GERMANY RECLAIMS THE FACTORIES OF THE RUHR RIVER VALLEY

PHOTOGRAPHER THOMAS MILLER EXPLORES THE SAHARA TO FIND THE ORIGINS OF EGYPTIAN ARCHITECTURE

MORPHOSIS EXCAVATES A HIGH SCHOOL FROM THE HILLS OF LOS ANGELES

BUILDING LANDSCAPES
Spot the two terms that don’t go together:

1. Suspended Ceiling
2. Grid-hiding Visual

Until now.
Milan, Italy-based architect Sebastiano Brandolini wields two pens, so to speak: one as practitioner, the other as critic. He founded his own architecture studio, Brandolini Valdameri, with partner Monica Valdameri in 1998. But he also served on Casabella’s editorial board for over 10 years, writes frequently for La Repubblica, and recently wrote a monograph, Gullichsen Kairamo Vormala (Skira, 2000). “You have more liability in practice, whereas for a critic there are seldom any consequences. Criticism and practice are like fiction and reality,” says Brandolini. This month, he writes about the Ruhr River Valley for our Culture section (page 75).

“My mother was a landscape painter and my father was a historian,” says photographer Chris Faust. “Landscape photography felt like an interesting blend of those aspects of culture.” Faust began taking pictures while he was a graduate student in biology. He has received awards from the Graham Foundation and the American Society of Landscape Architects, among other organizations, and has worked extensively with landscape architects as well as Landscape Architecture magazine. For this issue, Faust shot Loom’s Woman Suffrage Memorial in St. Paul, Minnesota (page 126).

Previously editorial director of Progressive Architecture (until it folded in 1996), Architecture’s contributing editor Thomas Fisher is Dean of the University of Minnesota’s College of Architecture and Landscape Architecture. “It was a great life, being immersed in the editorial world at P/A,” Fisher says, “and I still feel I haven’t left it behind.” Coeditor of Cambridge University Press’s Architectural Research Quarterly with Peter Carolin, Fisher recently published In the Scheme of Things: Alternative Thinking on the Practice of Architecture (University of Minnesota Press, 2000), a collection of his essays about the current and future state of the profession. This month, Fisher reviews Loom’s new Woman Suffrage Memorial (page 126).

After practicing architecture for 12 years, photographer Thomas Miller realized that he preferred photography, which he had been exploring on his own. “It was rough for the first two or three years,” Miller says. “I woke up one day and realized I was all alone, that I had given up my identity as an architect and was unfamiliar with the world of photography.” But this didn’t stop Miller, who began photographing natural landforms in the Colorado Plateau—many of which make up his book, Desert Skin (University of Utah Press, 1994). “I gradually began to understand the influence of the landscape on man-made forms.” To further study this idea, Miller traveled to Egypt to find parallels between the natural architecture of the desert and ancient man-made structures there. Photographs from this series appear as a photo essay in this issue (page 112).

Paolo Polledri came to the United States from Italy to attend graduate school at Berkeley, in the era of Spiro Kostoff. “It was an exciting time,” he says, “but after a few years I felt the need to work in a less academic environment.” The move out of academia was a gradual transition for Polledri, who conducted research at Harvard’s Center for International Affairs before working at the Getty Center in Los Angeles. In 1987, he went to San Francisco, where he founded the Department of Architecture and Design at the San Francisco Museum of Modern Art. He remained curator of the department until 1994, during which time he produced 12 exhibitions. Polledri returned to practice in 1998, and is currently a principal with Eight, Inc., a San Francisco-based architecture, design, and planning firm. For this issue, Polledri reviews the Hiroshi Sugimoto exhibit at San Francisco’s MoMA (page 84).

“Two years ago,” says Danish illustrator Ulla Puggaard, “I dropped everything and came to London to try to make a living from my drawings.” Wallpaper commissioned Puggaard to do several projects for its sports magazine, Line. She has also done illustrations for ESPN magazine and the Financial Times. She still does “underground work,” such as fliers and posters. “That kind of work allows me the freedom to develop new ideas, and helps me stay on the cutting edge of what’s going on.” This month Puggaard illustrates our story about concrete for our Practice section (page 70).
Reform the Competition System

By Reed Kroloff

Last month, to no one’s great surprise, the National Capitol Planning Commission (NCPC) approved architect Friedrich St. Florian’s much-revised design for a World War II memorial on Washington, D.C.’s National Mall (page 45). With nods from both of the city’s major design review boards—the Commission of Fine Arts had already assented—the troubled project finally cleared its last big hurdle, and one of the nation’s least successful design competitions sputtered to an ignominious end.

It was doomed to fail from the start. The project’s siting—flanking the Rainbow Pool, between the Lincoln Memorial and the Washington Monument—never made sense: What could compete with the soaring power of Washington’s obelisk, or the quiet majesty of Lincoln’s temple and reflecting pool? St. Florian’s solutions only underscored the problem: His first proposal—two great arcs of headless columns surrounding the pool and backed by 50-foot-high berms—met with howling disapproval. His final design keeps the arcs—now fitted with 56 garlanded pillars and two 40-foot-tall arches, all rendered in an airless neoclassicism—but loses the berms. Though misguided, at least the initial version had powerful scale. Now it looks shrunk.

That’s no way to honor people who literally saved the world from evil. Nor is it a way to honor the Mall, one of the nation’s most important and symbolic landscapes. NCPC and Fine Arts have betrayed the public trust; Washington, D.C., will be diminished by this project.

For architects, the debacle foregrounds the problem of design competitions in this country. St. Florian won the World War II commission in a 1996 contest sponsored by the American Battle Monuments Commission (ABMC). When officials balked at the berm-and-column scheme, he was sent back to the drawing board. That was wrong. St. Florian didn’t prevail in a request for proposals; his design won a competition. When that design went south, the designer should have gone with it. The ABMC should have shaved its pride and started fresh. Of course they didn’t, and the competition’s murky rules protected St. Florian against the indignant calls for his dismissal.

Sadly, there’s nothing new in this, especially in Washington, where memorial design is typically full of intrigue, and can take decades to sort out (the Franklin Delano Roosevelt Memorial gobbled up 30 years). Meanwhile, American clients—both institutional and commercial—have watched and have learned that design competitions can generate a lot of architectural ideas at little or no cost.

This is not to suggest that competitions are universally bad things. “A well-organized and well-managed competition can really up the odds for excellent design,” claims Roger Schluntz, dean of the University of New Mexico’s school of architecture and a frequent competition adviser. Further, the anonymity of competition entrants broadens the opportunities for less established firms to secure significant projects. The challenge is to rationalize the process and make it fair.

There are good models to study, especially the heralded European systems. But running competitions through centralized national agencies or professional societies (as Europeans generally do) would never work in the much larger, decentralized United States. We need a general standard that could be adapted to specific competitions. Certain provisions should be universal: Architects must not work for free beyond a preliminary round, competition rules must be clear and adhered to thoroughly, and architects should retain ownership of their ideas, unless they forfeit them willingly as part of the rules. This is just a start.

Who should develop such a standard? As the only national organization representing this profession, the American Institute of Architects (AIA) is the reasonable forum. The AIA has addressed the issue before in a competition guide, but at 20 years old, that document is hardly relevant. It is time to put competitions on the front burner of debate, before we all get burned with another memorial like the one about to break ground in Washington.
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Architecture, Undressed

Is it just me? Why do the full-page posed spreads bother me? I guess because it’s more personality/ego and less architecture. Specifically in the September issue: the “cool Eurochemist in jeans” (page 55), “the return of classic Latin sophistication” (page 67), and “the dean of Prada” (page 93). If I felt like the projects were thoroughly covered and there was a lot of space left to fill, this stuff would not be so troubling. How about more critical analysis, larger plans, more sections? In short, more in-depth coverage? Then if you feel that you have really exhausted the subject add the fluff. At this point I think it is just a big diversion. Is this what it takes to sell, or to get people’s projects into, the magazine these days?

Leland W. Stearns
Stearns Architecture
Laguna Beach, California

Structuring Sculpture

Reading “Building a Better Blob” by Joseph Giovannini (September 2000, page 126), I would offer two short observations.

The Statue of Liberty (SoL) is actually an excellent example of what Gehry’s work does not do. In the SoL Eiffel introduced a startling innovation in structural engineering to support Bartholdi’s sculpture. The structure and skin are distinct, and part of the beauty of it is their visual and conceptual interplay. In all but one of Gehry’s projects that I am aware of, the structure is designed as an offset from his established skin geometry. While the structures are devised with great pragmatism by his collaborators, the innovations are in the CAD/CAM process established by Gehry’s office.

The one exception is in the current Parizer Platz project with Jorg Schlaich. There is indeed a worthy parallel to the SoL collaboration, where structure and sculpture interplay beautifully.

Schlaich, in my view the greatest living structural designer, is sorely missed in your presentation of “digital” work. There are no better displays of the remarkable freedom and expression afforded by digital methods than his many realized projects.

Guy JP Nordensen
New York City

Spectacular

Richard Ingersoll’s brief essay on architecture and spectacle (August 2000, page 78), is the best piece of writing I’ve ever read in an architecture magazine. He is analytical, persuasive, suggestive, positive, resourceful, prescriptive, and intelligent. His varied references and historical understanding bring extraordinary depth to our perceptions of the current situations.

Thank you for making his thinking available to a wider audience. It certainly enlarges one sense of the architectural debates, and more importantly, the cultural discussions necessary for altering the direction of change.

Paul Hester
Hester + Hardaway Photographers
Fayetteville, Texas

No Sudden Movements

In regard to your article “New York Times Leaving Times Square” (September, page 34), the Times Company has not yet decided to make the move.

In addition, if Times Square is construed to be only the triangle between Broadway, Seventh
Avenue, and 42nd Street, then the Times Company left it in 1913, when the current headquarters was built on West 43rd Street. But if Times Square is not a district, then the Times Company is hardly moving at all. The proposed building would be located between Seventh and Eighth Avenues and between 40th and 41st Streets—a mere three blocks south of the current headquarters, well within the commonly recognized boundaries of Times Square.

A more accurate headline might have underscored the fact that The New York Times Company is not planning to leave either New York City or the Times Square area. The Times Company is fully committed to both.

Catherine J. Mathis, Vice President, Corporate Communications
The New York Times Company

Building A Legacy

Your tribute to John Hejduk is the most appropriate, precise, and insightful piece I have read to date (August 2000, page 13). To me it was a bittersweet issue; it starts with your tribute and virtually ends with my project, a project in which I really thought a lot about him and his pedagogy.

Paul Rudolph was supportive of John when he was young, and gave him a teaching job at Yale. John Hejduk was my mentor who gave me my first teaching job, therefore this issue has a metaphorical and historical loop about it, in how generations of architects continue the legacy by learning from history and mentors, and keep the future alive by supporting the following generation of architects. Of course I do not have a lot of sympathy for the in-between projects, but I hope the end pieces kept us sane.

Toshiko Mori
Principal, Toshiko Mori Architect
New York City

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Paul Warwick Thompson  
New Cooper-Hewitt Head
Briton Sits Back, Enjoys Ride

**Banter**  In January 2001, Paul Warwick Thompson will leave his post as director of London’s Design Museum to replace longtime director Dianne Pilgrim at New York City’s Cooper-Hewitt, National Design Museum. Mickey O’Connor spoke to him about his plans for the Smithsonian institution.

How will you change the Cooper-Hewitt? I want to make the Cooper-Hewitt better known and better used. I want New York’s design community to use the place. There’s a feeling that it’s not a place where designers hang out. I want to make it a kind of designers’ watering hole.

**Interesting choice of words. I think designers hang out there when “water” is available.**
Yes, but we’ve got to make sure that people turn up for more than just the private views. There have got to be programs that really appeal and engage practicing designers.
For example? I think one’s got to have events and lectures that are the big names. We had [Ford Motor Company’s vice president of design] Jay Mays and [industrial designer] Marc Newson at the Design Museum. And we filled the place—because every designer in London wanted to try to get a job from Jay Mays and talk in the flesh with Marc Newson. You’ve got to have those things that have a must-go quality to them, where people feel that it’s not just a social event, that it actually is essential professional networking.

You hold a Ph.D. in Modern European Thought. What does that mean? It basically means the [study of the] history of the modern movement or modern thought, between 1818 and 1917—wow, do you really want me to go into detail?—it’s really the whole notion of relativism and relativism from Wittgenstein onward really...

How do you use that knowledge in what you do? Put it this way: Wittgenstein isn’t first and central in my thoughts every minute of the day. But I think it’s very important to view any cultural movement, whether in design and architecture or literature or performing arts, against the thinking of the period.

Recent reports have branded Glasgow’s Year of Architecture a failure. What do you think went wrong? I don’t know, to be honest. The most important thing about that is sustainability, you know, what happens after the fireworks, what is the outcome rather than what was the impact. That’s what always interests me about any education program or any festival.

Speaking of the Millennium Dome... Just don’t even get me going. The Dome is just the most awful political white elephant. It could have been stopped. The signals were all there, you know. Price Waterhouse Coopers was doing audits on the business plan and saying this thing ain’t gonna fly. And still the politicians kept pushing because it was this great idol to their own ego. It’s what always happens when culture is hijacked by politicians. The trouble is that we’re left with a wonderful building, but with no future use for it.

What exhibitions are you planning? It’s still really early, but I’d love to do something on new media. You know, what’s at the end of this digital design thing? I think it would be such a challenge to do a metaphysics show in the Cooper-Hewitt without fighting the Carnegie Mansion, without putting up an installation that fights or tries to deny [its surroundings].

What are you looking forward to most about living in New York? Bagels. And also—I just think New York is just the most wonderful culturally supermarket. It is a fantastically vibrant and exciting museum and artistic community.

Have you found an apartment yet? No.

Good luck.

DaimlerChrysler, Cooper-Hewitt

Chrysler Design Awards

Design and marketing were married long ago, but recently the two seem to be on a second honeymoon—with the help of a big, shiny car. A style maven among the staid American automobile industry, DaimlerChrysler is known for its fashionable cars as well as its namesake deco building in New York City, which is often called a “beacon of progress.”

 Appropriately then, the eighth annual Chrysler Design Awards, presented on October 25, honored six designers who have fluidly combined art and commerce. Each winner received a trophy designed by Chuck Hoberman (a 1997 honoree) and $10,000. Lauren Wolfe

Architect Will Bruder (2) uses desert regionalism in such works as the Phoenix Central Library and the Nevada Museum of Art. Currently working on projects involving Governors Island and the Swedish town of Alvsjo, James Corner is chair of landscape architecture and regional planning at the University of Pennsylvania School of Fine Arts.

David M. Kelley is the designer of the original Apple mouse and the Palm V handheld computer. The founder of IDEO, an industrial design and product consultancy, he currently works with Nike, Oral B, Dell, and Samsung.

Ted Muehling (5) is a jewelry designer who uses both precious and everyday materials, and, more recently, has created a line of porcelain dinnerware.

As the graphic designer of television’s Pee Wee’s Playhouse and creator of the underground comic strip “Jimbo,” Gary Panter (8) combines whimsy and the sublime.

Paula Scher (4) develops period typography for graphic design heavyweight Pentagram. She has designed album covers, book jackets, and features in The New York Times Magazine.
Hewitt Hand Out Design Kudos

National Design Awards

Chicken, egg; form, function: It doesn't seem to matter anymore which came first. So say the winners of the Cooper-Hewitt's inaugural National Design Awards. They have done away with the bleached-out, barely there computer, and have then used this same computer to create even more interesting products, environments, and other design solutions—proving that "industrial" no longer necessarily means ugly. A group of "peer professionals" including domestic savant Martha Stewart and architect Daniel Libeskind judged the awards. The museum has already released the names of four winners, and, on November 15, will announce three more from the 15 finalists presented here in the categories of Environment, Product, and Communications design. L.W.

Cited for creating "a powerful new vocabulary," Frank Gehry (1) is the winner of a Lifetime Achievement Award. His Guggenheim Museum Bilbao and the Experience Music Project in Seattle use architecture as a tourist strategy.

Apple Computer (7), snagged the Corporate Achievement Award for its invention and reinvention of its technicolored Macintosh and iMac lines.

American Originals are those whose contributions “have produced a profound impact upon their professions and the public.” Architect John Hejduk (3) influenced generations of architects as the dean of Cooper Union’s School of Architecture (August 2000, page 29). In the 1940s and 1950s, Morris Lapidus (6) built his iconic Fountainbleau Hotel (1954) and retail stores using the “woggle” (an amoeba-like shape) and his theories of “curving, sweeping lines, drama, lighting, color, and adornment.”

Environmental Design: Architects Will Bruder, Steven Holl, Thom Mayne, Samuel Mockbee; landscape designer Lawrence Halprin.

Product Design: Industrial designers Niels Diffrient and Paul MacCready; structural inventor Chuck Hoberman; jewelry and furniture designer Ted Muehling; outdoor clothier Patagonia.

Communications Design: Exhibition designer Ralph Appelbaum; graphic designers Alexander Gelman, Fabien Baron, and Stefan Sagmeister; and digital designer April Greiman.

Buzz

London’s Conran & Partners is working on a 600,000-square-foot retail center at Ocean Terminal in Edinburgh, Scotland.

Preservationists in Santa Monica, California, are balking at architect-director Robert Redford’s attempts to restore Aero, a 1939 independent movie house to its original Art Deco splendor—but not for the reason you might think. Their only complaint is that Redford’s renovation plan, in conjunction with Sundance Film Centers, doesn’t include additional parking. In auto-centric Cali, this is crazy talk.

A neighborhood on Manhattan’s Upper East Side has taken a high-tech approach to urban security by installing a blockwide, outdoor system that—with the touch of a button on a keychain that residents carry—activates strobe lights and loudspeakers, calls the police, and instantaneously pinpoints a victim’s name and location.

Plans to install schmancy, self-cleaning public toilets (at $250,000 a pop) on the streets of Boston were quashed by that city’s Architectural Access Board when it was discovered that the Johns, designed by Wall USA, lack disabled access.

A survey by the Home Improvement Research Institute shows that more women are getting involved in the country’s do-it-yourself boom. In 17 home improvement categories, 12 showed an increase in participation among women between 1997 and 1999. At the same time, home improvement product purchases by men have declined.
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White House To Remove Fences, Make Good Neighbors

Politics If downtown Washington, D.C., were a human being, then the closing of Pennsylvania Avenue in front of the White House would constitute a five-year-long heart attack—an obstructed vessel lying at the vital center of the city. President Clinton, citing urgent security worries, closed the avenue between 15th and 17th streets, N.W., a few weeks after a truck bomb blew up the Alfred P. Murrah Federal Building in Oklahoma City. Downtown Washington hasn’t been the same since. Rollerbladers and street-hockey players, who quickly occupied the empty block hemmed in by checkpoints and huge concrete flowerpots, loved the idea. But nearly everybody else missed the cosmopolitan bustle of traffic by the executive mansion—especially local business owners.

With Clinton leaving office in January, the Federal City Council, a secretive civic group of business brokers in D.C. led by former Senator Bob Dole, decided to seize the occasion to reopen the avenue. The group hired the Rand Corporation to conduct a $75,000 study on security surrounding the White House and also retained Skidmore, Owings & Merrill (SOM) to redesign the street based on Rand’s findings. SOM’s plan envisions moving the street’s checkpoints to adjacent Jackson Place and Madison Place along Lafayette Park, which lies directly across Pennsylvania from the White House, and also erecting footbridges over the street that would allow cars to pass under but would keep out trucks or buses more likely to be carrying arms or bombs.

The reopening plan enjoys the support of Congressional Delegate Eleanor Holmes Norton (D-District of Columbia), D.C. Mayor Anthony Williams, and outgoing Senator Patrick Moynihan (D-New York)—every bigfoot its proponents could hope to gather in line, except one: The U.S. Secret Service, which has favored keeping the street closed all along. Marc Connolly, a Secret Service spokesman and special agent, says, “Obviously, that’s been a hot issue lately,” but adds, “right now, we don’t have a comment.” Bradford McKee

Seven Ways to Drive Down Staff Turnover

Mick Morrissey, senior vice president of A/E/C consultancy Zweig White & Associates, recently wrote of the primary importance of staff retention in architecture firms, offering these practical suggestions.

1. Don’t recruit anyone straight out of school.
2. Take the dollars you would have spent on on-campus recruiting, quadruple them, and aggressively recruit talent with two to five years of experience.
3. Get your ownership transition and expansion program moving.
4. Have a definite vision and plan for the future and make it available to everyone.
5. Create a modern, motivating work environment.
6. Scrap your mystery-laden bonus program.
7. As president or CEO, get involved in as many interviews as you can.

SOURCE: ZWEIG WHITE & ASSOCIATES

London architect Norman Foster has designed the $56 million, 160-acre London City Racecourse for steeplechases. Foster caught heat from Britain’s preservation community when it was discovered that an ill-informed materials supplier mistakenly specified a Portland cement-like product to repair an historic stone portico as part of the architect’s $141 million renovation of the British Museum.

The Federal Emergency Management Authority estimates that U.S.-based earthquakes cause more than $4 billion in damage annually.

The city of San Diego has run out of money for its Antoine Predock-designed Padres ballpark and ceased construction last month until it can float a new $225 million bond issue to residents to make up the difference.

Empire State Building officials, take note: Chicago’s Hancock Center has doused its ornamental nighttime lighting to save the nearly 1,500 birds that—nightly—meet abrupt deaths when they crash into the tower during migration season, mistaking its illumination for stars or the moon.

In the immortal words of Dennis Miller, “That’s the news, folks, and I am outta here!”

Pennsylvania Governor Tom Ridge has committed $15 million to an expansion of the Philadelphia-based Pennsylvania Academy of the Fine Arts, which currently occupies a landmark 1876 former automobile factory designed by Frank Furness.

Leominster, Massachusetts, officials have saved the last apple orchard in the hometown of John Chapman.
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Hans Hollein's proposal for a Guggenheim Museum outpost in Salzburg, Austria, which features a subterranean homage to Wright's New York City spiral (above left) and a geodesic skylight (above right), contrasts with city's baroque Old Town (top).

**Hollein to Design Austrian Guggenheim**

**Design** Hans Hollein's radical 11-year-old proposal for a subterranean museum carved into a mountainside may yet come to fruition as an outpost of the Guggenheim in the Austrian city of Salzburg. The scheme is currently the renewed focus of discussions with political and planning bodies. A decision is expected by the end of the year.

Hollein's project has a long, intriguing history. It was originally the winner of an international competition for a museum to house the city's art collection (other participants included Giancarlo de Carlo and Jean Nouvel). Hollein's proposal carves into the Mönchsberg plateau that towers over Salzburg's baroque Old Town, creating a network of subterranean galleries and ancillary spaces linked by a funnel-shaped ascent spiraling through the natural rock. Glazed shafts bring daylight into the labyrinth below.

Although it was undoubtedly visionary, practical and political difficulties contrived to sideline the project until Thomas Krens, then newly appointed as director of the Guggenheim Foundation, was shown plans of the scheme by friends who lived in Salzburg. Krens was immediately fascinated. Since the 1990s, the Guggenheim Foundation has been eager to expand its European operations (until Frank Gehry's museum in Bilbao, the museum could only display 3 percent of its collections). Hollein's suites of galleries seemed capable of accommodating a Guggenheim program of large-scale touring exhibitions and more intimate, studio-like displays.

Despite Krens' enthusiasm and commitment, however, wider doubts remained about the feasibility of the project's construction and operation and its effect on the historic Old Town, despite being largely underground. These reservations were compounded, when Salzburg was faced with an influx of refugees from Eastern Europe following the collapse of Communism in the early 1990s. Attention then switched to Bilbao and momentum was lost. Now, with a more settled political and economic climate and the huge success of Bilbao as a compelling tourist spot, the time seems right for Salzburg to try again.

In the meantime, Hollein can console himself with the thought that it took Frank Lloyd Wright 17 years to build the original Guggenheim in New York City. Radical vision takes time. Catherine Slessor...
For its corporate headquarters, Life Care Center’s facility and design team specified a range of flooring products developed to showcase the attention to detail inherent in the more than 260 senior living and long-term care facilities which it owns and operates nationwide. Carpet products require a unique balance between aesthetics and performance. High performance commercial broadloom was selected for its upscale styling. THE ENHANCER* attached cushion backing technology from Dow was specified for its superior ergonomic and underfoot comfort properties, along with its inherent moisture resistance to wet spills and routine maintenance.

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End Use:
Corporate, Healthcare

Application:
Offices, Common Areas, Lounge

Product Type:
Broadloom

Dow Polyurethane Backing: The Enhancer

Manufacturer:
Patcraft Commercial Carpet
Federal Jury Makes Clint Eastwood’s Day
Actor Kicks ADA Violations Charges

The Law

A federal jury in San Jose made Clint Eastwood’s day in late September. The stoic actor-director turned the spotlight on the 10-year-old Americans with Disabilities Act and stood his ground against allegations by a woman with muscular dystrophy that she was treated unfairly and embarrassed when she dined at Eastwood’s Mission Ranch Inn in Carmel, California, and found it was not fully wheelchair accessible.

Diane Zum Brunnen of Alameda, California, filed suit for unspecified damages in 1997, after she had to travel more than 200 feet and cross a driveway to reach an accessible bathroom. Among other things, she and her husband also complained that the only accommodations accessible to her cost $225 per night, while other rooms went for as little as $85.

An eight-member jury found inconsistencies in the plaintiff’s testimony and evidence. They unanimously found Eastwood not liable, a verdict that pleased the star of such outlaw fables as Unforgiven and The Good, the Bad, and the Ugly. The actor emphasized that he supports the ADA, but not what he views as unscrupulous lawsuits that ride its coattails.

Eastwood supports a Congressional bill that would give business owners a chance to fix ADA violations within a set period, such as 90 days. Failing to act on such notification, an owner could be sued. Advocates for the disabled argue that ADA building requirements are readily available, if somewhat confusing to some architects, builders and property owners.

“If a person were denied access based on ethnicity or race, nobody would say give them 90 days’ notice. People forget that we’re talking about discrimination,” said William G. Stothers, deputy director of the Center for an Accessible Society, a national organization based in San Diego.

Incidentally, Eastwood isn’t the only property owner lagging in ADA compliance: The federal courtroom where his case was heard is not wheelchair accessible. Ann Jarmusch

Ann Jarmusch is the San Diego Union-Tribune’s architecture critic.
Is Renzo Piano’s Kansai Airport Sinking?

O.K., it’s official: After years of denial, Japanese officials have finally admitted that the engineering heavyweight Kansai International Airport—just six years after its completion to designs by Italian architect Renzo Piano—is settling at an faster-than-expected rate.

Of course designers and engineers anticipated some settling: The entire 294,000-square-meter complex sits atop a 1,263-acre, completely man-made island in Osaka Bay. Unfortunately though, their settlement estimates fell short. Recent reports indicate that the airport has subsided 3.4 feet ahead of schedule. While builders planned for the complex to meander down to 11.5 feet over mean sea level over a decade, it is now expected to reach just 8 feet above sea level.

As a result, the airport has deployed a sophisticated pump system to reduce rising seawater levels. Future repairs may include a dike-like structure to maintain constant water heights. But officials are confident of having full buoyancy: Construction is currently under way on a neighboring man-made island to support additional facilities.  M.O.

Parliament to approve the billion-dollar project.

Skidmore, Owings & Merrill is designing a $900 million New York City headquarters for the Canadian Imperial Bank of Commerce and is retrofitting a portion of a Battery Park City tower in Gotham to house the Skyscraper Museum.

Arts patrons Eli and Edythe Broad have donated $20 million to the University of California, Los Angeles to fund the construction of a new arts complex to be designed by Richard Meier.

Although Friedrich St. Florian’s World War II memorial has jumped through that last bureaucratic hoop—snagging the approval of the National Capital Planning commission.

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2001 Harvard GSD Loeb Fellows

Among the 10 winners of next year's Loeb Fellowships from the Harvard University Graduate School of Design are these scholarly pursuits:

Terrence Curry, S.J., the head of the Detroit Collaborative Design Center, will learn about neighborhood-based participatory design programs.

Anthony Flint, the city hall bureau chief for The Boston Globe, will explore the success and failure of city parks.

Ben Hamilton-Baillie, a regional manager at Sustrans in England, wants to understand the connection between transit, children, and health.

Paul Okamoto, a partner of Okamoto Saijo in San Francisco, will study the intersection between design and public policy.

Roxanne Qualls, the former mayor of Cincinnati, will develop tools to help political leaders interact with design professionals.

Bob Stacey, the executive director for policy and planning of the regional transportation agency of Portland, Oregon, will study smart growth.

Rebecca Talbott, the interagency partnership coordinator of the Outside Las Vegas Foundation, will compare her work in the Nevada desert with urban models for wildlife conservation.

Katy Moss Warner, director of Disney's horticultural and environmental initiatives at Walt Disney World in Orlando, Florida, will study landscape design and "plant–people relationships."

Researchers at the Friedrich List Institute of Traffic Science at Dresden University of Technology in Germany are using a computer model to study crowd panic. The model factors in distances, sizes, and velocities rather than mental states to see how more intelligently designed buildings might alleviate panic-related injuries and fatalities in an emergency.

Italian architect Renzo Piano will oversee a $227 million renovation and remodeling of San Francisco's California Academy of Sciences. He
has also been selected to design a new Midtown Manhattan headquarters for The New York Times.

The University of Texas at Austin has selected "safe" Boston architects Kallmann McKinnell & Wood (KMW) to design the new Blanton Museum of Art. KMW steps into the commission nearly a year after university regents rejected three schemes by Swiss architects Herzog & de Meuron, eventually forcing them to resign.

OBITUARY: Benno Fischer, Holocaust survivor and former Neutra associate who helped design the planned Los Angeles Museum of the Holocaust, 86.

Fung is a professor of environmental design at the California State Polytechnic University and currently holds the Eero Saarinen visiting chair at Yale University's Graduate School of Art and Architecture. Hodgetts and Fung were 1991 recipients of the National Endowment for the Arts Rome Prize Advance Fellowship and 1996 Chrysler Award winners.

The National Council on the Arts, a presidentially appointed body, advises the National Endowment for the Arts on issues of policy, programming, and procedure. M.O.

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Exhibitions

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

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

St. Louis, Missouri
Architect of Form and Spirit: Eric Mendelsohn in Saint Louis at the Center of Contemporary Arts through March 10, 2001 (314) 725-6555

Tacoma, Washington

Washington, D.C.
On the Job: Design and the American Office opens November 18 at the National Building Museum (202) 272-2448

Art Nouveau, 1890–1914 at the National Gallery of Art through January 28, 2001 (202) 737-4215

Wood: An American Tradition at the National Building Museum through April 22, 2001 (202) 272-2448

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

Conferences

Vertical City: New Challenges for 21st Century Megacities Madrid; November 7–10 (34) 91-366-6170 wpawt.es


Build Boston Boston; November 14–16 (617) 991-1433 ext. 221

Competitions

NAHB’s International Builder’s Show Atlanta; February 9–12, 2001 (202) 822-0200

The Rudy Bruner Award for Urban Excellence recognizes places, projects, and organizations that demonstrably contribute to city life with a gold medal prize of $50,000. Applications due December 4 www.brunerfoundation.org

Young Massachusetts architects may compete for the $35,000 Rotch Travelling Scholarship. Requests for information due January 1, 2001 www.rotchscholarship.org

The James Beard Restaurant Design Award is open to any restaurant in the U.S. or Canada that opened after January 1, 1998. Applications due January 31, 2001 (212) 627-1064
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On the Boards

Barkow Leibinger Architects
Potsdam Biosphere, Potsdam, Germany

The Bornstedter Field outside Potsdam, Germany, has a long (though not quite illustrious) martial history. The Prussian army performed exercises there, the Nazis conducted mock battles to train troops, and, finally, occupying Soviet forces erected a series of barracks on the site. This last group dramatically reshaped the field by building huge earthen berms as fortifications for their barracks. Today, when traces of that occupation are being effaced in the rest of the city, Barkow Leibinger Architects is retaining the forms of the old earthworks as the basis for their Potsdam Biosphere.

The City of Potsdam, the project’s developer, asked for a 65,000-square-foot structure that could serve as a pavilion for the 2001 German Flower Show, and then be quickly transformed into a different public amenity. That second incarnation is a nature-oriented entertainment complex consisting of a series of created environments—an aquarium, ice cave, pond, and rock cliffs, for example—connected by a pathway that goes over, around, and through them.

The Biosphere, which will be finished next April, is less of a new building than a new roof over the man-made landscape of the earthen berms. Three 10-foot-high drumlins of recycled crushed concrete act as the walls for a 580-foot-long-by-140-foot-wide flat roof that spans them, though the drumlins are not structural—the roof is supported by concrete columns that make it seem to float above the mounds. A series of exhibit rooms, support spaces, and a restaurant are notched into the earthen walls, so that much of the interior is left open for the varied landscapes of the Biosphere. The 17.8-million dollar project is one element of a larger urban design plan for Potsdam, which will ultimately include housing and a new park nearby. Anne Guiney
Weiss/Manfredi Architects
Museum of the Earth, Ithaca, New York

The Finger Lakes region of upstate New York is a textbook example of glacially formed landscapes. Its topography was gouged out of the sedimentary rock that had accumulated for hundreds of millions of years by the Laurentian Ice Sheet as it made its way down North America. The tremendous weight of the ice scoured the rock below it, revealing fossilized ferns, trilobites, and other biological material trapped in the silt of a prehistoric sea. As the glacier retreated, the debris it dropped in its wake plugged up several river valleys and created the 11 distinctively long lakes that give the region its name. Above the steep shores of Lake Cayuga, in Ithaca, New York, Manhattan-based architects Weiss/Manfredi's Museum of the Earth exploits this natural history, showing that a building's connection to the landscape can be more than just metaphorical.

The Museum of the Earth is the public arm of Cornell University's Paleontological Research Institute. The new 18,000-square-foot museum connects to an existing laboratory, and will house the institute's collection of paleontological specimens, one of the nation's largest. The two wedge-shaped buildings that comprise it are connected underneath the open plaza they frame by an interactive research area, which is open to the public. The exhibition wing of the concrete
and glass clear-span structure is tucked into the sloping site, its southern face rising a few feet above grade to become a long clerestory window for the galleries below.

Above the museum buildings, four gravel-covered earthen platforms solve two problems at once: parking and storm drainage. Rainwater flows towards the rear of the slightly tilted berms, collecting in a biological swale just to the north of a footpath leading to the museum. The overflow from this wetland—in a sense another exhibit, showing the habitat of tomorrow's fossils—is funneled between the buildings, collecting in a pool below them, and ultimately flowing down the slope and back into the lake. The $3.8 million building breaks ground this April. Anne Guiney
If your employees can be three times more reliable

and you have three employees
Allen's Town

Microsoft mogul Paul Allen is Seattle's new architecture angel. Lawrence W. Cheek wonders how his patronage will change America's coffee capital.

Patronage  Seattle pedestrians don't jaywalk. Attribute it to our native Northwestern politeness, reserve, or stoicism. Whichever, it's a long-honored local tradition.

At least, it has been until now. On the streets around the Experience Music Project (EMP)—the first flamboyant, impudent, in-your-face public building in Seattle's history—people saunter, boogie, and skate against stop-lights with abandon. The old ethic has evaporated, at least within the sphere of EMP's gravity, as if to illustrate the power of architecture to affect human behavior. And it may also suggest how one immensely wealthy patron—in this case, Paul Allen, Microsoft's cofounder and EMP's angel—can influence a city's culture.

Along with his sister, Jody Allen Patton, Allen is easily Seattle's most prominent architectural client. In the past decade, he's given or spent:

Computer mogul Paul Allen is on a rock and on a roll in Seattle, where his Experience Music Project by Frank Gehry marks only the beginning of a slate of civic-minded works.
$10 million to complete a library addition for the University of Washington (Edward Larrabee Barnes/John M.Y. Lee & Partners): $3.75 million to buy (and an undisclosed amount to renovate) Seattle's Cinerama Theater (BOORA Architects); $250 million to buy and renovate Seattle's historic Union Station, which he then donated to Sound Transit, the regional transportation authority, for one dollar (NBBJ); untold “multimillions” to acquire 505 Union Station, a 300,000-square-foot downtown office building that will headquarters the umbrella company for Allen's ventures, Vulcan Northwest (NBBJ); $240 million to launch the Experience Music Project, the interactive rock 'n' roll museum opened this June (Frank Gehry); and $400 million for the Seattle Seahawks football stadium and exhibition center now under construction, kicked off by a $100 million Allen investment (Ellerbe Becket/ Loschky Marquardt & Nesholm).

As Seattle blinks in astonishment at the size and range of these projects, the city is also struggling over what to make of them. Generally, American history's high-profile patrons of architecture have stuck to a script: Carnegie's libraries, the de Menil family's fine-arts bequests in Houston, J. Erwin Miller's open-air expo of modernism in Columbus, Indiana. Allen confounds all these precedents. Seattle Times reporter Linda Keene described him as a "civic pixie, freely sprinkling money on causes." In a vividly contrasting image, Alex Steffen, president of Allied Arts, an urban-planning and arts-advocacy council, characterizes Allen as Seattle's "800-pound gorilla." Allen offered this ingenious self-appraisal in one of his rare interviews two years ago: "I'm an idea person."

The idea that made all this possible was the company first called Micro-soft, which Allen and childhood friend Bill Gates launched in 1975. Allen resigned his vice presidency only eight years later after contracting Hodgkin's lymphoma. The cancer went into remission and Allen parlayed his Microsoft stock into a constellation of business ventures, philanthropy, and playthings. The world's second-to-fourth-richest person (depending on market oscillations), Allen currently owns the NBA's Portland Trail Blazers, the NFL's Seattle Seahawks, two Boeing 757s, a 280-acre island in the San Juan archipelago north of Seattle, and a private recording studio in Seattle for his rock band, the Grown Men (Allen plays lead guitar). People who've dealt with him say he's impulsive and enthusiastic, easily engaged by everything from World War II bombers to biotechnology. A lifelong bachelor, he's been inaccurately described as reclusive, but he does seem to choose his public appearances whimsically—by showing up with his band, for instance, to play at a local bar.

On balance, Allen's patronage has been a cultural and financial windfall for Seattle. But because it involves change, he's winning less than unanimous applause. And as his ideas crescendo in ambition, they provoke widening ripples of controversy throughout the town.

Not even a churlish critic could object to the Allen Library, a demurring 215,000-square-foot addition to UW's heaven-storming 1926 Collegiate Gothic Suzzallo Library. Barnes and Lee completed the design in 1992, but the state's $36 million appropriation fell short. Allen's gift—which honored his father, an associate library director from 1960 to 1982—made up the deficit and established an endowment. "We think this is a wonderful building," says Charles Chamberlin, deputy library director today. "It's especially close to our hearts because it was given in honor of a librarian."

Four years later, however, the city decisively rejected another Allen gift: a $20 million seed for the Seattle Commons, a $166 million central-city park and redevelopment project. Voters shot down bond issues for

"If the [Experience Music Project] is the answer," asks one Allen observer, "what's the question?"
the Commons twice in eight months, and Allen took back the 11.5 acres he would have dedicated to green space. He has since bought five more contiguous acres, and his apparent plan is to develop the site privately as a cluster of high-tech and biotech firms. "We're going to get the intense development anyway," says Peter Steinbrueck, an architect and Seattle City Council member, "minus the green space."

Nothing in Seattle's history anticipated EMP, either in audacity or, possibly, in cost per square foot (about $715 for construction alone). The controversy is furious; mention EMP at any gathering of adults, and hostile opinions fly like volleys of arrows. Letters to local papers have run about three to one against the design, some sputtering with inspired criticism: "...a scattering of uncooked noodles laid over sculpted internal animal organs," read one.

Allen laid the EMP at the feet of the Space Needle, built in 1962 for the Seattle World's Fair. The Needle has become Seattle's beloved civic lawn ornament at least partly because it symbolized the mid-century aspirations of the space program, which enjoyed nearly universal support. Seattleites disparage the sprawling blob below not only for its bizarre form and colors, but also for its associations. "EMP is a temple to tripping on acid," says Knute Berger, editor of the Seattle Weekly.

Gehry hardly needs a prod to hang out over the edge, but pushing is Allen's and Patton's style—the one consistent thread in their patronage. "I like to be progressive," says Patton, president of Vulcan Northwest. "I think that's what art and architecture should be about. I don't want to do something that's been done before."

Patton, a mother of three who speaks guardedly but precisely, has worked alongside Allen since 1989, shepherding his ideas to completion. The Seattle buzz also casts her as the prime force in conceptually expanding EMP from a modest Jimi Hendrix gallery to a megamuseum, although she will not publicly say as much. She and her brother "work very closely together," she says. "I don't know who pushes whom more."

Allen's recent hobbies in Seattle include (left to right): 505 Union Station, the downtown headquarters of Vulcan Northwest, the umbrella company for his various ventures, by NBBJ; the Experience Music Project by Frank Gehry; the renovation of Union Station proper, also by NBBJ; the Cinerama Theater, renovated by BOORA Architects; and the Seattle Seahawks stadium, designed by Ellerbe Becket and scheduled for completion in July 2002.

Allen's new 505 Union Station project, nearing completion on EMP's heels, seems almost sedate by comparison, but its north window-wall abstracts an 11-story waterfall—a new sculptural direction for commercial architecture in Seattle. The process behind the design illustrates how Allen and Patton think.

The siblings wanted "contemporary, progressive, cutting-edge design," says NBBJ principal-in-charge John Savo, but they also wanted the building to be "a good neighbor" to the historic Pioneer Square and International districts. What they didn't want were literal echoes of the surrounding buildings. Even at the conceptual stage, they challenged NBBJ's design team to develop several different options and explain their consequences, and finally, says Savo, "they picked the one that pushed the envelope, the one that would challenge us the most as designers."

Allen kept a lower profile, literally and figuratively, in renovating Seattle's not-quite-historic Cinerama Theater, but the project illustrates how he follows through on his impulses.

The theater was built in 1963 to showcase the Cinerama spectacles, which then were considered high-tech because they required three projectors. In 1998, the obsolete building was about to be recycled into a rock-climbing club or dinner theater. But Allen, operating on personal nostalgia, bought it for $3.75 million and paid for a lavish renovation. He spoke briefly at its reopening debut a year later, recalling that he and his family had been there to see How the West Was Won in 1963. "Back in those days, coming here was a real event," he said. Later, he added, he and his sister saw The Exorcist on the...continued on page 146
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Steelcase House

Steelcase hopes to help younger workers loosen up on the job with a new modular office building. Christopher Hawthorne finds out just how cool the prototype really is.

Business | Workstage is a spin-off of the Steelcase Corporation with a pretty ambitious aim: to shake up the clubby, slow-moving world of commercial real estate. In recent years, Steelcase has poured millions of dollars into exploring seemingly every angle of workplace design, from the ergonomics of desk chairs to the psychological effects of the cubicle. Now, with the help of several architects, the company is taking the findings of that research into new territory: a series of free-standing modular office buildings.

A key part of its strategy is pleasing the young, mainly high-tech workers who are increasingly pampered with casual, mutable offices. “Generation X-ers are looking for an informal working ambience,” says Kent Riddle, Workstage’s vice president of development. “We knew these buildings had to be not only flexible but ‘cool’ spaces as well.” And to attract companies that have grown impatient in every aspect of business, Workstage promises that the new buildings can be completed in five months.

Thomas Phifer and Partners of New York, the firm that designed the first Workstage product—known as the P Building—had slightly more
humanistic concerns. "Over the life of a building, a huge percentage of its cost—something like 90 percent—goes to the salaries of the people who work there," says principal Thomas Phifer. "What that says to me is simply that we need to pay more attention to them."

The P Building prototype (which went up over the summer in Grand Rapids, Michigan, near the Steelcase corporate headquarters) is a case study in airy, user-centered minimalism. It features windows that open, accessible climate controls, and a huge porch along the southern edge of the building that serves as a kind of canopied piazza. The roof, supported by thin bowstring trusses, holds skylights that allow workers in the building to sense when the sun has emerged from behind a cloud or when rain has begun to fall. Many of these elements reflect the decade Phifer spent in Europe working with Richard Meier before returning to New York to launch his own firm in 1997. "In Europe, it's commonplace for architects to make a conscious decision to give people direct access to light and air," he says.

"The whole thing is very much like an Erector Set," says Steelcase’s Kent Riddle.

Phifer’s two-story 80,000-square-foot office has floor-to-ceiling tinted-glass windows and a loftlike feel. As will be true of every Workstage building, it is filled with furniture and interior fixtures by Pathways, a Steelcase arm. Most of the building’s guts lie beneath a raised floor on both levels.

Larger mechanical cores sit on the building’s perimeter to create wide-open floors. Many interior walls wheel easily from one place to another; some mechanical systems are even moveable. "The whole thing is very much like an Erector Set," Riddle says.

Steelcase set up Workstage in May as a joint venture with the developer Gale & Wentworth and Morgan Stanley Real Estate Funds. Phifer has drafted four possible schemes; other firms on board include Gensler and Grand Rapids-based Integrated Architecture. Riddle estimates Workstage’s construction costs at less than $100 per square foot.

Every Workstage product begins with a basic module that expands with relative ease. The buildings, which are intended for suburban or “exurban” settings, can rise as high as 10 stories—though if the architecture of most technology headquarters is any indication, the majority will be resolutely horizontal. So far, about half of the companies that have expressed interest in a Workstage office are traditional, established firms—a fact that Riddle says surprised him.

It shouldn’t have. Old-economy outfits are merely following tech upstarts’ lead in their eagerness to placate the 20-something workers who have turned the economy on its head. Workstage and its affiliated architects, of course, are only too glad to help out.

Christopher Hawthorne lives in Brooklyn and writes frequently on architecture and design.
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.
Paradise Found

A postindustrial wasteland is reborn as a cultural promised land. Sebastiano Brandolini reports on the miraculous transformation of Germany's Ruhr Region.

Cities' Industries once had exact shapes, with easily identifiable structures and landscapes. Today, we look at factories, mills, and refineries with curiosity. Mingling with contemporary structures, they jar our sense of time; like dinosaurs, they seem about to vanish or at least change skin. Some have survived the passage of time admirably, like warehouses that have been converted to postindustrial uses with ease. But what can be done with the more monumental emblems of our industrial past? What are the limits of their adaptability? Can industrial structures become new symbols? Can industrial land be returned to nature? Can industrial landscapes be invigorated with a new purpose, while preserving their own heritage?

One of the art components of the massive Emscher Park IBA '99 project is the work of London-based artist Jonathan Park (renowned for lighting Beatles concerts), who transformed the region's abandoned factories into gargantuan light sculptures.
In Landscape Park Duisburg Nord, formerly the Thyssen Steelworks, landscape architect Peter Latz endowed existing structures with new recreational uses. A local scuba divers' club uses old gas tanks for training (top), while parts of the factory's concrete foundations have been fitted with toeholds and outcroppings for rock climbing (center). Another of IBA's over 120 projects is the conversion of a factory into a performance theater (bottom) and museum (facing page).

Answers may be found along the shores of the Emscher River, a tributary of the Rhein River in Germany's Ruhr region, the heart of the nation's heavy industry. Cruising along the 56-mile-long, east-west freeway that connects Duisburg to Kamen, through Oberhausen, Essen, Gelsenkirchen, Herne, Bochum, Dortmund, one crosses a territory that is not especially dense (population about 2.5 million), but filled with heroic signs of its manufacturing power. The work of photographers Bernd and Hilla Becher (who are from nearby Dusseldorf) come to mind—black and white studies that celebrate the innate beauty of industrialism's relics.

But anyone who has ever visited the area, even as recently as 10 years ago, would hardly have described it as picturesque. Even those who grew up in the Ruhr region call it ugly, as it was perpetually cloaked in stultifying haze. In the 1970s, the decline of heavy industry worldwide precipitated a severe depression in the region, which in the 1980s was evident in its abandoned buildings, growing unemployment, and declining population. This crisis prompted the regional government of Nordrhein-Westphalen to establish, in 1989, the IBA (Internationale Bauausstellung), a flexible agency that would coordinate, promote, and guide projects aimed at reviving the region economically, ecologically, and culturally. IBA projects large and small were financed by both private and public sources, including regional, state, and European funds. Emscher Park IBA '99 was its overarching project, with the goal of finding solutions for the region's future set for only 10 years ahead.

Fast-forward to 1999: The celebration Das Finale marked the completion of the main parts of this ongoing program. The IBA has shepherd ed about 120 projects—an average of about one a month over the course of its existence—all aimed at making the region clean, attractive, livable, and forward-looking. Water courses have been renaturalized, ecosystems recovered, defunct structures rehabilitated, the economy revived, new residential quarters and industrial parks built, the landscape reinvented.

As visible proof of the transformation, the region's colors have changed: Like in a fairy tale, the once-gray rivers and streams are blue again, the mountains are no longer blackened with coke. This new picture is a faithful representation of the Emscher Valley's new economic base and its successful transition from manufacturing to tertiary industries—from mammoth expressive machinery to minimal clean computers, from monolithic industrial production to diverse cultural distractions.

One of Emscher Park's largest—and perhaps most emblematic—projects is the conversion of Thyssen Steelworks in Duisburg into an open-air museum and recreational park. Covering an area as large as the town itself, Landscape Park Duisburg Nord was designed by German landscape architect Peter Latz (who won the commission through a competition). Latz and his colleagues confronted a mosaic of elements, from blast furnaces to railroad tracks to slag heaps. Rather than tear things down or cover them up, he built in ways to bring people to them—interspersing walkways, plantings, and other friendly features among overhead cranes, blast furnaces, and drainage channels. The concrete tanks where trains once unloaded coal now serve as sports facilities.
As in a fairy tale, once-gray rivers and streams are blue again, and mountains are no longer blackened by coke.

and playgrounds: Rock climbers shinny up the factory’s foundation walls, divers disappear into old gas tanks (now filled with fresh water), while children clamber on slides and springboards against a backdrop of hulking, rusting metal. Older visitors can reminisce about the time they or their parents worked in these places, while younger generations stare in amazement at a world that never belonged to them, yet survives as a link to their identity and that of the region.

The flow of time has assumed a vaguely Disneyish flavor, but the appeal of this “industrial theme park” is hard to resist. Better than simulacra or flashy, empty gestures, the monuments that comprise this regional Landschaft are undeniably authentic, as is their power—in spite and because of their new uses. Though tourism is a strong motivation, ultimately, these developments benefit locals most. No longer unemployed, the local population finds a new beauty in the structures they’ve seen lie dormant for too long.

The Emscher Valley is foremost a transport network, a sort of horizontally laid Centre Pompidou. Motorways snake amid ramps, viaducts, and underpasses, and local railways navigate over or under other networks, such as massive gas pipes which draw cobwebs on the land. Meanwhile, barges still move slowly on the Rhein-Herne canal. Now cycling routes have been added to the mix. The IBA rightly considers the 143-mile-long Emsher Park Cycling Ring a kin of infrastructures rather than mere urban furnishings. A new footpath network, too, makes it possible to walk from Duisburg to Kamen. Beautiful sewage plants, whose aluminum oval shapes reflect the sunlight, act as stunning “lighthouses” along the green corridors that tie all of Emscher Park’s sites together.

Land-art monuments play a crucial role in the park’s overall conception. Newly commissioned installations form territorial triangulations with existing industrial buildings. These old and new landmarks allow people to navigate the region by sight,
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Bibliofile

Green Architecture, by James Wines (Taschen)
Arcology: The City in the Image of Man, by Paolo Soleri (Cosanti Foundation)

In his new book, Green Architecture, James Wines makes a nod to Robert Venturi’s seminal critique of modern architecture, but avers that ambiguity and complexity should be sought in the primal source of nature, not in the limited palettes of ideology and style. With a career that has always occupied the middle ground between environment and building, he continues to challenge architecture that works within "the limited state of objectness," exploring instead the question of “how to construct a habitat in harmony with nature." The book compiles built works that don’t simply deal with energy conservation, environmental technology, and sustainability, but convert these things into equally admirable artistic expression.

Wines has accomplished no mean feat in bringing together projects by architects as varied as Frank Lloyd Wright, Emilio Ambasz, Hans Hollein, Michael Sorkin, Jean Nouvel, Renzo Piano, among others—and in expanding the definition of “green.” Interestingly, he doesn’t mention Paolo Soleri, who is a key link in ecotopian musings. His Arcology: The City in the Image of Man has been reissued on the occasion of the book’s 30th anniversary, reaffirming his polemics of miniaturization, sustainability, and permeability. The book is beautifully illustrated with drawings (many by Soleri himself) of “arcologies,” or “ecological architecture” (above). These integrated cities combine grand-scale, technocentric modernism with the impulse to halt human sprawl across the earth’s surface. At Arcosanti, the first arcology, Soleri lives his ecological ideal, and serves as an inspiration to any architect aspiring to be green. Jay Powell

Waste Not, Want Not

Can damaged landscapes be salvaged?

Cathy Lang Ho explores reclamation strategies in the United States.

Green Links In the 1920s, artist Charles Sheeler memorialized the grandeur and heroism of American industry in his famous photographs of the Ford Motor plant on the Rouge River in Dearborn, Michigan. Intricate and awesome, the Ford factory was a proud symbol of American technological prowess. But Sheeler’s serene compositions gave no hint of the factory’s other reality—as a chemical-spewing behemoth that dirtied the sky and stained the river a distinct shade of rust. A century later, modern industry is no longer seen as a symbol of progress, but as a regressive perpetrator of environmental degradation.

Industry will have to undergo a significant metamorphosis for it to lose its tarnish. Vanguard green-architect William McDonough has taken it upon himself to try to turn industry from being environmentalists’ worst enemy into its best friend. With vision and chutzpah, he approached William Clay Ford, Jr. (Henry’s great-grandson) two weeks after his appointment as chairman of Ford, with the challenge of transforming the company from an icon of the first industrial revolution into a leader for the next. To McDonough, that means a company that operates as a total system, with the goals of efficiency and productivity inextricably intertwined with sustainability.

McDonough, with landscape architect Julie Bargmann, are tackling Ford’s sprawling 1,200-acre plant, which includes several still-operat-
Julie Bargmann’s project in Vintondale, Pennsylvania, addresses the problem of acid mine drainage on ex-coal-mining sites. Polluted water is sent through a series of settling basins, which forces metals to drop out before it can reenter the stream.

In the United States, there are several hundred EPA Superfund sites (deemed hazardous by the Environmental Protection Agency), awaiting clean-up enforcement. But more often, action results from grassroots efforts by the communities directly affected by them. Vintondale is a good example. This rural valley (60 miles east of Pittsburgh) suffers from decades of coal extraction and acid-mine drainage. Historian Allan Comp, commissioner of a local heritage group, assembled a team of scientists, artists, and designers to work with the community on a plan to reclaim the damaged land as a local amenity. Funded by grants from the EPA and others, the result is a 40-acre park that integrates passive water treatment systems with subtle design gestures, such as the Litmus Garden in which flowers change colors to show the cleansing process the water is undergoing. The point is to give new life to the area in a natural manner, while still making the transformative process legible—and thus serve as a reminder of the site’s industrial heritage.

Another grassroots project is the effort to convert Bravo 20, a 41,000-acre area in Nevada’s Carson Desert, used for decades by the nearby Fallon Naval Air Station for war games and bomb testing, into a national park. Bravo 20 began as a project by artist Richard Misrach, who in the mid-1980s produced a devastating photographic series on the decimated desert. He published the photographs with a tongue-in-cheek proposal to convert the test range into a historic park. Today, RAMA (Rural Alliance for Military Accountability), a Reno-based military watchdog group, is petitioning Congress to deny the Pentagon’s continued “withdrawal” of this parcel of land from public use, and to implement Misrach’s park scheme. Though he is not involved in RAMA’s efforts, Misrach hopes that the park will be realized as “a critical landscape reclamation project, not a theme park. There are lots of military sites that have become monuments, but very few are self-critical. A Bravo 20 national park should be
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In **Lightness**, authors Adriaan Beukers and Ed van Hinte make the "building structure of all things made and grown" their subject, and revolutionizing "the way we look at all objects" their objective. With 19 chapters plus addenda, this collection affirms these two Dutch engineers' belief that lightness encompasses many subjects and can be read in many ways. Chapters include "A Bathtub Full of Change," which charts the cultivation of sturdy materials, from natural metals to engineered polymers, and "The Trinity Essence," which posits that lightness depends on the balance between material, shape, and process. Kites, zeppelins, nomadic tents, egg crates, pole vaulters, bridges, and injection-molded plastic chairs are just a few of the examples that illustrate the authors' wide-ranging ideas.

Few architects can resist this topic. But just as few will be able to comprehend fully the principles of lightness, this book purports to reveal. It has a section, "In Depth," that is meant to be the technical and scientific backbone of material that is anecdotally discussed in previous chapters. But it (as well as the formulas that crop up throughout the book) will be incomprehensible to anyone unfamiliar with structural theory. It's almost as if the aim is to mystify and awe the uninitiated.

Part of the problem is the book's presentation. Graphic designer Eric Wong collaborated with the authors from the book's inception, and his work plays an important role in telling the story. With a dense, **Whole Earth** catalogue look, **Lightness**' organizing principle is a befuddling hybrid of free association. For actual enlightenment, I would suggest that readers refer to the works of engineering scholar J. E. Gordon, published in the 1980s but still available in paperback. While entertaining, **Lightness**, on its own, is too "lite." **Alexander Tzonis**

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**Memory Building**

Photographer Hiroshi Sugimoto transforms famous buildings into abstract glyphs. **Paolo Polledri** interprets the signs.

**Public Eye**  
Photographer Hiroshi Sugimoto's most recent series, now on view at the San Francisco Museum of Modern Art, captures some of the most famous examples of modern architecture, from the Chrysler Building in New York to Le Corbusier's Ronchamp Chapel. But his images are out of focus, vague, incomplete. The buildings are never shown in their entirety, always depicted as fragments, stripped of material qualities and construction details. Even so, they are no less recognizable; their singularity is actually strengthened. They show how we would see the buildings if we were squinting our eyes, attempting to reduce objects to what is essential, eliminating all that is unnecessary.

Modern, and especially contemporary, art is borne out of similar attempts to distill order from disorder. We think of Mark Rothko, Carl André, James Turrell, among others, but only of a few photographers. Sugimoto has acknowledged these artistic influences in his previous work, such as his series of photographs of empty movie theaters and his unchanging, elegiac views of sky and sea. These early images are striking for their repetition: Only minute, meticulously recorded variations distinguish them. Repetition is characteristic not only of minimal art, but also of traditional Japanese art. In painting and traditional Buddhist sculpture, for example, the same themes and subjects are repeatedly explored, documenting a diversity of personal interpretations and cultural intentions. The significance of Sugimoto's photographs lies precisely in these shades of difference.

Sugimoto's architectural series represents a departure in his work. (This is the first complete showing of the series, which was introduced in the Los Angeles MoCA's 1998 exhibition *At the End of the Century.*) The buildings are reduced to abstract, black and white fields, and stand out as individual forms rather than variations on a theme. They designate milestones in architectural history, but relate a history different from the one to which we are accustomed because they ignore periods and authorship. Blurred and detached from their urban context, the buildings assume a mythopoetic mantle and encompass a larger cultural context than the physical ones in which they are located. They have become glyphs or icons, no longer able to maintain an identity separate from the surrounding world, as minimal art is capable of doing. Rather, they rely on our memory, on associations and emotions in order to seem complete.

Buildings, like human beings, are not so much what they are when they are born, but what they have become. They are the product of personal and collective history, the result of choices made even before they existed. In his new series, Sugimoto transports architecture to a symbolic region, where it is still art and not simply a profession.
Making a Midrise out of a Termite Hill

Zimbabwean architect Mick Pearce gleans architectural lessons from insects. Liane Lefaivre investigates.

Profile Mick Pearce's favorite architects are termites. It all goes back to when he came across Bernard Rudofsky's Architecture Without Architects in the early 1960s. "The book was very important for me," says the Zimbabwean architect. "It marked my evolution as an architect because it opened a whole new world of possibilities. That's when I saw that bio-climatically efficient architecture could be derived organically rather than mechanistically." That's an important evolutionary step for someone who trained at the Architectural Association (AA) during its heyday (he was there from 1958 to 1963), when his instructors and peers were avidly embracing a machine analogy for architecture. One of his instructors, Reyner Banham, had just published Theory and Design in the First Machine Age (1960), while Cedric Price had already shaped future Archigrammers who would reach a zenith of futuristic machine-age zaniness. These influences surrounded Pearce and his fellow students, Richard Rogers, Anthony Hopkins, and Nicholas Grimshaw, who would earn the AA its reputation as ground zero for the high-tech movement.

But Pearce departed somewhat from the more mechanistic path his peers were taking. Like another AA classmate, Malaysian architect Ken Yeang, he took his hyper design-driven training to an "outsider" context, which has demanded the prominence of sustainability in his work. In 1963, after completing his studies at the AA, Pearce returned to Harare, the bustling tropical English colonial city where he was born. But he didn't stay long; he soon left for neighboring Zambia due to his opposition to the country's white supremacist regime. In Zambia, he was fortunate to work in the office of Erhardt Lorenz, a Danish architect who was a friend and collaborator of fellow Dane Ove Arup. The association with Arup would prove to be a continuing one for Pearce, who moved back to Harare in the early 1980s, after the country's independence.

Finding a client willing to invest in a building by an idiosyncratic, headstrong architect is hard enough anywhere, let alone in cash-strapped, crisis-ridden Africa. This explains why Pearce did not receive his first significant commission, Eastgate, a 30,000-square-foot mixed-use office and retail complex, until 1995, when he was well into his 50s.

Pearce was first introduced to insect architecture in the early 1990s, after seeing a television program made by English director Richard Attenborough, Battle for Life, which presented the termite mound as an engineering feat. Termites must live in a constant temperature of exactly 87 degrees to survive. The difficulty is that temperatures in the Zimbabwean savannah, for example, fluctuate from 35 degrees at night to 104 during the day. The termites' solution is to dig a kind of breezecatcher at the base of the termite mound, which cools the air by means of chambers carved out of the wet mud below, and sends hot air out through a flue to the top. The termites constantly alter the construction, opening up new tunnels and blocking others to regulate the heat and humidity. In other words, they use the thermal mass of a building to heat it and the changing environmental conditions to cool it.

The film was a revelation to Pearce. Termite mounds served a model for Eastgate, which uses the mass of the building as insulation and the diurnal temperature swings outside to keep its interior uniformly cool. Ove Arup & Partners helped devise an air-change schedule that is significantly more efficient than other climate-controlled buildings in the area. Eastgate's ventilation costs one-tenth that of a comparable air-conditioned building. It uses 35 percent less energy than six conventional buildings in Harare combined. Since its completion five years ago, the
For Eastgate (left), Pearce drew from the same principles termites use to construct their mounds (center), using the thermal mass of the structure to heat it and the changing environmental conditions outside to cool it. He extended the idea to a project in Zolder, Belgium (right), tapping underground mines to heat buildings in the town above.

$36$ million structure has saved its owner $3.5$ million in energy costs. Furthermore, unlike most other large developments in this part of the world, Eastgate did not require that an air-conditioning plant be imported.

Eastgate is one of the first of a generation of late 20th-century buildings that demonstrates that saving energy doesn’t have to mean sacrificing design for performance. The atrium, in fact, has a decidedly high-tech gleam, with delicately detailed steel-lattice girders, suspended walkways on tendons, bridges, and filigreed tiaras atop the main entrances to the complex. “We have moved from traditional sustainable approaches,” he notes. “We can’t rely anymore on getting the breeze to blow in a certain way through the building. Comfort standards are higher, too. We now have to compete with the air conditioner, and meet much higher expectations on the part of the client.”

In a recent project, the John Boyne House, Pearce was commissioned to “green-up” a 1960s 10-story glass tower in Harare. “The knee-jerk reaction would have been to cover the appropriate sides of the building with louvers and to introduce ventilation,” he notes. He found that the energy savings from traditional interventions would have been woefully minimal. Instead, he brought a layer of insulation inside the building, directly behind the glass façades, creating new wind shafts. Air is cooled by passing through what he calls a “rock store” in the basement. The rocks are cooled at night by a purge of air that is about 20 degrees cooler than daytime temperatures. During the day, the hot air is cooled by circulating it through the rocks. In effect, he converted a modern glass tower into a termite mound.

Pearce, along with Yeang, are among the few who are consistently pursuing sustainability in large-scale projects, and adapting sophisticated technologies to their purposes. Perhaps it is no coincidence that both are working in the tropics, where ecological and economic crises demand nothing less than inventive, resourceful solutions—not only for the benefit of their local populations but for the whole planet, whose health depends on tropical ecosystems. Says Mike Rainbow, an engineer at Ove Arup’s Harare office and a close collaborator of Pearce’s, “People don’t tend to look to Africa for groundbreaking ideas, but Mick has come up with some.”

Where Pearce takes his practice from here is uncertain for now, given his country’s current political upheaval. There is little work in Harare, though Pearce is keeping busy by lecturing and continuing his own research, exploring, for example, the possibility of applying the termite thermal principle to an entire town: In Zolder, Belgium (another collaboration with Arup), he believes it is possible to tap into the geothermal heat from underground mines to heat the entire village above. He is always looking for new building models, though certainly not from the architectural press, which has taken so long to notice him. What’s his favorite magazine? New Scientist. “Buildings are living systems,” Pearce says. “We still have a lot to learn from nature.”

For all his organicist claims, Pearce has not rejected mechanics at all. He is simply bending the machine to suit his purposes. As a matter of fact, notes Rainbow, “Pearce thinks more like an engineer than most architects I’ve worked with.” Then again, so do termites.

LANDFORMS

For Christian Norberg-Schulz, the late Norwegian architectural historian and theorist, architecture was inseparable from the spirit of a place. The argument, which he articulated in a series of treatises culminating in the epochal *Genius Loci* of 1979, is an existential one; it hinges on Norberg-Schulz’s belief in the “basic relationships between man and his environment.” People invest meaning in the palpable character of specific natural and man-made environments—mere spaces thereby become places. Norberg-Schulz posited as an example the domes and piazzas of Rome, which are inseparable from the hills and valleys of the surrounding countryside. The buildings in this issue are equally meaningful because they are rooted in particular landscapes. The prehistoric geology of the Great Lakes region, the topography of suburban Los Angeles, and the convergence of land, sky, and water on the Arkansas River all serve as starting points for contemporary place-making.
By carefully calculated positioning, the inner chamber receives the greatest amount of light on June 21, the date of the summer solstice and also the battle of Vinegar Hill. Fittingly, the monument’s Irish name, Tulach a’ tSolas, means ‘Mound of Light’.

The concrete slit (below) that bisects Scott Tallen Walker’s Tulach a’ tSolas memorial is the passageway to the interior, and its only source of light.
Deep in the pastoral landscape of Ireland's County Wexford, a shaft of concrete cleaves through a green hill like the entrance to some futuristic burial mound. This startling presence in the Irish rural idyll is both a symbol and a commemoration of history, marking the bicentennial of the 1798 rebellion against English rule. Fueled by political and ideological movements in North America and France, the Wexford Republic was established in a popular uprising at Oulart Hill in 1798. For a precious, brief moment, Irish liberty seemed possible, but three weeks later, nationalist forces were defeated at Vinegar Hill, seven and a half miles west of Oulart on the far side of the valley.

From a distance, the gently sloping green mound appears to be an organic extension of the existing landscape, but on closer inspection, it has a geometric definition and regularity that could only be man-made. The Oulart monument, which was designed by Ronald Tallon of the Dublin-based practice Scott Tallon Walker and the sculptor Michael Warren, rises at the end of a long walk across fields of lush, rolling pastureland. It is austerely and elementally simple: Within the grassy mound, a narrow concrete passage bisects a recessed chamber. The concrete chasm is open to the sky, allowing natural light to penetrate the chamber, and its east-west alignment traces an imaginary line between Oulart and Vinegar Hills, underscoring the two sites' historic connection. The sheer flanking walls of the passage frame views to Vinegar Hill and capture the rays of the rising and setting sun. By carefully calculated positioning, the inner chamber receives the greatest amount of light on June 21, the date of the summer solstice and also the battle of Vinegar Hill. Fittingly, the monument's Irish name, Tulach a' tSolais, means "Mound of Light".

Monastic in its rigor and plainness, the Oulart monument embodies a contemplative, ascetic realm of stillness and abstraction. Based on the proportions of a double cube, its floor is paved with dark gray bush-hammered granite slabs and its walls lined with raw concrete panels. Circular indentations from the shuttering have left a gridded imprint across the concrete, recalling the work of Japanese master Tadao Ando. Two massive, curving planes of 200-year-old Irish oak—which were saplings at the time of the 1798 rebellion—occupy the center of the chamber. Warren's powerful, horizontal sculptures are the only objects in the space. Both in the land and of it, Tulach a' tSolais's abstract form transcends the historical particular to articulate universal themes of commemoration and renewal. 

BY CATHERINE SLESSOR
TULACH A'TSOLAI S, OULART HILL,
COUNTY WEXFORD, IRELAND
CLIENT: Tulach a'T Solais Committee, County Wexford, Ireland
ARCHITECT: Scott Tallon Walker Architects, Dublin—Ronald Tallon, Michael Warren (concept); Brian Foley (project architect)
LANDSCAPE ARCHITECT: Charles Funke Associates
ENGINEER: Ove Arup & Partners (structural)
COST: $400,000
PHOTOGRAPHER: Peter Cook/VIEW

The precedents for the memorial's moundlike shape (this page) are the megalithic tombs and barrow graves built by Ireland's neolithic societies. Tulach a'T Solais's modern approach to this ancient form comes in the clean concrete interior (facing page) furnished solely by two tablets of oak.

Debut Scott Tallon Walker Dublin

Scott Tallon Walker is one of Ireland's oldest and best-known firms; its founder, Michael Scott, is considered the country's most important modern architect. Dr. Ronald Tallon joined Scott and partner Robin Walker in 1958, and as Scott Tallon Walker, the firm has designed buildings for the Dublin city government, the Bank of Ireland, and Trinity College. Current projects include a redevelopment of the Docklands, an old industrial area along Dublin's River Liffey, into a mixture of office and hotel space.

Principal: Dr. Ronald Tallon
By Lawrence W. Speck

Moshe Safdie is a refugee from the "style wars" that have swept across the international design landscape over the last three decades. Outspoken in his disdain for movements like postmodernism and deconstructivism, he has fled from trendy skirmishes between "hot" and "not" in favor of an independent career, producing work that is difficult to categorize or label. Not a media darling and rarely imitated by starstruck architecture students, Safdie has, with less fanfare than most, produced consistently over the last 35 years buildings of great variety, integrity, and imagination. His buildings begin with what his mentor, the late Louis Kahn, called "Volume Zero" — the very essence of a problem — and grow out of a sincere investigation of purpose and place. His approach is rooted in the humanist tradition of Alvar Aalto, Kevin Lynch, and Christian Norberg-Schulz, all of whom emphasized appropriateness and responsiveness over personal expression.

It was precisely these values that drew officials of Exploration Place, an interactive science museum in Wichita, Kansas, to select Safdie to design their new building over the five other big-name architects on the shortlist: Frank Gehry, Norman Foster, James Stewart Polshek, Christian de Portzamparc, and Hugh Hardy. As museum chairman Phil Frick recalls, "Moshe seemed to us not to have a fixed style, but to
The ultimate two-building design occupies its pivotal site with extraordinary grace and drama. The land-side building hugs the earth and becomes a part of the vast flatness of the surrounding prairie. The “island” building engages the sky with its playful peaks and fluid shapes.

The poured concrete walls of Exploration Place rise from the waters of the Arkansas River.
address each project in its own way.” Because this is an institution committed to science, technology, and exploration, the risk-taking, invention, and creativity inherent in Safdie’s design process were challenging and appealing to the board.

Safdie’s desire to tightly integrate building design and user activities captured the interest of the museum’s leadership as well. Put off by the “black box” character of so many recent interactive museums, they were convinced that the building design, both inside and out, could play a powerful role in conveying their message. Museum president Al De Sena observes, “We came with a more expansive notion of the relationship between architecture and exhibit design than most institutions of our sort. But Moshe stretched us well beyond that.”

The architects worked closely and interactively with a range of program and installation specialists, with surprisingly symbiotic results. Vistas, materials, shapes of spaces, and the proximity of exhibits to landscape features often reinforce the messages of the learning environments. An 18-foot-tall simulated tornado occupies a glass-enclosed acute corner of the building, making it seem to whirl across the exterior landscape. The backdrop for an exhibit on sedimentation is a broad, river-dominated view. There is a refreshing openness, clarity, and spaciousness in both the exhibit design and architecture that offers a distinct departure from the visual overkill and cacophony of so many children’s museums and science centers.

But the particularity and responsiveness of the building’s design is not limited to a reaction to program and purpose. In fact, as one of the museum’s exhibits showing Safdie’s sketches and design process demonstrates, the project’s character is very much drawn from its region and context. The museum’s 20-acre waterfront site, at the confluence of two rivers and adjacent to downtown, was the primary factor that drew such a star-studded list of architects to the project initially. Safdie, like most of the other candidates, suggested strong site-related notions at the interview stage: moving an existing roadway to allow the building to “kiss” the river directly, and creating a permeable building that would not separate the river from the adjacent parkland.

The ultimate building design occupies its pivotal site with extraordinary grace and drama. Safdie split the museum program into two separate buildings: A covered bridge links an “island” pavilion for exhibits to a pavilion along the river’s edge, which houses the lobby, an auditorium, offices, and other functions. “The two-building solution,” notes Frick, “was a way for the building to have closer proximity to the water without separating the park from the river.” The land-side building hugs the earth and becomes a part of the vast flatness of the surrounding prairie. The island building engages the sky with its playful peaks and fluid shapes. “What,” asks Frick, “could be more about Kansas than the land and the sky?”

Blessed by a prior public works project that stabilized the water level of the river, and also by available funding to relocate 1,500 feet of McLean Boulevard, a major thoroughfare that originally split the site, the architect was able to create a spectacular dialogue between buildings, programmed outdoor spaces, parkland, river, and city. George Hargreaves’s landscape design for this newly animated waterfront extends both didactic and geometrical qualities of the building into the surrounding park.
A moat-like pool (above and right) separates the exhibits pavilion, with its upturned roof, from the arc-roofed entrance pavilion. A large forecourt precedes the entrance proper (top); an arcade to one side (center) crosses the pool to the exhibits pavilion.
Curved glu-lam beam ceilings appear throughout the interiors of Exploration Place, including the lobby (facing page and above). In an exhibition space devoted to the theme of flight, Safdie installed skylights at the meeting point between ceiling and wall (top and drawing at right); moving metal disks covering the wall make wind currents visible.
The sum of all these specific responses to mission, program, region, and site is a building with integrity and presence. Safdie says that he wanted to create “complex forms that would bespeak the factors that shaped them.” He looked to the Jantar Mantar in Jaipur, India, an astronomical instrument with an evocative geometrical composition, as a model of “complexity generated by reason.” Safdie’s longstanding fidelity to platonic geometries is extended somewhat here by his use of two toroids to discipline and unify the building’s shapes. Through the design process, the building transformed from additive and “capricious in its complexity,” in Safdie’s words, to holistic and serene. Unified material treatment and integrating motifs such as curved glu-lam beams balance the individually expressive parts and create a community of forms based in both logic and visual finesse.

The dramatic and individualistic building that emerged has, in a very short time, become a landmark and a calling card for its institution. Though De Sena acknowledges the “antipathy” the science museum and children’s museum community has for strong architecture, his new building has thoroughly convinced him that “architecture is extremely important to the positive experience of the visitor and to accomplishing our mission.” Frick adds, “We wanted a building that was so compelling that people had to go there. We got that.”

**EXPLORATION PLACE SCIENCE CENTER AND CHILDREN’S MUSEUM, WICHITA, KANSAS**

**CLIENT:** Exploration Place, Wichita, Kansas—Al De Sena (president); Phil Frick (chairman of the board of trustees)  
**ARCHITECT:** Moshe Safdie and Associates, Somerville, Massachusetts—Moshe Safdie (principal); Jim Herold (project manager); Philip Matthews, Michael Guran, Rainer Goeller, Jeff Jacoby, Wendy Kohn, Hugh Phillips, Steven White, Bram Ratner, Paul Gross, Michael Kim, Tony DePace, Chris Goad, Amnon Haviv, Martin Ibarlucia, Peter Jelley, Ravit Kaplan, Michael MacPhail, Sarah Radding, Tazalika Te Reh, Frank Valdes (team)  
**ASSOCIATE ARCHITECT:** Schaefer Johnson Cox Frey & Associates, Wichita, Kansas—Sam Frey, Joe Johnson, Eric Lindebak, Vern Miller  
**LANDSCAPE ARCHITECT:** Hargreaves Associates  
**ENGINEERS:** Ove Arup & Partners (structural/mechanical, concept and design development); Dudley Williams & Associates (structural); Manson Ward Legion (mechanical, plumbing, fire protection); Stefan, Voegeli & Associates (electrical); Mid-Kansas Engineering Consultants (civil)  
**GENERAL CONTRACTOR:** Dondlinger & Sons Construction Co.  
**COST:** $27.6 million  
**PHOTOGRAPHER:** Timothy Hursley
Chicagoans have grown accustomed to a latent conservatism in their public architecture. From the banal modernism of Josef Paul Klieheus's 1996 Museum of Contemporary Art to Thomas Beeby's historicist Harold Washington Library Center (1991), for years the city's architectural legacy has not been challenged by any progressive mode of production. The new Peggy Notebaert Nature Museum in Lincoln Park, designed by homegrown talent Ralph Johnson of Perkins & Will, posits a forceful response to this dismal recent record.

There's an irony to this development. The Academy of Sciences (the Nature Museum's parent organization) is Chicago's oldest museum, and its home for the past century was a musty old beaux-arts jewel box several blocks south of the new structure. It was based, Johnson describes, on "a 19th-century idea of a natural history museum: glass cases." But this potentially staid client was looking for a design that would create connections between the new building's park setting and its mission to focus on the ecology and natural history of the Midwest.
The architect, mindful of the artifice that Lincoln Park embodies, draws on this to develop his design’s central metaphor: His shifting topography of canted solids echoes the ancient sand dunes that graced the site until the park’s construction during the 19th century.
Johnson's scheme faced notable constraints dictated by local officials and the community. The building could not rise above the top of Lincoln Park's tree line. The footprint of the structure had to remain within the limits defined by the maintenance buildings and parking lots that it replaced. And there was considerable opposition to the building's very existence: Montgomery Ward's dictum "Forever open, clear, and free" has been invoked since the early 20th century to fight structures along the lakefront. Despite the fact that these parks are home to many Chicago cultural institutions—including the Art Institute of Chicago, the Field Museum, and the Museum of Science and Industry—the Nature Museum is the first new facility to be built within these heavily protected landscapes in over 60 years.

"Lincoln Park is man-made," explains Johnson, who remains mindful of the artifice that this implies. "It looks like a wilderness, but it's not." The architect draws on this to develop his design's central metaphor: A shifting topography of cantilevered solids echoes the ancient sand dunes that graced the site until the park's construction during the 19th century.

Johnson's plan is deceptively simple. A north-south circulation axis parallels the shore of an adjacent pond and serves to join the museum's four primary volumes: three trapezoidal forms and a wedge. Entry to the 73,000-square-foot structure is through a cross-axial courtyard and lobby toward the south end of the composition. The two volumes to the north house exhibition spaces; those to the south contain the auditorium on the first floor, an outdoor terrace on the second, and a linear bird-walk bridge above that nestles just under the top of the tree canopy.

The roof slope of the four largely opaque building volumes, aided by Johnson's placement of large portions of the structure behind berms, make the building's actual size difficult to understand from a distance. By contrasting the Nature Museum's tilting topography with that of the hilly ground around it, the building's scale ranges dramatically, from monumental at its central entrance to almost domestic at the far ends.

The exterior is painted in a sandy hue that Johnson employs to make the dune analogy more explicit. Applied to almost all visible materials—
solid walls, window mullions, exteriors stairs, and railings—the monochromaticity draws together the structure’s disparate elements. The building’s steel frame is clad in EIFS, an odd choice for a museum devoted to nature. While the color may be appropriate for the sand metaphor, it’s a bit disturbing that the material may be as impermanent as a dune.

Unfortunately, the interiors are spatially limited. Exhibition areas feature exposed mechanical systems and varying heights that allow for maximum flexibility in presenting the museum’s changing exhibitions. “They’re really just loft spaces,” explains Johnson. The notable exceptions are those larger spaces that have an explicit relationship to the exterior. A soaring three-story lobby invokes an effective monumentality while framing views of the natural landscape and the local neighborhood. The two-story-high Butterfly Haven features a sloping glass curtain-wall that displays its fluttering inhabitants against the backdrop of Chicago’s famous skyline.

Despite its internal shortcomings, the Nature Museum’s vibrant exterior forms are an overdue addition to the Chicago scene. Might it be interpreted as a revival of Chicago’s architectural legacy? Perhaps not, but architectural developments in Chicago seem to recur on a 50-year cycle: Frank Lloyd Wright and Daniel Burnham opened the 20th century; the codification of Miesian modernism took place at mid-century. By this reckoning the first city of modern architecture is due for a clearing of the cobwebs. But to suggest such a trend would put unseemly pressure on what is a successful, but ultimately modest, building design. Nevertheless, if Ralph Johnson’s Nature Museum can help prod a conservative design community to see its lost legacy of invention and innovation anew, it could be a hopeful development for Chicago architecture today.

One glazed gallery houses an exhibit of live butterflies (top); weather-edged fieldstone lines the triple-height lobby (bottom), which opens on the west (center) to a rocky path and an existing Lincoln Park pond (facing page).
What is surprising is that historians seldom mention the desert as a source of inspiration for pharaonic art and architecture. For example, they typically treat the evolution of the pyramid as a rational, linear progression from mastaba to stepped pyramid to planar-sided monolith, though each of these stages is represented, complete and intact, by natural landforms in the adjacent sands. In short, history tells us the art and architecture of ancient Egypt are creations from the mind of man; the desert tells us they are translations from the language of landscape.
The building reads as an abstract cliff of sloping, intersecting planes and wedges, all slashing into the sky with equal bravado.

Antoine Predock’s new McNamara Alumni Center at the University of Minnesota juxtaposes copper and granite, the orthogonal and the oblique.
Minneapolis, for too much of the year, has a scurry-for-cover environment, which explains why we don’t encounter Antoine Predock’s usual premeditated complications in the entry sequence at the new University of Minnesota Gateway.

You dash for the door through blinding snow, and—wham!—the building explodes into a six-story cavity framed in a glassy waterfall, a surreal Anasazi cliff palace, and the ghost of football seasons past. There’s drama here, plenty of it, but instead of a deliberate massage of mystery, you get whiplash. Despite the airy dignity of the space, it’s a collision of images and sensations, as rapid and disjointed as high-speed Web surfing.

Three campus organizations—the Alumni Association, the Minnesota Medical Foundation and the University of Minnesota Foundation—teamed up to commission the $27 million building which serves a farrago of functions: university convocations, regents’ meetings, student recruitment, and alumni solicitations. The last function is critical. This university is no mom-and-pop operation, and you know it within seconds after entering. You’re encouraged to think big, both by architecture and policy. “We have no plaque in this building for [a gift of] less than $100,000,” says Alumni Association executive director Margaret Carlson.

Among six architects interviewed for the job, Predock was the only one without a Minnesota diploma, and the only one who showed up without a model tucked under his arm. He talked conceptually, scooping up swaths of Minnesota geology, landscape and culture. Carlson remembers thinking that Predock’s presentation “got at the heart and soul of what an alumni center could do for the campus.” The clients also dreamed of a second “signature” building for the university, a complement—or foil—to Frank Gehry’s 1993 Weisman Art Museum. “We wanted a building,” says Dan Saftig, vice president of the Medical Foundation, “that would create a buzz in the state.”
From the approach to the main entrance (top and center; facing page), Predock's geode-like form doesn't provide any clues about its interior or its relationship to the rectilinear office wing, whereas regularly spaced windows on a pathway to the main campus (below) clear up some of the mystery.
Predock's aptly named new University of Minnesota Gateway sits at the edge of the urban campus (above), at the intersection of its two principal streets. Some of the building's most dramatic details—the wedge-shaped windows and strips of glass that wrap the polyhedron—are oriented towards this corner (right).
Polyhedral skylights light Memorial Hall’s dramatic interior (top and facing page). The Heritage Gallery (center and bottom) is a venue for exhibits on famous alumni. It continues the motifs of the main space: Ceiling panels angle downwards, and one copper-clad wall (bottom, at rear) comprises a dense series of rectangular projections.

McNAMARA ALUMNI CENTER, UNIVERSITY OF MINNESOTA GATEWAY
CLIENT: University Gateway Corporation; University of Minnesota Alumni Association; University of Minnesota Foundation; Minnesota Medical Foundation at the University of Minnesota; The LaSalle Group (owner’s representative) ARCHITECT: Antoine Predock Architect, Albuquerque, New Mexico—Antoine Predock (principal-in-charge); Douglas L. Friesen (senior associate-in-charge); Geoffrey A. Beebe, Mark K. Donahue, W. Anthony Evanko, Paul A. Fehlau, Arturo Griego, Graham F. Hogan, Jennifer Lein, Robert McElheney, R. Lawrence Mead, Patricia J. Pollock, Kira Sowanick (project team) EXECUTIVE ARCHITECT: Korsunsky Krank Erikson Architects LANDSCAPE ARCHITECT: Sanders Wacker Bergly ENGINEERS: Meyer, Borgman and Johnson (structural); Eriksen Ellison and Associates (mechanical/electrical); Edwards and Kelcey (civil); Metropolitan Mechanical (HVAC) CONSULTANTS: Shuler & Shook (lighting designer); Electronic Interiors (electronic media consultant) GENERAL CONTRACTOR: M.A. Mortensen COST: $27,350,000 PHOTOGRAPHER: Timothy Hursley

It has at least created a buzz on campus, one that evokes the chasmic digital divide between generations. Students tend to dig the building, says architecture dean Thomas Fisher, while faculty and staff just don’t get it. Fisher theorizes that the Web-spun generation feels comfortable in a visual culture wherein images flash and collide in unpredictable succession, while people who grew up with books expect a building to have a clearly delineated façade and a linear progression of forms and ideas.

Predock’s building comprises two distinct pieces: a six-story rectilinear copper-clad office wing and a crisply folded polyhedron dressed in near-pink granite and slashed by diagonal 10-inch-wide ribbon windows. The polyhedron encloses the building’s main public spaces: the soaring 11,000-square-foot Memorial Hall for convocations and contemplation, a Heritage Gallery with exhibits starring alumni such as Garrison Keillor and Walter Mondale, four meeting rooms, and a café. Memorial Hall may be stagy, but it is unquestionably stunning. The interior walls are paneled in smooth hemlock planks separated by ½-inch gaps, and the wedge-like windows gather enough light to invest the room with the changing moods of the sky. The blocky office wing shoulders into the space as a copper façade richly articulated with balconies and rectangular projections, effectively abstracting a cliff dwelling. On the opposite side of the space, a 55-foot-high brick-framed arch—salvaged from the stadium that once occupied this site—forms the entry to the Heritage Gallery. Installed 15 degrees off the vertical, it becomes an artifact or even a heart-tugging icon, rather than a piece of an old building unwillingly put to work as part of a new one.

As a sculpture, and it begs to be evaluated as such, Gateway is only partly successful. From a block or two away, its two parts seem forced together in a shotgun wedding: Their materials, colors, textures and moods are so different that they appear to be very reluctant mates. The polyhedron is hip, clever, ready to party; the office wing is sober, dutiful, prepared to roll up its sleeves and work late. Predock tried to infuse each with a snatch of the other’s personality—one sleek window invades the office block, and out back the polyhedron dutifully adopts the office fenestration—but it’s not enough to be convincing. For this marriage to work, the box needs a sculptural energy of its own—different, but no less forceful than the polyhedron. Predock is designing a plaza to abut the building on the polyhedron side; it should tie the building to the ground more effectively.

Up close, approaching the entrance—when you’re not having to scurry—the composition works wonderfully. The building reads as an abstract cliff of sloping, intersecting planes and wedges, all slashing into the sky with equal bravado. And inside, Memorial Hall pulses with Architecture Power, and not in the predictable manner of a beaux-arts train station or cathedral nave of comparable volume. It’s not size that matters; it’s heart and intelligence. In a perfect world, all university buildings would have as much to say.
Woodland and prairie plants were carefully choreographed so that some are always in bloom, creating an ever-changing palette of color that varies with the seasons.

The Woman Suffrage Memorial (below) in St. Paul, Minnesota commemorates the struggle of 25 local women for the right to vote. To convey the duration of the movement, Loew used the natural imagery of glaciers and seasons. Curving stone lines (facing page, left) are suggestive of the receding path of the ice sheets that covered the area millennia ago, and the plants on the drumlin-like mounds between each line (facing page, top and bottom right) change with each month.
BY THOMAS FISHER

Architects struggle with time. All too often, they try to make their work either ageless or of-the-moment, but since time will neither go away nor come to a stop, they typically fail at the attempt. The Woman Suffrage Memorial in St. Paul, Minnesota—designed by Berkeley, California-based architects Loom to commemorate the 70-year battle waged by women for the right to vote—shows how time’s passage can be incorporated into and enhance the meaning of a space.

Called Garden of Time: Landscape of Change, the memorial occupies one of three terraces connecting the classical Minnesota capitol to downtown St. Paul. The memorial itself also consists of three parts: a shaded landscape of eastern woodland plants under an existing allée of trees, a sunny landscape of prairie grasses in amoeba-shaped beds stretching across an undulated lawn, and an open-weave, stainless steel trellis and walkway between the two fields.

The design, which won a limited competition and subsequently a P/A Award (April 1998, page 70), wisely rejects the symmetrical, classical layout called for in the capitol-area master plan and pursued by the other competitors. "Classicism," argues Ralph Nelson, the partner in charge of the
project, "has come to represent political and economic power in this country. It also suggests timelessness and a resistance to change—the very things the suffrage movement fought against."

The memorial’s trellis stands as a kind of three-dimensional timeline. Each of its vertical posts represent a year in the suffrage movement, and each horizontal bar, the lifetime of one of 25 women who led the battle in Minnesota. The bars, etched with the names and dates of the women they stand for, weave back and forth among the posts, flattening out to demonstrate the women’s periods of greatest activity. At the lower end of the trellis (it climbs uphill toward the capitol), metal plaques mounted on the concrete base reproduce historical accounts of the early suffrage movement, while at the upper end, text panels recount the political accomplishments of women since the passage of the 19th Amendment in 1920.

The surrounding landscape marks a different timescale. Loom carefully choreographed woodland and prairie plants so that some are always in bloom, creating an ever-changing palette of color that varies with the seasons. The architects also set narrow, undulated lines of stone pavement through the site to suggest geological time—specifically, the receding ice sheet that once gouged the bedrock below. "We wanted to convey the duration of the suffrage movement," says Nelson. "Many women worked their entire adult lives for a cause they never saw to completion."

Every detail of the memorial works toward that end. Take the pitch of the trellis: Rather than rise in a straight line up the incline, it starts level,
May (top); June-July (bottom)
slopes up with a sag in the middle, and levels off at the end, much like the suffrage movement itself, which lost and regained steam several times. Or take the dimensions of the trellis. Thick vertical bars make the structure seem, at times, like a prison fence, while from afar, its zigzag horizontals suggest a gossamer fabric of woven steel thread, or closer up, a garden lattice interlaced with steel vines.

The memorial also accommodates different uses over time. On weekends, children play along the low undulated and stepped concrete wall; during the weekday, office workers sit on the wall having lunch, with the trellis as a backrest; in the political season, speakers declaim at an upturned portion of the wall which functions as a podium. Nelson likes the different ways that people use and interpret the memorial, attributing them to the lack of specific references in the work. “We avoided symbols, which have a singular significance. Analogies are more open to multiple interpretations, more fluid.”

The suffragists understood this well. They had to attack the symbol of “the woman on a pedestal” in order to present women as analogous to men: as thinking human beings capable of voting. Architects must do the same. They have become prisoners of their own symbols, whether a historical style or the idea of the architect on a pedestal. They have also become captives of their own self-image as space makers, almost totally neglecting the temporal aspects of what they do. To see what freedom from these self-imposed traps looks like, they might look no further than this memorial.
MINNESOTA WOMAN SUFFRA GE MEMORIAL,  
ST. PAUL, MINNESOTA  

CLIENT: State of Minnesota—Nancy Stark  
(Capitol Area Planning Board)  
ARCHITECT:  
Loom, Minneapolis, Minnesota—Ralph Nelson  
(principal-in-charge); Raveevarn  
Choksombatchai, Martha McQuade (design  
team)  
LANDSCAPE ARCHITECT: Amy Stefan  
CONSULTANTS: Norma Nelson (graphic design);  
Barbara Stuhler (historian)  
GENERAL CONTRACTORS: Loom; Aloha  
Landscaping; Meisinger Construction  
COST: $453,000  
PHOTOGRAPHER: Chris Faust
BY AARON BETSKY

The Diamond Ranch High School unfolds out of the landscape in waves of fractured form to become a civic structure of astonishing beauty. Confronted with the pragmatic challenges of moving more than a million cubic feet of dirt around a steep site in suburban Los Angeles, a budget of $145 a square foot, and a society in which secondary education often takes place in prisonlike bunkers, architect Thom Mayne of the Santa Monica–based firm Morphosis has excavated a significant civic structure with the capacity to edify, educate, and delight.

Diamond Ranch is a stretch of hills that Californians euphemistically call "golden" (i.e., nearly barren, except for a few lonely oak trees). While the rest of the area is fast succumbing to sprawl, the Diamond Ranch High School's especially precipitous, 72-acre site was considered unbuildable because its unstable soils were likely to slide into the roadcut of a highway. The Pomona School District capitalized on the site's supposed uselessness, acquiring the land for a dollar from a nearby
A folded surface undulates across the site in a geometric abstraction of existing contour lines—this creased plane became the building’s roofs.

Evoking the piazza of a Tuscan hill town, the courtyard at the heart of Diamond Ranch High School overlooks the suburbs of Los Angeles.
ARRIVAL The school’s principal entrance sits at the corner of a two-sided forecourt (above). Students proceed from the parking lot, past a gymnasium, cafeteria and multifunction room (left, at left) to a staircase alongside a library and administration block (at right).
municipality's redevelopment agency and then obtaining $5 million from the state to stabilize the hillside. In negotiations with the state and environmental pressure groups such as the Sierra Club, the school district agreed that no soil would be removed from or added to the site.

"It all worked out, because in a high school you have to start with the playing fields anyway," comments Mayne, referring to the vast amounts of space most high schools devote to sports. Working with Thom Blurock of Blurock Partnership (a California-based firm with a specialty in schools) and Olveri Engineering, Mayne won a limited design-build competition that the school district staged in 1994. He proposed to tame the 380-foot drop across the site with three terraces: an upper playing field, the school, and a lower playing field. Further grading provided access and parking for 770 cars to the south of the main building site.

Mayne did not treat the site work as separate from the design of structures, but rather saw the whole task as a refolding of the land into a building. "I am interested not in making isolated objects, but in how plates can become forms," he explains. Working closely with project architect John Enwright, Mayne developed the concept of a folded surface that undulates across the site in a geometric abstraction of existing contour lines—this creased plane became the school's roof. Because of the way Mayne and Enwright manipulated them, the forms make visible the site's inherent topography, while at the same time appearing to be monumental and abstracted versions of the waves of pitched roofs covering the suburban homes below.

A particular program governed the making of spaces within this derived landscape. Superintendent of the Pomona school district Patrick Leier was concerned from the beginning with "how we keep students connected in such a large school; how we keep things smaller; how we blend with the site." He and his team proposed breaking the 2,000-student school down into small clusters with no more than 300 students in each, and asked Mayne to think of the facility more as a campus in the collegiate sense.

Mayne responded by cutting through his plates to create three separate wings for the ninth and tenth grades. These thin bar-buildings cantilever out over the slope and open up to playing fields on the south side of the building, he organized classrooms for the remaining two grades around small, internal courtyards. Teachers also have offices associated with each cluster. While the southern classroom buildings exhibit all the assertive exuberance of modernist construction, the back wing creates intimate and introspective spaces that mine the hill for small oases of academic gathering.

An internal street winds its way between the row of classroom wings on the north and through the class clusters on the south. The street twists between the roof's folds and the functional spaces, tying the volumes and the roof plane together into a coherent assembly. It is a canyon, but also a village street with activities. Periodically, the roof plunges down to meet buildings placed at slightly different angles, in a choreography of vertical measure and horizontal flow. Because of the separation between the wings to the north, the views always make students and faculty aware of the world outside, while the density of forms to the south roots the communal gathering space in the site.

The school's organization is thus rather conventional. The northern and southern classroom wings open on a central spine between the eastern and western wings. At the east end of this central corridor are the main entrance and gathering spaces: a library and administration building, a gymnasium, a cafeteria, and a multifunction room. Here the steel trusses holding up the roof are visible both inside and out, and the stucco-clad walls and glass planes rise up to announce the school's identity. These large spaces are what the public sees first, and what students can use to orient themselves as they return periodically to them for communal activities. They introduce the school and give it an identity like a pedimented and columned entry in your standard Central High. The facilities can also be used by the community.

Mayne has in many ways done no more than find the central idea of a conventionally organized school—with its long, double-loaded corridor with classrooms on either side and a controlling façade of administrative space—buried within the logic of the school's program. Rather than cladding this shape, he has treated the corridor like a cut in the ground, excavated one arm of classrooms and cantilevered the other, and then unfolded the formal front using his system of site analysis.

"At this stage in my career I am more involved in how you set up a strict system, and then open it up," Mayne claims. "I am concerned with how you create both difference and coherence out of the manipulation of a set of conditions, rather than adding them on to a simple shape."

To Mayne, this is not just an abstract working method. With two sons in high school, he understands such institutions as places where students learn about a tense cultural and political system that somehow remains coherent, and he wants his buildings to be part of that education: "By cutting into the lines we set up, which were based on the landscape, we initiated accidents and exploited them," he explains. "The result is heterogeneity and even conflict within something that still hangs together."

Superintendent Leier, who has gone on to expand on the "college campus" model in several other schools in Pomona, one of which was previously a shopping mall, agrees that the school should be "a place where students learn just from looking around themselves. It is really a model community," he says. What at first appears to be a confluence of tortured planes rising up out of a barren and banal landscape finally resolves itself into a model for civic architecture. Thanks to Mayne's structural expression, response to site and program, and a few willful gestures, the school offers intricacy, complexity, and a sense of discovery appropriate to the act of learning.

**THRESHOLD** A small courtyard (facing page, bottom) at the head of the entrance stair terminates a central, external corridor (or "street") that winds through the school. Ramps connect two levels of cantilevered classroom wings on the north side of the corridor as seen looking toward the landscape (facing page, top right) and backward toward the school (facing page, top left).
MOVEMENT

Mayne formed the school’s central corridor with tilted, corrugated-steel walls to create an abstraction of a natural ravine or of the false storefronts of an American main street (facing page, top left). Breaks in the walls provide views of the surrounding landscape and suggest gathering places for students (facing page, top right and bottom).
PERMEABILITY  A monumental angled roof and glazed facade denote the school’s principal gathering space, the multipurpose gymnasium (left). A large opening in the wall of the band room (top) allows it to double as an impromptu stage. Daylight from tree-planted courtyards (above) illuminates 11th- and 12th-grade classrooms.
DIAMOND RANCH HIGH SCHOOL, DIAMOND BAR, CALIFORNIA
CLIENT: Pomona Unified School District, Diamond Bar, California—Patrick Leier (superintendent) ARCHITECT: Morphosis, Santa Monica, California—Thom Mayne (principal); John Enright (project architect); Cameron Crockett, David Grant, Fabian Kremkus, Janice Shimizu, Patrick J. Tighe (project team); Sarah Allan, Kaspar Baumeister, Jay Behr, John Bencher, Mark Briggs, Frank Brodbeck, Takashi Ehira, Magdalena Glen, Ivar Gudmunson, George Hernandez, Martin Krammer, Ming Lee, Francisco Mouzo, Christopher Payne, Kinga Racon, Robyn Sambo, Andreas Schaller, Bennet Shen, Mark Sich, Craig Shimahara, Tadao Shimizu, Steve Slaughter, Brandon Welling, Eui-Sung Yi (project assistants)
ASSOCIATE ARCHITECT: Thomas Blurock Architects—Thom Blurock (principal); Tom Moore (project architect); Mark Briggs, Kevin Fleming, Nadar Glaseemlou, Chris Samuelian, Kristina Steeves, Jose Valentin, Wendell Vaughn, Lis Zuloaga (project team); Gregory Aston, Colleen Bathgate, Mike Blozak, Vince Coffeen, Karen MacIntyre, Kathy Sun, Brady Titus, Robert Trucios
LANDSCAPE ARCHITECT: Allen Don Fong
ENGINEERS: Ove Arup & Partners (structural); Andreasen Engineering (civil)
GENERAL CONTRACTOR: Bernards Brothers
COST: Withheld at client’s request
PHOTOGRAPHER: Timothy Hursley

EVENT: Exposed steel structure and artificially controlled lighting provide simple animation in the principal gathering spaces—the gymnasium (facing page, top) and library (facing page, bottom left)—as well as in classrooms (facing page, bottom right).
SITE WORK Three classroom wings cantilever over the lower playing fields (facing page, at right). Staircases (top) cut into the hillside and connect the school to the playing fields. A ramp (above) winds down from the library and administration block.
Allen’s Town
continued from page 65


Aldo’s Town
continued from page 65

all-too-vivid Cinerama screen. “We couldn’t eat pea soup for a year,” he groaned.

Allen hired BOORA Architects of Portland, Oregon, for the Cinerama rehab, and, says senior interior designer Tonia Hein, “he wanted us to come to him with ideas, pushing the edge.” They did, both in terms of nostalgia and technology. Wall coverings are screen-print reproductions of 1960s wallpaper. They specified both standard and curved Cinerama screens (only two other theaters in the world can show classic Cinerama films today). Allen also insisted on first-class amenities for disabled patrons.

The smash-hit Cinerama has spun off plenty of goodwill toward Allen. (Vulcan will not say whether it’s profitable.) In an editorial noting Allen’s “impulses” to buy the Seahawks, restore the Cinerama, and build a rock ‘n’ roll museum, the Seattle Times gushed, “Keep it up, Paul. For the sake of everyone having fun, trust the force.”

But any 800-pound gorilla’s movements are sure to cause discomfort. Local criticisms center on two points: that his patronage, for all its ambition, is desultory; and that, in the long run, it may be unhealthy for Seattle to depend on the fortune and largess of one individual.

“I think his patronage has been, frankly, uninspired,” says Allied Arts’ Steffen. “It’s not acting as a force of evil in the landscape, but it’s not visionary, either. I find EMP sort of an interesting building, but nothing that speaks to a specific problem: ‘Hey, look, we can make a blob.’ If EMP is the answer, what’s the question?”

Well, the question may be a sweeping one: Aesthetically, how does Seattle play out the role of world-class city that it’s claimed for itself? With idiosyncratic exclamation points such as the EMP, or through a stately and coherent urban texture, as in Paris? The same disposition that makes Seattle pedestrians wait politely for the light to change makes us chary of architectural exhibitionism; this is a city of grade-B buildings that make no forward lunges, and historically most people have seemed to like it this way.

Steinbrueck, whose father, Victor, was instrumental in designing the Space Needle, thinks Seattle’s “rather staid” architecture can use some prodding and shaking, but he worries about the concentration of power and wealth behind these new developments. “We cannot—should not—break the rules for good urban design and context, and I’m seeing intense pressure to do so.”

At the same time, Steinbrueck is concerned about the city’s increasing habit of looking to its nucleus of billionaires (Allen is one of nine in the Seattle area, according to Forbes) to do everything from preserving theaters to subsidizing mass transit. (In June, two City Council members wondered aloud whether Allen might like to get involved in expanding the downtown monorail.) “It’s not healthy,” he says. “It excuses us from personal responsibility. I think it’s distorting our attitudes and values.”

But the same can be said of a lot of things that are happening in Seattle, one of the world’s most conspicuous boomtowns. Bungalows in middle-class neighborhoods are selling for $300,000, a grotesque distortion of values. Microsoft geeks are retiring in their 30s with multimillion-dollar stock-option bonanzas, and the ways in which they spend, or give away, their wealth, marks a social revolution in the making.

“There’s still a search, not an absolute consistency in what they’re doing,” says Jeffrey Ochsner, chair of the University of Washington’s Department of Architecture. “They’re learning to be benefactors, because their wealth is so new. But clearly, Seattle is benefiting from people who have their roots here and want to make it a better place.”

Making any boomtown better is a complicated process. Wherever there’s a sudden infusion of wealth, traditions overturn, values distort, mistakes happen. But Seattle seems big enough and mature enough to absorb even Allen’s ambitions without corrupting its soul. Even if the EMP is the basilica of the nouveau-hip Seattle, it’s not about to replace the Space Needle as the city’s physical and spiritual symbol. As Steinbrueck says, correctly, the building is "not an image you can retain in your mind very well."
eliminating the need for maps or road signs. Richard Serra’s Haide Schurenbach sculpture in Essen alone justifies a trip to Emscher Park. Impossible to reach by car, one must make the pilgrimage to the installation by foot, climbing a black cok tumulus which is about 230 feet tall. No plants grow on this plateau, which resembles the crater of a volcano or some other surreal place, suspended between the sky above and the postindustrial landscape below. The sculpture seems either too big or too small, depending on one’s perspective: It is small against the pylons, chimneys, and motorways in the distance, but it is large on its prominent site.

Not far away is the gasometer of Oberhausen, a totem of industrial culture. A polygon in plan, its exterior skin is made of horizontal metal bands interrupted by corner supports. During Das Finale, artists Christo and Jeanne-Claude installed 13,000 multicolored petrol barrels inside the belly of the structure. The gasometer is an urban hinge where many routes come together, serving as a meeting point for pedestrians, motorists, cyclists and train passengers. On an adjacent site, a shopping center and sports complex are new money generators. If Oberhausen is now a commercial hub, nature and culture are the main attractions elsewhere in Emscher Park. The former Krupp Steelworks factory at Bochum is in the process of becoming a park, while the Jahrhunderthalle, a hangar that dates to 1900, has been converted to a theater, symbolizing a new alliance between archaeology, ecology, and the arts. Other disused buildings have been reincarnated as museums, community centers, techno-discos, and more. The material energy that once forged metal and drove machines has been transferred to the production of culture.

Emscher Park provides a meeting ground for nature and culture, bringing traditionally antagonistic forces into weirdly peaceful cohabitation. This is the foundation for the new postindustrial landscape. It contains spaces and moments that are wonderfully ambiguous, at times contradictory, but that aptly characterize our historically conflictual relationship with nature. Emscher Park challenges how we relate to the land. Take, for example, landscape architect Martha Schwartz’s project at Mechtenberg. Covering an area of 290 hectares, it resembles an enormous carpet undergoing constant change. In the different seasons, its plantings form different patterns. Visitors puzzle over whether it’s a garden, a field, a wasteland, a sculpture, or a strange mix of all of the above. Can we tramp on this flowerbed? Are these natural wind patterns or strange alien markings? Did someone really design this? Will all this be gone in someday, like the dinosaurs? Probably. But then something else will take its place.
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Circle 12.
Waste Not, Want Not
continued from page 81

educational and truthful, which could be embarrassing for the military but is important for the national conscience."

He is proposing something similar for Cancer Alley, a noxious corridor that stretches from Baton Rouge to New Orleans along the Mississippi River, which he began photographing last year. Over 100 petrochemical plants have made this one of the most toxic regions in the country. He enlisted New York architect Lindy Roy to help him develop a proposal that would renew the workings of this whole corridor, with the factories functioning equally on industrial, economic, cultural, and ecological levels. While theoretical, their plans are not so far-fetched.

"Because a lot of these places are Superfund sites, the government could force industries to clean them up," Misrach reminds. Why don't they? So many sites, so much bureaucracy. Tightening regulations is one approach, offering incentives is another. Across the country local governments already provide funding assistance and zoning variances for those willing to remediate and develop troubled (usually tagged "redevelopment") areas. On some level, the admirable conversions of sewage treatment centers into parks (Manhattan's Riverbank Park and Boston's Deer Island) and real estate ventures on landfills can offer some guidance on how to extend and solidify other reclamation projects.

McDonough believes it's far more effective—if more complicated—to convince companies to integrate sustainability and environmentalism in their larger corporate strategies from the get-go. Regulations, he suggests, will only lead to reactive gestures, such as meeting minimum soil or air quality requirements. "Rather than aiming for the least bad, companies should be encouraged to go out and benchmark the best," he says.

Germany's Emacher Park offers many precedents in reclamation efforts. Its diverse components run from the conceptual to the practical, and from the laudable to the problematic. One of the project's most visible gestures is the region's recasting of the many industrial structures as massive light sculptures—becoming art, just as Sheeler, Lewis Hine, the Bechers and others, have always seen them. But aestheticizing these landscapes would be terribly wrongheaded. Says Bargmann, "I get nervous when I hear people say that a project is about 'greening a landscape,' because it sounds like the solution will be only surface-deep." She, like Misrach, believes it's important for these projects to communicate what precipitated them in the first place. They should be both monuments to—and critiques of—the industries responsible for them. 

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Frankenstein Takes Manhattan

Fox & Fowle's new Reuters tower in Times Square is a clumsy assemblage of unrelated parts. Ned Cramer pieces the puzzle together.

With apologies to Chicago, New York is the first city of the skyscraper. There, especially, builders of high-rises aspired to something finer than mere height, and, even amid the belt-tightening of the Depression, attained it in the noble proportions and powerful iconography of the Chrysler and Empire State buildings. But in these ostensibly better times, Fox & Fowle's newly completed Times Square headquarters for Reuters falls short of the civic responsibilities of architectural patronage.

This latest upstart on the New York City skyline lacks the attenuated elegance of its predecessors, which is due—at least in part—to the contemporary market's demand for larger floor plates. Fox & Fowle clearly struggled to mask the building's squat proportions. They varied the cladding and massing to make Reuters appear, especially from Times Square, like several adjoining towers with slimmer profiles, and capped the biggest segment with a straining, wedge-shaped finial: "I'm a big boy!" But hey, it's not just the economy, stupid. Architects should be able to make magic of a demanding brief—by embracing it, not fighting it. Walk 20 blocks north to 59th Street, and take in Christian de Portzamparc and the Hillier Group's marvelous resolution of local setback restrictions in the crystalline LVMH Building (March 2000, page 84). And a few doors down from Reuters, Platt Byard Dovell's 42nd Street Studios building (May 2000, page 31) interprets the district's minimum illumination requirements as an elegantly lit façade of glass and metal screens.

Reuters' piecemeal surface treatment is an outgrowth, in more conventional architectural terms, of the cancerous, pedestrian-oriented advertising mandated by the design regulations of the "improved" Times Square. It would be naïve to deny that skyscrapers are anything but giant advertisements for the companies that build and occupy them. As cathedrals of commerce, they embody as much propaganda as St. Peter's. Still, so many different types of cladding subsume Reuters, as well as Fox & Fowle's similar Condé Nast Building across the square ("a building so nice they built it twice," quips one local critic), that neither can be recognized as icons of the companies whose names they bear. This may be a savvy developer's deliberately ambiguous branding strategy (given the petulant economy, it's anybody's guess whether the current tenants will stay put for long) but it makes for confusing architecture.

Fox & Fowle probably had complexity in mind instead. What they built is more of an identity crisis—a mish-mash of forms and materials utterly lacking in finesse or wit or higher meaning. Like Frankenstein's cannibalistically assembled monster, unsure of its humanity, the Reuters Building is forced to ask of itself: Am I a suburban office building? A Times Square landmark? A Vegas casino? A deconstructivist knockoff? Am I anything greater than the sum of my parts? The answer is no. Whatever it is, the Reuters Building is not a skyscraper. To use such a word would be a diminishment of its predecessors.
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