functional design. Its mandates are fundamental: good light, ample space, and protection from the elements. Propriety would be *outré* to its occupant, and adornment out of place. Here the architect designs for a kindred creator, a fellow traveler in search of beauty at its most elemental.

Richard Gluckman, a partner at Gluckman Mayner Architects in New York City, turned these requirements into an elegant studio in the woods of Mount Desert Island, Maine. His building, designed in 1996 and built the following year, is a wood-frame box built on a platform above grade and spanned by a canted, galvanized roof. It is a generous workplace for a painter or sculptor, a lofty, 700-square-foot room with a deck facing a mountain to the east.

Gluckman generated the design soon after he visited the Mount Desert residence of his client, Marion Stroud. She asked him to create a structure on her 100-acre property where invited artists could work under the auspices of the Acadia Summer Arts Program, an informal residency program directed and funded by Stroud. His response, informed by his friendships with artists, started as two 12-foot-tall sheetrock walls that form an L-shaped plan. These two walls, the primary work surfaces for a painter, face reciprocal 8-foot-high walls whose wood studs are exposed inside. Sliding birch panels along the west wall, where one enters the studio, screen a bathroom, stove, and sink.

Gluckman and Dana Tang, the project architect, decided that the studio, which has neither insulated walls nor room partitions, should derive its esthetic from its construction. The results, while handsome, did not come easily. There is virtually no trim inside or out, so the wood studs, plywood, and cement board used to build the studio had to align precisely. The architects planned the interior so none of the 4-by-8-foot birch plywood floor panels would be cut, and so they would meet the wall with a continuous 1/2-inch reveal to highlight the junction of wall and floor without using a baseboard. The enclosure is smoothly resolved: The contractors struggled to keep the surfaces of the cement board perfectly even and the orthogonal true. They perfectly aligned the stainless-steel grommets and countersunk screws that fix the cement board to the frame, thereby effecting a machine-made esthetic with old-fashioned craftsmanship.

While the architects have little to say about design precedents, the studio brings to mind Central European interpretations of the

The Acadia Summer Arts Program studio (left) rises from concrete piles with the authority of a Greek temple. Its broad canopied porch serves as a threshold for the studio, which is behind sliding and screen doors.



Gluckman and Tang also sited the project like the ancient Greeks (above), orienting its principal face toward a distant geographic landmark: Western Mountain. The clerestories (right and facing page) comprise a double layer of channeled plastic. Simple plywood and sheetrock make up the interior finishes (facing page).





**ACADIA SUMMER ARTS PROGRAM (A.S.A.P.)
MOUNT DESERT, MAINE**

CLIENT: Marion Stroud

ARCHITECT: Gluckman Mayner Architects,
New York City—Richard Gluckman
(principal); Dana Tang (project architect)

ENGINEER: Ed Drummond (structural)

GENERAL CONTRACTOR: John Dargis and
Associates

COST: Withheld at owner's request

PHOTOGRAPHER: Paul Warchol

primitive hut. There, protomodern architects followed the postulates of the 19th-century German theoretician Gottfried Semper, who wrote that the primitive hut was a structure of wood on which carpets were hung. Contemporary architecture should emulate primordial buildings, Semper wrote, in that exterior surfaces should look like non-load-bearing skin attached to a frame.

Gluckman seems to understand this intuitively when he describes the studio space as “the inside face of the outside skin,” where the wall section is revealed. It is a compelling room, intellectually satisfying to an architect. But its ultimate success is that it does not impose itself on the artist. The sheetrock walls of the interior do not interfere visually with works in progress. The tiered clerestories seem to lift the roof, and, as a composition of triangular voids, they imply movement above the solid walls. This is a simple building, but it is not static. With its roof tilted up and extended toward a distant mountain, the studio is a taut box, pried open by the potential energy within, a metaphorical overture for the talents each artist brings to it. ■

Peter Eisenman's folded-steel bus stop sits formally removed from its context in Aachen, Germany (this page). The shelter was initially designed at the request of French street-furniture manufacturer JCDecaux for New York City, in response to an RFQ that was ultimately tabled. The electronic screen (facing page) displays information, mostly about Aachen, provided by local newspapers.

Eisenman Architects

Bus Stop

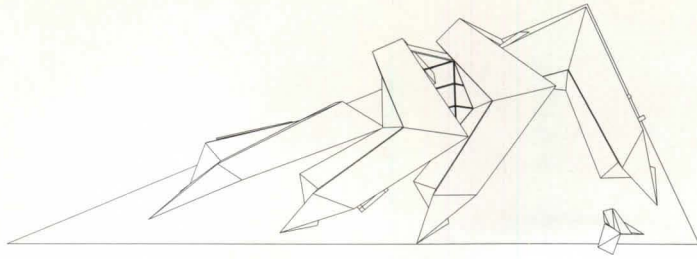
AACHEN, GERMANY





10:16

sche Bank



Plan 16' 8

BY HANS VAN DIJK

The most distilled, contemporary, and urban version of the primitive shelter might just be the bus stand: People look to bus stands for protection from wind and weather. They are not intended as places to live or stay (though in some cities they have acquired a double function as sleeping shelters for the homeless). Bus stands serve simply to make passengers' wait more pleasant, until those climatized wheeled capsules arrive to move them to other, more comfortable (and complicated) structures—dwellings or offices, shops or cinemas.

A bus stand designed by Peter Eisenman recently appeared on Elisenbrunnenplatz, the central plaza of Aachen, Germany, after the city council approved its installation by French street-furniture manufacturer JCDecaux. The company “donated” the structure in exchange for the opportunity to place information panels throughout the city, primarily for commercial advertising.

Eisenman's shelter is a strange animal in this old German city, like a huge, crippled crab scuttling across the square. Its sculptural body seems to withdraw from Peterstrasse, Aachen's main street, and to lean in the direction of the 8th-century cathedral, built when the city was the second capital of Charlemagne's empire.

To view Eisenman's built work—minus the usual battery of explanatory texts, subtexts, and diagrams—is a rare experience. Still, it is difficult to neglect everything the architect has said and written before: Eisenman is neither a contextualist nor a functionalist. The bus shelter is thus situated several meters from the sidewalk, in the middle of the square. It is an autonomous formal gesture.

The shelter consists of two parts. The first is a high tower with an electronic display for news and information, mostly about the city itself. The second—the bus shelter proper—is a steel structure that unfolds origami-like in non-Cartesian space. To be more precise, it is two intertwining folded structures, one dark gray, the other deep gold. The articulation of the formal structure—with separate “bays” opening along its sides—seems repetitive at first, but this is an optical illusion. Each “crab leg” is different; Eisenman has invited a “misreading.”

The gray parts of the structure end in benches—one of the only concessions the architect makes toward functional demands. Other practical allowances are vertical panes of clear glass, as well as wire glass to seal in odd gaps in the roof; after all, keeping bad weather out is one of the requirements of a bus shelter. But the glass panes appear to be provisional additions to an architecture that demands to be understood in its own terms.

Eisenman's work nonetheless creates surprise—that is something architecture can still do, on occasion. In this regard, this work's appeal is clear: It has become a local attraction on—what else?—guided bus tours. ■

**JCDECAUX BUS STOP
AACHEN, GERMANY**

CLIENT: JCDecaux Deutschland

ARCHITECT: Eisenman Architects, New York City—Peter Eisenman (principal); Richard Rosson (associate architect); Sergio Bregante (project architect); Peter Lopez, Sven Pfeiffer (project assistants)

ENGINEER/CONSULTANT/GENERAL

CONTRACTOR: JCDecaux

COST: Withheld at owner's request

PHOTOGRAPHER: Christian Richters



Eisenman's shelter is
a strange animal
in this old German
city, like a huge,
crippled crab scuttling
across the square.



From an Absolute Past to an Uncertain Future: The New Primitive Hut

BY JOSEPH GIOVANNINI

On its surface, Abbé Laugier's famous 1753 tract about the primitive hut demonstrated impeccable logic. The architectural theorist followed primitive man "in need of a place to rest" from a sunny stretch of grass (which turned out to be too hot), to the cooling shade of a forest (where it rained), to a protective cave (which proved dank), and finally to a primitive hut back in the forest, fashioned from branches laid out in a square and roofed with other branches.

"Thus, man is housed," Laugier concluded, stating that "all the splendors of architecture ever conceived have been modeled on the little rustic hut I have just described. It is by approaching the simplicity of this first model that fundamental mistakes are avoided and true perfection is achieved." For Laugier, still innocent of the lessons of relativity, the rudimentary elements of this hut established the precedent for the column, entablature, and pediment of classical architecture, and it evolved, in its highest, petrified form, into buildings like the Maison Carrée, a 1st-century Roman temple magnificently preserved in Nîmes, France, which Laugier extolled for its simplicity and nobility. His charming illus-

tration of the hut is an eloquent statement about a fundamentalism in architecture, one based in immutable, originary principles derived from facts of nature and man's responses to them. Today's less monolithic conception of nature has led to a plurality of form and ideas about architecture, as the projects in this issue demonstrate. Laugier likely would be surprised—and alarmed—at the explosion of diversity that has engendered many fundamentalisms, not one.

Laugier wrote during the Age of Reason, after Newton uncovered the laws of the universe, and he was looking for equivalent truths in architecture. Vitruvius had made a similar search centuries before. Though he did not get as specific as Laugier, Vitruvius said that the laws of architecture and the cosmos were identical; he surveyed the significance of the four elements (earth, water, fire, and air) for architecture; and attributed the origins of architecture to natural formations, such as caves, nests, and leaf huts.

By the time Laugier conjured his Rousseauian hut, Indians from America had landed on European shores, human exhibits wearing head-dresses and leggings. They evidently came without teepees. Laugier's primitive dwelling, derived from a nature that seemed universal,

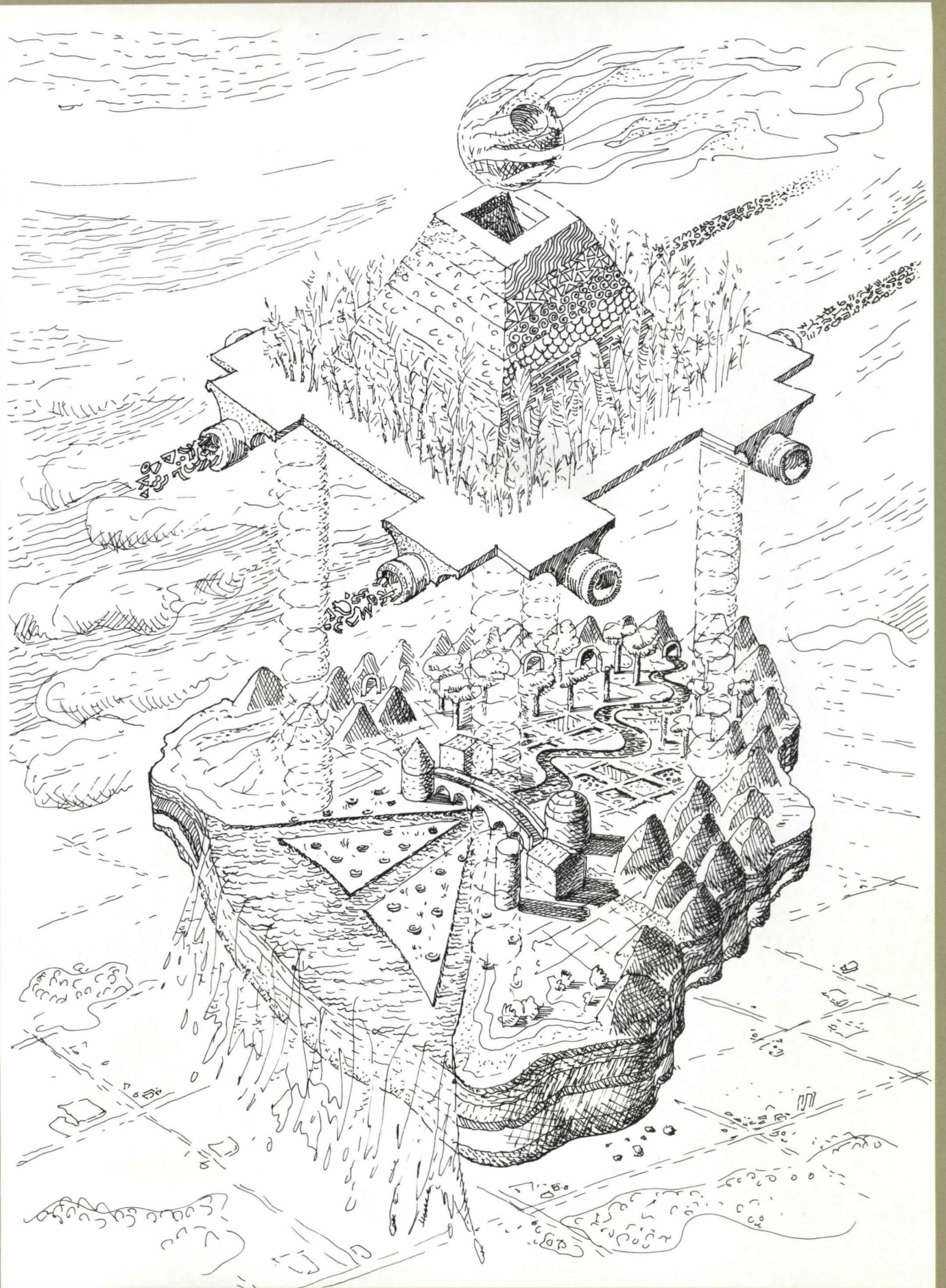
Six visionary reinterpretations of the primitive hut appear on the following pages, accompanied by statements from the architects who designed them. *Architecture* commissioned these projects to accompany this special issue.

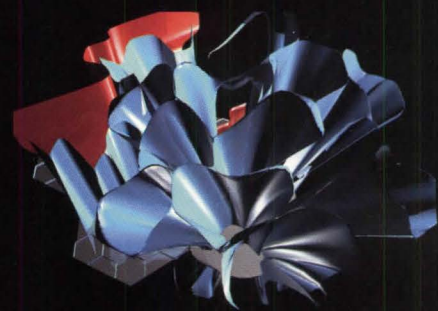
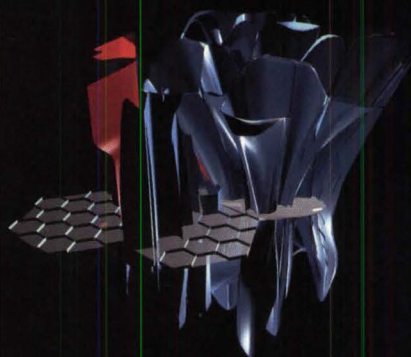
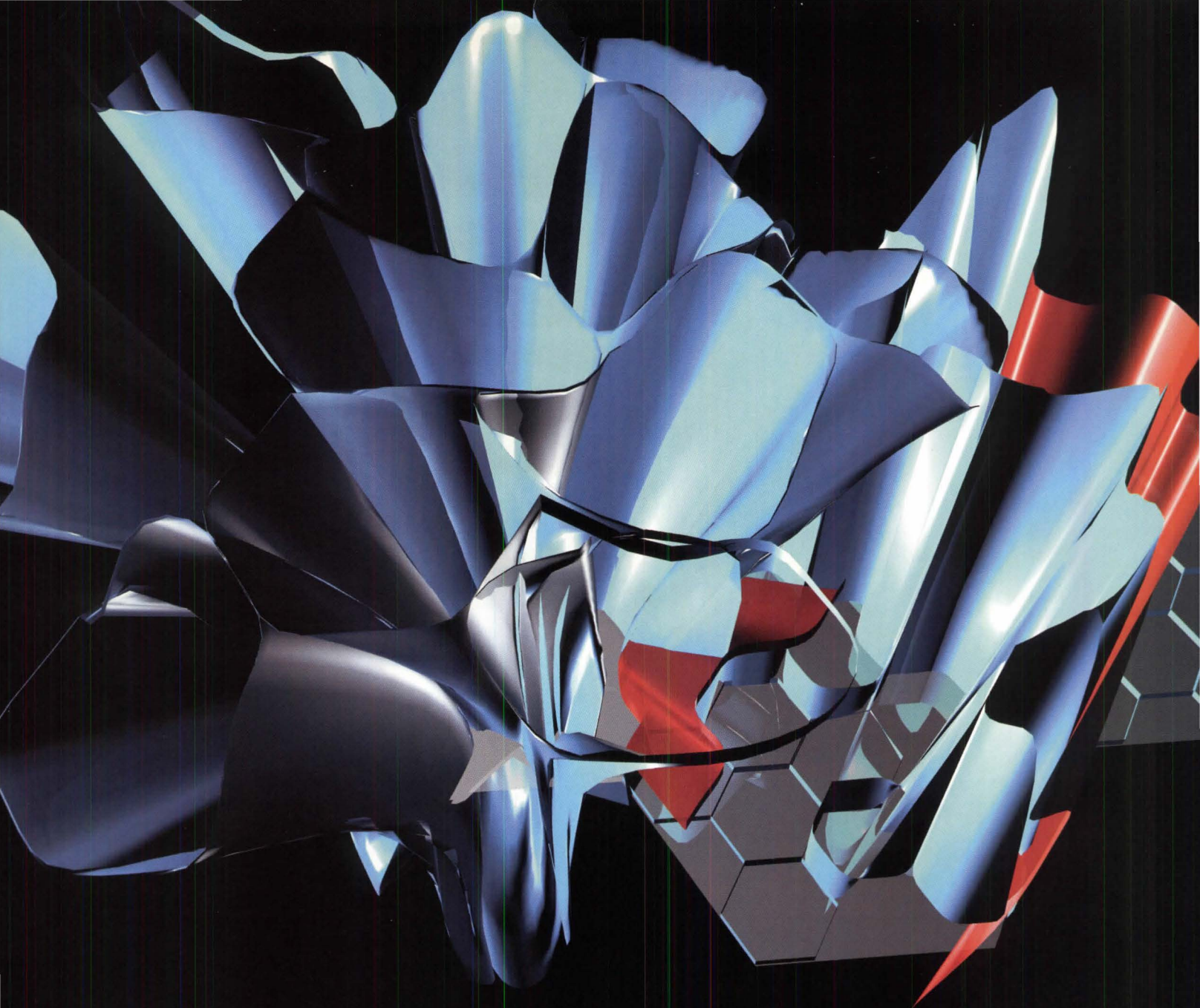
John Outram Associates

The primitive hut was Laugier's abridged, less-than-literate version of the Hellenic temple. It was suitable, one might argue, for the new class of professional engineers and architects, trained in a mere four years at the Grands Écoles. They were to deploy the automatic architecture of Durand and the *architecture parlante* of Lequeu, like grapeshot down the avenues of Haussmann, ordering and organizing the mass of newly enfranchised citizenry. Laugier's Noble Savage of Rousseau—or was he the Savage Noble of de Sade?—prefigures the pinheaded mechanic of Corbusier, all Aryan suntan, polished-steel muscles, and distant gaze. To escape from these antiquated visions of a modern architectural clientele has been my lifelong ambition. I use architecture to overcome the awful intellectual dreariness of a world made by noble mechanics. So far as I can see, it is only this that stands between the undeniable powers of our building technology and a world made by it that we might actually enjoy.

My drawing shows the Ark of the Entablature voyaging across an Earth that has already been urbanized by being alienated into salable and thereby economically productive plots. The Epistylion carries below it, on columns that are in tension rather than compression, a romantic, unspoiled, natural valley. This is my architectural analog and metaphor for a community that is politically effective because it is harmonious.

The full text of this abridged statement appears on our website.





Michael McInturf Architects

In today's environment, the single primitive icon as an essential arbiter of taste and language no longer applies, even though we respect its foundations. Our response to the primitive hut at the beginning of the 21st century turns instead on humankind's increasingly advanced understanding of nature, or at least an interpretation of it. Current technologies enable us to diagram nature at the molecular level as a series of dynamic, complex growth systems. This implies multiple interconnected networks, not stand-alone elements.

In our scheme, these networks create a habitation that vacillates between object and field. While not proffering our particular avenue of research as an absolute way to interpret nature, we pursue a botanical approach, loosely based on cell-aggregation. A base condition of controlling geometries—hexagons of uniform size—is initially close-packed in the ground plane. A complex tissue or object-field eventually develops: a synthetic landscape composed of both the human-made and the natural.

The individual objects or buildings within this matrix are designed and controlled by their inhabitants, whether individual or communal. Interior separation is established within a capillary-like system of partitions. Neighboring objects interact, providing surface tension at the epidermal layer to shape the building envelope. This continuous surface, while defining the base description of ownership, is the key to the idea of plurality, or object-object relationships.

This "seed program" will be preconditioned with infinite variables both hard and soft. Hard, or technical responses are informed by things such as streetscape, climate, sun angles, and materials. Soft, or creative responses represent the more intangible: the feel of the artist, the logistics of living, the mood of the occupant.

didn't apply to other cultures: The teepee was no less a reductive truth of final simplicity than Laugier's hut. But for the Abbé, the European truth precluded others.

Despite great curiosity about the New World, comparative anthropology was not yet invented: Laugier's viewpoint was Eurocentric, and the normative standard in architecture was classicist. Even had they known about them, theorists would not have embraced the beehived Dogon huts of Africa, the tunneled-stone ghorfas and subterranean earth dwellings of Tunisia, and the mud-packed houses of the Maghreb. Laugier's logic was not a blind exploration without prejudice: He found his way to a path that would confirm the tradition originating in ancient Greece. He wanted to recognize only one primitive architecture, not many. Truth was singular rather than plural, and architecture that was true to basic classicist principles did not admit pluralism.

Laugier's fundamentalism did not go unchallenged. In the 19th century, Gottfried Semper questioned the constructional premise of Laugier's hut by looking for a final logic based in materials—clay, wood, textile, stone. He advocated that building materials be undisguised, that they "speak for themselves" according to their own natures: stone as stone, wood as wood, brick as brick. Unlike Laugier, he traced architecture back to roots in the applied arts: For Semper, walls evolved from woven hangings, not branches.

The search for fundamental principles of architecture is as old as architectural theory itself, and architectural history can be understood through a long succession of huts, some theorized by the likes of Laugier, Vitruvius, and Semper, and others actually built. With his Ames Gate Lodge outside Boston, H.H. Richardson predicated architecture on another form of nature, the Rocky Mountains. That vision was based in an American nature that was grander and more spectacular than Europe's. If Laugier petrified the primitive hut by allowing it to lead to classical architecture, Greene & Greene in California, reversed petrification in their late bungalows. These woodsy constructions declassicized architecture, and rolled back the metamorphosis of the tree trunk into the column in favor of a more direct reference to nature.

The search for basic principles on which to found architecture accelerated early in the 20th century, when modernists were reconceiving the field on radically different principles. In 1911, R.M. Schindler promulgated a little known manifesto in Vienna called *Space Architecture*, in which he declared that space itself, not materials or form, was the essence of architecture. His revelation was that new technologies, including reinforced concrete, allowed columns that liberated buildings from bearing walls: Mass therefore ceded to the primacy of space. The Viennese architect's own house on King's Road in Los Angeles (1922) distills the manifesto with sectionally rich outdoor rooms and interiors.

The most famous modernist hut is, of course, Ludwig Mies van der Rohe's Barcelona Pavilion, with walls slipping through space in a idealized manifestation of industrialized construction. Like Schindler, Mies dematerialized mass with thin structural planes and columns, and underlined the lightness with wide stretches of glass. Unlike Schindler, classicism remained a persistent impulse in Mies' exquisite steel-and-glass pavilions throughout his career. They are poised,

The search for fundamental principles of architecture is as old as architectural theory itself; architectural history can be understood through a succession of huts.

and the classical ordination of the parts, each in its proper place, is neatly hierarchical. Besides their obvious symmetries and balance, what makes the buildings classical is that they are ideated with the notion of perfection, God being in the detail.

The perfect wood hut that Laugier conceptually transformed into stone and Mies into steel was superseded in the late 1940s by the agnostic imperfection of the house done in Pacific Palisades, California, by Charles and Ray Eames. Also a steel-and-glass box, but based in notions of Tinkertoy assemblage, their two-story structure is a paradigm removed from Mies' godly pavilions. An invention of empiricism rather than idealism, the structural parts come off the shelf for loose assembly: The finished design emits no cosmic ping, but is comfortably human. Industrial culture had replaced nature as the final source of truth, and by the 1960s, Buckminster Fuller hammered the final nail in



Deborah Berke Architect

What is primitive? Is it primitive to have to hold down a roof with tires? Lock the door with a plank? Have no way to receive a television signal? Sleep four to a room? Fix your house with duct tape and rope? Never decorate? Let the water bring the hillside past you every time it rains? Freeze in the winter and bake in the summer? Get tainted water from your well? Have no place for your wastewater to go? Live in a house that depreciates in value every day? Be on the grid but off-line? Have a party line? Have your livelihood eliminated? Send your children to bad schools? Have no means of getting them to school? Have nothing for them to wear to school? Have less than enough to eat? Have to choose between books and food? Have to choose between music and food? Have to choose between television and food? Learn how little is actually essential? Be judged by how you live? Wonder how the greatest postwar economic boom missed you?

**LOOM:
Ralph Nelson
Choksoombatchai, and
Martha McQuade**

“Beauty will be convulsive or it will not be.”—André Breton

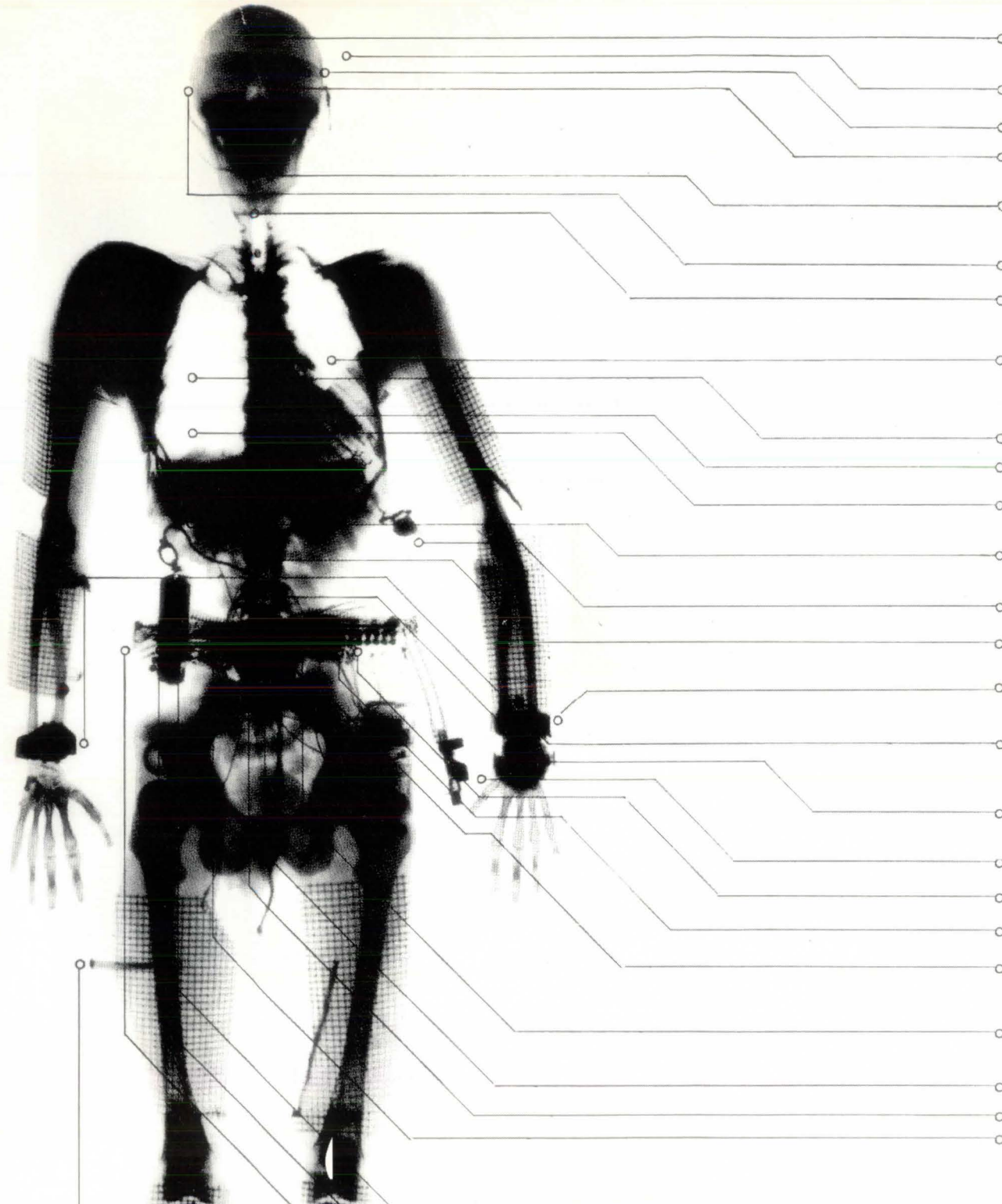
“A made thing is a projection of a live body that itself reciprocates the live body.”—Elaine Scarry

The task of building serves the body and its primitive physical necessities. Although architecture provides physical shelter, its task is also to harbor the psyche. Architecture is free to define what is desired, not just required. The primitive hut is not bound to practical necessities of mere survival; it need not provide comfort. Instead, the hut is free to respond to our primitive emotions: anger, fear, joy, love.

The human body is a temporal temple; the human soul can leap through time. Fear of mortality and the joy of light can be physically defined. Our primitive hut condenses these emotions into an architecture of raw material, space, and light.

Our primitive hut is a human artifact. The interior structure is formed by salt-cured tissue of fibro-areolar lamina, the layer just below the skin also known as the superficial fascia. The superficial fascia is held in tension by an armature of bony ribs bound by cured sinew. Our hut is like a hall of mirrors, a transitory passage for the revelation of a mortal body and an indeterminate soul.





Headset

TV/camera skullcap containing universal lens and backup clip-on systems for TV/cameras. (Sony)

Antenna for sending and receiving signals. (Garth Brooks)

Brain sensor for keeping track of brain functions.

Vision- and sun-correcting glass with built-in digital readout chip and micro/macro capability. (The Private Eye)

Microphone linked for audio input into tape, TV, phone, and sound amplification systems.

Headphone for sound input and environmental dampening.

Coaxial cable for connecting headset to waist brain.

Whole system life pac

Health pac containing body chemistry pills, health aids for dealing with physical breakdowns, microfilm medical history. (including Smart Dust)

Food pac containing vitamin pills, food wafers, and taste sensations.

Weather pac containing rain/wind wear.

Information pac containing information-storage cards (computer inputs), cassettes, and microfilm. (Visor)

Tools pac for repairing portable person and dealing with the outside mechanical world.

Protection pac with a built-in aggression bomb.

Transporters pac with collapsible containers.

Wrist bands

Information indicator band for time, date, weather, and health (endo system for body and ecto system for mechanical and electrical systems).

Control input band for phone, computer, TV, radio, tape, and other systems. (Twiddler, Visor, Wristwatch, Cell Phone)

Waist brain

Fuel cell for operating electronic systems and heating/cooling systems (rechargeable cassettes for exchange at "city terminals").

Plug-in jack for using local power source.

Coaxial cable connection to bodysuit connecting all systems to waist brain.

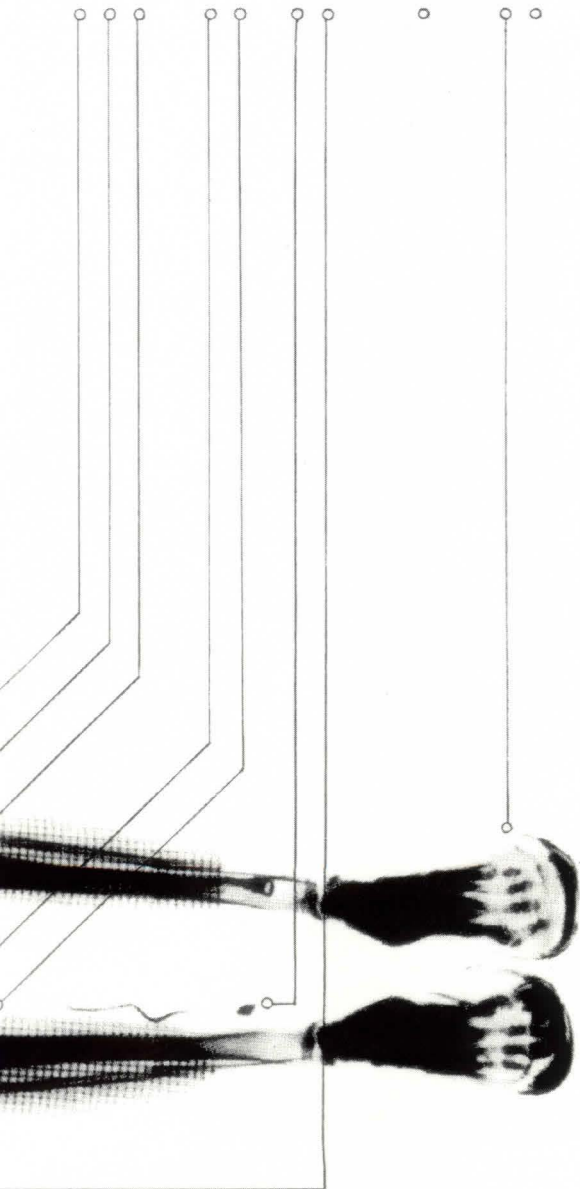
Internal circuitry with jacks for connecting all hardware.

Minicomputer with both built-in programs and slot for program card inputs (interfacing mechanism for external communication with larger computer). (Visor)

Medical monitoring storage and analysis unit connected through belt to medical sensors.

Card input for medical history (up to date).

Transmitter/receiver for phone, TV, and radio linked to headset antenna and amplifier/preamplifier/converter for phone, TV, radio, and tape systems.



Mini-cassette tape dock.
TV monitor for head, hand, or table use.
Camera storage.

Bodysuit

Heating system with grid of heating elements.
Cooling system with insulating/heat-dissipating material.
Clothing projecting desired image, including customized updating.
Body health sensors.
Internal coaxial cables connecting headset, wristbands, and waist brain.

Additive

Backpack/carry-all bag containing professional, recreational, comfort, and shelter items.

Motorized collapsible feet.

Service terminals for exchanging fuel cells, input, output, power terminals, and acquiring expendables.

Smart Dust

**Portable Person
1999**

Studio Works: Robert Mangurian and Mary-Ann Ray

nature's coffin when he declared in a Yale lecture, "If you can do it, it's natural."

Perhaps the first proposal for a post-Newtonian hut is Coop Himmelblau's Open House, a filigreed skein of steel designed in 1983 for a site in Malibu (though never built). With multitudinous parts moving like oppositely charged magnets in a conceptual energy field, the design embraces complexity rather than simplicity. The structure oscillates between order and disorder, and completely stands classical ordination on its head.

Even Schindler's notions of space as the fundamental property of architecture are altered by other huts that operate critically on the concept of pure space. At the North Carolina Museum of Art in Raleigh, by Smith-Miller+Hawkinson, where a giant "PICTURE THIS" by Barbara Kruger is writ large across the garden, space and form are mediated by words. Because the words can be walked among—occupied—by visitors, they become spatial: Architecture literally acquires a new dimension in the word.

Rem Koolhaas maintains that the architect is the last one for whom Newton's apple will fall. In other words, architecture may never be free of gravity. But manned satellites—the ultimate huts of the contemporary world—have already orbited the earth, bringing us face-to-face with an environment where even gravity holds no sway, a place that requires no corners, no orthogonality, no directionality. The apple for architects has indeed fallen, and our concept of space back on earth can hardly be unaffected.

Still, architects today continue to look, almost as an act of faith, for a fundamental architecture predicated on the "basics," and a surprising number are operating in reductivist terms that Laugier would recognize. In the portfolio of simple structures presented in this issue, most designs are predicated on what Le Corbusier called the divinity of the right angle. Some have a classicist impulse that tends to the universal rather than the particular. Most aim at simplicity.

A new recruiting station in Times Square by Architecture Research Office is a Miesian box whose glassy reflections are augmented by clustered video tubes that transform the facade into an architectural screen. In Tom Green County, Texas, God also resides in the details of another Miesian structure by Rhotenberry Wellen, where the connections between the parts are celebrated as moments of structural clarity. In Arizona, Rick Joy's rammed-earth studio finds meaning in a fundamentalist view of the elements, while an

artist's cabin in Maine by Gluckman Mayner represents the literate articulation of classically ordered parts—foundation, plinth, columns, roof, wall, clerestory window, studs, joists. A dogtrot house by Stephen Atkinson in Zachary, Louisiana, exemplifies a clear transliteration of Laugier's hut within a Southern vernacular.

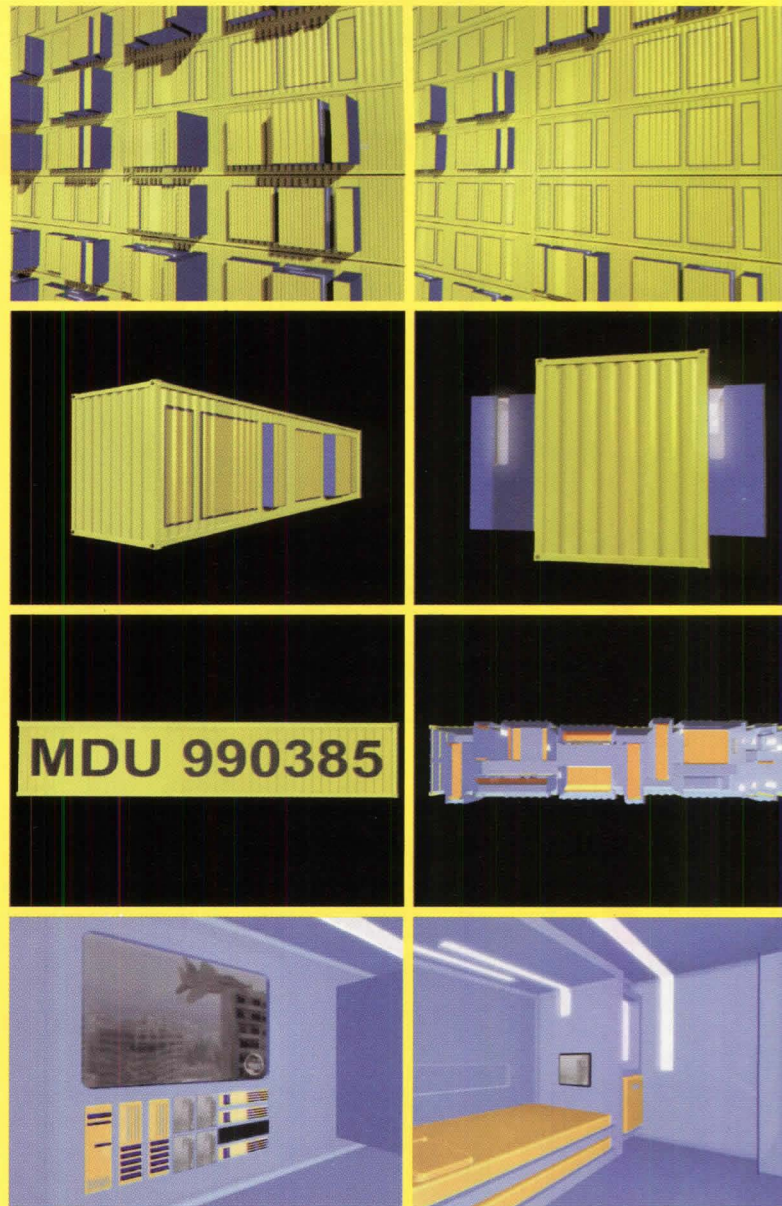
If it is not anachronistic to use the term beautiful for such a conceptually advanced structure, then beautiful is the word for a Carlos Zapata's glassy pavilion on Lincoln Road in Miami, which seems to sail by a shallow basin, as though equally at home on land and water. In Germany, the folded planes of Peter Eisenman's bus station display cryptic forms that invite interpretation: The environment asks why, and incites discourse that becomes a mental environment in itself. Zapata's and Eisenman's schemes shift

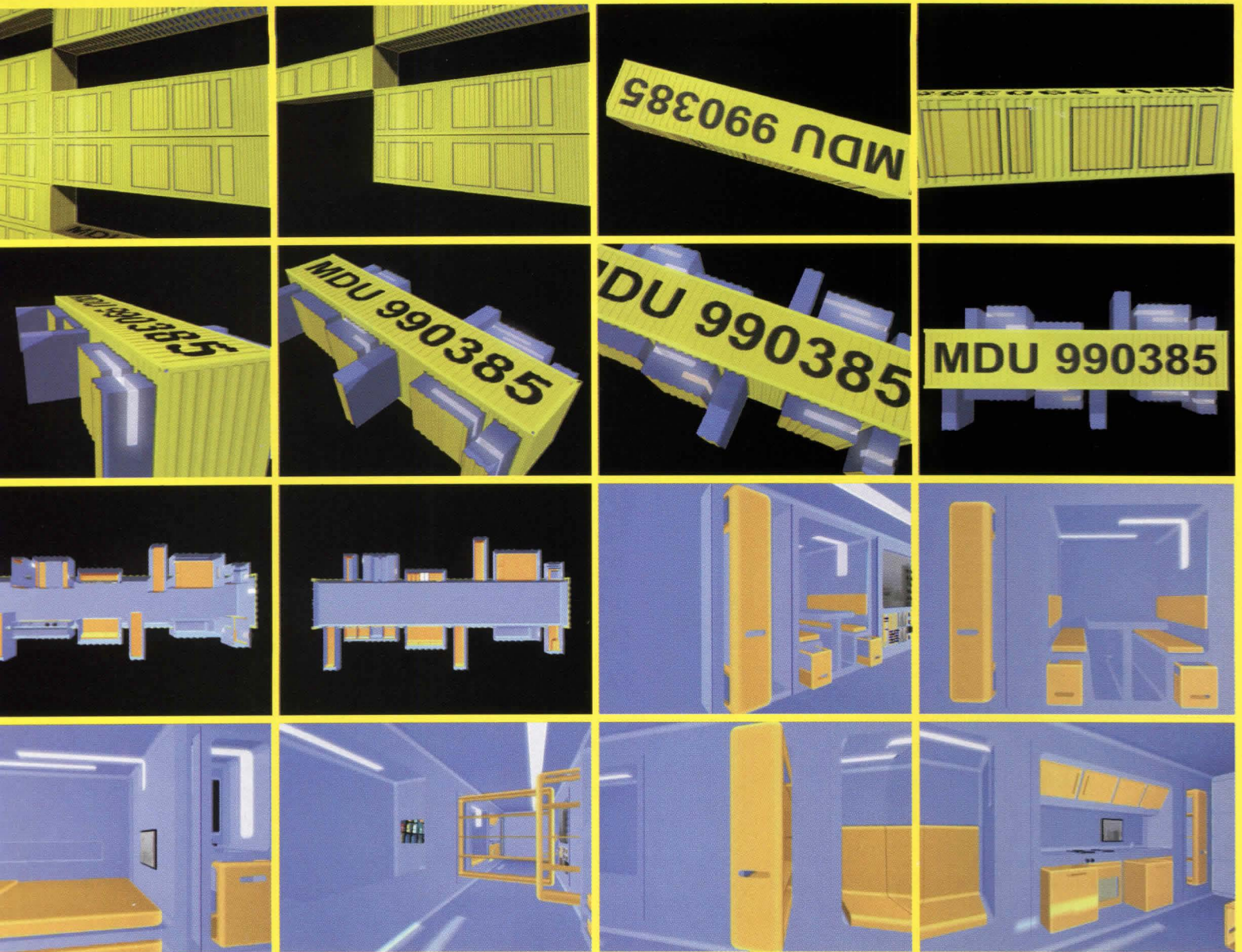
Architects today continue to look, almost as an act of faith, for a fundamental architecture predicated on the “basics.”

the foundationalism of simple reductivist structures toward a terrain of questioning and uncertainty beyond the reach of the more axial, symmetrical, catholic schemes that are self-contained wholes. The ground and grounding of the buildings by Zapata and Eisenman seem to liquify, and the only certainty is the question.

Among the schemes commissioned especially for this issue, Deborah Berke renders the universal generic: She photographs a common trailer—architecture as de facto shipping container. LOT/EK completes the circle by transforming an actual shipping container into a habitat. Mangurian + Ray submit that the human body is the ultimate performative structure, with a chart that details how the body can become an environmental carapace itself.

Readers will be hard-pressed to find a single truth common to all these pavilions—nothing so reassuring as Laugier's simple structure. Collectively, the buildings are theses that exhibit a range of philosophical positions. They represent no such thing as a single architectural truth, no fundamentalism, but rather a disconnected series of belief systems. The buildings evince a pluralism in contemporary architecture that is wide-ranging, healthy, and perhaps irreversible. In other words, while some architects may maintain an affinity with Laugier, few would say his hut is the ultimate. ■





LOT/EK Architecture

The Mobile Dwelling Unit (MDU) is designed for individuals moving around the globe. Created from a standard shipping container, the MDU travels with its dweller from one long-term destination to another. It is fitted with all the equipment necessary for living and work, and is filled with the occupant's personal belongings.

Cuts in the metal walls of the shipping container generate extruded subvolumes that encapsulate living, work, or storage spaces. To ease shipping, these subvolumes can be pushed inside the container, interlocking with each other and leaving the container's outer skin flush. When occupied, all the subvolumes are pushed out, leaving the container's interior completely unobstructed and all functions accessible.

The interior of the container and the subvolumes, including all fixtures and furnishings, are fabricated entirely of fiberglass. A central computer regulates airflow, temperature, and lighting. The computer is connected to communication networks; monitors, speakers, and microphones are distributed throughout the unit.

Once it reaches its destination, the MDU plugs into a vertical harbor—towers located in major cities around the world. They contain elevators; networks of power, data, water, and sewage lines; and a solid-trash disposal system.

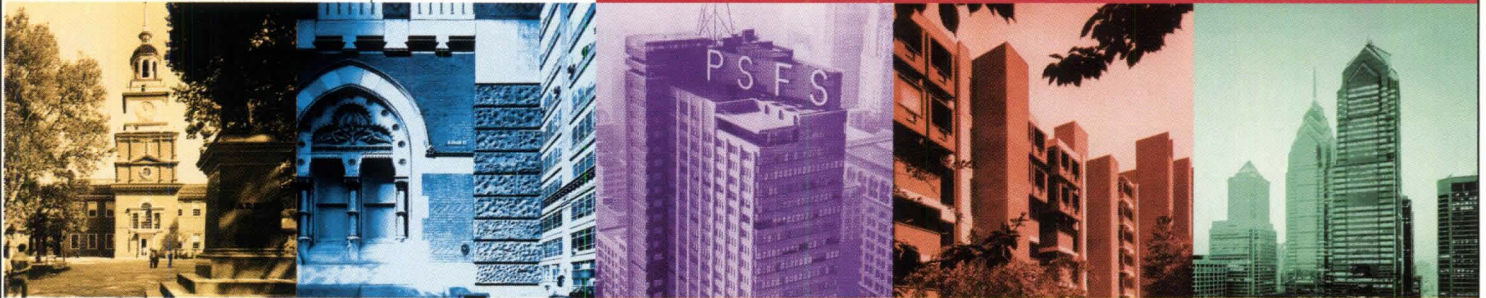
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 EC Recommend
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 FB Regional
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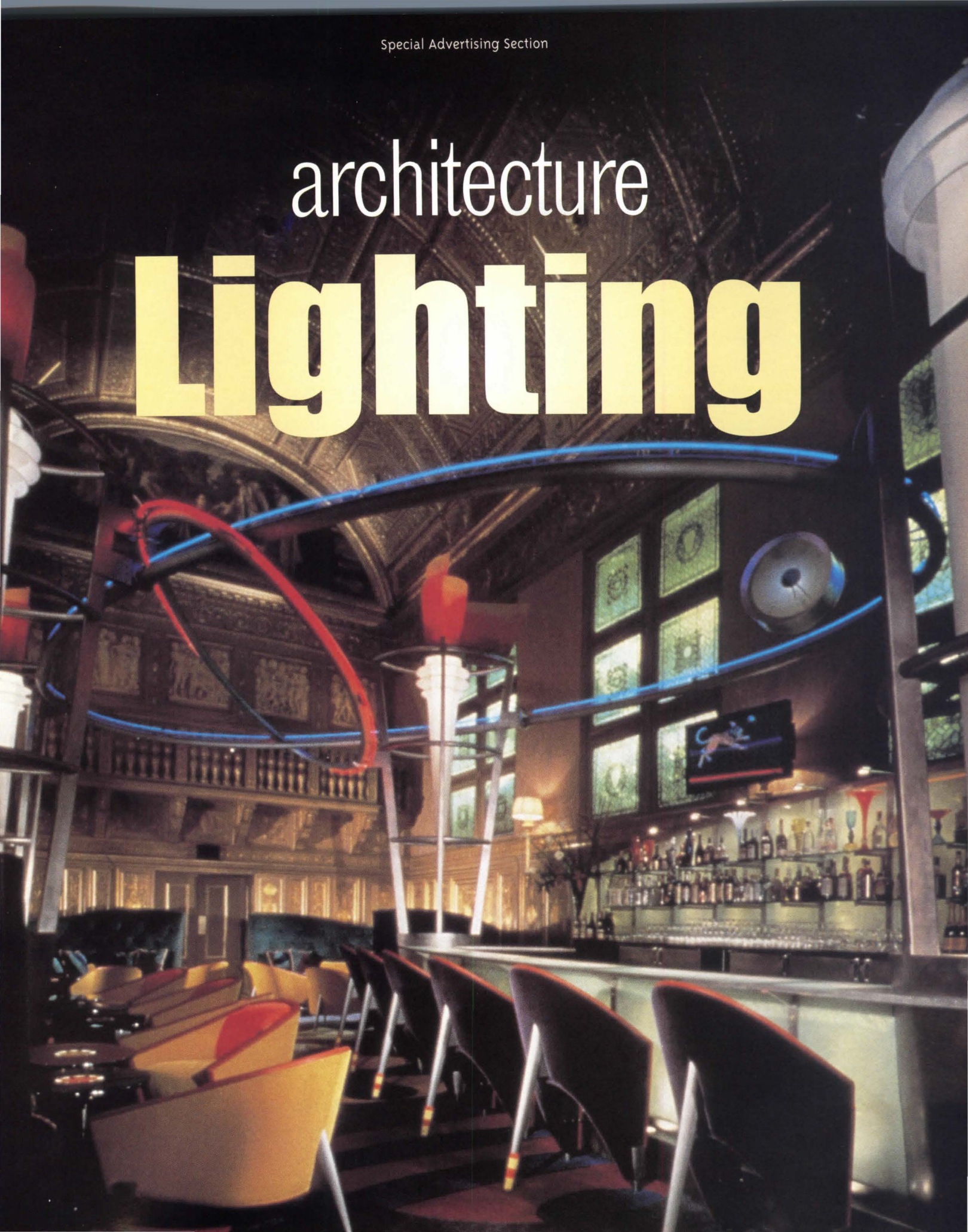
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 DA 1
 DB 2 - 9
 DC 10 - 49
 DD 50 - 100
 DE More than 100

architecture
Lighting



Let There Be

Of the many components that occupy an architectural space, lighting is the most tangible. Illumination is also a necessity, enabling occupants of a space to do their tasks, live their lives, play their games, eat their meals. But lighting also dramatically affects the perception of that space. Beautifully detailed architectural elements can easily be lost in shadows or glare if the lighting is less than ideal.

That's why—with the debut of **ARCHITECTURE LIGHTING**—we are turning the spotlight on the many facets of lighting design. An article on a new way to light the modern office, "Two-Component Lighting" (p. 126), stresses both ambient and task lighting, and shows how they are being melded into a cohesive design.

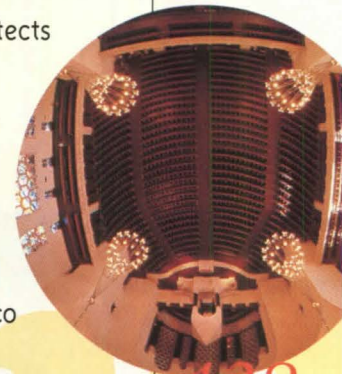
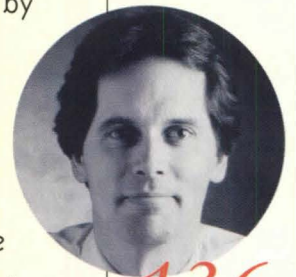
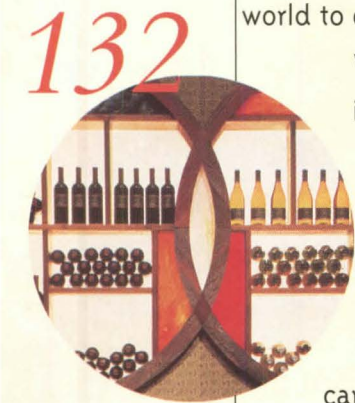
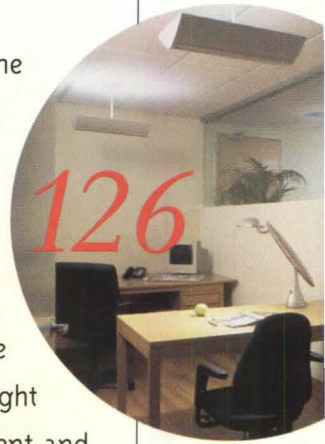
Lighting technology is also changing rapidly. We could easily fill every page of this issue with new lighting products. Instead, we present a broad overview of some recent developments (p. 128). From ballasts to fixtures, bulbs to troffers, lighting technology is progressing by leaps and bounds.

We also introduce lighting designer Paul Gregory and his team at Focus Lighting in New York and show how they have worked with renowned architects from around the world to create restaurants that turn meals into events (p. 132).

We're confident that some of the pros in lighting design can impart valuable insight to their architectural counterparts. We've included a roundtable discussion with some notables (p. 136). Barbara Horton, principal and president of Horton-Lees Lighting Design Inc. in New York; Richard Renfro, principal of Richard Renfro Design Group Inc., also in New York; and John Gill, head lighting designer with CRS Engineering, Inc. in Birmingham, Alabama, share their views on the current state of lighting design, where it's headed, and how lighting designers and architects can become a more cohesive team.

We're also presenting a profile of S. Leonard Auerbach (p.138), principal and founder of Auerbach + Associates and Auerbach + Glasow, San Francisco and New York. Auerbach and his team were recently singled out for an International Illuminating Design Award from the Illuminating Engineering Society of North America and by the International Association of Lighting Designers for their lighting design renovations of the San Francisco War Memorial Opera House.

We hope you enjoy our first Lighting Special Report. In the April edition of **ARCHITECTURE LIGHTING**, we're going to take a look at Lightfair International, the world's preeminent lighting trade show, and check in on the ethereal lighting at the W Hotel in New York.





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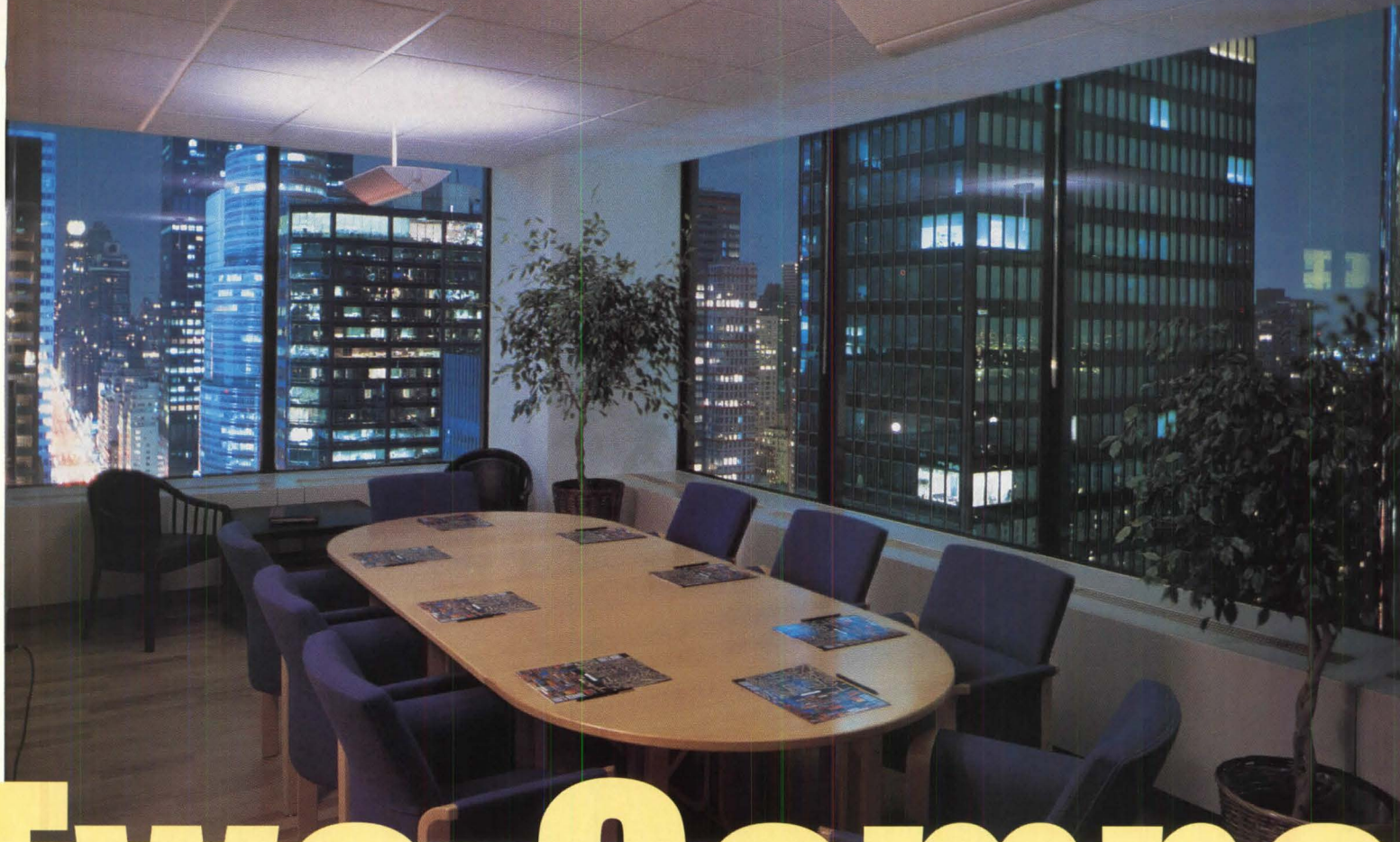
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Photography: Walt Roycraft © 1999



Two-Component

A Solution for the Modern Office

Are two components better than one when it comes to office lighting? The Norwegian Trade Council in New York City thinks so. They swapped their fluorescent troffers for this new approach, which has already gained a following throughout Europe.

Not too long ago, in a time now regarded as ancient history, most office work involved typewriters, carbon paper, and other such relics. But drastic changes in office technology have swept it all away, leaving a computer terminal atop virtually every desk.

Yet something as seemingly simple as office lighting remains mired in the past. The symptoms—glare on computer screens, eye strain, worker fatigue—offer ample evidence that many designers *aren't so enlightened* when it comes to lighting the modern office.

The problem is a basic one: Light levels appropriate for paper tasks and other duties can be annoying for anyone working on a video display terminal (VDT). In fact, providing adequate, glare-free lighting for VDT users is now recognized by lighting designers as one of the most critical, and still often overlooked, elements essential to achieving effective office design.

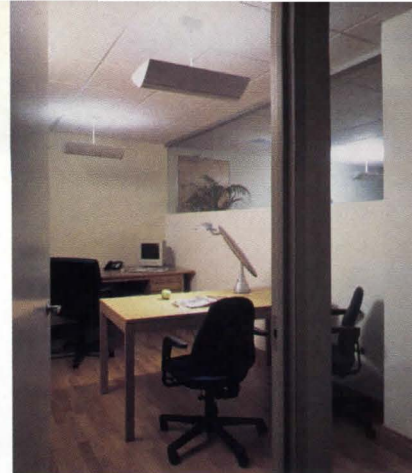
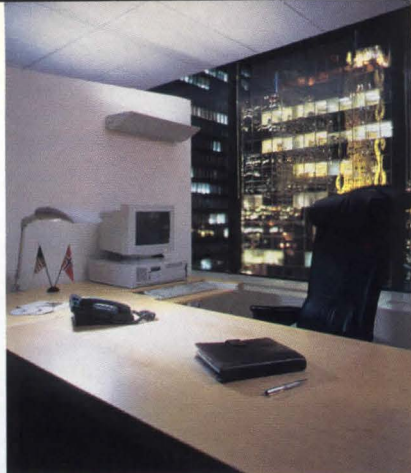
Task & Ambient Lighting. One solution that's proving both ergonomically and economically successful is the two-component

lighting system, designed to provide the two types of lighting needed in today's offices—task and ambient. The system successfully combines ambient indirect lighting with portable, adjustable task lighting to create a glare- and shadow-free work environment that supports frequent VDT use while meeting the comfort levels of the employees who occupy the space.

Task and ambient lighting have been employed together for some time, but often with varying results. Only now is their use in a simultaneous, integrated scheme gaining wider acceptance in the United States.

One notable advantage of two-component lighting: It meets the revised, updated guidelines established by the Illuminating Engineering Society of North America's standard for proper office lighting (known as RP-1).^{*} First issued in 1993, RP-1 stipulates that ambient lighting levels in a workplace should be between 30 and 40 footcandles (fc). This is a 50 percent drop from previous recommendations.

Studies of office facilities have found that traditional footcandle levels of 70–75 for ambient area illumination and 70 for task surfaces were just too bright. Besides, they weren't energy-efficient and didn't provide the proper levels of contrast at the work surface. Widespread eye fatigue among employees working at com-



puter terminals or other reflective work surfaces was prompting frequent breaks and a corresponding drop in productivity.

Since two-component lighting emphasizes lower ambient light and higher footcandle levels for work surfaces, it addresses that basic problem and provides an efficient way for designers to meet the IESNA recommendations.

The solution is achieved by using indirect pendant, wall-mounted, panel-mounted, or floor-based luminaires for general illumination, supplemented by portable, adjustable task lights. The result is a glare-free, individually adjustable, and flexible work environment, one that eliminates eye strain that occurs from pupils having to constantly adjust to irritating glare and either too much or differing contrast levels at the work surface. Relative luminance between a specific task area, surrounding work areas, and office background is also optimized. Task-directed light utilized in such schemes should be as evenly distributed and glare-free as that in surrounding areas.

Penny Wise. Although indirect ambient lighting is the base element of any two-component plan, it is frequently bypassed by lighting designers and their clients because, initially, it costs more than traditional direct downlighting. It should be noted, however, that permanently installed indirect luminaires are essentially stationary, bringing no additional expense or disruption of the area—just as with standard direct downlighting.

Recent luminaire designs are completely glare-free and use energy-efficient compact fluorescent sources with equally compact electronic ballasts. Many of these newer models are also designed for portability within offices that experience high "churn" rates. In offices where direct-downward fixtures are installed, they can be turned off to save energy and eliminate glare. Pendant or other types of indirect luminaires can then be installed adjacent to older direct ceiling troffers.

When specifying and installing two-component lighting, it is important to examine the role of task lighting. The traditional desk lamp is often called a task light, somewhat of a misnomer. A true task light adjusts to its individual user, as well as to the task at hand. It must have a movable multidirectional head and a movable articulated light arm. The best task lights offer adjustable precision lighting, energy efficiency, and task-specific design. They should illuminate keyboards and printed materials without reflecting in VDT screens.

Installing a two-component lighting system is much easier during an initial construction stage rather than in a renovation or retrofit. Frequently, however, users can simply turn off the previously installed system when a two-component system is installed in a retrofit.

NTC in NYC The Norwegian Trade Council in New York City is one recently redesigned office that is benefiting from two-component lighting. Architect Raymond Bennett, of the Bennett Design Group Inc. in New York, says a primary goal for the 5,600-square-foot facility was to eliminate glare that had previously hindered the work of NTC employees who performed intensive computer tasks.

The retrofit gutted the office but left the old fluorescent troffers in the ceilings. A network of ambient indirect compact fluorescent pendant and wall-mounted fixtures were installed in tandem with portable, adjustable task luminaires at each desk. Bennett said that the two-component plan, which he was specifying for the first time, not only created an "open feeling," but eliminated glare as well.

Once the renovation of the NTC offices was complete, all full-time employees were interviewed regarding the new office lighting. Photometric data on illuminance and color temperature for day and night conditions were also collected. Average daytime illuminance levels were 75 fc (807 lux) and average nighttime illuminance levels were 40 fc (433 lux).

Most NTC employees use a computer for a major portion of their workday. Interviewees found that two-component lighting performed well to support visual tasks. None experienced glare from the lighting, but glare from the windows was a problem for some employees. Most were extremely satisfied with the new lighting scheme.

The employees liked having personal control of the lighting in their workspaces. Ninety percent used their ambient indirect fixture all or most of the time, while 40 percent reported frequent use of their task light. Findings suggest that additional tips on the use of the lighting should be provided.

Additionally, all interviewees thought that two-component lighting improved office appearance and that it was an important office feature. The new lighting scheme was rated as significantly better, less bright, attractive, pleasant, calming, likable, soft, relaxing, and interesting by the employees. No negative visual health effects were associated with two-component lighting.

As corporate America continues the trend toward more flexible office environments that reconfigure as employee needs, tasks, and staffing levels change, a two-component approach to lighting provides a clear advantage. Because of its efficiency and its benefits to employees, it will become more commonplace and will join the ranks of such indispensable office mainstays as the phone, fax, copier, and the ever-present computer.

*IESNA is a non-profit technical society based in New York City dedicated to advancing knowledge and disseminating information for the improvement of the lighted environment to benefit society.

Bright Ideas

Downlight Collection

The Alkco Downlighting Collection of decorative recessed downlights provides crisp, focused illumination to highlight artwork, display cases, bookcases, architectural features, and more in a broad range of residential and business interiors. Ideal for ambient and accent lighting in museums, galleries, retail boutiques, offices, lobby areas, and upscale homes, this collection comes in a variety of sizes and styles.

All of the fixtures feature durable die-cast aluminum construction with a choice of trim ring styles that may be specified in chrome, white, gold, or brushed aluminum, with a variety of lens and louver options. The collection consists of three model lines, each of which has a variety of options to fit virtually any ambient lighting environment.

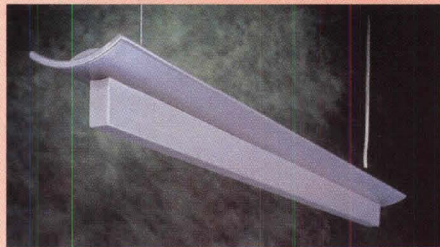


Ellen Maxi Sconce

Function and form come together in the Ellen Maxi wall sconce from Luxo Corporation. The sconce's contemporary aesthetic makes it a welcome addition to a hospitality, healthcare, museum, office, or public space project.

Characterized by its cylindrical metal shade, the Ellen Maxi creates a distinctive vertical/horizontal look while projecting functional light. The metal shade can be either solid or perforated, with evenly spaced ring louvers that run the length of the fixture from top to bottom. The fixture measures almost 1 foot long by 13 inches wide and protrudes 8 inches from the wall. As sources, one or two 18W compact fluorescent lamps can be used.

The Ellen Maxi features a metal wall bracket and ring louvers with a durable white polyester powder-coated finish. The diffuser is available in solid translucent opal acrylic or white perforated metal, and all exposed hardware features a polished chrome finish.

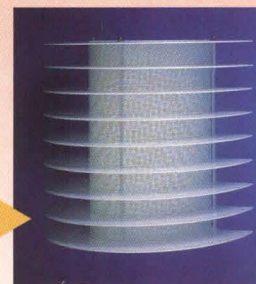


Silhouette

A compact luminaire called Silhouette™ incorporates the latest in T5 fluorescent lamp and electronic ballast technology. This linear lighting system from Lightolier offers a variety of configurations with an ultraslim profile that adds a stylish new dimension to a variety of interior applications.

Silhouette's modular construction permits the units to be mounted individually or joined together for a wide array of configurations. This flexibility gives the designer many options in creating the required lighting for a particular space. Light distributions can be adjusted for indirect, direct/indirect, or direct lighting.

At home in offices, conference rooms, board rooms, reception areas, lobbies, and more, Silhouette brings an elegant style and a modular approach to lighting modern offices.



Majorica

Blown-glass fixtures are always the perfect accent for restaurant or retail applications to add a splash of color while providing ambience. The Majorica pendant and sconce is the latest addition to the distinctive line from 2thousand degrees. Designed by the company's founder, Jim Henderson, the Majorica Series combines an exotic "old world" glass shape with a unique metal shade holder.

The fixtures are available in seven frosted-glass colors and three metal finishes. The pendant has a blown-glass shade with an optic pattern and a satin-plated shade holder and canopy. A 50-inch black cord is included, a white cord or longer cord can be specified. Both the sconce and the pendant use a 60W source with a 650-lumen output.





Star Chandelier

When an extra bit of sparkle is needed for a hotel foyer or any public building, the Strass® Crystal Star Chandeliers from Starfire Lighting provide the perfect solution, with a dash of dazzle. The reflected sparkle from Strass crystal, combined with the chandelier's star shape, makes the fixture well suited for large open areas where guests need the all-important ambient light for that first impression.

The chandeliers are characterized by a three-dimensional, eight-pointed brass star structure, brass canopy, and cut-crystal chains. Thin brass chains parallel to the star pattern heighten the fixture's visual interest. The crystals on the chains reflect light for an elegant shimmering effect. The Strass Crystal Star Chandelier typically measures 8 feet in diameter at the points of the star.



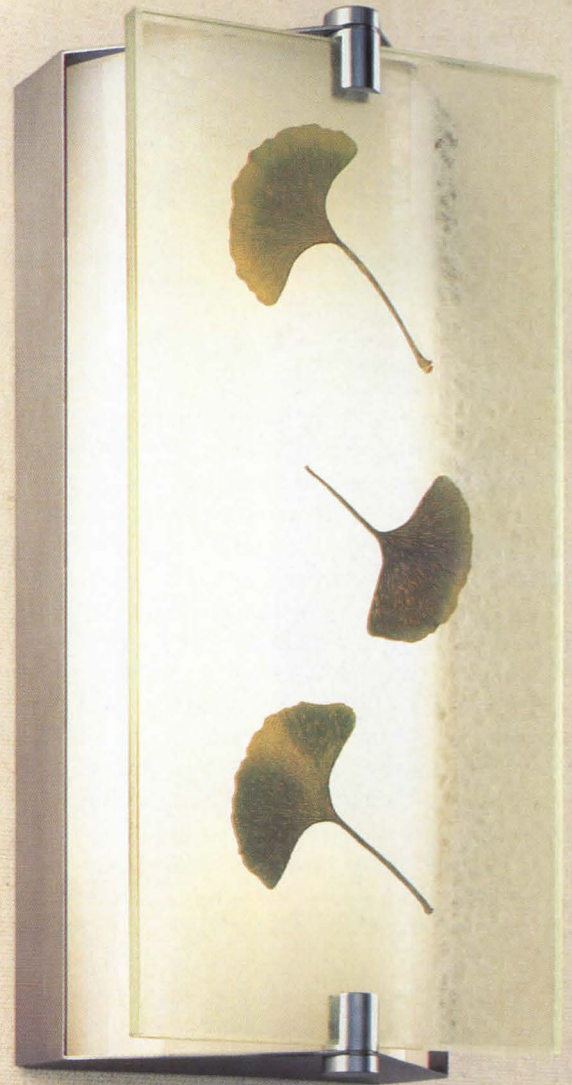
Adjust-A-Beam

For added drama for an outdoor lighting application, Quality Lighting has introduced the Model 550 Adjust-A-Beam aimable floodlight. This fixture provides area floodlighting with a widely adjustable beam spread, ideal for use in a range of commercial, industrial, and institutional applications.

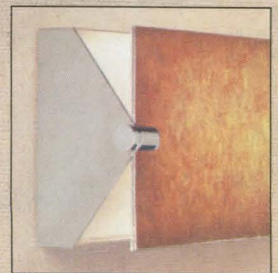
The floodlight uses a reflector system that allows the beam spread to be adjusted between 17 and 80 degrees without opening the fixture casing. The reflector system uses one fixed-position spectral metal reflector and four movable semispherical, variable-contour reflector panels that provide even vertical or horizontal illumination at any angle.

Concealed hardware on the fixture's CRT-shaped housing adds to its contemporary appearance. The housing is made from durable die-cast aluminum with a chip- and fade-resistant baked-polyester powder-coat finish. The clear, impact-resistant glass lens is sealed with a silicone gasket to provide maximum protection against weather, debris, and bugs.

BALDINGER

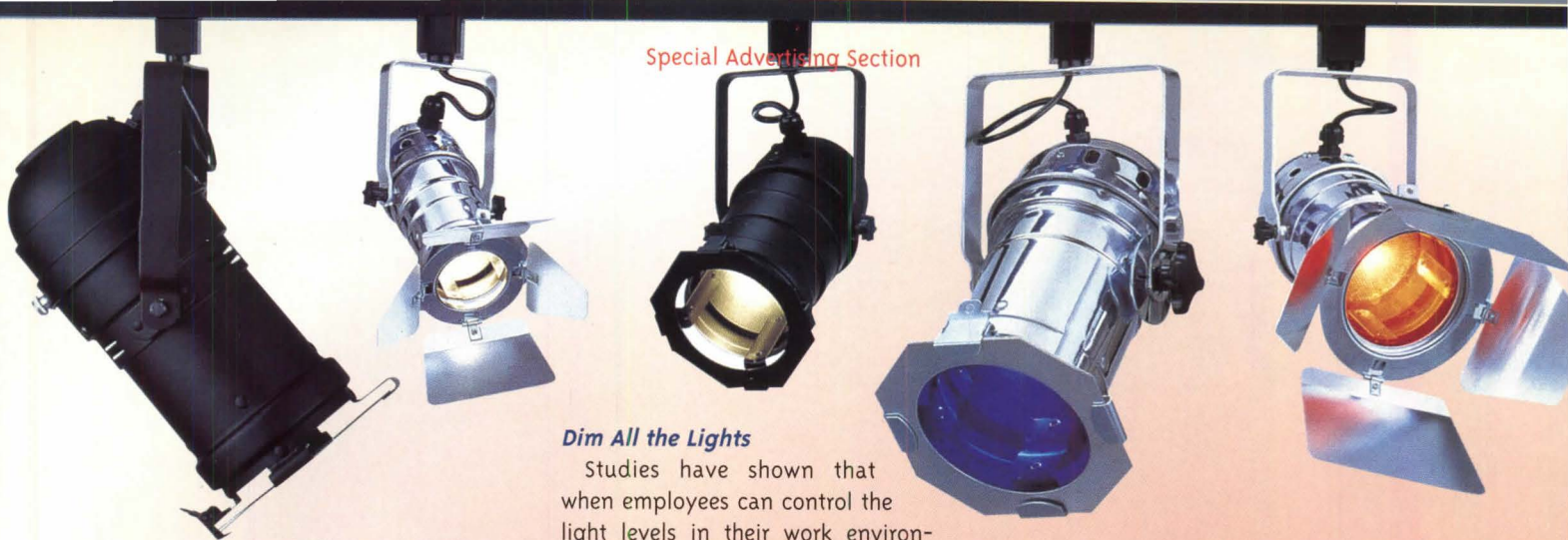


The Rockwell Group's new collection for Baldinger is innovative and imaginative. The Ricky and Little Ricky are new ADA compliant wall sconces available in a wide variety of diffusers and metal finishes. Chose a standard diffuser or create your own graphics. The possibilities are endless!



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Stylistic Track

Energy efficiency is a must in retail lighting. Now Amerlux extends its line of Stylist track luminaires with the introduction of Stylist III. With Stylist III, only one-third of the normal number of fixtures are needed and virtually no heat is produced, making the shopping experience much more comfortable for the consumer, the salesclerk, and the merchandise itself.

Stylist III utilizes a metal halide source and the reflector provides a tight beam of light for high-ceiling applications and can illuminate displays from up to 50 feet away. From a 20-foot distance, Stylist III provides a 7 1/2-foot beam diameter with approximately 100 footcandles. Furthermore, wattage per square foot is reduced to conform to all energy codes.

The luminaires are constructed from extruded aluminum for the ballast housing and spun aluminum for the reflector housing. A clear flat-glass lens and a black painted metal baffle trim ring complete the fixture construction, which can be either track- or canopy-mounted. It can also be mounted from high ceiling trusses for less visual distraction.



Dim All the Lights

Studies have shown that when employees can control the light levels in their work environment, they are more productive. Lutron has the solution for every large office that contains a number of employees at different workstations. The PerSONNA® dimmable fluorescent fixture features an electronic dimming ballast that can be operated by a wireless remote control. Thanks to a simple two-wire power connection that can drop into standard grid ceilings, no special wiring is needed for installation.

The PerSONNA fixtures dim smoothly and continuously from 100 percent measured light all the way down to 2 percent. They are available for single- or multiple-fixture applications. Single, dimmable fixtures are useful for computer and CAD workstations. Each employee can adjust and change the light levels over his or her desk—according to personal preference, time of day, or the task at hand—with a simple touch of a remote control.

For example, an employee may dim the lights a bit to better see a computer screen and brighten the light for paper tasks. In a multiple-fixture application, up to 19 fixtures can be connected to a PerSONNA master fixture for simultaneous dimming control.

Studio Classics

If the situation ever arises where you must put a diva in the proper light, the Studio Classics from Halo Lighting might be just what you're looking for. Reminiscent of classic theatrical fixtures, Studio Classics fixtures hark back to track lighting's theatrical roots. They can use halogen PAR20, 30, or 38 lamps or PAR30L or 38L metal halide lamps. The lampholders are available in polished aluminum or matte black, and come complete with gel holders for colored theatrical gels. Attractive venting holes reflect the units' classic style while providing convection cooling to prolong lamp life. Adjustment knobs with a full field of rotation and elevation complete the look.



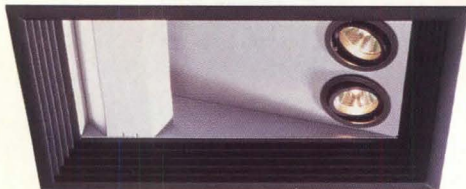
MatreX

Designed for accent and display lighting, the MatreX from Ardee Lighting is a versatile series of low-voltage recessed-fixture housings. MatreX provides a clutter-free, visually unobtrusive alternative to traditional track lighting without sacrificing design flexibility.

The multielement fixtures are characterized by a stamped-aluminum rough-in housing with a choice of linear, square, or rectangular lamp configurations. One to four halogen lamps fit into elements that rotate and tilt for maximum design flexibility. MatreX also offers the unique combination of indirect ambient color-

enhancing halogen light with an adjustable downlight. Select models feature a housing that angles back into the ceiling to hide a 100W quartz lamp that provides soft ambient light.

A stamped-aluminum base covers the transformer and the rest of the electrical components to present a clean, finished appearance. Baffled extruded aluminum trims frame the housing and complement the ceiling's appearance. Base, trim, and elements are available in white, black, or metallic silver powder-coat finish, and custom colors are available.





MonoRail

Now track lighting can be installed on a curve, thanks to the new Monorail system from Tech Lighting. It provides all the function and flexibility of a track lighting system, but it has a sleek, elegant look. MonoRail can be hand-bent on-site to customize simple linear shapes or shaped into smooth, sinuous curves to enhance architectural details.

Adjustable and decorative elements are available to add extra pizzazz to an installation, including curly heads, pendants of imported Murano glass, and whimsical balloons and biplanes to hold low-voltage halogen sources.

The MonoRail also comes in a color version and a two-circuit version. The Color MonoRail has an added strip of translucent color in the bendable track. This allows the lighting system to be an integral part of overall interior design. The two-circuit version gives the lighting designer an added level of control. Two individually switchable circuits are on a single run to allow separate control of ambient and task lighting or the creation of different lighting schemes to change a room's atmosphere.



Ovation

A new family of completely recessed fluorescent luminaires featuring modern architectural styling has been introduced by Metalux Lighting. The Ovation also has greater

optical and energy efficiency.

The Ovation's attractive construction makes it a suitable choice for private offices, conference rooms, retail settings, and libraries, to name just a few. Due to its computer-designed optics, the Ovation provides soft lighting with a balanced brightness, without direct or reflected lamp glare. This is achieved via a matte white indirect reflector mounted above an efficient fluorescent T5 or T8 source. The lamp shield is constructed of heavy-gauge, perforated steel with a milky white diffuser.

Designed to gently and efficiently distribute light over horizontal and vertical surfaces, the Ovation eliminates the "cave effect" common with other luminaires. All of the Ovation's components are located above the ceiling plane for a clean, unobtrusive architectural appearance.

Restaurant

WITH INSPIRED LIGHTING, A RESTAURANT SPACE CAN PLEASE THE EYE AS MUCH AS THE FOOD PLEASES THE PALATE. PAUL GREGORY OF FOCUS LIGHTING SHARES THE SECRETS OF FOUR HIGHLY SUCCESSFUL PROJECTS.

Lighting plays such an important role in revealing the architecture of a space, it's no wonder the best designers approach it as theater. That's certainly the approach used by Focus Lighting, a firm that has created architectural lighting designs for projects ranging from the Entel Tower in Santiago, Chile, to the Mohegan Sun Resort and Casino in Uncasville, Connecticut, with many hotels, restaurants, and retail stores in between. The company creates; "a sense of spectacle" that enriches every visitor's sensory experience, whether in a hotel, restaurant, showroom, or residence, says Paul Gregory, the company's founder and president. The secret to creating successful lighting design, especially with restaurants, is knowing how to create the key elements, according to Gregory. Those elements are:

- the "First Look," a series of first impressions: Is it inviting, urging passers-by to enter?
- the "Transition," a series of interesting smaller views between the front door and the table: a beautiful bar area, an artistic wine display, a grand fireplace. The "snapshots" from these first two elements are what people will tell friends about.
- the "Task," which enables the guest to perform the "task" of the space: read a menu, see a companion's expression, appreciate how appealing the food looks.

Four recent projects are notable for having successfully captured the vision of both owners and architects while creating comfortable spaces for guests: Ruby Foo's Dim Sum & Sushi Palace and Le Cirque 2000 in New York City, Lidia's Restaurant in Kansas City, and the Samba Grill in Las Vegas.

BON APPÉTIT!

His central image for Le Cirque 2000 was "a new Ferrari set in the middle of a beautiful Italian Palazzo," says interior designer Adam Tihany.

- The challenge: to accent the surreal interior and enhance the existing architecture.

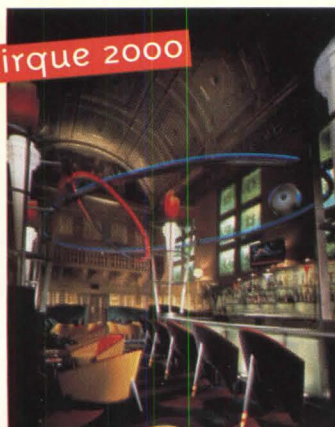
- The solution, as worked out by Tihany and Focus Lighting's Paul Gregory: "Use the new architectural elements as light sources to create highlights and a lovely ambient glow without altering the existing architecture."

- The result: a successful marriage of landmark architecture and innovative interior design, held together by light.

The use of architectural elements as light sources is seen throughout the restaurant, beginning with the striking entrance area. The brightly lit circus-tent structure hides 24 MR16s, which illuminate both the tent and the mosaic vaults at the entry. This creates a stunning first look. The Gold Room Bar features four torchieres made from stainless steel and white fabric; the internal illumination spreads a warm ambient



Le Cirque 2000



Lighting

light throughout the room. Eleven different fixtures are hidden in each torchiere, including four hidden in the top of each flame, adding a color accent at the top of the room and projecting light up onto the decorative ceiling. The torchieres support two ellipses of dimmable colored neon. Suspended above this structure, an internally illuminated clock slowly moves from one corner of the room to the other; patrons eat and mingle "as time flies." Theatrical Uplighting five different effects are involved in the lighting of the bar itself. First, fiber-optic backlighting emanates from the sandblasted glass panels from both the bar front and the back-bar wall area. Crumpled gold foil behind the glass gives sparkle and life to the front glass at the base of the bar and to the patrons seated nearby. Next, the front half of the glass bar top is uplit with MR11 lamps placed in the footrests. The back half is underlit by amber-gelled fluorescents, giving it a warmer tone than the front half. This creates a nice delineation down the center. The light also punches through the glass bar top in the two colors, creating a beautiful mixture of theatrical uplight on the faces of the patrons. The shelves at the back bar are frontlit from above with small halogen sources, adding dimension and sparkle to the bottles and glassware. Table lighting is enhanced by fixtures attached to the banquettes, arching over the seated patrons. The windows in this room mandated that the lighting on the ceiling and walls be bright during the day to keep the ambient level up and the contrast ratio acceptable. The Great Hall best showcases the contrast between the historic architecture and the colorful, contemporary interior design. Twenty pin-spots hid-

den within a custom-built box on the second-floor balcony highlight the extraordinary mosaic and marble ceiling.

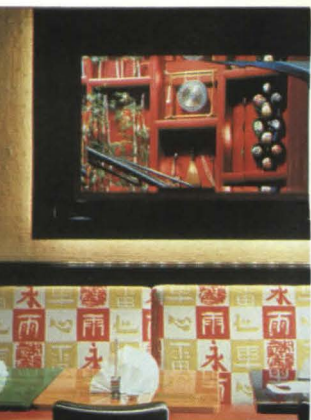
IF YOU KNEW SUSHI

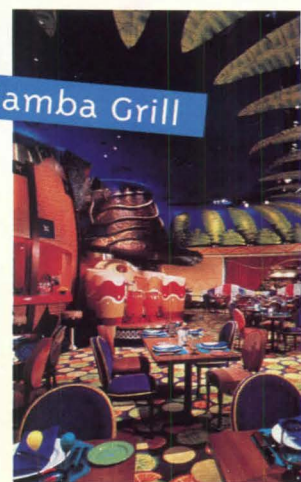
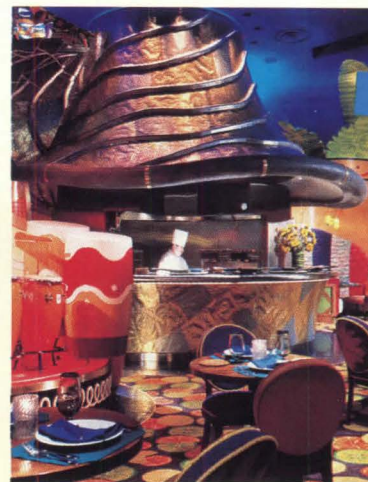
The best way to describe Ruby Foo's Dim Sum & Sushi Palace may be "ancient Orient meets Upper West Side hipster." For his seventh restaurant in Manhattan, Steve Hanson, owner and guru of B. R. Guest Restaurants, wanted to create a sexy, intimate environment—actually, an exquisite "hole in the wall"—where people could eat, drink, and relax. The challenge was doing it in such an expansive space—6,000 square feet on two levels. The visual experience of Ruby Foo's begins even before one enters the restaurant. The smallish storefront on Broadway at 77th Street belies the grander space and experience within. Inside the front door, the patron is immediately presented with the "Mahjong Wall," a 20-foot stretch of internally illuminated mahjong tiles incorporated into the millwork of a low-lying drink rail in the bar area. A low-voltage light strip at the top and bottom of the wall provides a warm glow that lights the pathway into the main dining area. The Mahjong Wall reflects a key decision made by Steve Hanson: to avoid tight pin-spots on each table (too dramatic) and create warm ambient light. Focus Lighting met Hanson's wish with interior designers at The Rockwell Group by illuminating a series of large decorative elements throughout. A general wash of light splashes across the main liquor bar from recessed adjustable MR16 fixtures. The back bar is a grid of backlit shelves containing liquor bottles and drink glasses. Behind each back-bar shelf, one row of 2800K warm white neon provides the backlight.

Front light skips across the bottles and glasses from MR16 track fixtures focused in a criss-crossing pattern.

The Great Wall Halfway into the dining area, the ceiling opens up to a second level, accessed by a long curved staircase that wraps around the double-height space. Following the curve of the staircase is the "Big Red Wall," the restaurant's showpiece: a massive expanse of "cubbyhole" shelf spaces in red lacquered ash wood. Another sushi bar with Shoji Panel greets visitors on the second floor. Across the dining floor, sliding rice-paper doors separate the main dining area from a private dining room. Lit from behind, the rice paper becomes a glowing wall of warm ambient light. Decorative custom-fabricated light pendants of various sizes and configurations are suspended throughout the space. Their deep amber fabric and warm incandescent lamps within generate a rich, saturated wash. By installing extra junction boxes in multiple locations, Focus Lighting allowed for the relocation of these fixtures (or new additions) in the future.

Preset Dimming System Another feature of the lighting design was a response to the client's desire to control light levels progressively throughout the evening. A preset dimming system specified by Focus Lighting creates looks for every hour, getting progressively more dim over the course of the evening. Since owner Hanson wanted to have control of the light levels at his fingertips, a remote-control station was located at the maître d's stand. A three-minute fade time was built into the system to create a seamless, inconspicuous transition from one setting to the next.





VIVA LAS VEGAS!

The Samba Grill at the Mirage Hotel in Las Vegas is a heavily themed environment, relying on vibrant colors and attention-grabbing fixtures to compete in the dazzling Las Vegas atmosphere. Focus Lighting teamed up with The Rockwell Group again to bring *caliente* Latin flair to Las Vegas. One specific challenge here was to use as few exposed lighting fixtures as possible. In the main dining room, four different types of fixtures are contained within a single ceiling cove to highlight oversized palm fronds from multiple angles and in multiple colors, and to uplight the deep-blue ceiling.

"Red on Red" Bright colors in the architectural finishes are made even more vibrant through the use of dichroic color filters. In the private dining rooms, red walls are washed with incandescent socket strips with red dichroic color filters, uplighting from behind the banquettes, while recessed MR16 slot aperture fixtures provide table downlighting. Ceiling-mounted "banana cluster" fixtures provide downlight onto corner banquettes, while red glass pendant fixtures in the bar provide the "pits" of the melon that gives the bar its shape. In the bar area, linear low-voltage light strips at the top of the wine displays wash the wall and columns above with light. A two-circuit track integrated into the overhead

beamwork in the bar area and throughout the restaurant allows for flexibility while providing multiple locations from which to highlight architectural features, displays, art, and chandeliers. By mixing a wide range of light sources—including neon, low-voltage spotlights, incandescent downlights, low-voltage strips, fluorescents, and theatrical framing projectors, Focus Lighting was able to give each area a unique look while maintaining a stunning overall visual image.

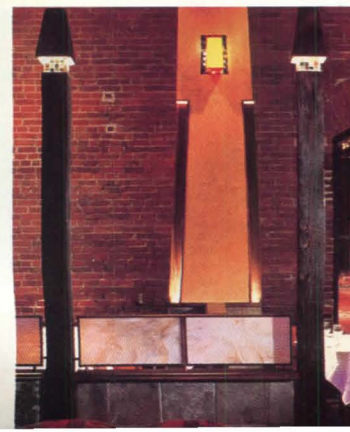
MANGIA!

At Lidia's Restaurant, the challenge facing Focus Lighting and interior architects at The Rockwell Group was to transform an early-1920s freight house located in Kansas City's Mission District into an atmosphere not unlike that of an Italian country home: warm, friendly, and comfortable. The concept was to highlight a series of architectural icons that convey Lidia's "passion for Italian food, wine, and culture." PAR38 downlights wash the room with a warm glow, allowing the owner to move tables without having to refocus fixtures. Patrons do not feel isolated from surrounding tables, nor are they put in a spotlight. Accent lighting on various architectural elements—such as the wine displays, fireplace, and chandeliers—provides a nice visual contrast. Adjustable PAR20

and PAR30 fixtures hidden within the pilaster bases and caps streak up and down each pilaster, serving to reinforce the repeating nature of the architectural elements.

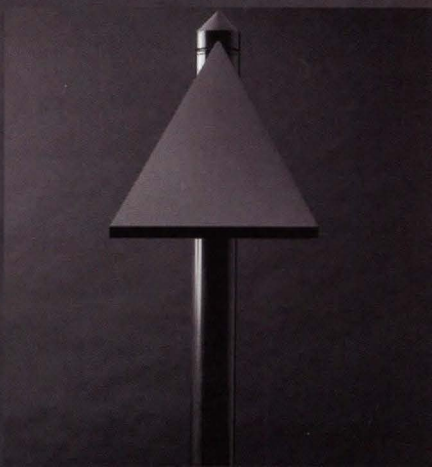
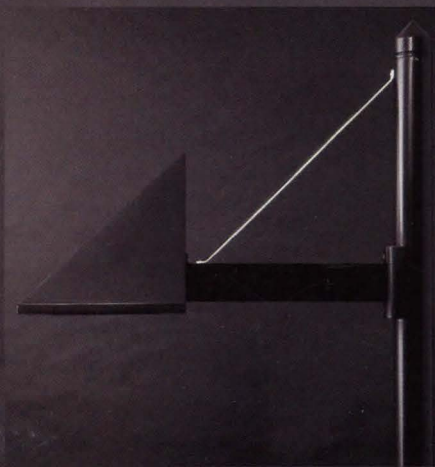
Focus on Wine Wine displays were lit from the front of each display, casting the shadow of each bottle onto the acrylic diffuser that served as the back panel of each display. It was important to minimize the amount of heat and ultraviolet light output to prevent damage to the wine. Multiple dimmable circuits allowed for flexibility to fine-tune the effect. At the end of the space, large wine casks serving as displays were backlit with neon, chosen due to its long life and ease of maintenance. The units were designed and built so that electrical components could be serviced without removal of the shelf unit, which weighs about 400 pounds without the wine bottles. Additional choices designed to improve ease of maintenance throughout the restaurant included using higher-wattage lamps than necessary and dimming the circuits down to increase lamp life. Narrow-spot (EXT) MR16 lamps were used in all locations, with various spread lenses added where necessary, to make lamp replacement simple.

Paul Gregory and the rest of the Focus Lighting team can be reached at 255 West 101st Street, New York, NY 10025-4974; Tel: (212) 865-1565; Fax: (212) 865-4217. Or visit them on the Web at www.focuslighting.com.



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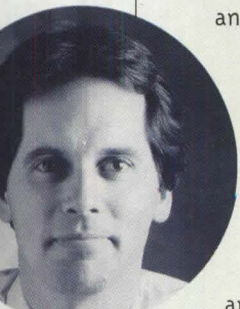
John Gill

WITH LIGHTING NOW EXPECTED to play a key role in everything from theme-restaurant lighting to "brand recognition" of building exteriors, one has to wonder: Is lighting design about to enter a golden age? Many lighting professionals say yes—the time has never been more auspicious for architectural and lighting design to make a great leap forward.

We recently asked some luminaries to assess the opportunities, challenges, and potential pitfalls ahead.

Our guests:

- **JOHN GILL**, department manager for lighting design at CRS Engineers in Birmingham, Alabama
- **RICHARD RENFRO**, principal of Renfro Design Group, Inc., NYC
- **BARBARA HORTON**, principal and president of Horton-Lees Lighting Design, NYC



Richard Renfro

What do you see for the future of lighting design?

BARBARA HORTON I see us becoming "visionists"—we have to see the space and envision the lighting effect before it's built. The future will bring us into areas of consulting we've never thought about. We now have a client asking our help in giving their building temporary brand recognition on the New York skyline while they embark upon a two- to three-year restoration. They asked us to create a new look for them and to envision the building in a scaffold and gray shroud, with light integrated into the temporary structure. It's architectural theater!



Barbara Horton

JOHN GILL I think lighting is entering its golden age. The technological advances taking place right now are really exciting.

Ergonomics will play a more significant role in architectural design, and lighting will follow suit, with more user control and

more small, independent light sources. Also, more color will be used because of its relation to mood and comfort. And new standards will be developed that relate to actual human performance and response.

As light sources continue to become more energy-efficient, more lights will be used in projects throughout the world. Designers will have to resist the urge to overlight spaces. A good designer will master the art of subtlety.

RICHARD RENFRO I see a very positive future. The awareness of the importance of light in architecture is growing. Technology will be a great influence. For example, recent developments in lamp technology have enabled designers to achieve a better balance between quality lighting and energy efficiency.

The Internet will continue to improve access to lighting information provided by manufacturers. More sophisticated computer programs used in the lighting design process will be a mixed blessing.

What are the biggest challenges facing the architectural lighting designer today?

RR Getting architects and owners to realize that including a lighting designer on the design team is not a luxury reserved only for national monuments. Good lighting is important and beneficial to every building; good lighting can happen on any type of project, in any space. You just have to care about it.

Some architects say, "There's no time for schematic design, so we'll just start in design development." I have even been told that the project is going from schematic design to construction documents without the development phase. This is not possible! Design is a process and a reiterative one at that. Skipping a step can only be done by making assumptions rather than thoughtful decisions. These assumptions can lead to problems in design, coordination, and/or

construction. Everyone needs to be realistic about the time required to design and document a building.

JG A major challenge is lighting specifications. It's difficult to balance specifications for lighting equipment so that quality products are provided at a competitive price. The contractor or distributor is tempted to substitute knockoff products that look like the specified item to increase their margins. Often, knockoff products are inferior. The end user is usually unaware of the difference until the project is completed and occupied.

Lighting is often treated as a commodity item and it is tough to battle "value engineering." It's frustrating when other players in the process aren't interested in giving the owner the best product possible.

Educating my architectural clients is another big challenge, particularly those who are inexperienced in how crucial architectural detailing is in making a space work. Poor architectural detailing can kill a good lighting design concept.

BH When I started in the business 20 years ago, it seemed that one of the biggest challenges was to convince architects, designers, and owners to use a lighting designer. Today, we have a fairly large number of professional lighting designers on almost every project team. So the challenge now is how to deliver the quality of services our clients have come to expect in light of the ever-decreasing project fee structures they accept.

What's your design philosophy when approaching a space?

JG Lighting should enhance the overall feel and quality. It's rarely the primary design element, so I use it to reinforce an overall architectural concept. I try to get the architect and the end user to share their vision of the space with me—its mood, appearance, intended use, and how people are expected to move through it.

Roundtable

I try to use lighting in a way that presents the materials in the space in the most flattering way. I love the materiality of architecture and I want the lighting to really celebrate it. Lighting attracts attention to the architecture so a person can then use their other senses to experience it.

RR Listening is the most important first step. I try not to have preconceived ideas about a space before I listen to the owner and the architect and hear their goals for the space. Ultimately you arrive at the answer to the essential question: "What element or expression of a space should be perceived first?" Design concepts can then be explored based on how light should flow through a space. These ideas are then developed to determine what the brightest element in the space should be.

BH We have developed a few tried-and-true tenets to guide our designs: (1) understand the client image (both the designer's and the owner's) and special components; (2) ensure the functionality of the lighted environment; (3) provide for the well-being of occupants; (4) consider energy conservation and environmental concerns; (5) use a minimum number of lamp types for easy maintenance; (6) integrate light into the overall environment to enhance the architecture; and (7) make economic sense with each design concept.

How can architects and lighting designers work together better?

JG It seems that what limits a lot of good lighting designs is an architect's overemphasis on the graphic appearance of drawings. That is, many architects don't realize that nice, precise designs on paper—particularly in plan views—don't necessarily make a nice space. This is especially true of ceiling plans. The architect or interior designer gets too caught up in creating nice ceiling patterns with light fixtures. *More often than not, this does nothing for the lighting design.*

Lighting design is about the light pattern produced by the fixture, not the fixture itself. Architects need to put away the computer mouse when the discussion turns

to lighting. Instead, they need to think more in the third dimension. Architects need to let the lighting designer control the design of the ceiling plane, based on the common goal of making all the surfaces in the space look better.

BH I think we do work very well together. Conflicts often arise when there is not enough communication or the fee structure is misinterpreted and the expectations with regard to the services are greater than the fee allowed. I'd say that the project architect should be aware of the services contracted with their consultants and respect them.

RR Start at the beginning. Understand each other's goals and expectations. And trust each other. I cannot emphasize how important it is to start the collaborative effort with light and architecture at the very beginning of the design process. No matter what the project or building type, discussions between the lighting designer and the architect during the architect's schematic design process can benefit a project in many ways. It can open the doors to design opportunities and avert the study of inappropriate concepts. This discussion can help all parties understand a space better and see it differently—or at least more realistically.

While it is important to listen to the architect about design goals, it is equally important to discuss expectations of each other's input to the design process. This is especially true when the team is working together for the first time.

I have been fortunate to work with most of my clients on a recurring basis. This working relationship provides a design team a shared experience to draw upon. The architect and lighting designer who collaborate frequently build a trust and synergy that allow the collaborative process to achieve the best results.

Identify some of the major influences in your career.

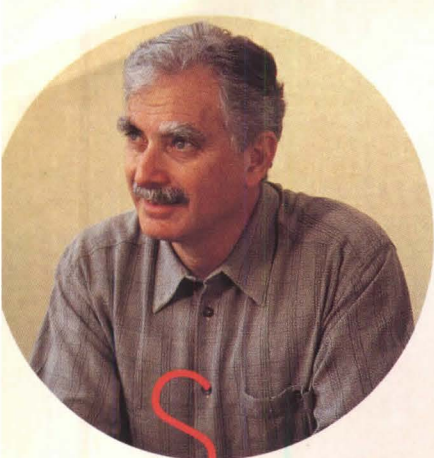
JG My clients are my major influence. Since I work in an engineering firm, my architectural clients help me keep a balance

between these otherwise different viewpoints. The dynamics of our work process push us to challenge each other. As we accomplish one design, we raise the bar for the next one. Architects keep me focused on the perspective that lighting design is not really about task illumination; that's an engineering concern. Lighting design is really about patterns of brightness, light, and shadow. These are things that we see and relate to visually. While my engineering background gives me technical knowledge, without the architectural viewpoint I would be creating well-illuminated spaces but not necessarily well-lighted spaces.

BH In my previous career as an interior designer, I became painfully aware of how little I understood lighting when a lighting salesperson advised our interiors team to use standard high-pressure sodium (HPS) in a branch bank. I mentioned it one day in passing to Jules Horton, the founder of our firm [Horton-Lees Lighting Design, Inc.]. He took me out in the street and had me look at the color of money under an HPS streetlamp. I was horrified. It was that moment that convinced me to join the firm on a temporary basis, learn everything there was to know about light, and return to interior design with a "full" understanding of how light works. More than 20 years later, I'm still here, still learning, and enjoying the challenges.

RR While an architecture student at the University of Arkansas, I had the good fortune of having professors who were not only educators, but also advisors and friends. Because of my interest in lighting, I was encouraged to explore architectural lighting as the topic of a thesis for my honors program. During this two-year project, I came across an image in a book of Saarinen's chapel at MIT. It is a photograph of the skylight over the altar, with a delicate reflective sculpture/screen suspended behind the altar. For the first time I could envision light moving through a space—from skylight to the altar. Without the sculpture—an object that reflects light—there would have been no light, no connection between daylight and the altar. ■

Profile



S Leonard Auerbach, ASTC, LC, is president of one of the country's leading architectural lighting design firms, Auerbach + Glasow, San Francisco. He has brought his dynamic vision to projects as diverse as the Hayden Planetarium, Shell World Headquarters in The Hague, and the new Zankel Hall at Carnegie Hall.

Len Auerbach has always approached architectural lighting from a multidisciplinary perspective, blending his academic training in theater and architecture with his professional experience in theatrical lighting and scenic design. In fact, it was the potential to integrate theatrical lighting principles into the design of architectural space that led him to become an architectural lighting designer.

Auerbach's hand is evident in hundreds of Auerbach + Glasow projects, ranging from corporate office facilities to civic buildings, historic renovations, museums, and theme parks. The consummate technician, he has received many national and international lighting awards for his innovative technical and design solutions.

Auerbach earned a B.F.A. in drama and an M.F.A. in theater architecture from the Carnegie Institute of Technology (now Carnegie-Mellon University). While there, he held a Heinz Fellowship for the Fine Arts. Auerbach began his design career as a theatrical lighting and scenic designer. In 1968 he left his position as resident lighting designer at the Tyrone Guthrie Theater in Minneapolis to become a theater consultant with the firm of Bolt, Beranek, and Newman in New York. In 1972 he launched his own architectural lighting design and theater consulting practice, Piacentini/Auerbach, in San Francisco. At the time, the professional architectural lighting industry on the West Coast was in its infancy, and Auerbach saw a window of opportunity to grow a design firm that would reflect his personal approach. In 1973 he became principal of S. Leonard Auerbach + Associates.

Len Auerbach

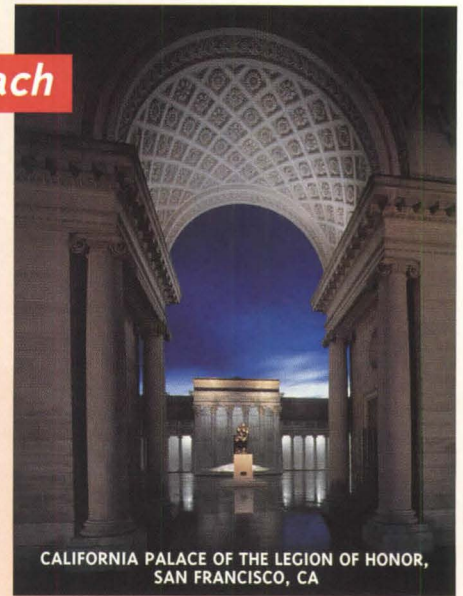
The firm's growth resulted in its reorganization in 1994 as Auerbach + Associates, Theatre Consulting and Media Facilities Design; and Auerbach + Glasow, Architectural Lighting Design. Auerbach's partnering with Patricia Glasow, now the principal in charge of the Lighting Division, established a collaborative strength that is the firm's cornerstone.

ARCHITECTURE: *Your formal training is in theater architecture and drama. When did you first become interested in architectural lighting?*

LEN AUERBACH: When I was the resident lighting designer at the Guthrie Theater, I was asked to design the lighting for an art gallery in Lacrosse, Wisconsin. It was a small project, but it gave me a taste of architectural lighting and allowed me to integrate both disciplines—theatrical lighting and architecture. That really stimulated me to expand my professional pursuits to include the field of architectural lighting. When I moved to Northern California in the early '70s, there was limited professional practice in the lighting field. But I had the determination, and when I started my own practice in theater consulting, I included architectural lighting design.

ARCHITECTURE: *You and your firm have always looked at architectural lighting a little differently than some of your colleagues. Over the years, your philosophy has "trickled down" into the psyches of many of those who work in the industry. Do you have a "world view" of architectural design that you can articulate?*

LA: All these years we've been dealing with lighting as an integral part of the architecture. We also apply the design principles of theatricality and architectural space to architectural lighting. We see architectural lighting as helping to define the space, and not as something that's added later to provide illumination.



CALIFORNIA PALACE OF THE LEGION OF HONOR,
SAN FRANCISCO, CA

The principals of our firm generally have a theater background. So we do look at lighting a little differently. We understand the difference between theatrical lighting and architecture, and we draw from both disciplines to create the final product. That's very important to what we do.

Architectural lighting also benefits from what is being done today in the theater in terms of control and application. The architectural lighting designers who come strictly from an interior design or electrical engineering point of view may understand the physical and technical aspects of fixture placement, but they have not had the opportunity to deal with the spaciousness of the theater.

In the theater, the designer has the audience in a fixed point of view. He has complete freedom to locate light sources within the stage and from a variety of positions, and to pick whatever light sources he wants to create the quality of light on stage and the focus on the performers in that space. All the characteristics of light on stage are highly controlled.

In architectural lighting, you don't have that kind of freedom, because the viewer is either on the street looking at or into the building, or is walking through the building. The viewer becomes the actor on stage. So it's sort of inside out from theatrical lighting; the architecture is like the scenery and the public is within it. Also, you don't have the freedom to locate the light sources where



LAKAWANNA LEATHER SHOWROOM, CHICAGO IL



SAN JOSE CONVENTION CENTER, SAN JOSE, CA

you like, because the dimensions and spaciousness of the walls and the ceilings play into it.

All of these factors have to do with where you place a light fixture, a spotlight, or something that accents, decorates, or provides general illumination. The lighting also has to be integrated into the architecture, so there's the aesthetics of the light fixture itself. In a theater, you have large, unsightly spotlights that can be concealed or not. So making the transition in thought and philosophy from theatrical lighting to architectural lighting is complicated but key to what we do.

ARCHITECTURE: How is the evolution of technology changing the profession?

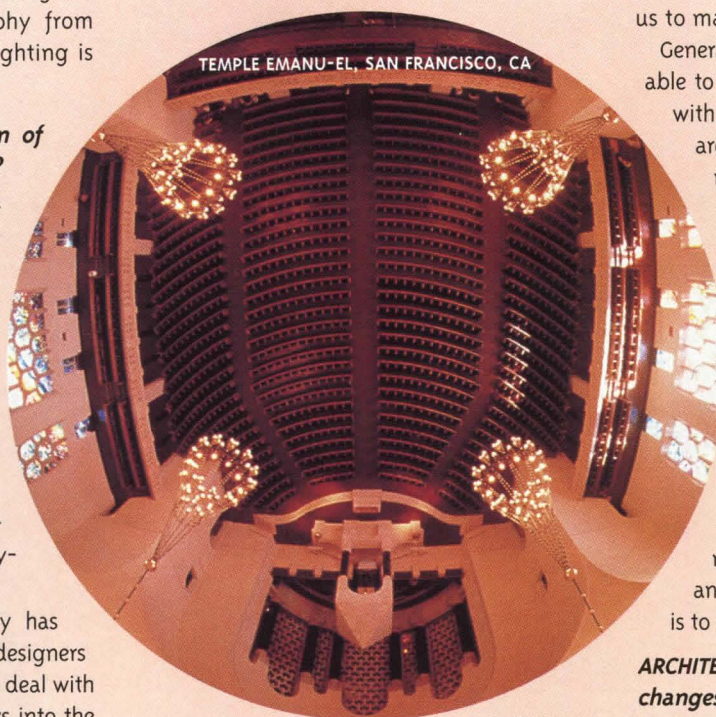
LA: We now have to be more technically knowledgeable about our craft than most electrical engineers. Design principles have to be integrated with an understanding of the development of innovative light sources, as well as new energy requirements and newly published regulations and standards. We were little worried about such things 25 or 30 years ago, when the power companies and lamp manufacturers were trying to sell more power and lamps.

It's a fact of life that technology has evolved to such a degree that lighting designers have to be very technically oriented to deal with these issues. To some extent, this plays into the frustration of effective collaboration with the architect, because so many architects are not aware of how restrictive things have become.

We are just now evolving into a period where light sources and new technologies are giving designers far greater tools than we have ever had. The style of convention and the use of these tools has had a significant impact. Just as architects have had to use new materials, this application of new products and approaches is happening in all of the building technologies.

The same thing is true in the theater. Theater lighting technology has really become exciting, with new light sources, computer applications, and "intelligent" light fixtures. In the past few years, we have seen this kind of technology move into architectural light sources. We are

using lights that are computer controlled—to change color, beam shape and intensity in the same way automated light fixtures have been used in the theater. One example of our early applications of this is the Sony Metreon project in San Francisco, where a portion of the exterior of the building is illuminated with changing colors. We applied this same lighting technology to the interior of Niketown Honolulu.



TEMPLE EMANU-EL, SAN FRANCISCO, CA

One of the most important areas where we have had a significant influence is in dimming and controls. We have pushed the theatrical industry to do significant networks and have carried this over into architectural dimming. I feel that the technical development of luminaires alone doesn't go far enough. We must be able to control them with efficiency and sensitivity in order for them to be effective design tools.

ARCHITECTURE: What about the quality of collaboration between the architect and the architectural lighting designer?

LA: One of my favorite subjects! When architecture was still a part of what was considered the Beaux Arts tradition of architecture, the architect did everything. The architect was the

Renaissance person who designed the building, as well as the landscaping, glass, furniture, and light fixtures. But there weren't as many demands on the quality of light in the forties or the thirties as there are now. We have to produce a certain amount of illumination, have to have a certain quality, have to consume a limited amount of energy, and have to make the lighting serviceable. We are confronted with construction budgets that force us to make very streamlined decisions.

Generally, the architect is no longer personally able to do all that, and therefore collaboration with other professionals is essential. The architect is the leader of the project, and we must win their trust. It is essential that they bring us in early enough so we can lend something to the process.

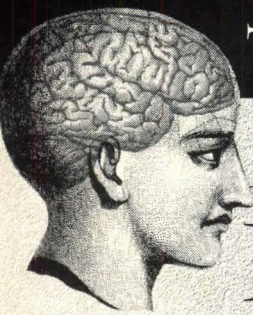
It is extremely important to have an early place on the design team, because we are helping the architect to define the space through lighting. The biggest difficulty we have is when the architectural design process advances so far that, when having to address the lighting, it becomes something that is overlaid rather than integrated. Get us in early and don't be afraid of us. Our primary goal is to enhance the architectural space.

ARCHITECTURE: What do you see as the biggest changes in the architectural lighting field in the next few years?

LA: A lot of changes are coming! We are going to have more compact, energy-efficient light sources, and there will be more application of theatricality to architectural spaces. Architectural lighting will benefit more and more from what is being done in the theater in terms of control and application.

ARCHITECTURE: What's the biggest stumbling block to the profession's development now?

LA: Bringing the right people into the profession, which has grown significantly and has reached a very fine professional status. But we must be able to mature new talent. So I encourage talented people to take a good hard look at it, because it is quite challenging and a lot of fun! ■



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Acquiring Minds

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the headaches are greater. A cold start isn't cheap, but failure has a lower cost." His firm has opened offices in San Francisco and Miami, in each case sending a senior associate to find office space, hire local staff, and direct marketing. This approach is abetted by computer technology: "Within days, the start-up staff can be working for our Cambridge office," Pollack says, "so they're not on downtime while we generate local work for them."

On the other hand, it may be more cost effective to buy an existing firm. "Most of these deals are done with no money down," says Stasiowski, "so you can get a client list, staff, and office infrastructure, and pay it off in two to three years."

Financial disagreements frequently break deals, but M&A veterans know to pay close attention to the touchy-feely intangibles. "The financial part is easy," cautions James McManus, president of S/L/A/M Collaborative. "It's the people part you need to pay attention to." Frank McCurdy, vice president of Pittsburgh's Burt Hill Kosar Rittelmann, a firm that has undergone "one merger, one acquisition, and one divorce," stresses the importance of due diligence. "The biggest hurdle is mismatched cultures," he notes. "You can use the due diligence period to learn about the other firm's culture and to get to know their people better."

Indeed, culture clashes lie at the heart of most failed M&As. The principal of a prominent 200-person West Coast firm blames cultural tensions for closing his office after it was acquired by a Midwestern engi-

neering firm. "Engineers don't care about design," he says, "and that ultimately affected the architects' sense of self-worth." The firm had previously played a prominent role in local civic matters through participation in local nonprofits, social causes, and political activism. The new home office squelched all that. "Everyone in the firm took pride in our community commitment, so that was a terrible blow to morale," the former principal says. "We weren't players anymore. And that ultimately compromised our ability to compete in our own market. We lost some key staff, and our clients started to see us as a firm with unstable staff and absentee ownership run by engineers."

"We didn't do enough homework," concurs the principal of an East Coast firm bought out by an A/E concern. "It quickly became clear that our values were off-base." His firm, recognized for its design skills, now struggles to maintain its profile. "The merger has actually diminished our reputation."

Marriage metaphors often work their way into M&A discussions. It's an apt comparison—architects jump into these agreements with all the giddy optimism of newlyweds, and surprises are not uncommon in the first year. Martha Ondras, driven to sell her firm by her growing distaste for management, finds that she has spent much of her first year with S/L/A/M Collaborative managing the transition. But the buck no longer stops at her desk. "Friends predicted that I'd never be able to give up control," she remembers. "Just watch me!" ■

Advantage Graphisoft

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with graphical information and refinement of relationships among zones (types of spaces in the building) and other elements such as office equipment.

The new software offers a wide range of elements that will automate revisions brought about by the domino effect of design changes. For instance, if the designer changes a building's roof profile with different slopes or forms, the software revises all wall and column heights, windows, and slab measurements to accommodate the new roof

design. In this regard, the approach is more sophisticated than Architectural Desktop in AutoCAD R14, and somewhat similar to MicroStation Triforma, depending on individual design habits and style.

Although ArchiCAD was developed for the Macintosh in the early 1980s, two-thirds of recent sales have been for Windows computers. The new ArchiCAD project files created on a Macintosh and on Windows are automatically binary-compatible, so they can be used interchangeably on both platforms. But ArchiCAD project files can contain many extras—library symbols, textures, and images, for instance—that differ between the two platforms. ArchiCAD insures compatibility by

allowing extras to be saved as an "archive" that can be cross-platform-compatible.

Available add-ons include a fine stair-maker, which allows users to create European-style, "space-saver" staircases with zigzag canted treads. Plus, there's better control over such details as railings than with Architectural Desktop. Other available add-ons include Art-Lantis Render with QuickTime VR animation tools, and MSA SoftTools Detailer. Add-ons that have been loaded are listed in a "report window."

Of course, Graphisoft hopes that someday AutoCAD will be relegated to a corner of most offices, with ArchiCAD holding sway. That's not likely; for one thing, Autodesk has not been standing

still. Bentley has also moved ahead. But it appears that the future will have plenty of room for CAD vendors other than Autodesk—room enough for architects to choose the product with which they feel most comfortable, not just an "industry standard." ■

For this review, ArchiCAD 6.5 by Graphisoft was viewed on a Pentium II, 366MHz, 128MB of RAM, Windows 98, and on a Pentium Pro, 200MHz, 64MB of RAM, Windows NT. \$4,295 plus annual maintenance fee of \$595; Macintosh or Windows 95/98/NT; www.graphisoft.com.

Steven S. Ross is an associate professor at Columbia University's Graduate School of Journalism.

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Peter Smithson

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Fitzgerald before the war, that there were secrets here. But there weren't any really—at least not as far as we could see. You have to remember that, from the end of the war in 1945 until 1953, the only interesting building in Europe was Le Corbusier's Unité d'Habitation.

Few architects today get to do as many diverse things as you and Alison did—build, write, collaborate in groups, discuss each other's work in a salonlike spirit. What made it possible?

Well, we got a lot done because there were two of us. We needed each other. That doesn't mean we

were the same. Alison was a born writer, I wasn't, and she took the lead most of the time. I think that had either of us had been working alone, we would not have been able to do what we did. Furthermore, architectural practice itself wasn't like it is today. Our generation got to work on its own projects, from beginning to end.

You and Alison were famously equal partners in everything you did. How did you manage?

Alison entered architecture school at the Technical School in Newcastle, same as I did, at 16. She graduated at 20 and immediately went to work as an architect for the London County Council, working on light structures for the School Building program. We mar-

ried and entered and won our first competition, for the School at Hunstanton, the same year. She was frightfully young, a girl really. But she was a strong person. Her energy, I believe, in retrospect, sustained our partnership, our family, and our creative work. Team Ten, too, was sustained to a great extent by it. She was at least three people in one: an architect, a writer, a mother. It's a wonder to me how she did it.

You recently willed your and Alison's archive to Harvard's Graduate School of Design.

I feel very close to Harvard. We were invited to Yale twice by Paul Rudolph, but it was Josep Lluís Sert who first invited us to the GSD. We had met at the CIAM

meetings and we became very close. Both he and Gropius later were extremely kind and helpful to us. It was like being in a family, really, just as it was with Team Ten. In addition, at Harvard, as at Yale in the 1960s, what we were talking about—what everyone was talking about—was the collective. We both identified deeply with Harvard's notion of "commencement"—in the original sense of the term, in which it was not just the end of your studies, but the beginning, when you started to pay back your debt to society. In the 1960s, that sense of the term still held to some degree. That seems to be missing in architecture schools today, a sense of "commencement," a concern for society as a whole. ■

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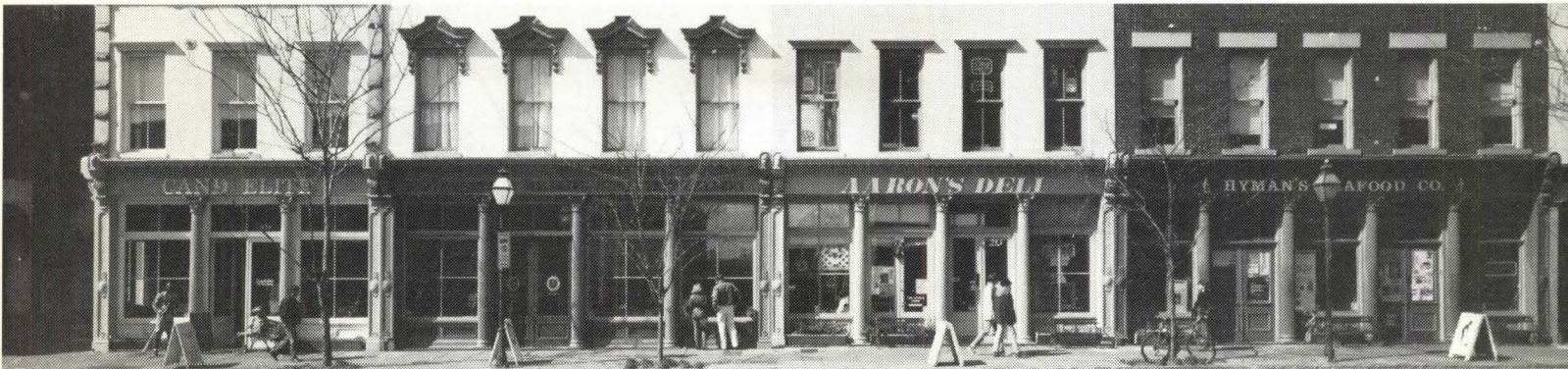
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Paper Architecture

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reportedly a *New Yorker*-type magazine focused on architecture and design. She is also helping to launch *Rumble*, which she will coedit with Sanford Kwinter and Jeffrey Kipnis. Dedicated to an interdisciplinary exploration of contemporary ideas in design and material culture, *Rumble* will take more of a book format, along the lines of MIT Press' Zone Books.

Another journal that happily has just been resurrected is *Design Book Review*, founded in 1983 in Berkeley as a book review magazine for the design fields. The original *DBR*, under the enlightened editorship of Richard

Ingersoll, functioned as a kind of idealistic community of authors and readers. But as an independent venture for most of its existence (it was published briefly by MIT Press in the early 1990s), it never fared well as a business. *DBR* has found a new, institutional home at the California College of Arts and Crafts in San Francisco, where its editorial team (John Loomis, Mitchell Schwarzer, and Barry Katz) will produce the magazine quarterly. Required (and cautionary) reading for anyone considering launching an independent design journal is a pair of editorials written by Ingersoll, one for the final issue of the old *DBR*, the other for the first issue of the new *DBR*, which are appearing concurrently this winter.

Harvard Design Magazine is among the most topical and lively magazines to emerge in recent years. The thematically organized, tabloid-format journal evolved from the *GSD Alumni News*. Edited by William Saunders with Nancy Levinson, it is undergoing the reverse transformation of *DBR*, from an "official" school publication to a broader-based journal published by MIT Press with a new external editorial board.

Perhaps the most ambitious newcomer in the field is *Praxis: Writing + Building*, slated to appear three times a year. The initiative of two recent Columbia graduates, Amanda Reeser and Ashley Shafer, it is supported by grants and independent funding. The vaguely Marxist title (inspired

by editorial mentor Kenneth Frampton?) reflects the editors' intent to integrate theory and practice, emphasizing both project documentation and critical commentary. Issue number 0, which appeared last November, was devoted to "Architecture and the University," and featured current work by Weiss/Manfredi, Rem Koolhaas, Kohn/Shnier, Springall and Lira, Bernard Tschumi, and Scogin, Elam & Bray.

School publications are springing up all over, although somewhat transformed from previous models. In the mid 1980s, nearly every major architecture school wanted a high-profile journal distributed by a "name" publishing house (the publisher of choice in those days was continued on page 151

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ARCHITECTURE'S LITERATURE PORTFOLIO

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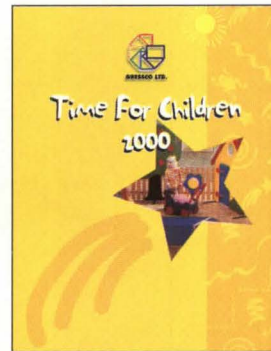
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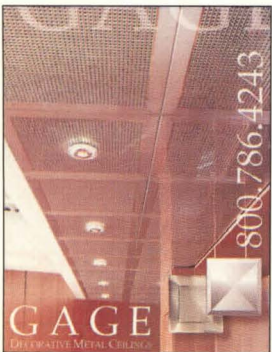
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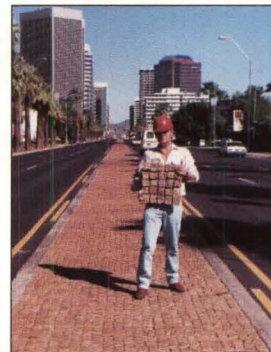
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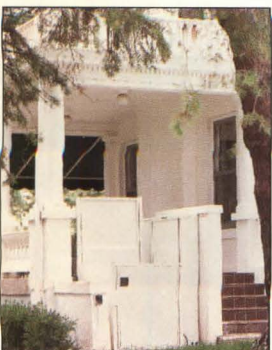
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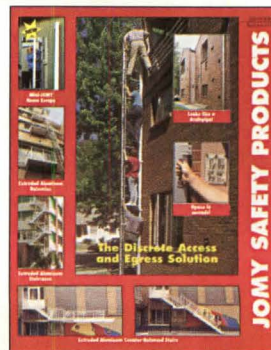
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Paper Architecture

continued from page 149

Rizzoli). Despite substantial subsidies from the schools, these journalistic undertakings—primarily in the hands of students with faculty advisors—proved commercial failures. The majority dried up by the early 1990s, or appeared infrequently. Today, school publications flood the market again, from graphically sophisticated newsletters to elaborate documentation of conferences, lectures, and studio work. But most tend to emanate from publications programs within deans' offices rather than the student body, functioning, regrettably, more as public relations and fund-raising tools than as educational enterprises.

The venerable *Perspecta*, preparing to celebrate its 50th anniversary, is a partial exception. This irregular "annual" continues to be produced by student editors who finish the job several years after graduation, and is consistently of professional quality. After a long hiatus, it has been picked up by MIT Press and further energized with the accession to dean last year of Robert A. M. Stern—himself a *Perspecta* editor while a student at Yale in the mid 1960s. Stern is attuned not only to the publicity value of a journal like *Perspecta* but also to the pedagogical importance of an ongoing, student-edited publication.

Center, another serious school-produced journal, is a publication of the Center for American Architecture and Design (CAAD) at the University of Texas at Austin. It is a scholarly rather than student journal, and emphasizes architecture and the contemporary landscape. Produced with private funding, it has been edited for most of the past decade by Michael Benedikt, CAAD's director.

Beyond these publications, which have small but established niches, several new publications are directed to more diverse readerships. *Aula*, an acronym for Architecture and Urbanism in Las Americas, is a lively bilingual, biannual journal dedicated to the study of Latin American and Latino-built environments. It is edited by Robert Gonzalez at UC Berkeley and Rafael Longhoria of the University of Houston. Another alternative undertaking is *Alphabet City*, put together entirely through volunteer contributions, editing, and design. Initiated in Toronto in 1991 and focused on culture, theory, and politics, *Alphabet City* evolved from a newsprint tabloid

to an impressive book series, with contributors including architects, artists, literary critics, poets, philosophers, and social theorists.

Interdisciplinarity, a more global outlook, and the blurring of the lines between magazines, journals, and book series are trends today. It remains to be seen whether this expanded spectrum of architecture-related publishing will be able to sustain itself—and

whether it will foster a wider critical debate or simply perpetuate its own rarefied discourse. European culture has long nurtured a high level of journalism in architecture, bolstered by a broader readership. It would be encouraging to think that the current ferment in specialized architectural publishing on this side of the Atlantic is a sign of revitalization within the architectural field as a whole. ■



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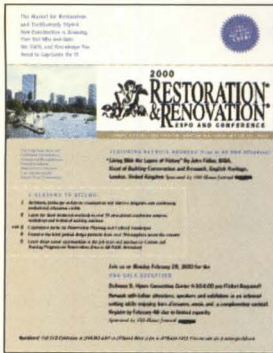
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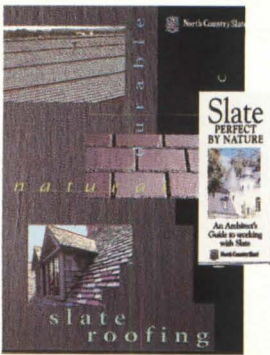
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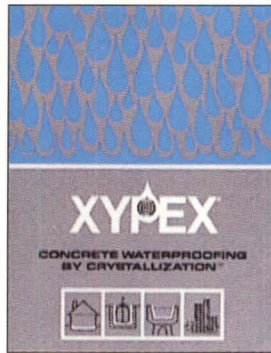
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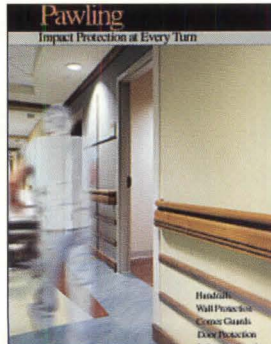
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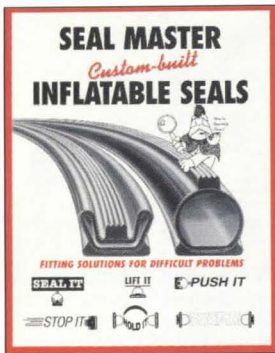
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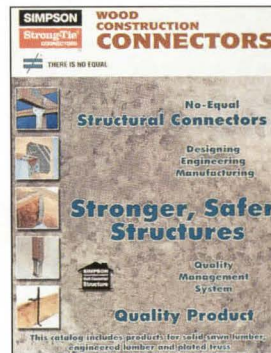
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May 2000	March 24, 2000
July 2000	May 22, 2000
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U.T. Holds the Swiss

When the University of Texas at Austin ran Herzog & de Meuron out of town, they lost the chance to have a great art museum—and a great architecture dean. **Lisa Germany** laments.

“Hold the bologna—we want the Swiss,” read one banner at a recent protest rally on the University of Texas (U.T.) campus in Austin. “Swiss” was a reference to the celebrated firm Herzog & de Meuron of Basel, who was hired in 1998 to design the \$70 million Blanton Museum, and “bologna” denoted the disgraceful treatment the firm had received at the hands of the university’s Board of Regents. A protest rally about architecture? Strange things were afoot at U.T.

The impetus behind the activism was the architect’s bail-out from the commission, one that offered them exposure on a grand scale. The architects had envisioned the museum as a lovely series of shady, glazed pavilions with flat roofs and views of the capitol. The almost invisible scheme deferred to the landscape to create a light, verdant respite on a masonry-heavy campus.

But no sooner did the architects’ sketches go up on easels than the regents blindsided the presenters with a style debate. The architects quickly realized that the regents had no interest in innovation; they wanted a grand design copied from the campus’ existing Mediterranean style. “Why doesn’t the museum look like this?” Regent Tony Sanchez demanded angrily, holding up a picture of an older university building.

Sanchez’s bullying persisted in a second meeting in mid-October when the firm presented a different scheme—a vast enclosed structure with an undulated tile roof that obliquely evoked U.T.’s vernacular. Sanchez hated it—and furthermore, had a few ideas of his own. After the

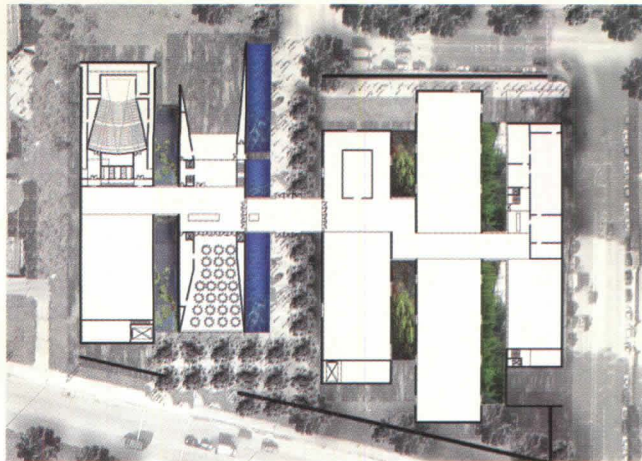
contentious meeting, he ushered Pierre de Meuron and partner Harry Guggler into a neighboring kitchen and unveiled museum drawings he had commissioned from another architect (at his own expense).

Sanchez’s hiring another architect not only was a slap in the face to Guggler and de Meuron, it also betrayed his fellow regents, who knew nothing of his underhanded scheme. A few weeks later, Herzog & de Meuron threw in the towel, frustrated by a process they saw as irreconcilable. One week later, popular School of Architecture dean Lawrence Speck resigned to protest the university’s treatment of the architects.

How did the process go so awry? The university’s president appointed a design-savvy selection committee that wholeheartedly gave the Swiss firm the nod. The museum loved the design. But in a bizarre accountability switch, Herzog & de Meuron then found themselves answering to a committee of regents, who had had no say in selecting them, no measurable knowledge of architecture, and an ethical pygmy in their midst. The result was a Shakespearean tragedy that cost the university its reputation, its dean, and its museum. What a sad way to get students to pay attention to architecture. ■

Austin, Texas-based Lisa Germany has written for House Beautiful, Texas Architect, and The New York Times.

More of the same please: U.T. Regents met Herzog & de Meuron’s flat-roofed, crystalline scheme with indignation because it didn’t look like anything else on campus.



COURTESY HERZOG & DE MEURON (TOP); WATERCOLOR BY RICHARD CARMEN COURTESY BLANTON MUSEUM, U.T. AUSTIN (BOTTOM)



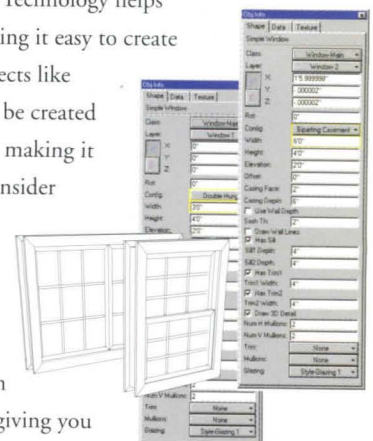
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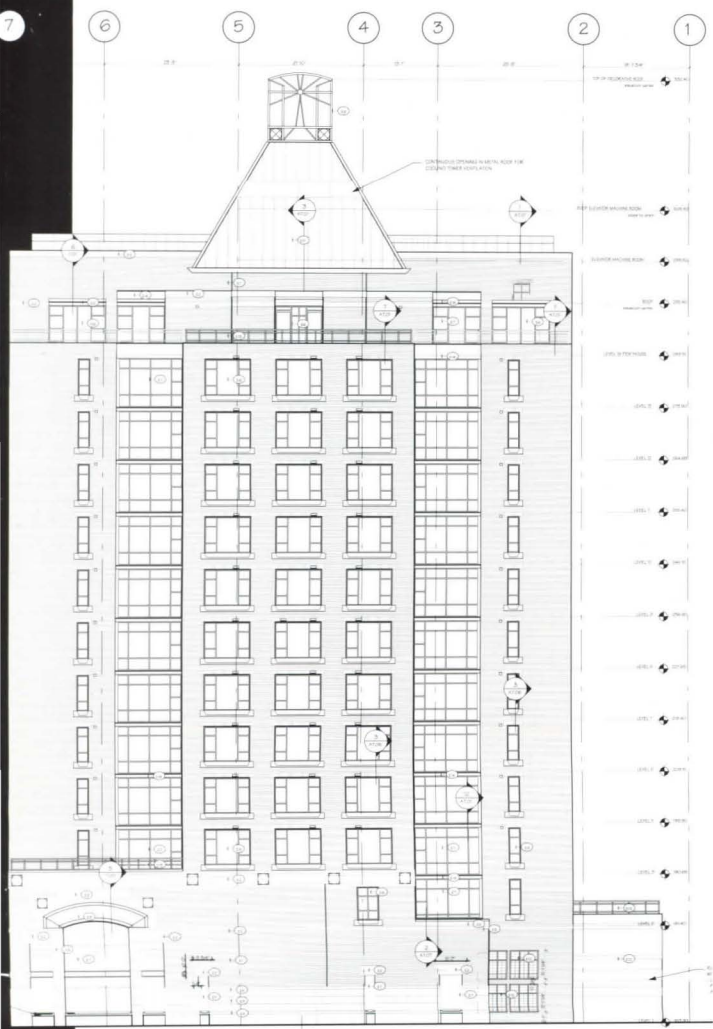


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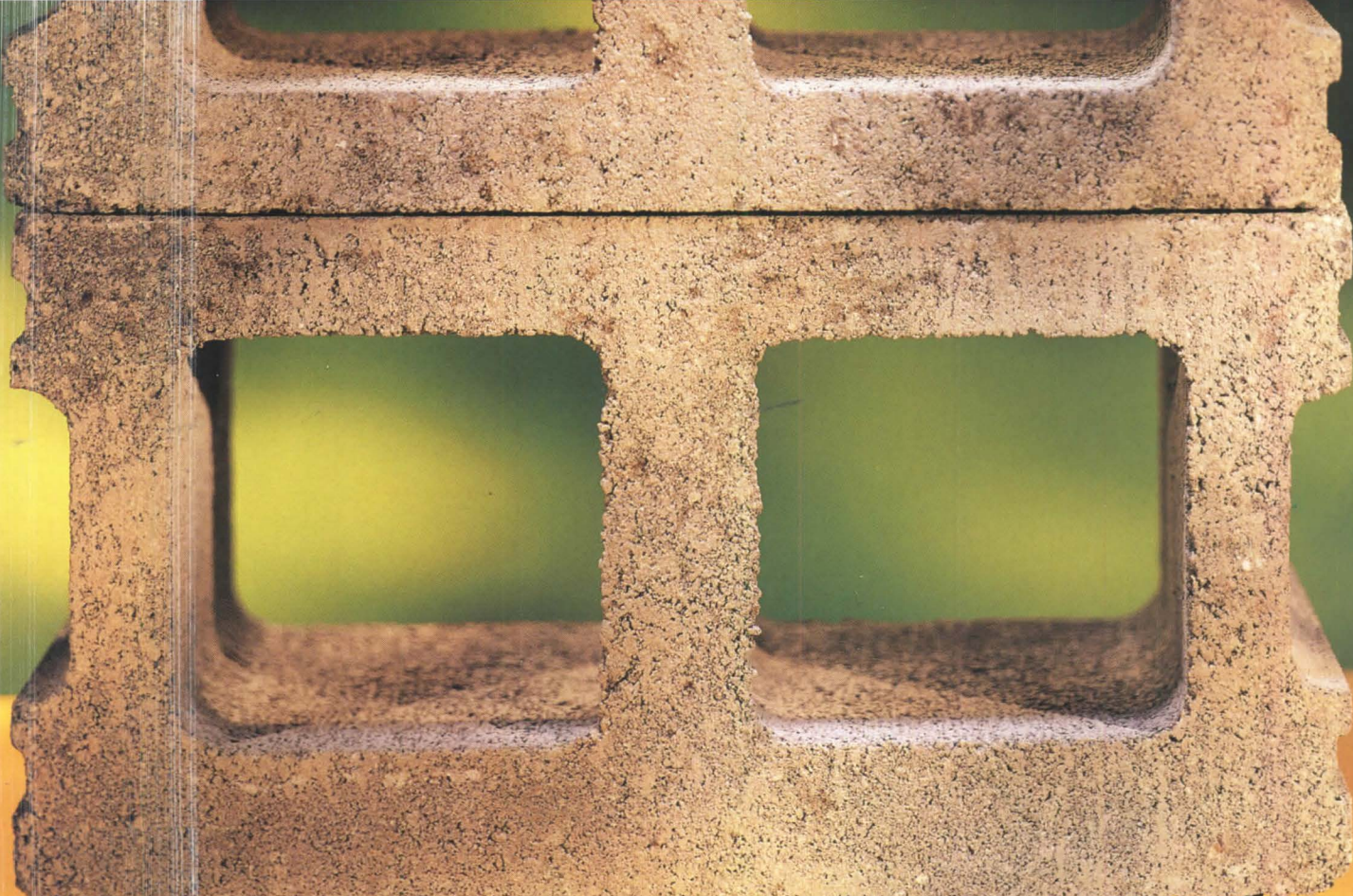
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