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They have been the glamour buildings of the last 10 years.
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and Centerbrook. By Robert Campbell

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Cover: The Hood Museum at Dartmouth by Charles W. Moore and Centerbrook. Photograph © Steve Rosenthal (see page 32).

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EVENTS


Feb. 3-5: Institute of Industrial Engineers and the Material Handling Institute Seminar, San Diego. Contact: Institute of Industrial Engineers Registrar, 25 Technology Park/Atlanta, Norcross, Ga. 30092.

Feb. 3-6: Fourth International Modal Analysis Conference, Los Angeles. Contact: Rae D'Ameiio, Union College, Wells House, Schenectady, N.Y. 12308.

Feb. 4-7: Roofing Industry Educational Institute Seminar, Denver. Contact: RIEI, 6851 S. Holly Circle, Suite 100, Englewood, Colo. 80112.

Feb. 4-7: Sprinkler and Other Automatic Fire Suppression Systems Conference, Madison, Wis. Contact: John T. Quiogue, Engineering Professional Development, University of Wisconsin, 432 N. Lake St., Madison, Wis. 53706.

Feb. 5-7: Design Management and the Computer Conference, Boston. Contact: Susan Sandomirsky, Design Management Institute, 621 Huntington Ave., Boston, Mass. 02115.


Feb. 16-19: Conference on Desktop Computers in Engineering and Architecture, Austin, Tex. Contact: DCEA Conference, University of Texas Law School, 727 East 26th St., Austin, Tex. 78705.


Feb. 20: AIA Professional Development Liability Prevention and Protection Workshop, Philadelphia. (Repeat workshops Feb. 21, New York City; Feb. 27, Boston; Feb. 28, Detroit.) Contact: Donald Levy at Institute headquarters, (202) 626-7458.

Feb. 20-21: Training Course on Federal Projects and Historic Preservation Law, Honolulu. Contact: GSA Training Center, Property Management Institute, P.O. Box 15608, Atlanta, Va. 22215.

Feb. 22-26: Annual Conference of the Ure­thane Foam Contractors Association, Orlando, Fla. Contact: UFCA, 4302 Airport Blvd., Austin, Tex. 78722.


June 8-11, 1986: AIA Annual Convention, San Antonio, Texas.

LETTERS

Illinois Center: A standing ovation to Nora Richter Greer in her "review" of the Illi­nois Center. Her efforts remind me of the methods our local newspaper reporters must use when reviewing a not-so-good high school play. Somehow, without being too critical about the whole seat-squirming event, they manage to say something nice about the plot. Roger M. Lepley, AIA
Kalamazoo, Mich.

Building Permit Delays: Costly delays of 30 days or more in reviewing plans for permits for construction appear to be sanc­tioned in the Los Angeles and New York City building departments. This is indicative of a nationwide trend.

I believe these delays are unnecessary and contribute to the national debt by several billion dollars annually. The delays contribute to the debt as lost tax reve­ nues due to putting off building construc­tion work, income to architects, consult­ants, construction workers, suppliers, manu­facturers, tenants, etc., in the largest single industry.

If the officials involved in these unnec­essary delays were held responsible for the lost revenues, something would be
done to reduce them. AIA members should assume their own responsibility by taking charge and taking legal action against those liable. In doing so, building permit reviews would be made promptly and in the best interest of every American.

I am interested in gathering AIA mem­bers' comments and hope that the edi­tors of Architecture would publish them, and/or forward them to me.

William R. Sachs, AIA
Past President AIA
New York City

P&G, Then & Now: "Making a Non­entity into a Landmark" in your Novem­ber 1985 issue is an excellent article about a distinguished corporate headquarters [Procter & Gamble headquarters in Cin­cinnati]. Having worked on the original 1956 building with punched window­es (not-mentioned) AIA Centennial Gold Medal winner Ralph Walker, my late boss, and his firm Voorhees Walker Foley and Smith, I take issue with Andrea Oppen­heimer Dean's characterization of it as a "dull and dour limestone box." This "older building" has stood the test of time, as evidenced by your photographs and by management's continued use of it.

One error we made in those years was discovered just as huge sets of drawings were leaving our office for Cincinnati. The title box was printed as Proctor & Gam­ble, rather than Procter & Gamble, the correct way. At considerable cost and an all-night session, all the documents were reprinted. Your own headline spelled Procter correctly but the text did not.

Even Architecture can goof sometimes! But continue goofing—it's still the best magazine in our country.

Jeffery Ellis Aronin, AIA, FRIBA
Woodmere, N.Y.

Philadelphia Tower: Architecture's Urban Electrification issue (Nov. '85) was very special indeed, and we certainly thank you for including One Reading Center and Market Street East.

John A. Bower Jr., FAIA
Bower Lewis Thrower
Philadelphia

"Where People Are 'Users':" The first eight paragraphs in Ellen Perry Berke­ley's article on EDRA (Nov. '85, page 76) were extremely powerful and touching. I was quite surprised to read these words in your magazine! The thought that archi­tects are human is a sobering thought.

Steven Turnipseed, AIA
College Station, Tex.

Correction: University of Virginia student Lori Snyder received honorable mention in AIA's Beaux-Arts Planning Revisited competition (Sept. '85, page 68).
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Arthur Erickson Named Recipient Of the AIA’s 46th Gold Medal

Arthur C. Erickson, Hon. FAIA, the peripatetic Canadian architect whose dramatic, light-filled buildings circle the globe, will receive the 1986 gold medal of the Institute. Erickson, perhaps best known for two works in Vancouver, B.C.—the Museum of Anthropology at the University of British Columbia and the campus of Simon Fraser University—is the 46th recipient of the Institute’s highest honor, the 12th foreign recipient, and the first non-American since Kenzo Tange, Hon. FAIA, won in 1966.

The 61-year-old Erickson, who maintains offices in Vancouver, Toronto, and Los Angeles with an overall staff of 80, has projects underway all over the world. By his own estimate, he travels some 500,000 miles annually.

Among his current works are the Canadian embassy, soon to rise on Pennsylvania Avenue opposite the National Gallery of Art; California Plaza on Bunker Hill in downtown Los Angeles, which will comprise when completed three office towers, 750 residential units, a hotel, 100 shops, and cultural facilities; a convention center in San Diego; two universities in Saudi Arabia; a hotel/office complex in Anchorage, Alaska; a new government assembly hall in Algiers; and several condominium towers in Kuala Lumpur, Malaysia.

The project that brought him nearly instant international recognition was the design with partner Geoffrey Massey that won the 1963 competition for Simon Fraser University atop Burnaby Mountain just east of Vancouver. Their linear plan for an acropolis-like collection of low buildings centered on a huge, glazed space-frame roof covering a central mall preserve the dramatic site that overlooks a river and snow-capped mountains in the distance. From initial design through construction to opening day with 2,000 students took only two years, a major accomplishment for a pair of architects who until then had only taught and designed houses on the side.

Subsequently, Erickson, who has been practicing independently since 1972, won a number of large commissions including the MacMillan Bloedel Building, a muscular, poured concrete office tower in downtown Vancouver, and another educational project, the University of Lethbridge in Alberta, a single building, nine stories high, that stretches 1,000 feet between hills on the rolling prairie. Design of the theme pavilion at Expo 67 in Montreal led to the Canadian Pavilion at Expo 70 in Osaka, Japan.

A Sikh temple whose multisided, stepped-roofed forms he has experimented with time and again, and Robson Square, a three-block government and courts complex under a glass roof are other notable Vancouver buildings by Erickson. He has also completed a number of projects in Toronto including office buildings, two subway stations (one features pulsating neon tubes that follow the arched roof of the underground station), and Roy Thomson Hall, a new concert facility.

Unlike many architects once they have landed sizable commissions, Erickson continues to design houses. “I would hate not to do one or two a year,” he says, and has residences under construction now in Tacoma, Wash., and Kuala Lumpur (that one has 60,000 square feet of terraces alone, all on stilts to lift the house off a hill). “Houses give you a chance to explore details, and you can get into different uses of materials. On bigger buildings, everything is run-of-the-mill, out-of-a-catalogue.” While the houses may be smaller than other projects, their budgets are still big—at least $1 million.

Perhaps his finest work to date, the Museum of Anthropology completed in 1976, cost a mere $3 million for what is unquestionably a most spectacular building. Located on a promontory overlooking the Pacific Ocean, the concrete and glass building houses Northwest Coast Indian totem poles and cultural artifacts. From a small sheltered entry, visitors pass down a ramp lined by carved figures of animals and birds. In her warm and lucid 1979 New Yorker profile of Erickson—it was expanded into a book, Seven Stones (1981, Harbour Publishing/University of Washington Press)—Elizabeth Iglauer explains what happens next. “Suddenly, the sky burst open around us: we were in a glass hall of dazzling proportions, facing snow-covered mountains across Howe Sound, an arm of the Pacific.”

The room, whose ceiling steps up to 50 feet high under banks of cascading skylights, is filled with massive totem poles. Visitors can look out and see the natural setting of the Northwest coast, viewing its treasures in their customary, but museum-protected, setting. The form of this great hall—spayed, paired columns with a long channel-shaped beam overhead cantilevered at each end—echoes the traditional frame of Indian houses, an idea that Erickson says he was not conscious of initially.

The museum’s entire collection of smaller artifacts is on display in glass-topped drawers and cases so that visitors and scholars alike can examine the objects at leisure. Erickson has recently designed an addition that is on hold pending funding.

Erickson is fascinated by other cultures and often refers to them in his work, not stylistically in the postmodern sense, but conceptually. He has written, “... it is only through architecture that I can comprehend a culture. Observing how a culture, in solving problems similar to the one I must solve, finds different solutions only through architecture that I can comprehend differences in attitude, throws my own work into perspective and my design into question.”

He first visited Southeast Asia during World War II when he was assigned to an intelligence gathering unit of the Canadian Army. Following the war, he returned to Vancouver uncertain of his future, but thinking of a career in the foreign service. A chance look at an issue of Fortune
magazine that featured Frank Lloyd Wright's Taliesin West changed his life, he has said. He had enjoyed art as a child and recalls on seeing the magazine, "if it was possible to create such a work of art in architecture, I was going to become an architect."

He enrolled immediately at McGill University, graduating in 1950 and winning a one-year traveling fellowship, which, by spending frugally he managed to stretch to nearly three years in the Middle East, Mediterranean, England, and then Northern Europe. He returned to Canada, worked for several firms, and taught at the University of Oregon and the University of British Columbia until he and Massey won the Simon Fraser competition.

Erickson has long had a concern for context, but in a much different manner than the now-popular use of the word. "Architects foremost of all should be listeners," he wrote in the foreword to The Architecture of Arthur Erickson (1975, Tundra Books, Montreal), "since architecture is the art of relating a building to its environment, and this requires listening to what the environment has to say—listening to the total context. For architecture is not so much a process of creation as it is of discovery, and a building is not so much designed as it is decreed by the context—by the fact of where and when and for whom the building exists. If we can learn this lesson of context then we might stop spreading our indifferent structures throughout the globe—imposing our mechanistic idiom even upon the tenderest third world villages, where life is still venerated as a solemn ritual."

Erickson's architectural roots are the modern movement when architects thought they could change the world. "That's cooled down," he says, but he still has a kind of idealism that manifests itself in a strong social conscience, and he has never hesitated to speak his mind about important issues involving cities and the fragile cultures of the third world. In 1971, he chastised businessmen—gathered at a banquet honoring him with the annual gold medal of the Royal Bank of Canada, a prize that includes $50,000—for the ruination of the continent's cities. The bulldozer, he said, is "the symbol of North America." He even raised the issue of whether land should be in public ownership, "so that the ultimate control is in the public's hands."

A year later, he addressed the Institute of Canadian Bankers and after chastening tourists for not understanding or trying to understand other cultures, he said the World Bank was no better for having funded a "multistoried monster" hotel in the extraordinarily beautiful Hindu Kush valley of Afghanistan and a similar facility in Bali, whose impact he described as "terminal." Erickson concluded, "You as bankers cannot afford to be concerned with only the economic aspects of projects that you finance. There may be serious implications... which at some future time may be considered crimes against mankind."

He returns often to these themes, comparing package tours to hordes of locusts who "arrive, destroy, and leave conscienceless from the havoc they have wreaked." And, he says, the anonymous city, "Anywhere, U.S.A.," is in danger of being replaced by "Anywhere, the World." He realizes that he is taking advantage of his audiences of influential people, because, most often, he is considered one of them, but, he says, "It is important to upset them." He believes these groups can be a positive effect on change, and declares, "I am completely apolitical, but I am pro-people."

Erickson feels very strongly that native cultures are what an architect should build upon, and that is one reason he thinks so little of postmodernism, calling it a pastiche approach that will not last long. "It will strangle on itself," he says, adding, "people will tire of it very soon." He thinks postmodernism is not too different from the romantic approach that architects like Minoru Yamasaki, FAIA, and Edward Durell Stone tried as a reaction to the sterility of the International Style in the mid-1950s.

Erickson adds that wit in architecture is fine and can be delightful as long as it is subtle, but he notes there is nothing worse than an architectural joke standing for 20 or 30 years. Erickson admits that losing several competitions—including the Portland Building to Michael Graves, FAIA, and the Beverly Hills City Hall to Charles Moore, FAIA, et al.—to postmodern designs has changed his way of thinking. "Postmodernism has freed the air to be able to look back. It allows you to expand your vocabulary," he says.

Generally, he prefers simple materials—wood, concrete and glass—and equally simple geometric forms often stressing the horizontal. "I abhor subterfuge or disguise, crave frankness, especially in exposing and featuring structure, though structure never determines the form but rather is the result of it," he has said.

Erickson eschews created pattern, preferring the natural surface of concrete, for example, rather than that of the board formwork. "I feel one should look deeper and see the beauty of the material in how..."
Board Reviews Latest Draft Of Proposed Ethics Code

At its December meeting in Washington, D.C., AIA’s board of directors received the latest draft of the proposed code of ethics and professional responsibility, and subsequently authorized discussion of the code at Grassroots ’86 this month.

The latest draft is a result of comments and suggestions received by the ethics task force, chaired by Harry Harmon, FAIA, from components who reviewed the proposed code during the fall. “Written comments were received from 71 individuals or components,” reported Harmon at the board meeting. The task force reviewed the comments, “some of which were general and some quite specific,” according to Harmon’s report, which prompted several changes in the latest draft.

As in the previous draft (see Sept. ’85, page 65) the latest draft of the code is comprised of five canons. The previous 20 ethical standards have been consolidated to 17, and the 36 mandatory rules to 31. The latest draft also contains “commentary” to some of the rules. “That commentary is meant to clarify,” Harmon reported, “often in response to questions raised in the comment process, or to elaborate when the intent of the rule is perhaps not plain on its face. The commentary is not part of the code, in the sense that enforcement will turn on application of the rules alone.”

After discussion at Grassroots, the code is scheduled to be reviewed by the board at its March meeting for ratification, and then voted on by the membership at the annual convention in June.

In other action, the board approved the governance task force implementation guidelines for service standards for AIA components. Based on the premise that “the rights of the individual member are key to the evaluation of programs and services and that the component is the principal point of delivery of programs and services,” the operation guidelines were designed to strengthen the components’ ability to provide those services. The guidelines call for the adoption of minimum mandatory standards of service for AIA components and the adoption of an annual component evaluation process.

New officers were installed Dec. 6. The new president is John A. Busby, FAIA; Donald J. Hackl, FAIA, is first vice president; A. Notley Alford, FAIA, Benjamin E. Brewer Jr., FAIA, David E. Lawson, FAIA, are vice presidents; and Harry C. Hallenbeck, FAIA, is treasurer. Philip W. Dinsmore, AIA, continues as secretary.

New board members are Harry Jacobs, FAIA, California; Gregory S. Palermo, AIA, Central States; Lawrence J. Leis, AIA, East Central States; Mark T. Jaroszewicz, FAIA, Florida/Caribbean; C. James Lawler, AIA, New England; Laurie Maurer, FAIA, New York; Thomas Van Housen, AIA, North Central; Gerald S. Hammond, AIA, Ohio; James Lee Thomas, AIA, South Atlantic; James D. Tittle, FAIA, Texas; and Gregory Franta, AIA, Western Mountain. Brent L. Davis is the new chairman of the Council of Architectural Component Executives.

As President, Busby Hopes To Broaden AIA’s Influence

John A. Busby Jr., FAIA, would “like to see the Institute be more responsive to a variety of issues” during his one-year term as president of AIA. “I hope that in the ongoing planning process the Institute will become more flexible in addressing the changing needs of the members while continuing to be responsive to social issues,” Busby says.

Many of the goals that Busby has set for his presidency coincide with the long term goals set by AIA’s board of directors. The issues Busby plans to emphasize include architectural education, professional development, compensation, liability, accountability, professional responsibility, and public awareness. “We are not going to focus on a single theme for the year,” says Busby, “and I believe this will allow the Institute to address and respond to more ‘cutting edge’ issues that face the profession.” But he was quick to point out that “it’s time we began to realize that as an institute we cannot be all things to all members.”

Although Busby acknowledges that liability will continue to be a major issue for architects, he is dedicated to seeing that the Institute develops a program to help architects deal not only with the costs of insurance and litigation but with the relationship of liability to methods of practice. “We are going to have to look at the services that we render, and we are going to have to be more accountable for those services. This is going to lead to better architects, better architecture, and I think a better environment,” he says.

Busby stresses the importance of continuing to focus on A/E procurement, tax reform, and legislation affecting small businesses. “The majority of our membership is in small firms so we need to carefully evaluate any legislation that may curtail opportunities to practice,” he says. Busby also believes the AIA should actively encourage the federal government to respect design and the value of design.

Another issue Busby plans to emphasize during the year is the importance of revitalizing urban centers. “It’s time that we begin devoting attention to improving the amenities in cities and developing the infrastructure. I’m also concerned about our elected officials taking a more sincere responsibility in planning for the future of our communities,” he says.

Busby believes that public awareness and appreciation of architecture have been increasing over the past few years and supports a firm commitment to public outreach programs including the Forum for Architecture, AIA’s public membership program. “We are evaluating many of the forum’s programs and we will be increasing the funding of the programs that have achieved their goals,” says Busby.

In the aftermath of the recent visit by Prince Charles, Busby hopes the Institute will continue to sponsor similar events. “I think the national attention given to the visit was important to AIA,” says Busby. He also expresses support for inviting congressmen, senators, and other prominent people who are interested in architecture to hold public symposiums at AIA headquarters.

A native of Charleston, S.C., Busby earned his B.S. and B.Arch. degrees from Georgia Institute of Technology. He is executive vice president/secretary of the Atlanta firm Jova/Daniels/Busby, Inc. His participation in AIA activities over the past 20 years has included serving on the board of directors and as treasurer of the AIA Foundation and chairing the design commission. In state and local professional affairs, he has been president of the Georgia Association/AIA and the Atlanta Chapter/AIA. LYNNE NESMITH 

News continued on page 12
REACH FOR THE SKY

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Kemper Award Goes to Harmon; Young Citation to Prosser

Harry Harmon, FAIA, has been selected by the Institute as the winner of this year’s Kemper award, and Richard McClure Prosser has been awarded posthumously the Whitney M. Young Jr. citation.

The Kemper award recognizes an Institute member “who has contributed significantly to AIA and the profession of architecture.” Harmon’s nomination noted his service to the Institute over the past four decades and his “significant” contributions as secretary and organizer of the board of directors activities.

As secretary of the Institute in the years 1981-84, Harmon reorganized board meeting agendas, developed procedures to update policy documents, and consolidated the board’s policies into one document. He served as a national director from California for three years prior to his two terms as secretary. While a director, Harmon served on the AIA education and professional development commission, the long-range planning committees of 1979 and 1980, and the finance committee. He has chaired the AIA Foundation, the architects in government committee, and the AIA Service Corporation evaluation task force.

Harmon recently prepared the AIA Foundation rules of the board and policies and currently chairs the AIA ethics task force that developed a model code of ethics and professional responsibility (see related story, page 10). He has also served as a director of the Los Angeles Chapter/AIA, the California Council/AIA, and the California Council/AIA Foundation.

A native of San Francisco, Harmon received his Bachelor of Architecture from the University of Southern California. Since 1946, his professional career has been devoted to planning and developing college facilities in California—first as senior architect at the University of California and later with the 19-campus California State University system.

The Young citation is presented to “an architect or architecturally oriented organization in recognition of a significant contribution to social responsibility.” The nomination recognizes Prosser’s ability to “inspire and involve not only professional architects but other professionals who helped to resolve inner city problems.”

Prosser was a Presbyterian minister, social worker, community organizer, activist, builder, and architecture advocate. In 1964 he moved to western New York state to rebuild a community institution, Friendship House of Lackawanna. He was associated with the Community Planning Assistance Center of Western New York for 10 years after its founding in 1972, serving first as director of advocacy planning and later as director of community services. During this period he also worked to help establish the Preservation League of New York State and served on the first board of trustees.

In 1978 under his direction, the Community Planning Assistance Center launched the Seventy-Eight Restoration, a community development organization involved in initiating physical development projects and building more than 100 new houses for moderate income persons in deteriorating downtown residential neighborhoods in Buffalo, N.Y.

Prosser died in 1984 at the age of 49.

Nine Foreign Architects to Receive Honorary Fellowships

AIA has named nine foreign architects honorary fellows of the Institute for their “esteemed character and distinguished achievements.” The honor is conferred upon architects who are not U.S. citizens and who do not practice in this country. They will receive their honorary fellowship at AIA’s annual convention this June in San Antonio, Tex.

The nine architect fellows are:

• John M. Davidson, senior director of the Australian architecture firm of Godfrey & Spowers and former president of the Royal Australian Institute of Architects.
• Solange d’Herbez de la Tour, Paris architect and urbanist and founder of both the Union Francaise des Femmes Architectes and the Union Internationale des Femmes Architectes.
• Abdel Wahed El Wakil, a Cairo architect currently practicing in London, who has worked with Egyptian architect Hassan Fathy, Hon. FAIA, and was presented the 1980 Aga Khan award for contemporary use of traditional architectural language.
• Brian E. Eldred, president of the Royal Architectural Institute of Canada and a partner in the Edmonton firm Eldred Barr Architects, Planners & Interior Designers.
• Wilhelm Holzbauer, an architect with offices in Vienna and Amsterdam and a professor of architecture at the Academy of Applied Arts in Vienna, who received the R.S. Reynolds memorial award in 1983 for the Vienna subway system.
• Henning Larsen, who maintains an architecture and planning practice in Klampenborg, Denmark, and is professor of architecture at Denmark’s Royal Academy of Fine Arts.
• Geoffrey Arthur Rowe, British architect and consultant now practicing in Perth, Australia.
• Heikki and Kaiji Siren, husband and wife and partners in the prominent Helsinki firm Siren Architects since 1949.

Portland Firm Wins Arizona Museum Competition

The Garfield-Hacker Partnership of Portland, Ore., was selected the first place winner from a field of 185 entries in a national design competition for a new 75,000-square-foot museum for the Arizona Historical Society.

The program for the $7.5 million museum called for “sensitivity toward the relationship between natural and developed portions of the 11-acre site, which is located in Papago Park and was donated by the city of Tempe. The selection criteria also emphasized that the building would house artifacts relating to the cultural, social, historical, and natural setting of the Salt River Valley.

In the winning design by the Garfield-Hacker Partnership, the two-story museum is arranged around a landscaped, central courtyard with a double screened entry, and the entire building is enclosed by an adobe block wall, penetrated on the east facade and built into the hill on the west. The lobby, gift shop, restaurant, storage, and educational and audiovisual facilities are located on the lower level, and galleries and administrative offices are housed on the upper floor.

“The approach to the building (from the landscaped parking area through openings in enclosed walls, under pergolas, through courts in which narrow streams of water flow) is handled with great skill,” said the jury.

The jury also cited four runnersup: Werner Seligman of Cortland, N.Y., $5,000 second prize; Terry Sargent of Atlanta, $1,500 third prize; Richard Schuh of San Francisco, $1,000 fourth prize; and Shelby Wilson of Tempe, Ariz., $500 fifth prize. Eight honorable mentions were also presented.

Joseph Esherick, FAIA, chaired the jury. Other jurors were Barton Myers, AIA; Robert Ferris, AIA; landscape architect Hideo Sasaki; Paul Zygas; and Arizona Historical Society representatives Robert Veazey, Lawrence Fleming, and James Moss. Roger Schultze, AIA, served as professional adviser.

News continued on page 14
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**Cities**

**Prospects Good for Renovation of Philadelphia Department Store**

Lit Brothers—one-and-a-half blocks of 19th and early 20th century commercial buildings that have been Philadelphia's longest running preservation crisis—will apparently survive. Mellon Bank (East), the Philadelphia-based division of the Pittsburgh Bank, has signed a 25-year lease to rent 475,000 square feet, about two-thirds of the complex, which covers slightly more than a full city block. The owner of the building, Independence Center Realty, has announced that it will spend $70 million to renovate the building.

Since the Lit Brothers department store closed in 1977, there have been numerous attempts to make use of the buildings for shopping centers, corporate offices, and even a bus station. And there have been many threats to knock the buildings down, the most recent of which came last year when, after a devastating fire in a nearby historic building that was undergoing renovation, the city's fire chief declared the buildings a public hazard and insisted on their demolition. By that time, however, the buildings had a political and public constituency that convinced the city to give the buildings one more chance, which stretched long enough for a development team to be put together that could land Mellon as a tenant.

The local catalyst for the deal was Growth Properties, a group of young architects turned developers, which has renovated several smaller historic buildings. The complex, which is directly east of the city's Market East redevelopment (see Nov.'85, page 52) and a block west of the Liberty Bell, will be renamed Mellon Independence Center. Principal architect is Burt/Hill/ Kossar & Rittelman of Butler, Pa., with John Milner & Associates of West Chester, Pa., as restoration architect.

Mellon plans to use the building to house back office functions, a use for which the complex's enormous floor sizes are desirable. Earlier developers who had options on, or owned, the complex foresaw courtyards, with a shopping mall on the lower floors and highly public use. The new plan calls for retail space at the level of the street and subway, but it will be primarily an office building. The facades, whose paint is peeling badly, will be restored, and the interiors completely renovated.

Lit's is not one building, but more than a dozen five- and six-story structures, most of them similar in their commercial Italianate style but very different in detail and materials. The first was built in 1858 and the last 60 years later. Around the turn of the century the entire block was taken over by the department store, which built similar buildings at three of the corners and painted everything—brick, granite, cast iron, terra cotta—a single color, visually unifying the entire complex and tricking the eye into passing over the many inconsistencies of the structure. These corner buildings feature octagonal towers and the legend "Hats Trimmed Free of Charge," the marketing gimmick that built the store.

As Lits swallowed up the block, whatever architectural integrity the buildings' interiors had was lost, and the store was a hodgepodge of ramps, columns, and an occasional bearing wall. Thus, the effort to save Lits was largely concentrated on the facades, although this probably could not have happened had the internal structure been found to be unsound.

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Advocates of saving Lits argued that use increased fourfold to about 1.7 million. Cities in its facades, a change of scale in business and the city, the emergence of merchandizing on a massive scale. The popular support for saving Lits, however, probably stemmed mainly from disappointment with the architectural quality of recent buildings.

While some preservationists argued that Lits is merely a group of facades, and not an architectural masterpiece in any case, the years of struggle to save the old store had a strong impact on local preservation efforts.

For the first time the city developed an effective citizen-based lobby for preservation and was able to involve many of the city's leading politicians in that effort. One major indirect result of the "Let Lits Live" campaign was the replacement of Philadelphia's pioneering but weak citywide preservation law with new, far stronger legislation. Thomas Hine

Mr. Hine is the architecture critic for the Philadelphia Inquirer and a frequent contributor to this magazine.

Commercial Construction Up; Housing Investment Declines

In urban areas across the nation, office buildings and hotels are being constructed at a record pace, even though vacancy rates in existing buildings are high. Meanwhile, millions of people with moderate incomes cannot afford to purchase adequate housing despite increased housing construction and improved economic conditions. Spurred by changes in federal policy and lending practices of financial institutions, these construction trends are expected to continue into the 1990s.

Anthony Downs, a fellow at the Brookings Institution in Washington, D.C., recently suggested (in The Revolution in Real Estate Finance) that these changes add up to a "little noticed revolution that is affecting the welfare of the entire nation. Housing has lost its once-favored position in capital markets, and now federal incentives encourage nonresidential real estate even when there is no demand for new construction."

According to Downs and others, what have been most damaging are:
- monetary and fiscal policies that drove up interest rates and home mortgage costs;
- partial deregulation that removed ceilings on interest charged by lenders, thus bringing in a flood of new capital. At the same time some federal rules were relaxed, allowing more of that capital to go into commercial real estate;
- generous tax breaks for syndicates and others investing in nonresidential buildings.

These measures were designed to check inflation, rescue savings and loan companies from bankruptcy, and carry out President Reagan's plan for reducing government regulation in the private sector, wrote John Herbers in the New York Times. "What has been an unintended side effect," Herbers continued, "is the flood of capital into nonresidential markets...."

And more and more of this new commercial construction is located in suburban and exurban areas. The Office Network Inc. of Houston, an organization that tracks office space in larger cities, reports that when new construction is completed, 57 percent of the total office market in the areas it surveyed will be outside the central business districts. By contrast, in 1981 the suburban market accounted for only 48.6 percent of the total market. "So abundant has money been for commercial real estate that investors regularly scour the country for places to build," Herbers said.

Also in the past, when space exceeded demand by a substantial margin, construction of commercial structures stopped, according to Downs, a practice that has not occurred in the '80s, even though vacancy rates are more than 20 percent in some cities—Houston, Miami, Denver, among others.

At the same time, the long-cherished dream of owning a house may prove impossible for more and more Americans. "The high cost of housing under current policies is stopping many people from owning homes, people who would have been able to buy in previous decades," wrote the Joint Center for Housing Studies at Harvard University and MIT (in the report "Home Ownership and Housing Affordability in the United States: 1963-1984").

The center said that in the last five years an estimated 800,000 households have been prevented from purchasing houses due to rising costs of home ownership: 34 percent of typical buyer's income in '84, compared to 40 percent earlier this decade, but 25 percent in the '60s and '70s. In addition, from 1968 to early '85, the prices of houses purchased increased 40 percent more than the incomes of the people who bought them. "So, even though the peak of the baby boom is now hitting the prime-home-buying years, home-ownership rates for young households are still declining," the center concluded.

continued on page 18

Sign of Downtown Revival: As Philadelphia and other cities work to find new uses for abandoned, downtown department stores, the largest freestanding department store to be built in a major downtown area in this country in more than 40 years recently opened in Washington, D.C. Designed by Skidmore, Owings & Merrill/Washington, the new Hecht's Metro Center store will serve as an anchor in the city's expanding retail and commercial district. The 275,000-square-foot building is clad in off-white granite and marble and interrupted with large display windows and bright red awnings. Medallion-shaped lighting fixtures were built into the exterior walls.
Cities from page 16

Downs argued that the number of households is increasing faster than the population and that housing production in this decade is likely to fall below that of the 70s. By August '85, housing construction had risen to an annual rate of 1.5 million units, which is more than '84, but not as many as predicted.

There has also been a decline in the supply of adequate affordable rental housing. Herbers found in some cities that high rental rates, which have been pushed up by demand from those who cannot afford to buy, keep many people in substandard units or on the streets without homes. And while federal assistance for housing has been sharply reduced, the number of Americans in need of housing aid has increased sharply. The National Low-Income Housing Coalition estimates that for every low-income family in subsidized housing, three others (or 7.5 million) are in need of subsidized housing. Homelessness is increasing dramatically.

What Downs, the Joint Center, Herbers, and others see for the future is "no easy way out" of the current situation, in Herbers' words. It seems unlikely that a tax reform, if passed by Congress, "would be sufficient to offset the trend toward overbuilding of commercial structures," Herbers suggested. And because of the federal budget deficit, it seems unlikely that interest rates will drop low enough to have a substantial effect or that housing subsidies will increase.

San Francisco Supervisors Vote to Demolish Freeway

Two months after a controversial plan to limit downtown development in San Francisco was signed into law, the city's board of supervisors voted to demolish the Embarcadero Freeway, a 1.2-mile-long elevated roadway that runs from Broadway to Beale Street along the edge of the bay.

Led by board president John Molinari, this decision to remove the 30-year-old highway is part of an ambitious $171 million plan to develop the waterfront. The highway would be replaced by a tree-lined, ground-level boulevard bisected by rail transit lines. The scheme would also include renovating the Ferry Building, establishing a direct linkage between land and water, and eliminating an uncompleted highway stub designed to connect Interstate 280 and the San Francisco Bay Bridge. New bridge off-ramps would be built to compensate for changes in the traffic patterns.

The scheme is expected to increase property values in the area, but director of city planning, Dean Macris, says that the main argument is "that the city gains esthetically and increases its liveability by providing people better access to the waterfront."

Although approximately 60,000 to 70,000 vehicles use the freeway every day, an environmental impact report completed late last year predicted that the changes would mean no more than three extra minutes for a motorist traveling from Oakland across the bay to San Francisco's downtown financial district.

In addition to the board of supervisors, the plan has been approved by San Francisco redevelopment agency, the public utilities commission, the port commission, and the planning commission. However, the scheme still requires the approval of state and metropolitan traffic commissions, which may prove to be significant stumbling blocks. These arise out of the state's overall priorities for funding of highways and questions concerning the city's authority over the highway.

In arguing for the demolition of the highway, Molinari said, "It's ugly. It was a mistake when it was built, and now is the time to rectify the mistake."

New Federal Legislation to Restrict Billboards Proposed

In 1965 the U.S. Congress enacted the Highway Beautification Act to regulate billboards along the Interstate and primary highway systems, but 20 years later more than 500,000 billboards still stand along federal highways. Intended to control and reduce the number of billboards, the act has actually encouraged and protected billboards and has made it difficult for cities and states to enforce their own billboard ordinances, which are often stricter than the federal law.

Senator Slade Gorton (R.-Wash.) has introduced legislation to close the original law's loopholes, which have allowed existing billboards to remain and permitted new billboards to be built.

Under the '65 law, states are required to establish sign control programs or risk the loss of 10 percent of their federal highway funds. Three classes of billboards are recognized by the law: legal signs, which include official, directional, landmark, and real estate signs, as well as those in zoned or unzoned commercial or industrial areas; nonconforming signs, which were legally erected before the enactment of the law; and illegal signs, which have been built where signs were banned. By exempting control of signs in commercial and industrial areas, the law allowed billboards to remain along heavily traveled federal highways that pass through downtown areas and permitted new signs to be built in these urban areas.

The law also provided compensation to billboard companies and owners who leased the land for nonconforming signs —75 percent of the money from the federal government, 25 percent from the state. This compensation requirement made enforcement of the law very expensive for the states, leading many states to make no effort to remove nonconforming signs or even illegal signs that require no compensation. In some cases, billboards that states had paid to be removed were left standing for two years more after acquisition.

Documenting the failure of the '65 law, two government reports from the General Accounting Office and the Department of Transportation determined that billboard owners have built "sham" commercial buildings surrounded by billboards in rural areas, and nonconforming billboards acquired for removal come from a list generated by sign owners who typically volunteer their least profitable signs.

The act has also been substantially weakened over the years. A 1978 amendment imposed new federal controls on...
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Now, without fear of contradiction, we can simply state: Trocal PVC membranes meet all the criteria necessary for long-term performance in the roofing environment. We have the track record. We have the proof. (And, we’d be happy to discuss it with you further.)

To be sure, we don’t expect people to stop saying “PVC won’t last.”
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Most of today’s lighting simply wasn’t designed for today’s office.

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Even the most sophisticated low-brightness downlights dictate the exact placement of computer terminals. If you rearrange the work stations, bright spots of glare appear on the screens.

These problems don’t exist in the office shown below. The difference comes from a highly-engineered indirect lighting system that’s based on a better understanding of what office lighting should do.

Keeping glare off the VDTs
There’s been much talk about “ergonomic lighting” lately, especially for VDT installations.

Downlighting isn’t the answer, even though over 90% of America’s offices use it. Any down light puts a bright light source in an unlit ceiling. The resulting strong contrast produces glare on any reflective surface: the cover of a magazine, a polished desk top or, unfortunately, a VDT screen.

To correct the problem, you need an indirect system designed with exceptionally wide distribution. This produces an evenly-lit ceiling which reflects as a soft, barely-noticeable veil. Since the VDTs don’t reflect hot spots from the fixtures, workers are more comfortable. And since the screens can face in any direction, the floor plan becomes flexible.

There’s a research study from a major university that discusses this in depth. Ask us and we’ll send you the results.

Getting good light on the work surfaces
Ftqzcandle levels tell us how much light there is on the work surfaces, but they don’t tell us how much light we think there is. And if we don’t think there’s enough light, there isn’t.

Another recent university study offered an important new insight: if you add a low-brightness visible source to an indirect fixture, you’ll immediately perceive 10% to 25% more light.

We’ll be happy to send you those results, too. They show how much the visible strip of low brightness lens on the fixture in this picture actually does. It spreads the light evenly over the ceiling and upper walls and, just because it’s there, it creates a higher level of perceived illumination.

The fixtures in the photo are 6” Round High Efficiency Softshine Indirect by Peerless. Under ceilings 8’6” or higher, Softshine Indirect fixtures give more good light per watt than any other fixtures made. Research computers at Peerless generated this diagram to show how the fixture’s lensed optics distribute the light facet by facet into precisely the right viewing areas.

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With six months to travel and study in Italy as a fellow at the American Academy in Rome, Albuquerque architect Antoine Predock, FAIA, produced some 400 sketches, four of which are shown here from a privately published collection of over 50.

Many of the sketches are powerful in their few, deft strokes and collages of color. "I was really immersed in the atmosphere and the spirit of the place," says Predock, who sketched quickly and repeatedly (sometimes a dozen sketches of a single subject) to capture those qualities on paper. The works are predominantly brushed ink with oil pastels, the colors fleshing out the life merely hinted at in the ink outlines.

While most of the sketches have Rome as their subject (the forum below left and the Basilica di Massenzio below right), others portray outlying regions such as Umbria (above) or Milan, whose Duomo is at right. Michael J. Crosbie
HOW TO COPE WITH EXTREME STRESS.

When the rumbling subsided on May 2, 1983, much of downtown Coalinga lay in ruins. It was the fourth largest quake to hit California during this century, jolting the Richter scale at 6.5. Amidst the rubble of brick and concrete block, however, newer “stick-built” structures remained intact. So much, in fact, that many escaped visible signs of damage.

A fluke? Hardly. Since typical wood-frame construction employs sheathing nailed to studs and joists, these stress-path assemblies are ideally suited to carrying shear. Walls, floors and roofing components work together as diaphragms to dissipate short-term, lateral loads.

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To its credit, timber construction has also proven surprisingly worthy under fire. In a fire-endurance test conforming Shear forces generated by seismic ground motion, wind, and snow load are especially devastating to rigid structures. Because wood-frame design is more elastic, it dampens these stresses for higher margins of survivability.
STM standards, a heavy timber beam stained full design load after a comparable steel beam collapsed. Following 30 minutes of fire exposure at more than 0°F; over 75 percent of the original wood section remained undamaged.

To learn more about the reserve strength of wood-frame construction, send $30 for a copy of our Western Woods Use Book. It covers everything in structural analysis—from allowable loads for 12-inch beams to 1-inch nails. At no charge, we'll also provide a technical design manual for multi-story construction.

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Circle 13 on information card
Last fall we invited our readers to nominate buildings of the last 10 years for addition to the list of the best works of architecture of America's first 200 years that a panel put together for our bicentennial issue in July 1976. That list was headed by Thomas Jefferson's University of Virginia campus, Rockefeller Center, Dulles airport, and Fallingwater.

The response to our invitation was, in a word, scattered. A total of 101 buildings of the period (and some before) were nominated, and only a handful received more than a single nomination.

The three shown here were the largest vote getters: E. Fay Jones' Thorncrown Chapel with seven; Maya Lin's Vietnam Veterans Memorial, six; I. M. Pei's East building of the National Gallery of Art, five.

Others receiving more than a single vote were Pennzoil Place in Houston by Johnson/Burgee, the Citicorp tower in Manhattan by Hugh Stubbins, the High Museum in Atlanta by Richard Meier, the Yale Center for British Art by Louis Kahn, the Humana headquarters building in Louisville by Michael Graves, 333 S. Wacker Drive in Chicago by Kohn Pedersen Fox, and Intelsat headquarters in Washington, D.C. by John Andrews.

Of the tiny and remote Thorncrown Chapel one nominator wrote that although other buildings of the period might prove more influential, it was "the only complete and fully expressed architectural thought built in the last 10 years." Said another of the Vietnam memorial, "It is probably the best thing done in the last part of the century in the world and the only war memorial ever built that does not glorify war."

It would seem that none of the works received enough votes to be officially added to the bicentennial list. But then there is no official procedure for adding to the list anyway.

We thank all of the respondents for participating in the poll. Most were architects and some took the occasion to suggest amendments to the list that predated the 10-year time span. One went as far back as to nominate St. Bartholomew's church in Manhattan.

While another found Frank Lloyd Wright "notably over-represented" on the bicentennial list, a third suggested addition of nine more Wright buildings. For those who went back past the bicentennial, the most frequently nominated addition to the list was the Kimbell museum by Kahn.

In thinking back over this 10-year period one cannot help wonder at what a turbulent time it has been. The wildly varying nature of the buildings listed above gives testimony to the searching pluralism of the period.

Yet out of it all have come some discernible patterns, three of which are examined on the following pages. One is the emergence of museums as the showcase building type for architecture. Although we don't usually organize things by building types we present a brace of intriguing new museums as fresh evidence of the type's celebrity.

The second phenomenon examined here is what San Francisco architect Cathy Simon called in our May issue "a rekindled interest in materials: their capacity to enliven architecture, their importance as the vehicles of architectural expression."

Finally we take a somewhat wry look at the new freedom, even audacity, in design of tall buildings that has so changed the skylines of our cities in the 10-year post-bicentennial period.
Showcases
For Architecture

Museums have been the glamour buildings of the period. By Andrea Oppenheimer Dean

In 1975 Paul Golberger of the New York Times eulogized that "the great era of museum building is over," while John Morris Dixon, FAIA, editorialized in Progressive Architecture that the recent cultural explosion "has peaked and subsided." Tom Wolfe, of course, knew better. The same year in The Painted Word he announced that "the real goods" are "paintings and sculpture that are indisputably part of the new movement, the new école, the new wave, something unshrinkable, chippy, pure cong, bourgeois-proof."

Another museum building boom was afoot to house the "unshrinkable, real goods," and the result would be showcases for many of the prevailing architectural ideas of the period 1976-86. Museums are, in fact, widely seen as modern day cathedrals, our biggest, most impressive, most expensive institutions, whose authority has grown in direct proportion to disillusionment with religion and government.

Feelings about this headlong rush to culture and opinions about why art has become all but sanctified are decidedly mixed. That life-long icon-smasher Philip Johnson, FAIA, chalks much of it up to social climbing and sex. He whispers, "You meet a much nicer class of people there than in singles' bars. It all started, I think, with my sculpture garden at the Museum of Modern Art. It's very polite; no whores or anything." More seriously, he says, "Museums are the only symbol our money culture has left."

The plum of all current commissions is the Getty Museum addition by Richard Meier, FAIA, which is scheduled for completion in 1993. Getty Museum Director John Walsh points out that "there have been rising expectations everywhere, that art has power for everybody." Robert Hughes, the acerbic art critic for Time magazine, views this "power" as a corruption of art. "Americans are very prone to talk about works of art in quasi-military jargon. Don't forget all that damned lingo of avant-gardism-confrontation, attack, advance." He notes that government's willingness to make contributions to museums tax deductible, which fueled the growth of American museums, is a very American solution, but essentially a religious one. "It surmises," says Hughes, "that works of art are morally beneficial, an idea that I reject with horror, but I'm not American." (He's Australian)

On a less polemical note, our elevation of museums—in large part depositories of the icons, symbols, and memories of days past and seemingly simpler—is attributed to a need for belief in permanence and continuity. It goes hand in hand with recently revived respect for historic buildings and the impulse to preserve and renovate anything predating 1960. The venerable Virginia Museum of Fine Arts, for instance, has just completed a rehabilitation and expansion designed by Hardy Holzman Pfeiffer, a firm that has transformed all manner of existing buildings into galleries and has restored, recycled, and expanded about 10 museums in as many years. As Paul Perrot, the Virginia Museum's director, says, "There is a thirst for going back to an earlier sureness that gives people a sense of being part of something still living, of other societies having survived traumas."

The transformation of museums from dusty depositories for Manhattan's Metropolitan, whose expansion by Roche Dinkeloo has been the decade's largest single museum project.
an elite into social and cultural centers for the many has made them fiercely competitive and commercial. "They each want to get a larger share of the market" by getting people in off Main Street who are not experts or connoisseurs, says Robert Venturi, FAIA. That means they have to be didactic, to explain themselves—like the cathedrals of old. Venturi sees all this as a generally good thing, remarking that both his museum for Austin, Tex., (under construction) and the one for Seattle (in design stages) were in "elitist suburbs" and decided to enlarge and move downtown "to get a larger market share."

Says New York Metropolitan Museum of Art's director Philippe de Montebello, "In order to retain or gain new audiences, museums are building highly visible, dramatic symbolic centers in imitation of the great European cathedrals that project a personality of grandeur totally out of proportion with the needs of the community. It's an indication that the appreciation of art as a personal experience is being lost."

Indeed, it would be extremely difficult to convince patrons or taxpayers to build something just because an art collection will look wonderful in it; the more convincing argument is that museums increase the city's revenue, prestige, and tourist trade. They have become economic and political forces, which is why citizens voted to raise taxes and bond issues to the tune of $25 million in 1979 to build a museum of art as linchpin for Dallas' proposed cultural center, which will cover 60 acres of previously undeveloped land; taxpayers similarly paid for Johnson/Burgee's 1981 Century Center for South Bend, Ind., to revive a depressed part of town. And what urban projects, other than new subways, can match the $130 million building program undertaken by the Metropolitan Museum over the last decade to reorganize its spaces and add a third again as much space in additions? Kevin Roche John Dinkeloo's gallery for 20th century art, the firm's last for the Met, is now under construction.

Can you, in fact, think of a civic, religious, or corporate landmark of the last 10 years that has impressed its image as vividly as has Meier's High Museum in Atlanta? Or can you think of two more architecturally significant buildings completed during the last decade than Louis Kahn's posthumous Yale Center for British Art of 1977 or Pei's 1978 East Building for the National Gallery of Art? Though both are "modern" urban buildings, their roles, designs, and influences have been vastly different, and the result, in Venturi's words, is "a greater eclecticism in architecture, more ambiguity and diversity."

The East Building, with its knife-like edges, minimal, marble facades, and huge skylit atrium ringed with flexible, enclosed perimeter galleries, may well be the nation's last great modern monument. The major elements of its interior configuration have been mimicked in institutional architecture across the land. Look, for instance, at the design of mixed used commercial buildings, corporate buildings, or spec office buildings, with their spacious, often top-lit lobbies, lined with pricey materials. Many, like the East Building, have overhead bridges and balconies, escalators and ramps, and generally all of this leads to cramped elevator banks and office floors with eight-foot ceilings. The East Building's model of grand spaces for public gatherings and approach ringed with more ordinary ones for the display of art was followed by Cesar Pelli, FAIA, in his 1983 addition to the Museum of Modern Art, and Meier credits a direct influence of the East Building on the High, whose focus is a four-story, top-lit drum.

As Robert Campbell wrote of the High in this magazine (May '84, page 222) "the architecture frames just about everything except the art." The same, to a lesser extent, is true of Meier's addition to the Des Moines Art Center and, of course, of James Stirling's Neustaatgalerie in Stuttgart, Oswald Ungers' Architecture Museum in Frankfurt, and Meier's Museum für Kunsthandwerk, also in Frankfurt (page 56).

These are the new mass museums, monuments often too large for existing collections, whose grandeur, in fact, is meant to attract not only tourist dollars but patrons and their art. To these ends, museums have added shops, restaurants, classrooms, and an array of other services. Moreover, because of their still spare collections, museums like the High and the East Building are "like a hungry lion you always have to kill sheep to feed," as National Gallery Director J. Carter Brown, Hon. AIA, puts it. The killings are made in blockbuster exhibits created by moving great works of art great distances for great economic and sometimes public benefit. But, imagine a university or corporation erecting a building that required the temporary hiring of squadrons of new employees and equipment just to fill it!

There has, of course, been a backlash against the principles of the East Building's plan. As in office design, such flexible spaces as comprise the East Building's "house galleries," for instance, are out of favor. The tendency today is toward creating rooms, with walls and doors, or a combination of open and contained spaces, depending on the art to be displayed. The almost completed Museum of Contemporary Art in Los Angeles by Arata Isozaki, Hon. FAIA, for example, will have both huge galleries for large 20th century artworks and more defined rooms, while the reorganization and addition of the Los Angeles County Art Museum by Hardy Holzman Pfeiffer, also to be finished in a matter of months, will consist mostly of rooms 25x50 feet or larger, the module used by John Russell Pope for his 1941 National Gallery of Art.

"There is greater flexibility in traditional rooms," says the Met's Montebello. "The more free, empty, columnless, and wall-less a space, the more it has its own tyranny." Besides, how many museums can afford to erect and demolish buildings within a building for almost every major new exhibition, as is done in the East Building?

Light, of course, is the key to museum design, and here, too, the tendency is away from the East Building's artificial, theatrically illuminated galleries in favor of controlled natural light.
that simulates the studios in which art was made or villas in which it was later displayed. One of the more interesting experiments will be the Price Collection of Japanese scrolls and screens for the L.A. County Art Museum designed by Bruce Goff. The controversial scheme, which just began construction, will consist of two pavilions clad in Kalwall that will create translucent galleries simulating shoji screens.

As Carter Brown says, "The climate has changed since we designed the East Building in 1969. It's usually that distance in time that's most unflattering, because everyone's off on a new kick." Ironically, the Yale Center for British Art, which started design a year before the East Building, is mentioned by almost every designer and museum professional (including Brown) as the favorite museum of the period.

Unlike the East Building, it was designed for a specific collection of small paintings, rather than for tides of humanity swelling through temporary exhibition spaces. A reaction is setting in against both large museums-cum-rush-hour-subways, and the smaller new museums whose anthological collections all look so much alike.

Though the design for the Getty is still under wraps, Director John Walsh says that his museum is interested in "wall treatments and arrangements of objects that either evoke the original setting or collector's houses, older museums, palaces. In fact," he continues, "our concern is that something has been lost in many museums in the commotion of temporary events and changing shows. It is the sense of a building where you can contemplate quietly the individual, beautifully lighted, nicely placed work of art under conditions that make a strong personal experience possible." The program for the Getty will concentrate on the permanent collection, a selective one. That sounds a lot like what Kahn did at Yale, in principle.

The Yale Center, like much recent architecture of all building types and styles, rejected neutral, placeless spaces in favor of the genius loci and specificity. It took a stand in favor of relating interiors to nature and the city through use of ample, framed openings, the layering of space, natural materials, controlled daylight, courtyards (rather than huge atria), a Beaux-Arts plan with distinct rooms, even intimate residential galleries. And it influenced many museums since, including the elegant 1983 neoclassical addition by Geddes Brecher Qualls Cunningham to the Speed Museum in Louisville, Ky.; Barnes' 1983 modern but restrained museum for Dallas, which New York Times art critic John Russell called "akin to the great Beaux-Arts museums built in America in the early 20th century"; the interiors of Cobb's 1984 addition for the Portland Museum of Art, with its series of toplit "space cubes"; plus recently completed museums by Charles Moore, FAIA, at Dartmouth College, Stirling for Harvard University, and Hardy Holzman Pfeiffer for the Virginia Museum of Fine Arts. The last three are discussed on subsequent pages. Kahn's impress is also seen in museums in design or under construction, such as Venturi's in Austin and Seattle, Cobb's for Oklahoma City, and Barnes' for Fort Lauderdale, Fla.

Yet the hallmark of recent museum design is, after all, the dramatic, eye-catching gesture, the faces and shapes of the building—how they look. As the Metropolitan's Montebello rhetorically asks, "Can you think of a single picture in any of these new museums?" What sticks in the mind is the museums, not their art.

This is a direct legacy of the East Building. For despite their eclectic variety, what most museums of the last 10 years share is a sense of flash, dash, and derring-do, which is today's substitute for modernism's much maligned monumentality.
College students love to explore the new university world they find themselves in. They yearn to achieve a sense of belonging by becoming the inside-dopesters of their environments, the initiates who know where all the secret places are.

The new Hood Museum at Dartmouth seems made for the purpose of catering to this collegiate and youthful impulse. It's a building so ungraspable you could spend your whole four years trying to figure it out and not succeed. You can discern clearly enough the Hood's center—it's the top-floor Churchill P. Lathrop Gallery, dominated by a huge bright Frank Stella collage—but you can't tell at all where its perimeter is. The Hood's edges interdigitate, as the scientists like to say, with everything around it and especially with two older buildings on either side. No matter how many times you wander through the Hood and its neighbors, in and out and up and down among its numberless entrances and staircases, you never succeed in forming a clear mental image of this essentially indeterminate building. Instead, you begin to think of yourself as the inhabitant of a graphic by Escher, doomed to climb forever the staircases of a universe of shifting perspectives.

The Hood's architects are Charles W. Moore, FAIA, and Chad Floyd, AIA, of Centerbrook Architects with Glenn Arbonies, AIA, as managing partner. Moore and his colleagues have long been known, of course, for whimsical buildings that often seem to be mocking their own pretensions. The Hood is sober for Moore & Co., with a sense of solidly built fabric and institutional permanence that is rare in their work, yet it retains all their usual invention and quirkiness.

A simple but inadequate description of the Hood might go like this. It is a two story (plus basement) building made of red and gray brick, dark bush-hammered concrete, and copper. It plugs a gap between two older buildings at a corner of the Dartmouth Green, the grassy common that is the heart of both the village of Hanover, N.H., and the college. It contains 10 gallery rooms, one auditorium, and various support spaces in 60,000 square feet. It also contains very good collections in both art and archaeology.

Unfortunately, that description fails to convey anything significant about the Hood. It fails to note, for instance, that the Hood wanders around its site as aimlessly as a lost cow, ignoring the orthogonal grid with which other buildings in Hanover...
Top, the Hood's concrete and copper entry gate from the north, between Hopkins Center and Wilson Hall; above, view of the courtyard framed by the gate, with far portal leading to second courtyard. Across page, reception area near entry vestibule.
are aligned. The Hood has many entrances, but no main entrance.
It shapes three courtyards so irregular that they cannot be expe-
nenced as outdoor rooms but seem, rather, to be clearings in
an architectural forest. All the Hood's parts look different from
one another, they tend to be incomplete in themselves, and they
collide at random angles and levels. If there is a single governing
metaphor, it is that of the Victorian New England mill village.
But the Hood is a mill village romanticized into something more
like an Italian hill town, picturesquely punctuated at the sky-
line by theatrical gables and cupolas.

Often charming, this exterior occasionally lapses into confu-
sion or self-indulgence. The problem is most serious at the most
important place, which is the facade facing Dartmouth Green.

Since the Hood itself is set well back from the Green, Floyd
and Moore have tried to give it a presence there by means of a
false front. This is a ceremonial gateway made of darkened, bush-
hammered concrete, lacking detail or ornament and facing north.
It is simultaneously timid and grim. The architects had wanted
granite here, real blocks of solid granite from the Granite State.
But the budget would have allowed only thin granite veneer; the
architects chose concrete instead. From any distance out on the
Green, you hardly notice the gate; the Hood instead presents
itself as a shapeless heap of copper roofs in the middle distance
between and behind its two neighbor buildings. When the roofs
turn green the museum will read as a bosque. As you approach
the Hood from the green and notice the gate, you also perceive
the museum's name boldly carved into it. The named gateway
is an architectural promise that if you pass through, you will arrive
at the Hood. Alas, you find yourself only in a mysterious court-
yard, facing a lady-or-tiger choice of two ramps, one curving up,
one going straight down. I watched while one unfortunate eld-
erly couple started down, then backtracked and started up, then
gave up and departed. Had they persevered, they would have
found that both ramps lead to entrances at different levels, but
they had no way of knowing that. Moore and Floyd here play a
little too aggressively the game of setting up expectations only
to undercut them. Failing to provide a legible entrance is coy.
And the split-level courtyard that results, intended for future sculp-
ture, is an awkward and unpleasant space.

Other parts of the Hood's exterior are more prepossessing.
The copper roofs, to be sure, are a little unsettled, sloping and
intersecting in so many ways, like a flight of copper-colored
paper airplanes. But the Hood nevertheless achieves a kind of
precarious wholeness through the use of a consistent palette of
materials. The red brick walls with punched, mullioned win-
dows are enjoyably like-but-unlike traditional New England vernacular. The gray brick, stack-bonded in friezes, helps belt
together the diverse shapes. And the three colors of green—plain
green, blue-green, and olive green—brighten the eaves and win-
dows, echoing the future color of the copper while perhaps gently
parodying the ubiquity of green (in another shade) at Dartmouth.

The Hood's interior, not its exterior, is where the big archi-
tectural successes are scored. Almost everything inside works
well, and the whole sprawling complex comes together with a
satisfying crescendo at the Lathrop Gallery, one of the remark-
able recent rooms in American architecture. It is this room—
just as Floyd and Moore predicted before the building was
finished—that is the memorable experience at the Hood. The
approach is dramatic: You climb a stair that hugs a glass wall,
a wall double-glazed in such a way that each layer has its own
separate grid of mullions, so that the grids slide past one another
as you move. Light fixtures in the shape of flaming torches line
this stair, as if a medieval banquet awaited you at the top. What
does await you is a gallery crossed at its gabled ceiling by a
catwalk, above which a skylight spills indirect daylight down
onto the gallery walls. The room is dominated by the 15x17-foot
Stella metallic collage (on loan from the artist, a Dartmouth
grad), which radiates energy from the far wall with a verve equal
to that of the architecture.
Standing in the center of the Lathrop Gallery, you realize you are at the focal point of two separate axial vistas, each of which penetrates a series of galleries arranged enfilade. The vistas extend outward from the Lathrop at angles, like two trains departing from a station in different directions. You feel yourself to be at the center of something, in a space that commands and magnetizes everything around it.

The Hood interior offers many further delights. All the rooms and passageways are treated differently. As Moore has noted in a published statement:

"Among my favorite museums are the little ones with lots of special places—like the Phillips in Washington; I wanted this museum to be a series of rooms of very different proportions, grandeur, and characters, where the art would not just appear in some anonymous matrix but have the opportunity to enjoy its own environment."

The Hood interior succeeds in the way Moore intended, as a linked grouping of individual places. If a building is a family of rooms, as Louis Kahn suggested, then the Hood is a sort of reunion of the members of a very idiosyncratic family, some of whom have chosen to arrive for the festivities in costume.

The auditorium, for instance, is a game of hide and seek played with columns. A row of three real, freestanding columns runs down one side. The middle column lacks its base and most of its shaft, which would have impinged on the seats: Its capital hangs like a severed head, suspended from the ceiling. On the opposite side, three corresponding column shapes are painted in silhouette on the wall, as if they were shadows of the first three but with the middle one now complete. All six "columns" serve as light fixtures.

The entry vestibule is another pleasing anomaly. Here several circulation paths come to resolution at a little octagonal circus with a ceiling of criss-crossing blue beams, an arbor-like place that opens out into the nearest thing the Hood has to a main lobby. Everywhere you go in the Hood, details like stair rails and lights are freshly invented. The architects toy with the risks of staginess or gaucherie, but never lose control. And the installations of the art and artifacts, too, are exceptionally well done, kept carefully in scale with the architecture. Rooms seem made for their contents, contents for their rooms.
To save confusion, I've left discussion of the two neighboring buildings until last. On the Hood's west is the Hopkins Center, a pretentious, disorganized, barrel-vaulted building of the 1950s by Harrison & Abramovitz, which contains a theater, a cafeteria, and a mishmash of student activities. The Hopkins shares with the Hood one quality, which is explorability. On the Hood's east is Wilson Hall, a good Richardsonian ex-library.

One of the best things Moore and Floyd have done is reach deeply into the Hopkins Center and renovate some of it into a new cafeteria, relocated next to the entrance to the Hood. As you now approach the Hood through the Hopkins, the cafeteria tables lead you seductively, step by fatal step, toward one of the Hood's numberless entrances, much as bait scattered on the ground might lead game into a trap. Student life and the world of art here interpenetrate so indiscernibly that you aren't really aware when you've left one and entered the other. And the cafeteria extends outdoors, too, under a long awning (green, of course), with tables facing the Hood across one of those clearing-like courtyards—another way of linking the Hood to its surroundings. At its other end, the Hood connects with, but doesn't really interact with, Wilson Hall, much of which has been renovated by Floyd and Moore as art and music facilities.

An unusual design process produced the Hood, greatly influencing its final form. Centerbrook began work by setting up an office in the Hopkins Center, next to the college snack bar. Here the architects could soak up college life while simultaneously being heavily kibitzed by a 30-person building committee. Even so basic a decision as where to site the museum came out of this collaborative client-architect process. Centerbrook simply designed six buildings for six different sites, and the committee picked a winner.

The Hood is a building of wonderful parts that seems to wish to convey—but doesn't always succeed in conveying—the sense of an order won momentarily from chaos. Like a college student's room, the museum is filled with shrines and sacred places while remaining, as a whole, not fully formed. In its indeterminacy it perhaps resembles the personality of its senior architect, Charles W. Moore, who in the days prior to the Hood's opening was, as usual, dodging around the world on airplanes (Brazil, Berlin), while simultaneously building in Texas the eighth of the houses he has designed for himself. The Hood possesses Moore's own trait of a nervously amused inventiveness that never quite risks coming to closure. It is a measure of the high quality of this building that one intensely wishes for it the very greatness it seems perversely resolved to fall just short of.

Despite such paradoxes or because of them, the Hood Museum is a building which, once seen, lodges forever in the memory, growing in interest the longer you think about it. □
“We knew he could do it because he understood art,” says Frances Lewis. She is speaking of Malcolm Holzman, FAIA, a partner in Hardy Holzman Pfeiffer Associates, architect of the just-opened west wing of the Virginia Museum of Fine Arts in Richmond. Lewis and her husband, Sydney, donated their collection of 1,200 works of contemporary art plus another 1,500 decorative objects, mostly from the art nouveau and art deco periods, to the museum. Founders of Best Products Co., they recommended Holzman for the museum commission because he had designed Best's award-winning, art-filled corporate headquarters. Holzman describes that office building as “a museum that you work in.”

But the new west wing had to house more than modern art. Mr. and Mrs. Paul Mellon gave a number of 18th, 19th, and early 20th century works from their collection—180 paintings and hundreds of drawings. In addition, each couple contributed $6 million toward construction (the 90,000-square-foot addition, half of which is gallery space, cost $22 million) and an endowment.

Holzman, however, had more to worry about in terms of design than accommodating two widely differing collections of art within a single unified structure. There was the existing building, completed in 1936 and with three major, albeit increasingly undistinguished, additions since. And then there was the site. The west wing was to be placed at the rear, which had never been finished off—Holzman describes it as looking like the backside of “a strip shopping center”—although it faces a handsome park. The architects were able to turn the disadvantageous location into a plus, because they did not have to copy the formalism of the front, or the materials of the additions, mostly brick. They also welcomed the opportunity to design a building that related to the park and its buildings—a small, clapboard chapel and the grand, limestone-walled Confederate Home for Ladies, among others.

HHPA decided that the original neo-Georgian building was the best part of the museum and looked to it for their design cues. They discovered, for example, that the facade was about 70 percent limestone, despite an overall impression that it was largely brick. In addition, the building was richly detailed with a base, cornice, and pediment filled with reveals and other three-dimensional elements that, Holzman notes, “provide an animated surface of shade and shadow in the strong Virginia sun.” In an effort to bring back those qualities, the architects selected Indiana limestone in a variety of finishes—rusticated, smooth, shot sawn, and ribbed—that band together to give rich texture to, and reduce the apparent size of, the facade.

Further visual interest is created by a mammoth bullnose section on top of the rusticated base and by a cornice composed of a pair of polished granite bands above a rusticated limestone course. In addition, small squares of granite are set into the window frames. The texture of the stone gives a syncopated rhythm to the facade, and although random-looking, the vertical demarcation is based loosely on the functional division of spaces inside.

Two sets of stairs linking the upper and lower galleries project diagonally from the stepped, rear facade, which compositionally echoes the tripartite front. These fully glazed boxes, which open onto a courtyard facing the park, are scored with grid-patterned mullions painted slate blue. This spot of color—it's all there is on the facade—continues an HHPA tradition and provides a pleasant counterpoint to the monochromatic stone. The dark glass, a new product from PPG, cuts 80 percent of the light by silkscreening a ceramic pattern, which in this case could easily be mistaken for a window screen, onto the inner side of each double-glass panel.

Combining art with architecture, metal artist Albert Paley, noted for his wrought and twisted iron objects, has installed two sets of gates on the building. The one at the rear center is small and based on Paley's usual tree-like forms, appropriate for the view into the park. But the gate at the service entrance seems quite unlike anything he has done to date. Thirty feet

Glazed boxes project from striped limestone facade over rusticated base. Across page bottom, Paley's service gate.
long, and on a track to slide back and forth, this gate is composed of a series of formally placed panels not unlike a Venetian blind, notes the artist, except that they are vertical and slightly tapered at the top. The panels create a sense of ambiguity; from one angle the gate looks like a solid wall, while from another it appears pierced. The rear of the 10-ton structure, which is composed of 900 individually welded pieces of steel, is a huge X-frame that resembles a bridge truss and has its own sculptural quality visible from the galleries.

Inside, the architects also took their cues from the existing museum, which has formal axes and columned, central spaces in the original building and each addition. The entry to the new wing is an east-west axis that ends with a glazed opening to the park. The museum’s original entrance is on this same axis and is being opened up to provide natural light at that end as well. This work is included in 20,000 square feet of renovated galleries, whose natural lighting design and color were under the direction of Hugh Newell Jacobsen, FAIA. Another axis running 300 feet north to south through the new wing also terminates in glazed panels rather than the usual piece of art. This, says Holzman, is to help orient visitors and to induce them to walk to the end and thus see other galleries.

The primary space for the west wing is a 30-foot-high, marbled hall with a bi-directional suspended stair rising to meet a V-shaped balcony-bridge. This skewed approach, a Hardy Holzman Pfeiffer organizational trademark, creates high drama and offers wonderful sightlines that encourage visitation to the eight galleries of the Lewis collection on the right and the 10 Mellon galleries on the left. Holzman describes this central hall as having a “stone carpet” running up the walls, the stone being a rosy Breche Perniche marble from Verona, Italy. That material was selected for its subtle color variation, which is accenteduated by skylights overhead that wash the walls with natural light, as well as its warmth and richness. A series of octagonal columns, clad in Texas shellstone, controls axial views, further orienting visitors as well as providing visual and textural interest (fossils are imbedded in the creamy white stone). The coffered ceiling is yet another example of an effort to provide some texture.

Within the galleries themselves, the architects and the instal-

Above, rose-colored marble ‘carpets’ the floor and walls of central area, while space is framed by shellstone-clad columns. V-shaped balcony-bridge carries visitors to either collection. Across page top, interior of view projecting bay containing stair. Plan shows continuation of museum’s axial symmetry.
Top, smaller-scaled Mellon collection is placed traditionally, on raised panels under coved ceilings. Above and right, Lewis collection demands contemporary setting and high ceilings.

In collaboration with the Lewis collection, George Sexton and Charles Froom were able to achieve unusual variety within unity. Because of the differing sizes, shapes, and forms of the Lewis collection, one large gallery is double height, allowing the works to be seen from several perspectives. Throughout, the hardwood floors and neutral-colored, painted walls complement the contemporary art. A series of movable partitions will permit changing the works—there’s room for only about 30 percent—periodically. For the Mellon collection, only one piece of which is larger than 30x24 inches, the raised walls of the galleries are covered with fabric and the floors richly carpeted. Natural light is filtered through skylights, and there is a deep cove in the ceiling. These efforts all combine to help create a more intimate setting, appropriate to these older works of art.

Paul Perrot, director of the museum, says he is pleased the addition is both “user friendly and object friendly. It invites discovery with the use of architectural surprises—vistas, cul-de-sacs, curved rails, suspended stairs. It stimulates the eye.” That, of course, is what art is supposed to do too. Frances Lewis was right when she said she knew Holzman “would come up with something that would equal what we were going to put into the building.”
The Arthur M. Sackler Museum at Harvard, by James Stirling, Hon. FAIA, presents the case of a building in which the highest level of talent and ambition on the part of both user and architect have been sabotaged by a difficult site and unworkable program. Absurdly low budget projections in the early stages may also have caused problems in the finished product, although if so they are hard to pinpoint. The resulting building, for all the international attention it has been receiving, is neither a very good nor a very bad work of architecture. Its exterior is, for the most part, dreary and unresponsive to context. Its interior is brilliantly organized but fails to achieve distinction, largely because it is so stuffed with functions that there is little room left over for grace.

The Sackler is an L-shaped, six-story building enclosed by half-story stripes of gray and orange brick punctured by small windows, with a rather grandiose stucco-framed entrance at one end. Inside, it contains gallery spaces for Harvard's superb collections of classical and Asian art, together with offices and seminar rooms for the art department, a small library, an auditorium, and backstage storage and lab space.

In designing the Sackler, Stirling faced a number of overwhelming constraints. The site was awkwardly L-shaped and faced a world's fair of neighboring buildings, all aggressively designed in radically different styles. The volume of the new building was fixed by zoning, since Harvard wished to avoid a possible neighborhood confrontation by choosing not to seek any form of variance. The program to be inserted into this rigid envelope was so ambitious it could be realized only by a floor plan with something like 80 percent efficiency. The budget projection by Harvard, meanwhile, was about $70 per square foot, about half the quite reasonable figure the building eventually was to cost. The architectural fee for the co-architects, James Stirling and Michael Wilford of England and Perry Dean Stahl Rogers of Boston, was a lump sum based originally on an ungenerous 7 percent of this Candide-like estimate.

One can only sympathize with the magnitude of the task Stirling faced in attempting to bring together all these incompatible realities. And one can only respect, now that the struggle is over, his unwillingness to convey by the slightest hint that any problems the Sackler may have are the fault of anyone but himself (although he has been known to complain about the fee).

Stirling addressed this hopelessly over-determined design problem with authority, organizing his building's interior with enormous skill and responsibility. Offices and seminar rooms are placed around the outside of the L, where they can enjoy windows facing out over the streets; galleries, on the other hand, needing no views, are given the inside of the L, facing a gloomy interior alley. The galleries are exactly twice the height of the office floors, so that six floors of offices fill up one side of the building and three floors of galleries fill the other. Connecting these two halves, zipperimg them together, is the Sackler's one brilliant architectural device. This is a stair that rises through the museum six stories in one straight line. A landing at every level serves the offices, and every second landing also serves a gallery floor. The stair is ingeniously expressed as an outdoor street, roofed with clear glass and walled with stripes and punched openings like those of the Sackler's exterior, though in different colors. It has much of the feeling of a stepped street in a Mediterranean hill town, and you expect to see strings of laundry or hanging banners or shawled heads poking out of the openings. An earth-toned column, half-way up, is an intriguing presence that marks the entry to the midlevel galleries. Coptic sculptures are set into the stair wall as if the plaster had been scraped back to reveal their ancient presence.

From the point of view of use, this parti of offices outside, galleries inside, stair between, was humane and sensible. But it
also painted Stirling into an esthetic corner. There was no way his building, a museum containing much of the world’s single greatest university art collection, could look from the outside like anything but an office or apartment building—given the fact that its visible facades do, in fact, enclose offices and other small rooms. Compounding this problem was another humane and sensible decision. Stirling mandated that each of these small rooms should have its own window centered in its outside wall, to permit useful furnishing or shelving on either side of the window and to give each room its own centeredness. The esthetic result of that decision was to ensure that the windows would be staggered in a random pattern all over the facade. Stirling then dealt with that condition by inventing his stripes of brick, which organize the disorderly windows into continuous bands.

As logical as that process seems, it leads to a result that can’t be justified. The abstract pattern of brick-banded facades is boring and gives no sense that this is a building of cultural use or civic importance. They have nothing to do with any definition of the genius loci of Harvard, although Stirling unconvincingly claims they refer to the polychrome of Harvard’s most monumental building, the Ruskinian-Gothic Memorial Hall, just down the street. Originally, the brick stripes were to have been in buff and green, but such colors would have required glazed brick, a material that weathers poorly in Boston. And it is said, too, that Harvard’s president insisted on some red. The wall, incidentally, is a bearing wall, a truth that is visually contradicted by the random placement of windows. The Sackler, in fact, is built like a motor hotel, out of bearing walls and precast planks, in an attempt at economy that predictably failed in a building so small and with so many special conditions.

The only part of the public facade that isn’t banded brick is the main entrance, a veritable explosion of architecture. For some reason, Stirling chose not to employ this one powerful accent as a means of animating his long facade on Quincy Street, but instead placed it in the Sackler’s short end, facing the Fogg Museum across Broadway. A Quincy Street entrance would have made better urban sense and would have invigorated the whole building. The only argument against it, a weak one that Stirling nevertheless makes, is that it would have faced the back of a fire station across the street.

The entrance itself is an architectural tour de force, a bold cartoon best read as an ideogram for the idea of “entrance” drawn from many styles and periods of architecture. It brings to mind, too, a marvelous comment made at the San Francisco AIA convention by Charles Moore, FAIA, who said of one of his own buildings: “In the main facade, I tried to achieve an easily deflatable pomposity.” The phrase captures the Sackler entrance perfectly. It has a theatrical grandeur made up of overblown columns and windows and stage-set stonework imitated in stucco. The entrance is so overscaled as to mock the overscaling of other Harvard buildings, notably the Fogg Museum, which is a Georgian villa grotesquely inflated. The Sackler facade, in fact, rather closely resembles the entrance facade of the neo-Georgian
Genuinely pompous, meant to express the power of the institution, the Sackler undercuts itself and seeks the typical postmodern balance between self-importance and self-mockery.

This grand entrance is a little precious, conceived perhaps too much as being permanently on display. It seems as detachable as a mask from the abstract striped box behind it. It also has practical problems. The glare of the southern sun penetrates its glass and can blind you in the lobby. It stands, too, a few steps down from the sidewalk in a tiny depressed concrete court, a questionable response to the need to pack those six floors of offices under the top of the zoning envelope.

Once you've passed through this Cecil-B.-de-Mille entrance, you find little inside that is of equal interest. The lobby is austere and high and made of drywall. A lower level lecture hall, with a shallow-vaulted ceiling, is successful as a space but you find little inside that is of equal interest. The lobby is austere and high and made of drywall. A lower level lecture hall, with a shallow-vaulted ceiling, is successful as a space but

The galleries themselves, the chief reason for the Sackler's existence, work well enough but lack distinction. They are best on the top floor, where they are skylit with the bunched daylight that has become a welcome commonplace in recent museums. The skylight system is too directional: Each skylight is linear, going east-west in two galleries and north-south in the other two. As the sun moves, some galleries grow too dark while others brighten. Even at its best, the daylight lacks the presence it has in such other recent American museums as the Yale Center for British Art (see page 64), the Portland Museum in Maine, or the addition to the Speed Museum in Louisville. And, of course, the site constraints at the Sackler force the galleries to be stacked vertically, so that only the top third receive any significant natural light at all.

The galleries are treated as rooms, with doorways and corners, rather than as free-flowing modernist space. Sometimes the doorways are arranged enfilade, sometimes not. The details—big half-cylinders of oak at the jambs, rough high plaster walls without horizontal or vertical division—are heavy, even clumsy, and lack the sense of order, measure, and human proportion one expects in spaces that are articulated as rooms.

It's as if all the joy and invention inside are concentrated on the one motif of the staircase, just as they are outside on the entrance. The stair is a delight of invention and metaphor, but it too has drawbacks. It certainly is too narrow—that jammed program again—and the conceit of making one of its handrails a light fixture doesn't work. It neither departs from the lobby nor arrives at the top with any particular architectural emphasis (at the top, four flights of axial movement end in a glass door). Nevertheless, it works extremely well in achieving the very large goal of making one imageable interior out of a diversity of functions.

In one important respect, the Sackler is not what it was meant to be. It was originally conceived not as an autonomous building but as an appendage to the Fogg across the street, to which it would have been joined by an umbilical bridge. The bridge was to enter the Sackler where there is now a large square window above the entrance. It was assumed that most visitors would either exit from the Sackler at its top floor, moving on through the bridge to the Fogg, or, more likely, would come the other way, entering the Sackler on the bridge at its topmost gallery level and circulating downward on the stair. Either experience would have been preferable to the upstairs-downstairs movement you now must make. More important, had the bridge been built, the great courtyard of the Fogg would have been felt as the major public space of the Sackler as well, making up for its present lack of any generous space or center. The bridge would also have made life much easier for the curators by permitting the secure transfer of artworks between the buildings (all the restoration labs are in the Sackler).

When the bridge failed to gain the approval of the local Cambridge neighborhood, Harvard chose not to seek city permission to build it—although Harvard clearly believes it will some day be built, and has banked the restricted gift that would have funded it. The bridge was to be itself a gallery, 18 feet wide, with one big round Cyclopean eyelike window in the middle of each side. It would have been supported by the two big round columns that flank the entrance, now used only as air intakes. Anchor bolts for the bridge, in fact, still protrude from the column tops. Harvard had planned to remove them, at least for the time being, until Stirling, never one to tidy up his buildings, told the university (says the university) that to do so would be "dumb and provincial."

That phrase sticks in the mind, in a meaning not intended by Stirling. Harvard itself, in its architecture, when it is at its best, is often "dumb and provincial," consisting of simple gabled boxes of red brick and white windows, standing separate from one another on an austere green lawn under a canopy of leaves, having something of the look of a primitive painting. The trustees of the university museum, in seeking an architect, clearly rejected any concept of Harvard as "dumb and provincial." They deliberately set out to find the greatest architect of the day for their purpose, winnowing an exhaustive list that began with 80 names on it, many famous. The goal was a building that would be an individual work of art comparable to the paintings and sculptures in the collection.

In retrospect, it is obvious that such a goal, given the circumstances, was naive. But, aside from circumstances, was it ever an appropriate goal? Should a university be thought of as a museum of great works of architecture? The Sackler raises, I think, but does not settle, that question.
In what may come as a rude shock to some, Kevin Roche has designed a building for Colonial Williamsburg, and a modern one, at that. No, it's not a historicist exercise in postmodernism. In fact, you can barely see it, because the DeWitt Wallace Decorative Arts Gallery is really a nonbuilding. A 12-foot-high brick wall, similar to those found in 18th-century gardens throughout the area, is all that shows. Roche brushes off the uniqueness of the underground solution and declares, "The only real buildings are nonbuildings. The rest is theater."

This quietly dramatic solution, a 465-foot-long brick wall shielding a 62,000-square-foot building, provides a perfect neutral backdrop for the reconstructed Public Hospital, a 1773 design by Robert Smith that was the country's first facility for the mentally ill. But even more important, the nonassertive building houses 8,000 decorative objects—furniture, textiles, prints, silver, porcelain—that Colonial Williamsburg could never before display due to lack of space.

The original intent had been to reconstruct the hospital—it burned in 1885—and install the collection there, but it was soon realized that there was not enough room in the 100x32-foot, two-story Georgian building. To accommodate its needs, the Colonial Williamsburg Foundation would have had to construct several mammoth sub-basements, leaving the tiny hospital on top, almost like a cupola to the underground structure. Roche says, "Intellectually as well as artistically, this was not a good solution." Since Colonial Williamsburg permits only historic buildings within its precinct, Roche had to search elsewhere for an
Visitors enter the gallery, whose only above-ground element is a brick wall, through a tunnel from the reconstructed public hospital, left. They arrive in a light-filled, two-story courtyard, above. Roche saw the wall as a functional device to screen out an intrusive, 1960s modern courthouse and jail. In addition, it is an appropriate response to the problem of designing a modern building in a historic environment.

The hospital was reconstructed—brick walls nine inches thick to remove the need for expansion joints—over a steel frame—under the direction of Williamsburg's historical architect, Nicholas A. Pappas, FAIA. An effort was made to use, as much as possible, authentic materials. The 200,000 bricks were hand-made as were the 35,000 cedar shakes on the roof. Travis McDonald Jr., the project's architectural historian, reports that a major difficulty lay in convincing the craftspeople to do less than their best, since the original workers were not as skilled as today's. One-half the building's first floor is interpreted as an insane asylum, complete with Williamsburg-created, but historically based, graffiti on the cell walls.

The remainder of the interior is a contemporary design by Roche with the entry, coat room, and lavatories on the ground floor and offices upstairs. Visitors to the DeWitt Wallace Gallery—the Reader's Digest founder and his wife donated $14 million of the $17 million cost for the joint gallery/hospital project—descend either by a handsomely paneled elevator or narrow steps to a small lobby and the transitional, introductory gallery. There, differing approaches to interpretation are demonstrated. Customarily, Williamsburg visitors view various objects in their mostly residential and utilitarian, room-sized settings. At the DeWitt Wallace Gallery, they stand alone as individual objects selected for museum display. By use and openness—there's a light-filled vista at the end of the dark space—the fact that the introductory gallery is a tunnel is minimized.

The processional then bursts dramatically into a two-story, skylighted courtyard, the most prominent features of which are a range of white columns around a massive bluestone staircase. The walls are lattice, a design motif inspired by the local architecture and one that Roche has used in a number of his recent designs. The lattice, in vertical panels, provides a warming, residential quality. In some cases, the criss-cross pattern is open, while in others a mirror behind the wood strips amplifies the light in the courtyard. Lattice is also used to line the walls of the 240-seat auditorium whose gray seats and carpet and white walls provide a restful combination. The remainder of the ground floor includes a small cafe at the rear of the courtyard and storage and mechanical areas.
Top, tunnel serves as introductory gallery. Above, objects are displayed in cases surrounding the central courtyard. Right, east garden court, designed to provide a pleasant respite.

The bulk of the exhibits is located upstairs in eight galleries differentiated by subject. The collection’s masterworks—100 to 150 rare objects including the governor’s chair from colonial Virginia, a case clock made about 1700 for William III, after whom Williamsburg is named, Charles Willson Peale’s portrait of George Washington, and a set of four, mid-18th century, silver candlesticks that resemble architectural columns—are placed around the balcony on the courtyard’s upper level. There are also 6,000 square feet in two areas for special exhibits, spaces that will now permit Williamsburg to take traveling shows for the first time. Set to open next fall is a large garden accessible from the galleries. Designed by Sir Peter Shepheard, a British landscape architect, it will include a fountain and a pergola under which visitors can sit, as well as historically appropriate plantings. The garden is enclosed within the large, coping-topped brick wall that surrounds the building. But it is not visible from the exterior and thus will provide a sense of surprise for visitors. A skylighted, interior garden court surrounded by galleries at the east end of the building fulfills a similar oasis-like function. Both will be furnished in bronze furniture cast in foliated patterns by French designers Claude and Francois Xavier Lalanne.

“One of the problems in all museums is fatigue,” Roche notes. “Relief spaces are very necessary and very welcome to visitors. It is good to be able to leave a gallery, go through a relief space, stroll around, enjoy some greenery, some water, and take a moment for relaxation.”

The galleries themselves were planned by the individual curators working with Vincent Ciulla Design Associates and Kevin Roche John Dinkeloo & Associates. One result of this joint effort is a consistency of detail throughout the museum. The individual spaces flow with ease and are designed to permit flexibility. The furniture, for example, is in two large rooms with the pieces placed on platforms that can be moved easily. In the textile room, visitors can pull open drawers filled with examples for further study; the same is true with vertical cases in the print department. The collection’s veritable orgy of silver and pewter is composed beautifully in glass cases. The palette for the walls ranges from white to gray to raspberry to green. Most of the floors are bleached oak, but an occasional plum carpet provides a rich accent.

According to Beatrix T. Rumford, vice president for museums at Colonial Williamsburg, Roche has an unusual “sensitivity to textures, fabrics, colors, woods.” In a delightful touch, the architect selected modern wooden chairs made by Stendig for seating in the gallery spaces. Given the contemporaneity of the facility, they seem much more appropriate than the ubiquitous colonial reproductions found elsewhere at Williamsburg.

Roche’s nonmonumental, almost nonbuilding, solution is filled with visual delights. “It’s a museum that unfolds at every turn,” notes Rumford. And it seems to be just what the doctor ordered for Colonial Williamsburg. They are so pleased with the results that they have commissioned Roche to design an addition to the Abby Aldrich Rockefeller Folk Art Center there.
Serene, Ordered Presence in a Park

*Museum für Kunsthandwerk, Frankfurt, Richard Meier: By A.O.D.*

Post-World War II attempts to revive modern architecture in Germany, the land that nurtured and then expelled most of the modern masters during the Third Reich, resulted mostly in a mediocre medley of cheerless commercial buildings and hostile highrise housing. Little wonder that by the time the recent German museum building boom began, postmodernism was without competition, as evidenced by commissions won by Ungers, Hollein, Kleihues, Stirling, and others.

Then, last spring Richard Meier's Museum für Kunsthandwerk opened in Frankfurt accompanied by press proclamations about *The Return*. The bimonthly architecture journal *Bauwelt* announced, “Now, after 50 years of emigration, modernism returns to Germany though Americanized in two generations,” and, as the daily Frankfurter *Allgemein* put it, “devoid of its puristic pathos... of its rage and weightiness.” The British critic Peter Murray, musing about the rash of new German museums, wrote that it “had roots in the need to absolve the nation of
Above, the west facade facing a park landscaped by Meier.

postwar guilt," and that "his [Meier's] architecture jumps the years they want to forget, his white architecture a cleansing force." The theme was reinforced by Meier's remarks at the ground-breaking five years ago. "As a Jew," he said, "whose grandfather emigrated from the Frankfurt area a century ago, the commission gives me an opportunity to reflect on my own roots."

By the time I visited Frankfurt last June, word had spread that Meier was a local boy who fled Germany with his family during the Hitler period. His native city, as we know, is Newark, N.J.

His Museum für Kunsthandwerk is what we have come to expect of Meier—a complex, carefully controlled and tuned gleaming white composition full of surprises, unexpected juxtapositions, and breathtaking touches.

Its design preceded that of both the High Museum in Atlanta and the addition to the Des Moines Art Center, both more flamboyant, less serene, and less securely anchored to their site and city than is the Museum für Kunsthandwerk. This, despite the fact that the last is the only "modern" building of the eight museums along the Schuamainkai—Frankfurt's museum way flanking the Main River—and that it is an addition to (albeit nine times the size of) the neoclassical Villa Metzler that housed Frankfurt's collection of decorative arts until last spring.

In fact, the starting point for Meier's building was urban design, an attempt to create the closest possible fit between the new museum, the old villa, the five-acre site they share, the river and the city to the north, plus the residential neighborhood just south of the site.

It was, first of all, Meier's great good fortune that the Villa Metzler, though dating from the days of Schinkel and Goethe and tranquilly disposed among pollard trees, "was quite by chance
a cube and it was white," as Meier says. Grist for his flair for geometric pyrotechnics. He simply took the square proportions of the villa's plan and pattern of its facades, which divided neatly into 16 squares, and repeated these as modules throughout his design—in the axial circulation system, the elevations, their grids, wall panels, skylights, mullions, and pavers. But while echoing the villa's plan and facades, Meier rotated his plan by 3.5 degrees to align it with the Schaumainkai and nearby buildings. The result is an overlay of grids, creating a lively interplay of planes and spaces. There is, in Meier's words, "a repetitive quality that's always changing; the cube is there but always different."

His "addition" is an L-shaped building formed of three square pavilions clad in gridded steel sheeting, while the connecting sections are stucco. The arrangement creates two courtyards. One is at the elbow of the L; the other, constituting the entry court, mediates between the new building and the villa, which are linked by a glass enclosed corridor. The dialogue between old and new, as Paul Goldberger has written in the New York Times, is "as graceful a one as the architecture of this decade has produced."

Unlike many of his peers, Meier is a man of scant rhetoric, but a written explanation titled "A Personal Manifesto" (Architectural Design 1/2/’85) tells a great deal about this building: "I manipulate forms in light, changes of scale and view, movement and stasis." Meier's museum is, in fact, a tightly controlled yet poetic configuration in which changes in light, scale, and
Left, the approach from the east provides a ground level view through the site. Below left, the north elevation from the Main River. Below right, the principal approach from the river side channels visitors through a freestanding stucco structure and, right, around a glazed pavilion shaped like a ship's stern. Note the end of ramps through window wall in photograph below.
views gently prod viewers on their way through a series of chronologically and geographically arranged exhibits.

From the ground floor entry hall, curved walls lead toward a dramatic ramping rising between two pavilions. It is topped, edged, and interlaced with so much incident—a huge skylight, framed windows, bridges, railings, patterns of light and shadow—as to make it hard to walk without wobbling and weaving since one is looking everywhere but down. Each floor provides a circuit around the courtyard, with the first threading through the villa.

Focused light suggests patterns of movement from gallery to gallery, and circulation routes and openings are varied to give a multiplicity of views into display spaces, sometimes direct, sometimes oblique, sometimes offering mere glimpses. There are framed windows of all sizes everywhere to create a variety of detailing and give views of the courtyards, villa, and park. There are no “rooms,” though exhibition spaces vary in size and proportions.

Some critics and many museum curators find that the building upstages the art, that the windows are too numerous, the contrast between circulation and display spaces too sharp, the light too bright. To reduce light levels, there are fabric screens for covering the skylight, which were used for the opening exhibit.
Right, a view from the south over the museum's backside. Villa's widow's walk and a rounded dormer can be seen over museum wing on the right. Windows of administrative offices are on ground floor of this quadrant. Beyond museum are the river and Frankfurt skyscrapers.

on Turkish art. Meier explains, however, that the glazing is filtered for ultraviolet rays and the screens need only be used if "you want to get down to five lux," which most conservators do insist on for delicate fabrics, feathers, and the like. He adds, "This is a very extroverted building, which is in keeping with the collection. The decorative arts have always been seen in houses. They are not self-referential, but need to be seen in reference to the place, to the landscape, to the city." He doesn't mention that the villas and palaces that originally housed such objects, were, unlike this museum, opulently hushed in tone with their curtains usually drawn.

The popularity of the Museum für Kunsthandwerk is attested to by the multitudes passing through its spaces at all hours. And as a piece of urban design its five-acre park dotted with sculptural fragments of the museum designed by Meier works splendidly. Sad to say, the authorities have blocked access from the residential neighborhood to the south by putting up a chain link fence, again severing it from the river and making entry to the museum possible only from the Schaumainkai.

Finally, a note of concern: Frankfurt's successors, the High—a complex and spectacular building but a poor showcase for art—and the addition to the Des Moines Art Center—which is in places overly complex and quirky—give one pause when considering the role of the Museum für Kunsthandwerk in Meier's oeuvre. Kenneth Frampton has called it "the most geometrically ordered building of Meier's career." When asked his reaction to this, Meier answered, "Yes, it's rigorous and well ordered." Does it mark the end of something? Meier responds, "It's not something I now have to do again."
Upon completion in 1977, three years after the death of its architect, Louis Kahn's Yale Center for British Art in New Haven, Conn., drew a variety of reviews in the architectural press. Commenting on its Miesian envelope, Vincent Scully pronounced it an “unexpected culmination” of Kahn’s work, “a sarcophagus at architectural scale.” Stanley Abercrombie appraised it as “the most beautiful building of Kahn’s career,” William Jordy saw it as “Kahn’s most conservative building,” while Martin Filler deemed it “one of Kahn’s least satisfactory efforts.” In 1978 the center received an AIA honor award, and in our recent poll it was identified as one of the decade’s most significant buildings.

Now in use for nine years, the Yale Center for British Art is still drawing mixed reviews. Most of those who know it best—its staff—praise it as a workplace and as an excellent environment for viewing and studying its impressive collection of British art. It is now a must on any Kahn pilgrimage to the northeast (or general architectural tour of the region), and as Andrea Oppenheimer Dean points out elsewhere in this issue, the center’s use of natural materials, natural light, and discrete gallery spaces has made an indelible mark on museum design. But even its defenders find, in living with the building day to day, odd, annoying shortcomings.

The building is appropriately urban in scale and form. Taking its place on Chapel Street across from the southern edge of the university (and Kahn’s first major commission, the Yale Art Gallery) the four-story center is reserved, unmonumental, and a clear expression of its concrete frame structure infilled with stainless steel panels and glass. The building’s multiple role as a museum and as a part of the city’s fabric is articulated in its street level commercial shops, above which the museum proper...
The retail space was not Kahn's idea nor that of the building's donor, Paul Mellon, but was sparked by student dissatisfaction that in moving across Chapel Street the university would demolish houses and shops and, with them, street life. In occupying the site, Yale (with its tax-exempt status) would also remove property from the city's always precious tax base (Yale occupies about 40 percent of downtown New Haven). The city fathers thus pressured Yale to provide taxiable commercial space in the building, and Kahn welcomed the idea. From an urban design standpoint the inclusion of commercial space was essential in maintaining an active edge along Chapel Street that would tie into the city's efforts to encourage commercial activity west of New Haven's Green, spurred by the Chapel Street Mall constructed 20 years ago. Today, the center's commercial areas still make eminent sense, and by maintaining an unbroken thread of retail activity on Chapel Street's south side have likely stimulated revitalization farther west.

However, the commercial spaces do have problems. Those located on High Street have not been as successful as those on Chapel Street, mainly because commercial traffic along High Street shop since the building opened, says that while the center and its commercial space has made the block "a focal point of the city," the university's strict limitations on commercial signage has impeded business. The shop next to Simpson's, on the building's southeast corner, has been chronically vacant during the building's history. Simpson remembers a three- to four-year vacancy between the shop's last two tenants, the latter of which moved out over a year ago.

The commercial spaces directly on Chapel Street, however, save for a subterranean restaurant), have been very successful. They currently include a bookstore and coffeehouse that expanded a few years ago to occupy two shops, a wine and cheese shop, a women's apparel shop, and a stationery cum lovely shop whose moniker "Scribbles" glows in pink neon behind its plate glass storefront. According to David Schaffer of C. S. White, Inc., which manages the commercial spaces for Yale, the shopkeepers can make no changes to the building's exterior and any sign must meet an unwritten criterion of tastefulness.

As far as the building's exterior materials go, they appear to have weathered the unkind climate well. The pewter colored stainless steel panels, however, tend to bear the building's urban scars, namely graffiti. According to Vincent Raucci, manager of building operations and security, it is impossible to remove graffiti without removing the matte finish, under which the stainless steel shines like a newly minted nickel. The material also shows traces of anything that comes in contact with it, like fingerprints. Next to the center's entry, for instance, a motorcycle "head runs up a panel, giving a glimmer of the type of nocturnal urban activities that the dark entrance sometimes harbors.

The entry is a brick and bluestone-paved, 40-foot-square, story-high void at the corner of Chapel and High, which leads directly to the travertine paved entry court, which is 40 feet square and at full height of the building, crowned with clear plexiglass skylights. The entry court's first story is paneled with the same stain-gray travertine floor, crowned with clear plexiglass skylights. The entry court can be disorienting. "First-time visitors don't know what we're about," he explains. "It says 'Yale Center for British Art' and they look around and they don't see any pictures." An unsightly security camera recently installed in the entry court only heightens the visitor's anxiety.

Once past the entry court and into the elevator, however, the building becomes welcoming and comfortable. In plan the center neatly divides into two overlapping squares, the one to the east comprising gallery space around the entry court and the one to the west spaces devoted to study, wrapped around a second court. (According to staff, the center's dual functions

Across page, top, Yale Center for British Art from High Street; across page, below, view from Chapel and York streets; below, Kahn's early designs for west elevation and, bottom, library court.
The second floor includes gallery spaces devoted partly to the permanent collection and partly to special exhibits, and three libraries: rare books, prints and drawings, and a reference library and photo archive. These three have changed little in nine years, save for diminishing storage space and raising the lamps over the reading tables after a few scholarly noggin's were banged. The libraries surround the second court, this one three stories high and hung with some of the collection's largest works. The library court is dominated to the east by a concrete stairtower, a rude intrusion into the space that stands mutely, like an uninscribed tombstone. Visitors occasionally miss the connection between this inscrutable cylinder and the staircase. Nonetheless, students who use the libraries often stretch out in the library court as if it were home.

Both library and entry courts can be viewed from above through wide, generous cutouts that beckon you to lean out and enjoy the view. As you lean, however, you become aware of a sign on the window's ledge cautioning that the fire shutter above your head may fall without warning, guillotine fashion. The image conjured up is usually enough to keep people at bay. The third floor holds light-sensitive works on paper, is necessarily dark, and seems suited to its function. There are also classrooms, a conservation lab, and offices for visiting scholars. The fourth floor is completely devoted to galleries holding the permanent collection, and administrative offices, both illuminated by coffered skylights that cast an even, gentle light. The galleries are distinguished in their roomlike quality, based on a 20x20-foot bay that evokes the spatial sense of the chambers in which many of the works once hung. The bay system is apparent throughout the building, demarcated by travertine strips on line with the column grid that frames the carpeting. The Belgian linen pogo panels are placed only on the travertine strips reinforcing the idea of "rooms."

One is impressed by the interior in the caring and thorough way it has been maintained. "Yale is a pretty smart place," says Robinson of the university's maintenance, "but even within the context of Yale people raise their eyebrows at just what length we go to make the building look its best all the time." The center is closed one day a week, Monday, which is good housekeeping day. The carpets are shampooed, the paneling dusted, the marble and metal polished.

From most reports the galleries function well, but there are complaints from the painting curatorial staff that the design is rigid because the panels cannot be painted for variety or placed outside the travertine grid. The larger panels are also cumbersome to move. "We've probably moved less than a dozen in nine years, which is astonishing," says Susan Casternas, assistant paintings curator. In defense of the building, Robinson points out that Mellon's collection of British art came first and the building was designed around it. "This is not a building for all seasons," says Robinson. "It's a building for a particular kind of art, but I think we've found in our temporary exhibitions that quite a wide variety of works does fit in and looks good, everything from 16th century panel paintings to contemporary art."

Whether a piece fits in and looks good at the center often hinges on whether it fits, period. To exhibit a large contemporary work during a recent show, two bays had to be covered with sheetrock to provide an uninterrupted 40-foot span. Kahn's use of exposed ductwork in the lower galleries (the "ship's innards," as one staffer described it) limits how high a work may be hung and is visually annoying to boot. "It's a piece of architectural mannerism that is quite useless," barks paintings curator Malcolm Cormack about the ductwork, which also transmits noise from the classrooms into the galleries and libraries. The track lights in the second and third floor galleries reflect off and occlude views of larger works. "The lighting in here is
rrible," muttered one visitor as she reeled back and forth to get an unobstructed view of Frederic Leighton's portrait of Mrs. James Guthrie.

Alterations to the building have been few and unobtrusive. In 1981 a variable air volume system was installed to cut down on the high energy costs of heating and cooling large volumes of air. The new system sends only the amount of air required to maintain proper temperature and humidity, cutting the building's energy consumption by half, reckons building manager Raucci. It has also mitigated a notorious condensation problem, which is the staff's universal complaint. In winter condensation forms on the windows, runs down into a well, and, if substantial, overflows onto the sills, many of which show water stains. The water has also loosened the seals on many of the double paneled windows, causing condensation to form inside and making the glass appear frosted. Raucci says that 14 windows have been replaced and another 18 should be. Condensation on the skylights a few years ago was so bad that buckets were positioned in the galleries and the library court, but modifications in the air handling system have alleviated this problem.

Another change, also for the better, has been the removal of the canvas window screens, described in this magazine's 1978 review of the center by Andrea Oppenheimer Dean as "baggy, appy things." They've been replaced by the movable wooden shutters that Kahn had originally intended, eliminated in construction for cost cutting reasons. According to Marshall Meyers, AIA, a Kahn student whose firm completed the building after Kahn's death, Mellon was never happy with the canvas shades either and underwrote their replacement in 1981. The oak shutters are elegantly detailed and were made to Meyers' specifications by the company who did the original millwork.

Meyers has just completed plans for another alteration of the building. The center's giftshop has grown substantially, having moved from the entry court's information desk to an orientation room nearby in 1982. It is now preparing to move again into the commercial space next to the jeweler on High Street. This will entail removing a coat closet to the left of its present location, breaking through the concrete wall, installing glass and oak doors, and reinforcing the partition wall with stainless steel. Meyers says that the new space will have a small office and stock room to accommodate the giftshop's expanding mail order business. It will also allow the present giftshop space to return to its original use as an orientation room.

Beyond the confines of New Haven, the center has drawn thousands of architects and architecture students every year, plus a few people intending to build museums of their own. Constance Clement, the center's director of education and information, has spotted visitors connected with many of the museums built in the past decade. "Moshe Safdie came through," says Clement, "people from the National Gallery in Canada, there was a group from the High Museum in Atlanta, there was a group from Dallas, another from Chicago where they're doing a new wing, John Walsh and Richard Meier came from the Getty." Thrilled by the attention the center receives by architects and his colleagues alike, Duncan Robinson sums the building up as being "like an ancient monument before its time; it has a hallowed, untouchable quality." As Kahn's last opus, this shelter for study of precious objects has itself become a studied object.
A decade of the influence of postmodernism has decriminalized decoration on buildings, and architecture now seems to be rising to its surface. Decoration, however, has not yet often meant ornament applied to a building, but natural materials selected and used for decorative effect.

The reductive palette of elemental materials favored by modernists—raw concrete and brick; honest woods and book-matched stones; steel and aluminum; and, above all, glass—has been widened and refined. Woods and stones now are frequently exotic and highly figured, coming with connotations of opulence rather than austerity. Metals include the yellow ones—brass, copper, and bronze—rather than the whites alone, and imply the hand rather than the machine.

The new, wider palette also encompasses materials that shock—ones taken from the everyday environment and placed in a fresh, new context. Ornyte, aluminum deck plate, even tastelessly "marbleized" formica, for example, have enlivened some projects when used out of context in unexpected ways.

As this indicates not only has there been a change in materials in the last decade, but the application now is often different. Materials no longer have to be integrated with the buildings or have to reinforce the idea of structure.

The Getty Museum in Malibu, Calif., was perhaps the harbinger of the new materialism in architecture. At the time (1974) the Roman villa, sitting over a garage and overlooking the Pacific, seemed somewhat eccentric, but what has proved prescient about the building is that it is virtually a compendium of marbles that presaged today's much expanded global traffic in stone.

As explained by Michael McDonough, a young New York City architect who frequently browses in the marble showrooms in Manhattan looking for new samples: A Chinese marble might now be shipped to Spain for cutting, then to Italy for finishing, and finally to the U.S. for use. The managing office could be located anywhere. And McDonough points out that computer-based technologies have further increased the material choices—stones can be cut with greater precision in thinner slices and surfaces can be treated in new ways: limestones, for example, can now be fired.

In the last year, buildings such as Michael Graves' Humana Headquarters in Louisville, Ky., and Kohn Pedersen Fox's Procter and Gamble headquarters in Cincinnati, have displayed elaborate palettes. In California, architects such as Frank Gehry, FAIA, and Frederick Fisher—materialists rather than idealists—have transformed common, dismissible materials like asphalt, plywood, and the wood stud into a rarefied vision. The material may be vernacular, but the speech is gifted. Younger architects, like Brian Murphy of Santa Monica, have pushed materials beyond the usual boundaries to a point that is downright confrontational.

As a painter, Graves is of course keen on exploring material palettes that have color and pattern. A marble with the right variations in color and patterns, for example, can impart to the surfaces of his walls an equivalent of the active surfaces that
his hand gives his colored drawings. Graves keeps what is virtually a library of samples in the basement of his Princeton office—a library that has to be kept up to date as quarries around the world and the United States open and close. Colors can even shift in the same quarry. In the case of Humana, Graves paints the walls with marbles and woods; the strokes are in the grains.

The palette of materials in the Humana building is so completely developed that from outside to inside, from downstairs to upstairs, they form a narrative. The 45-foot-high columns along the street are sheathed in green granite at the bottom and, above, in a polished red granite that has V joints decorated with gold leaf. Inside, marbles make up a geometric floor pattern; walls are surfaced in a beige marble; green and pink marbles frame the bronze elevator doors. The architect complements the stones and yellow metals with woods that are equally rich. The ceilings of the elevator lobbies are surfaced in mahogany with ebonized walnut trim. The elevator cabs themselves are large pieces of furniture, crafted in mahogany and bird’s eye maple that is inlaid with ebonized walnut.

Perhaps the most monumental return to the use of stone in a building after the long reign of glass is Kohn Pedersen Fox's Procter & Gamble headquarters. The twin towers and flanking wings are clad in limestone, and there is an extensive use of stone inside. The stone is finished and detailed to look constructive, the walls appearing to be made of stone blocks rather than simply covered by them. KPF's use of stone does not read like a glass curtain wall, as in Edward Larabee Barnes' IBM building in New York City. Nor is the stone used in Graves' painterly way.

Alex Ward, AIA, one of the architects who worked on the P&G design, talks of the way the limestone will age over time—in places protected from rain, the stone will acquire dirt that will become a stain underlining the building's natural shadows. He anticipates the building will look better in 20 years due to this patina. The aging of materials is hardly what modernists looked forward to in their buildings; instead they preferred a crisp and fresh esthetic. Inside P&G’s headquarters, the architects used woods extensively. “You pick a color of wood knowing it’ll change,” says Ward. “You’re building a time quality into the building.” The panelling and doors of the interior are made of stained African mahogany left with a clear finish so that its pores can be seen. As with the limestone exterior, the architects wanted the woods to appear built and assembled, as though they had body rather than only surface. This would avoid the visual effect of flat planes of wood walls, such as those done by Mies—who expressed the pattern of a wood wall as though on canvas.

Buildings enriched by new and rediscovered decorative materials—often used in combinations that are themselves decorative—are a logical consequence of shifts in what architects consider the subject of architecture. Buildings now tend to be less reductive, less structurally expressive, and less spatially layered. Space is often more contained and centered; there are more focal details; surfaces are more pronounced. Enjoying great theoretical freedoms, architects are simply exploring the wealth of possibilities in the surface, and the results are often rich. Designers are relearning and learning more about the neglected second dimension in their three-dimensional art.

Mr. Giovannini writes about architecture for the New York Times.
Skyscrapers: Adventures in Form

It’s not what will work but what will sell.

By Stanley Abercrombie, AIA

One obvious way in which architecture has changed in the last decade is that the designers of tall buildings have become much more adventurous in their exploration of form. You may remember the old days, when you could pretty well count on the 40th floor’s being like the 39th. Things were simpler then.

In another way, the design of towers, specifically office towers, was more complex a decade ago than now—or, at least, designers thought so, and so did their clients. For we had developed, rather laboriously, a new science of economically feasible office building design, and for a designer to flout its principles was an indication of either ignorance or wanton libido. This science was based on the efficient location of mechanical levels, the efficient disposition of elevator banks, the proper distance between glass line and service core and, most fundamentally, the use of a carefully chosen module, multiples of which could yield work stations and offices of appropriate size and which, in turn, determined the building’s structural grid and fenestration pattern. It went without saying that each floor in an office tower had to be a reasonable size and a simple, easily laid-out shape.

How naive. The newest crop of office towers includes Kohn Pedersen Fox’s 333 Wacker Drive in Chicago, one face curved, the other angular, and Philip Johnson/John Burgee’s oval-planned “lipstick” on New York’s Third Avenue in New York City (an oval! with every core-to-window dimension different from the next one), along with others that have plans for which no geometrical term has yet been invented. The dictates of efficiency, on which we thought so much depended, have proved to be secondary to the dictates of sensation. Damn near anything, it seems, can be made to work; the trick is to devise something that will sell.

Rectangular solids, obviously, are seen in this market as hopelessly retardataire, about as much in demand as buttermilk in a wine bar. What’s selling this decade, folks, is shape. Designers are dusting off their French curves, trying every exotic number on their adjustable triangles, and asking their video display terminals to show more imagination.

What started it all, perhaps, was Hugh Stubbins’ Citicorp tower of 1977, its lowest full floors lifted dramatically to free some of its Manhattan site for a church and an open plaza and its top 130 feet sliced at a 45-degree angle. In those days some excuse was needed for that kind of behavior, and the roof angle was explained as providing a south-facing surface for future solar collectors. Nine years later, the collectors are still future, the excuse is unnecessary, and the angle is hardly noticeable among Citicorp’s more acrobatic new...
neighbors. Among these last, of course, the most prominent is Johnson/Burgee's sedimented AT&T headquarters, a model of which, cradled in Johnson's arms, made the cover of *Time*.

These two early examples of formal innovation shared the characteristic that most of their excitement was either at the top or at the bottom, with not much in between. As Donald Canty, Hon. AIA, wrote here of AT&T in February 1985, "Truncate the base and lop off the est and you have a building no more distinctive (or distinguished) than many midtown built in postwar years." But progress has been made: In the hands of Johnson himself and others—perhaps notably and with the most flair, in the hands of Helmut Jahn, AIA, of Murphy/Jahn—the whole building now gets into the act.

Act is the right word, for some of our major new buildings are so lively as to make us think of architecture as a performing art. Sometimes the act is a superficial one, as in Michael Graves' Portland building, where a decorative veneer is applied to what is really a conventional ox; at times better, as in the same architect's Humana Building, the basic building forms are manipulated in a novel and naginative way. Sometimes the act is justified by resultant amenities, such as the provision of high-in-the-sky gardens the tower project dreamed up by Roger Perry of Welton Becket. Sometimes it is a response to a climatic determinant, as in the powerful form of the Kuwait National Bank building by Gordon Bunshaft, FAIA, of Skidmore, Owings & Merrill, where the office floors are shaped to act as their own sunshades. Most of the time, however, the act is pure look-at-me exhibitionism.

When we look, what do we see? Usually one of a few recognizable types. First, because most venerable, is the tower that zigs and zags in even, repeated pleats, the major precedent here being San Francisco's early-'70s bank of America (Skidmore, Owings, & Merrill and Wurster, Bernardi & Emmons with Pietro Belluschi, FAIA), and one of the more recent manifestations being New York's Trump Tower (Swanke Hayden Connell).

Second, related to the zigzag, but a little more adventurous, is the developing prism, a form that writhe as it rises. (Writhe geometrically, of course; the freeform skyscraper is still in our future.) Skidmore, Owings & Merrill's One Magnificent Mile in Chicago is of this type, Jahn has a number of such schemes up his sleeve, and Moshe Safdie's competition winning design for a pair of mixed use towers at New York's Columbus Circle is another.

Third, there is going up now a group of towers that might be called chicken-and-egg Or Jekyll and Hyde. In this group we find, for example, Ulrich Franzen's 800 Fifth Avenue apartment tower in New York, its restrained park-facing west facade of quite different character from its hyperactive neighborhood-facing east facade. The more puzzling designs in this group start at their base with a facade treatment that is irregularly interrupted, like a cracked egg; part way up, allowing the emergence of a contrasting facade treatment, which then continues to the top. This motif, visible in Cesar Pelli's Battery Park City and other places, must mean something, but it is hard to say just what.

Which brings us to the fourth type, those towers that definitely, absolutely, most certainly mean something. These are the literal ones, with Dutch gables (Johnson/Burgee in Houston), with Gothic pinnacles (Johnson/Burgee in Pittsburgh), with medieval crennelations (Johnson/Burgee in New York), or with a portico here, an arch there, and a tiny temple 'way up there (what's-his-name in Louisville). You know the type.

But best of all, surely, are the towers yet to come, those now on drafting boards and in young designers' doodles. There are bound to be many wonders and quite a few genuine beauties among these yet unbuilt forms. Now that the rules of efficient construction are revealed as outmoded Victorian etiquette, nothing more, it is hard to imagine an end to the explorations before us. It's a safe prediction that we ain't seen nothin' yet.

A safe prediction, too, that a decade hence, some young smart aleck will dazzle us with the rediscovery of a long-forgotten tower form: the flat-topped box.
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A Building Type Haunted by History

Reviewed by Percival Goodman


Behind the scholarly arrangement and objective style of Carol Krinsky's prose there are ghosts. Sometimes they break through the encyclopedic format, the carefully researched facts, and straightforward descriptions. These are the ghosts of 6 million people murdered in our time because they worshipped their God in the buildings illustrated and examined in this book. The book is also haunted by a history—more than 2,000 years of it—of other mass murders, of other oppressions, evictions, vilifications, and segregation through which these people persisted in their belief, building when they could houses in which they prayed. This is a story of vanished, or almost vanished, Jewish communities and their synagogues.

What amazes me about this book is not only the painstaking research (imagine! nine double-column pages of bibliography in a book on a single architectural type) but the dispassionate attitude the author maintains throughout. Descriptions of horrifying events, absurd restrictions, broken promises, all part of the history, are presented in the same factual tone given the description of a construction method. It is a powerful way to convey terrible truths.

For instance: In Rome on July 26, 1555, "all Jews were forced to move into the ghetto where the population was walled in for 300 years. The Jews were permitted to have one synagogue . . . " or in Amsterdam in 1671 when the Sephardic Jewish community started to build "the stateliest synagogue in all Europe" in front of the hospital for people with contagious diseases since they needed a good sized plot, the only other permitted to them being "at the edge of town on a site associated with a pest house," or in the city

Mr. Goodman, professor emeritus, graduate school of architecture and planning at Columbia University, is a prolific writer on art and architecture. He is author of Communitas and The Double E, both books on community planning. During a long career in architecture, he has designed many churches and synagogues.

Above, early 18th century synagogue in Volpa, employing log construction.

of Ceske Budjovice, then part of Austria Hungary where "... racial antisemitism was not virulent in 1888 when the synagogue was dedicated as it later became. . . . Perhaps a few of the Christians who attended the ceremony were still alive on June 5, 1942, when the Nazis set off an explosion that ruined the building. The site is now an empty space. . . ."

The book is divided into two parts, the first of which speaks to the origin and nature of the synagogue and the second analyzes and illustrates some 100 buildings scattered across Europe from Copenhagen to Rome, from Belfast to Moscow. Any understanding of these sometimes banal, often curious, rarely handsome buildings must take into account the history, the political, social, ideological, and economic circumstances under which they were built.

From the 5th century in Imperial Rome, Jews were forbidden to build synagogues and, through the centuries, would sometimes be permitted to build, sometimes to repair, existing synagogues, sometimes allowed neither, but always with the threat of desecration or destruction at the whim of some local or central authority. Add that Jews were often prevented from owning land on which to build their synagogues and, in most periods and most countries, were not allowed to practice the building trades. Also to be remembered was the wise precaution, even when not required by law, of keeping the synagogue inconspicuous or its purpose concealed on the exterior. And not the least, the Jew, brought up in cultural isolation behind ghetto walls, imposed or self-imposed, was required by his own people to literally obey the commandment "thou shalt make no graven image," which by extension meant avoidance of any visual expression. As Krinsky says, "The documentary references to synagogue art may be rare precisely because there is so little of it."

Until the 19th century, the architect for a synagogue (if there was an architect) had to be a Christian. With the mid-century emancipation, the Jewish community in most European countries entered the general society, ghetto walls fell, Jews entered the building trades, and many synagogues were built.

Although this book illustrates many examples from other periods, the preponderance is from the latter half of the 19th century and the first decade of the 20th. These were the years of eclecticism in architecture when, I suppose, the early question was "what style?" For a railroad station, the probability was a Beaux-Arts front and an iron and glass rear; for a church, especially after Ruskin and Viollet-le-Duc, the answer would be Gothic. But for a synagogue, something more exotic was called for. Maybe Egyptian? (The Jews did come out of Egypt.) Maybe Byzantine or Islamic? (These people did come from the east.) In Canterbury, England, tucked away in a close is a tiny, four-columned Egyptian order that forms the front of a synagogue built in 1848. But the favored style was a mixture: a bit from Samarkand or the Alhambra, a little from Constantinople, a splash of Continued on page 77.
What Do These Prestigious Buildings Have In Common?

**FORDHAM UNIVERSITY**

Lincoln Square of Fordham University
New York, NY
Architect: The Perkins & Will Partnership

**CARPENTER CENTER, HARVARD UNIV.**

Sealed with Polysulfide 1963
Carpenter Center For The Visual Arts
Harvard University
Cambridge, Massachusetts
Architect: Le Corbusier

**UNIVERSITY OF CHICAGO HEADQUARTERS**

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United Airlines Headquarters
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Books from page 75
Rhinish Romanesque, or even some modified Gothic when it might seem acceptable to the neighbors. And there it was—except for the program that while simple was layered with meanings, traditions, interpretations.
Surely that most curious synagogue of the period was built in Turin, Italy, between 1862 and 1889. Its cost, to the horror of the congregation, rose as the architect, "consumed by the passion to link his name with a monument of singular mastery and of a form more singular," added meter after meter until its final height reached 165.5 meters. In the end, the congregation couldn't afford it; the municipality took it over and made of it a museum of the Resorgimento with a winged figure topping the spire.

There are the synagogue designs in the modern tradition proposed or constructed before World War I and in the period between it and the Second World War, created by such men as Hector Guimard, Otto Wagner, Peter Behrens, Erich Mendelsohn, Richard Neutra—none memorable.

Without question, the most interesting and original building in the book was built of wood in a folk style at Volpa, Belorussia, during the early 18th century. Krinsky comments: "Those wooden synagogues that survived despite emigration and lack of resources fell victim to plunderers and vandals in 1914-18 and to even more depraved attacks after 1939. By 1945, not one wooden synagogue stood in all Poland, Lithuania, Belorussia, or the Ukraine."

(For more on these extraordinary examples of vernacular architecture, see Wooden Synagogues by Maria and Kazimierz Piechotka, Warsaw, 1959.)

Since the destruction of the Temple in Jerusalem, the Jew has been ambivalent about the sanctity of the synagogue structure; it is quite unlike the Temple dedicated by Solomon in 955 B.C. or the Second Temple destroyed by the Romans in 70 A.D. These had the priests and the people. In the synagogue there are not priests, except that all are priests, for does the Bible not say, "ye shall be a nation of priests?" In the Latin of the church, the term for synagogue was scuola Judeorum; in Yiddish, shul. It is a school, also a place for meetings, for secular festivities. Nevertheless, it is the prayer hall with its Ark and Bimah (reading desk) that is the heart of the program. So the synagogue is more than a community or learning center. For the pious the synagogue need only be 10 adult Jews gathered together for prayer. The rest is a shelter from the elements, a symbol of communal pride, decoration.

Professor Krinsky makes this clear in her dedication of the book to her grandfather: "He would not have had other than a grandfatherly interest in my subject as he typified pious Jews who care deeply for the word and little for the place in which it is read. . . ."

But for us who are involved in architecture and its history, it is rare that one can say with confidence that a definitive study has been made of a specialized building type. This book, although encyclopedic in scope, is detailed, precise, and—miracle of miracles—readable and sympathetic.

The Art of Chinese Gardens. Chung Wah Nan. (Hong Kong University Press; distributed in this country by University of Washington Press, Seattle, Wash. 98105, $36.)

Other works may introduce you to the art of Chinese gardens, but I know of none that better explains it than this intelligently put-together collection of black and white photographs and succinct text. Written by an architect, the work comes down hard on the structural elements: walls, windows, and doors; paving; bridges; pagodas; and the rest. But it's how these elements are used to create space we call gardens that yields understanding.

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design categories. About half of them describe the famous gardens of Suzhou; the rest are drawn from gardens in Hangzhou and a dozen other ancient cities.

Considerable attention is given to Suzhou’s Lion Forest and Tiger Hill, as well as to Yunnan’s Stone Forest and the Sichuan reaches of the Yangtze River—all notable for their natural rather than man-made elements.

But the man-made created spaces are the essential focus of attention. “I sincerely believe that some walls are deliberately erected so that doors and windows can be created,” writes Chung Wah Nan, RIBA, a professor at Hong Kong University. “Architecturally a bridge is an interlink between two different spaces. Psychologically a bridge is an intermission through which one prepares oneself for a new space.” These spirited quotations give you a flavor of the text, a valuable contribution to the debate about architectural design. Frederick Guthheim, Hon. AIA

Mr. Guthheim is a Washington, D.C., writer, critic, and educator.

Visual Notes for Architects and Designers. Norman A. Crowe and Paul Laseau. (Van Nostrand Reinhold, $24.95)

Visual literacy is just as important as verbal literacy, say the authors of this book, both of whom are architects. They tell how to make rapid notational sketches, capturing things a camera cannot. They describe tools and techniques, as well as explaining how to use the graphic information later to analyze a situation. Using their architectural background in supplying many sketches, the authors demonstrate with words and graphics that they are both verbal and visual literates.

Designing for Fire Safety. E. G. Butcher and A. C. Parnell. (Wiley, $51.95.)

Many architects have found, say the authors of this book, that fire precaution measures impose “onerous features dictated by a bureaucratic system.” The aim of the book is to dispel such an attitude and to show how the measures can be incorporated into building design without inhibiting effects. Written by British experts, with emphasis upon British standards, the work is nonetheless relevant for the American architect. The first section gives an account of how fires start and spread, while the remainder of the book, presented in a terse, almost tabular form, tells how to incorporate fire protection measures as an integral part of building design, beginning with fire safety aspects in site selection and continuing on through building maintenance.


Whether you’re designing a golf course or a residential development this practical and useful book on site planning will save you time and help you make wiser decisions. It covers preliminary site investigation and analysis, environmental considerations, and factors affecting building location and orientation. There are sections as well on residential development, the layout of recreational facilities, and site details. A final chapter provides illustrative site plans for a variety of developments such as mobile home parks and solar energy utilization. Graphics are used extensively to supplement the text, including both large-scale developments and site construction details.


The first book in English on Mario Botta, the Swiss architect who lives in Canton Ticino, this publication describes and illustrates the strangely beautiful houses designed by him, including a circular house in Stabio, Switzerland, that drew kudos from international critics when it was built in 1980. This facadeless house continued on page 81.
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Roger Lewis, who teaches at the University of Maryland's school of architecture, switched from a career in physics to architecture, and he writes with candor about the "realities" of architectural education and "agonies and ecstacies" of practice from his own experiences.

Lewis first discusses why one may want to be an architect—among the ecstacies are the rewards of creativity and intellectual fulfillment, the possibilities of social status and fame, the freedom of doing one's own thing. But he also writes honestly about the agonies—lack of work, legal and financial risks, competition and jealousies, disillusionment, and other dread things. About becoming an architect, Lewis gives practical advice on the structure of architectural education, the rewards and tribulations of architecture school, professors and their subjects, and what to expect after graduation. On practice, the reader gets to the nitty-gritty of the architect's role in the building process, how architects work and how they get work, clients, and an amusing account of architects as types, among them the prima donna, the plodder, the social worker, the hustler, the poet-philosopher.

Required reading for would-be architects, it's also of value for those who teach them. MARY E. OSMAN, HON. AIA

There are more than 2,000 definitions provided for the fields of community planning and environmental protection in this reference work. From A to Z, the entries give brief information on such topics as day health care facilities, turnkey projects, view protection regulations, and zoning variance. Included as well are entries for people, institutions, significant planning projects, and pertinent laws regarding land use.

Books continued on page 82

If your next client asks you for a cam-eback shotgun with an entresol, flush with banquette except for an abat-vent, and made of either bousillage, briquete-entre-poteaux, of colombage, chances are you had best pick up this splendid book at once.

Lloyd Vogt introduces his useful guide with the truism that "man's dreams, aspirations, and techniques for survival are all clearly reflected in the buildings he leaves behind, from the most utilitarian to the most lavish." This is particularly true of the houses built in New Orleans after the city's founding on its crescent loop of the Mississippi by the Sieur de Bienville in 1718. Not many American cities have had the opportunity to respond to such a cultural kaleidoscope—French, West Indian, Spanish, Creole, and 19th and 20th century American—and still fewer have retained such an intact treasury of houses and neighborhoods in use not as museums but for the human habitation for which they were created.

In superbly crisp drawings and straightforward text, Vogt traces the history of New Orleans as reflected in its houses over more than 270 years. The periods are colonial (1718-1803), postcolonial (1803-1830), ante-bellum (1830-1862), Victorian (1862-1900), early 20th century (1900-1940), and modern (1940- ). The styles that range through these periods have given New Orleans a marvelously piquant gumbo of buildings that create the evocative neighborhoods of the Vieux Carré, with its French colonial and Creole (Spanish) houses densely lining narrow streets around the Place d'Armes (Jackson Square) and the French Market, and the later residential districts, chief among them the Garden District with examples of all antebellum and Victorian styles from Greek and Gothic revivals and Richardson Romanesque (Richardson was a Louisiana born and bred) and styles of the turn of the century embedded in the lush tropical foliage along green avenues and boulevards. Vogt slips only once, when describing the bungalow style (1910-1940), stating that its two grandes artistes, Charles and Henry Green, had a practice "centered in the San Francisco area," when they were pre-eminently Southern California architects practicing in Pasadena.

As entertaining and informative as is the text, its real wonders are the sketches, plans, and drawings. Instead of the usual approach of illustrating and discussing well known or typical actual houses, Vogt has distilled the essences of each style into a prototypical building that he shows in elevation and in accompanying labeled sketch. (There are a couple of real buildings here, such as Madame John's Legacy, which is such a paradigm of the French colonial plantation house that it would be folly to invent one.) In chapter illustrating New Orleans house types in axonometric and plans so that the unique variation of buildings is made exceptionally vivid and understandable. A useful glossary of architectural terms, including the somewhat site-specific ones used in the first paragraph of this review, concludes the book.

New Orleans Houses should come in handy for architects explaining house design to their clients. It should be a great refresher course in both design history and clear architectural graphics for the practitioner. And architectural students should consult it as a demonstration of how to show and describe architecture lucidly, informatively, and entertainingly, within the context of the history and cultures that produced it. Jim Burns

Mr. Burns is a community planning consultant and frequent contributor to this magazine. He grew up across Lake Pontchartrain from New Orleans.

All About Old Buildings. Diane Maddex, editor. (National Trust for Historic Preservation, $24.95.) Architects in general practice are not likely to ignore historic preservation. In recent years $21 billion has been laid out to rehabilitate buildings, and 10,000 projects using federal tax benefits that have been in place since 1977 are running at the rate of $2 billion annually. These activities are addressed to the 37,000 properties now listed on the National Register of Historic Places, including nearly 4,000 historic districts. This body of work has enlisted architects in projects of every kind and created an audience that has long awaited such a book as this one.

Trumpeted as "all you want to know about old buildings (and historic preservation)," the problem is finding it in a book that lacks an adequate index. Far too many of its 400 large but frequently arid pages read like a bibliography. The typical answer given is the librarian's—a reference to some other source. Yet nearly a decade in preparation and surprisingly current in its references, this is a work of such smothering voluminosity that it almost defies editorial control. The work of many, many expert hands, this mass of facts, aphorisms, quotations, references, and just plain information has a hard time being a book. With 15 to 20 items on each double spread, something closer to a magazine layout might have made the total editorial content less daunting.

What began life inspired by that bible of the environmental movement, The Whole Earth Catalog, an anti-establishment product of the 1960s born in Ecotopia, has proved impossible to imitate. Too much creative spirit went into its creation not to mark the final result, but the accompanying frustrations are inescapable.

This book is not the first to wrestle with its subject. Its editor, Diane Maddex, in 1983 produced The Brown Book: A Directory of Preservation Information, and in 1982 the Advisory Council on Historic Information issued Where to Find It: A Guide to Preservation Information. However, only a glance at the chapter on "Rehabilitation and Renovation" will demonstrate that new ground has indeed been broken here.

Frederick Guthem, Hon. AIA □
This practice aid is devoted to sharpening the designer’s skills in the all-important area of fee negotiation. The author, an acknowledged expert on management, presents a methodical approach that is effective and easy to follow. In this book, designers in every field can receive the know-how, planning and tactics tailored specifically to their professional needs.

To order, send a check for the appropriate amount plus 5% for shipping to The AIA/SC, Fulfillment Service, 44 Industrial Park Drive, P.O. Box 753, Waldorf, MD 20601.
Gold Medal from page 9

it is made," he says. Similarly, he does not like to cover concrete, preferring to leave it raw. "Decorating it cheapens its nobility and compromises its strength," he believes. In using glass, he prefers it without metal frames, as with the large plates at the University of Columbia's Museum of Anthropology held together with large plated clips or the single sheets within the deep, squared recesses of MacMillan Bloedel.

To Erickson, "It is the dialogue between building and setting that is the essence of architecture." He believes strongly in the importance of site-specific designs and has said that he often considers himself more of a landscape designer than an architect because he takes "a landscape approach to architecture." In 1979 he became the first Canadian to receive the president's award from the American Society of Landscape Architects. The awards have multiplied since; in 1984 alone, he received the gold medal of the Royal Architecture Institute of Canada, the gold medal of the French Academy of Architecture and the gold medal of the Royal Architecture Institute of British Columbia.

In his travels around the globe, Erickson has noticed that "the quality of the local light will eventually determine the architectural style." Thus for the gray skies in Western Canada, he has searched long and hard for just that right image.

"Though the subtle and sensitive climate of the coast tends to make things drab and lifeless, it is also obvious that a too vital contrast of form or color kills its fragile poetry," Erickson says.

His interest in the natural surroundings of his native Vancouver was derived initially from many Sunday visits into the woods as a youth with his grandmother. It was at that time as well, he recalls, that he began to be aware of a sense of space, which he has translated into his architecture. Just as in nature, Erickson's buildings are filled with hidden pleasure, as though one were discovering a glade in a forest. Unfortunately for Vancouver, Erickson remains something of a prophet without honor in his own community. With little work there—for what are apparently political reasons, the designer of widely hailed world's fair structures in Montreal and Osaka has not been asked to do anything for Expo 86, which opens in Vancouver in May—Erickson is shifting his base of operations. The office in Los Angeles is now the firm's largest, and he expects that to become the headquarters. He would also like to open an East Coast office in New York City.

Those nominating Erickson for the AIA gold medal, Jane Hastings, FAIA, of Seattle, Samuel Anderson, III, AIA, of Richmond, Va., and W. C. Muchow, FAIA, of Denver, wrote, "While Erickson is especially identified with his personal and professional roots as a Canadian, he has long since bypassed any regionalism to become a truly international figure with contributions to the profession at that level." CARLTON KNIGHT III

Cities from page 18

local sign ordinances and required that monetary compensation be paid to sign and site owners for billboards that are removed because they do not conform to local laws. Federal regulations also permit states to authorize billboard companies to improve sign visibility by cutting trees and shrubs, which were often planted at taxpayer expense, on public rights of way.

The new legislation now pending action by the Senate would make several key improvements to the current law. The 1985 highway beautification act would:

• halt new billboard construction along federal highways, except for certain exempted categories of signs, such as on-premise or official signs;
• eliminate permission of new sign construction in unzoned commercial and industrial areas and require that signs existing in such areas come down after five years;
• require states to prohibit tree cutting on public rights of way for better sign visibility;
• delete the requirements for cash compensation for removal of nonconforming signs and restore to states and localities control over the removal of such signs.

BRIEFS

Design Competition.
The Foundation for Architecture and CertainTeed Corporation are sponsoring a competition to generate ideas for Philadelphia's neighborhoods and downtown area. Five cash prizes totalling $50,000 will be awarded to the winners. Registration fees are $35 per entry submission; $15 student fee. The application deadline is Feb. 10, and submissions are due April 3. For further information, contact the Foundation for Architecture, 117 S. 17th St., Philadelphia, Pa. 19103.

Architectural Tour.
The International Design Seminars is sponsoring a 12-day tour of the Soviet Union and Finland beginning April 10. The tour will address international influence on the architecture, interior design, and landscape design of these countries. For more information about the tour contact Kenneth Lupton, IDS, 4206 38th St. N.W., Washington, D.C. 20016.

Young Architects Competition.
The Architectural League is sponsoring its annual Young Architects Forum entitled "Behind Closed Doors." The competition is open to architects, designers, urban planners, and artists who have worked 10 years or less. Applicants should submit a portfolio no larger than 8½x11 inches for each project. The entry fee of $20 covers one to three entries; additional portfolios are $10 each. The deadline for submissions is Feb. 1. For more information, contact Betsey Peeley, The Architectural League, 457 Madison Ave., New York, N.Y. 10022.

CREDITS


West Wing, Virginia Museum of Fine Arts, Richmond, Va. (page 40).
The concealed closers specified for this unique corporate headquarters entrance had to do more than preserve the smooth, free flowing lines of its design. They also had to perform dependably in a location noted for gusty winds, severe weather and high peak volumes of traffic. One closer provided concealment with no sacrifice in power. The heavy duty LCN 2030 Series Pacer® is designed for narrow transom bars, requiring a tube only 1¼" x 4". The single lever arm provides total concealment when doors are closed. This closer also features full rack and pinion operation, adjustable hydraulic back check to cushion the opening swing, plus separate hydraulic control of closing and latching speeds. For complete information, see Sweet’s Section 8. Or contact LCN Closers, Princeton, IL 61356; (815) 875-3311. In Canada, Ingersoll-Rand Door Hardware, Mississauga, Ontario L5E-1E4; (416) 278-6128.
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3. Entry fee for up to five (5) color slides is $15.00 for members and $10.00 for students. Entry fee is non-refundable and must accompany slides.
4. The subject matter must be Architecture or some element of the man-built environment. Photographic interpretation of the subject matter is allowed, but no responsibility for loss or damage during transit or any phase of the contest will be assumed by the sponsors of the Competition or the organizers of the exhibitions.
5. Entries must have been exposed by the entrant.
6. Slides bound over "ready-mounts", glass mounts or otherwise too thick for standard manual projections, will NOT be judged.
7. Clearly mark slides with:
   A. Serial No. of slide: (A, B, C, D, E)
   B. Slide No: Title
   C. Entrant's Name: to agree with Entry Form.
   D. Name of School/University:
   E. Telephone No.: Home ( ) or Business ( )

8. Slides should be mailed in a plastic slide jacket enclosed for returning slides.
9. Entrant grants permission to Competition sponsors to reproduce slides for exhibition, publication, or promotional purposes.
10. All reproductions will become the property of A.I.A.
11. Great care will be taken with all slides submitted, but no responsibility for loss or damage during transit or any phase of the contest will be assumed by the sponsors of the Competition or the organizers of the exhibitions.
12. The decision of the judges shall be final on all matters relating to the Competition.
14. Submission of slides implies entrant's acceptance of all of the above conditions.
15. Mail entries, entry fee, Entry form and self-addressed, stamped slide return envelope to:

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St. Louis, MO 63101

For further information, Call (314) 621-3484.

Fill out the following Entry Form or a facsimile thereof:

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The American Institute of Architects
Architectural Photography Competition 1986
Prospectus
The A.I.A. Architectural Photography Competition is being organized by the St. Louis Chapter A.I.A.
Winning entries will be exhibited at the 1986 A.I.A. Convention in San Antonio. A selection of the winners is expected to be published in Architecture, the A.I.A. journal.

Eligibility
The Competition is open to all individual A.I.A. members, associates, student members and professional affiliates in good standing, except professional photographers.

Awards
Two Thousand Dollars ($2,000.00) in cash prizes will be awarded as follows:

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86 ARCHITECTURE/JANUARY 1986

Credits from page 84


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...LOAD UP ON IT.
We didn't want anything serious about this place, we wanted it to be fun," says Mark Stumer of Mojo Stumer Architects, Great Neck, N.Y., of his design for a hair salon that caters to a young clientele, located in a shopping mall in nearby East Meadow.

The interior has a toylike quality with its black and white checkered floor and color scheme of pink, gray, and baby blue. One enters through a doll house front into a foyer dominated by a huge video screen where patrons can watch M-TV. The peaked circulation spine, illuminated by fluorescent lights housed in a pink duct, cuts the long space (which is nearly four times the length of its 20-foot width) in half, with hair cutting and shampooing areas to either side and staff areas at the end. Michael J. Crosbie

Above, pedimented hair salon entry; above right, view down colonnaded spine; right, work areas separated by glass block.
Theatrical flair highlights this women's clothing store interior in a suburban shopping mall in Roanoke, Va., designed by Chad Floyd, AIA, of Centerbrook Architects, Essex, Conn., with Systems Design Associates and Brenda Huffman Graphic Design as consultants. Floyd explains that since clothing changes from season to season in style, color, and material, “we wanted an environment that can be visually altered.”

Neutral gray carpeting covers the floor and walls, while subdued dark blue for the columns gives these prominent elements weight. Flexibility in changing the interior comes in the form of more than 120 theater fixtures with changing gels. A computerized dimmer board allows the intensity of each light to be modulated. In keeping with the thespian theme, two large dressing rooms of mirror-clad plywood and pipe railing move on wheels, as does the central turntable with its changing displays. M.J.C.
For a corporate travel consultant's office in Great Neck, N.Y., Andy Pressman, AIA, of Pressman Associates, Arlington, Va., created an appropriately conservative and subdued interior in gray and light.

The project entailed expanding the small office into an adjacent space within an office complex and uniting these two spaces. Pressman used two elements—a reception desk and a reference counter—to bind the two spaces. The stepped reception counter is clearly seen from beyond the office's glazed front wall, which faces an interior hall in the complex. Rotated on a diagonal, the reception desk directs one's attention to the customer service area, distinguished by a long, narrow desk. Offices along the back wall receive additional light and visual contact through glass block walls. M.J.C.

Top, reception desk orients customers to service area, left, with long counter.
The Lowell Memorial Auditorium in Lowell, Mass., was built by the city in the 1920s. Lowell’s depressed economic fortunes following World War II, however, prevented this industrial center from properly maintaining the building, and the auditorium slipped into a state of disrepair. The city’s recent economic upswing allowed for the passage of a bond issue to restore the building, undertaken by Perry Dean Rogers & Partners of Boston.

Peter Ringenbach of the firm says that the colors for the restored interior are not original (“Those were pretty bland,” he comments) and were chosen as contrasting shades to give prominence to the architectural elements themselves, in effect playing supporting roles. Original materials such as mahogany woodwork and hardwood floors were refinished, while elements such as the oval-windowed doors into the auditorium were replicated with new materials. The cracked and worn terrazzo floor in the entry hall was replaced with carpeting edged in marble.

Along with new mechanical, electrical, and plumbing systems, original light fixtures were restored while new ones were installed in unobtrusive locations. The stage area itself was fitted with a new hydraulic lift. M.J.C.

Left, entry hall with new marble edged carpeting leads to auditorium, below right, with brass railed balcony, below.

Richard Mandelkorn
Taking Responsibility

Taking Responsibility for the quality of life is something you do every time you design. Celebrating that responsibility—and the achievements of those who assume it—is one of the major themes of the 1986 AIA National Convention. And where better to celebrate than San Antonio, where good design is a legacy as old as the missions that still stand along the San Antonio River—and where the willingness to take responsibility turned that forgotten river into an urban American jewel. You'll meet many experts and influential leaders, including Henry Cisneros, the planner-turned-mayor whose political leadership and concern for public design have drawn national attention. And you'll be welcomed by the San Antonio Chapter/AIA for a week of intellectual stimulation, professional interaction and pure Texas pleasure amid some of the best old and new architecture in America.


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Products

A selection of notable offerings and applications.
By Lynn Nesmith

Sensu One sculptural table lamp (1), designed by Sean Corcoran and Jorge Freyer of Hardware Arts Group, has an aluminum base and shade with a satin black anodized finish. The light fixture’s on/off switching is operated by the wave of a hand above the lamp. The shade rises when turned on, lowers when turned off. (Circle 201 on information card.)

The Canteen and Work Furniture series (2) by Kroin includes tables, chairs, trolleys, shelves, and accessories in a variety of colors and finishes. The simple tubular steel frame has an epoxy coating, and seating and work surfaces are available in wood or laminate. (Circle 202.)

Door, window, wall, and furniture hardware from the Italian firm Fusital is made of cast brass in various finishes and colors. The Quattro lever door handle (3) designed by Sottsass Associates and the Otto series (4) by Gregotti Associates both include a spring, rosette, and escutcheon and are available in gold or black. (Circle 203.)

Products continued on page 95

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**Light Fixture.**
Replicated early American fixture for outdoor installations has a glass refractor designed to use high intensity discharge lamps. The fixture and post are made of heavy cast aluminum. (TrimbleHouse, Norcross, Ga. Circle 188 on information card.)

**Office Seating.**
Affordables' commercial chairs have front and seat-back tilt mechanisms. Available in low back, medium back, and drafting models, the chairs have a fabric covered seat and a waterfall front cushion. The seat back has a manual adjustment, and the seat height is controlled by a gas adjustment. (Cole Business Furniture, York, Pa. Circle 195 on information card.)

**Bath Fixtures.**
Rainbow fill spout (above) is available with an installation kit that is designed to adapt to standard baths and spas. The kit includes the fill spout, coordinated faucet set, and mounting parts. The cascade spout and faucet are available in a choice of trim finishes. (Jacuzzi Whirlpool Bath, Walnut Creek, Calif. Circle 206 on information card.)

**Door Hardware.**
Spec-Rite trim hardware has a standard mortise lockcase, a stop works button, and UL certification. The fixtures are available in eight keyed and nonkeyed functional options in three finishes: bright brass, simulated oil-rubbed bronze, and satin chrome. The lever has a reposition spring designed to eliminate sag and assure a uniform angle on all lever handles. (Schlage, San Francisco. Circle 208 on information card.)

**Wall Sconce.**
Handcrafted wall sconce is available in two sizes: 11.5x16 inches with a 12.5-inch projection and 18x24 inches with 18-inch projection. Polished brass, brushed brass, or chrome rings hold a polished white acrylic diffuser within a cast aluminum housing. Custom white, dark bronze, or black finishes are also offered. The sconce is available in incandescent, halogen, mercury vapor, and metal halide lamping; halogen and metal halide models have vertically adjustable reflector modules. (Visa Lighting, Milwaukee, Wis. Circle 210 on information card.)

**Wiring System.**
Flexible under-floor wire management system for power, communications, and computers is made of steel ducting channels overlaid with fire-resistant flooring particle board. The system does not require continued on page 97
THE FOUNDATION FOR ARCHITECTURE PRESENTS THE CERTAINTEED AWARD FOR

City Visions

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The CertainTeed Award for City Visions is an international competition to generate ideas for Philadelphia's neighborhoods, downtown or region. Ideas which can be translated into designs for buildings, parks and urban spaces in Philadelphia, and which may be applicable to other cities.

The competition is open to design professionals, artists and the general public (individuals, firms or teams).

COMPETITION GUIDELINES

REQUIREMENTS
A brief statement about your idea and a design which illustrates the idea, presented on one or two 40” x 40” boards. (More specific details will be in entry packet.)
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Five cash prizes totaling $50,000 will be awarded at the discretion of the jury. Selected entries will be exhibited, as well as illustrated in a full-color publication.

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REGISTRATION
To register, complete the coupon below.
Upon receipt of registration, a competition packet including entry information and guidelines will be mailed. Each packet will include a copy of Philadelphia Architecture: A Guide to the City, co-published by MIT Press and The Foundation for Architecture.
Registration Deadline:
Postmarked by February 10, 1986.
Registration Fee: $35 per submission, $15 per submission for students.

CertainTeed Award for City Visions
Registration Form
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The CertainTeed Award for City Visions has been made possible by a grant from CertainTeed Corporation, a leading national manufacturer of fiber glass products, building materials and piping products, headquartered in Valley Forge, Pennsylvania.
Mosaic Tiles.
One-inch hexagonal porcelain ceramic tiles have a fine-grain texture with the color throughout. Suitable for interior floors, walls, counter tops, swimming pools, and exterior walls, the tiles are available in 37 colors. Thin-set mortars, organic adhesives, white or colored sanded grouts or epoxy adhesives are recommended for installing tiles. They are also available mounted in 1x2-foot Master-Set sheets. (American Olean Tile, Lansdale, Pa. Circle 197 on information card.)

Shower Door.
Optima 2000 shower door is a fully assembled three-panel enclosure. It has two magnetic side door panels and an open tracking system for cleaning. Equalizing side profiles that adjust to widths of a maximum of two inches are designed to compensate for fractional openings. Optional color accent strips are available on anodized aluminum frames. (Shower Door Co., Atlanta. Circle 191 on information card.)

Exterior Siding.
Sculptured aluminum siding has a multi-layered, baked-on polyester melamine finish available in buff, white, beige, green, gray, brown, blue, cream, and gold. Matching aluminum soffit, trim, and rain gear are also available. (Alumark Corporation, Roxboro, N.C. Circle 190 on information card.)

Entry Door.
Castlegate embossed doors have a textured finish that can be prefinished, primed, or stained to give the appearance of wood. Magnetic or compression weatherstripping and a bottom sweep and adjustable threshold seal off the space between the door and frame to minimize air and water infiltration. Selected models have leaded glass lights. (USG Industries, Chicago. Circle 189 on information card.)

Exterior Lighting.
Bega outdoor light fixtures are available in wall-mounted or bollard models. Constructed of die cast aluminum and stainless steel, the units are designed for incandescent or HID light sources. A simple mounting method eliminates anchor bolt systems. Single or double lamp units provide widespread illumination from anodized reflectors behind heavy glass or polycarbonate plastic diffusers. (Forms + Surfaces, Santa Barbara, Calif. Circle 193 on information card.)

Products continued on page 98

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Ask us about Emseal for abutment joints too!
Light Fixture.
Exterior bollard lighting fixture measures 18 inches in diameter and 24 inches high. It has spun aluminum louvers and accommodates HID lamps with a maximum of 250 watts. (Trimble House, Norcross, Ga. Circle 213 on information card.)

Ceiling Installation System.
Universal ceiling clip is adaptable to standard T-Bar or aluminum extrusion ceiling systems. The one-inch-square clip turns 180 degrees for panel rotation and angling to create herringbone, pyramid, or diagonal patterns. Sectionally dropped ceilings or panels are also possible. (Hunter Douglas Architectural Products, Maywood, N.J. Circle 214 on information card.)

Wall Base.
Vynite rubber wall base, made of a nitrile rubber alloy, is a lightweight, abrasion-resistant covering that is designed to have the pliability of rubber. It is available in eight colors in ¼-inch gauge, four-foot sections, or 100-foot rolls. (Mercer Plastics Co., Newark, N.J. Circle 227 on information card.)

Window Control.
Electric operator for GGL roof windows is concealed behind the ventilation flap at the top of the window sash. The motorized control opens and closes the window unit from a remote switch. The system includes 30 feet of wire, a 9.5-volt motor, wall switch, and transformer. (Velux America Inc., Greenwood, S.C. Circle 219 on information card.)

Drafting Table Lamp.
Striplite lighting fixture is available in three sizes to fit 50-, 60-, and 72-inch-wide drafting and art tables with or without drawing machines. The unit adjusts to any board angle, and a safety latch automatically secures the lamp at very steep angles. (Plan Hold, Irvine, Calif. Circle 218 on information card.)

Wall System.
Ultrawall movable partitions have face panels of 24 or 30 inches prefinished with vinyl in a number of colors and textures. Accessories are designed to allow cabinets, work surfaces, and "hang-on" components of most major office furniture systems to be suspended from the partitions. Doors and glazing are part of the system, as are full height privacy walls. (United States Gypsum, Chicago. Circle 215 on information card.)

Carpeting.
MacTreg Plaids carpeting is made of a wool and nylon blend designed for residential and commercial installations. Six distinctive patterns and color combinations are available as wall-to-wall or area rugs in a variety of sizes and shapes. (Ernest Treganowan, New York City. Circle 231 on information card.)

Mirror Panels.
Mirrex reflective panels are made of a clear, metallic film over a lightweight aluminum frame and supported by a rigi...
am core. Panels weigh six ounces per square foot and can be mounted directly into almost any flat surface. Available in silver, gold, bronze, and black, shatterproof panels are designed for installation in malls, offices, and shops. (Mirrex Corporation, Hillside, N.J. Circle 230 on information card.)

Storage Unit.
Audiovisual media storage cabinets, made of oak grain or white laminate, are designed to hold approximately 5,000 slides in addition to books, projectors, and accessories. The storage unit has a pull-out illuminated working surface with two fluorescent lamps that automatically turn on when pulled out. (Leedal, Inc., Chicago. Circle 186 on information card.)

Solarium.
Solar enclosures for commercial and residential applications have a tubular aluminum glazing bar and one-inch tempered, insulated glass. A thermally broken sill extrusion is designed to reduce thermal transmittance, and a primary and secondary condensation drainage system channels accumulating water to the exterior. Habitex, Inc., Norristown, Pa. Circle 236 on information card.)

Stand-Up Desk.
Stand-up desk (above) is made of oak, walnut, or mahogany and is constructed to individual height requirements. It also has a writing surface, a hinged top with storage area, and a brass footrest. (Stand-Up Desk Co., Bethesda, Md. Circle 212 on information card.)

Ventilating Fans.
Penn Zephyr ceiling exhaust fans for commercial, institutional, and industrial uses have an acoustically insulated muffler box and a molded white ceiling grille. Flat roof caps are spun aluminum, seamless vents that provide the discharge head for flat roof mounting. (Penn Ventilator Co., Philadelphia. Circle 237 on information card.)

Downlights.
Eight- and ten-inch-square, recessed downlights are designed to use high efficiency, compact fluorescent lamps. Units have diecast aluminum trim and drop opal or prismatic diffusers. (Prescolite, San Leandro, Calif. Circle 235 on information card.)

Security System.
Passive infrared security system uses a Fresnel lens in place of mirror optics. The Curtain Pir alarm has a range of 40 feet and provides a floor-to-ceiling wall of protection that extends to the wall where the unit is mounted. It uses a double-edge signal processing technique, which gives an alarm only when an intruder crosses both halves of the detection zone. A high sensitivity setting is designed to reduce false alarms. (Racal-Guardall, Middlesex, England. Circle 238 on information card.)

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