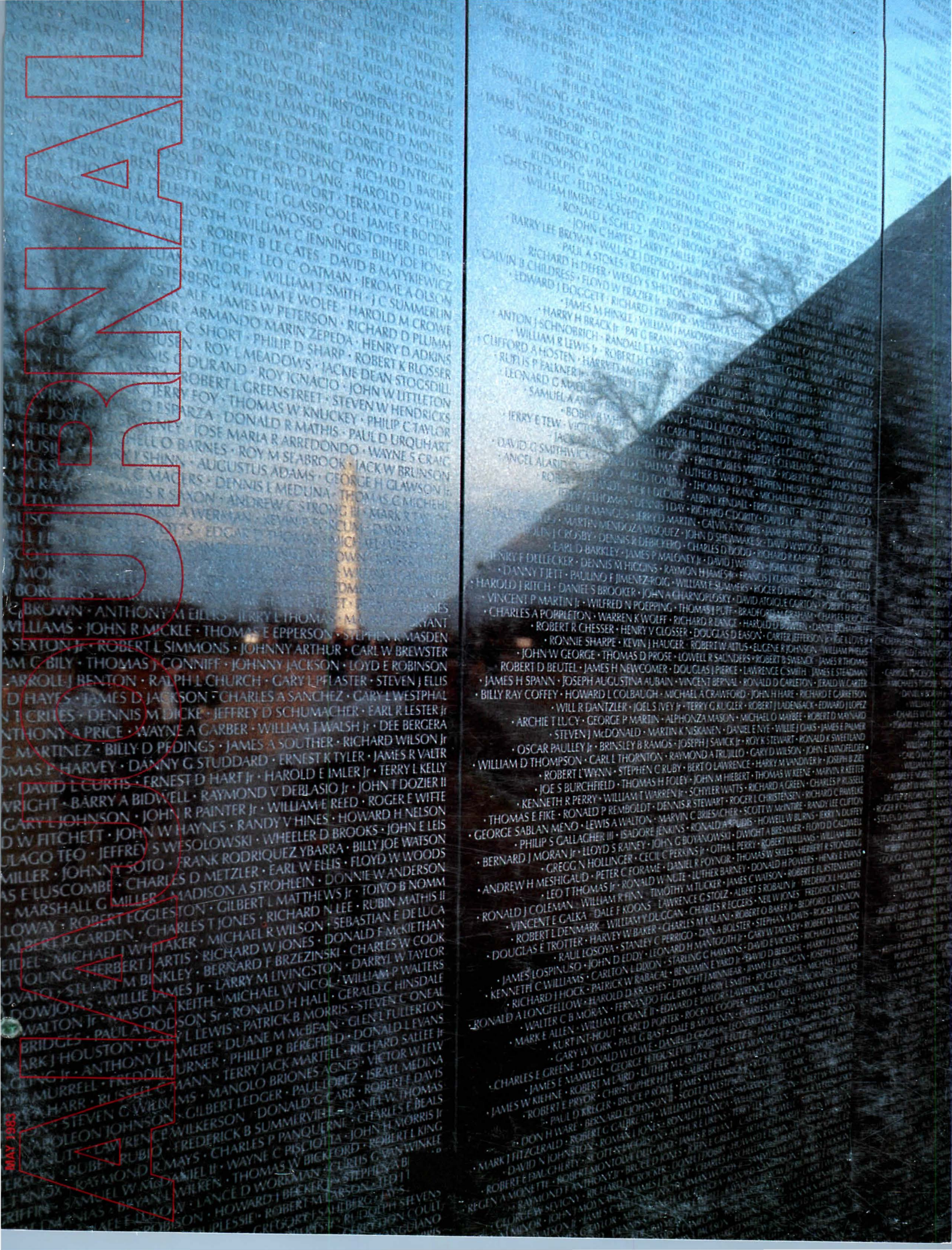
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EVENTS

June 1-3: Sixth Biennial Wind Energy Conference and Workshop, Minneapolis. Contact: American Solar Energy Society, Inc., 1230 Grandview Ave., Boulder, Colo. 80302.
June 5-17: Seventh Annual Design Discovery Program, College of Architecture and Design, Kansas State University, Manhattan.
June 7-9: Fifth Annual International Energy Trade Show/Conference, The Ohio Center, Columbus, Ohio.
June 8-10: A/E Systems '83, Dallas. Contact: A/E Systems, '83, P.O. Box 11318, Newington, Conn. 06111.
June 9-10: Technical Workshop on Rehabilitating Historic Buildings, Pittsburgh. (Repeat workshop June 23-26, St. Louis.) Contact: Education Services/"Successful Rehabilitation," National Trust for Historic Preservation, 1785 Massachusetts Ave. N.W., Washington, D.C. 20036.
June 10-11: AIA Energy in Design, Practice Workshop, Pittsburgh. Contact: Brenda Henderson at Institute headquarters, (202) 626-7353.
June 10-14: 1983 Convention/Expo of the National Association of Plumbing-Heating-Cooling Contractors, Dallas. Contact: NAPHCC, 1016 20th St. N.W., Washington, D.C. 20036.
June 12-17: 33rd Annual International Design Conference, Aspen. Contact: IDCA, P.O. Box 644, Aspen, Colo. 81612.
June 14-17: NEOCON, Chicago. Contact: Office of Communications, Suite 830, Merchandise Mart, Chicago, Ill. 60654.
June 18-24: Course on Conserving Neighborhoods, Durham, N.C. Contact: Robert Williams, National Trust for Historic Preservation, 1785 Massachusetts Ave. N.W., Washington, D.C. 20036.
June 19-21: Workshop on Rural and Small Town Planning, Nashville. Contact: John Waxman, American Planning Association, 1776 Massachusetts Ave. N.W., Washington, D.C. 20036.
June 20-24: Course on Structural Steel Design, Department of Engineering & Applied Science, University of Wisconsin, Madison.
June 24-26: Construction Specifications Institute Annual Convention, Kansas City, Mo. Contact: CSI, 601 Madison St., Alexandria, Va. 22314.
July 15-17: Seventh International Conference on People and Their Physical Surroundings, Barcelona, Spain. Contact: E.T.S. Arquitectura, Diagonal, 649, Barcelona 28 Spain.
Aug. 1-6: International Conference on Energy Efficient Buildings with Earth Shelter Protection, Sydney, Australia. Contact: Architectural Extension, Oklahoma State University, 120 Architectural Building, Stillwater, Okla. 74078.
Aug. 6-15: Tour of Italian Hilltowns, sponsored by the Northwest Institute for Architectural and Urban Studies. Contact: Richard Berg, 531 Bellevue Ave. E., Seattle, Wash. 98102.
Aug. 26-30: The Forsius Symposium on Colour Order Systems, Kungälv, Sweden. Contact: Secretariat of The Forsius Symposium, Box 14038, S-104 40 Stockholm, Sweden.

LETTERS

Congress and Matters of Design: As your news article on the Vietnam Memorial states (see Feb., page 11), it may be true that Congress has never before interfered with the resolution of design matters in the hands of the Commission of Fine Arts or the National Planning Commission. But it has interfered with the work of other equally distinguished commissions, notably the Franklin D. Roosevelt Memorial Commission, which was chaired by Francis Biddle.

In 1962, the House of Representatives Committee on House Administration succeeded in killing the winning design for the F.D.R. Memorial, thereby setting a precedent from which the arts in America still suffer. The story commonly believed at the time was that the deed was done at the request of members of the Roosevelt family, who simply did not like what they referred to as "instant Stonehenge."

The House committee did go through the motions of a hearing, and I testified at the request of Judge Biddle. It fell on deaf ears.

Philip Will Jr., FAIA
Venice, Fla.

The writer testified for AIA in 1962 as the immediate past president of the Institute.—*Ed.*

Vietnam Memorial: I recently had occasion to visit the controversial Vietnam Veterans Memorial, and, in a word, I consider the solution admirable. Congratulations to Maya Lin for an esthetic and well thought out design.

Samuel Z. Moskowitz, FAIA
Naples, Fla.

NCARB Degree Requirement (continued): I have just read Samuel Balen's reply to Keith White's criticism of the requirement of a degree to qualify for an NCARB certificate (see Feb., page 6). The persons who run this organization should descend from their ivory towers and maneuver on solid ground. There seems to be a degree syndrome in our society. If degrees were required for success we would not have the cotton gin, the electric light, the airplane, or the motor car. Where did Richardson and Sullivan get their degrees?

As an employer, I have not found college graduates uniquely competent. They apply for positions with portfolios of axionometric drawings and grandiose presentations of monumental projects they rarely, if ever, design but not the slightest indication of their ability to produce a working drawing. Knowledge of practical production and the application (not the theory) of the principles protecting public health, safety, and welfare, come from experience rather than from formal education.

Mr. Balen should visit the borough offices of the New York City building departments. There he will find architects doing scores of smaller and minor projects that the average Ivy League graduate would consider beneath him. Yet the law requires that these projects be processed by licensed professionals. In reality, the person with a practical background is far better equipped to produce them; he is, moreover, rendering a required service to the public.

I am not opposing or demeaning education; nor would I eliminate degrees. The road to architecture undoubtedly requires formal training, but it also requires practical experience. Architecture is an art and a science, but it is the science that protects the "public health, safety, and welfare" and that has to be learned through formal study. The art will surface in the talented individual.

The NCARB should recognize that practical experience is as valid as education and that both are essential to become architects.

Leon Rosenthal, AIA
Babylon, N.Y.

'Disappointing' Symposium: It is the morning after a two-day symposium on "The New American Architecture," and I am disappointed.

As an architecture student some years ago, at the end of each semester I presented my work to a panel of critics. The harshest condemnation I endured was not for making wrong assumptions, or forgetting programmatic elements, or ignoring technical problems. No, the severest criticism was for not making the most of an opportunity inherent in my design solution. The lost opportunity was unforgivable. And this morning, I have a new and better appreciation why.

Each year since 1977 Sweet Briar College has presented the Ewald Scholars Program, permanently endowed by the Ewald family for the purpose of bringing internationally recognized scholars to Sweet Briar. According to the advance brochure, this year's symposium was to bring together "seven of the country's leading architects, Diana Agrest, Michael

continued on page 14

Amplification: Design credits for the "wonderwall" feature of the 1984 Louisiana World Exposition (see March, page 96) are: Perez Associates, Allen Eskew, AIA, Studio II, project architect; Charles Moore, FAIA, and William Turnbull, FAIA, design consultants.

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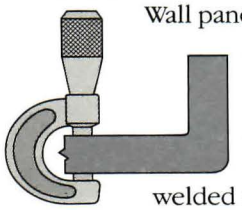

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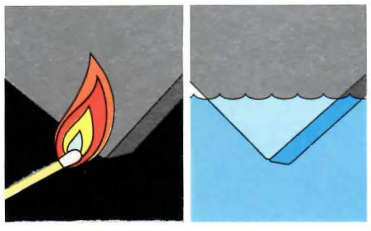
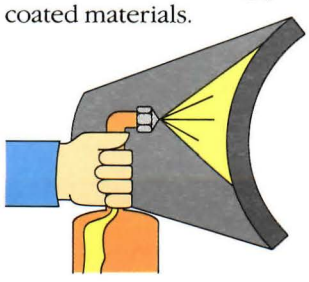


the event of fire. A positive joint seal combined with solid aluminum and welded panel corners insure weather integrity. (A composite's core, if exposed to weather, may absorb and trap moisture.) Unlike composites, Tech Wall panels are formed and contoured before finishing. An additional step; but it prevents the cracking, crazing and micro-splitting of finish films inherent in contouring pre-coated materials.



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Letters *from page 10*

Graves, Charles Moore, Jaquelin Robertson, Paolo Soleri, Laurinda Spear, and Robert Stern; two noted architectural historians, Vincent Scully and Phoebe Stanton; and two prominent critics, Paul Goldberger and Wolf Von Eckardt. . . . For Sweet Briar alumnae and friends, for architects and builders, . . . and for all those interested in one of the vital topics of our times, this [was to] be an opportunity to hear a discussion by its leading practitioners and their critics."

The program outlined an introductory and a concluding lecture, and three 90-minute "panel discussions," and promised to be a lively exchange. What the more than 500 attendees got instead was a compressed lecture series (not once in the more than nine hours of presentations did the panelists even talk to each other, let alone discuss an issue or address the panel topic), and a hefty dose of the New York/Yale perspective on modern architecture (there was not a single participant to represent Boston, Philadelphia, or Chicago, let alone Detroit, Denver, Wichita, or Tuscaloosa). And what the attendees did *not* get was even one opportunity to ask questions.

Despite the token invitation and appearance of Paolo Soleri, the narrow perspective which prevailed was best captured by one alumna with whom I spoke at the midpoint of the symposium: "If I see one more slide of the plan of Paris, circa 1850, or the Portland Building, or McKim, Mead & White's Low house, I think I'll scream." For myself, an architect familiar with this year's magazines, books, and lecture series, I was beyond screaming. (I secretly plotted, after the first panel discussion, to steal the remaining panelists' slide trays. But alas, I lacked the courage.)

Another attendee, near the end of the symposium, asked me, "Where is the cutting edge of architecture now? This all seems well established, or at least appears to want to be understood that way."

What has happened to architecture, then, that there are no more issues worthy of serious debate? Or to architects, that they now prefer to talk about themselves rather than to engage in meaningful discussions?

Certainly some of the participants were aware of issues larger than their own portfolios. Robertson, for instance, pointed out the blight of post-World War II urban planning in America, and Von Eckardt decried the demoralizing conditions of the modern office. But while Scully made passing reference to the gross inadequacy of public housing in the U.S., Goldberger passed off Soleri and his vision of urban man living in harmony with himself, his neighbors, and the land.

So what did everyone talk about for nine hours? "Contextualism" was certainly the catch-word, and came the closest to emerging as the theme of the symposium. And what I learned about contextualism, particularly from those architects who had had the opportunity to design in more than one area of the country, was this: that except for Stern, contextualism has nothing to do with regionalism. The same details, forms, and materials can be used in Portland as well as Louisville, and in Miami as well as Houston or New York. Indeed, one can even borrow from the tradition of the Mississippi plantation house to lend identity and a sense of place to low cost housing in Minneapolis.

I had a chance to ask two of the "panelists" why they had not discussed the issues. One laid the blame on the organizers, who, she explained, had instructed her to bring slides of her work and be prepared to talk for 30 minutes. That did not explain to me why she, or the others, had felt free enough to ignore the assigned panel topics for the sake of "better" ones, but *not* free enough to ignore themselves for the sake of a discussion of serious issues. The other panelist? He had not brought slides, and was more honest. "When have you known an architect who did not prefer to talk about himself?"

Where does that leave me? I suppose if you've gotten used to calling an entrance a portico, and a skylight a celestial soffit, you might accept calling a group of lectures a panel discussion, and a presentation of your own work a debate of important issues.

Still, I am disappointed . . . at the opportunity lost.

Bruce W. Dicker, AIA
Washington, D.C.

Letters continued on page 22

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Letters *from page 14*

'In Desperate Straits': In response to Ben Jones' letter in your March issue (page 13), no colleague I know regards architecture as anything less than a positive force. That does not belie the fact (not myth, as Mr. Jones says) that the availability of employment is very limited and the financial remuneration basically pathetic.

I am delighted Ben Jones works for a progressive firm and makes a good salary. Actually, so do I. But my lucky state of affairs hasn't come with a set of blinders. I see all around highly qualified and talented people and firms in desperate straits. It would be more constructive if rather than adopting a "let them eat cake" attitude, Mr. Jones let us in on his secret.

Valery Baker, AIA
New York City

AIA's Support of ERA: I was gratified to read in the January issue (page 16) that the AIA board of directors has reaffirmed its support for the Equal Rights Amendment. For those of us who have struggled for 10 years to secure ratification, it is easier to find energy to begin again when professional organizations, like AIA, lend support. *Martha Bergman, Executive*
Portland (Ore.) Chapter/AIA

Fazlur Khan's Contributions: Not that it would matter to Faz, but let the record show that the photo on page 109 of the April JOURNAL is not the John Hancock with diagonal bracing but the Sears Tower with bundled tubes. Faz's great qualities were his humility, humane attitude, and concerned involvement. He was a great friend, an awesome competitor—competent beyond measure—and one who is sorely missed. *Richard P. Geyser, AIA*
Chicago

Of Student Chapters: At the Grassroots seminars this past January I came away with a good feeling about the relationship between students and professionals. However, I was surprised at the number of component leaders who had been unaware of student involvement and unfamiliar with the Association of Student Chapters of the American Institute of Architects (ASC/AIA).

ASC/AIA is dedicated to better preparing students to enter the profession of architecture. It is an organization run by students and it supplements the general architectural programs taught in many schools. ASC/AIA offers students the opportunity to work in a professional capacity and introduces them to the professional environment that they will soon be working in.

The organization provides students with the potential to expand their personal goals and offers a more realistic and pragmatic approach to their futures. ASC/AIA opens the eyes of many students to the many disciplines involved in creating buildings and affords them opportunities to participate in a variety of ways.

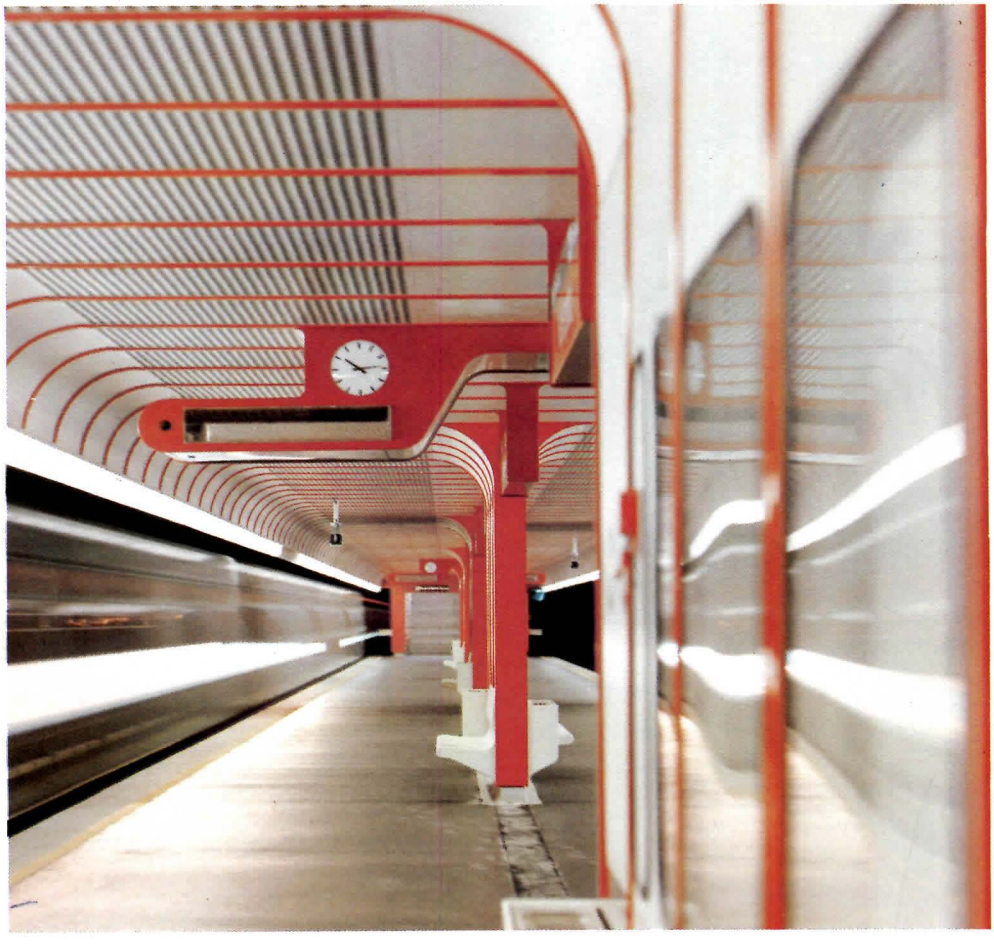
Some of the programs offered are design competitions, participation on AIA committees, *Crit* magazine, lectures, seminars, forums for discussion of current architectural issues, leadership skills, organizational and political skills.

The association participates in National Architectural Accrediting Board accreditation visits, along with the intern and associate programs. ASC/AIA is actively involved with the National Council of Architectural Registration Board's development of the intern development program and represents students on AIA's board of directors.

ASC/AIA offers the profession better prepared architects ready to accept responsibility, people knowledgeable about current issues, resources, and professional practice, aware of the qualities of good design, and devoted to the profession of architecture.

Local components and individual firms as well as students benefit from participation in ASC/AIA. Many students are willing and available to help and learn about the profession. Many students are willing to accept responsibility even with their erratic schedules.

To get in touch with students, call the local school and present opportunities to participate in professional and social events. Or you can call the national office of ASC/AIA in the Institute building in Washington, D.C. *Robert D. Fox*
President-Elect, ASC AIA
Temple University, Philadelphia



Awards

Vienna's Gleaming Subway Wins '83 Reynolds

The winner of the 1983 R. S. Reynolds award is the Vienna Subway System (U-Bahn Wien) designed by Architektengruppe U-Bahn (consisting of architects Wilhem Holzbauer, Heinz Marschalek, George Ladstätter, and Bert Gantar, all of Vienna). The project included the design of new stations plus the renovation of those designed by Otto Wagner and built between 1893 and 1906.

The new system consists of two subway lines, the red line and the green. The 10.5-kilometer-long, entirely new red line is two-thirds underground, with the rest elevated. It has five elevated stations (one contained in the structure of a new bridge crossing the Danube River) and nine underground stations. The 16.5-kilometer-long green line is the existing Stadtbahn, designed by Wagner. The buildings on this line had been "reduced to fragments of their original splendor," in the architect's words, due to neglect and the results of destruction during the wars. Of the 17 stations on this line, the project involved renovating buildings and platforms of two stations; restoring entrance pavilions and adding new stairs, escalators, and platforms on six stations; and designing three new stations.

In addition, the program called for a design that expressed a strong visual image, and was "optimum" in terms of security and economical in both initial investment and subsequent maintenance. What the team of architects produced is a crisp, clean, efficient image. The design follows Wagner's precedent of designing a system where a "string of stations form a unified continuous building," extending over the whole subway line. All stations are color-coded (the predominantly white paneled interiors are highlighted with either green or red accents, depending on the subway line).

Above, new segment of the Vienna Subway System by Architektengruppe U-Bahn.

In the newly designed underground stations, there are plastic-coated aluminum profiles supporting the paneling system, all concourse areas have aluminum lamella light diffusing ceilings; all support elements (handrails, information units, etc.) are cast aluminum, and parts of the specially designed strip-line light fixtures are aluminum. In the renovated Wagner stations, all the above are used, as well as the aluminum roof edging on the platforms and aluminum vertical and curved window frames. All missing cast-iron decorative elements of the Wagner design are replaced in cast aluminum. The material is used most widely on the newly designed elevated stations, however. In addition to all of the above, all exterior surfaces are anodized aluminum panels, with windows framed in aluminum profiles.

The jury consisted of Robert Lawrence, FAIA (chairman), Hugh Stubbins, FAIA, and Rafael Norma, Hon. FAIA.

Awards continued on page 31

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Wright's Oklahoma Price Tower Wins Institute 25-Year Honor

The Institute has bestowed its 25-year award on the Price Tower in Bartlesville, Okla., designed by Frank Lloyd Wright and completed in 1956. One of only two towers designed by Wright that have been built (the other being the Johnson Wax Research Tower in Racine, Wis.), the building "explores a personal vocabulary that nonetheless achieved universal acceptance," in the jury's words. "It's responsiveness to siting and climate, its value as a model for mixed use, and its enduring qualities make it a reference for modern buildings and buildings yet to come."

The tower was designed for Harold C. Price as a headquarters for his oil pipeline welding company. Wright was then in his mid-80s, and "he looked back on a career in which some of his most important designs had been for towers that had never been built," wrote David DeLong in the July 1982 AIA JOURNAL (page 78). "The location of the tower within a small town, and the possibility of combining offices and apartments within one building, provided an opportunity to express ideals that had become an essential component of his mature architectural vision."

The 19-story building (186 feet high) is surprisingly small (only 37,000 square feet) yet complex. DeLong says, "No two elevations are alike, each is accented by different sorts of angled projects, and special elements enrich both base and summit. . . . Had these effects been arbitrarily contrived to achieve mere visual complications, it would seem very much of our own time. Yet Wright has made clear in various writings that each complicating element reflects some special condition of plan or interior volume, that each part of the plan derives from a carefully reasoned program, and that the program itself developed not only from the special conditions of the commission but also from underlying principles of a more universal nature."

The building's interior floor plan can be thought of as a pinwheel, whose center is a small elevator lobby, with four small elevators perfectly spaced around an inner circle. From this center radiate four lines, which divide the space into four separate rooms. Three of these rooms—designed as offices—are rotated 30 degrees off the axis, while the fourth—an apartment—intersects the lines at right angles. The apartments are two levels: The first floor has a double-height space at the outer edges, which is overlooked by a small balcony. The second floor is rotated 30 degrees to relate to the office spaces. The top four floors are unique. The 16th has a small buffet with terrace; the 17th and 18th a duplex apartment with conference and reception rooms; and the top floor a penthouse office with fireplace, balcony, and tall glass doors.

On the exterior, copper louvers, designed to shade the windows from the hot Oklahoma sun, were placed vertically on the southwest side (sheltering the duplex apartments) and horizontally on the other three sides. Alternate spandrels corresponding to the balcony levels within the apartments are sheathed in copper.

Since the building opened in 1956, there have been few changes to the exterior. But inside, the apartments have been converted to offices (only two were used as Wright intended—for tenents who lived and worked in the building—and the rest were difficult to rent). A ground floor shop has been converted to a reception area. And between the tower and attached two-story office wings a roofed drive that originally linked the office and apartment courts has been enclosed to serve as additional office space.

The jury was comprised of Charles Gwathmey, FAIA (chairman); David L. Browning, associate member/AIA; Chris Coe, a student at Louisiana Tech; Robert J. Frasca, FAIA; Graham Gund, AIA; George J. Hasslein, FAIA; Bates Lowry, director of the National Building Museum; Antoine Predock, FAIA; and Milo H. Thompson, AIA.

Community, Campus Libraries In Five States Are Cited

Five libraries—two serving communities in Ohio and California plus campus facilities in Connecticut, Indiana, and New York—have been premiated by AIA and the American Library Association. Awards will be presented June 27 to the architects and owners at the association's annual conference in Los Angeles.

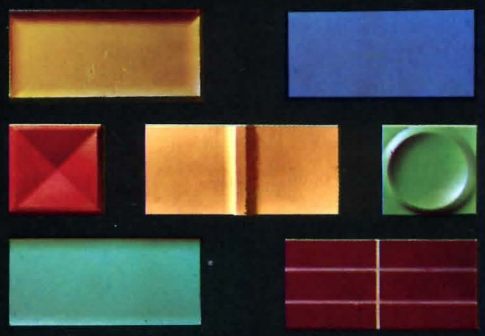
Three of the winners are new facilities. The largest of these is Cushwa-Leighton Library at Saint Mary's College, Notre Dame, Ind. (see page 226). The college wanted a building with a domestic feel-

continued on page 33

NEWS CONTENTS

Unless otherwise indicated, the news is written by Allen Freeman, Nora Richter Greer, and Michael J. Crosbie.

INTERIOR& EXTERIOR



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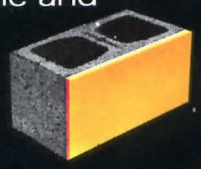

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Awards *from page 31*
ing to blend with the existing campus. The architect, Woollen, Molzan & Partners, designed a three-story reinforced concrete structure with brick facades, a prominent slate roof, and interior trim of natural oak. The plan provides a variety of discrete reading spaces open to natural light, and the awards jury noted that the plan "has an excellent distribution of individual and group seating that avoids uncomfortable, large massing of seats."

With an emphasis on pleasant seating, the library at Saint Mary's is primarily for undergraduates' use. A different requirement was a prime consideration for a new library on Yale's campus: providing efficient, well-organized storage for 1.5 million books in the minimum amount of economical space. A separate major collection of federal documents was to reside in the same facility. Roth & Moore, architect for Yale's Seeley G. Mudd Library, placed the closed stacks in the basement, second, and third floors; the federal documents, accessible to the public, are on the ground floor.

Designed to relate in height and materials to an adjacent 1904 building, exterior walls are waterstruck brick laid in Flemish bond, with buff limestone carved trim. The structure's cement is exposed with a slight sand-blasted finish.

The other honored new facility stands in marked contrast to Yale's. Thousand Oaks Library, serving a community of 140,000 in Thousand Oaks, Calif., has white plaster exterior walls, bands of horizontal windows, and a series of white metal shed roofs in sawtooth configuration. Architect is Albert C. Martin & Associates.

The jury praised the building profile for providing "strong definition . . . in a flat, open, anonymous valley." The interior is dominated by exposed steel truss framework painted dark blue and suspended HVAC ducts. "The soaring openness of the interior gives a necessary degree of flexibility for present and future layout," said the building's nominators. The jurors noted the raised entrance "where a descending ramp into the central service area gives a wonderful opportunity to get oriented to and understand" the large, one-story building.

The other cited community library project is the renovation of Cleveland's innercity Jefferson Branch. The renovation architect, William A. Blunden, Robert A. Barclay & Associates, restored three large, unused skylights to supplement lighting and heating systems, and brought order to "a formerly cluttered interior space which had been confused by walls, lights, and false ceilings," said the jury. "Consistent use of color and lighting creates a comfortable, open feeling of space and enhances the transformation."

Renovation of the exterior was modest, restricted mainly to new insulating glass, frames, and skylights.

The intent of a much more extensive renovation/addition project was to change the identity of a 1950s library on the campus of Colgate University, Hamilton, N.Y., while expanding book storage and doubling seating. The solutions, by Herbert S. Newman Associates, transforms "an undistinguished, barren campus structure . . . through careful planning and skillful use of traditional forms and materials," said the jury. The exterior of the Dana Addition to Case Library combines fieldstone, brick, limestone, and a sloped slate roof with copper flashing and eaves. The new exterior "complements the campus and represents the heart of the university," according to the librarian who nominated the building.

The library awards are given every other year. Jurors this year were Lee Harris Pomeroy, FAIA (chairman), Eugene Aubry, FAIA, George W. Homsey, FAIA, and three librarians: Nolan Lushington of Greenwich, Conn., Gloria Novak of Berkeley, Calif., and Robert Rohlf of Edina, Minn.

Nine Foreign Architects Named To Honorary AIA Fellowship

AIA has selected nine foreign architects as honorary fellows, a title reserved for architects of "esteemed character and distinguished achievement" who are not U.S. citizens and who do not practice in this country.

The nine, who will be invested at AIA's annual convention in New Orleans this month, are:

- Geoffrey Bawa of Sri Lanka, a partner with the firm of Edwards, Reid & Begg since 1959 and recipient of AIA's Pan Pacific architectural citation in 1967. His major projects include the Ceylon Government Pavilion at the Exhibition in Osaka, Japan, as well as schools and hotels in Sri Lanka, Indonesia, and India.
- Gottfried Böhm, West German architect, city planner, and professor at the Rhenish Westphalia Polytechnic in Aachen, West Germany. He is a member of the Academy of Artists in Berlin and of the German Academy for Civil Buildings and Land Planning.
- Ference Callmeyer, architect, lecturer, author, and head of the department of architecture at the Institute of Design Development and System Designs, Budapest. Callmeyer has received more than 30 awards in national and international competitions and in 1980 received the silver medal of labor from the Hungarian Council of Ministers.
- Teodoro Gonzalez De Leon, who practices in Mexico City. He has served as director of rural housing for the National

continued on page 35

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Circle 18 on information card

Awards *from page 33*

Housing Institute, technical director for the Council of Economic and Social Planning, secretary of state of public works, and adviser to the secretary of public education.

• G. Macy DuBois, Canadian architect and founder of DuBois Plumb & Associates, Toronto. He is energy critic for and a fellow of the Royal Architectural Institute of Canada and has served as visiting professor of architecture at the Technical University of Nova Scotia and as visiting architectural critic at Harvard, the University of Toronto, and Waterloo University. DuBois is the recipient of numerous design awards, among them the 1964 and 1967 Massey Foundation medal for architecture.

• Knud Friis, a practicing architect in Aarhus, Denmark, since 1957. A member of the Danish Academic Society of Architects and the Royal Academy of Fine Arts, Friis has won several architectural prizes, including the Eckersberg medal given in 1967 by the Royal Academy of Fine Arts.

• Arata Iosaki, internationally known architect of Tokyo. From 1954 to 1963 he worked with Kenzo Tange's Team Zoo architects and Urtec. Forming his own firm in 1963, he rejected Metabolism architecture and created his own language exploring form and experience in architecture at a personal level. He has written several books and essays and has been visiting professor at the University of California, Los Angeles, University of Hawaii, Rhode Island School of Design and Columbia, Harvard, and Yale universities.

• Ervin P. Putsep, founder of Putsep International in Stockholm, Sweden, a firm specializing in hospital design. He has served as director of planning for the Karolinska Teaching Hospital in Stockholm, and has represented Nordic region architects in the public health group of the International Union of Architects. He authored the book *Modern Hospital.*

• Enrique Avila Riquelme, professor of architecture at the National University of Mexico. Riquelme has served as manager of housing and urban development for the National Bank of Construction and Public Services, as director of construction of Mexico's National Institute of Social Housing Developments, and as coordinator of technical programs for the National Institute for Rural Community Development and Social Housing. He is the author of *The Social Housing Module, Housing for Mexico,* and *Social Housing, Family Space, Social Space.*

Government

Korean War Memorial Sponsors Know What They Don't Want

Controversy surrounding the design of the Vietnam Memorial has apparently played to its conclusion, but two other groups are planning memorials in the capital honoring the allies who fought in the Korean War and the victims of the Holocaust.

A National Committee for the Korean War Memorial, headquartered in Washington, has selected jurors for a design competition, is seeking passage of enabling legislation in Congress, and has conducted a sample mail solicitation for funds.

The competition, originally planned for this summer, has been delayed, but eight out of a planned nine jurors have been selected and accepted. They are Representative Larry McDonald (R.-Ga.); Arthur Rosenblatt, FAIA, of the Metropolitan Museum of Art; Wanda M. Corn, associate art professor at Stanford University; Franklin A. Lister, president of the Noncommissioned Officers Association; John Pinlott, art professor at Messiah College in Pennsylvania; Peter Braestrup, editor of *Wilson Quarterly;* retired Navy Vice Adm. James Stockdale, a senior research fellow at Stanford; and Joseph Brown, a landscape architect in Washington who consulted on the execution of the Vietnam Memorial. The jurors, says spokesman Michael Panayotopoulos, were selected by the committee to "cover a very wide spectrum, both as to professional and geographic origins, and possibly political orientation. . . . We thought we should have a jury not exclusively comprised of Eastern establishment exponents of modern art." This last is a direct reference to the jury for the Vietnam Memorial.

A preaddressed, post card questionnaire distributed last November at the dedication ceremonies for the Vietnam Memorial implies further disagreement with the conduct and results of that competition. It reads: "If you are a veteran, we value your advice and participation in the building of the Korean War Memorial. Design Opinion [select one]: (1) Above ground, visible, or Below ground; (2) Modern art, or Traditional art; (3) Decisions by veterans, or Decisions by architects." Of 6,000 cards distributed, 850 were returned, according to Panayotopulos, who says, "With very few exceptions, respondents

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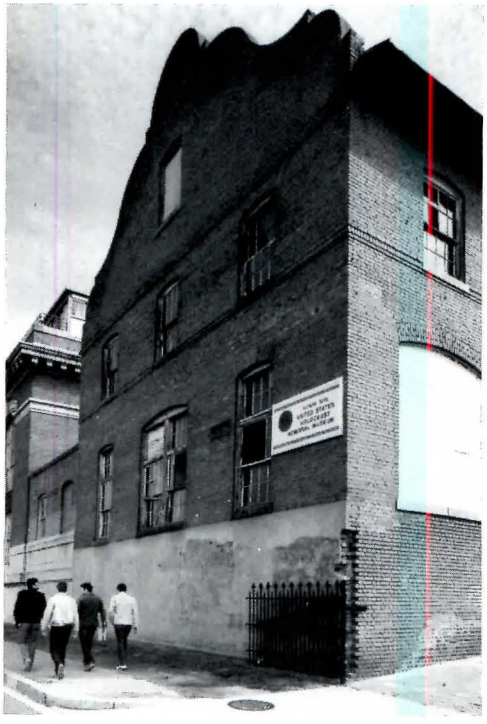

Holocaust memorial/museum building.

Government *from page 35*
say they want a traditional monument rather than modern art, they want the decision to be based on the preference of veterans rather than architects, and, of course, they want it above ground and visible." He says that the questionnaire was not intended to take "a cheap shot" or make "sarcastic comment" about those involved in the Vietnam Memorial.

The approach of the Korean Memorial committee contrasts with that of the Vietnam Memorial sponsors, who engaged a professional adviser and remained neutral on matters of design during the competition phase. However, according to the enabling legislation now before Congress, the Korean memorial design would be subject to the same approval process as the Vietnam Memorial. Required is the sanction of the Interior Department, the Washington Fine Arts Commission, and the National Capital Planning Commission. Also, according to the legislation, the Interior secretary would "select a suitable site on public grounds in the District of Columbia," with the approval of the two commissions and the mayor of Washington.

The legislation was introduced in the House last month by Representative Charles Rose (D.-N.C.). It is essentially the same bill sponsored last year by Senator David Pryor and Representative John Paul Hammersmith, both of Arkansas. Hammersmith reintroduced the bill in the current session, then suspended his support. An aide says the congressman remains committed to the concept of a Korean War memorial, but cited "internal problems" within the sponsoring committee. Last month, Pryor's staff said the senator was considering reintroduction in the current session.

Panayotopulos acknowledges that there has been friction among members of the committee, but said the problems are now cleared up. The committee was organized and founded in 1981 by Cheyenne Kim, a U.S. citizen of Korean birth; economist Timothy Halliman; and journalist Kenneth Scheibel. Kim is no longer a board member. The board is currently comprised of Halliman, Scheibel, Washington utility executive Jesse Brown, and Myron McKee. McKee is currently also working without pay as executive director of the committee.

Meanwhile, planning for the Holocaust Memorial is in a more advanced stage. Two adjacent, surplus federal buildings near the Washington Monument were ceremoniously transferred last month to the U.S. Holocaust Memorial Council, established in 1980. The long, deteriorated, red brick buildings are to be renovated into a memorial museum with $2.4 million in federal funds and $75 million in privately raised donations. Tentatively approved themes for the exhibits include the collapse of democracy in Germany, anti-Semitism, the indifference of the world to the Holocaust, the struggle for survival inside and outside the death camps, the lost culture of European Jews, the way groups other than Jews were swept up in the slaughter, the liberation of the camps, and the fate of the survivors. Officials hope to open the museum by late 1988.

New York City Outlaws Additional Sliver Buildings

The New York City Board of Estimate has moved to ban further construction of "sliver" buildings. The buildings are so named because of their narrow width and great height. One whose construction was halted would have reportedly risen 32 stories on a site 18 feet wide.

The board voted unanimously on March 3 to ban sliver buildings, the majority of which had been built or proposed in Manhattan's fashionable upper east side. The new law states that buildings in residential areas on sites up to 45 feet wide can be no higher than the width of the street they face or the lowest building adjacent to the site, whichever dimension is larger. The restriction applies to the blocks between Park and Lexington avenues from 59th to 99th streets.

The board heard testimony from residents of neighborhoods in which slivers had sprouted. Escalating real estate prices and a shortage of large building lots had prompted developers to put up slivers as the demand for luxury housing continues to grow. Since 1981, 21 slivers have been built; 10 more were being planned.

The board ruled that construction could continue on buildings whose foundations had already been started. Developers aware of that possibile stipulation had begun frantically pouring foundations a matter of days before the board's decision.

News continued on page 44

Washington's Old Post Office renovation is nearing completion on Pennsylvania Avenue as workmen secure framing, within the atrium, for a glass elevator that will take tourists to the bell tower of the 1899 building. Ten bells, given by the Ditchley Foundation of England, are installed in the tower and were dedicated last month. Meanwhile, federal office workers—staffs of the arts and humanities endowments—are moving into offices that ring the atrium, and the ground floor retail space is being made ready for opening sometime in September.

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International Housing Concerns: Density, Technology, Context

Housing strategies were presented and discussed by over 100 architects, housing specialists, and engineers from nearly 20 countries at a conference, "Typology and Density," sponsored by the International Union of Architects' Working Group Habitat, conducted at AIA headquarters in Washington, D.C. AIA also supported the conference.

As one might expect, the housing solutions discussed were as varied and numerous as their contexts: China, Hungary, Spain, South Africa, and the U.S., among many others. But a thread of consistency wove its way through nearly every presentation. This was the participants' concern about how housing and the process of housing can be responsive to those who are sheltered, while still maintaining a high density. Of particular interest was the impact of housing technology, be it that of a highly industrialized or developing country.

This theme was evident in the opening presentation by three American architects: John Dziurman, Laszlo Papp, FAIA, and Zane Yost, AIA. Dziurman presented a historical overview of housing development in the U.S., showing how density increased due to the Industrial Revolution. This density, with the subsequent retreat to the suburbs, created the present urban/suburban division. Dziurman said the alternative of lowrise, high density housing may meld the two extremes, and might provide more "individualized" housing.

Papp spoke of "homing" instead of housing, and the need for a shift from "grand housing schemes" to those that attempt to preserve family structure. He suggested that the housing industry and architects allow inhabitants to "do their own thing" instead of offering "ready made solutions."

Yost spoke of the body of social research on housing that already exists, and expressed concern that architects are not making sufficient use of this information in housing design. He also said that the AIA Research Council is investigating a "national information retrieval system for the profession," and suggested cooperation through UIA for an international system.

The participants from Europe, Africa, and Asia put similar emphasis on the need for housing to respect local contexts, community life, and existing building technolgy. Among the highlights, Ignacio Paricio Amsuategui of Spain presented various industrialized building technologies in use and analyzed how each could either clash with or adapt to the talent of local builders. He also called for "decentralized" technology that could be implemented without special training.

Amsuategui showed examples of building systems that had been scaled down so that they could be manipulated by local builders without the use of heavy machinery. These small scale, mass produced products, he said, were also more accessible in terms of capital investment.

In a similar vein, Revel Fox of South Africa presented "housing alternatives" (many of which he had worked on) that involved the users in designing and building their own homes. He emphasized the combination of current building technol-

continued on page 50

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Practice *from page 44*

ogy with traditional building processes, and the importance of technical information for self-help builders.

Fox reviewed domestic building as it has traditionally been pursued in South Africa, showing the impact on housing form of indigenous materials, contexts, and customs. He said that combinations of public and private sectors have provided the best solutions: The government being responsible for utilities and infrastructure, and private companies being responsible for the units themselves, with architects working closely with the community.

John W. Hill, FAIA, presented a series of projects in China that melded new and old housing in high density areas with attention to the historical form of the communities. He showed examples of how architects had worked within the confines of historic districts, taking design cues from the existing context.

Hill compared this approach to I.M. Pei's recent hotel project in Peking, where Pei incorporated traditional forms and embellishments, and took advantage of the talents of local craftsmen.

Abercrombie to 'Interior Design'

Stanley Abercrombie, AIA, has assumed the editorship of *Interior Design* magazine in New York City. Abercrombie joined the staff of the AIA JOURNAL in November 1979 as senior editor, architecture. He had previously been editor of *Abitare in America* and *Interiors,* and senior editor of *Architecture Plus.* He also maintains a practice in New York.

As editor of *Interior Design* Abercrombie will be responsible for all editorial content. He also anticipates publication this fall of his book, *Architecture as Art.* Van Nostrand Rienhold is publisher. Abercrombie will serve as contributing editor to the JOURNAL, joining David Dillon (see page 217) and five others recently named.

Preservation Law Conference

"Reusing Old Buildings: Preservation Law and the Development Process," will be the subject of a conference June 27-28 in San Francisco, sponsored by the Conservation Foundation and the National Trust for Historic Preservation, both in Washington, D.C., and the American Bar Association's section of urban, state, and local government law.

The sponsors note that "with greater preservation activity underway, stimulated in part by federal tax incentives, preservation laws are becoming increasingly significant." Tailored for architects, planners, preservationists, developers, attorneys, and others involved in building rehabilitation, the conference will include advice on federal tax credits, economic analysis of reha-

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Practice *from page 50*
bilitation projects, arranging financing, historic properties certification, and other legal, regulatory, and development issues.

For information and a registration form, contact: Conference Coordinator, Conservation Foundation, 1717 Massachusetts Ave. NW, Washington, D.C., 20036, (202) 797-4300.

Designing Hazard Protections

Architects throughout South, Latin, and North America are generally not well-informed about how to design buildings to withstand the natural disasters of earthquakes and floods. In addition, building codes and standards designed to mitigate the losses of these disasters range from good to weak to nonexistent throughout the Americas.

These were the general conclusions of the participants at the International Workshop on Natural Hazards Protection Design, sponsored by AIA in cooperation with the Colegio de Arquitectos del Peru (with support from the Office of U.S. Foreign Disaster Assistance of the Agency for International Development).

The meeting, held Feb. 2-4 in Lima, Peru, and attended by the presidents of architectural societies in 12 South, Latin, and North American countries, centered around developing a mutual exchange of information on hazards protection design techniques, education programs, and policies; increasing awareness among architects of the importance of designing for protection against natural hazards; and increasing knowledge on the latest advances in hazards design techniques.

What became evident at the meeting was that while earthquakes and floods were not becoming more prevalent, their consequences were becoming more serious, due to rapid population growth and urban development and changes in building technology. The role of the architect in designing buildings to withstand such natural disasters was also seen as increasing in importance.

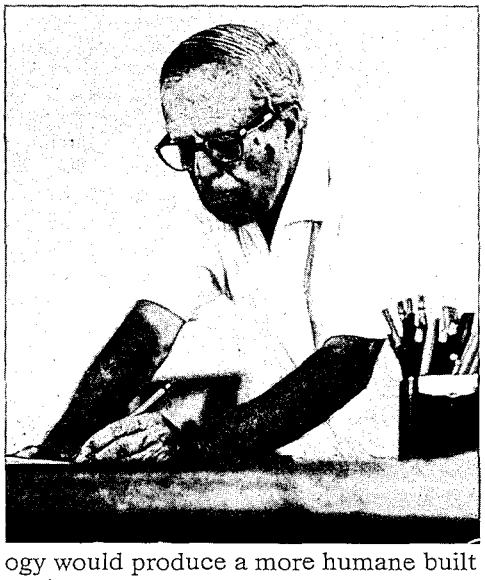
Deaths

Gold Medalist Josep Lluis Sert: Architect, Teacher, Urbanist

On March 15 the architectural profession lost one of its great modern leaders—Josep Lluis Sert, who died of cancer at the age of 80 in his native Barcelona, Spain. Winner of the AIA gold medal in 1981, Sert's major contributions to the profession were threefold: He furthered the language of modern architecture; he helped establish the connection between city planning and architecture as urban design; and he was a dedicated educator.

A small, soft-spoken man, Sert had an inquisitiveness and ambition that propelled him into the center of avant-garde intellectual and artistic activities. He was a disciple and friend of Le Corbusier; a friend of artists Miró, Picasso, Calder, Léger; a president of CIAM (Congres Internationaux d'Architecture Moderne); the moving force behind the Cambridge, Mass., firm Sert, Jackson & Associates; and dean of Harvard's Graduate School of Design for 16 years.

Proud of his heritage as a Catalan (in fact he changed the spelling of his name in 1970 from the Spanish José Luis to the Catalan Josep Lluis), Sert once described Catalans as "always in disagreement with everything in principle. This made one feel from the beginning he was in revolt against existing conditions in life." While that revolutionary spirit was tempered somewhat as he grew older, Sert was a person dedicated to a strong vision of the world—one in which modern technology would produce a more humane built environment.


F. Catalá-Roca

Upon receiving the gold medal, Sert said, "The architectural vocabulary today is more than ever before tied to the urban condition, to an urban vocabulary, to urban design. Our buildings are increasingly dependent on what is around them." He also stressed that "modern architecture is not dead. It has not yet followed its full course. If you have a sense of history and compare it with other great changes in different periods you will find it is still young and very much alive."

Both Sert's buildings and his teaching methods reflect his commitment to urbanism. At Harvard, he instituted the world's first degree program in urban design and gave the school a new definition in which urban design was seen as the necessary extension of architecture.

Sert was more of a teacher than an administrator. He taught the master's class himself and would wander around the room, conducting individual conferences with each student. He was also responsible for bringing to Harvard professors and visiting critics of high caliber.

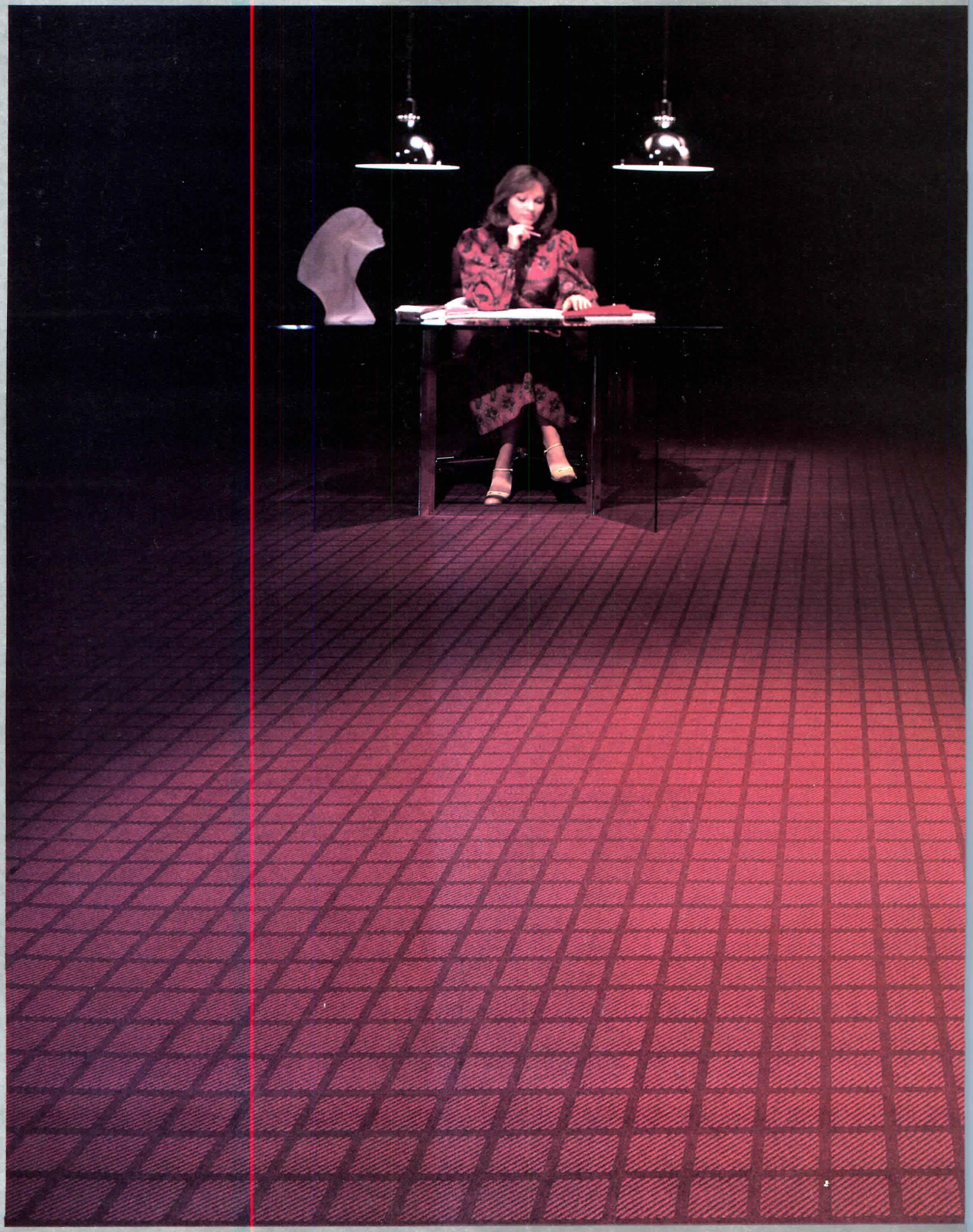
Sert was born in 1902 to an aristocratic family in Barcelona. At first he followed in the footsteps of his uncle, José Maria Sert, and became a painter (his uncle is best known in the U.S. for his murals in the lobby of New York City's RCA Building at Rockefeller Center). In the mid-'20s he switched to the study of architecture, and in 1926, when visiting Paris, discovered Le Corbusier's books *Vers une Architecture, L'Art Décoratif d'Aujourd'hui,* and *Urbanisme.* Corbusier's thoughts added fuel to the fire that was already burning in the students at Barcelona University who wanted to replace the traditional Beaux-Arts training. Sert persuaded Le Corbuiser to visit the school.

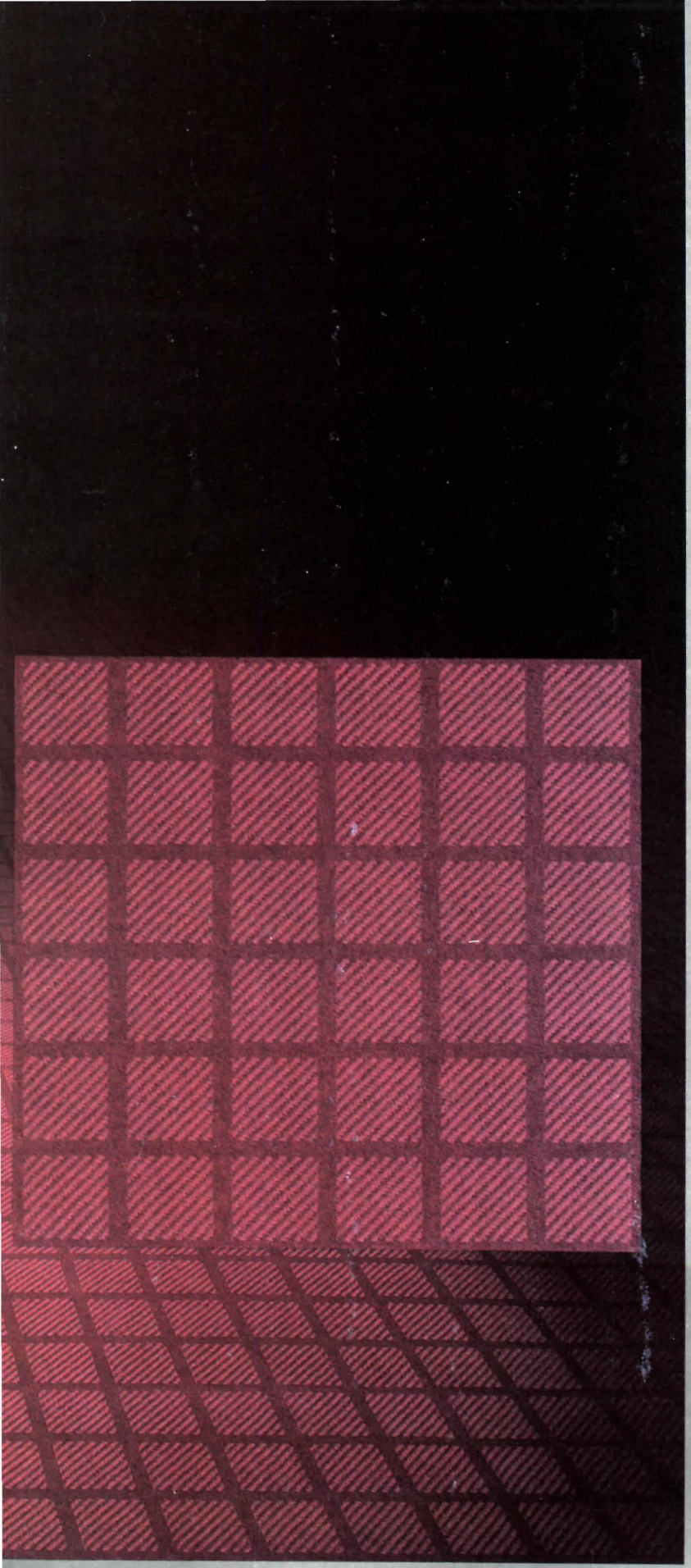
This lead to Sert's working with Corbusier in Paris for a year after his graduation. He partook in preparation of a design for the League of Nations headquarters. Upon returning to Barcelona he quickly became the most prominent Spanish member of a growing group of architects throughout Europe committed to the modern movement in architecture. His most significant project of this period was the Spanish pavilion for the Paris Exposition of 1937-39, for which Pablo Picasso painted "Guernica." The Republican government of Spain collapsed in 1939 and Sert was exiled. He moved to New York City.

For the next two decades he was associated with the New York City firm Town Planning Associates (the other partners were Paul Lester Wiener and Paul Schultz). The firm was the planning consultant to Latin and South American governments for some dozen master plans for new cities and the renewal of old cities. No plan was ever implemented, but it gave Sert a chance to test and develop some of the urban theories put forth by Le Corbusier and CIAM. Over the years Sert became disenchanted with that concept of large-scale, sweep-the-slate-clean planning.

In 1953 Sert was appointed dean of Harvard's Graduate School of Design and chairman of the department of architecture. Three years later he became planning consultant to the university. Meanwhile, he had founded the firm that later became Sert, Jackson & Associates. It was

continued on page 387





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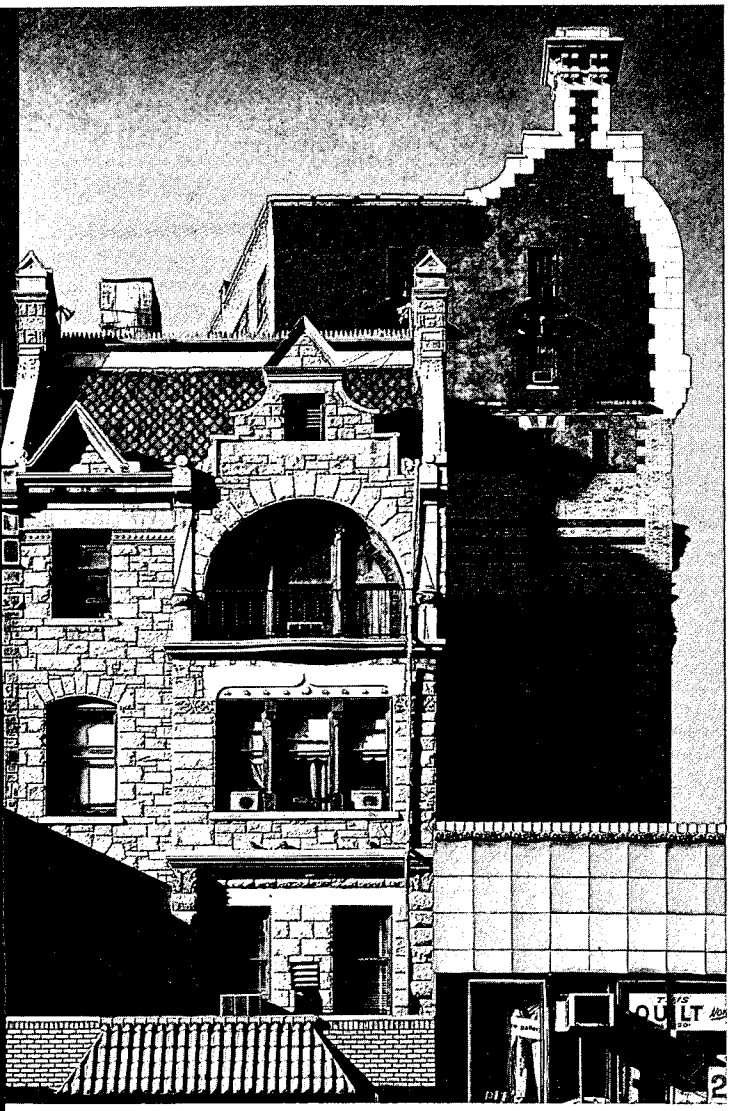
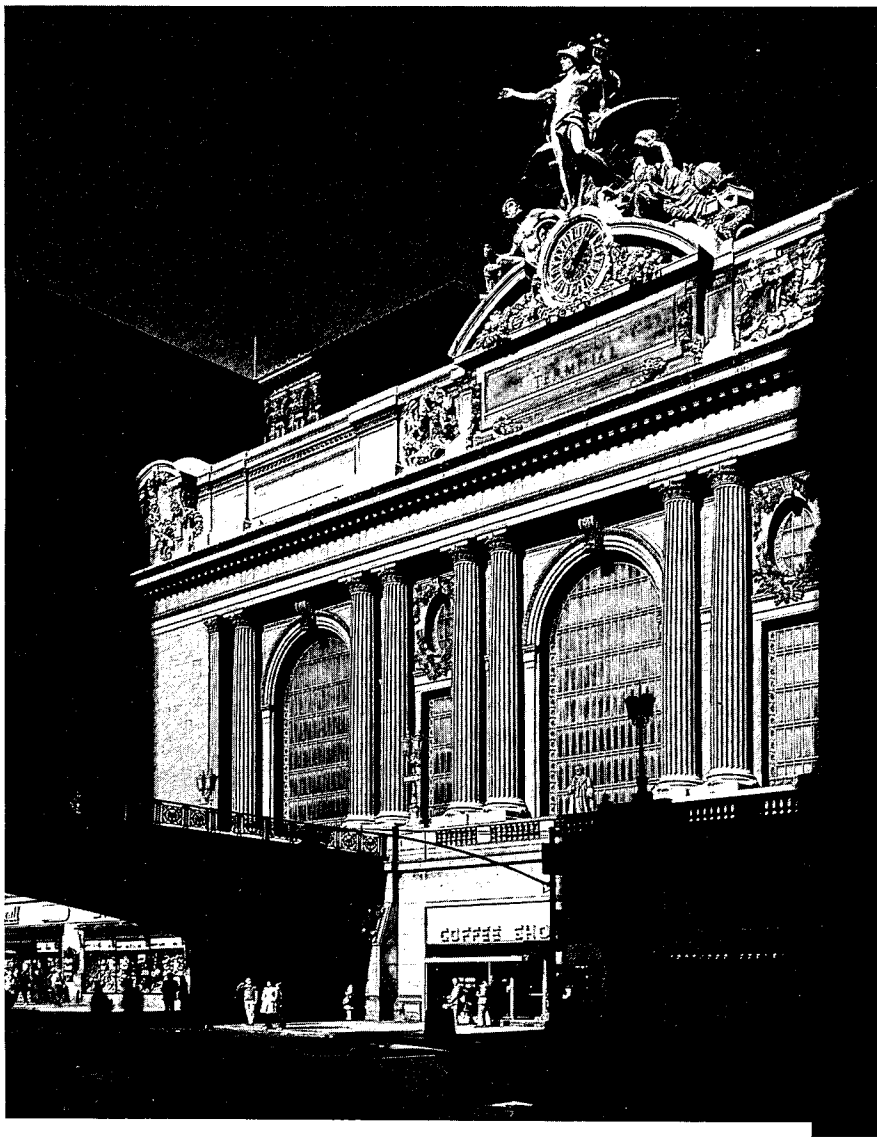
The Arts

The Photography of Cervin Robinson



Across page, Manhattan's Chrysler Building behind a detail of the Daily News *Building. Left, detail of a building at 72nd Street and Broadway. Below, Grand Central Terminal.*

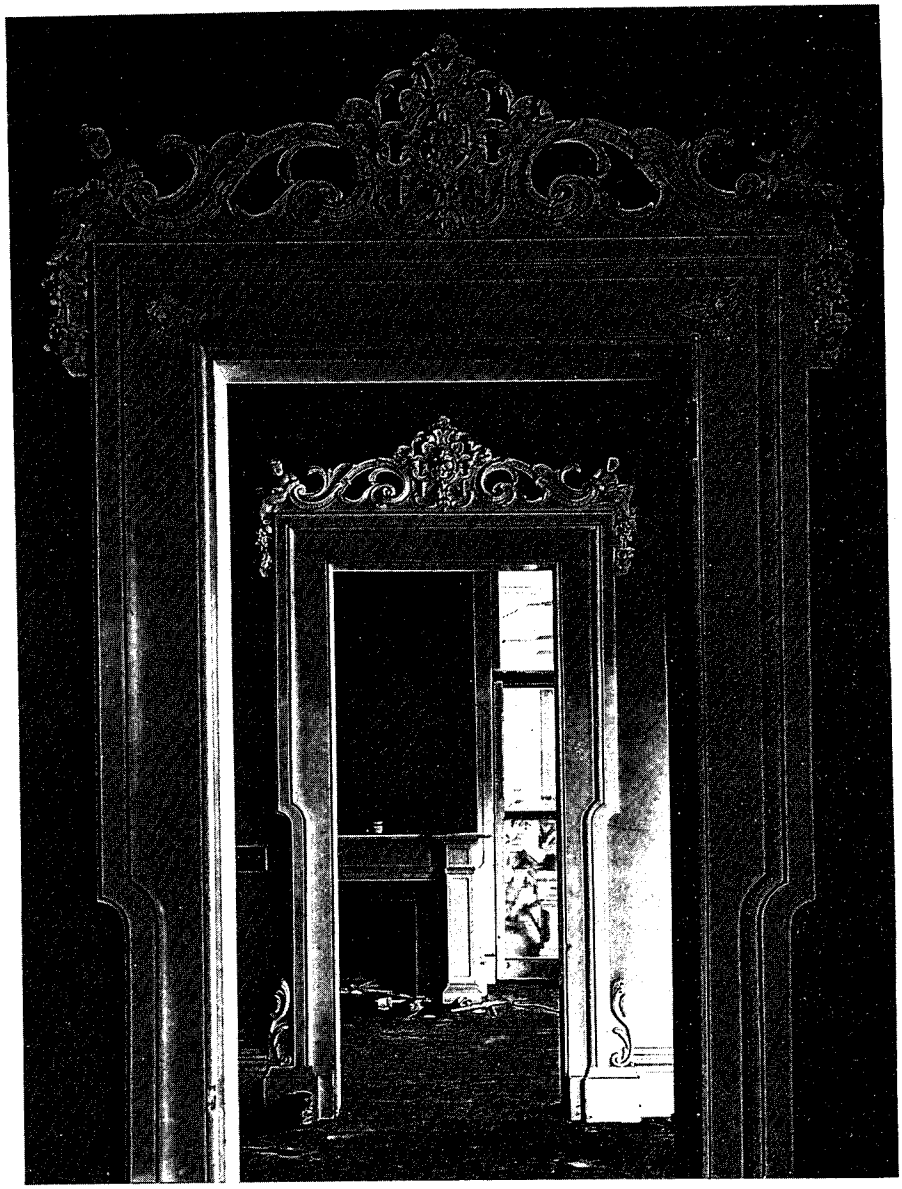


Cervin Robinson, the eminent New York City photographer of architecture, was influenced by his father in at least two significant ways. Father gave son a camera kit at an early age. He also happened to be an architect, a circumstance that contributed to turning Cervin's camera toward architecture—along with the fact that, in his words, "buildings don't move and are therefore easier to photograph than some other things."

Cervin's education at Harvard was in English literature, but in 1953 he went to New York to become an assistant to the great artist of photography Walker Evans. His first professional architectural photography was on commissions for the Historic American Buildings Survey. He came to the attention of the *Architectural Review* of London, for which he became New York correspondent. His photographs also frequently appeared in *Architectural Forum* and, more recently, in this magazine.

He teaches architectural photography

Left, Penn Station in 1962. Right, Moses Yale beach house, Wallingford, Conn. Below, Ernest J. Magerstadt house, Chicago. Below right, fence at Cobern Tyler house, Rockport, Me. All of these photographs were taken for the Historic American Buildings Survey.

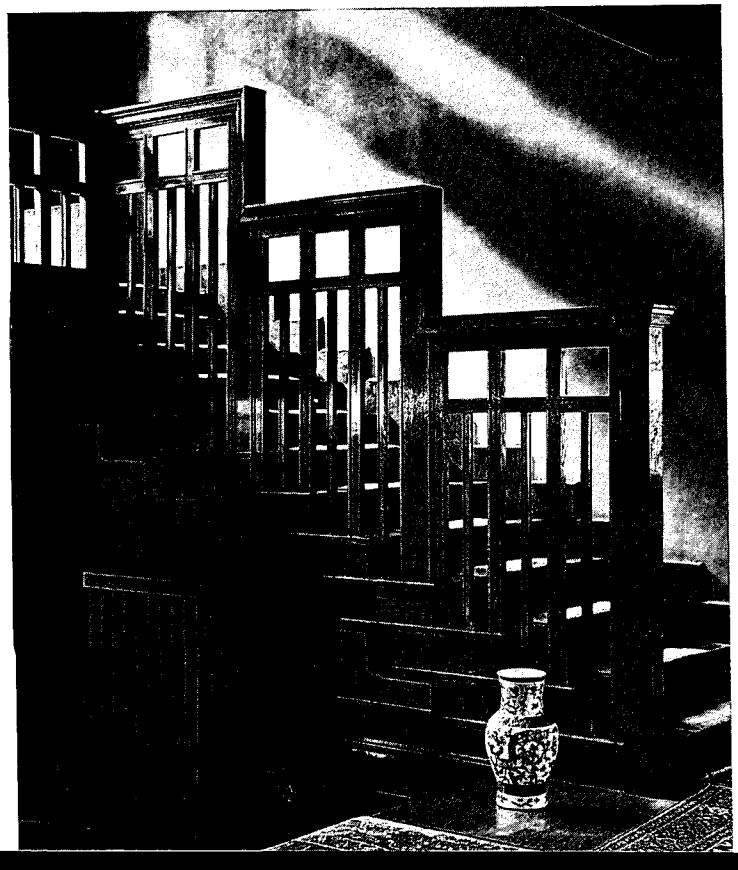


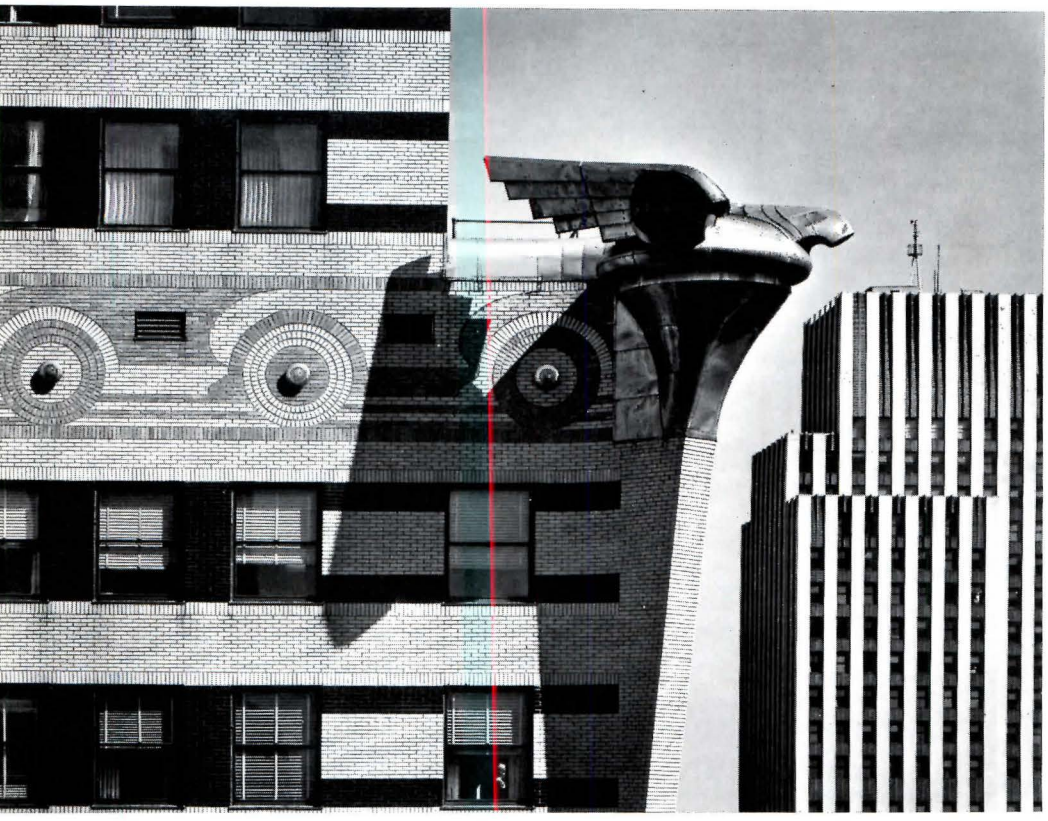
at Columbia University and is writing a book on the subject for MIT Press with art historians Donna Stein and Joel Hershmann.

The pictures on these pages are from an exhibit of his work mounted this spring at Rice University, which will be shown at Wellesley College in November.

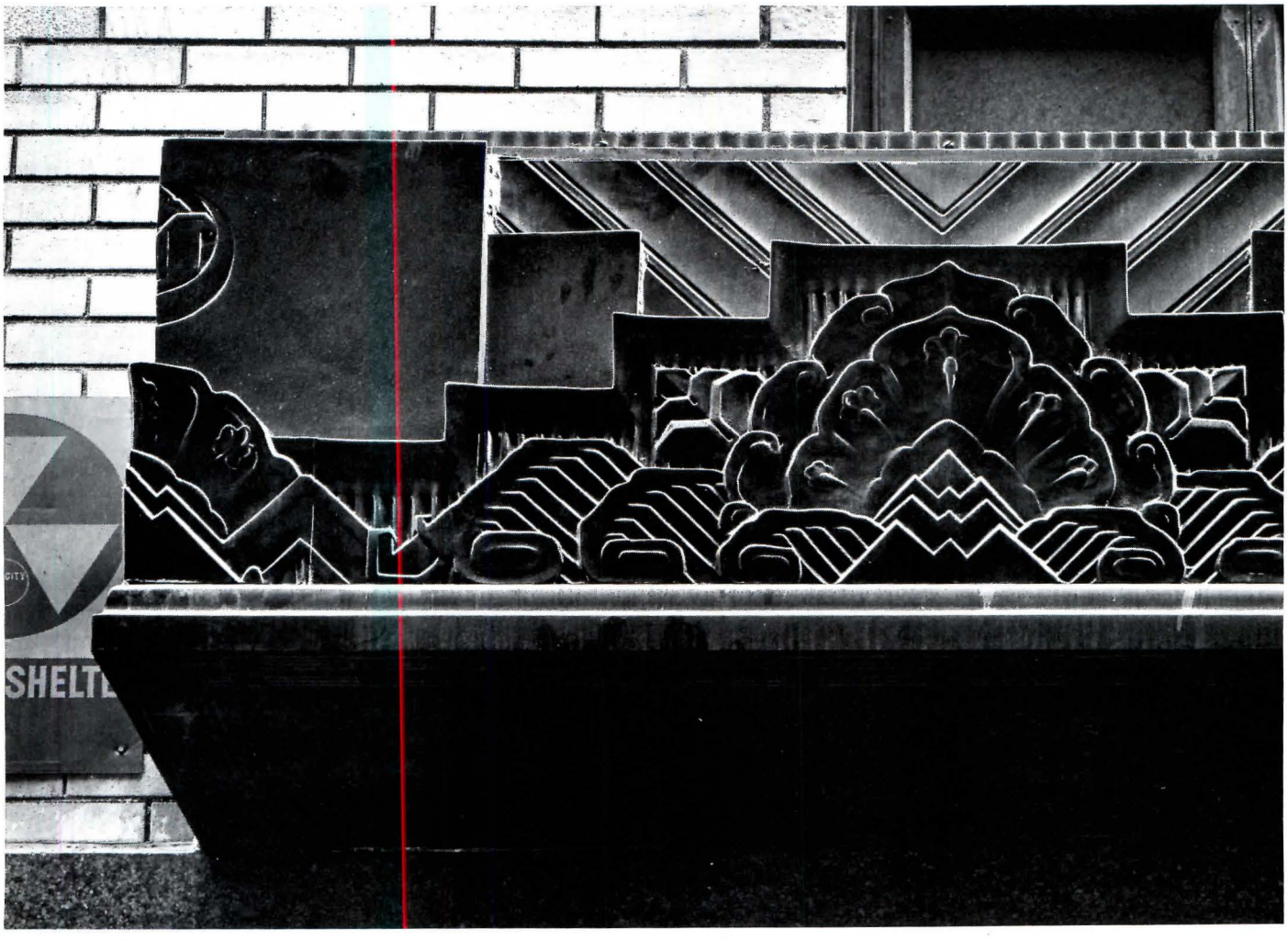
It is hard to say what is so special about Cervin Robinson's photography. Certainly he is a consummate craftsman, but it is more than that. Perhaps it is that, while the buildings in his pictures do indeed stand still, they exude life.

DONALD CANTY





Left, detail of the Chrysler Building, hubcaps and all, with the General Electric Building in the background. Below, detail of the Daily News *Building. Right, the twin towers of the World Trade Center framing the Woolworth Building.* □



The Year's Architectural Events

The following is a summary by Michael J. Crosbie of major events within or affecting the profession of architecture in the year between publication of the 1982 and 1983 editions of this annual review. It starts with a recapitulation of the year's most significant awards and competitions. Shown at right are two widely publicized competition winners: Michael Graves' office building for Humana Inc. and Helmut Jahn's 82-story Houston tower. Ed.

A 1,400-foot tower of steel, glass, and granite was chosen last October as the winning design in a nationwide competition for a Houston office building. The competition was sponsored by Southwest Bancshares, Inc., and Century Development Corporation. The design, by Helmut Jahn, AIA, of Murphy/Jahn, Chicago, will contain 82 floors of office and retail space.

Occupying a full block in Houston's downtown grid, the building will be rotated 45 degrees on the site. On each corner there will be an entrance into a 10-story arcade. The design also employs a dramatic use of exterior lighting.

Last June, as his Portland Building neared completion, Michael Graves, FAIA, won a competition for a Louisville, Ky., office building. The competition was sponsored by Humana, Inc. Graves' winning entry is a rectangular structure, 27 stories tall with a seven-story "porch," which contains executive offices. There is also a shopping arcade. The building will be clad in marble and granite, topped with a barrel-vaulted penthouse.

Argon Associated Architects of Coral Gables, Fla., won a competition for the design of a plaza in nearby Ft. Lauderdale. The city's Downtown Development Authority sponsored a one-stage competition for a two-acre plaza last summer. The plaza's riverfront site included an existing park and called for commercial, civic, and office space. Argon's U-shaped scheme formed a piazza open to the river.

In California, Charles Moore, FAIA, produced the winning design for the Beverly Hills civic center. The center is to be built on an adjacent site to city hall. Moore's scheme couches public spaces in three elliptical courts that move diagonally across the site.

Nathaniel Owings, FAIA, founding partner of Skidmore, Owings & Merrill, received the AIA gold medal for 1983. The firm was started in the late-1930s and is now the largest architectural/engineering practice in the U.S., with 1,500 employees in nine offices. Besides his work with the firm, Owings was cited by AIA's board of directors for "his seminal contribution to the revitalization of Pennsylvania Avenue and the Capitol Mall, and his very significant role in the resurgence of national concern for conservation and preservation of the natural and built environment."

Holabird & Root was the winner of the 1983 AIA firm award. Long known as Holabird & Roche, the firm started over a century ago in Chicago, and was responsible for many landmark Chicago School buildings. In 1927 the firm's name was changed to its present form. Still located in Chicago, Holabird & Root employs approximately 175 people.

AIA's 25-year award for 1983 went to the Price Tower in Bartlesville, Okla. Designed by Frank Lloyd Wright and completed in 1956, its 19 stories contain both office and apartment space. The jury commented that the tower "explores a very personal vocabulary that nonetheless has achieved universal acceptance."

Eight Institute honors were announced for 1983. They included: Missouri Governor Christopher Bond; architectural journalist Donald Canty; the late Fazlur Khan, structural engineer; Knoll International of New York City; architectural theorist Christian Norberg-Schulz; architectural delineator Paul Stevenson Oles, AIA; Washington, D.C.'s Metro subway system; and urbanologist William H. Whyte.

Charles Burchard, FAIA, was the recipient of the AIA/Association for Collegiate Schools of Architecture annual award for excellence in architectural education. Burchard was educated at MIT and Harvard, where he also began his teaching career. In 1964 he became dean of Virginia Polytechnic Institute, where he was also campus architect.

Jules Gregory, FAIA, won the 1983 Edward C. Kemper award, which recognizes an Institute member "who has contributed significantly to the Institute and

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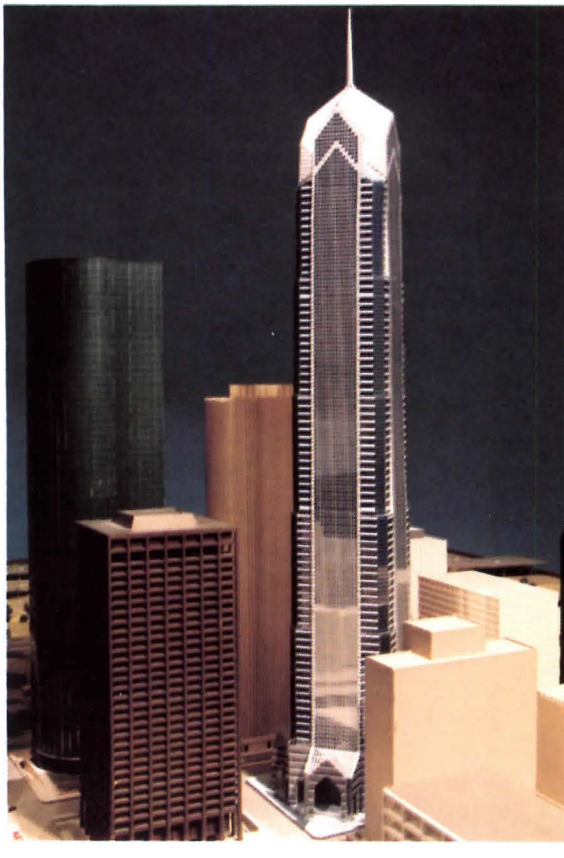
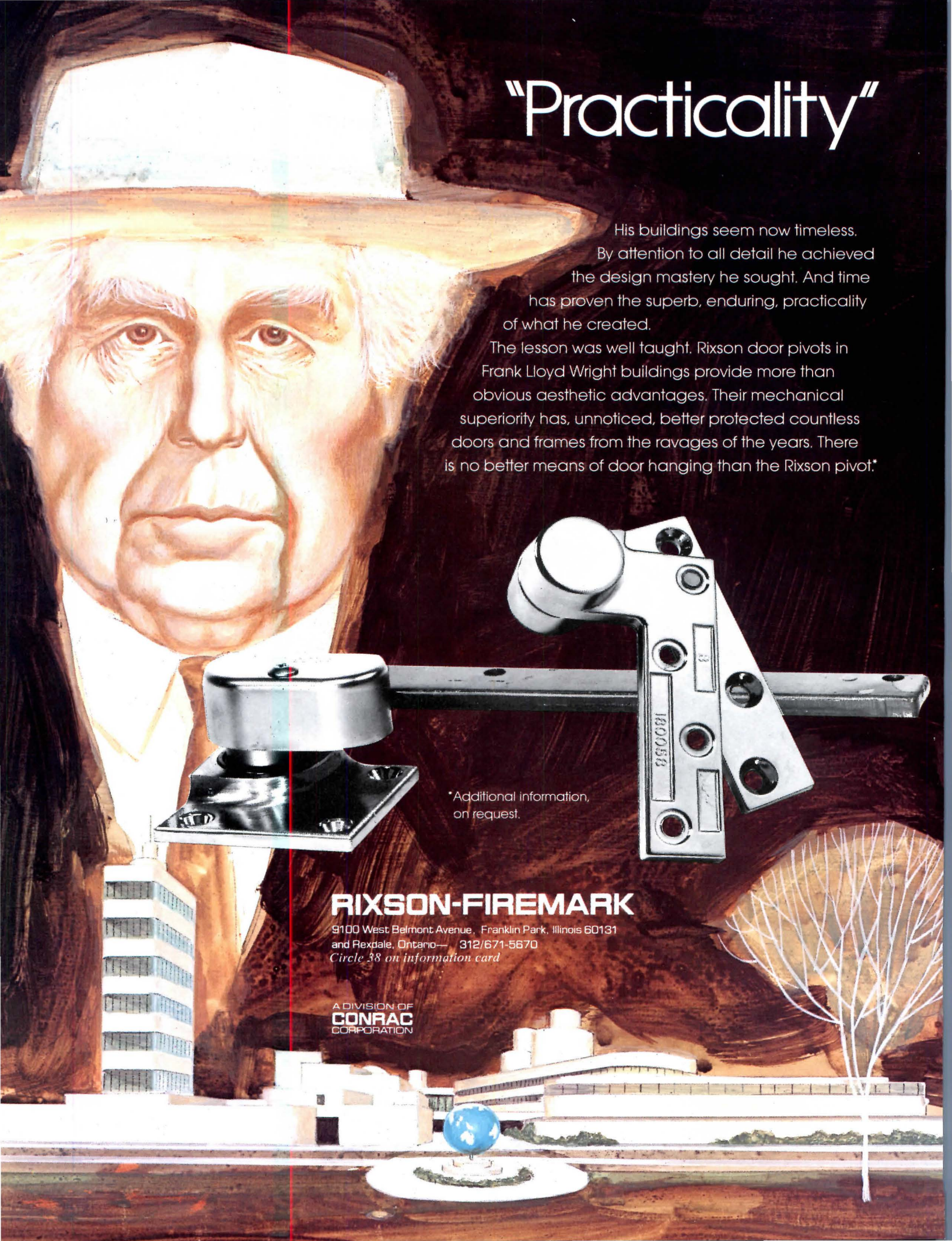


Two competition winners: Top, Jahn's Houston tower; bottom, Graves' office building for Louisville, Ky.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the profession of architecture." Gregory was cited for his work in urban and regional design.

Howard Mackey Sr., FAIA, was awarded this year's Whitney M. Young citation, which recognizes the "significant contribution to social responsibility" of an architect or architecturally oriented organization. Mackey was cited for his service to Howard University's school of architecture in Washington, D.C., as its first dean, and for his efforts in overcoming racial prejudice.

Government

Housing Commission Proposes a Further Federal Withdrawal

The Reagan Administration's "new federalism" was clearly evident in a report from the President's Commission on Housing released last April. It suggested that federal programs to subsidize new housing construction be replaced by direct payments to help low-income persons pay their rent. It was also critical of rent control and housing regulations regarding finance.

The report, over 800 pages long, was prepared by the 30-member commission that was established by Reagan in June 1981. Chaired by Los Angeles attorney William F. McKenna, the commission's members were drawn from federal agencies, universities, foundations, trade organizations, etc.

A "housing payments program" was suggested in the report. Claiming that federal housing programs should "help people, not build projects," the report said that "allowances are less expensive to the government than new construction, and more likely to reach families spending too much of their income for rent."

But the report also suggested abolishing regulations that have kept rents low, claiming that rent control results in a reduction in the quality of existing rental housing stock and discourages investment in new rental property. The report recommended that properties financed by federally insured loans or by loans from federally insured institutions be exempted from rent control.

Regarding housing finance, the report suggested a return to traditional sources of mortgage finance and unrestricted access of lenders and borrowers to money and capital markets. Among other recommendations in the report: Mortgage investment tax incentives should be extended to all types of institutions to increase the mortgage supply base; private markets for mortgage related securities could be stimulated by removing tax, legal, and regulatory impediments; and there should be fewer federal credit programs as the private sector becomes more able to meet public demand for housing credit.

Housing regulations were also criticized in the report, which claimed that they unnecessarily limit production, restrict consumer choice, and inflate costs. The report suggested easing requirements for environmental impact statements, instituting negotiated rulemaking for federal agencies leading to fewer and more effective regulations, relying more on the private sector model codes and standards and regulatory reform at state and local levels.

In apparent agreement with the report's recommendations, Reagan vetoed a mortgage aid bill in late June that would have allocated $3 billion for mortgage subsidies. The House upheld the veto. The bill's proponents, led by Senator Richard G. Lugar (R.-Ind.), said that the program would have offered interest rate subsidies of 4 percentage points on mortgages for newly built houses for moderate-income families. The proponents claimed that the program would have spurred construction of an estimated 200,000 new houses, creating 500,000 new jobs in the building trades and related industries.

Arguing that the program would do little to help the industry, while worsening the federal government deficit, Reagan said, "We will not promote a housing recovery by going even deeper in debt."

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BANK OF AMERICA

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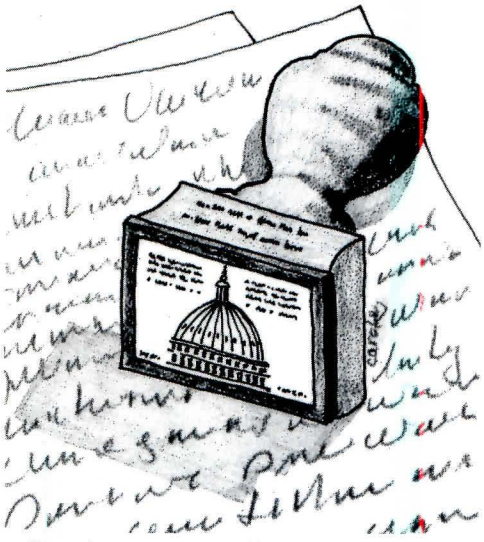
He also pointed to housing starts that increased 22 percent in May as evidence that the program was unnecessary. U.S. Department of Commerce statistics reveal, however, that housing starts for 1982 were 1.06 million, the lowest since World War II.

In September, Senator Charles McC. Mathias Jr. (R.-Md.), introduced an amendment to the National Housing Act that would provide mortgage interest rates to first time home buyers as low as 7 percent under the Federal Housing Administration's 30-year mortgage program. The program would defer part of the cost of the mortgage to the term's later years when the homeowner's income would be greater, or with the resale of the house. These reduced payments would accumulate as a second lien on the house for up to 12 years or upon resale or refinancing, whichever came first. This lien would be repayed in installments that would increase by 5 percent each year.

The bill did not pass the last session of Congress, but was reintroduced by Mathias on Jan. 31, and is now being considered by the Senate's housing committee.



Late last summer, disagreements about federally subsidized housing programs arose as Congress considered HUD appropriations for fiscal year '83. The Administration requested that $5.4 billion be rescinded from the programs and proposed a cash voucher system to help poor tenants pay their rents. A Senate bill combined Reagan's request with a program to convert funds for rural housing programs into block grants for states.

A bill introduced in the House called for the existing programs to remain, and also proposed a new, multifamily rental housing production program to provide grants for cities that would aid developers to build or renovate units. In September, Congress passed a HUD appropriations bill that excluded all funding for subsidized housing programs.

During the lame-duck session in December, Congress finally voted to continue funding the existing housing programs. These funds—$11.15 billion for FY' 83—were approved as part of the $379 billion continuing appropriations resolution. The funds will provide $8.65 billion for Section 8 low-income housing programs, funds for 2,000 units of Indian housing and 14,000 units of elderly and handicapped housing, and $2.5 billion in new budget authority for modernizing public housing.

Energy is the Subject of a Fair And of Continuing Controversy

With assurances that America "never again will be so vulnerable" to oil embargoes as in the past, President Reagan promoted his energy policy in an address opening the energy-themed World's Fair in Knoxville, Tenn., last May. Admonishing the Carter Administration for "gas lines, bottlenecks, and bureaucracy," Reagan claimed that his emphasis on free enterprise and decontrol had resulted in lower oil prices, greater production, increases in the nation's oil reserve, and "great progress in the area of conservation."

Department of Energy statistics indicate otherwise. Oil was decontrolled under Carter in June 1979. By October 1982, prices had risen 168 percent. By November 1982, domestic oil production was down 3 percent. By the end of 1981, reserves had dropped 6 percent. Conservation *has* increased due to higher prices, according to many analysts.

In line with his energy policies, Reagan requested the elimination of the business energy conservation tax credits. Treasury officials claimed that the provisions of the Economic Recovery Tax Act of 1981 and decontrol made the tax credits obsolete, and in fact were costing the government money.

However, both the Senate finance committee and the House ways and means committee refused to rescind the business energy conservation tax credits.

In April, a coalition filed a suit in U.S. District Court in New York against the Reagan Administration, claiming that it had violated congressional intent by not distributing $21.85 million appropriated for the solar and energy conservation bank.

The bank was created by Congress under the Energy Security Act to help homeowners and commercial operations finance solar and energy conservation expenditures. Authorized to subsidize 20 to 60 percent of financing for solar or conservation improvements, the bank was also permitted to issue direct grants to low-income persons for up to 50 percent of conservation projects.

The coalition was comprised of Representatives Stewart McKinney (R.-Conn.), William Green (R.-N.Y.), Stephen Neal (D.-N.C.), and Mike Lowry (D.-Wash.); the cities of Philadelphia and St. Paul, Minn.; New York State; the National Resources Defense Council; Solar Lobby; the National League of Women Voters; the National Audubon Society; NYPIRG/Citizens Alliance; the National Association of Solar Contractors; and solar bank advisory members Paul Sullivan, Joseph Honick, and Harry Schwartz. The defendants in the case were President Reagan, David Stockman, and cabinet secretaries Samuel R. Pierce Jr., James B. Edwards Jr., Donald T. Regan, John R. Block, and Malcolm Baldrige.

In 1981 the Administration had requested that all solar and energy conservation bank funds be rescinded, and Congress complied for all but $250,000. In the Omnibus Budget Reconciliation Act of 1981, however, Congress authorized future bank appropriations to a ceiling of $25 million each for fiscal years 1982-84.

In reaction to the lawsuit, the Administration once again asked Congress to rescind the appropriation and terminate the program, but this time Congress refused. The Office of Management and Budget then released all funds to HUD. In May, the coalition filed a motion asking the court to order HUD to issue the bank regulations, hire appropriate staff, and distribute $21.85 million during FY '82.

In July, a U.S. District Court in New York ordered the Administration to release the FY '82 appropriation and ordered HUD officials to "implement the Act" and "appropriate the funds to qualified applicants as expeditiously as good faith efforts permit."

Another Administration action to limit the federal government's involvement in energy surfaced when Senator William V. Roth Jr. (R.-Del.) sponsored the Federal Energy Reorganization Act, which sought to abolish the Department of Energy. The bill would shift approximately two-thirds of DOE to the Department of Commerce, a large portion of the remainder to the Department of the Interior, and the rest to the Departments of Agriculture and Justice.

Among those testifying in favor of the bill before the Senate Committee on Government Affairs (chaired by Roth), were Commerce Secretary Malcolm Baldrige, Defense Secretary Casper Weinberger, Energy Secretary James B. Edwards Jr., and Office of Management and Budget Deputy Director Joseph Wright. They claimed that abolishing DOE would strengthen the energy functions of the federal government and in no way impair defense and nuclear programs.

O. Pendleton Thomas, chairman of Houston's PenVest, Inc., and one who has held board positions on various oil companies, also championed the bill. He said

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that "the perceived need for a Department of Energy resulted from government enacted regulations and controls. Without . . . controls there would have been little need for a cabinet level position. . . ."

Among others who spoke against abolishing DOE was former Energy Secretary James R. Schlesinger. He said that a strong voice for energy "at the cabinet level is perhaps most dramatically needed to satisfy our international responsibilities," and that at its core the reorganization plan was "a poor idea."

Scott Sklar of Solar Lobby said that the reorganization "will only lead to a disjointed, incohesive national energy policy in an area where coherence is imperative." David H. Moulton of the Energy Conservation Coalition suggested that "both Congress and the Administration redirect the time and energy spent on considering this bill to the more urgent and necessary task of managing existing programs efficiently and cost effectively."

The bill died in committee.

Tone of Qualified Pessimism Marks Reports on the State of The Cities and the Environment

The state of the environment has improved over the past decade, but more needs to be done and resources for environmental protection are dwindling. The state of the cities is baleful and steadily getting worse. These were major conclusions of two reports released during the year by Washington-based research groups.

The 439-page state of the environment report was released last summer by the Conservation Foundation, a nonprofit, nonpartisan environmental research and communications organization. It called attention to major strides that have been made in air quality. Data from 23 metropolitan areas revealed that particulate emissions dropped 56 percent between 1970 and 1980, partly because of a decrease in burning coal and solid waste.

Other data shows, however, that "no similar significant progress toward water quality goals" has been made. In regard to water quality, the report was optimistic nonetheless, saying that to "hold the status quo is an achievement in the face of significant economic and population growth since 1970." There has also been "episodic evidence" that some of the worst water pollution problems may be easing.

Growing areas of concern cited in the report included acid rain, indoor air pollution, the buildup of carbon dioxide and chloro-fluorocarbons in the atmosphere, groundwater depletion, contamination of drinking water by toxic chemicals, haz-

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J. Seward Johnson, Jr.

By capturing human gesture in bronze, J. Seward Johnson, Jr. creates a sculptural experience that all can enjoy. The cast-metal muses that already populate the downtown activity centers and public spaces of many cities, have received an overwhelmingly positive reception. Through specific choice of placement, Johnson allows them to become silent participants in the daily lives of his public. Even people who do not usually look at sculpture are intrigued by the paradox of a gesturing bronze counterpart. In an age when so much of the art produced is indecipherable to the common man, Johnson introduces his statements in the most easily read form, the human figure, and depicts narratives of universal appeal and significance.

An untraditional aspect, one which enhances the sculptures' capacity to surprise, is the placement of pieces in outdoor settings appropriate to their narrative. What could be more natural than a boy, book in hand, having lunch perched on a fountain ledge, or a workman enjoying a break in his day stretched out on a curbside bench. These figures, except for their portrayal in bronze, seem to lose context as sculpture, for they are never divided from the surrounding activity or their human counterparts by stand or pedestal.

By casting his works in metals, Johnson is able to eliminate the need for a protective indoor site, and situate pieces where they become a part of public life. Fascinated yet not intimidated, children and adults alike are often seen tactually exploring the textured surfaces of a figure, or joining a Johnson sculpture to share a bench. Johnson purposefully reaches for this public involvement, and in fact believes public response to be the sculpture's completing element. The human forms of these pieces convey spirit and emotion, drawing each viewer into self-association, and becoming a humanistic link to their surroundings.

Outdoor sculpture parks, National recreation areas, downtown centers of shopping and business activity, resort communities; placed in these settings Johnson feels that his sculptures act as a bridge between the populace and the man-made structures. By offering a familiar image, Johnson's figures imbue their environments with decidedly human gesture, humor, and spirit.

—Paula A. Stoeke

Current Exhibitions

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J. Seward Johnson, Jr.

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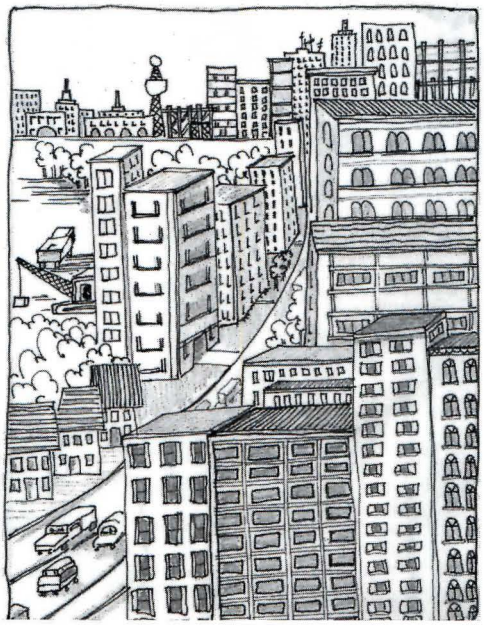
ardous waste disposal, and the recurrence of farm practices that cause soil erosion.

Hazardous waste disposal topped the list as the most "important, controversial and difficult" environmental problem. Many communities continue to be threatened by toxic chemicals from old dump sites and, the report said, "much of the waste now being generated is disposed of under environmentally unsafe conditions."

The report highlighted a number of other problem areas: Soil erosion, especially in farmland, has grown more acute; despite increasing energy efficiency, federal energy research has been all but eliminated; nearly 35 million people live in areas that will be unable to meet air quality standards for ozone protection by 1987, while the Reagan Administration advocates relaxation of emission standards; pollution has adversely affected the National Park System.

Perhaps the most critical depletion has been in information gathering. The report warns of the "deterioration of the already inadequate information base on which environmental policy depends. Our monitoring of environmental problems is even more deficient than our scientific knowledge. We have no monitoring data sufficient to describe accurately the extent of developing seriousness of any environmental problems. Because of budget cuts, the information base for environmental policy is likely to be even weaker in the future."



The report was critical of the Reagan Administration's apparent lack of commitment to do something about the environment's decline. By giving priority to "deregulation, defederalization, and defunding domestic programs," the report said, the Administration has broken "the bipartisan consensus that supported federal protection of the environment for more than a decade."

In response to the Administration's suggestion that the private sector and state and local governments assume the federal government's environmental programs, the report points out that it was "the failure of the private marketplace and failures or inaction of state and local government that led to federal intervention in the first place."

Echoing the tone and critical posture of the environmental report was an analysis of America's cities sponsored by the Brookings Institution. This report, which also appeared last summer, concluded that urban decline was widespread, and that its causes—population loss, rising unemployment and crime rates, and stagnant city revenues—will continue into the 1980s.

The report noted that a number of cities, especially older metropolitan areas in the Northeast and Midwest, were increasingly unable to adequately provide such services as police protection, education, and waste disposal. Data for the report were gathered between 1960 and 1975 on the 121 largest cities in the nation. The report presented a "distress and decline" list of cities. "Distress" was measured by a city's unemployment and violent crime rates, percent of population at or below the poverty level, percent of housing built before 1940, and the difference in tax rates between the city and its

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suburbs. City "decline" was measured in changes in unemployment, crime rate, city debt burden, and per capita income. Boston, Philadelphia, and St. Louis were among those cities high on the list.

Not surprisingly, the report found that cities experiencing trouble are in metropolitan areas that are also in distress or decline, although the cities are sliding faster and deeper.

Conditions for growth and rejuvenation, suggested the report, included more metropolitan employment opportunities; warm January temperatures; extension of the city's public school district beyond the city limits; high percentage of Hispanics in the city or metropolitan area; small numbers of muncipalities in the metropolitan area; and low city/metropolitan disparities in percentage of older housing stock, percentage of blacks in total population, and local tax rates.

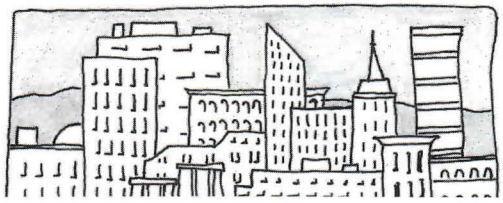
The single most damaging factor in urban decline appears to be population loss. According to the report, "Big city population decreases set in motion certain self-reinforcing forces likely to perpetuate it." Among these: the disproportionate withdrawal of high- and middle-income households for the cities, rising local taxes, deteriorating public services, losses of jobs, physical deterioration, and city/suburb disparities in the percent of older housing.

Despite dwindling populations, the report notes that "cities will not disappear. . . . Eventually, vacant areas created by building abandonment will become sufficiently inexpensive and isolated from surrounding blight to entice developers to build new, lower-density structures on them. . . . Some rebuilding and renovation have already begun in cities still losing population."

How might the federal government help cities avoid further decline? The report emphasizes programs that aid residents of concentrated poverty areas within big cities. Also suggested was removing anti-city biases from federal policies that have, the report contends, favored new construction in the suburbs over construction or renovation in the cities; helping cities adjust to smaller populations; effective forms of federal aid such as revenue sharing and block grants; more freedom for cities to allocate federal funds; and increasing tax-base sharing at the metropolitan level.

The report's recommendations on federal aid to cities will not likely be translated into federal programs, at least not by the present Administration. The message of Reagan's first urban policy statement, issued last July, was that cities must rely more on the private sector and less on federal aid.

The policy statement, one of which is required every two years, was presented



to the Joint Economic Committee of Congress, chaired by then-Representative Henry Reuss (D.-Wis.). In shifting aid from federal to state and local governments, the report stated: "The Reagan Administration intends to devolve the maximum feasible responsibility for urban matters to the states, and through them, to their local governments, and to limit federal government responsibility to those matters where clear national interest is at stake."

With regard to housing, the policy statement says that "the Administration will rely upon private housing markets to provide sufficient supplies of housing and to remove inadequate units from the housing stock, and it will provide assistance in the form of housing certificates to some households with insufficient income to afford decent housing."

Several mayors present at the hearings accused the Administration of shirking its responsibility. Seattle Mayor Charles Royer said, "The urban policy report and the 'new federalism' initiative together are an attempt to rationalize some serious budget-cutting with a certain amount of rhetoric," and he called the statement "a blueprint for surrendering America's cities."

Lever Given Landmark Status

A high point in historic preservation history occurred just a few weeks ago when New York City's Board of Estimate voted to uphold the landmark status of Lever House on Park Avenue. Designed by Gordon Bunshaft, FAIA, of Skidmore, Owings & Merrill and completed in 1952, Lever House has been called a "key monument in the evolution of the International Style."

The preservation community and others became alarmed last year when Fisher Brothers Developers announced plans to raze the structure to erect a 40-story office tower. The developer claimed that this new tower would generate jobs and additional taxes for the city. The New York City Landmarks Preservation Commission moved quickly to give Lever landmark status, reserved for buildings over 30 years old.

By a vote of six to five, the Board of Estimate upheld the commission's designation. Following the decision the New York Landmarks Conservancy, one of the leaders of support for preservation, expressed its satisfaction that people "had become much more sensitive about architecture and what's being built."

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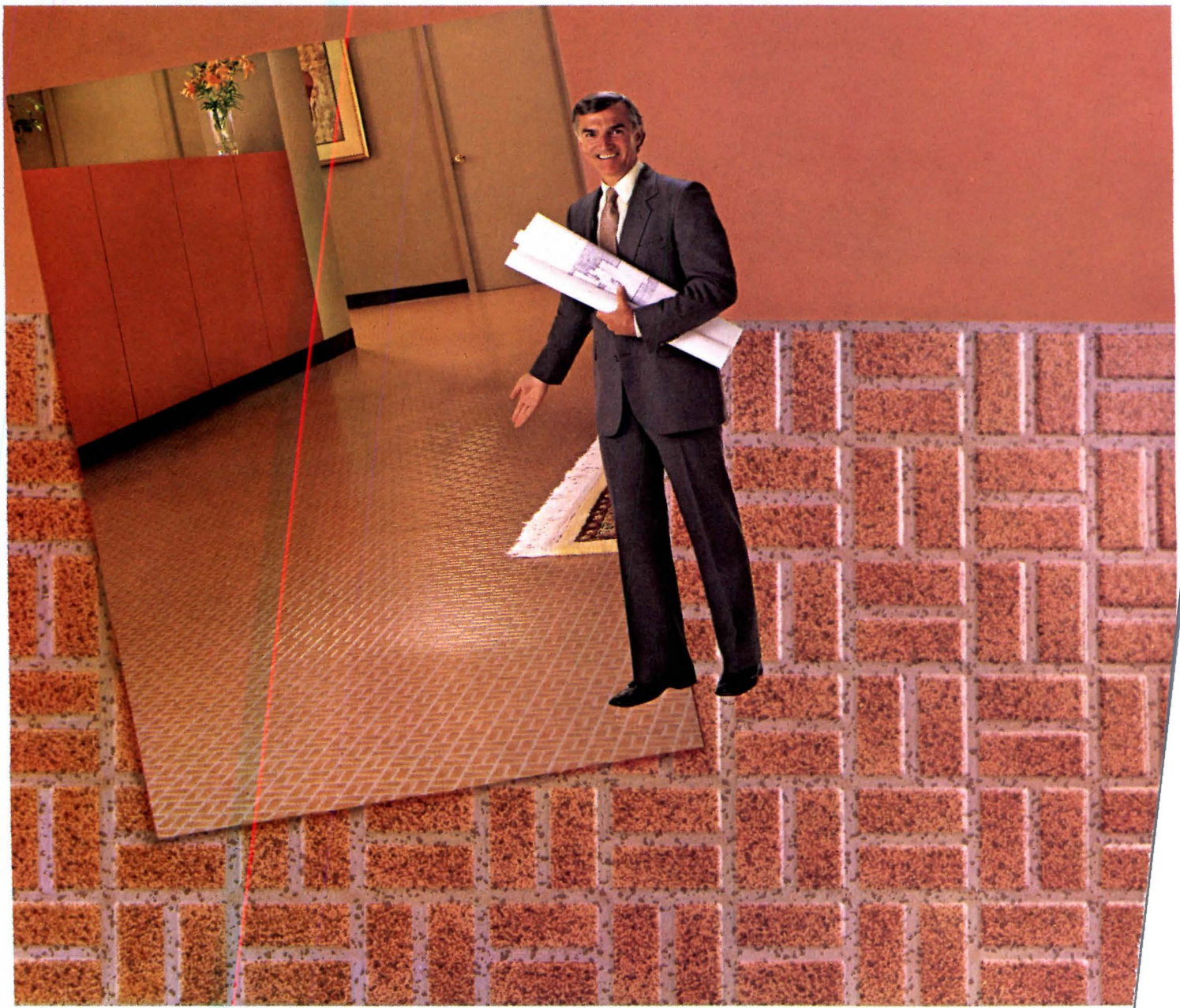
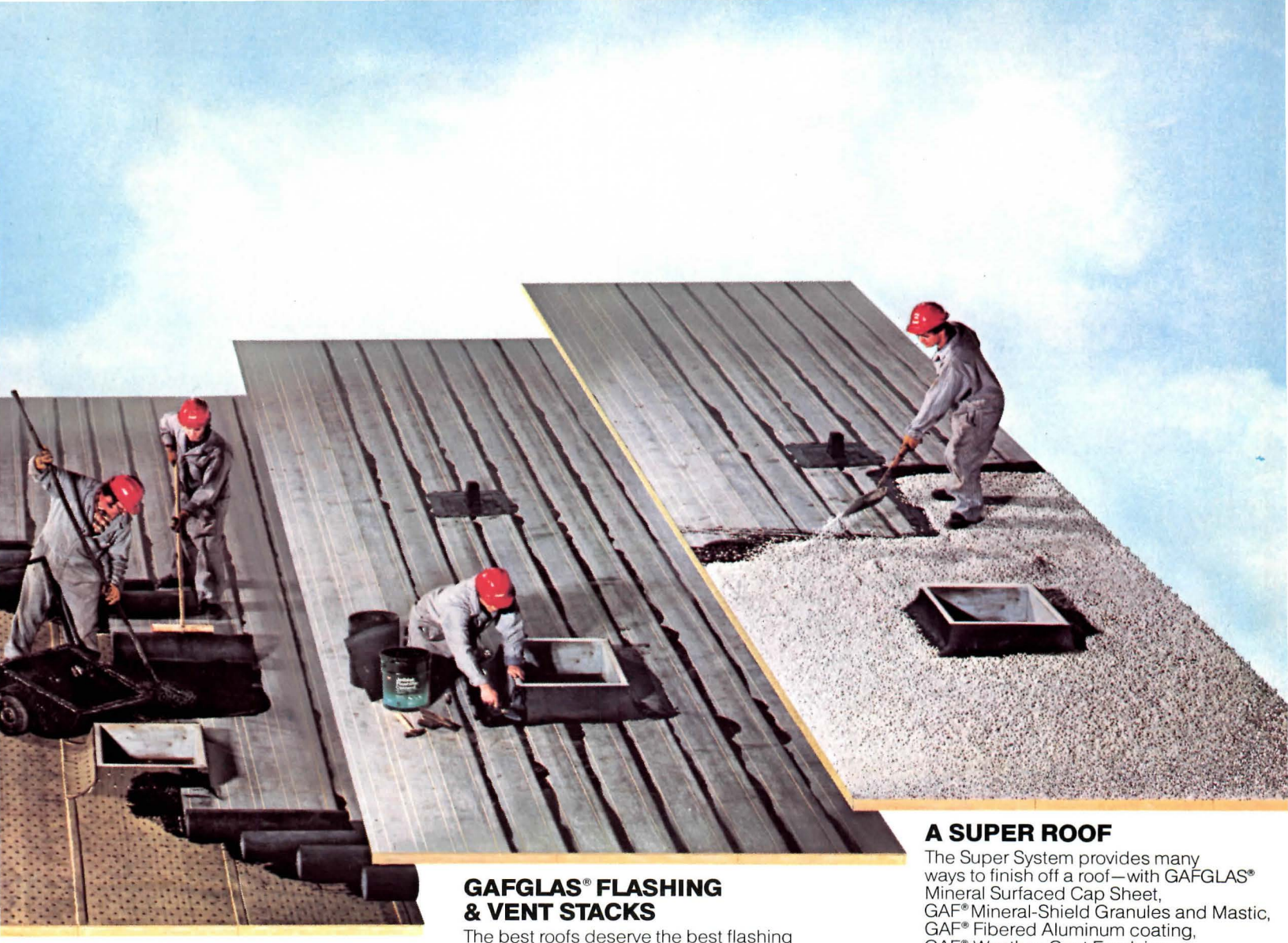
The Congoleum difference





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Another Year in Which the Condition of the Economy Hung Like a Fog Over the Profession

As 1982 closed with total GNP down by 1.7 percent, business investments down by 14.9 percent, and housing starts at a 36-year low of 1.06 million, the economic climate for the profession was hardly optimistic.

Reports from AIA regions last December reflected a decline in work around the country, with few bright spots. The Texas and Florida/Carribean regions were the strongest. The latter reported an "excellent" economy, while the former saw only a few slowdowns among active construction.

By far the worst conditions were reported by the Ohio and Pennsylvania regions. The Keystone State described conditions there as "deeply troubled," with replacement of dwindling backlogs "potentially lacking." Ohio called its economy "poor to nonexistent," the hardest hit areas being Cleveland, Toledo, and Youngstown. The California region also reported its work outlook as "pretty grim," the result of Proposition 13 and government cutbacks.

The Michigan region, with major clients of government, housing, and the auto industry all stagnant, reported poor conditions, while a slowdown was also evident in the western mountain region.

Other regions reported mixed conditions. The central states region saw a dip in activity, but not as bad as its coastal counterparts. The New England, New Jersey, New York, north central, south Atlantic, and Gulf states regions reported strong and weak areas, with large and medium sized firms doing best. North Dakota, however, said that "small firms are busier than ever."

Illinois reported that housing was "deader than a doornail," with the east central and mid-Atlantic regions experiencing similar housing slumps.

A survey of professional service firms by Birnberg & Associates of Chicago found design firms "doing poorly," with net profit falling 4.9 percent since 1980. The finding was based on responses to a questionnaire by 272 design firms around the country.

Escalating overhead costs were a major cause of lower profits. Overhead rates rose 10 percent since 1980, with architects having the highest rate—154.7 percent (before distributions). Reflecting the AIA regional report, the survey found the highest levels of profitability in the sunbelt, the lowest in the Midwest.

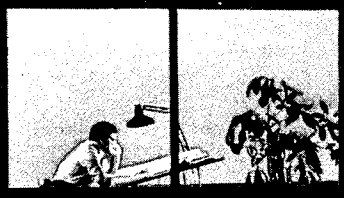
Meanwhile, an AIA survey of firms found that real income for architectural principals and office staff declined both regionally and nationally, and failed to keep up with the incomes of other building professionals. The data were collected from 630 firms surveyed at random.

While the consumer price index rose 140 percent between 1970-81, compensation rose only 59 percent for principals, 80 percent for supervisors, 66 percent for senior technical staff, 57 percent for intermediate technical staff, and 70 percent for junior technical staff. In comparison, incomes for construction workers rose 114.2 percent between 1970-79, while engineers, surveyors, accountants, and auditors enjoyed an increase of 194.5 percent.

The survey also revealed that the average base salary nationally for principals was $34,802, with bonuses, profit sharing, and other dividends amounting to $12,344. Also, average staff salaries in most job categories are highest in the West, including Alaska and Hawaii, and lowest in the Southeast.

In connection with architects' incomes, the firm survey and an AIA analysis of industry trends uncovered a fluctuation of new construction investment and building value in public and private nonresidential construction. In real value, invest-

continued on page 102



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MASTERSPEC 2

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Year's Review *from page 98*

ment in public construction decreased by 32.8 percent between 1970-81. For the same period, the investment in private, nonresidential construction increased by only 7.9 percent.

But both of these categories showed a decrease in value over the same period. New public building construction fell in value by 33.5 percent, while private, nonresidential buildings declined by 22.9 percent (except office buildings). These two categories account for 60 percent of architects' income.

A Year Marked by the Loss of Four Very Different Leaders

In the past year, the profession lost four of its leaders, each quite different from the other, including gold medalist Josep Lluis Sert, FAIA (see page 55). The other three, all of whom died within the space of four weeks last summer, are:

O'Neil Ford, FAIA, whose name was synonymous with Texas regional architecture, died July 20 at the age of 76. Ford rose to prominence as a designer during the height of the International Style in this country, but his work reflected a concern with indigenous materials and the vernacular forms of the Texas landscape, an approach that is only now coming to the fore.

Bruce Goff, 78, a student of Frank Lloyd Wright who went on to develop his own very personal approach to architecture, died Aug. 4. Goff began his architectural career at 16, completing more than 500 buildings in little over 60 years. Goff used common materials in uncommon ways, with no two of his buildings looking alike.

George E. Kassabaum, FAIA, president and one of the founding partners of Hellmuth, Obata & Kassabaum, Inc., of St. Louis, died Aug. 15 at the age of 61. Kassabaum built a reputation of completing projects on time and within budget. He achieved this through his own system of work flow and cost control analysis, which was widely applied by other architects. HOK is one of the largest firms in the U.S.

Computer Use Continues Spread; Degree Requirement Debated

More and more architectural firms are using computers, or anticipate using them in the future. That was the conclusion of AIA's second annual survey of computer use, the results of which were released last September. Of the 580 responding firms, 30 percent used some type of office computer compared to 24 percent a year earlier. Fifty-two percent anticipated acquiring a computer or increasing their

hardware/software capital compared to 46 percent in 1981.

Word processing was cited as the most frequent use of computers (53 percent). Specification hardware followed at 40 percent, job cost accounting at 39 percent, and financial management at 36 percent. Regarding equipment cost, the majority of responding firms spent under $15,000.

Asked what were the firms' needs in the area of hardware/software, 43 percent cited knowledge of software availability and 41 percent reported basic computer applications education. Problems most often mentioned included evaluating needs (14 percent) and comparing cost versus system value (13 percent).

At its annual meeting last June, the delegates of the National Council of Architectural Registration Board voted for a "uniform" registration examination to be administered as of June 1983. The requirement that all candidates hold a profes-

continued on page 375

THE REST OF YOUR BUILDING SHOULD BE BUILT THIS WELL.

A roof's primary mission is to preserve a building's weatherproof integrity. No other component is called upon to withstand such torturing extremes. Roof temperature variations of over 100 degrees in a single day, high winds, ice and snow can take a terrible toll.

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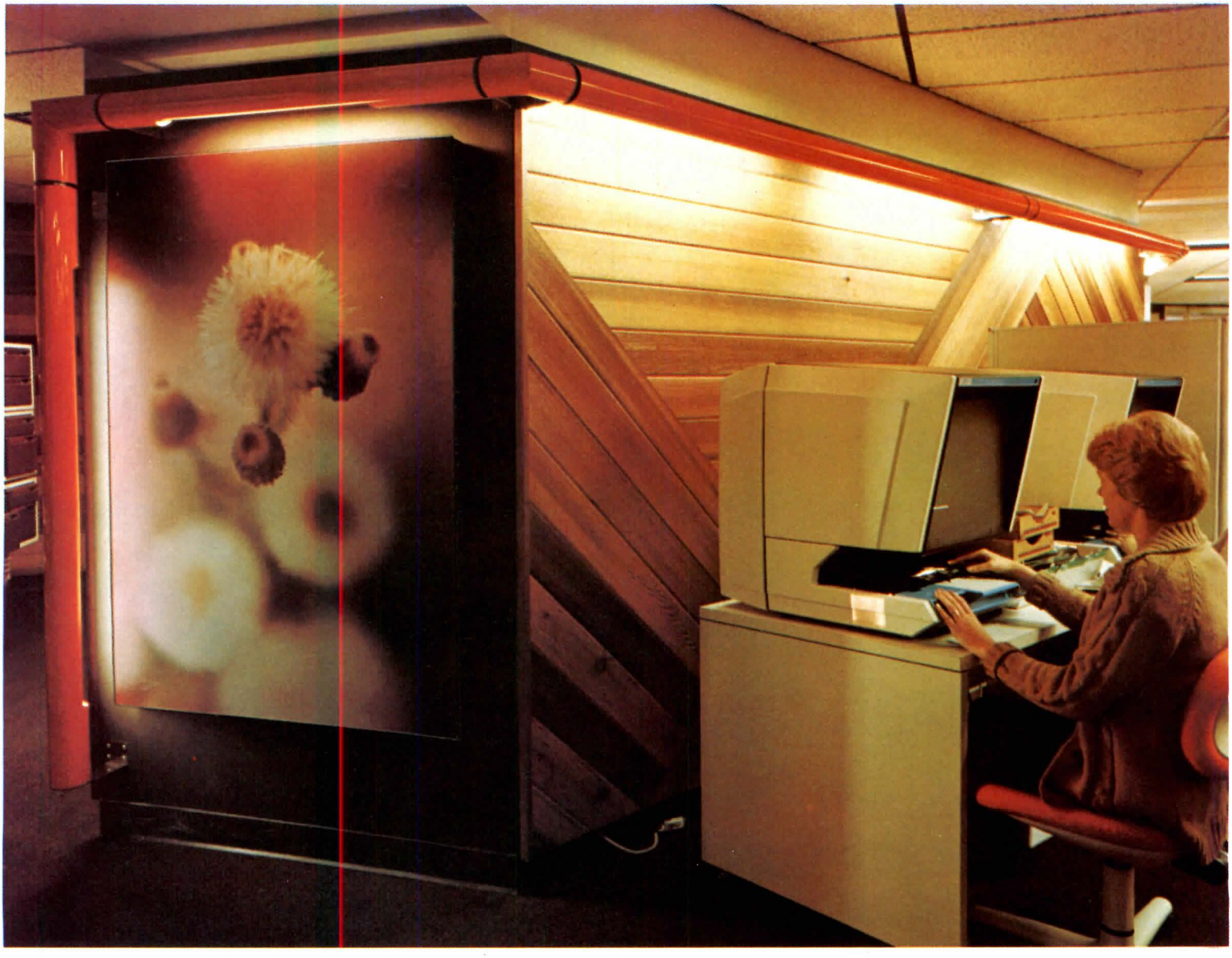

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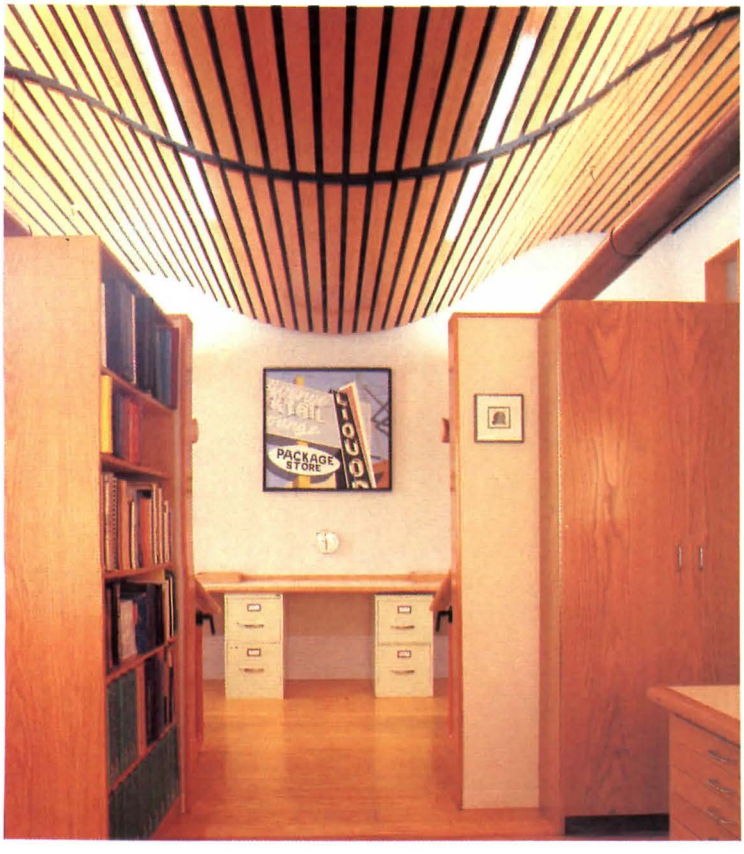


Mid-Florida Chapter. Divoll & Yeilding Office Renovation, Orlando, Fla. (left); Divoll & Yeilding, Orlando. The architects and staff did most of the construction work in renovating their own office, a 667-square-foot leased space in a 1925 arcade building. The program called for maximum exposure to the interior arcade with visual privacy for work areas. The major feature of the remodeling was the addition of a curved oak slat ceiling that integrates acoustic insulation, air distribution, sprinkler system, and ambient light reflection. Carpeted walls facing the arcade provide exhibition space for photographs, drawings, and illustrations of work in progress. The ceiling, suspended lighting system, and built-in furniture are all designed as removable components.

Georgia Association. Prucare Northeast, Atlanta (right); Heery & Heery, Atlanta. This group health facility was conceived in four modules, two of which are built, arranged along two wings spreading from the entrance (in photo). Each module has its own waiting area, reception desk, nurse station, toilets, 12 examination rooms, a treatment room, and four offices for doctors. Shared facilities—pharmacy, X-ray room, record keeping, and the like—are centrally clustered. The interior is finished in expertly applied, sculpted gypsum board highlighted by a range of pastel colors and cove lighting. The exterior is stucco and ceramic tile.

Timothy Hursley

Chicago's dramatic 33 West Monroe building was designed by Skidmore, Owings & Merrill and is managed by Draper and Kramer, Inc.

How Laminated Glass helped move the great outdoors upstairs.

It was an inspired idea.

Instead of a ground-level atrium, create a sunny, open space on the top eight floors of Chicago's 33 West Monroe building.

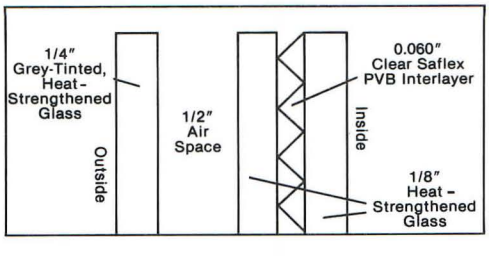
Laminated architectural glass, with its resilient Saflex® polyvinyl butyral interlayer, made by Monsanto, brought the idea to life.

To help protect people beneath this soaring expanse from glass fallout, laminated glass was the ideal choice.

Without foregoing any of the physical beauty of glass, it offers fallout protection. In the event of breakage, shards and fragments tend to adhere to the Saflex polyvinyl butyral interlayer.

To help protect building management and tenants from high energy costs, laminated glass was again the ideal choice. A wide variety of reflective coatings, tints and configurations can be specified to provide precise control of glare, solar heat, light transmittance, insulating properties and reflectivity.

The configuration specified at 33 West Monroe is detailed in the illustration:



This configuration provides the following performance characteristics:

	Winter (Nighttime)	Summer (Daytime)
U Value	.49	.57
Shading Coefficient	.55	.55

Laminated glass, with a Saflex interlayer, gives you opportunities no other glass offers. That's why it ended up on top at 33 West Monroe.

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(7) The 4 stories in Xerox World Headquarters, Stamford, Conn., are built around Celotone Texturetone 12" by 12" acoustical tiles. Incredible as it may seem, they refused to settle for any copies.

Celotex has 18 different ceilings you can build your own stories around. Contact Al Thornton, The Celotex Corporation, 1500 North Dale Mabry Highway, Tampa, Florida 33607, 813/871-4133 Ask for our 1981 Celotex Acoustical Ceiling Systems brochure. It tells the whole story.

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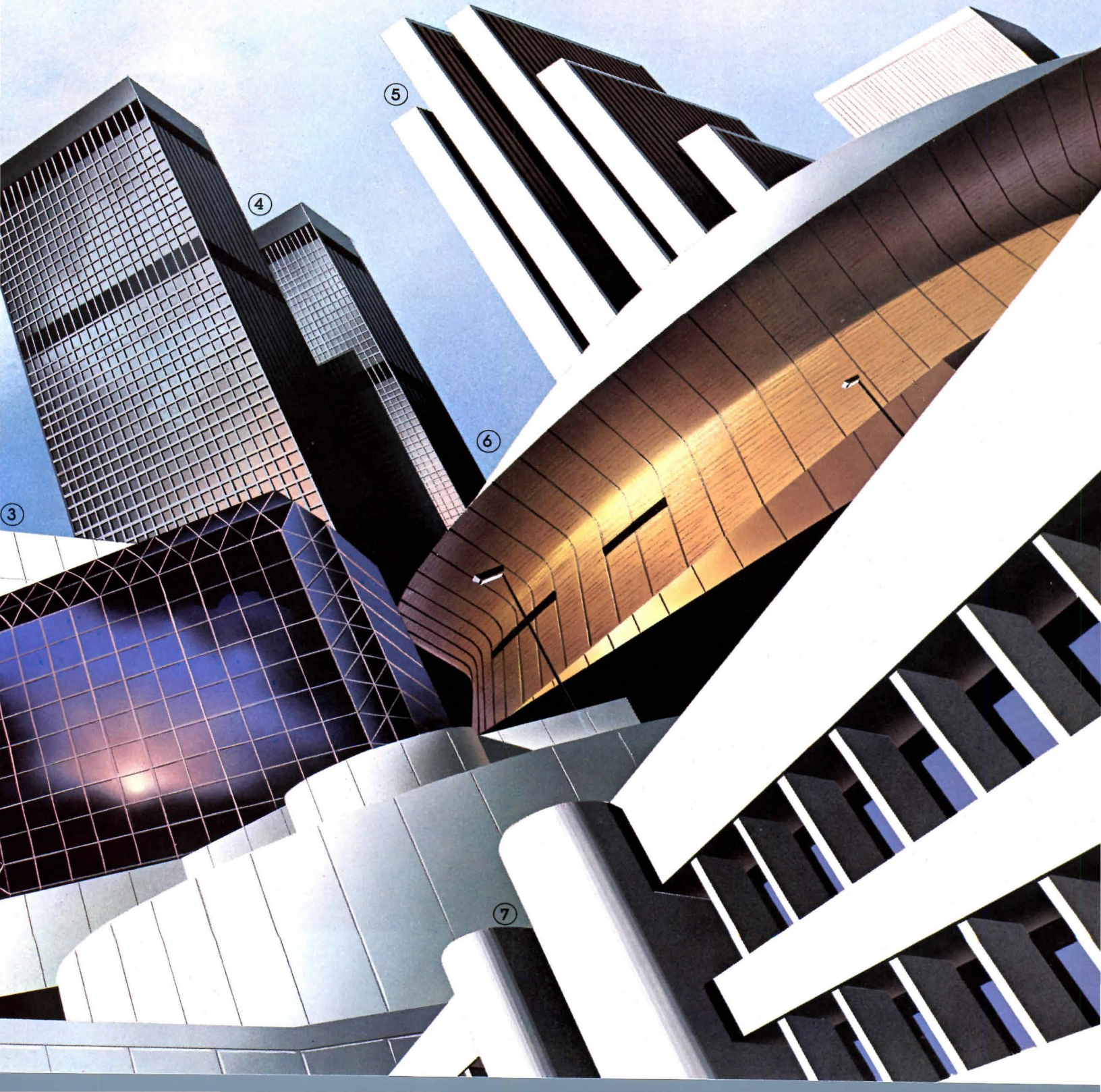
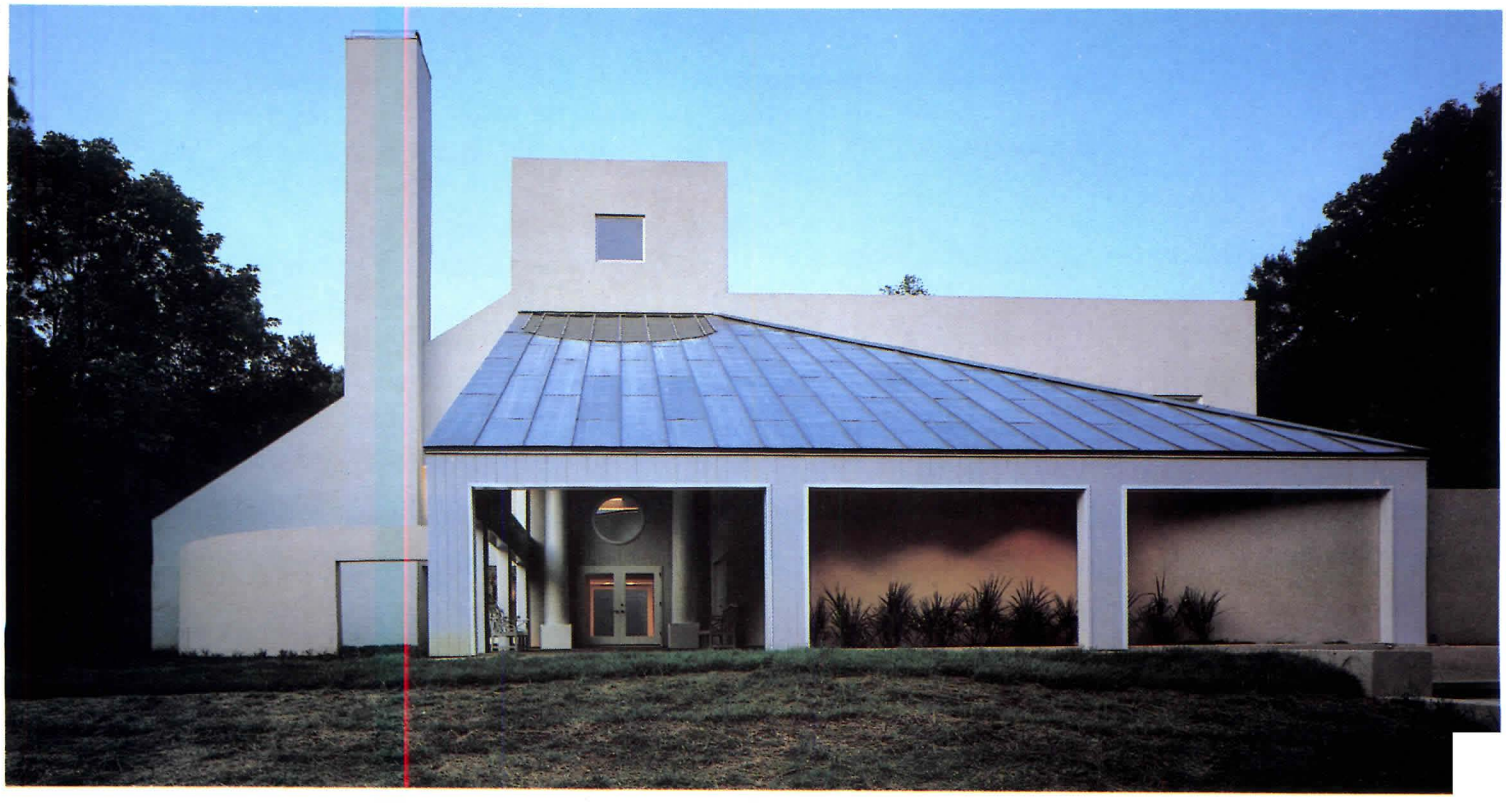


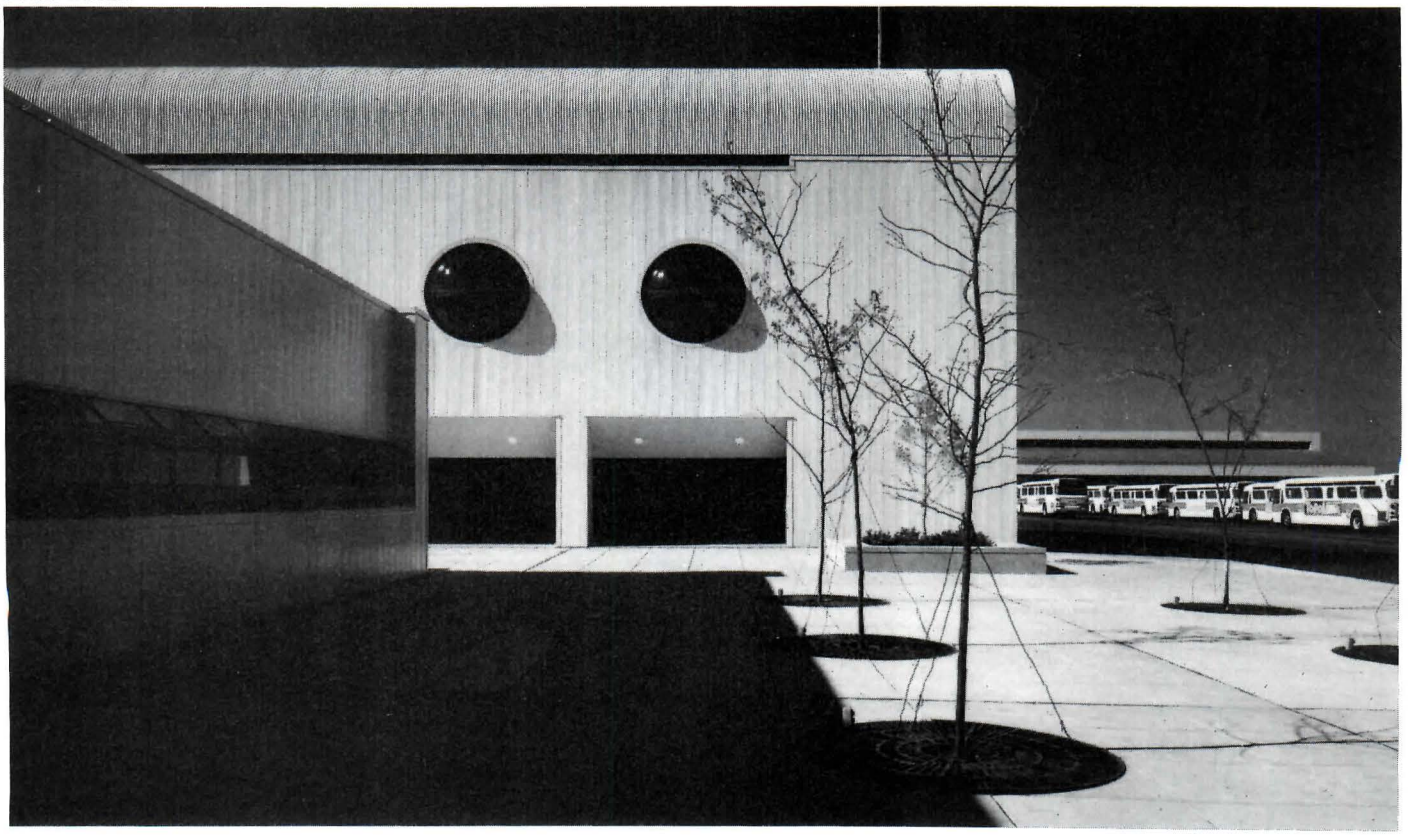
Hursley/Lark/Hursley



© Ron Calamia Photography

Gulf States Region and Mississippi Chapter. Sanders House, Jackson, Miss. (above); Goodman Architects, Jackson. A young couple with three small children wanted a "modern interpretation" of a five-bedroom house with patios, courtyards, and a screened porch that would acknowledge the neoclassical and regional influences of this affluent, 30-year-old neighborhood. A central tower rising to a third floor sunlit playroom serves to tie together the various components of the house and also functions as a vehicle for heat convection. It contains operable windows and a flow-through ventilation system. The large southern facade of gray glass is designed to block much of the radiant heat yet provide natural lighting for the courtyard. Pastel colors were used throughout.

Louisana Architects Association. Raceland Bank & Trust Company, Thibodau, La. (left); Ernest E. Verges & Associates, New Orleans. The renovation of a Victorian house, located in an area with both residential and commercial buildings, to house a branch bank called for the addition of a motor banking facility and a vault. A drive-through facility, featuring a canopy with columns similar to the front porch, and a gable roof were added to the rear of the building. The vault was constructed adjacent to the structure outside the original walls and covered with matching siding. The original oak wood floors were sanded and stained, and a new bank counter and fluorescent lighting system of stained red oak were designed by the architect to complement the floors. All interior walls were shaded with pastels.



Tennessee Society of Architects. Maintenance, Servicing Operations Office for Memphis Area Transit Authority, Memphis, Tenn. (above); Walk Jones & Francis Mah, Memphis. The program called for a facility for inspection and servicing of a 350-bus fleet. The architect divided the various functions between four buildings, all of which employ passive solar cooling. During the summer, the heat buildup is vented with the use of a double-roof cavity and natural convection. In winter, the roof's louvers are closed and the heated air is recycled into the building. Use of metal cladding and bubble windows give a high-tech look, appropriate for the work that occurs within.

South Atlantic Region. Real Estate Offices, Charlotte, N.C. (right); Meyer • Greeson, Charlotte. The task at hand was the space planning of a real estate office to include a reception area, executive and broker's office, work room, rest room, two conference rooms, storage area, and ample sales space, all within 1,500 square feet. The complex was to be accessible from a pedestrian promenade and parking lot. The resulting design has a spacious quality that belies its modest dimensions. The oval sales area (accessible from the promenade) is designed to promote brochure browsing. The colors suggest the coastal and mountain properties for sale, and also suggest that the room is open at one end.

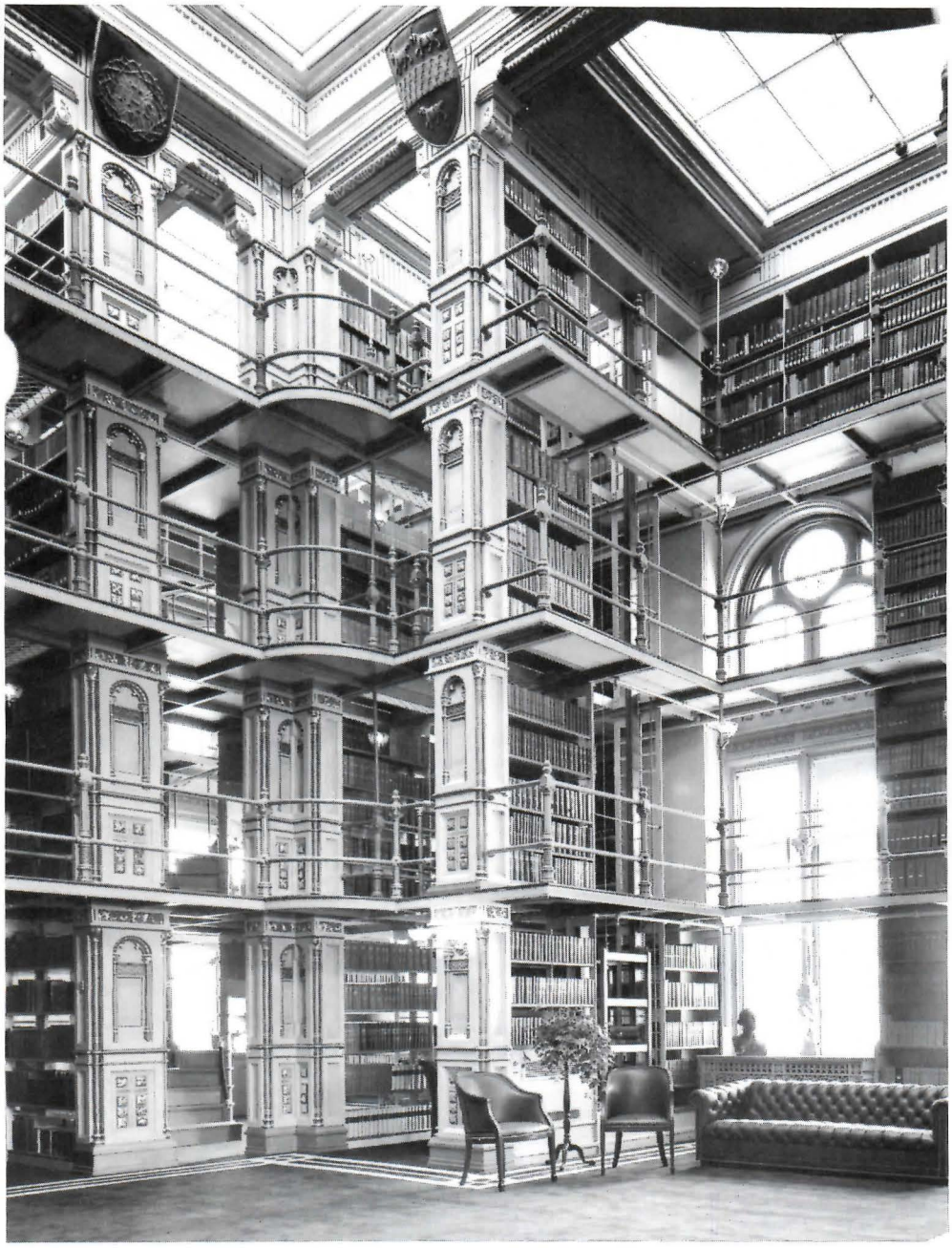
Bernhard Schopper

West Virginia Society. College Stadium Press Box, Shepherdstown, W.Va. (above); TAG Architects, Charleston, W.Va., and VVKR, Alexandria, Va. This joint venture, with TAG as designer and VVKR as construction manager, produced a simple structure that serves its purpose in a subtle way. The press box is an addition to a stadium that was completed approximately 30 years ago. The box was restricted to a spot with western exposure, so operable aluminum louvers were employed for sun control. At ground level, facing away from the stadium, is a concession stand. Behind the glass is stepped seating, and on top is a railed roof deck for cameras. The stair tower is pulled away and skewed not only to create interest, but to allow circulation underneath. The structure is exposed steel frame with brick and block infill.

Virginia Society. Multifamily Residence, Williamsburg, Va. (below); Robert A. Magoon Jr., AIA, Williamsburg. The architect was originally called in to renovate an existing structure on the site, but eventually determined the structure to be unsound. It was suggested to the client that the old building could be razed and then duplicated, or an entirely new project could be planned. The client opted for the latter. Since the site was in the heart of Colonial Williamsburg, the architect strove for "a contemporary design solution demonstrating a sensitivity to its surrounding environment. . . ." To that end the complex, comprised of nine town houses, is small in scale and incorporates many of the contextual forms and materials: gable roofs, strong chimneys, cedar shakes, white beaded siding, and brick foundations and walls.

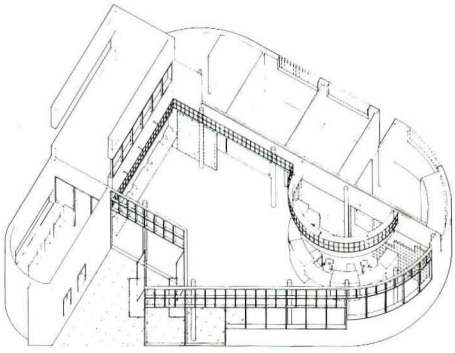
Douglas Kennedy

Walter Smalling Jr.



Washington Metropolitan Chapter. Riggs Library Restoration, Washington, D.C. (left); Environmental Planning & Research, Inc., Washington, D.C. The Riggs Library, located on the Georgetown University campus, was completed in 1891. The architect was asked to restore the library but for a slightly different use: It was to accommodate various social activities such as dinners and recitals, and serve as a repository for rare books. Spaces adjacent to the library were converted into storage and a pantry. Paint scrapings were taken to restore the original colors, and gold leaf was repaired or replaced. Photos of the original gaslight fixtures were used to reproduce them as electrical fixtures. The ceiling glass was also replicated and replaced.

Brookland Branch, Perpetual American Federal Savings & Loan, Washington, D.C. (below); Keyes Condon Florance, Washington, D.C. Located on a major artery near a subway stop, the architect wanted this bank to reflect its high-speed context in materials and form. Thus the shiny, "banker's blue" brick is punctuated with a black racing stripe. The curvilinear facade steps along, creating a logo backdrop that is visible at high speed. The main lobby echoes the square subdivision of the brick and glass block, and the curved tellers' counter suggests the outside form.



Gary P. Fleming

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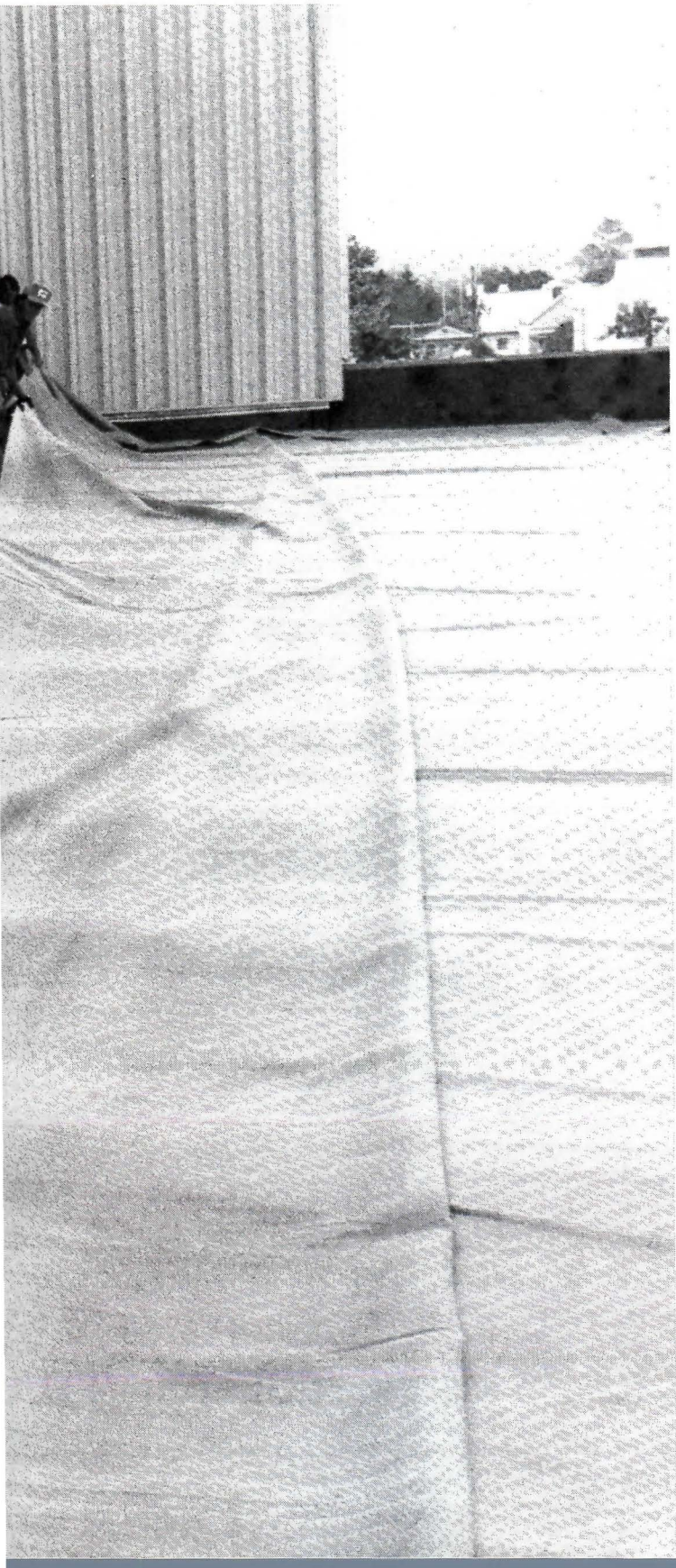

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	Loose-Laid Ballasted	Fully Adhered	Partially Adhered	
Squares per Man/Day*	up to 12	5-8	8-12	3.5-5.5

*variation due to roof and system type, penetrations, flashings, etc.

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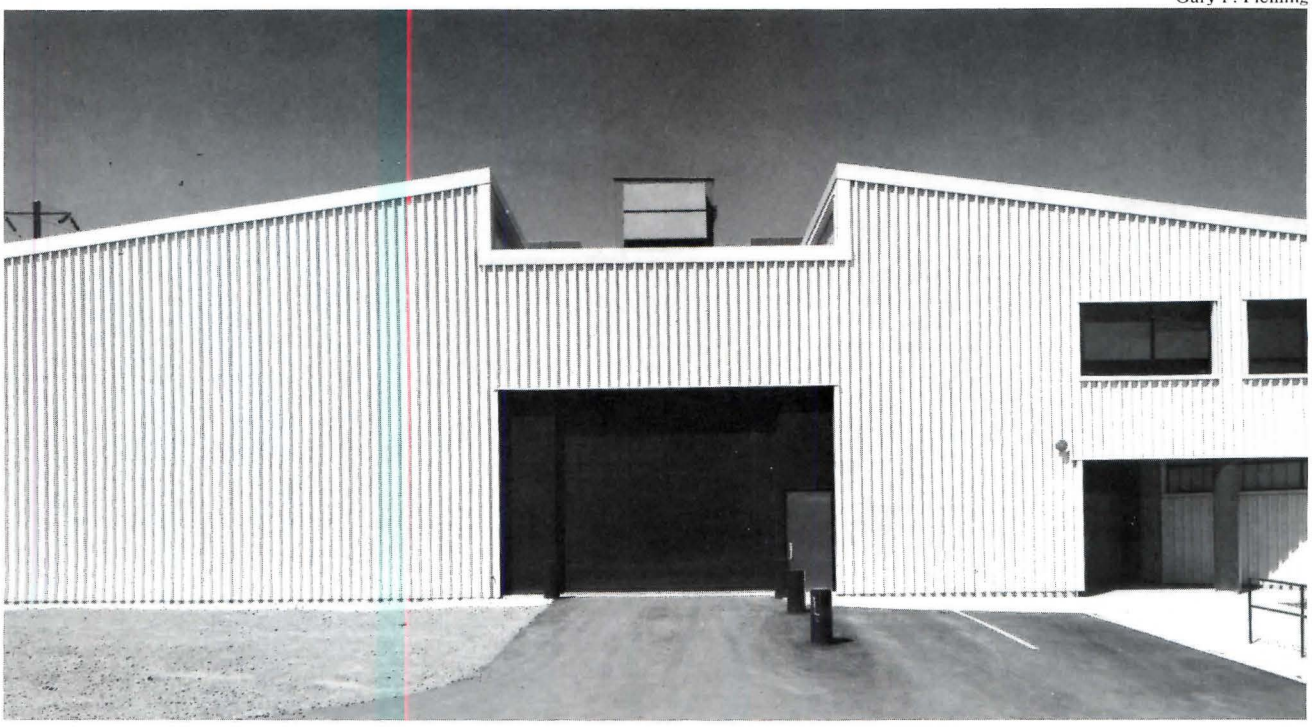


Washington Metropolitan Chapter. PEPCO Combined Shops Building, Washington, D.C. (above); Keyes Condon Florance, Washington. The program for the client, a major regional power company, called for an economical industrial shops facility consistent with an existing warehouse complex on the site. It is a one-story, steel frame structure of 34,374 square feet, with an interior mezzanine level providing an additional 5,300 square feet of enclosed space for offices and shops requiring separation from the general work area. A flat roof segment over the center bay is set lower than the sloped roofs on either side. The resulting exterior form expresses the central circulation axis as distinct from the shop areas and allows clerestory lighting into the central portion of the building.

Potomac Valley Chapter. Crystal Gateway Marriott Pedestrian Concourse, Crystal City, Va. (right); CHK Architects & Planners, Silver Spring, Md. Mirror strips and bright red half-columns were used on the walls, and the ceiling was given a linear reflecting treatment in order to provide an illusion of intersecting paths and provide a sense of spaciousness in this 36-foot concourse linking a hotel to an underground shopping arcade. Walls of the ramped segments are tiled with horizontal stripes in shades of gray, darker at the floor and lighter up to the white ceiling, which is brightly lit and coffered.

More component awards on page 309

AIA JOURNAL

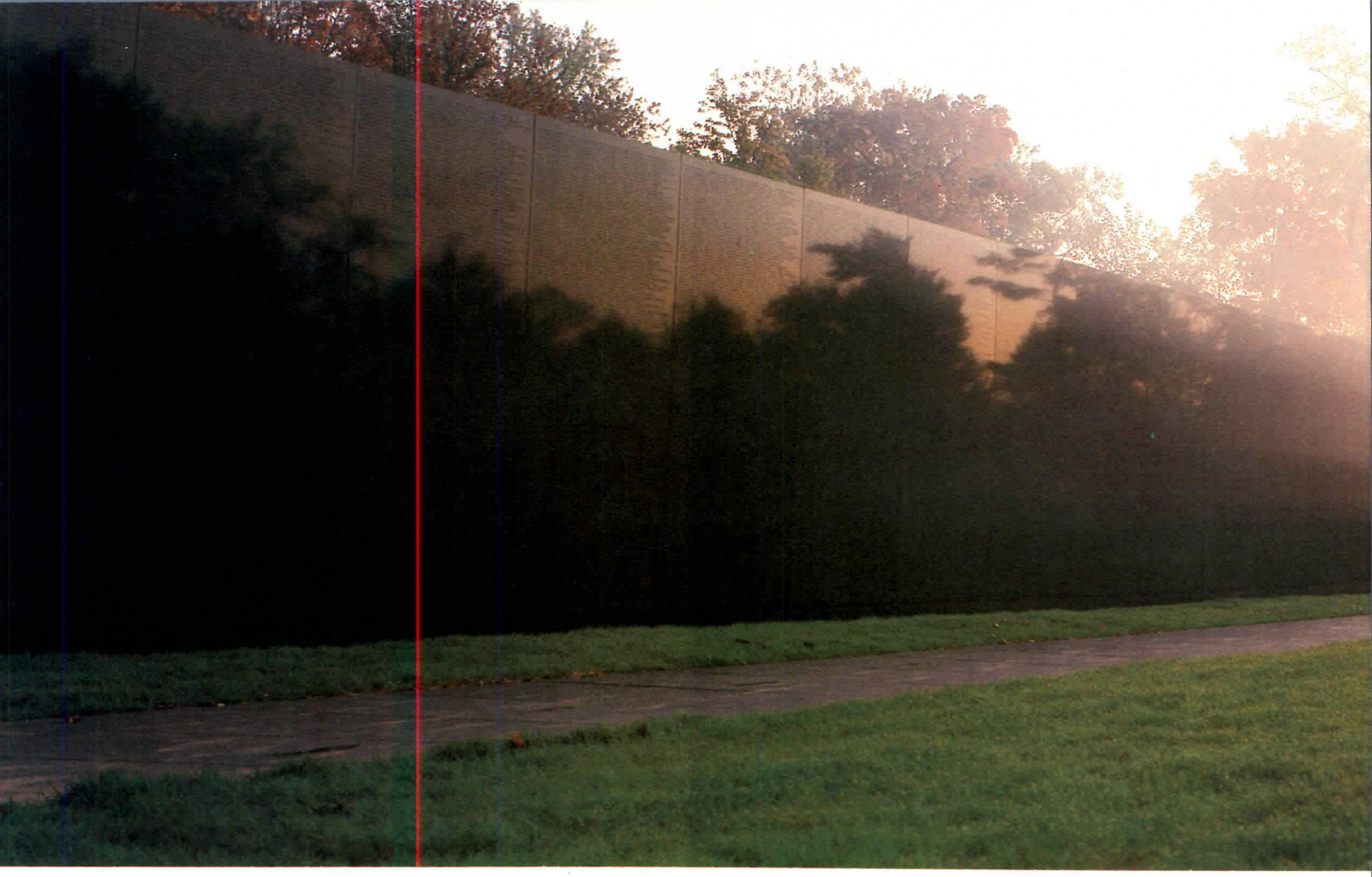
The Sixth Annual Review Of New American Architecture

Once again we bring together the best work that we and AIA awards juries can find, to assess the state of the art of American architecture. We begin with a work that is not a building. It is nonetheless architecture: perhaps the most successful act of civic architecture in Washington since the building of the two wings of the National Gallery of Art.

The first actual buildings in the issue are the work of the same architect in the heart of the same city, Chicago, where grand architectural gestures seem to come in bunches.

By some definitions these buildings could be called postmodern. In fact, the striking thing about this year's collection is the emergence of postmodern works of significant size, after a decade or so in which the postmodern revolution was fought mainly in words and drawings and buildings of minuscule scale.

Defining postmodernism is the task attempted in this issue by a diverse group of practitioners in the essays on architectural trends that have been part of the annual review from the beginning. It is a lively debate. *D.C.*



An Emotive Place Apart

By Robert Campbell

The Vietnam Veterans Memorial design by Maya Ying Lin was the winner of the most visible competition for a work of U.S. public art or architecture in the two decades since the F.D.R. Memorial competition. And, for a time, it seemed possible that the Vietnam Memorial, like the F.D.R., might collapse in a fiasco that would hurt the credibility of competitions and, still worse, lead to a bad compromise, crippling what many observers, including this one, felt was among the strongest designs for a war memorial ever conceived.

That didn't happen. The tide of opinion set firmly in favor of the memorial, it now seems clear, on Saturday, Nov. 13, 1982, when tens of thousands of veterans and surviving relatives came to Washington to dedicate the new memorial. Families brought snapshots and flowers and laid them at the memorial's base, while faces and campfires and flags and sky could all be seen reflected in the long, mirror-black granite wall among the innumerable carved names of the dead, in an astonishing integration of almost everything a monument could say about a war. No one except the designer, perhaps, had fully realized how vividly the memorial would come to life through such interactions.

As everyone must know by now, the Vietnam Memorial is a retaining wall, 440 feet long, faced with black granite and inscribed with the names of the 57,939 American men and eight women who are listed as killed or missing in the Vietnam War. The top of the wall is horizontal and flush with the grassy lawn behind it. In front of the wall, the ground swales down gently to form a shallow amphitheater, thus exposing the wall's face. At either end the wall feathers into the rising earth and disappears. At the center, it's 10 feet high, and here it bends once, making an angle.

As you descend the path along the wall and reach this angle, you realize that one wing of the black wall points straight at the tall, white Washington Monument a mile or so off, and the other at the Lincoln Memorial, visible through a screen of trees about 600 feet away. In making this descent you feel you're entering a cloistered space, set off from the busy surroundings. Streets and skylines disappear to leave you alone with the wall and its names. Then, as you pass the angle and begin to climb, you feel yourself emerging again into the world of noise and light after a meditative experience.

At close range, the names dominate everything. There are so unbelievably many of them, quirky and vivid as real names always are. The name of the first soldier who died is carved at the angle in the wall, and the names continue to the right in columns in chronological order of date of death, out to the east end where the wall fades into the earth. The names begin again, with the next soldier who died, at the west end, where the wall emerges from the earth. It is as if the wall, after sinking beneath the earth, has continued on around the world underground before emerging once more.

The names continue, remorselessly, to the name of the last soldier killed, which is carved on the wall at the angle, directly beneath the name of the first soldier. The angle here at the apex of the wall, between Washington and Lincoln, is thus a

Mark Segal

place of first and last things, and there is a sense of closure, of a story completed. The wall is a huge book open at a place where it both begins and ends, and its text, its long march of names, has made it, you realize, a memorial to individual human beings rather than to any larger but vaguer concept of country or sacrifice or victory or heroism.

At some moment of your visit, probably not at first, you've noticed with a slight shock your own face reflected among the names of the dead, an effect that makes the granite mirror a kind of scrim set between past and present, between living and dead, integrating both on a single dark plane. Other images collect at special times. On some evenings, along the memorial's eastern wing, the image of the red sun setting among black trees is seen in reflection while, simultaneously, the same sun is casting the shadows of those trees directly onto the granite and lighting with pink the real trees rising behind the wall on the slope above. In such ways the memorial reaches out beyond itself to engage and transform its surrounding world.

The story of how this unlikely and wonderful design came into existence is one of the classic competition stories, too familiar to need much detailing. Maya Ying Lin was 21 and a senior at Yale, planning a career as an architect, when some students (she wasn't one) persuaded an instructor, Andrew Burr, to offer a design studio on funerary architecture. Lin enrolled. The Vietnam competition was Problem Number 3 in the Burr studio. The students visited Washington to reconnoiter the site. Maya Lin's chief impression then was one of living people enjoying a sunny, open park that shouldn't be taken from them nor be trivialized into a mere setting for some big monument. A landscape solution seemed better.

"I thought about what death is, what a loss is," she remembers. "A sharp pain that lessens with time, but can never quite heal over. A scar. The idea occurred to me there on the site. Take a knife and cut open the earth, and with time the grass would heal it. As if you cut open the rock and polished it."

The notion of making the angle and aiming the wall at Washington and Lincoln came later, back in the studio. Last to occur was the unique arrangement of names. "Andy said, you have to make the angle mean something. And I wanted the names in chronological order because to honor the living as well as the dead it had to be a sequence in time."

These were powerful intuitions, and they led directly to a powerful design. The briefest talk with its creator makes it clear that nothing about the memorial is either casual or lucky.

Only Lin, from the Yale class, actually sent her proposal to Washington, in the form of two 30x40-inch boards onto which were glued, in a visually rather disorganized way, a few inept, scaleless drawings and a hand-lettered, very well-written statement. The jury saw through the crudeness of this student presentation to the great concept that lay beneath.

Detailing of the finished memorial was performed by the Cooper-Lecky Partnership, with Lin's collaboration. Most of it is excellent, but in light of the celebrated controversy over adding a flag and statue to the memorial it is interesting to note a couple of jarring elements not in the original design. A gutter along the base of the wall was demanded by the Park Service, which maintains the memorial, because power mowers can't cut grass against a vertical surface. The gutter is modest but clearly damages the design; this is one wall you want to see rise straight up out of the earth like a natural cliff.

A path of granite slabs of changing sizes and shapes is another alien presence in front of the wall, often too bright and always too obvious. And the contour of the earth as you read it against the wall is unnatural as a land form, part flat and part sloped. These are minor defects, but they should serve as warning that Lin's conception was so complete and so delicate that any attempt at embellishing it hurts it. □

Jahn's Chicago. 1. Board of Trade

By Andrea Oppenheimer Dean

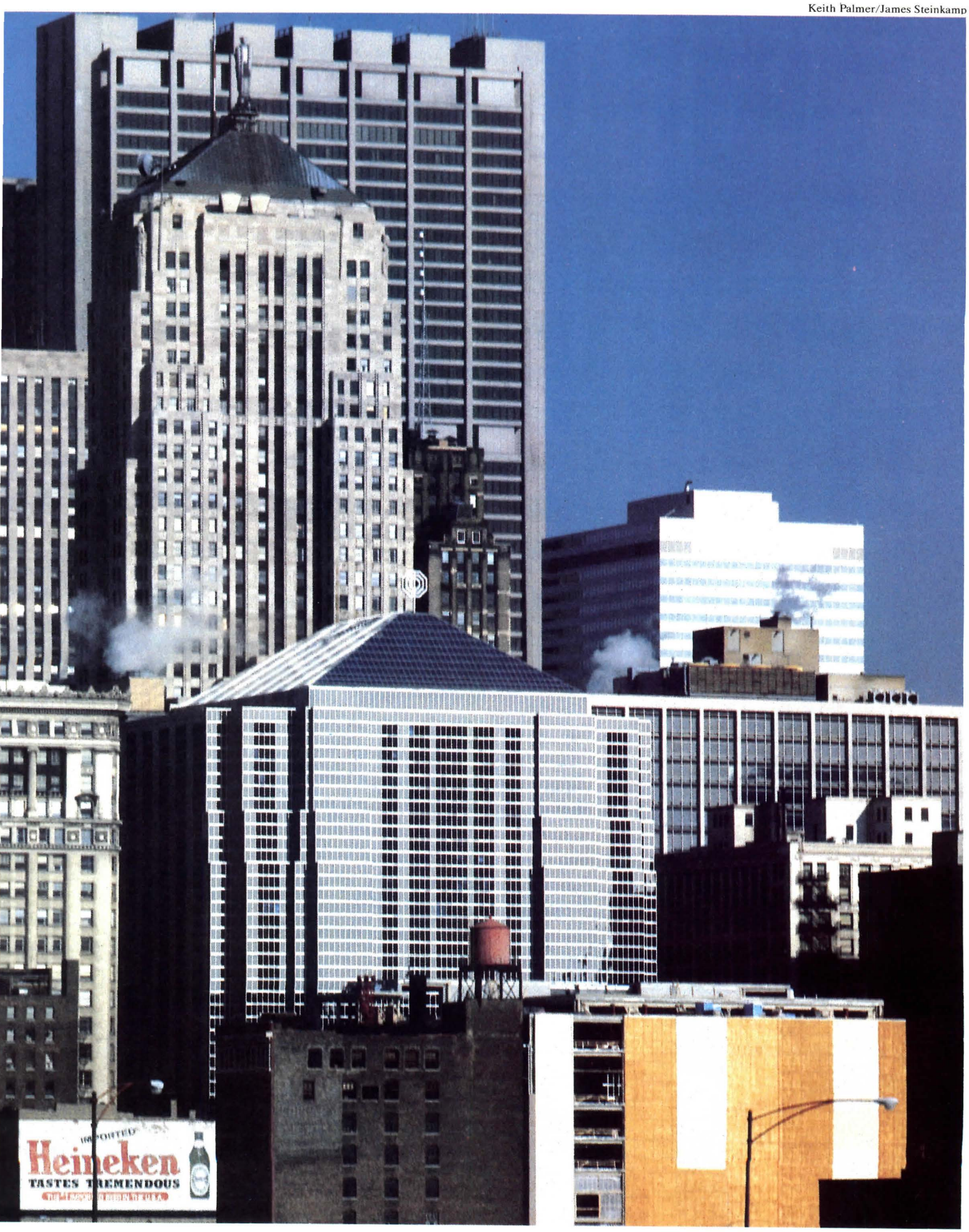
"Synthesis" is the word that Helmut Jahn, AIA, uses more than any other when talking about his new work. And while he is certainly not alone in striving for an architecture that fuses concerns of program and performance with those of appearance and expression, Jahn is rare indeed in his ability to produce in built form an evermore imaginative, yet relentlessly orderly melding of the needs of function and expression, nature and technology, old and new shapes, abstraction and metaphor, purity and pizazz. This is especially evident in his newest contributions to the Chicago skyline: one an inexpensive, yet expansively buoyant speculative office building at One South Wacker Drive (page 160), the other an addition to Holabird & Root's Board of Trade Building of 1930. (The project was a joint venture of Murphy/ Jahn, Shaw & Associates, and Swanke Hayden Connell.) Both transform art deco motifs into glittery grids, still recognizably, if distantly, related to those of Jahn's original mentor, Mies.

Jahn traces his fascination with art deco to the Board of Trade addition, which the client insisted should closely resemble the original landmark, but adds, "The trends were out there, and those '20s buildings have an unusually high level of attention to surface detail, which I think we have lost." For Jahn, no less than for Mies, divinity is in the details. And for Jahn, the synthesizer—the logician with intuition—the arresting motifs of art deco would seem to fit as though custom tailored, combining as they do—and as he did at Xerox Center—lush curves and rich, highly finished materials with tight grid and taut skin. Also consonant with Jahn's longstanding predilections are deco's unselfconsciously urbane forms and massing, friendly yet formal, abstract yet explicit.

Though his work has been strongly influenced by recent trends, it remains rooted in the pragmatic concerns of modernism. He is, therefore, a postmodernist with a difference. Take his attitude toward context, which together with history and decoration form the tripod upon which, according to Robert Stern, AIA, the movement, if it is one, is based. "I think," says Jahn, "context is one of the most misused words today. Buildings can be in contrast, as One South Wacker surely is, and still be responsive." He admits to creating icons, contextual mainly because their "footprints adhere to the city grid, reinforce its urban connections, its spirit and meaning." His new towers, nonetheless, make frequent neighborly gestures to their surroundings. He also differs from many of his peers in his attitude toward decoration. One of his favorite sayings is, "We don't construct decoration; we decorate construction." He, therefore, feels that many of the new postmodern buildings, including Graves' in Portland, are traditionally modern boxes *except* at the facade. Both One South Wacker and the Board of Trade addition derive their striking exteriors largely from programmatic requirements.

From a distance, at least, the new Board of Trade addition appears genteel and aloofly sophisticated, even as it glistens in the sun. It was intended as a recognizable offspring of Holabird & Root's 1930 landmark, and it has been called a clone by at least one critic. But cladding makes the building as much as clothes make the man, and the addition's finely articulated,

With its hipped roof echoing that of the old Board of Trade Building behind it and its metal and glass gridded cladding, the addition is a well-mannered neighbor and respectful offspring.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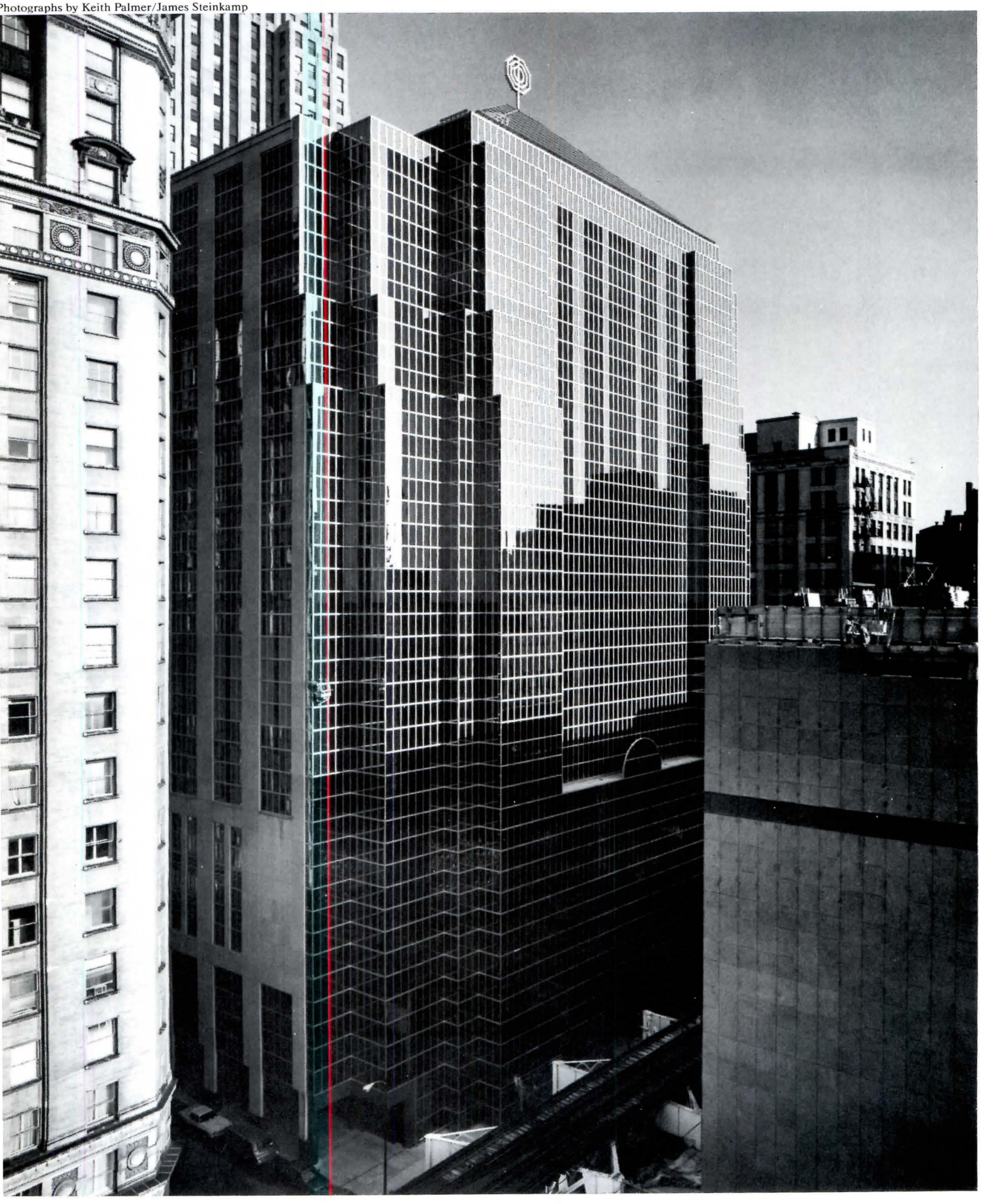
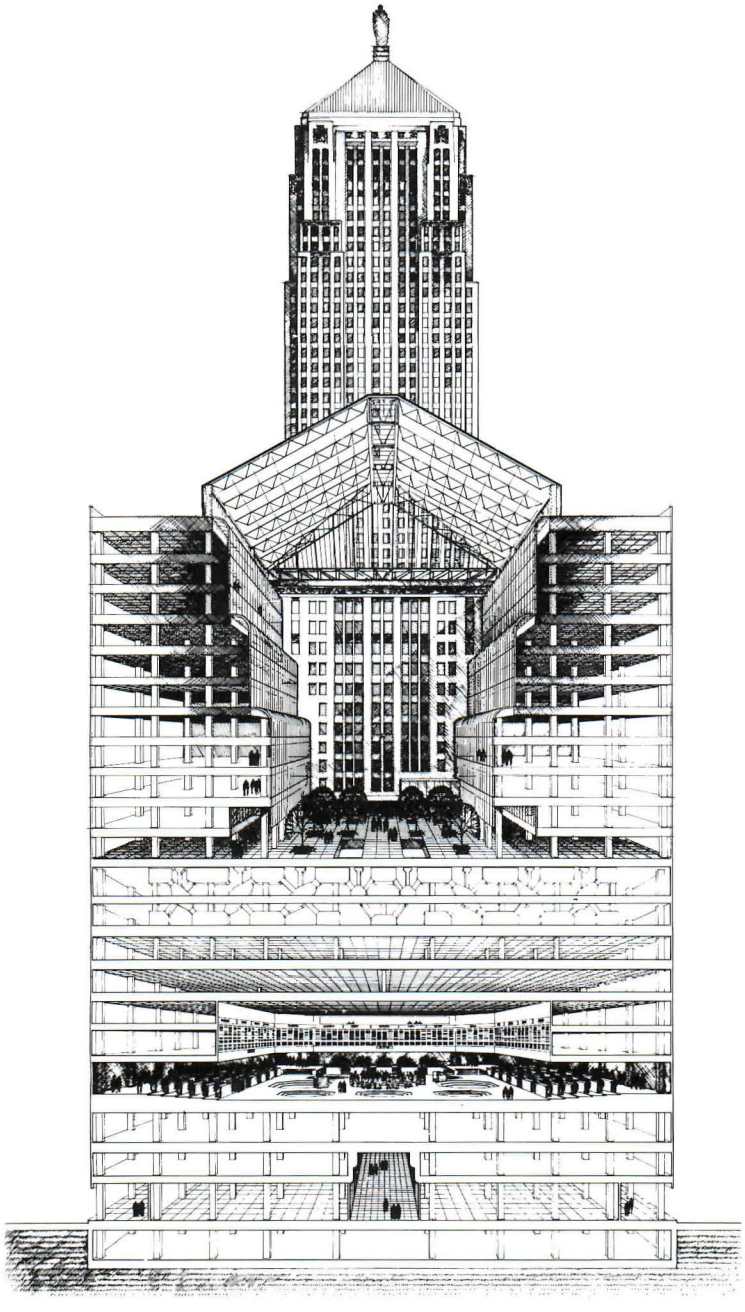
Photographs by Keith Palmer/James Steinkamp





Portly offspring of a craggy parent.

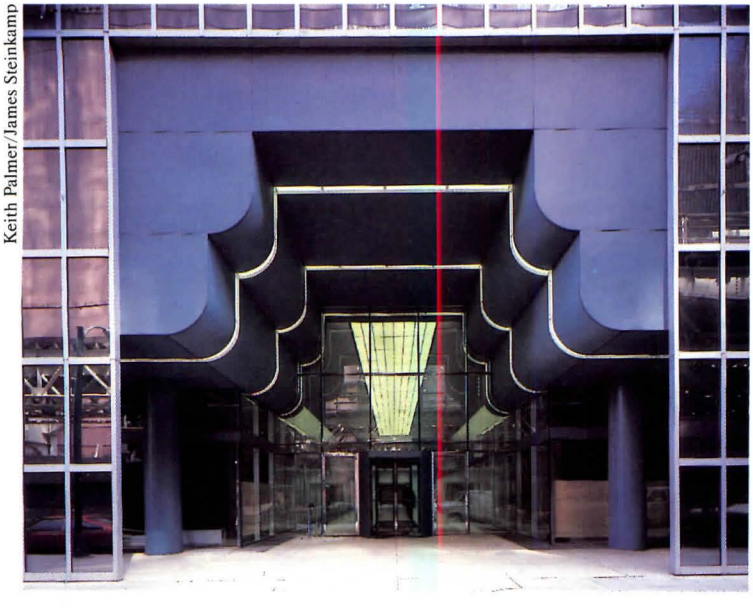
black and silver, shiny topcoat, stretched tight over its front by narrow, mullioned panes (2x6 feet) is in striking contrast to the old Board of Trade's buff-colored, rough-looking, limestone pelt. The addition is, further, a portly, midsized, though sleekly detailed building tailored to fit snugly into the adjacent skyline and streetscape, while the original structure is slender, craggy, and towers over its neighbors. As a radical transformation of its art deco forebear, the addition is far more intriguing than if it had been merely an updated copy.

The addition's exterior form was determined by programmatic requirements, but this is far from apparent, since its uniformly gridded, symmetrical outer garment gives virtually no hint of

The Chicago Commodities Exchange occupies the first 12 stories, which include a huge, multilevel trading floor. The atrium, surrounded by rental offices, rises another 12 stories.

McShane-Fleming Studios

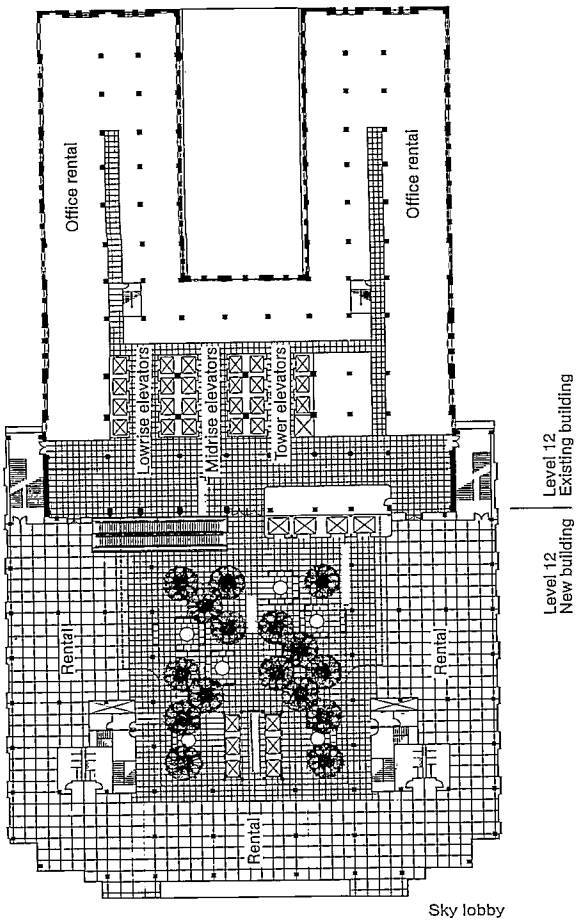
Keith Palmer/James Steinkamp

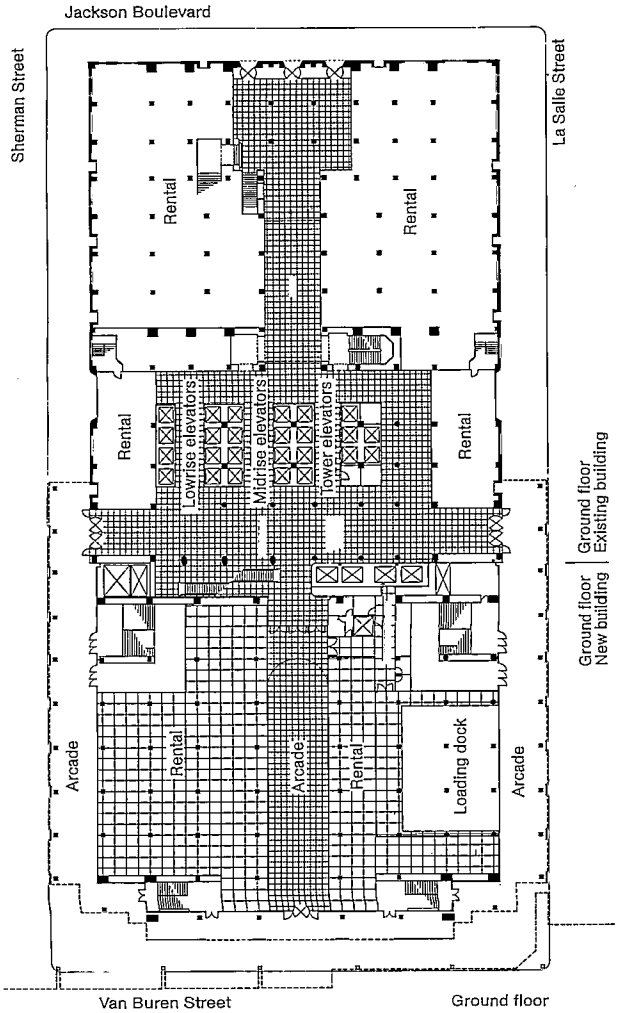


Keith Palmer/James Steinkamp

As seen from under the elevated train running along Van Buren Street, the building is tightly wedged into its narrow site, top. Its main entrance, on Van Buren, above, is a combination of high-tech cladding with art deco, scalloped motifs, which echo those in the old building and are repeated throughout the new—as seen in the principal interior arcade, above right, in twin throughways from side street entrances, right, and in the 12th-floor atrium space, across page.

Keith Palmer/James Steinkamp



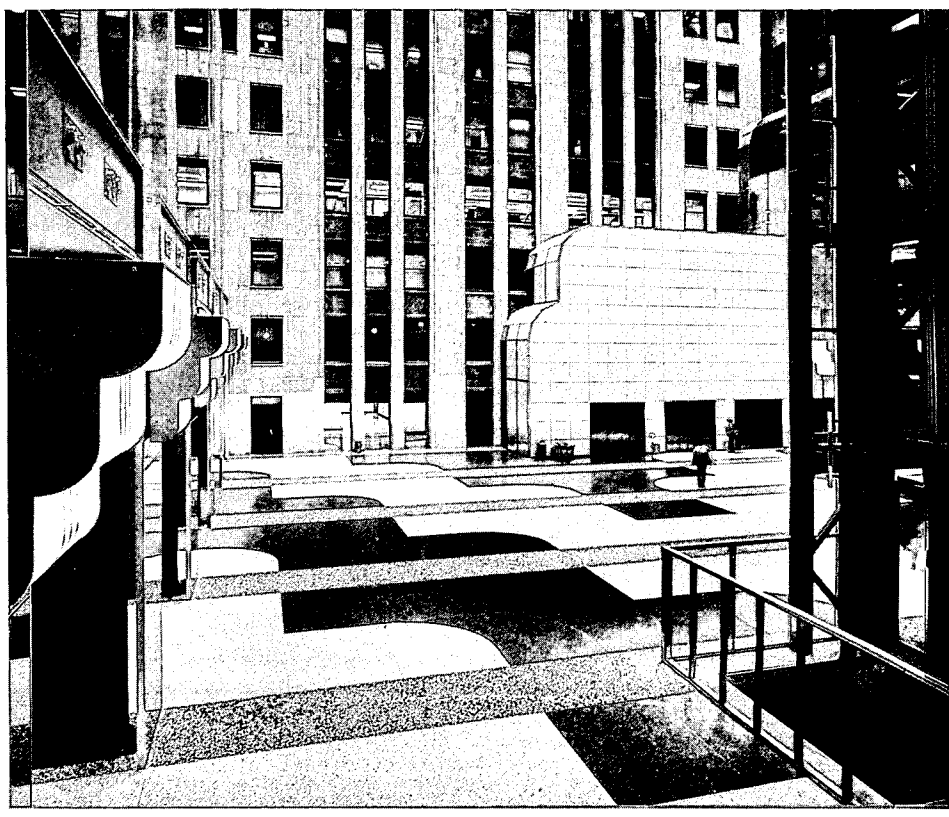


Bringing a many-layered building to the street.

the complex, varied spaces within. The raison d'etre for the new building, of course, was to create a large trading floor and support spaces to service the Chicago Commodities Exchange, the largest in the world. These are housed on the first 12 floors, whose focus is a mammoth (35,000 square foot), column-free, multistory room starting at the fourth level. On the exterior, all this is barely perceptible, and then only on the side elevations where limestone cladding over gridded glazing is fairly solid up to the 12th floor where it changes to vertical paneling. On the building's principal facade, just above the trading floor, is a shallow setback topped by a half circle—an abstracted old-time clock—that also hints at a change in plan.

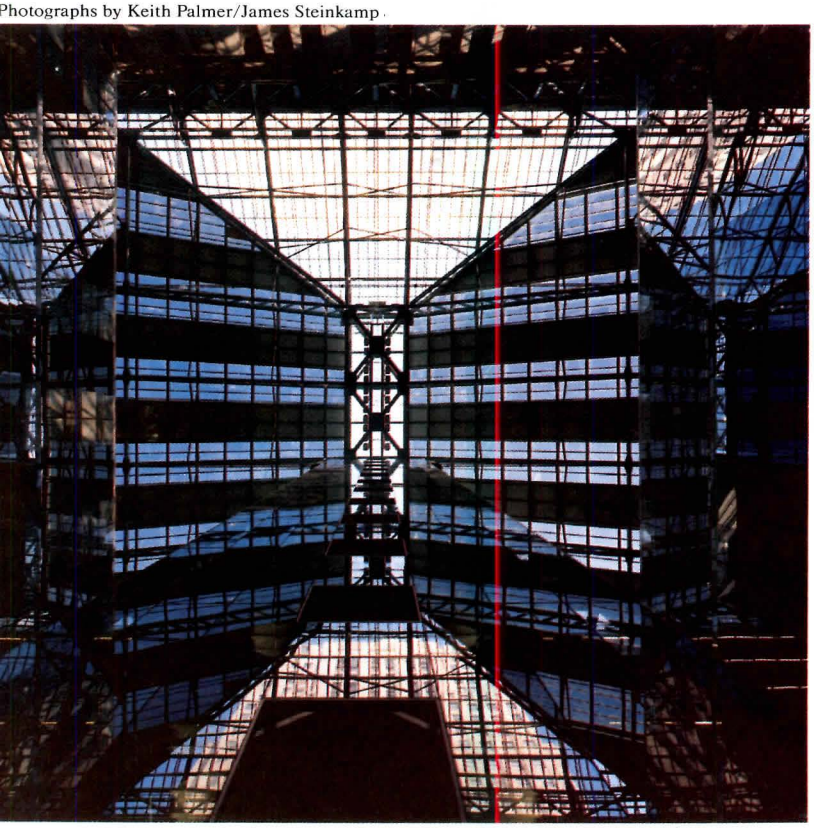
But there is no indication on the building's main elevation of the existence of the enormous trading room per se, or of the two-story trussed space spanning it (which houses centralized mechanical systems), or of the stunning atrium around which the top 12 floors of offices are arranged. The reason is plain. Giving this configuration exterior expression would have had the effect of visually cutting the building into two fat blocks tied together by a thick belt of trusswork at its midsection. Instead, the architects used every possible device to integrate and elongate the elevations—using narrow glass panels, half the conventional size and twice the normal amount of mullioning to obtain a tight, overall patterned skin; vertically striping the facade with continuous black bands; stepping the sides of the building back in narrow, faceted strips; and using a hipped roof to point the structure skyward.

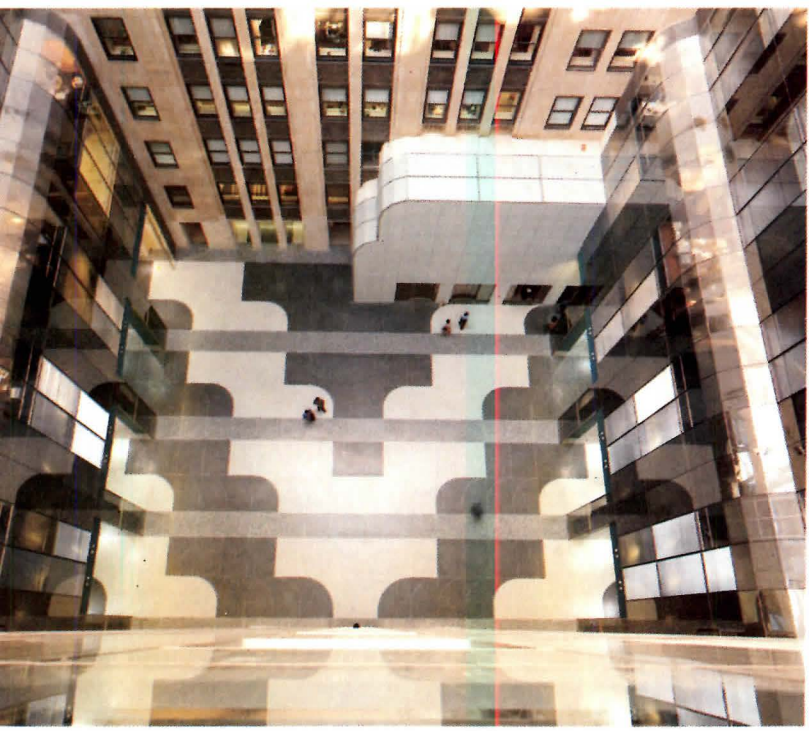
However, the huge trading floor, the largest the site would allow, determined the dimensions and shape of the building and dictated that it be brought right out to the edge of the sidewalk on the east and west, where the architects carved out arcades. These meet the ground in a somewhat makeshift-looking way. As project architect Rainer Schildknecht, AIA, says, "Bringing these many-layered buildings to street level is a problem." The limestone cladding was terminated a few feet from the ground and replaced with steel painted red. Abutting the inner edge are green columns; then comes the walkway with a green plaster roof overhead, then the building's glass and metal



Keith Palmer/James Steinkamp

Photographs by Keith Palmer/James Steinkamp





A view up to the atrium's glassy roof, and down. This exuberant, finely detailed space is marred only by an ungainly, metal paneled structure, in photo above, for elevators from lower stories.

An adept connection between generations.

skin. The scheme contrasts with the overall elegance of the building, as does, to a lesser extent, the main entrance on Van Buren Street, where a somewhat ungainly, blue-green, scalloped opening, with seams etched in fluorescent, is revealed behind a layer of mullioned glazing. But in the context of its street—a narrow throughway covered with elevated train tracks and lined with somewhat shabby-looking shops—it makes a certain amount of good sense. Tightly wedged into its site, the building can, in fact, only be seen from a distance. Up close, the view is of arcades and entrances at eye level, and looking upward of an undifferentiated grid.

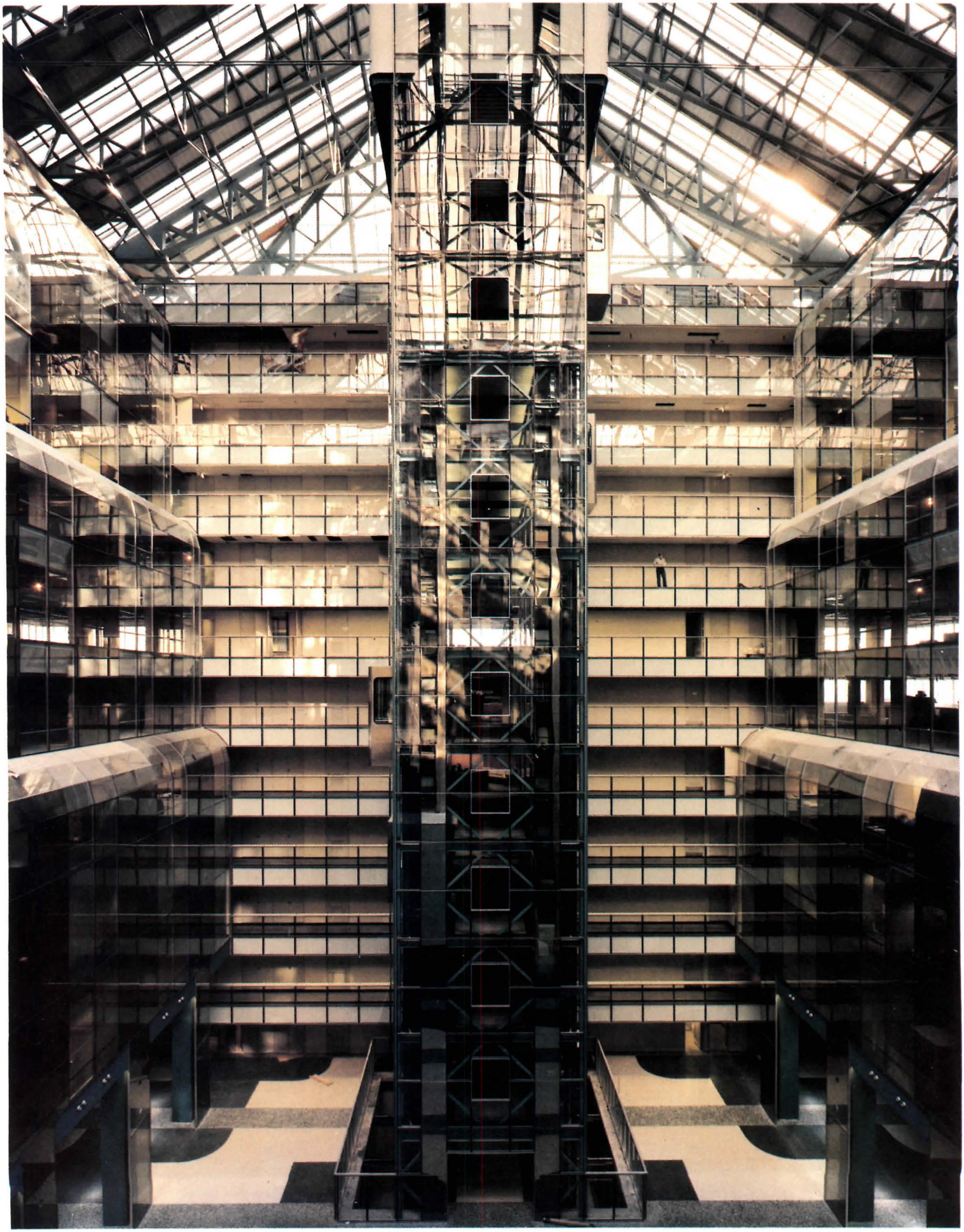
The addition provides a multistoried interior street with commercial and retail spaces. The principal colors here and in the elevator core at its end are buff terrazzo and blue-green, which are used throughout for the building's trim and structure. The prevailing motif is the scallop. The last is a deliberate echo of the lush forms in the lobby of the old Board of Trade. Jahn's original scheme, in fact, was for a building in the form of a huge, rounded echelon. It was rejected by the client, but an only slightly altered version of it will rise as another Jahn office tower to soon replace Chicago's old Northwest Station.

At the addition, he repeated the echelon form with unyielding consistency—the mezzanine balconies in the interior arcade are continuous scalloped forms; the flooring at ground level and in the atrium is inlaid with echelon shapes; the atrium itself cascades downward in scalloped setbacks; and scallops appear in trim and detailing throughout the building. The repetition of this motif was, as Jahn says, "a relentless way of reproducing something that could be understood."

On the ground floor, the effect is mixed. The horizontal scalloped mezzanine balconies are attractive, but almost frail-looking, especially when compared to the robust forms in the old building's lobby, while the numerous, scallop-shaped blue-green metal light fixtures look chunky and over-scaled. And while the shapes of the Board of Trade's lobby are mostly vertical and lofty, those in the addition are low and broad.

The 12-story atrium, by contrast, is a soaring tour de force. On its east and west sides, it rises in bands of flush-glazed reflective and clear glass, which arches back twice before meeting the building's hipped roof. The last is striped in reflective and clear glass except on the north, is flashed with terne-coated stainless steel, and is supported by exposed, blue-green trusswork. The atrium's north wall is formed by the old building's former south elevation, whose strong verticals, continuing above the addition, are visible through the clear glazing of the north-facing portion of the new structure's roof. The result is an adept visual connection between the mother building and its offspring. The south side of the atrium is bounded by open circulation balconies over which is set a freestanding, glazed elevator in an exposed blue-green steel tower.

The overall effect, as Jahn intended, is something of a turn-of-the-century, industrial look. Everything in this atrium space is transparent, glassy, airy, and made all the more so by multiple reflections. Its detailing, moreover, is inventive and elegant yet comfortable-looking, thoughtfully conceived and skillfully executed—characteristics we have come to associate more and more with Helmut Jahn's work. □



Jahn's Chicago. 2. One S. Wacker

By A.O.D.

At One South Wacker, the program called for 1.28 million gross square feet of office space, with floor areas from 25,000 to 38,000 square feet. The building couldn't be more than 40 stories tall because of soil conditions, had to be concrete, and had to be on a five-foot module with 30x30-foot bays. In different hands, it might have become a bulky blimp, though doubtless these days not without decoration and flourishes. Instead, Jahn, as though pulling it out of a magician's hat, came up with a graceful, shimmering, fairy tale-like tower, its painterly surfaces in silver, black, and a rosy-pink, modeled with a sure touch.

He broke up the building's mass by stepping it back three times, at heights that meet cornice and roof lines of adjacent buildings. It jogs back twice to accommodate three different floor sizes (38,000, 32,000, and 26,000 square feet), and then again to mark off the building's top, which contains a mechanical penthouse. Jahn shaped this crown by pulling back its skin at two levels to make notches revealing structural columns.

The principal facade on South Wacker is articulated by a plane that folds back at a 45-degree angle. A module placed at the same angle is also used to turn the building's numerous corners. This again softens the silhouette and eliminates the usual awkwardness of forming a corner with two half-modules. Further breaking up the building's mass are elongated, black, reflective glass panels (some with tops, all looking like little painted towers against a black ground), plus the pinkish-rose glazing above and below the setbacks where small, three-story atrium spaces have been carved out. These create U-shaped floor plans that give users increased perimeter daylight without increasing the exterior wall area, and, of course, determined the canting of the setbacks, without which the building's principal elevation on South Wacker would look quite different.

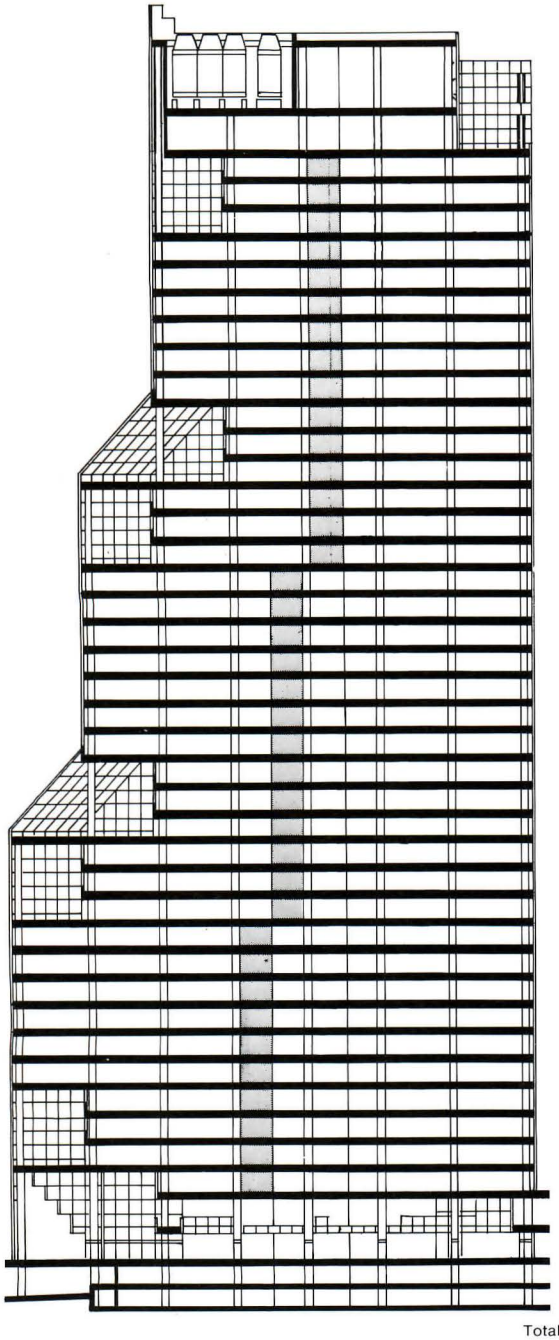
Jahn says that many of the firm's buildings are grafted to fit their sites, giving the example of Xerox Center with its corner-turning curve. At One South Wacker, he brought all of the elevations, except the main one, straight down to the ground, since each abuts either another building (as on the east), an alley (on the south), or a side street (north), and this gave him the greatest possible amount of floor space. He thus covered the site except on South Wacker, where he set the structure back 20 feet from the sidewalk to create a forecourt and recessed entrance. Here, a broad 45-degree plane deflects the building into the corner, because "we wanted to underline the corner location." This relationship is strengthened by the vertical banding, which relates to the structure, but does not, as in Jahn's earlier buildings, *express* structure. "It's mainly that structure still serves as the underlying, rational principle of the building, and then gives clues and indications of its decoration," he says.

The recessed entrance on South Wacker is marked by an arch-like portal, notched out of the skin and split down its middle by a strip of two, 45-degree angled modules that meet the sidewalk. On the side streets, the building meets the ground in layers. Its inner surface consists of a glass and aluminum skin; then comes a row of black marble columns banded in aluminum; and projecting out and over these is the building's exterior glaz-

In sharp contrast to its neighbors, One South Wacker's bulk is reduced by a facade with strong vertical definition—slim silver and black panels, pink accents, and a crenelated crown.


POLK
BROS

Photographs by James Steinkamp



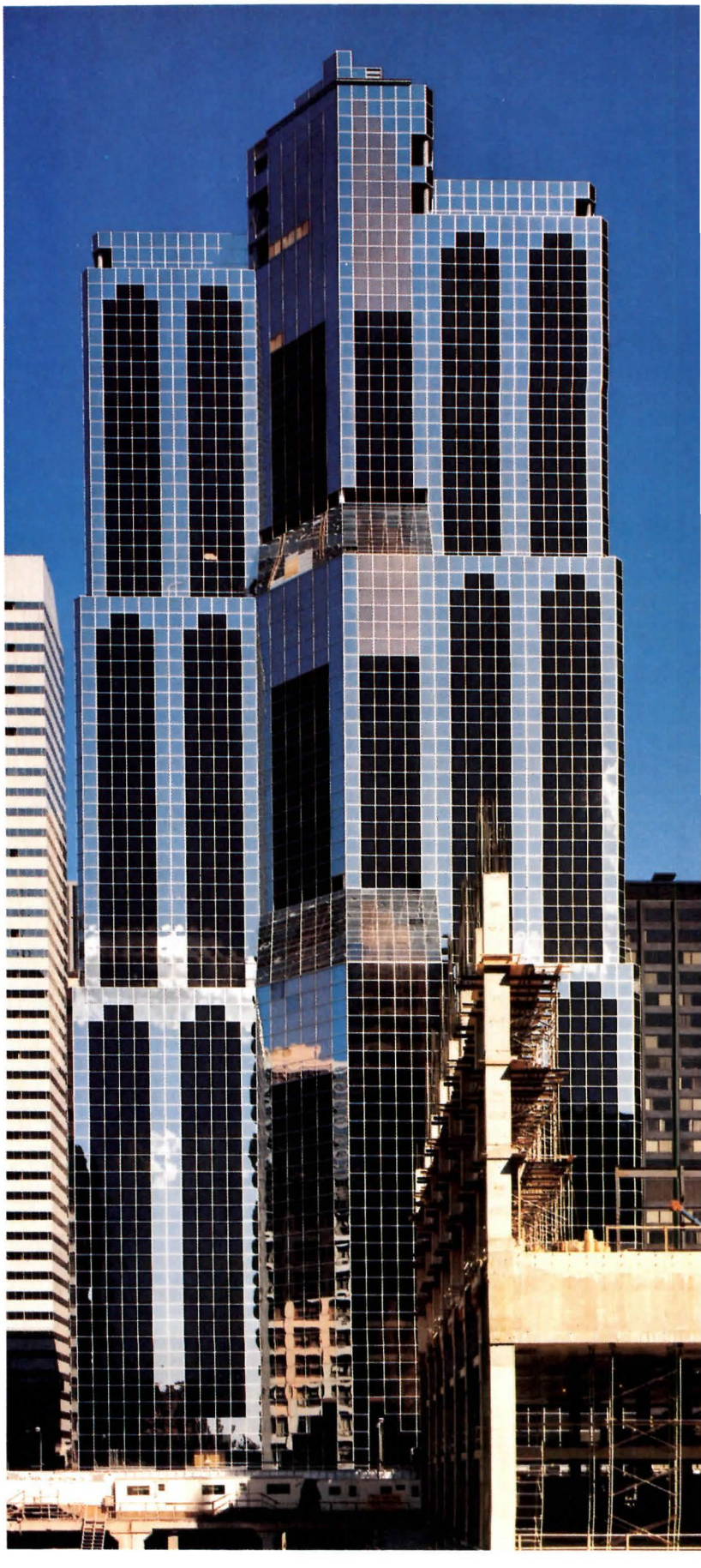
	Rentable Area
	24,561
	24,561
	25,972
	25,972
	25,972
	25,972
	26,148
	26,148
	26,148
	24,912
	24,912
	28,203
	30,885
	29,817
	31,435
	31,729
	31,729
	31,729
	31,523
	31,523
	31,523
	31,523
	30,053
	30,053
	33,281
	35,690
	34,815
	36,152
	23,020
	25,789
	36,983
	36,983
	36,983
	36,983
	35,527
	35,527
	27,236
	17,320
	29,249
	23,640
Total	1,188,181

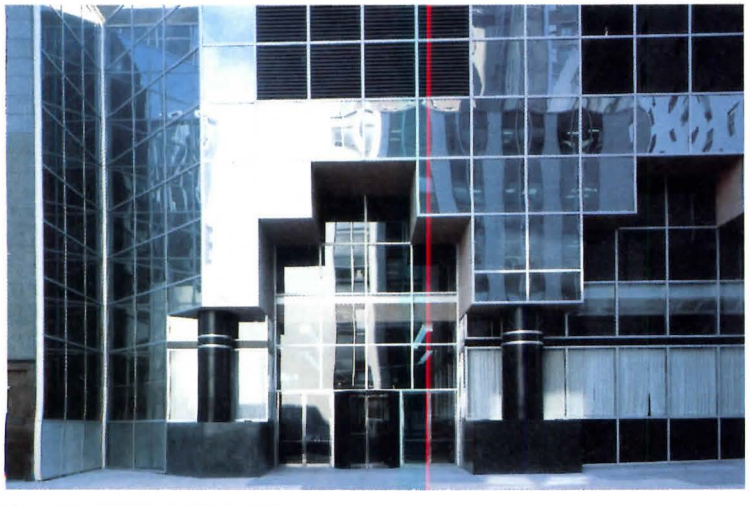
Shaped by streets as well as setbacks.

ing, which is terminated in a series of stepped arches, whose recesses are painted a rose-pink to create a visual transition to the pink ceilings inside. The effect of all this is striking, if somewhat mannered, even a little awkward, but it fits with the prevailing scale, color, and shapes of the adjacent streetscape.

If the exterior of One South Wacker is shaped, to a significant degree, by the configuration of the streets bounding it, its plan at ground level was, as Jahn says, "very much affected by our desire to have a street, with commercial and retail spaces,

At ground level is a multistoried commercial gallery with atrium. Two angled setbacks, with atrium spaces above and below, create three different ranges of floor sizes.





Sleek black columns marching along an arcade.

go through the building." Hence the multilevel interior arcade, which splits the elevator core, and proceeds from South Wacker on through the building's far side on Madison, a side street. In fact, Jahn managed to persuade the city that this thoroughfare was a public amenity, and to therefore waive a municipal requirement for a 20-foot setback at ground level for public use.

The street-like feeling of One South Wacker's interior arcade is underscored by a procession of black marble columns marching down along a dark line on the buff-colored terrazzo floor, by continuous strips of aluminum on highly polished marble walls, and by straight paths of overhead channel lighting set in a pink ceiling. Detailing and trim throughout is lush, pristine, and logical, right down to the elevator cabs with their black, subtly striped, plastic laminate and 45-degree-angled corners.

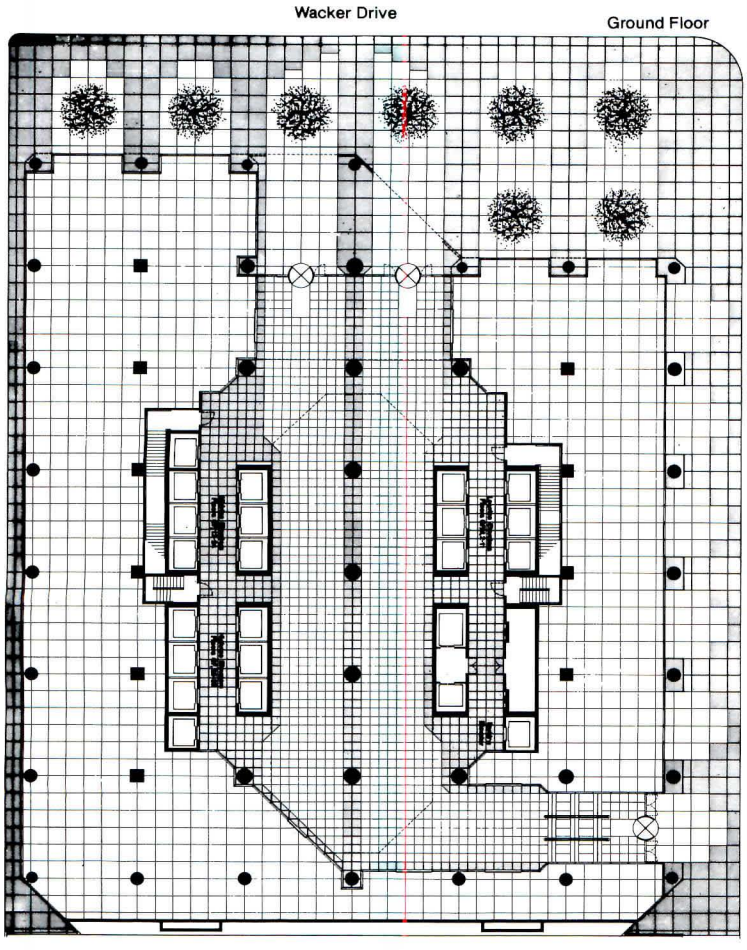
At upper levels, the spaces between the elevator cores, which are lined with shear walls for wind resistance, are filled with

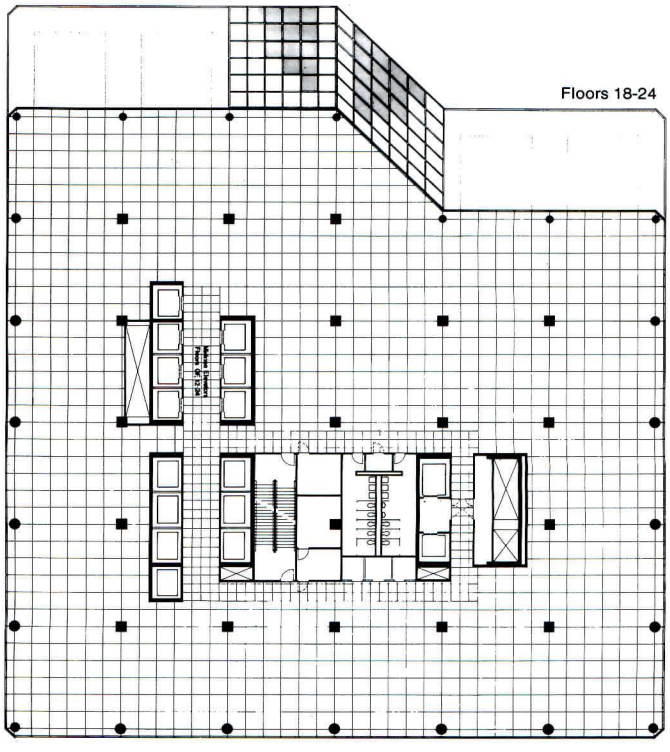
Photographs by Keith Palmer/James Steinkamp

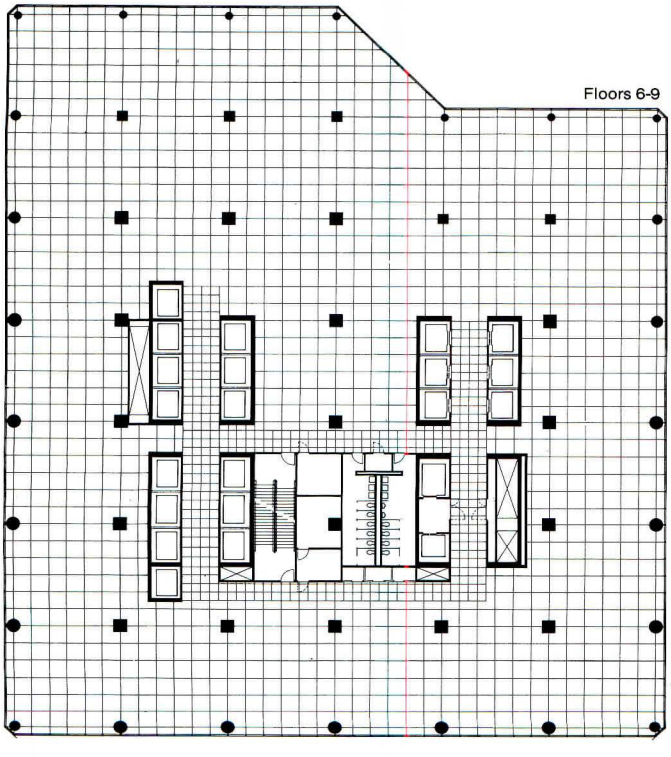
such utilitarian functions as toilets, stairs, and mechanical rooms. This being a spec building, the office floors are, of course, beyond the control of the architect. Even the use and decoration of the atriums, with their angled glass walls, will be up to the individual tenant, though it will be hard to compromise these delightful, light, three-story spaces.

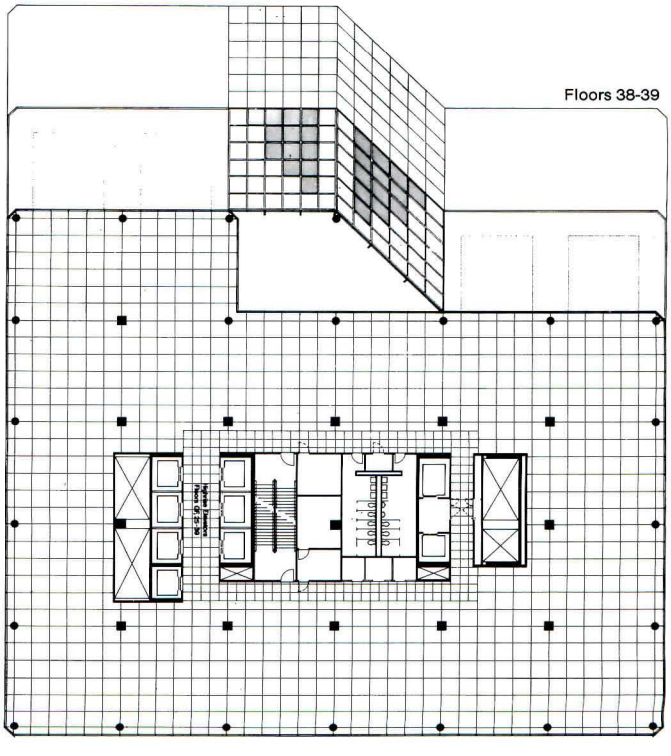
The atriums are lit up at night, as are a light box and corner notches at the building's top, to create a glowing apparition on the Chicago skyline. In combining his longstanding interest in glassy building skins with his more recent enthusiasm for the fertile skyscraper heritage of the 1920s, Helmut Jahn has here produced his most exuberant building yet.

As seen on side elevation (across page), the building meets the ground in layers—a clear glass and metal skin, then a row of columns, finally exterior cladding with notched arches. Interior arcades (main entrance, above; side entrance, right) are lined with black, banded columns and streaks of channel lighting.









At ground level, the building is bisected by an L-shaped, interior arcade flanked by elevators, one each for levels 1-11, 12-24, and 25-39. Floors 6-9 each have 37,000 square feet of rentable space; 10 and 11 have the same plan as 6-9, but a portion is devoted to mechanical services. At 12-17 the building takes its first step back; 18-24 each have 31,729 square feet; then comes another setback, then six floors each with 26,000 square feet; at 38 and 39 is a final atrium space without setback. ❑


MIDLAND HOTEL

Stan Kulesa

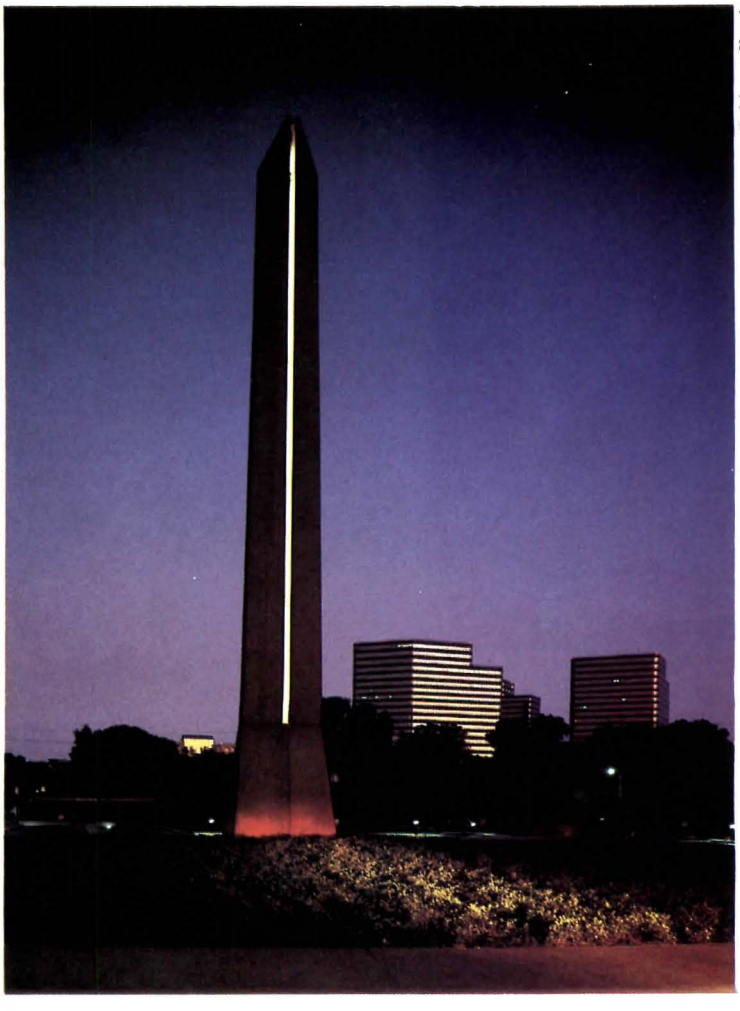
Speaking Softly in Strong Colors

Four Leaf condominium towers, Houston. Architect: Ceasar Pelli. By A.O.D.

With their polychromed, slim silhouettes capped by truncated, pyramidal roofs, Cesar Pelli's Four Leaf condominium towers assert a strong new presence in Houston's Galleria area. "Buildings like these," says Pelli, "become, want it or not, pylons, obelisks, markers. They either become dumb pylons or good ones." Though far from dumb, these speak in less stentorian tones than their more audacious neighbors, such as Philip Johnson's sveltly striped and curvaceous, black and silver Post Oak towers. This was precisely Pelli's intention.

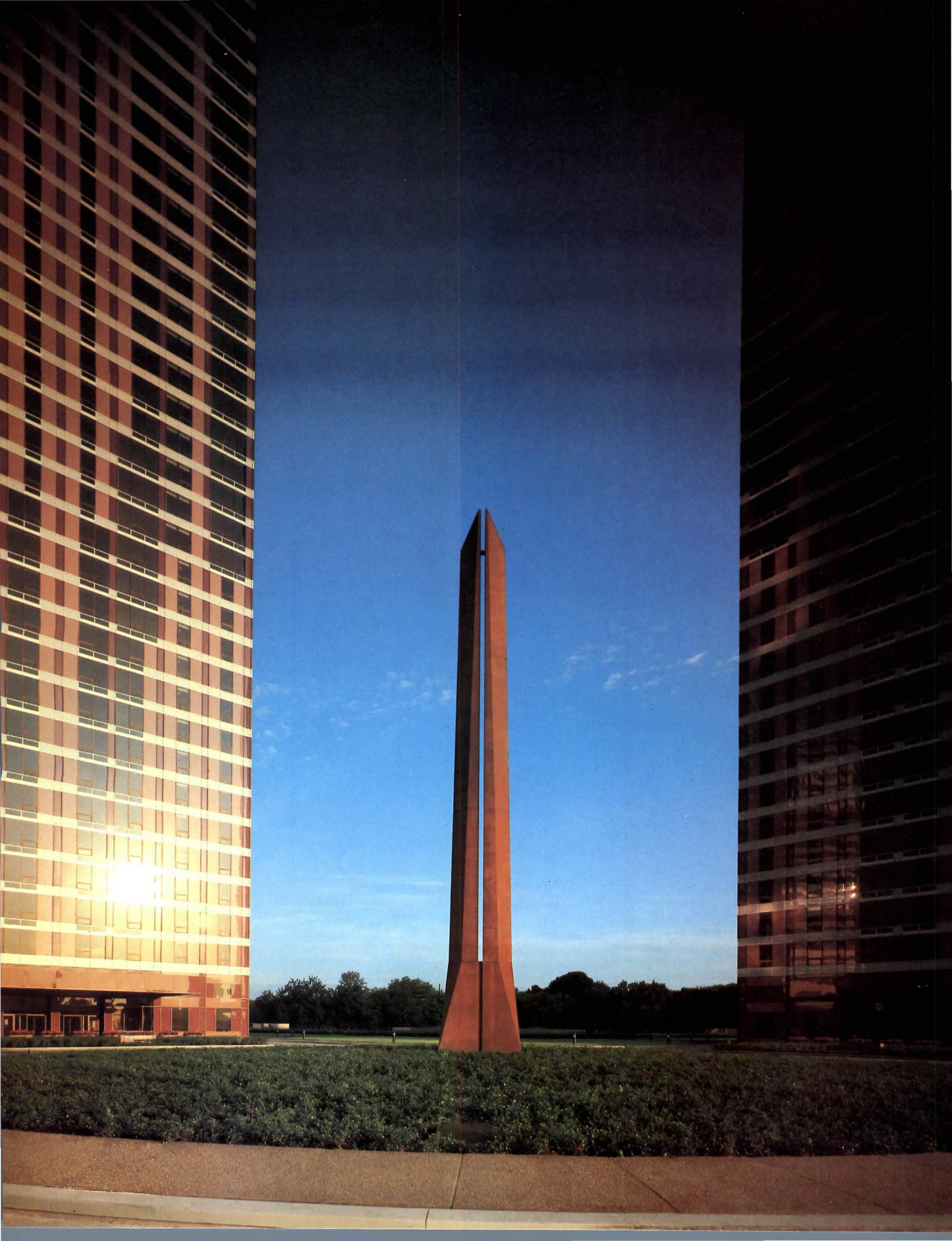
He says, "We wanted the two buildings to fit into that part of Houston, where all the buildings are exuberant, a bit brash, are technologically oriented, and have a great sense of optimism. We wanted at the same time to do something more subtle. One of the subtler things is the use of color. We purposely used strong color, but in the most delicate, quiet, sophisticated way we could."

Before Pelli appeared on the scene, developer/architect Lorenzo Borlenghi of Milan had created plans for two highrises square in plan with a regular structural grid, a center core, and a typical arrangement of four apartments per floor, plus pent-



Balthazar Korab

Above, Pelli's towers are prominent in the Galleria area. Right and across page, a sculpture by Beverly Pepper, positioned in the park-like setting between the towers.



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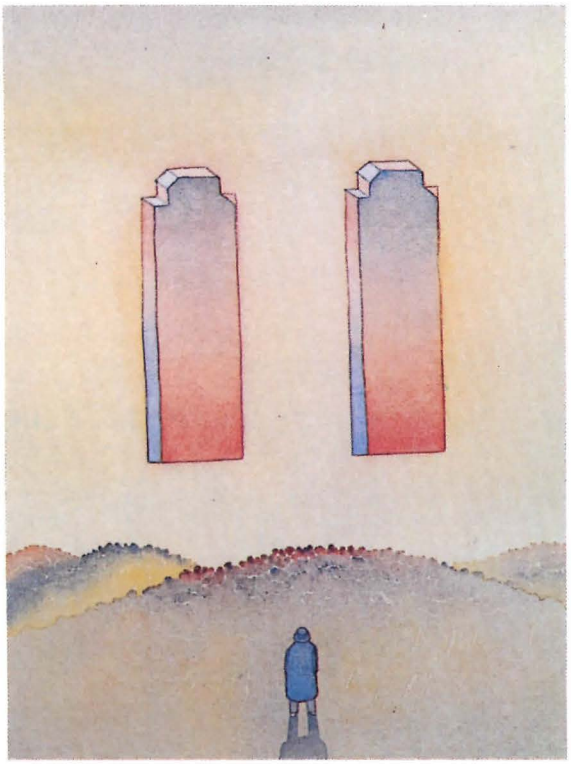
Drawing by Folon



As interpreted by Jean-Michel Folon, left, Pelli views these buildings 'as though carved from a colored crystal, but to be read as having a residential feel.'

Balthazar Ko

'Large, iconic pylons' above the greenery.

houses. The configuration satisfied him well enough, but needing help with its image, he called in Pelli to give the buildings form and character. Borlenghi, however, retained overall control, was responsible for the buildings' layout, and hired Melton Henry of Houston as associate architect for construction.

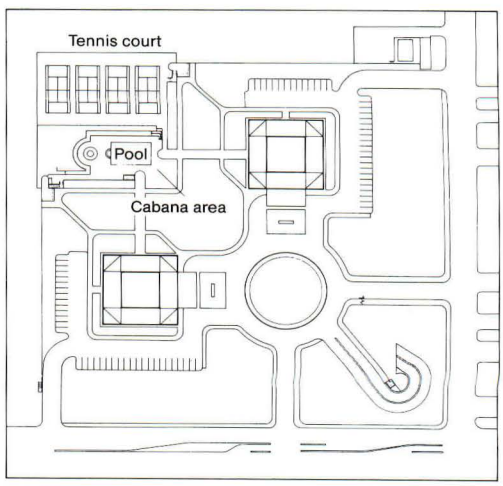
Pelli derived the buildings' mostly warm earth colors—browns, a salmon-pink, terra cotta, and white—from the tones of the surrounding residential area. "So when you see the buildings through the trees," he says, "they are really large, iconic pylons, but they also recapture the colors of the houses in the area." The skin is color coded to indicate what occurs within. About one-third of the way up each shaft, the plan changes from one with eight units per floor to one with four, with an apartment at each corner (hence the name, Four Leaf). The skin pattern shifts accordingly, changing gradually over six floors to make a smooth transition between the two configurations. Above the 40th floor are two-story, octagonal penthouse units capped by raked roofs.

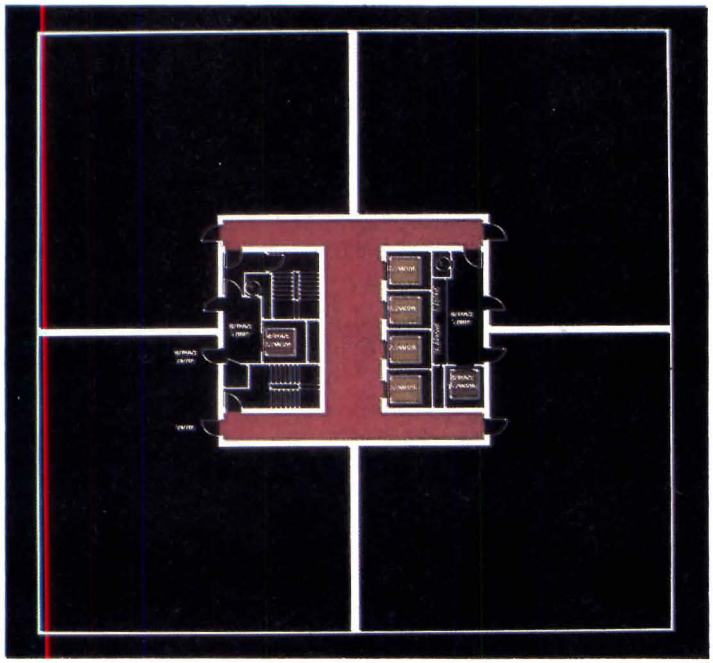
Pelli clad the buildings' vertical structure with a dark red-brown, the space between floors with a white glass band, vision panels and operable windows with bronze-tinted glass, and he wrapped the balance of living spaces in an opaque rose color. He achieved a painterly effect by creating large planes of color. The mullions change color as they pass from one color field to the next, so that their lines form boundaries between surfaces of color rather than an overall grid.

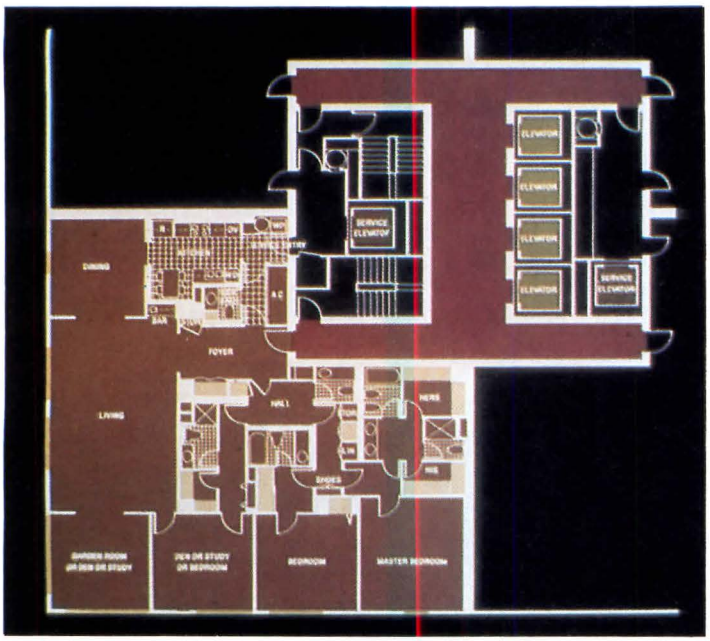
"The dark, red tops of the buildings are extraordinarily important," says Pelli. On the one hand, they underscore his idea of the buildings as obelisks, or pylons; on the other, they are a symbol for house. Under construction on a nearby site are office towers by Pelli for the same client, with flat roofs, which to Pelli say "office."

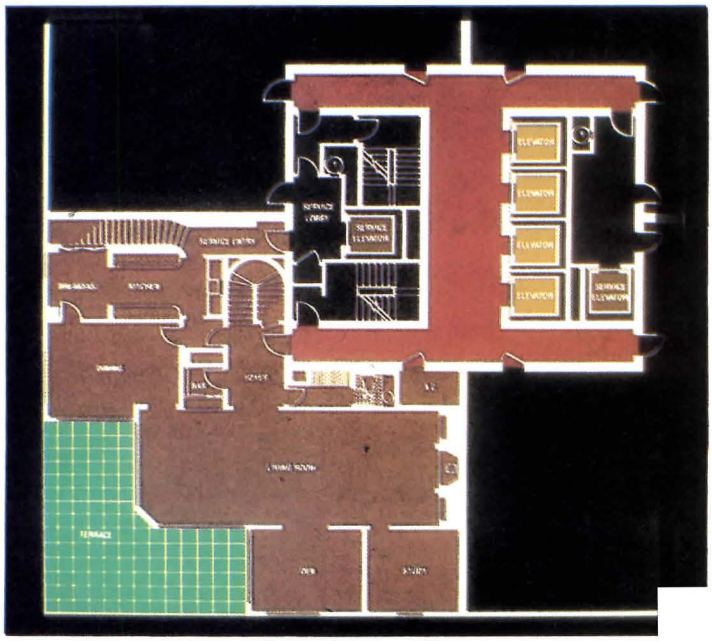
Apart from their skin and massing, the condominium towers are quite ordinary, with a cushy-condo, decorator-created lobby, but thoughtfully worked-out floor plans. Sited on a 9.5 acre, park-like site, they "don't stick to the rest of the city at ground level, but neither do any of Houston's other buildings," as Pelli says.

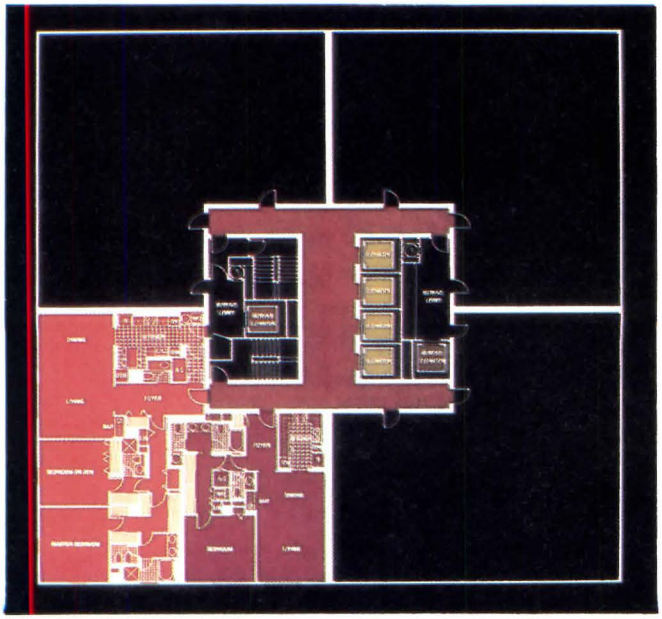
What he attempted here, with evident success, is what he calls "an exploration of how you take these thin layer envelopes and make them rich, and make them able to carry many layers of meaning and complexity."











The name Four Leaf comes from the building plan, arranged around the corners of a square central core, top. Two- and three-bedroom units are from floors 3 through 15, with eight apartments per floor. Levels 16 through 38 each have four three-bedroom units. Duplex penthouses top the building at floors 39 and 40. Above, 39th floor plan with corner terrace adjoining living areas. On the towers' exterior, patterning of vision glass and three colors of ceramic frit glass supported by a fluoropolymer painted aluminum frame shifts with changes in floor plans. □

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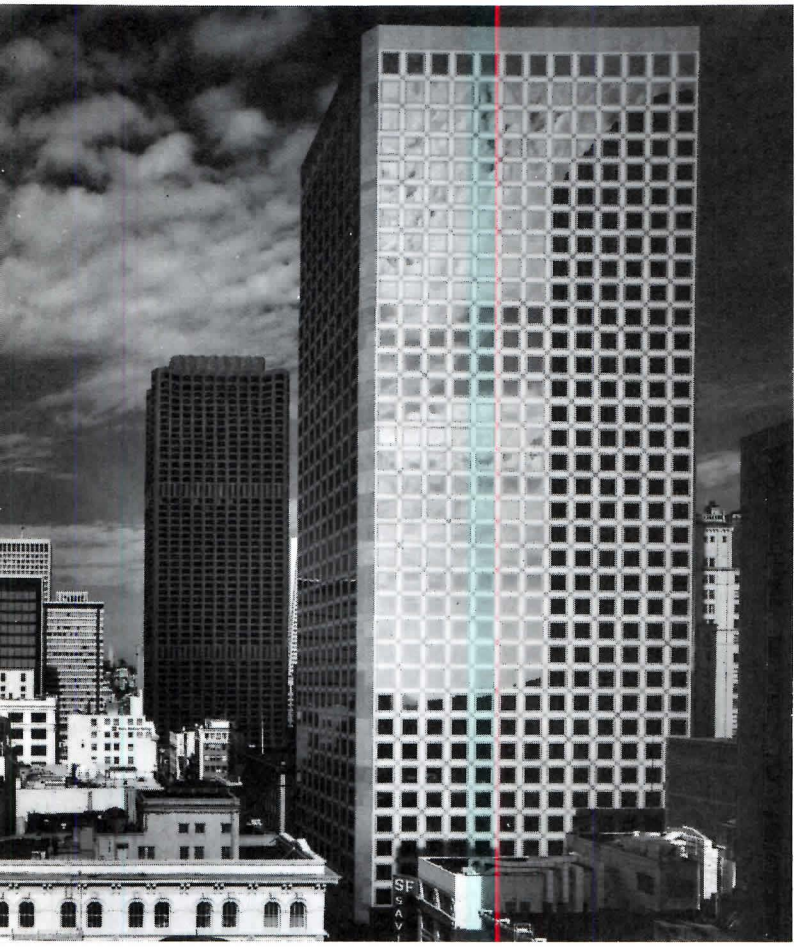


Glazed Gallery Behind an Elegant Tower

Crocker Center, San Francisco.
Architect: SOM, San Francisco.
By Donald Canty

The two towers at left have two significant things in common: They are both office buildings for two of San Francisco's banking behemoths, Bank of America, left in photo, and Crocker National Bank, right in photo. They also share architectural parentage in the person of Edward Charles Bassett, FAIA, of SOM's San Francisco office. Bassett was prominent in the SOM team that was involved in the design of Bank of America in the 1960s, along with Pietro Belluschi, FAIA, and Wurster, Bernardi & Emmons. Bassett was a principal designer of Crocker Center, along with SOM's Richard Foster and Danica Truchlikova (and Gensler & Associates for the tower interiors).

Here the commonalities end and the differences begin. The 52-story Bank of America tower has folded, faceted walls that change with changes in light and terminate irregularly, giving it an almost crenelated top. The 38-story Crocker tower has a very regular graph-paper facade of seemingly square windows (they are actually six inches taller than they are wide) and simply ends, sliced off against the sky in the manner of the typical modernist office building. In these respects it is a step backward from Bank of America in terms of visual interest.

It wins hands down in terms of skin, however. Bank of America's is a very dark, brooding brown granite with tinted glazing. Crocker's is in varied hues of reddish brown granite with reflective glazing. It looks pieced together but is actually comprised of continuous slabs patterned by polishing parts of them and flame finishing other parts so that they retained a matte surface. The result must be one of the most elegant building skins anywhere, well suited in color and texture to its older neighbors.

The two towers also differ sharply in the ways they meet the streets and the kinds of public space they provide the city. Bank of America is simply rooted in its site without greeting or gesture. The space that it created is a 120x300-foot plaza at the entrance, bearing a Bassett-designed banking hall but otherwise unadorned except for a few small planting tubs, a kiosk, and a big black granite sculpture by Masayuki Nagare. It is not a very inviting space, particularly since, being on the north side, it is shaded by the tower itself very nearly all of the time.

The Crocker tower meets the street in more lively (perhaps too lively) fashion. Shops line both of its street-facing sides, with alternating arched and rectangular openings to the street, above which are awnings and stainless steel, semicircular flower boxes. These are busy little touches and they seem in danger of being crushed by the weight of the tall tower above.

The public space that Crocker Center provides is something else, and it is the glory of the complex as so far built. It is a glass-vaulted, block-wide shopping gallery running laterally behind the tower. The Galleria, as it is called, already has become a major and well utilized civic asset.

Joshua Freiwald

Above, the south facade of the Crocker tower with the Bank of America to its left. Right, Crocker's street-meeting 'fringe' and carved corner. Across page, Crocker in the context of San Francisco's rapidly growing financial district.

Across page, the Galleria's Sutter Street entrance, flanked by a small public park with the tower beyond. Left, the Hallidie Building from the Galleria. Below, the Post Street entrance.

Soaring arches frame views inward and outward.

The Galleria is, to begin with, an imposing and endearing presence on Post and Sutter, the streets from which it opens. Entry from both is through broad-shouldered portals of the same two-tone granite as used on the tower, topped by airy glazed arches that rise a full 75 feet above the sidewalks. Held in the center of each portal by metal strands, like spiders in webs, are two oversized, antique-looking clocks that chime cheerfully in unison.

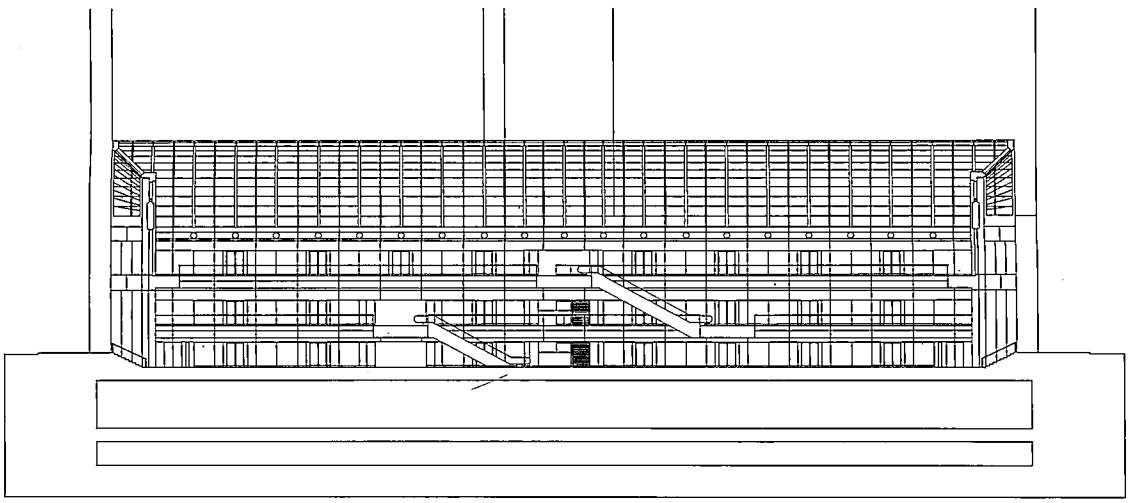
The 275-foot stretch between the portals, which used to be a dark back alley, is now a three-level pedestrian way, roofed by a soaring glass and metal vault, containing 62 shops and two restaurants (nearly all of the space is leased but not all is yet occupied). Along the way are potted palms and vaguely Victorian park benches.

Entry is down a few steps from the sidewalks, making the volume of the Galleria seem all the more grand. In the opposite direction, the portals offer impressive outward views. On one side are glimpses of the dark Bank of America facade, on the other is a wonderfully framed view of Willis Polk's 1917 Hallidie Building—bearing the nation's first, and still one of its most delightful, glass and metal curtain walls. It is a wonderful compliment for the new building to pay the old.

The Galleria was meant to, and does, echo the arcades of antiquity in European cities, and also the glazed confections of the premodern era. It is at least a distant cousin of the Hallidie Building and also the great *fin de siècle* Golden Gate Park conservatory.

The Galleria is the newest of San Francisco's impressive recent crop of pedestrian amenities, others including the five-block podium of Embarcadero Center and the varied open space of Levi's Plaza.

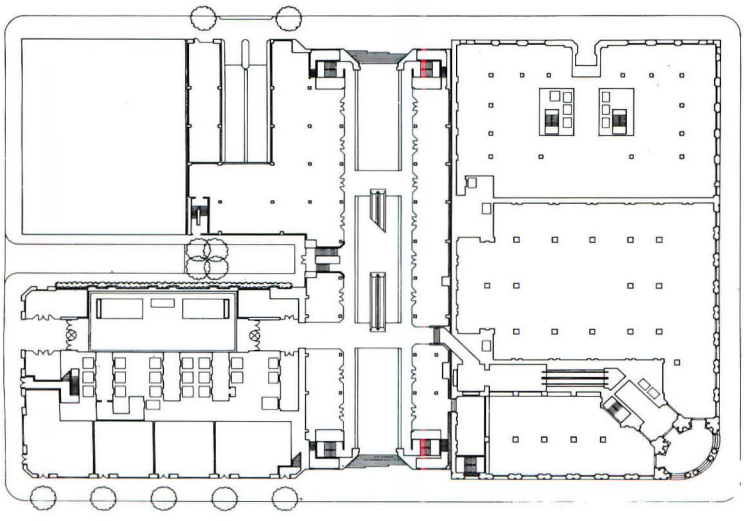
Photographs © Peter Aaron/ESTO



Across page, the Galleria's soaring space from the second level, with glimpses of the dark brown Bank of America facade. Left and drawing, the Galleria's three levels of varied shops and restaurants.

Photographs © Peter Aaron/ESTO

Right, the impact of the bridges and escalators from ground level. Below, the ground level plan showing passages from Galleria to tower. Across page, aligned along Post are the tower, the Galleria and the original Crocker Bank building, which will have its top lopped off (see following pages).



Understated details and segmented space.

However, the Galleria is not really a pedestrian street, as it has been called. It doesn't lead anywhere in particular except from one side street to another. It is more a pedestrian room, a great glazed hall.

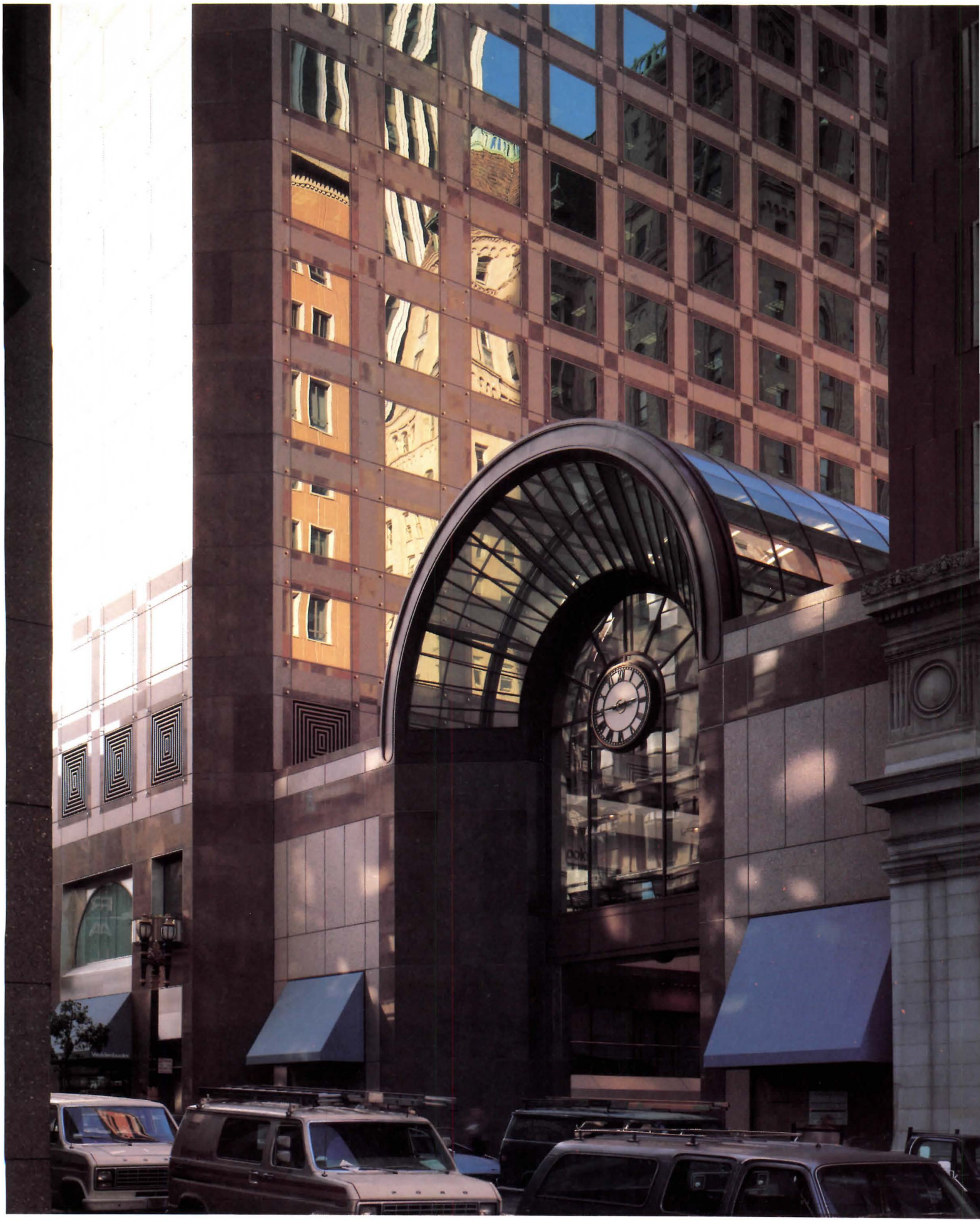
Nor does it, as some have claimed, provide a link between the financial district and the bustling hotel and shopping precinct near Union Square. In fact it faces in quite the opposite direction. True, one could travel between these two parts of the city by going into the tower lobby, through it to the gallery, sideways along the Galleria to either Post or Sutter, and then onward, but it would be a circuitous route.

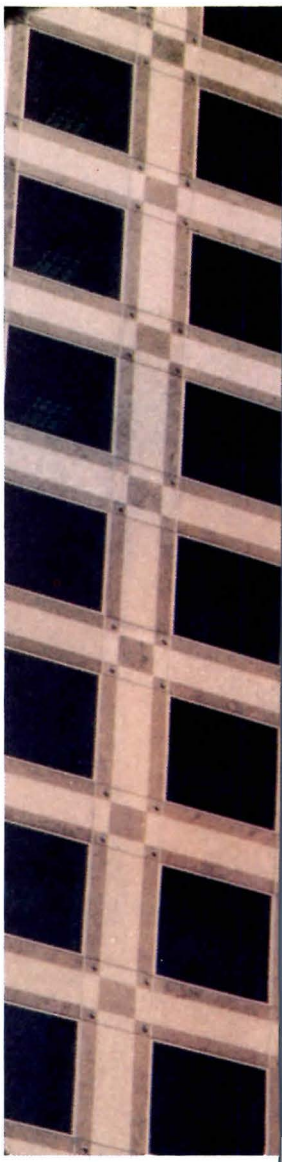
No, for most the Galleria is a destination rather than a way point. And an attractive destination it is, with a wide range of generally high quality facilities and activities.

It is not quite the festive place it might be, however. Aside from the benches, palms, and clocks, the architects have assiduously avoided historicist decor or appurtenances. No fake gaslight here. The detailing is unswervingly modern, which is to say plain.

This has saved the Galleria from cuteness. But it also has kept it from taking on the kind of timeless quality of Baltimore's Harborplace.

There is exhilaration in the Galleria's volume, but it too is muted somewhat by the amplitude of escalators and the bridges that crisscross—and segment—the space and impede the views upward and outward.





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In rendering above and elevation below, the tower, Galleria, and truncated bank building with roof garden. In roof plan across page, the tower is at bottom right, the roof garden at top right, with the gallery running laterally in between. In photo across page, the tower peers benignly down at an elder neighbor.

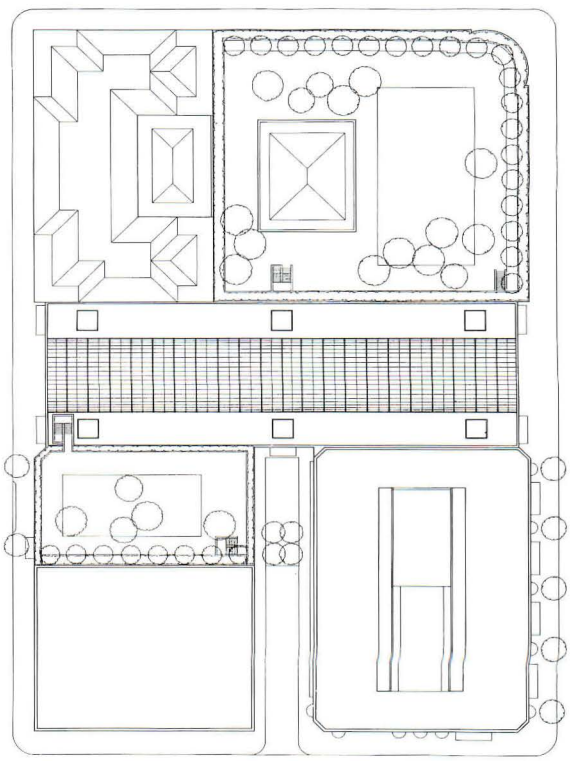
A roof garden will complete the complex.

Despite the various kinds of success enjoyed by the Galleria the most interesting part of Crocker Center may be yet to come. It involves a most unusual way of combining new and old, one that may well be applicable in other places.

The tower and Galleria are two of four buildings owned by Crocker on the block bounded by Post, Sutter, Montgomery and Kearny. The other two are a 1927 French Renaissance office building at the corner of Sutter and Montgomery and the bank's original 1908 headquarters, designed by Willis Polk. The old headquarters contains noble and historic banking halls, but the exterior was defaced in the 1950s by new red cladding on the upper floors.

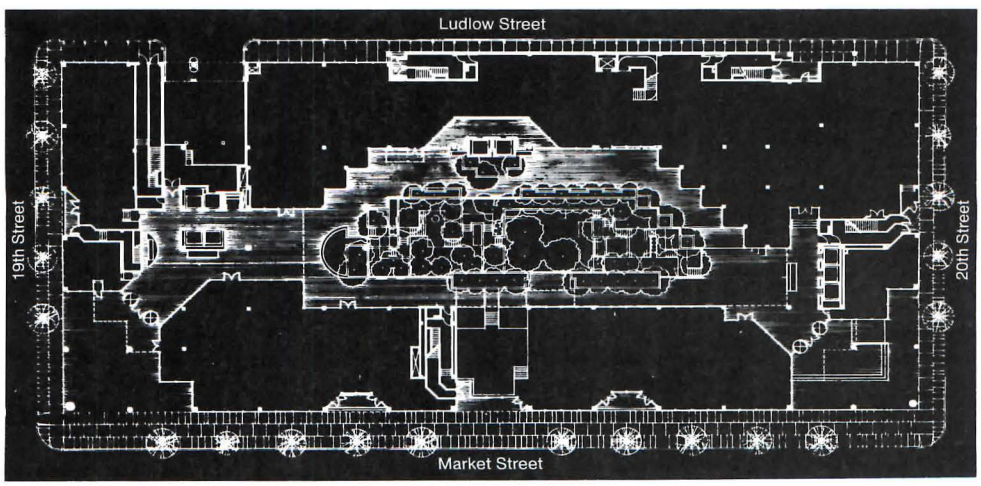
The final phase in development of Crocker Center will be the removal of the top 11 stories of this building and installation of a roof garden three stories above the street. The garden will be accessible from the Galleria, will be a forecourt to Crocker's new tower, and will serve as an entry court to the 1927 building. It should have some wonderful views and should provide a welcome breathing space in the increasingly dense financial district.

Crocker couldn't acquire a small hotel at the corner of Sutter and Kearny, next to the tower, but it was treated politely by the new construction. In all, Crocker Center may be creating one of the most interesting blocks in one of the most interesting and sensitive precincts of any American city. □



Soaring Space Behind Sleek Facades

Philadelphia Stock Exchange. Architect: Cope Linder Assoc. By Carleton Knight III



William Penn had a good idea when he planned the City of Brotherly Love. He ordered five public squares, totaling more than 40 acres of open, green space, set aside within Philadelphia's grid plan. Three hundred years later an imaginative architect and a sensitive developer have done Penn one better. They have extended his idea, creating a new park and wrapping an office building—a speculative one, at that—around it.

The Philadelphia Stock Exchange Building, named for the lead tenant, fills the block on the south side of Market Street between 19th and 20th streets. It features an almost one-half acre, tree-filled atrium under a 15,000-square-foot skylight. The space—with its terraced pools and 2,900 plants—resembles nothing less than a lush, tropical forest. The garden is a delight to the senses—visual, auditory, and olfactory—and a special treat for those who work in the building and walk through the atrium daily.

But why would a developer spend the considerable extra dollars required (about $65 per square foot instead of $50 for a standard office building, including nearly half a million dollars for the skylight alone) to create something unusual? And why build only 500,000 square feet when he could have built three times that?

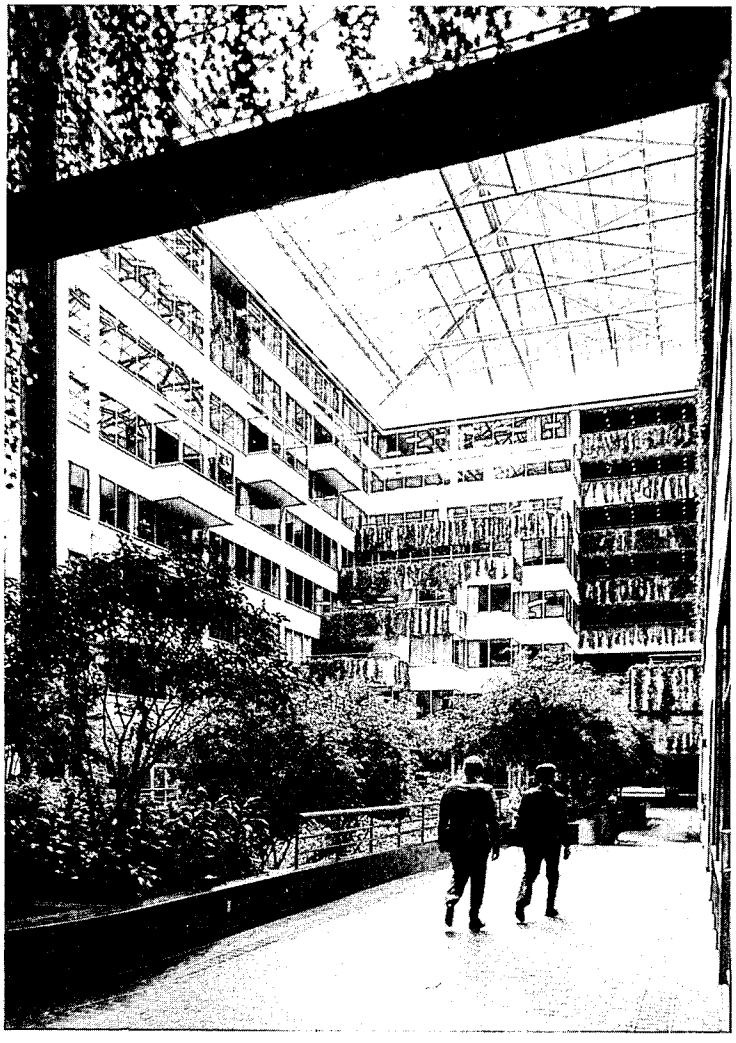
William Rouse of Rouse & Associates (a Philadelphia developer not to be confused with his uncle, James Rouse, developer of Columbia, Md., and Faneuil Hall Marketplace) puts it simply. "Why bother to build just another building? There's no kick to that. It's more fun to do a good building, one that is people-oriented."

Those are enlightened words for a developer, but Rouse refuses to accept that label, adding that while his approach has been "couched as altruism, it is not." Rouse believes that his $23.6 million building's uniqueness is overstated because of the situation in Philadelphia, where he bemoans "the lack of competition and the lack of gutsy development."

His approach, he says frankly, "is very pragmatic." He is a firm believer in quality and is convinced that spending extra money to create a unique environment will pay off in the long run. And he has his proof in the stock exchange where he is able to charge rents of $25 a square foot compared with an average of $21 for other downtown Philadelphia office buildings. "We get premiums for what we do, and corporate America is buying," he says.

Rouse contends that an unusual building will attract poten-

Stairstep fenestration patterns reinforce corner cutouts. Ground floor plan, opposite, shows irregular, 80x200-foot atrium.



An atrium was a central part of the program.

tial clients because the tenants will get more and better work from employees who react positively to their office environment. "The average corporate headquarters," Rouse declares, "is designed to overwhelm employees." Looking at the stock exchange building, Rouse notes with pride, "if secretaries walk in and feel better about themselves and their companies, then we have succeeded."

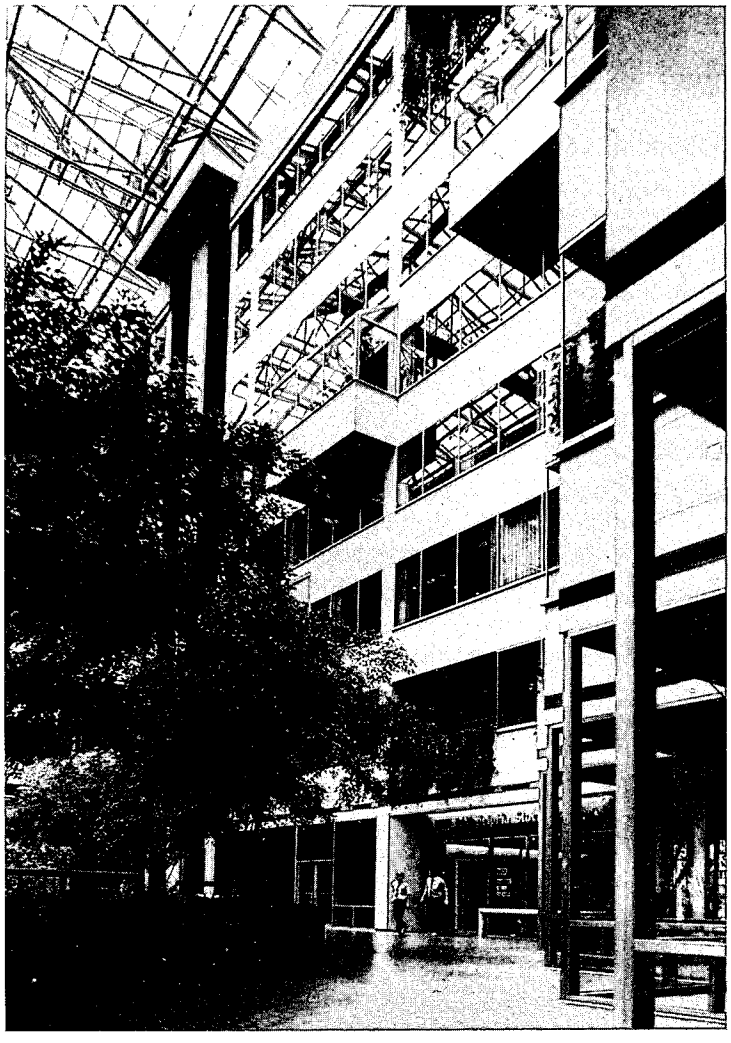
Rouse's problem was how to translate his ideas about a special environment into architecture. He had envisioned an atrium from the start, and that was one of the reasons he chose Cope Linder Associates of Philadelphia as the architect. The firm's experience with a similar kind of space, shopping malls, including the one in Columbia, Md., impressed the developer.

There were several obstacles to hurdle, not the least of which was winning over the residents of a cooperative apartment building that abuts an alley along the south side of the site. Prior to Rouse's purchase of the property, these neighbors had succeeded in halting development of a highrise hotel because it would block their views. Rouse also wanted the space in a hurry, to beat potential competitors to the marketplace with available rental space.

The solution, an eight-story building shaped like a doughnut, met all Rouse's needs. The neighbors did not object, and it could be constructed under fast track for less money than a larger structure and at less interest cost for the borrowed construction funds. Finally, the plan offered a variety of office layouts that allowed diversity for large and small tenants, a significant

Entrance to the atrium from the east elevator lobby is under a scrim of vines, above. Right, view from steps into the garden.

Photographs by Allen Freeman



An artful blending of 'natural ingredients.'

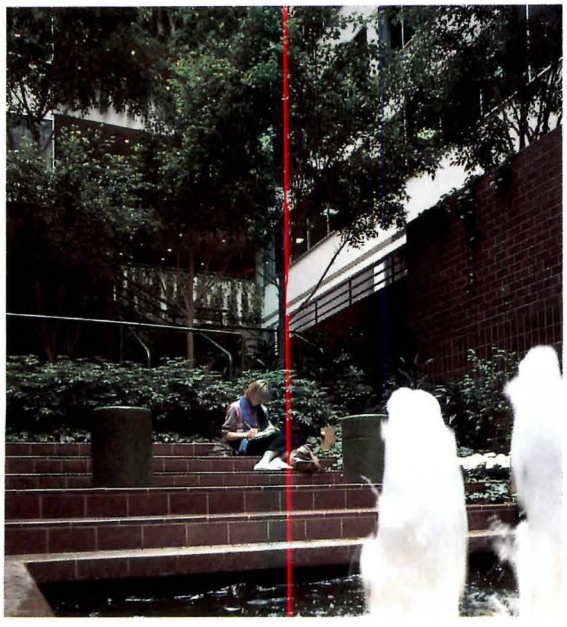
factor in the marketing strategy. "Even the standard office is a treat," says Gerald M. Cope, AIA, partner in charge. All offices have a window on Philadelphia's world, either real or manmade.

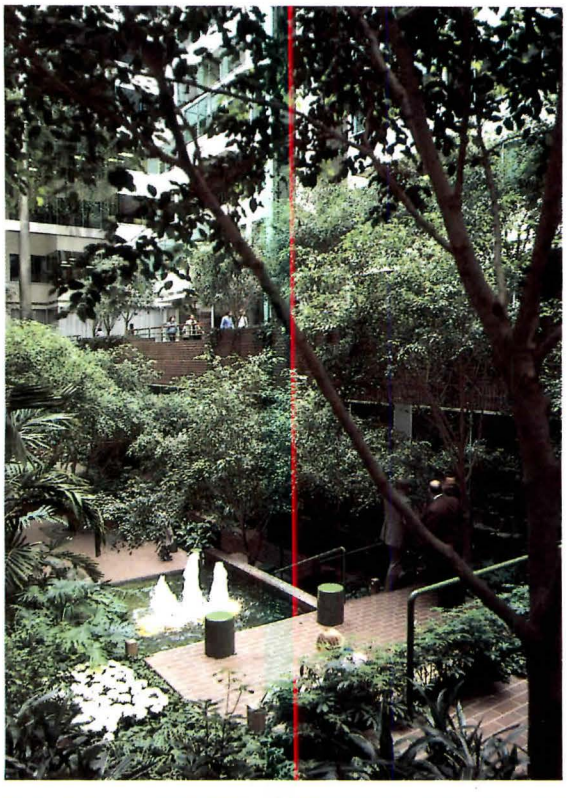
The hole in the doughnut is what holds the building together. Here Cope, an architect and a landscape architect, used what he describes as "natural ingredients"—light, trees, and water. "They are materials that people can respond to," Cope notes. The question was how to put them together. Originally, the atrium was to be on one level, but when the Philadelphia Stock Exchange agreed to move into the building during the design development stage, the courtyard garden grew downward by 19 feet. The exchange needed to have its trading room in the basement, but wanted an open feeling. This was solved by dividing the hurly-burly of the trading room from the peaceful repose of the garden with a glass wall. And to keep the garden from appearing as a hole in the ground, the tile brick on the floor was folded down over the walls. It also covers the steps and the entire interior of the garden and its multileveled terraces.

The garden is filled with a living palette of 36 different kinds of trees, shrubs, ground cover, flowers, and vines. In addition to the plants, water flows down through a meandering collection of stream courses, falls, and fountains to reflecting pools at the bottom. The low-level sound of the rushing water drowns out any street noise, and, combined with the layout of the area and large shade trees, the overall effect is a sequence of sensuous spaces to screen, channel, and create views. Architect Cope compares it to a cloister or grotto.

A corner of the atrium, seen at ground level, above, and from a middle floor, right. Green glazed brick stripe accents the border.

Photographs by Allen Freeman





Greenery below and greenhouses above.

Plantings are not limited to the garden; a collection of vines grows from balconies so that the entire space appears as one huge garden in the sky. The vines have grown so long and full on the east end of the atrium that they are now hanging down like a natural scrim in front of several floors of offices. The view from behind, through the leafy curtain into the atrium, is arresting.

The 80x200-foot atrium (larger than it appears in photographs) is modulated in plan and in section by a variety of elements. While offices step out, creating a series of terraces, along the west wall, they are cut back on the east end. Here and there a balcony projects into the space, or a terrace is recessed.

A series of greenhouse-like window boxes that resemble large versions of the kind that can be installed outside the kitchen window of a home project from the south wall of the atrium. They are big—4x12 feet—and each has a pitched roof of glass. Their form is echoed as well in the twin elevators on the south wall, which look like mini-greenhouses marching up and down the facade.

The projecting greenhouses and the stepped offices create a certain esthetic interest, but they meet an important economic need as well. They provide significant extra rentable footage in a building where the atrium has reduced such space.

The color schedule of the interior is simple—white walls, red brick tile paving on the floor and garden, and green trim in several shades. Pipe railings—some with a mahogany handrail—and bollards in the garden are a rich forest green and match twin rows of green tile pavers that outline a path around the edge of the garden. A narrow band demarcating the airconditioning feed and return grilles circling the top and bottom of the atrium is painted pea green.

Walls in the entrance lobbies are composed of deep green felt panels with narrow stainless steel dividers. Stainless steel also encases a pair of tall columns with crossbracing at one end of the atrium and is used with mahogany to create a contemporary chair rail in the twin lobbies. It is also used in the elevators and even in the mail collection box. This elegant combination of materials, says the British-born Cope, is evocative of his country's green and silver military badges.

There's another pleasant touch just off the atrium. The entrance to the newsstand is framed by a pair of round columns painted a dusty rose and topped by an unornamented turquoise entablature framed by a mirrored reveal.

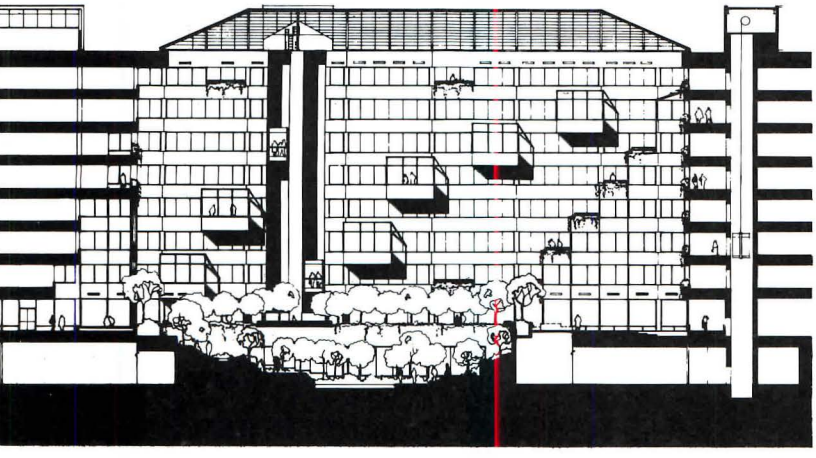
Although the interior is clearly the highlight of the building—it's not often that can be said of any office building—the architect expended considerable effort on the exterior as well. One formidable design challenge was to work the change from a busy street to a quiet interior. This was accomplished by cutting away the entrances of the building at the 19th and 20th street corners (both streets are southbound), creating important focal points there. The three-story stepped cutouts, resembling a cross-section of the building, are framed by circular columns covered with stainless steel. Passersby can see into offices as well as the atrium.

The bulk of the exterior is composed of alternating ribbons of glass and superbly precast concrete. The spandrels on the north step up and out to the corners, while those on the east and west facades also step up. This echo of the stepped atrium "gives a slight indication something is going on inside," says Cope. The back, or south, wall is blank as it faces the decks of a parking garage below the cooperative apartments.

There's a classy touch at both front corners of the building. The stainless steel column appears to extend upward into the curved corner. This quarter-round panel of mirror glass is evoked

The garden as seen from the eighth floor, right, and from various levels within it. In the photo at bottom left, passersby look through window wall to exchange trading floor.

Photographs by Allen Freeman



A success financially—and otherwise.

inside with similar concave stainless steel panels in the elevators and convex ones on the building core.

The first floor, designed for retail uses, is mostly glass with recessed entries that resemble reversed bay windows. The center of the three bays on the front also shields an emergency stair exit that is walled in bronze-finished aluminum. Similar exits are on the east and west facades, but the central placement of this less-than-attractive feature gives it a prominence that detracts somewhat from the rest of the facade.

The architects used three kinds of glass in the building: bronze mirror on the upper floors of the exterior, green tinted in the atrium, and clear on the ground floor (to enable a view into the courtyard) and in the skylight. The building is protected from direct sun by 30- and 40-story highrise office buildings to the east and west and the residential tower to the south. According to the architect, these buildings offer "natural protection" by cutting the heat gain.

The building is a success financially for its developers as well as esthetically for its users. Said one tenant in an office overlooking the atrium, "I wish my apartment was here." The atrium is used frequently for other functions: Last October the Foundation for Architecture of the Philadelphia Chapter/AIA, held a costumed Beaux-Arts ball there. Earlier last year, the chapter honored Cope Linder Associates with its highest annual award, the gold medal, for the stock exchange. The jury cited it as "a building within a building" and said it was "a fresh interpretation of a time-tested concept."

Developer Rouse says, "We don't expect to be known by the money we make, but by the buildings we build." This building can only enhance his reputation.

W. C. Fields, it would appear, died too soon. For if he had visited the stock exchange he might have changed his mind about the city. Clearly those who have experienced the space really would rather be in Philadelphia. □

Cascading balconies spill down into the atrium, left. Seventh floor greenhouse encloses conference space, above. Right, the view from inside a greenhouse office on south wall.

Photographs by Allen Freeman

Sophisticated Fantasy In Three Parts

Elliott house, Pennsylvania. Architect: Jefferson Riley, Moore Grover Harper. By A.O.D.

Jefferson B. Riley, AIA, likes to design into his houses the qualities of ancient, walled villages: their legibility, mixture of ceremonial and secluded spaces, surprises, broad views and private peekholes, combinations of grand and cozily scaled buildings, formal and funkily shaped elements, "each different from the other, yet agreeing to disagree," as Riley puts it.

His Elliott house, in Ligonier, Pa., is three separate buildings—a sculptor's studio, a writer's cottage, and a main house—and a happy confabulation of mixed metaphors and odd shapes linked by what Riley calls the "fence-wall." With its crenelations and turrets and towers, the complex recalls Norman castles (sculptor Ann Elliott, who grew up on and inherited the land, says she always wanted to live in one after visiting St. Mâlo in France), while its balconies and peaked roofs are reminiscent of Victorian houses (favorites of writer Peter Gruen, Elliott's husband). Another source was the famed, nearby Rolling Rock Hunt Club's kennels, "the best of the local buildings," according to Riley. Despite its rampant eclecticism and nostalgia for things and times past, the Elliott house is modern in its open-plan first floor layout, it is a passive solar design with abundant glazing on the south and almost none facing north, and it is sensitive to the environmentalist concerns of its owners in blending unobtrusively with the landscape. Gruen's and Elliott's naturalist tendencies—and Riley's ideas of village—are further reinforced by a layering that makes a gradual transition from spaces that are fully outdoors to outdoor-indoor areas and then to indoor-indoor rooms—Riley's language.

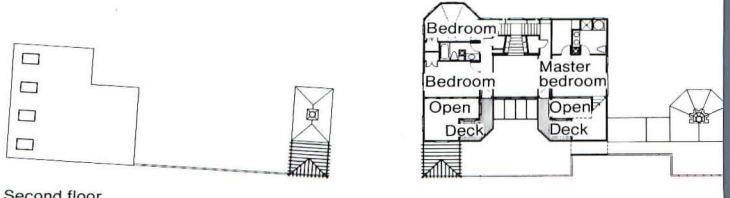
The setting is idyllic. Perched on a hilltop in green, rolling, Appalachian countryside, the Elliott house faces south overlooking a wheat field, and beyond it the Ligonier Valley. It is aligned with the edge of a dense woods, which still sports hunting trails for hounds and horsemen.

On arrival from the west, and in photographs, the complex looks far larger than it actually is. It stretches out in leisurely fashion some 192 feet, most of it tucked behind the "fence-wall" of cedar siding with redwood trim. With its arches and trellises, this wall lines a continuous path, which opens here and there to form little courtyards for a congeries of variously shaped and sized, mostly small buildings.

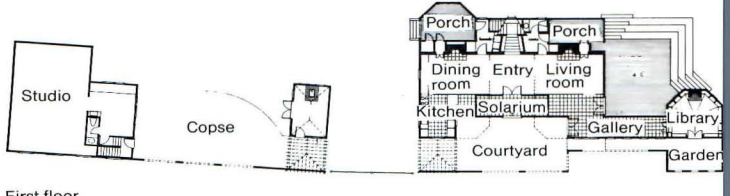
Disparate elements are linked by 'fence-wall.' From left: sculptor's studio, courtyard, writer's cottage, split rail fence, main living areas with bedroom tower, art gallery, and library.

© Norman McGrath

Photographs © Norman McGrath



Second floor



First floor

A somewhat formal, yet cockeyed, entry.

First comes Ann Elliott's sculpture studio, with flat, slanting roof, the largest (21x31-foot) single space in the complex. Adjoining it, behind three trellised arches in the fence-wall, is a courtyard, then Gruen's tiny, peak-roofed writer's cottage. Next comes a break in the fence-wall that is bridged by a split rail fence, a favored spot from Ann Elliott's childhood, which was selected as "the symbolic, spiritual heart of the house," in Riley's words. The path behind the fence-wall continues to the main house, past its entrance, its three-story master bedroom cum campanile, its first story art gallery, to end at the edge of the last element in the complex—a small, pointy-roofed library.

The entrance to the main house is from a courtyard bounded by the fence-wall. It is symmetrical and somewhat formal, a sturdy anchor among wildly asymmetrical, odd-shaped building elements. But it is asymmetrically placed with relation to the fence-wall, peeking out rather cockeyed through one of its two south-facing archways.

The entry court, flanked by overhanging second story balconies, is conceived as an indoor-outdoor space, which Riley indicates in part by use of materials. The south of the house (and the cottage and the library) is faced with Dryvit, a Portland cement stucco, over rigid insulation board, to contrast to the outdoors material of the fence-wall. The glazed entranceway itself is framed in poplar, and the interior ceiling motif of 4x4-foot pine panels

Trellised fence-wall creates path with courtyards. Main entrance is from court, above, with overhanging balconies. Above half-arched door is sitting room, then high, light-filled bedroom.

Photographs © Norman McGrath

The colors came out of a Hammett novel.

with poplar batons is introduced outside under the balconies. A slightly awkward, heavily framed glass door in a half arch to complete the arch begun in the fence-wall to the east of the entrance is painted white, again to connote that this is a partially interior space. Of all the elements in the complex, this door is singular for looking somewhat ungainly and unrelated visually to anything in view. There is something of a hodgepodge of riches in this attempt to differentiate outdoors from indoor-outdoor space at the entry court through different materials and shapes.

From the entry court, one passes through a small greenhouse with slate floor, which edges the south face of the first floor for purposes of solar heat storage. It also serves as another layering device to create a transition to indoor-indoor spaces, and extends on the east side down two stairs to form a narrow art gallery, which, in turn, steps down to the six-sided, 14x15-foot, two-story, peak roofed library—a gem of a room. On its north wall is a soapstone-faced fireplace framed with curlicue cutouts carved by the architect himself. It also has a scoot-around bookshelf ladder, windows that face the woods, and a French door that looks onto a courtyard and through it to spectacular views framed by large cutouts in the fence-wall.

Returning to the main area, the living room, dining room, and kitchen are one flowing space, separated by a two-story central entry hallway, with balconies forming second-story corridors. It leads to a foreshortened stairway, whose walls angle inward as it rises. This stair is framed by a tall, narrow slot; at its top is a large window overlooking the woods. Bounding the north edge of the living and dining areas is a plastered masonry wall (again for solar storage), which has been carved with swirling forms by Ann Elliott and imprinted with leaves by Jeff Riley.

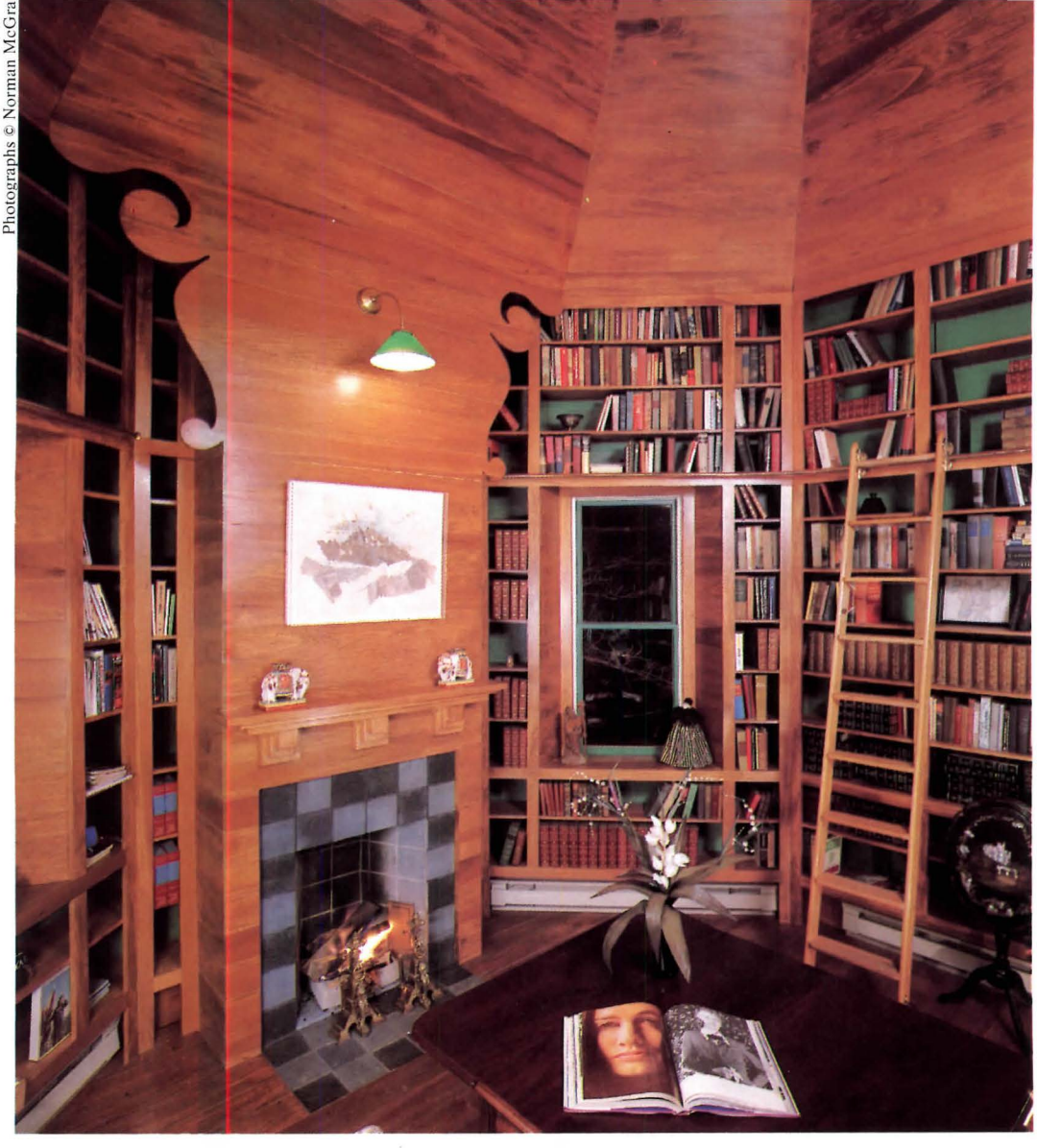
For purposes of heat distribution—and for fun—the kitchen area adjoining the dining area is two stories high. The young daughter's bedroom overlooks this space, and has windows that can be opened to admit warm air from below. Also double-storied is the area just in front of the living area, plus the gallery; overlooking the gallery is the parents' sitting room. These two-story spaces are painted white to reflect light and create, again, a psychological transition from the light of the fields to the cozy, woodsy look of the living areas with their pine and poplar paneled ceilings. The many double-hung windows in the double-level space have light blue sash and much lighter—almost white—*blue* frames.

The interior colors, deep green and light green for the stair, white and blues for the two-story spaces, red-rust and a taupe for the bedrooms, were chosen by Peter Gruen in a somewhat unconventional manner. He was reading Dashiell Hammett's *The Dain Curse,* where, he says, he found "a particularly luscious description of a house." From this house of Hammett's imaginings came the colors for the Elliott house.

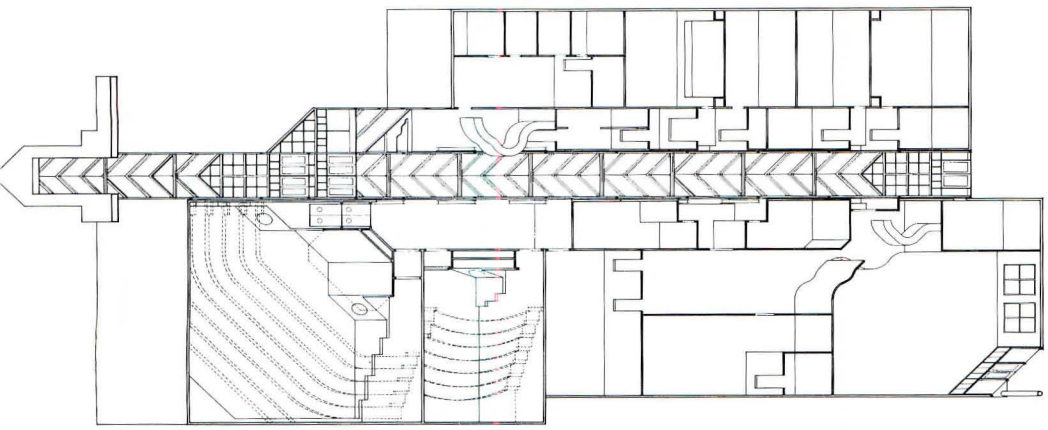
Beyond color, the house has numerous fanciful touches: the cabinets over refrigerator and stove shaped as battlements and containing uplights; the medallions (squares within squares) dotting woodwork here and there; the child's hexagonal rooms with octagonal peaked roof; and, best of all, the two-story, small master bedroom with arched windows on all four sides.

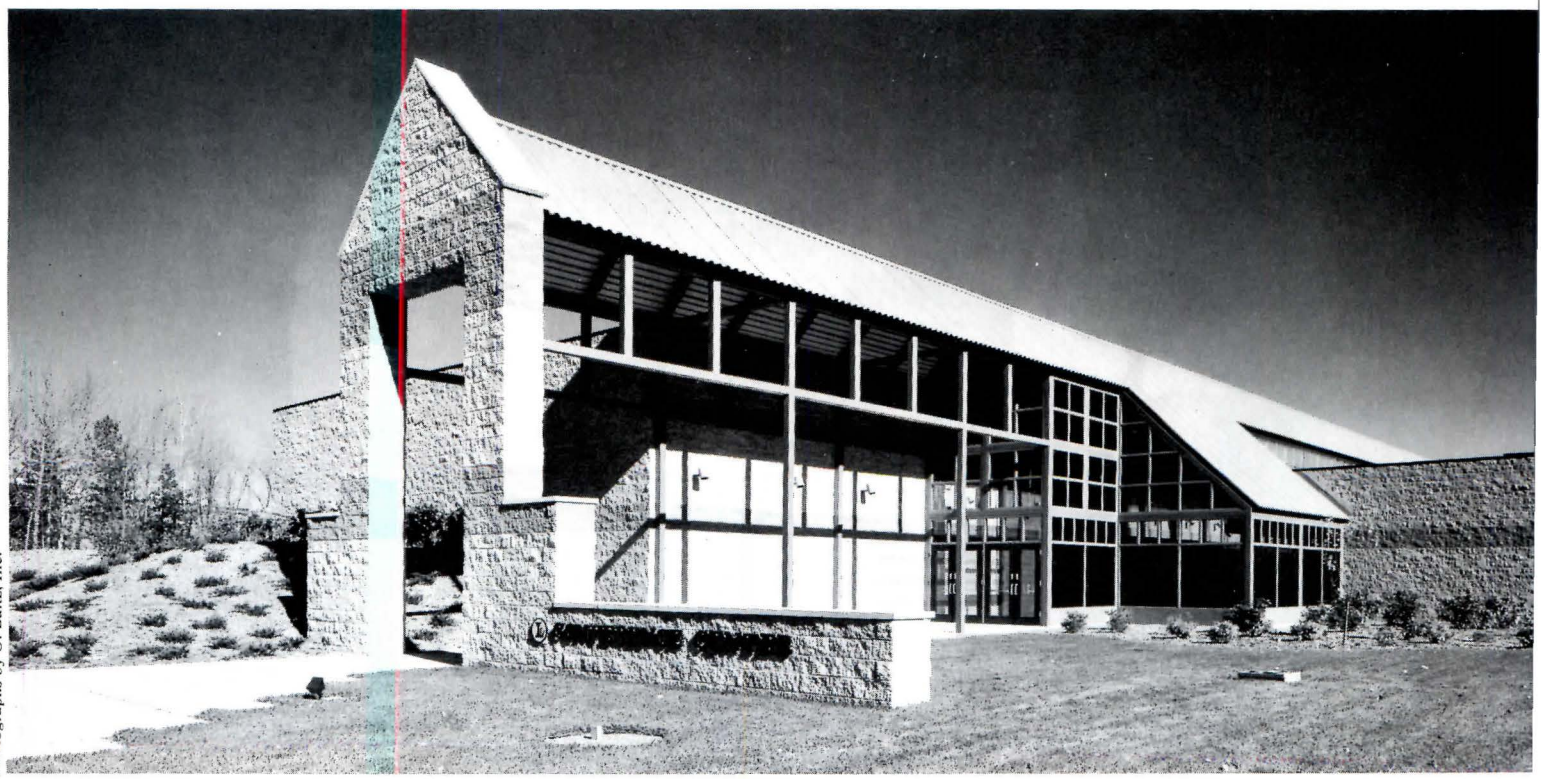
"We wanted," says Ann Elliott, "a solar house, but something that looked funky, not like a farmhouse or a space machine." And that's what Jefferson B. Riley made for them.

The main entry, across page, is symmetrical, formal, an anchor for dissimilar elements. Inside, ceilings are high at the center, low in the living, right, and dining room. The space is enveloping and mood-filled. Above right, windows illuminating the gallery.



Above, the six-sided, peak-roofed, and paneled library with soapstone-faced fireplace, scoot-around bookcase ladder, and curlicues carved by Riley. In double-storied kitchen, right, canted, crenelated cabinets are above refrigerator and stove. Across page, a plastered, masonry wall for solar storage was imprinted with leaves (by Riley) and flowing lines (by Elliott). The foreshortened stair is in a high, narrow slot. Second story balconies adjoin bedrooms. □

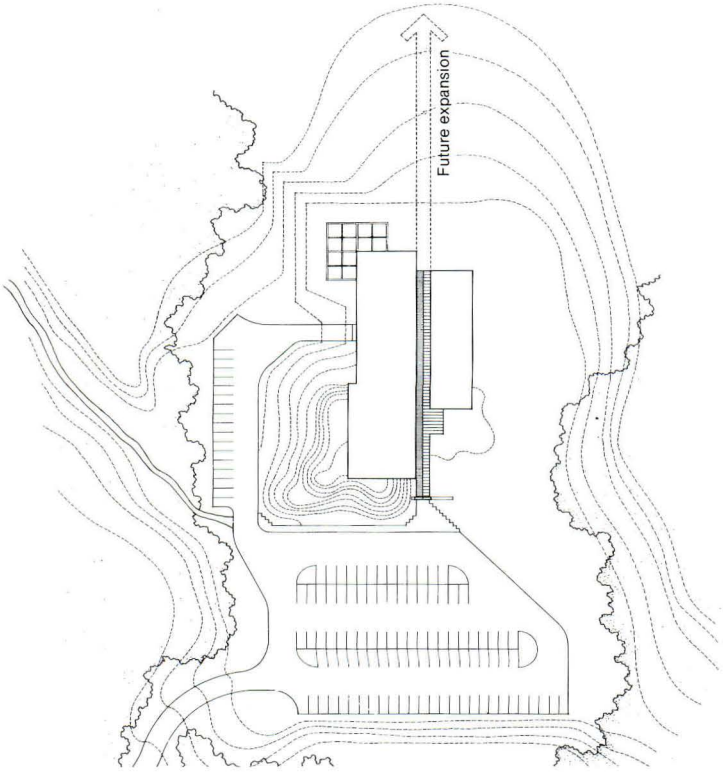




Photographs by O. Baitz, Inc.

Long Spine Punctuated by Lively 'Events'

College Center, Pennsylvania. Architect: Bohlin Powell Larkin Cywinski. By Carleton Knight III



Seeing this new educational conference center in Nanticoke, Pa., for the first time, one is struck immediately by the resemblance, albeit severely abstracted, to a tipple, the simple wood-frame structure over the head of a coal mine. That image is altogether appropriate, for this building is located in the heart of northeast Pennsylvania's coal country.

While that once-bustling industry is but a shadow of its former self here—unemployment runs at more than 13 percent in the Wyoming Valley around Wilkes-Barre—there remain reminders of this past, like the abandoned tipples leaning forlornly against hillsides.

Although Peter Q. Bohlin, FAIA, says the similarity of his building to a tipple was not intentional, he does see an affinity between the two. "They share a common attitude," he says. "They are spare and a direct response to user needs."

In this case, the user is Luzerne County Community College whose 120-acre campus stands on land reclaimed from earlier mining operations. The academic core—a congeries of one-story utilitarian boxes with no esthetic interest—is situated on a terraced rise at the north end of the property.

The college, according to its president, Tom Moran, wanted to expand and "aspired to something better." Seeking a "special building," the college turned to architects Bohlin Powell Larkin Cywinski of Wilkes-Barre, because of the firm's experience with well-designed buildings on limited budgets.

Conference center, exploded plan at far left, is entered through gabled gateway, above, that is extension of interior spine, left.

O. Baitz, Inc.

Selecting the spots 'to do extra well.'

The college envisioned a facility that could be used by both itself and outside businesses and organizations. The building would be filled with a variety of large and small meeting spaces, a dining room with a teaching kitchen (for culinary arts classes and hosting conference meals), a prototype hotel room (for hotel management classes), and administrative and service spaces.

Notes Moran, "The mission of a community college is to be flexible enough to meet the changing needs of society." The college viewed this center as a link to the community that could offer assistance to the unemployed in entering the job market.

For that reason, the federal government's Appalachian Regional Commission funded one-half of the $2 million cost of the building. The remaining funds came from the state ($800,000) and the college ($200,000). The tight budget would be the most limiting factor in the design.

Bohlin likes to describe the result as "sleight-of hand. It looks like more than it is." This modest building is small (21,000 square feet) and inexpensive ($60 a square foot exclusive of site work, equipment, and furnishings), but it packs a great deal into its modesty.

There are two auditoriums with full audiovisual capabilities, seating 260 and 90 persons each, five seminar rooms that seat from 12 to 37 persons, and a dining room for 160 (an outside terrace can accommodate another 100 persons). There's even a satellite dish to receive the latest in telecommunications.

Originally the structure was planned near the academic cluster, but that proved unfeasible due to the extensive work required on the steeply sloped site. Moving the locale to a relatively flat area to the south separated from the existing buildings by a heavily wooded ravine, proved especially advantageous. It emphasized the center's somewhat independent program and allowed for future expansion of both the building and the college. And, significantly, the cost savings from less site work could provide more money for the building itself.

Bohlin has developed a simple technique for making what would otherwise be ordinary buildings look special. "You can't spread the dollars evenly throughout a building," he says. "Therefore you must select spots to do extra well."

In the case of this educational conference center, he chose one spot, and it's a gem. The spot is an interior street, a 200-foot-long axial spine that runs through the building, holding it together. The larger spaces in the facility—the auditoriums, kitchen, and dining room—are lined up on the north side, while the smaller spaces—seminar rooms and offices—are on the south. Fitted between them, and running from a gabled entrance at the parking lot to a glass wall at the east end, is this generous 12-foot-wide spine that evokes a 19th century arcade.

It is punctuated and enriched by what the architect describes as a series of "events," such as lounge areas, the reception desk, and anterooms. The quarry tile floor flows out into these spaces, serving as an orientation device for those unfamiliar with the building.

Primary geometric forms are emphasized with color on exterior, above, and in the entry vestibule, below, where airconditioning grilles are set in duct sections. Opposite, reception area.

Carleton Knight III

Carleton Knight III

O. Baitz, Inc.

Using comfortable forms and colors.

The spine was thought of from the beginning as almost an entirely separate structure; the columns in its steel tube frame are paired with the columns in the areas opening off each side, giving further prominence to the spine. The tube columns support a pair of Vierendeel trusses on which the gable roof rests. The truss frame acts as a visual device to frame the translucent glass fiber infill panels in the clerestory on the south wall. The ceiling is a conventional steel deck, covered on the outside with rigid insulation and a corrugated roof.

"The key," Bohlin says, "is not to try too hard. Otherwise the results look too frantic or uptight." He believes that much of contemporary architecture is "trapped intellectually," adding that the average person "cannot connect or relate to some building in Italy." Too much architecture today, he thinks, is designed to appeal only to other architects.

Bohlin's solution harkens to older buildings where familiar forms and polychromy made people comfortable. He likes to select "symbols common to cultures, rather than those lost on viewers." Thus, in this project, as well as in others by his firm, primary geometric forms—squares, triangles, and circles—predominate.

Square grids can be found throughout the building, starting with the patterning in the concrete sidewalk and extending into the pattern of the quarry tile floor. The windows form another square grid as do the truss members. The gabled roof presents a series of triangles, a form that is re-emphasized in the dropped roof over the reception area. Circles offer decorative relief in a band along the spine: A row of mundane, airconditioning grilles is celebrated inexpensively by placing each in a four-inch-deep section of steel duct, as though the duct were poking through the wall. There are other circles as well; porthole-like windows on the doors to the auditoriums and large speakers for the sound system.

Two-hundred-foot-long spine, opposite page, links various building functions. Main auditorium, below, has entry at stage level to aid disabled users.

Lest one think these architects think only in geometrical terms, they throw in a few curves. The first evidence of this is in the lobby where the reception desk reaches into the spine, playfully wrapping around whoever is at the counter. This form is echoed as well in the bar of the dining room and extends into a wall of that space.

Moldings and trim, so common on older buildings, are given a contemporary interpretation here by such elements as recessed drywall panels along the spine. "It gives relief to what would otherwise have been a long, flat expanse of wall," says Bohlin.

Also, as with other buildings, color can be important to highlight areas and add interest. And, as Bohlin notes, "color doesn't cost extra." Just as the architecture of the center is what Bohlin likes to call "soft," so is the palette. The bulk of the color is in the spine—blue-gray for the steel frame, deep rose for the window frames, and a golden tan for the ceiling deck. The quarry tile is terra cotta and gold.

The walls of the rooms are warm grays with colorful furnishings—blue chairs in the auditoriums and bright orange laminate tables in the seminar rooms. The curving bar in the dining room and the reception desk are also constructed of orange laminate.

The exterior is standard split block, but a triple course of red block, which looks like a rich sandstone trim, zips around the entire building, pulling the various size elements together. This color band, which flows out of a wall mounded by earth on the north side of the front, continues into the interior of the building, where it is amplified by three additional stripes. (The block wall on the north side of the spine acts as a heat sink for the clerestory windows high on the south wall, according to Bohlin.) The corrugated metal roof is painted a deep red and is intended, says Bohlin, to be an evocation of the terra-cotta tile roofs found on older buildings.

The Luzerne County Community College Educational Conference Center is a distinctly modern building that does not shout its modernity. Under Peter Bohlin's deft hands, it is enriched with historical allusions, but takes a gentler, softer approach than much contemporary design. The result is a building that welcomes its users, making them feel comfortable.

The approach seems to be working: Last year there were 150 separate functions at the center (not including regular classes) and more than one-half were non-college. Says college President Moran, "The center has done wonders for the school, providing opportunities we've never had before. It's great for outside groups and the academic setting is more conducive to learning than a hotel ballroom."

He adds that the building has had a "synergistic effect" on the community. There were some groups that needed a regular place to meet, he says, but there were others that had never considered providing any kind of educational opportunity for their members. Now that there is a space, they are using it. Moran welcomes the building's "inspirational aspect" in this sense.

The range of users extends from the local chamber of commerce to the local district attorney's office and from the State Historical Commission to the League of Women Voters. Notes Ann Williams, center director, "We don't have to sell the building. It sells itself."

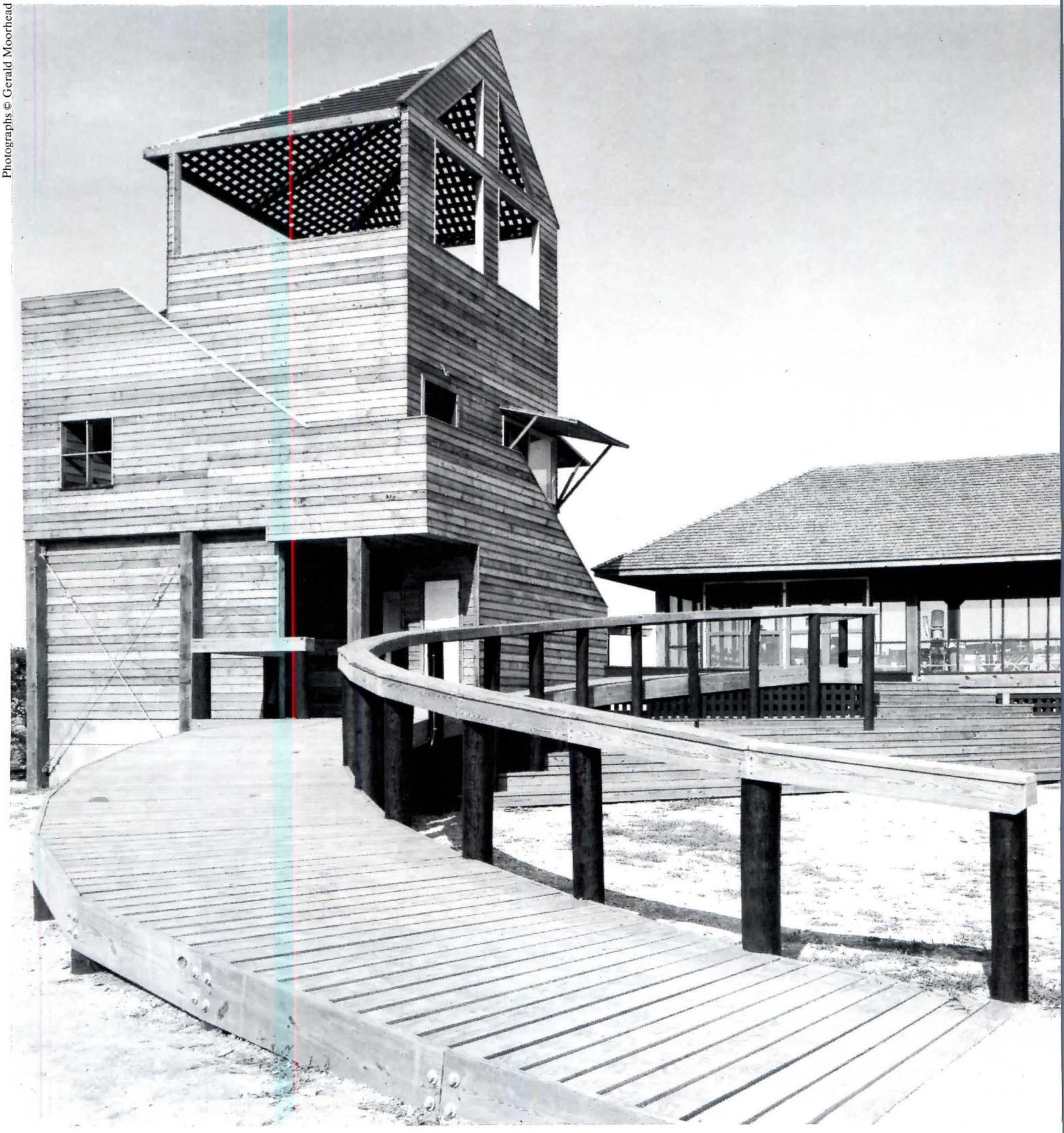
Moran makes an important point when he says, "King Coal remains a ghost of the past here. The people need to let go of that past and look to tomorrow."

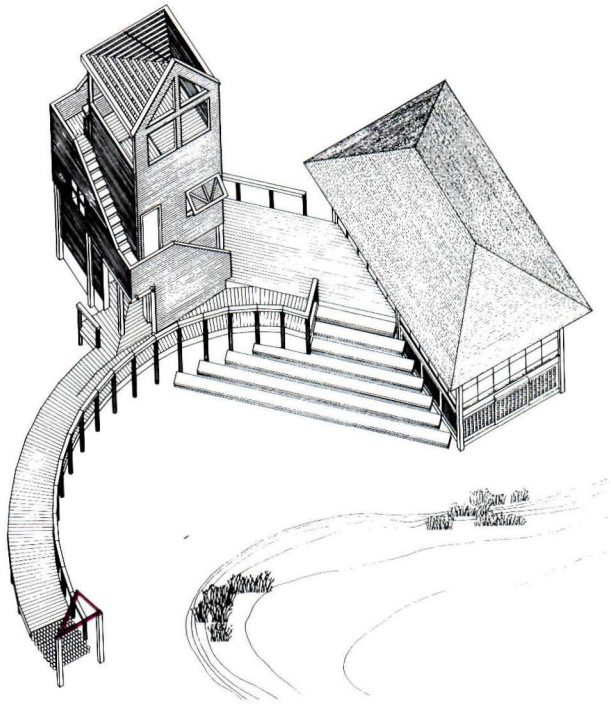
This modest structure, designed with panache, can help do just that, acting as a gateway to the future for the Wyoming Valley. □

Photographs by O. Baitz, Inc.

'The Best Little Boathouse in Texas'

Architect: Charles Tapley Associates. By Michael J. Crosbie

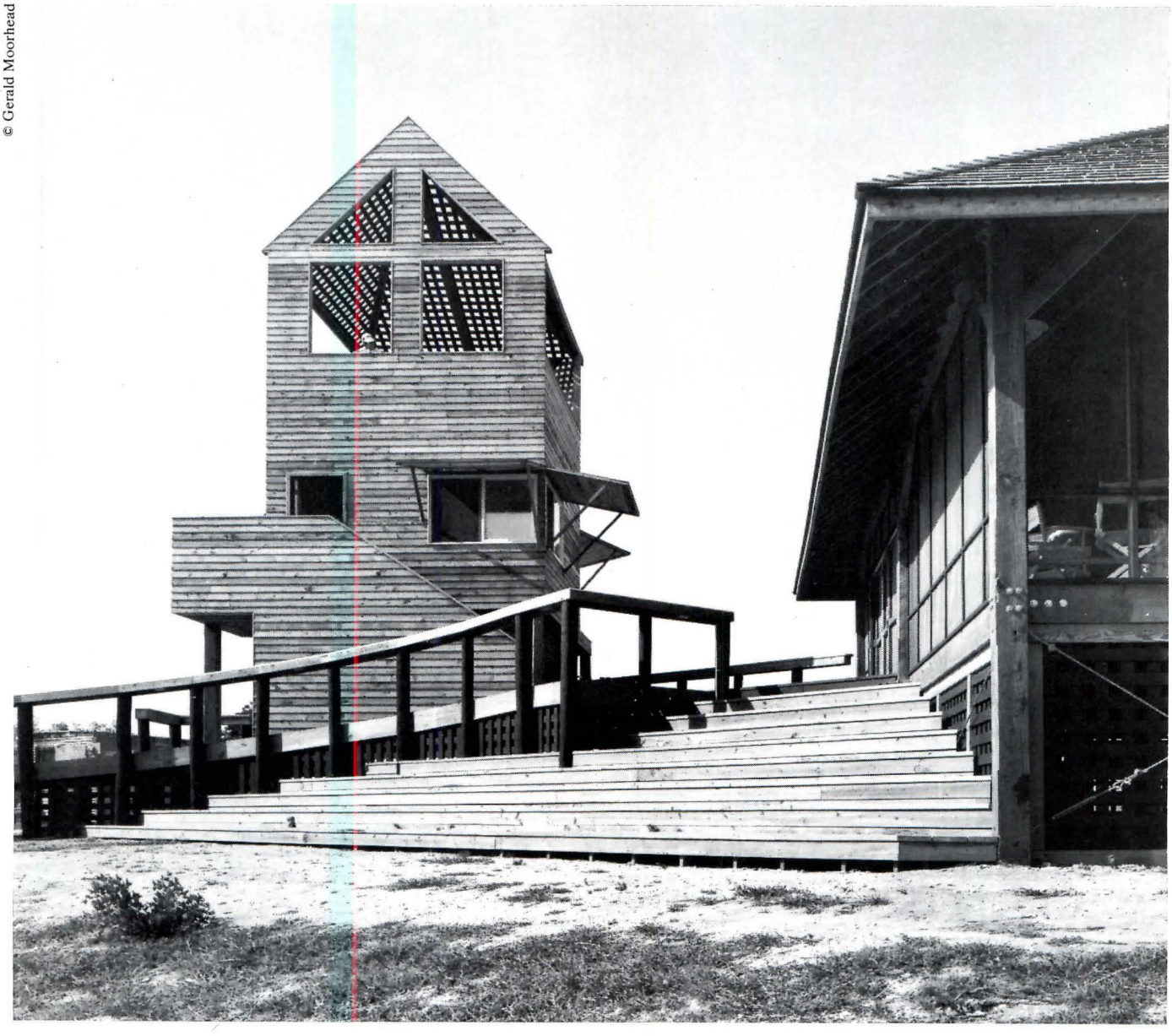




The Live Oaks Recreational Retreat, near Rockport, Tex., is a 100-acre parkland used by a local company's employees. Jerry Lunow, AIA, of Charles Tapley Associates, Houston, says that the site has long been coveted for its natural beauty and access to Aransas Bay. From there, a Spanish garrison guarded the only deep-water harbor on that length of Texas. Later, the area was a trading post, eventually spawning a town that produced the state's first governor. Archeological evidence reveals, too, that Indians found the site suited for settlement.

With history in mind, Lunow says, his primary concern was to provide the desired recreational facilities while disturbing the site as little as possible. The boathouse, with its attendant, watchful tower, was the first structure built from a master plan that

Left and above, the curved ramp that welcomes one to the boathouse and its tower; below, the structure from across the marsh.



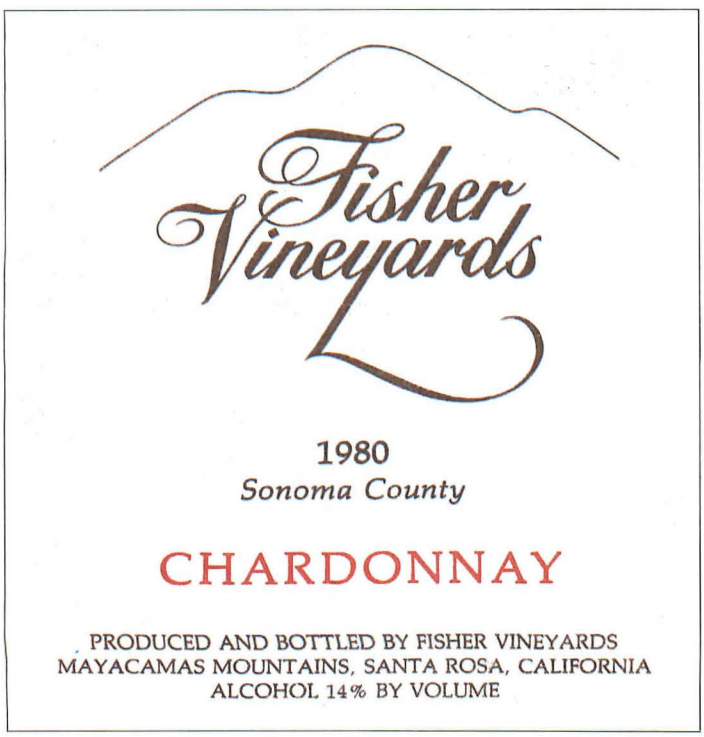
Sensitivity to site and history.

will eventually comprise a score of cabins, an activity building, and eating facilities, all sited in natural clearings. Located at the edge of a tidal marsh next to the bay, its form and materials—treated pine covered with cedar lap siding, with cedar roof shingles—are vernacular at heart, "like the fishing sheds common to the area and inland livestock barns," says Lunow.

The entrance ramp is announced with a festive red pediment. Foot-high steps beside the boathouse can be used as a mini-amphitheater. The tower offers an overview of the site, and contains a caretaker's office and restrooms. Boats and gear are stored beneath the elevated pavilion and ramp, behind latticework. Lunow says the screened pavilion, which catches elevated breezes, has proved a summer oasis. Main activities occur in early morning and late afternoon, "but midday is a time to hole up and rest somewhere," says Lunow, "like the old front porch."

The architect's attention to history, terrain, natural materials, and vernacular forms has made this, quite possibly, the best little boathouse in Texas. □

Above, stepped seating serves as an amphitheater; right, screened porch of one of the retreat cabins that dot the site.



A Winery of Simple Elegance

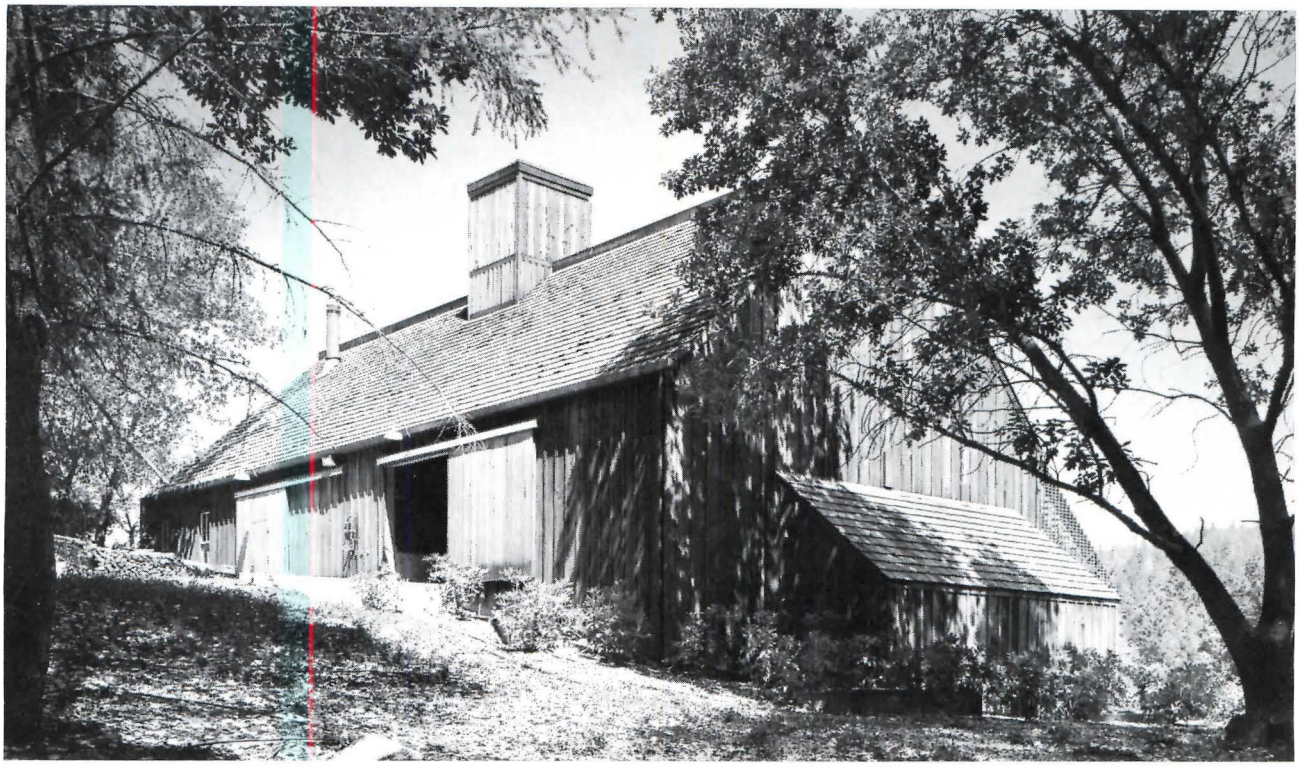
For Fisher Vineyards. Architect: MLTW/Turnbull, Assoc. By D.C.

The architect describes this as a "deceptively simple industrial structure." Simple it is, but the term industrial seems a bit harsh for this warm and textural building so at home on its site that it might have been found rather than recently built there.

The site is some 100 acres of second-growth forest and vineyards on the road from Santa Rosa, Calif., to the Napa Valley, bought by a successful young management consultant who felt a need to return to the land. He settled on winemaking as his new vocation, married, and engaged William Turnbull, a friend, to design a winery based on a program devised with the help of oenologist Charles Herald, who also advised on the planting of the vineyards.

The couple wanted everything about the operation—the wine

The Fisher label and Turnbull's 'sophisticated barn.'

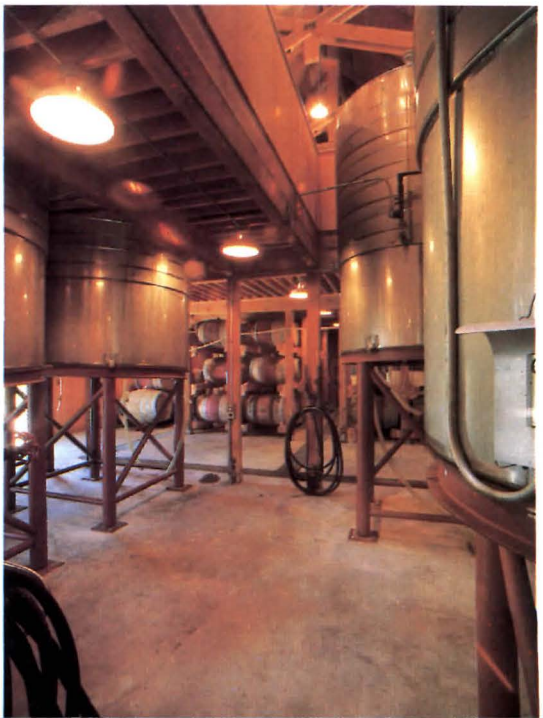


Precise trusswork and gleaming metal tanks.

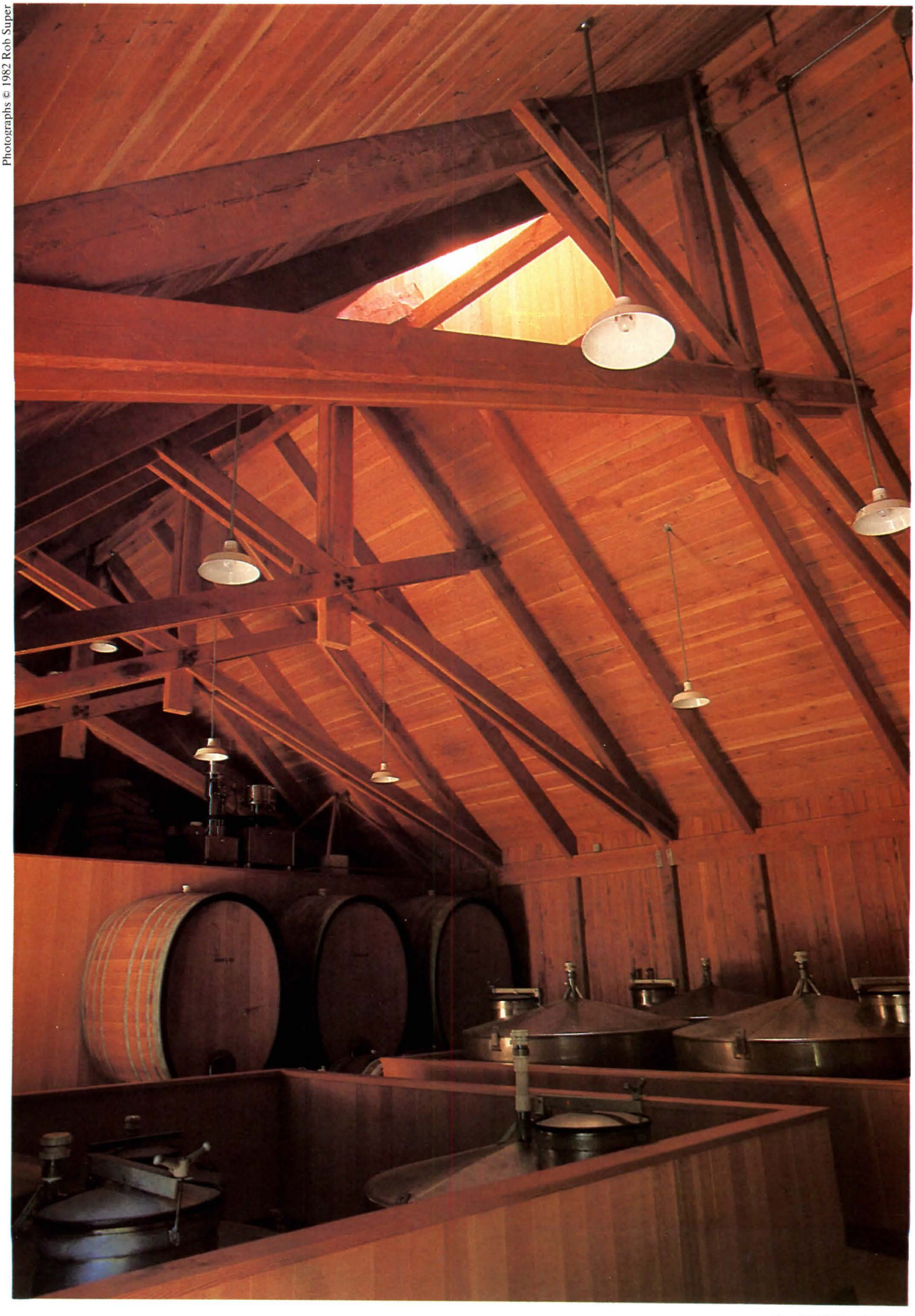
itself, their label, the winery—to have a straightforward, almost rustic, kind of elegance. Turnbull gave them precisely that in this small building, which resembled nothing so much as a sophisticated barn.

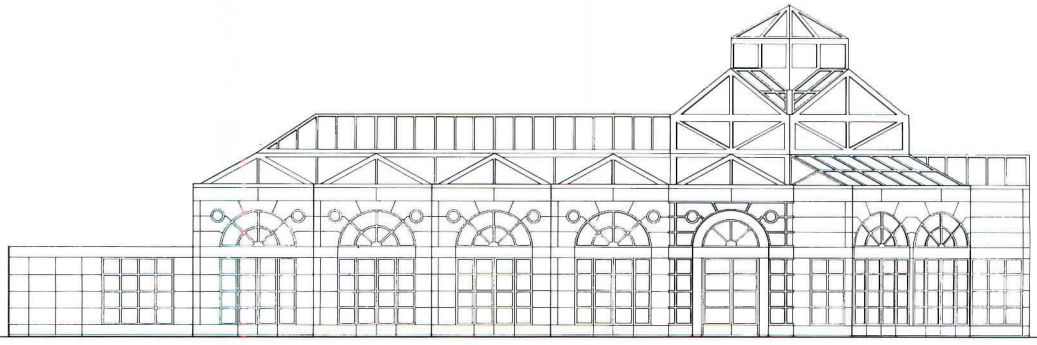
It is set, at Turnbull's suggestion, into a knoll overlooking a vineyard valley and rolling hills beyond, the earth providing thermal insulation. The walls are of heavy Douglas fir framing and vertical redwood siding. All of the lumber was cut on the site as land was cleared for vines, and sawn there in a temporary mill.

The only embellishments to the building are a rectangular cupola skylight and, on the north side, a trellised porch that serves as a crushing bay during harvest and is covered with climbing white roses. The interior is dominated by precisely and lovingly hewn scissor trusses, barrels, some of which might be sculpture, and fermentation tanks gleaming against all the wood. □



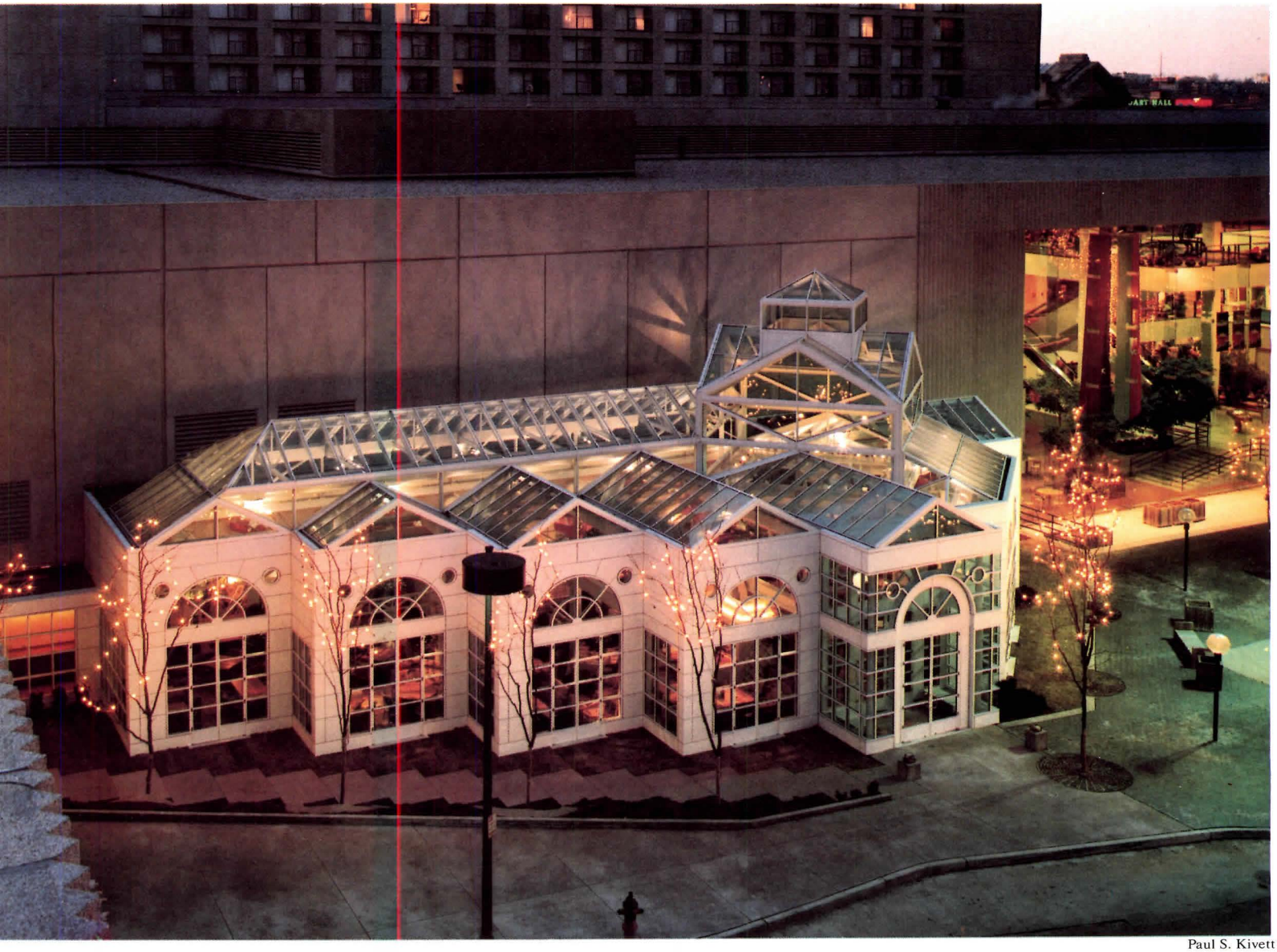
The downhill facade is trellised, the uphill facade all business. Right, the lower level storage area, with verticals supporting both building and barrels; across page, skylit, betrussed main space.





Faceted Jewel Against a Blank Wall

Crystal Pavilion, Crown Center, Kansas City. Architect: Jack Gordon. By Allen Freeman



Paul S. Kivett

Allen Freeman

Crown Center is an anomaly. Not quite downtown, neither is it suburban. Although its speculative office buildings and hotels have been commercially successful in a slack Kansas City economy—even after the tragic collapse of the Hyatt walkways—its retail mall has languished in competition with bigger shopping centers farther out that have drawn the best retailers.

What was needed in the large plaza, much of which is defined by monolithic, precast panels, was new life—something to draw people into new shops inside—and, in the parlance of the trade, a "destination." These were two recommendations by Philip George of consultants Harper & George, who suggested a greenhouse restaurant and recommended Jack L. Gordon Architects as designer. Harper & George did the interior.

Gordon's white pavilion pops out near a corner of the plaza, a position dictated by the location of a new kitchen and two additional new restaurants that share it, all within the existing building. It steps away from the corner in five equal bays, wrapping back to the mother building with a chamfered double bay and then another single bay set four-square. The roof is all skylight, a spine running the building's length with butting segments of varying lengths corresponding to the stepped-out bays. At the building's deepest dimension, the roof rises in a two-stage pinnacle twisted to align with the chamfered corner. Two nice touches: The building's form mirrors the massing of Edward Barnes' stepped offices across the plaza, and the high point of the skylight mimics the shape and orientation of Warren Platner's freestanding American Restaurant on top of the nearby Hall's store.

The building frame is steel, rolled sections and pipe columns; the independently structured skylight frame is aluminum, as is the skin. Fenestration of the typical bay is a pleasing arrange-

Paul S. Ki

From a distance, top, the little pavilion seems to snuggle next to its parent. At ground level, above, it appears more assertive. The greenhouse structure glows at twilight, across page.

len Freeman

A great deal is going on inside.

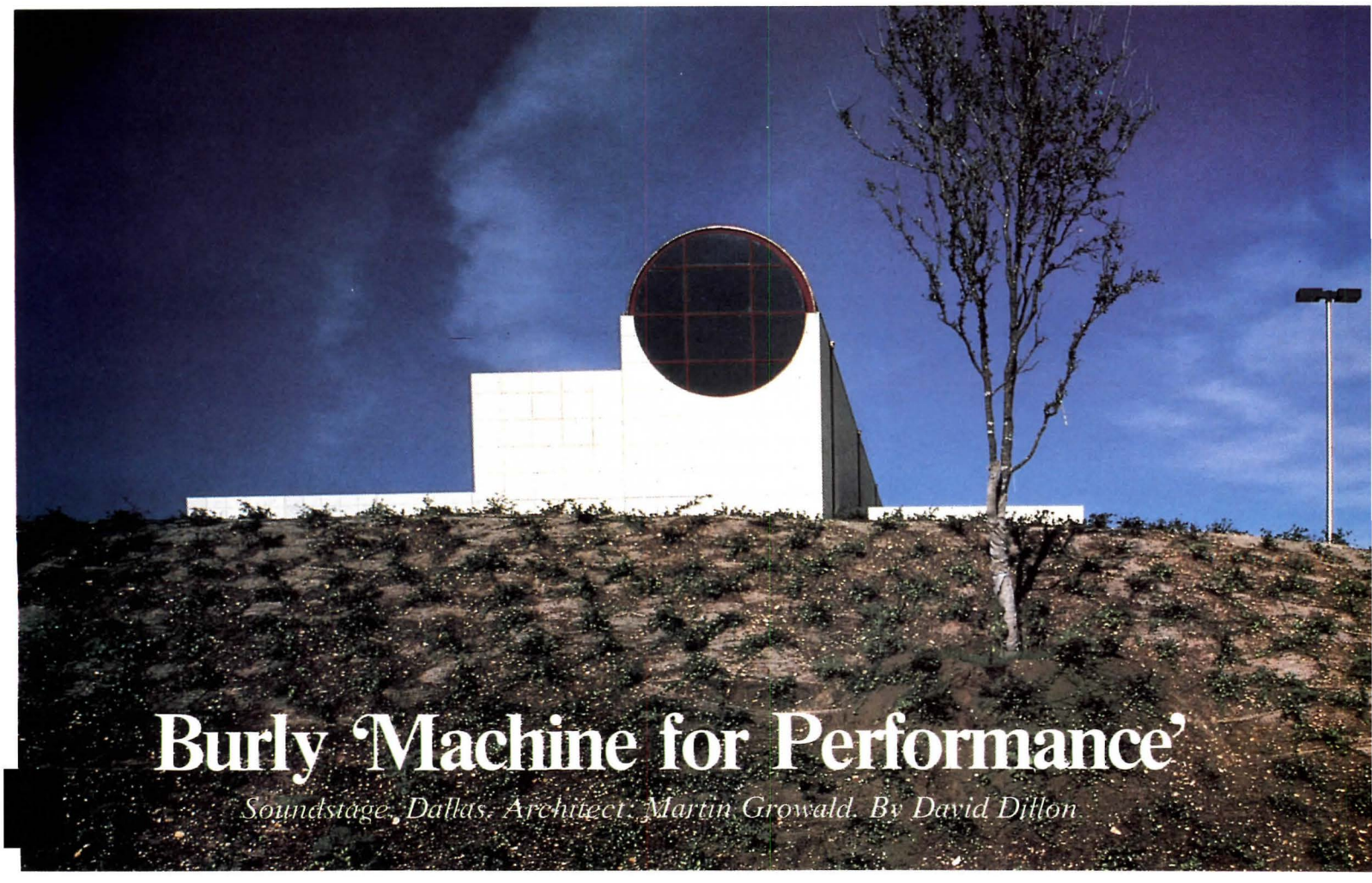
ment of a large square element divided into 16 smaller squares topped by a fanlight flanked by bull's-eyes. Setting off this vaguely Renaissance composition is the way the aluminum panels are segmented to imitate stone, a play upon the nature of materials that is carried a step further in the entrance bay. There the solids of the typical bay are transposed into glass voids.

The effect of the facade games, though postmodern, has about it the discipline of a modernist who has merely loosened his tie a bit. A measure of the building's overall success is its easy accommodation of an interior scheme by a different designer who would seem more comfortable wearing no tie at all. Harper & George went for whimsy. If there is more going on inside than any building of this size could be expected to absorb—embellished columns, polychromed corbeling, lattices, mirrors, etc.—there are also some truly lovely touches. Among these are peach-colored column capitals shaped as petals. Vestiges of a planned sunshade system, the petals were to be larger and were to spread open on the columns like inside-out umbrellas operated by cables. But the client felt that the larger size would obscure the skylight, says Gordon, and the tight building schedule precluded working out the engineering in time, according to George. At any rate, the resulting petals are stationary, with sunscreening accomplished by a more mundane, but appropriate, white willowing canvas.

This tight schedule produced a timetable of 10 months from contracting to completion. A couple of shortcuts: The skylight was fast-tracked, and the aluminum cladding painted in the field rather than given a baked enamel finish. Completed on time, the pavilion is a small gem that contrasts handsomely with its setting. As critic Donald Hoffmann wrote in the Kansas City *Star:* "If it doesn't fit, it nevertheless belongs." □

Paul S. Kivett

Tile, trusses, trellises, palm trees. Pastel petals adorn columns, above, and rocking rabbit, top, surmounts bar.



Burly 'Machine for Performance'

Soundstage, Dallas. Architect: Martin Growald. By David Dillon

Dallas has traditionally billed itself as the "third coast" of the American film industry. Yet until completion last October of the Soundstage in nearby Irving, the distance between the third coast and the other two, New York and Los Angeles, was immense. Dallas shot the commercials and a few industrial films, while the features and specials were produced elsewhere.

Now Dallas has a facility that can accommodate the most sophisticated film and video productions, and is finally in a position to live up to its own hype. "Silkwood," Mike Nichols' dramatization of the Karen Silkwood story, and Robert Altman's "Streamers" have recently completed filming at the Soundstage, with other major movie and television productions scheduled for later this year.

Designed by Growald Architects of Fort Worth, the building is the first phase of a 100-acre planned development for the video and film industry known as the Dallas Communications Complex. The program called for a 71,000-square-foot structure containing three sound stages (14,500, 5,900, and 3,000 square feet), a 7,000-square-foot service and ready area, space for rehearsal and set construction, plus dressing rooms and administrative offices.

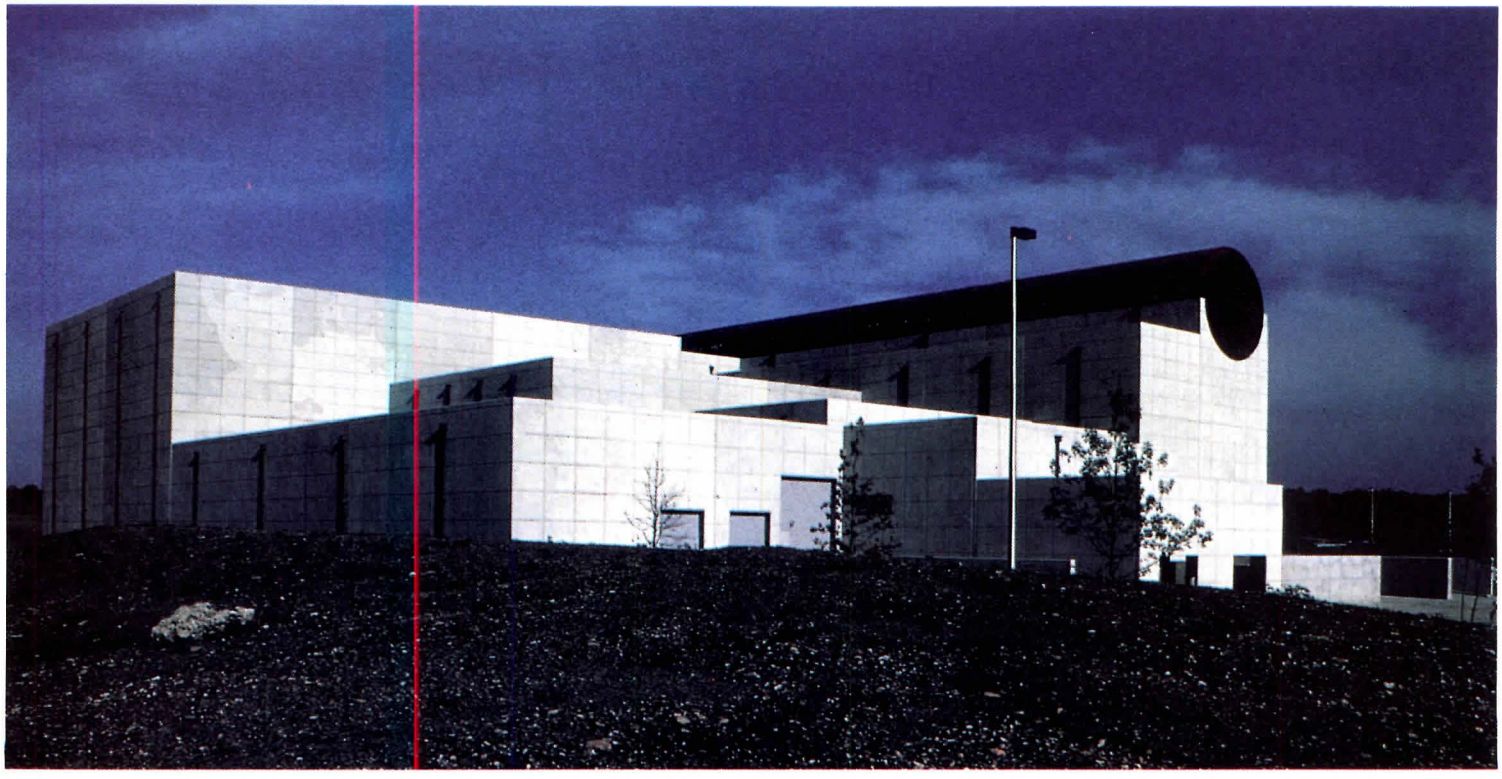
Growald organized these various functions by making the service and ready area a spine that runs the entire length of the building. The soundstages and set construction area are on one side, the support functions on the other. Large roll-up doors allow service vehicles to drive into the center of the building, where the action is. Between takes, this space becomes an interior street, similar to those on Hollywood back lots, where the cast and crew can mingle informally. "It's my contribution to democracy in the movie business," chuckles architect Martin Growald, AIA.

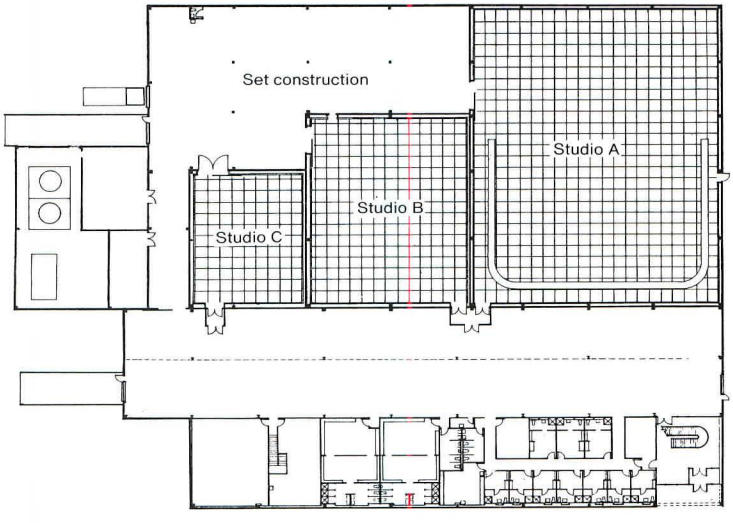
This 72-foot-high space is topped by a copper-clad barrel vault with oculus windows at both ends. It's a grand room with as many cinematic possibilities as anything the movie set designers can come up with. Mike Nichols was so taken with its trussed painted I-beams and iron catwalks that he turned it into a plutonium processing plant in "Silkwood." It's also the one dramatic design flourish in a building that is basically just a large warehouse.

However, Growald has added further interest by cutting deep grooves into the wall panels, giving them the appearance of cut stone blocks. He has also taken several large bites out of the southeast corner of the box to create a series of stepped forms. The north elevation, however, still looks like a power plant, which may please movie producers more than the tenants of the office buildings being constructed next door.

Ultimately, of course, a soundstage is a machine for performing on which millions of dollars are spent to ensure the fidelity of a single note. The challenge, therefore, was finding a way to isolate three boxes (the studios) inside another box (the building shell) so that sound can't pass between them. The foundations for the studios were poured individually and then separated by a two-inch gap, like an expansion joint in a highway. Because the soil in North Texas literally walks, the foundations were also raised on piers to keep them level. Construction is all steel on concrete piers. Floors are concrete, except for the mezzanine, which is concrete over a steel deck. The walls are standard tilt-up concrete panels. The cost was approximately $11 a square foot for the shell, $24 a square foot for the finished building. Exterior walls contain seven inches of concrete, then an 18-inch air space, four layers of sheetrock, and several layers of glass fiber.

Mr. Dillon, architecture critic for the Dallas *Morning News,* this month joins the JOURNAL's roster of contributing editors.





To one side of copper vaulted spine for service and ready areas, across page, are stepped studios, on other dressing rooms, etc. On service center wall, below, mural of a Palladio building.

Drama inside and out—and a touch of fantasy.

Cracks around doors and windows were painstakingly sealed, and water pipes were eliminated from the core of the building.

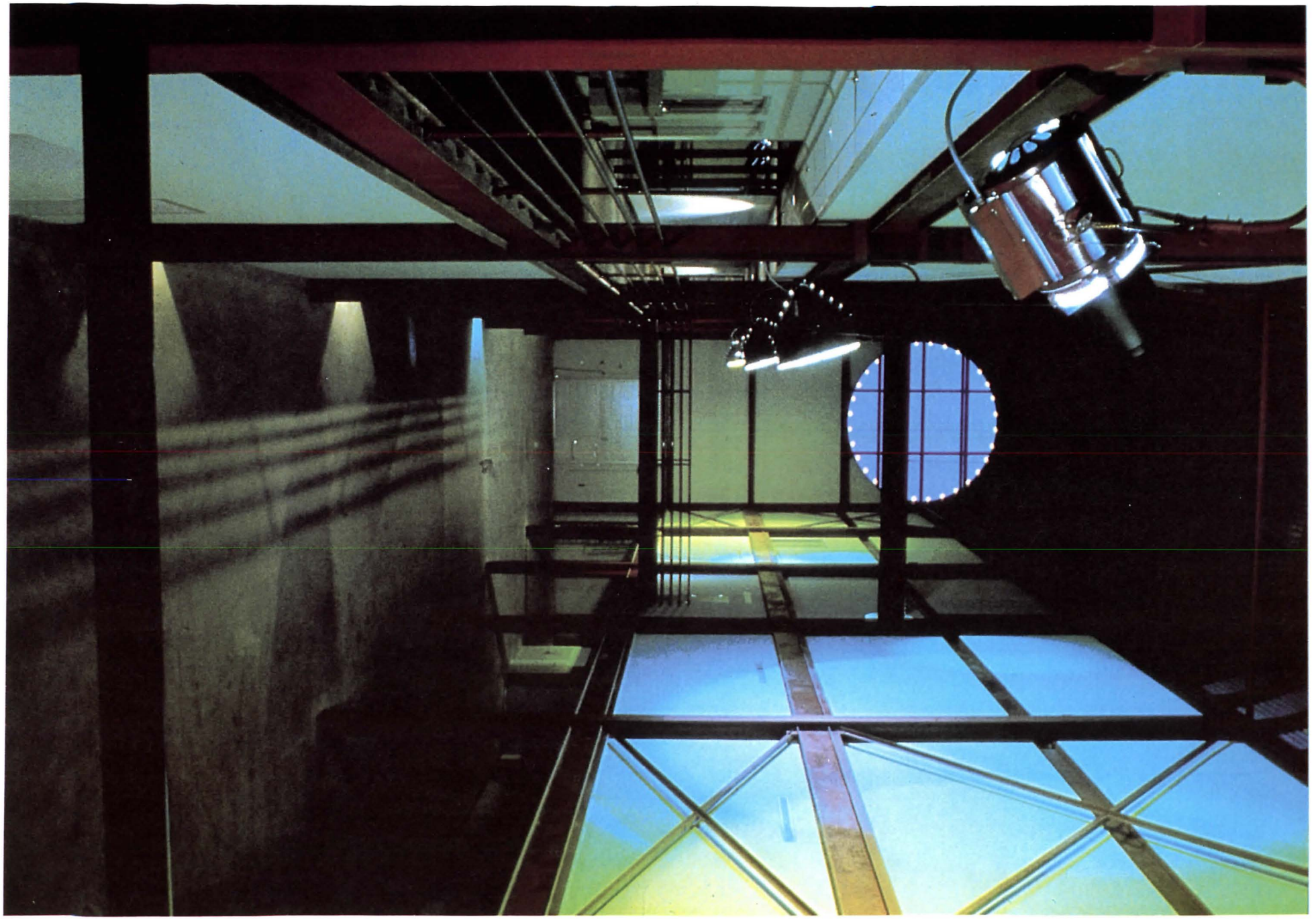
To reduce interference from the airconditioning system, the source of 80 percent of the ambient noise in a soundstage, the architect installed individually zoned fan units in each of the studios. Compressors and chillers are housed in a separate building behind the soundstage, and cool air is piped over the tops of the studios by large fans that whisper it through the building.

The result is a facility with a NC (noise criterion) rating of approximately 25, which is sufficient to shut out everything from the sound of a Stevie Wonder rehearsal in Studio A to the roar of a 747 taking off from nearby Dallas-Fort Worth in Studio B. The world's great concert halls, such as Symphony Hall in Boston, have NC ratings of between 15 and 20. The Soundstage's highly sophisticated lighting system reflects the influence of contemporary television technology on movie production.

Each studio at the Soundstage is equipped with a complex grid lighting system. The largest, used for feature productions, contains a system of motorized self-hoisting grids, rigged with light and sound equipment, that are operated by computer. The two smaller studios, designed for commercials, soap operas, and other smaller productions, have motorized grids that can be worked from above to below. The difference between a Chevette and Lamborghini.

Anticipating the future growth of the Dallas film and video industry, Growald has completed a 50,000-square-foot office building and a 150,000-square-foot service center next to the Soundstage, using the same inexpensive steel frame and tilt-wall construction. A 100,000-square-foot office building is planned for later this year.

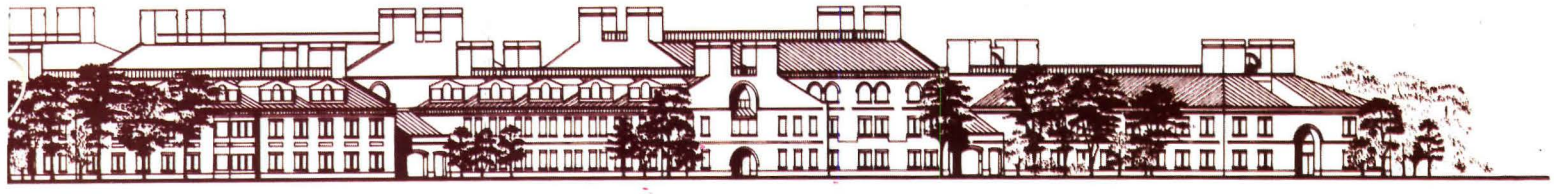
On the exterior wall of the service center is a mural depicting Palladio's Palazzo Della Ragione in Venice. Palladio surrounded the town hall with a two-story screen of delicate columns and arches, transforming a hunky mass into a light, elegant structure. The Soundstage mural has a somewhat ambiguous effect on the blank concrete wall of the serving center, yet mainly it's just an amusing bit of set design, the sort of thing one expects to find on the back lot of Warner Brothers or MGM. It enhances the element of fantasy and illusion that is the heart of movie making, and of much good architecture as well. □



Photographs © Norman McGrath

Sturdy Set of Traditional Forms

Beneficial Center, New Jersey. Architect: Hillier Group. By Stanley Abercrombie, AIA

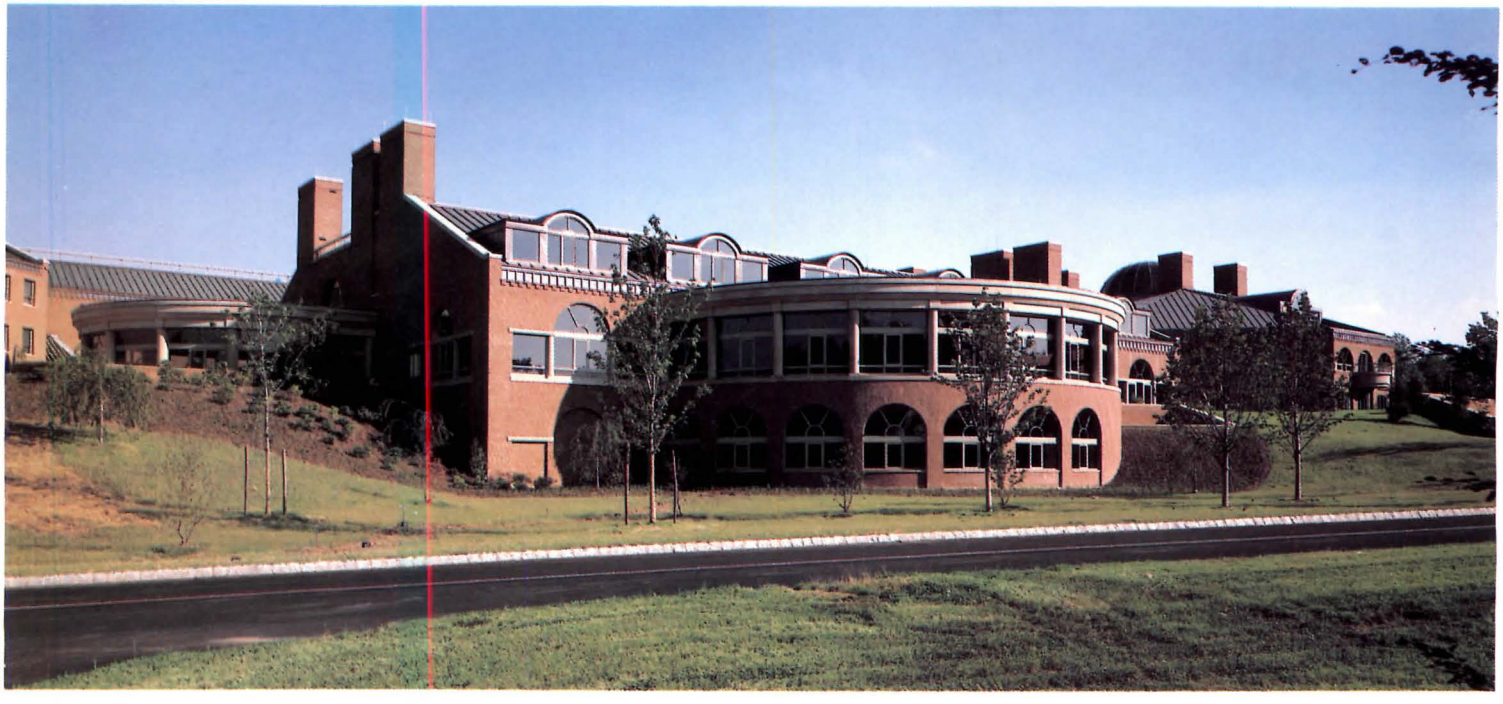


With Beneficial Center, we come full circle. This rambling corporate headquarters complex is not mainstream modern, not by a long shot, but neither is it postmodern; rather, it is an informed new version of what we once called traditional. Just the sort of design we all would have fervently despised if it had been built in the '50s.

Perhaps the distinction between traditional and postmodern needs some explanation. Certainly postmodern style is enriched by allusion to tradition—is, indeed, dependent on such enrichment. But postmodern is flat. Not flat in the sense of lacking spirit, not flat like the club soda when we forget to screw the cap on; heaven knows, postmodernism has plenty of fizz. But it often is literally flat, a stage set evoking memories of the more solid past and, at its best, entertaining us with the clever ways in which two dimensions can represent three.

In the context of such work, some of which can be seen on other pages of this issue, and educated by such work so that we are able once again to consider traditional forms without prejudice, Beneficial seems sturdy as a rock. Its materials are solid and genuine: lots of thoughtfully detailed brick, limestone trim, copper roofing, carved wood handrails, granite paving, and columns and other elements of cast stone. Its forms and spaces

Skyline of the complex is punctuated by a campanile and chimneys. Frequently arcaded buildings are grouped around open spaces. A centerpiece is executive building, above left.

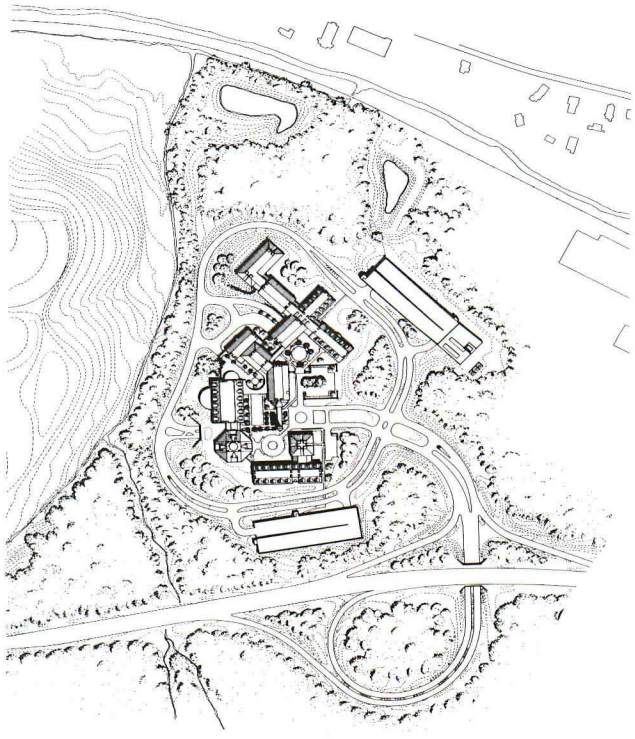


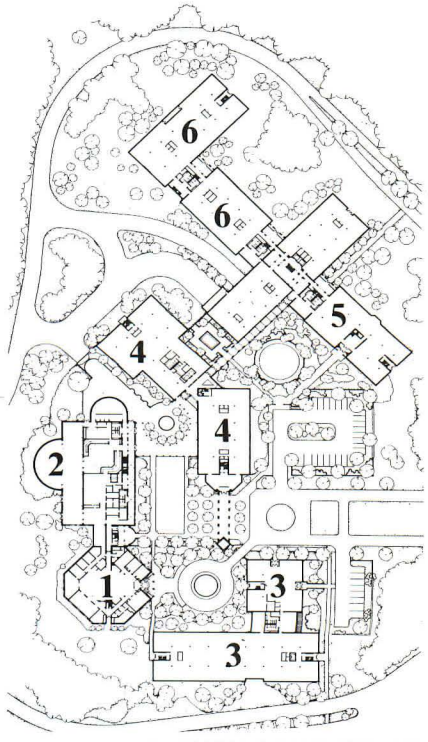
No illusion of wandering into Williamsburg.

are generous, too: vaulted ceilings, arcades, two- and three-story building lobbies, and—establishing a central focus for the picturesque composition—an 88-foot-high brick campanile.

Yet there is no illusion here that we have wandered by mistake into Colonial Williamsburg, nor have generosity and tradition led to waste and anachronism. These brick forms are efficient containers for up-to-the-minute offices (with interior design by Innerplan) and computer equipment; the campanile serves as a water storage tower. Even in the overall composition, a modern sensibility is evident: Although each of the main building elements is given some individuality in fenestration pattern and in siting, all are basically similar in section; they could be lengths of office space cut as needed from a single extrusion.

The total effect is a satisfying and rare combination of grace and logic, and the architect, a fast-growing Princeton, N.J.-based firm called The Hillier Group, seems to have achieved it with little dependence on expensive custom work and traditional craftsmanship. As John Pearce, AIA, Hillier's principal-in-charge for Beneficial, says, "In the last 15 years or so, technical advances have made it possible to fast track a project of this size and complexity, using traditional themes and motifs. For example, we can copy a typical detail on mylar and repeat or modify it indefinitely to take account of special on-site conditions. . . . We can get manufacturers to produce a custom window extrusion, or produce bricks in the old forms, or give us custom paint colors. . . . Although a job of this scale gives manufacturers extra incentive to creativity, I think we architects could do more to advance the quality and diversity of modern architecture by making the manufacturers partners in our ventures on a much wider range of projects."





Above left, view from the third floor of the operations building, from left are the executive building, food service building, and financial buildings. Left, 'bustle' at rear of food service building. Above, 'moon gate' in a courtyard wall. On site plan are:
(1) executive building,
(2) food service building,
(3) operations building,
(4) finance building,
(5) insurance building,
(6) computer center.

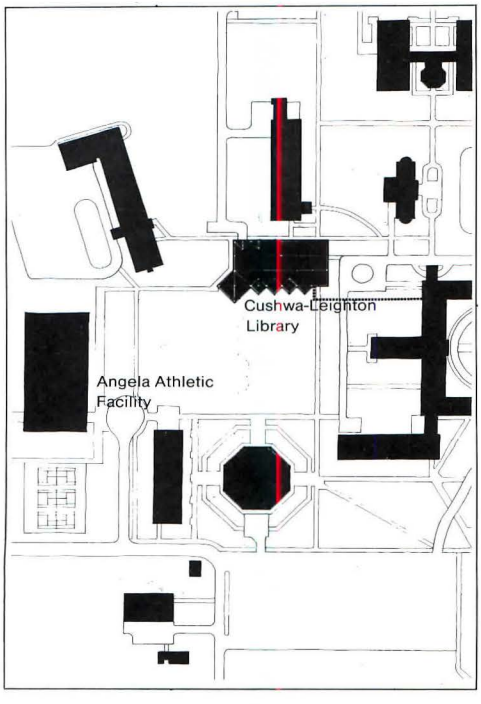
A village that might have been a megastructure.

Beneficial Center is the headquarters of Beneficial Management Corporation, a financial institution that began as the Beneficial Loan Society and whose now diverse activities were scattered among a dozen locations in New Jersey. The new center, on 150 acres of gently rolling countryside near Peapack, N.J., faced, at first, a design problem that has become commonplace for suburban corporate headquarters: The preliminary sketches had to ingratiate the newcomer to the existing community. The traditional look of the Hillier scheme, along with the promise of a new highway underpass and a substantial amount of underground parking, seemed convincing to the conservative potential neighbors.

The village-like composition, in a way, belies the nature of the complex, for all building elements are linked by an elaborate network of underground passages, and the whole could just as easily have been built as a single giant megastructure. In another way, however, the village concept is exactly right; because of its remoteness from urban amenities, the center constitutes a little community of its own, with employee facilities such as lounges, indoor and outdoor dining areas, an exercise room, a sauna, a whirlpool bath, and a company store. Beneficial Center is therefore much more than a monolithic machine for working in, and the variety and idiosyncrasy of its building elements—its dormers, its chimneys, its molded bricks and carved wood—seem perfectly appropriate.

Can anyone now remember the fury of Frank Lloyd Wright and other modernists when John Russell Pope's traditional design for the Jefferson Memorial was proposed? If Beneficial is among the first of a wave of traditional architecture executed with genuine, convincing care, an honest reuse of old forms and not just an intellectual reference to them, then the time may not be far off when it will be hard to remember what all the traditional versus modern squabble was all about. □

Above, main employee cafeteria in food service building (interior of 'bustle'). Top, passageway between the cafeteria and the executive dining room, with characteristic arched windows and alcoves. Right, atrium lobby of insurance building.



A Library Respects Its Elder Neighbors

At a small Indiana college. Architect: Woollen, Molzan & Partners. By Nora Richter Greer

In the course of programming this library for St. Mary's College, Notre Dame, Ind., the architect conducted some 60 individual interviews of college staff and students and held two group sessions. What emerged was a sophisticated statement of needs (the librarians had just developed, with the help of outside consultants, a new technical program) and an aversion to the college's most recent major building preceding the library.

This was the Angela Athletic Facility, a bright and airy high-tech gymnasium by Helmut Jahn, AIA, winner of an AIA honor award in 1979 (see Mid-May '79, page 184). It wasn't that the interviewees actively disliked the building. It was more that "they feel that it was parachuted in from someplace else and doesn't have anything to do with their campus," says Evans Woollen, FAIA, of Woollen, Molzan & Partners.

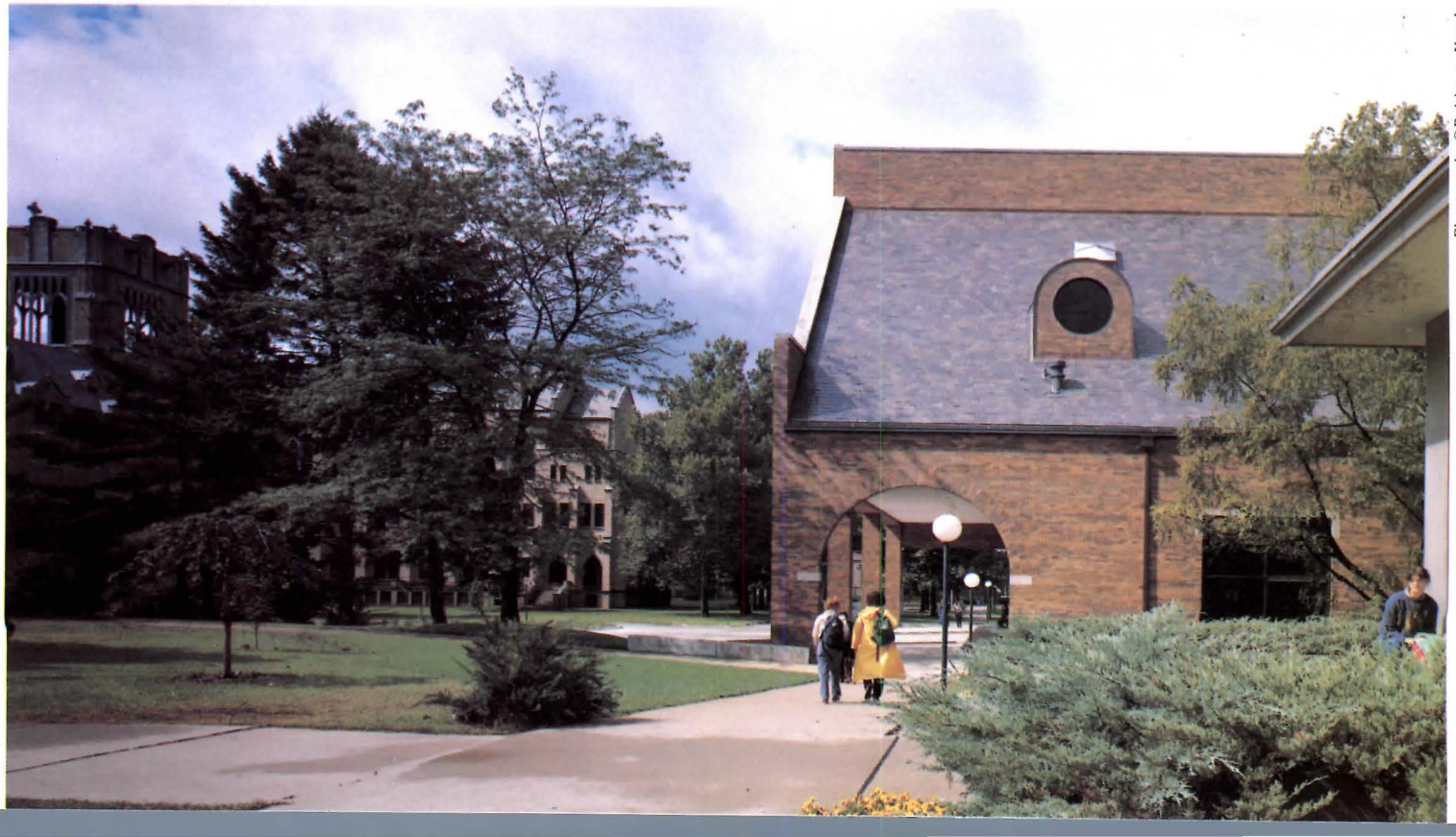
The Cushwa-Leighton Library has everything to do with Saint Mary's College campus, at least on the exterior. It borrows the forms and materials of many existing buildings—steeply sloped slate roofs, towers, dormers, gables, brick—to make a sympathetic, yet unique building. A monitor on top of the sloping roof gives the library a squared-off appearance and becomes a backdrop for the playful west facade. The tower becomes a subordinate building, and dormers are used only occasionally as accent marks.

But while its exterior clearly takes a sharply different design tack from the gymnasium, the library embraces the gym through siting. In fact, the library is the closing element of a secondary quadrangle on the campus, a quadrangle whose north end is the gymnasium. This placement ties up what were loosely connected buildings in that part of the campus, and since the library is located over a former road, it makes the area more of a pedestrian preserve. Subtly subdividing the quadrangle is the tower, located on the northwest corner of the library. As Woollen explains: "The tower reaches out to go around that corner and subdivides the quadrangle with a subsidiary space north of that next to Jahn's building."

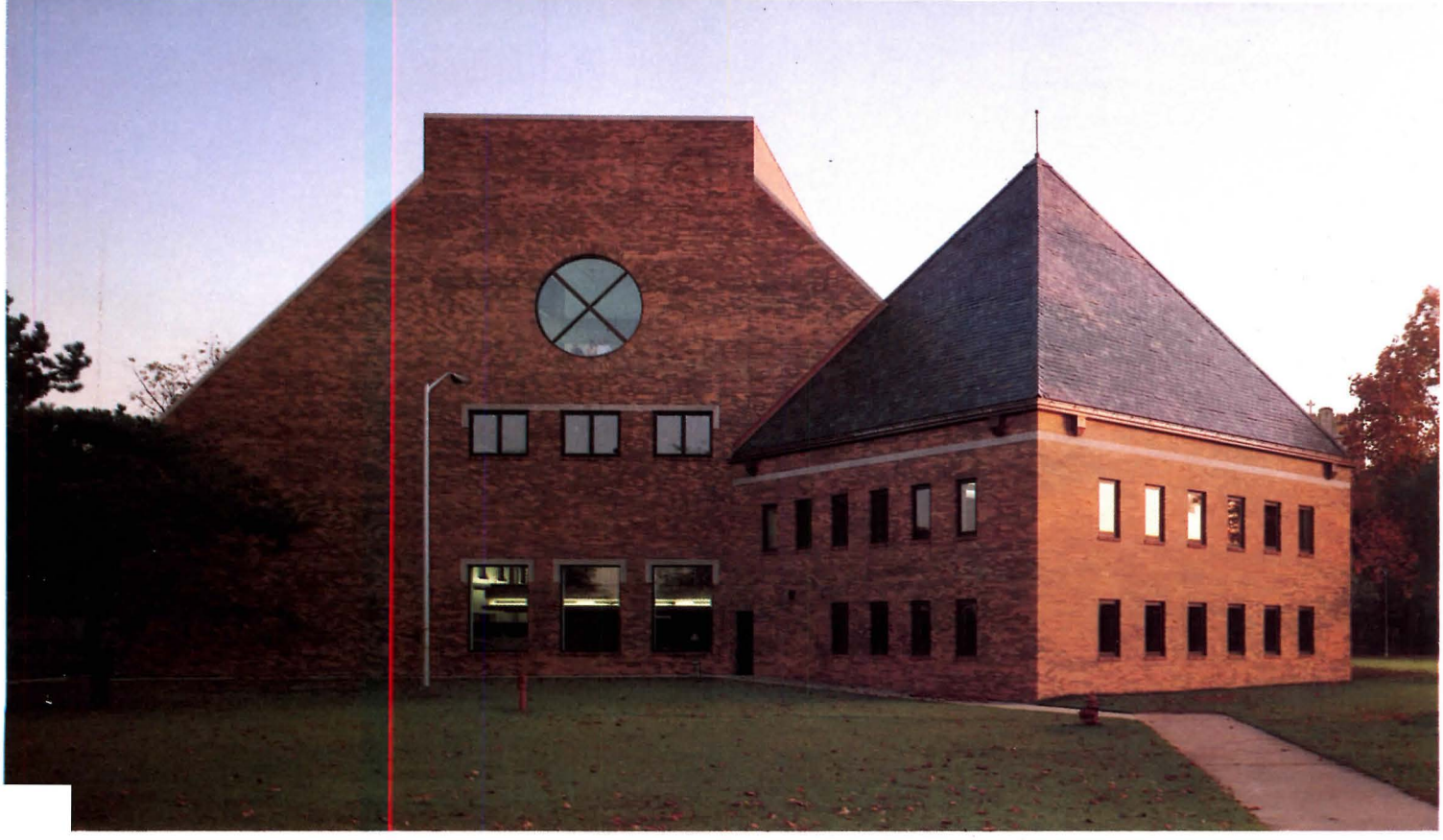
The tower, which is a highly decorative element, is also quite functional. It serves to separate the few "private" library activities from the general public. It is easily entered from the rear of the library, so it is accessible even though it is separate. The first floor houses the head librarian's office, the president's conference room, and staff lounge. The second floor has faculty study rooms, with four group study rooms occupying the corners. The top floor has storage and washrooms.

Besides enclosing a quadrangle, another consequence of the siting is the building's rectangular shape and the predominance of the south and west facades. The south is the main entrance, an "entry loggia" that spans the major pedestrian path connecting residences with academic buildings. The west facade, the building's major exposure to the quadrangle, becomes the showplace, with playful zig-zag bays (that "leak the building into the quadrangle," in Woollen's words), gables, tower, and part of the roof cut away for an outdoor deck.

The west facade with its zig-zag bays, above. The entry loggia, right, with other campus buildings across the quadrangle.



Photographs ©Balthazar Korab



A sense of openness pervades the interiors.

The bays are also important for what lies behind them—the "periodical room." Says Woollen, "I think we went into the whole design with a preconception that the periodical room was the single most important room in the library, because it is the one that induces the casual library user to settle down, with, if nothing more, a magazine. I think of periodical rooms as living rooms or anterooms, or particularly pleasant, casual rooms. So it seemed natural that it should enjoy the nicest position in relationship to the ground." The periodicals are displayed on natural oak bookcases located away from the bays; the bays become separate reading spaces.

Actually, the library is filled with varying sized and shaped, discrete reading areas. The building consists of two floors, each with its own mezzanine. On each level, except the first floor, the open stacks are placed in the core of the building, freeing the perimeter spaces for study areas. On the first floor, the librarian workrooms occupy the core area. All levels are visually connected by an entrance atrium that travels the full height of the building. If designed in a straightforward way, this organization could become boring to the frequent user. However, each level is different, and there is a sense of delight in moving from one to another.

The first floor and mezzanine are simply organized: The ground floor with its periodical room on one side of the core and the reference/card catalog area on the other is overlooked by a simple core mezzanine, which has study carrels along its edge. The second floor and mezzanine are more complex. Both have large (in the context of this building) reading areas at the front and rear. The second floor has reading areas tucked here and there throughout the stacks that extend out beyond the mezzanine. It also contains two large and two small group study rooms and has a specially ventilated smoking room. The second floor mezzanine has higher ceilings than the first floor mezzanine due to the monitor. Here some reading areas extend all the way to the steeply sloping roof, which gives the whole mezzanine the feeling of an oversized attic. As a special surprise there is an outdoor deck accessible from this level.

Throughout the building there is a tremendous sense of openness. The walls that surround the atrium have cutouts that echo the shape of nearby windows. The mezzanines are open, with sides protected by metal railings. Only the group study rooms are closed, and the small ones have window walls. This feeling of openness is carried into the relationship between the librarians and the users. The librarian workspaces are separated from the periodical and reference areas by mullioned window walls, which allow for privacy but at the same time for visual contact between librarian and user.

The basement, or lower level, is also used to the fullest. It houses more stacks; a growing audiovisual department; the special collections, exhibit space, and archives; and a 24-hour study room, with washrooms and vending. When the library is closed, the after-hour study area is accessible through a tunnel from nearby Le Mans Hall.

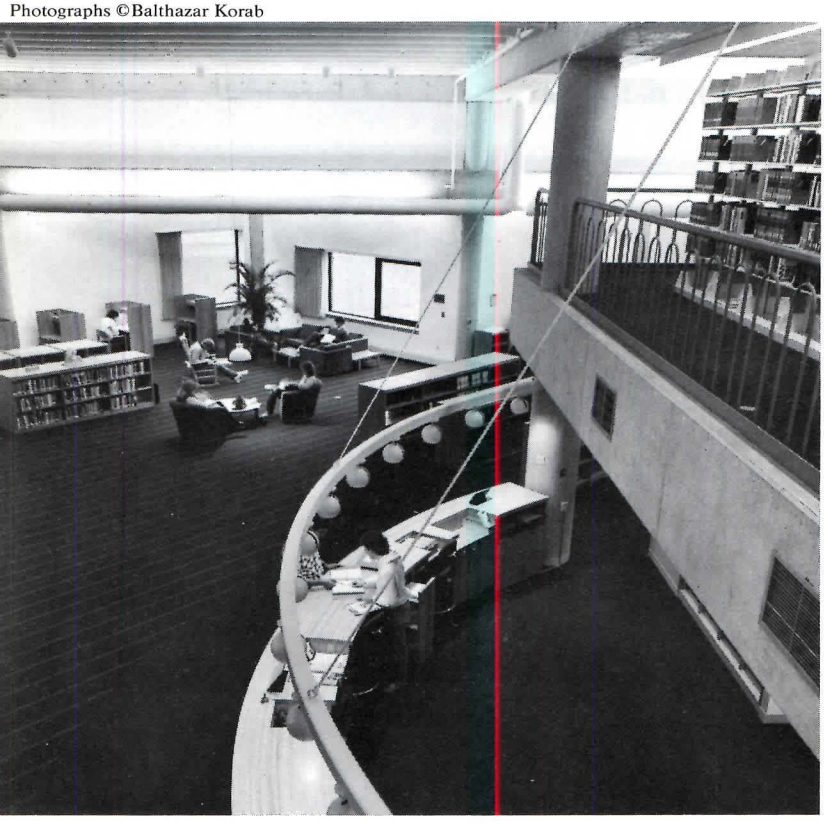
It is in the interior finishes that one sees the closest connection to Jahn's gymnasium: Mechanical ducts are left exposed, as are beams and concrete columns; stair and mezzanine railings are metal; lighting is more utilitarian than stylish; acoustical panels cover the ceiling. These finishes were chosen to save money, but, as Woollen says, "It would be dishonest and dumb to say that we weren't influenced by buildings like the gym that we have done ourselves. . . . We still go into a building with some of the tenets of the last decade, which are to show structure and to get interesting forms." Woollen, however, acknowledges that the firm "may have been trying too hard to show the bones of the building." And, indeed, the finishes seem a little hard-edged compared with the contextual exterior and the warm, natural oak and upholstered furnishings.

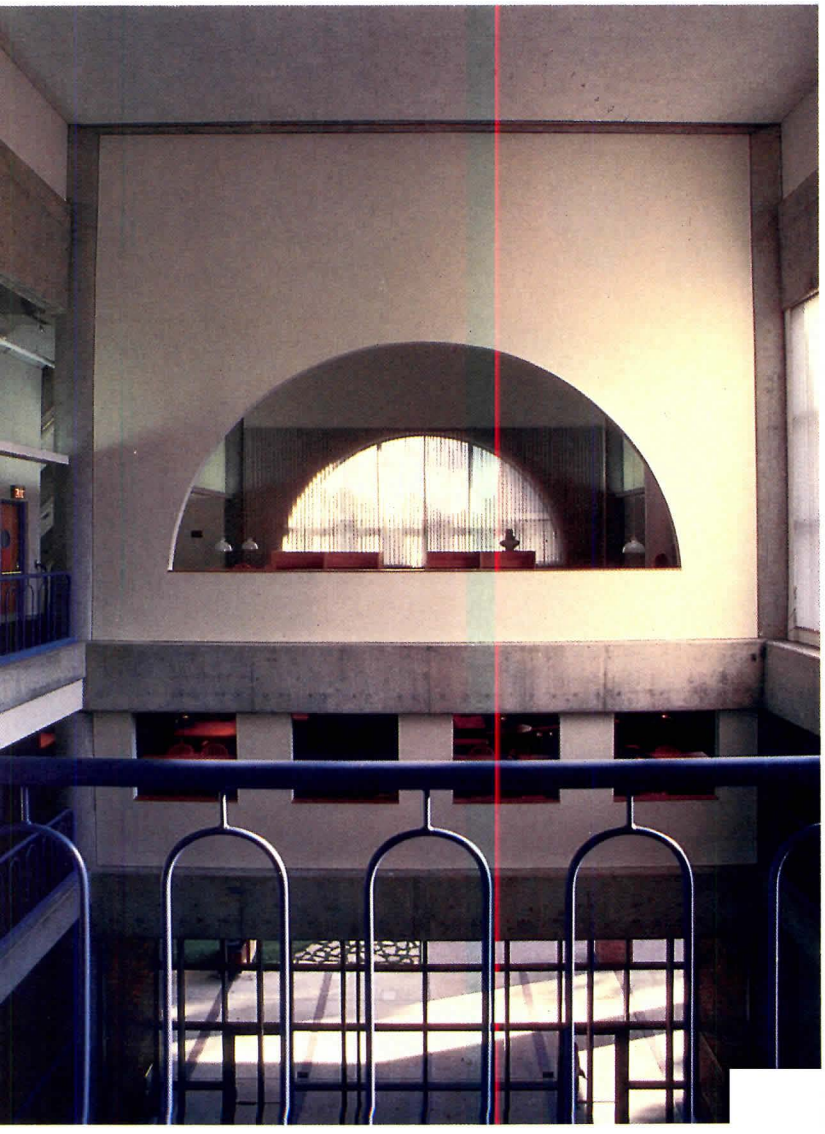
Overall, however, the building works, and it works well. That may be due in part to a tremendously thorough, cooperative effort in the predesign stage between architect and client. But it is also because of the firm's interest in what Woollen calls "situational architecture—architecture that bends every effort to be particular to the place where it is built." This 78,000-square-foot building is more than just contextual; it is comfortable, functional, and friendly. It is, as Woollen says, "a library that is like a big house."

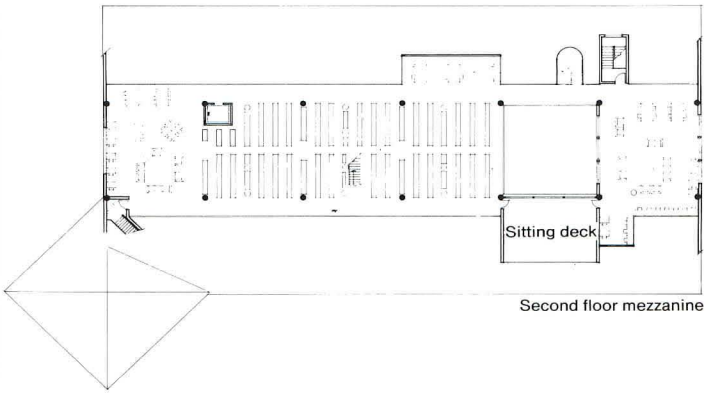
The north facade and tower, above. Across page, above, first floor reference area looking toward front entrance, and, below, a study area. Wallpapered section hides the service entrance.

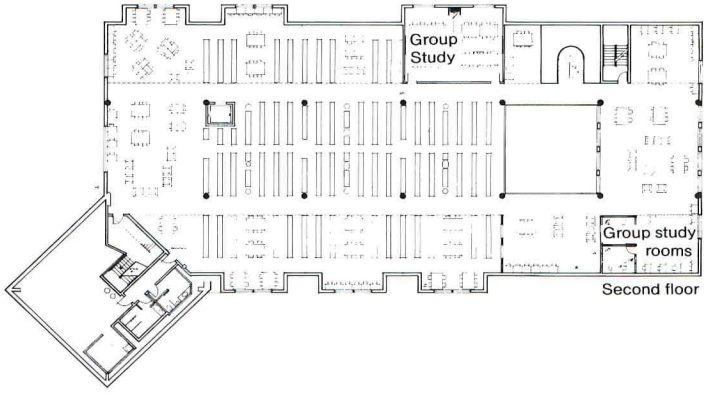
Photographs by Wilbur Montgomery

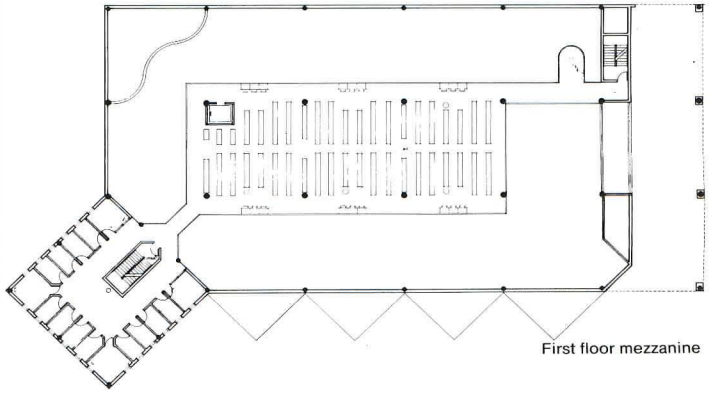
Photographs ©Balthazar Korab

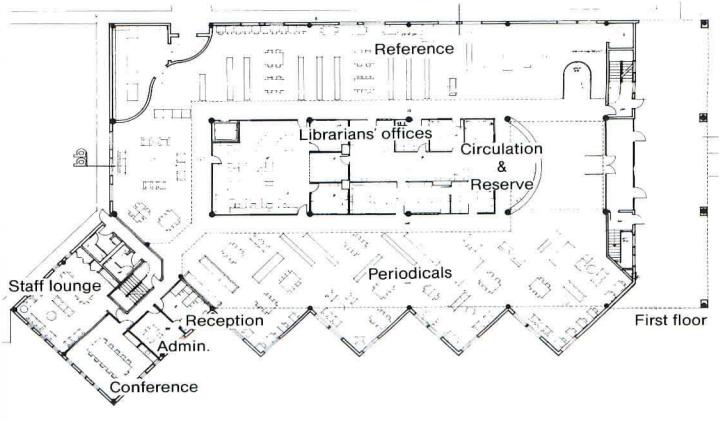












The custom-built, oak circulation desk as seen from the first floor mezzanine, above. View from second mezzanine across full-height atrium, left. The library is filled with reading areas of varying sizes and shapes. The one, right, is located on the second floor overlooking the quadrangle outside. The first floor and mezzanine are simply organized; the two upper levels are more complex, as seen in plans above. □

©Greg Hursley

'First Monument Of a Loosely Defined Style'

Michael Graves' Portland Building. By John Pastier

Portland is the most traditional major city on the Pacific coast, but during the postwar era it has also been in the forefront of America's architectural and urban evolution. In 1948 it became home to Pietro Belluschi's Equitable Building, the first aluminum and glass skinned office structure in the country, and last year's winner of AIA's 25-year award. In the years since the Equitable opened, the city commissioned two of Lawrence Halprin's earliest and finest urban fountains and became a pioneer in providing free public transportation downtown and in replacing a riverfront freeway with a park. This is an impressive record for a city of 350,000, and it has gone largely unnoticed. Late last year, however, the completion of a single building generated what seemed to be as much attention as all those other events combined.

That building is, of course, Michael Graves' Portland Public Services Building [recipient of a 1983 AIA honor award—Ed.]. Just as Belluschi's work was the first American example of a modernist commercial genre that was later to become ubiquitous, Graves' is the nation's first executed monument of a loosely defined postmodern style. Whether it is the first of many is another question. If it is not, it will be seen as an architectural freak, but if it has credible offspring, it will be assured an important place in architectural history. Ours is a society that worships winners and forgets losers, and the Portland Building (which is one of its two official names) and its creator have advanced their argument with such insistence that black-and-white judgments are almost inevitable.

Its opponents, and there are many, find the building garish and without substance. The most concise statement of this position came at a city council hearing from Belluschi himself, when the courtly octogenarian called it "an enlarged jukebox" and "an oversized beribboned Christmas package" more suited to Las Vegas than to the city he has lived in since the 1920s. Its proponents, and there are some, fall into two groups. The more committed portion, found mainly in the geographic or philosophical vicinity of Princeton, declare it an unquestioned triumph of architectural humanism and symbolism. Its more realistic supporters concede the existence of flaws and compromises while finding it worthy on balance.

To address the issues raised by the building's friends and foes, a review of its complicated history is needed. In early 1979 the city decided to consolidate its various operating departments, scattered throughout 12 buildings, into a single new structure. Mayor Neil Goldschmidt, a mover behind Portland's Transitway Mall and later U.S. secretary of transportation, gave impetus to the project and declared his desire for a "high-tech building." (The irony of his request has gone unnoticed in the debate over the chosen design.) Concluding that a design/build competition

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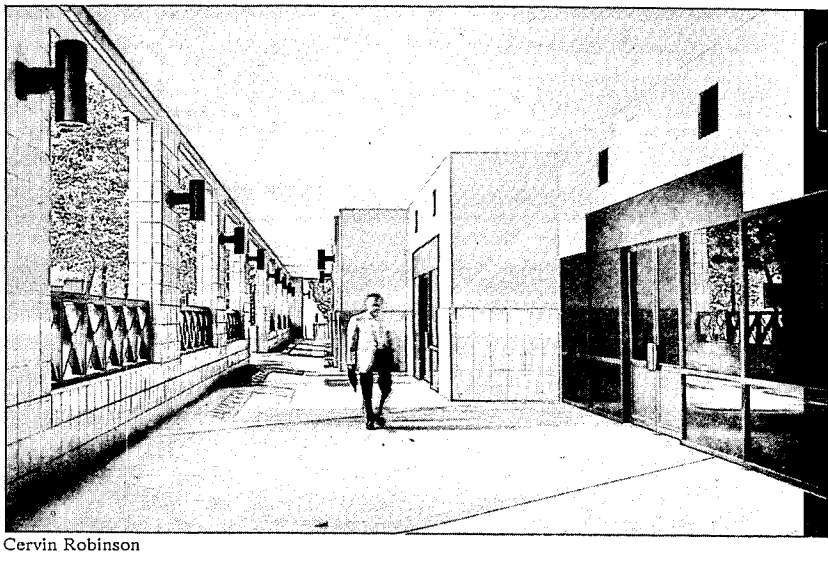

Cervin Robinson

Across page, the Portland Building as seen from across Fifth Avenue. Entrance to the parking garage sits in the middle of the Fourth Avenue facade, above. Main entrance is at right.

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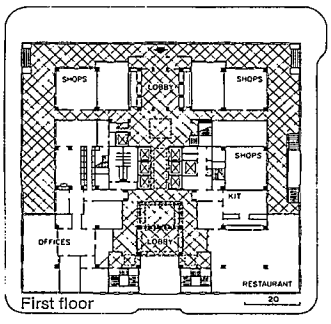
Entrance lobby, top, surrounded by public information and building security areas on the first floor, visual arts gallery on the second. Above, foyer through second floor elevator lobby.

A precompetition process of elimination.

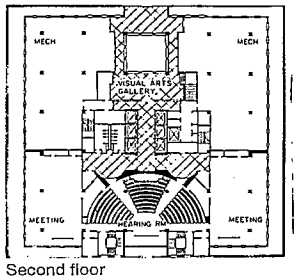
would best meet its practical and esthetic needs, the city hired a consultant to prepare its program and budget, and advertised for entries. In June, a jury of five nonarchitects was selected—it was not an AIA-sanctioned competition—and Philip Johnson, FAIA, and John Burgee, FAIA, were appointed architectural advisers to the jury. This act would prove central to the controversy that later ensued over Graves' design, since the persuasive and esthetically mischievous Johnson was in effect the jury's sole source of design advice. He has been widely blamed for wielding undue influence in the selection of Graves from a field of three finalists, but the charge seems misplaced in light of the relative quality and cost of those designs. At that point—February 1980—Graves' team was proposing the most building for the least money, as well as the most interesting architecture, so that giving it the commission was the most practical as well as the most avant-garde thing to do.

But if Johnson's role in that final selection was beyond questioning, his earlier involvement was not. The crucial event occurred in July 1979, when the jury met in New York City to select three teams of finalists to compete from a field of 11 applicants, based on architectural design qualifications. The selection was to be based—to paraphrase the official document slightly—on the designer's potential and ability to respond to program requirements; to establish appropriate relationships between quality and form, function, and economy; to maximize efficiency of design; and to maximize energy conservation opportunities.

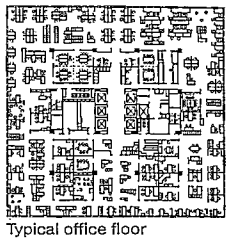
Given these criteria, Graves' inclusion was peculiar, for he was an academician whose building experience had been scant



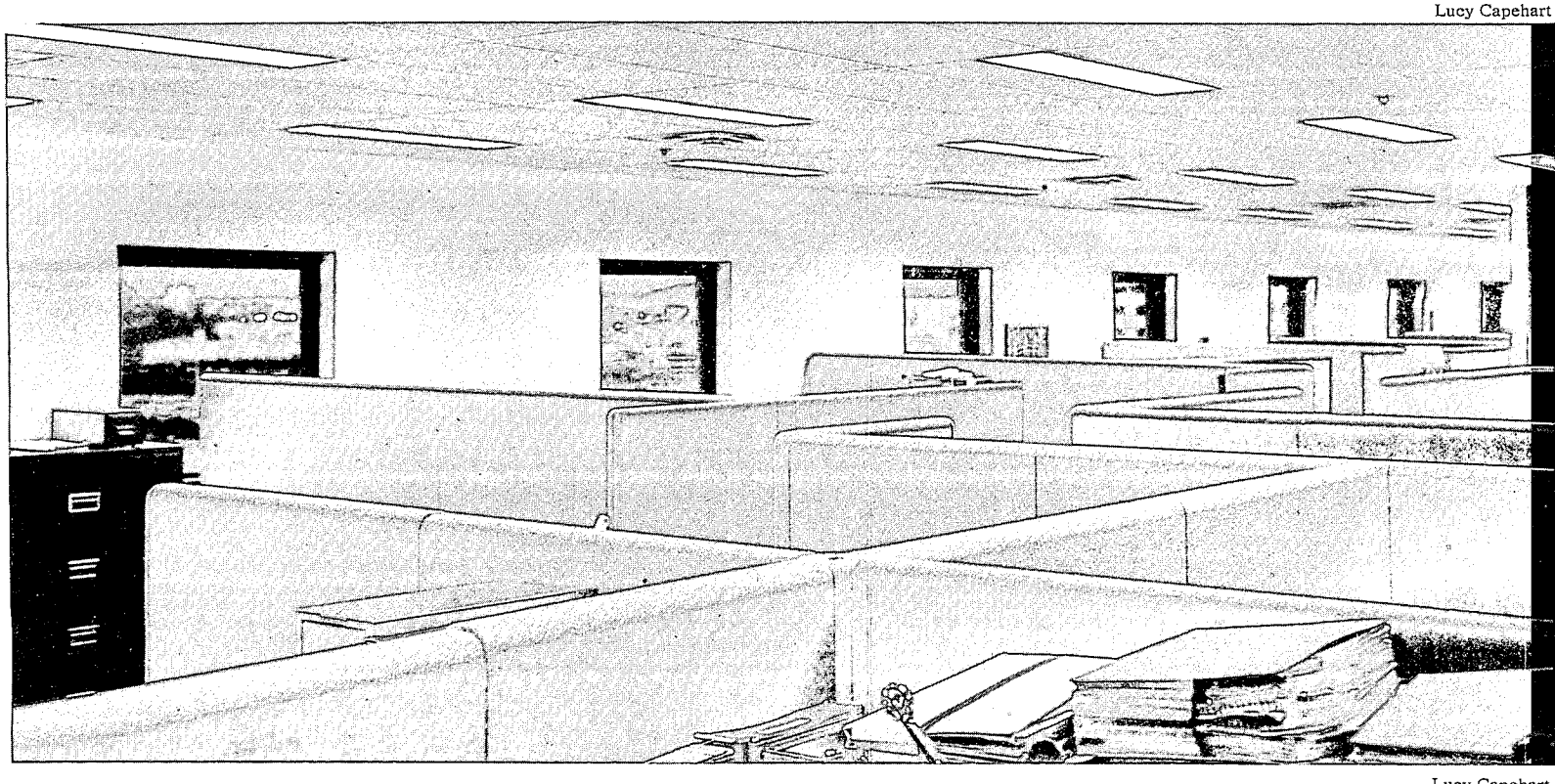
First floor



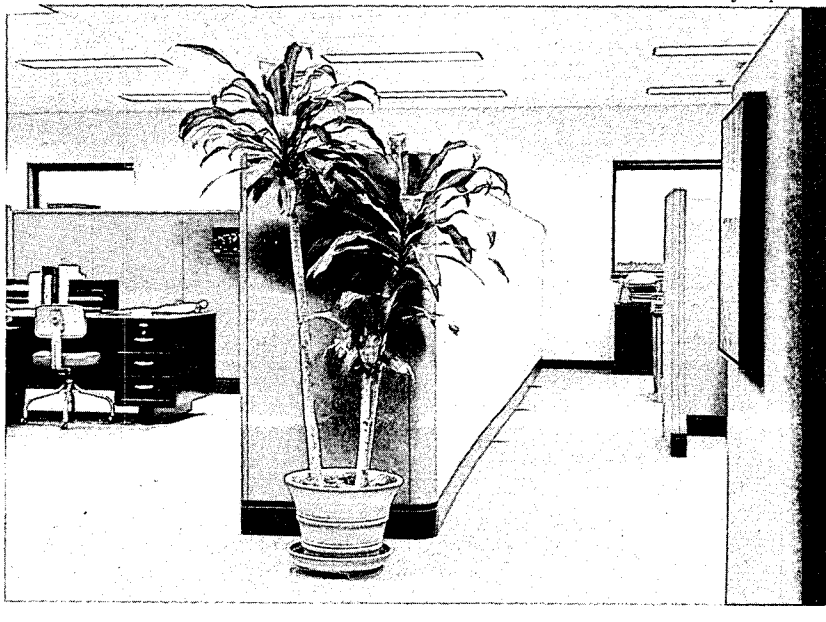
Second floor


Typical office floor

Lucy Capehart



Lucy Capehart



and at a small scale. At that point there was little concrete basis for concluding that Graves could meet the official criteria for design ability. The other two teams selected had as their architects Mitchell/Giurgola and Arthur Erickson. Both were less trendy designers than Graves but infinitely more experienced in dealing with a project of Portland's nature and scope.

If Johnson was exercising license to encourage a potentially provocative design, it is odd that he did not also choose the team that included Frank Gehry, FAIA, who is if anything more original than Graves and had a stronger record in urban-scale public design. (According to one observer of the selection process, Johnson literally tossed Gehry's application file away, calling him "a madman with a two-by-four.")

But the competition document was clearly seeking something other than provocative esthetics—it was aiming for responsible design in the fullest sense. Given that goal, Johnson's rejection of another team seems inexplicable. Van der Ryn, Calthorpe & Partners had under construction by then a governmental building that was everything that the Portland building aspired to be (see Jan. '81, page 58). The firm's state office building in Sacramento, Calif., was predicated on energy efficiency, urban context, and a humane working environment, and it managed to integrate those qualities within a visually and spatially impressive design. Denying that firm a chance to compete in Portland was a blunder of the first order, and one that escaped the public scrutiny that was later focused on the Graves design.

As has already been said, the later selection of Graves' project over those of Erickson and Mitchell/Giurgola generated controversy that was not totally deserved. The furor was strong enough, however, to move the city council to ask that the Graves

Above, the open-office configurations and the four-foot-square windows on the 11th floor.

'A practical success and an esthetic failure.'

and Erickson teams modify and resubmit their designs. A month later, the council sought further changes from the Graves team, and a month after that awarded it the contract.

As a result of those mandated changes and other revisions the team made during construction, the building that stands today is not the one that was first submitted—it is simpler, starker, and more crude. Not much of this regression can be laid at the feet of the city, for many of the changes stemmed from miscalculation about what could be built within the budget, and others seemed to be a matter of purely esthetic revisions for the worse. The most satisfactory version of the scheme was achieved midway through the initial design period, and what was first submitted to the city already represented a decline in design quality. The later changes merely continued that decline.

The Portland Building is little more than one of Graves' Sunar showrooms blown up in scale and turned inside out. Its stylized garlands derive from Sunar's hanging fabric samples, its crudely abstracted "column capitals" are Sunar's lighting sconces magnified, and its undersized polka-dot windows correspond to the grids of brass studs that Graves uses to decorate Sunar's walls. (Originally, Graves designed three-foot-square windows *10 feet on* center, but the city insisted that he enlarge them to 4x4. Some windows, however, remain less than two feet square.) As in the showrooms, much of Portland's design impact comes from color. Graves' strongest ability is as a colorist, but his usual subtlety is often lacking in this structure. As the revisions progressed, he opted for ever greater contrast, destroying what was once a balanced dialogue between solid mass and surface pattern.

Originally, a cluster of symbolic houses was to have crowned the roof, but they were eliminated by an admittedly stringent (yet also known from the start) $51 per square foot budget. All that remain of them are two trabeated frames that block the view from top-floor conference rooms. Symbolism figures often in the building's forms, sometimes obscurely (as in the remnants of the houses just cited), sometimes as caricature and mixed metaphor (as in the seven-story column "signifiers" that support a four-story keystone figure), and sometimes whimsically (as in the mechanically rendered ribbon garlands that make the building look as though it just won grand prize at the county fair). There is also inadvertent symbolism, including what is meant to be a seven-story representation of a window frame that reads equally strongly as a liturgical cross, and an entrance facing the park that leads only to the garage yet is far grander than any meant for people. The ground floor arcade carved into part of the perimeter is not especially pleasant: It is dark (Portland skies are not often sunny), has two dead ends, is narrowest at the main entrance to the building, and divorces the ground floor from the street. Under that arcade, however, there are several stores, a welcome touch for a governmental office.

There is a vast gulf between the exterior appearance of the finished building and that of Graves' early study models and witty first sketches. The models showed a rich three-dimensional expression, while the drawings humorously captured the anthopomorphic qualities that Graves claims for his design. The executed structure lacks these attributes: It is inert, essentially flat, and seems more an outsized object than a real building. On the evidence of this project, Graves is more an artist than an architect; his real media are the maquette and sketch pad rather than the full-sized edifice.

Inside, all but one of the public spaces are poor to mediocre. The two-story lobby, penetrated by four real columns and eight false ones, is poorly proportioned and self-consciously embellished by fat half-round sheet metal moldings that produce a hollow sound when tapped. The adjoining elevator is narrow and so dismally dark that its peaked ceiling carries little visual weight. The rear lobby is larger but undistinguished, its stepped platforms leading to a view of the garage entrance. On the second floor an art gallery occupies the balcony of the front lobby, but it is so narrow that all it conveys is meanness. A hearing room on the same floor has a semicircular seating pattern that does not permit an effective view of the stage from a significant portion of the seats. The one exception to this dismal pattern of public spaces is the interior of the elevator cabs, where the architect's coloristic talents have transformed a normally banal space into a surprisingly pleasant one. In this instance, Graves has achieved an unqualified design success.

The working spaces upstairs were not designed by Graves, so that his response to the problem of the building's large floors and small windows cannot be known. As occupied, the city's floors present (aside from their skimpy fenestration) an unmemorable image, but the two topmost floors leased by Multnomah County (the product of a different designer working with a better budget) are impressively elegant in a way that is sympathetic to Graves' building design while also transcending it.

If there is little doubt that in Portland Graves bit off more than he could manage, it must also be said that the structure has virtues beyond its elevator cabs and upper floor tenant improvements. In general ways it observes the context of downtown Portland. Its roughly cubic massing and approximate 200-foot height correspond to many of the district's older offices, and its use of strong color continues a polychrome tradition represented in dozens of restored Victorian commercial structures nearby.

The building also represents solid professionalism in areas beyond visual design. The design/build team included Pavarini Construction Co. of Greenwich, Conn., Hoffman Construction Co. of Portland, and the New York City architectural firm of Emery Roth & Sons, responsible for construction documents. In addition, the city retained Morse/Diesel of Chicago as project manager. These organizations were able to deliver a very economical, fast tracked building on time and on budget. The energy requirements of the structure are quite low (37,000 BTU per square foot per year), thanks in large part to its cubic form and its small, widely spaced windows. From the city's standpoint this building was its most trouble-free construction project in recent memory, and General Services Director Earl Bradfish is pleased with the effectiveness of the design/build process. Since Graves' client was the contractor, and since the contractor had to guarantee its bid figure and completion date, the design/build system also assured strong coordination of design, cost, and timetable. Perhaps the strongest testimonial to the efficacy of the arrangement is that despite Graves' inexperience with large public projects, his team was able to meet its tough contractual obligations successfully.

The City of Portland proved to be an enlightened and courageous client. It opened the original bidding to all interested parties, heeded the advice of its professional consultants, and went ahead with the most controversial of the three designs despite the furor that it caused. In doing so, it brought into being America's first large postmodern building, bearing a political and esthetic risk that government bodies usually do their best to avoid. The Portland Public Services Building is on the whole a practical success and an esthetic failure. Yet however badly one may be disappointed by the building, it seems fair to call the failure a worthy one: It fails not through timidity but through its very boldness, and not for lack of ideas but rather for retaining more of them than its designer could master. □

In the second floor, semicircular hearing room, grilled screens flank the rear entrance, right.

Postmodernism: Definition and Debate

Each year in the annual review we invite comment on directions in American architecture. This year's invitees were a group of practitioners, and we asked them these questions: "What is postmodernism? Is it a period, an approach, a style, a philosophy, a set of mannerisms, or a combination of the above?" The responses follow, and the respondents have our enduring gratitude for their contributions. Their essays are accompanied by a galley of new buildings incorporating some of the characteristics associated with postmodernism. Ed.

Pietro Belluschi: 'The experiment has begun with a bang and appears to be ending with a yawn.'

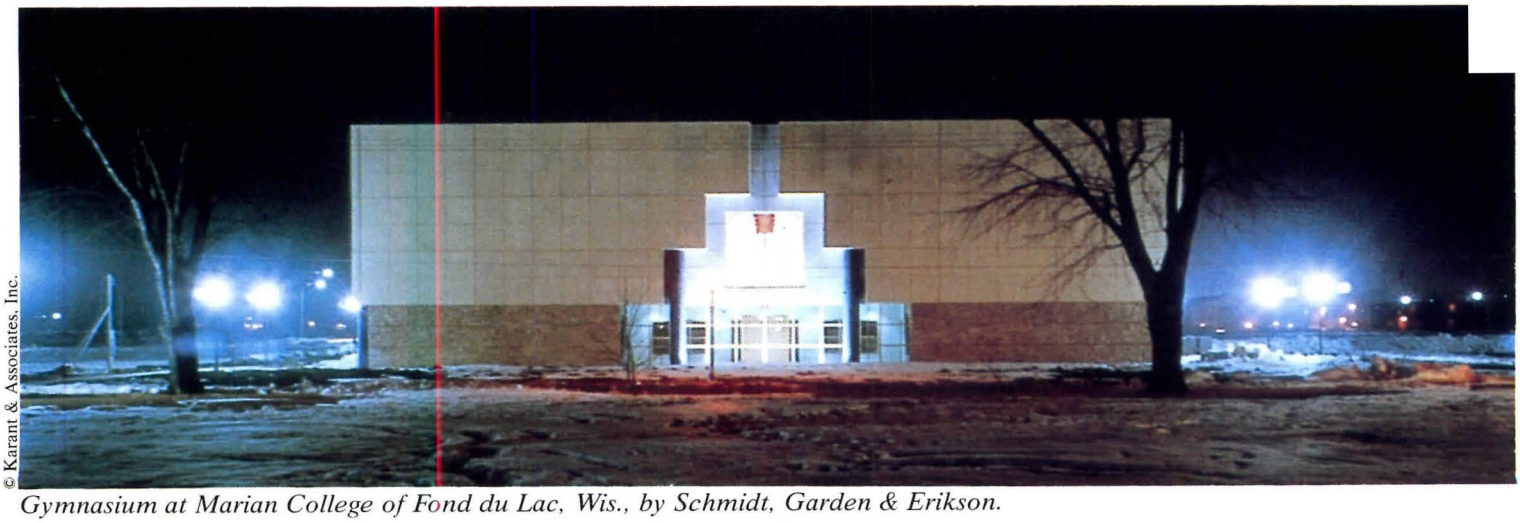
Your letter asking for a definition of postmodernism almost got tossed into the wastebasket, so boring has the subject become to us who live in Portland, Ore., the city where Michael Graves built his temple. On further thought and out of respect for your now wonderful magazine and on the vague fear that the young heads on the AIA jury may yet give Graves an award, I am going to unburden myself of some personal thoughts, fully biased and worthy of an old fogy.

Is postmodernism a passing aberration, you ask, or is it a serious attempt to set things aright in this fast-changing permissive society? I will confess that my first gut reaction to the mindless pastel-colored pastiches, expensively printed in our periodicals, was of deja-vu images drawn from miasmic eclectic periods of past years, when pre-invented forms, born from the untutored fancies of the designers, were straining for the greatest visual shock. The typical Beaux-Arts forms at the turn of this century were in the main borrowed from a rich tradition, thus saving the designers the trouble of inventing new ones. Today forms are borrowed from a confused accumulation of mass culture clichés, through a progressive leveling of values down to boring mediocrity.

I must admit surprise for the unexpectedly large and almost euphoric reception accorded to postmodernism, particularly by the younger generations and by the students in our schools. This has really left us old timers wondering. The old arguments, on which our faith had for so long rested, seem all of a sudden trite and unconvincing in the face of their brilliant, if flatulent, propaganda. Given the widespread acceptance of the trend, I think we are justified in considering this a historical phase coming at a time when shock and fashionable images have become handy tools for selling the goods.

When Philip Johnson proclaimed from the mountaintop that the profession was on a new watershed, I was slightly amused. Now, I thought to myself, everything goes: the good with the bad, the serious with the frivolous. I am no longer amused; as always, Philip was right on course. In his natural role of guru, he did much to manipulate and to push his coup d'etat, having the time of his life in so doing; he also knew that historical adjustment to a fast-changing situation awaited someone like him to give it life, and he was the witty guy to pull it off. That the postmodernists adopted the jargon of fashion is surely related to our age of communications media engulfing our vision; that they found so ready an acceptance is that they knew how to exploit the legitimate desires of the man-in-the-street for something more nourishing to the senses than the sterile structures that have crowded our cityscapes. They discovered that frivolous means get immediate attention, that fashion need not last; they tell us that content and expression have no more fundamental a connection to architecture than scene painting, dressmaking, or hat design. So they reject the hated glass box and erect the enlarged jukebox.

At this juncture, a way to restore my own lagging faith is to hope that this phase represents a tentative and short approach to the worthy goal of a more humane environment. It will run its course, I am sure, while evolving its own restraints and rectifying its own abuses and mistakes. My hope is reinforced by the awareness over the last few years that we all seem to have great difficulty in defining good planning or good architecture, unless we take into account human beings, which means allowing for their unpredictable idiosyncrasies. As we look at the city, we claim to know more about its problems. We may not know how to solve them, but we have come to believe that to succeed, we must learn to love people, which is not always easy to do. Our perception of beauty has become so blurred



Gymnasium at Marian College of Fond du Lac, Wis., by Schmidt, Garden & Erikson.

that we now confuse art with fashion. We can only agree that the spirit of man rejoices in certain sounds and in certain visual experiences, which of course are as varied and unpredictable as human beings themselves. I accept the fact that the postmodern appeal rests on wide acceptance of forms, which are inevitably the wavy mirrors of our culture and in which we may take no pride, but a sorting of values is what democracy can do, if it is given the right leadership.

In spite of its many serious shortcomings, democracy is still the best system, because at its very core rests the freedom to make choices, and this implies the ability to rectify mistakes. Whitehead once defined wisdom as freedom in the presence of knowledge. My plea to the younger generations is that if they wish to acquire the freedom to be different, they must also take the trouble to know and to learn.

Solzhenitsyn said about literature what can also be applied to architecture: "Artificial, strained concepts do not withstand the test of being turned into images; they fall to pieces, turn out to be sickly and pale, convincing no one. Works which draw on truth and present it to us in live and concentrated form grip us compellingly, involve us, and no one ever, not even ages hence, will refute them."

I tend to believe that an architect will more likely find truth if he thinks of architecture as building rather than as fashion. The fact that architecture is more than mere building is surely enough to inspire the gifted designer to greatness.

Thus far, the experiment has begun with a bang and appears to be ending with a yawn. This may be because of some designers' narcissism; existentialism has been their cradle, and their superficial skills have struck a chord of sympathy for those who want to enjoy life without paying its toll.

One of the many advantages of having lived a long life is to have seen change and adjustment take their place, while life has continued to prevail and flourish. So I have faith.

Helmut Jahn: 'In this newfound freedom the dangers are there and the risk of failure is high.'

Postmodernism started as one of the most important esthetic events in the last 50 years. It was a realization and a response to the failures of modernism: Architecture along the principles of functionalism, programmatic determinism, and technological expressionism produced buildings without connection to site, place, the human being, and history. The utopian belief of universal solutions to problems of shelter and urban living was never realized. Technology and industrialization were never exploited to their potential. Above all, architects sought only to express the functional, technical, and economic aspect of the architecture, thus abandoning their traditional role as willful creators of architectural form in search of the important aspect of element-meaning in architecture.

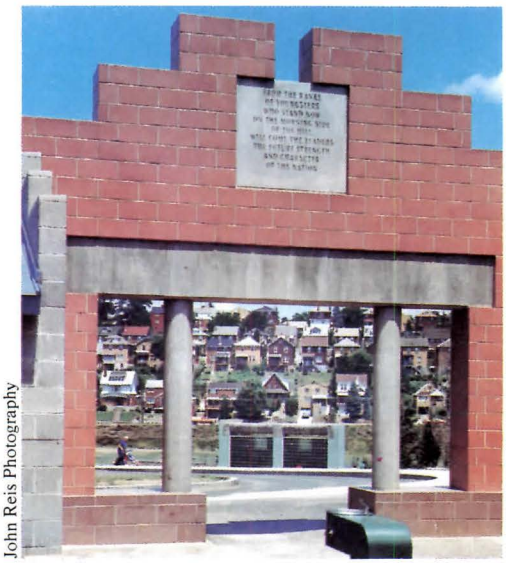
The press and public media, alert for cultural trends to exploit, declared modern architecture dead. Heroic attempts like Centre Pompidou and the British new towns became memorials to efforts celebrating technology and modern planning ideals.

Postmodern is a term invented by its apostle Charles Jencks. It lacks the development of a cohesive architectural style. Instead, it characterizes a period of a number of contemporary attitudes in architecture. Postmodernism emerged as a loose characterization for many fragmented efforts, primarily concerned with historic style, contextualism, symbolism, and ornament. These efforts contributed to a thorough re-examination of the generators of architectural form. They have changed the way we look at buildings and talk about them, established a more open dialogue between architecture and its social and cultural context, extended its communicative potential, and responded to its obligation as a civic art.

Today "postmodern" is an umbrella for all efforts that leave the mainstream of modernism. It has become increasingly vague, depending on what one expects of it, and means very different things to different people. As a counterrevolution, it began to question the hermetic ideals, the exclusiveness, and the perpetuation of the capitalistic system. It started a renaissance of architectural thought, generated by a plethora of manifestos, exhibitions, books, and articles spread throughout the world.

Much of the built postmodern work fell into its own orthodoxy, through its use of traditional and eclectic forms as formal reference—as a narrow and often naive approach devoid of the inclusiveness it proclaimed. Architects found them-

Below left, detail of gym facade; below and bottom, entrance to a baseball field and swimming pool facilities, respectively, for a recreation park in Pittsburgh by L.P. Perfido Associates.



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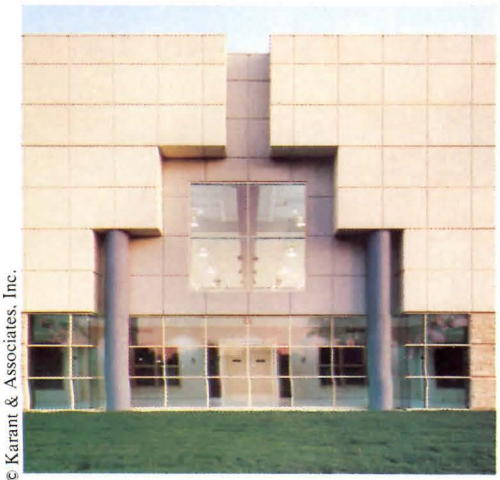

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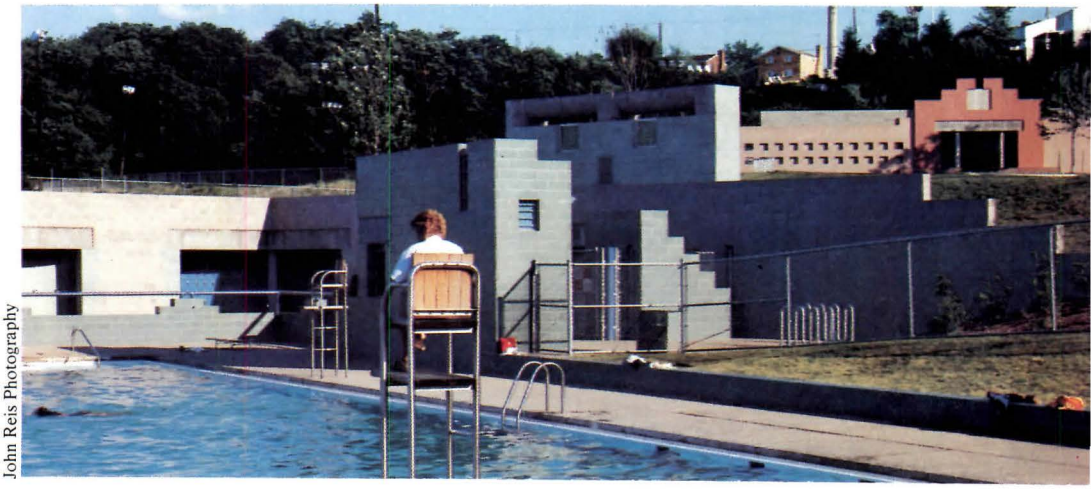


John Reis Photography

Mr. Belluschi, a design consultant, was dean of architecture at MIT. **Mr. Jahn's** firm is Murphy/Jahn of Chicago.

selves increasingly self-conscious of current and future directions of philosophy, especially with no rigid and commonly accepted dogma to influence design. In this new-found freedom the dangers are there and the risk of failure is high. This "radical eclecticism," as Jencks refers to it, could easily degenerate into a new superficial play with forms, the striving for meaning becoming lost, as the sign itself becomes the content.

At best we might well be moving into an exciting and challenging new area.

Behind the current "puns," "metaphors," "ironic references," and "jokes" is a serious body of thought, re-examining the age-old conflict between art and technology in architecture, giving today's architects once again the chance to leave their mark on history.

John W. Hartray: 'After filling a few shelves at Rizzoli, the movement looks as if it may pass into history without having made any.'

Postmodernism is one of those annoying labels that seem to have a meaning until they are scrutinized. I suspect that the term was invented by writers who had nothing more to say about an equally vague concept that they had previously named modernism. They may have believed that the modern style could be frightened into retirement by naming the next chapter in the history book. This kind of literary voodoo seems to be taken quite seriously by architectural theorists.

There was very little to add to the new chapter after the title. Some architects might suggest that the work of others was postmodern, but few volunteered for the revolution themselves. After filling a few shelves at Rizzoli, the movement looks as if it may pass into history without having made any.

Veterans of the modern movement came away from the campaign having learned that it is impossible to improve society by housing it in a new architecture. But we also had the satisfaction of having tried, and while failing, we produced some good buildings. Given this experience, it seems strange that anyone could have had much hope for a new style based on the boredom of critics.

In spite of the architectural press's heroic efforts to provoke novelty, most American architects seem to be building on the experience of the last 50 years. This allows them great scope, because the period has been richly diverse, particularly if one includes unpublished work.

There is no unpublished postmodern work. The quality that distinguishes the style is that it is designed solely for publication. It cannot exist in separation from the printing press. It employs architectural form to transmit ideas. It must convey its meaning rapidly; often in two dimensions. It fails if it is not talked about.

It is hard to object to this if one thinks of it as a separate art form, concerned with the meanings we attach to buildings, rather than with the buildings. The books and magazines are lovely to look at and the gallery openings are great fun. But, unfortunately, after the critics have decoded the messages we are left with the structures in which they were delivered.

Every city seems destined to have a complete collection of nationally advertised forms. Since Pennzoil and Citicorp, we must have lopped off the tops of a hundred buildings. A visitor from a land where architects worked from programs might conclude that there was a tax break for providing office space for very short executives.

The Boston John Hancock Building is beautiful in the late afternoon, but as the forms of reflective curtain walls become more arbitrary and as they proliferate in our central cities, they take on the banality of inflated bowling trophies.

The current academic style has rejected technology with the same fervor that characterized modernist ideologues, in their reaction against history. History, however, has not replaced dogma at the center of the new curriculum. Unlike the Beaux-Arts, which drew its inspiration from the measured ruins of ancient buildings, the current revival seems to be based on faded post cards. This view of the past is detached and ironical, making it impossible to distinguish between ignorance and sophistication without checking grade point averages.

The confusion between symbols and reality has become so great that buildings are almost invisible to us except as imperfect representations of drawings we remember having admired. At least that's how it's supposed to work. I'm not sure the public is equally enthralled.

But in spite of what we read in the papers all is not egocentric frivolity and the mindless cloning of tax shelters. The most positive development in current American architecture is the expanding interest and skill in the preservation of individual buildings, the restoration of the urban fabric, and the revival of regional traditions. The assumption underlying this is that we have inherited the best environment that we are likely to have in the

Below and across page, an addition to a nursing facility in New Britain, Conn., by Pierz Associates.

Photographs © Ken W. Sasso

forseeable future. This attitude, conservative in the only true sense of the word, is a realistic response to an historic period characterized by institutional upheaval and the prospect of unprecedented global catastrophy.

I don't expect American architecture to end here, but I doubt that we will really start a new chapter in architectural history until we have invented the institutions that we need to control our technology. The making of architecture requires both the past and a future.

In the meantime we should try to be useful and avoid doing anything that might be interpreted as an act of desperation.

Hugh Hardy: 'What is missing...is a sure sense of how we want to live in the approaching century.'

Traditional architecture was replaced by modern architecture, which has been replaced by postmodern architecture.

But if those who rail at modernism are correct, why hasn't its "aberration" been simply replaced by a return to the traditional way of doing things? Why have painted icons in the place of the real thing?

In part because several things have radically changed since the beginning of modern architecture.

1. The myth that science (and its handmaiden, technology) could lead to utopia has been discovered faulty.
2. Consumerism's throw-away culture, based on infinite growth, has discovered its own poisoned limits.
3. The public has found the beauty of the machine esthetic unappealing and alienating.
4. The complementary reuse and renovation of old buildings has again become professionally acceptable.
5. High energy costs have distorted earlier assumptions about the purity of abstract shapes, making natural materials more competitive with machine-made materials.
6. The context (historical, cultural, or natural) in which buildings are built is again recognized as a valid influence upon design.

Etc.

Some things, of course, have not changed. Novelty and a society premised on change rather than renewal is still very modern. The star system, with its ability to popularize and glamorize, still creates instant heroes. And architecture still takes a long time to make.

It seems only natural that such shifts of opinion and theory would create new forms of architecture. (There is also a heavy burden of nostalgia threaded through contemporary work, and idealized memory of lost years.)

What is missing, however, is a sure sense of how we want to live in the approaching century. What is our common purpose beyond survival? Since we can't *all* go dwell in outer space, we must instead find ways to sustain and renew life here. The built environment is a great legacy that can teach many lessons about a responsible use of resources. If its influence—all 20 centuries of it—leads to more postmodern buildings instead of a new rejection of all that has gone before, America will finally have an architecture worthy of its cultural wealth.

Mr. Hartray is a principal of Nagle, Hartray & Associates of Chicago. **Mr. Hardy's** firm is Hardy Holzman Pfeiffer Associates of New York City. **Mr. Horn** practices with Holabird & Root of Chicago.

Gerald Horn: 'Freedom to explore and not take ourselves too seriously.'

Postmodernism has given us all freedom to explore options we never would have tried 20, 10, or five years ago. My design options today are completely different than they were five years ago.

Twenty years ago, I was wrapped up in the "purity of architecture." Architecture was 100 percent serious. There were "bibles" that we followed and strict rules that really weren't questioned. Everything had to be 100 percent "pure," and that was hard—hard to do and hard for a client to accept. But things have changed, gradually.

Over the years, I have learned that you should never have set rules, and I do not think good architects do. However, you cannot constantly be trying out every new or current idea. That is the fallacy. You are setting vogue and being fashionable; you are a set designer then, and that is not architecture.

Architecture, in all its parts, is nothing more than about quality. Our hangup today is that people mistakenly believe that quality is based on the amount of ornament, the color or the use of details from another architectural period. But quality refers to "excellence"—in proportion, scale, and details. Modern architecture had quality. The acknowledged great works of modern architecture like Mies' Seagram Building in New York City or Jacque Bronson's Civic Center in Chicago were designs of the highest quality and are distinguished by their beautiful proportion and details. They do not look like a premodernist piece of architecture, but they are still works of quality.

People are turning to postmodernism

Photographs by Walter Smalling

Above and across page, neo-Romanesque street facade and alley view of a Washington, D.C., office building by David M. Schwarz Architectural Services.

because it is hard for them to actually live, on a day to day basis, with a truly "pure" modern architecture. They want "something more." However, I think the "something more" has to be more than the use of pastel colors and a few architectural details from the past. I am already tired of the soft colors popularized by some of the postmodernists.

Postmodernism has allowed me and other architects working today to use elements that never would have been used by a pure modernist, elements that I like such as contextualism and symbolism.

The climate created by postmodernism has given me "permission" to evolve in ways I feel comfortable with. As an architect works out a design, he or she studies what has been done before to solve a particular problem while looking back on the past and using what he or she sees to keep on going and to make improvements for the future.

Some of the postmodernists are rediscovering and using details that we thought were lost. Twenty years ago, I would have dismissed buildings that I now study and admire. But while we are looking and learning from the past, we have got to keep on developing new ideas for the future. A good part of architecture is the exploring of the new, and, for example, using what is new, such as the latest in technology, in our buildings. But we have got to do both, learn from the past and look to the future.

One of the problems with postmodernism today is that most of the postmodern buildings still are unbuilt, and while the postmodern architects are making all the right moves in their drawings, when we look at the few postmodern designs that are actually built they lack quality—lack details, lack a three-dimensionality, lack a certain kind of caring. Some of the postmodern architects are seemingly just trying to be trend setters, but they end up being cheap—and their work looks more like stage-sets than enduring works of architecture.

Color has been with us a long time. The Greeks used color on the Parthenon, but there has to be more than color to make good architecture. Some architects working today are taking flat facades, painting them, and calling it architecture. If and when the color is gone, unless the building is basically a good piece of design, then we will realize that the seeming richness of the few built postmodern buildings is nothing more than their color.

I hope that the new freedom in architectural design today brought about in part by the postmodernists will mean that as we keep growing, we will have the freedom to go on from where we are now. I also hope it is not back to modernism.

Mr. Cox is a principal of Hartman-Cox Architects, Washington, D.C. **Mr. Bender** is dean of the college of environmental design, University of California at Berkeley.

Warren Cox: An answer from Alexander Pope. 'He gains all points who pleasingly confounds.'

In answer to your questions on postmodernism, my partner George Hartman and I think Alexander Pope has some answers in his "Epistle to Richard Boyle, Earl of Burlington: Argument of the Use of Riches," dated 1731. We think Pope addressed the current situation with great insight and eloquence. Therefore, we would like to let him speak for us. We subscribe to his views, as follow, completely.

That the first principle and foundation, in this as in every thing else, is Good Sense. The chief proof of it is to follow Nature, even in works of mere Luxury and Elegance. Instanced in Architecture and Gardening, where all must be adapted to the Genius and Use of the Place, and the Beauties not forced into it but resulting from it. How men are disappointed in their most expensive undertakings, for want of this true Foundation, without which nothing can please long, if at all; and the best Examples and Rules will but be perverted into something burdensome or ridiculous.

You show us, Rome was glorious, not profuse,
And pompous buildings once were things of Use.
Yet shall (my Lord) your just, your noble rules
Fill half the land with Imitating-Fools;
Who random drawings from your sheets shall take,
And of one beauty many blunders make;
Load some vain Church with old Theatric state,
Turn Arcs of triumph to a Garden-gate;
Reverse your Ornaments, and hang them all
On some patch'd dog-hole ek'd with ends of wall,
Then clap four slices of Pilaster on't,
That, lac'd with bits of rustic, makes a Front:

Or call the winds thro' long arcades to roar,
Proud to catch cold at a Venetian door;
Conscious they act a true Palladian part,
And if they starve, they starve by rules of art.

Oft have you hinted to your brother Peer,
A certain truth, which many buy too dear:
Something there is, more needful than Expence,
And something previous ev'n to Taste—'tis Sense:
Good Sense, which only is the gift of Heav'n,
And tho' no Science, fairly worth the seven:
A Light, which in yourself you must perceive;
Jones and Le Notre have it not to give.

To build, to plant, whatever you intend,
To rear the Column, or the Arch to bend,
To swell the Terras, or to sink the Grot;
In all, let Nature never be forgot.
But treat the Goddess like a modest fair,
Nor over-dress, nor leave her wholly bare;
Let not each beauty ev'ry where be spy'd,
Where half the skill is decently to hide.
He gains all points, who pleasingly confounds,
Surprizes, varied, and conceals the Bounds.

Consult the Genius of the Place in all;
That tells the Waters or to rise, or fall,
Or helps th' ambitious Hill the heav'ns to scale,
Or scoops in circling theatres the Vale;
Calls in the Country, catches op'ning glades,
Joins willing woods, and varies shades from shades;
Now breaks, or now directs, th'intending Lines,
Paints as you plant, and as you work, designs.

Still follow Sense, of ev'ry Art the Soul,
Parts answ'ring parts shall slide into a whole,
Spontaneous beauties all around advance,
Start ev'n from Difficulty, strike from Chance;
Nature shall join you; Time shall make it grow
A Work to wonder at—perhaps a STOW.

Richard Bender: 'Isms don't have much to do with the roots of architecture or culture.'

I have a sculptor friend who makes very realistic ceramic boots and shoes. They are marvelous portraits. They tell you a lot about where they have been and who has worn them. Marilyn says she makes boots and shoes rather than hats because, "worn shoes tell you about how a person lives; hats tend to tell you how a person would like to be seen."

Postmodernism feels to me like a hat. I don't mean by that that other isms—modernism, classicism—are boots and that only postmodernism is a hat. Most isms are hats. They tell you more about what people think is attractive or stylish than they do about how people really live. Isms don't have much to do with the roots of architecture or culture, but they are very visible. We tend to notice hats more easily than boots. That's what hats are about. In recent years, the styles have changed. Modern hats are out. Postmodernism has become a favored style. We shouldn't be overly concerned but we should also be careful not to be overly distracted; after

all, a great work of architecture is not a hat. It is not picked off a shelf or out of a catalog. It grows out of human life and takes nourishment from a place, from art, and from professional expertise. It is our time translated into space. It is more like a good pair of shoes.

Too often in the press, on the lecture circuits, in classrooms, and in galleries, we are offered a narrow definition of our field. A century ago, it was Imperial Rome. A generation ago it was mass production and industrialized production. Today there are a lot of haphazard borrowings from the past; a historicism that is little more than caricature and some good drawing about bad architecture. Some of it is stimulating. It reminds us that there is more to architecture than what we see around us. For many of us it is often annoying. But it's really not dangerous; it's ribbons, feathers, and bows. We know real architecture when we see it. It strikes with the force of lightning. It dreams, it grows out of roots in our culture, and it engages real issues. Today we certainly have no shortage of real issues. These do not get in the way of great architecture. They are its roots. Architecture is energized by life and by society's issues, drawing strength from an amazing history. An occasional costume ball is fun. It can inspire, remind us of our past, and suggest new ideas. But dressing up like children who have found a trunk full of old clothes in the attic quickly becomes uncomfortable and tiresome.

So, we are being treated to a very comfortable revolution: Modernism is rejected while the forms of practice that were at its heart are retained. The same fashion experts who sold last year's hats have become the chroniclers of the revolutionary new, postmodern ones. Is this a fresh vision? I am afraid not. It's more like the new line from the couturiers of Milan and Paris and the commercial knock-offs that follow than the revolution that is being proclaimed.

I would not get too distressed by this phenomenon because there is a lot more than hat design going on today. There have been some real changes in recent years. Today's architects address new concerns with new sensitivities and new understandings. They are taking on new responsibilities and reaffirming traditional ones. They work in a world more able to tolerate the unfinished; a world that values continuity, history, growth over time, and the ability to add to what others have started. They work with a new focus on people. A more truly populist view has replaced an oversimplified and often caricatured concern for the "working man," and the new technology is used as a tool rather than an icon. The changes of the last generation are absolutely without parallel—the challenges for the coming generations are enormous. We don't need a new style. What we need more than another style or movement is an attitude, a stance--a way to approach our work that brings together a profession and raises it above the level of fashion. We need a way of working that provides a beacon and network of paths to help us bring our arts and our efforts into tune with our dreams.

Recent years have seen fascination with the easy, with things quickly learned and mastered. But real buildings do not emerge from instant history, the new movements of art, or dialectic argument. They emerge from constraints, contradictions, puzzles, and dreams. They are molded by site, climate, customs, and traditions, by the forces of nature and the nature of materials. Today's good work takes many forms. Those doing good work take many approaches. The thing they have in common is that they do not deny the fact of the search nor make it shallow or superficial.

Balthazar Korab

Charles W. Moore: 'The new postrevolutionary architectural freedom was pretty heady...but it didn't last long.'

Postmodernism is a claustrophobic description of what I think is an urgent human need, squeezed much too soon (if ever would have been soon enough) into a mannered, sometimes silly, often ugly new orthodoxy. Its extended media hype is so alarming (to just about everybody) that it is easy to forget why "postmodern" is there, how urgent a need it represents to connect with the past again.

Because it has surely become evident to almost everybody (except maybe for a few architects) that when the earlier 20th century's Buck Rogers dream of a future altogether disconnected from the past started, after the '40s and '50s, to come true, helped along by a big war and the devastation of holocaust-style urban planning, it became a nightmare. People generally realized that a necessary sense of *place,* the importance of being *somewhere*, came from human geography, and history, as well as from the natural landscape; and old buildings, instead of being automatic candidates for eradication came to be seen as essential links with a past that is an important part of our lives. Also, though it is a serious embarrassment to architects, many people have now come to believe (and with good reason) that old buildings, however indifferent, when they are pulled down will doubtless be replaced with something worse. Then too, it has come to seem that the puritan revulsion with ornament and the kind of measure that pilasters and other recognizable shapes can give have brought us (not always, but often) a set of architectural hair shirts that grow scratchier over the decades, as the ecstasy fades.

Each of us has his own view of history; it seems to me that puritan revolutions (like our own modern architectural one) cannot last forever. After a while the graceful ways of the soft old things expunged begin to slip back into the scene.

Someone decades after our own revolution noticed that buildings made only with planes look streaky and awful after a while, and that the moldings we banished had served to sort out the dirt and shadows so that buildings looked better over the years. It even became possible again to note that buildings can remind us of things other than cubes, cylinders, cones, and spheres, and that they don't all have to be freestanding. It even began to be apparent that other civilizations, with social and technological arrangements quite different from ours had successfully addressed all sorts of architectural problems that we hadn't gotten around to yet.

The new postrevolutionary architectural freedom was pretty heady, as if our own Gang of Four had been put in the cooler, but it didn't last long. Suddenly, instead of an almost infinite world of possibilities from the past, there ready to be transformed for our own use, there was barely one, a kind of bulging Doric, with architects already screaming that it wasn't orthodox enough.

So now, instead of addressing real issues of how buildings can mean something to inhabitants of very different backgrounds and persuasions and memories, and give them (the inhabitants) the sense that they are somewhere, and glad of it (all these issues of quality, and usefulness, as well as of style), architects debate the worth of late-modernism, usually distinguishable by its overweening blandness, and postmodernism, generally expected to be the bland former with joke Greek temples glued on the front. There must, for a people as interesting as we think we are, be more to it than that.

Daniel Solomon: 'Its central and best idea is not stylistic; it is the reification of public space.'

Postmodernism: A deplorable word that has stuck like an unwanted nickname (Muffy, Stinky, Stretch), stands both for silliness and for ideas that are important, needed, and inevitable. Let us therefore root out silliness and embrace the rest.

Postmodernism in its best moments reaches back across the wreckage of postwar urbanism to seize the strands of urban culture at the point they became unravelled. It rejects the Charter of Athens and its esthetic and ethic of the object building and optimized production. It sees the devastation brought to townscapes by designing from the inside out. Its central and best idea is not stylistic; it is the reification of public space, the conviction that the positive shaping of public space by buildings is obligatory. Already the changes this doctrine has brought to design method and teaching are profound. Now landscape architecture requires redefinition.

In the city of object buildings, landscape architecture became the autonomous discipline of filling in the gaps with artificial sweeteners. This will no longer do. As we abandon the architecture of dislocated, disembodied objects, the art and history of the garden resurface as part of architecture.

Robert Stern and others have commented on modernism and progress—the conception that the subject matter of architecture is the future. Living in the city of anticipation has proved unsatisfactory for a variety of reasons—one of which is the grotesque way that modernist buildings age—like plastic TV starlets with wrinkles and tummies.

Disenchantment with nostalgia about the future has led to two stylistic phenomena—one mostly American, the other both American and European. The mostly American branch of postmodernism is antiquarian and pictorial. It reminisces about what buildings used to look like. It is filled with hermetic references and, despite populist intent, is perilously elitist: It is like obfuscating on thin ice.

The other branch is better. It is neutral about past and future, and is more likely to be sentimental about place than time. The pedigree is solid, the spirit world-wide and collective, the achievements already impressive: van Eyck, Kahn, BBPR, Barrigan, Scarpa, Rob Krier, sometimes Stirling, maybe Botta. Appearances are rooted in construction rather than the other way around, and architectural language is more intrinsic than metaphoric.

This kind of postmodernism retains much of moderism—its habit of abstraction, its quest for perfection, its respect for craft. Coupled with total exorcism of the urbanistic wrong-think of the modern movement, it is our best hope.

The culture of the world has suffered at the hands of architects and planners inflated with unreasonable optimism. Ancestor worship and a certain *gloominess* make for trustworthiness in architects.

Jefferson B. Riley: 'A product of the mass communications revolution.'

Postmodernism is, in part, a product of the mass communications revolution and, as such, marks a revolution in architecture. We are, at last, creating an architecture that strives to be part of the whole life of the world.

At its best, postmodern architecture is sociable, receptive, and inclusive. At its worst, it is fake.

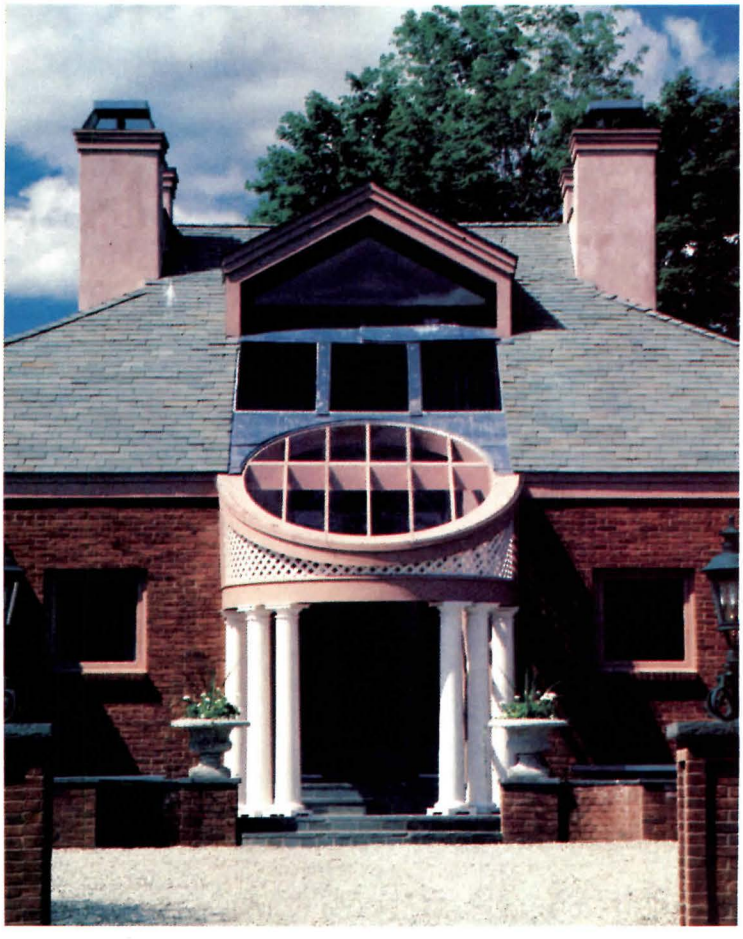
Mr. Moore, affiliated with several firms around the country, heads the school of architecture at UCLA. **Mr. Solomon** heads his own firm in San Francisco. **Mr. Riley** practices with Moore Grover Harper of Essex, Conn.

Harlan Hambright

Across page, Sammis Hall on Long Island, N.Y., by Moore Grover Harper; right, a branch bank in Washington, D.C.'s Georgetown by Martin & Jones.

William Turnbull Jr.: 'The prime purpose of making architecture is in jeopardy.'

Postmodernism seems to be a catchy side show on the main road to finding an architecture of consideration and value. Originally Charlie Jencks' invention to sell his books, it has now come to symbolize an attitude toward the past and the near past that is disheartening. Instead of learning and using the lessons from previous generations—place making, inhabitation and so on—people are designing (and building) collections of symbolic fragments. At best it can be considered a harmless fun and costuming, but at the worst it becomes formalism or the manifestation of solids for their sculptural and surface effects. Once the focus on space and light for purposes of human inhabitation and use are put aside, the prime purpose of making architecture is in jeopardy. The sensationalism of these new buildings is heady wine for the young designers but the same can be said of punk rock.



Right and across page, entrance, sloping roofs, and multiple chimneys of a Massachusetts house by Robert L. Harper, AIA.

Sym Van der Ryn: 'Neofashion for the bored, the rich, the jaded, the blind.'

What is postmodernism?
I don't know.

My contact with the phenomenon has been limited to glancing at magazines.
The words don't make sense to me.

The drawings seem effete, like what I imagine Victorian ladies might do if they were imagining buildings rather than faintly sketching flowers.
I prefer flowers to what I see in the magazines.
What postmodernism seems to be is *neofashionism.*

Architecture stripped of social significance,
devoid of human content,
uncoupled from technology and nature
is neofashion
for the bored, the rich, the jaded, the blind.

I refuse to pay attention to it.
To honor it with my time
anymore than I would pay attention to
the Paris spring fashion show
or Bill Blass' latest color job on Ford automobiles.

The neofashionists are not architects.
They are fashionists
wrapping shoddy merchandise in titillating packages
soon to be forgotten.
They are creatures of the New York media
and of Philip Johnson's dark salon.
Their pastel pastiches will airily fade away
when we cease to honor them with our attention.

Neofashionism fills space—
symbol and symptom of illness and emptiness
in society and in architecture.

Yes, the greatness of the modernists
did too often degenerate into humorless, humanless nightmares
of cities destroyed and landscapes desecrated;
sacrificed to ideal and abstraction,
self-serving technology, commercial greed,
and institutional irresponsibility.

The horseman of the Architectural Apocalypse
did too often trample common sense,
the grain and texture of a commons
built over centuries through the work of thousands
of honest craftsmen.

Yes, it is time for change.
But the vacuous vagaries of neofashion
are only a pause between the acts,
hardly an act in themselves.

They are doing damage in the Academies
where their facile formulas and dictums
can easily be copied by novices
seduced by flash, paralyzed by fear,
eager for entrance into illusion.

Neofashionism is a sleight-of-hand state of mind.

Photographs by Robert L. Harper, AIA

Richard Meier: 'It seems regrettable that we must return to a former time so wholeheartedly.'

Pluralism, eclecticism, populism, postmodernism, all the "isms" abroad today in architecture speak for the breakdown of the ideological base of the modern movement.

Some would say that we have happily escaped the spectre of modernist dogma, the huge, petrifying responsibility of the making of a better world through architecture. Some would say that finally we have liberated our art, secured its autonomy, wrested it from enslavement to a utopian determinism, an enslavement that seems unreal and inappropriate and has proven disastrous more often than not. The great faith in the miracle of technology and the great faith in the architect as a provider of global situations are dead.

Essentially what this means is that the specific subject of our art has changed; it is no longer the ideal, the future, but the real, the present, and the past. If one thinks of architecture as the treatment of meaningful forms, then the rigorous absolutism of modernism looms as a period in which many fundamental meanings were forgotten or proscribed.

It is the aim of this new pluralism to make the totality of significant human experience potentially available again. In this way, history becomes a dimension of fundamental importance.

The revival of the neoclassical tradition is essential to the new wave in architecture, postmodernism, a remarkably uninformative name, which covers a multitude of styles.

They do have certain things in common. In the language of elements and meaningful forms, architecture can be seen as commentary on the condition of man in relation to his object world.

The basic difference between the postmodernists and their modernist progenitors comes from attitudes about the expressive, didactic role of architecture, whether architecture should speak to man about man, or about architecture, about the object itself.

Within the neoclassical tradition, the architect used forms that referred to man's physical reality; a building had foot, body, and head. The architecture subsumed the object within the man-nature relationship.

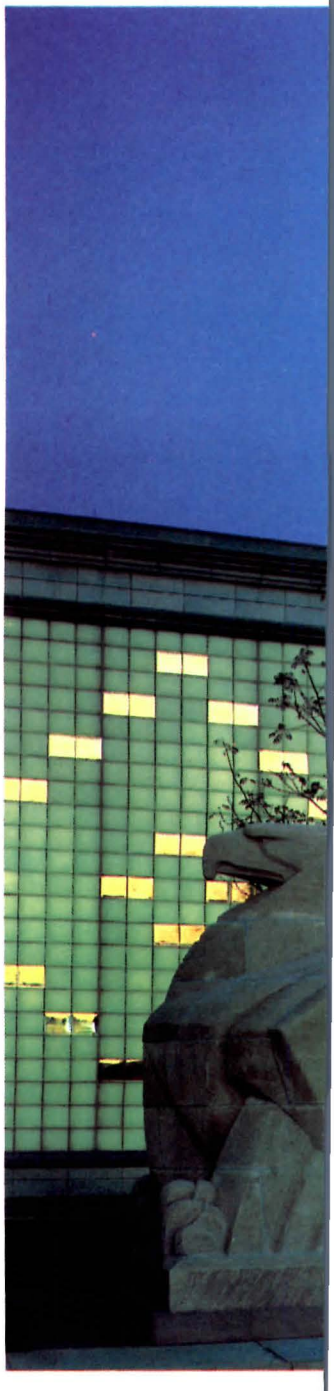
Mr. Turnbull is a principal of MLTW/Turnbull, San Francisco. **Mr. Van der Ryn's** firm is Van der Ryn, Calthorpe & Partners of Sausalito, Calif. **Mr. Meier** heads his own practice in New York City.

Modernism, with its technological liberation and abhorrence of the past, sought to differentiate men from nature, man from machine, machine from nature. This new abstraction let the building speak for itself. It was an abstraction that celebrated the potential realization of a condition of objecthood that served man but was distinct from him. Modernism strived for a primal statement. In it, all elements are reduced to raw material, dehistoricized in order to become reconstituted as structure. That is not to say that modernism did not deploy both archetypical and historical references in its symbolism, but it was never repesentational.

Essentially postmodernism is a return to the neoclassical tradition, to the representational in architecture. It is a return to the anthropomorphic notion of architecture as a reflection or image of man himself. It is architecture as a vehicle of expression for meanings and evocation of memory. At its best, this can mean an architecture of rich collage, a complex layering of meaning, symbol, and metaphoric imagery. At its worst, which is unfortunately all too frequent, it becomes a literal reading of historical quotes and allusions that are ultimately either so accessible that they become uninteresting or so esoteric that they become unintelligible. The danger of this is that it reduces architecture to a jabber of styles,

continued on page 286

AIA Honor Awards 1983



This year the American Institute of Architects honored 11 buildings in its annual tribute to design excellence. For the first time since 1976, extended use and new buildings were judged simultaneously, leading to the jury's choice of only one extended use project—the restoration of the California State Capitol in Sacramento, Calif.

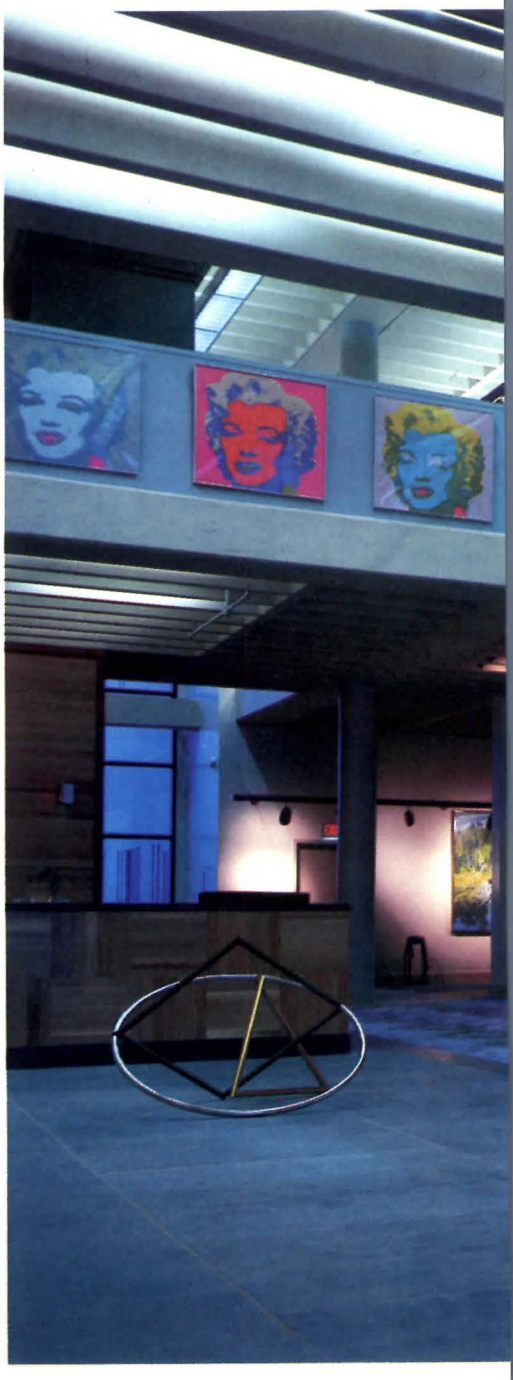
Of the other winners (all new projects), there are three governmental buildings of very different styles: a county courthouse in Charlotte, N.C., a county administration building in a rural area outside of Denver, and the Portland, Ore., Public Service Building (page 232). The other winners also show considerable diversity of type, location, and esthetics. Among them are a fabric-roofed airport in Saudi Arabia; a fanciful corporate headquarters in Richmond, Va. (the Best Products building at right); high-tech condominiums in Santa Monica, Calif.; a quiet pair of weekend houses on Block Island, R.I.; a colorful YWCA branch and office building in Houston; a "vernacular" addition to a church in suburban Washington, D.C., and a seminary in Hartford, Conn.

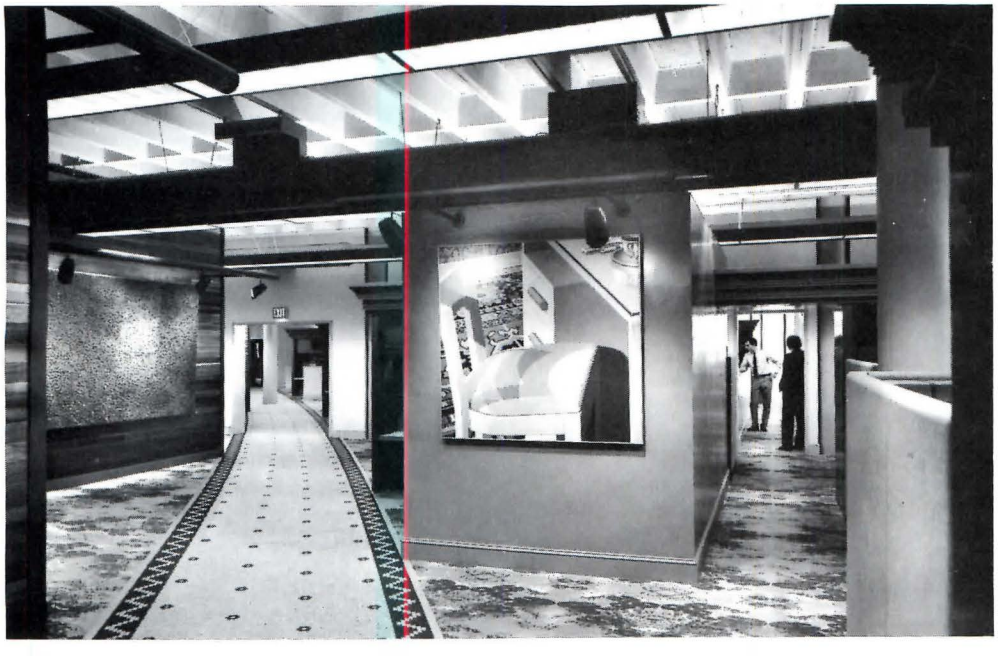
The winners were chosen from 599 submissions. "In this time of pluralism, the submissions represented a variety that was nonexistent two years ago," said Charles Gwathmey, FAIA, jury chairman. "The energy and commitment to purpose was obvious and ultimately made the final selections rather simple; they are clearly the best buildings, in terms of types and point of view. The winning projects represent a restatement of architecture as being vital while also serving.

"All of these buildings met their programmatic obligations, while simultaneously recognizing contextual references, materiality, and invention. In the best sense, the jury was impressed by the theoretical as well as the practical aspects of the projects and the fact that the buildings do not merely accommodate, but insist on intellectual evaluation."

The other jurors were David L. Browning, associate member/AIA; Chris Coe, an architectural student at Louisiana Tech University; Robert J. Frasca, FAIA; Graham Gund, AIA; George J. Hasslein, FAIA; Bates Lowry, director of the National Building Museum; Antoine Predock, FAIA; and Milo Thompson, AIA. Nora Richter Greer

Norman McGrath





Artful Headquarters

The Best Products Corporate Headquarters in Richmond, Va., is a pluralistic design, combining elements of historical allusion, contextualism, and high-tech. It is an expansive art museum (housing the firm's extensive collection of contemporary art), and at the same time, it has warm and intimate office spaces. It is, overall, an appropriate headquarters for this client, which has become well known for its lavish, and sometimes outlandish, catalog showrooms.

Designed by Hardy Holzman Pfeiffer of New York City, the building sits on 25 acres on a plateau facing one quadrant of a cloverleaf highway interchange. To fit the contours of this site, the building's front facade is a long curving gesture, echoing the shape of the road.

The materials are translucent glass block interspersed with pieces of transparent glass block to form a diamond pattern, with a turquoise terra-cotta cornice. The glass block emits a warm glow of light into the interiors during the day, and at night glimmers from the lights inside. The addition of a moat running the full length of the curve, dotted with Italian Renaissance-like fountains, magically turns the building into a fortress of times past.

The front entrance fenestration is slight, but visitors have no problem finding their way into the building. The passageway (across a bridge over the moat) is heralded by two massive art deco stone eagles, which once sat atop the now-demolished Airlines Terminal Building in New York City.

Approaching the structure from the rear is a much different experience. Here rectangular-shaped forms jut out into the landscape, forming a series of small courtyards and cloister-like gardens. These rectangles are clad in white panels and dark insulating glass, and the side of the buildings where future additions will turn the structure into a semicircular shape are constructed of inexpensive corrugated panels.

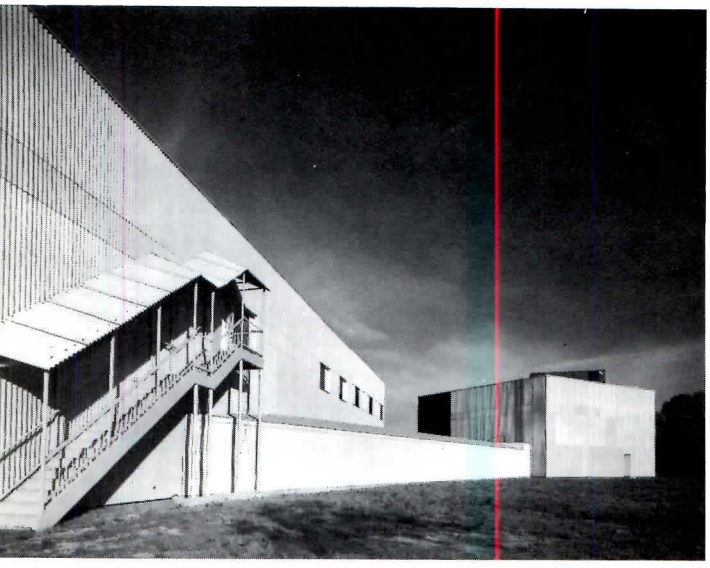
Inside, the main lobby is a spacious two-story atrium, with the second-floor open-plan offices forming a mezzanine. The private offices generally flank the edges of the rear walls. While

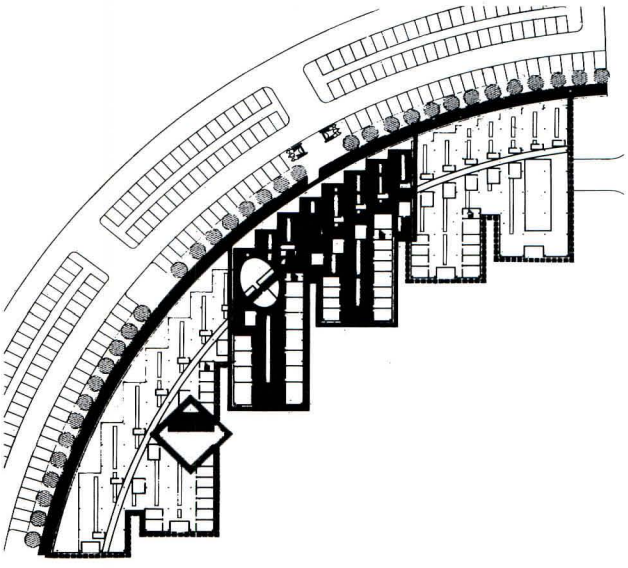
Photographs by Norman McGrath

The main lobby is a two-story atrium, with second floor offices acting as a mezzanine, above. The floor plan for the offices is a grid, with the tiled main circulation spine following the curve of the front facade, right and facing page, bottom. An executive office, with a dazzling display of art, facing page, above.

the offices are arranged in a straightforward grid plan, the major circulation spine is a curve that follows the shape of the front facade, adding a complexity to the space. Historical whimsy is used in the design of the open-office partitions: small, linear colonial "houses" (with traditional architectural cornices finishing off the tops), fitted with desks and task lighting. This playfulness is carried into the flooring: The office floors are covered in decorative carpeting (designed after a silk screen), while the curving main circulation path is covered in a contrasting tile.

Throughout the building, there is a hint of high-tech in the exposed air ducts, columns, glass block wall supports. However, the coloring is muted, with the strongest color—a deep colonial blue-green—used for the open-office partitioning. Every viewpoint offers a glimpse of artwork.

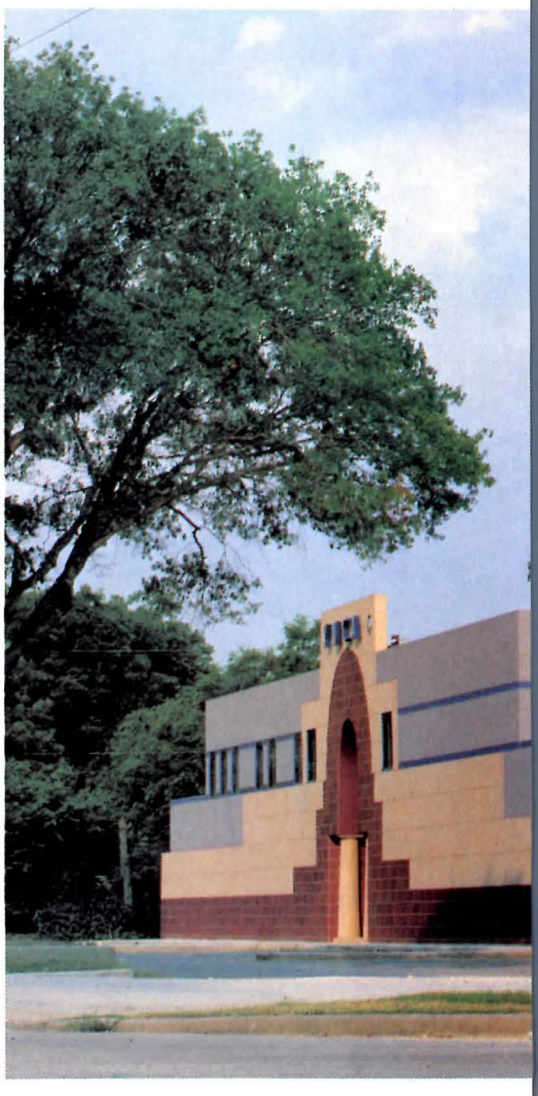




The corrugated panel walls of the south facade are temporary, to be removed for future additions, above. View from the second floor mezzanine down to the main lobby, right. One of the two massive, art deco eagles that flank the main entrance, facing page. The building's curving front contrasts sharply with the series of rectangular-shaped spaces in the rear, plan above.

Photographs by Norman McGrath

Highly Articulate 'Y'



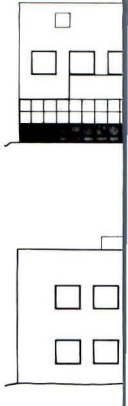
The YWCA Masterson Branch and Office in Houston is a building of dual appearance. The front facade is highly decorative, linear, low-scale, with minimal window and entrance fenestration. The rear, in contrast, is a series of larger-scaled, light and airy pavilions. Overall, the building, designed by Taft Architects of Houston (John J. Casbarian, AIA, Danny Samuels, AIA, and Robert Timme, AIA, partners-in-charge), is an imaginative solution to a difficult site and a tightly prescribed program.

The narrow site is wedged between a mixed residential/industrial neighborhood on the north and a large city park with a bayou running through it on the south. The program called for modest-sized offices and activity rooms as well as larger spaces for swimming and other physical recreation activities.

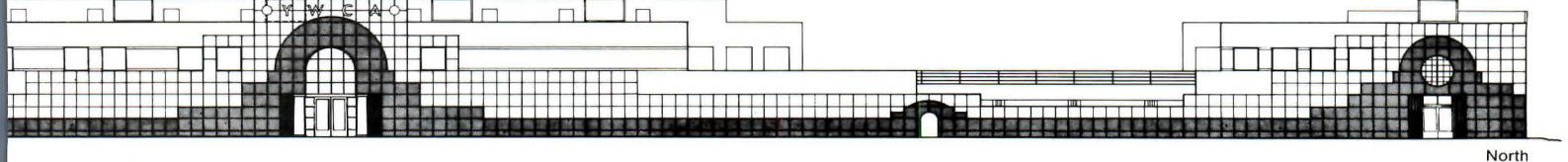
The solution is a building of two parts. The first is a 350-foot-long, north-facing building that also serves as the main entrance. Its first floor houses the reception area, administrative offices, women's and men's locker rooms, racquet ball court, day-care center, conference room, and child's play court. Its second floor contains more offices, two classrooms, a crafts room, kitchen and eating area, and washrooms. The second component contains the larger spaces—the pool and multipurpose rooms—that are placed behind the front section and have vast window openings overlooking the park. The two areas are connected by a large, enclosed atrium containing a ramp that moves across the building from front to back, returning on itself to reach the second floor.

The two disparate parts are thematically linked by facade treatments. While the front elevation is more decorative, its materials become location codes in the rear. The terra-cotta tiles are repeated on the rear of the offices and classrooms. The beige stucco is used to distinguish the pool area, and the gray, the multipurpose room. Blue, used to highlight the exterior, also adorns the atrium circulation space.

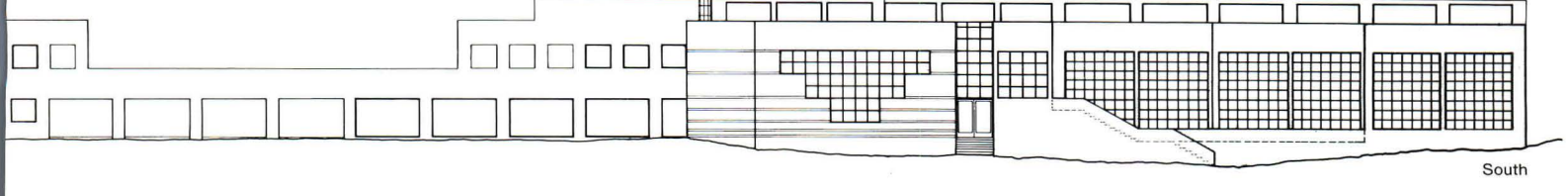
The jury said the building "offers a unity and clarity to a difficult, disparate program."



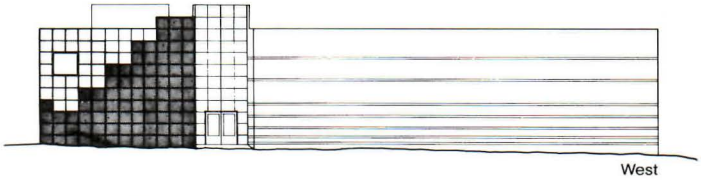
Photographs by Taft Architects



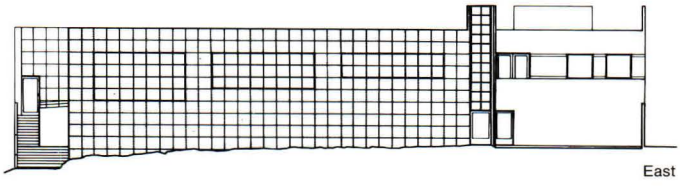
North



South



West



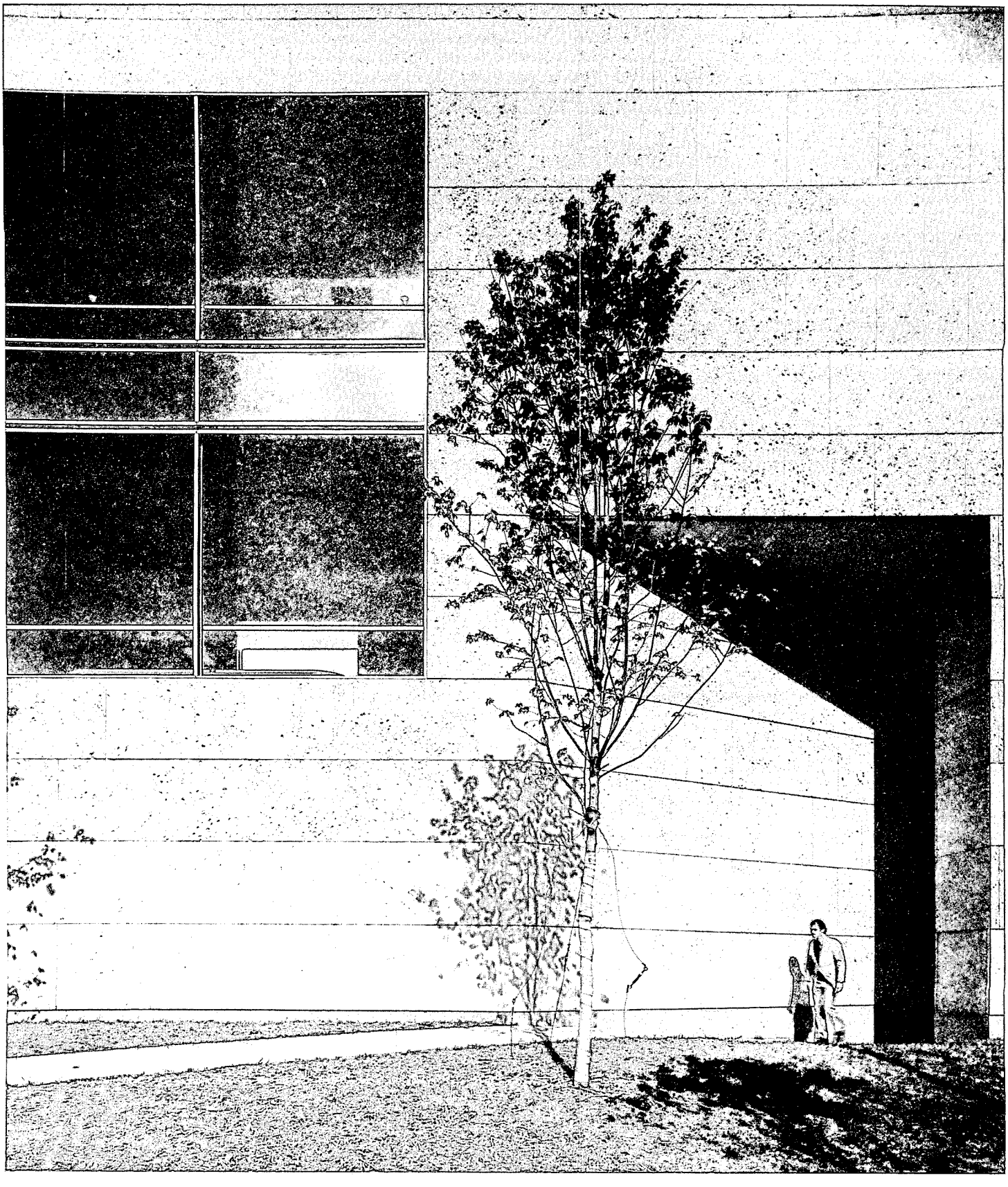
East

On the 350-foot-long north facade, public entrances are framed by bands of gridded materials that suggest layers, above. The spacious multipurpose room is wrapped in gray stucco with blue tile bands, and the atrium circulation space is blue, left.

Taft Architects

Taft Architects

An atrium circulation space connects the front offices to the multipurpose room, above top. Windows (at left in top photo) overlook the swimming pool. Above, the pool area, with large, south-facing windows. Exterior decorative motifs are carried inside: The multipurpose room has squares of sound-absorbing material and air grilles in the same blue as the pavilion's strips. Structural beams and corbels pick up the cubic theme.



Contextual Courthouse

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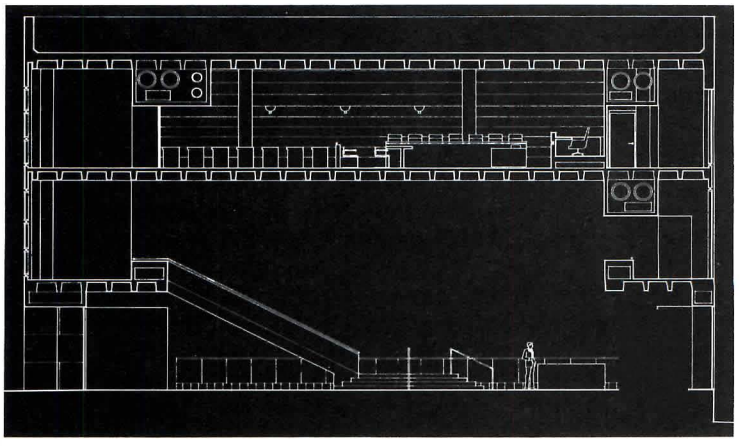


As the newest addition to a city/county government center in Charlotte, N.C., the Mecklenburg County Courthouse is a unifying element. The building, designed by Wolf Associates Architects Ltd. (also of Charlotte), serves as a link between the center's many parts: a county office building, garage, pedestrian walkway, and park. At the same time, its public plaza becomes the focal point of the whole complex.

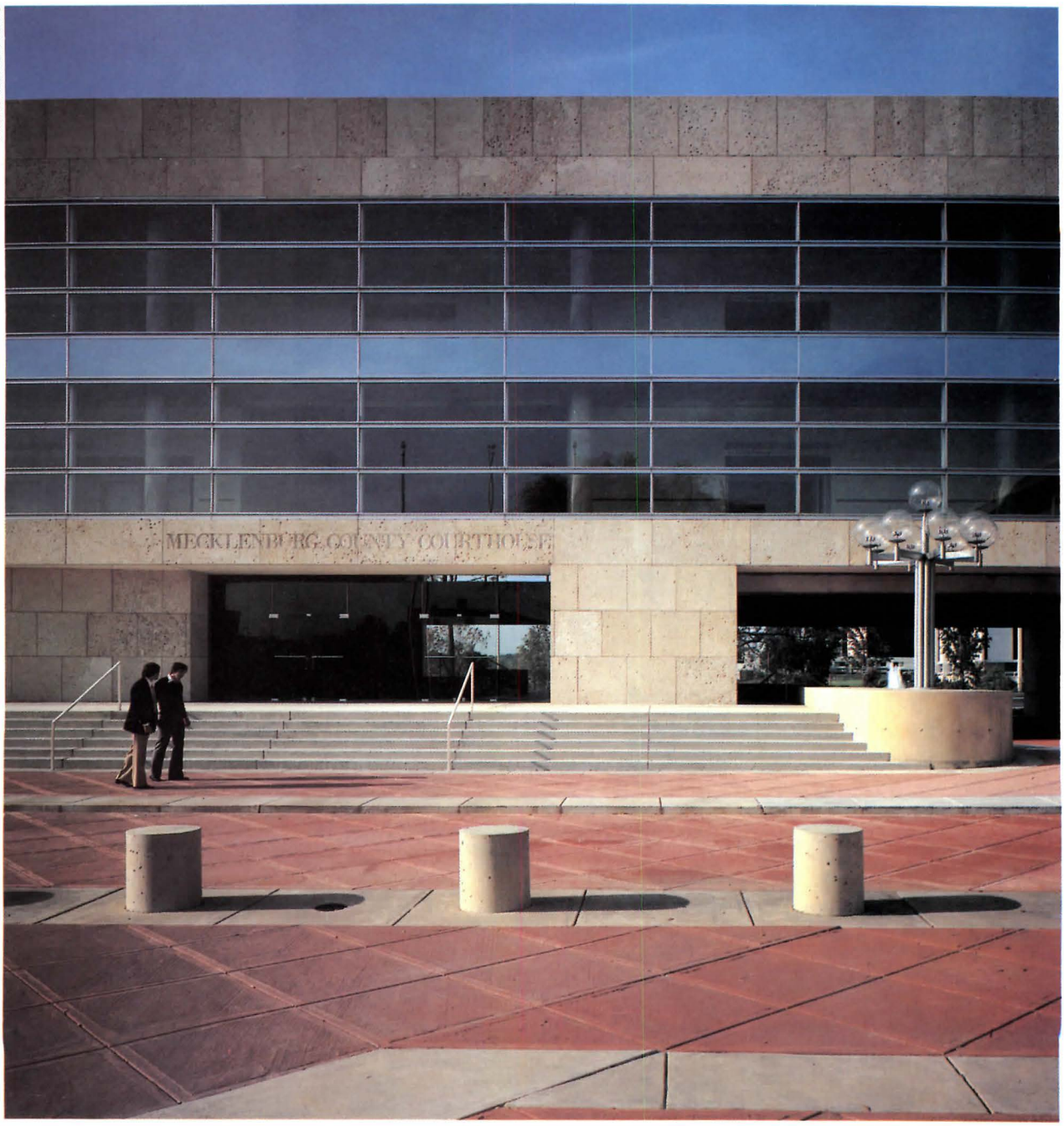
In designing the building, the architect's task was to also provide a master plan for the center, which would determine the placement of both the courthouse and anticipated 450-car garage. The solution was to combine two square blocks, resulting in a rectangular site. In this rectangle, the plaza occupies the center, and the existing county building and pedestrian walkway flank one of the shorter ends and the new garage the other. The new courthouse links the two sides horizontally, becomes a circulation path between the garage and county building, and defines the central plaza. The road that bisected the square lots provides access into and through the complex (it travels through a cutout on the courthouse's ground floor), and at the same time becomes part of the public plaza.

The design of the courthouse itself reflects both its "public" and "private" functions. On the plaza side, the facade is a glass and aluminum curtain wall. Inside, the public corridors line this window wall, providing views into the plaza. On the opposite side of the building, the exterior is Cordova shell limestone, with few window openings to provide "selective perspectives of the park to the south," in the architect's words. Behind this facade is the "private" circulation corridor for county employees. The core of the building consists of the courtrooms and offices: The courtrooms are approached from the public corridor; the judges' chambers and jury rooms from the "private corridor."

The jury called the building a "contextual addition to an existing city/county government center. . . . By assuming a somewhat submissive role, the courthouse becomes a backdrop for the buildings nearby. Yet, in its unpretentiousness, it adds a dignifying force, a unifying element, to the complex."

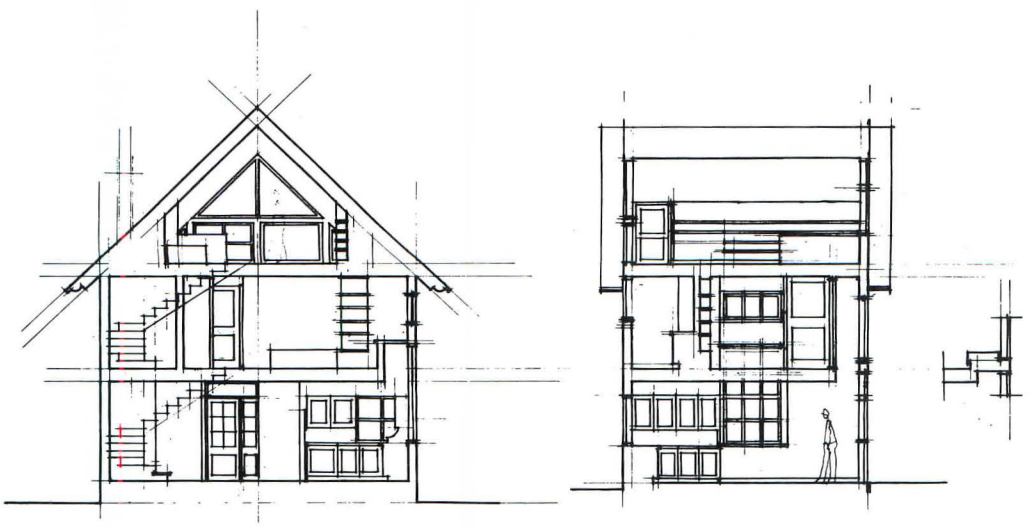
©Ezra Stoller/ESTO

Facing page, entrance to a typical juryroom, top, and a courtroom, bottom. Below, the glass and aluminum curtain wall faces the newly created public plaza, below; left, the limestone-clad side overlooks a city park.



©David Franzen/ESTO

Thomas Bernard



Well Matched Couple

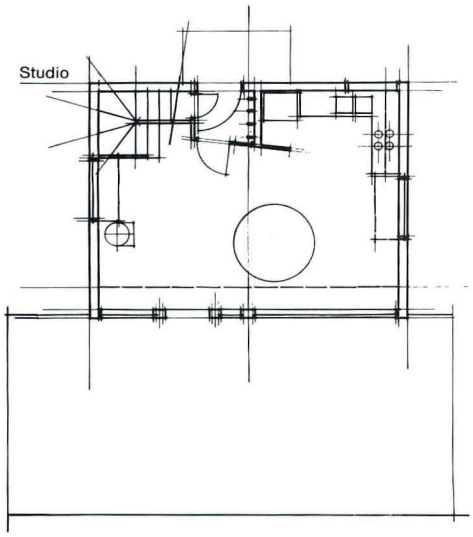
The design of the Coxe/Hayden house and studio on Block Island, R.I., is, as described by Robert Venturi, FAIA, an expression of "complex simplicity, new oldness, and a blending of individual expression within an established architectural vocabulary."

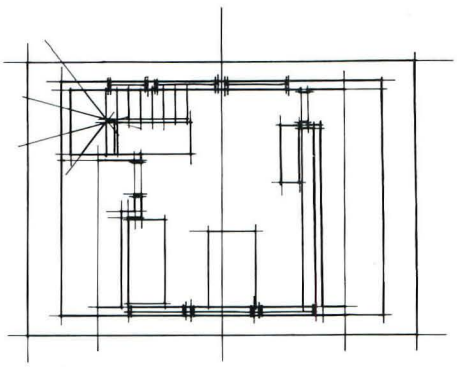
The programmatic requirements for the project were spelled out for Venturi, Rauch & Scott Brown in a written narrative: "Keep it simple, and make it architecture. . . . The living elements will best support the creative function if they are stimulating spaces, both within and without. I always feel stifled in boxy, rectangular rooms. Capture a beautiful view, change the loft of the ceiling, or vary the angle of the walls, and the space will feel different and more energizing for me. . . . Outside, I most want to feel a sense of community, not isolation. I don't like to feel physically alone. The proximity of other houses to the north and south is welcome."

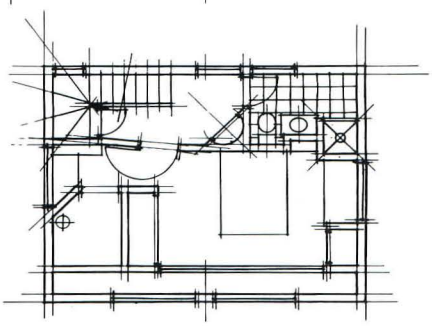
The design fits these requirements to a "T." Instead of one vacation house, two smaller buildings that hug one another on the open meadow were chosen. The larger structure contains living, dining, and kitchen areas on the ground floor; bedroom and bath on the second; and writing studio in the gable. The smaller building has a garage-workshop below, with two guest rooms and bath above. To further develop the sense of community, the architectural language of countrified classic revival was used, a style typical of many 19th century buildings on the

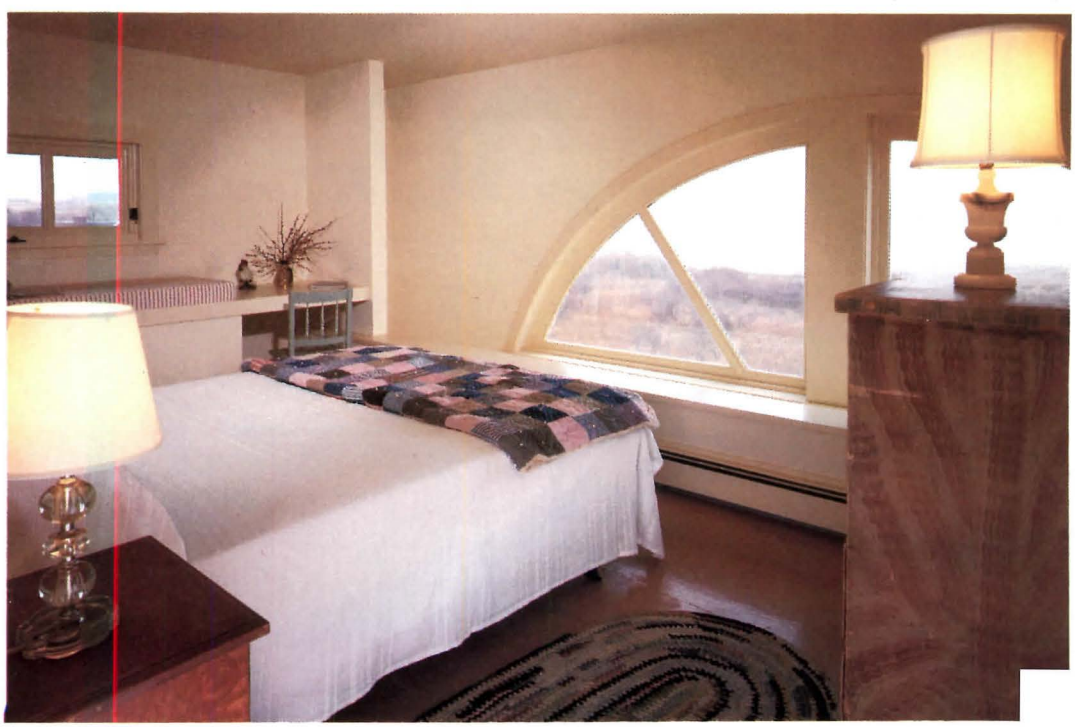
Northwest elevation of the two buildings—the larger one is the main house, the smaller the guest quarters, left. Looking west out of the main house's third floor studio window, below.

Courtesy of Venturi, Rauch and Scott Brown


Studio







Photographs by Thomas Bernard

Playful gestures by the water.

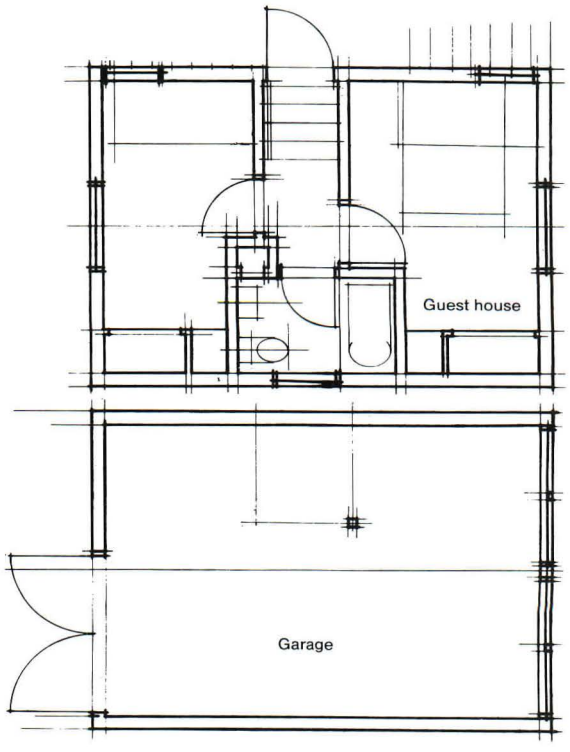
island. That style is exemplified by a temple front with symmetrical entrance, a simple profile with overscaled overhangs, windows, batterboards, and trim.

The front elevations of both buildings are embellished by symmetrically positioned windows, yet their shapes differ from the traditional and present a quiet, playful gesture. On the other elevations the playfulness becomes more explicit. For example, on the large building's rear facade the window placement loses its symmetry, with some of the balancing windows eliminated.

On the inside, great attention was paid to getting the "right" view, the "right" entrance, and the "right" feel, in Venturi's words. Careful details, such as the cupboard on the second floor landing and the kitchen cabinet edging in the main house, are meant to provide the extra touches needed to create "stimulating space," without sacrificing simplicity and ease of use.

"An immediate sense of warmth and human scaling are achieved, in part, by the buildings' charming simplicity, shingled exteriors, and orientation to views of the salt water pond below," the jury commented. "This is a contextual building suitable to its time and place."

The main house's kitchen and bedroom, across page. The buildings' northeast elevation, above. The simplicity of the interiors as seen in floor plans: studio, across page, and guest house, right.



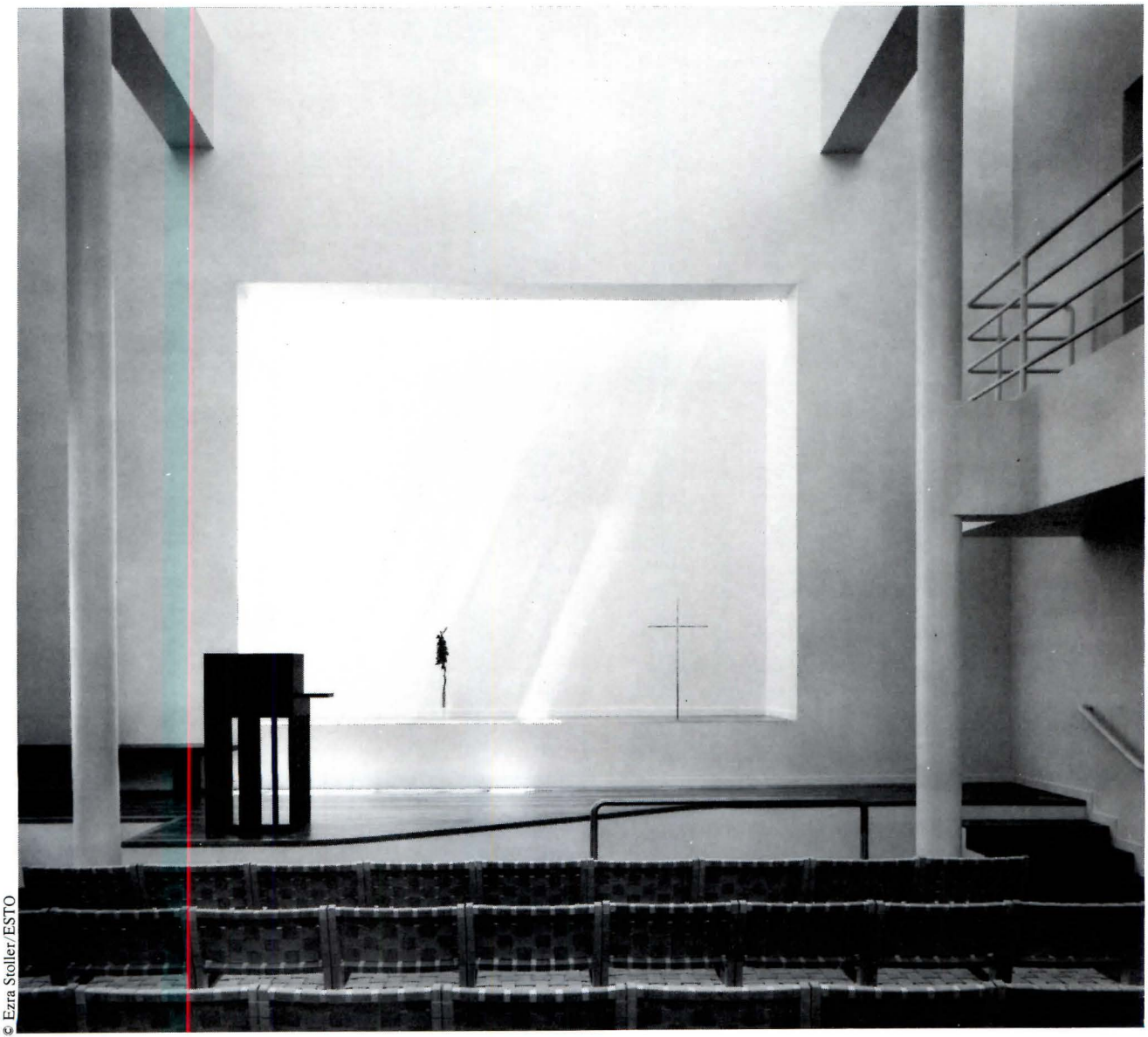
Steve Rosenthal

Shining Seminary

The Hartford, Conn., Seminary is a highly rhythmic composition of forms and surfaces, a remarkable sculptural object that changes from one vantage point to another. It is also a building of vertically expansive public spaces and more intimate places for contemplative study and meditation (see Mid-May '82, page 124).

In designing the building's exterior, New York City architect Richard Meier, FAIA, borrowed from his earlier designs, particularly the Atheneum in New Harmony, Ind. The building is clad in white porcelain-enameled walls placed together like pieces of a jigsaw puzzle, in this case an L-shaped one. Inside, the design reflects the theological center's dual public/private role. Meier explains: "On one hand, it is a partially cloistered, inward-looking organization of spaces, a contemplative place for gathering and study. On the other hand, it is intended to be the center of a large domain, which reaches out to the public, informs it, and invites it to take part." The major public spaces—the sunlit, soaring, three-story meeting room and chapel—are located at the extremities of the L, with reading room, bookstore, and lobby occupying the other first floor spaces. The second and third floors house small seminary rooms and offices.

Below, sunlit, three-story chapel. Left, front elevation.



Robert Lautman

Pert Sanctuary

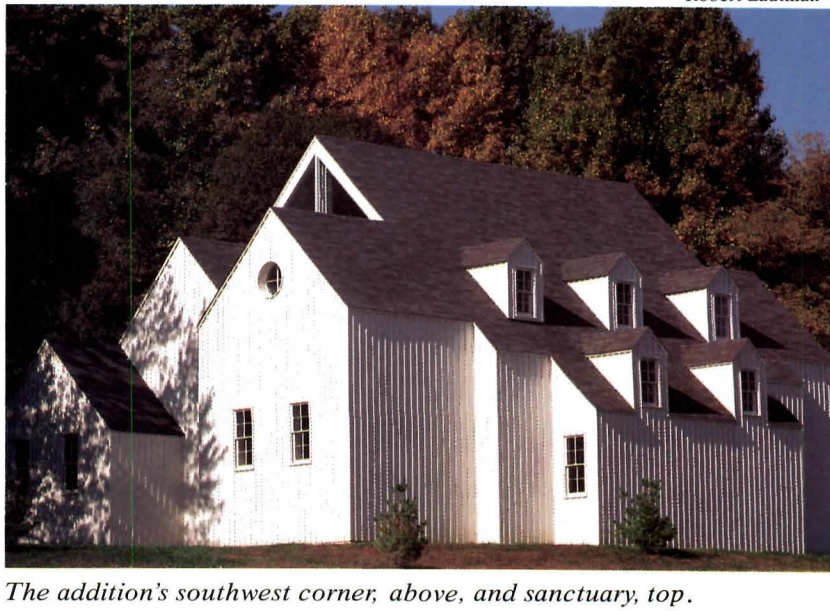
For the addition to the Immanuel Presbyterian Church in McLean, Va., the vernacular forms and materials of the original building are echoed to produce a simple yet graceful structure (see Mid-May '81, page 159).

The original building—a Southern farmhouse located on a six-acre suburban Washington, D.C., site—housed the sanctuary, fellowship hall, and school. The addition, designed by Hartman-Cox, sits parallel and south of the original structure. A U-shaped covered arcade links the old to new while tying together the old structure's disparate parts and creating a courtyard around a pair of mature linden trees. The courtyard becomes the central focus of the complex.

The north side of the addition (which faces the old structure) resembles a Southern farmhouse with mullioned windows surrounding a fireplace and dormers. The south wall is windowless except for high dormers, and its pitched roof steps down, reducing the building to residential scale.

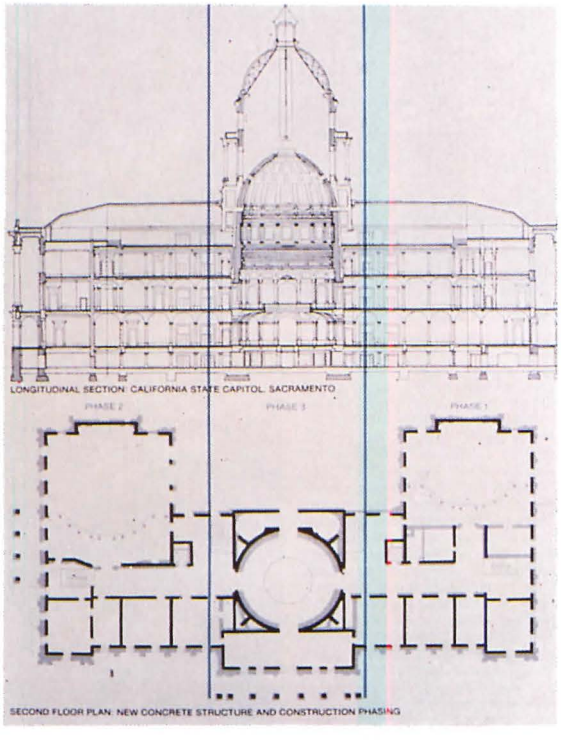
The large hayloft interior is divided into discrete spaces: A mullioned window wall separates the sanctuary from the fellowship hall. The fellowship hall conveys a warm, cozy feeling with low, heavy overhead beams and a fireplace on the north wall. The sanctuary is more formal in tone with higher ceilings, cooler colors, and braced and tied timber ceiling framing. Natural light floods the room through diamond-shaped, large windows on the east and west sides and dormers on the south wall.

Robert Lautman



The addition's southwest corner, above, and sanctuary, top.

Photographs by Welton Becket Associates



SECOND FLOOR PLAN: NEW CONCRETE STRUCTURE AND CONSTRUCTION PHASING

Capitol Restoration

In 1972 the state architect of California declared the 19th century capitol in Sacramento seismically unsound and closed the building. Three years later after much debate, the state legislature voted to preserve rather than rebuild the tarnished capitol. What ensued was a tremendous cooperative effort involving architects, historians, structural engineers, earthquake consultants, state representatives, craftsmen, and contractors. What resulted is a splendid rendition of the building as it appeared at the height of its integrity, the period between 1900 and 1910.

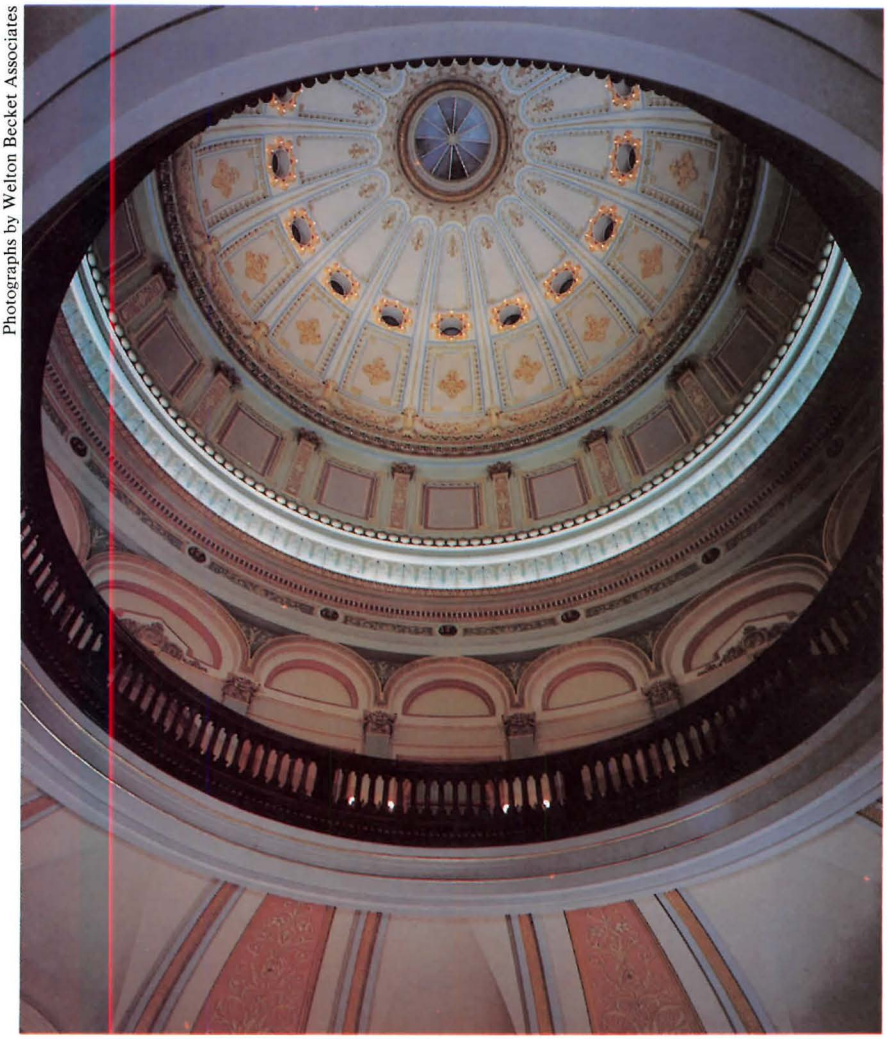
Of great influence on the state's decision to restore the capitol was a two-volume study conducted by the Santa Monica, Calif., firm Welton Becket Associates, which was subsequently hired as architect for the project. The study revealed that the capitol had gone through a number of renovations in its first century of use (the building was first occupied in 1869). The senate and assembly chambers had received new balconies and column placement. Steel roof trusses had been suspended over both chambers to create additional work space on the fourth floor. Original light fixtures, marble fireplaces, elevator enclosures, floor tiles, friezes, carved monumental stairways, among other things, had been destroyed over time. The firm recommended that the building should be restored to its 1900 to 1910 appearance because by then modern conveniences, such as elevators and electric lights, were in place. It also allowed for the use of the fourth floor as office space (added in 1906). At the same time, the 1900 to 1910 design retained many of the magnificent decorative details from earlier eras.

Discovering all design elements of this period proved a tremendous task. The state's archives were thoroughly researched for photographs or documentation of the building (fewer than two dozen photographs were found). The existing building was recorded in drawings and photographed, and pieces to be saved were labeled and chronicled (such as 500,000-inch-square pieces

West front of the capitol, above. Restoration was in three phases, the two wings first, then the central rotunda, plan at left. The assembly chamber restored to its 1900-1910 appearance, right.


LEGISLATORUM EST JUSTAS LEGES CONDERE

Photographs by Welton Becket Associates



Reviewing 19th century craftsmanship.

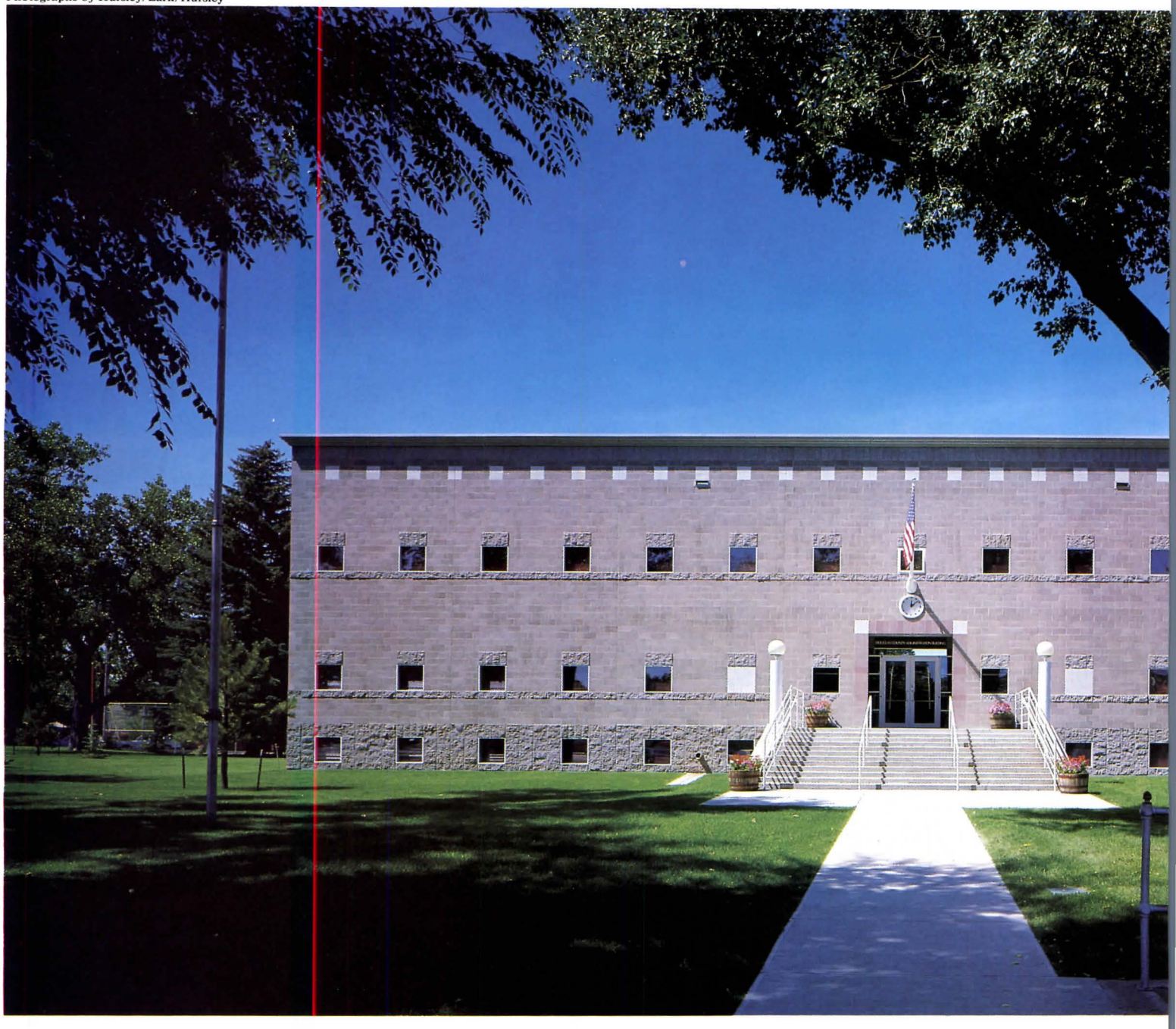
of marble mosaic). To fill in the blanks—of which there were many—designers turned to the literature of the period. Working from whatever clues could be found, they drew Corinthian capitals, entablatures, friezes, columns. Color schemes were recreated and eventually scientifically checked against remaining fragments.

Then the demolition and rebuilding began. Exterior porticos and the central rotunda and dome were strengthened and stabilized in place. Both wings flanking the central rotunda were dismantled from roof to foundation, then seismically stabilized with shotcrete on the inside face of the exterior walls. Old floors, walls, and foundations were replaced with reinforced concrete. All ornamental elements were reproduced in their original materials—marble, plaster, wood, iron, or clay tile. This involved using 19th century craftsmanship skills on a scale unprecedented in this century. To protect the historical integrity of the design, heating, ventilating, and airconditioning was concealed within the ceiling ornament. Overall, the care taken in integrating the old with the new was extraordinary. For example, in the senate chamber, ceiling lights are sufficiently intense for television, but can be dimmed to the original gaslight level. An electronic vote tally machine slips out from behind a door when the senate is in session.

Of the building the jury said, "What was once a deteriorating seismic hazard is now a magnificently restored tribute to the virtues of preservation and extended use in American buildings."

The monumental stair railings, left, were modeled on an original piece found in a nearby church. The intricate detail work as seen in the first floor rotunda and dome, right and above.

Photographs by Hursley/Lark/Hursley



Sturdy County Seat

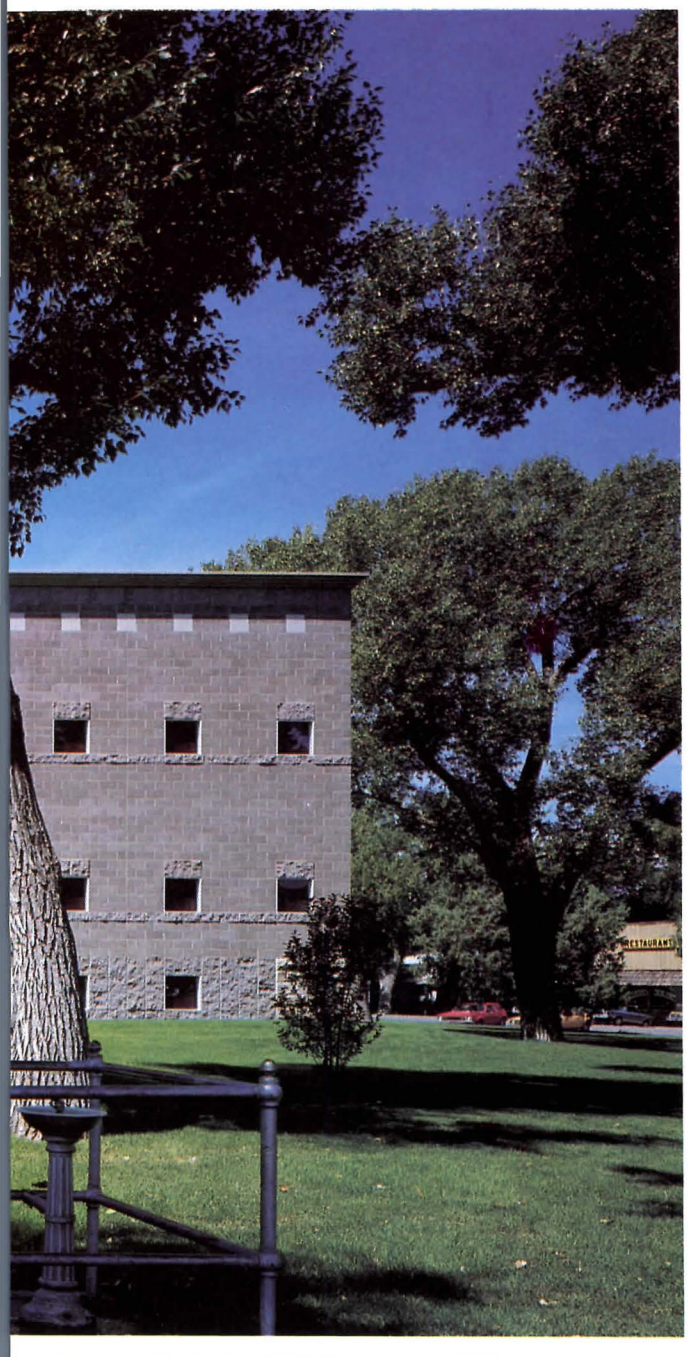
Located in the heart of a small Colorado town, the Douglas County Administration Building asserts a strong, judicious, contemporary image, while at the same time reflecting the surrounding Western vernacular architecture.

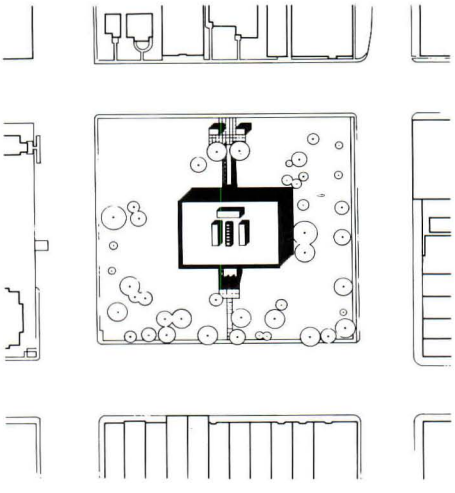
In designing the structure for Castle Rock's town square, Denver architect Hoover Berg Desmond borrowed some of the characteristics of the structure it replaced—a 19th century courthouse destroyed by arson—as well as its neighbors. The exterior materials of ground-faced and split-faced masonry block echo the rough-hewn texture of the lowrise, commercial buildings around the square. The building's scale resembles that of the old courthouse, and its fenestration is reminiscent of the courthouse's punched rectangular windows. And like the old courthouse, it has an entrance on both the east and west sides.

Yet, the administration building's design exudes a quiet strength of its own. It is a building at once formal and ironic: formal in its precise symmetry; ironic in the undersized, perfectly square windows and playful lampposts, clock, and flag decoration at the front entrance. (The lampposts are repeated at the rear entrance.) The building, in fact, has been criticized by the predominantly rural Douglas County community as being too "modern."

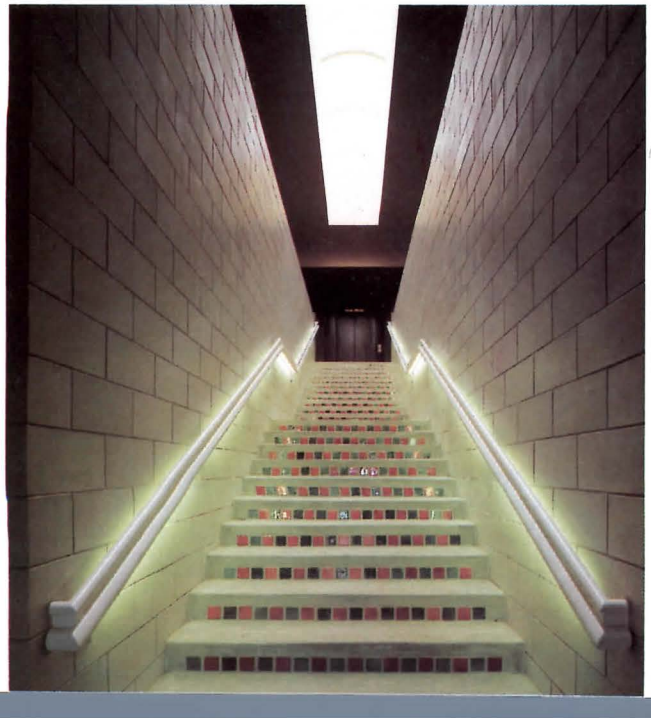
Inside, the only walled-in office space is the commissioner's hearing room; the rest is open plan configuration. The project's program required 20,000 square feet of finished space and an additional 10,000 square feet of unfinished space to accommodate future expansion. Stairs directly behind the front entrance (the east facade) lead up to the second floor, above which a skylight brings natural daylight into the interior. Interior finishes are cinder block walls, and quarry tile and carpeted floors.

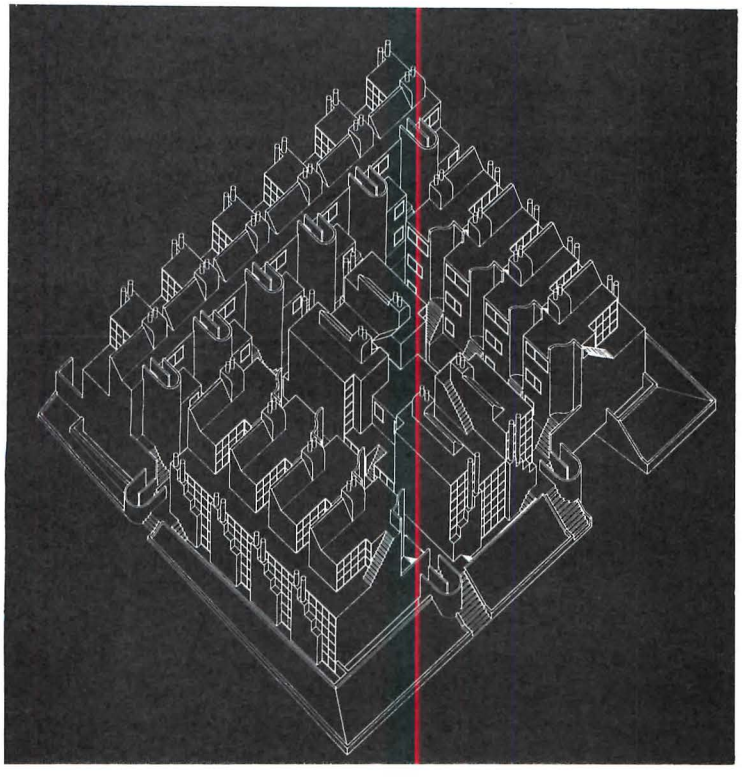
The jury called the structure a "modern building reflecting the architectural character of the region.... The new administration building confirms a dignity associated in the public mind with civic buildings. It is not a reflex solution but a thoughtful design of quiet strength whose exterior materials repeat the same rough texture of surrounding buildings."

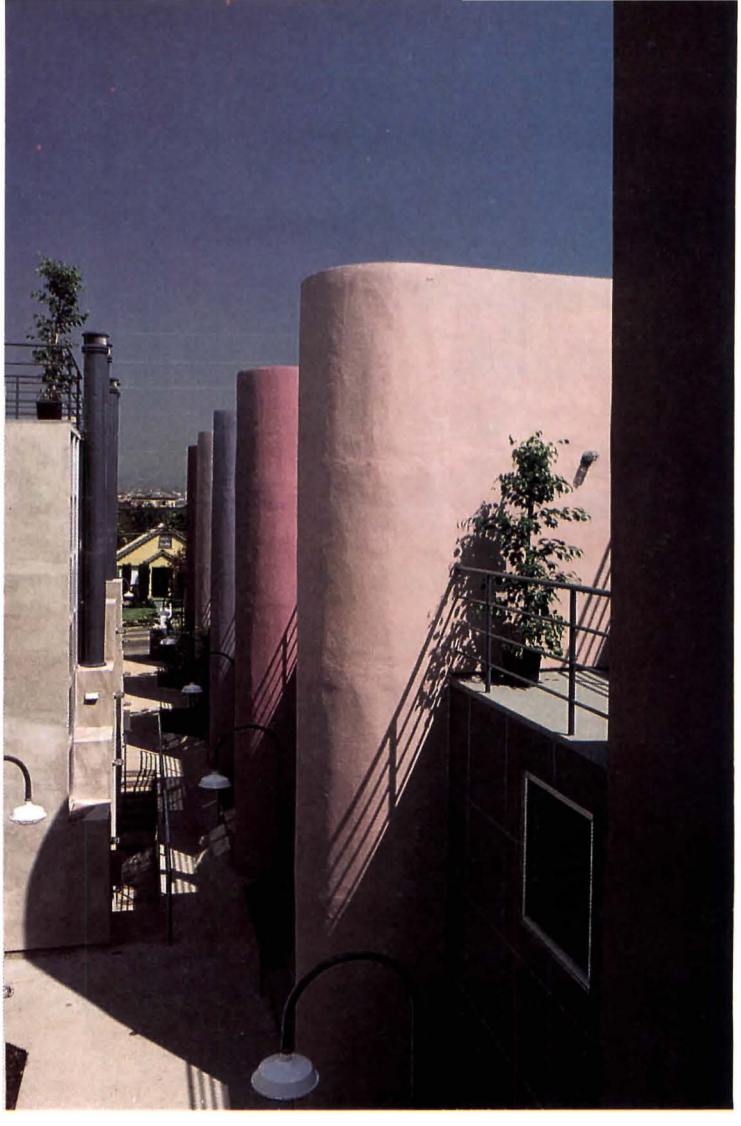




The county administration building's front elevation, left. The building borrows from the architecture of its surroundings, below. Main staircase and skylight, below left.







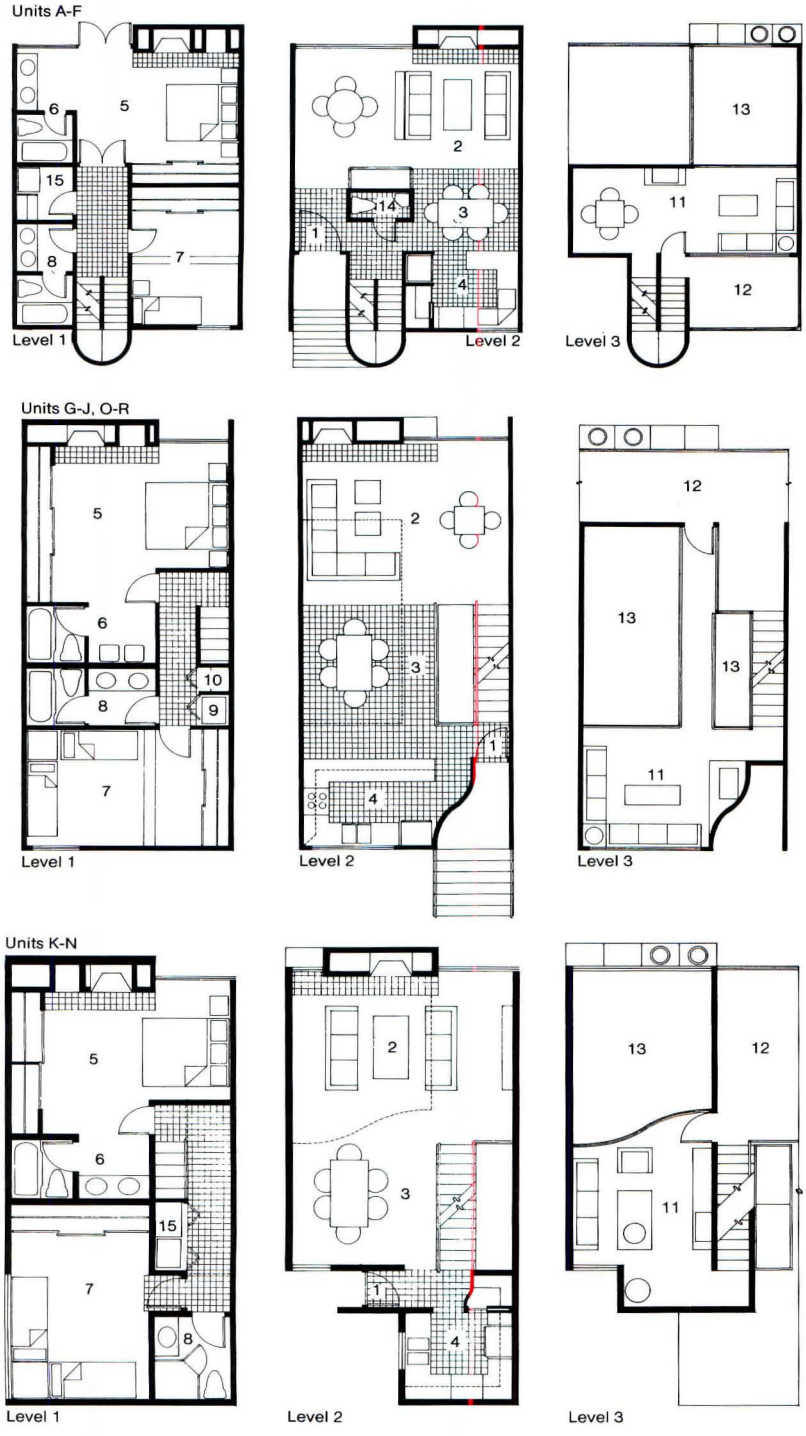
Bristling Town Houses

The Suntech Townhomes project is a dynamic design solution to high-density urban housing. Located on a 150x160-foot site, the project reinterprets the intimacy and privacy of narrow city streets and at the same time conveys a dramatic high-tech character.

Designed, built, and owned by the Los Angeles firm Urban Forms, the development consists of 18 three-story units stacked on top of an underground garage and storage rooms. To achieve the desired density of 36 units per acre, yet provide enough open space and access, the units are arranged in three parallel rows, with an additional row running their width horizontally. All units are entered from narrow "avenues" running between the rows, which are served by three public entrances.

The high-tech image is conveyed by the use of exposed chimney stacks, metal railings, metal pipes for lampposts, and boldly shaped stucco walls. Facade patterns are repeated down each row, although each unit is painted a different color from its neighbor (the palette includes pastels, bright colors, and white). Communal roof decks are interconnected by walkways running over the interior avenues. (The success of these decks is illustrated by the fact that there have been two rooftop weddings.) Each unit has a staircase leading to the second story entrance and a private deck. Throughout the development the large window

Drawing above shows arrangement of units in three parallel rows along internal 'avenues.' Photo at right is the bristling, outward-facing north facade. Above and left, two of the differing, colorful facades that look onto the internal spaces. The bridges at left link roof decks above the units.



Across page, loft overhangs a unit's two-story living and dining room. Above, the view downward from the loft. Floor plans above show three different units, keyed as follows: (1) entry, (2) living room, (3) dining area, (4) kitchen, (5) master bedroom, (6) master bathroom, (7) bedroom, (8) bathroom, (9) washer/dryer, (10) linen, (11) loft/mezzanine, (12) deck, (13) open, (14) half bath, (15) washer/dryer/linen.

Spatial variety and design consistency.

areas are strategically placed to avoid views from one house into another.

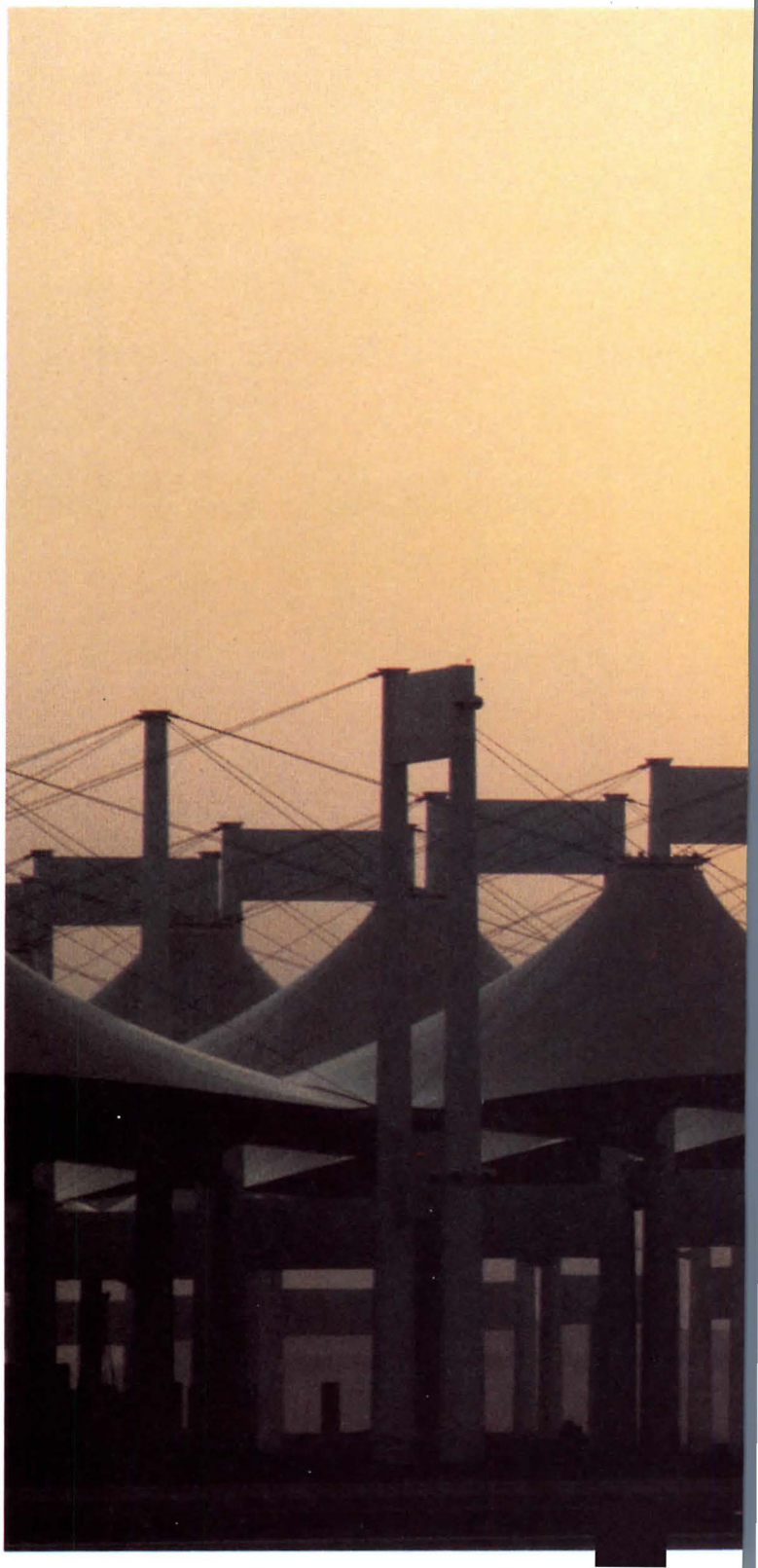
Energy-conscious features of the project include rooftop solar collectors, orientation of all units to take full advantage of cross ventilation from afternoon ocean breezes, and tinted south- and west-facing windows.

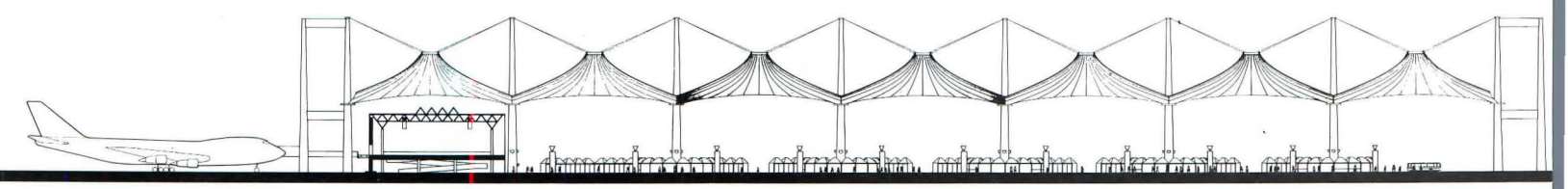
There are three different unit plans, but in all units the first floor contains two bedrooms, two full baths, and laundry facilities. The second houses the kitchen, dining area, two-story living room, and half-bath. On the third level is a loft overlooking the living area below and an outdoor deck.

"As a response to the need for attractive, high-density housing on a small urban site, the design for Suntech Townhomes offers a unique solution, a fresh note," the jury commented. "The density of 36 units per acre is countered effectively by a consistency of design esthetic throughout."

Photographs by Jay Langlois/Owens-Corning Fiberglas

Huge, Soaring Tents on the Desert





Terminal ◂ ▸ Support area

From a distance, it appears as a shimmering mirage in the hot desert—a vast tent city articulated with gleaming white columns. Inside, it is a colorful Middle Eastern bazaar where merchants sell their wares, people congregate, the smells of spicy foods fill the air. At this oasis, hundreds of thousands stop during their annual pilgrimage to the Holy Moslem City of Mecca. It is the Haj terminal at Jeddah International Airport in Saudi Arabia. The architect is Skidmore, Owings & Merrill.

The terminal is used only once a year for a six-week period and is expected to accommodate up to 950,000 pilgrims by 1985. It is a unique airport facility in that at the onset of the religious festival all planes arrive full and leave empty. At the celebration's end, the process is reversed. The pilgrims must be housed after arrival for an average of up to 18 hours before boarding ground transportation to Mecca, which is about 70 kilometers away, and up to 36 hours before departure.

SOM's solution is a 105-acre fabric structure, consisting of 210 semiconical, Teflon-coated, Fiberglas roof units arranged in two sets of five modules each, separated by a service road. Each module is a self-contained unit. Passengers disembark from the plane, cross a bridge, and then descend stairs to the bag-

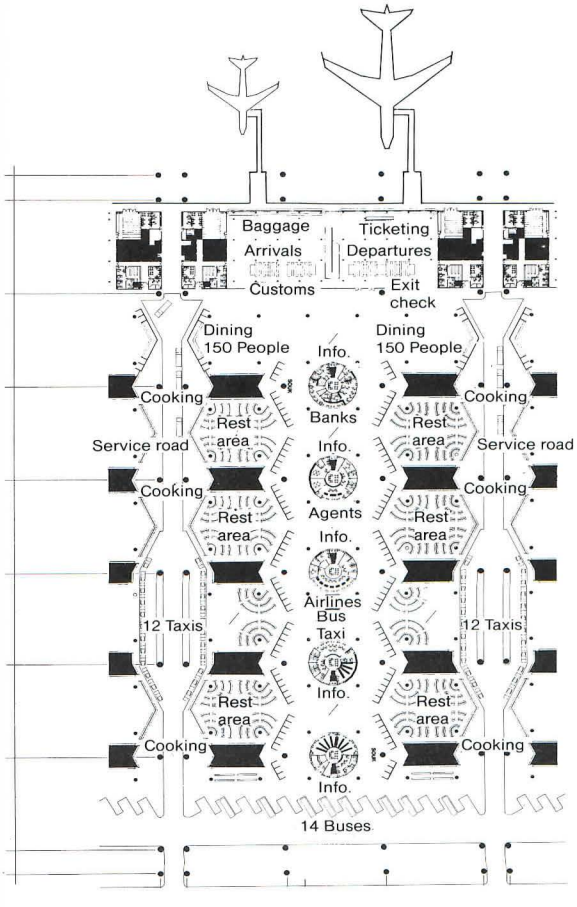
The terminal has fabric roof units arranged in modules, with access to planes on one end, ground transportation on the other.

A decision to do without walls.

gage retrieval, customs, and ticketing area (the only mechanically airconditioned space). From here they move into the enormous one-level waiting area, complete with benches for sleeping or sitting, cooking facilities, restaurants, shops, and information and public toilet facilities. Ground transportation is boarded at the service road side of the structure.

In designing the terminal, the SOM partners in charge (Gordon Wildermuth, AIA; Roy O. Allen, FAIA; Raul De Armas; Gordon Bunshaft, FAIA; Parambir Gujral; John Winkler, AIA; and the late Fazlur Khan) turned to the Middle Eastern vernacular. The tented structure reflects the traditional abode of the desert nomad and echoes the temporary tent city constructed for the pilgrimage weeks in the valley of Meena near Mecca. While visiting the area, the designers, following the example of the natives, learned that being under the shade of an umbrella in the intense heat of the sun was preferable to being enclosed in a hot building. Also influencing the design was the realization that mechanically airconditioning and lighting a building of the size needed for the terminal would be extraordinarily expensive.

Throngs of pilgrims fill the vast terminal, across page. Pilgrims congregate to wait many hours for transportation, above. Baggage retrieval, customs, and ticketing areas at top in plan right; ground transportation at bottom.



Photographs by Jay Langlois/Owens-Corning Fiberglas

'An aspect of soft monumentality.'

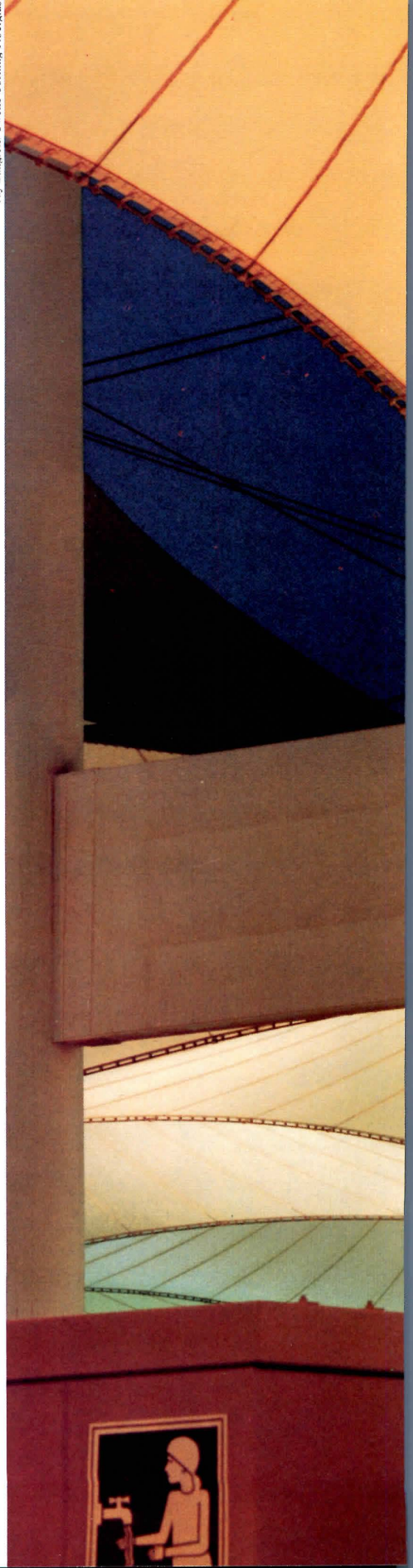
All of these considerations led to the choice of a thin fabric roof with a low heat transmission. The translucent nature of the material allows admittance of enough daylight to sufficiently light the terminal, while at night the fabric becomes a great reflective surface for the pylon-mounted uplights. For cooling, the form and height of the roof units promote circulation of air from the terminal's open sides up through the open steel tension ring located at each unit's top. Mechanical fan towers are placed intermittently between the columns to enhance air circulation. Acoustical problems created by the many thousands of pilgrims are also diminished by the roof height and material.

The configuration of the terminal's structural elements reads like a mathematical handbook. Each of the 10 modules contains 21 semiconical fabric roof units connected to 3.96-meter-diameter central steel tension rings. Attached to each ring are 32 radial cables, which stretch and form the roof units. On the other end the cables are attached to 45-meter-high steel pylons arranged on a square 45-meter grid. Each column tapers from 2.50 meters at its base to a single meter at the top.

Overall, the building "takes on an aspect of soft monumentality," the jury commented. "It is a mirage-like building that floats above the desert floor, matching the experience of flig' and reflecting the spiritual quality of the pilgrimage." □

Hundreds of buses wait to transport pilgrims to Mecca.

Courtesy of International Airports Projects/Saudi Arabia

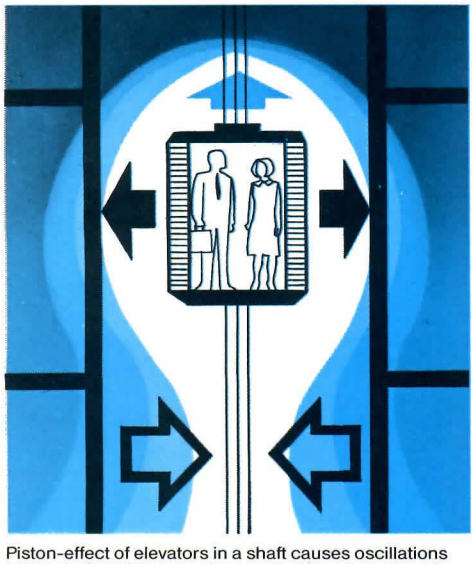


Jay Langlois/Owens-Corning Fiberglas

CAVITY SHAFT WALL:

Specifying the most important wall of all.

From a life-safety point-of-view, walls that enclose elevator, stairwell and mechanical shafts are the most important walls in a building, whether the building is four or 40 stories tall.



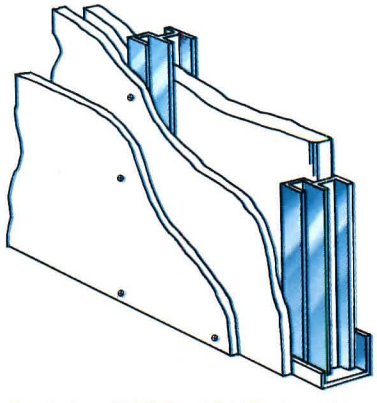
Piston-effect of elevators in a shaft causes oscillations in the shaft wall that require a wall with well-designed, thoroughly-tested details.

In the event of fire, stairwells are the only means of human escape or rescue. Elevators are used by fire fighters to reach a floor near the fire. Mechanical shafts are vital channels for vertical communication, power, water, fresh air and exhaust. These shafts are truly the life-lines of the building. It is critically important that these walls protect people and necessary services from fire and that they be structurally able to withstand air pressure loads and impact.

Drywall systems have become almost universal for shaft wall applications because of their light weight, economy and inherent fire-resistive qualities, and few architects or engineers will choose any other type of system. There are specific performance needs that a system selected for these important walls must satisfy. Thus a system used for shaft enclosures must be thoroughly tested and fully developed. A particular system should be selected because it is the most reliable and safest.

The following check list contains the most important features and tests applicable to shaft wall performance. These may be used as criteria to measure the systems of the various manufacturers. Comparing these criteria against manufacturers' product literature will show whether a chosen system or "equal" has all the needed performance features.

- Tested to meet codes for 2-hr. fire rating (Note: some situations require 1-hr., 3-hr. or 4-hr. ratings).
- Tested with the 1½-hr. fire-rated entranceway (elevator or stairwell doorway) that is to be used on the job.
- Has 20-ga. J-strut with a 3-in. leg at elevator door jamb as terminating structural member at wall and door-frame interface. Both the thickness and length of leg noted here are necessary to meet existing fire tests of elevator entrance doorways.



Innovative design of USG Steel C-H Stud and 24-ga. J-runners are key elements in making USG Cavity Shaft Wall the construction industry's most reliable drywall shaft enclosure system. Construction shown here is U.L. design number U438 (2 hr.).

- Tested with call-button and floor-indicator penetrations to confirm that the wall still meets the required fire rating.
- Limiting height tables for the system, covering design loads for 5, 7½, 10 and 15 psf intermittent air-pressure loads and allowable deflection criteria.
- Limiting height calculations based on *all* critical design factors, including stress and end-reaction shear of the system components, as well as deflection.
- Pressure-tested through 1 million cycles to assure performance for the life of the building.
- Has minimum 24-ga. J-runners to provide required strength under flexing from pressure oscillations to prevent fracture over an extended period of time.
- Impact-tested according to ASTM procedures to 270 ft.-lb. to assure that people won't fall through the wall into the shaft.
- Has a strong, rigid stud that is designed to hold the gypsum liner panels firmly.

The USG® Cavity Shaft Wall System is the only drywall system in the industry that satisfies all the criteria on the check-list above. The major differences between systems are in component design details, and they show up clearly in fire and structural testing. The superior performance of the USG Cavity Shaft Wall System results from a program of extensive testing and continuous improvements since 1966 when U.S.G. introduced contemporary drywall shaft walls. For complete information on the tests that have been conducted and an explanation of the development work that has earned the USG Cavity Shaft Wall System the right to be used in a building's most important walls, write to Dept. 124, United States Gypsum Company, 101 South Wacker Drive, Chicago, IL 60606.

Circle 96 on information card

Postmodernism *from page 247*
a process of mere packaging. This is a world in which there are no standards, no good or bad; everything and anything is acceptable.

Under the postmodernism umbrella are found a multitude of directions. They range from an espousal of the incoherent and illogical clothed in the commonplace, a kind of chaotic game in which rules are never really established and order is nowhere to be found, to the romance of the familiar, the adulation of the everyday. The messiness and disorder of life, scorned by the modernists, are catapulted to a place of honor. We are to learn from the pop idols and the instant esthetics of the highways. We are to look to McDonalds and Caesar's Palace for inspiration. Architecture is no longer seen as timeless, but ephemeral, a throw-away, subject to the caprice of commercial culture and the exigencies of the marketplace.

Another phenomenon that seems peculiar to this time and place is the emergence of the architectural drawing as art object. Architectural drawings, especially the visionary sort, have a long and celebrated tradition. From Piranesi to Le Corbusier, drawings have always had a special power and profound influence. The difference here is that a market has been created. The drawings are sold and collected not, for the most part, because they are seminal and important, but because they are thought to be pretty. These potent and seductive images have a tendency to distance one from the architecture. They occupy a no man's land: They aren't really architecture and not really painting; they are merely pictures.

Specifically, the preponderance of the elevation as the most accessible two-dimensional expression of the design incites a kind of obsession with the facade. This in turn de-emphasizes the plan and section, the more abstract drawings, of which spatial exploration is the subject.

This again is quite within the neoclassical tradition. The representational, the pictorial dominate the scene. It seems regrettable to me that we must return to a former time so wholeheartedly. The free plan, the free facade, the separation of structure and skin, the whole formal basis of the modern movement, fostered a new kind of volumetric exploration, one that seems to hold even more possibilities.

Caesar's Palace, Las Vegas.

Courtesy of Las Vegas News Bureau

John M. Johansen: 'Perhaps it is, as historians would put it, a period of resignation.'

Having been given by Charles Jencks the title of "maverick postmodern," I offer this critique not only as an independent, but as one of the inner group vulnerable to my own criticisms.

The term postmodernism is, in the first place, unfortunately vague and misleading. It refers to nothing specific except that which distinguishes itself from the early period of revolutionary modernism. The U.S. version of postmodernism, if we must use the term, was evident in the 1950s. To put the record straight, departures from early modern started with Johnson's stupa shrine and Atrius Museum, with my neo-Palladian houses and ad hoc theaters, Stone's neoclassic embassy, Eero Saarinen's neo-Gothic dormitories at Yale, and his bird image TWA airport. Arthur Drexler in fact installed a show at the Museum of Modern Art called "Architecture of Imagery." The schism widened with Venturi's *Complexity and Contradiction,* with the works of Moore, Eisenman, Graves, and the brilliant contributions of the Archigram Group, and the recent visionary work of Cook-Hawley.

But postmodernism, as exemplified by symbolism, images, scenic effects, and references, by no means has a clear field at the present time. One must agree that postmodernism must take its place alongside very strong currents of the high-tech esthetic and computer devised systems design; regionalism and the new relatedness to nature movements, as well as preservation and conversion of historic buildings and contextualism. The widening gap is particularly apparent between high-tech in the form of structures and services on the one hand and scenic sets, facades, room liners, and ornamented skins, on the other.

The indictments of postmodernism are both familiar and well founded: reports of personal indulgence, inaccessible meaning, mannerism, lack of scholastic discipline, short lived fashion, but, more seriously, little concern for performing a service, little relatedness to nature or understanding of organic principles, and a disdain for technology. Even in its private domain of image and reference it fails to understand or deal with the primordial spatial symbols, which have always been that unique power from which architecture speaks, in satisfying the psychosocial needs of mankind. Some see postmodernism as a bit fey. Some see in this period a loss of faith, or the loss of a professional ethic. Perhaps it is, as historians would put it, a "period of resignation."

But I believe postmodernism is more than a reaction to the austere rationalism of the 1920s and 1930s architecture. For on the mechanistic manifestations of the Industrial Age, just passed, we witness the superimposition of a new technology of the oncoming information age, and our new modes of sensibility that we develop in response to it. For V.I.P. backup, we may refer to the following observations: McLuhan speaks of our living in a new "mythological world," and of the "bombardment of images" we are subjected to. Hartwig Fritsch speaks of the fusion (or confusion) of our cultures developing in our new "technic society." Joseph Campbell reminds us of "myths to live by" in this present time. Psychiatrists use the ancient Greek word, "personae," meaning masks, which we may interpret as the equivalent of building facades. Carl Jung updates timeless symbols and rituals in contemporary settings. John Naisbitt deals with the "high-tech—high touch"

continued on page 290

Mr. Johansen is principal of Johansen & Bhavnani, New York City.

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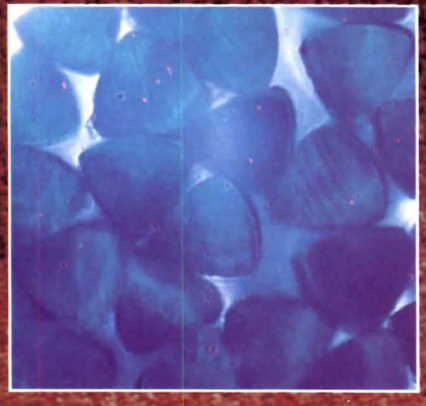

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Postmodernism *from page 286*
balance in response to the impact of this information age.

We begin to see that there may be far more ahead for us, and for architecture, in the near future, than is suggested by the limited offerings of the current postmodern heroic architects so highly acclaimed today. First of all, the scenic designers cannot go it alone. High-tech backup is required, and here to stay. I would agree with Kenzo Tange that we may expect a fusion of high-tech and the psychedelic aspects of our architecture, which are presently in a state of estrangement. I, in fact, look forward to a composite architecture based on what I find as the three indispensible and indisputable ingredients of architecture, suggesting as our guide three imperatives: that of technology, organic principle, and the psyche. These imperatives have governed architects for some 4,000 years, and will likewise in the future.

At present, postmodernism is too diverse to be a style, not deeply enough felt nor thoughtfully structured to be a philosophy, and certainly in too formative a state to have proved much achievement. We are a profession in the midst of larger technical and social forces, which we don't yet quite understand and therefore cannot be in command of. We must be very selective and critical of what postmodernism now offers, and must demand much more of it. We haven't yet done our homework, haven't yet dug into the depths of the human psyche, rejoiced in the wealth of the new technology of this information age, nor given ourselves to the embrace of nature and the organic principles of which we are all an inseparable part. We have a long way to go. It should be interesting.

Raymond Kappe: 'Architects must become more sensitive to what they are doing.'

Recently, I asked a group of first year graduate and undergraduate students to discuss the issue of postmodernism after they read several articles and books and attended faculty presentations representing a wide range of views on the present state of architecture. Many were not impressed by the postmodern presentations. However, others felt strongly that it was representative of their age and provided a great sense of freedom in architectural thought; a sense of freedom that they did not perceive in the modern movement.

Speaking as one who grew up with modern architecture after World War II, I never felt the constriction that some of our young people express today. But I did not define modern architecture in the restrictive terms most of the postmodernists are using today—the failure of Mies's universal building, the never achieved social and political aspirations of Gropius, and the ill-conceived planning principles of Le Corbusier. Certainly self-expression existed in the architectural work of Le Corbusier, Wright, Aalto, Kahn, and all of the expressionists. They also were not devoid of historicism. Much of what is being done today under the guise of a new movement is still very much connected to the pluralistic movements that have always existed and still exist in modern architecture.

Unfortunately, most of the postmodern work that is being produced today, in my opinion, does not express what the real intent should be of those who are re-evaluating the past 70 years of architectural development. There is obviously commentary in their work, but it is devoid of real solution and much too involved with novelty and semiology. The historical references are exaggerated, flat, overstated, and simplistic—a pastiche. If we include the rationalists among the postmodernists, we can add historical references that express fascism and autocracy.

To lump all of the attitudes being expressed today under the one heading of

continued on page 296

Mr. Kappe heads the Southern California Institute of Architecture.

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Postmodernism *from page 290*
postmodernism is also irresponsible. To discuss solutions for Europe and the East Coast in the same breath with solutions for Los Angeles does not make sense. Zoning codes define urban spatial intentions in Los Angeles and other American cities, but this does not exist in Europe. The answers are not simple. Self-indulgent free expression cannot be considered the same as a conscientious and responsible search for urban solutions.

If the present re-evaluation of modern architecture has determined that our urban centers are unsuccessful, that modern architecture does not satisfy the popular mode, that glass boxes have become scaleless and anonymous, and that technology has not been a cure-all, is it not more intelligent to understand the cause rather than turn to formalism? Cities are made better by understanding how to make a pedestrian street, a place, as well as to make them more responsive to the automobile. The solutions to these problems can be found in a modern vocabulary, but they require sensitivity, humility, and patience, especially in a democratic, pluralistic society. One has to understand social, economic, and political forces. It also requires involvement in the political processes, and a re-evaluation of our zoning codes, height restrictions, potential building envelope, parking requirements, as well as a balance between slow-moving and fast-moving aspects of the city.

It is obvious that we have not done well at the urban scale; it is obvious that architecture has not changed behavior; it is obvious that the whole world does not want to live and work in modern buildings; it is obvious that the anonymity expressed in scaleless buildings doesn't make people feel good about their environment; and it is obvious that so far, we have not come to grips with technology. It is also obvious that expressions of greater self-indulgence, excesses of the avant-garde, misguided historical expression, the totalitarian expression of the rationalists, and the emulation of builder's architecture are not going to make these ills better.

If context is important, as some but not all members of this so-called movement state, then what is obvious is what has always been obvious. Architects must become more sensitive about what they are doing, as it relates to society and to the city. Much easier said than done, but if what we do is going to have any meaning, we have to be much more involved in the decisions of the economic and political bodies under which we work. If we know how to define street and place through democratic processes better, let's do it. If we think we can use technology within the capitalistic system better, then let's do it. If we can make better cities through the pluralistic process, then let's do it. These are extremely difficult areas. Modern architecture didn't fail, the architects did. Postmodernism will not succeed either if the primary tenet is self-indulgence, live for the moment, and instantaneous heroism.

Those formal solutions that have as their basis a search for universal icons will probably end up being a new (old) set of images, which will take their place among others in history, but without providing meaningful new direction. Many of these seem to have references to art nouveau, art deco, and WPA modern, all of which are phases of the modern movement, in my opinion. However, on the positive side, I would say that the present concern for context and better urban spaces is truly the most significant aspect of the present re-evaluation. With less emphasis on the offbeat, novel, and instant hero-making syndrome, and more emphasis on the urban aspects, I could stomach the whole process a little better. Add to this concern for new life styles, affordable housing, energy, resource management, and intelligent use of technology, together with the recognition that much of what has been produced over the past 200 years since the beginning of the iron age and industrial processes has not been all bad, and the whole appraisal might make some sense.

Postmodernism continued on page 301

Henrik Bull: 'The fad or fashion will fade away.... The reaction against modern architecture will not.'

In the book *Megatrends,* John Naisbitt makes a distinction between fad and trends. I believe postmodernism can be looked upon as either. The image of the pastel-colored building with applied classical details on a nonclassical building might be considered a fad. The overall reaction against the modern architecture movement with a new emphasis on humanistic architecture is a genuine trend, in my opinion.

The surface manifestations of postmodernism, the fad or fashion, will fade away like a changing hemline. The reaction against modern architecture will not. People simply want more humanity and individuality in their surroundings. Naisbitt also explains that while the high-tech revolution is here to stay, it is balanced by the "high-touch" trend. Translated into architecture, this means a more humanistic approach—design as if people mattered. The popular books debunking modern architecture pointed out that nobody liked the faceless, scaleless glass boxes with facades that had all the imagination of graph paper. No one liked them except the architects, and the architects generally didn't work or live in these buildings themselves.

To me the most important postmodernist is John Portman, who brought delight back into architecture for the average person. The doctrinaire modernists were furious because the detailing wasn't pure and the architecture was unnecessarily theatrical. The public was amused, and the bankers were pleased. The average person responded to the human activity at ground level and dramatic space far more positively than the jealous professional colleagues. Not that the architects didn't enjoy it; they didn't respect it. "Let us *never* have our emotions influence our rational thinking"—or was it all that rational?

Disneyland is panned and praised alternately in the serious architectural press. It is corny and pretends to be nothing else. One thing that cannot be denied is the positive manipulation of architectural spaces for their enjoyment. The Old New Orleans section of the Anaheim Disneyland manipulates space in a way that makes people feel comfortable whether they are there as part of a group of two or a crowd of thousands. It's the old trick of designing a restaurant that feels comfortable if you are the first diners, and equally comfortable when the restaurant is full. This was a lost art during the modern period and has come back with a vengeance in "theme" restaurant design. Modern architects gladly frequent such restaurants, as long as they were established before their own architectural education commenced. Now many architects are responding to the fashionable aspects of postmodernism, while the public yawns.

I would have thought that the demolition of Pruitt-Igoe would have been the final chapter in the Corbusian saga of city planning. People with families simply don't want to live in a highrise building, out of touch with the ground. It hasn't worked anywhere where people have a choice, and probably never will. Dense, lowrise buildings are just as efficient of land as the towers in the park, and cost less as well. That third-world countries follow the mistakes of the industrialized world is understandable. What is disturbing is that many of our schools still teach our youth and the future leaders of other countries that the "radiant city" is ideologically correct. I believe that the professors teaching this nonsense are out of touch with the reality of how human beings behave.

The challenge of postmodernism is weeding out what was truly valid in the modern movement and what might be valid in other previous periods of architecture for conditions of today. □

Mr. Bull is a principal with Bull Field Volkmann Stockwell, San Francisco.

Concrete masonry Trombe walls are located behind the glazing which borders the upper portions of the building.

View from the interior, looking out, showing the extensive use of concrete masonry for passive solar heating and cooling and structural purposes.

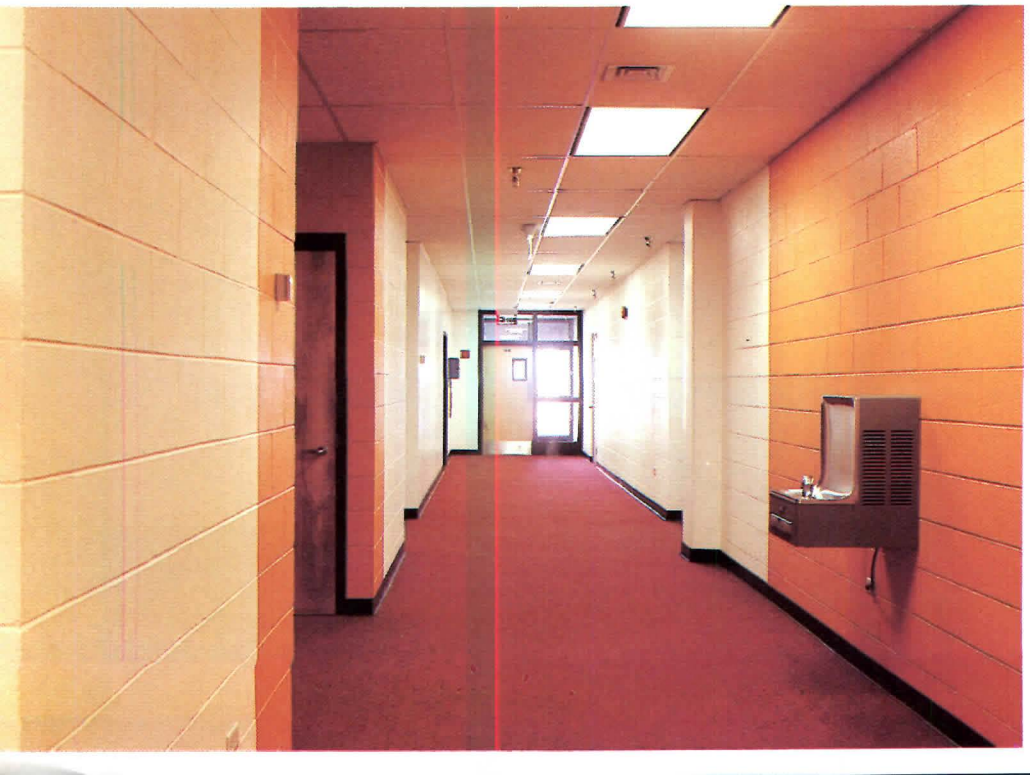
Energy consumption for both heating and cooling was cut an estimated 85% in this passive solar concrete masonry U.S. Department of Energy building.

Wind Energy Systems Test Center Building

Rocky Flats, Colorado

MCB, Architects

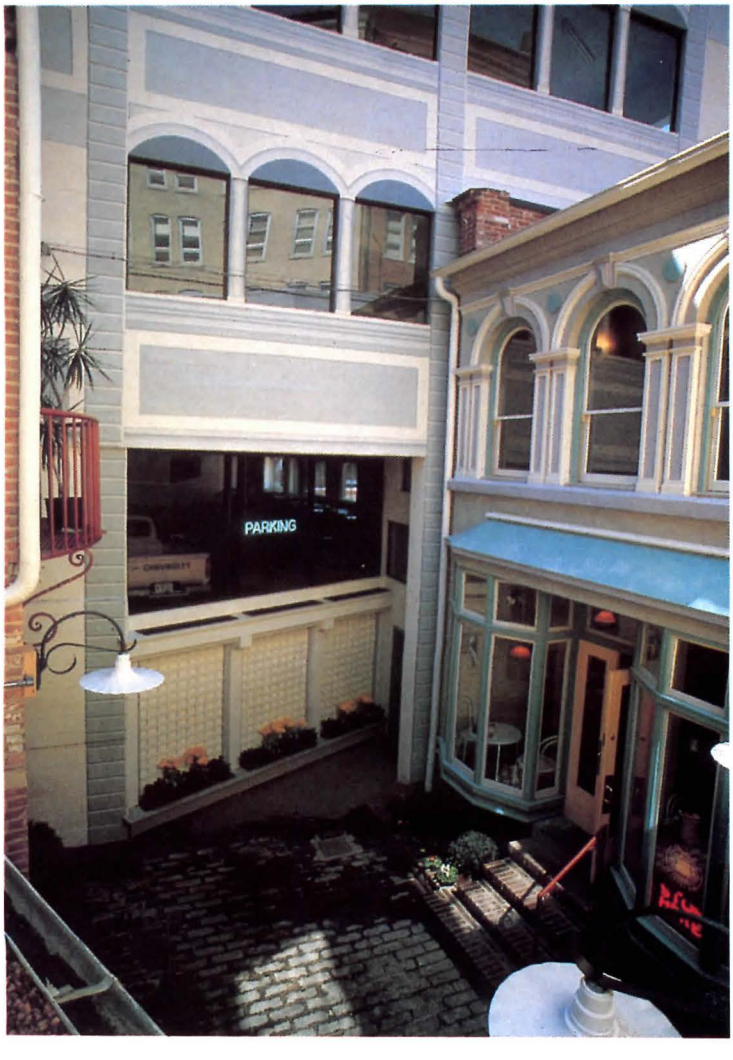
Interior walls of concrete masonry, used for thermal storage, are employed throughout the project.



Twenty-five miles northwest of Denver, Colorado, at Rocky Flats, is a unique 22,700 sq. ft. structure housing office space, a technical library and laboratory facilities for the U.S. Department of Energy's Center for Wind Systems Testing and Development, managed by Rockwell International Corporation.

Originally designed to use another building material, it was redesigned in concrete masonry for its superior cost effectiveness. The structure uses passive solar concrete masonry construction for both heating and cooling. Even in this area of cold winters and high winds, energy consumption for both heating and cooling will be 85% below conventional buildings. This facility is the most energy efficient federal building constructed to date.

Exterior walls are loadbearing concrete masonry with split ribbed block veneer on the lower ten feet and passive solar Trombe walls of regular



Baltimore Chapter. Town Center at Boca Raton, Fla. (above); RTKL Associates Inc., Baltimore. The center consists of the "town square," a retail cluster with three anchor department stores and room for a "high-fashion" department store, and the "marketplace" and "patio," which consist of a collection of specialty food retailers and cooking-ware shops. The design was influenced by the area's architectural tradition laid down by Addison Mizer (designer of the Boca Raton Hotel), a style emphasizing sharp contrasts between high and low and dark and light spaces. In this project the town square is a linear central court, which is visually separated by three 45-foot-square pyramidal skylights. The main focus of the patio is an outdoor pool and landscaped courtyard.

Brown's Arcade, Baltimore (left); Cho, Wilks & Burns, Baltimore. The problem was to renovate four 19th century town houses into a single recognizable structure focused around a courtyard. The solution was to orient the buildings inward around a newly designed arcade. The ground level houses small shops and the upper ones offices. The facade was removed from the cornice line down and redesigned to restore a rhythm with the upper floors. The two existing decorative porticos were restored, and the arcade was given a new main entrance.

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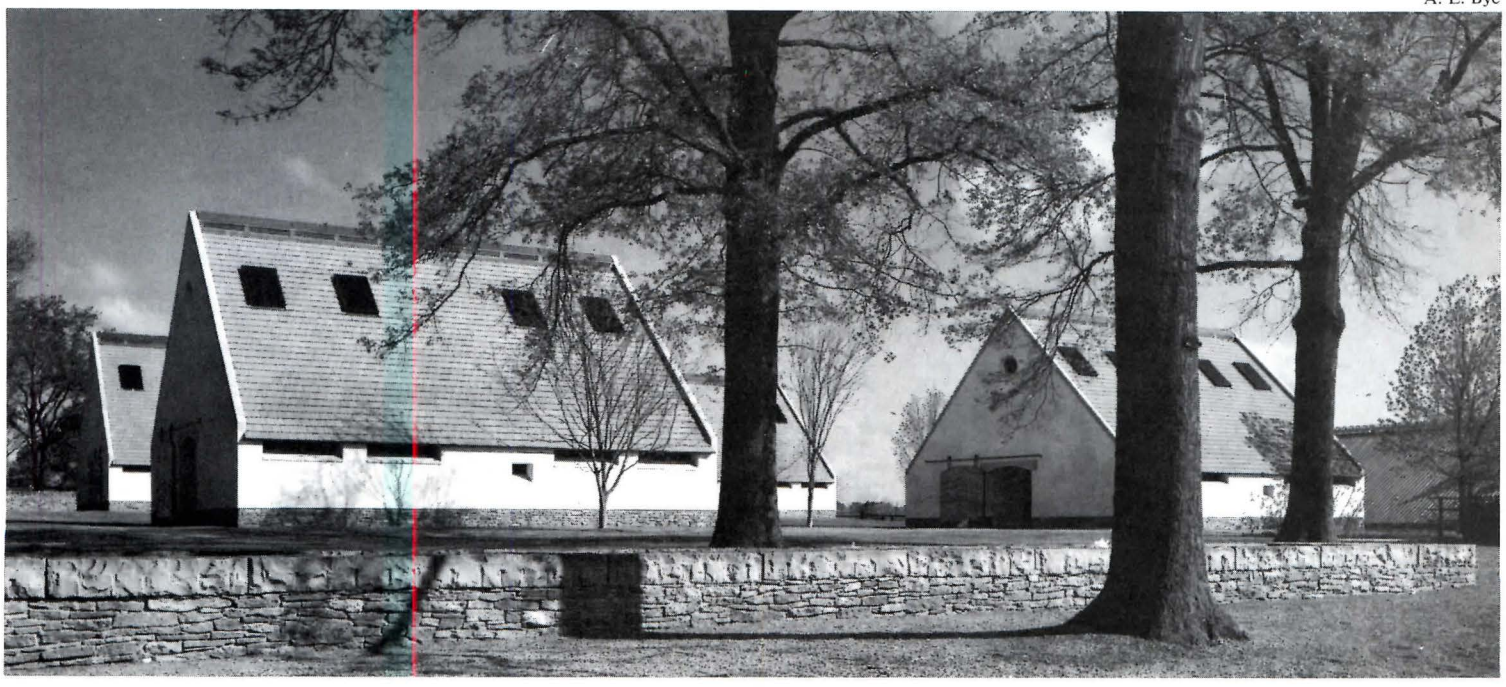
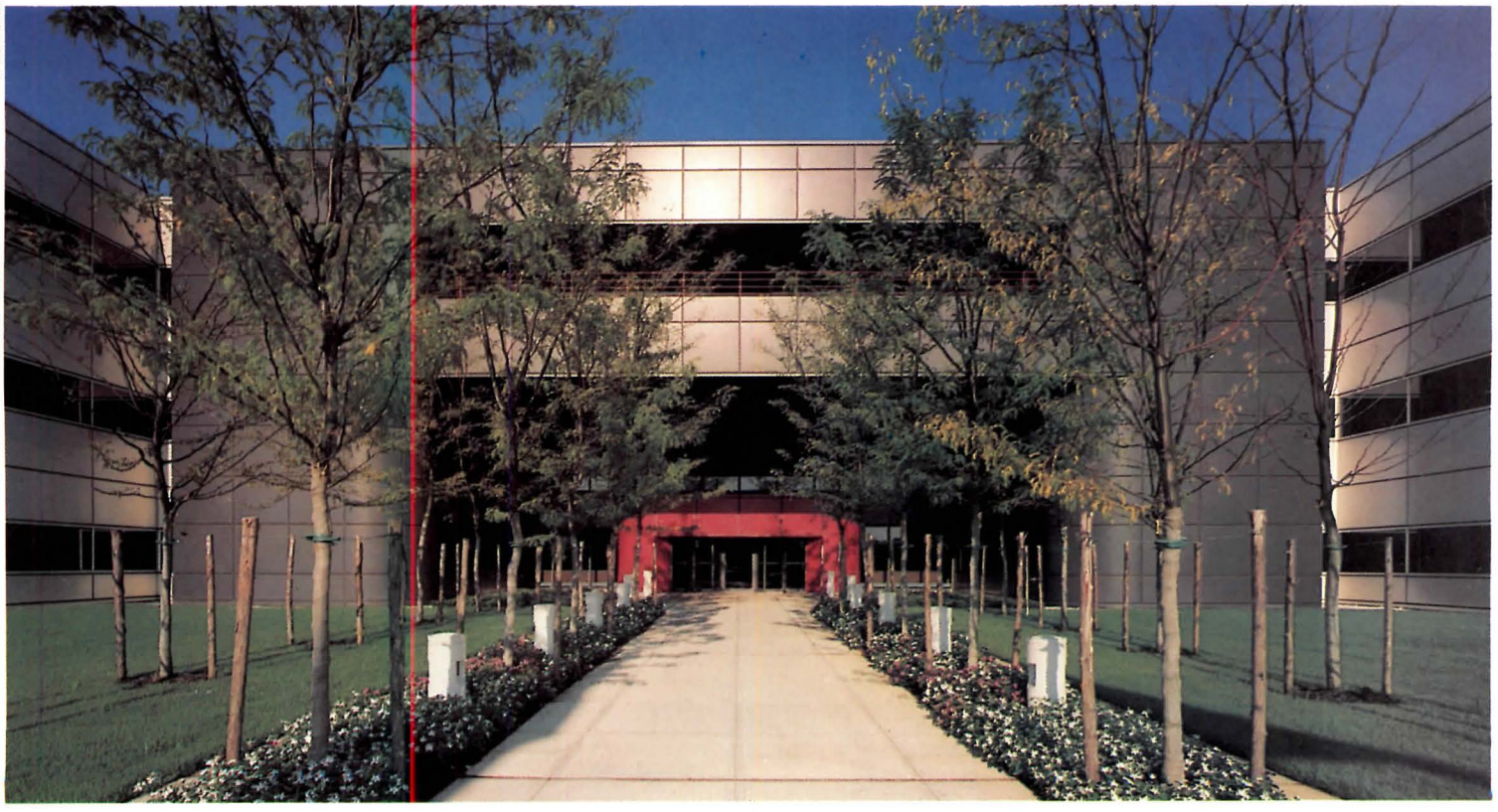
A. E. Bye



New York Chapter. Gainesway Farm, Lexington, Ky. (above); Theodore M. Ceraldi, AIA, Nyack, N.Y. The program for this horse breeding farm consisted of the renovation of the existing structures and the addition of eight barns, a breeding shed, and a lunging ring pavilion. All aspects of the project were developed for maximum protection of the stallions. This lead to the concept of four-stall barns, an arrangement that minimizes the adverse effects of lightning, fire, wind storms, earthquakes, and disease. Each barn has walls of concrete block with stucco facing, an 18- to 20-inch-high plinth of natural field limestone, heavy clay tile floors, window slots for ventilation, and eight skylights. The interior spaces consist of four stalls, separated horizontally by a main hallway and vertically by a wash area on one side and a feed and tack area on the other. The roof pitch of 12 over 12 allows for natural convection through the copper ridge ventilator. The barns are arranged in groups of four and located near the breeding sheds.

New Jersey Society of Architects. Bell Laboratories Office and Research Facility, Middletown, N.J. (below); Rothe-Johnson Associates, Iselin, N.J. To blend in with the surrounding residential neighborhood, this 350,000-square-foot building is low in profile and set back from the road. It is approached by a formal entry drive that leads to the main entrance. The structure has a central atrium, which is bisected by an elevator lobby and support facilities. Surrounding the central atrium core are open offices, which are organized into quadrants. The building also has dining, health, and education facilities, and a library. The exterior is comprised of aluminum panels in three colors, which are to differentiate functions and also be decorative elements.

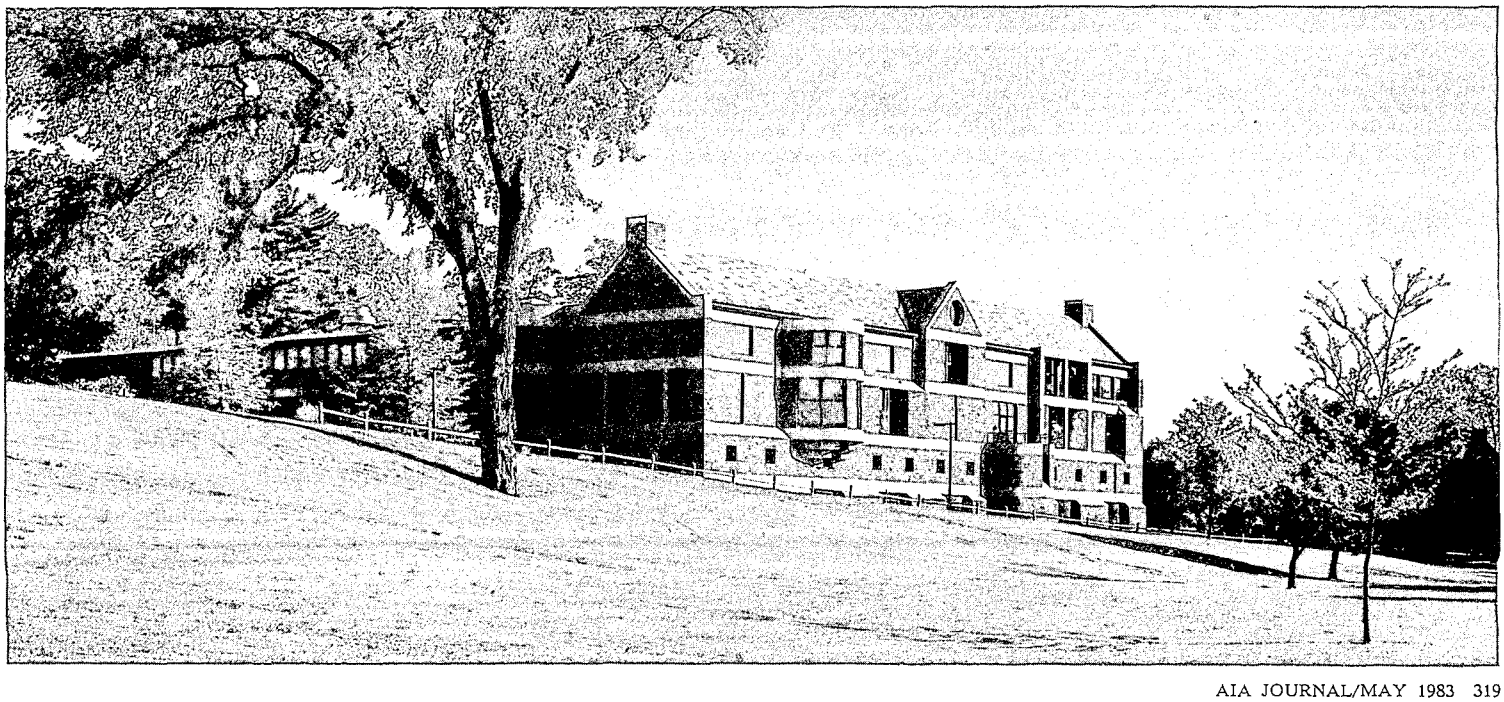
Otto Baitz



Connecticut Society of Architects. Lenz Winery, Peconic, Long Island, N.Y. (above); Mark Simon, AIA, of Moore Grover Harper, Essex, Conn. The clients are transforming a potato farm into a vineyard and winery. The architect saw his task as one of landscaping and exterior reorganization of existing farm buildings. At the road front, inexpensive pressure-treated poles were fashioned into an arched entry (in photo) on which fox grape and other vines will grow. Through the gate, visitors drive through rows of grapes and park at a second entry made from the unused center bay of the existing garage. Trellises are used to separate private areas from public, to screen a road, and to relieve the expansive front of the barn.

Colgate University library addition, Hamilton, N.Y. (below); Herbert S. Newman Associates, New Haven. Colgate, which wanted to improve the appearance of its industrial modern 1950s library, placed a 30,000-square-foot addition across the north facade to form a new frontispiece for the campus that is in greater harmony with the rest of its 19th century buildings. The interior was expanded along existing circulation paths with the creation of the major reading room. Another layer of reading areas was added, offering a variety of spaces from alcoves to an attic loft. The addition is steel frame construction with concrete slabs in a metal deck. Exteriors are brick, fieldstone, and limestone with steel stud backup.

Nick Wheeler



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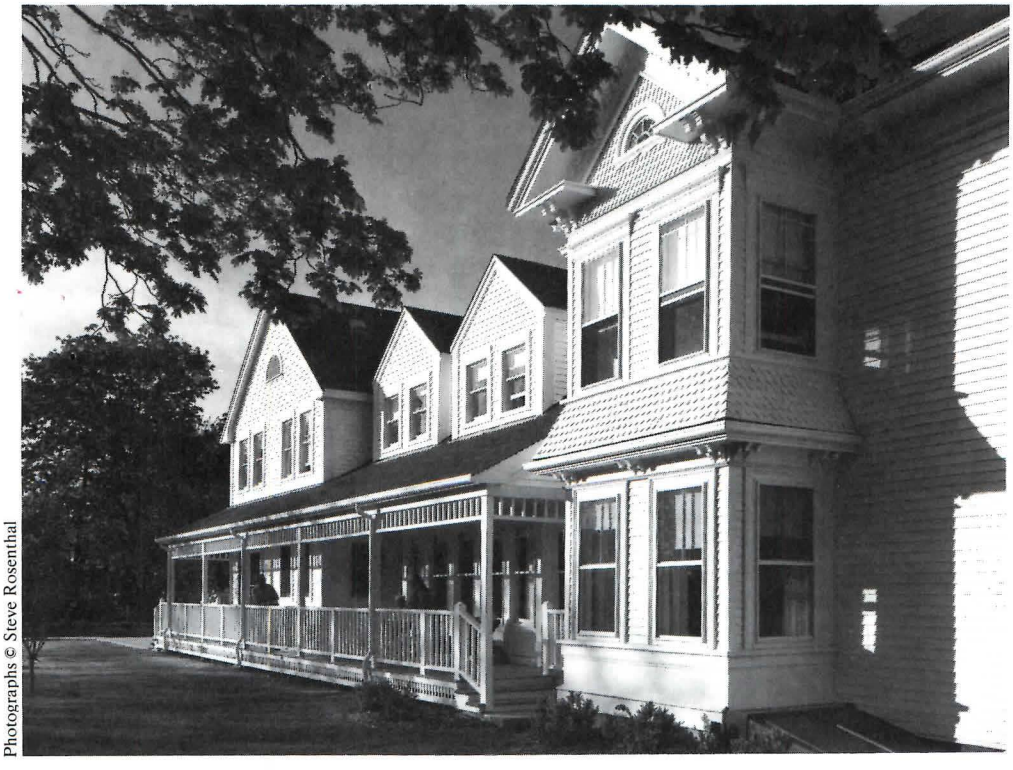
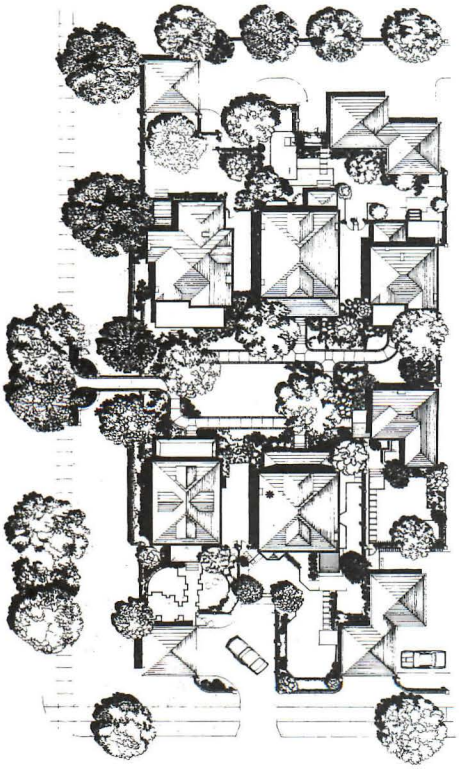
Boston Society of Architects. Villa Victoria Housing Development, Boston (right); John Sharratt Associates, Boston. A Hispanic neighborhood in Boston's South End urban renewal area was designated by the Boston Redevelopment Authority for demolition and reuse as upper-middle income housing. An alternative renewal plan to save the neighborhood, executed by a community group with John Sharratt Associates as advisers, provided affordable housing, shops, and a plaza, and preserved the existing sound structures.

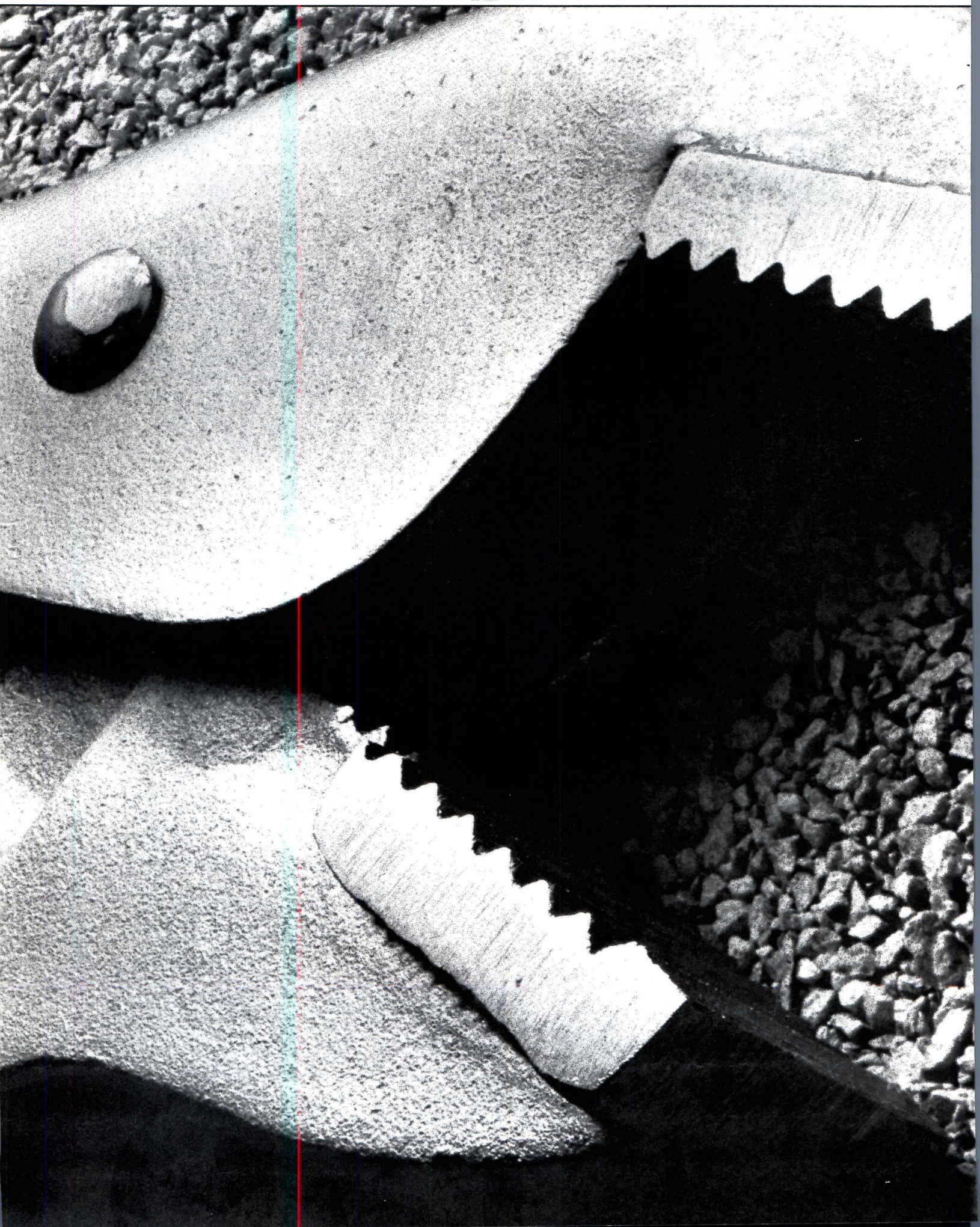
Captain Eldridge House, Hyannis, Mass. (below); Brett Donham & Tadgh Sweeney, Boston. The renovation of a late-19th century sea captain's house on Cape Cod to housing for the elderly called for the addition of 8,500 square feet of space. The 20-resident facility features private, semiprivate, shared, and public areas. The interior focuses on a central space open to the dining room and visible through large lightwells from second floor corridors. To remain consistent with other Cape Cod buildings and to retain a residential scale, the architect chose vernacular elements, including a pitched roof, two-story massing, a large front porch, dormers, and white clapboard siding.

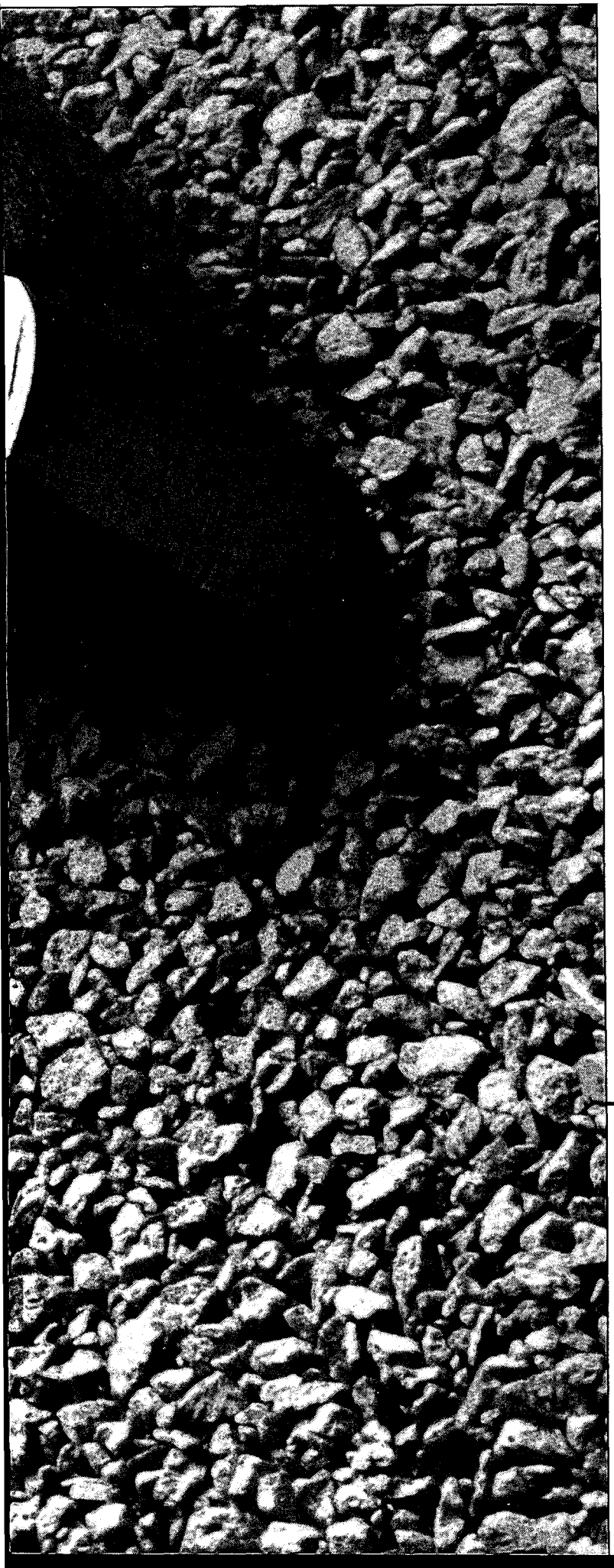


New England Regional Council. Harvard/Brattle Temporary Station, Cambridge, Mass. (above); Skidmore, Owings & Merrill, Boston. The program called for a temporary station to relieve vehicular and pedestrian congestion in Harvard Square during the five-year construction of a permanent station. Constraints of the existing subway line determined the site, clearances, and underground portal. The station includes three separate platforms for the trains, toll booths and turnstiles, two stairways, and waiting space with protection from the weather for bus and train patrons. It is constructed of glue-laminated wood beams and wood decking with tongue and groove panel cladding.

Architects Society of Ohio. Battelle Memorial Institute renovated housing, Columbus, Ohio (below); BÖHM-NBBJ, Columbus. Six brick houses located on the property of the Battelle Memorial Institute were moved approximately two blocks across an adjacent boulevard. The single-family residences were arranged in a cluster configuration around a landscaped courtyard and surrounded by a decorative wooden fence with a brick entrance. The renovation of each house included the addition of a basement.







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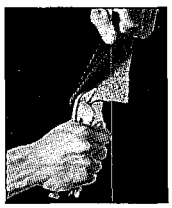

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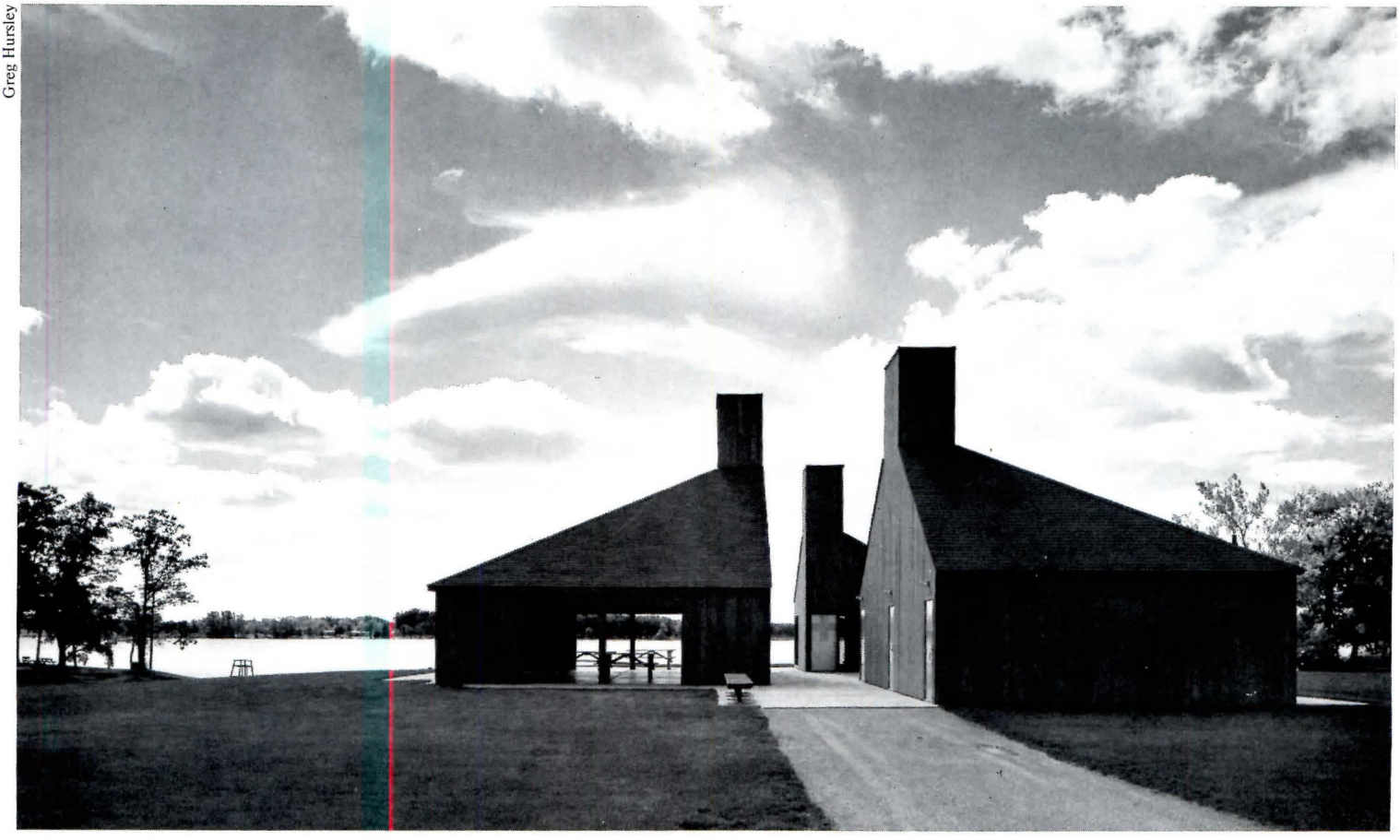
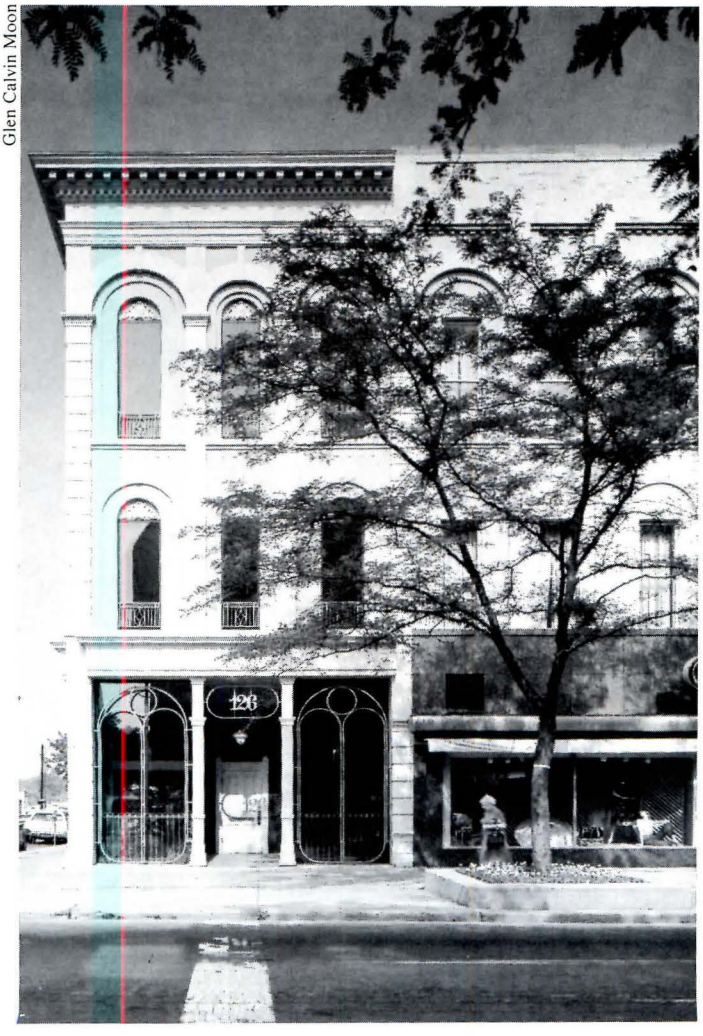
Greg Hursley



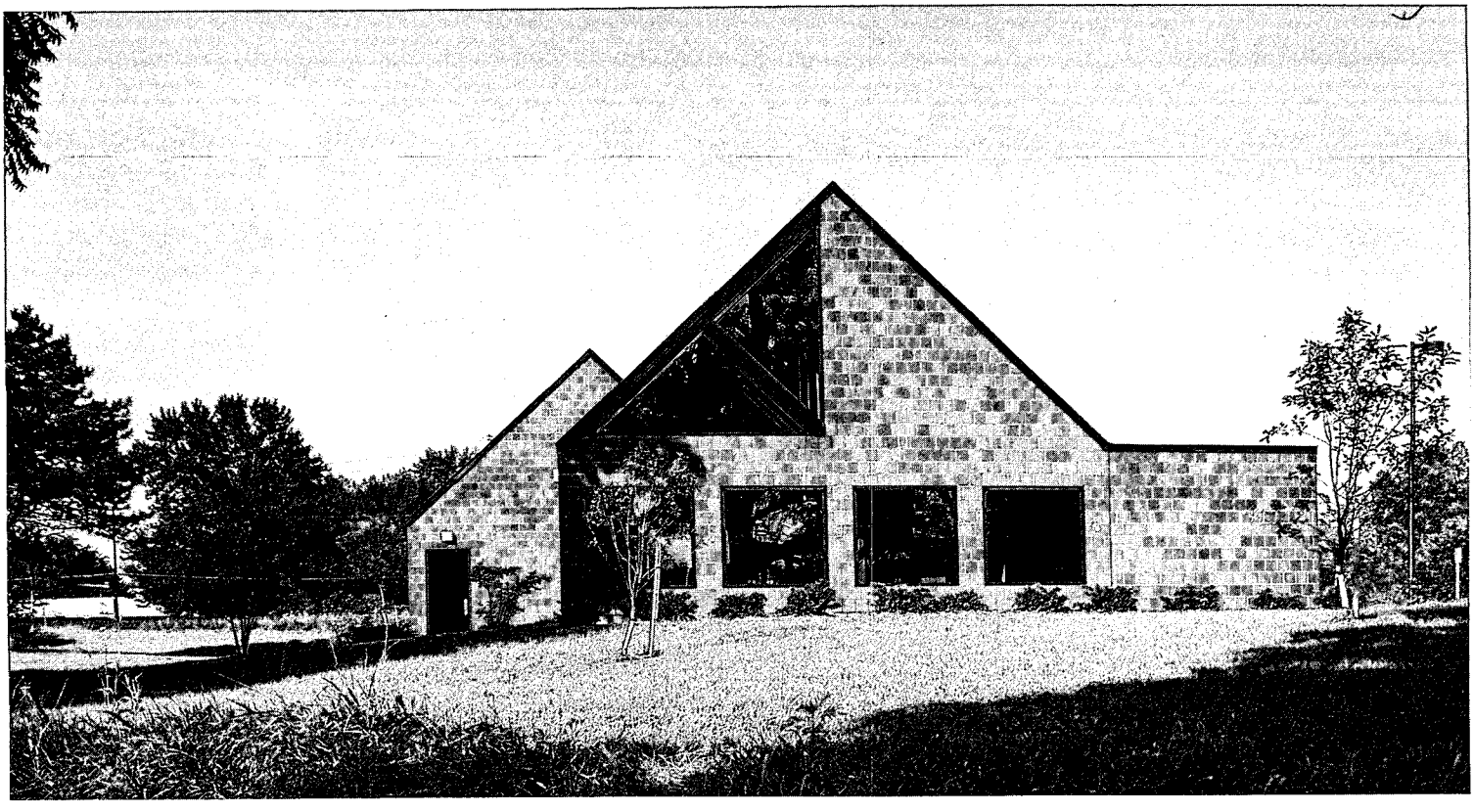
Glen Calvin Moon



Michigan Society of Architects. Independence Lake Park Pavilions, Washtenaw County, Mich. (above); Osler Milling, Ann Arbor, Mich. The program called for administrative office space, public restrooms, and sheltered picnic areas for a 170-acre county park. The architect clustered three small pavilions midway between the parking lot and the beach on a knoll overlooking the lake. The buildings' arrangement and sheared vertical angles are intended to take advantage of natural breezes and define the narrow walkways that form a central piazza. Exteriors feature 1x6 wood siding. The approach to the pavilions is a one-mile access road through undeveloped wood to a rolling meadow.

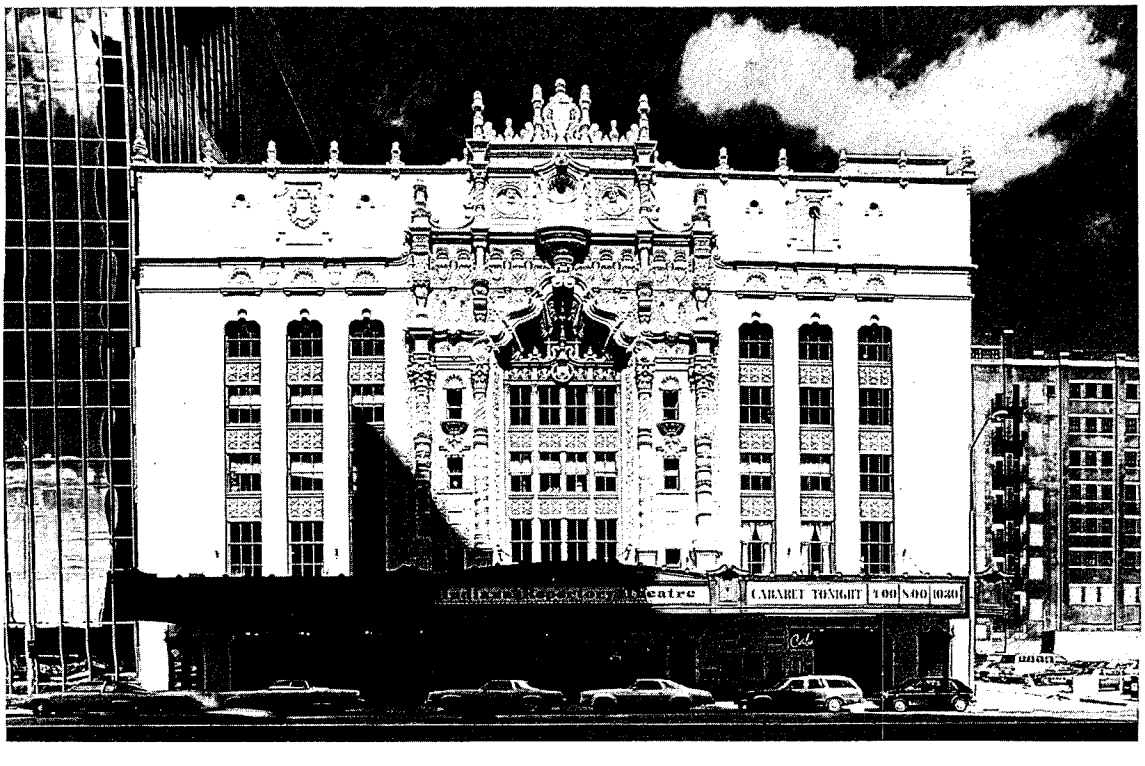
Hooper, Hathaway, Price, Beuche & Wallace Law Offices, Ann Arbor, Mich. (left); Hobbs & Black Associates, Ann Arbor. The rehabilitation of a three-story commercial structure to house a law firm centered around preserving the historical value of the building. Views of the first-floor pressed metal ceiling were preserved by use of glass partitions with mirrored panels at the cove. The original fenestration and detail of the facade was restored, iron grille work was replicated to match an 1867 photograph, and all windows on the south elevation were opened to the original size and fitted with dark bronze tinted glass. A two-story atrium with skylights was created to provide natural lighting to central work areas and corridors.

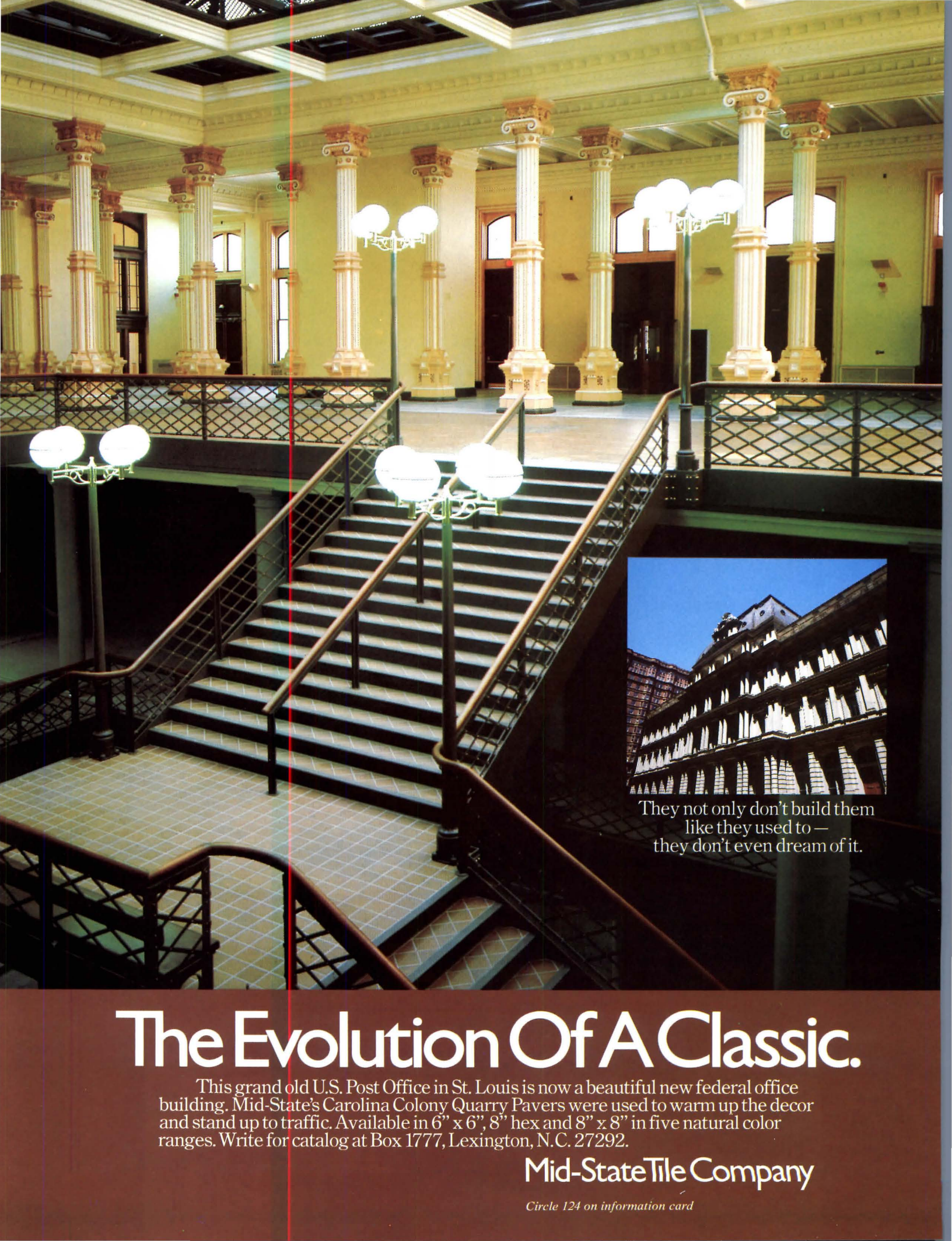
Daniel Bartush



Detroit Chapter. Nature Interpretive Center, Sterling Heights, Mich. (above); Straub Associates, Troy, Mich. A large display room and a 40-seat auditorium are housed in two distinct pavilions separated by a "greenhouse" entrance. The two units, designed to function together or independently, are defined by a steep pitched roof with a flat-roofed support space. Large triangular windows provide natural lighting and highlight the exposed wood trusses. The exterior brick veneer, gray insulating glass, and black trim were selected to reflect the materials of the nearby civic center. Expansion is possible by constructing additional pavilions.

Indiana Society of Architects. Indiana Theatre Renovation, Indianapolis (below); Woollen, Molzan & Partners, Indianapolis. The Indiana Theatre, a 3,000-seat movie palace built in 1926, had fallen upon hard times in the late '70s and was threatened with demolition. In the renovation, three stages for the Indiana Repertory Theatre Co. were constructed within the original space, which had only one stage. Closely related to the lobby is the 600-seat main house that features a semi-thrust stage and a three-row balcony. A 250-seat theater has a steep slope with straight line seating and a proscenium stage. A cabaret theater with flat floor seating for 100 utilizes the preserved ornament of the original proscenium on its walls. Fragments of the original plaster were restored and replaced.





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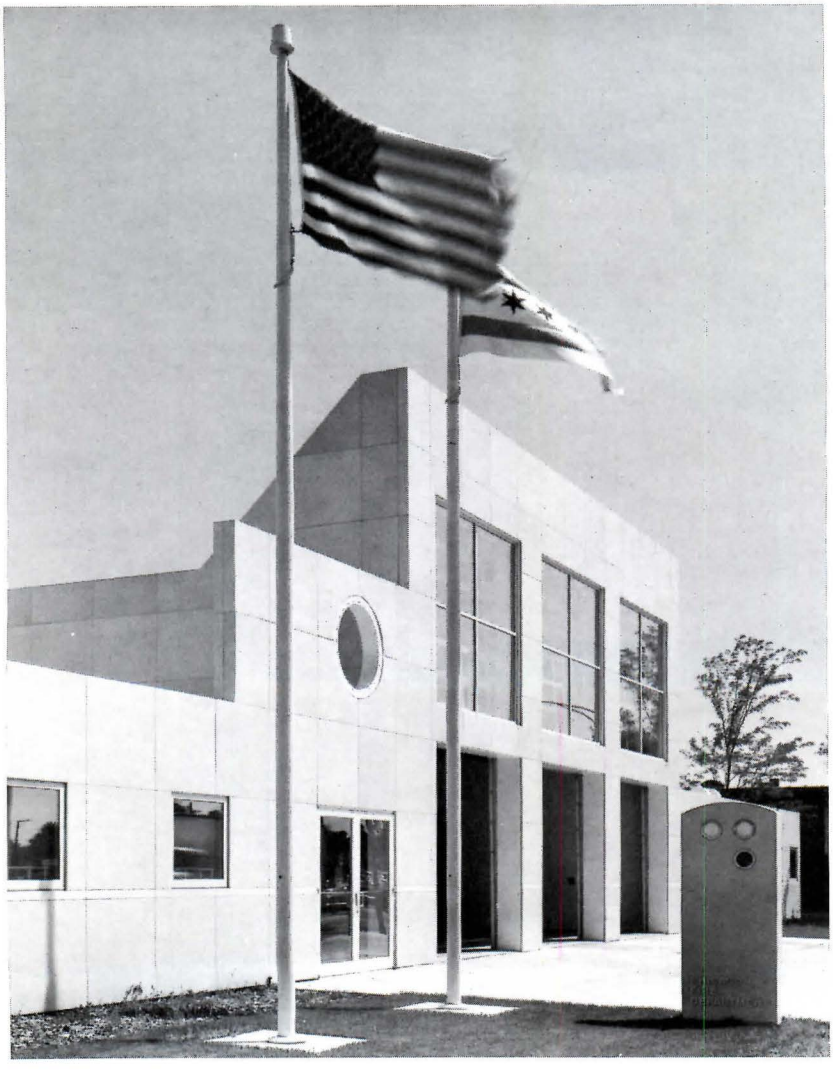

Harr. Hedrich-Blessing

Wisconsin Society of Architects. Lake Vacation House, Door County, Wis. (above); Bruce Jackson, Waukesha, Wis. Located on the shores of Lake Michigan, this vacation house is for a family of six who desired a casual retreat that needed minimal maintenance. For the design the architect borrowed from the region's vernacular materials and massing. Inside, the dining room opens onto a two-story living area, which is overlooked by a loft and has as the central focus a fireplace with large glass windows on either side. The master bedroom is also on the first floor. The second floor has two bedrooms; the attic has large dormers.

Chicago Chapter. City of Chicago Fire Station CF-14, Engine Co. 91 (left); Joseph W. Casserly, AIA, city architect, Chicago. The design of the fire station was to be of a "practical monumentality expressing a democratic civic government," in the architect's words. It achieves this in an unpretentious way. The front elevation resembles a Western storefront, and at the same time expresses the inside organization. The fire engines are housed in the "apparatus room," which receives natural light through three large front windows. This room is flanked by wings housing support functions.

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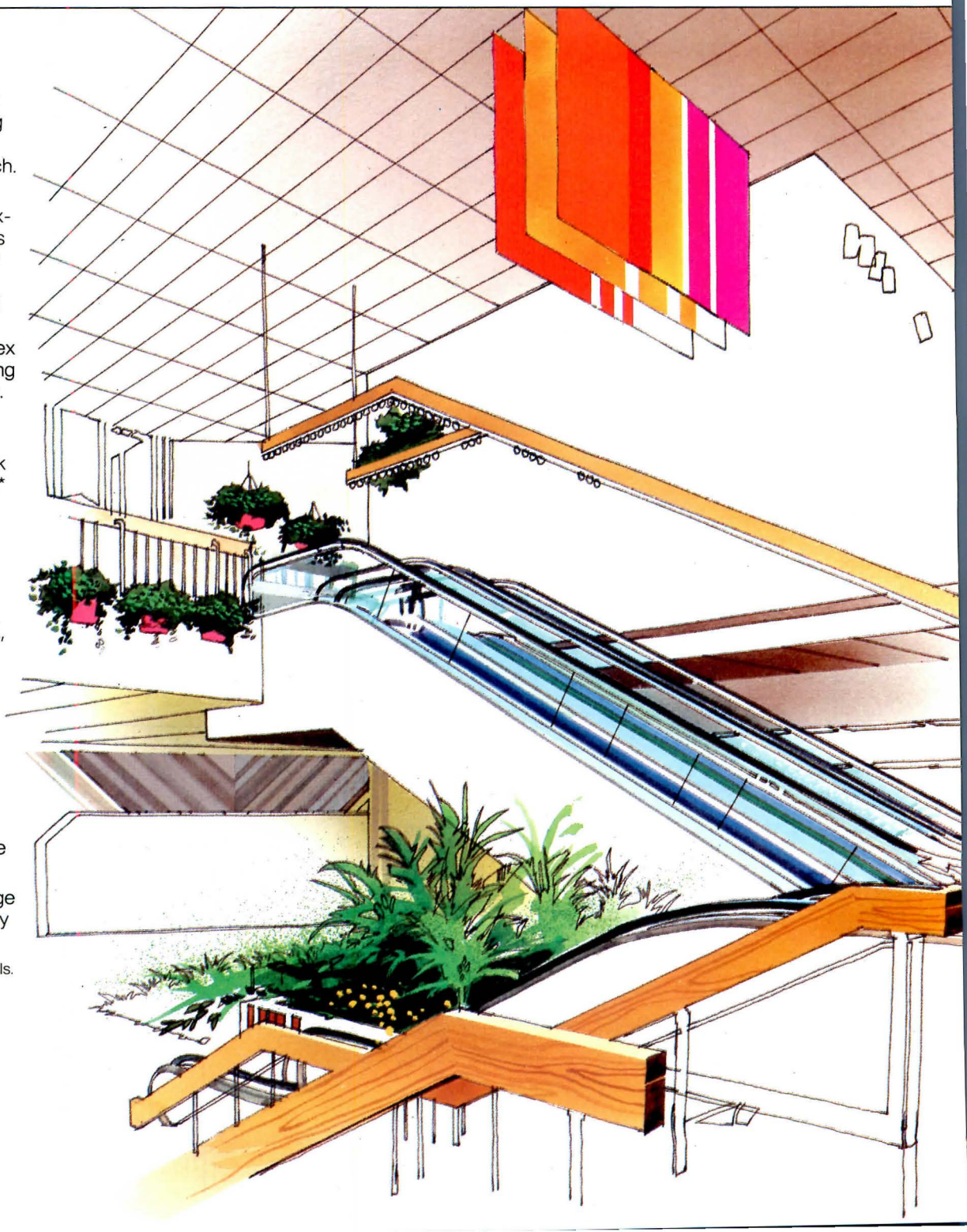

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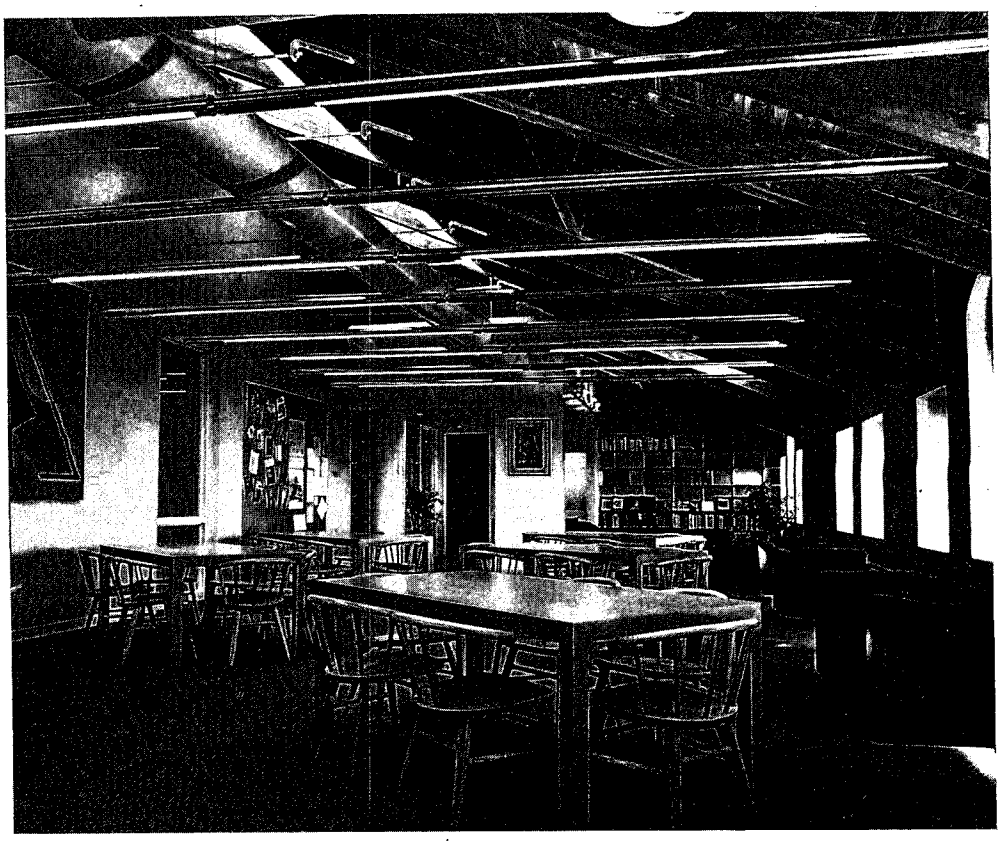
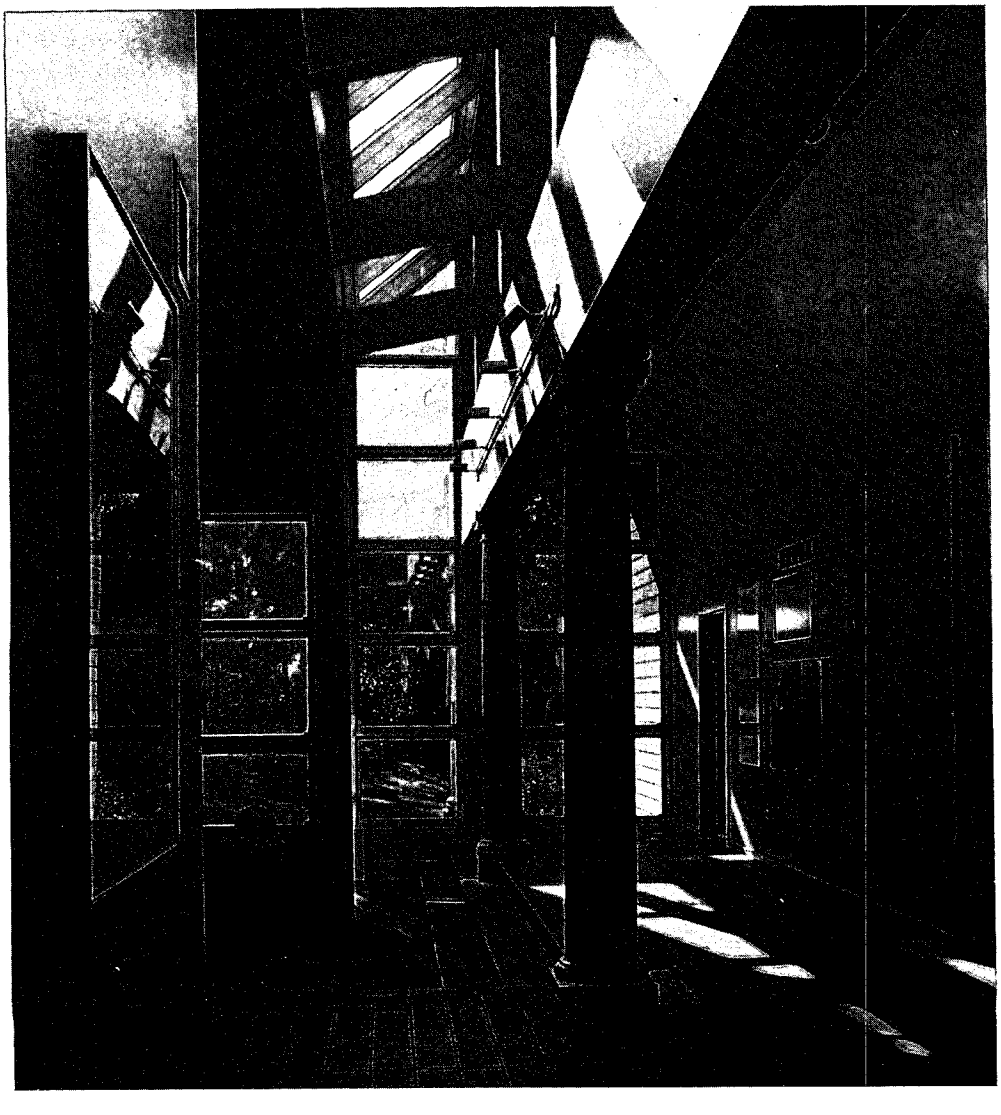


Kansas City Chapter. Marvin Hall Renovation, University of Kansas, Lawrence (right); Gould Evans Partnership, Kansas City. The 1909 building was renovated for use by the school of architecture and urban design. This involved totally reorganizing the existing spaces. In the new plan, the design studios are decentralized throughout the building and clustered around faculty offices and group spaces. The second floor contains a jury/exhibition space, which has exposed timber roof trusses and skylights. When possible, the old elements—such as arches, windows, wood beams—were combined with the new—exposed ducts and lighting.



Iowa Chapter. Felton/Evans Residence, Dubuque, Iowa (left); Wehner, Nowysz, Pattschull & Pfiffner, Iowa City. Located in a wooded area, this single-family residence was designed to express the "duality of public versus private," on both the exterior and interior. The house is divided by a skylit gallery, which is decorated with Tuscan columns supporting a massive beam. On one side of the gallery are the more public spaces, which are open to the interior circulation path (the gallery) but have minimal window exposure. The other side contains the private spaces, which are closed to the gallery but have extensive windows overlooking the gardens.

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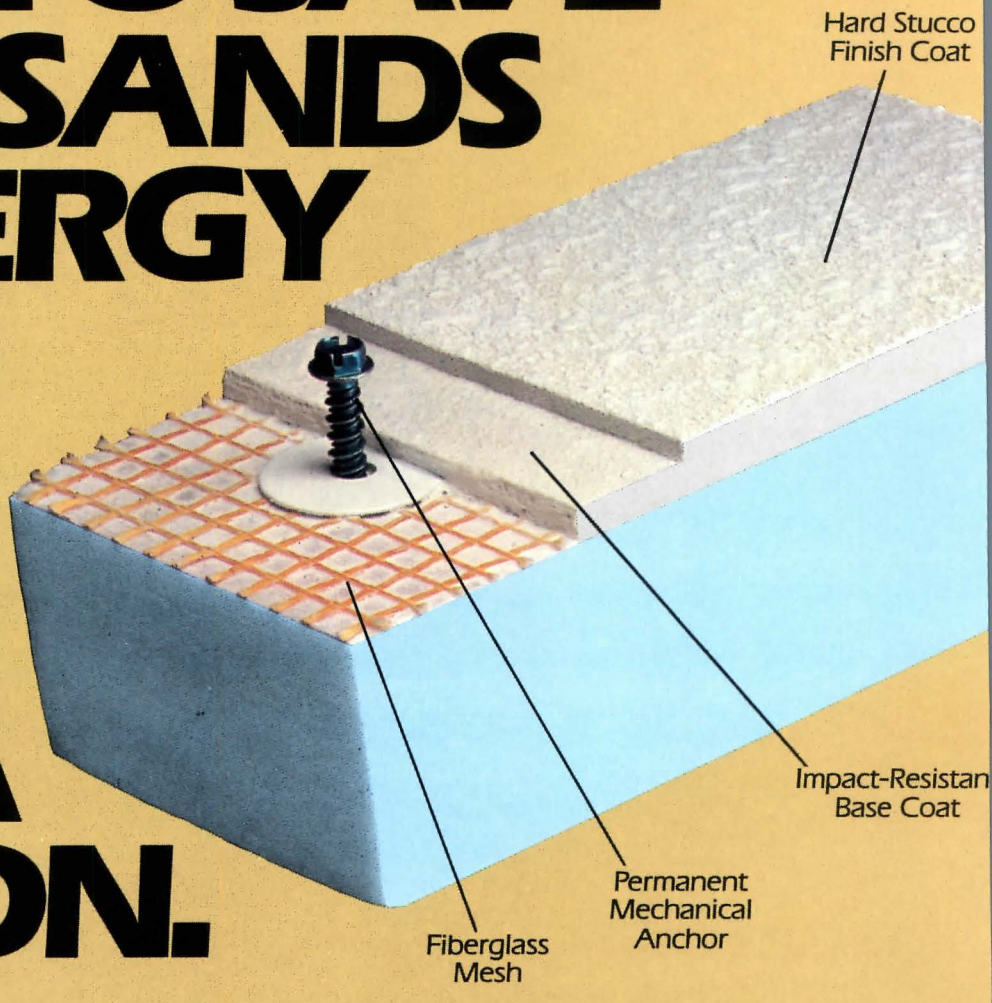
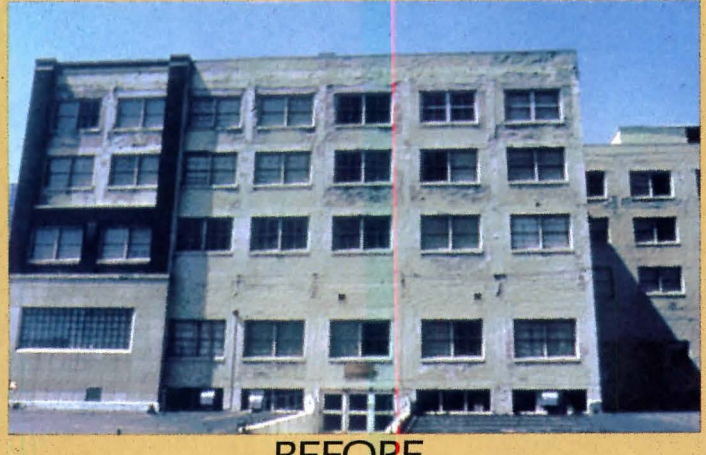


Federal Center, Madison, Wisconsin



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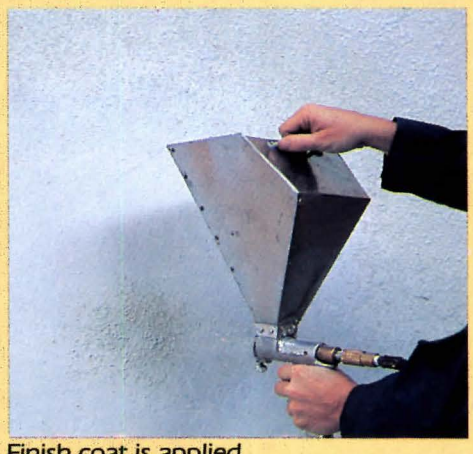

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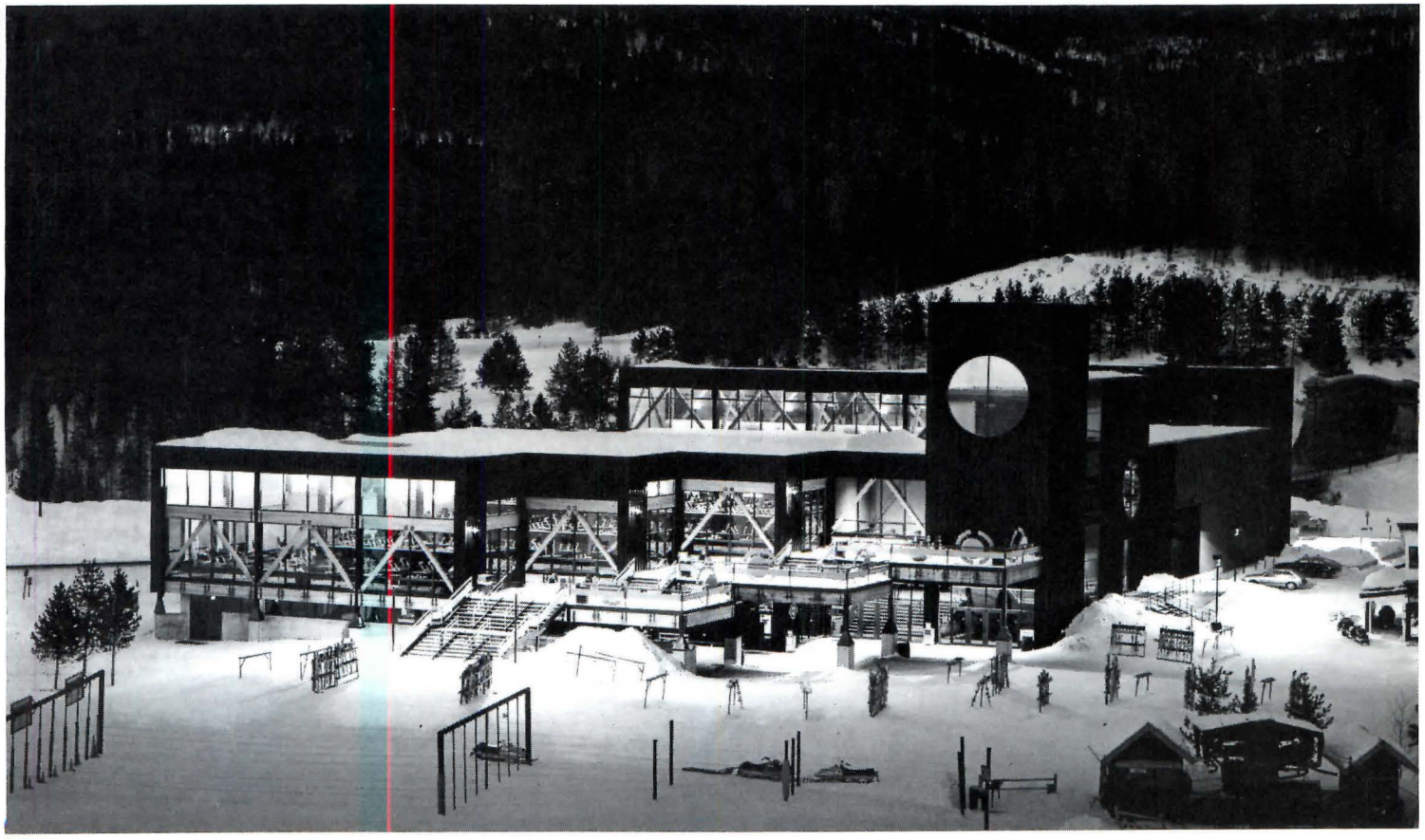
Bob Springgate

Western Mountain Region. Old Main Chapel, University of Colorado, Boulder (right); Midyette Associates, Boulder. Completed in 1875, the three-story neo-Gothic structure is the oldest building on campus. The renovation involved altering the main space into a small (225-seat) theater, while retaining the "spirit" of the old chapel. This involved moving the stage from the east to north side and creating a balcony. Wall panels, oak trim, carpet, seating, and ceiling decoration were all designed to reflect those of the original building.

Colorado Society of Architects. West Portal Station, Winter Park, Colo. (below); Muchow, Haller & Larson, Denver. The design was meant to combine the historically derived image of a mine shaft with the modern "high performance" image of the ski industry. The building is clad in black metal siding with an exposed, glue-laminated braced wall system. It contains ski rental/repair/sales, retail shops, kitchen, dining area, and a ski facility for the disabled.

Andrew Kramer

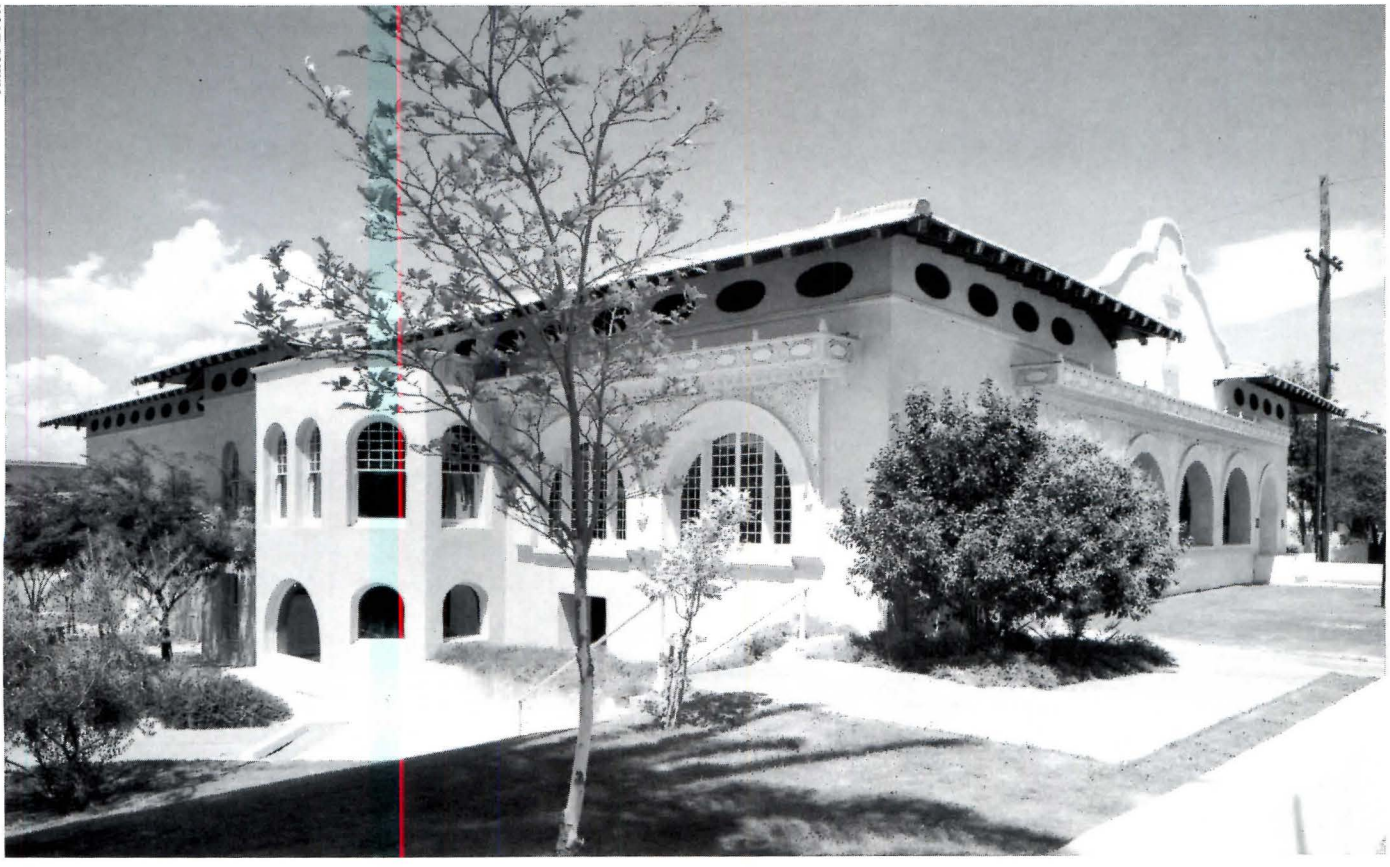


Utah Society. Bertrand Museum/DeSoto Visitors Center, Missouri Valley, Iowa (above); Astle Ericson & Associates, Salt Lake City. Located on the banks of a lake in a 7,800-acre national wildlife refuge, the structure was designed to blend into the natural environment. It is unobtrusive, sits on pilings for protection from flooding and poor soil, and has passive and active solar systems. The museum contains exhibits of artifacts from the Missouri riverboat "Bertrand."

North Dakota Chapter. Federal Square Office Building, Fargo, N.D. (below); Seth W. Twichell & Associates, Fargo. Constructed in the early 1900s for the Ancient Order of United Workman, the building is listed on the National Register of Historic Places. Exterior restoration centered around preserving the original character of the building and involved patching, repairing, and cleaning. Inside, the third floor space was retained as a meeting room, with toilets, stairs, and elevators located along the windowless portion of the north and south walls. The woodwork on the first and second floors was retained.

James R. Dean

James Brett



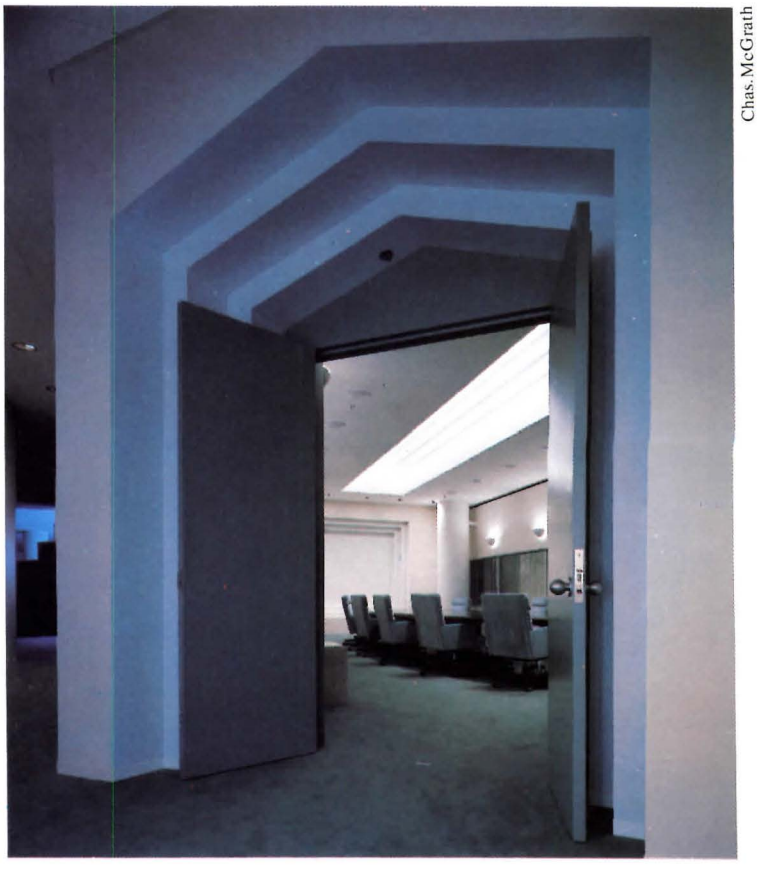
Arizona Society of Architects. Steinfeld Mansion, Tucson (above); Gresham Larson Associates, Tucson. Located in the Presidio Historic District, the building was completed in 1899 as an "elegant home" for four bachelors. In restoring the structure, the original exterior ornamentation was replicated as closely as possible. The courtyard was restored to its original appearance, with a grand stairway sweeping down to it. The interiors were adapted for offices.

Texas Society of Architects. IBM Branch Office Building, Houston (right); CRS, Houston. On a 6.2-acre wooded site in the West Loop area, the 420,000-square-foot, 17-story building is the shape of an isosceles triangle, with the broad side facing north. The silver reflective glass walls allow only 17 percent solar radiation to enter the building, and also visually diminish its mass. Building energy consumption is computer controlled, and heat generated by lights, people, and equipment can be recovered and reused. Other energy saving features include operable three-foot, double-glazed windows and insulated spandrel glass. The entrance is recessed and highlighted by red anchor panels and dark brick pavers. A 1,400-car parking garage steps back from the tower.

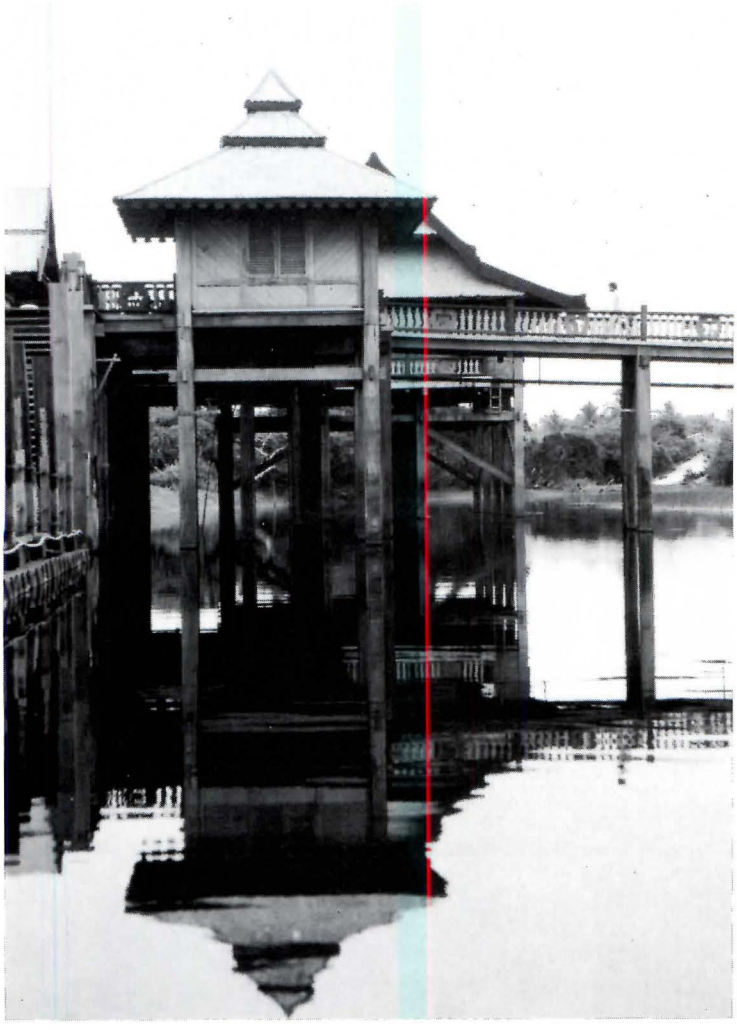
Mark Scheyer

Texas Society of Architects. Gulf States Utilities Executive Offices, Beaumont, Tex. (right); Morris/Aubry Architects, Houston. The main idea behind the design was to create a "serene," luxurious atmosphere with color, light, and gypsum board, rather than expensive wood finishes and fancy furnishings. Executive offices are on the floor's curving perimeter (the building is a quarter circle in plan), and secretarial and reception areas are clustered around a central rooftop courtyard. Interior colors range from light gray to gray-blue.

Dallas Chapter. Adolphus Hotel Renovation, Dallas (below); Beran & Shelmire and The Jerde Partnership, Inc., Dallas. Since the building opened in 1912, there have been five additions, causing it to have the appearance of a montage of architectural styles and images. To unify these disparate parts large portions of the 1916 addition were removed, allowing the building to gradually step back from the main tower. Large gaps existing between structures were covered with a false front. Each addition was covered with a tan plaster finish to blend with the tower's terra-cotta facade. The interior spaces were completely reorganized to house new guest rooms, three restaurants, a banquet room, and 14 meeting rooms.

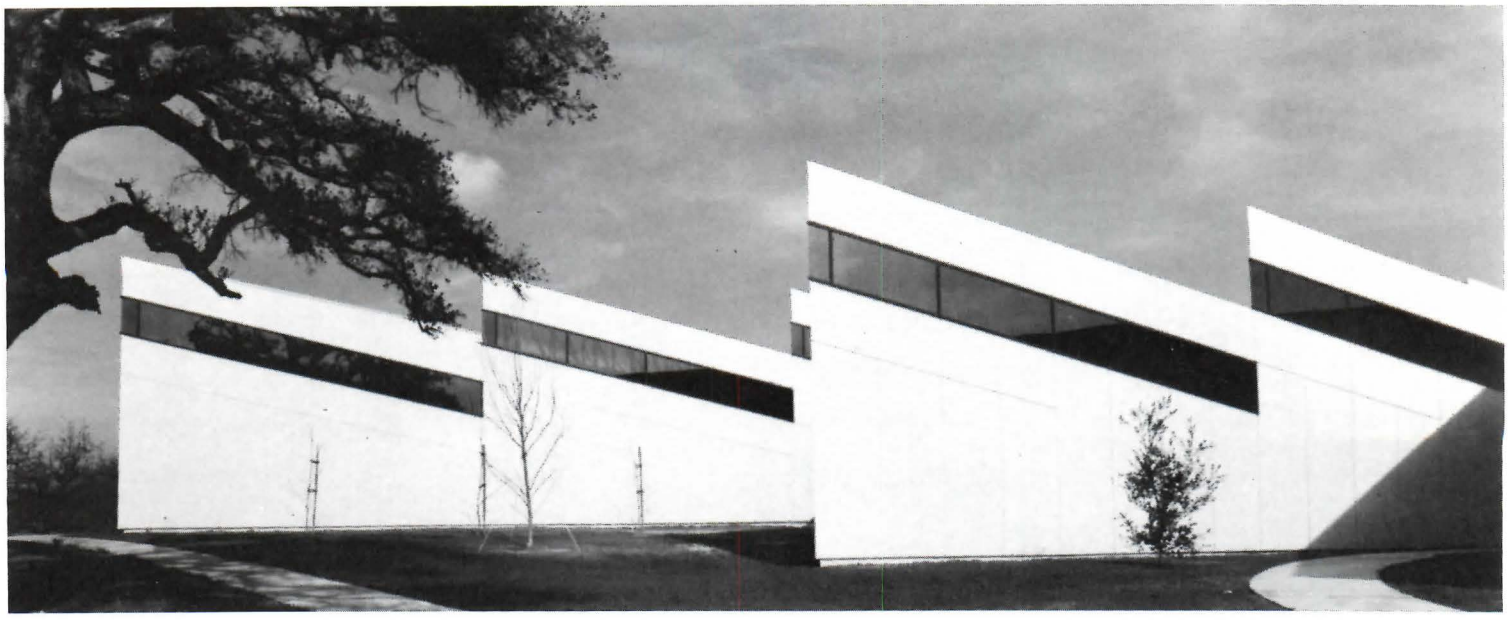


Chas. McGrath



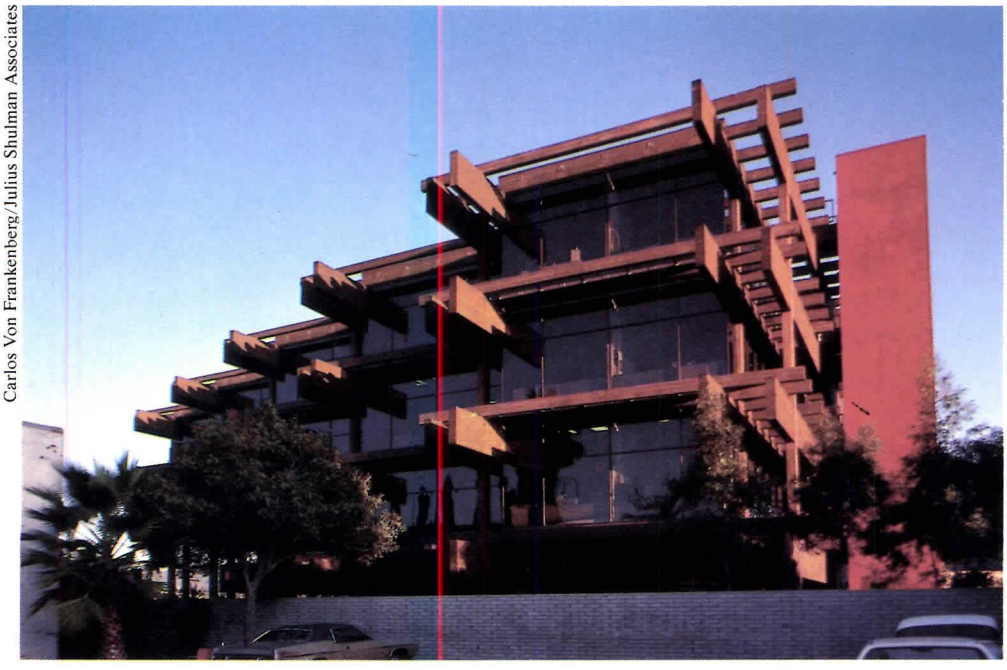
Hawaii Society. Rantau Abang Sea Life Museum and Visitor Center, Rantau Abang, Trengganu, Malaysia (left); Wimberly, Whisenand, Allison, Tong & Goo, Honolulu. The complex consists of a museum, visitor center, a bazaar featuring Malaysian crafts, a restaurant, and guest bungalows. All buildings are designed to be part of the "total museum exhibit," in the architect's words, and are styled after Malaysian traditional architecture. The materials are native hardwoods from nearby forests and Trengganu flat red bisque clay tile. To eliminate disruption of the site's natural characteristics, the buildings were placed on piers above the river and dunes. This also allows for a panoramic view of the turtle hatching grounds. For cross ventilation, many walls are fully openable.

California Council. Three Artists' Studios, Venice, Calif. (below); Frank O. Gehry & Associates, Venice. The units sit on a narrow lot that has strict zoning regulations. They are detached and are lined up, front to back. Two units have direct access from garages; the third is entered from a walled access walkway. These "boxes" are decorated with overscaled parts of buildings: stairways, a chimney-like shape, and a huge bay window. The stucco is painted shades of green, blue, yellow, and pink to reflect the adjacent buildings. Interior spaces were left unfinished for economic reasons. The second floors have large skylights and are double height to allow for future mezzanines.

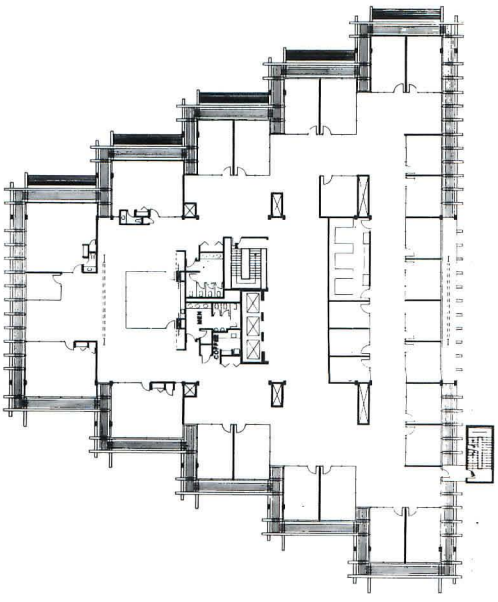


Los Angeles Chapter. Thousand Oaks Library, Thousand Oaks, Calif. (above); Albert C. Martin & Associates, Los Angeles. The white, sawtooth roof forms of this community library set it distinctly apart from its 40-acre park site. Serving a community of 140,000, the library itself is housed in a single large room separated from meeting facilities and the mechanical plant, the latter contained in an adjoining concrete structure. The main room's two levels are joined by ramps and steps. The bands of insulated, north-facing windows admit diffused daylight, and natural ventilation is utilized. The walls are steel studs with exteriors of painted plaster and interiors of gypsum board.

San Diego Chapter. Calexico Main Post Office, Calexico, Calif. (below); Coup & Smith, Calexico. Forms and colors for this 12,500-square-foot post office were drawn from Southwestern pueblo architecture. The client's program dictated an inexpensive "box" high enough to accommodate security lookout galleries suspended above the essentially one-story building. The architect attempted to reduce the apparent scale and mass through use of lower outer walls of contrasting color. These also provide for entrance and exit portals and create cloistered, shaded spaces within. Exterior surfaces are stucco, with the outer walls painted terra cotta to contrast with the beige building behind. Trellises between the outer and inner walls create strong shadow patterns to provide additional visual interest. As a response to the hot climate, all west-facing walls are windowless, while south- and east-facing windows are shaded by trellises with members slanted at 25 degrees to admit winter sun.



Carlos Von Frankenberg/Julius Shulman Associates



Fourth floor plan

Cabrillo Chapter. Warner/Elektra/Atlantic Office Building, Burbank, Calif. (above, with floor plan); Hugh Gibbs & Donald Gibbs Architects, FAIA, Long Beach, Calif. Large wood members infilled with glass comprise the exterior of this record company headquarters, and most of the interior walls are glass, bringing daylight deep into the interior offices. The structure is double 1x5-foot beams spanning 60 feet. Steel grating between the beams on the exterior provide sun shading and window washing platforms.

Santa Clara Valley Chapter. Cecil H. Green Library, Stanford University, Stanford, Calif. (right); Hellmuth, Obata & Kassabaum/San Francisco, with Marquis Associates, San Francisco, interiors architect. The design team was asked to structurally rehabilitate and remodel the special collections department of the graduate library. This department houses, in a single existing space, a major reading room for rare books, a space for exhibition of rare books, and a reception area. The architects subdivided the existing grand reading room with 24-foot ceilings and north-facing industrial windows using a semicircular colonnade and raised reference desk. At the rotunda (in photo), banded carpeting, eight curved display cases, and the suspended chrome ring of downlights emphasize the circular form of the space. Three alcoves off the rotunda house more exhibit cases, two fine old printing presses, and the controlled entry to the main reading room.

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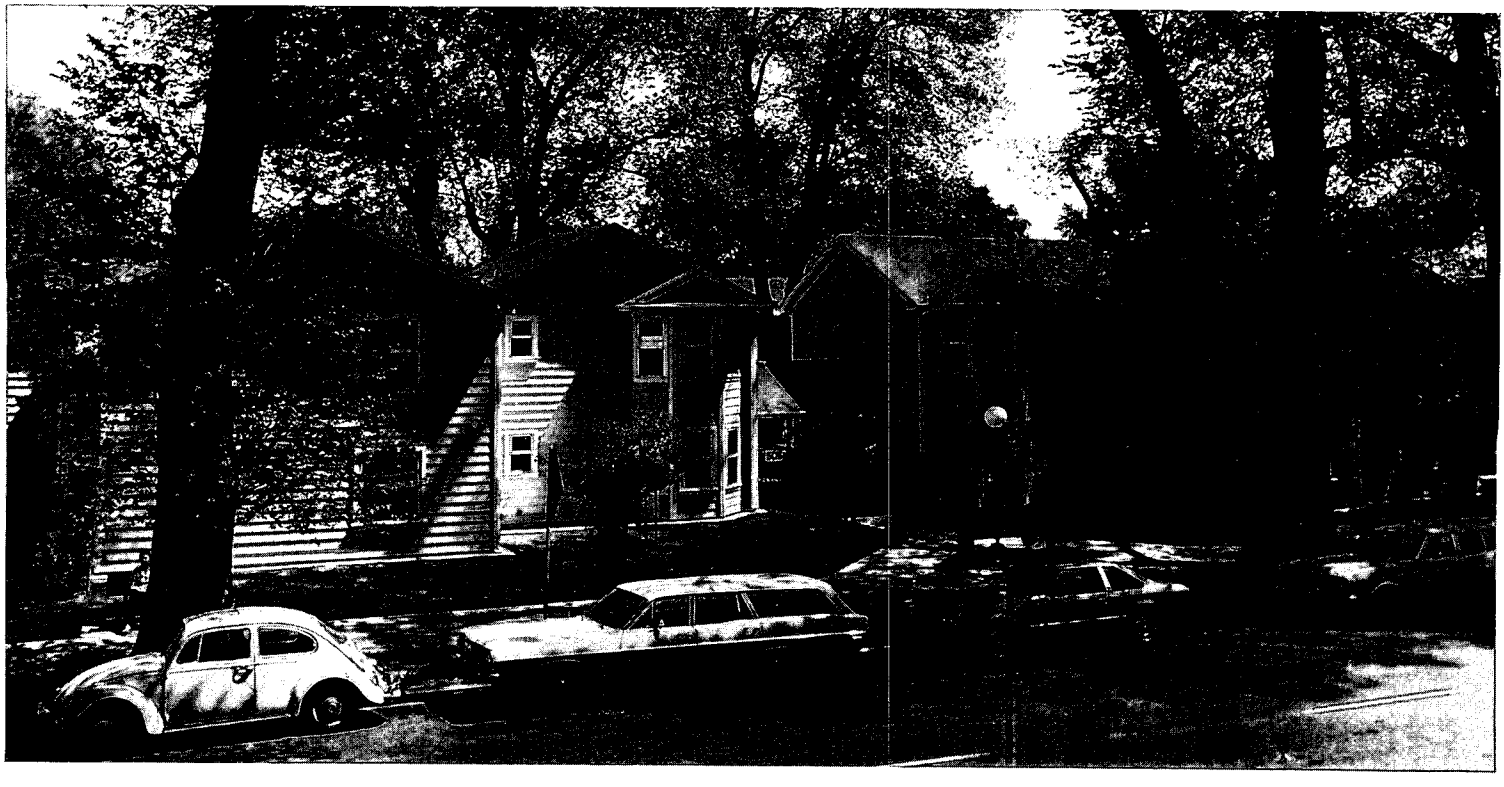
Jim Mazzuchi



Central Valley Chapter. Las Victorianas, Sacramento, Calif. (above); Dreyfuss & Blackford Architectural Group, Sacramento. Forty public housing units for the elderly are sited on an inner-city half-block in one of the oldest remaining residential neighborhoods. The project is designed to blend with surrounding, privately renovated "workman Victorian" cottages, but woodwork details are simplified in response to 1980s economics. Five separate buildings each house eight one-bedroom apartments. Five units on the first floors were specially designed for use by the disabled. The complex also provides a small recreation room with a kitchenette adjacent to the communal laundry and service facilities. Interior courtyards preserve pre-existing towering elms, and the complex is sited adjacent to a new public park.

San Francisco Chapter. Glover Street Condominiums, San Francisco (left); Daniel Solomon & Associates, San Francisco. On a blind-wall site with a permitted building envelope only 45 feet deep, 22 feet wide, and 40 feet high for the first 35 feet of the depth and 30 feet for the rear 10, the architect fitted two apartments in three stories, with the middle floor shared between the two. Both apartments include double height spaces. Says the architect: "With interlocked section, double volumes, and skylighting, [the units] are based on a Corbusian spatial model and the Corbusian ideals of compactness, efficiency, austerity, and health."

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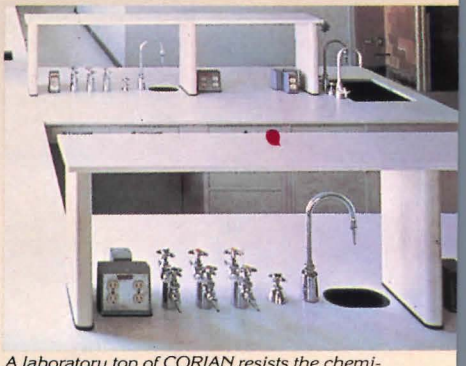

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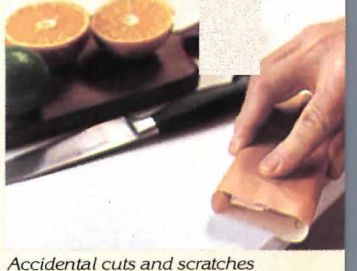

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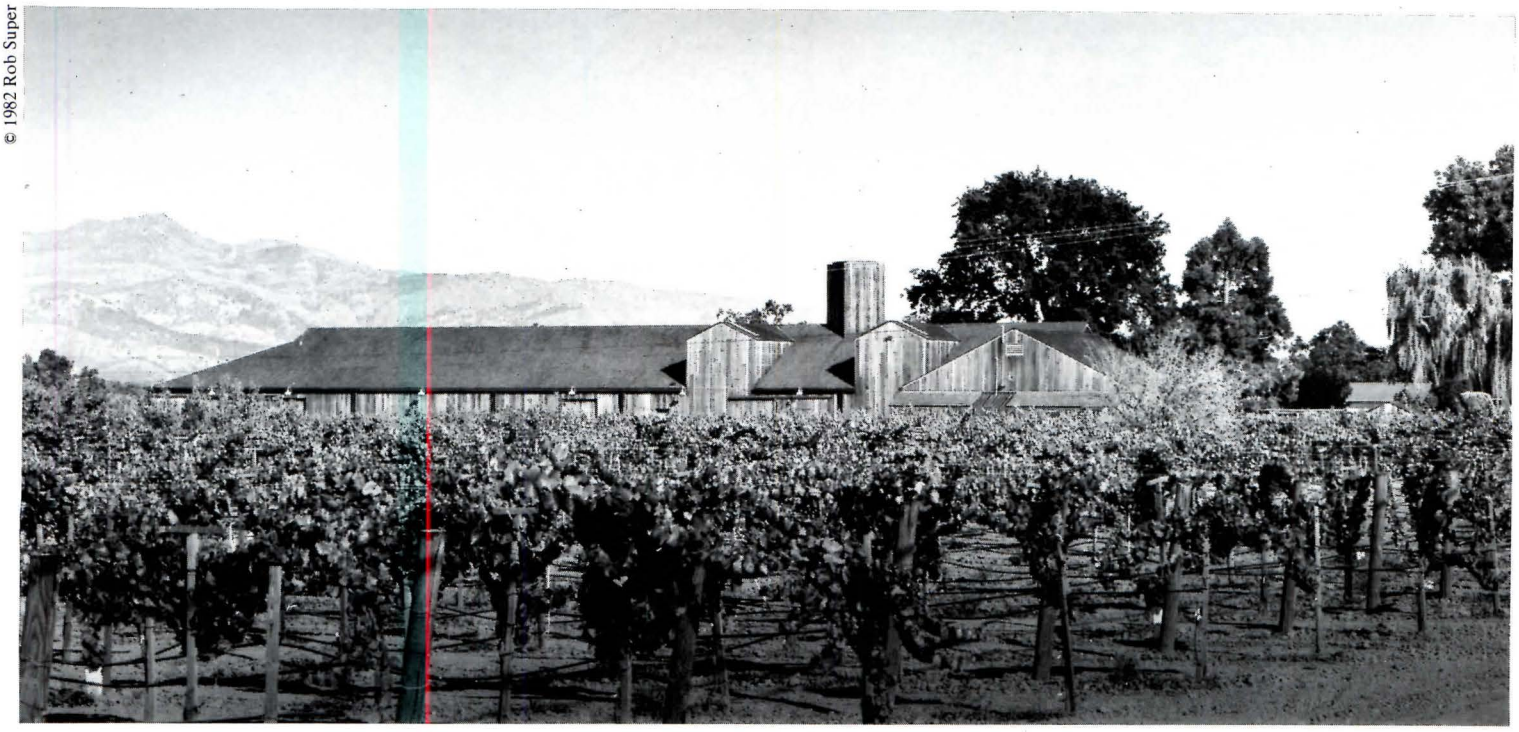

East Bay Chapter. Cakebread Cellars Winery, Oakville, Calif. (above); MLTW/ Turnbull Associates, San Francisco. For this remodeling/addition to a winery sited on the main highway between Oakville and Rutherford in the Napa Valley, existing outdoor fermentation tanks were covered with dormers sized to just fit over the stainless steel, and the center working space was marked with a large, skylit cupola. Aging and barrel storage are housed to the east in an extension of the barn, which terminates in a machine shed for storage. Construction is of heavy timber with barrel racks doubling as structural columns. The building can be extended into the vineyard for as many bays as may be required. Siding of unfinished Douglas fir and redwood helps the large building to blend into its agricultural setting.

Portland Chapter. Play Structure, Knight Elementary School, Portland, Ore. (below); Martin/Soderstrom/Matteson, Portland. The west-facing false front with bell for this covered outdoor play area implies a little red schoolhouse. Across this playful facade, a 16-foot-long, neon American flag is timed to come on every evening at sunset. The structure itself is of steel tube trusses and open web steel joists supporting a translucent fiberglass roof. Concrete masonry units provide game court walls. The structure is primarily for the use of fourth, fifth, and sixth graders, but it also is used during nonschool hours as a day and night community basketball court.

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Southwest Washington Chapter. Henry Drum House restoration, Tacoma, Wash. (left); RasmussenHobbs, Tacoma. The interior of this late 1880s house, in an advanced state of deterioration, was renovated and adapted to professional offices, and the exterior was repaired and restored. Landscaping was planned to complement the building and provide a tree-covered courtyard. Said the jury: "In every respect quality and integrity of effort are evident."
Seattle Chapter. Office/gallery building, Pilchuck School, Stanwood, Wash. (right); Thomas L. Bosworth, FAIA, Seattle. The client was a small, private, rural, residential summer school specializing in glass art. The narrow building acts as a gateway to the campus of simple studios. Its tall, tower end contains the gallery, its windows placed high to provide soft, reflected daylighting. The rectangular peak hole (at right in photo) is for curious passersby. Fenestration of the opposite end, containing offices, is large expanses of glass at eye level, intended to symbolize and encourage accessibility to the school's administration.

Gene Coulon Memorial Beach Park, Renton, Wash. (below); Jones & Jones, Seattle. This is a linear park of 53 acres extending 5,800 feet along Lake Washington. The site previously was used as a coal dump dock, a log dump, and for log and boat storage. The city acquired the land in three parcels over a period of 18 years. Activities now include swimming, volleyball, tennis, boat launching, fishing, picnicking, boat rentals, and walking on a mile of pedestrian trail. The clustered buildings in the photo serve as a restaurant/snack bar, restrooms, picnic shelter, and boathouse. □

Mirrors of Design Directions

Throughout the years of the printed page, architectural books have been a mirror, reflecting the distinct and particular concerns of their time. And so it is today that they lay out the state of the art of contemporary architecture. Certainly, the books reviewed below are probably not among the past year's so-called best books (many will not last beyond their present printing, perhaps deservedly so), but in one way or another they seem to typify intellectual architectural concerns in our era. They range from a "coffee table book" for postmodernists and studies of architects and buildings (past and present) that have helped to shape the architecture we know today to what our reviewer calls a "thin" effort to crystallize the image architects have had of themselves. MARY E. OSMAN, HON. AIA.

Architecture Today. Charles Jencks, with a contribution by William Chaitkin. (Abrams, $65.)

Postmodernism finally has a coffee table book! The discernible trend in recent years for large-format, thin paperbacks filled with glossy photographs has finally resulted in a genuine coffee table book devoted to postmodernism. It weighs six pounds, measures 12x12 inches, is awkward to hold, and has a price that will make most people think twice. The illustrations are plentiful (550 for 359 pages, with 184 in color). The quality of the photographs for the most part is excellent, though a few are blurred and the colors of some are too intense. A few photographs are given the prominence of a full page or a double page spread that could be cut. Appropriate for its coffee table status, the book has several color photographs that are repeated in different sections, implying that the publisher believes nobody ever reads the entire book, or that readers can't remember what they have looked at previously. Plans and drawings are used as illustrations; the plans in general are reproduced in miniature and lack legends or a scale. This is basically a coffee table book with all of its virtues: large size and a plentitude of illustrations; and vices: padding, such as capsule biographies, poor index, and high price. And it is obviously intended to appeal to a readership far beyond the architectural community.

The book attempts to cover the most advanced architecture of the past 15 years. For anybody who reads the architectural press, there will be little that is a surprise—all the usual stars appear: Michael Graves, I. M. Pei, Philip Johnson, Norman Foster, Richard Rogers, Ricardo Bofill, Bruce Goff, Quinlan Terry, Leon Krier, James Stirling, Arata Isozaki, and Charles Moore, among many. It is a handsome compilation of recent work and tendencies, and, if you buy the book, you can toss out all those architectural magazines lying around. You can also toss out all those thin paperbacks that Jencks has written, rewritten, and edited on postmodernism and late modernism, for they are all encapsulated within *Architecture Today.* Jencks claims he has updated his earlier works for this book, but there is a distressing similarity of language and of footnotes—a good half refer to Jencks' prior writings.

Above, 'Tower House' by Val Agnoli; below, Tuscan and Laurentian houses by Thomas Gordon Smith.

While Jencks contributes the majority of the book, about one quarter is given over to a "contribution" on "Alternatives," written by William Chaitkin. This is a compilation of *Handmade Houses, Whole Earth Catalog, Shelter,* drop city, domes, ant farm, Soleri, communes, inflatables, nomadic truckitecture, funk, and other oddities beyond the mainstream architecture of late modernism and postmodernism. This movement has had, of course, extensive exploitation both through the underground press and then the more conventional architectural press, but now it seems long ago. It is hard to believe that it was only 12 years ago when radically chic architects could claim *The Whole Earth Catalog* as a substitute for Sweets. Chaitkin's section does give one a sense of déjà vu, but it also is to my knowledge the first attempt to write a comprehensive history—albeit mainly an American version—of the dropout housing culture of the 1960s and '70s. This movement, however, seems now largely dormant and hardly a challenge (if ever a challenge) to current architectural thought.

The challenging ideology of the present is, of course, that which has been labeled, especially by Jencks, postmodernism. In this book Jencks devotes the first few chapters to what he labels late modern—the sculptural, abstract, noncontextual, nonhierarchical, overly technological designs of Pei, Foster, Jahn, Pelli, and most large architectural firms. Also included as part of late modern is the work of Peter Eisenman, Richard Meier, and some of the work of Johnson/Burgee and Hans Hollein. Jencks openly admits an antipathy to much of late modernism. Some of this antagonism seems specifically directed toward what he calls "late-capitalist accumulation," though this soft-core Marxist approach is never fully spelled out. This does not mean just hostility to late modern commercial architecture, but late modern public buildings and private houses as well. Since postmodernists produce many of the same

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building types and yet are not so criticized by Jencks, one has to conclude that a selective yardstick of Ruskinian morality (which the old modernists used as well) is being resurrected by Jencks.

Postmodernism contains some remnants of modernism, and it has as positive attributes all of those elements that late modernism lacks: irony, contextualism, sense of history, ornament, pluralism, multivalent meaning, shifted axes, and layered spaces. The "silence" at the heart of late modernism (a concept he has borrowed from the critic Manfredo Tafuri) is replaced with meaning and surprise in postmodernism.

Jencks' approach to the problem of recent architecture and instant history leaves much to be desired. He is a polemicist, as he openly admits, for postmodernism, and there can be no quibble with this aspect, but he conceives of the job of the historian and critic in an odd way. He obviously perceives the major task of the historian and critic as categorization, and he continues in *Architecture Today* with his—by now—infamous charts and pigeonholes: slick tech, '20s revivalism, neovernacular, metaphor metaphysical, straight revivalism, extreme articulation, and so on. While these names make snappy prose, they are ultimately so reductivist as to make every building and the designer a caricature of the category. Jencks' problem is not simply with late modernism, but postmodernism as well; he too facilely assigns architects and their buildings to pigeonholes—all must fit somewhere! Certainly, categorization and stylization is a method for organizing phenomena, but that is not the end of criticism and history. One of the goals of both the critic and the historian should be to understand and elucidate what the architect's intentions were, to understand the aspirations of the designer and not simply impose another meaning upon the work.

Postmodernism has already produced a vast corpus of writing, perhaps unequalled by the participants, proponents, and detractors. This writing is scarcely referred to in the book, though Jencks does spend considerable time defending his earlier positions from detractors. I am specifically referring to the work done on typology, the renewed interest in history by architects, and the search for philosophical strategies that may be applied to design. Jencks has been somewhat a leader in the area of semiotics and the application of the language of literary criticism to architecture. Terms such as "oxymoron," "elision," "grande trope," and "chimera" frequently appear in Jencks' section of the book. What is missed, however, is the search so many architects have made, far beyond the normal boundaries of building, to find strategies from other arts and disciplines and apply them to their designs.

Nothing is more transitory than the present, or the immediate past. Perspective is a necessary ingredient of any criticism or history, especially instant or very recent history. As I noted in this magazine in the October 1982 issue, a case can be made for seeing elements of postmodernism as evolutionary, a growth out of earlier concerns that were never dormant, but simply ignored by the architectural press in the 1940s and '50s. Certainly, this is not the entire explanation for postmodernism, and there are other reasons including major societal changes in the past 20 years. The reappearance of classicism on the scale we are currently seeing in Europe, the Far East, and the U.S. appears to be one of the major motifs of recent architecture. Jencks notes the new classicism and some of its varieties: ornament with Stern, structures with Bofill, and replication with Greenberg, but he doesn't probe any deeper. Why does classicism keep reoccurring, or did it ever disappear? To view postmodernism as simply an internal architectural debate

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over style, the use of ornament, and spatial layering, as Jencks does, is to trivialize the argument to such a degree as to wonder, who cares?

My criticism with Jencks is not over late modernism versus postmodernism, but that his approach is too facile and ultimately reductivist. All the juice and life is taken out of architecture. He quite correctly criticizes some of the earlier historians of modernism—Giedion, Pevsner, and Hitchcock—as writing biased-reductivist history that supported a certain outcome, the triumphs of radical modernism and the International Style. Would he take a little of that criticism and apply it to his own position, we would profit immensely. RICHARD GUY WILSON

Professor Wilson is chairman of the division of architectural history, school of architecture, University of Virginia.

Adolf Loos. Benedetto Gravagnuolo. Preface by Aldo Rossi; photography by Roberto Schezen. (Rizzoli, $50.)

At first glance, this may appear to be a picture book. Almost 400 photographs, many of them recently taken and heretofore unpublished, provide a lavish visual format, the illustrations alone making the book a valuable reference. The text, however, merits close attention. The first section of the book is an essay primarily devoted to analyzing Loos' ideas. The second part is a catalog, offering a complete listing of the architect's designs. Throughout, there are numerous insights and fresh interpretations.

Loos is among the most misunderstood early modernists, writing and designing in a manner that is deceptively simple. Gravagnuolo helps clarify some of the ambiguities, emphasizing the coherence between Loos' ideas and practice and the consistency of the work itself during most of the architect's career. Gravagnuolo also provides convincing explanations for aspects of Loos' work that have often been depicted as unresolved or contradictory. The treatment of projects such as the Monument to Franz Josef (1917) and the Chicago Tribune Building (1922) are particularly welcome in this respect.

This book is not always easy to read; its prose can become pedantic and repetitive. A thorough editing of the English edition might have eliminated bumpy passages and tightened the organization. The author assumes that his audience is already well informed on Loos and early 20th century Viennese architecture and culture. Unfortunately, the book also has some substantial shortcomings. Under the pretext of historical analysis, the author often slips into polemics, with the result that the text becomes as much an apology for Loos as it is an explanation of his

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ideas and methods. The discussion lacks the breadth it deserves because Loos' writings serve as the principal basis for interpreting his designs.

Gravagnuolo introduces people who had an impact upon Loos, from Fischer von Erlach to Freud; the sources, however, seem arbitrarily selected. It is difficult to understand, for example, why the decisive influence the English arts and crafts movement had on both Loos' ideas and designs is not mentioned, while much is made of H. H. Richardson's domestic interiors based on a thesis that is tenuous at best. Treatment of Loos' attitude toward classicism can be enlightening, yet no clue is given of the persistence of the classical tradition in Vienna and the positive influence it had on Loos and his contemporaries.

Loos owed a major debt to Otto Wagner; he also appears to have taken much from recent American academic work, and even from designs by his arch rival Josef Hoffmann. The interest shared by Hoffmann, Joseph Albrich, and other Wagner disciples in vernacular architecture of the Mediterranean basin provides an important basis for Loos' subsequent preoccupation with pristine, white, geometric forms. But Gravagnuolo tends to depict Loos through Loos' eyes, acknowledging his heroes and friends, deriding those whom he criticized. Loos' accomplishments are not bolstered by making Wagner's and Hoffmann's work seem trivial. Loos defied much that was around him, yet he drew from it as well. A well-rounded analysis of these relationships is needed before the undeniable importance of his individualism can be fully assessed.

While the second part of the book is filled with information, it falls short of being an exemplary *catalogue raisonné.* Almost half the entries have either no text or one that is so minimal that it is hardly worth printing.

For the remaining entries, the text focuses on analysis. The rationale of the chosen format—to assemble data on the client, program, site, and other contributing factors, and to describe the design and its development—is often overlooked. The accompanying bibliographies would have been of much greater value had they included more than an occasional contemporary source.

Although numerous and elegant, the photographs do not comprise an adequate supplement to the text. Frequently, written descriptions have to suffice. This is especially irritating when one is informed that the most important feature of a scheme is the interior, without either plans or photographs to support the case. The interior views presented generally focus on a single aspect. For a sense of Loosian space, one must still turn to such standard texts as Heinrich Kulka's *Adolf Loos: Das Werk des Architekten* (1931) and Gustav Kunstler's *Adolf Loos: Pioneer of Modern Architecture* (1966). Some factors may have been beyond the author's control. Many photographs are reproduced so small that their impact is lost. In the case of plans, this layout often makes them impossible to examine in detail with the naked eye.

Despite these and other flaws, the book is a worthwhile addition to the large corpus of literature on Loos. It is more useful since it is one of the few such studies published in English. Scholars will no doubt turn to a much more ambitious and definitive monograph: *Adolf Loos: Leben und Werk,* by Burkhard Rukschcio and Roland Schachel (1982). But many others with an interest in early modern design should derive benefit from Gravagnuolo's book. RICHARD LONGSTRETH

Mr. Longstreth is assistant professor of architectural history, college of architecture and design, Kansas State University.

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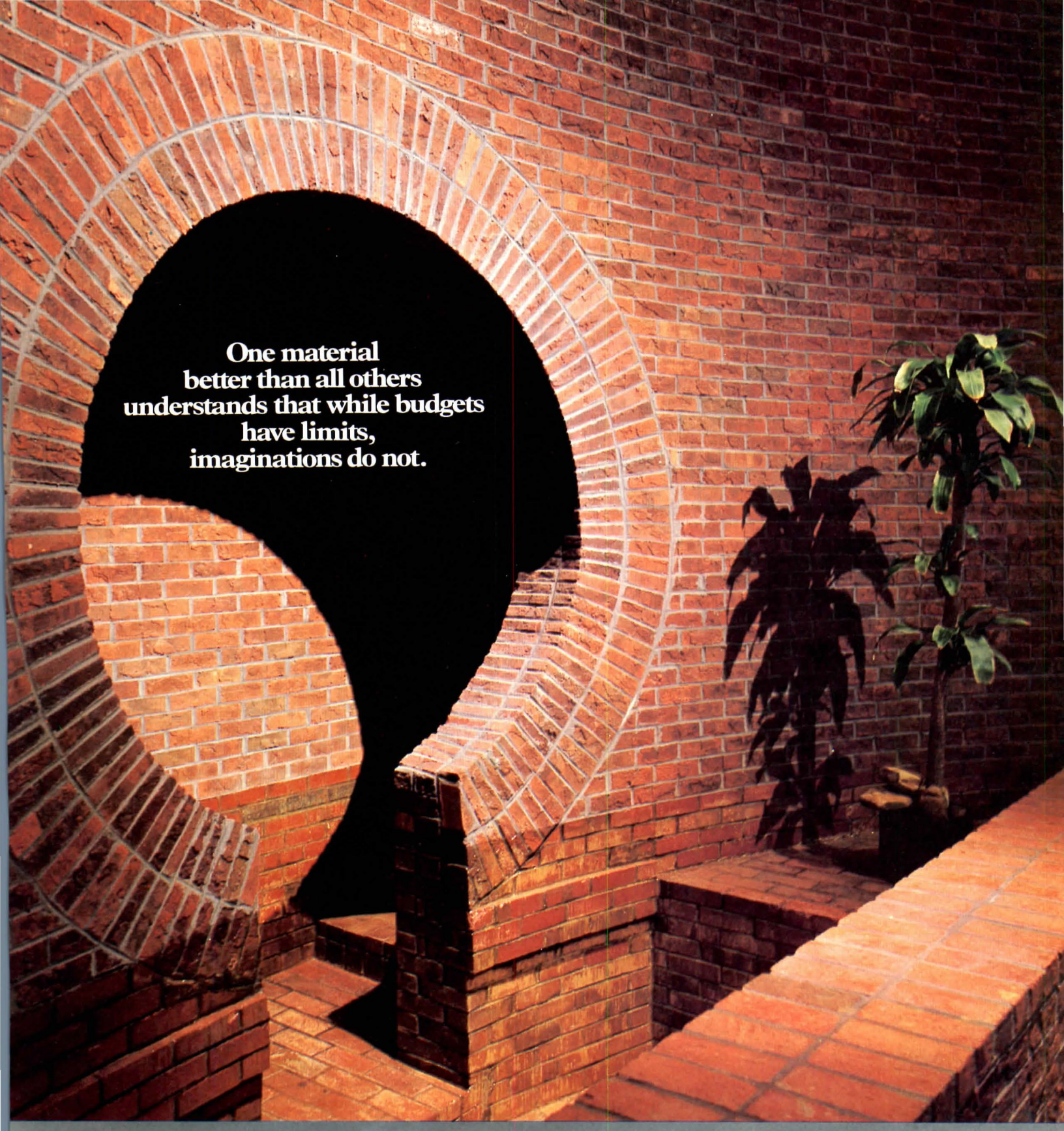

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Signage: Graphic Communications in the Built World. Charles B. McLendon and Mick Blackistone. (McGraw-Hill, $27.50.)

This reader was in a government complex recently, trying to find the way to the room where tax forms are distributed. A disagreeable (but necessary) errand was made more disagreeable because of a lack of signage. Those who designed and who control this building should read this practical treatise on graphic communications.

Advocating the team approach, the authors identify the professional disciplines involved in signage and define their roles. They outline the steps in graphic communications—from initial planning to evaluation after installation. They tell how to use a systems concept, using each member of the team's expertise. They offer design quidelines; present a catalog of signs; give the elements of a contract package—in brief, a complete methodology is elaborated upon. The book contains numerous illustrations and gives case studies to further enhance the information.

Both authors head consulting firms and have years of experience in graphic design.

Classicism Is Not a Style. Guest-edited by Demetri Porphyrios. (St. Martin's Press, $19.95.)

According to Porphyrios in the introduction to this paperback, recent architecture's story relates how postmodernism was born to "disreputable" modernist parents, left home for America where it took to the shingle style and neo-Corbusianism while serving in the household of late modernism, has short-lived affairs with Queen Anne revival and collegiate Gothic, and then returned to "a classicism that was to be qualified as 'free-style.'"

For some thinkers, however, says Porphyrios, "the spectacle of this classical renaissance fades away into the debris of a make-believe culture." He pleads that the lessons of classicism are not to be learned from its "stylistic wrinkles," but its "rationality." So he calls upon us to repudiate modern eclecticism and to reflect "on the limits of architecture and on its nature as rational tectonic discourse." We should not look at classicism for "consolation" nor for "stylistic usurption," but for the lessons it has to teach "about the nature of tectonic and architecture discourse and about the distance that separates them."

The authors and architects who have contributed to the volume, Porphyrios says, share an opposition to eclecticism and revivalism. They share as well a value of classicism for its "pursuit of rendering tectonic rationality symbolic." Among the essayists are Aldo Rossi who writes about "The Greek Order," Leon Krier who considers "Architecture and Vernacular Building," and Giorgio Grassi who discusses "The Limits of Architecture."

More than half the book is devoted to a discussion of contemporary buildings by their architects, such as Porphyrios himself considering his design of pavilions in Highgate, London; Edward Jones on the Schinkel Archives Building in Berlin; and Aldo Rossi on the Modena Cemetery in Italy. The book is heavily illustrated with both color and black and white photographs.

The book is provocative. Contemporary architecture is in a predicament, says the editor in an essay he contributes, which has the title of the book, because of a twofold inheritance: "(a) the semantically mute elements of industrial production—inherited from modernism, and (b) the semantically expendable historicist signs of industrial kitsch—inherited from modern eclecticism."

The movement collapsed by 1920, partially from being assimilated into the mass culture, partially from its leaders' adoption of the mystique of function. Replaced by the international movement, Taut was scorned and forgotten for almost 50 years. Whyte recalls and describes his work, but there is a decided lack of empathy or enthusiasm in his account. A systematic catalog of works would have been helpful, as would a more sympathetic interpretation and fewer phrases such as "chiliastic eschatology." Perhaps we must still await the definitive work on Bruno Taut.

SARA HOLMES BOUTELLE

Ms. Boutelle is founder/director of the Julia Morgan Association in Santa Cruz, Calif.

Caribbean Georgian: The Great and Small Houses of the West Indies. Pamela Gosner. (Three Continents Press, Inc., 1346 Connecticut Ave. N.W., Suite 1131, Washington, D.C. 20036, $35 hardbound, $15 paperbound.)

Pamela Gosner writes engagingly about the architecture in 16 island countries of the West Indies. Equally pleasing are her drawings, most executed on the site. Although historic West Indian architecture is hard to date, she says, most of the architectural influences tended to be English Georgian, whether the government of a colony was English, French, Dutch, or Danish. The West Indians modified the Georgian style, she explains, to take into account climate and resources.

Gosner describes the general characteristics of residential architecture, plantation structures, military buildings, religious buildings, public structures. She then devotes separate chapters to the architecture of the various islands, among them Bermuda and the Bahamas, Haiti, St. Thomas and St. John, and Grenada and the British Windward Islands.

Books continued on page 370

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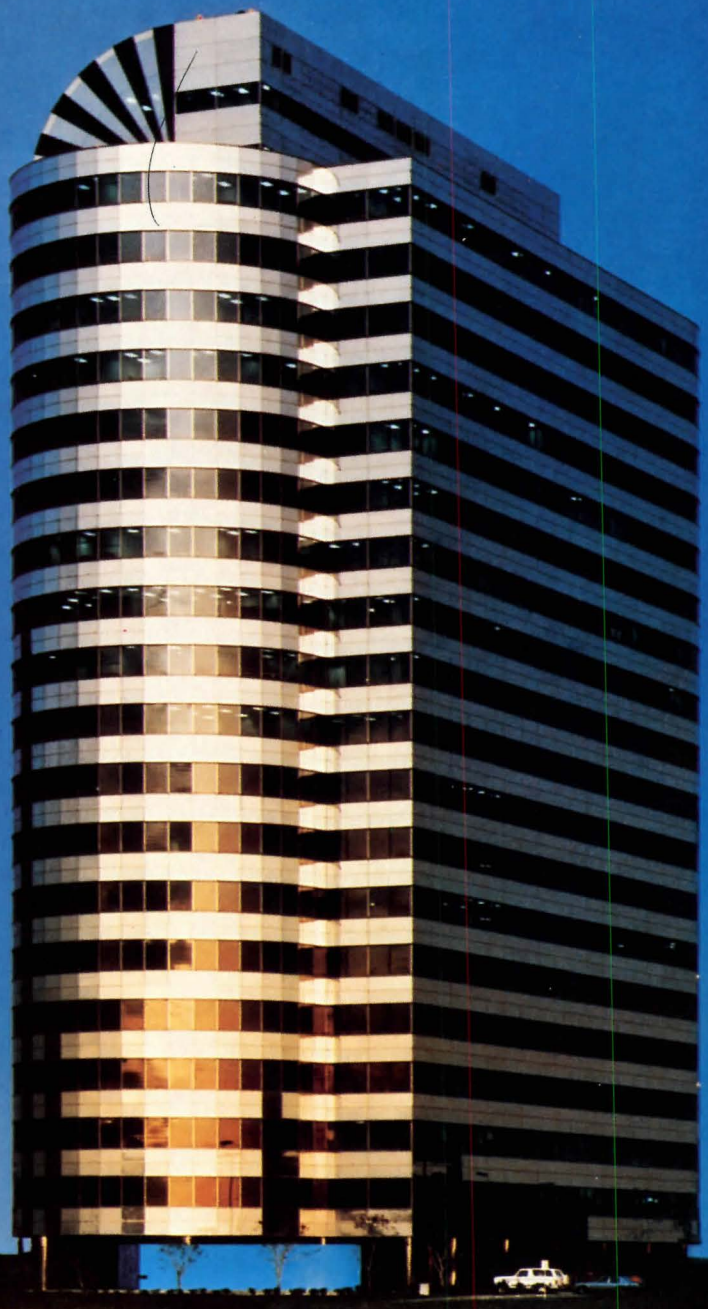

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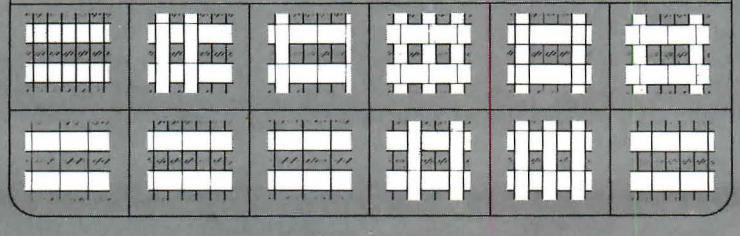

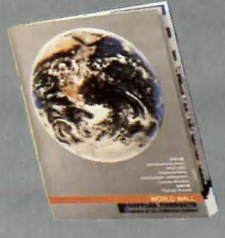

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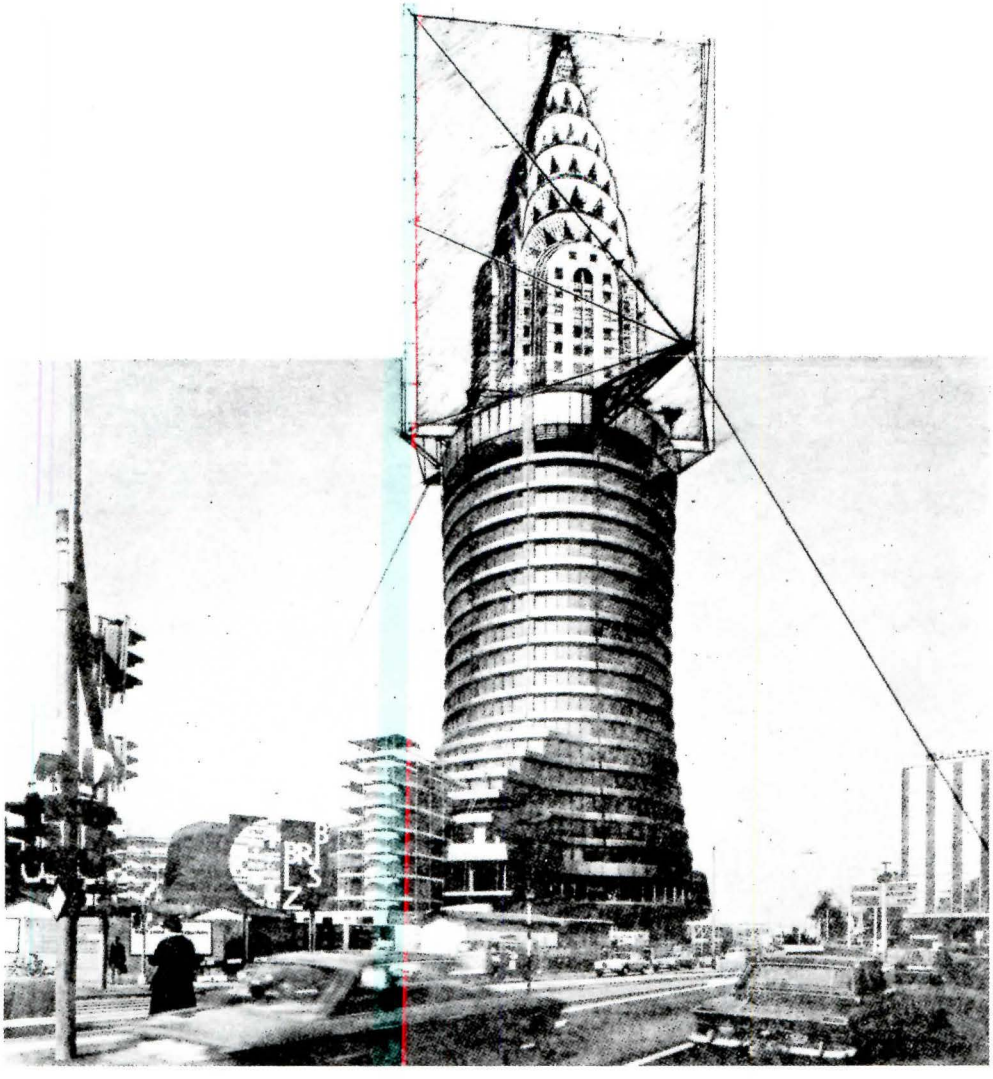
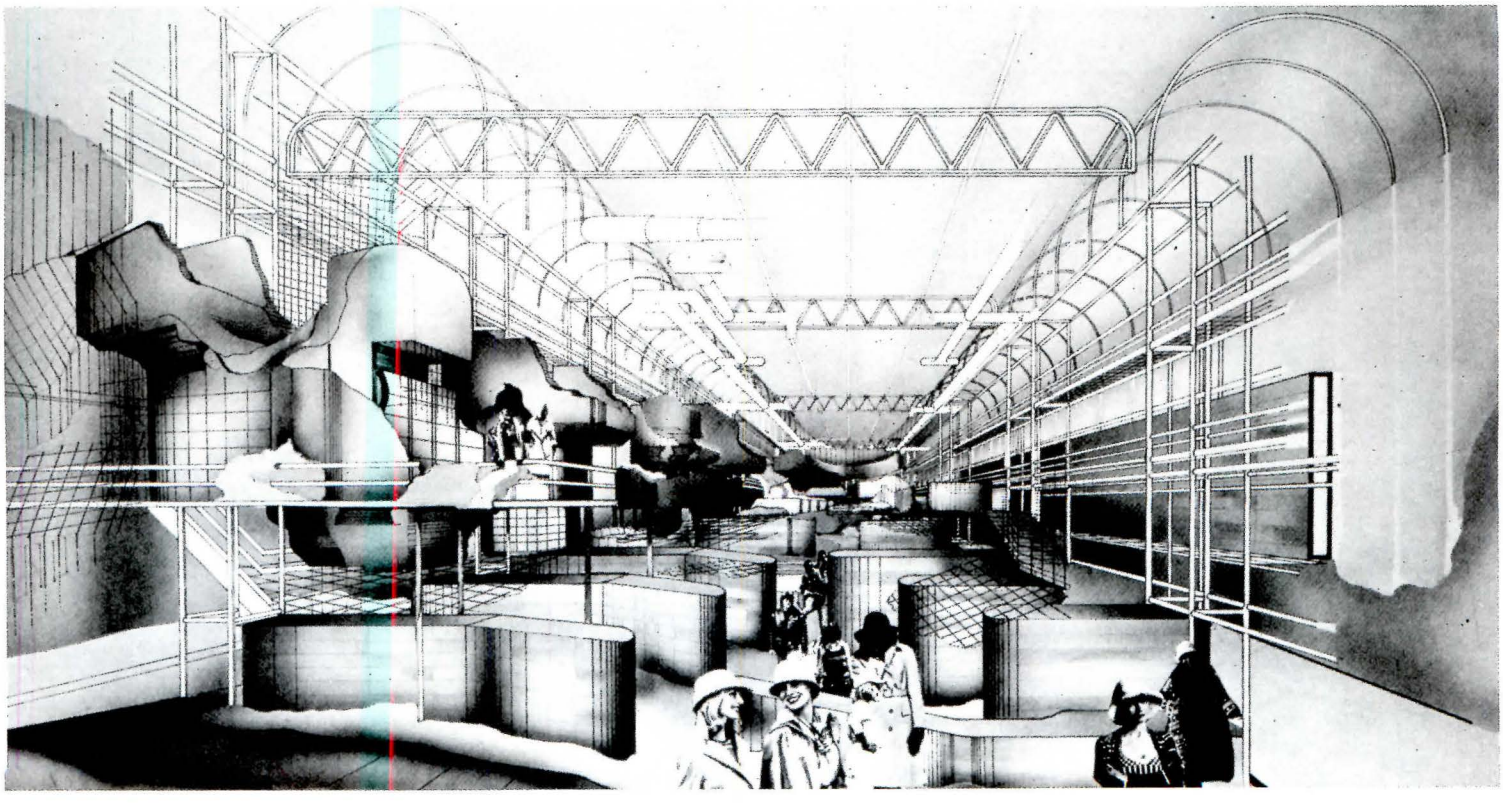


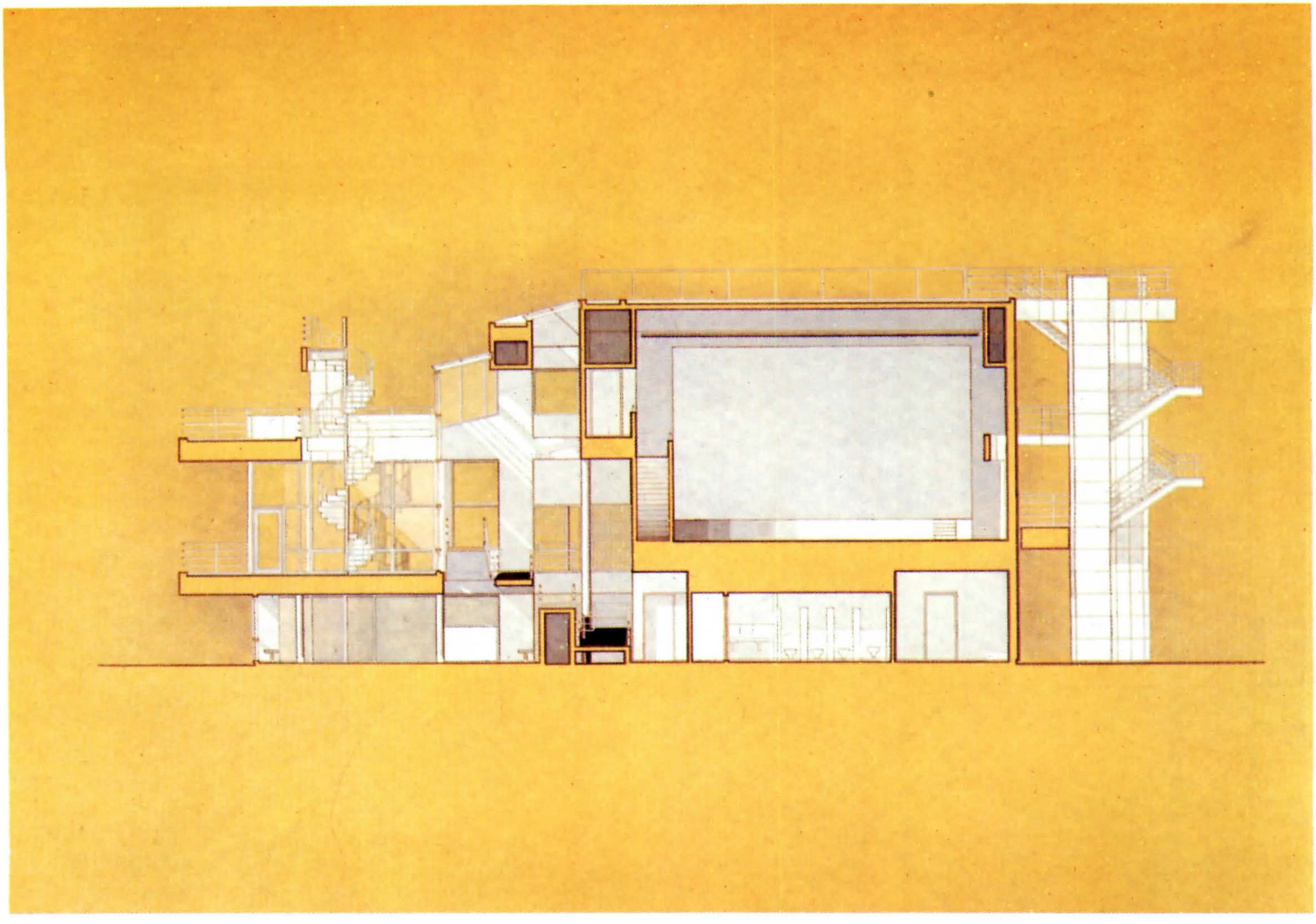
Architecture of the 20th Century in Drawings: Utopia and Reality. Vittorio Magnago Lampugnani. (Rizzoli, $35.)

In this handsome book that is a collection of 168 drawings by 20th century architects, architect/critic Lampugnani shows how drawings reveal the streams and directions in the evolution of architectural thought. Drawings by architects, whether for a project that comes into being or for some unrealized utopian scheme, have a special power in their ability to preserve ideas and to reveal the nature of architectural development. There is special significance in drawings of unrealized projects, Lampugnani says, for here there is release from any pressure of realization. "Creativity appears in its purest form, visions, unfettered by compromise, unfold freely." Whether the drawings are for projects that finally come into existence or are "desk drawer architecture" of unrealized schemes, they reveal architecture of the 20th century in a vivid and sure fashion.

The drawings in this book, covering the period from 1910 to the present, are grouped first according to six directions and then in chronological order. Interruptions occur in the arrangement, Lampugnani explains, when comparisons are appropriate. In this visual survey, he says, synthesis is given preference over

Left, a collage of photo and drawing by Haus-Rucker-Co, 1977; below, an imaginary interior by Peter Cook and Christine Hawley, 1979.





analysis and "the overall view" over "concentration in depth."

The so-called streams in architecture's historical evolution as revealed by the drawings are six in number, the first being "The Myth of Nature as Model." Among the drawings are those by Frank Lloyd Wright and Alvar Aalto where "the buildings grow up from the ground, absorb the formal influences of the landscape and become part of their surroundings." "The Breakthrough of Subjective Expression," the second stream, had among its exponents such stellar figures as Bruno Taut, Erich Mendelsohn, and Hermann Finsterlin.

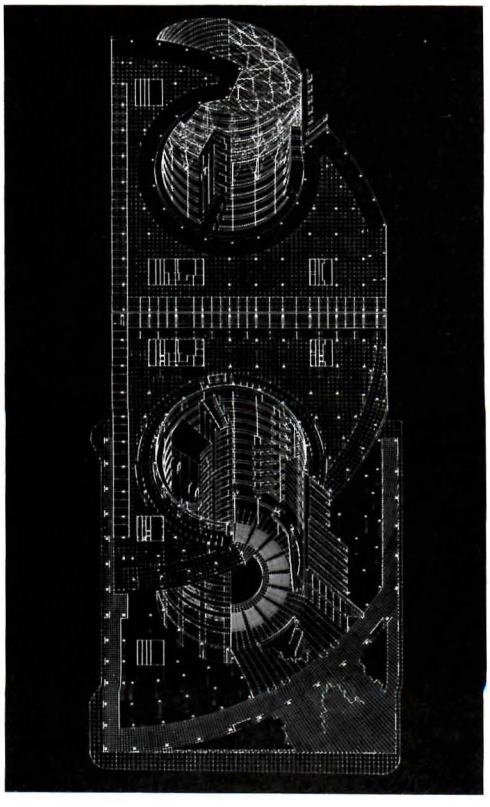
From expressionism the stream turns to the esthetics of reason, the third direction, with drawings by Ludwig Mies van der Rohe revealed as "a vivid testimony to the fact that logic and self-limitation need not produce rigidity." Here, too, among others are drawings by Antonio Sant'Elia, Adolf Loos, and Walter Gropius.

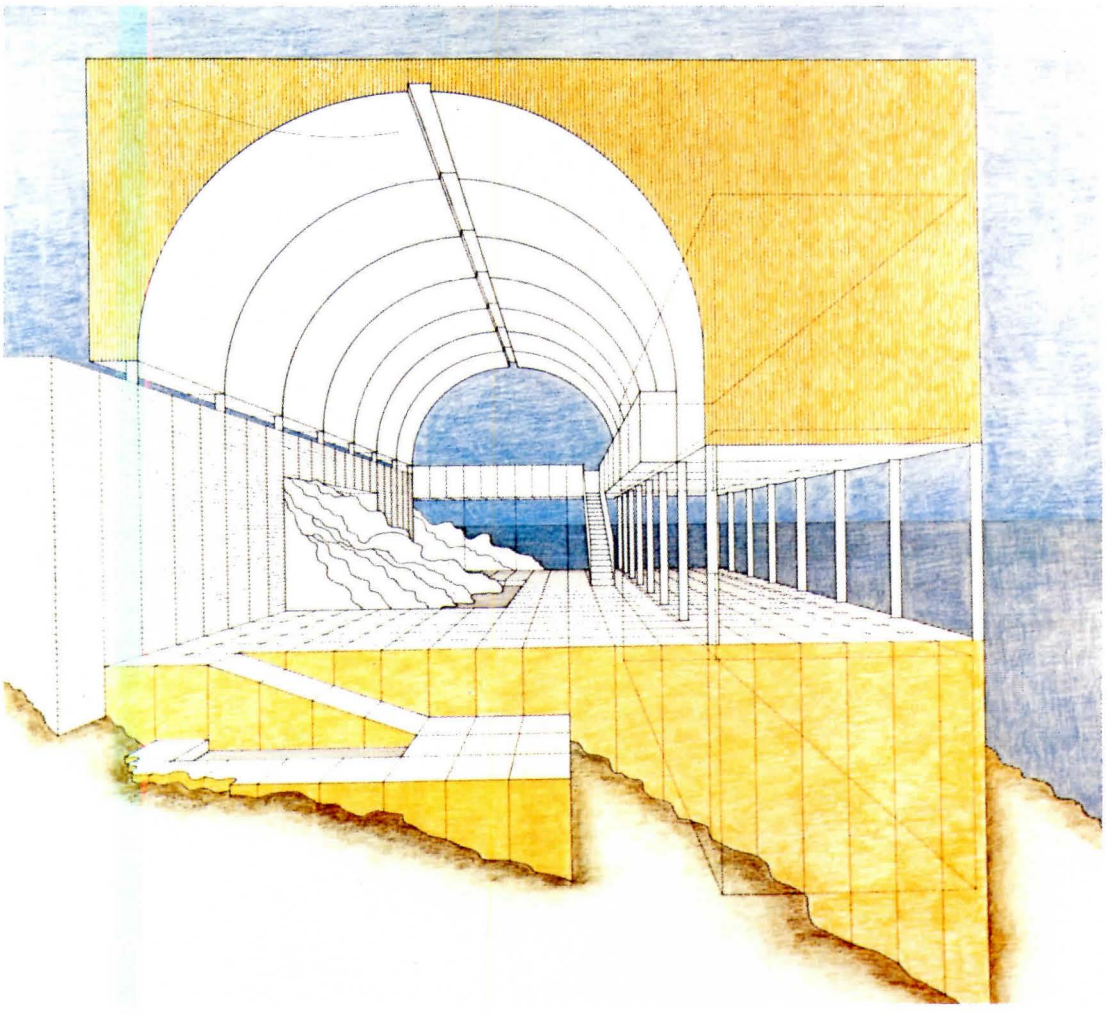
Above, a monochrome building section by Richard Meier & Partners, 1979; right, a meticulously executed axionometric plan by Murphy/Jahn, 1981.

The next stream, which concerns "The Fascination of Technology," is placed in perspective by the drawings of such architects as Peter Cook, Norman Foster, and Richard Rogers.

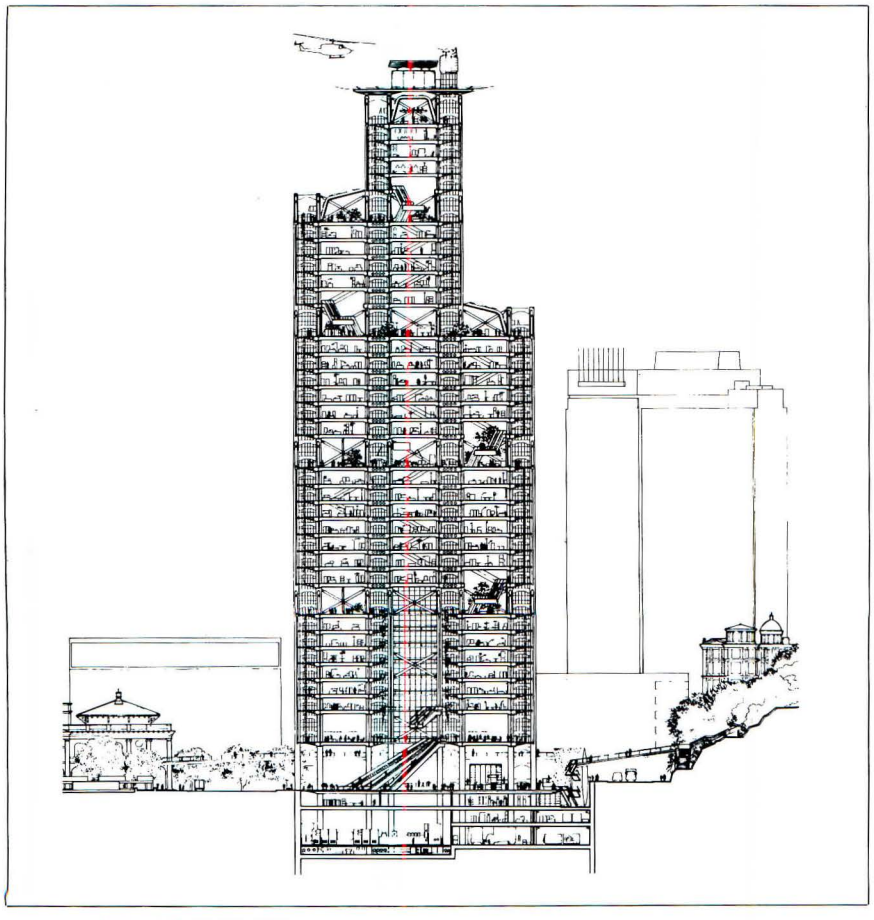
The fifth stream, "The Ambivalence of Tradition," shows, for example, the elegant and controlled drawings of Theodor Fischer that have an underlying emotionalism, but little in common with the "sensual exuberance" of the expressionists. Here, too, are drawings by Michael Graves, where color plays an important role, "imparting a strangely disturbing, melancholic and autumnal mood to the monumental remains of a past which cannot be revived, however many efforts are made."

And finally there is the stream called "Towards a New Autonomy," in which new attention is paid to architectural form. "At first hesitantly, then with more self-confidence and meanwhile in hectic enthusiasm the representation of architecture has moved back into the focus of attention of producers, consumers, and critics," Lampugnani observes. It was Louis Kahn who was "the figurehead in the contradictory process of re-establish-





Right, an imaginary section by Friedrich St. Florian, 1973-76; below, building section by Foster Associates, 1981.



ing architecture with a capital 'A.' " It is Aldo Rossi, Lampugnani says, "who casts a shadow over virtually the whole of present-day avant-garde architectural culture." His drawings explore only one thing: "the possibility of combining a handful of elementary forms, archetypal elements which make up the repertoire of architecture per se."

The book also contains lengthy comments on architecture made by many architects. Hans Hollein is quoted as saying, "Architecture is elemental, sensual, primitive, brutal, terrible, mighty, dominating. But it is also the embodiment of the most subtle emotions, a sensitive record of the most refined sensations, a materialization of the spiritual." The drawings in this visually pleasing and thought-provoking book bear witness to his words. □

Year's Review *from page 102*
sional degree as of July 1984 (adopted in 1980) was also upheld.

The need for a uniform examination was the recommendation of a two-year study, and the vote to adopt the examination directs NCARB to complete work begun in 1980 on formulating such an examination. NCARB's coordinating council has been testing possible examination methods, and reported to the delegates that the new examination may last 32 hours with half that time devoted to site planning and building design.

Regarding the degree requirement, resolutions and amendments were proposed at the annual meeting, which ranged from rescinding the degree requirement to a board proposal to develop an "education alternative" for "applicants who are able to demonstrate the educational qualifications equal to those of accredited degree holders."

Although this requirement was finally upheld by the delegates, there is evidence that the door is still open for an alternative. In his report to the AIA board of directors in December, NCARB President Sid Frier, FAIA, noted that although the accredited degree requirement will not be in effect until July 1984, the council was investigating an alternative to the requirement.

The Institute

Convention Votes Sharp Change In Direction; Board Begins To Plan its Implementation

At its annual convention one year ago in Hawaii, AIA approved a report from the Direction '80s task force. It also adopted a number of resolutions and elected new officers.

Adoption of the purposes, goals, and responsibilities recommended by the Direction '80s task force marked a fundamental shift in the Institute's direction. According to the task force's report, this shift would be "from a primary concern for architects to a primary concern for architecture—from a service-oriented association to a knowledge-based national institute" concerned with "advancement of the art and science of architecture and advocacy of design excellence."

The adopted recommendation—divided into the five segments of body of knowledge, education, public policy, communications, and organization—are long term goals, "intended to be accomplished in a thoughtful, evolutionary manner." The report also said that the effect of Direction '80s "will be a more active relationship between individual members and their local chapters, as chapters become a source for professional development programs, practice aids, and information exchange. Increased responsibility at the state and local levels will be accomplished by proportionate increases in local staffing expense."

The convention delegates also adopted a resolution on nuclear disarmament in which the Institute urged "the United States government to take a leadership role in achieving total nuclear disarmament and to direct its strongest diplomatic efforts to achieving world peace through cooperation, brotherhood, and mutual respect." A call for a nuclear freeze was deleted on the floor.

Other adopted resolutions called for an "appropriate AIA commission" to review issues of education, training requirements, internship, examinations, and reciprocal registration facing the profession. An AIA associate task force was also sought to "communicate and represent" the goals, programs, and resources of associate members.

Delegates to the convention elected new officers for the Institute. George M. Notter, FAIA, of Boston was elected first vice president/president elect. Notter will succeed AIA president Robert Broshar, FAIA, of Waterloo, Iowa, who was inau-

continued on page 378

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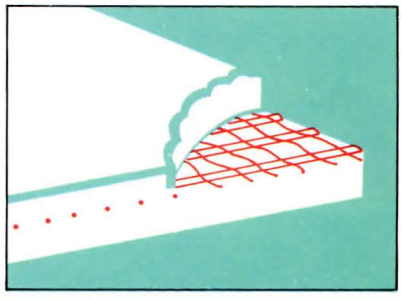

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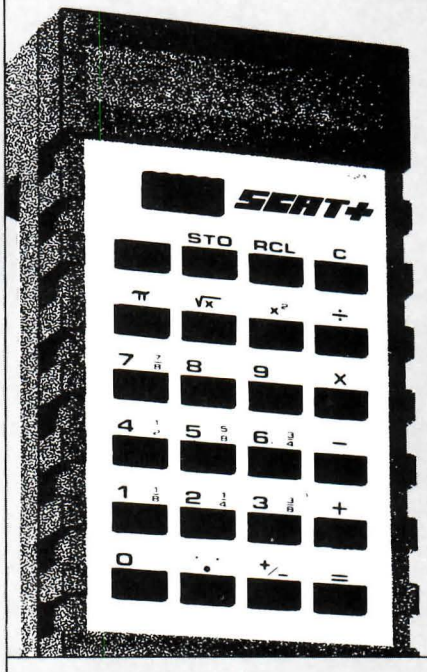

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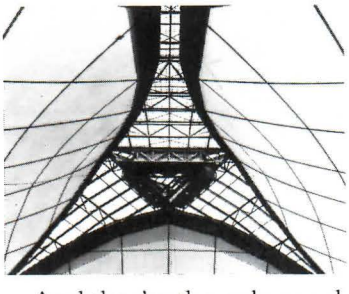

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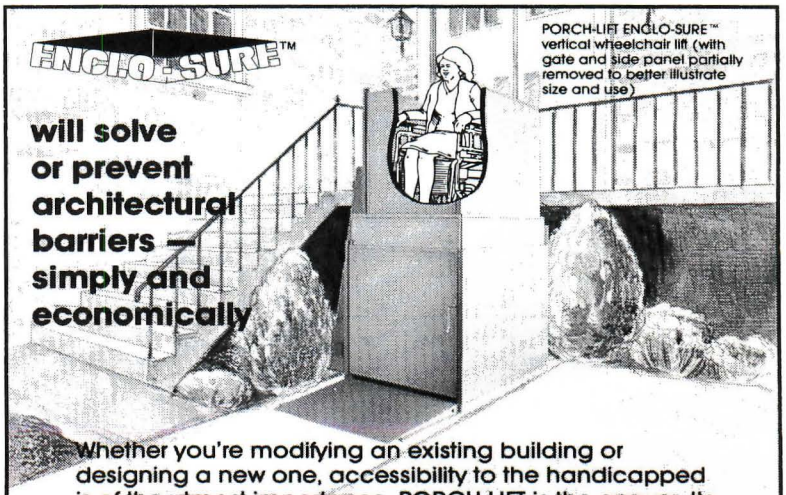

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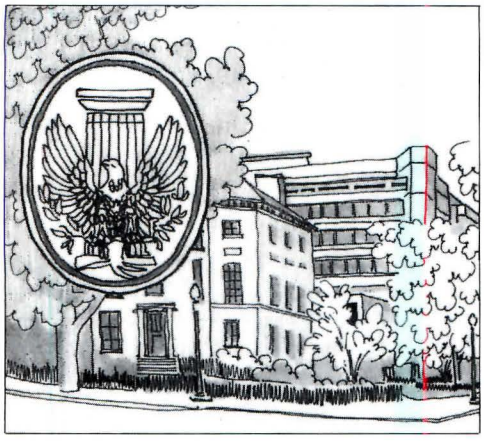
gurated in December. Also elected were three national vice presidents: Leroy Bean, AIA, of Sioux Falls, S.D.: John A. Busby Jr., FAIA, of Atlanta; and R. Bruce Patty, FAIA, of Shawnee Mission, Kan. Harry W. Harmon, FAIA, of Long Beach, Calif., was elected secretary.

In a meeting prior to the convention, AIA's board of directors approved the Institute's first transportation policy, which stesses that "the primary purpose of the nation's transportation system in all its modes should be to provide reasonably priced transportation that will benefit all citizens."

The major objectives of the policy are to integrate transportation planning with



that of land use, growth management, environmental protection, energy conservation, social and economic development, health care and social services, and maintenance and expansion of urban systems; the preservation of natural and historic resources in planning and developing transportation systems; the efficient use of existing systems; a balanced system that utilizes various transportation modes with effective land use and energy conservation; the promotion of government policies that will encourage expansion and improvement of systems by the private sector; and the acknowledgement that the provision of transportation systems results in public benefits and that the provision of such should be borne by the public.

In terms of the architect, the policy supports the involvement of multidisciplinary teams early in the design of transportation systems to "ensure that the planning and design is responsive to social and environmental goals and to the need for the highest order of design."

At its December meeting in Washington, D.C., the board further refined its implementation plan for Direction '80s, synthesizing the board's and a private consultant's recommendations. The plan would be enacted in seven phases—a governance study, communications study, component study, management audit, public awareness program, body of knowledge task force, and a component training program—subject to the board's funding approval.

Also at the December meeting, the board updated a number of policy statements. Concerning energy, six separate policy statements were combined into one, covered in nine points, promoting continued research and public education on energy issues and design, and government involvement in promoting energy conservation and research. The board also reaffirmed the Institute's support of the Alaska National Interest Lands Conservation Act and the Equal Rights Amendment.

An Anniversary Celebrated in A Variety of Ways and Places

Proclamations, celebrations, and designations marked the 125th anniversary of AIA during the week of April 18-24 last year. That week was proclaimed "National Architecture Week" by President Reagan, while Washington's Mayor Marion Barry proclaimed "Architecture Week" in the city.

Music, clowns, cakes, and balloons were in abundance at the Institute's headquarters, which hosted architects from around the country. AIA chapters across the nation staged their own activi-

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ties in observation of the anniversary.

A special luncheon for local officials and a gala reception for 1,000 invited guests occurred on the Institute's formal birthday, April 20 (although at the close of the first meeting of the founding members on Feb. 23, 1857, it was resolved that Feb. 22, Washington's birthday, would mark the Institute's anniversary).

Throughout the city of Washington 100 banners designated buildings of "architectural significance." Public forums on architecture were also conducted at the architecture schools of three Washington-area universities.

The Capital

A Blow-by-Blow Account of the Protracted Controversy Over The Vietnam Veterans Memorial

In April 1982 Maya Ying Lin's design for the Vietnam Veterans Memorial began to take shape on the National Mall. Her design had been chosen from 1,421 entries in a competition juried by Pietro Belluschi, FAIA; Harry Weese, FAIA; landscape architects Garrett Eckbo and Hideo Sasaki; *Landscape Architecture* Editor Grady Clay, Hon. AIA; and sculptors Richard H. Hunt, Constantine Nivola, and James Rosati.

But even as the site was made ready critics of the design had called for a number of "additions" to embellish the minimalist memorial. The directors of the Vietnam Veterans Memorial Fund selected a panel of four veterans to make esthetic decisions regarding a sculpture and flagpole to be added to the memorial. The VVMF had agreed to the additions, called for by outspoken opponents of the design, in return for permission from Interior Secretary James Watt to proceed with construction of the memorial. The panel was charged with the selection of a sculptor and a sculpture of servicemen, and to specify the placement of it and the flagpole.

The four included James Webb, a lawyer and author of two war novels, who called Maya Lin's design a "mockery" that will become "a wailing wall for future antidraft and antinuclear demonstrations"; Milton Copulos, a member of the conservative Heritage Foundation and also a critic of the design; and William Jayne and Arthur Mosley, volunteer advisers to the VVMF and supporters of the original design.

In July the panel announced its selection of Frederick Hart, a Washington, D.C., sculptor who was a member of the team that won third place in the memorial design competition. Hart said that he intended "to preserve completely the artistic integrity of the existing design by Maya Ying Lin."

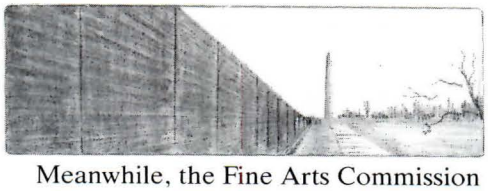
But Lin strongly denounced the addition of the sculpture and flagpole. She likened it to "drawing mustaches on other people's portraits," and said that the sculpture is going to "make one feel watched," while the flagpole on the site would make the memorial "look pretty much like a golf green."

The additions also drew fire from AIA. Then-President Robert Lawrence, FAIA, called the changes "ill-conceived" and a "breach of faith."

As arguments raged pro and con, the memorial's two concrete walls were poured, ready to receive their black granite cladding.

In September a model of an eight-foot-high sculpture of three infantrymen—two white, one black—was unveiled, to be placed 150 feet from the apex of the memorial walls. A 50-foot-high flagpole would be positioned 40 feet behind the apex. Both of these elements would need approval from the Interior Department, the Washington Fine Arts Commission, and the National Capitol Planning Commission.

Hart said that his sculpture "does not intrude or obstruct . . . does not attempt to compete or dominate," while Maya Lin said that the additions, "which treat the original work of art as no more than an architectural backdrop, reflect an insensitivity to the design's subtle spatial elegance."



Meanwhile, the Fine Arts Commission received hundreds of letters from throughout the country, many of them opposing the additions.

In October the Fine Arts Commission made its decision on the additions, approving them in concept but disapproving their proposed locations. After hours of testimony for and against the additions, and a trip to the site, the commission suggested that the sculpture, flagpole, and a name locator be used to "enhance the entrance experience to the memorial," in the words of commission Chairman J. Carter Brown.

Following the decision Maya Lin expressed relief "in a small sense," because of her concern that the new elements "not interrupt the memorial." Hart called the commission's decision "Solomon-like."

In December, a month after the memorial's dedication on Veterans Day weekend, then-Representative Donald Bailey (D.-Pa.) succeeded in passing a resolution in the closing hours of the 97th Congress that would override the author-

continued on page 384

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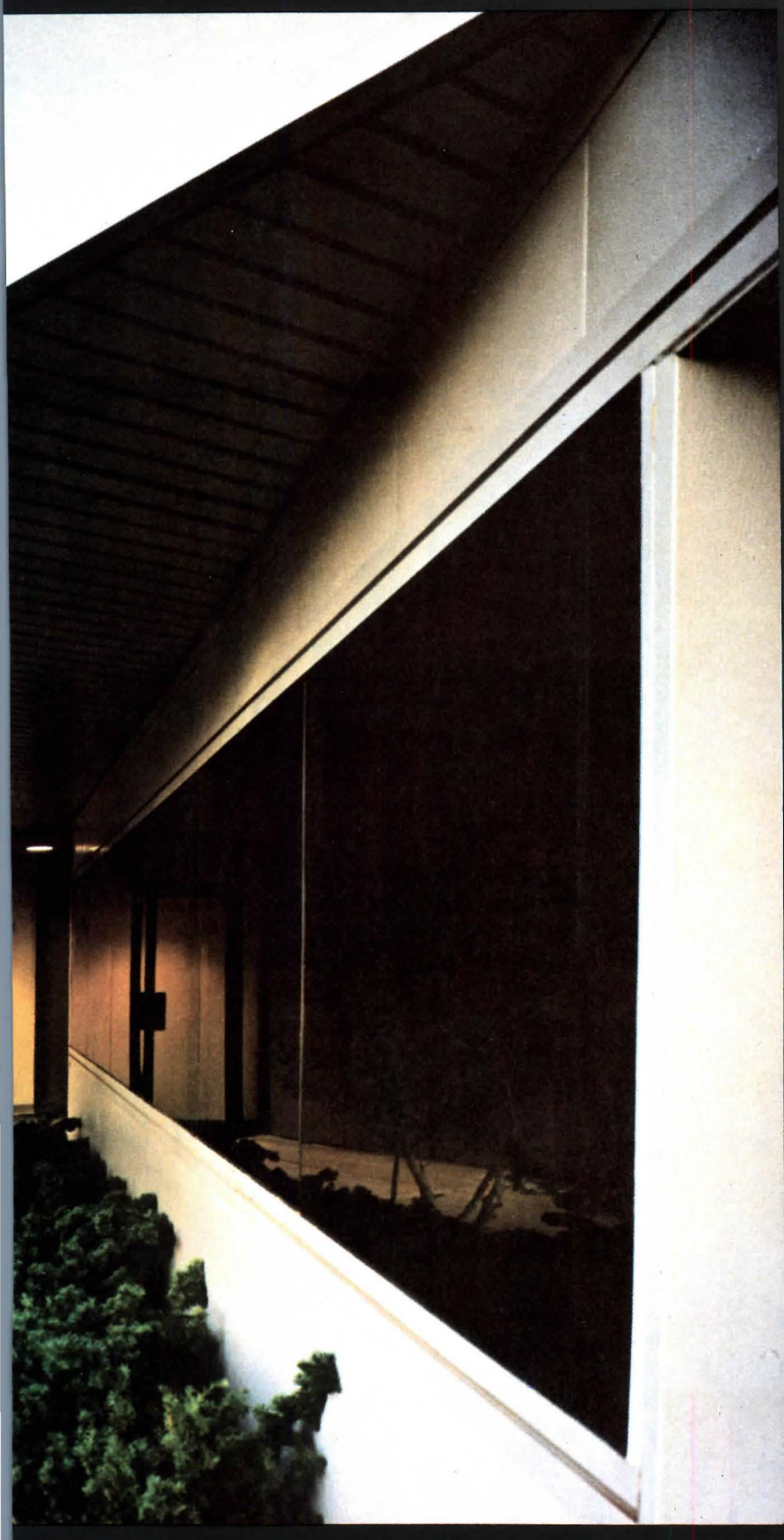

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Year's Review *from page 381*
ity of the Fine Arts Commission on the placement of the elements. The bill was blocked in the Senate.

Bailey's resolution called for the placement to be decided by the "Vietnam-era veterans of the United States, veterans service organizations, [and] theVietnam Veterans Memorial Fund...." The VVMF said that it had no knowledge of the resolution and did not condone it. The Vietnam Veterans of America and AMVETS supported the VVMF's position.

In February the Fine Arts Commission approved a siting plan for the elements near the entrance to the memorial. The flagpole is to be positioned at a projected new crossing of paved paths southwest of the walls, while the statue is to stand at the edge of a cope of trees 35 feet from the flagpole in line with the apex of the walls.

Chairman Brown praised the scheme, which was selected over two others: one placing the sculpture farther from the walls and the flagpole on the sidewalk of Henry Bacon Drive, and another that was virtually identical to the plan turned down in October.

In March the planning commission approved the siting plan, and the controversy, which has raged for more than a year, came to a quiet close.

Further Skirmishes Along 'the Main Street of the Nation'

Another theater of controversy in the capital was Pennsylvania Avenue, whose redevelopment began in 1963 and continues at a steady if stately pace.

A major addition to the avenue was proposed last year in the form of an arch 112 feet high designed by Conklin Rossant of New York City. A Navy memorial, the arch was to be built in Market Square at the foot of the planned Eighth Street corridor, facing the National Archives.

The proposal won preliminary approval by the Pennsylvania Avenue Development Corporation and the Fine Arts Commission but was killed in July after a barrage of criticism from the design community and a negative analysis of its size and suitability by the staff of the National Capital Planning Commission.

In March 1983, PADC gave preliminary approval to an alternative proposal by the same designer for a smaller-scale memorial consisting mainly of a circular, sunken plaza bearing wave-like forms sculpted in granite—plus the apparently obligatory flagpole and statuary.

PADC also stirred the embers of an earlier controversy involving Western Plaza, an elevated, unadorned space bearing the image of the L'Enfant plan for Washington in its paving. The original design called for little models of Washington landmarks such as the White House to be placed upon the plaza, and for pylons bearing passages from historic documents in huge blue letters to rise from it.

These elements were never built but last year PADC put a couple of full-scale mockups of the models on the plaza to see how they might look. There was no talk of reviving the idea of the pylons.

Other developments related to Pennsylvania Avenue during this past year included the unveiling by GSA of a master plan designed by Harry Weese & Associates of Chicago for the Federal Triangle. The proposal, which was approved by the fine arts and planning commissions, is a massive mixed use complex for an L-shaped site fronting the avenue at Western Plaza, and wrapping around the D.C. government building to 14th Street.

It would contain seven floors of office space above three of mixed use, with a high, glazed galleria for National Archive exhibits that would cut through the complex on a east-west axis.

Central to the concept is a series of pedestrian walkways that would link various "important destinations," in the architect's words. A competition is to be held for the final design of the building. □

Deaths *from page 55*
in the 1950s, after assuming the Harvard leaderships, that Sert's career as an architect blossomed. He designed a studio for Joan Miró and a house for Georges Braque. These led to commissions to design the Maeght Foundation and Miró museums. For Harvard he designed the Peabody Terrace Housing for married students, Holyoke Center, the Center for the Study of World Religions, and the Undergraduate Science Center. Across the river he designed numerous buildings for Boston University. Four of his buildings won AIA honor awards, and Sert, Jackson & Associates received the AIA firm award in 1977.

Sert retired from teaching in 1969 and from his architectural practice in the late '70s (although he remained a consultant to the firm). He moved to Spain last summer.

William H. Scheick, FAIA: Executive director of AIA from 1961-69, Mr. Scheick was also an educator, practitioner, and a leader in the research field. Born in Uniontown, Pa., he received a B.Arch. in 1928 from the Carnegie Institute of Technology and a M.Arch. in 1937 from the University of Illinois. He taught at Oklahoma A&M in 1929-30, and at the University of Illinois from 1930-1949. He also actively practiced architecture from 1935-44. While at Illinois he was director of the school's Small Homes Council (the housing research program). This led to his appointment as first executive director of the Building Research Advisory Board at the National Academy of Sciences in 1949 and the first executive director of the Building Research Institute in 1951. From 1958-60 he was the vice president in charge of research, Timber Engineering Co.

Succeeding Edmund Randolph Purves, FAIA, as the third executive director of the Institute, "he ushered the AIA and the profession of architecture into a new era, which reflected his background as an architect, educator, and researcher," said the Institute's current executive vice president, David Olan Meeker Jr., FAIA. Scheick served as an Institute counselor after his retirement from the directorship. A resident of Beaufort, S.C., he died on March 15 in Savannah at the age of 77.

Harold Bush-Brown, FAIA: From the mid-'20s until the mid-'50s, the period during which Mr. Bush-Brown was head of architecture at Georgia Tech, the program grew from a department into a school of architecture with an enrollment exceeding 450 students and was expanded to include industrial design and graduate studies in architecture and city planning. His professional practice was almost exclusively for Georgia Tech, and he was responsible, with faculty associates, for many of the early buildings on the campus.

Mr. Bush-Brown retired in 1956 and lived in recent years in Duxbury, Mass. His book, *Beaux-Arts to Bauhaus and Beyond,* was published in 1976. He died Feb. 27 in Duxbury at the age of 94.

Rockwell DuMoulin, FAIA, Wakefield, R.I.
Frederick I. Fryer, Bethesda, Md.
Walter M. Gaffney, Centerville, Mass.
R. L. Lukowsky, Long Island City, N.Y.
Jerry R. Rippa, Plainfield, N.J.
William R. Shirley, Millbrook, N.Y.
Joseph W. Staniford, Pasadena, Calif.
Harlow E. Walla, Vancouver, Wash.

BRIEFS

Lectures, Tours in Maryland.
The Center for Palladian Studies in America will hold its third annual conference and tour June 3-5 in Annapolis, Md. Tours will include the country estates of Wye House, Whitehall, and Tulip Hill. For more information, contact the center, P.O. Box 5643, Charlottesville, Va. 22905.

Harvard GSD Career Program.
The 11th annual career discovery program will be offered by the Harvard Graduate School of Design from July 7 to Aug. 12. The program includes studio projects, lectures, field trips, and personal career counseling in architecture, landscape architecture, and urban design/planning. Contact Admissions Office, Box 0, Harvard Graduate School of Design, 48 Quincy St., Cambridge, Mass. 02138.

European Study Programs.
Parsons School of Design is sponsoring European study programs with emphasis on the visual arts. The curriculum in Paris includes studies in the history of French architecture and decorative arts. The history of Italian architecture and contemporary design will be examined in Rome, Florence, and Venice. Contact Office of Special Programs, Parsons School of Design, 66 Fifth Ave., New York, N.Y. 10011.

England Study Tour.
The Victorian Society in America is sponsoring its ninth annual summer seminar July 9-29 to be held in London and the Midlands. The seminar is open to professionals and graduate students in art, architecture, and social history with interests in Victorian architecture.

Lighting Awards Program.
The International Association of Lighting Designers is sponsoring an awards program "to recognize lighting design in architecture and interiors that humanizes the given environment through esthetic achievement, backed by technical expertise." The program is open to architects, interior designers, engineers, and related professionals. The deadline is Aug. 12. Entry forms may be obtained from Stephen Lees, Jules G. Horton Lighting Design, 200 Park Ave. South, Suite 1401, New York, N.Y. 10003.

Lighting Design Competition.
General Electric is sponsoring a lighting design competition to recognize outstanding and innovative installations using GE's low voltage, precision beam lamps. The competition is open to all professional designers, architects, engineers, and consultants who have used "Precise" lamps in a project. Deadline for receipt of entries is Sept. 1. For more information, contact General Electric Co., Specialty Lamp Department, Nela Park #3372, Cleveland, Ohio 44112.

Housing Educators Meeting.
The American Association of Housing Educators is calling for papers for its annual meeting to be held at the University of Nebraska, Oct. 5-7. Papers will be considered on all topics relating to housing and may take theoretical quantitative, institutional, policy, or other perspectives. For more information, contact Dr. Lou A. Guthrie, Family Resource Management, Oregon State University, Corvallis, Ore. 97331.

Western Mountain Region Awards.
Denver architect William C. Muchow, FAIA, was awarded the Western Mountain Region/AIA silver medal for "his consistent design performance and his continuing influence throughout the region." Johnson-Hopson & Partners of Denver received the WMR/AIA architectural firm award.

Housing Handbook Available.
The National Housing Law Project has published *The Subsidized Handbook: How to Provide, Preserve and Manage Housing for Lower-Income People,* a 500-page guide that details housing production, acquisition, finance, tax laws, and management. It is available for $42.75 prepaid from the National Housing Law Project, 2150 Shattuck Ave., Suite 300, Berkeley, Calif. 94704.

Haj Terminal Film Available for Loan.
A 28-minute film examining the design and construction of the fabric roof of the Haj Terminal, Jeddah, Saudi Arabia (see page 276) was produced by Owens-Corning Fiberglas Corporation in cooperation with Skidmore, Owings & Merrill. It details the architects' design concept, highlights preliminary testing, and concludes with footage of the Haj Terminal during the 1981 fall pilgrimage. For more information, contact L. C. F. Meeks, Owens-Corning Fiberglas, Fiberglas Tower, Toledo, Ohio 43659. □

1

2

3

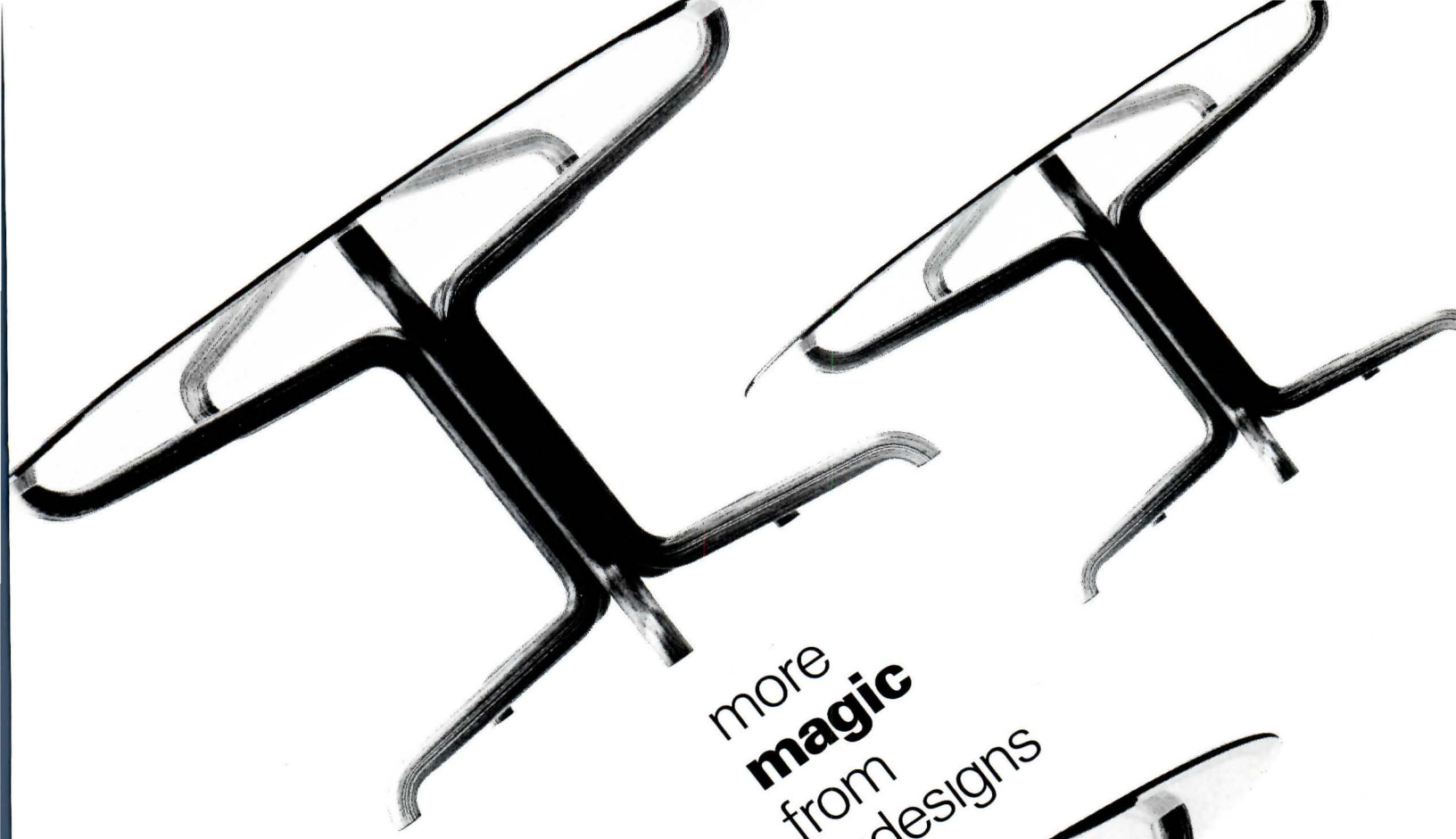
Furnishings

As resources for design and objects of design.
By Nora Richter Greer

Shown here are some current offerings of painted furniture by four New York City area artists. A whimsical approach is taken by Friedrich Gross. Born in Switzerland, Gross is striving to maintain the Swiss-German tradition of hand painted, decorative cabinets. The tradition involved presenting a young married couple with an armoire for linens on which was painted their name, date of marriage, and happiness symbols such as hearts and rising suns. The most recurring symbols in Gross's cabinets are cats, cows, and horses, as in the three pieces shown here: (1) Be Careful What You Eat, (2) Where is the Mouse? (3) My Vacation in Boston. The materials are acrylic and oil on newly designed and antique furniture. He also paints chests and fireplace mantels.

The trademark of Robin Mazey and Roy Schell are cutouts, such as the Toucan table and chair (4). They began by creating brightly painted mobiles and then transfered their skills to furniture. Their newest creations include a series of cutout Manhattan skyline consoles, toucan chairs, dressers, collapsible beds, and children's furniture.

The last of our artists is Lynn Shelton, whose geometrically decorated cabinets (5 and 6) offer an elegant simplicity. His technique involves painting on canvas or paper, attaching this to the surface of the wood and then applying several coats of lamination. An electrical engineer, he first began painting silk and cotton fabrics, and now, in addition to cabinets, creates screens, pedestal tables, and chests. □



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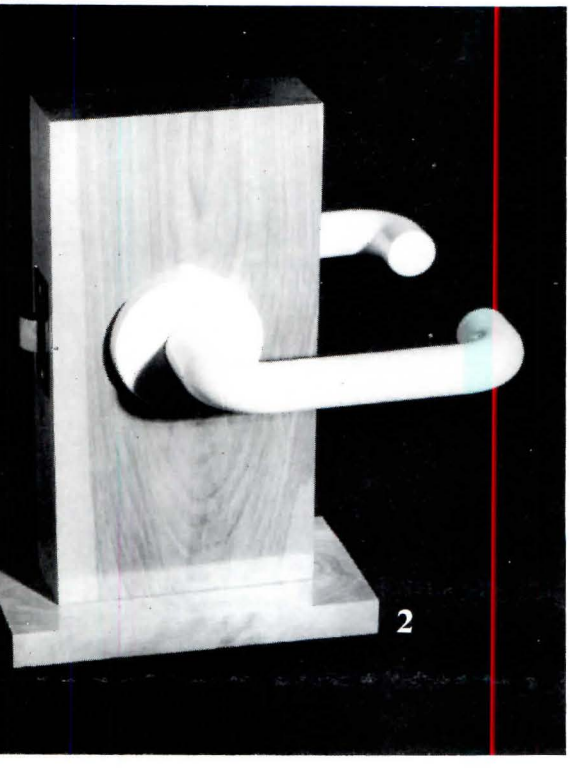
1

Products

A selection of notable offerings and applications.
By Lynn Nesmith



2

Classic American House note cards (1) designed by architect Jeffrey Milstein of Woodstock, N.Y., are die-cut, full color reproductions of a series of paper and cardboard doll houses designed to represent classic American architectural styles. There are six designs: New England colonial, Georgian, Greek revival, Gothic revival, Italianate, and second empire. Each card has a historical description of the style printed on the back. Bulk orders of six dozen or more are available from Paper House Productions, P.O. Box 172, Woodstock, N.Y. 12498. The set of six is available for $8 prepaid from the AIA Bookstore, Institute headquarters.

Door levers (2) by Normbau, constructed of injection-molded nylon with a solid colored core, meet requirements for barrier-free accessibility. The five-inch lever, designed for commercial and residential applications, is adaptable to standard interior and exterior doors with a 2⅛-inch precut bore. Levers are available in nine colors. (Circle 192 on information card.)

System 7 Doors (3) by Forms + Surfaces, constructed from single sheets of metal and bonded to 1¾-inch-thick wooden sub-frames, are available in stainless steel, anodized aluminum, and aluminum with acrylic colors. Doors are factory glazed with ¼-inch clear, bronze tint, gray tint, or reflective tempered plate glass set in black neoprene gaskets. (Circle 191.)

In the Ishihara residence (4) in Osaka, Japan, by architect Tadao Ando, a large central atrium space uses lateral rib glass block by Forms + Surfaces that provides a high degree of light transmission yet insures visual privacy. Rounded flutes on the inner faces of the blocks are at right angles to each other to diffuse light and generate light patterns. Glass block is suitable for exterior walls, interior partitions, and horizontal surfaces. (Circle 190.)

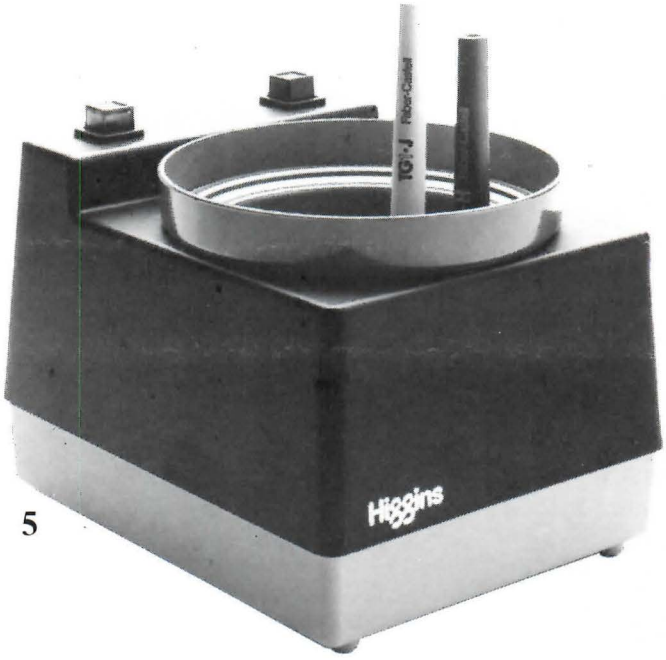
Higgins Pen Cleaner (5) by FaberCastell generates ultrasonic waves to dissolve ink deposits from technical pens, airbrushes, ruling pens, and small parts of other drawing instruments. The unit features a stainless steel reservoir and a lift-out tray with slots for holding fully assembled pens in place. (Circle 189.)

Italian ceramic tile by Ottanta Quatro (6) is designed with the look and texture of marble for bathroom floors and walls. The highly glazed tiles measure 8x10 inches. (Circle 188.)

Products continued on page 394

©Forms + Surfaces

3



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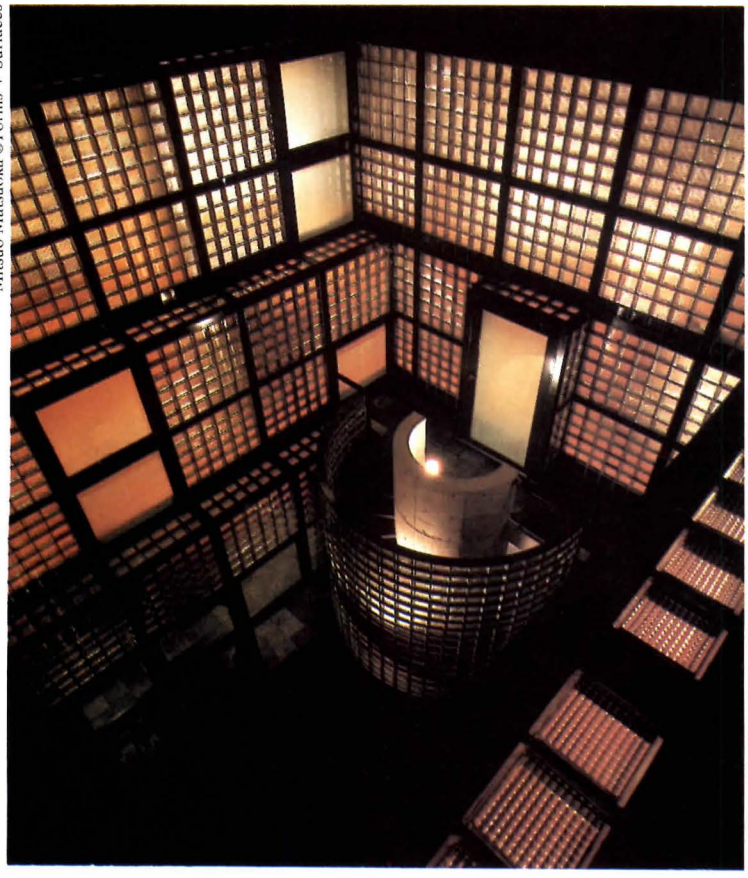


Mitsuo Matsuoka ©Forms + Surfaces

4

6

Fluorescent Lighting System.
Lighting fixture measuring 20x60 inches is designed to adapt to standard ceiling grids. It consumes 7 percent less wattage than the standard 48-inch fixture, and fewer units are required to light the average building, according to the manufacturer. (Columbia Lighting, N. 3808 Sullivan, Spokane, Wash. 99220.)

Multi-Location Dimming System.
Skylark SX³ Multistation remote control modular dimming system regulates incandescent and fluorescent lighting levels from 10 locations. With a bar-graph displaying the relative lighting levels, the system is designed for application in restaurants, auditoriums, theaters, churches, residences, etc., where lighting control is required from more than one location. (Lutron Electronics, Inc., Coopersburg, Pa. 18036.)

Seating System.
Laminated seating by Micro-Lam, is constructed of many thin layers of veneer coated with waterproof adhesives. It is available in lengths up to 80 feet and can be cut to fit most stadium seating foundations and bleacher frames. (Trus Joist Corporation, P.O. Box 60, Boise, Idaho, 83707.)

Corner Greenhouse Structure.
Commercial and residential installations (below) of solar enclosures and greenhouses feature aluminum jack rafters symmetrically connected to 2x2-inch aluminum square tubing for support of the corner glass panels and the structure. The system incorporates dense neoprene gaskets to create an insulating thermal break between glass and aluminum. (Habitek, Inc., 906 E. Main St., Norristown, Pa. 19401.)

Roofing Tiles.
Spanish "S" concrete roofing tiles (above) by Gory are available in a number of custom-flared, colored sealed finishes. The fireproof tiles are designed with an air space between the tile and subroof for increased insulation value. A single color or combinations are possible for residential, multifamily, or commercial applications. (Gory Roof Tile, 1773 N.E. 205th St., North Miami, Fla. 33162.)

Lighting Control Sensor.
An electric, infrared sensor is designed to automatically turn lights on when a person enters an office and turn lights off 12 minutes after the last person leaves the office. Infracon operates by sensing and responding to infrared heat given off by movement of a human body. The sensor features solid-state circuitry designed to be wired into new or existing lighting systems and is mounted in the suspended ceiling of an office. (United Technologies and Tishman Research, 666 Fifth Ave., New York 10103.)

Metal Faced Laminates.
Mettle Laminates, designed for tables, walls, doors, fascias, decorative columns, and store fixtures, are available in a variety of finishes including brushed brass aluminum, brushed aluminum, polished chrome, and several handcrafted copper and brass finishes. The laminates can be worked with standard woodworking tools and can be applied with most standard adhesive systems. Sizes are available in widths of 24 and 48 inches and lengths of 96 and 120 inches and in custom sizes. (The October Co., 51 Ferry St., Easthampton, Mass. 01027.)

Mobile Sound Dividers.
Portable dividers mounted on durable coasters feature solid aluminum frames with two layers of 1½-inch acoustical insulation and polyester fabric coverings in a selection of 27 colors. Individual panels measure 48 inches wide by 75 inches high and may be arranged in almost any configuration. Optional chalkboard and viewing screen are available. (Tibbet, Inc., 155 S. Superior St., Toledo, Ohio 43602.)

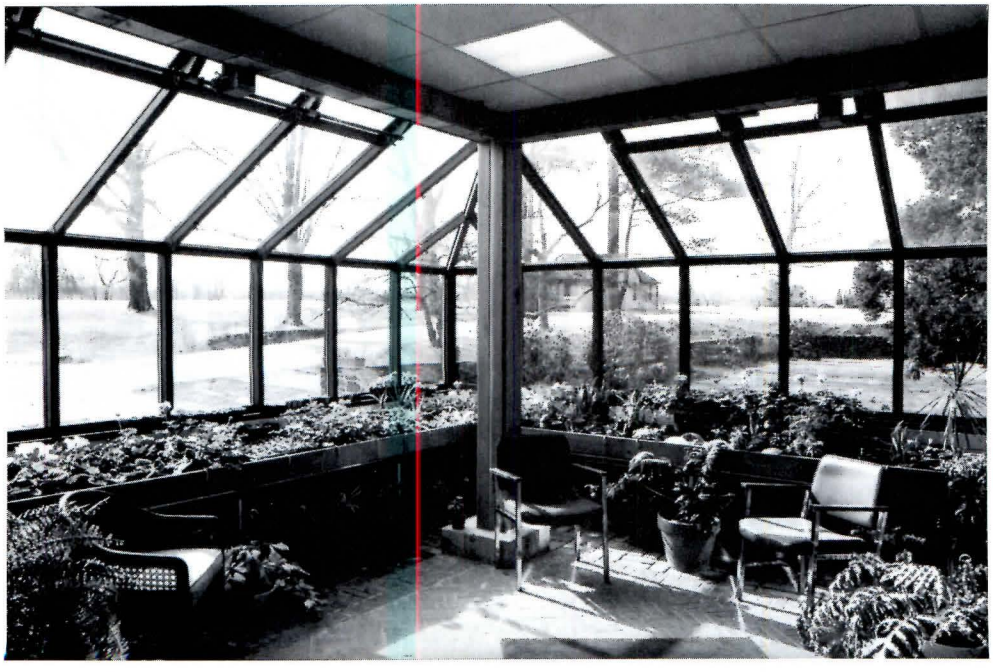
Acoustical Wall Panels.
Soundsoak panels by Armstrong are constructed of a mineral substrate with a woven fabric facing. The panels measure 30 inches wide and 9 feet high and are available in 16 colors. (Armstrong World Industries, P.O. Box 3001, Lancaster, Pa. 17604.)

Roofing Insulation.
A facing of latex modified concrete mortar is bonded to two- or three-inch-thick boards of Styrofoam brand insulation. The panels measure 2x4 feet and feature tongue and groove edges. The mortar facing provides a smooth surface appearance and is designed to allow light foot traffic. (Dow Chemical Co., 2020 Dow Center, Midland, Mich. 48640.)

Exterior Window Shades.
Luxalon sun louvers are designed to shield direct sunlight in summer, permit lower winter sunlight to enter. The natural air flow is not interrupted and the view from within the building is unobstructed. The panel carrier and panel louvers, constructed of a corrosion-resistant aluminum alloy, are available in a variety of colors with five types of carriers including two for vertical applications. (Hunter Douglas Architectural Building Products, 87 Rt. 17, Maywood, N.J. 07607.)

Exterior Blinds.
Baumann Noval Exsotrol solar control blinds are for heavy duty, exterior applications. They feature wide, roll formed aluminum slats, factory coated with a siliconized polyester finish in a variety of standard colors. Alternate slat ends are held by a sliding lock bolt in side guides to prevent flapping or rattling. The blinds can be hand- or motor-operated or controlled by a computerized central command system. (Baumann, Inc., 1301 N. Main St., Wauconda, Ill. 60084.)

Products continued on page 396



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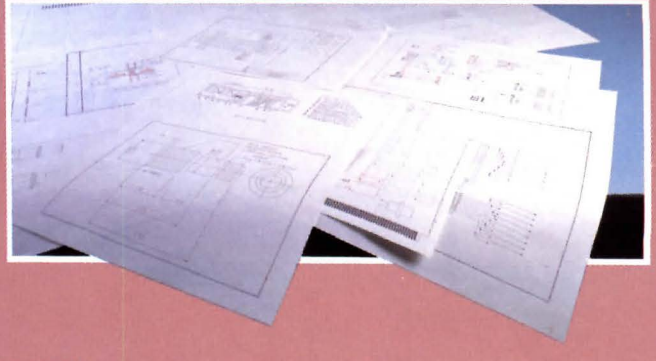

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Products *from page 394*

Low Voltage Lighting Fixture.
Odyssey fixtures feature bright, quartz-halogen Precise lamps with full spectrum color rendition. An integral power pack, hidden within the fixture, converts standard power to the 12-volt operating current. A weighted canopy base allows for ceiling, wall, or track-mounting. (Capri Lighting, 7020 E. Slauson, Los Angeles.)

Paint Collection.
Fuller-O'Brien Paints' Cape May Victorian collection (below) features 70 colors reminiscent of the bold hues of the late-19th century. The color palette, named after the seaside resort in New Jersey, is being used in the restoration of Victorian-style houses, hotels, and other buildings in the area and has been endorsed by the city's Historic District Commission. The paints are available for interior and exterior application in flat, satin, semigloss, and gloss finishes. (Fuller-O'Brien Paints, 450 E. Grand Ave., San Francisco.)

Window Insulating Film.
SunGain film by 3M is designed to provide insulation without reducing light and energy transmission. The specially coated plastic film is suspended between two panes of sealed glass. (3M, P.O. Box 33600, St. Paul, Minn. 55133.)

Prefabricated Drainage Structure.
Miradrain subsurface drainage system features a three-dimensional plastic core covered on one or both sides with a fabric filter. It is designed to allow water to pass into the drain core while preventing soil particles from entering and clogging the system. The system can be used in retaining walls, foundations, embankments, athletic fields, roof gardens, and pavements. (Marafi, Inc., P.O. Box 240967, Charlotte, N.C. 28224.)

Etched Metals.
Lunstead etched and polished metals are designed for walls, counter tops, door panels, columns, fireplace hearths, and trim pieces. Panels are available in square and rectangular custom cut sizes with etched brass, etched pewter, polished brass, and polished chrome finishes. The etched brass and pewter stock sheets feature a polyurethane protective coating. The polished brass is coated with a heat-baked lacquer. (Harry Lunstead Designs, Inc., 8655 208th St., Kent, Wash. 98031.)

Window Frame System.
Thermoplastic window frame system features unitized construction with five still-air chambers. Snap-in construction for glass stops, nail fins, and expansion strips is designed to provide easy installation. (Artek Industries, 23890 Industrial Park Dr., Framington Hills, Mich. 48024.)

Cavity Wall Insulation.
Frothane injected insulation is a two-component isocyanurate pour foam process designed for masonry and stud cavity wall assemblies in retrofit and new construction. It expands to form a monolithic, closed cell, rigid plastic insulation. (Therma-Froth Systems, Inc., 99 Collier St., Binghampton, N.Y. 13901.)

Cedar Shingles.
Fancy Cut shingles from Shakertown Corporation, designed for interior and exterior installations, are available in nine patterns. The 5x18-inch shingles are cut from Western red cedar with a vertical grain. Eight-foot panels are available for large coverage. Exposed surfaces may be painted, stained or left natural. (Shakertown Corporation, P.O. Box 400, Winlock, Wash. 98596.)

Reinforcing Wall Fabric.
A flexible reinforcing fabric for exterior wall systems, Iron Grid, is made of a woven glass fiber material with a proprietary coating. The fabric bends around corners and can be overlapped in double layers for increased support. (Syenergy Methods, Inc., 1367 Elmwood Ave, Cranston, R.I. 02901.)

Self-Contained Wash Centers.
Bradpack Wash Centers are available in 17 models that conform to barrier-free requirements. The preassembled units combine several washroom-related functions into a single self-contained system designed to reduce installation costs. (Bradley Corporation, 804 East Gate Dr., Mt. Laurel, N.J. 08054.)

Suspended Wood Beam Ceiling.
Kern Wood Beam Ceilings feature four-inch-wide custom made beams constructed of solid oak and left unstained to match existing cabinets and woodwork. Any brand of ceiling tiles or light panels may be used with the ceiling system. (Kern Wood Beam Ceilings, 515 N. Victory Blvd., Burbank, Calif. 91502.) □

Credits and Specifications

Beneficial Center Corporation Headquarters, Peapack, N.J. (page 220). *Architect: Hillier Group, Princeton, N.J.; Innerplan (interiors).* Brick: Glen-Gary. Caulking, sealants, gaskets: Tremco. Copper sheet metal: J. P. Fyfe. Skylights: Fisher Skylights. Metal decking: Robertson. Entrance doors: Kawneer. Rolling doors and grilles: Jim Walter Doors. Aluminum windows: Wasco Metal Co. Hardware: Stanley. Ceilings: Manville. Gypsum drywall: U.S. Gypsum. Paneling: Custom. Wall and floor facing tile: American Olean Tile. Flooring: American Olean Tile. Carpet tile: Milliken. Signs and directories: Spanjer. Lockers: Penco Products. Office furniture (chairs and tables): Kawneer. Telephone equipment: N. J. Bell. Elevators: Dover. Telelift: Mosler.

Best Products Corporate Headquarters, Richmond, Va. (page 250). *Architect: Hardy Holzman Pfeiffer Associates, New York City.* Client: Best Products Co. Structural engineers: LeMessurier Associates/SCI. Mechanical and electrical engineer: Site Utilities and Lehr Associates. Landscape architect: Villa/Sherr Associates. Construction manager: McDonough Construction Co. Structural steel studs: United States Steel. Concrete: Lone Star Cement. Gypsum board: U.S. Gypsum. Windows: PPG. Skylights: Wasco Skylights. Doors: International Door Co., Allied Bronze, Williamsburg Door Co. Ceiling surfacing: U.S. Gypsum. Roofing: Trocal/Dynamit-Nobel Co. Insulation: Owens-Corning Fiberglas. Movable partitions: Owens-Corning Fiberglas. Paint and stain: Glidden Paint Co. Hardware: Hager Hinge Co., Russwin Hardware, LCN. Kitchen equipment: Gaylord Guardian, Hobart. Elevators: Dover. Lighting: Central City Electric Co., Edison Price Co. Plumbing and sanitary: American-Standard. Water fountains: Halsey Taylor. Sprinklers: Viking. Heating/airconditioning: McQuay Manufacturing Co. Carpeting: Mohawk Carpet. Lamps: Kenroy Lighting Co., Nessen Lamps. Open office/work stations: Xception. Desks: Hardwood House. Files: All-Steel. Acoustical panels: Owens-Corning Fiberglas. Tables: ICF, L&B Products, Berco Industries. Seating: Vecta Contract, Brayton International, B&B America, David Edwards, Knoll International. Chairs: David Edwards, Hardwood House, Stow/Davis, Thonet Industries, Hank Lowenstein, Jasper Seating Co.

Board of Trade Addition, Chicago (page 152). *Architect: A joint venture of Murphy/Jahn, Shaw & Assoc., and Swanke Hayden Connell. Architect of original: Holabird & Root.* Curtain wall: Bruce Eng. Co. Glazing: PPG. Skylight: IBG International. Skylight glass: PPG. Limestone: Indiana. Steel: Bethlehem Steel. Roofing: Follansbee. Dry wall: U.S. Gypsum. Marble: Vermont Marble. Acoustic ceiling: Chicago Metalic. Acoustic tile: U.S. Gypsum. Insulation: U.S. Gypsum. Elevators and escalators: Westinghouse. Sealants: Tremco, Sonneborn. Silicone struct sealants: General Electric. Rolling door: Cookson. Paint: Tremco, Glidden, Benjamin Moore, Lambert. Spray fireproofing: W. R. Grace. Hardware: Schlage, Brookline. Hollow metal doors and frames: Superior. Revolving doors: Crane Fulview Doors. Toilet partitions: Global. Toilet accessories: Bradley. Curtain wall insulation: Owens-Corning Fiberglas. Venetian blinds: Levolor Lorentzen.

California State Capitol, Sacramento, Calif. (page 266). *Architect: Welton Becket Associates, Santa Monica, Calif.*

continued on page 400

Specifications *from page 399*
Historical consultant: Raymond Girvigian, FAIA, Client: Joint Rules Committee, California State Legislature. Owner's representative and historical consultant: John C. Worsley, FAIA. Structural engineer: URS/John A. Blume Associates. Mechanical engineer: F. M. Booth. Electrical engineer: Stein Electric. Landscape architect: State Landscape Architect. General contractor: Swinerton & Walberg and Continental Heller, Inc. Cast ironwork: Knight Foundry. Precast plaster: Leyva's Ornamental Staff. Woodwork: Burnet Miller & Sons. Fireplace mantel restoration and carving: American Marble & Onyx. Manufactured ceramic tile: Heath Ceramics. Historic Wilton carpet reproduction: Bloomsburg Carpet. Museum historical carpets: Scalamandré Carpets. Restoration furniture: Bristol Antiques. Historical lighting fixtures: ELA Custom Division.

Coxe/Hayden House and Studio, Block Island, R.I. (page 260). *Architect: Venturi, Rauch & Scott Brown, Philadelphia.* Design: Robert Venturi, FAIA. Project architect: Frederic Schwartz. Client: Weld Coxe and Mary Hayden. Structural engineer: Keast and Hood Co. Mechanical and electrical engineer, general contractor: Donald M. Coxe. Landscape architect: Jeanne Schlesinger. Interiors: Dian Boone. Energy: Total Environmental Action. Washer/dryer: Westinghouse. Paint: Buten, Benjamin Moore. Plastic laminate: Formica.

Crocker Center, San Francisco (page 174). *Architect: Skidmore, Owings & Merrill, San Francisco; Gensler & Associates (Interiors), San Francisco.* Glass: PPG. Granite: Texas Granite. Finished metal: C. E. Toland & Sons. Ceiling tiles: Pitcon Industries. Elevators, escalator: Westinghouse. Doors: Automatic Doors. Marble, travertine: Western Art Stone. Toilets, sinks: American Standard. Lighting: Omega, Capri, Peerless, Columbia, Prescolite, Lightolier, Wellmade. Skylight: Super Sky. Tile: Durable Tile. Hardware: LCN, Rixson, McKinney, Glynn-Jackson, Falcon, Pemko. Insulation: Owens-Corning Fiberglas. Carpets: Karastan. Office system: Knoll. Desks: Dunbar. Chairs, tables: Stow/Davis, Knoll, Kittinger, Brickwell, Zographos, Baker. Wallcoverings: Scalamandre, DM Fabrics, Randelph & Hein, Jack Larsen.

The Crystal Pavillion, Crown Center Plaza, Kansas City, Mo. (page 214). *Architect: Jack L. Gordon Associates, New York City; Harper & George (interiors) New York City.* Skylights: Super Sky Products. Steel: Builders Steel Co. Exterior aluminum walls: A. Zahner Sheet Metal. Glazing: Atlas Glass. Doors and windows: Atlas Glass. Glass: PPG. Drapery for skylight: General Drapery Service. Sprinklers: American Fire Sprinkler Corp. Tile: American Olean Tile. Table tops: Kneedler-Fauchere Imports. Table bases: L & B Product Corporation. Pedestal: Florentine Craftsman. Chairs: Kneedler, Shelby Williams, Claud Bernyard Designs. Bar stools: Kneedler. Cocktail stools: London Marquis, Inc. Fabrics: Baussaca France, Howard & Schaeffer, Thomas K. Smith, P. Kaufman, Papiers Paints, Covington Fabrics, Cohama Specifier. Antique units: R&G Ltd. Glass: PPG. Paint: PPG. Caulking: General Electric. Sprinkler: Grinnell. Sprinklers: Viking. Metal doors and frames: American Weld Metal. Pivots: Rixson. Convector grill: Tuttle & Bailey. Concrete: Fordyce. Lighting: Lightolier, Perfect Light, Neo Ray, Burger Art Metal, C. J. Lighting.

Cushwa-Leighton Library, St. Mary's College, Notre Dame, Ind. (page 226). *Architect: Woollen, Molzan & Partners, Inc., Indianapolis, Ind.* Shingles: Vermont Slate. Brick: Sioux City Brick and Tile. Doors, windows, and frames: Kawneer. Carpet: Mohawk. Light fixtures: Light Control, Lightolier. Single membrane roof: Trocal. Ceiling grid: Donn. Acoustic tile: U.S. Gypsum. Insulation: Dow, U.C. Industries. Masonry damp proofing: Hydrozo Coatings. Wood doors: Weyerhaeuser. Glazing: LOF. Temperature control: Johnson Controls. Sealants: Tremco, Sonneborn. Handrail: Evans Metal. Elevator: Westinghouse. Security system: Simplex. Library furniture: John Adden Associates.

Douglas County Administration Building, Castle Rock, Colo. (page 270). *Architect: Hoover Berg Desmond, Denver.* Client: Board of Commissioners, Douglas County. Structural engineer: KKBNA, Inc. Mechanical and electrical engineer: Swanson-Rink & Associates. General contractor: Fischer-White Contractors, Inc. Split face and ground face concrete block: Denver Brick and Pipe Co. Glazed concrete block: Spectra-Glaze. Pre-formed metal cornice: Concord Metal Corporation. Aluminum windows and storefront: Amarlite Anaconda. Horizontal louver blinds: Levolor Lorentzen. Elastic sheet roofing: Trocal. Plastic skylight: Plasticrafts. Suspended acoustical ceilings: Conwed. Vault doors: Diebold. Lighted handrails: Zimmerman Metals, Inc. Passenger elevator: Dover Corporation. Water repellant masonry coatings: Chemstop. Carpeting: Milliken. Quarry tile: Summitville. Ceramic mosaic tile: American Olean Tile. Plastic laminate: Formica. Simulated marble sills: Mir-Mar Corporation. Builders hardware: Russwin, Hager Hinge Co., Von Duprin, Rixson, Pemko, Glynn-Johnson. Architectural lighting: Columbia, Lightolier, Prescolite, A.S.I. Sign Systems, Acme. Rooftop HVAC units: Lennox. Plumbing fixtures and trim: Kohler. Water fountains and coolers: Haws.

The Elliott House, Ligonier, Pa. (page 194). *Architect: Jefferson B. Riley, AIA, Moore Grover Harper, Essex, Conn.* Windows: Pella. Roof: Manville. Hardware: Baldwin. Lighting: Progress, Prescolite. Slate floor: Vermont Slate. Insulation: Manville, Dow. Stucco wall: Dryvit. Sealants: GE, Pecora. Skylights: Wasco. Paint: Pratt & Lambert. Plumbing fixtures: Kohler, American Standard.

Fisher Winery, Santa Rosa, Calif. (page 211). *Architect: William Turnbull, FAIA, MLTW/Turnbull Associates, San Francisco.* Door and window hardware: Stanley. Hinges, catches: Amerock. Countertops: Formica. Membrane waterproofing: W. R. Grace. Rigid insulation: United Foam Corporation. Sealants: PRC. Sash balances: Duplex. Aluminum doors: Fentron. Locksets: Schlage. Butts: McKinney. Barn door: Richards Wilcox. Weather strip sets: Pemko. Padlocks: American. Door stops: Quality. Push pulls: Builders Brass. Special lock set: Weiser. Tile: American Olean Tile. Sheet flooring: Lonseal. Paint: Martin Senour. Stain: Olympic. Toilet accessories: Nutone. Fireplace: Majestic. Electric switchplates: Slater. Plumbing fixtures: Kohler. Sinks: Elkay. Fittings: T&S Brass, Chicago Faucet. Appliances: Kitchen Aid.

Four Leaf Towers, Houston (page 168). *Architect: Cesar Pelli & Associates, New Haven, Conn.* Appliances: General Electric. Heat and airconditioning: Carrier, McQuay, Baltimore Air Corporation. Glass for shower doors and mirrors: PPG. Gypsum board: U.S. Gypsum. Elevators: Westinghouse Elevator. Switch gear: ITE. Light fixtures: Lightolier, Lithonia.

Haj Terminal, Saudi Arabia (page 276). *Architect and engineer: Skidmore, Owings & Merrill, New York City and Chicago.* Client: International Airport Projects, Ministry of Defense and Aviation, The Kingdom of Saudi Arabia, Brigadier General Said Y Amin, Director. Partners in charge: Gordon Wildermuth, AIA, Roy O. Allen, Raul De Armas, Gordon Bunshaft, FAIA, Parambir Gujral, Fazlur Khan, John Winkler, AIA. Construction manager: Saudi Arabian Parsons Ltd. and Daniel International Ltd. General contractor: Hochtief AG. Fabric roof system contractor: Owens-Corning Saudi Co. Engineering consultants: URS Corporation and Geiger-Berger Associates. Structural steel: Nippon Kokan K.K., Mitsubishi. Structural cable: Chiers-Chatillon-Gorcy. Structural cable coater: Owens-Corning Saudi Co. Fabric roof fabricators: Owens-Corning Fiberglas Corporation, Birdair Structures (Division of Chemfab).

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*Tile Council of America, Inc. 1979 Comparison Report.

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Specifications *from page 400*
Fabric roof panel: Owens-Corning Fiberglas Corporation, Birdair Structures. Fabric: Owens-Corning Fiberglas Corporation, Chemical Fabrics Corporation. Fabric weaver: Chemical Fabrics Corporation. Beta yarn: Owens-Corning Fiberglas Corporation. Teflon: E.I. du Pont de Nemours & Co. Special erection equipment: SIARGA Int'l. Special tooling: Schueler-Leukart.

Hartford Seminary, Hartford, Conn. (page 264). *Architect: Richard Meier & Partners, New York City.* Client: Hartford Seminary. Structural engineer: Severud-Perrone-Szegezdy-Strum. Mechanical and electrical engineer: Cosentini Associates. Landscape architect: The Office of P. DeBellis. General contractor: Charles Jewett Corporation. Acoustic ceiling: Alcan Planar Ceiling System (meeting room only). Light fixtures: Edison Price, Columbia Lighting, Lite Control, Keeline, Keene, Work-o-lite, Aldo Manufacturing, Sterner, Street Lighting. Chairs and tables: Scandinavian Design (Alvar Aalto, designer). Desks, desk chairs, steel files: Steelcase. Folding tables: Lammhults. Side chairs, armchairs: Hazen's Inc. (Marcel Breuer, designer). Banquettes: Citron Upholstery (Richard Meier, designer). Banquette fabric: Gretchen Bellinger, Inc. Bench, lecterns, conference tables, liturgical table: The Hartford Builder's Finish Co. (Richard Meier, designer). Sealant: G. E. Silicone. Room shades: Epstein Brothers. Motorized shades: General Drapery. Chapel Cross: Treitel-Gratz Co., Inc. (Richard Meier, designer). Bathroom fixtures: Kohler. Panels: Wolverine Porcelain & Enamel. Glass: PPG. Windows: Alumiline. Hardware: Russwin. Gypsum board: U.S. Gypsum. Carpet: Mohawk. Wood floors: Dixon Brand Flooring. Roofing: Celotex. Skylights: Supersky. Quarry tile: American Olean Tile. Elevators: General Elevators. Cabinets: Hartford Builders Finish.

Immanuel Presbyterian Church, McLean, Va. (page 265). *Architect: Hartman-Cox, Washington, D.C.* Structural engineer: James Madison Cutts. Mechanical and electrical engineer: Girard Fox Ltd. Landscape architect: Lester Collins. General contractor: Schoolfield Construction. Gypsum board: U.S. Gypsum. Double hung wood windows: Delmarva Millwork Corporation. Plastic laminates: Nevamar. Paint: Duron. Roofing: CertainTeed. Insulating glass: Guardian. Brick: Glen Gery Corporation. Plumbing fixtures: American Standard, Elkay. Hot water heaters: A. O. Smith. Light fixtures: Robert Long, Edison Price, Lightolier, General Electric, Dual-lite, Wiremold. Builders hardware: Von Duprin, Schlage, McKinney, Rixson, Russwin, Ives, Lindstrom, National Guard Products, Norton.

Live Oak Point Retreat Boathouse, Rockport, Tex. (page 208). *Architect: Charles Tapley Associates, Houston.* Sliding windows: Andersen. Door hardware: Richards, Wilcox, Merit, Schlage. Asbestos vinyl floor: Azrock. Kitchen unit: Dwyer. Exhaust fan: Dayton. Toilet: American Standard, Rheen, Speakman. Electrical fixtures: Abolite, Wright light, Lightolier, Stonco. Plastic laminate: Wilsonart.

Luzerne County Community College, Nanticoke, Pa. (page 202). *Architect: Bohlin Powell Larkin Cywinski, Wilkes-Barre, Pa.* Exterior masonry, walls: Scranton Block Co. Metal and curtain wall: Custom Hollow Metal, Doral Manufacturing. Insulation: Manville Corporation. Spray-on weatherproof: Prime-a-pell. Caulking: Pecora. Roof: Carlisle Rubber. Sloped metal roof: H. H. Robertson. Glazing: PPG. Hardware: Russwin, McKinney. Ceilings: Armstrong. Toilet partitions: Sanymetal. Porcelain on steel whiteboard: Alliancewall. Vinyl wallcovering: Borden. Plastic laminate: Nevamar. Tile: American Olean Tile. Carpeting: Lees. Signs: Andco. Auditorium seating: Irwin. Airconditioning: Carrier. Fixtures: American Standard. Auto temp control: Honeywell. Stackable chairs: American Seating. Security controls: Rixson-Firemark. Dry wall: U.S. Gypsum. Bathroom accessories: Bobrick. Drinking fountains: Haws. Valves: Sloan. Light dimmers: Lutron.

Mecklenburg County Courthouse, Charlotte, N.C. (page 257). *Architect: Wolf Associates, Charlotte, N.C.* Client: Mecklenburg County. Structural engineer: King-Guinn Associates. Mechanical engineer: James A. Story & Associates. Electrical engineer: Bullard Associates. Landscape architect: Arnold Associates. General contractor: Parke Construction Co. Glazing: L.O.F. Elevators: Dover. Finished hardware: Schlage, Rixson. Acoustical ceiling: Armstrong. Lighting fixtures: Columbia, Lightolier, Lithonia, Kurt Verson. Stone: Cordova Shell Limestone. Concrete form work: Ceco. Carpet: Patrick. Ceramic tile: American Olean Tile. Sealants: Thiokol. Fixtures and cabinetwork: Adleta Fixture Co. Glass doors: Virginia Glass. Insulation: Dow.

One South Wacker, Chicago (page 160). *Architect: Helmut Jahn, AIA, Murphy/Jahn, Chicago.* Roofing: Tremco. Curtain wall: Cupples. Glazing: PPG, LOF, Guardian. Insulation: Dow Chemical, U.S. Gypsum. Sealants: DAP, Pecora, General Electric. Entrance doors: Ellison. Revolving doors: International Steel. Overhead doors: Overhead Door, Kinnear. Hardware: Schlage, Sargent, Brookline, Glynn-Johnson. Skylight: IBG International. Dry wall and plastering system: U.S. Gypsum. Ceramic tile: American Olean Tile. Acoustic ceiling: Armstrong Cork. Marble: Vermont Marble. Paint: Pittsburgh Paint, Benjamin Moore, Pratt & Lambert. Vinyl tile: Armstrong Cork. Vinyl base: VPI. Blinds: Levolor Lorentzen. Floor mats: Reiss Enterprises. Plumbing fixtures: Kohler.

Portland Building, Portland, Ore. (page 232). *Architect: Michael Graves, FAIA, Princeton, N.J.* Client: City of Portland Public Buildings. Project manager: Lisa F. Lee. Associated architects: Emery Roth & Sons and Edward C. Wundram. Structural engineer: DeSimone & Chaplin & Associates. Mechanical engineer: Thomas A. Polise. Electrical engineer: Cosentini Associates. General contractor: Pavarini-Hoffman. Construction manager: Morse Diesel, Inc. Insulation: Owens-Corning Fiberglas. Sheet membrane: Koppers. Caulking: Tremco. Tile: Gail. Doors: Styles. Aluminum windows: Alcoa. Hardware: Yale. Ceiling: Owens-Corning Fiberglas. Plaster: U.S. Gypsum. Toilet partitions: Sanymetal. Paints: Rhodda Paint Products. Vinyl wall coverings: Owens-Corning Fiberglas. Tile: Gail Tile, American Olean Tile. VAT: Kentile. Carpet: Trend Carpet. Airconditioning: Trane Filter. Glass curtain wall: Alcoa, Guardian. Entrances: Kawneer, Cascade. Glass: PPG, Guardian, Cascade. Plastic laminate: Formica. Boilers: Brasch. Pumps: Weinman. Air filters: Farr. Louvers: Air-o-Lite. Fibration control: MacDougal. Ventilators: Trane. Mixing boxes: Temp-Master. Toilet fixtures: Eljer. Sprinklers and standpipes: Fireguard. Panel boards and wiring: Westinghouse. Lighting fixtures: Columbia, Lobby Lighting, Lightolier. Fire alarm system: Simplex. Elevator: Otis.

Soundstage, Dallas (page 217). *Architect: Growald Architects, Fort Worth, Tex.* Hardware: Hager, Corbin. Rolling steel doors: Windsor Door. Mounting pads: Vibration Mountings. Acoustical isolator hanger: Mason Industries. Steel cable trays: Square D. Ceiling hangers: Target. Toilet accessories: Bobrick. Silicone RTV foam: Dow Corning. Plastic laminate reception desk: Nevamar. Ceiling tiles: Armstrong. Floor tiles: Dal-Tile. Stucco: Tex-Star, Lone Star. Wood floors: Horner Flooring. Sound retard doors: Protective Door. Doors: Ellison. Subway Door: Forms + Surfaces. Store front system: Amarlite. Roof scuttle: Bilco. Flooring VAT: GAF. Flooring base: Roppe. Tem-

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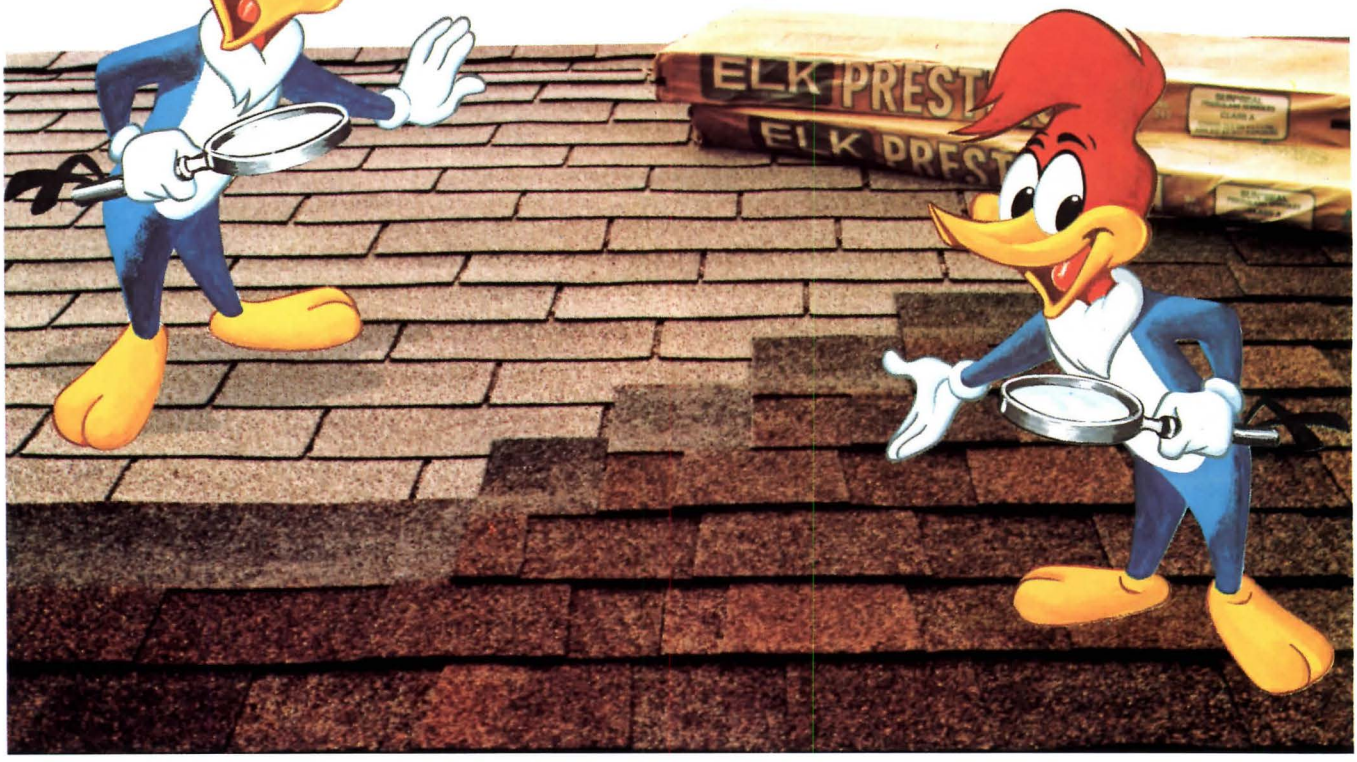

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Specifications *from page 402*
perature controls: Johnson Controls. Plastic laminate: Wilsonart. Sealants and caulking: Pecora.

Stock Exchange Building, Philadelphia (page 184). *Architect: Cope Linder Associates, Philadelphia.* Exterior precast concrete: John W. Caldwell Corporation. Aluminum windows: PPG. Glass: PPG. Roofing: Celotex. Insulated roof fill: W. R. Grace. Building insulation: Owens-Corning Fiberglas. Skylight: EPI Architectural Systems. Heat pumps: Friedrich. Fountain equipment: Kim Lighting. Lighting fixtures: Lightolier, Perko, Metalux, Gibson, Crouse-Hinds, Halo, Yorklite. Elevator equipment: Schindler-Haughton. Elevator cabs (regular): Brice Southern. Elevator cabs (glass): Globe-Van Doorn Corporation. Hardware: Schlage, Hager, Stanley, Pemko. Millwork: Superior Millwork Co. Paint: M. A. Bruder. Ceramic tile: American Olean Tile, Midstate Tile. Paver tiles: Metropolitan Ceramics, Summitville Tiles. Acoustical ceilings: Armstrong. Aluminum ceiling panels: Alcan Aluminum Products. Graphic lettering: Spencer Industries. Vinyl wallcovering: Genon Wallcovering.

Suntech Townhomes, Santa Monica, Calif. (page 272). *Architect: Urban Forms, Los Angeles.* Draftsman/Designer: David Van Hou and Steve Andre. Client: Urban Forms/John Kaufman. Structural engineer: Steve Mezy. Mechanical engineer: Richard Felix. Electrical engineer: Art Patton. Landscape architect: Emmit Wemple. General contractor: Urban Forms. Specifications not available.

YWCA Materson Branch and Office Building, Houston (page 254). *Architect: Taft Architects, Houston.* Client: YWCA. Structural engineer: Karl Krause Engineers. Mechanical and electrical engineer: MNM Associates. General contractor: Volume Builders. General contractor for swimming pool pavilion: Creole Investment Corporation. Steel studs: Buckner Steel. Lightweight concrete on metal deck: Grefco. Stucco exterior on metal lath on gypsum board sheathing: U.S. Gypsum. Ceramic tile: American Olean Tile, Gladding McBean. Interior gypsum board walls: U.S. Gypsum. Hollow metal window frames: Texsteel. Tinted glass: Solex, PPG. Aluminum entrance doors: Amarlite. Interior folding doors: Pella. Aluminum overhead doors: Overhead Doors. Concrete floor stains, interior: Scofield Stain. Tile floors: American Olean Tile. Sports floor: Sport Tred, Campo Industries. Gypsum board and suspended acoustical ceiling: U.S. Gypsum, Conwed. Built-up roofing: Celotex. Sealants: Thiokol, Pecora. Batt insulation: Owens-Corning Fiberglas. Paint: Cook, Du Pont. Hinges: McKinney. Exterior locksets: Adams Rite. Interior locksets and door closers: Sargent. Exit devices: Jackson. Lockers: Lyons. Chalkboards: Claridge. Lighting: Marco, Devine, Crouse-Hinds, Moldcast, Contemporary Ceilings, ITT Swivelier, Crouse-Hinds. Exit lights: Marco. Dimmers: Decor, Hunt Electronics. Lavatories and water closets: Kohler. Flush valves: Sloan. Toilet stalls: Global Steel. Water fountains: Sunroc. Water heaters: Rheem, PVI. Drains and toilet chairs: Jasam. Rooftop single-zone airconditioning with gas heater: Trane. Grilles: Krueger. Dampers: Ruskin. Exhaust fans: Acme. Cabinets: Gulf Coast Wood Products. Countertops: Formica. Racquetball equipment: Strongwall Systems. Acoustical boards: Owens-Corning Fiberglas. Fabrics: Gilford. Swimming pool equipment: Swimquip, Teledyne Laars. □

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