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EDITOR'S PAGE

IN SEARCH OF EXCELLENCE



WHAT IS DESIGN EXCELLENCE AND HOW IS IT ACHIEVED? THIS year's AIA honor awards jury (below) decided that only 19 projects out of more than 600 entries were worthy of such status. With few exceptions, the awards were given to architect "stars," recognized by their unique signature. How do these firms consistently achieve design excellence? Is the secret of their success the young designers in their offices, a sophisticated corporate structure, unusual clients, or raw talent? None of the above, claims a report recently issued by the AIA. Written by James R. Franklin, FAIA, *Keys to Design Excellence* (right) presents the findings of the institute's 1989 Design Practice for the '90s Program. It offers commentary from the AIA's signature firms roundtable, a discussion in which recipients of the gold medal, the firm of the year award, and the Pritzker Prize participated.

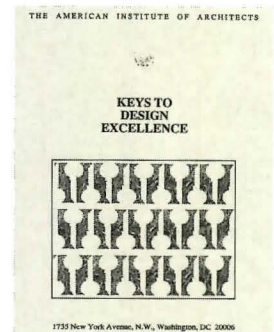
The publication not only debunks the myth of the famous architect, but offers practical advice on how to improve design excellence in any firm. Among its recommendations are weekly pin-ups with project teams and extending the pre-design phase.

The guide includes a self-assessment quiz and step-by-step planning strategy to spur architects to analyze how much time they really spend designing. Principals

of signature firms concentrate 35 percent to 95 percent of their time on project design, according to the study. In other words, design excellence requires an unswerving quest for innovation, project by project, that pervades the culture of a firm.

"Design excellence is not the same thing as success," maintains Franklin, who points out that many profitable firms put client service and office management ahead of more intangible, long-range goals such as public recognition. The most successful firms—those that both make money and win awards—attribute design excellence of a project to 40 percent talent, 40 percent team work, and 20 percent firm structure and support. Clearly, commitment to a project, its process, and management are more important than talent alone.

— DEBORAH K. DIETSCH



Keys to Design Excellence is available from the AIA bookstore (202-626-7475) and costs \$10 for members, \$20 for non-members.



LYNNE LEWICKI

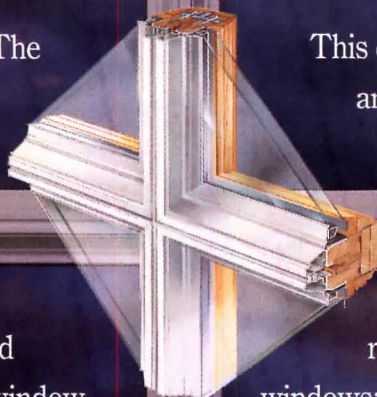


The 1990 AIA honor awards were selected by (front row): Rob Wellington Quigley, Thomas Vriesman, Henry Beer; (second row): Peter Eisenman, Matthew Gilbertson; (top row): awards program director Maria Murray, chairman Stanley Tigerman, Sam Mockbee, and George Hartman.

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LETTERS & EVENTS

Preserving Character

I am writing in response to your November 1989 article, "In Boston, Adding Floors and Flair." I am pleased that you thought to mention the National Park Service (NPS), but I also would like to place our interest in rooftop additions in the proper context. It is important that your readers know that the NPS's concern in dealing with historic structures is for their preservation according to the Secretary of the Interior's "standards." The "standards" were written to help ensure that a historic building's architectural and historic character is maintained while undergoing rehabilitation, restoration, preservation, or stabilization. The "standards" for rehabilitation have two elements that are different for those for restoration in order to deal with new construction. In any case, it is the historic appearance of these buildings that has been declared valuable to our nation, and it is that historic character that should be preserved.

My office of the NPS, which is responsible for implementation of the tax incentive program for historic preservation, does not consider itself an arbiter of design for rooftop additions, per se. In that sense, it is inaccurate to say that the NPS favors rooftop additions "that are clearly differentiated from the buildings they top." The truth is that no matter what the design of the rooftop addition (whether very different from the historic building's design or materials, replicative of the same, or in-between) the project may not be certifiable by the NPS as compatible with the historic character of the building. When considering the compatibility of new construction of this kind, we look first at the location, mass, and scale of the addition. Those elements alone are often the determining factors. If the addition is essentially not visible because of its inconspicuous placement or small size, the design is immaterial to our decision.

Our goal is to encourage rehabilitations that allow historic buildings to operate and to remain sufficiently intact to be true to the historic and architectural values, materials, and design for which they have been recognized.

*Cynthia MacLeod
Chief, Preservation Services division
Mid-Atlantic Regional Office
National Park Service
Philadelphia, Pennsylvania*

Same Coast, Different State

In reference to the article "Earthquake Hits West Coast: Still Not The Big One," which appeared in your December issue: The headline should have stated "California," not "West Coast." Whatever happens to California, good or bad, should be credited to California. The article neglects the fact that Oregon and Washington are also on the West Coast, and in this particular incident, the Northwest was not affected by the tragedy. We in the Northwest are very jealous of who we are and what we do. A distinction should have been made, especially in a magazine devoted to the architectural profession, a profession that must pay attention to specific details in their day-to-day work life.

*R. Gira
Professional Affiliate
Portland, Oregon Chapter, AIA*

Women in the Ranks

I enjoyed reading in the December issue that 50 percent of Baskervill & Son's employees are women. Congratulations to them on their growth, diversification, and openness to women in the field of architecture! I appreciated that openness to aspiring women architects when I started work there in 1962, being the second woman on their architectural staff. Their attitude contrasted sharply with that of some other Richmond firms noted for not hiring women. Now I enjoy working for a firm that has 44 percent female employees.

*Sarah H. Brownlee, Architect
Spangler & Manley Architects, P.C.
Griffin, Georgia*

Corrections:

The Lee/Naegle Partnership of Dana Point, California, should have been credited as associate architect with Robert A.M. Stern Architects on the Fine Arts Studio at the University of California, Irvine. (January 1990, page 68). Scott Sebastian Land Planning and Design of Laguna Beach, California, was landscape architect for the project.

The photographs of the Knott Athletic Recreation/Convocation Complex at Mount Saint Mary's College (January, 1990, pages 105-109) should have been credited to Matt Wargo.

THE COUNCIL FOR INTERNATIONAL Exchange of Scholars has announced the competition for 1991-92 Fulbright grants in research and university lecturing abroad; about 1,000 grants will be made available. Contact: Council for International Exchange of Scholars, 3400 International Drive, Suite M-500, Washington, D.C. 20008-3097. (202) 686-7866.

March 7-April 11: The Southern California Institute of Architecture announces its spring lecture series on the act of intervening in space. Contact: Rose Marie Rabin, (213) 829-3482.

March 15-June 8: The National Society of Professional Engineers offers seminars ranging from marketing to ownership transition. Contact: Patricia Kutt, NSPE Continuing Professional Development, 1420 King Street, Alexandria, Virginia, 22314. (703) 684-2864.

March 30: Deadline to register for the national design competition sponsored by the New York Chapter of the AIA, entitled "A Choric Monument to Twentieth Century Architecture." Contact: NYC/AIA, 457 Madison Avenue, New York, New York, 10022.

April 2: Deadline for registration for the international open design competition being held for an AIDS Life Center and a home for the AIDS memorial quilt, sponsored by the NAMES Project Foundation and Trinity United Methodist Church of San Francisco. Contact: Jonathan Pearlman, Competition Advisor, 2338 Market Street, San Francisco, California, 94114. (415) 626-0931.

May 1: Nominations due for the National Trust for Historic Preservation's 1990 Preservation Honor Awards. Contact: Katherine Adams, Honor Awards Program Coordinator, (202) 673-4165.

June 4: Nominations due for the American Institute of Architects Citation for Excellence in Urban Design 1991, which recognizes distinguished achievements that involve the expanding role of the architect in urban design. Contact: Bruce M. Kriviskey, AIA/AICP, Director, Design Programs, American Institute of Architects, 1735 New York Avenue, NW, Washington, D.C., 20006.

NEWS

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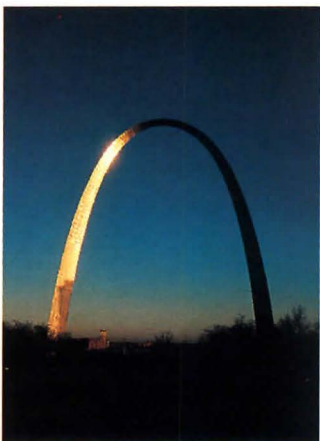
KPF Wins Firm of the Year

THE NEW YORK CITY FIRM KOHN PEDERSEN FOX Associates received AIA's 1990 architectural firm award. One of the Institute's highest honors, the award recognizes a firm that has consistently produced distinguished architecture for at least ten years. The jury recognized their consistent commitment to excellence in the innovative design of a large number of high-rise structures. "Their buildings, now dotting the skylines of many American cities, combine an imposing originality with a sensitive respect of contextual tradition within the constraints of the urban environment," the jury stated. The founding partners previously worked at the John



Carl Warnecke New York office before establishing their own firm in 1976. Today, KPF has grown to nine senior partners and a staff of over 220. Principal partner Eugene Kohn feels the reason for the firm's success is the balance it has achieved between mature and young talent and skill. Kohn said that while many factors inform and influence of their designs, they owe much to the clients that have collaborated with them, "without whom this award would have not been possible." In a firm profile in ARCHITECTURE, May, 1989, senior partner Sheldon Fox said; "We approach our design philosophy in our own way. The strength of the firm comes from the interplay of the people working from this ideal." KPF has won AIA Honor Awards in 1984 for 333 Wacker Drive and in 1986 for the Procter & Gamble General Offices Complex.

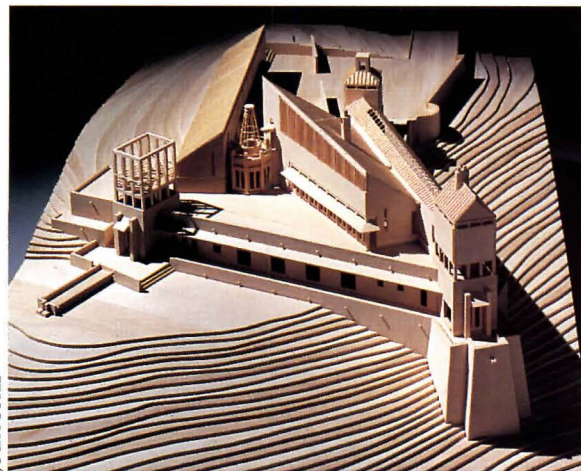
—AMY GRAY LIGHT



ALLEN FREEMAN

25 Year Award

The St. Louis Gateway Arch, designed by Eero Saarinen and completed in 1964, has won the AIA's 1990 twenty-five year award. The stainless steel curve rises 630 feet from the banks of the Mississippi River, and pushed the limits of construction technology at the time of its completion, 17 years after Saarinen won the commission. The arch has helped rejuvenate St. Louis civic pride; the awards jury called the structure "a symbolic bridge...embodying the boundless optimism of a growing nation."



JOCK POTTLER

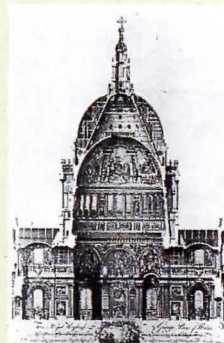
Kohn Pedersen Fox Associates' first house is to be completed in 1991. Located in Stratton, Vermont, the 8,500-sq.-ft. family compound comprises a community of rooms. Each volume is designed with a specific solar and view orientation.

AIA BRIEFS

In recognition of projects involving architects in urban design and community planning, the AIA is seeking entries for its 1991 Citations for Excellence in Urban Design. Projects or programs contributing to the quality of the urban environment, and involving the public in the planning process, will be awarded. For information contact Bruce Kriviskey, AIA (202) 626-7452.

His Royal Highness, The Prince of Wales, opened an exhibition of Sir Christopher Wren's original 17th-century drawings and plans for London's landmark St. Paul's Cathedral (inset) on February 22 at the Octagon Museum. "Sir Christopher Wren and the Legacy of St. Paul's Cathedral" runs through May 8.

AIA's fledgling Public Outreach Project, a program that identifies and focuses on client groups best served by understanding the architectural process, offers "A Beginner's Guide to Architectural Services," a brochure aimed at small, first-time clients to educate them on the value of architectural services. The guide is available to members for \$2 a copy or less for bulk rate. To order, contact Elizabeth Lazarus at the AIA, (202) 626-7411.



The Iowa Chapter's "Architecture In the Schools" program introduces students and teachers to the basic concepts of architecture. The program has proved so popular since its 1985 inception, despite its reliance on sporadic funding, the chapter hired an education coordinator in 1987 to ensure future development. The core of the program is an extensive workshop that has attracted over 200 teachers. For information contact Barbara J. Schmidt, Education Coordinator, Des Moines.

Wright Drawings in Phoenix

"WE WATCH IN AWE AS FROM A HAND MOVING LIGHTLY AND swiftly across the drafting table there leaps into being something never seen before," wrote Brendan Gill in *Many Masks*. These closing words of Gill's 1987 biography of Frank Lloyd Wright form the perfect accompaniment to the superb exhibition of Wright drawings currently hung (through April 8) at the Phoenix Art Museum.

Thousands of ideas leap from these drawings, and they range from the sublime to the impractical. But nearly every drawing shares the quality that Gill described, confirming the architect's genius.

There is a rendering, for example, of a bank with a drive-up window from 1947. The pretentious but astounding "Donahoe Triptych" house would have crowned three Arizona hilltops with one structure. A New York racetrack stadium seating 80,000 was to have had its roof suspended from a geometric spiderweb of tensile steel cables—an essay in engineering as decorative art. None of these was built but that does not diminish the power of the ideas.

The show comprises 302 sketches, studies, plans, and presentation drawings spanning Wright's entire career, beginning with the elevation of a "dream house" that convinced Louis Sullivan to hire him as a draftsman in 1887. And there's more contained in the exhibition than architecture. Also included are designs for furniture, bridges, the unpublished 1926 series of covers for *Liberty* magazine, and even a touring car with a cantilevered convertible top.

There's also more in it than Frank Lloyd Wright. Casual visitors may not realize it unless they read the catalog, but most of the presentation drawings in the show were drawn by apprentices and then "edited" and signed by Wright. Frank Lloyd Wright Foundation archivist Bruce Brooks Pfeiffer, who co-curated the show, recalls his work as an apprentice to Wright. "He would do the conceptual sketches, then give them to us, and we would develop the elevations and plan. When he worked for Sullivan, he called himself 'the pencil in Sullivan's hand.' He would say to us, 'Boys, you're the fingers of my hand.'"

What Wright added to these drawings, however, frequently illuminated his design philosophy—and sometimes his character. There is an interior rendering of the Guggenheim Museum depicting a crowd of people viewing a painting. One of the fig-

ures, a girl maybe eight years old, has her back turned to the art, and is peering over the curving parapet. Wright, recalls Pfeiffer, came in to sign the drawing, then took out a pencil and drew a yo-yo spinning from the girl's finger into the great central well. "Boys," he told the apprentices, "in all this endeavor we must never lose sight of a sense of humor."

Some of the drawings will be familiar to architects and architecture buffs—there's the famous color pencil presentation drawing of Fallingwater, and the elevation of the mile-high "Illinois" skyscraper. The show, however, is more intriguing because of the less celebrated, unbuilt work.

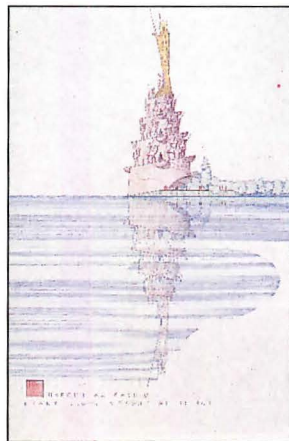
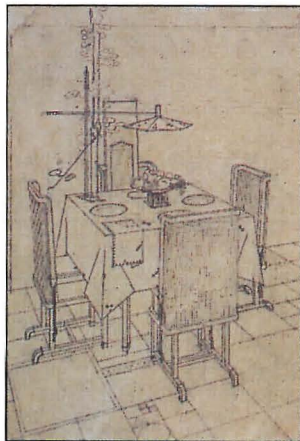
"No detail was beneath him," says Pfeiffer, and we can see that in Wright's design of a dining table for Chicago's Midway Gardens hotel. The master had pondered the problem of clutter on a compact restaurant table, and designed a silver fruit bowl centerpiece that would nest salt and pepper shakers beneath it. At the same time, this wonderful drawing illustrates one of Wright's maddening contradictions: his notorious indifference to basic issues of physical comfort. The straight-backed metal chairs around this very neatly thought-out

table would have been excruciating to sit on.

Arizonans should be interested particularly in the several drawings of San Marcos-in-the-Desert, a major Arizona desert resort designed in 1928. Although working drawings were made, it was not built; the stock market crash ruined its investors. However, the design represented revolutionary thinking on how to slip a big building into a stark but delicate landscape. Its massing and angularity echo that of the mountains, while the vertical pleating of the walls break up the fierce desert sunlight and mimic the ribbing of the saguaro cactus.

The exhibition would have benefitted from explanatory details and anecdotes (such as the yo-yo in the Guggenheim) accompanying the drawings. The 303-page catalog, which Pfeiffer wrote, provides many such nuggets, but it costs \$37.50. The main disappointment, however, is that the exhibition will appear nowhere else: the foundation believes it is too valuable and too delicate to travel. Too bad, because if it did, the show would help accomplish precisely what the foundation has long tried to do: expand the influence of Frank Lloyd Wright's profoundly original thinking.

—LAWRENCE W. CHEEK



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The exhibit included a drawing of furniture and diverse objects (left) for Chicago's Midway Gardens and an unrealized 1959 design for the Donahoe house (right).



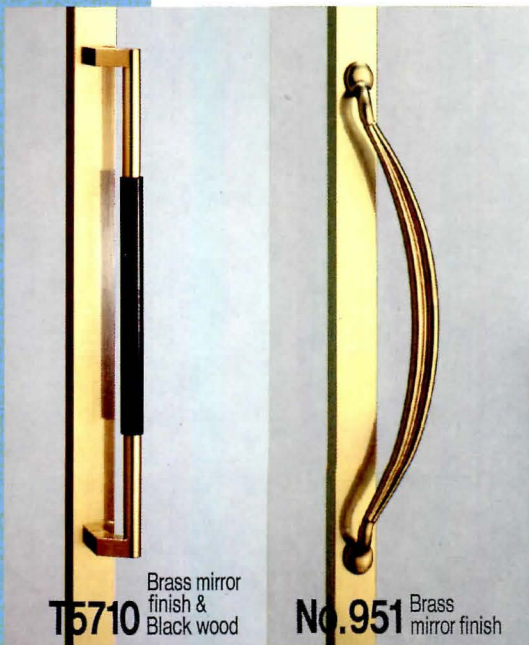
RICHARD CREEK

Wright House

The Currier Gallery of Art in Manchester, New Hampshire, has announced plans to restore one of Frank Lloyd Wright's most important Usonian houses, the Isadore J. and Lucille Zimmerman House (above). The house is scheduled to open to the public in October, after completion of the first phase of a multi-phase restoration under the direction of the Chicago architect John Tilton of Tilton + Lewis. The Zimmerman House, an example of Wright's extensive series of houses designed and built for people with moderate incomes, will be the only Wright-designed residence open to the public in New England.

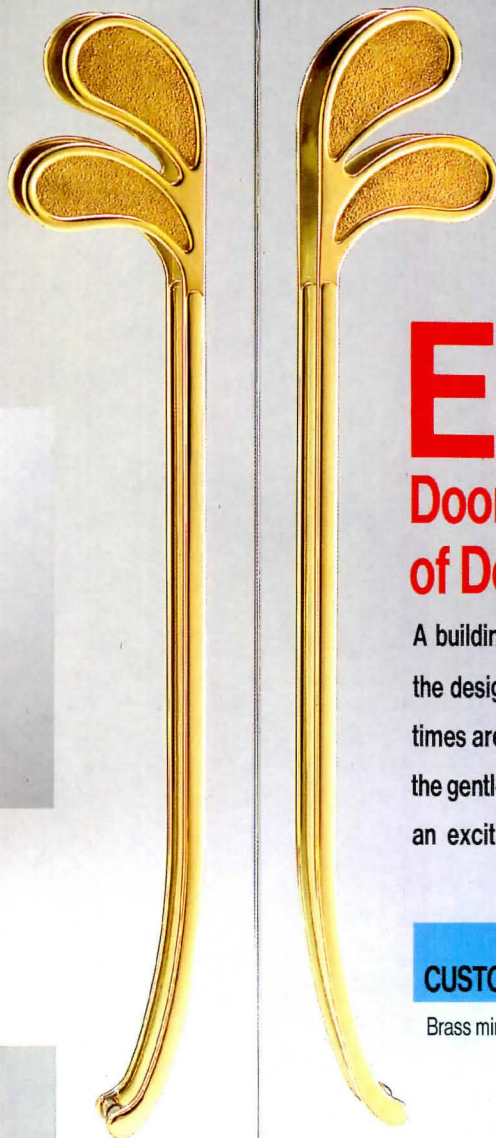


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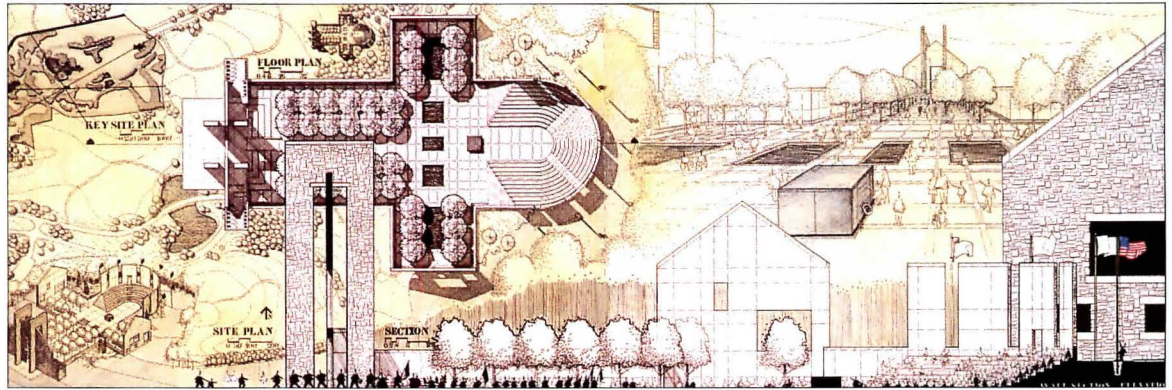
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Landscape of Reality and Ruins

CEE JAY FREDERICK OF WEST CHESTER, PENNSYLVANIA, WON the design competition for a veterans memorial to be located at In-diantown Gap National Cemetery, a replacement cemetery for Arlington National Cemetery that serves five states in the Northeastern United States. Intended as a memorial to veterans of all wars and to anyone who died for an ideal, the project is in the final design and fund-raising stage, and should be under construction within a year. Frederick's symbolic bombed-out structure conveys the hollowness and destruction of war. Sited atop a knoll, the fragmented facade will be constructed of rough ashlar stone. One enters through the wall and descends into a quiet landscaped plaza, flanked by interior walls of smooth cut limestone. This transition is intended to convey the passage from reality into an ideal space of peace and tranquility, containing the elements of air, land, and water. Trees placed as columns on either side of the plaza support a "roof," and provide shelter from the elements. Centered horizontally across the square are five pools of water, repre-



senting the major oceans of the globe, that mask intrusive outside noise. The global theater of past wars is referenced in abstractions of the continents depicted on the transept walls. At the front of the apse is a tomb for all soldiers. The apse turns around on itself to provide an amphitheater. Large gatherings or ceremonies can be accom-

modated here with temporary seating arranged in the nave form. An existing Administration Building located a quarter of a mile from the memorial also resembles a ruin. When Frederick discovered this, he almost didn't turn in this design. But the two structures together will build upon the memorial's image and tie it together, turning the entire landscape of the cemetery into a memorial. —A.G.L.

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Paul Kennon, Teacher and Explorer

PAUL A. KENNON, FAIA, DEAN OF THE RICE UNIVERSITY SCHOOL of Architecture and design principal of CRSS, Inc. of Houston, died unexpectedly of cardiac arrest on January 8, 1990. He was 55 years old. As a practicing architect, teacher, and sportsman, Kennon's un-failing energy and enthusiasm welded life and work into one continual charette.

Like his mentors William W. Caudill and Eero Saarinen, Kennon influenced those with whom he worked and studied through his approach to architecture. Kennon vigorously searched for the right concept and solution to each design opportunity. Constant experimentation and a problem-solving attitude yielded variety rather than dogma or preconception in architectural form.

Born and raised in Shreveport, Louisiana, Kennon attended Texas A&M on a football scholarship. He graduated with a Bachelor of Architecture degree in 1956, receiving the Alpha Chi Rho medal and first prize in architecture award given by southwestern schools. Kennon worked during the summers with Caudill Rowlett Scott and attended Cranbrook Academy, graduating with a Masters of Architecture degree in 1957. After six months in the army, Kennon worked for Eero Saarinen. During seven years as senior designer, he was involved in most of Saarinen's late projects.



Bill Caudill, the Director of the School of Architecture at Rice from 1961 to 1969, brought Kennon back to Texas in 1964 to serve as associate director. He spent two years working on a community facilities program in Chile and after another year teaching, Kennon joined CRS in 1967.

The team approach to architecture at CRS was well suited to Kennon's method of experimentation and investigation. Relying on process rather than typography or style, he applied his search for the appropriate concept to many building types, including office towers, medical complexes, educational facilities, industrial plants, sports arenas, and shopping centers.

Kennon was elected to fellowship in the AIA in 1978 for his accomplishments in design. He was a lecturer at many universities and the work of his CRSS team received innumerable awards. In 1989, Kennon was selected as the new dean of the Rice University School of Architecture. Like many other architects whose careers were influenced by Eero Saarinen, Kennon focused on a tireless exploration for the best idea. It is his valuable legacy.

—GERALD MOORHEAD

Houston architect Gerald Moorhead, AIA, studied with Kennon at Rice University and worked with him at CRSS from 1969-70.

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Preserving L.A. History

LOS ANGELES' COMPLEX AND DIVERSE history is known to few people, largely because there has been little effort to preserve or interpret it. To increase public awareness, the non-profit organization Power of Place was formed to develop new approaches to urban design, public art, and historic preservation. It is comprised of architects, planners, preservationists, historians, and designers who study and explain Los Angeles' unique cultural and ethnic past by focusing on the economic development of the city. They work on sites that reveal the history of L.A. through the impact of ordinary people who have settled in the area since the early 1800s.

One such person was Biddy Mason, a black midwife and nurse who was born into slavery, won her freedom, and eventually became the first black woman in Los Angeles to own property. She also founded the city's first black church, day care center, and orphanage. Last November, an 80-foot-long wall commemorating Mason was unveiled in downtown Los Angeles on the site of her homestead. A parking garage and stores now stand there.

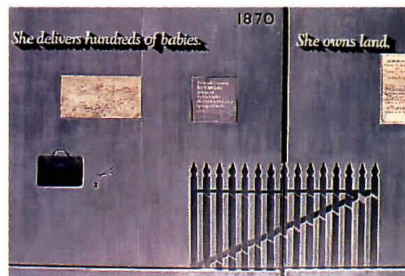
The wall, designed by artist Sheila Lev-rant de Bretteville, is constructed of concrete, slate, limestone, and aluminum, and imprinted with a time-line of images from Mason's life, juxtaposed with another documenting the growth of Los Angeles. An installation by sculptor Betye Saar, displayed in the elevator lobby of the retail building located on the site, incorporates images of Mason's home with an assemblage of domestic objects evoking her life. The project's director, Dolores Hayden, provided historical research and text; assisted by Donna Graves, executive director of Power of Place. The wall is located at Broadway Spring Center, 331 South Spring Street.

Another public works project that will be developed over the next 18 to 24 months is the Embassy Auditorium and Hotel in downtown Los Angeles. Designated a Los Angeles cultural-historic landmark, the Embassy is important for the jazz greats, such as Duke Ellington and Ella Fitzgerald, who performed there. It also played an historic role as a gathering place for labor unions and community organizations, especially from the Latino community. Built in 1914, the residential hotel included office space and a

theater that provided the first home to the Los Angeles Symphony Orchestra. The building is now used as a residential college by the University of Southern California, an enthusiastic supporter of the project. The

Embassy Public Art Project is being supported by the California Arts Council and the Los Angeles Cultural Affairs Department. A public symposium on the history of Latina labor organizing will be held this spring, co-sponsored by UCLA's Chicano Studies Research Center and the UCLA Graduate School of Architecture and Urban Planning.

—A.G.L.



JULIE EASTON

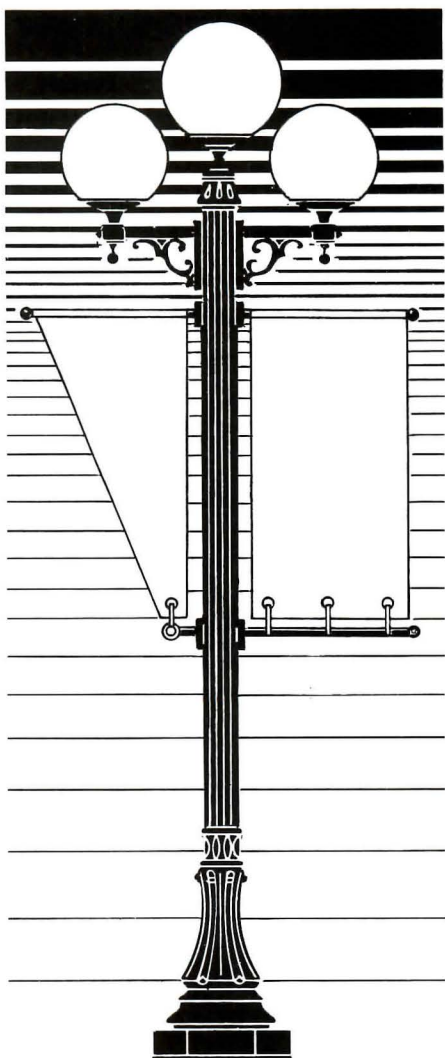
World's Fair Threatens Historic Venice

TEETERING UPON THE DESTRUCTION that time has wrought, Venice—clad in the history of over fifteen centuries—has become the proposed site of a World's Fair for the year 2000.

The original site for "Expo 2000" was to be located in the immediate vicinity of Venice's historic center. However, plans now call for Expo activities to take place outside the city. Those opposed to Expo 2000 believe that despite the modified plan, visitors would still feel compelled to visit the magnificent island, and the normal rate of 25,000 visitors a day would increase to 230,000. Already, seasonal tourism weighs



MARK EDWARD SMITH



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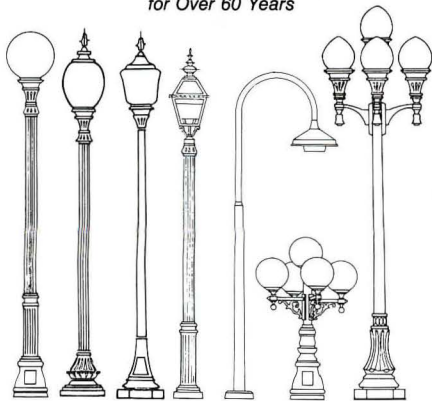
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heavily upon Venice's aging threshold, narrow corridors, crumbling buildings, crowded canals, and cracking walkways. The increasing number of tourists visiting every year deluge the city's transportation, infrastructure, sanitation systems, and cause irreversible damage to the city's historic architecture.

Opponents bolster this argument with the events of July 1989, when Venice suffered damage due to an all-night rock concert, "Pink Floyd Saturday," that became an unexpected addition to the traditional Rendetore, a festival of thanksgiving the Venetians usually celebrate with fireworks. A horde of 200,000 people filled the city, leaving behind more damage than Venice's buildings could tolerate. Those opposed to Expo 2000 feel that every day crowds would devastate the city's delicate equilibrium, already wavering on collapse.

Other proposed alterations include an underground railway system, an artificial lagoon near the mainland beside the airport, floating restaurants, numerous aquatic vehicles, a congress hall, a new exhibition complex near an ancient abandoned arsenal, theaters, cinemas, and artificial clouds used as screens in laser light shows.

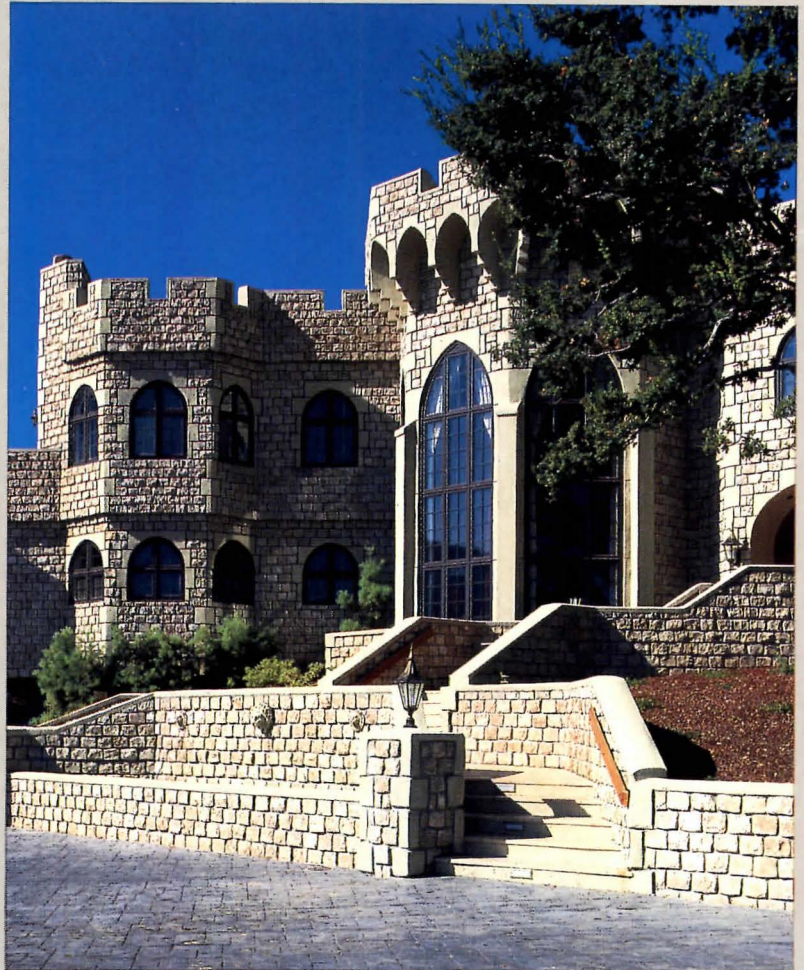
Directly in the center of the uproar is Italian Foreign Minister Gianni De Michelis. His deemed support of Expo 2000 in collaboration with powerful political figures, as well as 35 Italian corporations, stands undauntedly upon what he considers saving Venice from future decay.

Despite Venice's increasing rate of tourism, he believes the city cannot raise enough money to protect itself from continuing ecological, economic, and environmental decline. De Michelis believes that Expo 2000 would rescue the ancient city from sinking further into the sea. "It won't be a vulgar Disneyland," he maintains. "Expo 2000 will safeguard the city's future and make up for the lack of enterprise during the last forty years. It will be a great occasion. I've been backing it all the way."

But Venice's monumental beauty, whose delicate encasing runs roughly on the course of historic enticement, may be already beyond the mending and patching so vital for its survival. As John Ruskin wrote, "Venice is still left for our beholding in the final period of her decline... So bereft is her loveliness, that we might well doubt, as we watched her faint reflection in the mirage of the lagoon, which was the City, and which the Shadow."


—ELISE G. AHLGREN

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Mumford's self-portrait, 1919.

Lewis Mumford, 1895-1990

SOCIAL PHILOSOPHER, HISTORIAN, AND architecture critic Lewis Mumford died at his home in Amenia, New York, in January at the age of 94. A prolific writer, Mumford authored more than 30 books and hundreds of articles over a career that spanned three-quarters of a century. The range of subject matter for his commentary was fitting to his Renaissance talents: architecture, urban design, art, literature, technology, science, philosophy, ecology, politics.

But it was his writing on architecture and cities that endears and continues to draw

most architects to Mumford. His was a fresh and encompassing view of the discipline—never the dry taxidermy of the art historian but a living, breathing, courageous, and complex depiction of architecture as the very stuff of human life. For Mumford, a building or a city was never just an object, but was instead the skin of a civilization. His observations, critiques, and caveats of the built environment were always planted firmly in the soil of human circumstance.

Lewis Mumford was born in New York City in 1895, and he became a student of the city by walking its streets as a small child with his grandfather. After a flirtation with electrical engineering (he never completed college due to illness), he gravitated toward a literary career. As a young man he discovered the writings of Sir Patrick Geddes (whose theories on city design Mumford credited with having the most influence on his own work). At the age of 26, he published his first book, *The Story of Utopias*, and a year later co-founded the Regional Planning Association of America.

More books on architecture followed. In *Sticks and Stones*, published in 1924, and *The Brown Decades*, which appeared in 1931, Mumford perceptively traced the early roots of Modernism through the works of Henry Hobson Richardson and Louis Sullivan at a time when architecture was still embedded in the Beaux-Arts tradition. During the 1930s and early '40s, Mumford wrote a column on architecture for *The New Yorker*, and was a regular contributor to this magazine, among others.

Two books alone, *The Culture of Cities*, a comprehensive, penetrating analysis of the city as a living organism, and *The City in History*, a sweeping study of the origins and development of cities, would secure Mumford's place in the pantheon of urban scholars and theorists. In later books on the effects of technology on city form, such as *The Highway and the City* and *The Urban Prospect*, he painted a dark view of the future if technology were not tempered with *humanism*.

Those unfamiliar with Mumford's work often pigeon-holed him as a planner or architect, which caused the cultivated generalist to bridle, and to point out that he was no more an architect "than if I wrote about criminology I'd be a criminal." It was the depth of his knowledge and understanding about history, technology, culture, and human beings from which Lewis Mumford drew his rich view of architecture.

—MICHAEL J. CROSBIE

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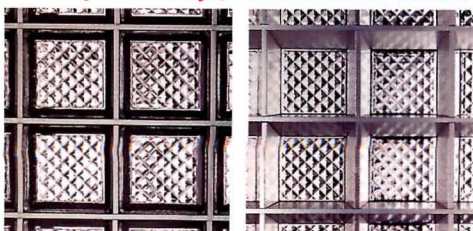
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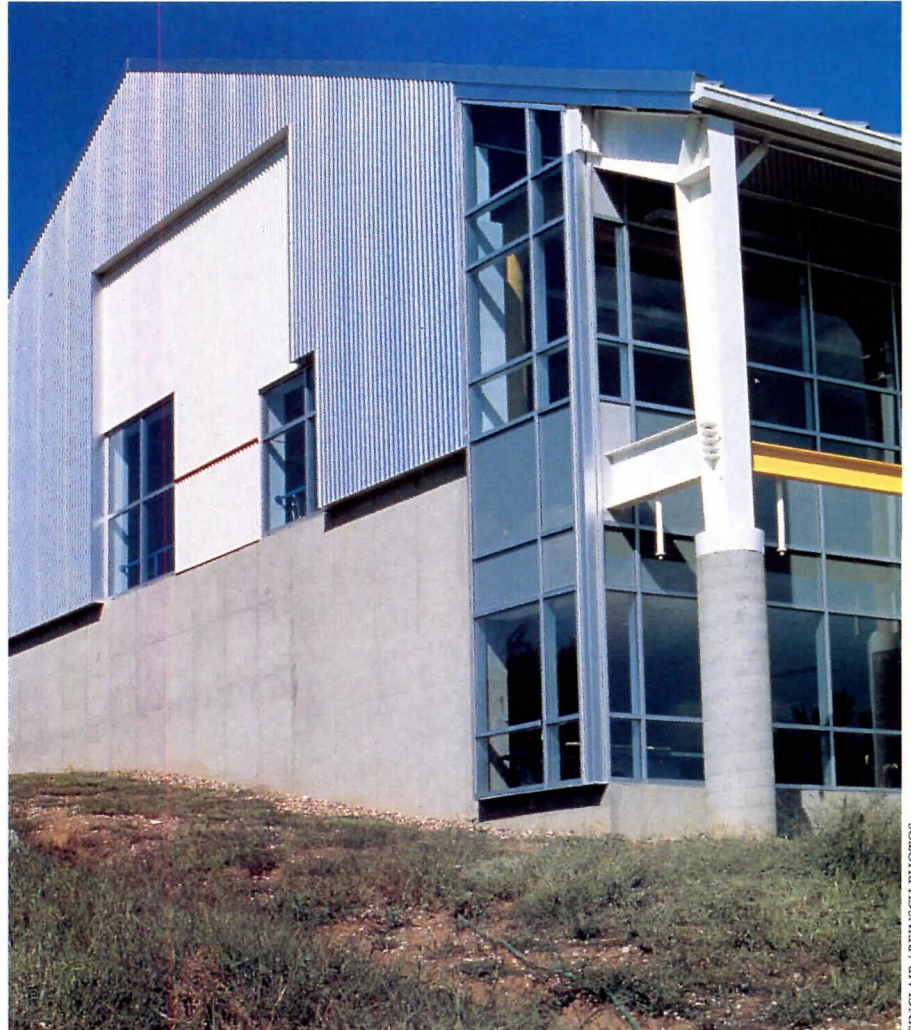
1990 AIA COMPONENT AWARDS

A SAMPLING OF DISTINCTIVE BUILDINGS that have been honored by the AIA's state, local, and regional component organizations is presented on the following pages.

Although not every project that has been distinguished with an award this year could be featured, our survey conveys the spirit, diversity, and fresh approach to design, as reflected throughout the various geographical areas of the U.S.

We plan to include additional component award winners in future issues, to highlight the achievements of AIA members around the country.

—AMY GRAY LIGHT



SINCLAIR / REINSCH PHOTOS

Central States Region

Sheet Metal Union Hall

Kansas City, Missouri

Shaughnessy Fickel and Scott Architects

THE UNION HALL AND OFFICES OF A local chapter of the International Association of Sheet Metal Workers are designed to showcase and celebrate the sheet metal craft and worker. Constructed primarily of metal products, the pre-engineered framed building atop a concrete foundation uses standard detailing and stock materials to highlight typical trade skills and keep within the program budget. The design incorporates intricate inset/outset panels and overhangs, multiple changes in panel colors, formed flashing integrated with the building materials, and trim alignments to articulate the building skin with depth. The meeting hall and offices comprise 8,500 square feet of the facility, with another 8,500 square feet of leased space available. The building is located on a seven-acre residential area with views overlooking two lakes.



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1990



KEVIN C. ROSE

Tennessee Chapter
Marvin Runyon Residence
Monteagle, Tennessee
Tuck Hinton Everton Architects

THE CLIENT FOR THIS VACATION HOUSE REQUESTED THAT THE structure hug the edge of a steep cliff plunging 180 feet and descending another 900 feet into a heavily wooded area, and that it reflect the vernacular character of rural Tennessee. The result is a 2,500-square-foot, three-level house placed so close to the edge of the cliff the contractor had to install a net to protect his crew during construction. The internal functions of the residence are expressed separately in geometric shapes that present an assemblage of rural forms, as desired by the owner. The garage is located in a square resembling a farmhouse; kitchen and private functions are placed in a vertically exaggerated barn; and a spiral stair is housed in a circle evoking a grain silo. The final geometric form is an equilateral triangle containing living spaces and the master sleeping loft, positioned for optimum views of the valley. The verticality and massing of the wood structure masks the actual position of the house on the site. Visitors are directed up an inclined bridge, entering the house at the most distant edge of the composition, a corner point above the site's dropoff. The primary facade is articulated by a series of narrow, vertical windows derived from the ventilation slots found in nearby tobacco barns. The house is constructed of stained cedar siding above a limestone base, fiberglass shingle roofing, and a glass curtain-wall system.



KEVIN C. ROSE

directed up an inclined bridge, entering the house at the most distant edge of the composition, a corner point above the site's dropoff. The primary facade is articulated by a series of narrow, vertical windows derived from the ventilation slots found in nearby tobacco barns. The house is constructed of stained cedar siding above a limestone base, fiberglass shingle roofing, and a glass curtain-wall system.

Tennessee Chapter
Richland Creek Apartments
Nashville, Tennessee
Tuck Hinton Everton Architects

A KEY CONSIDERATION IN DESIGNING THIS housing was the steepness of the wooded seven-acre site. To avoid stacking plain boxes and asphalt plateaus on a hillside, and to give residents premium views of the city skyline and surrounding mountains, the architects divided the 135-unit, three-story building into two main sections. The uphill complex stretches along the breadth of the slope and staggers down to embrace an elevated pool that provides a centralized focal point. Below a divided roadway and parking lot, the downhill section is composed of six segments that wind up and down the steep terrain in V-like configurations that create a series of alternating public circulation areas with private vista-oriented spaces. Tall, thin walls provide a monumental sense of orientation at the entrances of the corridors, and also serve to frame visual portals to the impressive views beyond.



TUCK HINTON EVERTON ARCHITECTS PHOTOS



Top: Credit Agricole, San Francisco, California
 Architect: Michael Marx & Associates
 Glazing Contractor: Cobbletick-Kibbe Glass Co.



Bottom: Bunny Davis Gallery, Atlanta, Georgia
 Architect: Smallwood, Reynolds, Stewart & Stewart

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AIA COMPONENT AWARDS



WARREN JACGER

Rhode Island Society of Architects
Universal Press Corporate Headquarters
East Providence, Rhode Island
Extrados Architects

THE ARCHITECTS WRAPPED A NEW addition around an existing, undistinguished building, almost doubling its size and giving it a spirit and character in keeping with the company's corporate image as a high-quality color printing company. The addition's curved exterior wall of steel panel and acrylic stucco encloses a public entry, gallery, and reception area conference room. An L-shaped anchor building encases the existing structure on either side and houses administrative and production areas. The jury said the building contributes "a little bit of Florida" to its New England surroundings.



STEVE ROSENTHAL

Boston Society of Architects
Cabot's Stains Corporate Headquarters
Newburyport, Massachusetts
Leers, Weinzapfel Associates

WINNER OF A BOSTON EXPORT AWARD, the Cabot's Stains building was honored for its "highly successful, innovative," response to the program and the site. The jury stated the rough New England detailing of the exterior is strengthened by the "wonderful play of shadow on the building's surfaces." This treatment contrasts with the smooth detailing of the interior's elegant, light wood paneling. Skillful handling of natural light in the clerical spaces and conference areas also contributed to the overall success of the project, according to the jury. The 16,000-square-foot complex is based on an agrarian model in which workplace and nature are unified. The opportunity to display the company's products made wood a natural choice for construction.




NICK WHEELER

Boston Society of Architects
Wange Institute of Graduate Studies
Boston University
Tyngsborough, Massachusetts
Earl R. Flansburgh + Associates, Inc.

IN EXPANDING A GRADUATE SCHOOL, THE ARCHITECTS integrated a contemporary 42,500-square-foot addition with an austere, Gothic Revival structure. Another 420,000 square feet was provided by the renovation of the older structure. The facility acts as a satellite campus for the university, reinforcing the image of an educational campus and establishing a direction for the future. The low masses of the building flank the existing structure, so it retains its centerpiece status. The new two-story building is brick and precast concrete with granite trim.

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1990 AIA COMPONENT AWARDS

Pennsylvania Society of Architects

**Hartwell/Clearwater
Pittsburgh, Pennsylvania
John A. Martine Architect/
Integrated Architectural Services**

LOCATED IN A GROWING COMMERCIAL area of Pittsburgh, this 25,000-square-foot speculative retail shopping complex occupies the site of four separate structures that were demolished to make way for new construction. The resulting additions envelop a remaining light well and the replicated wall of the original corner building. The older buildings were gutted and interconnected with the additions to form a four-level complex. A canopied entrance separates the new addition from the existing structure along a re-oriented, street-facing facade. At street level, a series of punched windows in a new black granite base open first-level tenant spaces to the street. The formerly brick facade was replaced with steel-framed storefronts at the first level, and a fenestration pattern of original brick was replicated on the floors above. Upper levels are constructed of glass curtain wall with a steel cornice inspired by the classical mouldings reconstructed on the rest of the building.



JEFF GOLDBERG / ESTO



TOM CRANE

Pennsylvania Society of Architects

**Pennsylvania Ballet Headquarters
and School
Philadelphia, Pennsylvania
Dagit Saylor Architects**

A FORMER AUTOMOBILE SHOWROOM now headquarters the Pennsylvania Ballet's rehearsal studios, locker and exercise facilities, and executive and artistic offices. Analysis of the existing structure resulted in upgrading the original building to fit the program requirements. All internal columns and roof slab were removed and a 16-foot-high floor inserted on top of the building, resulting in column-free studio space on the upper floors and a "penthouse" that added 41,000 square feet to the existing structure. The original terra-cotta facade, with the exception of the cornice, and aluminum siding and tinted glass windows comprise the exterior. The architects used metal ornaments such as banner standards, canopy, and facade decorations to unify the new floor with the older facade and create an airy and dynamic statement that suggests the kinetism of dance within.



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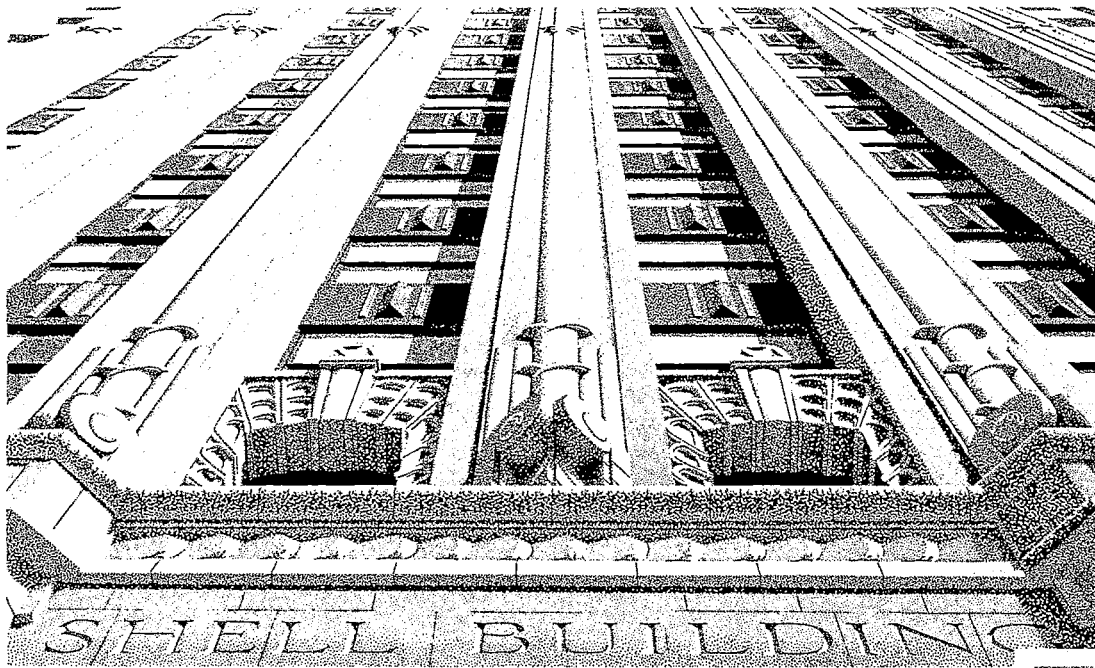


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Using some familiar San Francisco and New York City subjects, John Anderson, a landscape architect presently living and working in Tokyo, Japan, shows us his pointillist abilities using a Rapidograph® pen to create a fine perspective in modeling architectural details. In some of these illustrations the stippling actually simulates the texture of the subject. With this kind of representation, details can actually be projected out of a completed drawing for a clearer image of project



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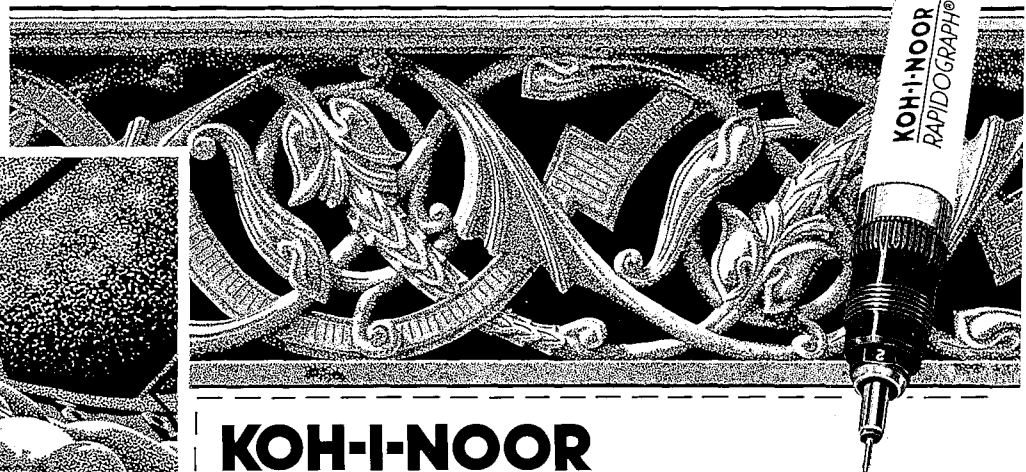
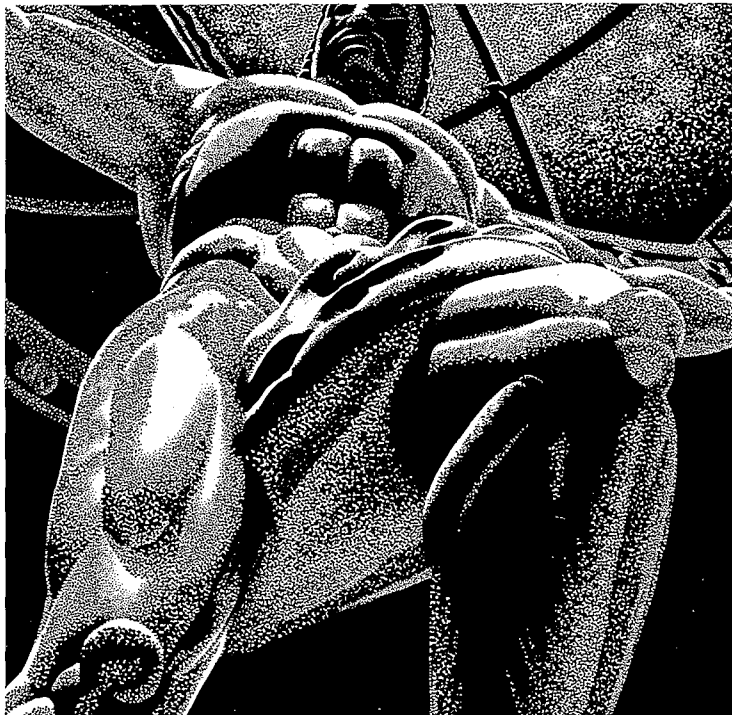
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1990 AIA COMPONENT AWARDS



WALTER SMALLING

Potomac Chapter
Knight Vacation House
Front Royal, Virginia
McInturff Architects

BUILT IN A VARIATION OF THE SHOTGUN house style, this 1,100-square-foot vacation retreat takes advantage of its south-sloping meadow site with views to the Shenandoah River and surrounding mountains, through a linear arrangement of rooms that step down the hill. The house is derived in both form and materials from simply built agricultural buildings found in the rural area. A plain roof spans its length and width, and a minimal foundation of post and beams supports a 14-foot-wide center span of rooms. Cantilevered structures on either side support circulation space. The exterior is clad in metal with wood sheathing on either end. Red and gray wood accents add a touch of whimsy to the playful house locals have dubbed "the Gypsy caravan."

Washington Chapter
2631 Connecticut Avenue
Washington, D.C.
Martin & Jones Architects

LOCATED IN A COMMERCIAL AREA IN NORTHWEST Washington, D.C., the program for this retail and office building required that it provide the maximum allowable commercial development of the vacant, street-front site within the strict budget constraints of the developer. The result, which also conforms to Washington's strict zoning regulations, is a 30,000-square-foot structure densely compacted on its site. The building features below-grade parking, loft retail space on the first floor, and related office space on the second level. The design is a clear expression of both the building's commercial use and its steel frame construction.

Two pavilions flank three recessed glass storefronts. These towers are designed to reflect the scale of adjacent converted rowhouses, a reference that is reinforced by their projecting stucco cornices. A second-story terrace features a painted steel pergola in front of the second floor offices and the tower cornices. The pergola implies the building's steel frame structure and distinguishes its image and scale.

Rendered in economical gray brick, stucco, painted metal, and glass, the building facade is modulated in a varying, symmetrical rhythm that is punctuated by recessed storefronts. To integrate the various retail spaces into a cohesive whole, a white lintel carries commercial signage above the storefronts.



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1990 AIA COMPONENT AWARDS

Georgia Chapter

Underground Atlanta
Atlanta, Georgia
Cooper Carry & Associates, Inc.

UNDERGROUND ATLANTA ATTEMPTS TO give Atlantans back some of the colorful architectural historical character of their city, much of which was lost in the burning of the city during the Civil War. Building a new city upon the old, and incorporating historical elements of the past such as rubblestone foundations and cast-iron facades, the mixed-use complex projects a new image rooted in the past. The project revitalizes a major section of downtown, creating a new town center that takes up a full six city blocks, above and below ground. The complex contains 225,000 square feet of office and retail space, restaurants, and entertainment areas. Research on the existing buildings was conducted to uncover and preserve, as much as possible, the original architecture. While some structures were successfully restored, others, altered beyond restoration in previous attempts to revive the underground, were reconstructed with new facades compatible with the old. Additional features of the underground village include spaciouly landscaped plazas, wide pedestrian walkways, water displays, and a light tower, all harmoniously integrated into the surrounding downtown. The architect's vision for the plaza areas was influenced by a piazza in Sienna, Italy. The Peachtree Fountains Plaza, a 10-acre urban area with trees and waterfalls, features extensive use of glass within the enclosed, climate-controlled underground areas. The jurors cited the mixed-use project as a development "sensitive to interventions with the new people-gathering places," adding that the light tower gives the project a clear identity.



TIMOTHY HURSELEY

Georgia Chapter

Gainesville Dental Clinic
Gainesville, Georgia
Reynolds/Lord & Sargent, Inc.

THE CLIENTS FOR THIS PROJECT REQUESTED TWO BUILDINGS on a wooded site for their separate dental practices that would complement each other yet also convey individuality. Since the project is in a mountain town and the clients loved mountain lore, the architects designed the 1,000-square-foot and 1,500-square-foot structures in a residential scale in keeping with the vernacular architecture of the surrounding mountainous area. Using simple forms reminiscent of the wood sheds, add-on porches, and back rooms characteristic of the rural South, the architects designed the clinics in a straight-forward, nostalgic manner that gives a fresh twist to the structures. Construction materials used are also typical for the area. The roofs are covered in metal, and exterior walls are clad in wood siding. Inspired by the haunting stone chimneys and foundations left standing after frequent fires in the rural landscape, the architects created stone chimneys and foundations echoing the aging sites. Wood truss structural configurations and details in the interior further enhance the design vernacular, and were left exposed. Wood trim accents the windows and walls, and the floors are finished in pine. The operating rooms generally face north with a garden view, transforming a clinical procedure into a pleasant experience. In awarding the project, jury members noted that "the rural esthetic is well-studied with its reinterpretation in a new modern building," which "seems fitting in its place."



JONATHAN HILLIER

Another Hardheaded Dover Breakthrough On The Three Basic Elevator Functions.

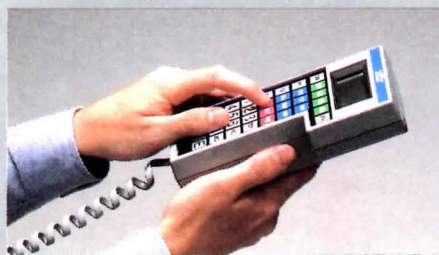
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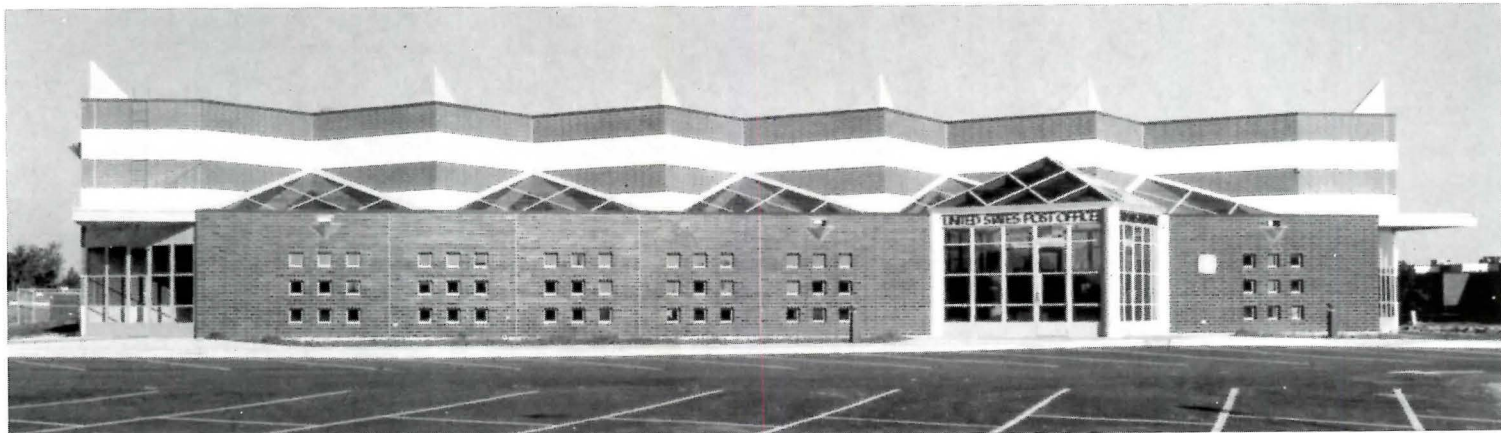
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BARRY RUSTIN

Chicago Chapter
Glendale Heights Post Office
Glendale Heights, Illinois
Ross Barney + Jankowski

LOCATED IN AN INDUSTRIAL PARK, THIS 24,000-square-foot suburban post office is the only retail operation within a warehouse area. The design seeks to distinguish the facility from its surrounding neighbors, while maintaining the brick palette of the park. Since the first impression of the building is seen from an adjacent highway, the facade is scaled to be quickly comprehended from the road. The building consists of two basic components—a high bay workroom and a low-ceiling customer lobby. Interaction between these two functions—the receiving and the depositing of mail—happens in the folds of the facades, illuminated by skylights. Red and buff striped brick walls enclose

the workroom and carrier parking located in front, and a blue-glazed wall defines the service and lock-box lobbies. The lockboxes are organized in bays that pierce the workroom wall, allowing a higher ceiling and creating coves of boxes. The wall is punctuated by a field of small openings to admit natural light while screening an uninspiring view of surrounding parking lots. A series of skylights further illuminates the entrances to lock-box bays. Bright gold screens mark the workroom skylights on the facade. These triangular forms are repeated as roof scuppers. Inside, a “Stars and Stripes” theme is carried out through striped brick walls and patterned linoleum flooring.

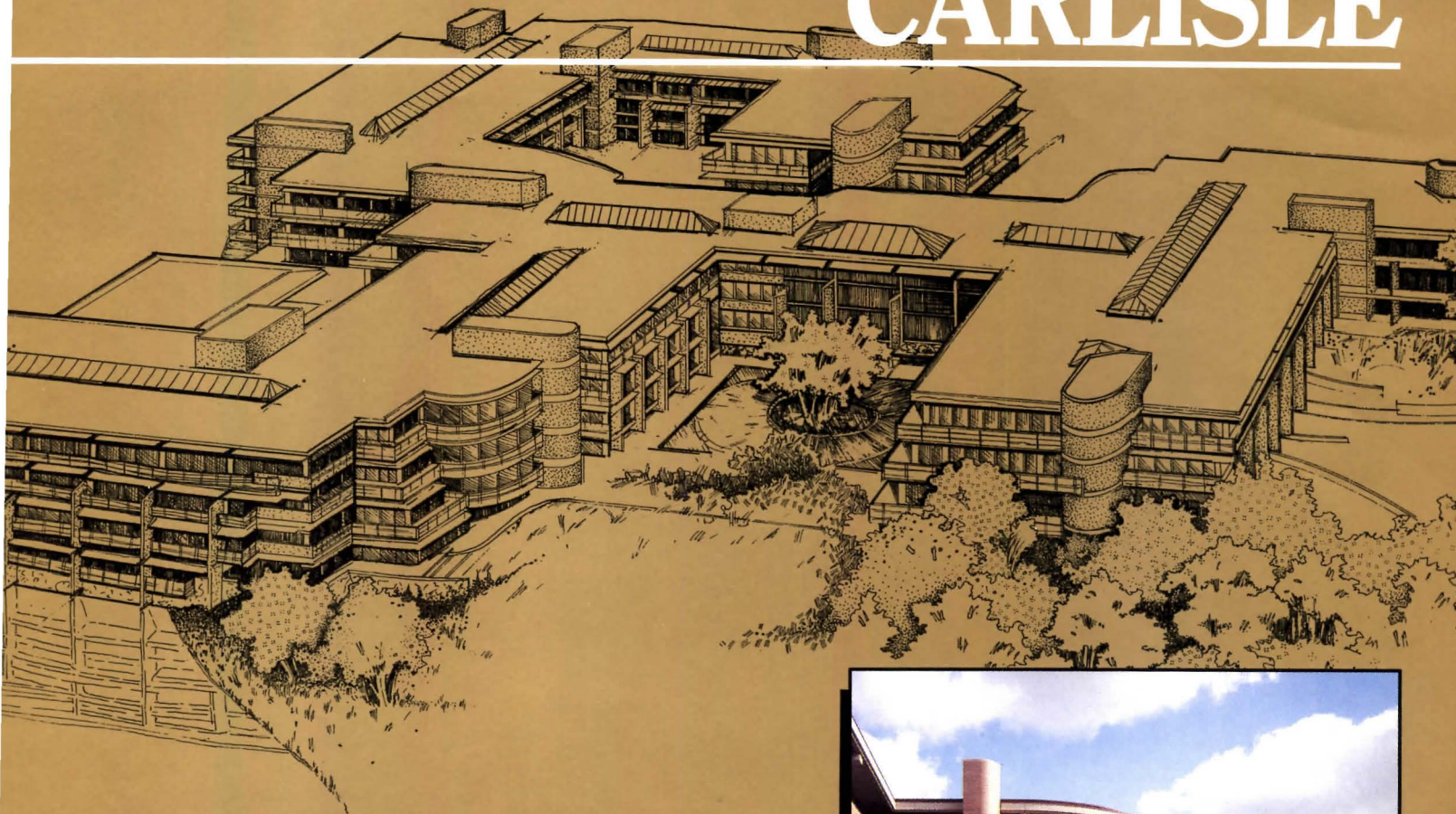


TIMOTHY HURSLEY

Chicago Chapter
Kinkead Pavilion, Krannert Art Museum
Champaign, Illinois
Booth/Hansen & Associates, Ltd.

THE PAVILION PROVIDES AN ADDITIONAL 20,000-square-feet of exhibition, study, administrative, and storage space for the existing Krannert Art Museum at the University of Illinois. It is sited to integrate the museum with student pathways and to connect with the surrounding buildings visually through the repositioning of an entrance made more prominent and accessible to the main campus quadrangle. Upper-level windows allow natural light into the galleries without *sacrificing* control over exhibition lighting. Rich primary materials of copper, marble, and oak harmonize with the surrounding Georgian campus. The pavilion was awarded a certificate of merit from the Chicago chapter, whose jurors said its Post-modernist form and discordant notes play upon the harmony of the existing museum.

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CARLISLE

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1990
AIA COMPONENT AWARDS



WILLIAM SWARTZ PHOTOS



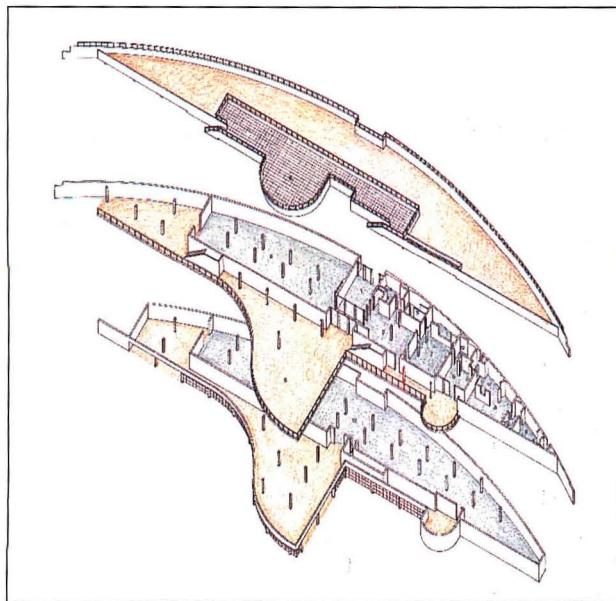
Ohio Chapter

**Prehistoric Indian Village Interpretive Center
Dayton, Ohio**

Lorenz & Williams Incorporated

THE INTERPRETIVE CENTER REPRESENTS a sensitive response to the problem of relating a 20th-century building to a reconstructed environment abandoned by its inhabitants 800 years ago. To achieve this solution, the architects worked closely with the director of The Dayton Museum of Natural History, as well as its Curator of Anthropology. The resulting structure acknowledges the importance of the societal and agricultural affects of the prehistoric village through its orientation along a symbolic Indian marker whose axis centers the building and provides the focus to the surroundings. The marker consists of a pole that serves to relate solar cycles to elements of the village, signalling planting and harvest periods, as well as the location of ceremonial houses and gates. The center is sited north of the pole, minimizing any effect its presence would have on the village's relationship to the sun. A zone of space between the village stockade wall and the center's curved north facade contains a mix of enclosed spaces, decks, and terraces for archaeological study and observation. Orientation is achieved through interpretive programs and views from the terraces and roof decks. The center's entry wall signals a passage from the present into the past. To preserve the character of the primitive surroundings, the center is constructed of timber and steel framing with cedar siding. ■

—A.G.I.



BOOKS

Vladivostok

John Hejduk, Edited by Kim Sbkapich (Rizzoli, \$50.)

TURNING THE PAGES OF THIS BOOK BY John Hejduk exposes the extraordinary creations of one of our preeminent architects and teachers. Contained here are beautiful drawings deceptive in their simplicity, prose and poetry rich in the myth of life. The startling photographs of built projects affirm all the power, mystery, and wonder contained in the architect's drawings.

Hejduk offers the reader of *Vladivostok* evidence of a journey through three towns in Russia that lie on bodies of water: Riga on the Gulf of Riga, Baikal on Lake Baikal, and Vladivostok on the Sea of Japan. Inhabiting the cities of Hejduk's journey are 96 urban objects—characters in the architect's civic theater, with settings and narrative through which they engage other cast members. Hejduk introduces the cast at the trilogy's beginning, each shown in black profile, with their names in Russian and English, such as "Garden of the Angels," "Botanist Complex," "House for the Homeless," and "Chair of the Northern Watercolorist."

In each city, characters are explored in sketch form, or shown in their urban context. Beside some sketches, the architect provides a narrative vignette, next to others are dictionary entries pertaining to the object. Some projects are simply described in terms of their spatial layout and use.

A number of the projects are traced from sketches, through finished drawings, to construction documents, and finally to built reality. Such is the case with "The House of the Quadruplets," which becomes the Tegel Harbor Villa, a four-family house in West Berlin (right).

One of the most fantastic projects documented is Hejduk's "Clock/Collapse of Time," a clock tower mounted on a caisson that pivots 90 degrees. Hejduk describes its design and its function in a town ritual. The tower was built and displayed in London's

Bedford Square. Helene Binet's black and white photographs of the clock tower capture every splinter and bolt of this eerie structure—you can almost hear it creak as it is pushed along its way.

The most terrifying moment for any architect is when life is breathed into a drawing, and the three-dimensional reality either lives on its own or it dies. The past few years have provided Hejduk with the opportunity to build a number of his projects. Their transformation from sketch to drawing to building should be studied by every student and architect who seeks validation of architecture's breath of life. *Vladivostok* is a textbook.

—MICHAEL J. CROSBIE

Renzo Piano: Buildings & Projects 1971-1989

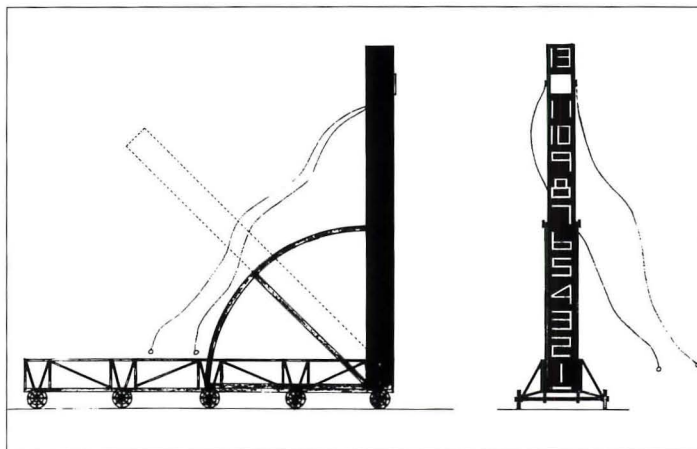
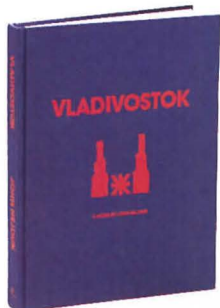
Introduction by Paul Goldberger (Rizzoli, \$50.)

THE RENZO PIANO REVEALED IN THIS book is very different from the one we might imagine. Given his involvement with Richard Rogers in the design of the Centre Pompidou, we might forgivingly expect to meet a man who thinks the picturesque treatment of mechanical systems can amount to architecture, perhaps even one, long overdue, that might fulfill a modern zeitgeist. A sort of Bucky Fuller with visuals, parading pulchritude as principle.

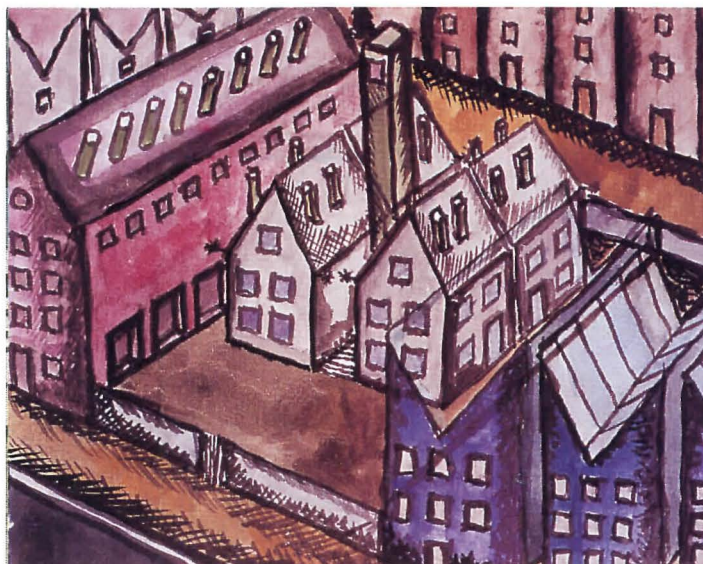
Indeed, the book begins with a too lengthy display of Pompidou, so familiar, so

bizarre, so beloved an icon of cultural consumption in Paris. But here we find no easy master of picturesque technology, no polemical hysteric, no programmatic automaton, no shallow equator of radical with right. If anything, Piano goes too far the other way. His interest in technology is so genuine, so self-effacing, so instrumental to the task at hand, that his product is often in danger of becoming visually undetectable.

Piano seems a charming, quite superior human being. He has a sweet face, and his remarks shine with a fine human nature; natural modesty balanced by natural aplomb. The reader is filled with empathy to find, in an interview with Vittorio Gregotti, that Piano designs without a theoretical base and likes bolted connections a lot. Not that either of these predilections is especially laudable, nor on the



Vladivostok's characters include the clock/collapse of time (above) and the house of the quadruplets (below).





© 1990 CYRO Industries

other hand do they suggest intellectual vacuity. They are merely honest statements of the kind you seldom see nowadays. They reveal a man with self respect, willing to show himself as he is. As Lionel Trilling might have had it, the complexities of “sincerity” over the simplicities of “authenticity,” if you don’t mind.

In this age of architectural hype, Piano comes across as a breath of fresh air; a talented, socially concerned professional practitioner, with a varied, not always especially “architectural” practice, a type many of us can identify with. He has, as far as I can see, but one perversity. For all his restraint and balance, for all his sublimation of the technologically picturesque, he continues, in his own way, to be overly dependent on technology as the stuff and spirit of architecture.

Whatever else it may be about, architecture is always about things like shape, axis, circumference, silhouette, solids in light and casting shadows. It is one of the remarkable aspects of human epistemology as it relates to art that, of themselves, these things are purely banal. But as architecture they constitute a veritable human wonder—greatly important, grand things.

So much was made clear 75 years ago by Geoffrey Scott in *The Architecture of Humanism*. While it is understood that Scott had his

own esthetic axe to grind, it is nonetheless obvious that architectural theory and criticism since that time have proceeded intact largely by ignoring his warnings, blithely replacing those grand banalities with one fallacious notion after another. But it sometimes comes as a pathetic little epiphany to realize how often architectural practice itself has ignored the same warnings, and how determined it apparently is to continue doing so. If Piano’s persistent emphasis on technology lays him open to aspects of Scott’s “mechanical fallacy,” he at least stops short of suggesting that architecture consists of nothing else, thereby avoiding more problematic fallacies, so typical of some of his colleagues, namely the romantic and the ethical.

We have here then more a man of personal principle than of theoretical polemic. An attractive scene it is, wholesome in a world that could use some wholesomeness. And while today a book about architecture of a mostly technological posture may not exactly be riding the tide of topical enthusiasm, some of his projects are rather nice, in the way of being ingenuously self-absorbed. Besides, you never know; tomorrow technology may be all the rage.

I would say, if you want something built with competence, intelligence, and care, Piano may well be your man. But here I offer a

heartfelt advisory: If you want a book, this is definitely not it. Someone has made a grave miscalculation. What is praiseworthy as a practitioner turns out to be deficient, in crucial ways, as the subject of a book.

Every project in his career—too many at any rate—may well be included here. This is more complete than wise. As a practicing architect, his production has taken place more with a view to the problem at hand than to the possibility of publication, and some of these things simply die on the page. The wonder of it is that no one seems to have noticed them there, expiring.

Take, for example, his “Projects of Urban Reconstruction in Historic Centers of Italy.” I take it one faith that the historic centers of Italy are in deep trouble—I’m sure it must be so in the bad lands well south of Rome. The process involves dispatching by truck a demountable tent-pavilion, designed by Piano a la Frei Otto, to various piazzas, where information on sweat equity renovation is dispensed to locals like so many free chest X-rays. Laudable? Absolutely; but perhaps more sensible as part of a larger treatise on that theme than as part of an architectural oeuvre. Just not “archi” enough, as Nikolaus Pevsner once said.

In another instance, Piano’s “Rehabilitation of the Lingotto Factory Area” has as its

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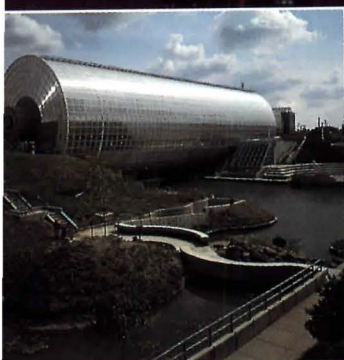
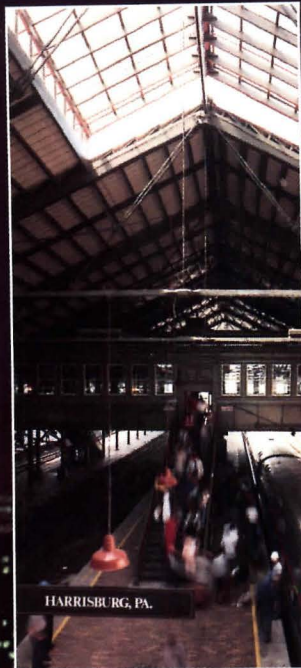
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goal the transformation of the Fiat factory at Turin "into an intelligent (sic) building. Housing telematic cable systems, connected with data banks all over the world, and governed by computers in its visual functions, it will be a place where memory, experience, and intelligence (sic?) are exchanged." That's the project. Allocating new uses to an old shell a book does not make. Twenty-two pages, mostly exterior shots of the original Matte-Trucco rooftop extravaganza, tell us almost nothing about what's going on. I really wonder why it is included at all, as the reader is obliged to deduce either that the project is not yet designed, or that nothing we could ever see is expected to exist.

It goes on at too great a length to rehearse here, carried slowly along by an obfuscatory collection of hopelessly causal photographs and mostly illegible drawings. (No floor plan appears until more than half-way through the book. It is followed by only two others, one largely unreadable, the other largely by Palladio.)

The text and captions, as vehicles for ideas, and as English, fail. It is not too much to say that they descent regularly into broad comedy, ranging from prosaic to pompous to plain goofy double-talk. For example: "...joints are made by using gluing systems reminiscent of those found in nature: an-

other example of how tradition can be reinterpreted through method."

Sides are confused with ends, length with width, and so on. The words and the pictures hardly relate at all. The text usually sets "goals" in functional terms and the illustrations are left to suggest whatever else may be imagined to be said. The result is entirely disingenuous.

These congenital defects of bookmaking diminish whatever interest there surely must be in the more architectural work; not only Beaubourg, but the Menil Collection in Houston, for example, in which the drawings and photographs obscures much of a project that embodies really critical questions—and astounding problems—of style, context, scale, location, material, and use.

How all this is allowed to take place without Piano or Rizzoli taking a hand to change it I fail utterly to comprehend. The publishing apparatus on page four, however, suggests what may be much of the problem as it stands: the book was produced in Piano's Genoa office with at least four people responsible for text, captions, and illustrations, both their selection and composition. Neither Piano nor a translator is mentioned.

There are some bright spots. There is a shopping center in Bercy, bizarre but arresting; a little addition to Palladio's Basilica in

Vicenza, which in New York City would create decades of controversy; a sports center for Ravenna, with some problems meeting the ground; a football stadium in Bari, equipped with a weird and unlikely "historical reference" that we are not allowed to see; an airport for Osaka where a latent expressionism flowers to the detriment of structural logic, but which works nonetheless to make a huge building palatable.

These items, in spite of skimpy text and graphics, make me wish Piano had simply deferred this book or else concentrated on recent projects instead of dilating on the more architecturally pedestrian work, however socially, technologically, or otherwise excellent it may be. With more persuasive documentation he might then have been able to make an interesting book about the practice of architecture. In this day it would take someone of his sort, who combines ability, modesty, and integrity, to pull off such a book. But it would have to be done with great care. So inured are we to architecture publishing as popular entertainment, it's like getting used to too much salt. Nothing longer thrills.

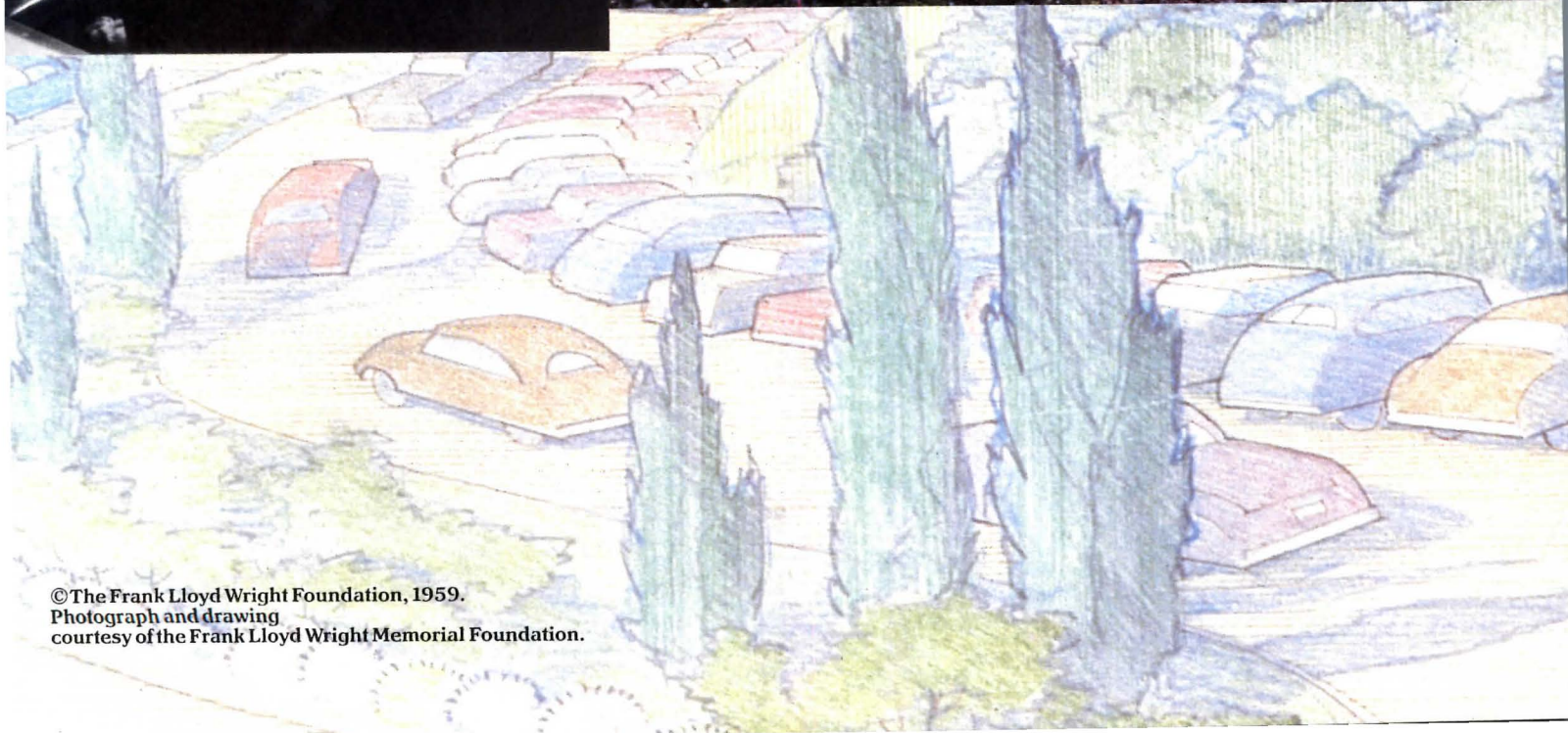
—WILLIAM ELLIS, FAIA

Mr. Ellis practices in New York City.

Books continued on page 228



THERE'S ONLY ONE FRANK LLOYD WRIGHT.



ABOUT THIS ISSUE

AMERICAN AUTHENTICITY

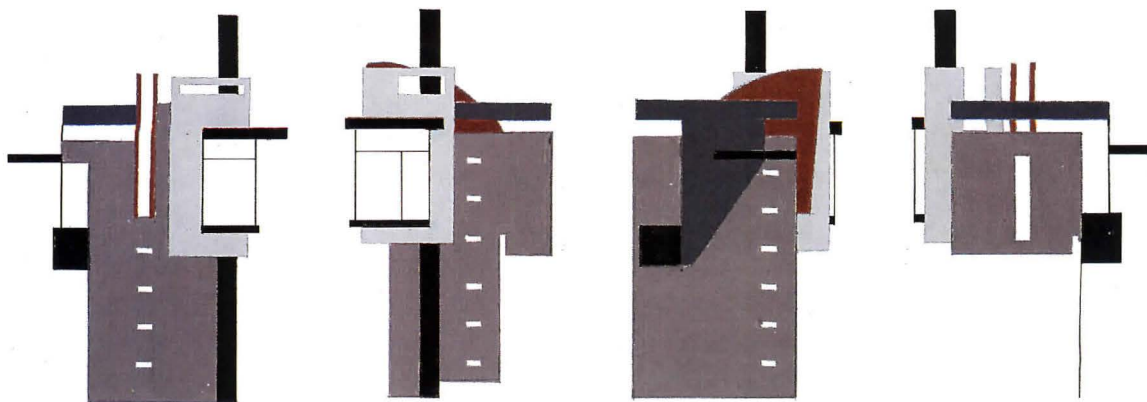
TRADITIONALLY, WE PUBLISH OUR annual issue devoted to the national AIA honor awards and the best American buildings in May. This year, we moved the annual review to March to coincide with the announcement of the 1990 awards on February 22 at Accent on Architecture, an AIA-sponsored celebration held in Washington to raise public awareness about architecture.

This year's 19 honor awards represent a variety of building types and esthetics. They range from a dignified, Neoclassical school and a sleek, prismatic highrise to a house with spiky projections and a one-room essay on planar abstraction. As awards jury chairman Stanley Tigerman points out, "This awards program reflects the essence of American hybridization as architects continue to seek an authentic American architecture." To underscore that American authenticity, we begin the issue with a profile of Fay Jones, the Arkansas architect who was awarded this year's gold medal and an honor award for his Pinecote Pavilion.

Following the AIA awards, a portfolio of four buildings similarly depicts a hybrid approach to architecture. Though stylistically diverse, each of these projects expresses a collage approach to buildings that attempts to encapsulate the richness of the city on a smaller scale. The last part of our design section is devoted to houses, a building type that continues to serve as a laboratory of esthetic experimentation, especially for young designers, such as Rene Davids and Christine Killory. Their studies for the award-winning Observatory House (below) symbolize the spirit of transformation that pervades this issue.

In our Technology & Practice section, we present another side of residential experimentation, a futuristic model home with plug-in componentry. Also featured in this section is a preview of topics related to Lightfair, a new trade show to be held in New York from April 10-12. Articles on the new addition to the Guggenheim Museum, code restrictions in New York City, and new incandescent fixtures illuminate the latest trends in lighting design.

—DEBORAH K. DIETSCH



Studies for Observatory House, Davids Killory, Architects.



SOLID GOLD

AIA's gold medalist is honored for his distinctively American design.

FAY JONES IS AN ARCHITECT MOST OTHER PROFESSIONALS would like to be: a man of principle exercising intellect and intuition through his art to produce an identifiably American architecture. The man behind the buildings is one of the most admired in the profession—humble, warm, and energetic.

The American Institute of Architects recognized Jones's peculiarly American talent when they awarded the Arkansas native their highest honor, the gold medal, last month in Washington, D.C. The award recognizes a fully-rounded architectural legacy—from craftsmanlike houses to transcendent ecclesiastical buildings that are among this century's most admired structures.

As teacher, lecturer, and design awards juror, Jones has unselfishly shared his gift. Born in Pine Bluff, Arkansas, in 1921, his persona is intertwined with his unspoiled native state. He was the first student to enroll in the University of Arkansas's fledgling architecture program in 1946. After receiving a masters degree in architecture from Rice University in 1951, and working with Bruce Goff at the University of Oklahoma, Jones returned to Fayetteville. He has taught there ever since, combining architectural practice and teaching. Honors have fallen like leaves: a mid-career fellowship at the American Academy in Rome (1980); honorary degrees from Kansas State University (1984), and Drury College (1985); the first Association of Collegiate Schools of Architecture Distinguished Professor award in 1985.

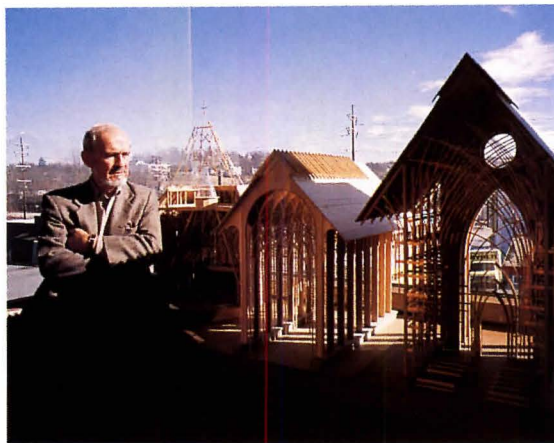
The confidence so apparent in his work is grounded, like his home, in bedrock. Central to that confidence is his marriage to wife Mary Elizabeth ("Gus"). She, like Jones's professional partner Maurice Jennings, has participated in the practice by maintaining accounts for the office and by organizing the increasing correspondence. When Fay and Gus built their home in 1956, the American dream and the American house were synonymous. Jones came to national attention through residential design early in his career.

He won his first AIA/House and Home honor award in the Homes for Better Living program (1961), which was followed by widespread publication and a growing national reputation. Recognition for other building types awaited the completion of Thorncrown Chapel at Eureka Springs, Arkansas, in 1980. An American equivalent of Le Corbusier's Ronchamp Chapel, it welcomes from one to two thousand visitors daily. Jones's most recent honor has been the

announcement of a 1990 AIA honor award for Pinecote Pavilion, near Picayune, Mississippi (facing page).

Jones's quiet but persistent American voice is most audible in his small-scale work, emerging from the rolling landscape of the hills he loves, removed from current fashion. His vision focuses on an individualistic architecture that evolves from nature. Large and small design decisions are interrelated in the pattern of the work as a whole, echoing the philosophy of another gold medalist, Frank

Lloyd Wright. While Jones strongly admires Wright—he and his family spent six months at Taliesin in 1953—the Arkansas architect drank from other wells to move beyond his mentor. From fellow Fayetteville native Edward Durrell Stone, Jones acquired a window to view the larger world; from Bruce Goff, a deeper appreciation of the intuition's power. History, a subject that Jones has taught, is another design determinant. He has embraced the underlying forms and theories of historic and vernacular models to create his own architecture (what he calls the



"generative idea"), never imitating but transforming. Thorncrown Chapel, with its seemingly infinite interior cross-bracing, for example, is a Gothic essay, the lateral buttressing transformed from exterior stone to interior wood. The Pallone residence (1975), on the other hand, is inspired by the Golden Pavilion near Kyoto. Hogegey (1980), a simple gabled house, is influenced by Arkansas barns.

While there is a direct link between Thorncrown and earlier residences, Jones's art moved to a new level of achievement with a simple leap of faith. The ensuing work has maintained a heightened level of inspiration that occasionally rivals the original, such as Cooper Chapel (1988), near Bella Vista, Arkansas, or Pinecote, with the total environment of water, building, and landscape.

The promise of achieving fresh masterworks keeps clients calling Fayetteville from throughout the United States. Jones's practice has grown to embrace residential commissions in Massachusetts, Alabama, Michigan, and Virginia. The architect also has designed a chapel in Fort Worth, Texas, now under construction. His expanding clientele and increased media exposure will offer the architect opportunities to further explore his vision. Jones's challenge for the 1990s will be carefully choosing his commissions as he seeks to simplify his work to emulate the golden purity of the medal. ■

—ROBERT A. IVY, JR.





Watson Residence
Fairfield Bay, Arkansas
Fay Jones + Maurice Jennings Architects

SET IN STONE

SET IN THE DARK GREEN PINES OF FAIRFIELD Bay, Arkansas, the Norman Watson house exhibits the signature high craftsmanship of Fay Jones through “organic” architecture: the site, residence and its details combine into a single piece of joinery, a harmoniously dovetailed design. To describe his understanding of organic architecture, Jones frequently cites master Frank Lloyd Wright, who stated: “The whole is to the part as the part is to the whole.”

A curb-side view of the house presents a seemingly modest Arkansas chalet with a narrow elevation, pitched shake roofs, wood batten siding, and a dominant car port. The visible gable, however, is only the tip of a 6,000-square-foot house that steps down and across a hillside, sheltering both soaring and intimate spaces under its large roof.

The massive, pitched roof of the carport

describes Jones’s affinity for a whole/part relationship in his work. In order to span from high ridge to ground-level low wall, Jones devised a series of sculptural steel brackets to share the load. The carport roof remains pencil thin, its burden transferred to an ornamental, integral structural detail.

The interior space is fluid, filling the entire light-filled first floor, flowing from outdoor terraces and entryway to living room and master bedroom. Only a small service space is enclosed by doors. Building materials carry their weight as they define space. Red oak warms the interiors, which are punctuated and anchored by fieldstone columns and chimney. Wood, glass, metal, and mirrors, in combination with silk fabric and the changing light and color of the Arkansas day, are the chief ornamental elements. Nothing is extraneous.

Pragmatic, customized elements are tailored to the occupants—cabinet doors feature hefty strips of solid red oak along their edges as handles and stiffeners, the master bedroom includes a folding wood privacy screen which can be opened to capture welcome living room sunshine, and a built-in sofa doubles as a cabinet and low wall creating enclosure for the living room.

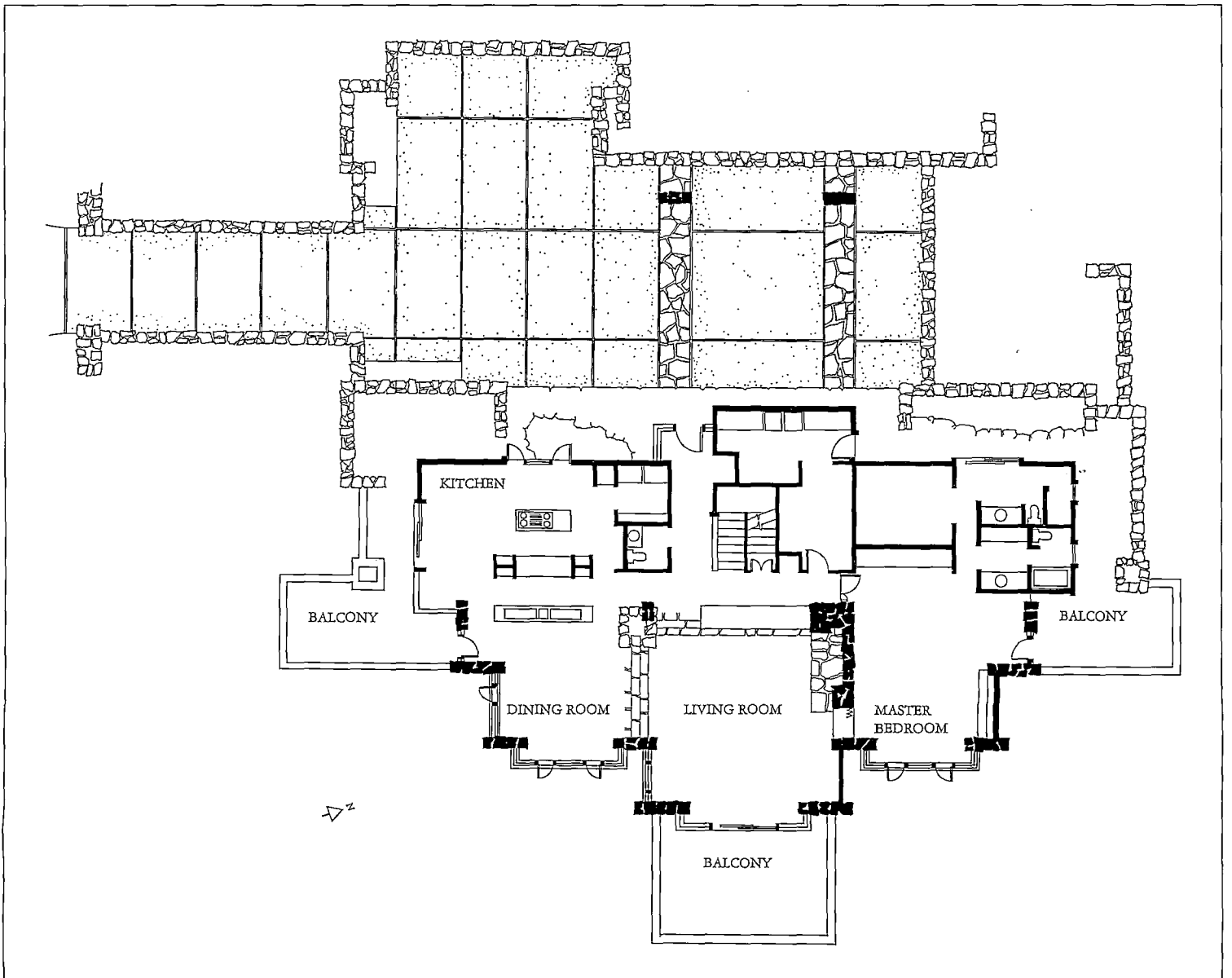
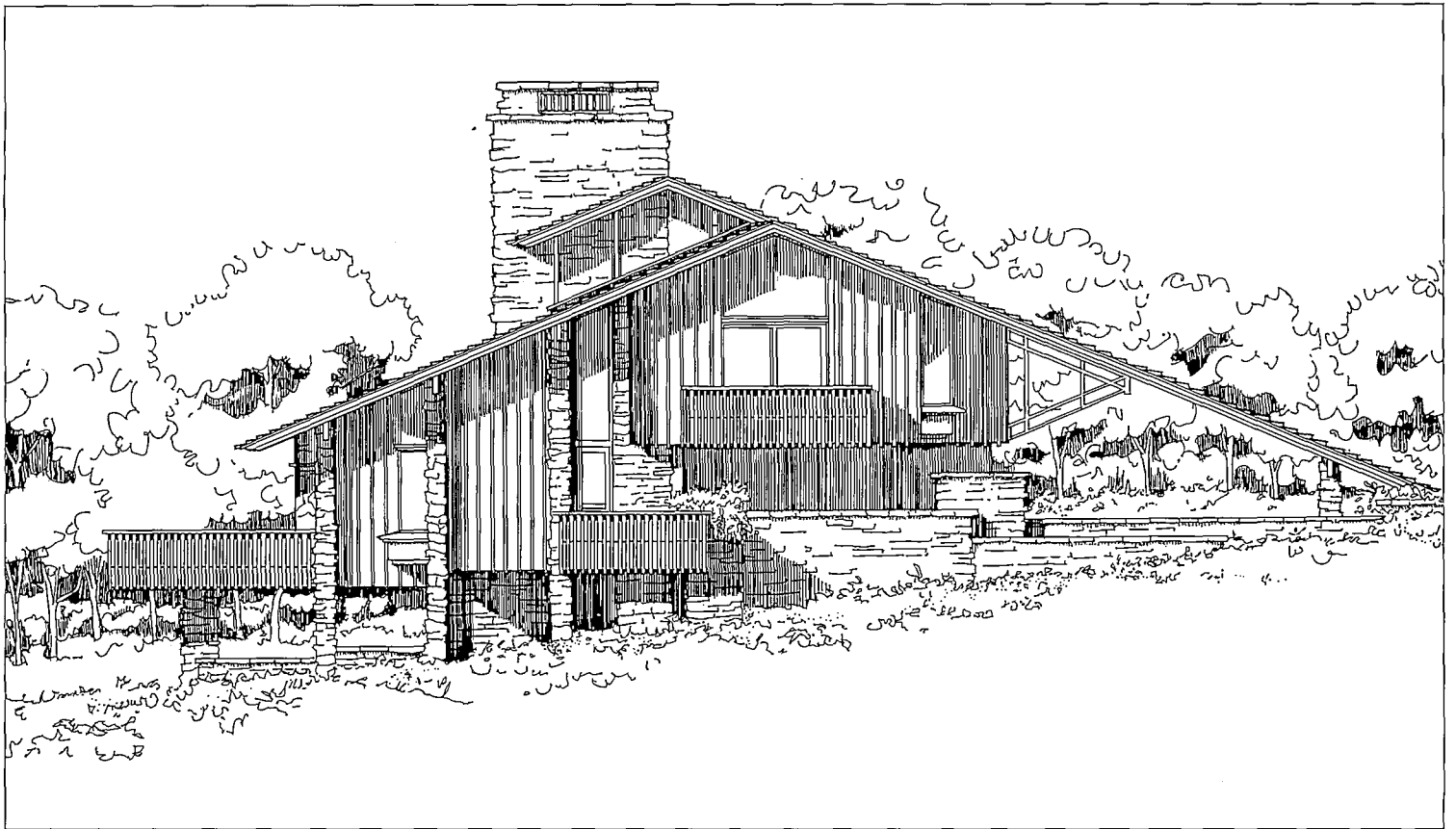
Norman and Thelma Watson cited Jones’s responsiveness, particularly mentioning “the interest in accommodating our wishes” on the part of Maurice Jennings, Jones’s partner. Apt words, for the Watson house is not an imposed solution nor a formal breakthrough. Invisible, but underpinning its spatial sophistication, high craftsmanship, and regional character are design principles as sound as stone.

—R.A.I.



The street elevation of the Watson Residence (above) grows from a hillside above Greer's Ferry Lake in north central Arkansas. An overhanging gable roof shelters the Alpine-like residence while emphasizing the dropping site. The sloped carport roof is supported by ornamental steel brackets (left). Materials bespeak functional roles: stone walls, chimneys, and columns provide support, vertical battens shed water from wood walls, and broad glazing creates continuity of exterior and interior spaces. Patios, decks, and overlooks are sheltered by stone walls and vertical wood balusters. The true size of the three-story, 6,000-square-foot residence in the pines is evident from the park-like south elevation (facing page).

ARCHITECT: Fay Jones + Maurice Jennings Architects, Fayetteville, Arkansas—Fay Jones, principal-in-charge; Maurice Jennings, project architect; David McKee, Greg Lickman, Larry Fox, George Goudarzi, John Womack, Leroy Scharfenberg, design team
 GENERAL CONTRACTOR: Hilton Roberson
 PHOTOGRAPHER: Timothy Hursley/The Arkansas Office





Axial symmetry of the plan underscores flowing spatial sequences, which terminate in exterior decks or patios (facing page). The dominant characteristic of the elevation drawings are carport roof, stone chimney, and batted vertical siding (facing page, top). Interiors of the Watson house show high craftsmanship akin to the Greene brothers, with soaring spaces and light (above and right). Furniture is primarily hand-crafted red oak, including dining table and chairs (top).



**Worship Center at
Thorncrown Chapel
Eureka Springs, Arkansas
Fay Jones + Maurice Jennings Architects**

LEAP OF FAITH

THORNCROWN CHAPEL IS A MAGNET for pilgrims throughout the world who travel to Eureka Springs, Arkansas, to wonder and to commune. However, when requests for wedding and worship services threatened to overwhelm the diminutive building, the chapel's governing board called for relief. The client asked Fay Jones for a new sanctuary, more like a traditional church.

The architect considered the problem, surveyed the potential building sites on the steeply sloping Ozark hillside, and placed a chapel in the air. The small structure, a needle-spined "church in the wildwood," stands on its sloping hillside site at treetop level—a very different solution from its woodland counterpart. The most striking difference between the two are their walls: transparent glazing surrounds the Thorncrown Chapel; wood siding surrounds the Worship Center. While the chapel rests on stone walls and evanesces into the treetops, the worship center floats solidly above the ground, connected to grade by a bridge.

Like the Thorncrown Chapel, the worship center contains one room. Like its relative, the center's altar is nature, here a large mul-

lioned tripartite window with a view to the blue hills across a chasm. Twice the width of the original, the building's solid walls surround and protect the occupants, focusing all eyes on the services at the foot of the sloping 300-seat auditorium and the trees beyond.

While walls of the center are constructed of simple gypsum board with oak trim, they are graced by the rhythm of customized wood lanterns similar to those found up the hill. The chief ornamental element is a structural composition of scissored roof trusses, whose crossbracing and pegged vertical members create the depth and intricacy of stalactites. Surmounted by a skylight along the roof's ridge, the angular structural pendentives lighten at the room's center, gaining heft as they narrow to their perches along the walls.

The worship center at Thorncrown is a more rational, less intuitive building than its neighbor. However, its profile stands strongly above the treeline, in harmony with its site and independent from the tree-shrouded chapel. Full of light and grace, the worship center allows Thorncrown Chapel to be free.

—R.A.I.

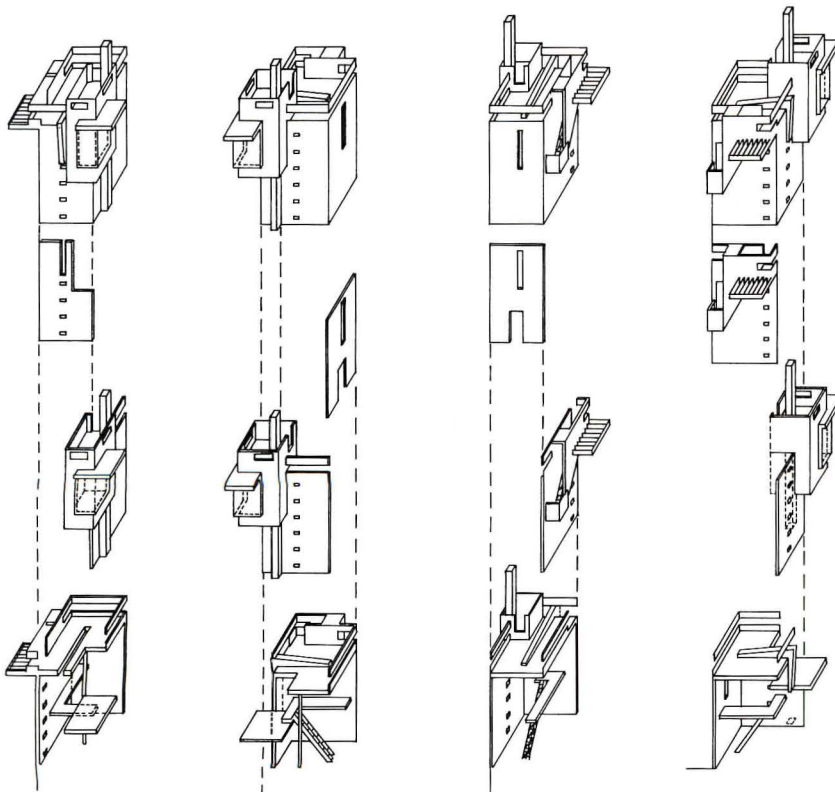
Scissor trusses enliven the 48-foot-wide Worship Center at Thorncrown, near Eureka Springs, Arkansas (above). The broad interior with its sloping carpeted floor contrasts with Thorncrown Chapel and is used for weddings and worship services. Cool colors are warmed by high delineating skylight and windows. The new church seems to float above the treeline (facing page), related to the neighboring chapel, yet identifiably different. Its appearance is solid, more like a traditional church with high entry, wood walls, cupola, and wood-battened steeple (inset, facing page).

ARCHITECT: Fay Jones + Maurice Jennings Architects, Fayetteville, Arkansas—Fay Jones, principal-in-charge; Maurice Jennings, project architect; David McKee, George Goudarzi, Leroy Scharfenberg, Larry Fox, design team
CONSULTANT: Jerry Wall (structural)
GENERAL CONTRACTOR: Bill Carver, Ron Latta, David Hyatt
PHOTOGRAPHER: Timothy Hursley/
The Arkansas Office





Observatory House is in fact a small tower (facing page) added to an existing one-story residence (right in photo above). Davids Killory detonated Modernist geometries (below) to explore the three-dimensional possibilities of the extruded 13-foot-by-11-foot tower (above). Each facade features different plastic configurations relating to the context without and the program within. Elements of assemblage combine to create a figure reminiscent of synthetic Cubism.



Observatory House
San Diego, California
Davids Killory, Architects

IN THEIR FIRST BUILT PROJECT, RENE Davids and Christine Killory integrated a tower as the most potent element in the reworking of their own San Diego home. Measuring a mere 13 feet by 11 feet, it functions as a den of intellectual research and leisure, providing a gathering place for the couple's large collection of books and a series of venues in which to enjoy them.

The house lies within a neighborhood east of lush Balboa Park, marked by wide streets, sporadic palm trees, and low-strung residences designed in an assortment of Craftsman styles. The Observatory House has been intelligently grafted by Davids and Killory, who drew on the formal manipulations of the surrounding pre-war houses and, in particular, by the way in which their corners are celebrated through bay windows, wrapping porches, and climbing turrets.

Looping down San Marcos Street, which Killory playfully calls "the scenic route," motorists arrive on axis at this small gray tower with its cantilevered woodwork. Hugging the soft crosscurve of Kalmia Street, the Observatory House punctuates the suburban silhouette with a thin red shaft and a projecting box pristinely clad in black marble. Approached across a patch of lawn, a bright, copper-colored wall with punched openings screens the entrance facade and leads one directly into the main living room. A wooden floor flows directly into the base of the tower. The plan's extrusion is instantly revealed though more than twenty feet of space. Books are indeed the foundations of this project as the library forms a garland for the reader and ballast for the vertical thrust of the interior. The walls and shelves are painted throughout in pale gray, the grid of the bookshelves framing an ascending ladder of horizontal slots, which cast changing globules of light.

One ascends symmetrically in the space. Metal stairs with staggered threads allow for a minimum of comfort as one climbs toward an equally thin and axially-disposed roof-light. Splicing the ceiling and immediate elevation, this prismatic wafer pushes out toward the street and up against the sky.

Again to the left, a red metal column holds up a wooden cabin. The connection between column and support is articulated with the exposure of four diagonally piercing bolts. What at first reminds one of a tree house is on the inside more like a lifeguard





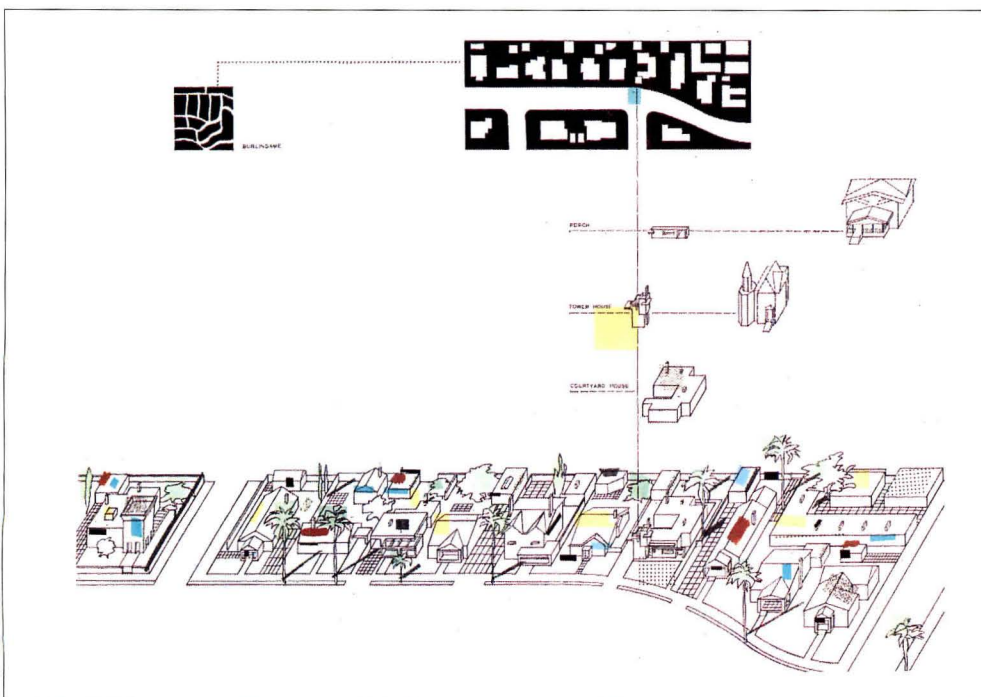
station as one is presented with two projecting facades of glass. This cabochon, which is the protrusion of marble seen from the street, acts both as private study and voyeuristic balcony onto the lawns below. When lit, it transforms into a communal lantern, which one looks both from and at.

Back along a nautical grille, with a rising wall of books to one side and the chasm of space to the other, one exits though a side door onto a landing cantilevered out over the driveway. From there, external stairs climb up to the roof of the tower. Bisected by the emerging planes of aluminum and glass, this deck is a memory of the library floor beneath.

Finally, above the carrel, Davids points out the highlights of the wraparound panoramic view. Here the Spanish notion of "mirador" is realized. Out over the rooftops, the tree canopy and monuments of the park, the towers of downtown and boats in the bay, and even the mountains of Mexico, are all visible. This upper terrace is the terminus and consummation of the project. It confirms the sense of "observatory," not as some complicated, mechanical contraption but simply as platform from which to observe. As a final connecting device, the red skewer that rises through and above the tower contains a miniature dumbwaiter. Relaying bibliophilic refreshments for mind and body, this charming instrument reiterates a sense of being within a machine for truly living.

Imbued with what jury chairman Stanley Tigerman has referred to as "the essence of American hybridization," the Observatory House is a reinterpretation of typological devices. It is exclamatory in honest pursuit of pleasure and re-establishes a bond between inhabitant and passerby, an interactive spectacle that animates an increasingly lost sense of community.

—RAYMUND RYAN



Raymund Ryan is a board member of L.A. Architect and contributes to Blueprint and the R.I.B.A. Journal from Los Angeles.

Generically American, the community near San Diego's Balboa Park contains modestly scaled examples of Queen Anne, Prairie, and Mission Revival houses (left). The massing of Observatory House (above left) shares a verticality with the various pivoting elements and additions of its older neighbors and complements the horizontality of the original structures. The cave-like security of the interior (facing page, bottom) evolves into the sweep of the viewing platforms above (facing page, top). Protruding forms, including a staircase (facing page, top right), are set orthogonally and seemingly held by centrifugal force.





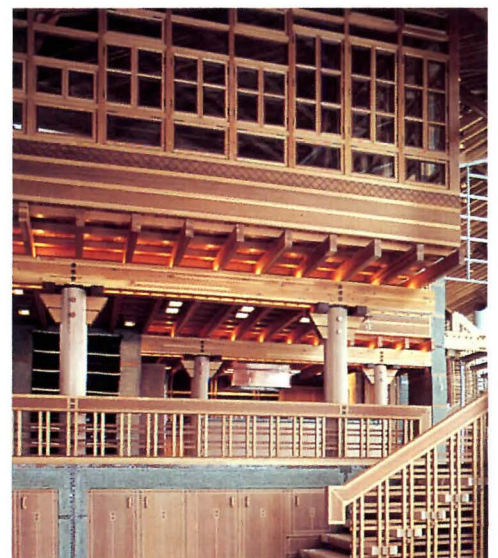
ANNE BYSTROM PHOTOS

Sun Valley House
Sun Valley, Idaho
Arne Bystrom Architects

THE JURY CALLED THIS HOUSE A WAY station between the past and the future, "proof that technology could have a soul." In the tradition of mountain houses, the bi-level residence for an extended family is articulated with deep overhangs, layered beams, and bracketed column supports. The roof is shaped to repel snow and direct it away from usable outdoor spaces, and berms on the east and north provide privacy from the road and protection from winter winds. The architects integrated passive and active solar strategies to save an estimated 90 percent of heating and cooling costs. Their systems include evacuated tube collectors, radiant floor heating, evaporative pond cooling, computer controlled ventilation and shading, argon-filled high performance glazing, and rock-bed thermal storage.

The house is divided into three zones. The first contains a garage, studio, and storage area; the second houses four bedroom suites adjoining a solar gallery, which opens onto a sunken pool and garden; the third comprises the nuclear family's quarters. The building's very advanced solar technology is integrated with "the warm tradition of wood structuralism," says the architect. The wood interiors are flooded with natural light. "Every joint, beam, and mullion has been carefully crafted with lavish detail rarely found today," noted the jury.

—ANDREA OPPENHEIMER DEAN



With its glazed, many-faceted, south-facing elevation (top), the vacation house designed by Arne Bystrom includes the latest advances in passive and active solar energy systems. It combines sophisticated technology with such traditional mountain house forms as deep overhangs and bracketed column supports (above left), plus layered beams and lavish wood carving (above right).



Residential

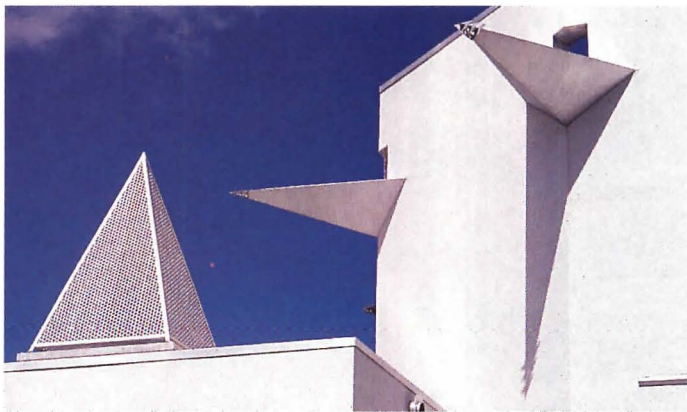
House at Tanglewood West Stockbridge, Massachusetts Schwartz/Silver Architects

SCHWARTZ/SILVER'S RETREAT FOR A violinist in the Berkshire Mountains of Massachusetts communicates mixed and contradictory messages. The absence of such scale-giving elements as a traditional front door creates ambiguity. The building's exterior recalls both a feudal watch tower and a futuristic fortress, while its bold aluminum detailing looks aggressive, its white stucco walls stark. Inside, on the other hand, the rooms are filled with light, their wood floors and ceilings creating spaces that are "warm and wonderfully tranquil," said the jury.

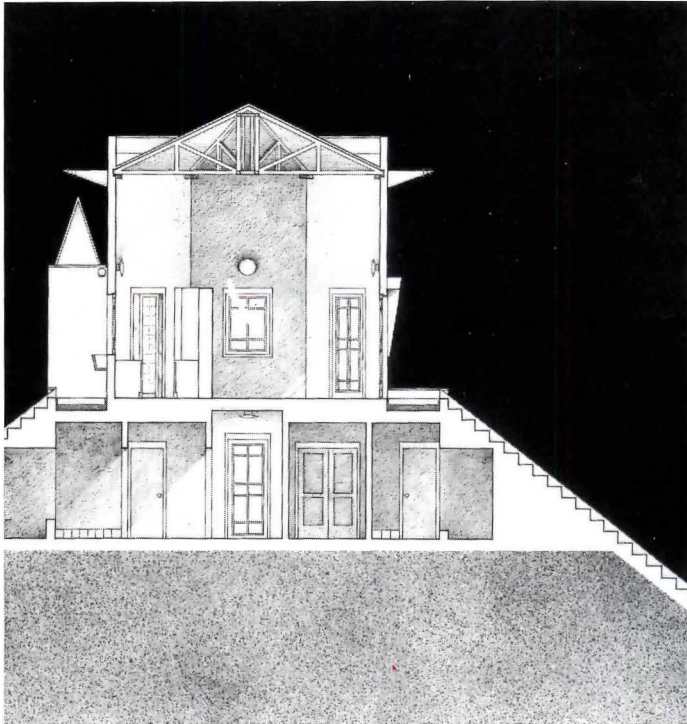
The little building (1,200 square feet of usable space plus 400 square feet of terraces) was intended as a private music conservatory. In fact, the jury viewed the watch tower as "guarding the serenity of the music conservatory inside from the distractions of the outside world." An octagonal, 20-foot-high music room with wide terraces, unto which activities can spill in good weather, sits above the building's square base, which contains sleeping, living and dining spaces, plus a kitchen that opens to a small garden.

A long, narrow exterior stairway at the west serves as a formal entrance to the music room, while a short east-facing, casual stair leads into the house. Inside, the living areas and the music room are joined by a sky-lighted stair.

—A.O.D.



The retreat designed by Schwartz/Silver focuses on an octagonal music room (bottom left). It is approached from a long, narrow, exterior stair, sitting atop a rectangle containing the living areas (section). Dangerous-looking aluminum detailing is appended to the fortress-like, stucco exterior (top and left).



CHRISTOPHER LITTLE PHOTOS

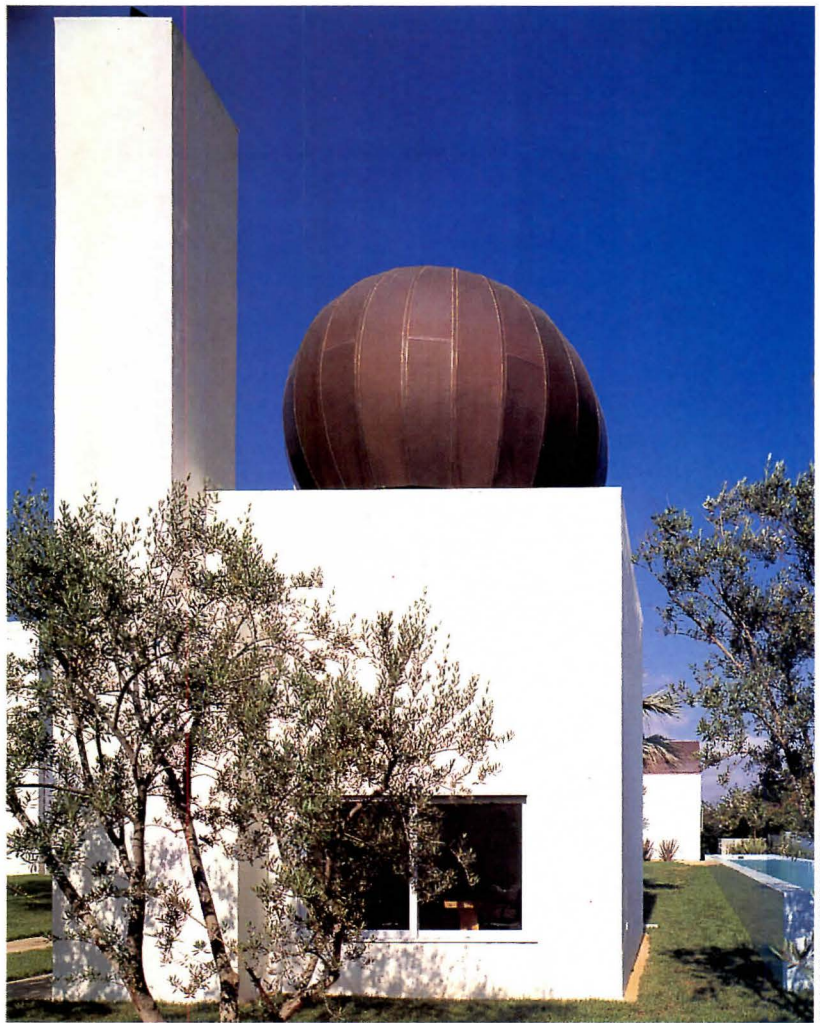


Residential

Schnabel House
Los Angeles, California
Frank Gehry & Associates, Architects

"BOLD AND IDIOSYNCRATIC, THIS LOS Angeles house is the essence of originality," opined the jury. The 5,700-square-foot residence is villagelike in accommodating different functions in distinct structures having different shapes and surface treatments. An upper garden level contains a skylighted guest apartment, a lap pool, and a studio-bedroom. The lower level, configured around a shallow lake, houses the more private spaces, with the master bedroom dramatically aground in a lake. The focal element of the complex, a cruciform-shaped volume comprising the entry, living room, dining room, and library, culminates in a central, three-story skylighted space and is sheathed and roofed in lead-coated copper panels. Attached to this central element is a two-story stucco volume containing a double-height, skylighted family room, a kitchen, study, and two upstairs bedrooms.

—A.O.D

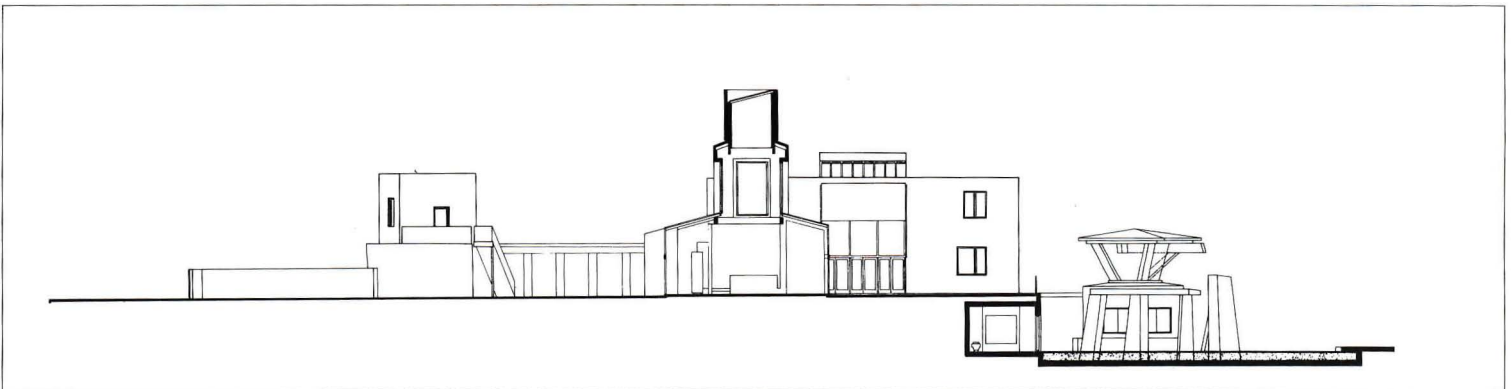


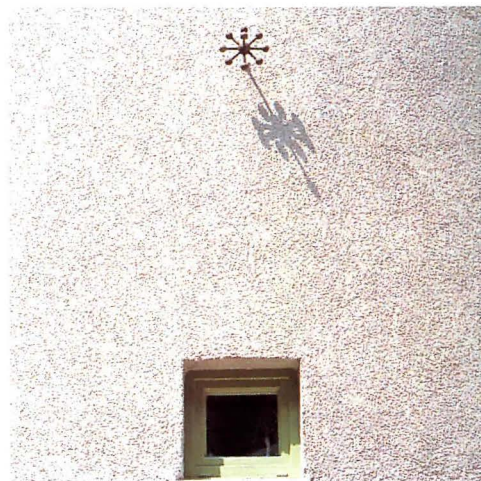
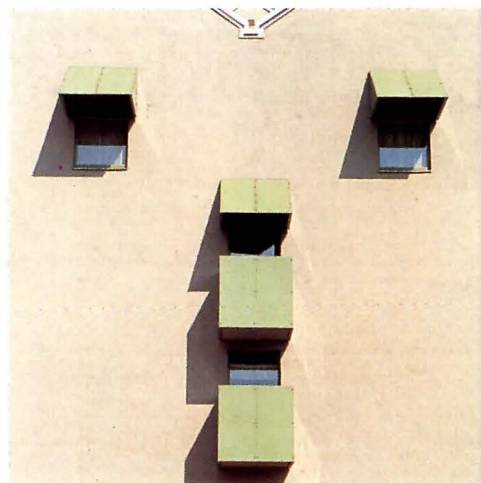
GRANT MUDFORD PHOTOS





The centerpiece of Gehry's composition of variously sheathed, distinct shapes is a copper-clad, three-story structure (facing page, bottom). It contains the entry, library, dining room (left), and a three-story, skylighted living room (far left). Adjoining it is a stucco, skylighted, copper-domed guest apartment with two copper entry columns (facing page, top). The idiosyncratic composition is best seen from the lower, more private side of the site, which is organized around an artificial lake (above). As though marooned in the lake, the master bedroom is capped by a complex clerestory element (right in photo above), clad in lead-coated copper, and surrounded by shade-giving copper clad forms.





HELENE BINET PHOTOS



Details of Hejduk's apartments in West Berlin's Southern Friedrichstadt district reveal sun-filled balconies and atriums at top level (above). Metal balconies and awnings (top right) create shadow plays on the virtually flat elevations of the blocks. Bronze stars decorating the tower (middle right) represent a celestial gathering of eight planets around Mother Earth. The tower and apartment wings in context (top) demonstrate a shift in scale that allows the tower to appear taller than its 14 stories. Hejduk's drawing of the tower (right) shows two smaller structures intended for the garden that are yet to be built.

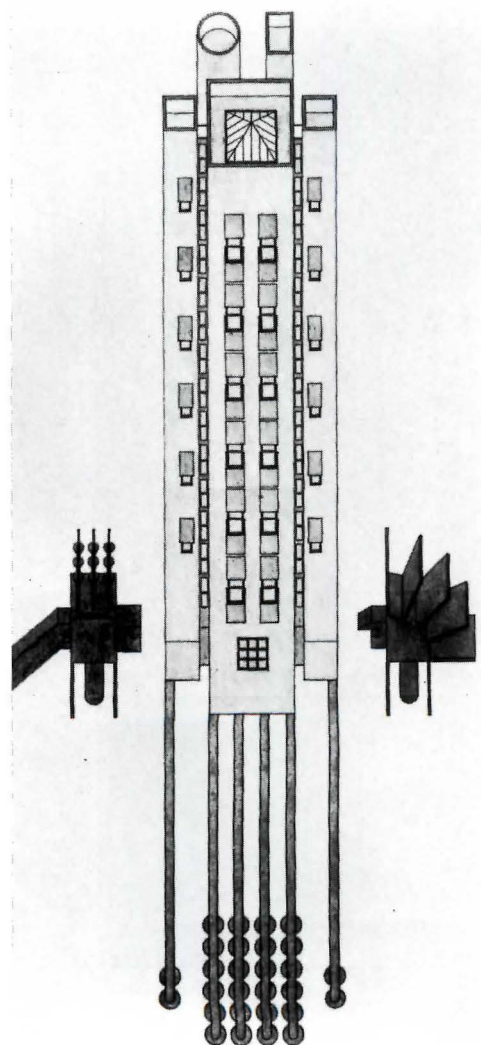
**Residential blocks and tower
West Berlin, Germany
John Hejduk, Architect**

"SINCE 1978, I HAVE STUDIED THE CITY of Berlin," says John Hejduk, FAIA, in describing his social housing project for the International Building Exposition in Berlin. "I wanted to search out certain essences and capture a certain aura. I wanted to mesh aspects of Berlin with that of New York."

The result is a 55-apartment complex not far from what is left of the Berlin Wall, shocking in its simplicity and daring. Two five-story wings with inverted gabled roofs extend from an existing apartment building to enclose a garden. At the courtyard's center rises a 14-story tower containing seven duplex apartments. The buildings are rendered in stucco with metal awnings and balconies; inside the apartments are loggias; top-level units embrace open-air atriums. The project was completed for \$125 per square foot.

Of this project the awards jury commented: "The three buildings make a powerful statement and create a strong sense of place," demonstrating that "low cost does not mean low on amenities or design."

—MICHAEL J. CROSBIE





Residential

Sea Ranch Employee Housing Sea Ranch, California William Turnbull Associates, Architects

TWENTY YEARS AFTER THE SEA RANCH project was built on the Northern California coast, one of its original architects, William Turnbull, FAIA, won a competition to build 15 units of low-income housing for the enclave's employees. The result exhibits the same sensitivity to landscape, vernacular building form, materials, and siting as the first condominiums.

These small houses with open floor plans, ranging in size from 700 to 950 square feet, were constructed for \$50 per square foot. Post and beam, single-wall construction allows for natural finishes inside and out, and for structural flourishes such as exposed scissor trusses. Turnbull placed the houses at a boundary of their small lots, allowing meadows with flowering crab apple trees to spread out before them.

The awards jury praised the scheme for its "skillful siting and seamless landscaping," which create "a sense of inevitability—these houses and no others belong here. Humble, yet self assured, this project lends a quiet dignity to the spectrum of social housing."

—M.J.C.



CHRISTOPHER NOLL PHOTOS

Site plan (right) indicates layout of 45 housing units, 15 of which have been built in concentrations west of all three cul-de-sacs. House forms appear very simple (above and top), reminiscent of the profiles of barns found in the region. Floor plans of various sizes are accommodated in either single-story structures or two-story long houses. Architect William Turnbull stressed the integration of the Sea Ranch houses into the landscape (above right). With sensitivity to the landscape, hedgerows of redwood trees are used to blend with the background forest, yet are noticeable by their regular planting along driveways, intended to screen automobiles (site plan).



Westchester House
North Salem, New York
Richard Meier & Partners, Architects

THIS COOL AND ELEGANT, PRECISE BALANCE of pristine forms is vintage Richard Meier. It is also the architect's first residential experiment with adding stone and masonry to his usual vocabulary of white metal cladding. As such, it is a prologue to his design of the Getty Museum.

The house is perched on a rural, sloping site overlooking rolling hills interlaced with fieldstone walls. The approach is from the south, the entry elevation resembling a mono tone Mondrian composition, whose centerpiece is an abstracted keystone—somewhat incongruous, as even Meier agrees, for such a Modern composition.

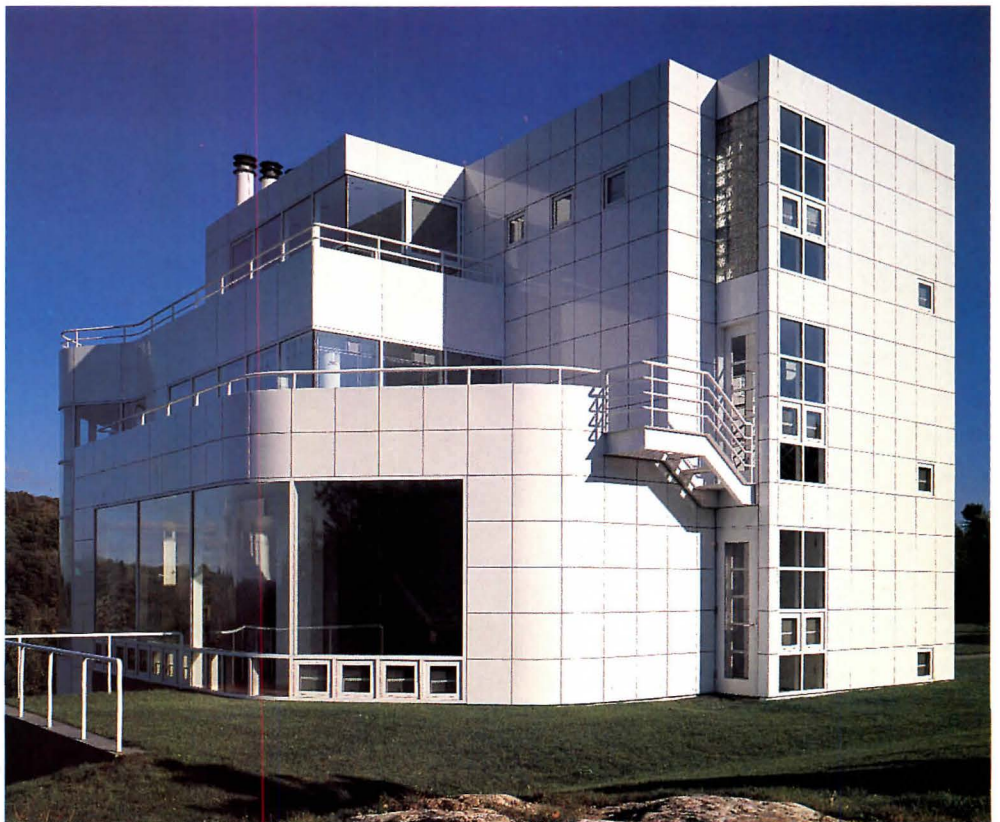
The house, garage, and pool are ordered by the east/west axis that bisects the house, separating public from private spaces. The bedrooms, baths, and kitchen are contained in a three-story, masonry volume which "relates in scale, color, and texture to the fieldstone walls," says the architect. In contrast to the rectilinear, self-contained private area, the public spaces are shaped by a flowing, curved membrane of glass and metal panels that face north and provide splendid views, especially from the triple-height living and dining spaces. The public spaces extend into the landscape and onto terraces.

The jury called Meier's Westchester house a "study in contradiction: hard-edged squares and rectangles collide with soft curvaceous forms; man-made materials such as porcelain enameled steel panels, glass block, and concrete contrast with the pastoral setting; natural light gently envelopes the interior spaces while outside light bounces off the angular forms casting dazzling shadows."

—A.O.D.

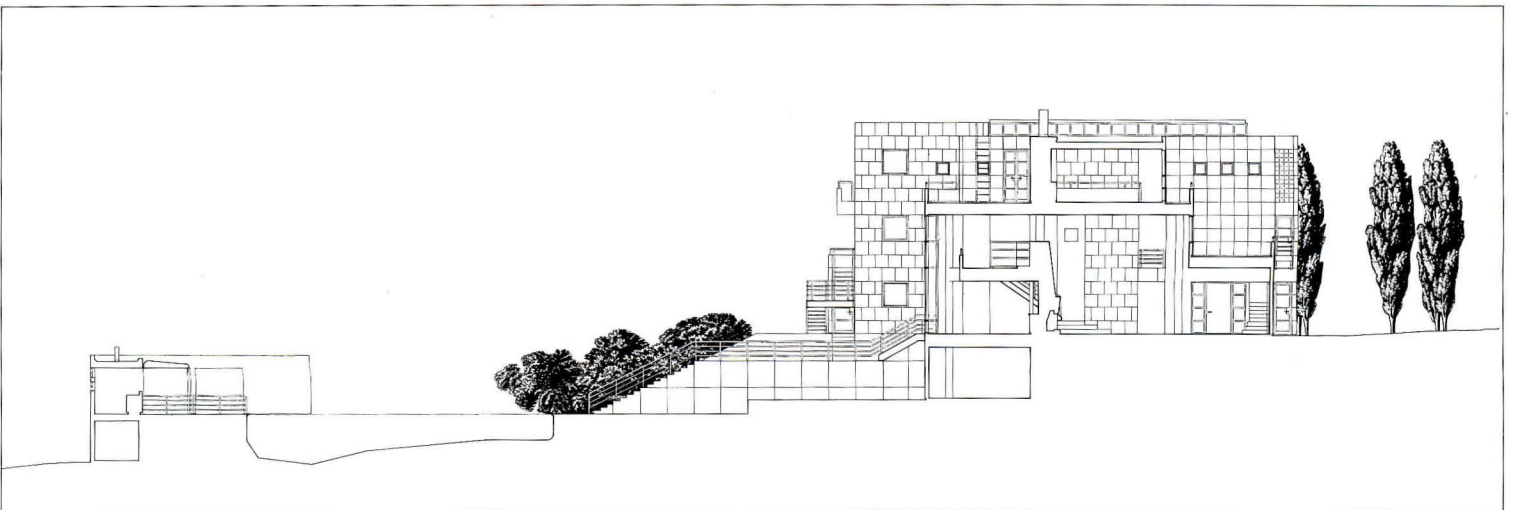
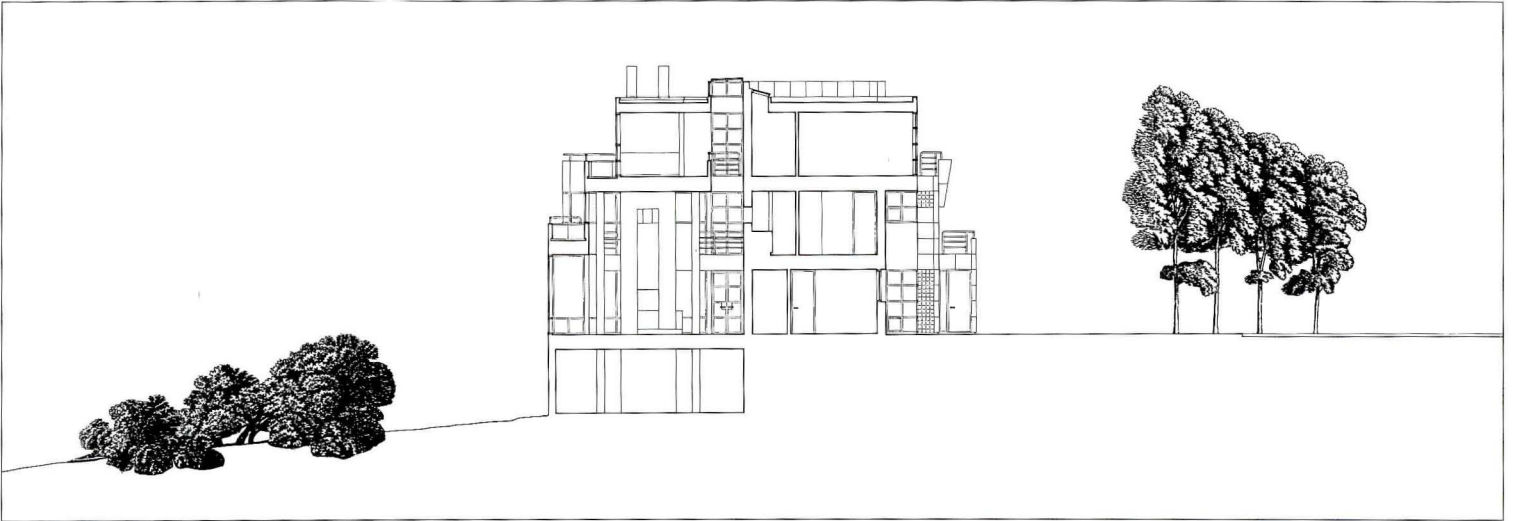
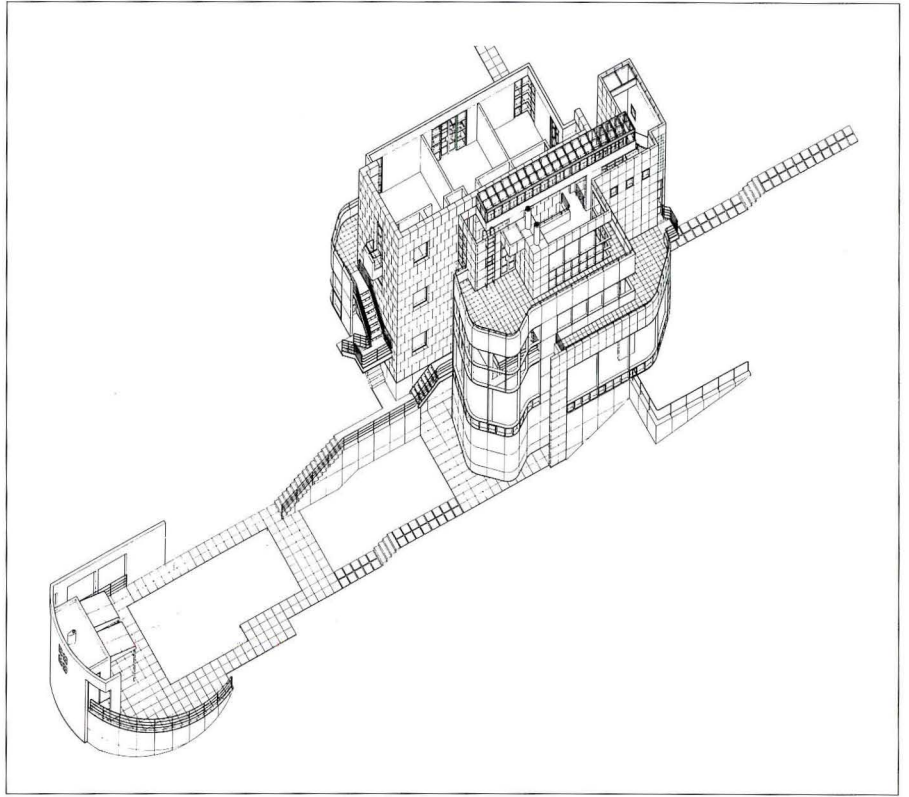


WOLFGANG HOYT © ESTO PHOTOS



Meier's house has four very different elevations. Behind the south-facing entry facade with its odd keystone (top), the more private and utilitarian spaces are contained in a thick, walled masonry volume (sections, facing page). The bedrooms and utility spaces are linked by an east-west skylighted spine to the public areas on the north (axonometric and top section, facing page), which are enclosed by a long, curved glass and metal facade (above). From the east facade (left), a long stair leads from the skylighted gallery down to the swimming pool (axonometric). The living room clerestory (facing page) is based on a Frank Lloyd Wright design.





**First Interstate Bank Tower at Fountain Place
Dallas, Texas**
Pei Cobb Freed & Partners, Architects

"WITH THIS PROJECT, THE ARCHITECT distorts the typical box-like office building, creating a fascinating piece of urban sculpture," the AIA honor awards jury said of this familiar Dallas icon. "The glass cladding holds up a mirror to the rest of the Dallas skyline, reinterpreting in its reflection the shape and feel of the city, clouds, and sky."

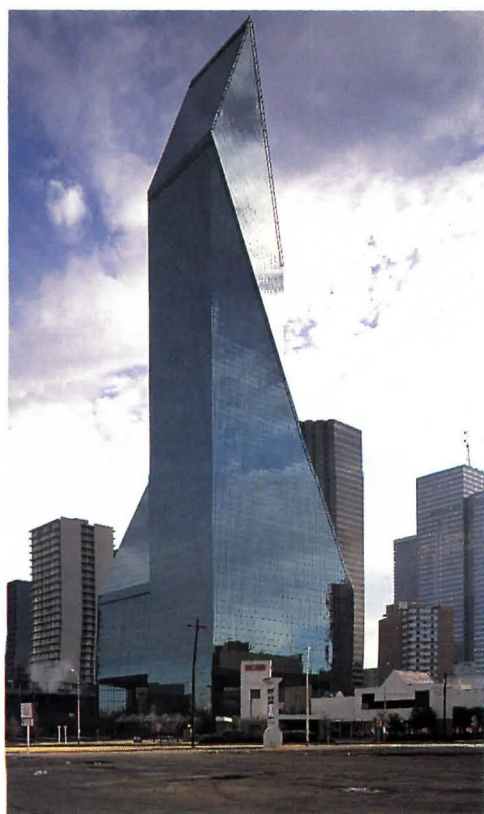
The glass-prism form of the bank tower follows the diagonal of a double square in both plan and section. The resulting skyscraper contains office floors, each averaging 21,000 square feet. Floor-high vierendeel girders and a large-scale perimeter truss system allow column-free interior space. The 60-story, 1.3-million-square-foot office tower, with its surrounding water garden, is the first phase of development on this site. A second tower is planned, identical to the first, but rotated 90 degrees.

The tower complies with ASHRAE 90-75 energy requirements. The curtain wall consists of tinted vision glass and reflective heat-treated spandrel glass with insulation, in an aluminum frame. A chilled-water system stores water after hours, when power rates are lower. Heat recovered from the refrigeration system warms the building at night.

—DOUGLAS E. GORDON



WES THOMPSON



RICHARD PAYNE



RICHARD PAYNE

"A chameleon of a skyscraper, the building's shape changes depending on the angle from which it is viewed," notes the honor awards jury of First Interstate (above and far left). Vision glass makes up less than 40 percent of the wall surface. From the tower's base to 60 feet above the street, half the building volume is carved away, providing a 1.5 acre gathering place with a water garden and bald cypress trees (left).



Corporate

Clos Pegase Winery Calistoga, California Michael Graves, Architect

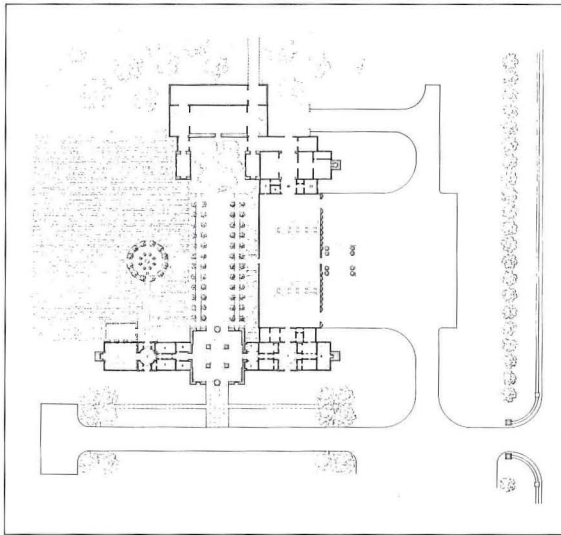
"MONUMENTAL IN SCALE YET WARM IN feeling, the Clos Pegase Winery forcefully asserts its place in the Napa Valley," points out the AIA awards jury. "The rows of spare columns, large open porches, and the procession up the hill from parking lot to winery recall the splendor of Greek architecture."

The winery takes both its name and its original thematic organization from the myth of Pegasus, inspired by an Odilon Redon painting in the owner's collection. The client's design competition required an artist/architect collaboration. Graves collaborated with painter Edward Schmidt. Wine-making functions take place in the east wing. Wine storage is located in caves dug into the hillside. The west wing contains offices and public winetasting rooms. Although different in use, these two parts are unified in the imagery of the street facade, which projects the dual aspects of winemaking: pleasure and process.

—D.E.G.



OTTO BAITZ



Fields separate the winery from an access road. The public portico (above and bottom left) faces south. A second grand entrance, facing east, welcomes yearly grape deliveries to the crush pad and fermentation shed beyond (below left). The northeast corner (below right) comprises an element of symmetry in two planes—the public facade and the delivery entrance (plan, left). The fermentation shed encloses the garden's east side (bottom right).



GRANT MUDFORD PHOTOS



Corporate

Mexx International Headquarters Voorschoten, The Netherlands Robert A.M. Stern Architects

"THIS SENSITIVE AND SKILLFUL ADDITION to a renovated 19th-century Dutch silver factory incorporates eccentric, contemporary forms without disturbing the ordered symmetry of the original building," the AIA awards jury says of the Mexx, a clothing retailer, headquarters.

"Tucked away behind the older building," the jury continues, "the new structure...includes a circular, glass-clad restaurant and spectacular atrium with a curved glass curtain wall. A small reflecting pool is the esthetic glue cementing the old and new structures together. A feat of architectural acrobatics, the new addition looks as though it evolved naturally."

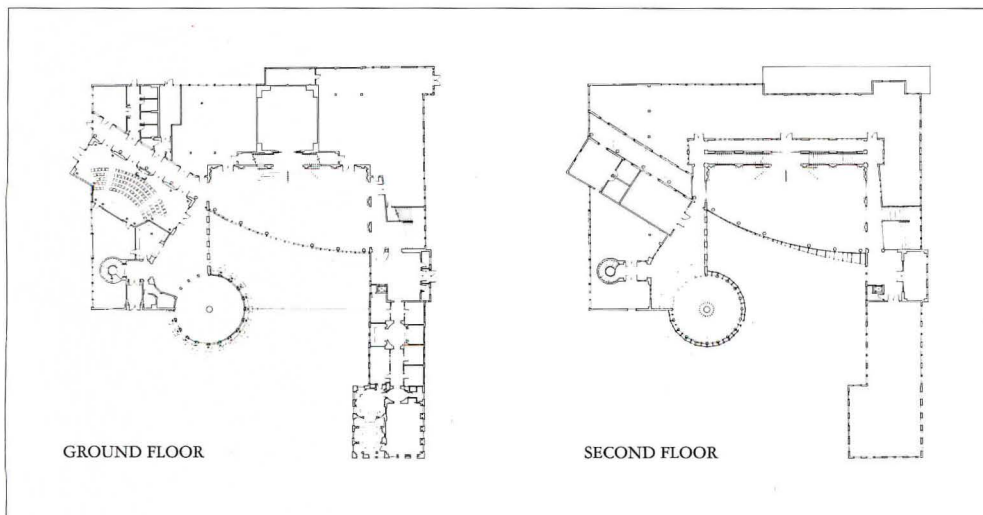
Set in a suburb of The Hague, the Mexx headquarters reflects the dichotomy of a tightly organized international corporation that produces colorful, youth-oriented clothing, the architect states. The building accommodates the informal, village-like social organization of the company.

The design consists of an existing 25,000-square-foot, 19th-century silver factory renovated to accommodate corporate offices on the ground floor and fashion design studios in what were the second-floor silversmiths' studios. Behind the existing structure, a new, 25,000-square-foot addition surrounds three sides of a double-height, south-facing atrium. A reflecting pool provides animated daylighting to the atrium and a restaurant for employees. The atrium floor serves as a dark terrazzo heat sink, and the outward-tilted glass atrium wall blocks high summer sun while allowing low winter sun to enter.

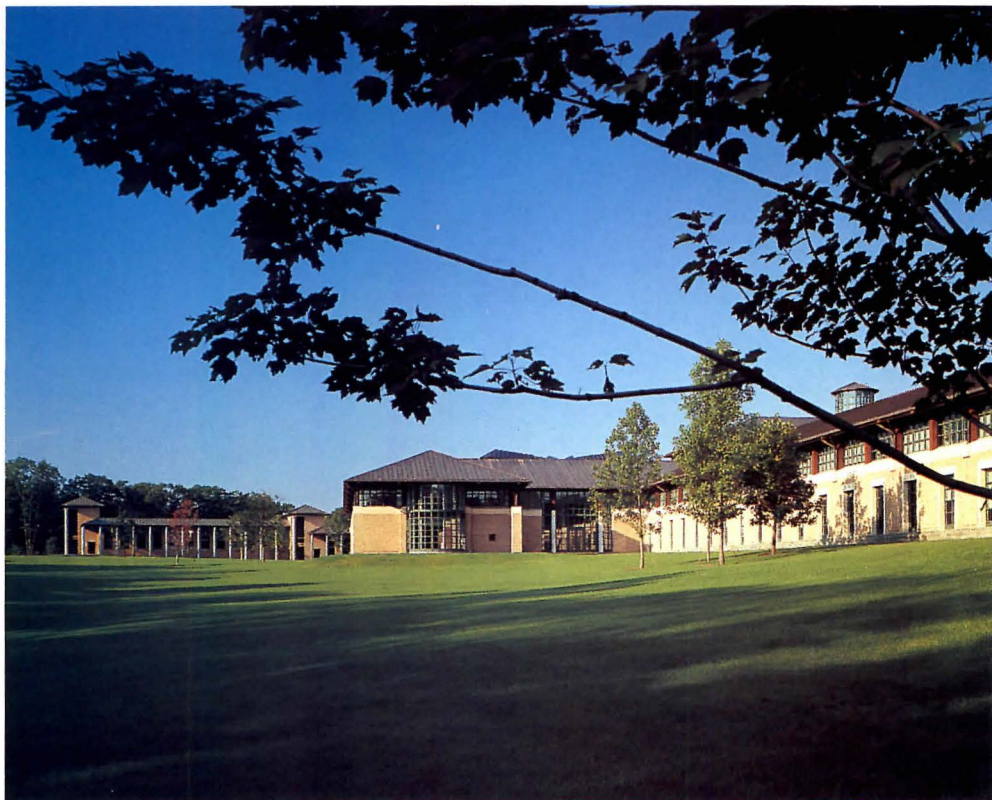
—D.E.G.



PETER ARON / ESTO PHOTOS



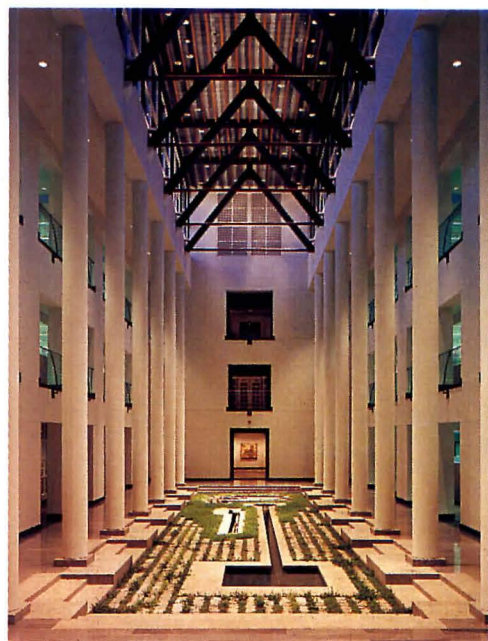
Stern's design strategy creates a retrospective history for the building (top), from the stately Baroque Classicism of the original factory (middle, above) to the freewheeling shapes of the addition and its idiosyncratic Dutch Modernist spirit. The employees' restaurant, located in a drumlike projection (above left), focuses on a central column (above right). The silver factory forms the southeast facade of the complex (plan, left).



To get permit approval in a development-sensitive area, the building had to blend with its heavily wooded site (above). Freestanding columns and overhangs (right) integrate the building's edges with its surroundings. Fingerlike extensions maximize views to the outside (plan). Clerestories and a glazed cupola bring daylight inside (bottom right). The landscaped atrium resembles a sculpted archeological dig (top right).



STEVE ROSENTHAL PHOTOS



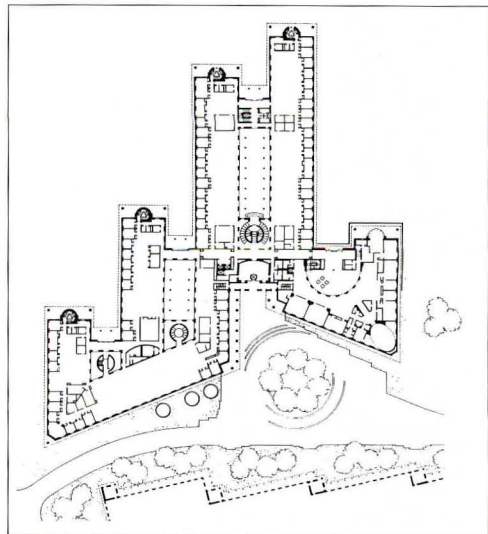
Becton Dickinson and Company
Corporate Headquarters
Franklin Lakes, New Jersey
Kallmann McKinnell & Wood Architects

"BEAUTIFULLY DETAILED AND CAREFULLY crafted, the Becton Dickinson Corporate Headquarters in New Jersey is thoroughly professional, yet comfortable and inviting," the honor awards jury states. "The low-rise brick buildings set on 130 acres of heavily wooded property resemble more a university campus than an international corporate center."

Wherever possible, the architect brought natural light into spaces through a series of skylighted atriums and long rows of windows. Steel girders span 53 feet to create an open office.

"The high quality of the interior spaces is established by English slate floors in the grand public spaces, and extensive use of mahogany," the jury continues. "The architects have successfully translated management's commitment to providing its employees with an extraordinary work environment."

—D.E.G.



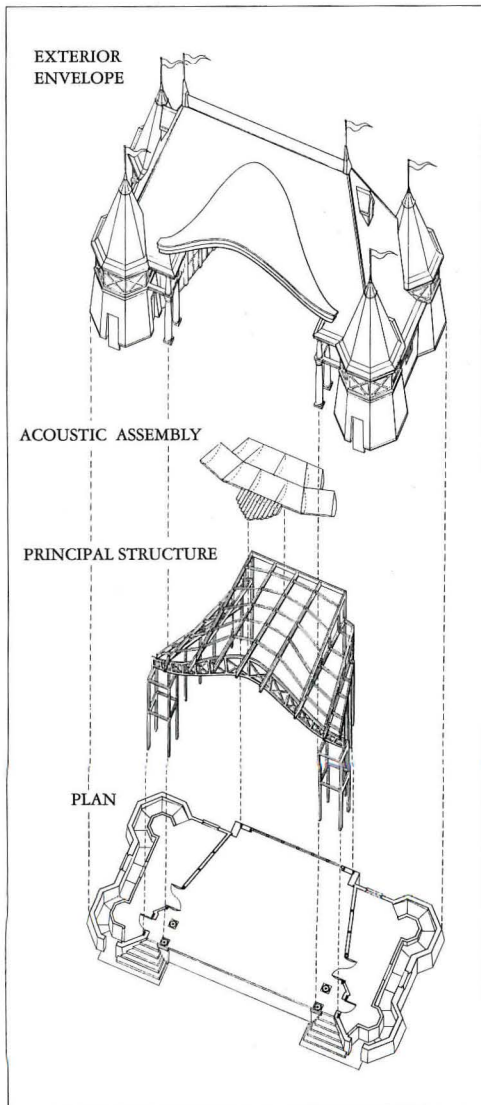


Recreational

Lake Harriet Band Shell
Minneapolis, Minnesota
**Frederick Bentz/Milo Thompson/
Robert Rietow, Architects**

DELICATELY SITED ON THE NORTH SHORE of this suburban lake, the romantic cedar-shingled band shell with its turrets and friendly eyebrow roof comes across as “comforting, inviting and familiar, while evoking the romance of 19th-century park pavilions,” according to the jury. Yet Milo H. Thompson, FAIA, in association with Kirkegaard & Associates as acoustical engineers, applied 20th-century ingenuity to the project by filling the attic space with speakers and microphones to create an acoustically rich outdoor performance space. This technological enhancement to the design, otherwise based on the romantic style of the surrounding structures in the park, creates a “focal point for public celebrations while enhancing the serenity of the lake,” noted the jury.

—GREGORY LITTLETON



GEORGE HEINRICH PHOTOS

The enormous window behind the stage allows the audience to maintain a relationship with the serene countryside (left). Boaters and pedestrians can also enjoy the festivities through the window (above). The reassuring shell, with its turrets and steeply pitched roof, encourages intimacy during performances, while acting as a reverberant chamber for optimal acoustics (far left).



Light of the World
Littleton, Colorado
Hoover Berg Diamond, Architects

BLESSED WITH A HILLTOP SITE THAT affords a magnificent view of the Rockies to the southwest, Light of the World church brings a harmonious built offering to the natural landscape, pinnacled with a mirrored stainless steel and reflective glass steeple that highlights the building's presence night and day. Architect Hoover Berg Diamond of Denver designed the 800-seat Catholic church for a young parish, incorporating an early Christian basilican concept of a worship space that also can be used for secular activities.

Light of the World Church incorporates the energy-conservation principles of a north wall set into the hillside, passive solar collection through the south gallery, and south-facing glass doors that are shaded by the roof during the summer. Quarry tile and concrete slab floors store heat for re-radiation and distribution.

The awards jury said of the project, "Its simple geometry, modest materials (brick dry wall, and glass block), and incorporation of traditional Christian forms—colonnade, cloister, and tower—encourage spiritual contemplation. The dramatic cone-shaped steeple is a beacon, identifying this building as a holy place, day and night. With its humble strength, this church embodies the spirit and thought of Catholicism."

—M. STEPHANIE STUBBS



A dramatic steeple (top) gives the chapel its unique profile and shines with mirrored glass by day and interior lighting by night. Traditional Christian cloistered forms coupled with modern materials mark the entranceway (above). Worship space (left) may be used for secular activities.

R. GREG HURSLEY PHOTOS



GREGORY MURPHEY PHOTOS

The outdoor dining area fronts a landscaped courtyard and the library's screen wall (top right). The crisp, sun-filled interiors harmonize the simplicity of the school's exterior (top left). The third tower entry (foreground above) serves the gymnasium, which opens onto a paved courtyard. The main classroom block is oriented toward the mountain views to the northeast (site plan). The gym is placed on a north-south axis, which corresponds to the orientation of the sports fields.

Capital High School
Santa Fe, New Mexico
Perkins & Will, Architects

LOCATED AT THE SOUTHERN EDGE OF A sprawling suburban area in Santa Fe, the 800-student Capital High School combines regional esthetic with the power and scale of Italianate public architecture.

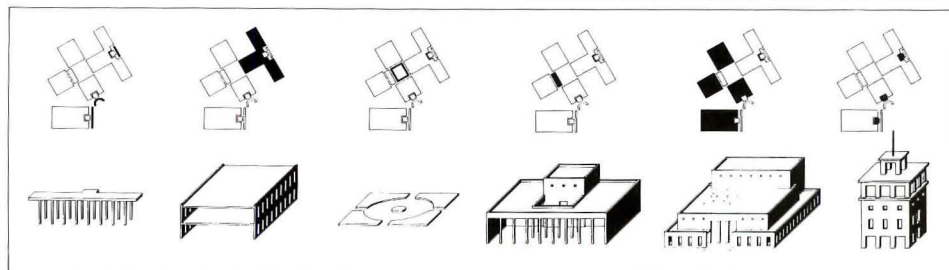
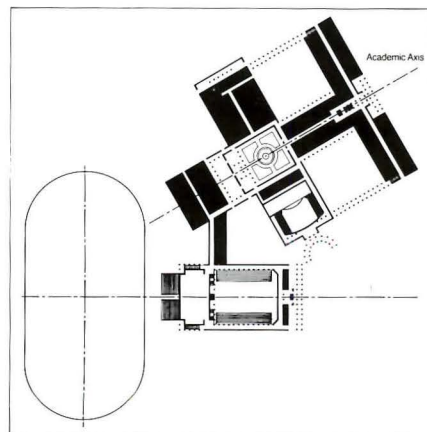
Drawing from a vocabulary based on both vernacular adobe architecture and Neoclassicism, the architect created a series of interconnected symmetrical pavilions oriented to respond to its desert landscape and surrounding vistas of the Sangre de Cristo Mountains to the northeast.

The pavilions are organized along two distinct axes with colonnades defining outdoor circulation paths and a series of three towers announcing the entrances. Classrooms and laboratories are arranged symmetrically along a central block that contains administrative offices, a library, and a cafeteria.

A two-story portico with a glazed lantern marks the main student entry, which fronts a semi-circular landscaped space containing an area for bus loading. Another tower defines the auditorium entrance, flanked by a curving colonnade.

"Proud and dignified in stature," noted the awards jury, "this school also has a rough-and-tumble quality that welcomes the student and the community."

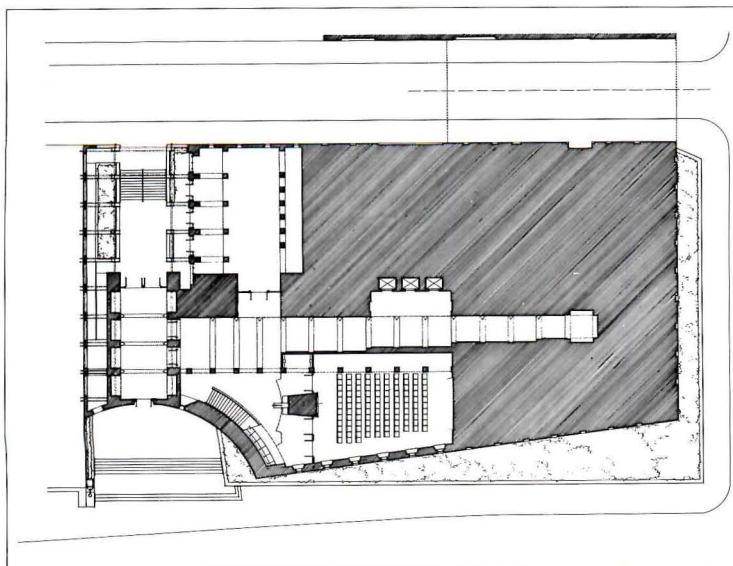
—LYNN NESMITH





KARL A. BACKUS PHOTOS

The SEI's Fifth Avenue elevation responds to the adjacent Mellon Institute's height and massing. A horizontal break in the curtain wall grid at the top floor relates to the Mellon building's pediment, while vertical bands recall the rhythm and scale of its columns (above). The limestone-clad entry pavilion anchors the eastern edge of the building (right). The entrance lobby to the Institute's auditorium (plan) has a curving stairway and an oversized, extruded-aluminum light fixture (bottom right).



**Software Engineering Institute
Carnegie Mellon University
Pittsburgh, Pennsylvania
Bohlin Powell Larkin Cywinski
and Burt Hill Kosar Rittelmann Associates**

AN INDEPENDENT RESEARCH CENTER operated by Carnegie Mellon University under contract to the Department of Defense, the Software Engineering Institute successfully accommodates complex computer systems and their human users.

The architect used a reflective glass facade with a granite base capped with limestone at the first floor, and divided the building into three sections to define public spaces and high security areas. As the building turns the corner, the main facade is inflected, creating a stone-paved, semi-circular entry plaza on axis with the imposing 1906 St. Paul's Cathedral across Fifth Avenue. The resulting exterior of the institute appropriately echoes the massing and monumental qualities of its Gothic and Neoclassical neighbors.

Inside the 154,000-square-foot research facility, the architect placed "user-accessible" wiring in dark red trays suspended from the ceiling and lined the building's perimeter with sound-insulated research offices, which are designed to be easily reconfigured to meet technological changes.

The building serves as an architectural bridge between old and new. "This well-conceived research facility," noted the awards jury, "is a modern-day temple honoring a new technology."

—L. N.





Academic

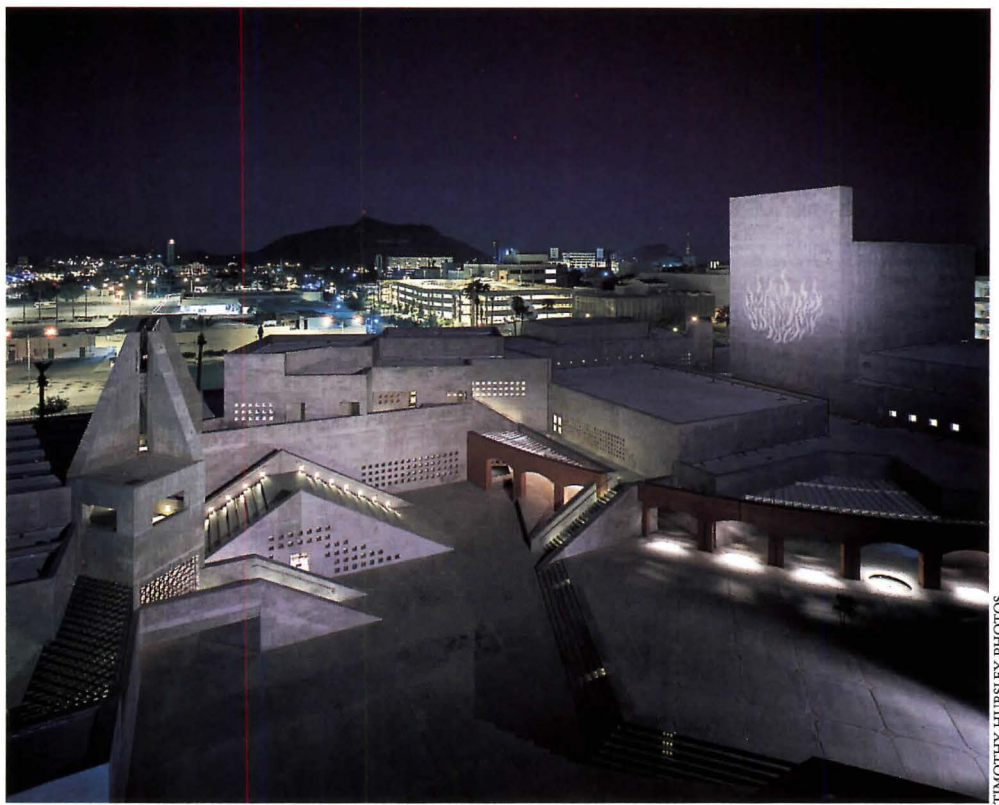
**Fine Arts Center
Arizona State University
Tempe, Arizona
Antoine Predock Architect**

ANTOINE PREDOCK'S FINE ARTS CENTER is a mysterious and intriguing building that invites, and sometimes demands, varying interpretations. "As romantic and colorful as the desert southwest," said the AIA jurors, "this vibrant city of art awakens the imagination and stirs the senses."

Predock won the commission in an international design competition in 1983, the first ever held for a university building in Arizona. His winning scheme provided a "gateway" structure that would functionally and symbolically unify arts programs scattered throughout the campus.

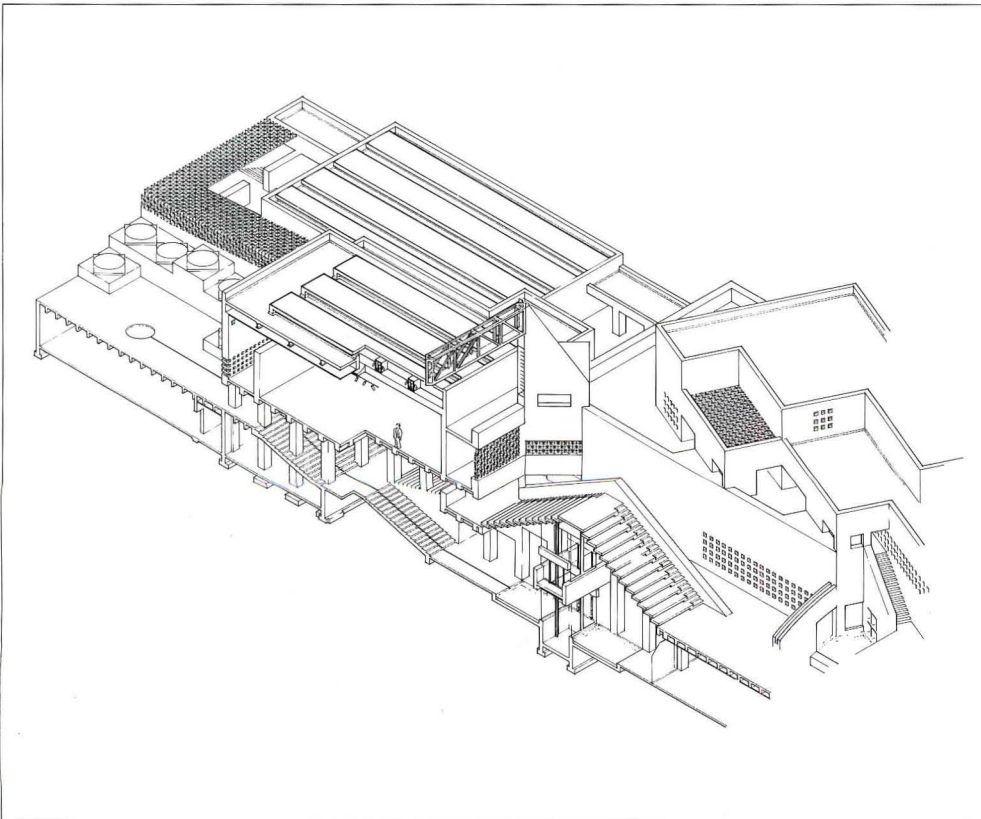
The center rides the landscape with a low, unifying silhouette. Its towers appear as abstractions of the surrounding mountains and buttes. Massive walls derive color from the rock faces of nearby ridges. As a processional, almost labyrinthine building, Predock's assemblage establishes new campus linkages and copious exterior spaces, while its "rich and varied facades invite speculation about what treasures lie within." The stairways, finished with the same lavender stucco as the exterior, are haunted with wisps of natural light from clerestory windows.

—L.N.



TIMOTHY HURSLEY PHOTOS

Predock's building "evokes images as diverse as ancient cities and drive-in movies," according to the jury. At night, his fly-bridge is literally transformed into a giant movie screen with images projected onto its surface from the tower bridge (above). The playhouse and dance studios are set behind the brick arcade (right); the stairway leads up through the tower bridge to the museum (lower right). The main temporary exhibit space is located directly over the main entrance and flooded with light from punched windows (bottom right and below).





The Sports Center faces Bancroft Way, the southern border of UC Berkeley's campus (above). The field house entrance is framed by the atrium's west wall, while the atrium's south wall is almost hidden behind grand double staircase accessible from either end (right). The arcade that runs along the south wall is colorfully detailed in scored stucco (bottom left). A darker gray band marks the floor levels of the gyms (bottom right).



Recreational Sports Facility
University of California
Berkeley, California
ELS/Elbasani & Logan Architects

ON A TIGHT SITE "WHERE TOWN MEETS gown," the local firm ELS/Elbasani & Logan broke down the mass of the large sports facility by dividing its functions into three distinct building blocks. Set on a flat podium, the upper floors hover above the sidewalk and street as they slope west, with parking located below grade.

To enrich the rather large and plain character of the programmed spaces (a four-court gymnasium, handball courts, a three-court multipurpose field house, and four large exercise rooms), the architect developed a rich vocabulary for the smaller ancillary element and extended a skylit atrium lobby the length and height of the central block. Anchored on one end by a small cafe, and enlivened by a row of glass-walled handball courts, this great interior street encourages social interaction.

Fronting the street, a concrete arcade is banded on its back wall with subtle shades of color and punctured with high, square windows. Above the arcade, the central component is covered in bluish-green stucco with gray banding and carved to reveal the fire stairs. On the south elevation, the bluish-green band is diagonally scored to suggest the steel bracing behind the walls.

The building's massing, detailing, and color effectively reduce its perceived bulk and animate its varied facades, while its "skillfully choreographed interior spaces provide a spontaneous and dynamic setting for university recreation," according to the jury.

—L. N.

MARK CITRETT PHOTOS





Academic

Trinity School
Atlanta, Georgia
Lord Aeck & Sargent, Architects

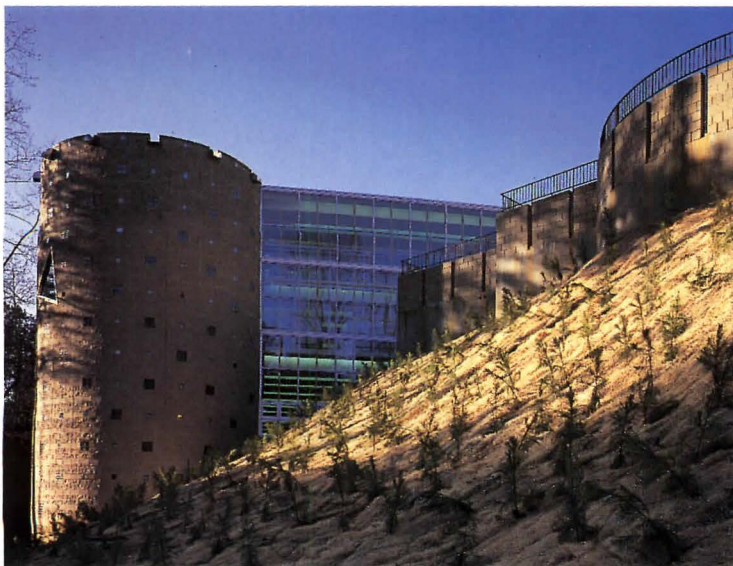
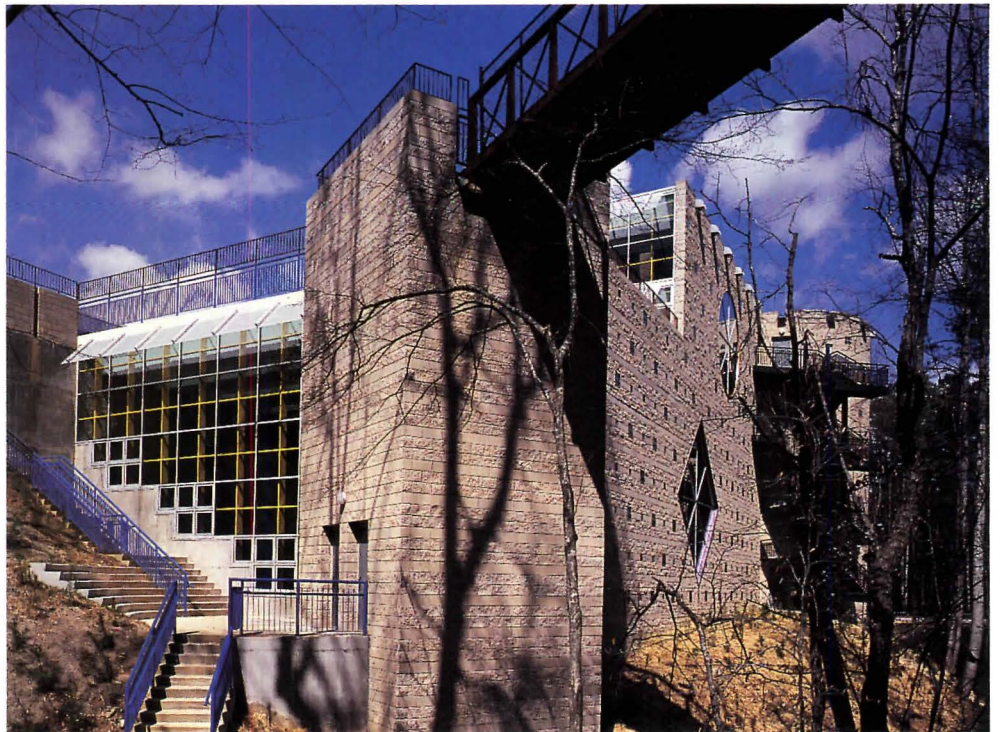
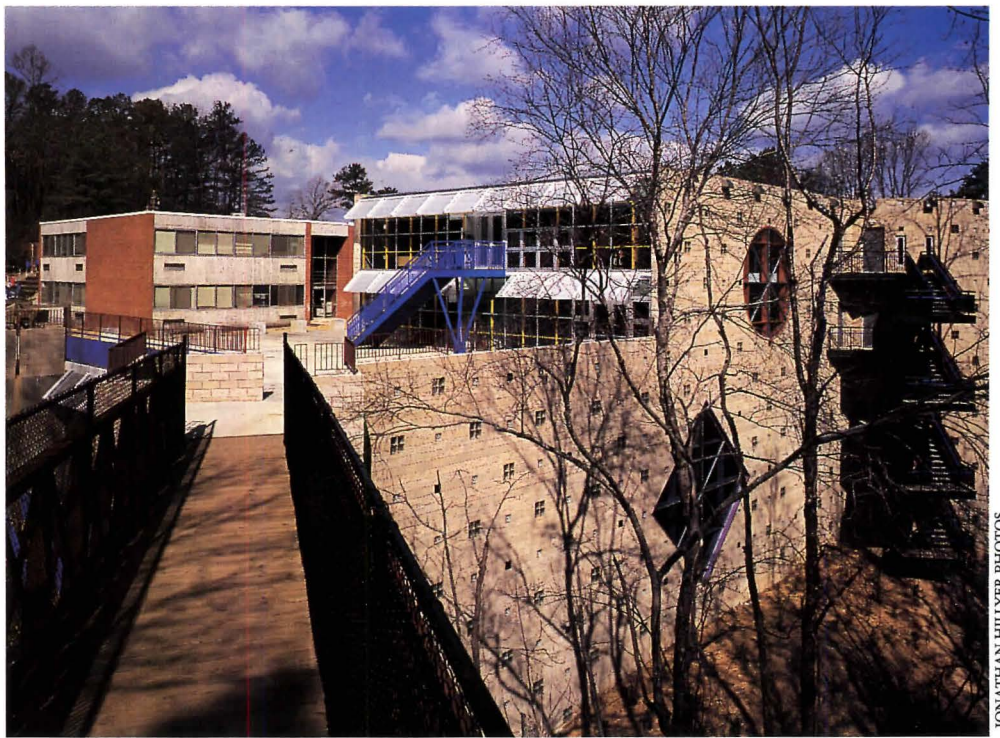
A MAJOR EXPANSION TRANSFORMED A mundane, 40-year old public school into an exciting educational environment for a private elementary school in Atlanta. "Uninhibited, energetic, and egocentric," claimed the honor awards jury. "The Trinity School embodies the characteristics of the children who play and learn there."

Lord Aeck & Sargent added a 3,000-square-foot entrance block to house administrative functions and to provide a protected carpool pick-up space within a slightly concave colonnade. On the opposite side of the existing school, the architect set a three-story, 18,400-square-foot structure containing a gymnasium/auditorium and library into the side of a 40-foot ravine.

The cylindrical corner tower is accented with glass block windows and a slightly tilted triangular window. A stair tower zigzags down the tower leading to a small amphitheater. Playground space was created by extending the existing grounds with retaining walls, by using the roof of the new multi-purpose space, and by connecting the land on the other side of the ravine by a bridge.

The circular, triangular, and square windows subtly teach children about various types of masonry arches and create whimsical play spaces, while the bright blue, green, yellow, and red moldings, mullions, stairways, and railings accent the more restrained tan and gray tones of the floors and walls. "A giant three-dimensional toy," noted the AIA awards jury, "the building entertains as well as educates." ■

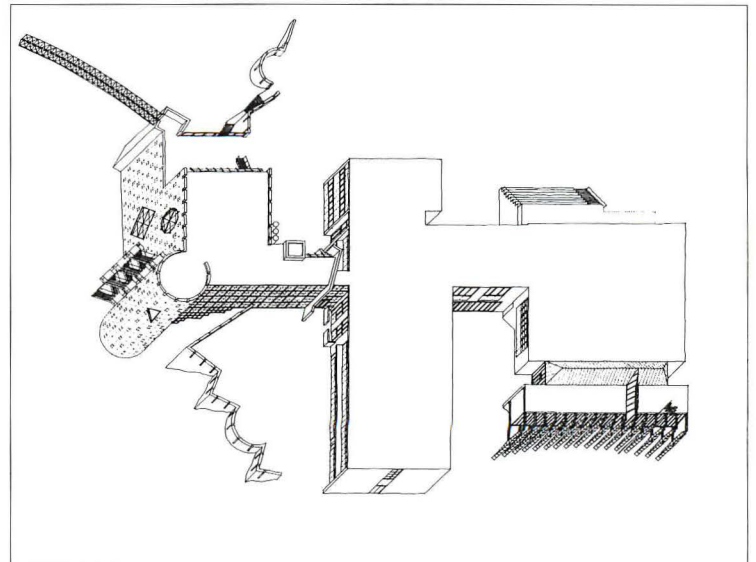
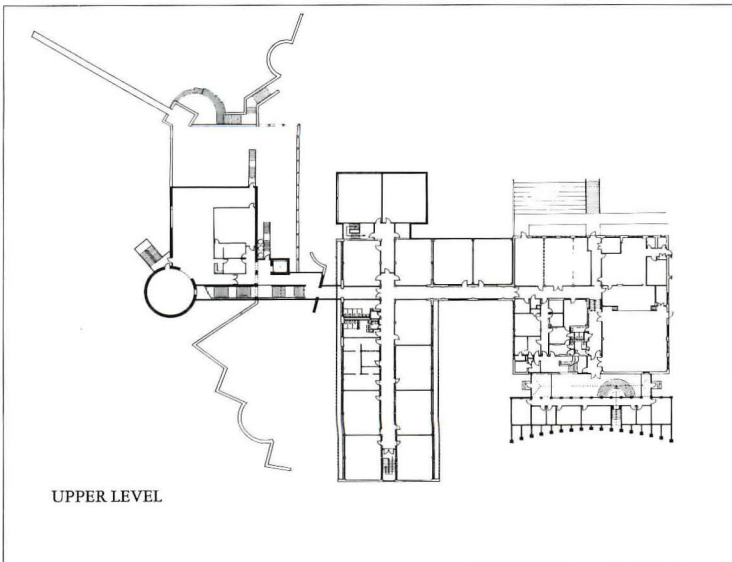
—L. N.



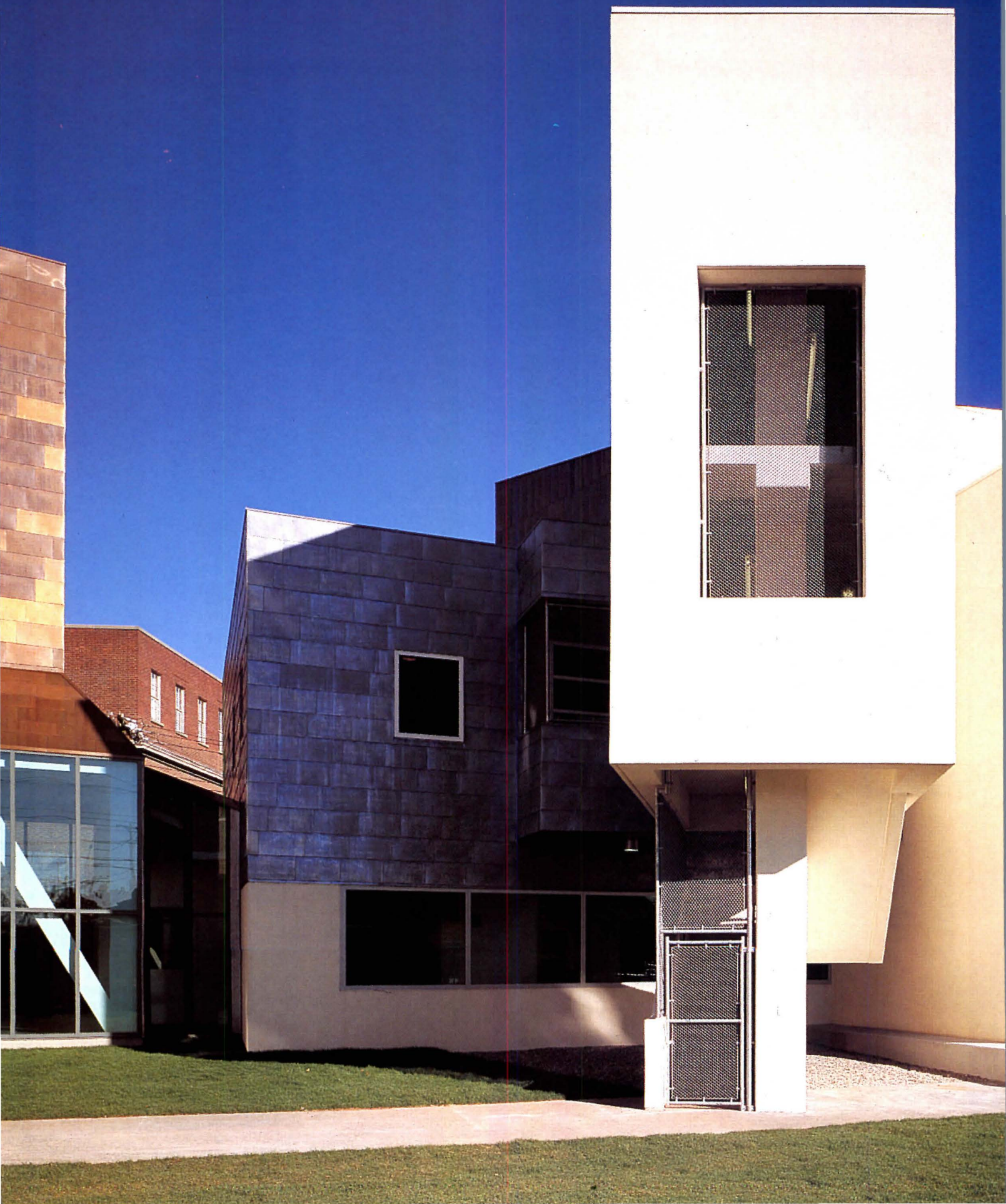
JONATHAN HILLYER PHOTOS



A pedestrian bridge connects a square tower with playground areas across the ravine with the new rooftop play space (facing page, top). A stairway provides access down to the ravine (facing page, middle), and the south window wall fills the multi-purpose area with natural light. Anchoring the corner, a rounded tower rises 52 feet from the ravine floor (facing page, bottom left). The bottom half of the large circular window opens into the preschool activities center (facing page, bottom right), which is located above the multi-purpose space. The top half of the circle is a window into the library. The long staircase traverses a glazed passage from the upper deck to the base of the round tower and multi-purpose space (left). The entrance addition features a slightly curving colonnade of 17 columns made of skewed, stacked, concrete cubes, reminiscent of children's building blocks (below).



A V I L L A G E



O F H E A L I N G



**Yale Psychiatric Institute
New Haven, Connecticut
Frank O. Gehry & Associates
Allan Dehar Associates, Architects**

HOWEVER ONE CATEGORIZES THE STYLE of Yale University's Psychiatric Institute, the premise of its design is essentially Modern. The notion that architecture has the power to heal—above and beyond a building's role as a setting for treatment—is ascribed to the Modern movement, particularly to Le Corbusier, who believed architecture could cure societal ills. Architecture as medical talisman remains an untested proposition, but most would agree that comfortable environments with generous sunlight, air, and visual stimulation aid recuperation, particularly when the maladies are of the mind.

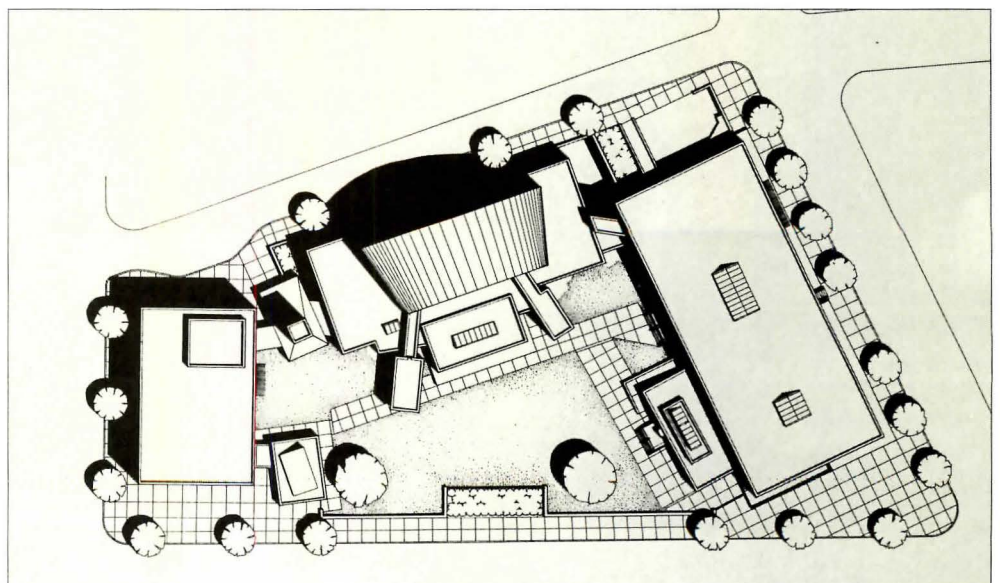
The new Yale building, designed by Frank O. Gehry & Associates in collaboration with Allan Dehar Associates of New Haven, Connecticut, is occupied by 66 adolescents with varying degrees of emotional disturbance. The patients are withdrawn from life in the public realm, and their treatment by a staff of approximately 170 professionals centers on providing emotional support and awareness, and aiding them to return to life outside the institution. The average patient age is 18 and average length of stay is six months, during which the institute is essentially "home."

Gehry and Dehar were chosen by Yale's late president A. Bartlett Giamatti from a list of four architects compiled by a search committee headed by Cesar Pelli. "Because I'm schizophrenic," is Gehry's gag answer to why he wanted the commission, and why he got it. In fact, the architect has long been involved in psychotherapy and has several friends active in the field. When the search committee set to work six years ago, Gehry had not completed a project of this complexity and felt the need for a collaborator. Dehar was chosen "because he's a designer as well as a technical man," explains Gehry. "We thought it would strengthen our team to bring in a local presence." Dehar has completed work for Yale's medical school, which made Gehry's choice politically savvy.

Dehar was initially skeptical about collaborating. "I told Frank I wasn't interested in doing a joint venture or being an associate architect, or getting involved in a project that is designed by one firm and executed by another," he explains. "That pleased him. We decided that the project would be designed in both firms, and that construction documents would be done by both offices." According to Gehry, who has worked with other artists and architects; "I pick collaborators who are designers because I don't want to argue about those issues. I want complicity instead of antagonism. I took the



Yale Psychiatric Institute's warm-colored southwest elevation overlooks a courtyard (previous pages). The light-filled entrance lobby (above), distinguished by a tall hat of copper that encloses a 40-foot-high light well, serves as access point to the institute and an adjacent research wing. View from the west (facing page, top) sets the building within the context of New Haven, and reveals a courtyard that is punctured by a metal fence. The building's opposite side (facing page, bottom) overlooks a parking lot and is punctuated by a variety of fenestration. Two large rectangular windows in the arched form of the top-floor gymnasium offer city views.



design lead, but when we presented ideas to Allan, he took the design further."

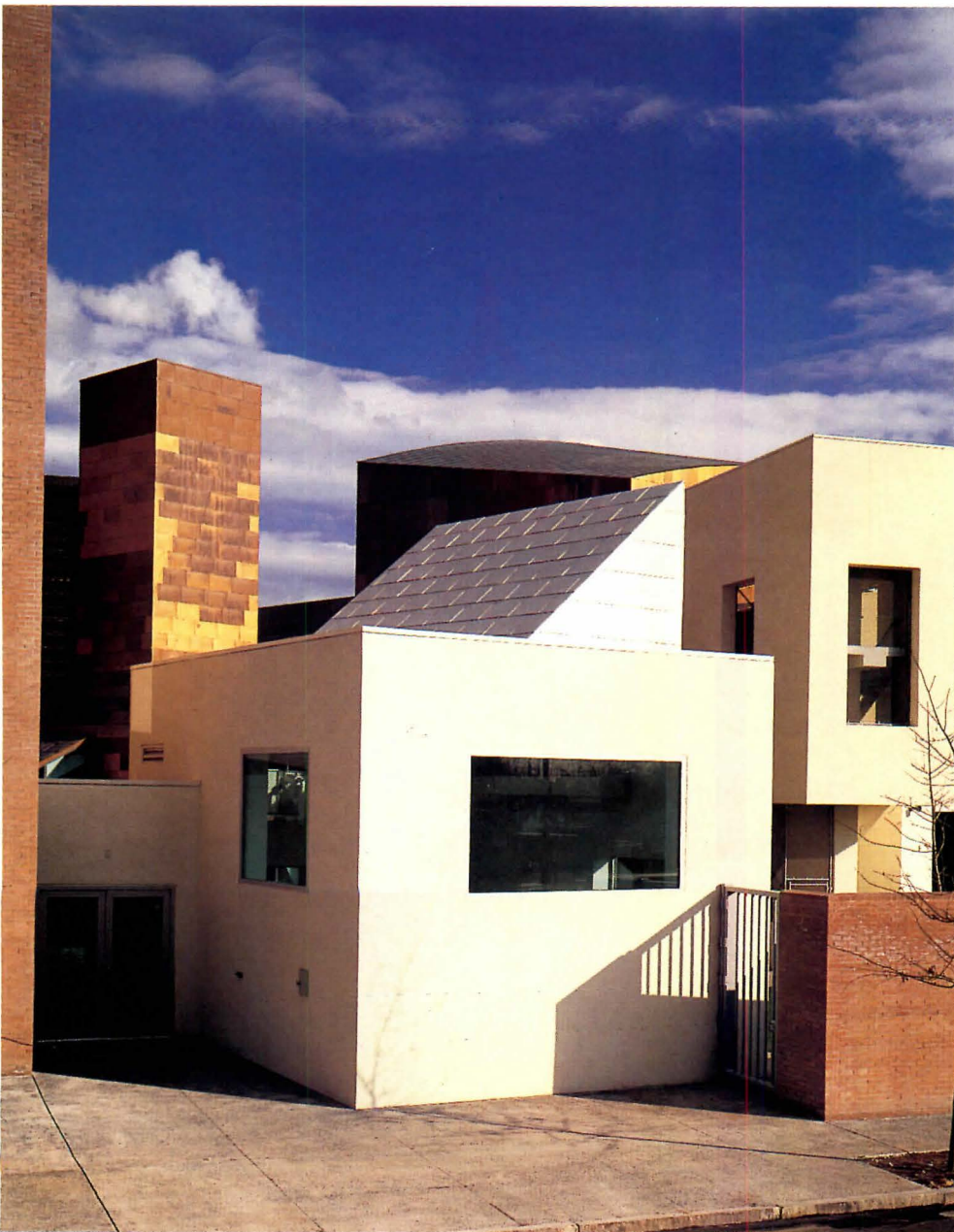
After a nearly six-month programming phase that included interviews with staff, patients, and visits to other facilities, the architects met at Gehry's Santa Monica office to evolve a corresponding architectural form. Gehry queried his psychiatrist friends about which of his previous projects might provide a starting point. The Loyola Law School's assemblage of sculptural pieces seemed a model worth pursuing. Within a week, the architects had created the bare bones of the institute's form: three building masses, stitched together with circulation space, surrounding a courtyard.

The collection of tightly packed volumes protecting an oasis of green open space makes sense for the institute's site: a one-acre island of land surrounded by four streets, at the threshold of one of New Haven's most crime-ridden neighborhoods. Pressed to the site's northwest and southeast borders are two large brick boxes of four and three stories respectively, bland in their ordinariness, and intended as a contextual gesture to nearby medical school buildings. The taller brick box houses research labs and administration areas, and commercial space located street-side. The other box includes dormitory rooms, nurses' stations, staff offices, multi-purpose spaces, and a cafeteria.

In sharp contrast, the connective section to the northeast possesses the vibrant, sculptural quality that has become Gehry's trademark. Compared to the brick boxes with their square, punched windows, the center volumes receive light through a variety of openings, and are clad with different materials. This middle section contains staff offices, administration, conference rooms, and a gymnasium under a gently arched roof.

The center of the complex is defined by a courtyard. Sensitively scaled, open yet closed, it serves as the stage for the building's emerging personality. The courtyard's





brick wall is open to the street through a section of metal fence, which was included after a local neighborhood group expressed concern over the building's "exclusivity."

Gehry's favorite metaphor for the Institute is a village, not only to describe how it looks, but how it functions. "People can look out the window and see the recreational building," explains Gehry, "or the arts and crafts building, or the cafeteria—places where they can go and identify with their village. This is my village, but it relates to the larger village, outside. From the minute you come in, you're pointed back out."

The interiors bear out these intentions. The glass lobby in the chimney-shaped volume brings you in and immediately positions you to look out to the courtyard and the street beyond. But there is no direct access to the courtyard—one needs to move all the way around the building to gain access. The dorm rooms have large windows with views of the adjacent volumes of the complex, pedestrians on the sidewalk, or cityscapes of New Haven. The top floor of the dormitory is punctured with skylights—everywhere is the suggestion of a world beyond.

What remains to be tested is the building's role as therapist—do the vigorous forms intimidate or liberate, is the village intelligible or confounding? This is a building whose long-term use deserves careful study to verify architecture's medicinal potency. ■

—MICHAEL J. CROSBIE

**YALE PSYCHIATRIC INSTITUTE
NEW HAVEN, CONNECTICUT**

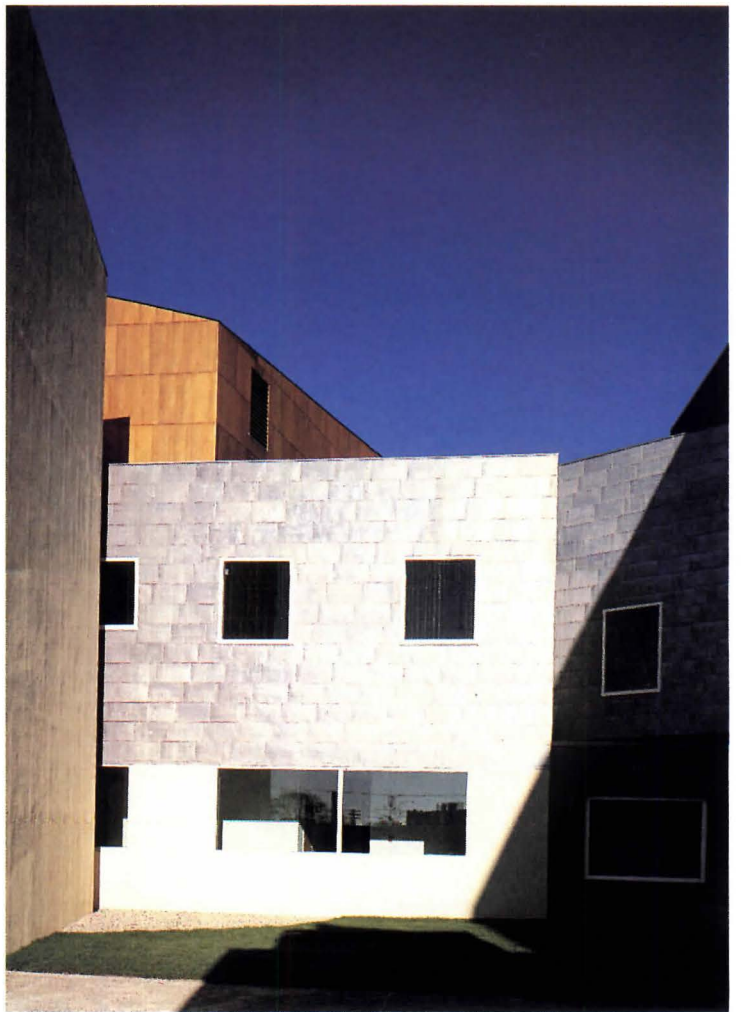
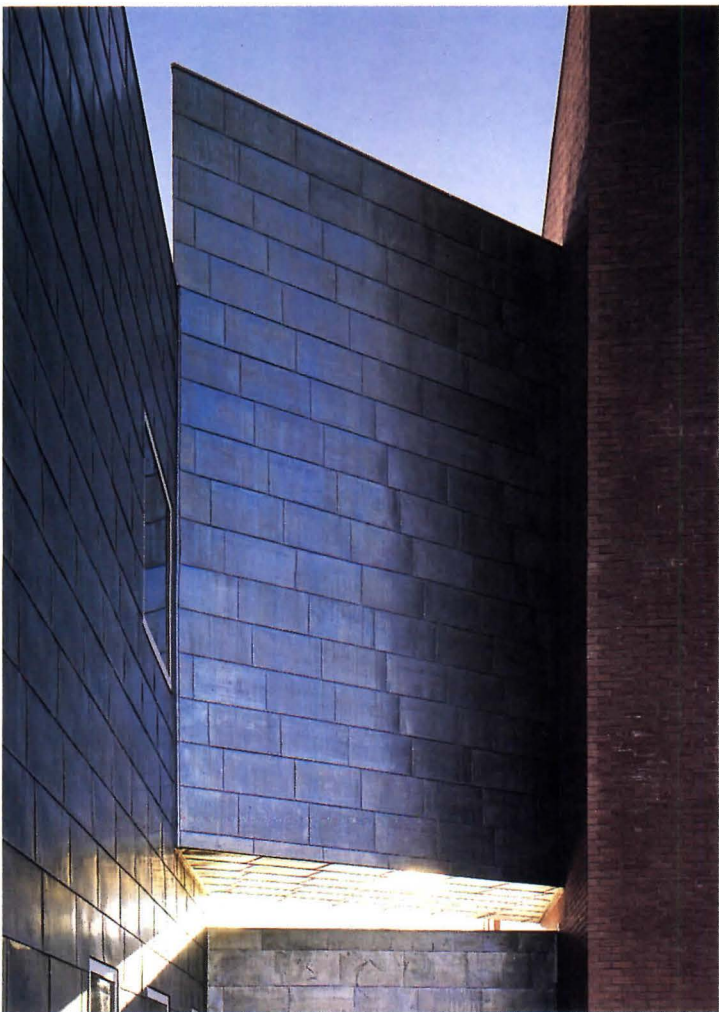
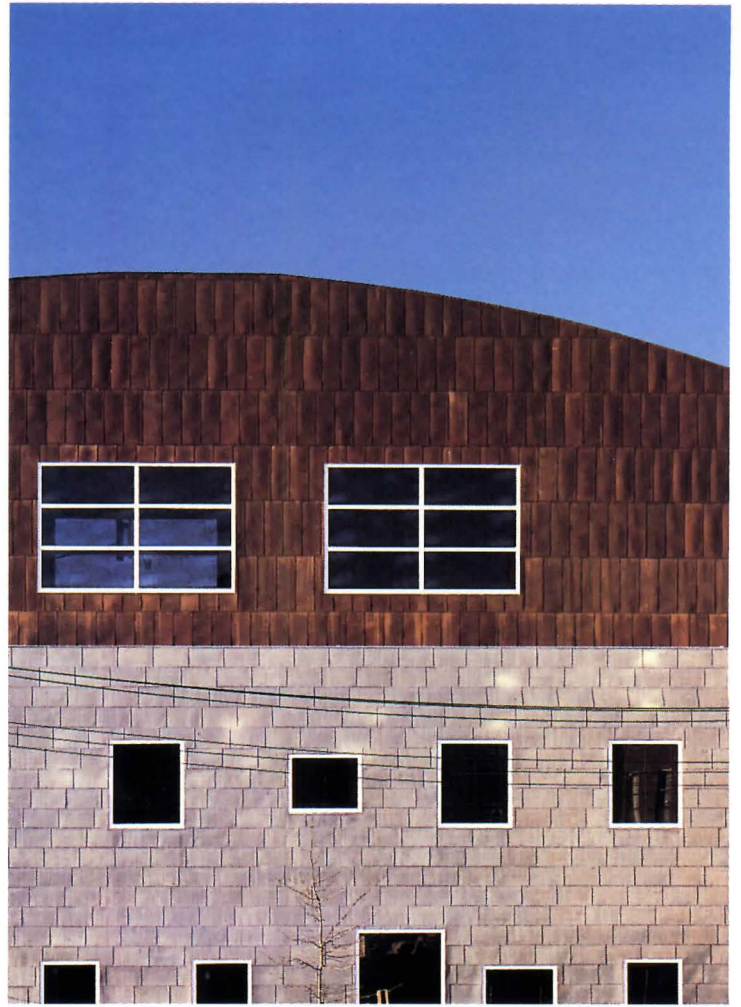
ARCHITECTS: Frank O. Gehry & Associates, Santa Monica, California—Frank Gehry, designer; David Denton, Roberta Weiser, project architects; Greg Walsh, Tom Duley, Aaron Betsky, project team; Allan Dehar Associates, New Haven, Connecticut—Allan Dehar, principal-in-charge; Gerold Reich, project architect

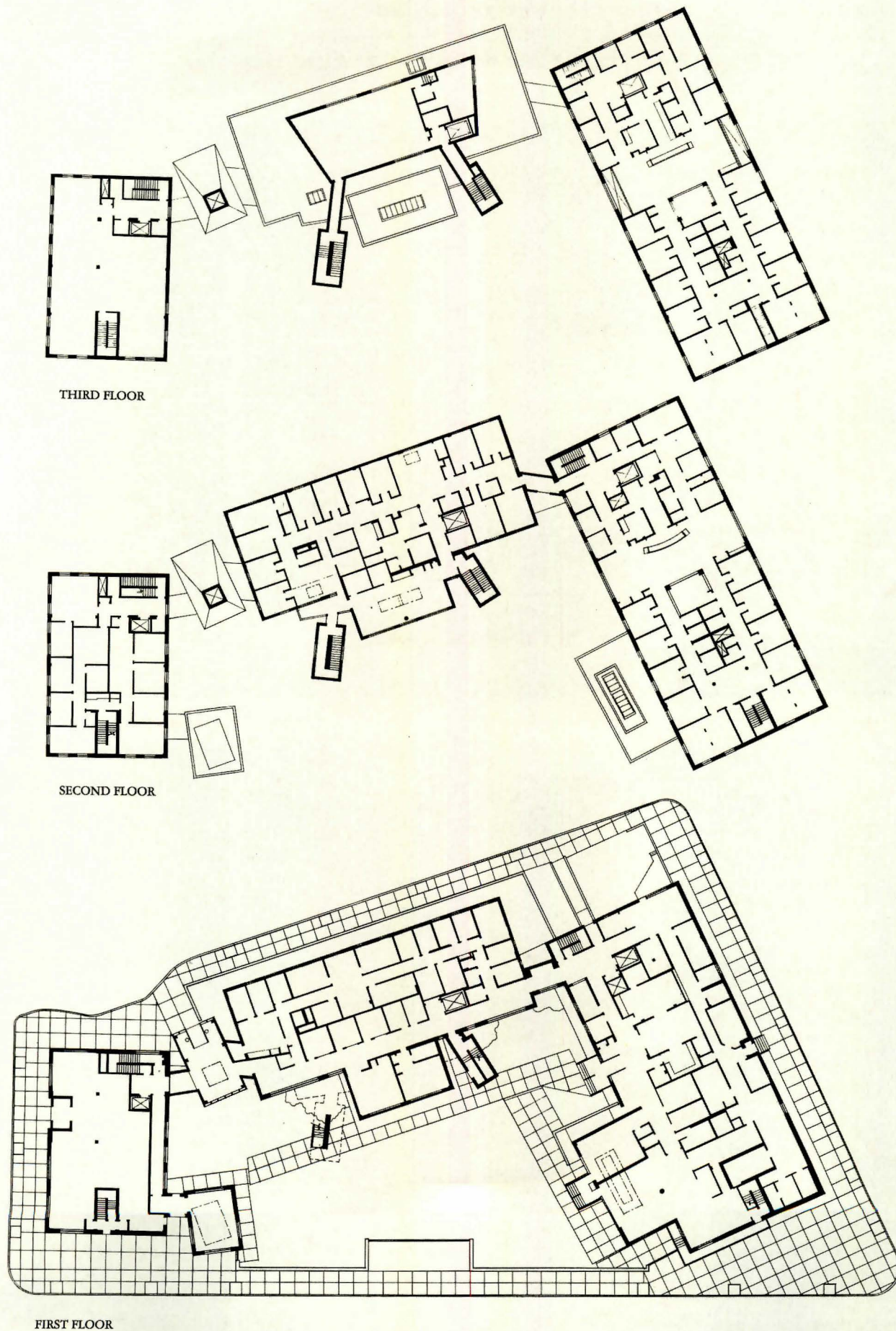
LANDSCAPE ARCHITECT: Rolland/Towers, P.C.
ENGINEERS: Speigal & Zamecnik, Inc. (structural); Luchini Milfort Goodall & Associates, Inc. (mechanical and electrical)

CONSULTANT: Barun Basu Associates (facilities)
CONTRACTORS: E & F Construction Company (general); Hilton Mechanical Contractors (mechanical); Genovese and Massaro, Inc. (electrical)

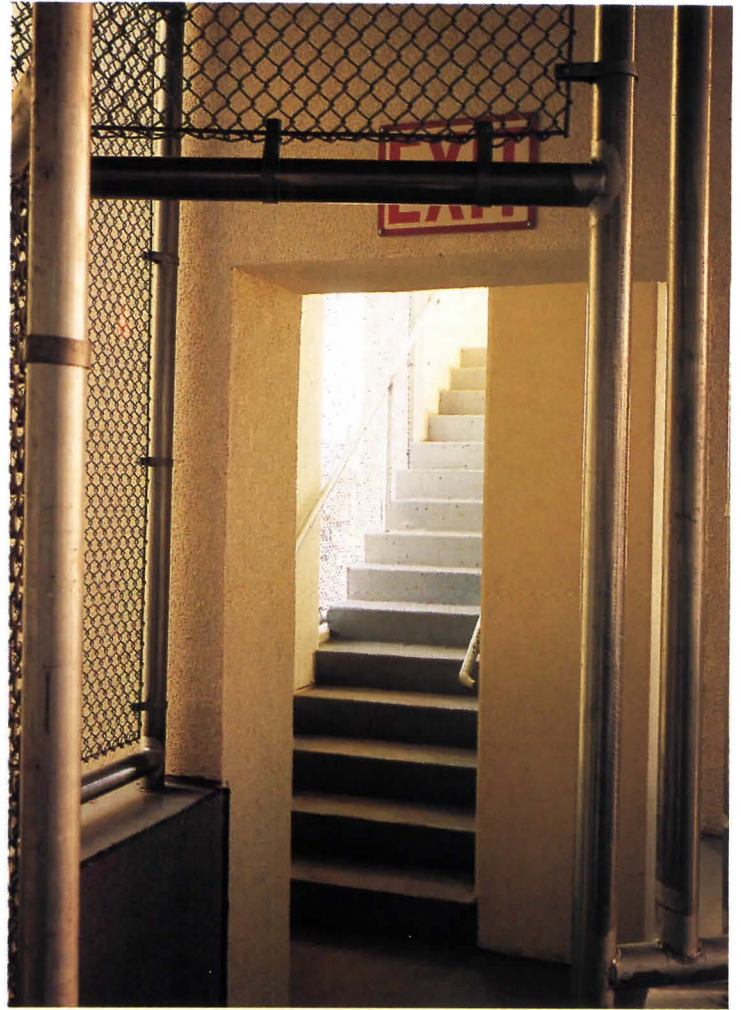
PHOTOGRAPHER: Jeff Goldberg/ESTO

Access to the courtyard (top) is gained from the institute's south wing. The small structure at the site's edge (left) houses workshop/therapy space. A diverse palette of materials distinguishes every nook and cranny (facing page). Synthetic stucco replaced limestone for budgetary reasons (facing page, top left). Dehar suggested lead-coated copper on vertical surfaces to Gehry, who has since used it in subsequent projects.





Plans (above) show the interconnective nature of the psychiatric institute's three wings. Interiors are not lavishly finished, but provide an atmosphere of openness. Entry lobby offers views of courtyard and structural gymnastics (facing page, top left). An exterior stair, surrounded by chain-link mesh (facing page, top right), is suggestive of a cuckoo's nest, but Gehry reports that he "talked to the shrinks about it, and they weren't that concerned." Sun-filled nurses' station and living area (facing page, bottom) are located on the third floor of the south wing (right in top plan).





M O D E R N I S M

Memphis Brooks Museum
Memphis, Tennessee
Skidmore, Owings & Merrill/Houston
Lee Askew Nixon Ferguson & Wolfe, Architects



V I T H M A N N E R S



American
Modernism



2011



SINCE 1916, THE CULTURAL ASPIRATIONS OF MEMPHIS, Tennessee, have been embodied in a small marble treasury in a garden. Its image, that of an elegant Trianon perched in Frederick Law Olmsted's Overton Park, is inextricably linked with the city's. Yet change was inevitable for the Memphis Brooks Museum. Blue jeans were invading the cultural citadel; the treasury walls were groaning.

In 1989, the museum metamorphosed into a strong, completely new creation. The latest addition, which doubled the square footage of the existing building to 80,450 square feet, is simultaneously respectful and assertive. So dominant was the early James Gamble Rogers design that subsequent additions—a 1955 wing designed by Everett Woods and a 1973 extension by Walk Jones & Francis Mah—deferred to the original by stepping back down a knoll, leaving the tiny, twin-galleried building to occupy center stage.

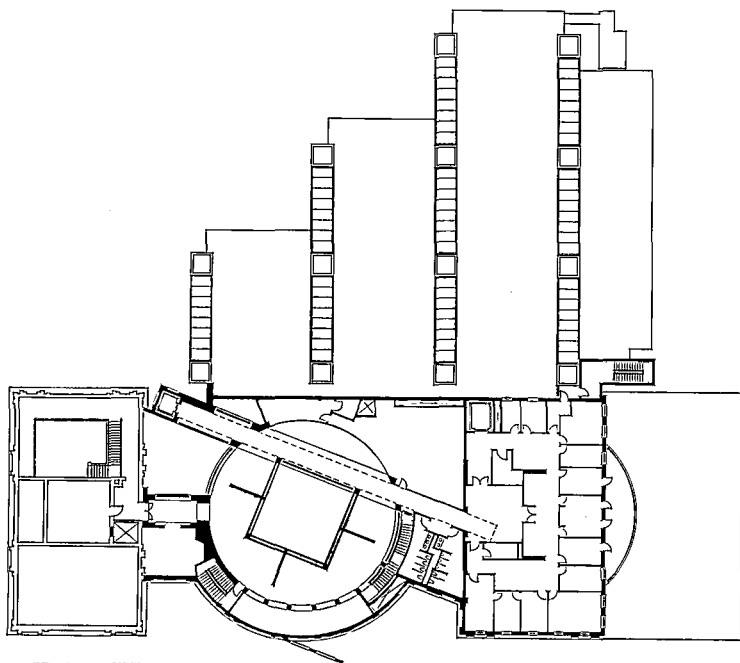
The architects of transformation, Skidmore, Owings & Merrill, and local architect Lee Askew, AIA, recognized the challenge of adding to a regional landmark. They worked from a master program that identified five areas of development: additional gallery space, visitor services, expanded educational space, more staff offices, and improved service facilities. Their solution was a bold rethinking of the total museum, demolishing the 1955 wing and adding numerous functions in controlled phases.

While the museum's vaulted marble entrance remains untouched, it serves now as a side door, and a public entrance was inserted to face south. The new entrance is more visible to passersby, presenting the museum's face to Overton Park and to the city. The addition has increased the public orientation of the entire facility, according to museum director William Heidrich.

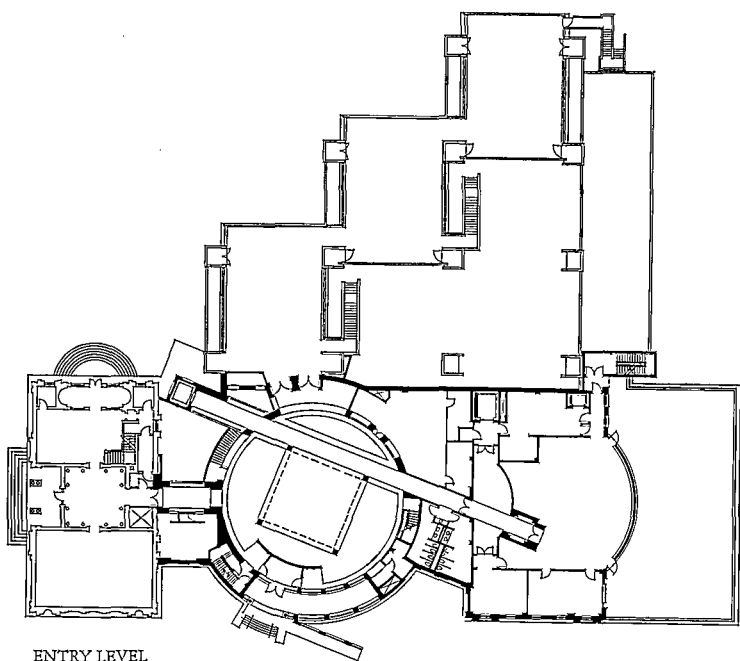
The view of the revamped museum from Poplar Avenue presents a unified composition. A sympathetic glue—Modernism with manners—ties the addition to the original; the pieces fit. The addi-

The recent additions to the Memphis Brooks Museum, designed by SOM and Lee Askew Nixon Ferguson & Wolfe, (previous pages) complete phase one of a three-part master plan. New and old juxtapose harmoniously at the entry, where the original James Gamble Rogers-designed building (facing page and below) and the contemporary addition meet. An al fresco dining terrace (above) extends activity into adjacent Overton Park. The reoriented entrance in a central drum (below and facing page) is marked by a metal grid for changing banners and signage. The addition reorients the building to a park and public street.

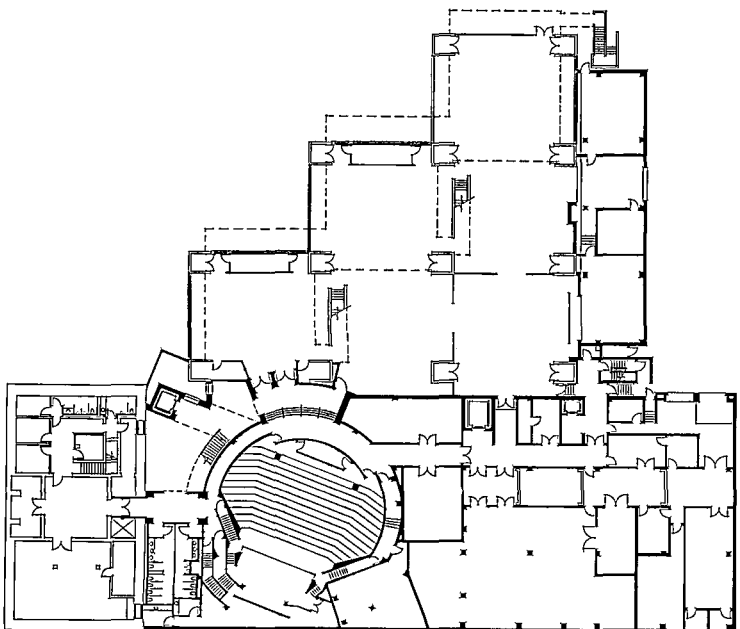




UPPER LEVEL



ENTRY LEVEL



LOWER LEVEL

tion complements its Neoclassical mate by acknowledging the rhythm of the earlier building's Renaissance bays in a repetitive gridded module, by sensitively respecting the marble in cream-colored stucco walls, by responding to the original fenestration, by breaking the wall into two levels, and by continuing the cornice detailing. Seen from a distance, certain overtly contemporary elements of the building are intriguing. A temporarily penny-bright copper roof with clerestory lighting knives across the flat top of the new wing, its angular placement indicative of an irregular pathway inside. The south wall bows out to a semicircular form, sliced by a banner-draped, gridded metal frame. The presence of the Modern intrusions raises questions and invites exploration.

What a relief to walk along the curved entryway, to pass into a sanctum sanctorum, to be confronted not with architectural histrionics but peace. The large, two-story circular space within the curving walls (called the "great hall") is a muted drum containing a spectacular Classical torso. Its location is pivotal, serving as visitor entry and orientation point, sculpture showcase, and entrance to the staff wing, the gift shop, and renovated 1973 galleries beyond.

Other major museums of this century, such as Atlanta's High Museum, New York's Guggenheim, or the East Wing of the National Gallery, are art in themselves; heroic cultural statements. As containers, they overwhelm their contents. In Memphis, the architects built with conviction, with homage to the Renaissance masters of the museum's Kress collection.

The great hall's restraint is tempered by a dramatic fragment in the corner: a three-story space has been carved at the interior juncture of new and old. A curving stair sweeps down to the lower gallery level and up to the full height of the exterior wall of the 1916 building. The outside marble wall extends inside to form an approachable, sensuous western boundary to the great hall. The stone's tactile quality is underscored by natural light, which flows through an adjacent three-story window and spills onto a carved shell. Caryatids, one of which can be touched in the third-story gallery for the sight-impaired, add sculptural depth to the wall.

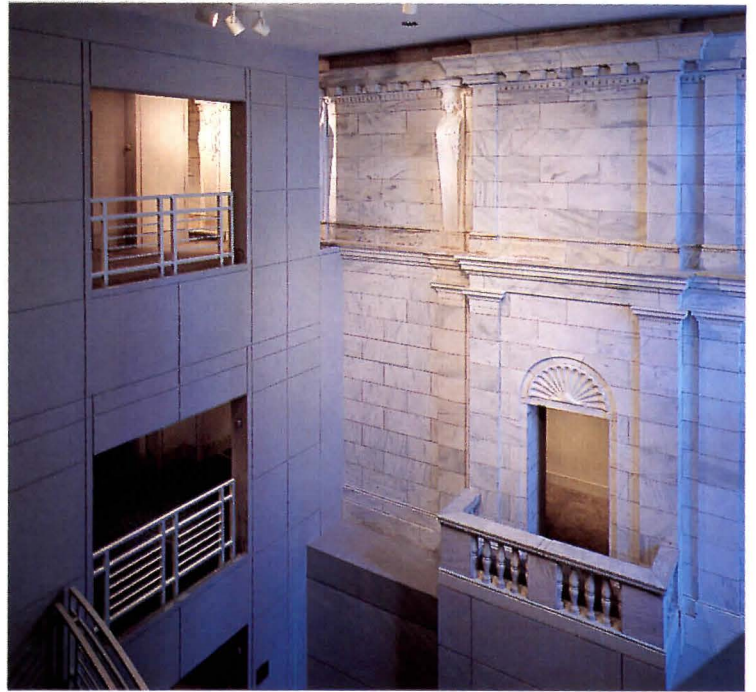
Controlled artificial light draws the visitor into the main galleries beyond the great hall. The architects' task was to provide immediate access to the works within this 1973 addition by opening up the wing, removing partitions, and by softening the reinforced concrete spaces. The lower level of this two-story wing is used for educational galleries, contemporary work, and traveling exhibits.

To the west of the great hall, the 1916 building is currently being restored. Its vestibule and twin galleries, which are being returned to their vivid original colors, gilded column capitals, and faux marble detailing, will house a permanent collection of Renaissance and Baroque art in the near future. To the east of the hall, a restaurant and outdoor dining terrace, small gallery for local art, member lounge, and access to the staff wing complete the circle. Below the drum is a 275-seat auditorium; above are located additional gallery space, library, and staff offices.

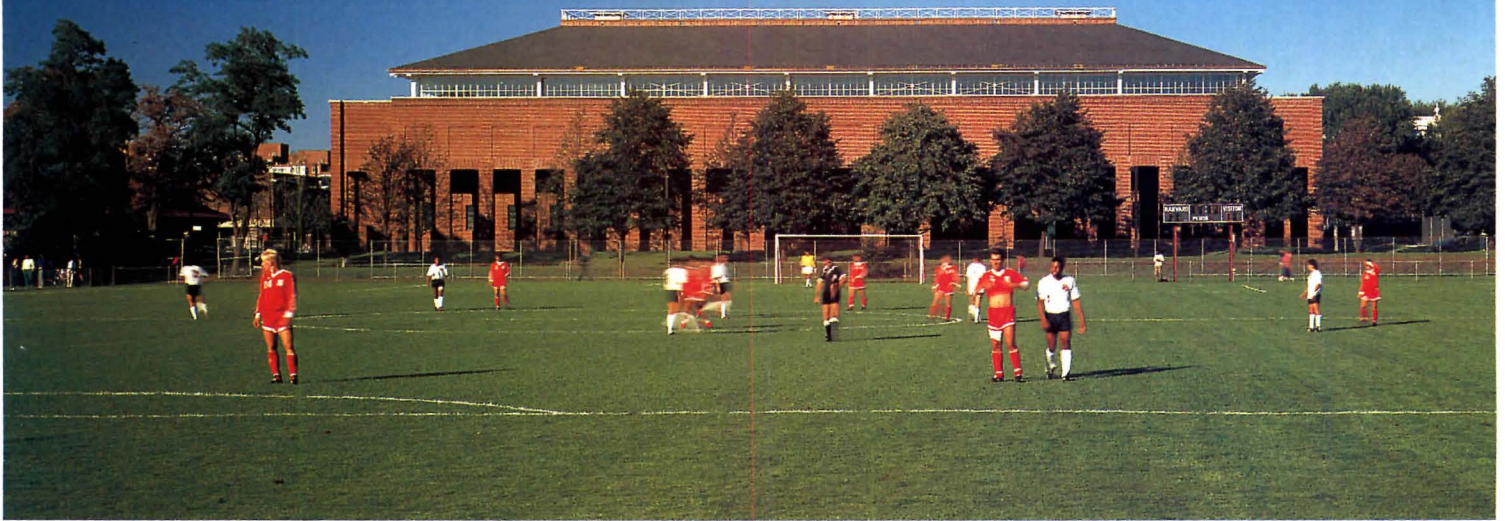
The museum has come full circle, literally. SOM, under the direction of partner Richard Keating, Lee Askew, and the administration of the Memphis Brooks took a risk by rethinking the total operation of the museum. It was risky to demolish an existing wing, risky to create a new front. The result may lack Wright's cathartic spatial genius or Pei's absolute elegance, but SOM's assemblage and superbly controlled plan, above all, honor art.

—ROBERT A. IVY, JR.

The plan of the Memphis Brooks Museum, focused on a central drum, masterfully melds disparate pieces into one, unified institution (left). Within the entry drum, an interior sculpture court (facing page, bottom) widens to include the exposed marble wall of the 1916 museum (facing page, top right), a curved rail on the upper level (facing page, top left) leads to exhibition space.

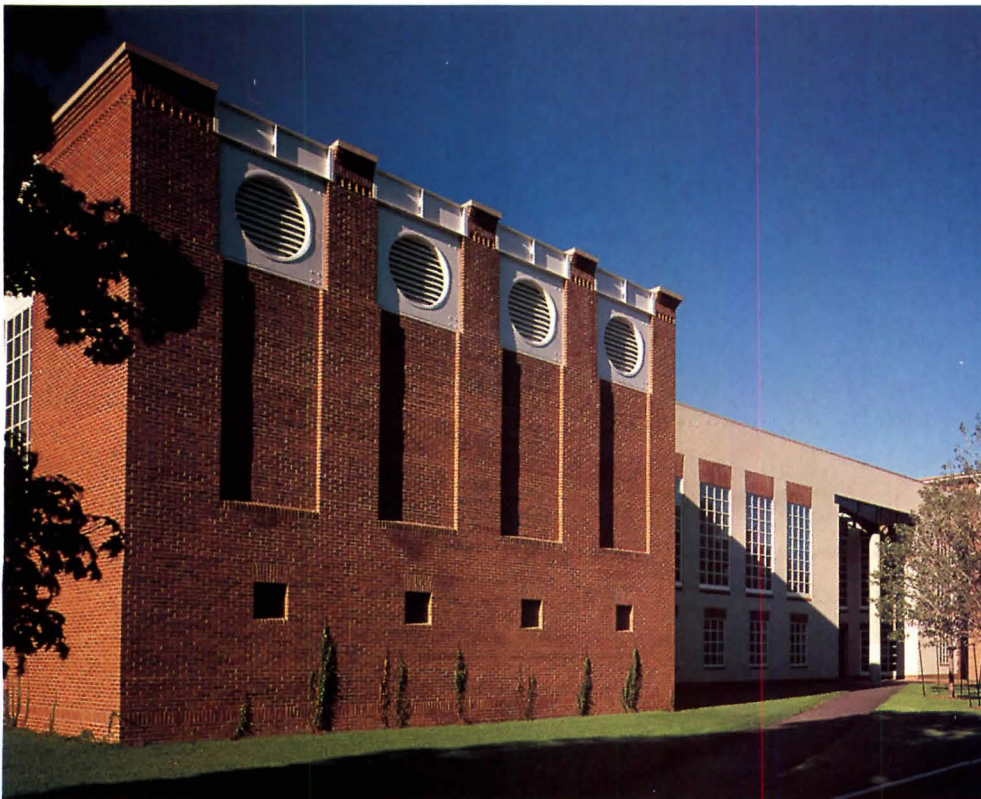


Shad Hall
Harvard University
Boston, Massachusetts
Kallmann, McKinnell & Wood Architects



A C A D E M I C F I T N E S S

A Boston firm exercises tradition in a new design regimen.



Seen across the athletic field (top), Shad Hall encompasses a simple, barnlike shape. Facing the campus (above), the center is smaller in scale as it meets its neighbors. At the entrance (facing page), an exposed structure expresses the muscularity of the building's functions.

THE ESSENCE OF A UNIVERSITY LIKE Harvard is to move forward in quest and discovery. But just as essential to such an institution is the treasuring of old books, old ideas, old friendships, old architecture. This contradiction is beautifully resolved by Kallmann, McKinnell & Wood at Shad Hall, a new athletic center for Harvard's Graduate School of Business Administration.

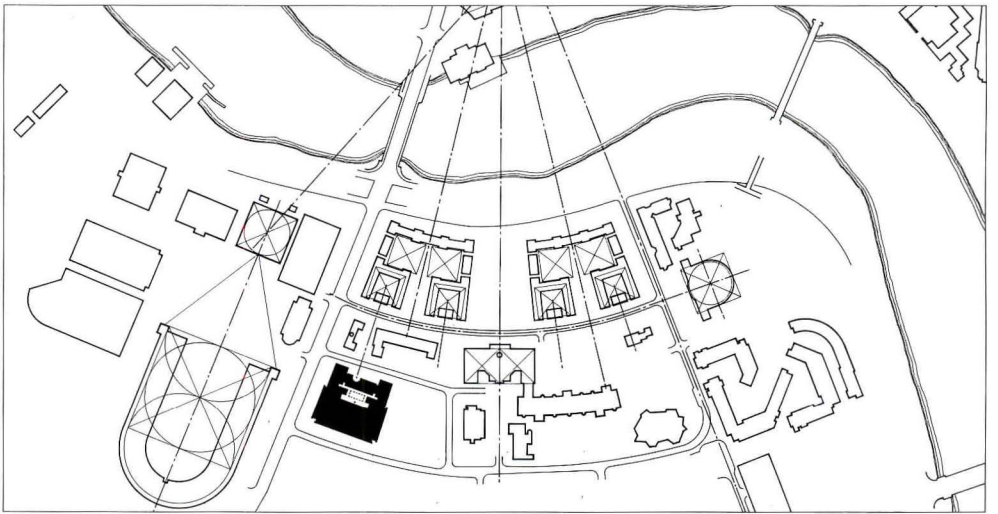
Harvard's business school is a little village unto itself, lying just across the Charles River from the main campus. It was designed in 1927 by McKim Mead & White, which won a competition for the commission. The business school is like most of Harvard: a grouping of Neo-Georgian buildings surrounding grassy quads, designed in an austere manner that relies heavily on a characteristic iconography of green paneled doors, red brick walls, and white windows, cornices, and cupolas.

Fitting Shad Hall into that kind of matrix was difficult. Both its 110,000 square-foot size and its let's-get-fit, thirtysomething program are alien to the original business school. Luckily, Shad was to be sited at an edge of the campus, beside the athletic fields, which prompted Kallmann, McKinnell & Wood to design what is really





Kallmann, McKinnell & Wood divided the mass of Shad Hall into a pair of skillfully detailed structures that are inspired by the Neo-Georgian vocabulary and splayed geometry of the business school campus (site plan, right). A formal “villa” with elongated windows (top right) faces neighboring campus buildings and a brick “barn” flanks the playing fields (below). The arcade wrapping the simpler volume (facing page) is intended to bridge public and private realms, and articulate the windowless box containing the center’s athletic activities.





not one building, but two buildings butted together. The resulting complex evokes the relationship of a villa and its barn. In front is the villa, carefully articulated, with a recessed entry framed by two wings. In back, facing the fields, is the barn, a big red box.

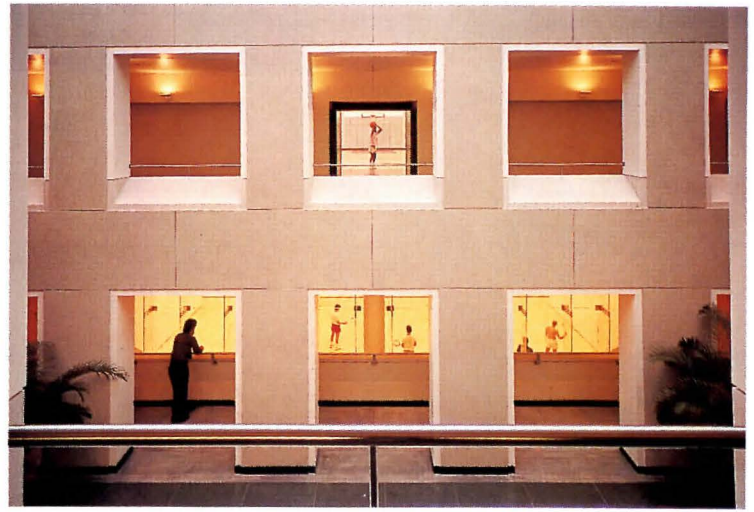
The barn is simple and plain enough to hold its own when seen across the spacious playing fields. Inside it, just as in a real barn, are Shad Hall's large volumes: its basketball courts and squash courts and running track, occupied not by animals, of course, but by grunting athletes. The villa is very different. It addresses the McKim campus in a more formal and frontal way. Brick wings and a stuccoed entrance break its mass down to fit the scale of the older buildings. It houses not anonymous athletic sweatboxes, but rather the more delicate, more humanly scaled spaces that support them: lobby, lockers, exercise rooms, circulation, and a café.

With the siting established, the problem for Kallmann, McKinnell & Wood became making Shad look Georgian without imitating Georgian. Like the university itself, Shad had to convey tradition and future direction with equal fervor. It needed "consonance without replication," in Michael McKinnell's formulation.

The architects looked closely at the old McKim campus and took many cues from it. They respected the odd radial campus layout that shapes buildings into trapezoids in plan, but removed Shad from the focal point of the plan so that its splay is barely perceptible. More important, the architects accepted and employed the given architectural language of Harvard—all those green doors, red bricks, and white windows. But they refreshed these elements by transforming them in ways that express our own era. For example, a grid of mullions, no longer made of wood as in the past, is expressed as far more delicate tracery. The bricks match the color and mix of those in the old buildings, but structurally, they are applied as a veneer, not a cavity wall, and are detailed in ways that subtly suggest the difference.

The architects learned, too, from McKim's strategy for breaking down scale. A pattern recurs in the old campus, in which a stucco pavilion is framed by two brick ones to either side. What is really one big dormitory looks more like a manor house framed by a couple of outbuildings. Surely the McKim office adapted the pattern from the oldest part of Harvard, where the white





granite University Hall, by Charles Bulfinch, stands among red brick neighbors. Kallmann, McKinnell & Wood compressed the pattern, creating at Shad a single building with a white center and brick wings.

Other elements of the athletic center are similarly transformed. The entrance is located off center to align with a campus pathway. Instead of a protruding portico, it's a recession. And because Shad is a gymnasium, a place for physical strength, Kallmann, McKinnell & Wood placed at the entry an unadorned concrete column that supports a massive steel plate girder as an arm might lift a barbell. Connecting column and girder is a steel capital. At this capital, the architects' iconography becomes pleasingly obscure. It is to be gilded. Other Harvard buildings sport gilded domes to celebrate the intellect, but Shad, a gymnasium, celebrates the body with a gilded steel joint.

Indoors, the athletic center is an austere symphony of light and space. Its clear plan takes advantage of the natural symmetries of the program, not only those of playing courts, but those created by the need for equal men's and women's areas. A full-height atrium organizes the building and makes all its activities visible to one another. The first thing you see when you enter Shad is usually someone playing squash beyond a glass wall across the atrium.

As befits a school for learning to get rich, the facilities are ample. Every shower is its own little room, with tiled walls and a small dressing area. Colors are muted. Floors are covered in carpeting or polished concrete. Drywall walls and ceilings are given diversity and depth by the use of many subtle shades of off-white paint. Throughout the building, there's a hint of some other era of architecture. In the lovely café, for instance, furnished and paneled in glossy black wood, a Glasgow-Vienna, turn-of-the-century atmosphere is unmistakable. But it's elusive; you can't pin it to any detail.

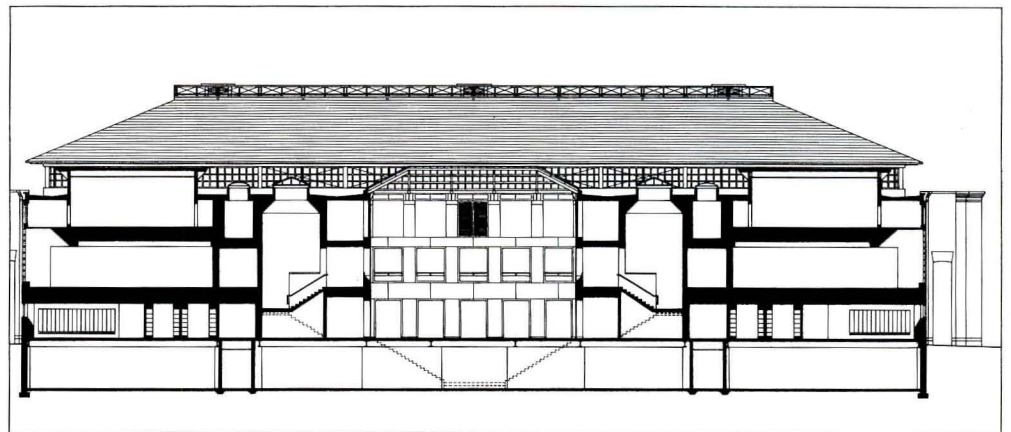
One of Shad's details has puzzled local architects. A monumental arcade girds the

barnlike part of the building. It has no apparent function. McKinnell admits this is true but argues for it anyway. "It represents the idea of engagement between the observer and the building," the architect says. He claims it mediates between the public world and the private and is needed especially in a building that because of its function "is theoretically blind."

The athletic center has proved immensely popular already, busy by day and glowing by night when the café cups the entrance in a bowl of light. Despite its size and special program, it reads as a piece of the fabric at Harvard's business school, a background not a foreground element. Shad Hall is a fresh invention in the Georgian tradition that strengthens Harvard's character. ■

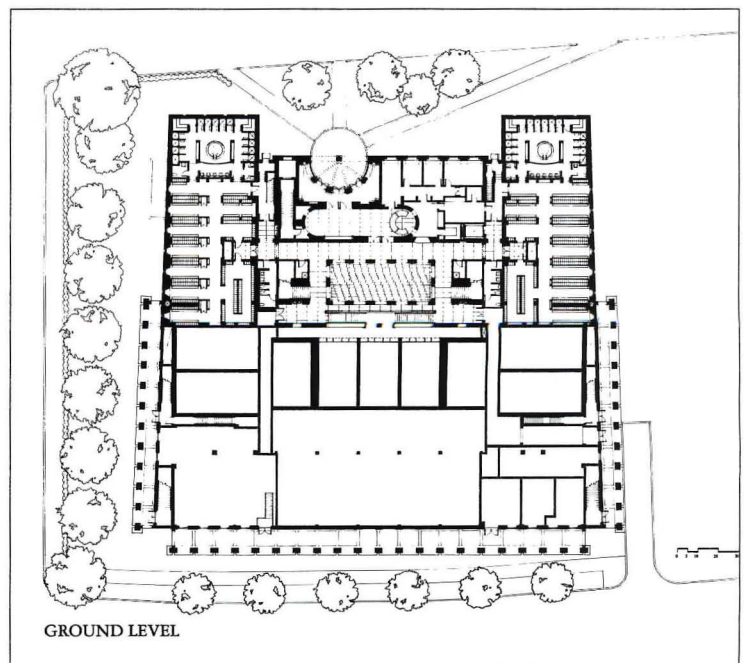
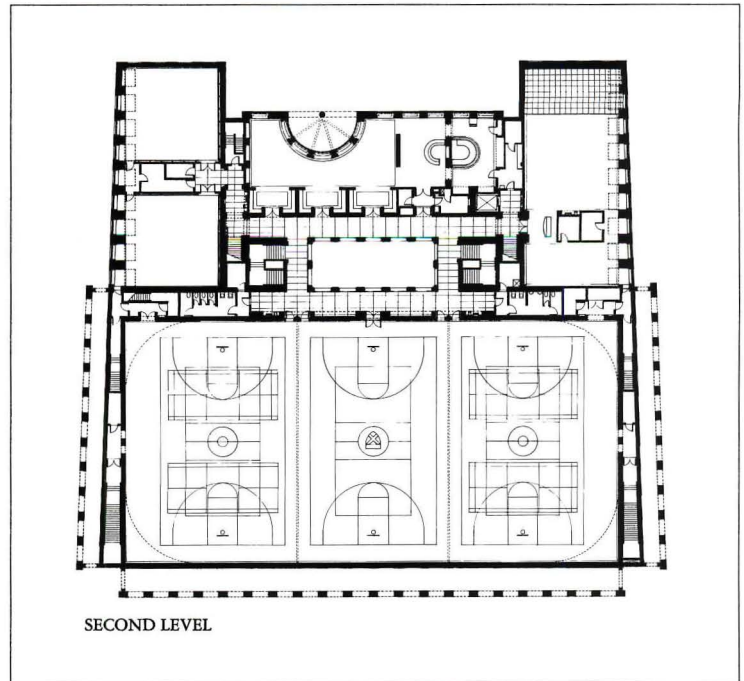
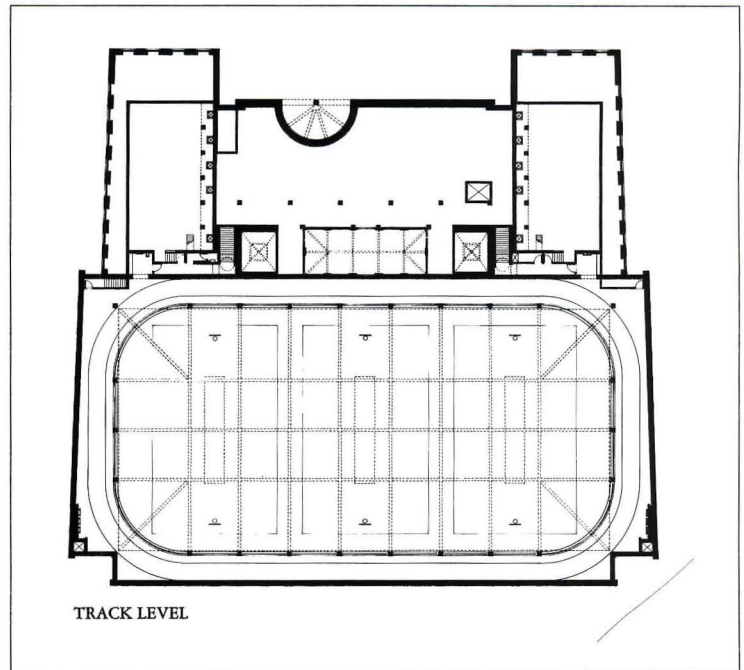
—ROBERT CAMPBELL

A running track, ten laps to the mile, encircles a triple basketball court to form the major indoor space of Shad Hall (facing page and sections below). Subtle shades of white paint give life to the trusswork overhead. A little theater of athletics—squash and basketball—is framed in small prosceniums from the moment you enter the athletic center (above). The courts are reached from a stairway behind the arcade flanking the entrance lobby (above left).





Kallmann, McKinnell & Wood was asked to give Shad Hall's café a pub-like atmosphere; instead, they designed a space that resembles a fin-de-siècle Viennese café or a Charles Rennie Macintosh interior (above). Placed directly above the main entrance lobby, the brightly lit café with its semi-circle of windows (facing page) becomes a lighthouse at night to draw visitors. A delicate grid of mullions reinterprets the thicker white Georgian windows of older Harvard buildings.



SHAD HALL
HARVARD UNIVERSITY
BOSTON, MASSACHUSETTS

ARCHITECT: Kallmann, McKinnell & Wood Architects, Boston, Massachusetts—Gerhard Kallmann, Michael McKinnell, Henry Wood (principals-in-charge); Theodore Szostkowski (project designer); Ron Steffek (project manager); Deborah Collins, Ken Cooper, Vincent Cortina, Marsha Cuddeback, Kenneth Hartfiel (design team)

ENGINEERS: LeMessurier Consultants, Inc. (structural, mechanical, electrical); Fay Spofford & Thorndike, Inc. (civil)

CONSULTANTS: William A. Rae (landscape); Stephanie Mallis, Inc. (interiors); Cambridge Acoustical Associates, Inc. (acoustics); Terry Chassman & Associates, Inc. (lighting); Cini-Little Associates, Inc. (food service); Todisco Associates, Inc. (specifications)

CONTRACTOR: George B. H. Macomber Company

PHOTOGRAPHER: Steve Rosenthal



Koning Eizenberg house
Santa Monica, California
Koning Eizenberg Architecture

INTO THE

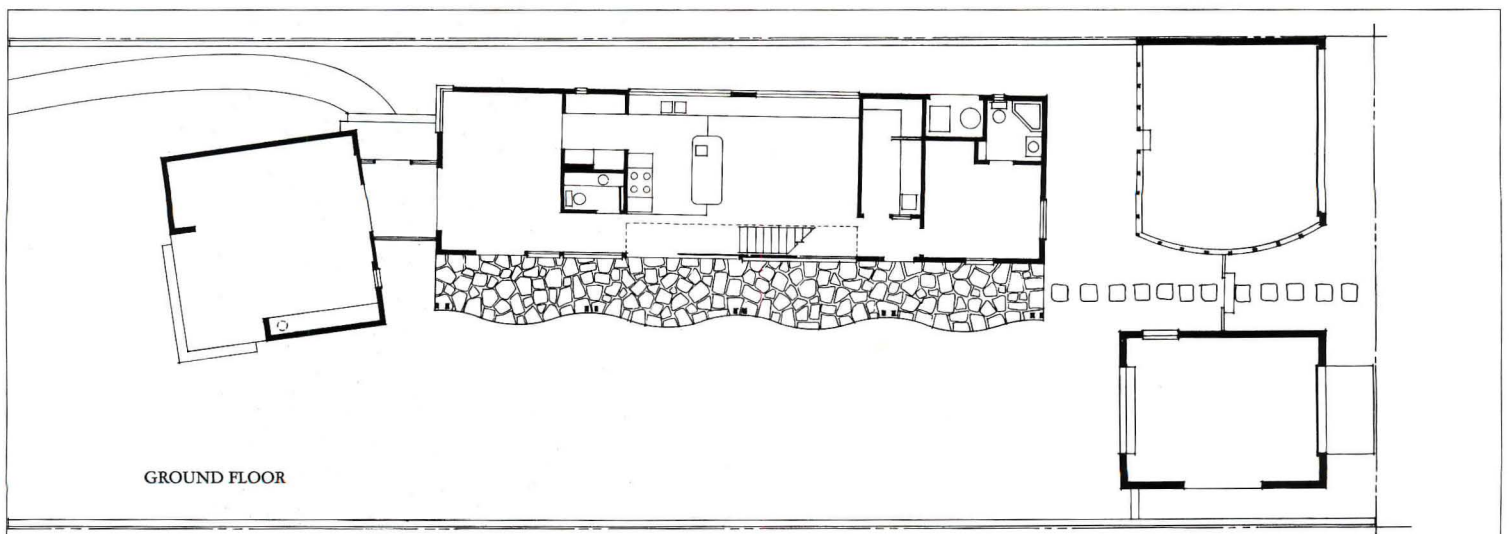


GARDEN





Koning and Eizenberg contributed to the landscape of their Santa Monica paradise (previous pages) by inserting a wavy-edged, stone terrace (above and plan below) and an airy metal verandah (facing page, top), which was inspired by French Impressionist Claude Monet's garden in Giverny, France. The studio and living room at the front of the lot (above) are connected to the main linear block of the house (facing page, top) by a glass enclosure (facing page, bottom).





HANK KONING AND JULIE EIZENBERG ARE AUSTRALIAN-BORN architects with a growing practice in Santa Monica, and a couple with two small children who needed a larger place to live. The young couple searched for a way to realize the concept sketched in the house they had remodeled earlier for themselves: a simple, narrow residence with interiors flowing easily into a garden.

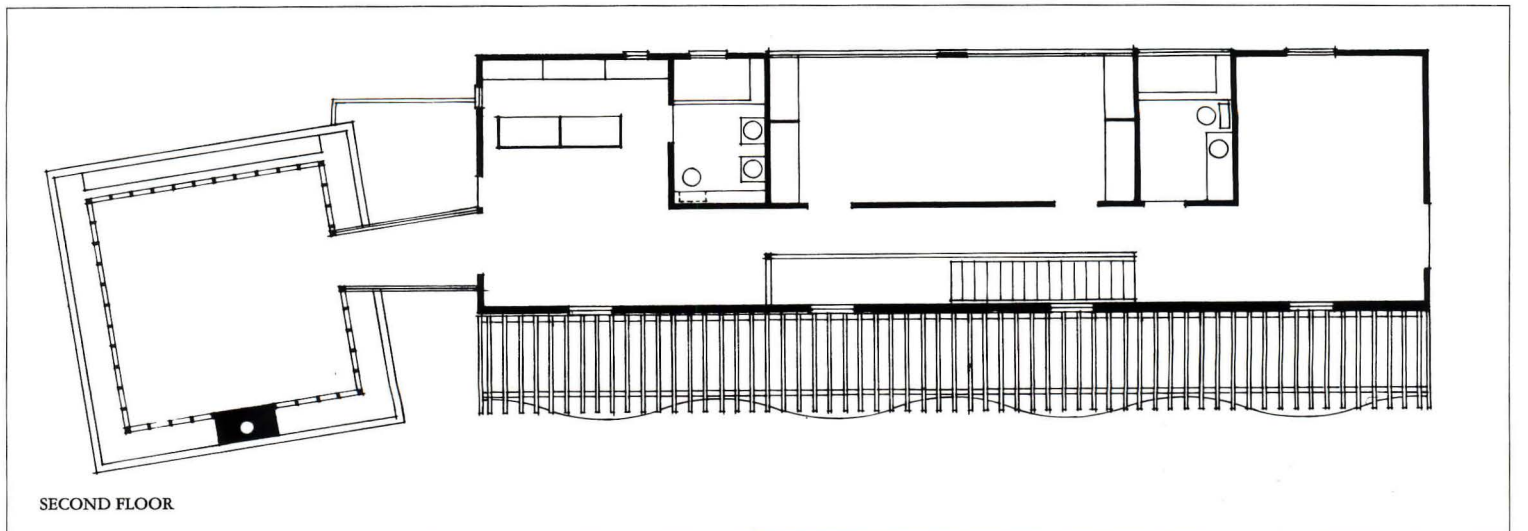
On a leafy residential street near their previous residence, Koning and Eizenberg found an unusually deep lot with a rear alley that allowed them to park in back of the house, eliminating the need for a driveway. The tiny bungalows to either side of the site were set so far back that the street frontage seemed almost rustic. The architects chose to locate their house along the north boundary line, facing south over a broad expanse of lawn. They were inspired by the traditional Australian homestead, in which a broad shady verandah is wrapped around a plain brick box, and the porticoed flounder houses of Virginia, sited on the edges of rectangular lots to face sideways.

Koning and Eizenberg originally planned to build a single-story studio at the front of the house. To their surprise, the architects discovered that local setback regulations encouraged them to build a second floor and tuck a living room under the studio. They redesigned the front volume as a solid block, cut away at the southwest corner and topped it with an elegant glass cage set back behind a narrow balcony and flat roof plane. The architects then rotated this block nine degrees to the trunk of the house, a move that opened up space for an entrance on the north side, helped define the adjacent garden, and infused the linear scheme with a sense of movement. Joined by a glass bridge, the two parts of the house complement each other like head and body: the parents' private retreat and "public" family areas; rounded and sharp-edged forms; dark and light-colored materials. The inward tilt of the studio-living room is balanced by a lath-covered carport and a red brick workshop that close the rear of the site.

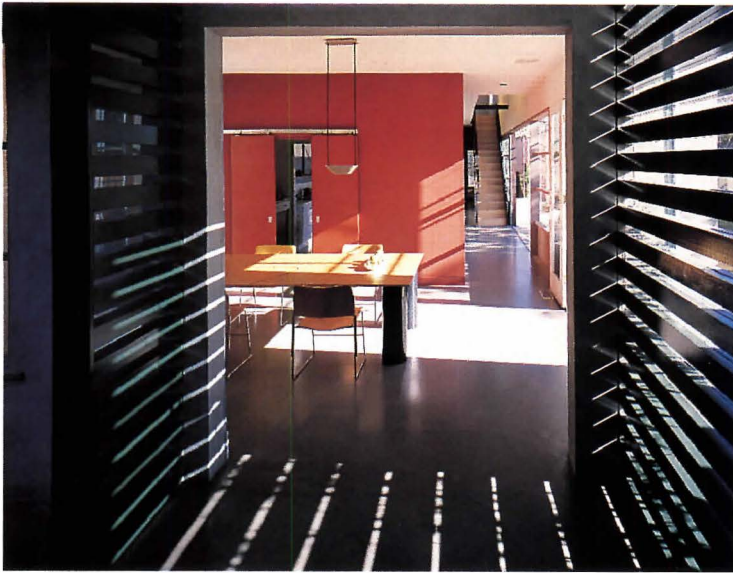
Such clusters of related forms have been created by Frank Gehry to turn simple buildings into sculptural complexes. Koning Eizenberg's solid forms, however, are reticent and refined in deference to the surrounding landscape. To the southeast of the architects' home, landscape architect Robert Fletcher created a broad green axis that flows like a stream past the building and through a meadow studded with wildflowers. The flow will be contained by walls of gray-green eucalyptus and guavas when the plantings mature, a setting that reminds the owners of Australia.

Koning and Eizenberg planned their house and garden as one, and a sense of openness predominates. From the meadow, the heart of the house is visible through the open windows in the corner of the living room. Much of the south facade consists of openings that reveal and connect, with a suggestion of Rudolf Schindler in the studio window detailing.

Continuity between lawn and floor, sky and ceiling extends to the



SECOND FLOOR



A view from the slatted link between ground-floor living area and dining room (above, top) reveals the strong color palette and patterns of daylight within the interior. The upstairs corridor (facing page) features a glass channel set within its plywood-covered vault. Wooden flaps in the channel can be opened for light and air, or shut to conserve heat. The master bedroom at the end of the corridor (above, middle) adjoins the Schindler-inspired studio (above).

interior. The guest bathroom and pantry are housed in a free-standing structure that divides the living room and dining area from the kitchen/family room. These modest spaces are enhanced by pleasing proportions and an inspired sense of color and detail. The chimney-piece in the living room, for example, is patterned with eucalyptus leaves that were laid on the concrete when it was cast.

A free-floating, steel-framed staircase leads to a more enclosed sequence of spaces on the upper floor. A narrow corridor beneath a smoothly curved plywood vault evokes the feeling of a yacht, leading past children's cabins to a master bedroom and up a step to a studio, whose wraparound windows suggest a ship's bridge.

The studio cuts loose from the rest of the house with strongly defined window mullions and ceiling, a galvanized metal chimney, and a checkered floor of maple-veneered plywood and masonite. Many of the house's best elements required patient shopping around, even for something as simple as the sliding slatted wood shutters. Other features were improvised between architects and contractor during construction.

The house is pleasingly unpretentious, a quality that has been the firm's signature since it began ten years ago. Koning and Eizenberg confess that their dream is to live in a trailer on a large empty lot, enjoying the minimum of shelter and the maximum of nature. Their own house comes a lot closer to that ideal than some new residences now under construction in west Los Angeles, whose master bathrooms and walk-in closets are as large as a mobile home.

The firm has consistently demonstrated its skill in packing a lot of ideas into a deceptively simple frame. Koning and Eizenberg made their reputation with projects so small that they had to build as well as design them in order to make a living. Challenged by sites as tight as the budgets, they created a series of infill rental apartments that stand out crisply among the clapboard cottages and "dingbats" of Santa Monica.

The most ambitious of Koning Eizenberg's earlier projects is a pair of loft towers on a picture-pretty street in the Hollywood hills. Each 20-foot-square block comprises three stories of living and working space, rising up a steep hillside. The towers are as stark and versatile as industrial lofts, but they anticipate the architects' own house in the way they are slightly rotated to open up views, and in the subtle inflections of the service areas in back. As you walk around and through Koning Eizenberg's architecture, you realize that the apparent simplicity is illusory.

—MICHAEL WEBB

Michael Webb is a Los Angeles-based contributor to LA Style and Metropolis. His book, The City Square, will be published in October.

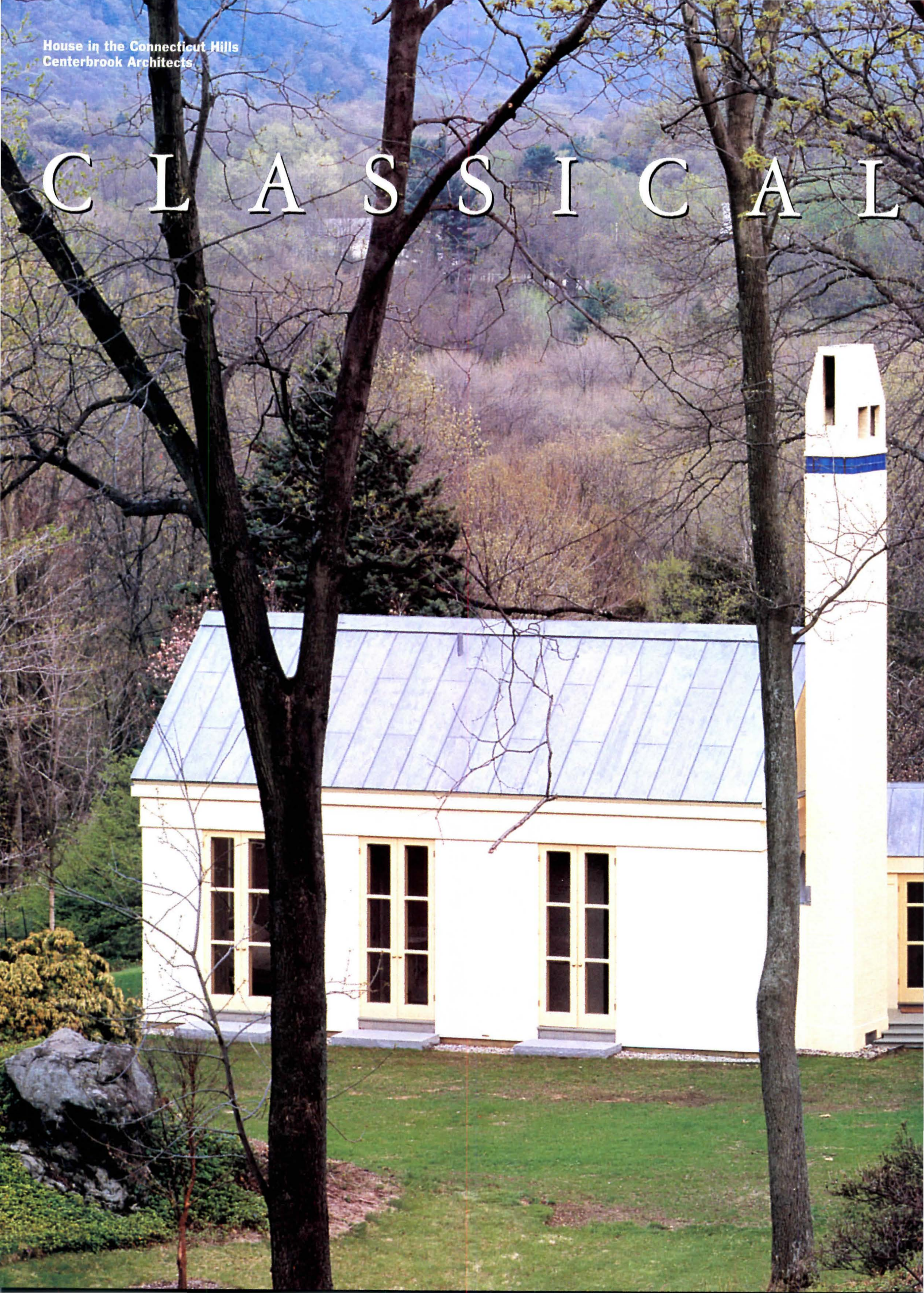
KONING EIZENBERG HOUSE SANTA MONICA, CALIFORNIA

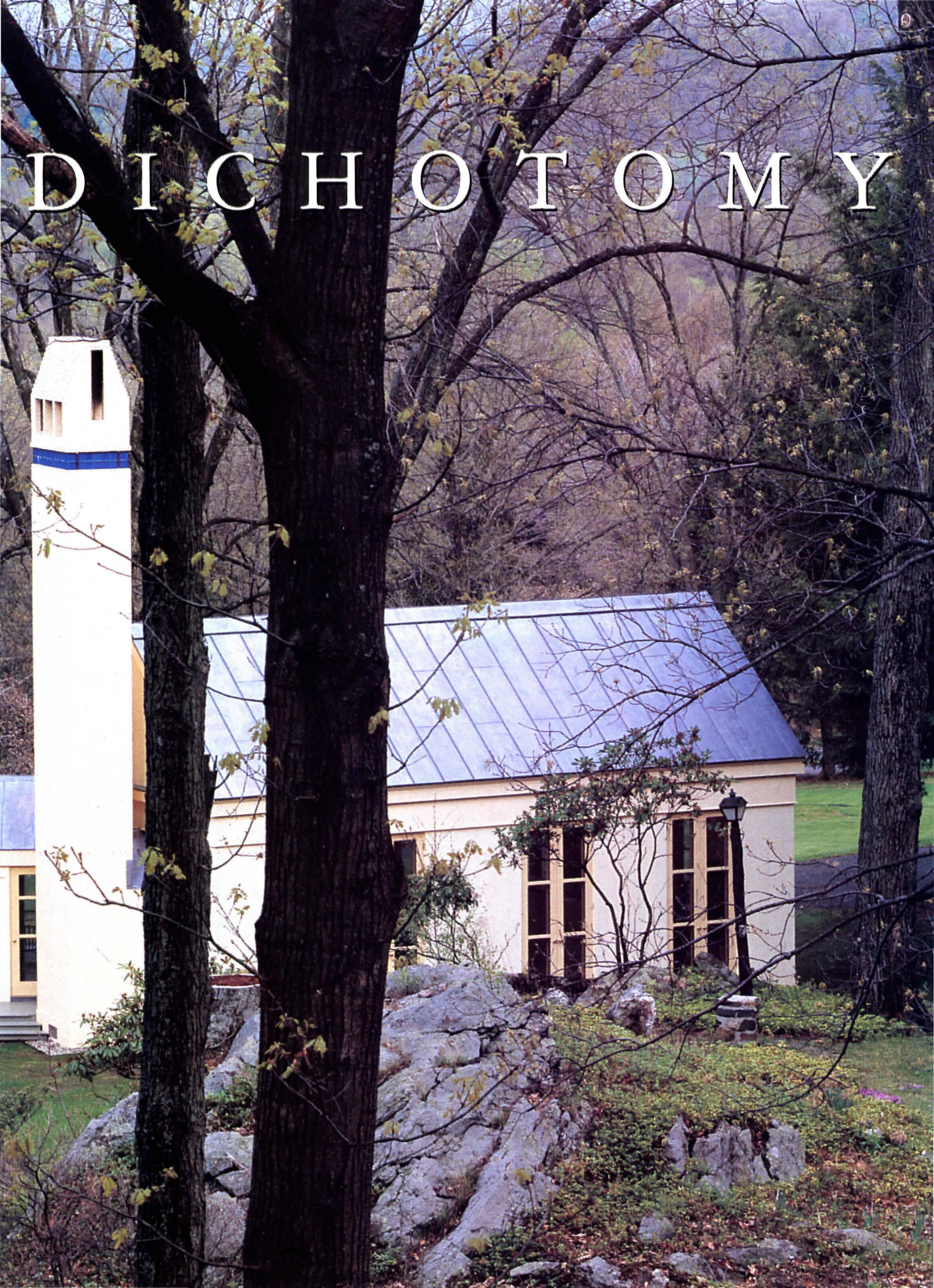
ARCHITECTS: Koning Eizenberg Architecture, Santa Monica, California—Hank Koning, Julie Eizenberg (principals-in-charge); Tim Andreas, Stuart Emmons, Yo-ichiro Hakomori (design team)
LANDSCAPE ARCHITECT: Robert Fletcher
ENGINEER: Gordon Polon (structural)
CONTRACTOR: Bruce Brown Construction
PHOTOGRAPHER: Grant Mudford



House in the Connecticut Hills
Centerbrook Architects

CLASSICAL





D I C H O T O M Y



Centerbrook framed the entrance pavilion of the Connecticut house with a pair of tall, narrow chimneys (previous pages). Although the wings appear symmetrical, they are placed at different angles (plan, facing page). Daylight infuses the interior, flooding in through six sets of oversized French doors in either wing (above).

UNLIKE HOUSES THAT RELY ON GRAND gestures and flamboyant details to announce their presence, the house designed by Centerbrook's Mark Simon and James C. Childress needs no such theatrics. Instead, this diminutive design, at once both refined and dynamic, calmly asserts its preeminence while quietly acknowledging its role in the Connecticut landscape.

Such self-assurance, though seemingly spontaneous, grew out of the architects' agile melding of a number of influences. Long inspired by the Classical canon as well as the local vernacular, Simon discovered a fresh counterpart in Childress's commitment to simple, bold forms. Together they created a house in a style Simon refers to as "Nordic Classicism," combining the serene order of classical Greek architecture with the natural grace of Scandinavian architecture. This is a house without excess: simple, refined, yet with a sense of humor. Pale yellow walls of cedar siding are topped by a lead-covered copper roof painted gray-blue; two brick chimneys each sport separate bands of royal blue glass tile.

"This house is both a gatehouse and a manor house," says Simon, referring to the building's role within its context. Set at the end of a long driveway and at the base of a

manicured rock outcropping, the house is an exuberant marker, acknowledging the driveway's end, the beginning of the forest beyond, and the presence of nearby structures.

For this house is not alone. Instead, it sits amidst a compound of small boxy buildings—two guest houses, a garage, a tool shed, a poolhouse—all designed in the 1950s by the property's former owner, a New York-based professor with a yen for architecture.

At first, Centerbrook's plan appears simple—two wings set on either side of a small central entryway, rooms all on one floor—an arrangement that reflects the clients' desire for a weekend house without levels. On second glance, however, it's clear this is a house where apparent simplicity masks a great sophistication, where the obvious often takes an unexpected turn.

"I like to design houses that people can appreciate at a number of levels—intellectually, artistically, and viscerally," Simon says, "where some aspects seem to sneak up unexpectedly." Nowhere is this approach more apparent than in the house's interior. Seemingly petite when viewed from the exterior, the house turns monumental when viewed from the interior, an effect created by the presence of six sets of French doors in each

wing, each more than nine feet in height. The entryway is smaller than the two wings, a playful subversion of Classical ideals. And its role as center is subsumed by two chimneys of different sizes and angles that face each other in a permanent state of communion.

By slightly skewing the two wings, the architects created an enfilade with insouciant verve; allowing the eye to travel from the living room, past two structural columns in the entry, into the private wing beyond. (A jut in the wall in front of the bedroom assures privacy by preventing the eye from traveling further.)

Such wry manipulation of materials and forms reflects Simon's ability to absorb, then contort, a wide range of architectural antecedents. From Trystam Edwards, an English writer active in the early 1930s, Simon developed a respect for buildings with clearly-defined centers, sensitive to their surroundings, with parts that relate to the whole. But in this house, Simon's center—the entryway—bows to the dominance of the chimneys. And the wings, at first seeming symmetrical, actually are set at different angles to each other. Transforming the tenets of the past with a graceful twist of the present, Simon and Childress have created a house that's dignified, yet buoyant, comfortable, and refined. ■

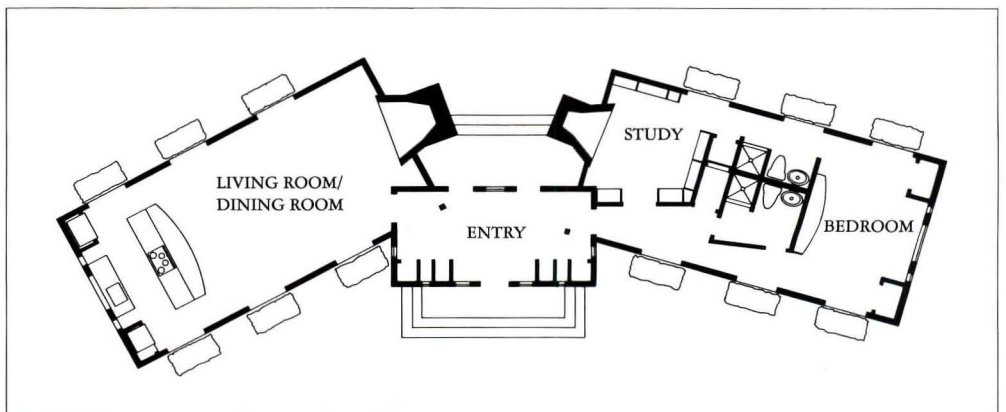
—VICTORIA GEIBEL

Victoria Geibel is executive editor of the New York-based magazine, Metropolis.

HOUSE IN THE CONNECTICUT HILLS

ARCHITECT: Centerbrook Architects, Essex, Connecticut—Mark Simon, James C. Childress, design team; Charles Mueller, job captain
ENGINEER: Besier Gible Norden (structural)
CONTRACTOR: Picton Construction Company
LANDSCAPE CONSULTANT: Sylvia Surdoval
PHOTOGRAPHER: Timothy Hursley/The Arkansas Office

At night, halogen lights hung from the cathedral ceiling swathed in silk drapes smoothly spread ambient light (top right). On the wall at the end of this public wing, a Venetian window stretches the full height of the wall, partnering built-in cabinets in a dance of light and mass. A bird's-eye-maple sofa, five-legged coffee table, and bed (center right) are designed by Simon and Childress. Niches of storage space built into the walls eliminate the need for freestanding cabinets. The house's straightforward plan (right) belies its quirky sense of sophistication. Within the entryway, two structural columns define and divide the central space, diverting the eye from a singular path.



Gospodnetic House
Goochland County, Virginia
Interplan, Architect



W H I T E H O U S E

OVERLOOKING THE JAMES RIVER, THE HISTORICAL REFERENCES of the 5,000-square-foot Gospodnetic house are strong, yet clearly not of the vintage so common in this affluent and growing suburban area west of Richmond, where “luxury homes” of the mock-Georgian and mock-Federal variety are the rule. Its bold assemblage of forms immediately recalls Le Corbusier’s houses of the 1920s. Within this strict vocabulary, architect Vera Gospodnetic bridged the gap between traditional notions of home-as-haven and Modern ideas of open plan for her own house.

After turning off the main road, the house is approached along a winding gravel road. Its pristine geometrical silhouette emerges from the woods with the bulk of the house set atop a hill with its entrance and garage nestled into the landscape. A rounded tower anchors this north-facing elevation and a pyramid skylight peaks slightly above the roofline. The exterior surface is a tautly stretched skin of synthetic stucco over a skeleton of reinforced concrete block.

Cubic in definition, the house is animated by contrasting volumes such as a sawtoothed, curving stairway; geometrical fireplace and

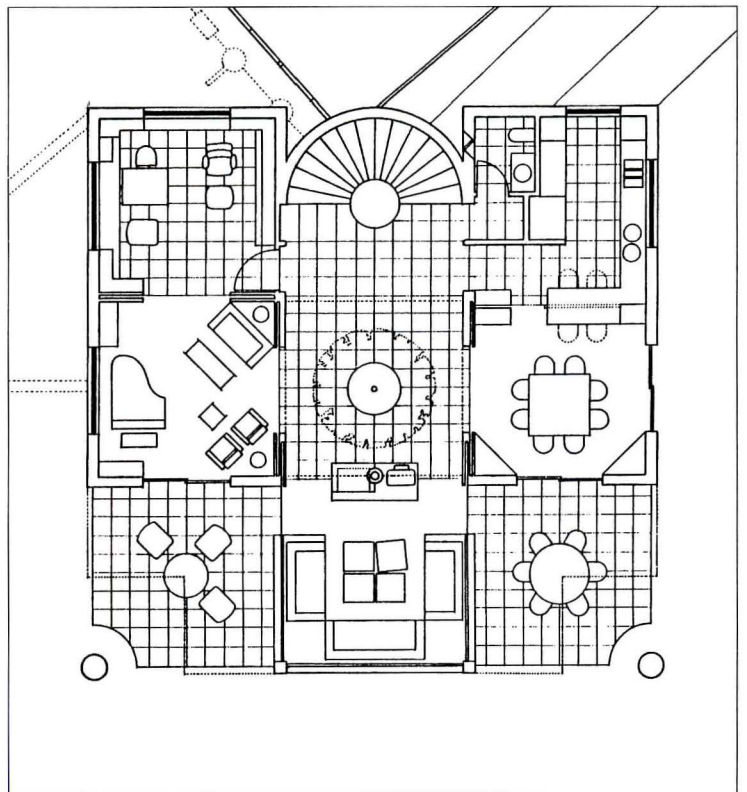
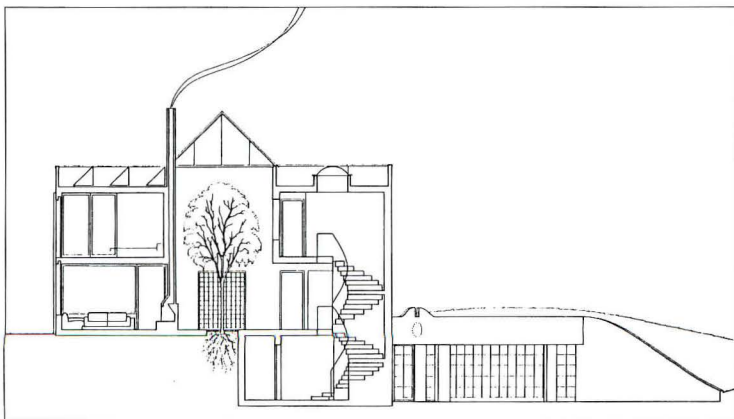
cylindrical chimney flute; and red and blue columns, which flank the entrance and accent the opposite elevation. The flowing interior spaces on the main floor are separated only by pocket doors crafted with gridded windows. The grid pattern is repeated in skylights made of square glass blocks.

Appreciation of the design of this house is dependent on the forms and the relationship of the parts to the whole and the functions they support. Such formal directness requires impeccable and consistent detailing. In its proportions, finishes, handcrafted built-in fixtures and furnishings, and such mundane requirements as provisions for heating and cooling, the house has been thoroughly considered. It is a precise composition, meticulously executed. ■

—LYNN NESMITH

The glistening north facade centers on a stair tower (above). Expansive windows along the southern elevation (facing page, top) offer views to the river. A study on the lower level opens onto a protected grassy court (facing page, bottom).





A sinuous stairway within a tower rises from the lower-level foyer (top right) to the main level (top left). The plan of the main living level shows the building's proportioned grid (above right). Elevation reveals the rigid symmetry of the southern facade (above left). The double-height atrium opens to the second floor hallway and serves as gallery space filled with works by contemporary Yugoslavian artists (facing page and section). Criss-crossing the space is an adjustable, low-voltage lighting system.

**GOSPODNETIC HOUSE
GOOCHLAND COUNTY, VIRGINIA**

ARCHITECT: Interplan, Richmond, Virginia
Robert W. Stewart, AIA, principal; Vera Gospodnetic, project architect;
Vera Gospodnetic and Branko Siladin, design team
ENGINEERS: Joseph H. Norman Jr. (structural);
John W. Ostergren Jr. (mechanical)
GENERAL CONTRACTOR: B. H. Vianes Construction
COST: \$600,000—\$120/square foot
PHOTOGRAPHER: Whitney Cox



Arango/Berry House
Los Angeles, California
Franklin D. Israel Design Associates Inc.



ANGELENO ABSTRACTION





WHEN MARISA ARANGO AND BILL BERRY BOUGHT THEIR LOT on the upper slopes of Beverly Hills, their intention was to demolish the rundown 1950s bungalow that occupied the site. "The old house was ugly and boring," Berry says, "and we wanted something with more oomph to measure up to the property's 180-degree views over the Los Angeles Basin." But the city's building and safety department, concerned about a crack in the site's bedrock, made so many expensive seismic code demands for a new house that the couple and architect Frank Israel decided upon radical renovation rather than complete demolition of the existing structure. The result is a residence completely new in everything but the original framing.

The one-acre lot consists of a narrow plateau that falls away to a steep incline overlooking a canyon that slices through the foothills of the Santa Monica mountains. The 2,750-square-foot, two-level house sits on the middle of the plateau, oriented toward a spectacular panorama. From the street, a walled entry courtyard gives an intriguing foretaste of the urbane visual sophistication inside the house. It is mottled cobalt blue à la Luis Barragan and penetrated by a two-tone stucco facade reminiscent of Rudolf Schindler and Richard Neutra. A Gehry-esque galvanized sheet metal roof caps the abstract compositions, completing Israel's sly compression of decades of architectural innovation. "I wanted the house to convey nostalgic yet ironic resonance," Israel explains. "Upon the bones of the 1950s tract bungalow, I've layered understated references that bring to mind our special brand of Angeleno Modernism."

The plan of the house is composed of two offset parallel rectangles separated by three steps. The upper level contains a master bedroom suite, a guest room, and a bathroom, while the lower level houses the living-dining room, kitchen, and twin studies for the owners, both of whom are involved in the Hollywood film industry. A sensuously curving ceiling in the entry, accompanied by the blue stuccoed wall that runs through into the interior, leads the eye down the steps into a spacious volume of the living-dining room. This interior is basically plain white, set off by bleached oak floors and free-standing screens of burgundy plywood fastened to steel skeletons.

In the master bedroom, the steel and wood canopy that hovers over the king-size mattress is a witty, Neoconstructivist evocation of a traditional four-poster. Behind the plywood screen that serves as a headboard is a master bathroom. Completely private, this space is isolated from the rest of the house in a quiet corner of the lot with a view framed by honeysuckle. To articulate the wing's separateness, Israel clad its walls in the same zinc that covers the roof. The roof's somber sheet metal, shaped to cover a mechanical plant and ductwork, is one place where the intrusion of the original bungalow's awkwardness threatens the elegance of the renovation.

Overall, however, Israel's touch is skillful and serene, energized by rich details that catch the eye. The Barragan-esque black handrail attached to sculptural metal plates is well-crafted, as are the sleek, Neutra-inspired metal corner posts that articulate the steel casement windows. At a construction cost of \$125 per square foot, the Arango/Berry house, as Israel remarks, is "an overlay of texts that can be deciphered or ignored, as you please." ■

—LEON WHITESON

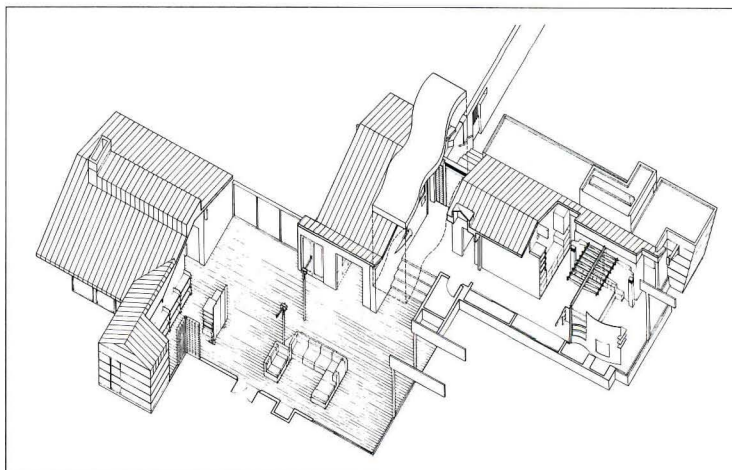
Leon Whiteson writes about architecture for the Los Angeles Times.

ARANGO/BERRY HOUSE
LOS ANGELES, CALIFORNIA

ARCHITECT: Franklin D. Israel Design Associates Inc., Beverly Hills, California—Frank Israel (principal-in-charge), Mitchell Dejarnet (project architect), Jim Harlen, Michael Lee (design team); Jeffrey Chusid (production coordinator)
ENGINEERS: Davis Fejes Design (structural); Mel Bilow (mechanical)
CONTRACTOR: Mike Iverson
PHOTOGRAPHER: Grant Mudford



Barragan meets Schindler, Neutra, and Gehry with a twist in Frank Israel's radical renovation of a 1950s tract bungalow on the upper slopes of Beverly Hills (previous pages). Two views of the junction of the metal roof and zinc-clad walls reveal the glazing of the west-facing study (facing page, top) and bathroom wing with glass blocks set into the corner of the living room (facing page, bottom). In the bedroom, a Neoconstructivist canopy suggests a traditional four-poster (top) set off by curving burgundy plywood screens around the fireplace and in the headboard. The entryway (above) is defined by an undulating ceiling, a dark stucco wall, and a knife-edged metal shelf. Axonometric (below) shows the two-level rectangles that comprise the plan, with low-sloped roofs linked by a central trough.



QUIET SPIRIT



Stageberg's pavilion and screened porch on the Lac Qui Parle River provides a box seat in a theater of the seasons (facing page). The structure's curved form is reminiscent of local barns (above), and a rounded roof evokes the image of an upturned boat (below).

*"The stubble field catches the last growth of sun.
The soybeans are breathing on all sides.
Old men are sitting before their homes on car seats
In the small town. I am happy,
The moon rising above the turkey sheds.*

*In the small towns the houses are built right on
the ground;..."*

—from *Driving toward Lac Qui Parle River*,
by Robert Bly

LOCATED NEAR THE WESTERN BORDER of Minnesota, on the Lac Qui Parle River, this modest wooden pavilion is built close to the ground—a simple, frank expression of its owners' request for a place of solitude to enjoy the river and the majestic landscape encompassing the family farmstead.

Designed by Minneapolis architect James Stageberg, it is a strong yet unassuming structure that fits naturally into the land. "We call it our river bluff folly," says Gerald Michaelson who, with his wife Pat, has farmed the land for more than thirty years, growing soybeans in the rich, black marl of

the Minnesota prairie. Michaelson grew up in the farmhouse that he and his wife now occupy, and as a boy, he attended a one-room schoolhouse with Stageberg.

The Lac Qui Parle ("lake that speaks") River that runs through the Michaelson's farm is an endless source of pleasure to the couple, who notes: "We love the folly. The river and scenery are always changing." To the architect, the pavilion is intended as "a place of quiet spirit," a repose for spiritual rejuvenation. Each evening after a day's work, the owner and his wife retreat there (only a five minute walk from the main house) to drink in the theater of the seasons, frequently spotting deer, raccoon, and fox crossing the shallow of the river.

The bluff on which the pavilion stands is covered by cottonwood, box elder, scrub trees, and bushes. "I used to walk along the river path," says Gerald Michaelson, "and stop at the same point to watch the river and its changes, right smack in the middle of where the pavilion now stands." He used to sit on wire corn cribbing until his wife finally got tired of the wire and demanded decent seating.







At first it seemed all that was needed was a platform with a roof over it, but after discussions with Stageberg, the folly grew to be an enclosed structure with lots of windows—"something to keep out the wind and the mosquitoes." The form, according to the architect, is derived from the shapes of barns, Quonset huts, and outbuildings found in the area, its gentle curving roof shaped like the bottom of an upturned boat. The rounded form is actually made from all straight members to simplify construction.

Covered by a cedar shingled roof and siding, and finished inside with pine wainscoting, the pavilion is heated only by a small wood burner. At the owner's request, the pavilion lacks water or plumbing, with only electricity for lighting. The large double-hung wood windows and cross beams are stained blue to contrast with the clear wainscoting.

Connected to the front by a wood deck is a smaller square pyramid-roofed screened gazebo for sitting. Taut, plastic-coated airplane cable and turnbuckles brace the structure against the strong west winds that sweep in from the Dakotas.

"We are emotionally attached to it," say the Michaelsons of their folly. "As soon as you go there, it's like a different world." ■

—BRUCE N. WRIGHT

Bruce Wright is editor of Inform Design Journal and teaches theory at the Minneapolis College of Art & Design.

PAVILION ON LAC QUI PARLE RIVER
LAC QUI PARLE COUNTY, MINNESOTA

ARCHITECT: The Stageberg Partners, Inc.,
Minneapolis, Minnesota—

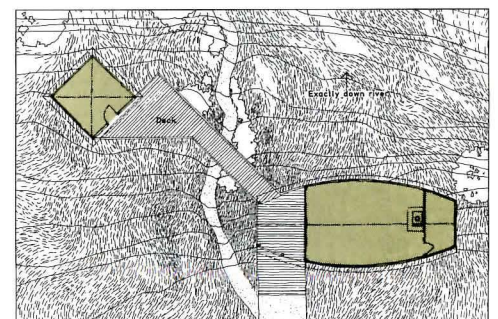
James Stageberg, Jim Foran (design team)

CONTRACTOR: Harris Ronning

PHOTOGRAPHER: C. Korab



Behind the wood burner in the pavilion is a storage room that is carpeted on top (top left). "The grandchildren like to sleep up there," says owner Gerry Michaelson, "sort of like the hay lofts in old barns." The furniture placement (left) underscores the singular purpose of the structure and adjacent screened gazebo (facing page)—a place to observe.





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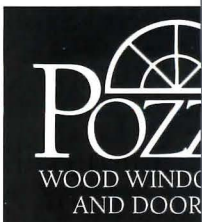
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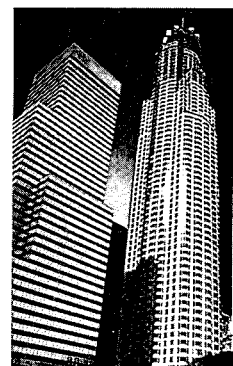
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Plastic for the People

An electricity pioneer builds a lab that functions like a home.

GENERAL ELECTRIC'S "PLASTIC" HOUSE IS ONLY 30 PERCENT PLASTIC. IT IS A 5,000-SQUARE-FOOT laboratory built like a home to test an entire spectrum of housing ideas. The house, sited in a residential area located half a mile from GE's Plastics Technology Center, displays systems adaptable for affordable 1,200-square-foot, expandable dwellings. The prototype was designed by David George, AIA, of Richardson Nagy Martin, Newport Beach, California, interiors by GN Associates, and landscaping by Matarazzo Design.

In the past, attempts to move housing from its traditional craft and architectural context into a modern industrial system—from Walter Gropius in 1913 to Operation Breakthrough in 1968—failed in marketing and in organization, not because of design or technical defects. The ideas were ingenious, the technology well-conceived, and the finished products of high quality, yet all fell short of their objectives. Time will tell if the new GE "Living Environments" project, prototype house in Pittsfield, Massachusetts, stacks up.

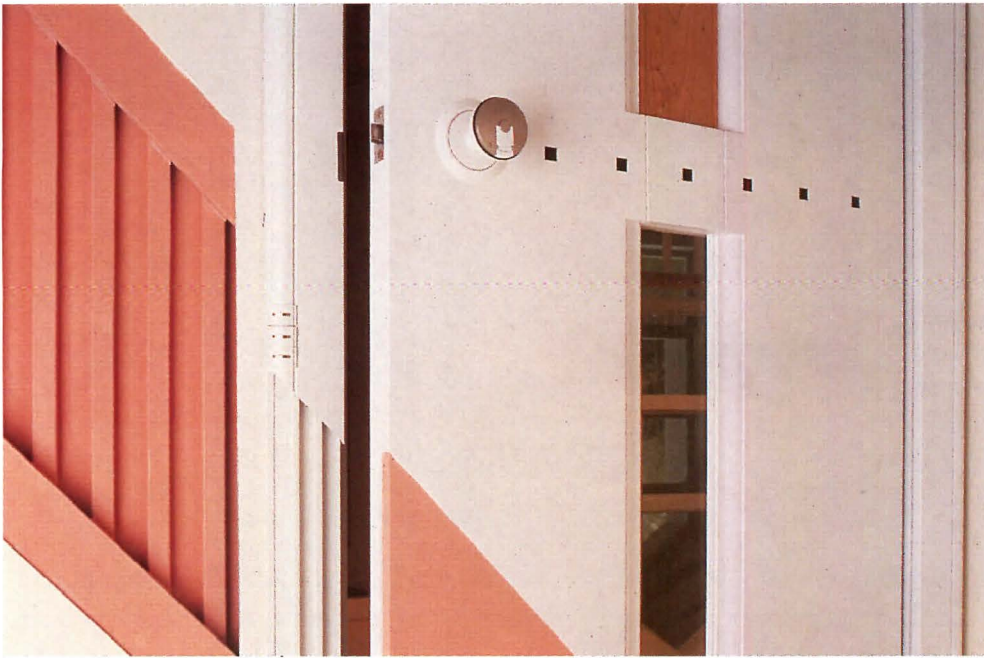
Mechanical and electrical systems

ONE OF THE ACCOMPLISHMENTS of the plastic house is its neatly integrated systems. The modular HVAC, or Total Environmental Control (TEC) is a conceptual unit that supplies and controls five environmental functions including heating, cooling, water conditioning, and heat recovery. It combines new concepts in heat exchange and distribution, as well as reverse osmosis water purification. The TEC water collection system in the basement draws directly from an integrated gutter system that also may be used for heat storage. The basic heat and hot water systems comprise slide-in components. Additional functions, such as waste heat recovery, can be added as a snap-on unit. All of the TEC units can be plugged in and out like household appliances. They are attached to the basement wall with mounting grooves molded into the concrete forms left in place. TEC units are checked using hand-held diagnostic instruments.



Despite its preponderance of new modular systems, GE's prototypical house maintains a "traditional American home" appearance (above and right). The Total Environmental Control box governs five environmental systems (inset).





Piping and wiring throughout the house is accessed through pop-off panels. The fittings are snap fits, with automatic electric power and control connections that can operate from different power sources, and the door frame functions as a raceway for wiring with light switches integrated into its frame.

Molded baseboards include raceways to carry power, telecommunications, temperature controls, and security systems to a central computer control. Home entertainment comes from large, flat TV screens run with high power, and from small-scale audio speakers plugged into overhead raceways or built into the floor. A liquid crystal control changes window glass from transparent to frosted.

Hard foam underfloor tiles form a grid that supplies and defines the position of the jetted tub and base of the shower and all other attached appliances. The floor system gives quick access to plumbing that can be routed anywhere in the house through floors and walls.



The Living Environments Laboratory offers amenities that benefit the environment as well as the occupant's comfort, safety, and well-being.

Structure and envelope

THE CONCRETE FOUNDATION was poured into lightweight, molded plastic forms. The forms were designed to be left in place to serve as wall surfaces. Siding, developed specifically for the project, is made of extruded resin that has improved weathering qualities over more traditional siding, says the manufacturer.

Standardized structural panels upgrade the traditional two-by-four stud wall, positioning and fastening studs on special headers. Another wall

Door frames contain space for wire raceways and integral light switches (top), and cutaways throughout the house allow views of systems at work (above). Electrical fittings allow power and control connections to operate from different sources (right).



system uses two identical foam profiles fastened with factory-installed Velcro fasteners. These panels permit access to wiring, plumbing, heating, and utilities. Wall insulation, which turns the house into a giant thermal container, includes corrugated panels of experimental, engineered wood-standboard insulation with a fire-protective thermoplastic composite skin.

The plastic house incorporates two roofing systems: stamped, thermoplastic composite shingles and injection-molded panels. Thermocouples installed under roof panels connect to a computer that records roofing performance for materials research.

Other amenities

GE'S PROTOTYPE OFFERS A NUMBER OF amenities that benefit the environment as well as the occupants. A disposing unit in the kitchen reduces domestic plastic waste to recyclable pellets. The exercise unit in the master bedroom boasts a "unique electronic viscous resistance unit" for exercise variety. The master bathroom has a jetted tub,

steam shower unit, and full-body dryers to eliminate the need for towels. The vanity area includes an "appliance garage" that conceals the clutter of grooming supplies and a "health pad" to give a readout of pulse rate, blood pressure, and weight. The all-plastic toilet has a hygienic self-washing/drying system, an integrated exhaust fan, and a wall-mounted urinal.

User-friendly modularity

GE'S LIVING ENVIRONMENTS OVERALL concept includes designs for two modular, highly movable factories: one to produce raw panel stock and another to produce finished components for plastic houses. The panel factory will use two high-speed continuous lines to generate interior panels and roof sections that will be shipped to the finishing factory, located near the building site. The factories can be moved to service a building radius, in a manner similar to that of the modular home industry whose trucks usually supply approximately a 300-mile circle around the factory. The movable factories allow considerably more freedom than a fixed-location factory to cope with shifting market demands.

Nothing will be wasted; the panel delivery trucks will return cutting scraps to the factory for recycling. Recycling is an important concept of the plastic house prototype. Concrete walkways leading to the house and the basement floor use recycled thermoplastics as aggregate.

No one can predict with certainty a product's market acceptance, but as a general rule, acceptance increases as products become more "user friendly." User friendly means user control: the product can be installed and placed, and plugged in and out, without the aid of scientists or tradesmen. The strength of the Living Environments house is not in its multitude of beautiful, industrially designed artifacts, although these will help to sell house and products, nor its inspired construction supervision. Its virtue is user-friendliness. All the inherent user-control advantages—including choice based on price, quality, taste, whim, and requirement—are present, as are the inherent dangers of shoddy and inferior products typical of the housing market.

GE has adopted the approach developed in 1961 by Ezra Ehrenkrantz in the School Components Systems Development (SCSD) program, in which he organized a market for school buildings to encourage product research by major product manufacturers to develop new ideas for the building industry. David MacFayden of the NAHB Research Center used the same concept for the "Smart House" (ARCHITECTURE, October 1986, page 102). The concept appears sound, but the results are unpredictable. GE's new "Living Environments" is a first rate try. ■

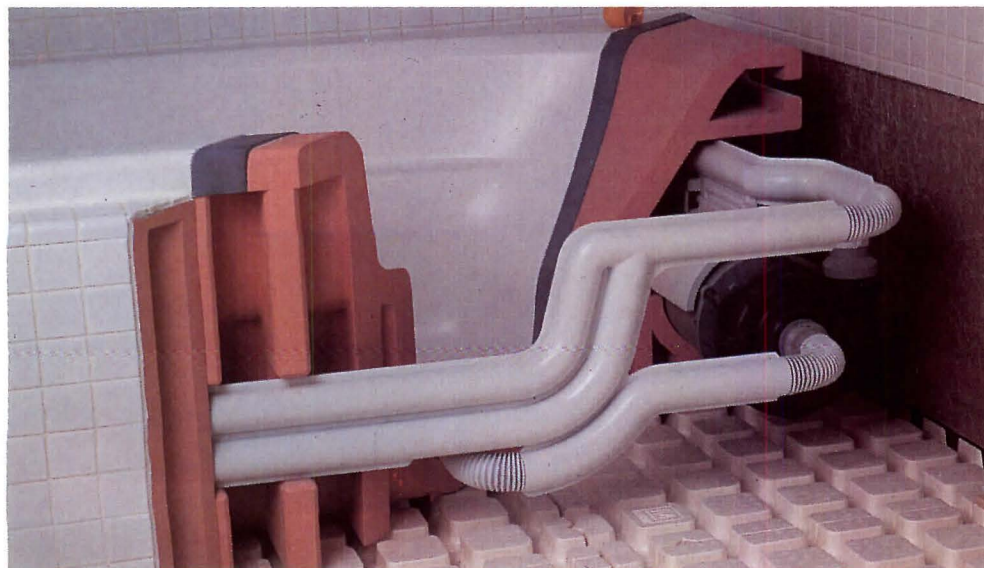
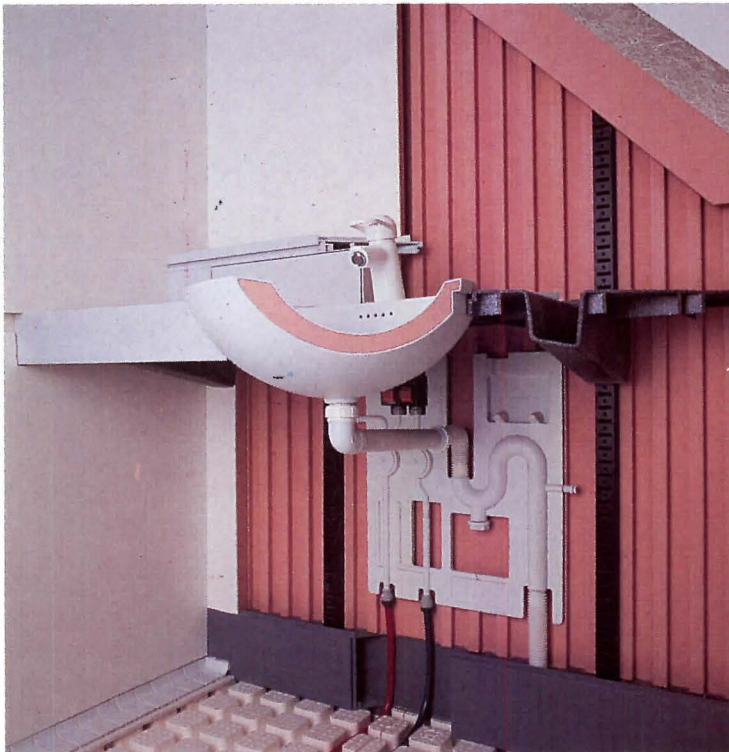
—FORREST WILSON



The prototype all-plastic toilet developed by GE boasts a hygienic self-washing and drying system and an integrated fan (above). Shower stall with cut-away walls permits viewing of a raceway system that allows modular installation of features such as a steam shower unit and full-body dryers that eliminate the need for towels (left). Installation of the shower stall, tub, and toilet modules conforms to the gridded floor that accommodates plumbing.



Master bath includes streamlined fixtures, including a "health pad" that gives a read-out of blood pressure, pulse rate, and weight (above). Piping is accessible through pop-off panels, removed to allow a view of the systems (right and below). Note gridded foam underfloor that allows placement of lines and determines position of attached appliances (right).



THE WIZARD'S COMPANY: A HISTORY

General Electric was formed in 1892. Thomas Edison, one of its founders, already had established the first U.S. research laboratory specifically devoted to "marketing invention" at Menlo Park, New Jersey. At the outset, GE manufactured dynamos for steam turbines. As the company learned how to generate electric power, it realized the technology could be applied to products such as light bulbs, and decided to generate an entire industry, says Dr. Douglas St. Pierre, GE scientist. In 1913, GE brought together a small group of light bulb manufacturers in Cleveland, and formed the National Electric Lamp Association (NELA). GE set up lighting research to market directly to the public and to this day, GE's company campus in Cleveland is called NELA Park.

The company's first research successes resulted in improved lamps, and then the high-vacuum, hot-cathode x-ray tube in 1913 that formed a base for the company's medical business. In 1928, GE formed the Carboly Co. to market the "hardest metal produced by man." A team of GE scientists succeeded in making synthetic diamonds 30 years later. Then came silicones (familiar to kids as Silly Putty) that a team developed into a new generation of plastic materials. When GE needed ceramics for electrical equipment, it developed ceramics. Later, the company moved to plastics for developing cheap phenolic insulators, which became the forerunner of engineering plastics.

In the mid 1950s, GE decentralized into small, independently-operated profit centers, whose emphasis was on markets rather than engineering functions. The centers now combine their research with the acquisition of inventions, patents, and licenses from other sources. St. Pierre says that while the old GE buzzword was "ventures," the new ones are "alliances" and "mutual benefit." This change in operations is reflected in the tendency to call the associated profit centers "GE" rather than General Electric; electricity is but one aspect of their R&D activity.

The amount of research that an industry undertakes is a function of the financial status the industry enjoys, says St. Pierre. For comparison, clay technology improves very slowly because bricks are cheap, and engineering plastics advances relatively quickly because the materials are so expensive.

GE today is a primary materials supplier: power for light bulbs, synthetic diamonds for cutting, engineering plastics for housing, automobiles, and buildings. The company uses research as a marketing tool. Ewa Wascher, chemical engineer and marketing vice president in charge of the Living Environments project says proudly, "Ideas are worthless unless proven in the market place. That is what we are doing."



Civic Facelift

Synthetic stucco uplifts a permit center.



THE ONE-STOP PERMITTING CENTER REFLECTS DENVER'S NEW ATTITUDE TOWARD DESIGN AND the process of getting buildings built. Architect C.W. Fentress & Associates applied a new synthetic stucco skin that turned the somber-faced Modernist University of Denver Law Library into a compatible neighbor to the prestigious, classical revival buildings surrounding Civic Center Park, a product of the City Beautiful movement.

The Permitting Center's "friendliness" extends to its users as well, who now can get all necessary city permits for construction in one building. "Before this building was built, obtaining a building permit was a nightmare," says Robert Root, project designer and senior associate with the firm.

"There literally were five or six different locations scattered all over the city where a citizen might have to go for parts of the permit process, even for minor projects."

The architect extended the ease-of-use concept to the interior of the building by enclosing an existing courtyard to create a grand, three-story public space. From the open atrium space, the visitor can see the various offices of the permitting center on all levels.

The architect cut 30 square feet out of the corner of the building that faces the park, and constructed a new, skylighted rotunda to diversify the blocky building form and to direct users to a new point of entry. "We couldn't give up much square footage to create the rotunda, but its visual impact is important to the overall design," says historic project director James Hartman, an associate with the firm. Broad lawns and formally placed little-leaf linden trees reinforce directionality and further tie the building to the natural elements of the adjacent public park.

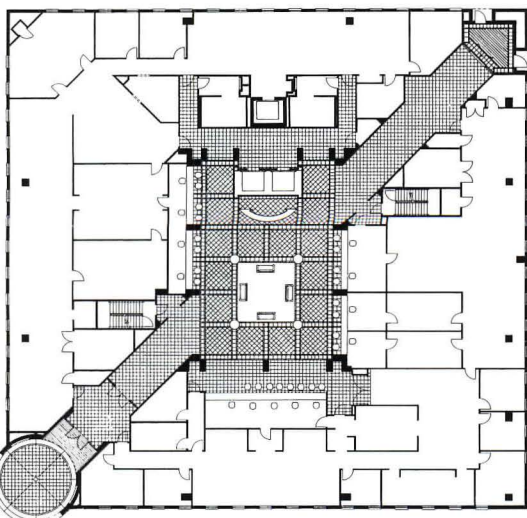
Like the new rotunda, the existing

concrete aggregate wall panels were covered with brick at the ground level and synthetic stucco on the upper two floors, in tones that echo those of the Denver Art Museum across the street. Darker-colored synthetic stucco panels at the windows and glued-on stucco medallions give depth to the new facades.

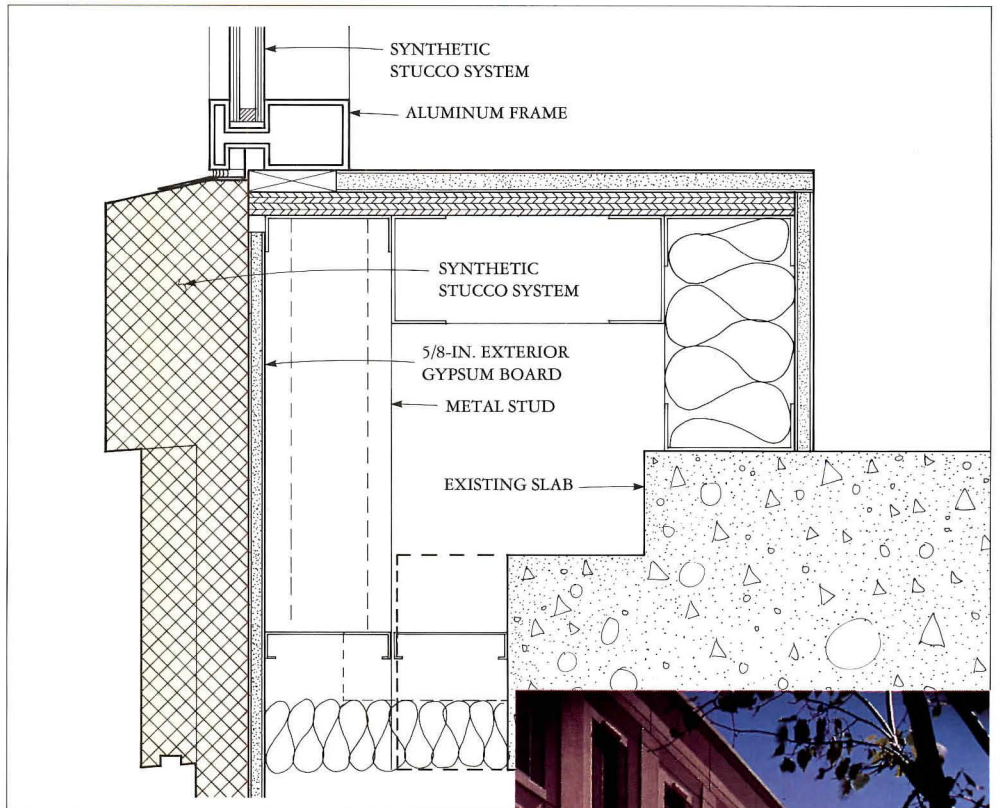
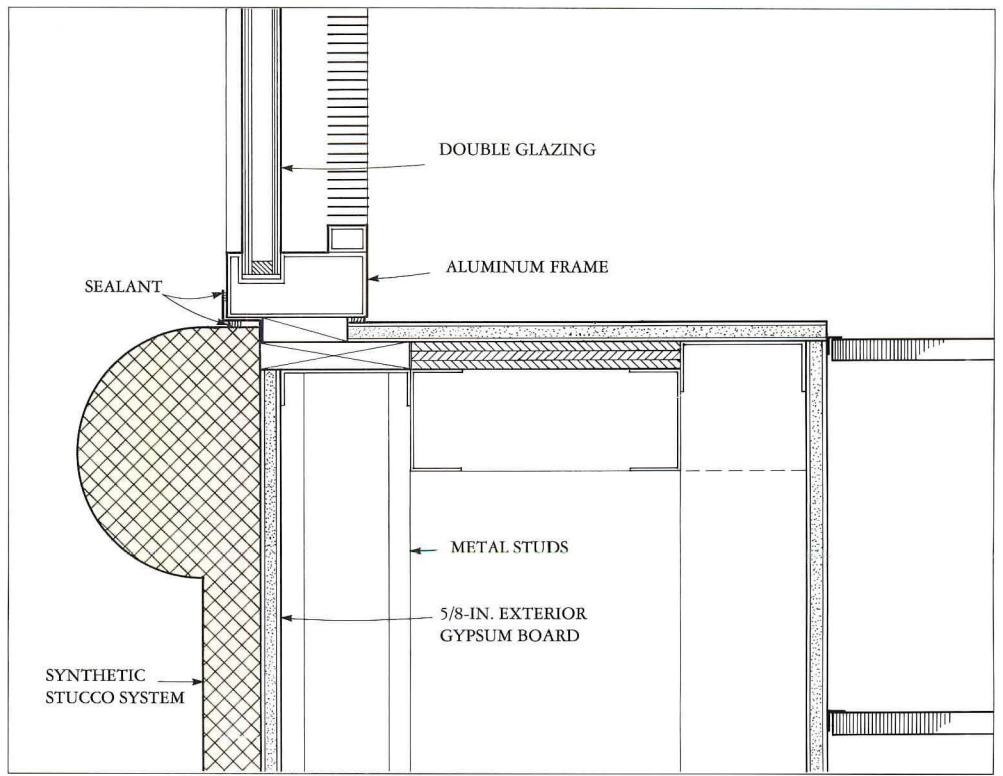
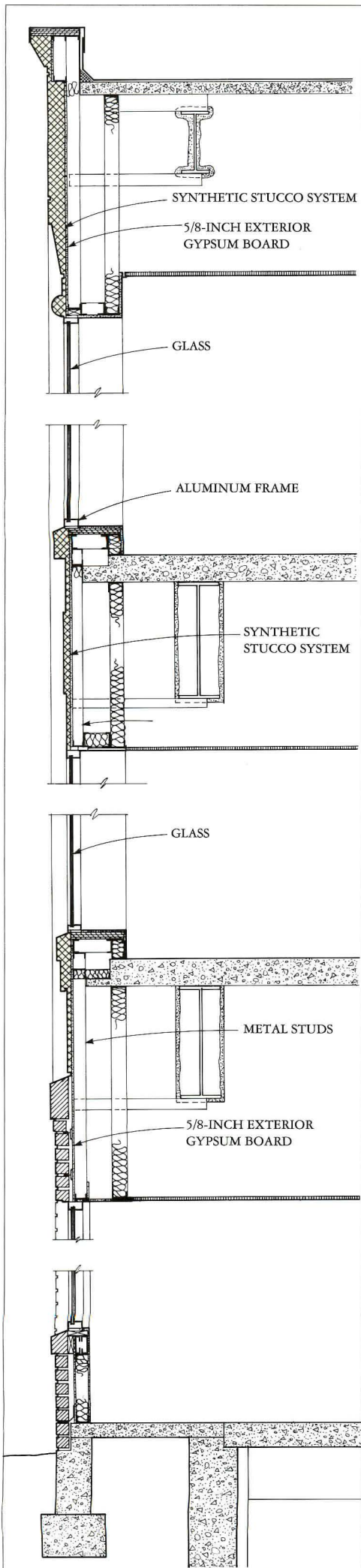
The bulk of the original building, placed over a recessed, first-floor storefront, was divorced from the ground plane, a situation the architects remedied by projecting out the first floor flush with the rest of the facade. "It definitely was cost-effective to remodel this building as opposed to tearing it down and starting over. But we did have a modest budget, and we chose synthetic stucco because it is a low-cost material. But it also gave us the ability to fine-tune color selection," says Hartman. The architects constructed two full-scale mockups on the site.

Root and Hartman both compliment the city's officials on their role in supporting and expediting the new Civic Center. The architects have high hopes that the efficient function of one-stop permitting, as well as the design itself, will foster relationships among the city's building officials and designers. ■

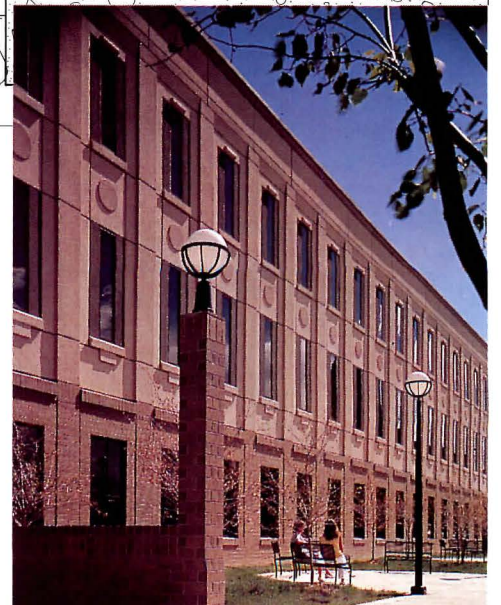
—M. STEPHANIE STUBBS



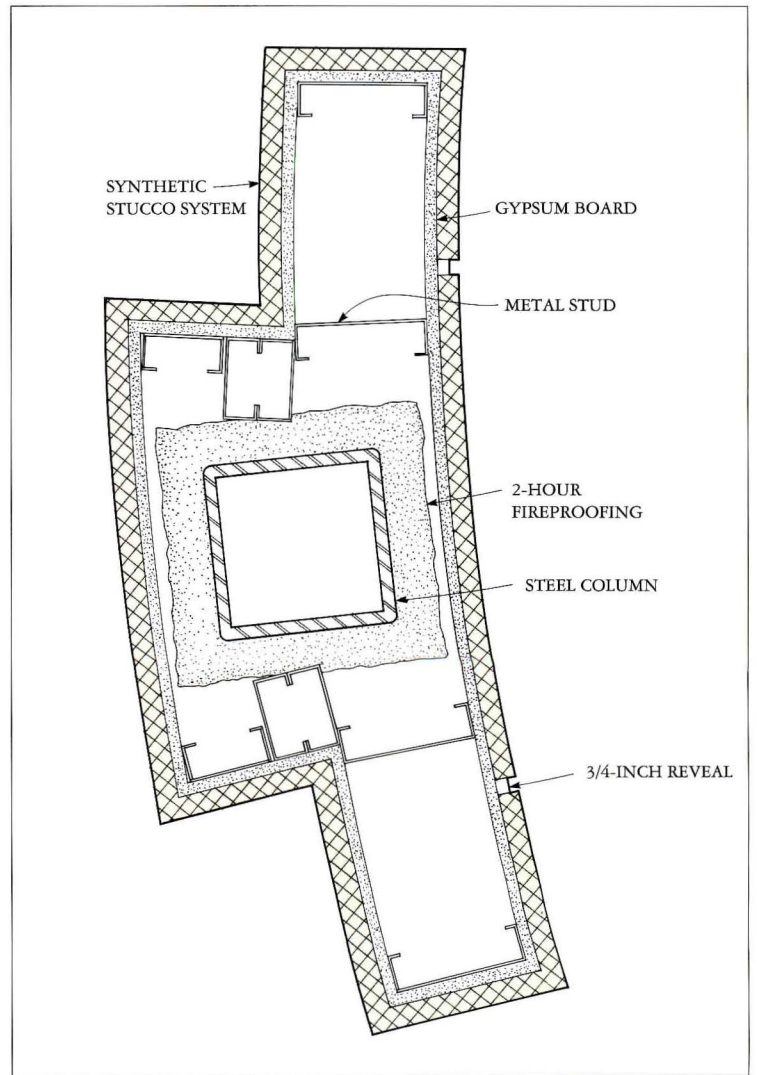
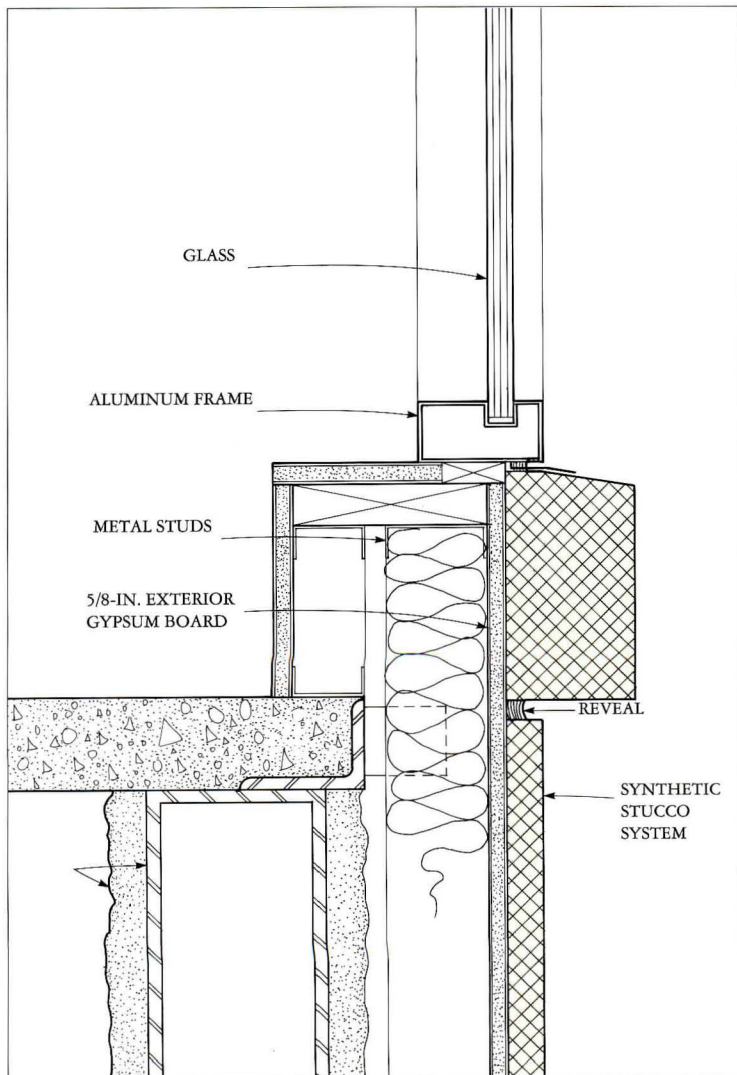
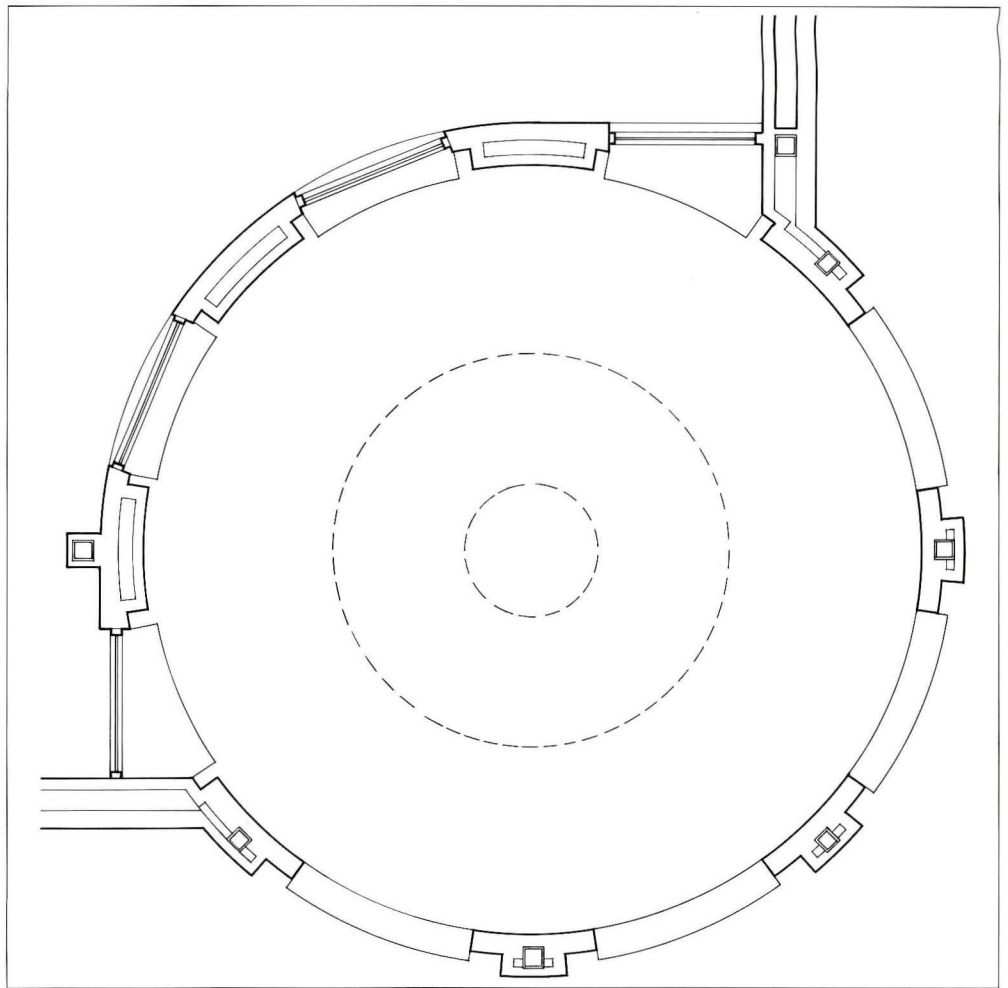
A facelift of a 1960s Modernist facade (inset above) transformed a library's bland appearance into a civic center harmonious with neighboring buildings (top).



Wall section indicates detailing of two structurally isolated wall systems: a ground-level brick facade and synthetic stucco over metal stud framing for upper floors (left). The architect separated the two systems to prevent potential differential settlement that could have resulted from cutting away the building's corner to make way for the new rotunda entrance. Head detail shows formed section of synthetic stucco (top). Sill detail above indicates heavy duty mesh at face and sides of synthetic stucco construction. Note subsurface membrane installed to prevent water penetration. Side elevation shows careful detailing of the new facades (right).



The Center's new rotunda on the building's northeast corner highlights its prestigious position facing Civic Center Park (below). The second-floor plan of the new entrance indicates metal stud and synthetic stucco construction and marks position of the skylight above (right). The synthetic stucco construction for the new rotunda is detailed over metal studs (below, left and right); the stucco covering existing walls is detailed for placement over concrete (preceding page).



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The State of Facilities Management

New York moves ahead with computerization in surveying 20 million square feet.

THE NEW YORK STATE OFFICE OF GENERAL SERVICES (OGS), ONE OF THE LARGEST FACILITIES managers in the country, began an ambitious plan in 1985 to expand its developing facilities evaluation program. As the program developed, it became clear that computerization would greatly enhance the state's ability to inventory, evaluate, recommend action, and plan long-range for the more than 20 million square feet of state-owned facilities targeted for inclusion in the program.

As one of five architecture firms initially commissioned to inventory the OGS facilities statewide, Cannon independently elected to automate its inventory. In 1987, our client was impressed enough with the firm's computer-aided inventory system as to commission Cannon to transfer information from its data base to OGS's Prime mini-computer system and to standardize reporting techniques and develop automated processes.

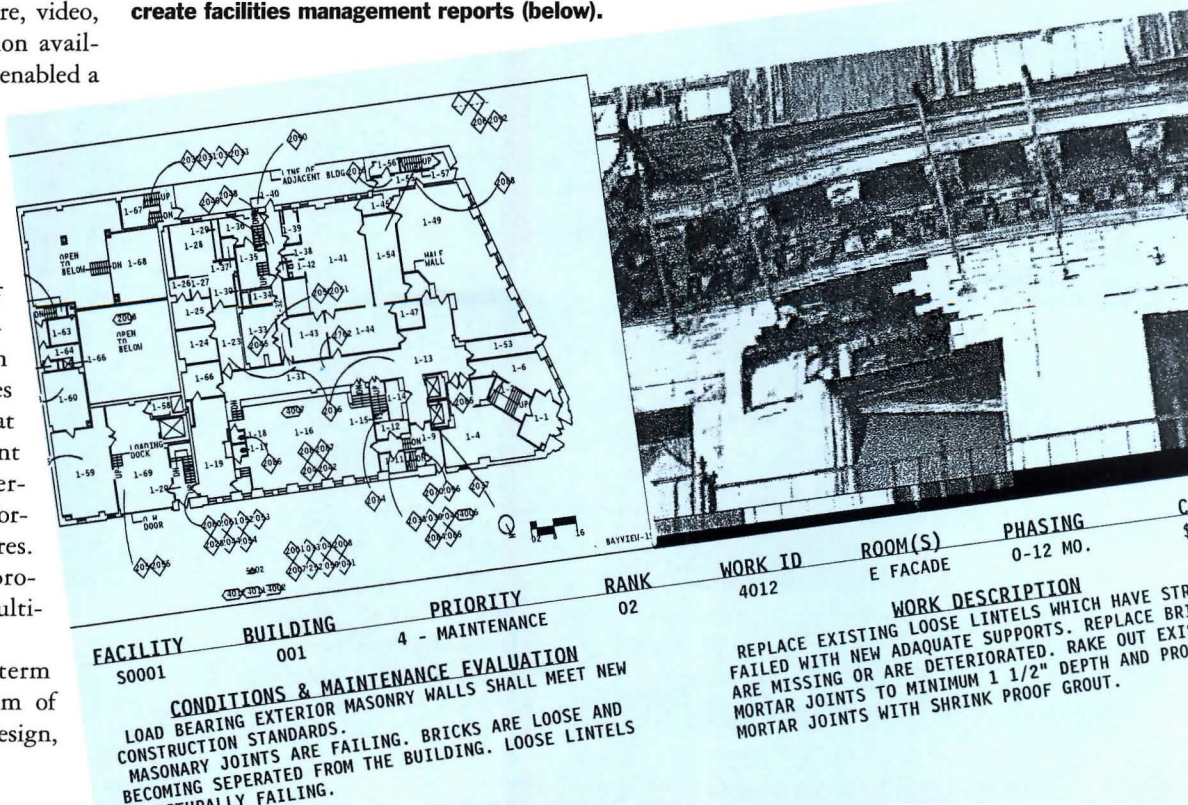
The most difficult element of early New York State facilities evaluations centered on the wide variety of formats among conditions reports. Computer systems allowed the state to standardize evaluations and expand their scope. This served to eliminate highly subjective opinion reflecting only the evaluator's knowledge and interpretation of conditions. Although initial field survey time increased slightly with the computerized method, the need for subsequent follow-up surveying was reduced. Furthermore, video, CADD, and written documentation available at the facility manager's office enabled a more thorough analysis; and a central computer data base dramatically reduced the time spent evaluating field data.

Ultimately, we recognized that a central pool of information was the only way that all levels of management could access and update coordinated information needed to make day-to-day facilities decisions. To function effectively at all levels, the facilities management system had to be extremely user-friendly and combine all needed information, text, drawings, and pictures. This single information source provided the capability to produce multiple coordinated reports.

"Facilities management" is a term that connotes the entire spectrum of conceiving, planning, overseeing design,



The typical OGS workstation (above) consists of a high-end personal computer—with an 80386 microprocessor and running at 20 MH, five specialty circuit boards, an internal hard disk of 130 megabytes or more for video and graphic records, an external optical disk drive and a modem and a laser printer. In-house and off-the-shelf software create facilities management reports (below).



furnishing, occupying, maintaining, and expanding buildings and complexes.

Three major components comprise the automated system Cannon developed for New York State: a survey and evaluation process, a relational data base, and a workstation configuration.

The survey and evaluation goal is to gather detailed, uniform data in a cost-effective manner. Multimedia data are collected through CADD drawing files, video surveys, and expert code and condition evaluations.

Where measured drawings exist, the user enters CADD drawing files manually or with a scanner. Where no drawings exist, a team develops floor plans from manual measurements of the building. The CADD drawing helps the survey team verify room layouts and note the location of conditions being entered into the data base. The team director records field notes on audio tape.

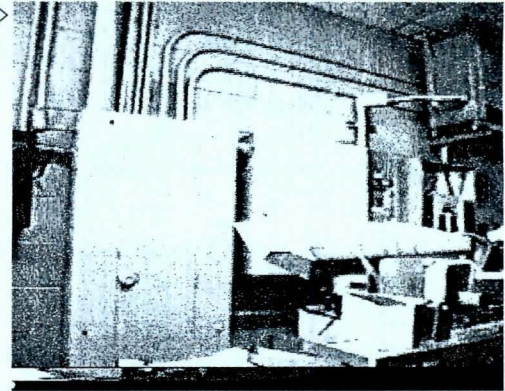
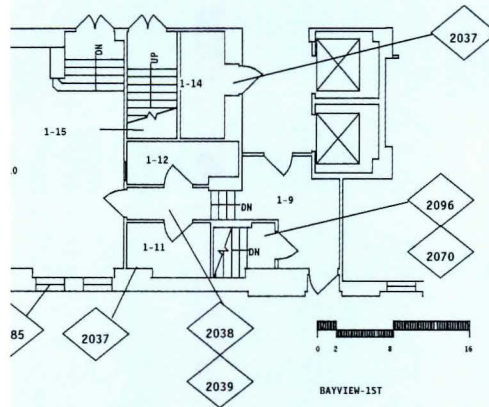
The team's video surveys record a facility visit for remote viewing later. Off-the-shelf hardware and software allow managers to enter pertinent images taken from the videotape directly into the facilities management data base.

Cannon's critical device for standardizing the way information is collected is called an expert code and condition evaluation system. An expert system is one that establishes relational links among pieces of information. In gathering facilities management data, for instance, a handheld computer prompts the user so that all applicable information is entered in the appropriate order and format—much like an automated report form.

Initial data collection and evaluation is accomplished most efficiently through abbreviated, bar-coded menus on handheld bar-coding computers, which also serve to inventory equipment and other components. Alternatively, survey teams may record information in handwriting on a paper form, which later is keyed into the facilities manager's workstation data base. Information stored on the handheld computers can be downloaded directly into the workstation data base. The data base acts as the master connecting device for the three media: text, drawings, and video.

In the facilities manager's office, another expert system—the heart of the evaluation process—prompts the manager by offering a

Cannon developed an automated system for New York State based on a trio of components: a survey and evaluation process, a relational data base, and a workstation.



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Cannon compiled asset management reporting forms for New York State's maintenance/evaluation/corrections, codes and standards evaluation (above), capital improvement recommendations, budget and finance, preventive maintenance, furniture and equipment inventory and move management, telecommunications management, and interior design standards. The computerized forms assess the status of a given condition within a facility and offer a means to correct the condition, including the cost. The expert menu system works through a relational data base management system that runs with most widely used relational data base programs. Information can be entered either by filling out a form or by bar-coded data entry.

detailed menu that describes the specific code, standard, and maintenance conditions of an evaluated facility. The system then offers a series of progressively detailed options for correction, culminating in the cost of correcting the condition. Once a diagnosis is made, the program automatically updates the data base with the recommended course of action and an estimated cost.

Flexibility is built into the expert evaluation program. As the codes change, for instance, that part of the expert system can be updated apace. As a result, facilities can be reevaluated with only a fraction of the effort necessary for a conventional facilities recordkeeping system.

The most effective benefit of the system is that it generates detail at levels previously

impossible. Small increments of data, supported by pictures, graphics, and uniform condition statements, provide the basis for budgeting, planning, and maintenance decisions. Factual evaluations and inventories feed into a data base, creating reliable information for budgets and renovation projects, while offering an accurate and complete foundation for space planning and preventive maintenance programs.

Cannon continues to refine and modify its computer-based facilities management services. With transfer of the system from mini-computer to micro-computer, other market applications now are becoming evident, particularly those projects that require the interworking of CADD and relational data bases. Cannon already has applied its component facilities management system to university facilities, historic preservation, and military housing. Prospects for customizing and applying the system to health care facilities, commercial projects, and other types continue to emerge.

—DAVID R. VADMAN, AIA

David Vadman is corporate vice president for Cannon. One of his responsibilities is presentation of the firm's facilities management programs.



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TUESDAY, APRIL 10

- 7:30 am-9:00 am: AIA Exhibitor Breakfast, AIA-F.W. Dodge Survey: "Who's Really Making the Decisions?" with Ann Oliveri, Senior Marketing Director, American Institute of Architects.
- 9:00 am-10:45 am: "Lighting Leads the Way to the New Century: the Cultural Aspects of Lighting," with Professor Gerhard Auer, Technische Hochschule, West Germany; Motoko Ishii, Motoko Ishii Lighting Design, Tokyo, Los Angeles, and London; and Andre Tammes, Lighting Design Partnership, Edinburgh, Scotland. Moderated by Art Golden, *Architectural Lighting* magazine. Mercury Ballroom.
- 11:00 am-12:30 pm: "The Effects Visual Display Terminals Have on the Office Environment," with Sam Berman, Lawrence Berkeley Labs; Mitchell Kohn, Architectural Lighting Consultant; and Bill Warren, The Lighting Group. Moderated by Len Corlin, *Contract* magazine.
- 11:00 am-12:30 pm: "Nuts, Bolts & Emotions: Beyond Decorative Lighting, a Visual Heartbeat for Restaurants," with Pat Kuleto, Kuleto & Associates, San Francisco; and Pam Morris, Exciting Lighting, San Francisco. Moderated by Mary Jean Madigan, Restaurant/Hotel Design International.
- 11:30 am: Hall opens.
- 3:00 pm-4:00 pm: New Product Portfolio. Sponsored by *Interiors* magazine and ARCHITECTURE magazine. With Justin Henderson, Senior Editor, and Peter Barna, Lighting Editor, *Interiors*.
- 5:00 pm-7:00 pm: Reception and Industry Achievement Awards, sponsored by *Architectural Lighting* magazine.

WEDNESDAY, APRIL 11

- 8:00 am-9:00 am: "Enlightened Contracts—Illuminating the Professional Services Agreement," a Breakfast Program with Alfred Borden IV, The Lighting Practice; Hollye C. Fisk, Fisk & Fielder. Moderated by Gary Dugan, *Lighting* magazine, Ontario, Canada.
- 9:00 am-10:30 am, continues from 11:00 am-12:30 pm: "Lighten that Task." Sponsored by the Designer's Lighting Forum of New York, with Noel Florence, Connie Jensen, Lighting Professionals, and Babu Shankar, WGFS Lighting. Moderated by Wanda Jankowski, *Architectural Lighting* magazine.
- 9:00 am-10:30 am: "Moonlighting: What is it? Why use it? How is it achieved?" with Rob Dischino, Nightscaping, Wakefield, Massachusetts. Introduced by James G. Trulove, Publisher & Editor-in-Chief, *Landscape Architecture* magazine.
- 11:00 am-12:30 pm: "Urban Streetscape Lighting," with Gary Steffy, Gary Steffy Lighting Design. Introduced by Connie Webster, past President, New Jersey ASLA.
- 11:30 am: Hall opens.
- 12:30 pm-2:00 pm Richard Kelly Awards Luncheon, sponsored

by NY IESNA. With Richard Hayden, Swanke Hayden Connell Architects.

- 2:00 pm-3:30 pm: "The Specification of Custom and Decorative Lighting Fixtures," with Robert Friedman, WGFS Lighting, Mark Kruger, Kruger Associates, and J. Woodson Rainey, Jr., Kohn Pedersen Fox Conway Associates, New York. Moderated by Andrea Loukin, *Interior Design* magazine.

THURSDAY, APRIL 12

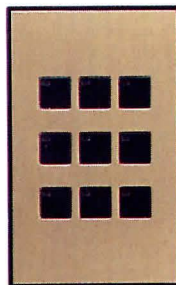
- 9:00 am-10:30 am: "Light Sources," moderated by William F. Blitzer, Genlyte Group. Mercury Ballroom.
- 9:00 am-12:00 noon, continues from 2:00 pm-5:00 pm: "The Basics of Fine Lighting Design." CEU Course with James Benya, Luminae Souter, San Francisco. 3rd Floor classroom.
- 9:00 am-12:00 noon, continues from 2:00 pm-5:00 pm: "Landscape Lighting: A Sculptural Approach that Integrates into the Neighborhood." CEU course with Janet Moyer, Jan Moyer Design, Berkeley, CA.
- 10:45 am-12:15 pm: "Lighting for an Aging Population," with Naomi Johnson Miller, Principal, Luminae Souter Lighting Design, San Francisco.
- 10:45 am-12:15 pm: "Why Utility Companies are Willing to Pay You Rebates for the Installation of Highly Efficient Lighting Equipment," with Charles Copeland, Senior V.P., Goldman Copeland Ballan & Oxman; Peter Flynn, Director of Demand Planning, New England Power Service Inc.; Alfred Ornstein, Director, Commercial and Industrial Energy Management Services, Con Ed. Moderated by Joseph Knisley, Senior Editor, *EC & M* magazine.
- 11:30 am: Hall opens.
- 2:00 pm-3:30 pm: "Department Store Lighting: History and Future," with David Apfel, Hambrecht Terrell Int'l. Introduced by Lorraine Tierney, Associate Editor, *Canadian Interiors* magazine.
- 2:00 pm-3:30 pm: "How to Make Money and Energy Without Sacrificing Quality," sponsored by Energy User News, with John Feters, Senior Engineer, AT & T Network Systems, Robert Fey, Saks Fifth Avenue, Jeff Kessel, P.E., U.C. Berkeley, Jack Lindsey, Senior Engineer, Southern California Edison, and Sandra Stashik, Principal, Grenald Associates. Moderated by Mark Dunbar, Technical Editor, *Energy User News*.
- 5:00 pm: Hall closes.

For information and registration, contact Lynn Weller, Lightfair, Suite 2200, 240 Peachtree St. N.W., Atlanta Georgia 30303. Telephone: 404-220-2215, Fax: 404-220-3030.

Advance Registration is necessary for Special Events. Contact Dee Murray, Lighting Dynamics, at 212-268-9222.



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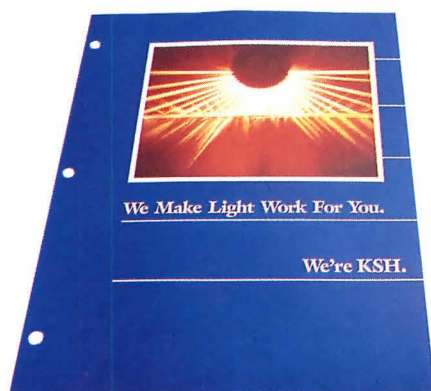
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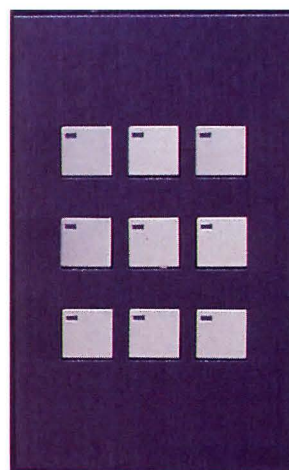
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Prismatic Lighting Lens Brochure Available from K-S-H, Inc.

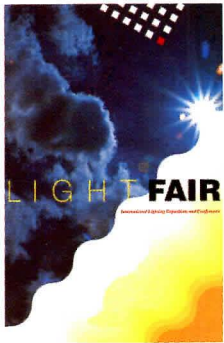
A full color lens brochure from K-S-H, Inc. describes the company's comprehensive line of prismatic lenses for fluorescent lighting fixtures. The brochure offers prismatic lenses for standard applications and special prismatic lenses designed for "yellow-light" rooms and computer rooms where "glare-guard" lenses are needed. Other lenses available include those for suppression of ultraviolet light and electromagnetic interference, lenses for directional light control, vandal-resistant units, and lenses designed to reduce energy consumption by as much as 50%. K-S-H, Inc., 10091 Manchester Road, St. Louis, MO 63122. Phone: 314-966-3111. Fax: 314-966-3117. Circle 6.

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Lighting Wright

How the new Guggenheim Museum galleries will be illuminated.

THE EXPANSION AND RENOVATION OF NEW YORK CITY'S GUGGENHEIM MUSEUM has not been without controversy. While the design of the expansion, by Gwathmey Siegel & Associates of New York City, has been lauded for its sensitivity to Frank Lloyd Wright's original structure, there are those who have argued that any alteration of Wright's masterpiece is

undesirable. Nevertheless, the work is in progress, and the addition, known as the annex, is now under construction.

The annex is a ten-story rectangular tower that will house the museum's administrative entrance, shipping, and receiving on the ground floor, and administration and office support spaces on the top floors. Sandwiched between are four floors of exhibition space, accessible by way of new connections to the spiral ramps in the main rotunda of the original building. Ceiling heights in these new gallery spaces range from nine to 19 feet.

Natural light admitted into these new galleries will be limited, due to a variety of

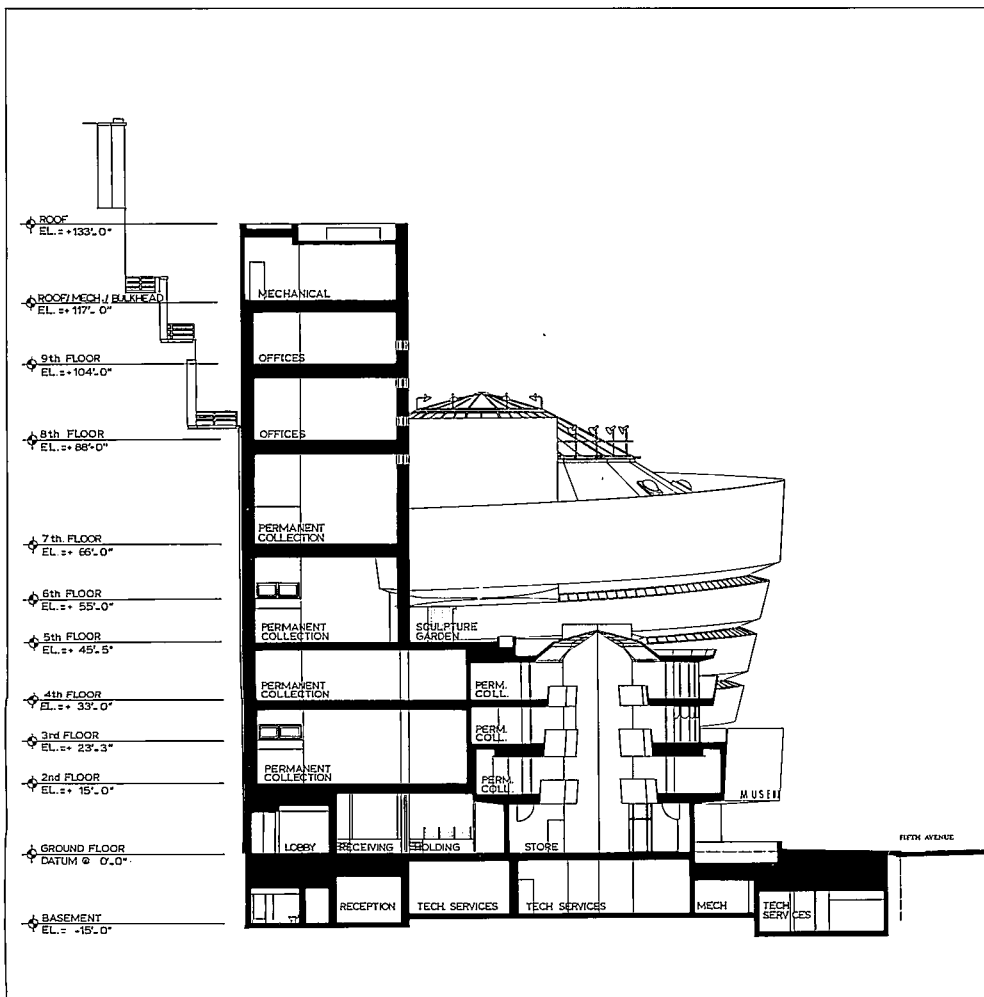
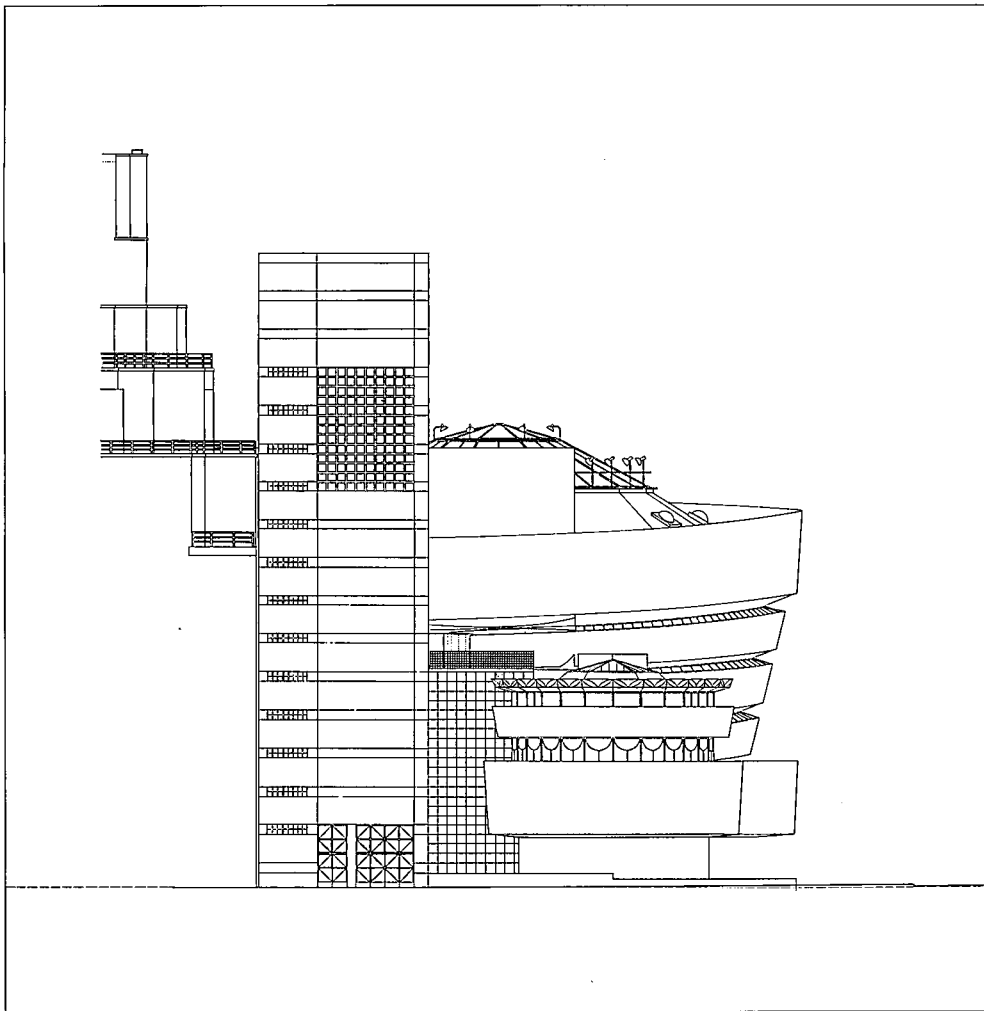


Gwathmey Siegel & Associates' ten-story annex to the Guggenheim Museum in New York City (left) includes four new levels of exhibition space. The galleries will be illuminated by a double ceiling of rectangular slots that conceals adjustable track lighting fixtures (below).



DAN CORNISH/ESTO (ABOVE)

DONNA DAY PHOTOS



constraints. The site limitations determined the location of the addition between an apartment building to the east and the museum to the south. Linking the gallery floors with existing ramps, and placing the administrative offices above the gallery floors, blocked the use of skylights. The western exposure of the annex towards Central Park is problematic for illuminating artwork because of the extreme variance in sun angle, light color, and intensity. The northern exposure, occurring at the short (20-foot) end of the annex, is largely shielded by apartments on the north side of 88th Street. These site constraints indicated that electric lighting would play a critical role in establishing the illumination quality of the new gallery spaces.

In investigating the museum's lighting parameters, the following requirements became evident: for the most sensitive art works—typically works on paper—a maxi-

In designing the gallery lighting, the architects considered the transition between Wright's daylighted spiral and artificially lighted spaces in the windowless annex.

mum light level of five footcandles could not be exceeded and ultraviolet light, which has proven to be the most destructive to art, had to be virtually eliminated from the light beam. At the same time, one purpose of the expansion was to allow display of larger two-dimensional works and sculpture in the original Guggenheim Museum collection, art works appropriate for display in diffusely filtered daylight (100-500 footcandles). While light levels this high are inappropriate for artificially illuminated gallery spaces, the new galleries clearly required a lighting plan emphasizing flexibility, combining relatively high ambient light levels with controlled low level lighting. A 30 footcandle to 5 footcandle range was selected.

With this information in hand, an assessment of the spatial relationship between the main rotunda and the new annex galleries was undertaken. Wright's powerful spiral configuration is naturally illuminated by daylight filtered through the domed skylight

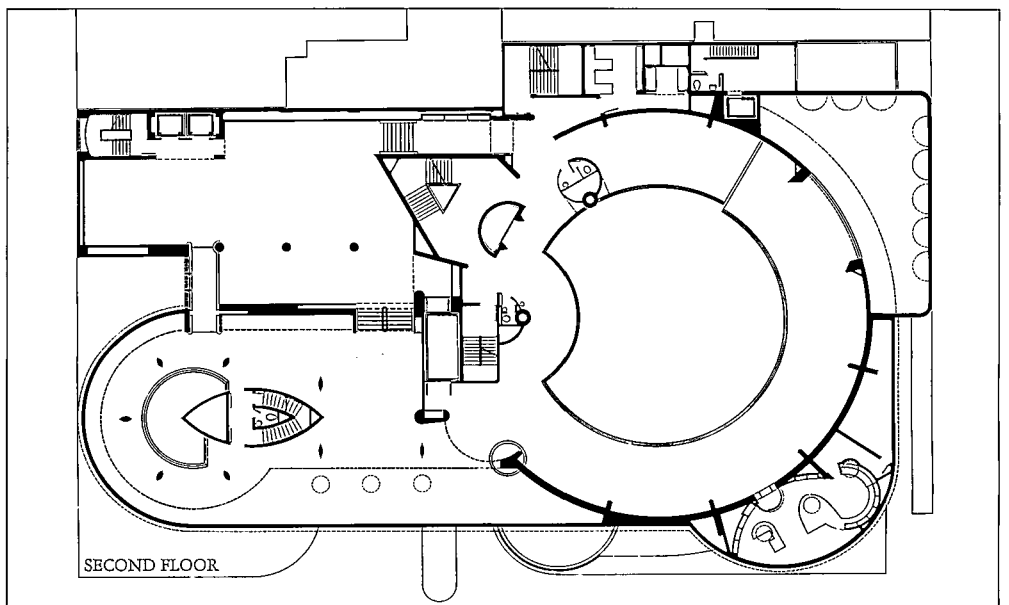
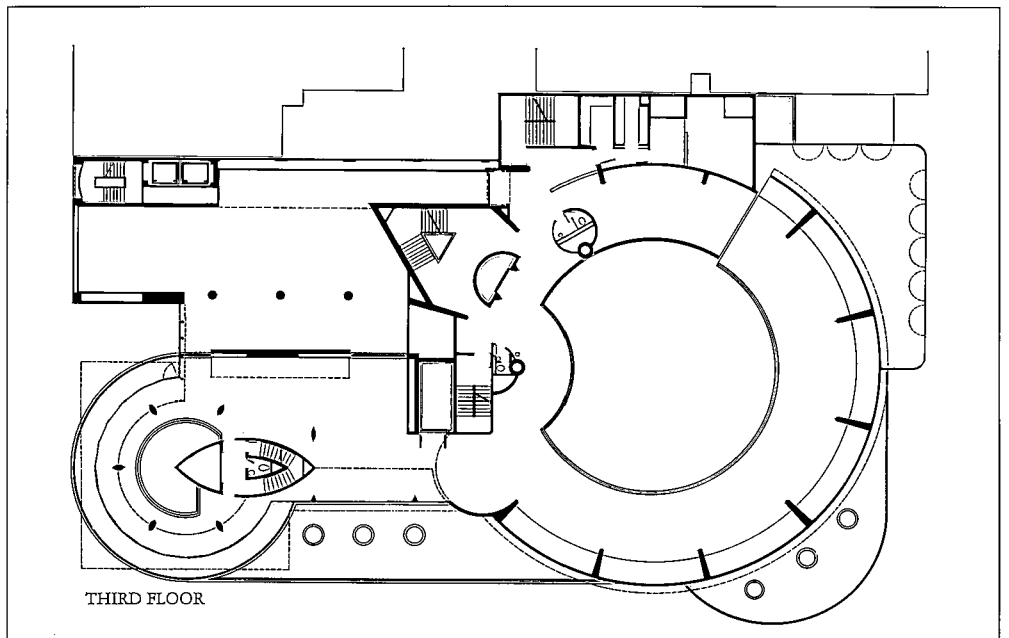
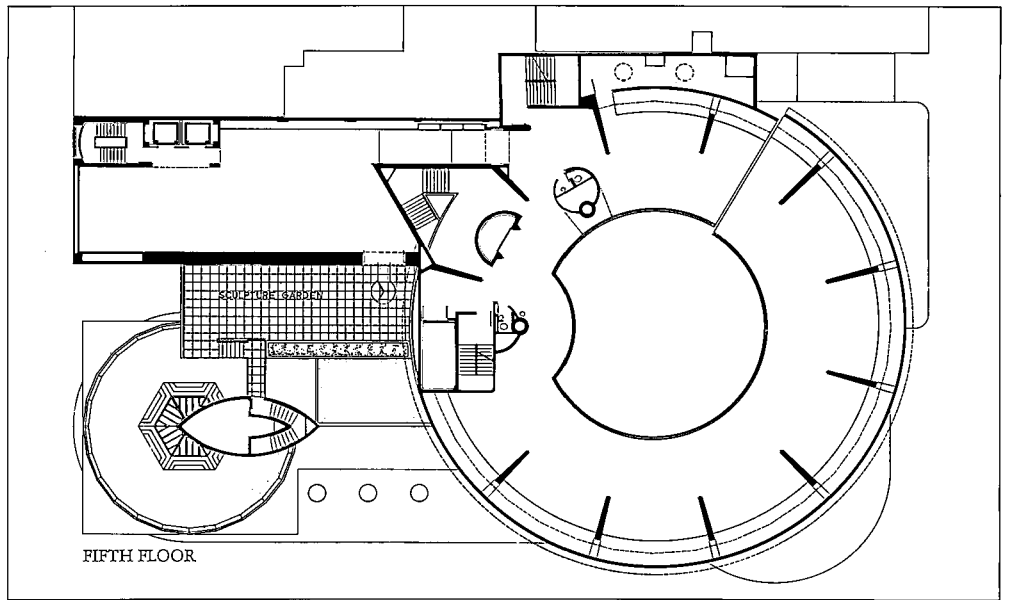
above, and perimeter daylight systems along the ramp. A primary concern was the impression received as one moves from this grand, richly daylighted space into the artificially illuminated annex galleries to the northeast. A similar transition takes place in the National Gallery's East Wing, designed by I.M. Pei, which causes a psychological letdown: the artificially lighted galleries feel insignificant in comparison with the monumental daylighted space of the main atrium. While it can be justifiably argued that this type of abrupt space/light transition acts to focus the visitor on the introspective act of viewing art, its implications are more totalitarian than democratic. Wright might have agreed.

A second consideration focused on the museum's location in New York City: Manhattan is crowded with hundreds of loft galleries, and the annex exhibition spaces are intended to be similar in scale to such SoHo galleries. To accent the importance of the Guggenheim, the architects wished to create a lighting system that would distinguish the new spaces from typical loft galleries, establishing a sense of "public" rather than "private" space.

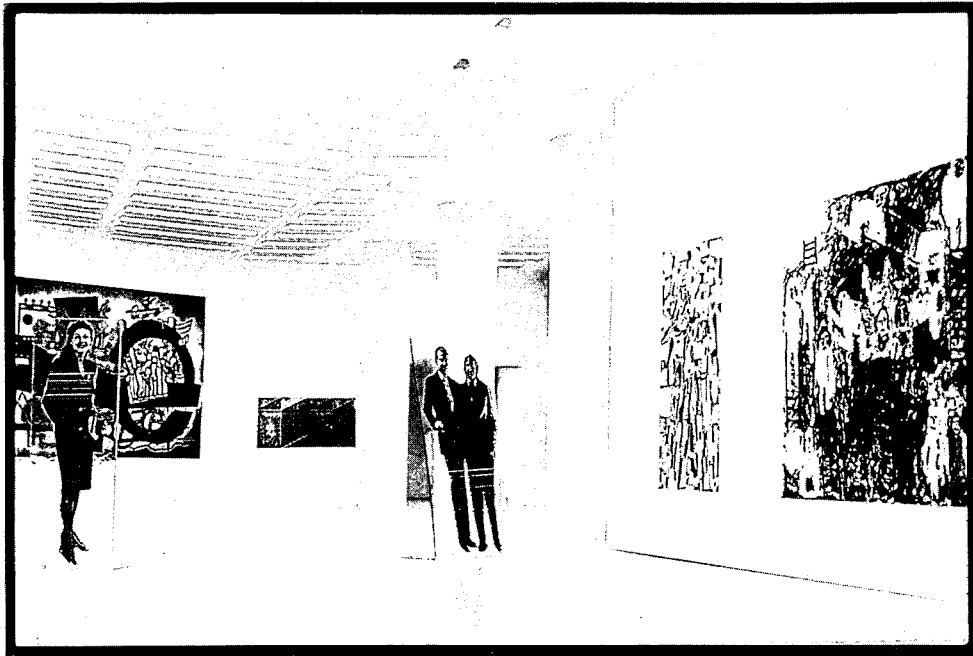
The lighting program suggested an overall ambient light level as high as 30 footcandles for sculpture exhibitions, while providing an adjustable accent system for tightly controlling the lighting of sensitive works. Artificially lit galleries often achieve ambient light levels through reflecting light off vertical surfaces by wall washing. Operating under the assumption that a different approach might provide the "public" rather than "private" image, the focus of the ambient component moved to the ceiling, rather than the walls. An indirect system reflecting light from the ceiling became the architects' system of choice.

Given the number of ways such a system could be developed, Gwathmey Siegel and lighting designers, Light & Space Associates of New York City, chose to construct study models, scaled at one-half inch to the foot, to explore various alternatives. While this approach precludes working with adjustable fixtures at a miniature scale, it allows for visually assessing the impact of different ambient systems on the space.

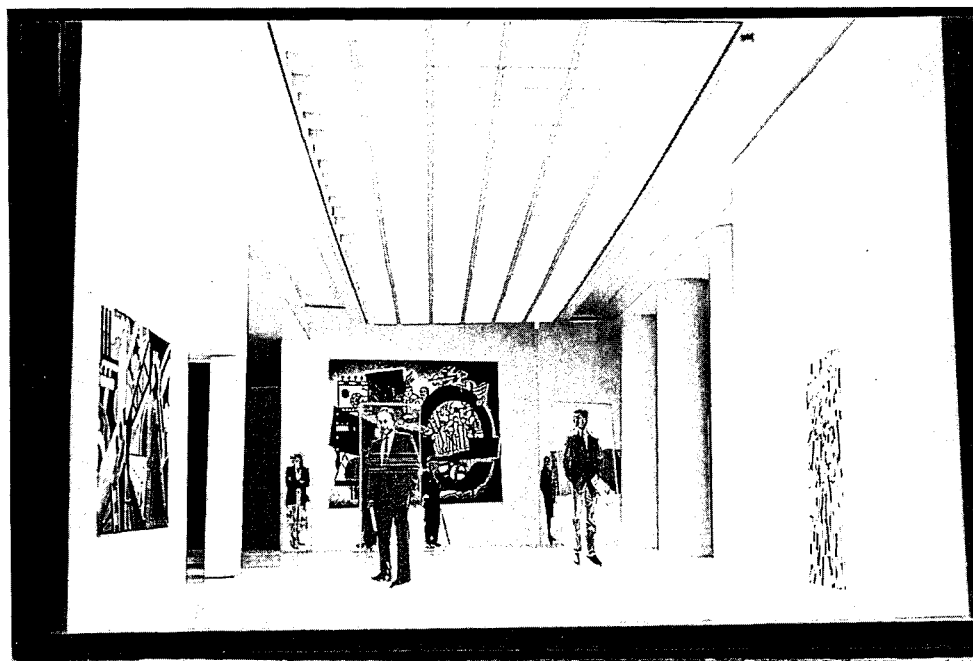
In developing the possibilities, the designers came up with fifteen different solutions that fall loosely into four major categories. A pendant-mounted fixture system dropped below the ceiling plane was devised to provide indirect uplighting as the ambient component and opportunities for focused track fixtures. A variety of such pendant systems was explored. This approach has the advantage of relatively low cost by combining the ambient and adjustable systems into a manufactured unit. However,



Gwathmey Siegel's addition to the Guggenheim Museum is being constructed on the northeastern edge of the site. The annex includes administrative areas and four floors of galleries (section, facing page). A sculpture garden terrace on the fifth floor (top) is connected to a staircase in the original Wright-designed museum.



A double ceiling system was modeled to provide an upper surface for reflecting ambient light and a lower surface cut with openings.



The lower ceiling, above which lighting equipment will be mounted, was designed with rectangular slots (top). An artificial skylight (above) was also studied.

pendant fixtures have a tendency to visually clutter a space. They present a "showroom" or "office" image, and limit options for subdivision of the spaces as future exhibitions might demand.

An artificial "skylight" system was also developed. Using fluorescent lamps and appropriate diffusers, it could provide both the ambient lighting and an impression of daylight. Both small-scale and large-scale "skylights" were explored. The large-scale "skylights" tended to unify the space but acted to shrink the room visually. Additionally, subdivision of the annex galleries became expensive. The smaller-scale systems solved this problem, but the appearance of the skylight during those art shows not requiring ambient light proved to be an unacceptable element.

A vaulted or coffered ceiling was examined, which would allow the lighting equip-

Double-ceiling system configurations included grid patterns, circular openings, and slots running the width of each gallery. All met the lighting level criteria.

ment to be integrated with the architecture. A number of these systems was explored, ranging from triangular coffers to barrel vaults. These approaches have the advantage of providing both direct and indirect light while integrating the lighting elements into the architecture. However, in trying to balance the scale of the vaulting with even indirect lighting, the designers found the ceilings would have to be dropped extensively, reducing the potential height of the artworks. Coffers, on the other hand, imposed a false structure on the space: since all the ceilings are hung to begin with, creating sectional coffers appeared to be visually and structurally inconsistent with the design.

Another alternative was a double ceiling system providing an upper surface to reflect ambient light and a lower surface, above which the lighting equipment could be mounted. In this approach, the upper ceiling is a flat white plane, free from all interruptions (including sprinkler heads and diffusers). The lower ceiling, a three-inch-thick

sheet, would hang 13 inches below the upper plane. Fluorescent uplights, mounted in the lower ceiling, could evenly light the upper plane. Openings cut into the lower ceiling would allow reflected light to filter through to the galleries. Additionally, accent fixtures mounted above the lower ceiling could peek over its edges, providing an architectural home for these interior "pigeons." Configurations explored in designing the lower ceiling included assorted grids, circular openings, and a series of slots running the width of each gallery.

Since all of these systems met the lighting level criteria in the strictest sense, the decision was based largely on visual impact. As each system was explored and presented by the architects in model form, the museum's staff was given the opportunity to make visual evaluations, and to debate the pros and cons of each design.

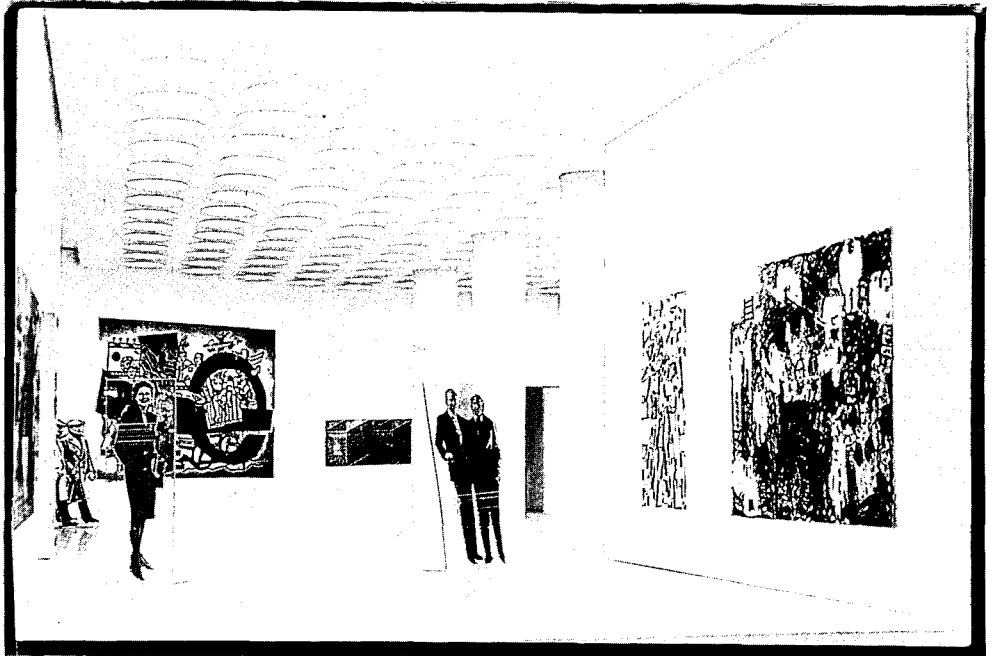
A double-ceiling approach using rectangular slots was finally selected. This solution suspends the lower ceiling only 13 inches below the upper ceiling. Eighteen-inch-wide slots, four feet on center, are cut into the lower ceiling. The lower surface acts like a shallow pan, allowing for location of adjustable track fixtures to sit atop its lower plane and aim through the slots. Dimmable indirect fluorescent fixtures evenly uplight the upper ceiling.

All elements in the system are hidden above the lowered ceiling, minimizing their visible intrusion into the gallery spaces. A major advantage of the double ceiling system is its appearance when the ambient lighting system is turned off. The slots appear to be dark recesses with adjustable fixtures inside, a technique often used in showrooms to reduce the visual clutter of track fixtures. Additionally, since all indirect fluorescent light is reflected from the upper ceiling, most ultraviolet light is eliminated—titanium oxide, the major pigment in white paint that was applied, is an excellent absorber of ultraviolet.

The solution represents a middle ground between an architectural volume determined prior to evolution of the lighting system, and adaptation of that architecture to accommodate the lighting. It places the responsibility for the visual quality of the space in the hands of both architect and lighting designer. The Guggenheim annex is presently under construction. A comparison between the model/dream and built reality will have to wait until the opening of the expansion in the fall of 1991. ■

—PETER BARNA AND JUSTIN HENDERSON

Peter Barna is president of Light & Space Associates, a New York City lighting design firm. Justin Henderson is a writer based in New York City.



Another alternative for the lower plane was a series of circular openings, inspired by Wrightian geometry (above).



An earlier configuration (above) included a large-scale coffer with indirect fluorescent uplights mounted around the perimeter.



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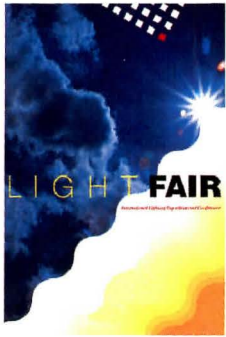
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Big Apple Barriers

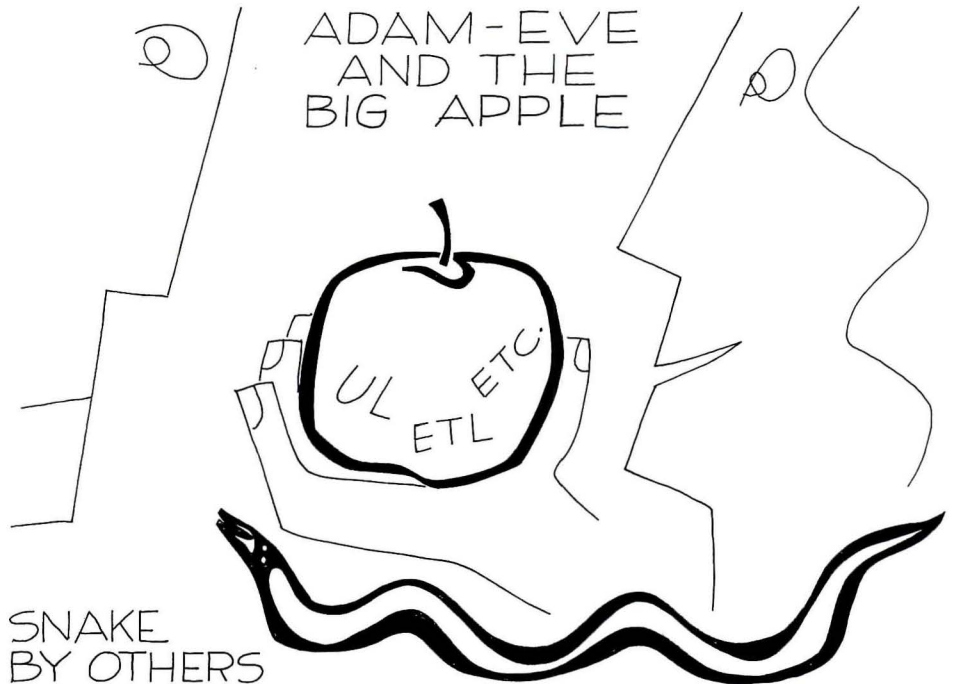
Specifying lighting for projects in New York City poses obstacles.

WHILE THE EUROPEAN COMMUNITY IS BUSY STANDARDIZING EQUIPMENT IN preparation for the 1992 market integration, many U.S. cities still maintain local electrical codes and construction conventions that restrict the free flow of domestically made products into local markets. One such area is the Big Apple. In New York City, adjustments required in

lighting design practice fall into two major areas: those required to meet the legal mandates of the Electrical Code of the City of New York (especially as it varies from the National Electrical Code), and those "suggested" by local labor union conventions. While no attempt has been made to review all the variations of the local New York City code, some understanding of the major issues can help insure smooth installation of products on the job site.

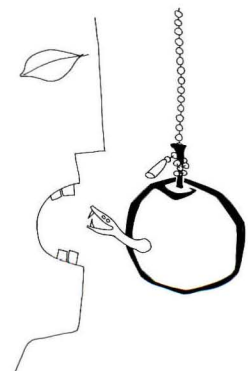
Fixtures installed under the National Electrical Code require a national testing lab approval label—UL, ETL, etc. However, New York City maintains its own approval process as outlined in Section B30-26.0 of the city code. Under the rules of this section, fixtures must be submitted to and approved by the Advisory Board to the City Bureau of Electrical Control, which is part of the Department of Buildings. Approvals from this board are often rubber stamps for UL, ETL, or CSA (Canadian Standard) labels, but the process takes time. While some manufacturers submit New York-bound products in advance, not all do: check with your sources before specification, and make sure the approval is secured. Lead times on getting a docket number with the board can stretch out, wreaking havoc with construction schedules.

The Electrical Code of the City of New York requires that all fixture housings be a minimum of 20-gauge metal. Since the National Electrical Code requirement is 22-gauge (thinner than 20-gauge), manufacturers may need to construct fixtures out of different gauge metals for New York City. This particular requirement most often affects recessed fluorescent equipment and bare fluorescent strips, so be especially wary in specifying this kind of equipment. And remember that casegoods shipped from outside the region into New York may contain lighting fixtures purchased elsewhere which may not meet the 20-gauge requirement. On-site replacement of such fixtures is time-consuming and expensive, so architects must do their homework. Remember, some manu-



facturers build a separate product line strictly for New York City usage, and even offer separate catalogs for New York City. If your firm is located outside the city, ask your rep for guidance.

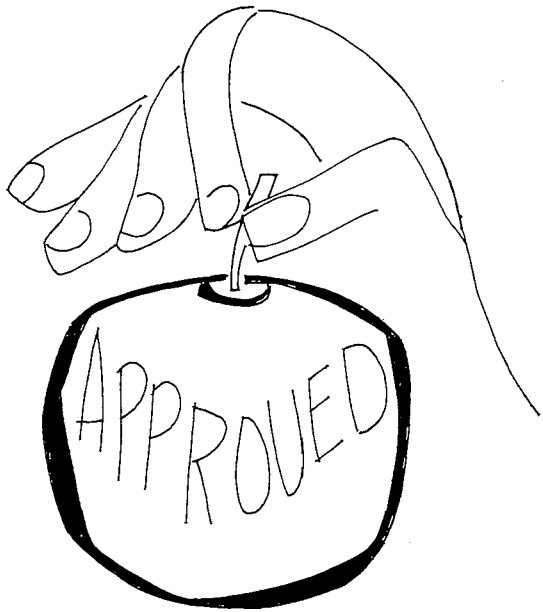
New York City's Electrical Code restricts normal 120-volt lighting circuits to 15 amps, while the National Code allows 20 amps. Additionally, New York City limits the connected lighting load on 15-amp circuits to 1,380 watts, which is approximately a 75 percent loading, unlike the national code which allows 1,440 watts (80 percent loading) on 15-amp circuits. The NYC code also limits the number of fixtures per circuit to ten, regardless of total fixture wattage on that circuit. This effectively limits a group of lights within a room to ten per switch. This made sense when incandescents reigned, but the introduction of compact fluorescent downlights (running as little as 30 watts each) has created a situation where a "fully loaded" circuit would only be carrying 300 watts of lighting. This outdated requirement



Some manufacturers create separate lighting lines for New York City.

ILLUSTRATIONS BY FORREST WILSON

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can add to expenses in the form of increased branch circuit wiring, switching, and circuit breakers.

"Approved wiring methods" are also required by the New York City code. A loose interpretation of the code requires that all wiring be contained in metal conduit—no Romex or plastic-sheathed cables are allowed. This conduit requirement applies to low voltage switching controls and dimming control stations. In other parts of the country, low voltage cable, which is similar to telephone wire, can be run freely on walls or ceilings without conduit. The result of the New York City code? Once again, increased expense.

The dominant electrical trade union in New York City is the International Brotherhood of Electrical Workers (IBEW). In most cities, specifying fixtures bearing the IBEW label on union projects helps insure a problem-free installation.

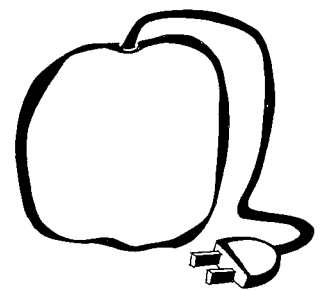
In New York City, however, there is a special twist. Having organized most of the lighting manufacturing workers in the New York City metropolitan area, the IBEW has taken the power of the union label one step further. In New York City, in addition to advisory board labeling and IBEW labeling, most basic, "bread and butter" variety lighting equipment (the definition of bread depends on the appetites involved, of course) will need a Local 3 IBEW label, or its use may be challenged on the job site, if not before. This classification works to the advantage of manufacturers located in New York City and operating Local 3 shops, but obvi-

ously severely restricts or eliminates the use of competitive lighting equipment manufactured outside the city's Local 3 IBEW jurisdiction.

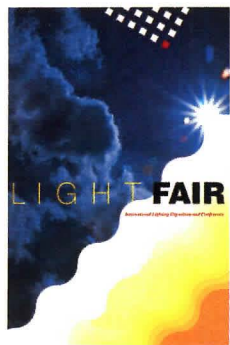
So much for opening up markets in Japan! We often can't even cross the Hudson River with lighting equipment, much less the Pacific Ocean. (Non-local 3 equipment does get installed in New York City, but usually in small quantities, on projects with a sympathetic client, a strong-willed designer, a cooperative contractor, a determined manufacturer, and a rep with street smarts.)

These factors add up to a situation that favors the manufacturers and lighting industry workers based within the metropolitan New York area. While many of the restrictions are based on valid safety concerns, others are clearly of the "make work" variety. Fortunately, the situation may be changing. In 1987, a committee was appointed to revise the electrical code of the City of New York, and subcommittees were formed to contemplate revisions of specific sections of the code to bring them more in line with the national electrical codes. Comprised of city officials, contractors, union representatives, architects, and engineers, the committees will hopefully steer clear of the political land mines implicit in such a venture, and come up with a way to abolish the trade barriers set up along the Hudson River. Until that happens, however, prudence with regard to New York City code and convention is strongly advised. ■

—PETER BARNA AND JUSTIN HENDERSON



To be approved in New York City, all wiring, including low voltage controls, must be contained in metal conduits.



Watts Down in Seattle

A new lab helps architects select fixtures to conserve energy.

SEATTLE'S NEW LIGHTING DESIGN LAB, OPERATED BY SEATTLE CITY LIGHT, SERVES AS a region-wide resource center to educate architects, engineers, lighting designers, and other professionals about energy-efficient lighting in commercial buildings. The lab is the brainchild of a number of diverse organizations, including the Bonneville Power

Administration and the Natural Resources Defense Council (NRDC), that collaborated to sponsor the Lighting Design Lab. Their common interest is energy conservation: NRDC scientists have found that lighting has the highest potential savings of any electrical application in a building. While buildings constructed to today's energy codes expend as much as 3.0 watts per square foot, the NRDC goal is .5 watts per square foot by using more energy-efficient products, without sacrificing esthetics or function.

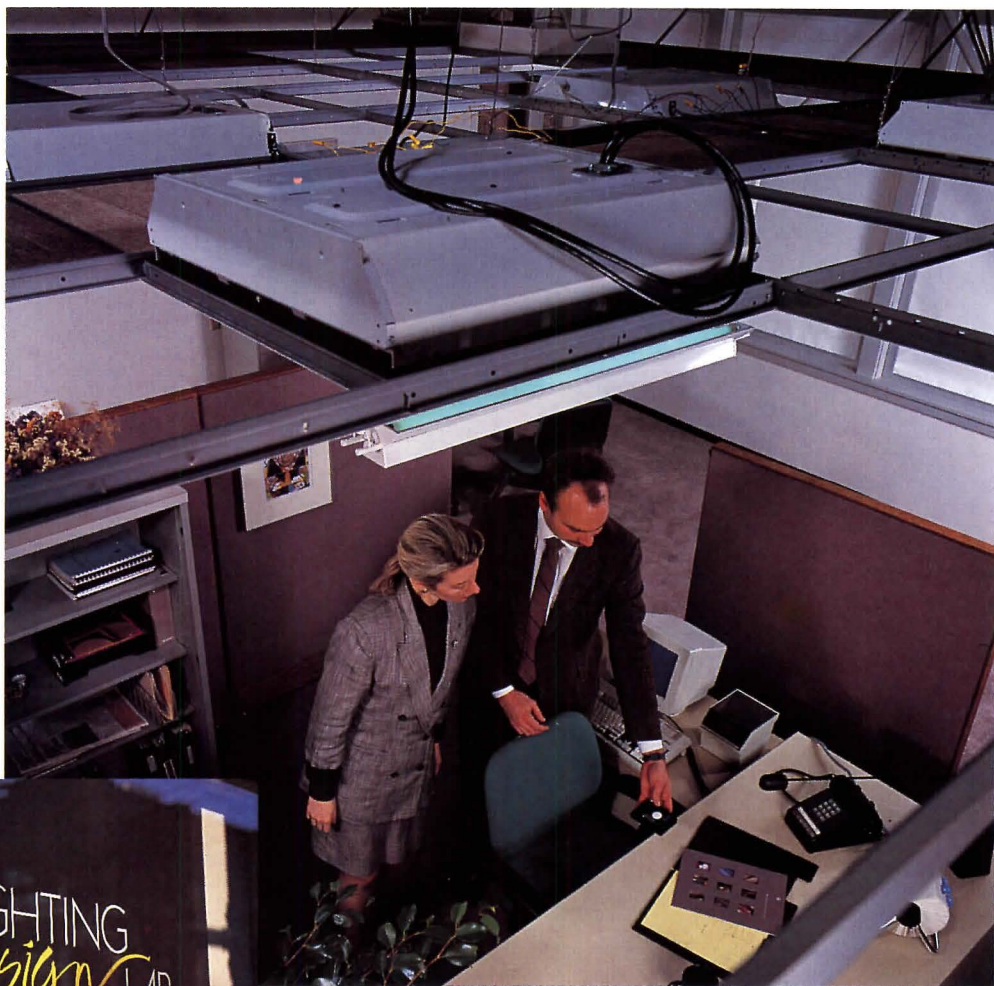
The lab provides free consultations that consist of reviewing architectural drawings and suggesting two or three options. "We're not trying to compete with the private market," insists Diana Campbell, project manager. "We want to encourage people to use lighting designers, but we also want them to look at the broader issues involved in creating a lighting environment."

"Many architects feel they can do the work themselves," adds lighting specialist Michael Lane, "but unfortunately, they may not be up-to-date on the latest technology or energy code. They aren't in tune with what 50 foot candles of light really means." Lane explains that codes usually do not specify the number of footcandles necessary, and often designers will design an entire space a very high lighting level, when, in reality, that level only is necessary on the desk surface.

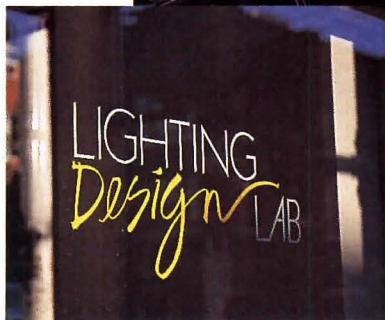
The Lighting Design Lab occupies an old building that has been remodeled and divided into a series of multipurpose rooms. The staff offices are designed to display a variety of lamps and fixtures, a number of controls, and often several different types of sensors. If given advance notice, the staff happily conducts tours.

Architectural services

THE LIGHTING DESIGN LAB OFFERS A range of services that help architects develop schemes for daylighted and artificially illuminated spaces. Full scale mock-up areas



Overhead view of the Lighting Design Lab mock-up facility, with its adjustable height ceiling. Windows allow daylight to be factored into the lighting equation (above).



provide an excellent method of showing a client exactly the design in mind. The architect can bring in furniture, fabric, carpets—in other words, all the components—to create a mock-up of a single room or number of rooms. The Lighting Design Lab staff provides the lighting fixtures and will work with architects free of charge, even providing a shop where they can construct temporary partitions. The 30-foot-by-40-foot mock-up facility is equipped with two movable ceilings and windows on the south and west. "It's the largest mock-up space of its

kind. We can set the ceiling height so you can get the right room cavity ratio, the room volume, and the light distribution matched as closely as possible to your space," says Campbell.

The color rendition and beam spread room features one track after another crossing the ceiling, each complete with 25 to 30 fixtures aimed at the back wall. The wall itself is divided into a one-foot-by-one-foot gridded pattern, to permit measurement of beam spread from the different kinds of track lights. The side walls of this alcove

hold daylight color boxes that reveal the effects of different colored window glass, and color boxes, that show the colors of light emitted from different fluorescent tubes.

The daylight modeling lab allows the designer to simulate the effects of direct sunlight and overcast sky on architectural models in order to determine their impact on the lighting load. Framed by large south-facing windows with half-drawn shades, the daylight control systems room incorporates three lighting systems. The first, composed of recessed fluorescent wall washers, illuminates three windowless walls at only 1.35 watts per square foot. The two other systems operate on photocell controls that shut off the lighting when there is enough daylight to illuminate the room. The systems are nearly identical except for color temperature. Both are parabolic downlights that produce .75 watts per square foot, about half of what the code recommends, while still meeting all code requirements.

Product demonstration

THE PRODUCT DEMONSTRATION AREA displays between 40 and 50 different fixtures. "Architects often don't know what new products are available and can't keep up with them," Campbell says. "So they specify what they know best, which often are fixtures that are 10 years old. They also have to go to many different places to get the information—there's no place to compare fixtures side by side. A specifier can't see the advantages or disadvantages of a fixture by just looking at a catalog."

"Our conference room is set up to be a high-end boardroom, with appropriate new fixtures," Campbell says. She points out a recessed fluorescent 2-ft.-by-2-ft. fixture that lights the entire room at a third of a watt per square foot. Also present are small downlights, podium lights, and fluorescent pendant-mounted fixtures, all controlled by the energy management control system located in the closet.

The lab's library features no programmable controls, but, like the rest of the

lab, incorporates a number of lighting systems. Two of the systems are fluorescent fixtures: one pendant mounted, the other recessed, operating at .3 and .37 watts per square foot respectively. The third system consists of metal halide lamps in two pendant fixtures. These are very efficient, but better used for uplighting instead of down-



The 30-foot by 40-foot lab's mock-up potential ranges from a succession of spaces to a single office (above). The lab provides lighting fixtures for testing and advice to designers free of charge.

lighting because of poor color rendition. Two 70-watt halide lamps light the entry to the lab and the librarian's desk at 1.53 watts per square foot.

Resources

THE LIBRARY IS A formidable source of information. Its card catalog ties into the Washington State Energy Office, which has a grant from the Bonneville Power Administration to be the regional energy information clearinghouse. "For any requests we might get stumped on," librarian Randy Smith says, "we'll call upon the state's

energy resources material library. It's also hooked into the Western Library Network, which includes every library from Anchorage to San Francisco, so we can work out inter-library loans."

In the back of the library, separated by a full-height glass partition, resides the computer modeling lab. Occupancy sensors au-

tomatically turn on the lights when a user approaches. The two direct/indirect fluorescent fixtures are specially designed to avoid glare on the computer screens. "Where you put the fixture makes a big difference in computer rooms," says Campbell. "With the fixture located above the screen and a little bit behind it, you don't get any shadows over your shoulder or glare on the screen. The computer room staff will sit down with architects, and help them with a cost benefit analysis, for instance. We also hope to train people to use those programs themselves."

The lab's classroom space demonstrates two distinct lighting systems. First is an overall system, consisting of six fluorescent fixtures and two lamps, that lights the room at about one watt per square foot. The recently installed second system consists of 10 compact fluorescent fixtures of 26 watts each, designed to allow one to take notes when a slide show is going on. Even the corridor that connects the library with the classroom and labs is sectioned into systems demonstrating corridor lighting options.

It's rare to find a resource such as the Lighting Design Lab that is not tied to a particular manufacturer and is free to the design professions. How well it performs in the future will depend, in part, on architects' use of it.

—TIMOTHY B. McDONALD

Many architects feel they can create a lighting design themselves, but they may not be up-to-date on the latest technology or energy codes.

PRODUCTS

INFRARED REVOLUTION

A new incandescent lamp captures waste heat.

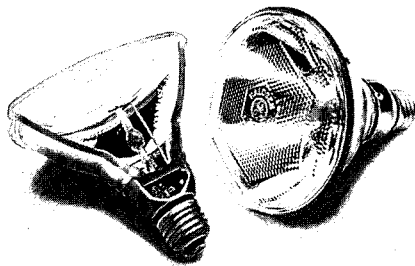
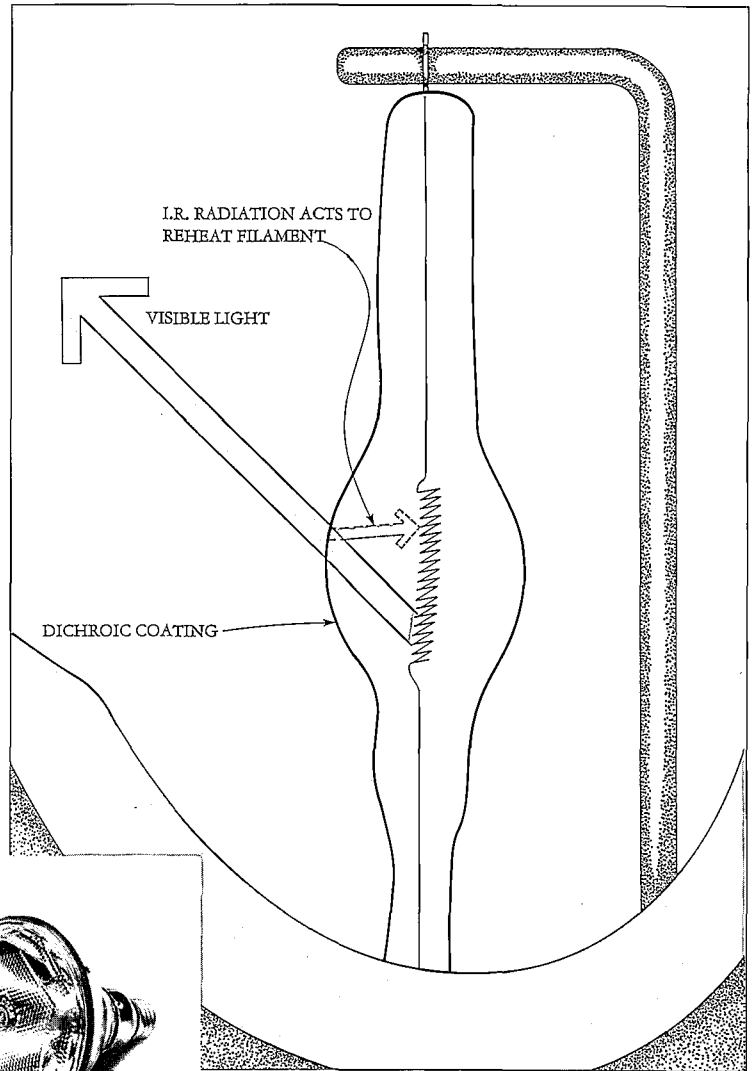
EVER SINCE EDISON INVENTED THE INCANDESCENT LAMP, scientists and engineers have struggled to improve lighting technology, seeking greater efficiency, truer color temperature, and extended lamp life. Improvements in the past have included better filaments and fill gasses, and, more recently, the appearance of the quartz halogen lamp (essentially a high-tech incandescent lamp that utilizes a halogen cycle and high temperature quartz glass to increase light output and extend lamp life). Today, with the introduction of General Electric's new infrared reflection technology—called Pow-IR-Film—the incandescent lamp is poised on the verge of another breakthrough.

Incandescent technology is relatively simple to understand. Electric current heats a filament, producing electromagnetic radiation (visible light and infrared radiation). The infrared radiation, felt as heat, comprises about 90 percent of the energy consumed in an incandescent lamp—and most of this energy is wasted, escaping out of the lamp and heating the space. What GE engineers have done now is figured out how to reflect a major portion of this escaping heat back onto the filament, thereby greatly reducing the amount of energy required to keep the filament at the correct temperature.

Ten years ago, the Dura-Test Corporation invented an infrared incandescent lamp with reflective coatings on the outer bulb envelope rather than on an inner filament capsule. This solution never proved to be commercially viable, and so in GE's new lamp, the filament is contained in a small inner capsule whose outside surface is coated with multiple layers of reflective material. The capsule is shaped precisely to reflect the heat back evenly on the filament, reducing energy requirements by as much as 60 percent. With color temperatures from 3,000 to 3,050 degrees Kelvin, the new lamps match standard incandescents, and also register the same excellent Color Rendering Index (CRI) numbers as do standard quartz or incandescent.

On an individual lamp-to-lamp basis, the manufacturer claims minimal variation in color temperature or CRI numbers. The lamps are fully dimmable with standard incandescent, and do not utilize diodes which can cause lamp flickering. According to Terry McGowan, the manager of lighting technical support at GE, there appears to be no limit to the applications of the inner, coated filament capsule, so the technology may be extended into a full range of incandescent sources, from 120-volt R lamps to the miniature low voltage MR-16 lamps.

The initial offering in the Halogen IR line is a family of Par 38 lamps, available in both spot and flood models. The 60-watt Halogen IR Par 38 produces a beam intensity equivalent to a standard 150-watt incandescent par, while a 100-watt IR lamp matches the light output of the 150-watt halogen par presently available. Prices



GE's Pow-IR Film, placed on a capsule inside of the bulb envelope, reflects heat back to the filament. Circle 423 on information card.

are higher than those for the standard 150-watt lamps, but accrued savings in energy costs over the life of the lamp will easily validate the investment.

General Electric intends to create a broad family of incandescent lamps employing the infrared technology, which will restore incandescent lamps to a more acceptable position vis-à-vis fluorescent. While the efficiency of fluorescents remains at three to four times that of these new IR incandescents, GE's technological improvement represents the greatest energy advance since the invention of the incandescent lamp. This development will make it easier for the designer to justify the specification of incandescent lamps, with their controlled beams, warm color temperatures, high CRI, and inexpensive dimming. The concept of reflecting infrared radiation back onto the filament is at least ten years old, but it appears that the scientists and engineers at General Electric have engineered a viable commercial application.

—JUSTIN HENDERSON AND PETER BARNA



1



2

LIGHT AFTER DARK

Illuminating nature at night.

LIGHTING OUTDOOR AREAS AROUND A building or residence requires the same consideration and planning as illuminating the interior. Comfortable brightness patterns are necessary, especially in places for activities such as swimming, entertaining on a deck, or backyard grilling.

Other factors that contribute to the selection of appropriate outdoor lighting are the amount of light emitted per fixture, the height of lamp supports, and distance between fixtures to assure uniform lighting. The type of lamp chosen will determine the energy efficiency of the lighting system, maintenance and replacement schedules, and, to a great extent, the color rendition.

In addition to its decorative function of accenting sculpture, trees, and shrubs, exterior lighting improves the visibility of steps, pathways, and landmarks. Adequate lighting also provides a sense of security while encouraging nighttime use of the outdoors.

The lighting fixtures shown here not only provide shading, shadow, and color, but they are made of materials such as redwood, steel, or aluminum that are rugged enough to weather the elements.

With the exception of one floodlight, these basic, low-voltage bollards and posts are below the line of sight to minimize glare and provide low lighting levels for paths, ground cover, and steps.

—A.G.L.



3



4



5

1 & 2. Contemporary tectonic metal shapes in decorative finishes from Liteforms. Circle 408 on information card

3. Fixtures of California redwood and other desired woods from Woodform. Circle 409 on information card

4. The KLD series of low-mounted recessed floodlights permit wide-ranging adjustments of light beam at the job site. Lithonia Lighting. Circle 410 on information card

5. Large spread downlight is appropriate for illumination of larger ground cover areas. Lightolier. Circle 411 on information card

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WOOD WORKS

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TREATED WOOD HAS FOR A LONG TIME been used extensively for outdoor structures such as decks, fences, docks, siding, and gazebos. Wood used outdoors must withstand long and often harsh exposure to the elements, and wood, if it is not of a naturally resistant species, can be chemically treated to make it virtually immune to decay, rot, and insect attack.

The Environmental Protection Agency (EPA) and the wood preserving industry are making an effort to educate consumers on the safe use and handling of those products, as well as the potential hazards, of pressure-treated wood and wood preserving chemicals. To this end, the EPA and the industry recently initiated the consumer awareness program.

Lumber retailers are being supplied by EPA with information detailing the precautions for the use and handling of wood. Because the chemicals used in wood penetrate the lumber, there is little danger of chemical seepage or leaching. The only way to break the chemical bond is to burn the wood. Some other recommendations are not to use it in contact with drinking water, or for kitchen countertops, cutting boards, or food storage containers.

—A.G.L.



1. Sharon Harris of Pro Designs in Raleigh, North Carolina, used Fancy Cuts shingles of western red cedar. Shakertown. Circle 402 on information card



2.

2. Cuprinol stain removes stains and discoloration of wood. Darworth Company. Circle 403 on information card

3. Lifewood pressure-treated lumber has a life-time guarantee, both for the treatment and the grade of the lumber. Replacement glulam headers are also available. Weyerhaeuser Company. Circle 404 on information card

4. Custom wood premium-grade coverplates crafted in any hardwood or hard surface material enhance interiors. Torrence Coverplates. Circle 405 on information card

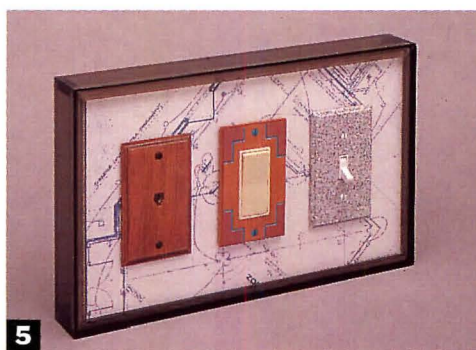
5. Machine application of pre-stained lumber achieves uniform and protective coating. Olympic Stain. Circle 406 on information card
6. A building in Wheeling, West Virginia, by Source Archi-technology Systems uses Dricon fire-retardant treated framing. Hickson Corporation. Circle 407 on information card



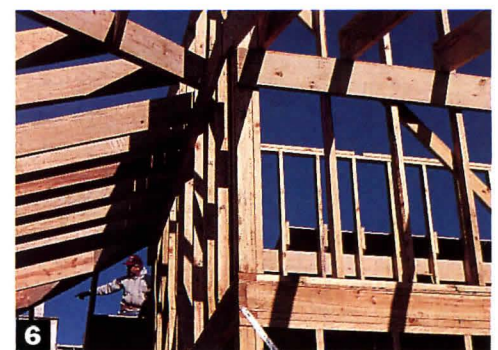
3.



4.



5.



6.

There are 24 CAD programs offered for Architects on the Macintosh. ArchiCAD has the highest price.

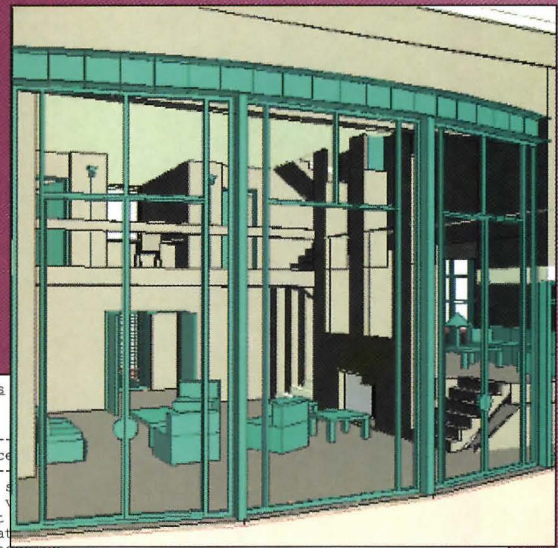
Why?

Project Conception:
 Marc Corbiau,
 Architect,
 Brussels, Belgium
 Realisation:
 Marc Lust, Architect

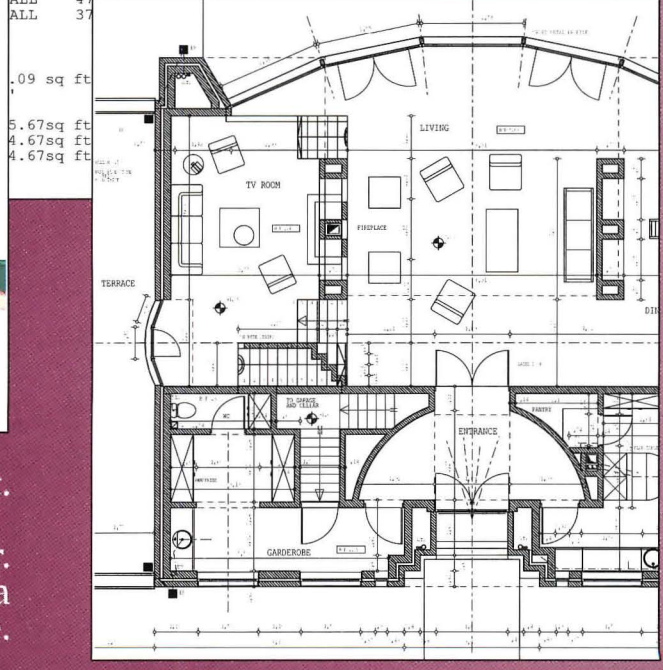
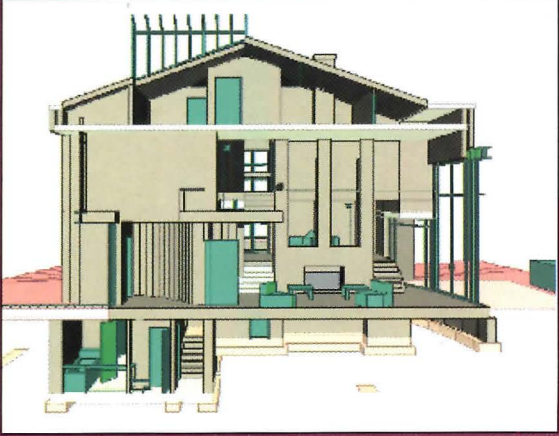
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Walls	Surface				
WALL	510.49 sq ft				
2X1 stud+brick veneer					
-story height					
-2X1 sole plate					
-subfloor extension					
-brick veneer					
face brick					
mortar type N					
metal ties					



WALL	239.76 sq. ft	237.09 sq ft	1	8
2X4 stud + plaster				
5'				
WALL	671.33sq ft	245.67sq ft	278.33c	
ALL	47			
ALL	37			



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ALL WRIGHT

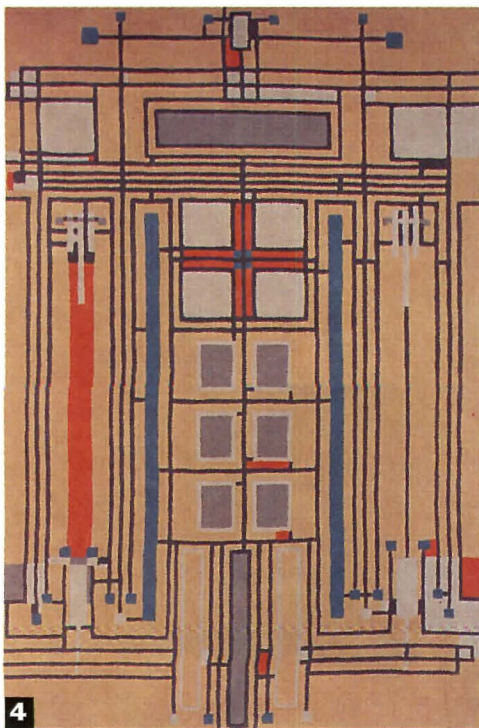
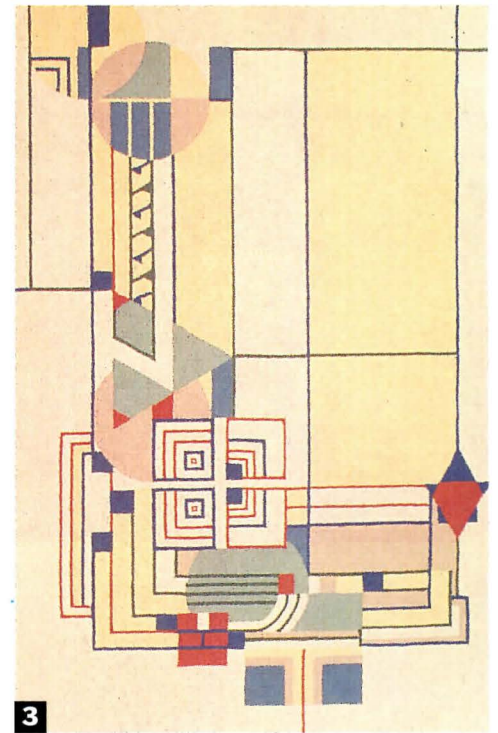
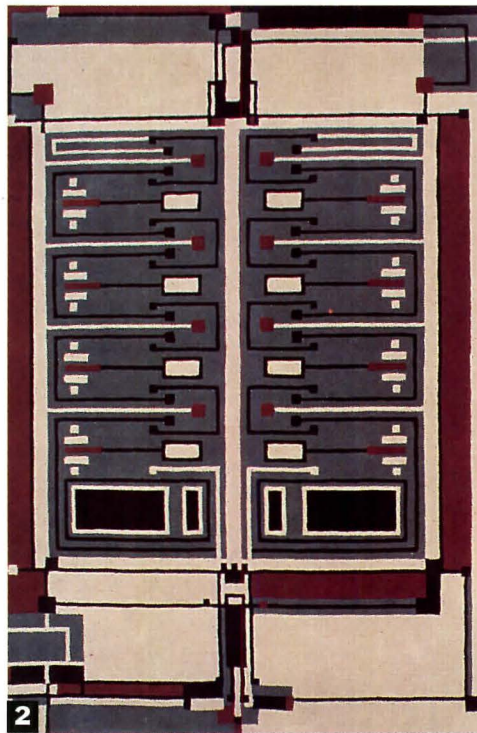
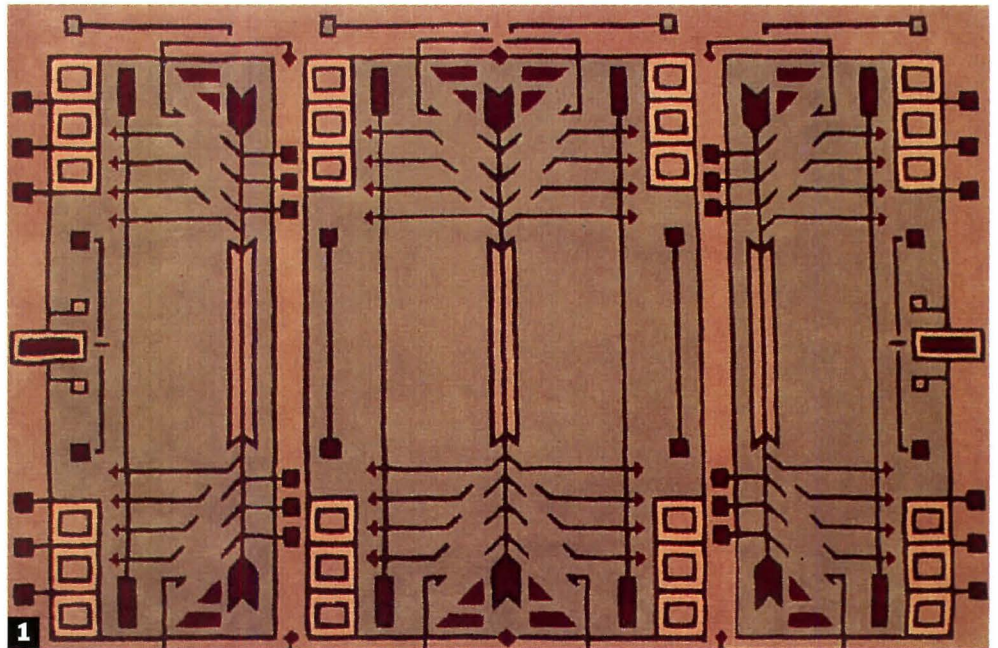
A new collection of Frank Lloyd Wright rug designs.

F. SCHUMACHER & COMPANY, THE OLDEST family-owned textile firm of its kind in the United States, was founded in New York City in America's Gilded Age. Now celebrating its centennial, the firm is re-issuing eight major rug designs by Frank Lloyd Wright. Four are new, two of these have recently been re-discovered, and they will all be presented to the design community as a new collection during WestWeek in Los Angeles, March 21-23.

Wright used Schumacher textiles in many of his projects, and because of this established relationship, the firm approached him in the early 1950s to design a collection for Schumacher called the Taliesin Line.

Several of the rug designs were never produced, and the original artwork for two was eventually donated to the Smithsonian Institution. The designs recently resurfaced at a gallery in Wisconsin that exhibited Wright's works, on loan from the Smithsonian. When it was discovered that the designs were originally made for Schumacher, the firm decided to produce the rugs as intended. The new collection should offer a welcome addition to Schumacher's already extensive line.

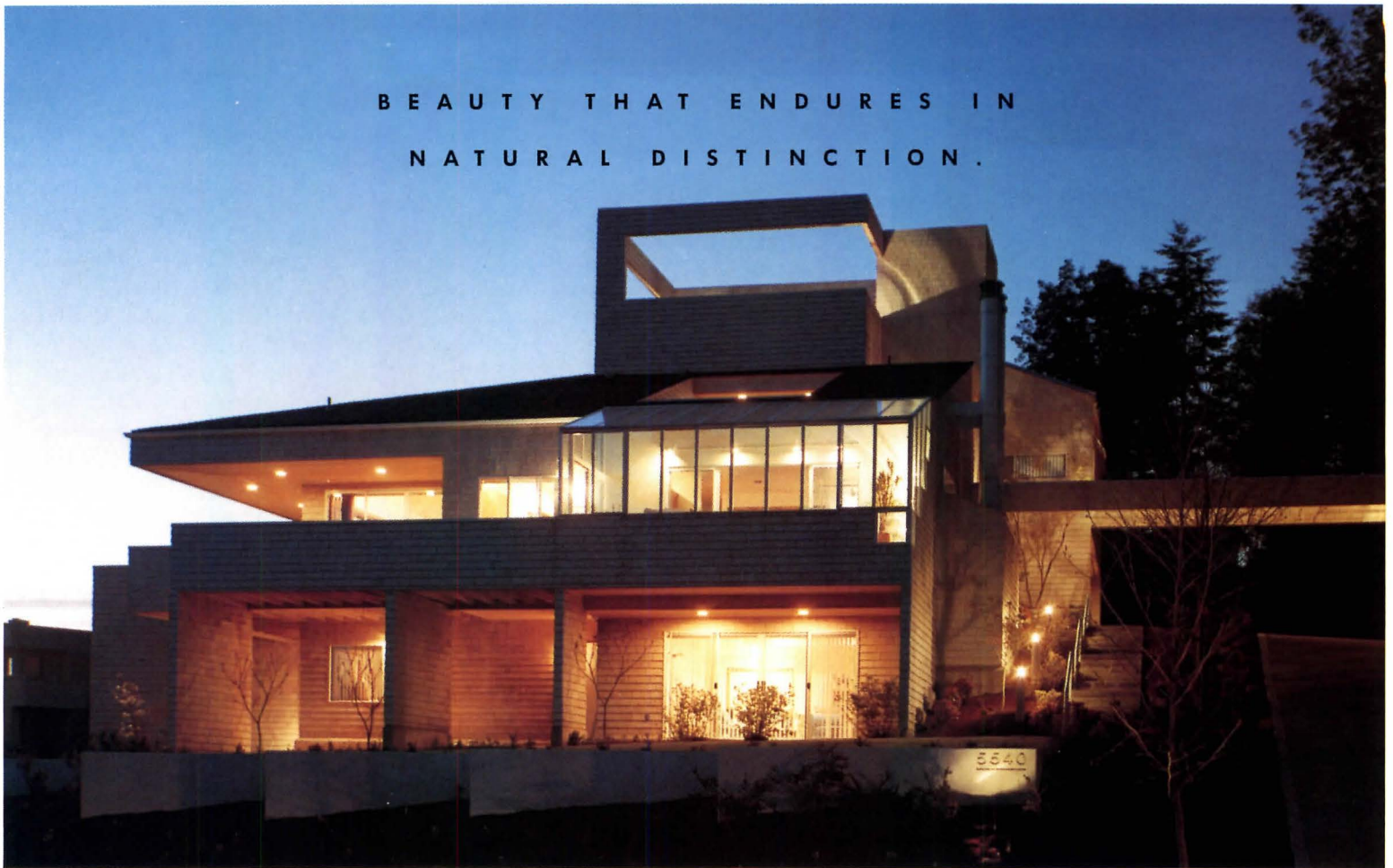
—A.G.L.



These geometric rug designs were produced in close collaboration with Wright's architecture firm at Taliesin West, with final approval from the Wright foundation. They are offered in customized sizes and colors.

1. This carpet is based on a Wright design in 1906 for the Arthur Heurtley house in Oak Park, Illinois.
2. Recently rediscovered, Wright created the Coonley No. 2 design in the '50s, based on the carpets he designed for the Avery Coonley house in Riverside, Illinois, in 1902.
3. In 1926, Wright created a series of 12 designs for the cover of *Liberty* magazine which were never published. This carpet, called Liberty, is an adaptation created from the architect's original drawings.
4. The Coonley No. 1 is another new design, and like the Coonley No. 2, was created after 1902. F. Schumacher & Co. Circle 401 on information card

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Martin Henry Kaplan, Architect AIA

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PRODUCTS

GlasWal

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Circle 424 on information card

Roofing Technology Catalog

California-based Gerard Roofing Technologies offers a fully-detailed catalog of its 1990 product line and specifications. Gerard, a manufacturer of lightweight stone-coated steel roof tiles and shakes, developed the catalog as a guide for architects and specifiers and as a reference tool for contractors and installers. The catalog provides technical information, installation tips, product descriptions, and style availability, as well as information on the company's extensive international research and testing program.

Circle 425 on information card

Lock Brochure

This newly revised twenty-page brochure from Best Lock Corporation details their entire line of door hardware and other related locksets featuring the Best Interchangeable core and Masterkey systems. Mortise locksets with newly designed lever handles, and key-in-knob cylindrical and tubular deadbolts are a few of the product lines illustrated. Also included in the brochure are all the specifications, order procedures, function charts, and trims and finishes available.

Circle 426 on information card

Metal Building Systems Catalog

A new color catalog of metal roofing and siding systems is available from Steelite, Inc., a manufacturer of metal building systems. The publication includes details on a wide variety of coatings systems, accessories, and related products. Highlighted in the brochure are Steelite's exclusive Corrtan Multi-Mil Protected Metal Coating System for use in harsh, corrosive applications, and their new SRS Standing Seam Roof Systems. Also featured are panel guide specifications, a color selection guide, a guide to Insul-Therm insulated wall and roof systems, and information on louvers and gravity ventilators. The brochure introduces Steelite's new high-strength Econolap 4.2 Roofing and Siding, designed for use in corrosive environments.

Circle 427 on information card

Washroom Accessories Catalog

This new 44-page product catalog contains descriptions of Bradley Corporation's broad line of traditional and new washroom accessories. Included are facts on the company's new modular wall units and telephone booths, hand drying equipment, waste receptacles, dispensing units, mirrors, and shelves. Also described is Bradley's complete line of security accessories for jails and prisons. Related accessories such as clothes hooks, custodial equipment, shower seats, rods and curtains, and hospital/medical equipment are also detailed.

Circle 428 on information card

Horizontal Access Door Catalog

The Bilco Company's 1990 catalog features a complete line of Bilco roof scuttles, automatic fire vents, ceiling access doors, and ladder safety posts. Each product page is illustrated with color photography, detailed drawings, and comprehensive specifications. The manufacturer's catalog emphasizes the engineering capabilities of the company with information concerning various product sizes, types, and options.

Circle 429 on information card

Window Systems Catalog

Caradco provides the necessary information for design and construction professionals to select and specify their clad and primed wood window systems and patio doors in its new 1990 product catalog. Illustrated are Caradco's large selection of primed and clad awning, casement, double hung, horizontal slider, and round top windows. Patio doors and replacement window systems as well as the Georgetown Collection of true divided light products round out the catalog. The catalog leads the reader from initial product comparison through the steps necessary for correct product selection.

Circle 430 on information card

Low-E Glass Technology Brochure

Libbey-Owens-Ford Company's new brochure introduces the technical features, benefits, and applications for its latest product, LOF's Energy Balance Low-E Glass. The Low-E glass is a neutral colored pyrolytic hard-coated glass that combines the thermal performance of a soft-coated product with the solar performance of a hard-coated product. Energy Balance Low-E can be used in a variety of applications where enhanced solar and thermal performance are required.

Circle 436 on information card

Directory of Infrared Thermographers

Infraspection Institute, a company that trains individuals and companies in the applications of infrared thermography, offers a free directory of Infrared Thermographers. Locating problems in electrical and energy distribution systems, wet insulation in flat roofs, and excessive energy losses in building envelopes are some of the uses of infrared thermography. The directory is an invaluable resource for purchasers of infrared inspection services. It includes thermographers names, addresses, the types of services offered, whether they are certified by the Institute, and other professional qualifications.

Circle 431 on information card

Window Design System Brochure

The Color/Flex window design system from the architectural window division of Season-All Industries, Inc., is described in a new eight-page brochure. The brochure explains ways to use window color as a key architectural element to complement a building's shape or structure. The system allows architects to design a single window using as many as six colors and various finishes for the interior trim, interior frame, exterior frame, and exterior panning.

Circle 432 on information card

Preservative-Treated Wood Pamphlet

A new pamphlet shows consumers how to select the best preservative-treated woods for their home and business projects. While wood preservatives improve wood's durability and extend its life, the chemicals used to treat wood are potentially harmful to humans and animals. The pamphlet discusses what kinds of preservative-treated woods are the safest and most appropriate for specific projects.

Circle 435 on information card

The Blue Book Of Building and Construction

This hard-cover reference directory contains over 575 different classifications covering all aspects of the construction field. These classifications have over four thousand cross and index references for quick and easy use, and are complemented by a comprehensive alphabetical "white page" listing.

In addition to the eight geographical markets currently served, an edition of *The Blue Book* is being developed for the San Francisco/Oakland/San Jose/Sacramento area. Published annually since 1913, regional editions of *The Blue Book* are recognized as the construction and building industry's standard reference guides.

Circle 433 on information card

GluLam Timber Beam Sizing Software

The American Institute of Timber Construction announces the development of a software program, GLSizer (Glulam Sizer) which makes it possible to quickly and easily determine the size of structural glued-laminated timber beams with a constant rectangular cross section.

Structural glued laminated timber, or glulam, has long been popular within the construction industry for its strength, durability, beauty, and natural resistance to fire. However, determining the size of glulam bending members having complex loadings with multiple span configurations has been difficult.

This new software program reduces the design process for virtually any glulam beam down to a matter of minutes and reduces the potential for error. Intended for use on IBM and IBM compatible computer systems, the GLSizer leads the user step-by-step through the design process by means of a help-supported menu. After using this program, at the conclusion of the design process, the user is able to print out a complete design report providing all the necessary information for engineering review.

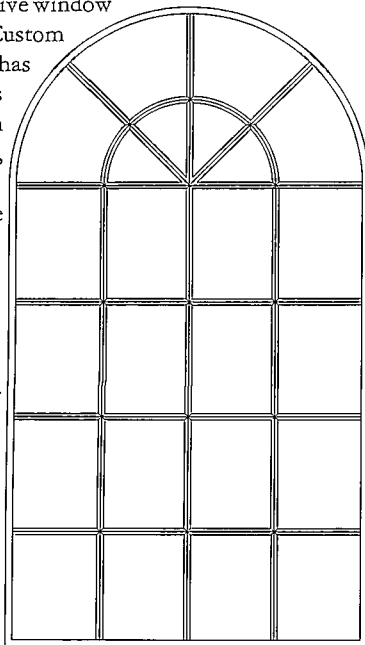
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Products continued on page 227

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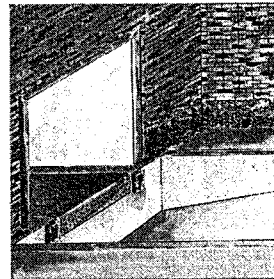
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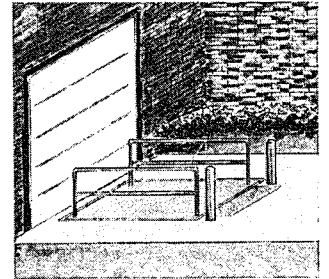
Circle 165 on information card

"THE DISAPPEARING DOCK"

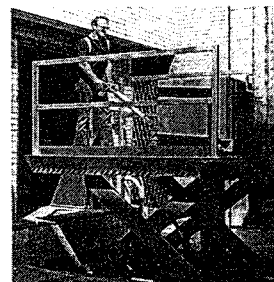
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Circle 163 on information card ARCHITECTURE / MARCH 1990 225

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Special Guest and Speaker

The Gold Medal
The Twenty-Five Year Award
Honor Awards
The Architectural Firm Award

Products from page 225

Plumbing Fixtures Portfolio

This new 12-page catalog contains descriptions of Bradley Corporation's broad line of traditional and new electronically-controlled plumbing fixtures. Included are facts on the firm's new ACCU-ZONE infrared control-equipped faucets and multiple station Washfountains, Micro-Touch electronic control-equipped showers, and security fixtures. The catalog includes the company's new line of patient care plumbing equipment.

Circle 438 on information card

Exterior Insulation Finish System Brochure

A new, full color catalog reprint for exterior insulation finish systems is now available from TEC Incorporated, manufacturer of FUL-O-MITE insulation decorative finish. The catalog features concise usage descriptions and illustrated installation basics, and also includes a representative finish coat color selection guide and a performance chart that matches the FUL-O-MITE system against applicable performance standards such as weathering, chemicals, fire, and impact.

Circle 439 on information card

Ceramic Tile Catalog

This redesigned brochure boldly displays the 25 glazed and unglazed ceramic tile series

offered by American Marazzi Tile. Each product series has a detailed description, catalog number, and concise technical data. Also included is Marazzi's highly successful and patented "Marazzi Enduro" series which carries a 10- or 15-year warranty.

Circle 440 on information card

Lock Catalog

Schlage Lock Company's 1990 catalog illustrates the full line of Schlage mechanical and electronic security products, including Primus High Security Cylinder and the Key'N Keyless Residential Electronic Lock. This new catalog serves as a practical reference guide containing Schlage products, functions, and styles, along with the relevant ANSI number and grade classification.

Circle 437 on information card

Architectural Panels Brochure

A four-page, four-color brochure featuring information on the full product line of Weyerhaeuser Architectural Panels is now available. This brochure includes product descriptions, attributes, applications, sizes, colors, options, and some technical information on Weyerhaeuser Panel 15, Insulative Foam Panels, Glazing Panels and new FRP Panels.

Circle 441 on information card

Infrared Unitary Heaters Brochure

Design certified by the American Gas Association and backed by a three-year limited warranty, Vantage II gas-fired radiant heaters are designed to provide fuel cost savings while improving worker comfort. They can be installed in auto-motive facilities, warehouses, manufacturing facilities, fire stations, and other buildings.

Models are available in straight, U-tube and L-shape configurations with tube lengths from 10 to 60 ft. and inputs of 40,000 through 150,000 BTUs per hour. The brochure provides features, dimensions, clearances to combustibles and architectural/engineering short-form specifications of the Vantage II line.

Circles 442 on information card

Kitchen Design Literature

The kitchen design approach of the Hammer & Nail is detailed in an eight-page brochure. The brochure explains how The Hammer & Nail plans a space, arrives at a concept, balances function and beauty, emphasizes craftsmanship, and works as a team of design professionals. The literature also gives a view of the company's expertise with media rooms and interesting design details.

Circle 443 on information card

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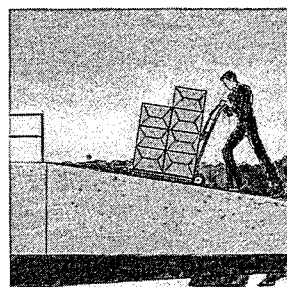
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Circle 167 on information card

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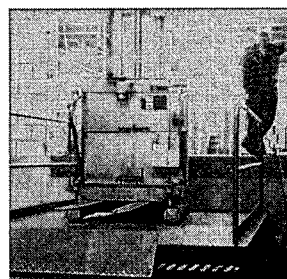
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Circle 169 on information card ARCHITECTURE / MARCH 1990 227

Carlo Scarpa: Architecture in Details

Bianca Albertini and Sandro Bagnoli (MIT Press, \$50.)

AUTHORS BIANCA ALBERTINI AND Sandro Bagnoli have pulled off a minor miracle. These former students and employees of Carlo Scarpa pay loving homage to their maestro in this sumptuous book. It will stand as a rich source document of the Venetian architect's hybrid ideas and makes clear that to call Scarpa's work architecture rather than art places undo boundaries on its genius.

Some of Scarpa's details appear as if they were built 500 years ago. Some pieces seem

sad or broken at first glance, or if some mistake had been made. But soon the eye identifies an insightful peculiarity and the artist's intention strikes home. The details reveal a different world, challenging our idea of a bridge, or a hinge, or a joint, or whether there should even be a joint.

The book's format does complete justice to the material presented and in so doing achieves the aim of its authors. Albertini and Bagnoli wish to "describe the working methods" of Scarpa, and they do so on many levels, exceeding their initial premise. In their essay "The Course of Invention," the authors ruminate about their hero with simplicity, warmth, and intelligence. Most writings

about Scarpa's work typically digress into tales of Scarpa the man, and this volume is no exception. In one story, Scarpa had a client who telephoned him constantly. "It was absolutely necessary to throw her off his trail and answer over the phone that 'il professore' was not in—he was in Venice, in Genoa, in Palermo, on the building site—and, if anyone could come up with a better idea, to go ahead and use it. He himself, with his nose deep in a handkerchief, had once answered that 'il professore' was at school. He had promised her that everything would be finished shortly, but he just wasn't ready."

Scarpa's temperament was unpredictable and demanding, irresponsible, and meticulous all at once. His magnificent sketches serve as an archive of this thought- and labor-intensive process, with scratches of color, doodles, drafted lines, and stray marks covering every inch of the board. Scarpa usually colored his working drawings "to enhance their legibility...certain parts might overlap, as much to exploit the space of a sheet to the maximum as to enhance its visual appeal. At the last moment there might be further retouching, second thoughts pencilled in on the copy, accompanied by more precise instructions or recommendations to the worker involved."


These drawings didn't need to be immaculate, since Scarpa worked closely with his craftsmen, who ultimately "showed an intuitive understanding of his requirements without need of long explanations." But the ideas demand precision, and Scarpa was a devotee of rationalism. The book carefully delineates his working method, and how Scarpa's approach, despite the appearance of graphic meandering, represented a high level of perfection through its emphasis on communicating the essential intent of the design.

The authors demonstrate Scarpa's method by grouping the details thematically, unlike the G.A. Detail series or other studies that organize work by project. Its organization derives almost intuitively as if springing directly from Scarpa's mind, and since the book skips around in time through his career, one finds a remarkable consistency and unity throughout the almost 50-year period.

The authors define eight themes that recur in Scarpa's work, and have chosen examples to illustrate each. The chapter "Support," for example, depicts a column from his Ottolenghi house that looks like a stack of deliciously colored sugared wafers. A steel support at the Brion cemetery in Treviso has already broken and sheared, and remains permanently frozen in a position of rupture.

The examples chosen are well documented in excellent color photographs of

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drawings and built work and are supported by a few minor examples from related works. Each example is then further cataloged by a "dossier" section at the end of the book that explains the history and background of the projects shown, a useful device since several details may derive from one project. And, finally, the projects are listed and cross-indexed with the book's thematic elements and illustrations.

Thus, the reader may flip open to any page and delve into the fragment confronted, relieved of the need to be too aware of the place, date, and concept behind each project.

This stream-of-consciousness approach occurs naturally, yet because it is more studiously and scrupulously organized, all the structure and information is there, so the book avoids being a merely impressionistic survey as seen frequently in books on architects such as Louis Kahn, which try to emulate their subject's difficult and abstract creative process. This book provides a logical embellishment of previous excellent Scarpa collections.

—DONALD LONDON, AIA

Donald London practices in New York City.

Bruce Graham of SOM

Introduction by Stanley Tigerman (Rizzoli, \$45.)

"THE MAGNITUDE OF THE ARCHITECTURE produced by Skidmore, Owings & Merrill...far exceeds that of any contemporary firm," writes Stanley Tigerman in this personal portfolio, which spans more than three decades. "At the moment of this writing, SOM and Bruce Graham are, for all practical purposes, indistinguishable. But who is Bruce Graham, and for that matter, who is SOM anyway?"

If you can understand architects through their buildings, this survey of the work of one of SOM's premier partners may, in part, answer Tigerman's question. Graham has designed several landmarks of late Modernism, such as Chicago's John Hancock Center and Sears Tower. Twenty-seven projects are presented in this book, beginning with the Miesian Kimberly-Clark Corporation headquarters of 1956 and closing with projects now under construction, such as the mammoth Bishopsgate project in London. Each project is presented with profuse illustrations, a short statement by Graham about the project, and a project description.

—MICHAEL J. CROSBIE

Architect's Detail Library

Fred Stitt (Van Nostrand Reinhold, \$89.95)

NO ONE CAN DENY THAT REPETITIVE drafting robs the architect of some profit on every job. Standard details have been successfully used by many architects, particularly those whose work itself is repetitive in nature. For those seeking to institute a standard detail library, the instructions portion of this book provides a method for the organization of a system. The details themselves, however, are of questionable value.

While there are building elements and components that do not vary, details are project specific. Detailing a building requires constructing it first in one's mind and then on paper. During this process, the architect becomes intimately familiar with the building, seeing the common elements, which act as threads to bind the whole together. The successful "standard" details are those produced from one's own design sense, research, and experience. Like the pattern books of the 19th-century, *Architectural Graphic Standards*, and publications of similar ilk, it provides

Books continued on page 230

The University of Florida invites nominations and applications for the position of Dean of the College of Architecture.

The University: The University of Florida is located in Gainesville, a city of approximately 100,000 situated in north central Florida, midway between the Atlantic Ocean and the Gulf of Mexico. The University of Florida, the largest and oldest public university in the state, is a land-grant institution which is a member of the Association of American Universities and accredited by the Southern Association of Colleges and Schools. There are approximately 36,000 students enrolled in 240 degree programs.

The College: The College of Architecture, with an enrollment of over 1,700 students, offers undergraduate programs in architecture, building construction, landscape architecture and interior design. There are graduate programs in architecture, building construction, landscape architecture and urban and regional planning. The college offers a Ph.D. program, supported by seven research centers and has one of the largest research programs in the country. The college offers programs in Nantucket, the Caribbean Basin, England and Italy. The annual operating budget for the college is two hundred and fifty thousand dollars with an endowment of over eleven million dollars.

Responsibilities: The Dean of the College is its chief academic officer and reports to the University Provost and Vice President for Academic Affairs. The Dean is responsible for the administration of internal college matters and will be expected to prepare plans for maximizing interdisciplinary research and teaching opportunities. In addition the Dean is expected to extend programs for funding from both private and public sources, to build strong service and educational links to the design, planning and construction professions and to provide vigorous leadership to a diverse faculty of 85.

Qualifications: The candidate should:

- Hold an advanced degree and be eligible for full professorship with tenure within one of the college's disciplines;
- possess skills to include demonstrated ability to build academic, research and service programs with creative leadership and management;
- have demonstrated administrative and leadership ability in planning, program development, personnel, budget development and working with professionals related to the college;
- be able to document distinguished scholarly, professional and administrative accomplishments within a broad base of experience in the field appropriate to his or her expertise.

Application Procedure: Nominations and applications will be received and reviewed by the search committee. At a minimum, applications must include the following:

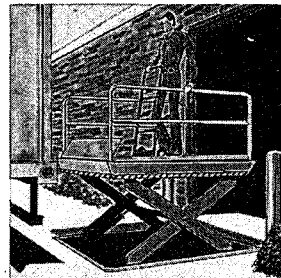
- A letter of application including relevant information regarding scholarly, professional and administrative experiences;
- A current curriculum vitae including addresses and telephone numbers of five references;
- Three documents which demonstrate the candidate's creative, administrative, managerial, scholarly and professional work.

Nominations and applications should be sent no later than March 15, 1990, to:

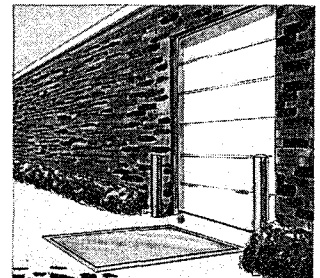
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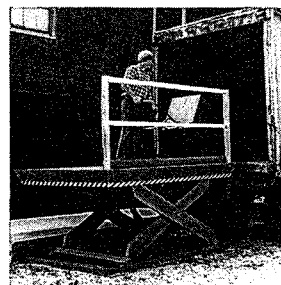
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Now you don't



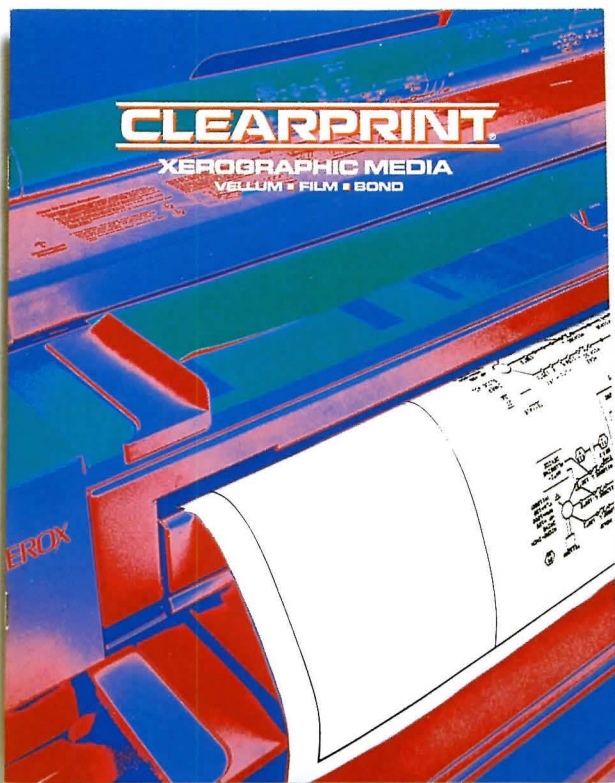
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Books from page 229

information conceptually with no pretense of being the correct solution.

I realize that Fred Stitt is not proposing that these details be used without thought, but we live in a time when there is a propensity to accept information simply because it exists, especially when it is computerized. As a textbook for the inexperienced, the *Architect's Detail Library* can provide a false sense of security based on the assumption that if the information is in detail form, then someone must have thought about it, even though the purpose of some elements in the detail may not be understood.

—RICHARD L. KING, AIA

Richard L. King practices with Centerbrook Architects in Essex, Connecticut.

Virginia Plantation Homes

David King Gleason (Louisiana State University Press, \$39.95)

THE PLANTATION HOUSES OF VIRGINIA are landmarks in the development of American domestic architecture—producing models for housing still widely copied today. These estates, which were the focal points of Virginia agrarian-based society, once possessed thousands of acres and scores of slaves. They included not only great manor houses but also dwelling quarters, farm buildings, and support buildings, developing into self-sufficient villages. The men who built these houses had vision and influence, and their houses were reflections of their wealth and taste. They enlisted the services of craftsmen and architects from abroad, imported architectural elements and furnishings from Europe, and demonstrated a conscious consideration and appreciation for the esthetic qualities of architecture. The plantation houses possess a gentlemanly quality, comparable to the best small country houses built in England.

In *Virginia Plantation Homes*, David King Gleason captures the variety of the individual houses and continuity of the plantation system as a type of domestic architecture. He presents houses of a wide array of sizes, styles, and materials. In presenting his grand tour of the great plantation houses of Virginia, Gleason offers the reader a sense of the genteel quality of domestic life that existed in these grand settings. Through Gleason's photographs, the reader can perceive the vital qualities these houses possess—their utility as the center of vast agricultural complexes, the beauty and charm of buildings and interiors, and their universal appeal as great works of genuinely American architecture.

Books continued on page 232

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Books continued from page 230

The houses fall into three predominant stylistic modes—Georgian, Federal, and Antebellum periods. The houses of the Georgian period date from the 1720s to the 1780s, and are characterized by their combinations of simple shapes tied together by roofs and cornices, regular planning with a symmetrical organization of rooms, and the use of an elaborately framed doorway and/or window as a focal point of the facade. Many of the plantation houses of the Georgian era were located along the great rivers of Virginia—the James, the Potomac, and the Rappahannock—which provided them with sweeping views and direct access to trade and communication with England.

The houses of the Federal period, which date roughly from the 1780s to the 1820s, incorporate French and Italian (especially Palladian) elements and planning. The most innovative influence of the period was the work of Thomas Jefferson, who experimented with compositions using classical geometries, elements, and models. The houses of the Antebellum period reflect the eclectic expressions of the current European styles—Greek revival, Gothic revival, and Italianate.

Virginia Plantation Homes is a large format book containing more than 80 houses documented with memorable color photographs of exteriors, interiors, and aerial views. The houses are presented by region—Tidewater, Northern Virginia, and Piedmont. Gleason's exterior photographs are elegantly composed, capturing the houses in all seasons. He includes views of the gardens and outbuildings to give the reader a sense of the importance of landscaping and setting in the development of the houses. The interior photos capture the elegance of the period and exude a sense of the warmth and comfort of these homes. The most impressive photographs are the aerial views. They reveal the plantation as a complex organization of the house, dependencies, outbuildings, farm structures, formal gardens, and axial approaches—not as a singular house devoid of a geographic context.

Calder Loth's introductory essay places the houses in their cultural, social, and historical context. In it he traces the development of the plantation house from the earliest colonial structures to the approach of the Civil War. Gleason's extended captions describing each house provide anecdotal information about the character of the houses, the men who built them, the fortunes they have come to through the years, and the efforts of the men and women to save and preserve these fine homes.

—JAMES A. COAN, AIA

James Coan practices with Centerbrook Architects in Essex, Connecticut.

Books continued on page 234

The AIA Bookstore

Some Stately Views of British Architecture

...And A Rebuttal To The Prince Of Wales

These four selections provide a rich examination of British architecture, past, present and future. His Royal Highness Prince Charles has definite ideas on English architecture, but the President of the Royal Institute of British Architects disagrees. Balancing these modern views are historical perspectives of St. Paul's Cathedral and three centuries of Britain's architectural heritage.

A Vision of Britain. HRH The Prince of Wales

The Prince draws on his speeches and TV documentary and expands on his ideas of modern and historic architecture and town planning which are complemented by photos and Charles' sketches. You'll see why his Ten Principles of Building have sparked lively debate throughout the country. \$40 (\$38 AIA Members).
160pp R874 1989 Doubleday

The Prince of Wales: Right or Wrong? An Architect Replies. Maxwell Hutchinson

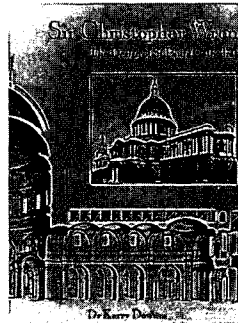
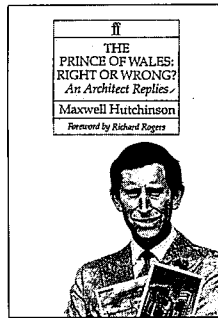
Hutchinson, President of the Royal Institute of British Architects, questions the Prince's return to the past even as Britain faces a new century. He argues that architects must reappraise their role and seize the opportunity to shape Britain's future. This new book is a fascinating rebuttal to the Prince's argument. \$8.95 Paperback (\$8.50 AIA Members).
203pp R873 1989 Faber and Faber

(NEW) Sir Christopher Wren

This volume contains Sir Christopher Wren's previously unpublished drawings for the design and construction of St. Paul's Cathedral, one of the most remarkable buildings in Great Britain and the world. \$39.95 (\$35.95 AIA Members).
190pp R751 1989 AIA Press

The Architect and the British Country House: 1620-1920

The style, character and development of Britain's architectural heritage is presented in this beautifully illustrated book with 95 main drawings, 31 color plates, and 150 black-and-white prints. Hardcover \$29.95 (\$26.95 AIA Members), softcover \$19.95 (\$17.95 AIA Members).
263pp 1985 Hardcover R341H Softcover R341P AIA Press/Trefoil



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Books continued from page 232

New York Architecture 1970-1990

Edited by Heinrich Klotz with Luminita Sabau (Rizzoli, \$75.)

THIS BOOK, ORIGINALLY PUBLISHED IN West Germany in conjunction with an exhibit at Frankfurt's Deutsches Architekturmuseum, is, like its subject, vast, sprawling, and incoherent. It is an encyclopedia, both flashy and boring at the same time, and ultimately insignificant. It is not clear from the contents and packaging what market Rizzoli is targeting: architects or the general public? Is it an ill-considered attempt to show Europeans the good, the bad, and the ugly of American architecture, reincarnated as a coffee table book?

Amazingly, *New York Architecture 1970-1990* features some unusually excellent essays. Barring the editors' rambling notes and copy-editing errors, the book features some of the most relaxed, lucid prose by architectural writers in recent memory.

Michael Sorkin's caustic article is the best. He feels that New York architecture represents "the commingling of anxiety and hype. 'If you can make it here, you can make it anywhere' is the mantra of empty struggle elevated to credo." He attacks recent projects like Battery Park City as "a demographic instrument" to ghettoize yuppies, and feels that the Trump City, Columbus Circle, and Times Square proposals fulfill the same function. Sorkin distinguishes urban renewal, which merely demolished buildings, from gentrification, which absorbs the old like a "parasite." The ultimate gentrifier's dream is the SoHo loft: "It's a void, as undifferentiated as possible and the bigger the better...it has been emptied...its floors have been sanded smooth and sealed with urethane. Its walls have been sprayed white."

Art fills the void and Sorkin believes that art is New York's major consumable item: "The city is, at once, both shopping mall and museum...as museums become appendages to their gift shops." He concludes that "New York is no longer a center for the building of serious architecture," and that the last true quality building was Roche Dinkeloo's Ford Foundation, which paradoxically dispenses gentrification at home and abroad through its philanthropies.

Douglas Davis declares that New York architecture "seems curiously abstract and disembodied, without stylistic homogeneity," and that "'style' in New York is bereft of ideology." Davis cites Daniel Bell's *The Coming of Post-Industrial Society*, which predicts the rise in status of the idea, as opposed to products or commodities in society. The subsequent "lust for cultural certification" is why "we are drowning in New York-based labels" generated to satiate the public thirst for enlightenment.

Christian Norberg-Schulz benevolently asserts that New York "expresses the possibilities of openness...the prospects of pluralism." He feels that Robert Venturi's message has not been properly understood, "and the New York scene has split into competing currents." Whereas pluralism recognizes that "life means choosing between values," deconstruction negates any value whatsoever while embracing "the sterile forms of late Modernism."

Kenneth Frampton's essay is the strongest attempt to throw a net of coherence over the book's contents. His critique of the "reactionary triumph of Postmodernism" in New York by the "anti-Modern architectural establishment" is amusing, considering the fact that his colleague Peter Eisenman is far trendier today than Robert Stern. Like the other essayists, he isn't quite sure what unifies this exhibit, but perceives that "here in Trumpville, an appalling level of Postmodern 'schlock' seems the rule." He mourns the inability of talented architects to become established and build, as "insurance profits, laundered drug money, and Japanese corporations compete with unprecedented voracity for a piece of the Big Apple."

It is difficult to comment on Klotz's selection of buildings. In any collection, one could compare the inclusions to the exclusions. This set fails to inspire such speculation because it seems relentlessly random. One strong point is the inclusion of work that might be categorized as conceptual art. In fact, it seems that the quality of New York work declines as the project approaches the possibility of realization.

In the category of most conceptual, Diller & Scofidio's Columbus Circle project—featuring hundreds of parking cones—and "Sentinel," the firm's Art on the Beach entry, say more about New York than most of the architecture represented. Rem Koolhaas and OMA probe the New York situation with "The City of the Captive Globe." Simon Ungers' waterfront competition entry for the Municipal Art Society is disturbing and politically incisive. Tod Williams, Billie Tsien & Associates's Columbus Circle project—a huge hole in the ground—and their idea to enhance the Statue of Liberty with copper lightning rods represent more of what this city needs—a sense of humor.

Several slightly more "real" projects also elicit this conceptual enticement. Venturi's proposal for a bonafide Big Apple was probably too much for the grim urban reapers of Times Square. UKZ's Pan Am rooftop development is both daring and perfectly logical. Neil Denari's forms are compelling, but where is the work of Harvard classmates Wes Jones and Douglas Darden? Several excellent Constructivist projects by Peter Pran, Carlos Zapata, et al. represent exciting and probably buildable projects.

Modernist houses by Masque, Pascal Quintard-Hofstein, and UKZ merit recognition, as does a more historicist project by Michael Mostoller and Fred Travisano. On the urban scale, the Westway project, and its failure to materialize, is probably the greatest tragedy to befall New York during this period. Venturi and Scott Brown's design was so refreshingly simple, clear, and life-enhancing that only in New York City could its intent be totally misconstrued and the project rejected.

One failure that got built is Metropolitan Tower, one of the most repellent images produced in the history of this city, for which the architects wisely allowed developer Harry Macklowe to list himself as project designer. Another questionable entry is Eisenman's frightening Travelers Financial Center, with its unctuous, glittery curtain wall. The book includes Roche Dinkeloo's graceless 750 Seventh Avenue as well as the obsessive monotony of UN Plaza.

The quality of the photographs and the graphic layouts are uniformly excellent. One would have expected the project descriptions written by the editor or curator of this show, but they are provided by the architects themselves or their marketing departments, giving the book a slight "public relations" edge.

—DONALD LONDON, AIA

Remembering the Future: The New York World's Fair from 1939 to 1964

Introduction by Robert Rosenblum (Rizzoli, \$25.)

REMEMBERING THE FUTURE IS A SCHOLARLY work that celebrates the 50th and 25th anniversaries of the 1939-40 and 1964-65 New York world's fairs. It opens with a heart-felt remembrance of both events by art historian Robert Rosenblum, whose reverie captures a good deal of the allure and spectacle of the fairs. In remembering the first fair in 1939, he beckons a child to the future, and in 1964 reminds the child-now-man that the future, to paraphrase Pogo, is us.

The fairs have not been easy to assess in academic terms, and the perception of their significance has changed a good deal over time. It is the profundity of these happenings as interventions in the lives of Depression-era and post-50s Americans that is at stake here. Simply put, the book addresses what the fairs were about, and their legacy. Thanks to a rich assortment of archival material, it is easy to describe the history of each fair, its physical setting, the nature of the events, and the like. Interpreting all these details is another matter.

The book presents the fairs through essays by Rosemarie Haag Bletter, Morris Dickstein, Helen A. Harrison, Marc H.

Books continued on page 237

Books *continued from page 234*

Miller, Sheldon J. Reaven, and Ileen Sheppard. Most of the essays develop a historical overview of some aspect of the fairs and establish something of the context in which each took place. In all the essays there are examples of continuities and discontinuities, conjunctions and disjunctions of ideas and values between the two events and among the fair planners and managers.

Morris Dickstein sees the fairs as "happenings—social moments in the popular imagination," and tries to assess each fair's themes within their social contexts. Robert Moses is the subject of Marc Miller's essay. Moses, one of New York's principal civic figures, was the master of the grand plan, with little regard for the effects of big schemes on everyday people.

Sheldon Reaven addresses the state of science and technology at the fairs, especially 1964, summarizing its preoccupations: paraphernalia, simulated journeys, communications, atomic power, consumer gadgetry, exotic materials, and varieties of human experience. The major change in attitudes toward technology between 1964 and the present centers on the guidance of technologies and their environmental consequences.

"The 1964-65 Fair never achieved the iconic impact of the 1939-40 Fair," states Rosemarie Haag Bletter in her excellent essay on architecture at the fairs. Bletter explains the difference clearly and then sorts out the major players and the issues, making a strong case for the high degree of continuity in design, conservative design at that, between the fairs. The fairs were not without good design, however: Eero Saarinen and Charles Eames designed the IBM pavilion, Masayuki Nagare created the Japanese pavilion in 1964, and Albert Kahn designed the General Motors building in 1939.

Helen Harrison discusses the differences in attitudes toward art held by both fair administrations, with "art for the millions" guiding the 1939 World of Tomorrow, and "art for the market" defining the 1964 fair. Harrison is particularly good at recreating the presence of art in the fair environments, dealing with subjects like the general heroic character of 1939 work and the theatricality of the presentation of Michelangelo's *Pieta* in 1964.

The final essay, "Icons and Images" by Ileen Sheppard, deals with the cultural legacy of the fairs. She argues, as she must, that the fairs have had "a strong impact on the popular imagination." Her list of legacies suggest that the fairs also had a strong affect on the corporate imagination.

In the public realm, the fairs produced memorable imagery, as evidenced by this book, but fair legacies are suspect. Corporate America's failure to plan long-term and its passion for short-term profits has mortgaged

our future. The fairs, especially the 1964 version, would seem to be hollow, if enjoyable affairs. Theme parks, with their sanitized environments, are not much of an accomplishment for a civilization, and the media blitzes of fair displays only prepared us for the Reagan years. None of this, however, detracts from this worthwhile book, which, by the way, would have benefited from an editor and a less self-conscious design.

—HERBERT GOTTFRIED

Herbert Gottfried teaches at Iowa State University's college of design.

The Hidden Order: Tokyo through the 20th Century

Yoshinobu Ashihara (Kodansha International, \$17.95)

WITH MORE THAN 26 MILLION PEOPLE living within its greater metropolitan boundaries, Tokyo is now the most populous city on earth, having absorbed roughly one fifth of the entire population of Japan into an area about the size of Los Angeles. Tokyo architect and Sony headquarters designer Yoshinobu Ashihara argues that, "although appearing chaotic and lacking in artistic ordination," modern Tokyo possesses a redeeming hidden order that makes it a model for the cities of the future.

Yet the best case that the author can make for the existence of this "hidden order" is that, were it not a reality, how else could Tokyo's inhabitants lead the lives of reasonable comfort which they do now? He never considers that they may simply be practicing the well-developed Japanese art of ignoring the unpleasant at the cost of becoming increasingly indifferent to creating, or even appreciating, the congenial and the refined.

There are no zoning laws in Japan prohibiting division of land into minimum sized or oddly shaped lots. Consequently, particularly in Tokyo, where land prices are the highest in the world, divided properties and the buildings placed upon them have become so numerous and irregular that the cityscape has come to resemble "a set of badly aligned teeth," according to the author.

Yet such jarring externalities, Ashihara maintains, are not nearly so important as the freedom for change and metabolic growth. Even on the single building scale, Tokyo architects, released from the obsession with creating beautiful or at least noteworthy false fronts, can concentrate on designing more functional, humane interior spaces.

It is sad to realize that the same culture that produced a style of nature-oriented architecture, so harmonious that the inside and outside became magically one, can now excuse architectural ugliness by pleading that the integration of form and content is

artistically irrelevant and needlessly expensive. There would be some consolation if behind their banal exteriors, modern Tokyo's home and office interiors really did embody exceptional virtue. But with few exceptions, they are, at their most ambitious, muddled attempts to fuse traditional Japanese and Western spatial concepts, which are fundamentally incompatible.

While Ashihara seems largely oblivious to such esthetic problems, he does concede that Tokyo is not without its faults. Most commuters, for example, must ride for three or more hours per day packed like sardines on public transport, and return home to "rabbit-warren" company-subsidized housing blocks, which resemble nothing so much as American inner-city public housing projects, complete with half-topped TV roof antennas and laundry hanging off balconies.

What is the author's solution to such dilemmas? He believes in decentralization; encouraging the suburbs or smaller nearby cities to absorb more of the work-oriented activities of the Tokyo central core. Yet he offers no advice on how to avoid the gridlock and disfigurement that have come to characterize other large cities' experiences with unplanned suburban sprawl, or how to improve the living conditions of workers who, being closer to their jobs, will have more time on their hands to ponder their wretched conditions at home.

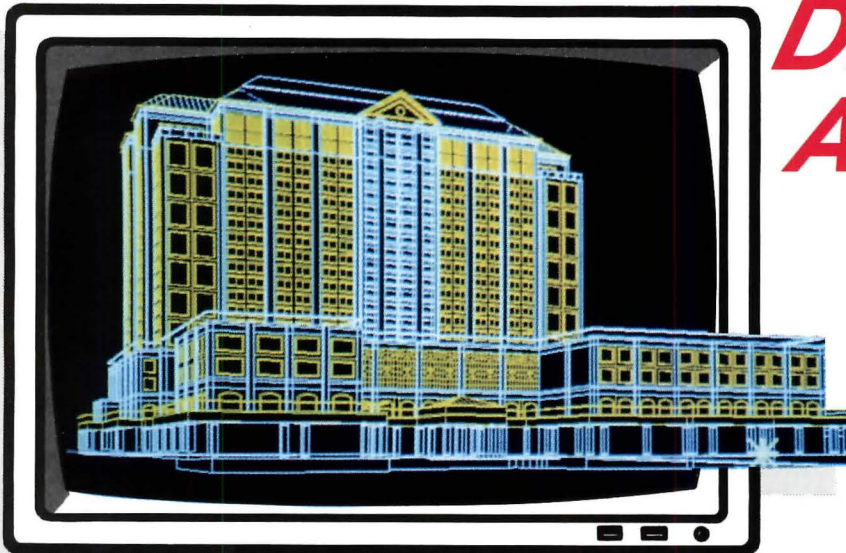
Neither does Ashihara consider how such decentralization schemes would undermine the strong Japanese desire to conduct work and business on a face-to-face, moment-to-moment basis—which may be one of the real keys to Japan, Inc.'s economic success. It is certainly a reason why Japanese firms continue to move their operations to downtown Tokyo, despite the astronomical costs of doing business there.

If the answer to Tokyo's growth pangs is not decentralization, then what is it? Presumably, the solution seems to be accommodating Tokyo's inhabitants more comfortably and centrally in ever smaller amounts of space. It is being achieved already in a genre of contemporary Tokyo architecture that Ashihara never mentions: the "hangover" hotel, where guests are accommodated in miniature "space capsules" stacked one upon the other, each of which is beautifully detailed and includes all the amenities necessary for a good night's sleep. Such arrangements would seem to embody everything ingenious and desirable about Japanese miniaturization and packaging technology, which is one area where traditional Japanese esthetic sensitivity has continued to flourish into the modern age.

Taken a step further, there seems to be no reason why the gardens, which Ashihara believes are still what most Japanese urban

Books continued on page 240

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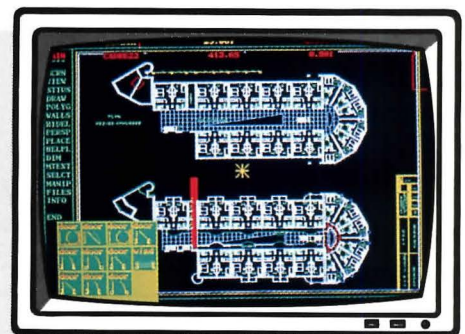
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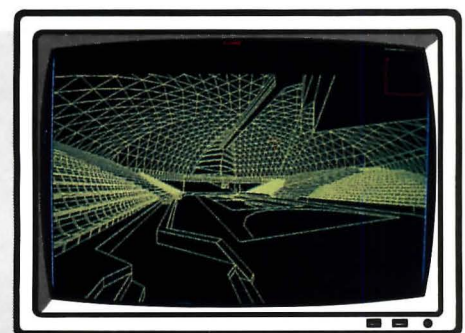
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Books continued from page 237

dwellers really crave, could not be incorporated into exquisitely designed, factory produced, plug-in, high-rise, miniaturized dwelling modules. They could not only be incorporated into the Tokyo landscape, but profitably exported to similarly congested metropolitan areas around the world. Ashihara does not explore prefabrication potentials or any other technologically advanced possibilities. He believes that the city will be preserved by its existing hidden-order evolutionary mechanism, which insures human welfare by promoting laissez-faire organic growth.

Yet if there is a "hidden order" in today's Tokyo, it would seem to have less to do with the triumphs of that city's architecture and lack of city planning, than with the rigid cultural rules and passive conformist attitudes which have characterized its people. Such a hidden social order may well have made a more tolerable situation out of one which might otherwise be degenerated into a totally awful mess, but it hardly seems likely to launch the world's largest city into a golden age of civilization, or even announce it as an exemplary place in the future.

For that to happen, the Japanese will need to invest a great deal of their vast wealth and latent creative resources into truly bold and imaginative urban experiments. Otherwise, Japan's one-time skill for using architecture to increase sensitivity and transcend materialism will soon be forgotten, and the unpleasantness of living in cities like today's Tokyo will grow even worse.

—NATHAN EDELSON

Nathan Edelson is director of Environments for Health, an ergonomic design and consulting firm in Missoula, Montana.

Henry Van De Velde

Klaus-Jurgen Sembach (Rizzoli, \$50)

BELGIAN ARCHITECT HENRY VAN DE Velde was born in 1863 and is considered a precursor to the Modern movement. An Art Nouveau designer interested in creating organically whole environments, he designed and built houses with all their contents—hardware, furniture, carpets, curtains, and tableware—under his design control.

At the beginning of the 20th century, he moved to Germany where he executed larger works such as theaters, museums, shops, and factories. In 1905, he built the New School for Applied Arts at Dessau (which later gave birth to the Bauhaus) and was an influential teacher who took the radical step of throwing out the study of historical precedents and encouraging his students to design with spontaneous invention.

This survey of Henry van der Velde's life

by Klaus-Jurgen Sembach, who knew him personally, is illustrated with beautiful black and white photos of the designer's work, which included book design and even oil painting.

—M.J.C.

Inigo Jones: Complete Architectural Drawings

John Harris and Gordon Higgott (Harper & Row, \$80)

NO OTHER BRITISH ARCHITECT OF THE 17th-century had such an effect on the development of English architecture as Inigo Jones. This son of a humble cloth worker was born in 1573, and visited Italy for the first time in his late 20s and again in 1613, bringing back to his native country the ideas of Palladio and a first-hand knowledge of the ruins of the Roman empire. Flush with these classical models, Jones broke with traditional Jacobean architecture and introduced Italian design in such landmark works as the Queen's House in Greenwich and, perhaps his most famous building of all, the Banqueting House at Whitehall, London. Christopher Wren, 60 years his junior, might rival Jones in stature, but Wren merely followed the classical groundwork laid by Jones.

Presented here for the first time are Jones's extant drawings, 93 in all, with a third of them reproduced in color. John Harris provides illuminating insight into Jones and his works and, with Gordon Higgott, traces the provenance of his drawings. Along with drawings of buildings and interiors are Jones's designs for theater costumes, stage sets, and ornament.

—M.J.C.

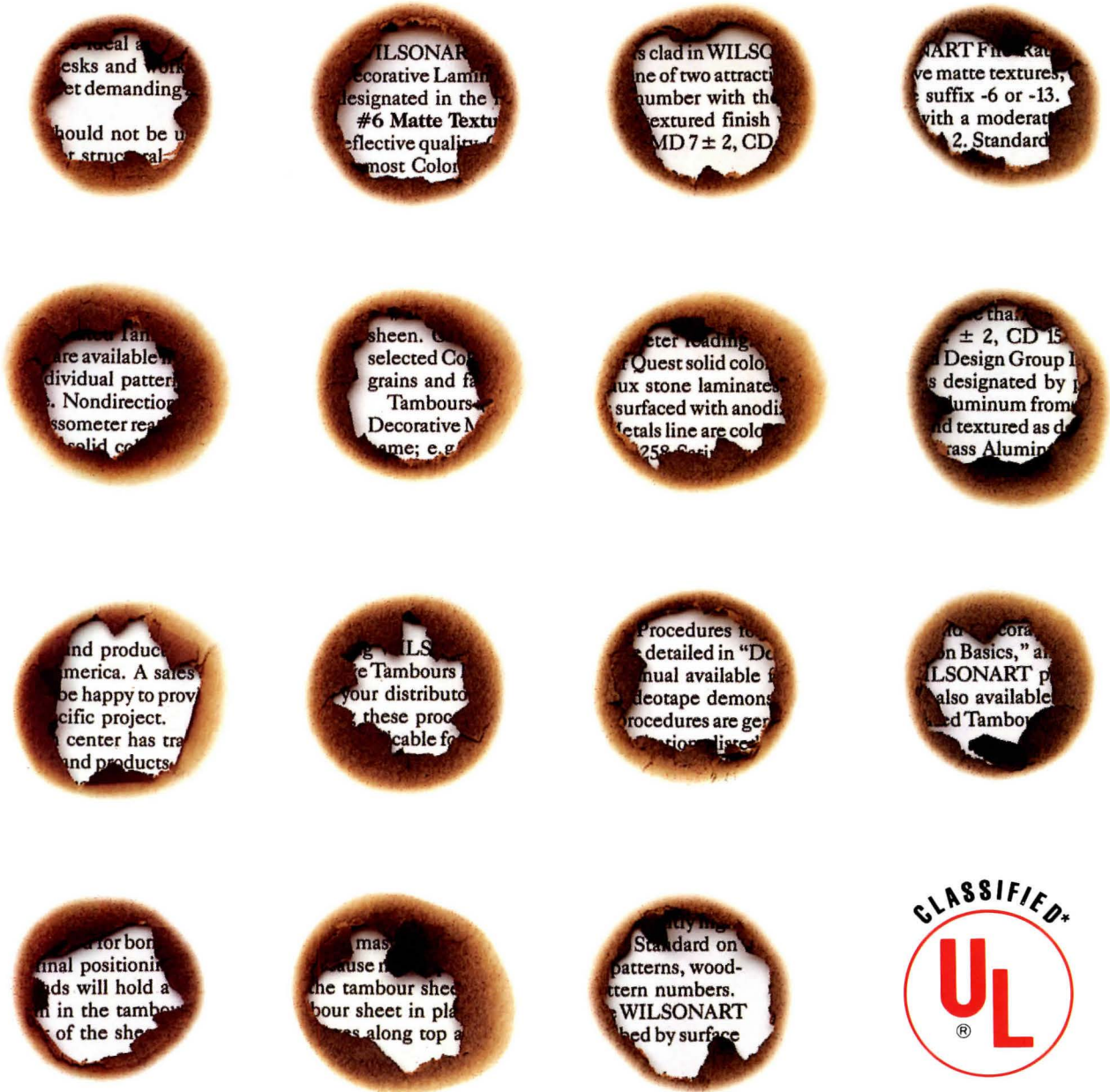
The Architect's Remodeling, Renovation, & Restoration Handbook

H. Leslie Simmons (Van Nostrand Reinhold, \$69.95)

THE AUTHOR IS AN ARCHITECT WITH more than 30 years experience, and has been a specifications consultant since 1975. This book is oriented toward the documentation of the projects in its title, which have traditionally lacked documentation standards special to these kinds of projects. Simmons covers drawings, schedules, and specifications for commercial, institutional, educational, industrial, and housing construction.

The book is full of examples of documentation that have been used by the author and firms of various sizes and expertise. There are lots of lists and drawing examples, along with project manual guides, and a section on photographing existing work and obtaining data on existing buildings.

—M.J.C.



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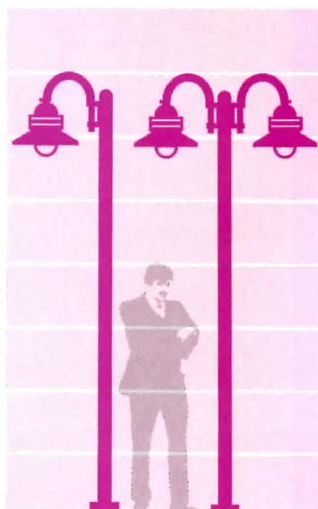
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