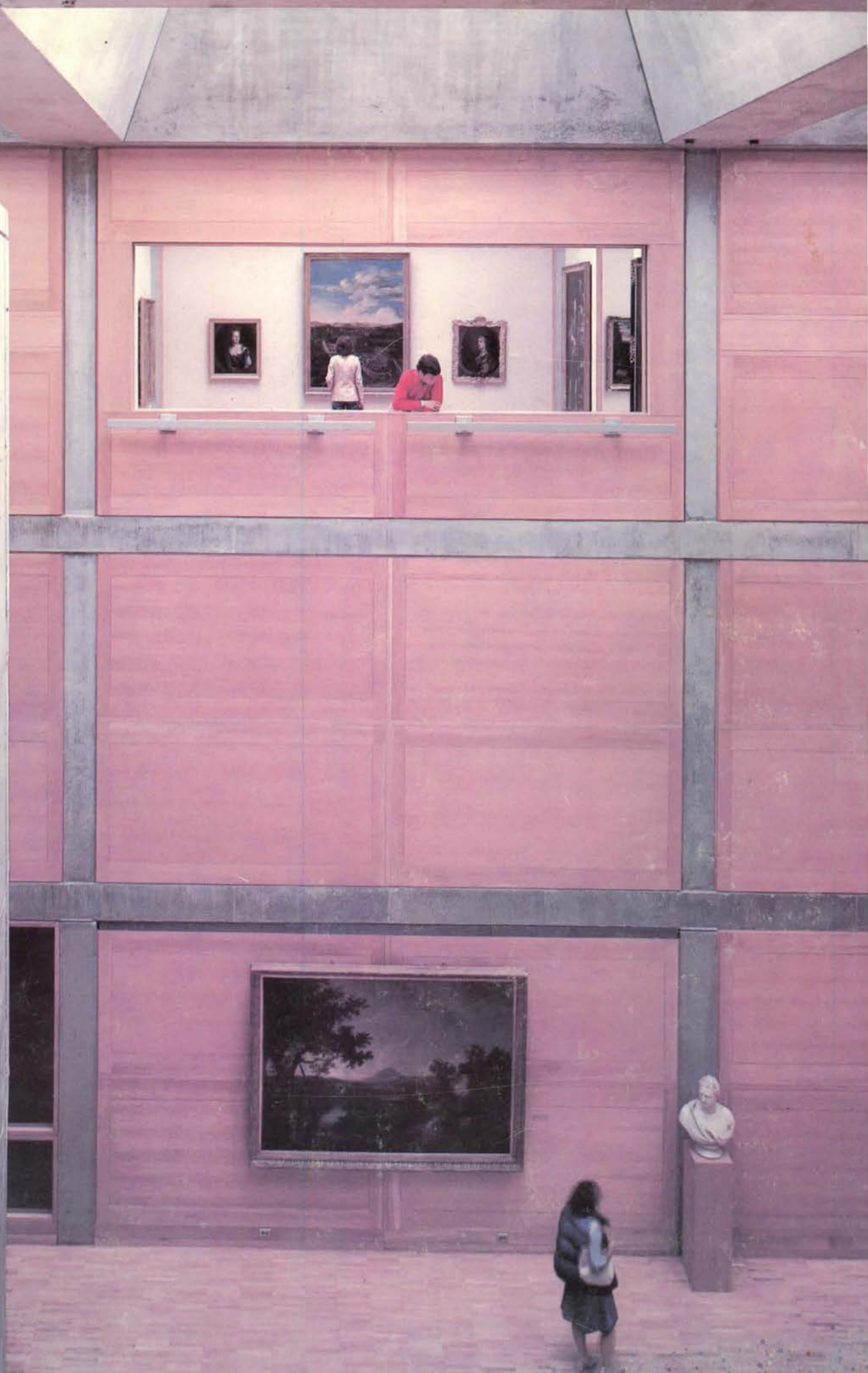
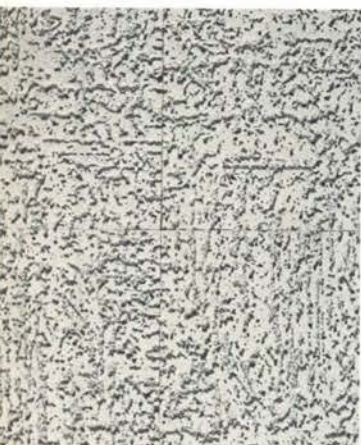


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Cover: Photo by Cervin Robinson of the Yale Center for British Art by Louis Kahn

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EVENTS

July 6-7: Seminar on Energy Conservation in Industrial Plants, San Francisco, sponsored by New York University (repeat seminars: Aug. 17-18, Washington, D.C.; Sept. 11-12, Toronto; Oct. 19-20, New Orleans; Nov. 9-10, Los Angeles; Dec. 18-19, Chicago). Contact: New York Management Center, 360 Lexington Ave., New York, N.Y. 10017.

July 6-7 and 10-12: Course on Preparing the Comprehensive General Plan, University of California, Berkeley.

July 10-15: International Conference on Energy and Community Development, Athens, Greece, sponsored by the National Energy Council of Greece and the U.S. Department of Energy. Contact: Secretariat, Environmental Design Co., c/o H.P.O. 36, Voukourestiou Str., Athens 136, Greece.

July 11-12: Seminar on Energy Management in Buildings, Montreal, sponsored by New York University (repeat seminars: Aug. 22-23, Denver; Aug. 29-30, Atlanta; Sept. 12-13, Los Angeles; Oct. 3-4, New York City). Contact: New York Management Center, 360 Lexington Ave., New York, N.Y. 10017.

July 19-21: Workshop on Life-Cycle Cost Application, Boston, sponsored by AIA and the American Consulting Engineers Council (repeat workshops: Aug. 16-18, Seattle; Sept. 20-22, Kansas City, Mo.; Oct. 9-11, Atlanta; Nov. 15-17, Anaheim, Calif.; Dec. 6-8, Denver). Contact: ACEC, 1155 15th St. N.W., Washington, D.C. 20005.

July 19-21: Seminar on the Planning, Design and Implementation of Pedestrian and Bicycle Facilities, Chicago. Contact: Metropolitan Association of Urban Designers and Environmental Planners, Inc., P.O. Box 722, Church St. Station, New York, N.Y. 10008.

July 21-25: American Society of Interior Designers International Exposition of Designer Sources, Washington Hilton Hotel, Washington, D.C. Contact: Ed Gips, ASID, 730 Fifth Ave., New York, N.Y. 10019.

July 22-25: American Society of Interior Designers annual conference, Washington Hilton Hotel, Washington, D.C. Contact: ASID, 730 Fifth Ave., New York, N.Y. 10019.

July 23-28: International Conference on Computer Mapping Software and Data Bases, Laboratory for Computer Graphics and Spatial Analysis, Harvard University, Cambridge, Mass.

July 23-28: Seminar on Economic Impact of Energy Conservation Measures, New England College, Henniker, N.H., sponsored by the Engineering Foundation.

Contact: EF, 345 E. 47th St., New York, N.Y. 10017.

July 23-28: Seminar on Design and Performance of Structures Exposed to Fire, Franklin Pierce College, Rindge, N.H., sponsored by the Engineering Foundation. Contact: EF, 345 E. 47th St., New York, N.Y. 10017.

July 24-28: Course on Lighting for Interior Designers and Architects, University of Colorado, Boulder.

July 27-29: Stanford Conference on Design, Stanford University, Stanford, Calif.

July 31-Aug. 4: Seminar on Energy Conservation in Buildings, Hotel Sonesta, Hartford. Contact: Energy Educational Services of Connecticut, 266 Pearl St., Hartford, Conn. 06103.

July 31-Aug. 10: Institute on Principles of Construction Specifications Writing, University of Wisconsin, Madison.

Aug. 15: Entries deadline, Owens-Corning Energy Conservation Awards Program. Contact: W. N. Meeks, Owens-Corning Fiberglas Corp., Fiberglas Tower, Toledo, Ohio 43659.

Oct. 23-27: World Congress of the International Union of Architects, Mexico City. Contact: Maurice Payne, AIA, Institute Headquarters, (202) 785-7364.

LETTERS

'New Regionalism': The article on passive solar design (April, p. 52) should be a timely eye-opener for the concerned practitioner. In a clear, concise way, the undeniable logic of natural solar architecture is presented.

It is ironic that highly efficient and cost effective architecture is being built, yet not one truly energy-conscious design was given an honor award this year. Merit was not lacking in the submitted projects, but simply a consciousness by the jurors.

Many progressive designs currently point the way to a significantly more natural and meaningful architectural direction. The final outcome of designing structures that optimally interact with their environments is a new regionalism. I look forward to more responsive structures in our landscape.

*David Wright, AIA
Sea Ranch, Calif.*

Hartford's Phoenix: I was appalled to read in the January issue James Britton's attribution of the form of Hartford's Phoenix to "accidental felicity" (p. 25). Felicitous it may be, but accidental the form is not. Not only is the statement inaccurate, it is demeaning. It is such a trivial—almost facetious—description of the symbol of Hartford's successful rebuilding of its once decrepit downtown

that it reflects on the "new spirit" that triggered this rebuilding.

Does Britton think that Hartford's "new spirit" is also no more than a felicitous accident?

Most of us who participated in the long and exciting urban design effort to rebuild the heart of Hartford have heard the old "form follows function" rationale for the building's shape. And we have taken it with the grain of salt it deserves. After all, what else would a corporate officer say to justify so unusual a design in the eyes of conservative stockholders nervous about their institution's public image? I could make the urban designer's counter argument: that the building's location and symbolic significance determined its design, in which case the building's function must have followed its form.

It is probable that, as with most successful works of architecture, the felicitous form of Phoenix results from a bit of both rationales.

To correct Britton's article and perhaps help give it the depth it deserves, the story of the Phoenix is as follows:

(1) In the 1950s, Connecticut General pulled its headquarters out of downtown Hartford and developed a then much heralded suburban plant;

(2) Phoenix announced that it, too, had acquired a suburban site for relocating its downtown headquarters;

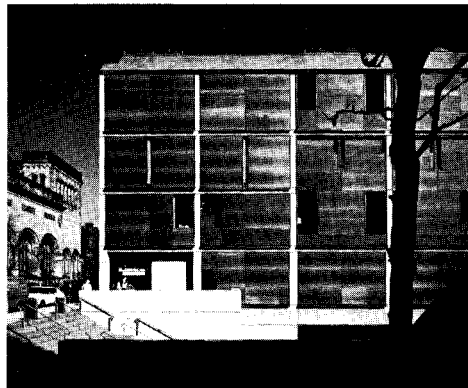
(3) the public and private leadership of the city reacted with vigor—and this reaction was the origin of the "new spirit" which quite correctly has attracted Britton's attention. Constitution Plaza was initiated as was the downtown plan (including, incidentally, a pedestrian system that linked Main Street to the plaza and that raised the plaza's height to make this linkage possible);

(4) Phoenix took a second look at the changes planned for its downtown setting and decided to build its new headquarters in relation to the plaza. The designers of the plaza—and of its subsequent southern extension—respected this decision and provided a background for an architectural jewel reflecting Hartford's and the Phoenix's "new spirit." And a jewel we got!

I worry about the current chic trends such as those reflected in the Britton article. The whole article has to me, instead of currency, a dated quality reminiscent of the serious discussion of the '30s and late '40s reserved for the battle of the styles, or the surface effects of architecture. One wonders whether this is really the future of design today and, if so, what we have done with the urban design lessons learned since the stylistic battle had presumably ended—lessons learned at such cost in cities like Baltimore and Cincinnati—and Hartford.

*Archibald C. Rogers, FAIA
Baltimore*

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Recapitulation: Events Affecting Architecture, 1/77 Through 4/78

The news of this 16-month period that is summarized below and on following pages was drawn from the pages of the JOURNAL and other periodicals, and was in some cases updated and expanded through interviews. What emerges from this recounting of recent history, not surprisingly, is that this is a time of constant change—and that changes in society and architecture are inextricably intertwined.

More change will occur, and more news will be made, in the time that it takes to print and mail this issue. Perhaps the most anticipated professional event of this period is AIA convention action on ethics, which will be reported in the June issue.

We relate two major events in this issue for the first time. The first, reported under the heading "Ethics," is the Supreme Court's ruling that the National Society of Professional Engineers' ethical ban on competitive bidding is in violation of federal antitrust laws.

The second, reported under "Awards & Honors," is the bestowing of the R. S. Reynolds memorial award upon Pennzoil Place in Houston (see p. 152), by Philip Johnson/John Burgee and S. I. Morris Associates.

In the recapitulation that follows, events are grouped generically by topics. The first is that current national preoccupation, energy.—Mary E. Osman

Carter Lists Energy Proposals, Creates Cabinet Department; Schlesinger Budgets \$14 Billion

Last spring, President Carter (who for symbolic reasons had viewed his inaugural parade from a solar heated reviewing stand) outlined his sweeping energy program. The President's package included HUD-promulgated mandatory performance building codes for energy conservation; conservation loans administered by federal agencies to ensure ready capital at reasonable rates from private lending institutions; insulation tax credits to homeowners; low-income assistance for weatherization hardware and labor; mandatory energy efficiency standards for appliances, and assistance to utilities to promote energy efficient equipment and energy conservation loans to customers.

There was generally favorable reaction from individuals in the design professions and construction industry. As Richard C. Stein, FAIA, an authority on energy conservation technology, remarked, "one obvious and desirable premise" was the

"acceleration in the programs and policies that reshape our entire method of thinking about building design."

The President's concern with the energy situation was underscored last October with his creation of the Department of Energy (DOE) and appointment of James Schlesinger to head it up. In his 1979 budget request, Secretary Schlesinger projected an operating budget of \$14 billion, \$1 billion of which is to go for conservation programs. While the secretary's remarks didn't go into great detail, he did mention weatherization of 850,000 homes in 1979 as "a significant help to individuals in low-income brackets" and "an important step on the road to conservation at the individual homeowner level."

AIA Research Corporation is conducting research for much of the Carter-mandated HUD energy performance standards, which were to be completed by August of next year. The first phase measured energy use in buildings designed since 1973 in four residential categories and 12 nonresidential categories and seven climactic regions.

The study showed that on the average, hospitals and restaurants have the highest levels of energy use of all building categories, while highrise apartment buildings rank the lowest in the survey. In the residential group, based on data supplied by the National Association of Home Builders Research Foundation, single-family detached houses and mobile homes have the highest average consumption rate.

HUD's project is in line with AIA's contention that energy standards should be performance-oriented, i.e., designed to meet certain levels of performance. Another approach was taken in the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) document 90-75, which is held to be merely "specifications-oriented" by its proponents and "too prescriptive" in nature by others.

Prescriptive standards specify how much energy a building can use by evaluating its components. The performance approach, however, deals with relative potential amounts of energy so that, for instance, a designer is free to insulate or not so long as the building meets performance standards in the amount of energy the structure requires to maintain occupant comfort. Proponents of performance standards maintain that this approach encourages innovation while maintaining design freedom.

Meanwhile, ASHRAE is writing energy conservation standards for retrofitting existing buildings. These standards will provide a method to calculate how much energy a building uses and will show how the building can be modified to cut energy use, taking economics, operation and maintenance into consideration.

In line with the President's program, two California utilities—investor-owned Pacific Gas & Electric Co. of San Francisco and the City of Palo Alto, Calif., utilities department—are offering aid to homeowners to insulate their attics in the form of 8 percent loans of up to \$500 for a maximum of five years.

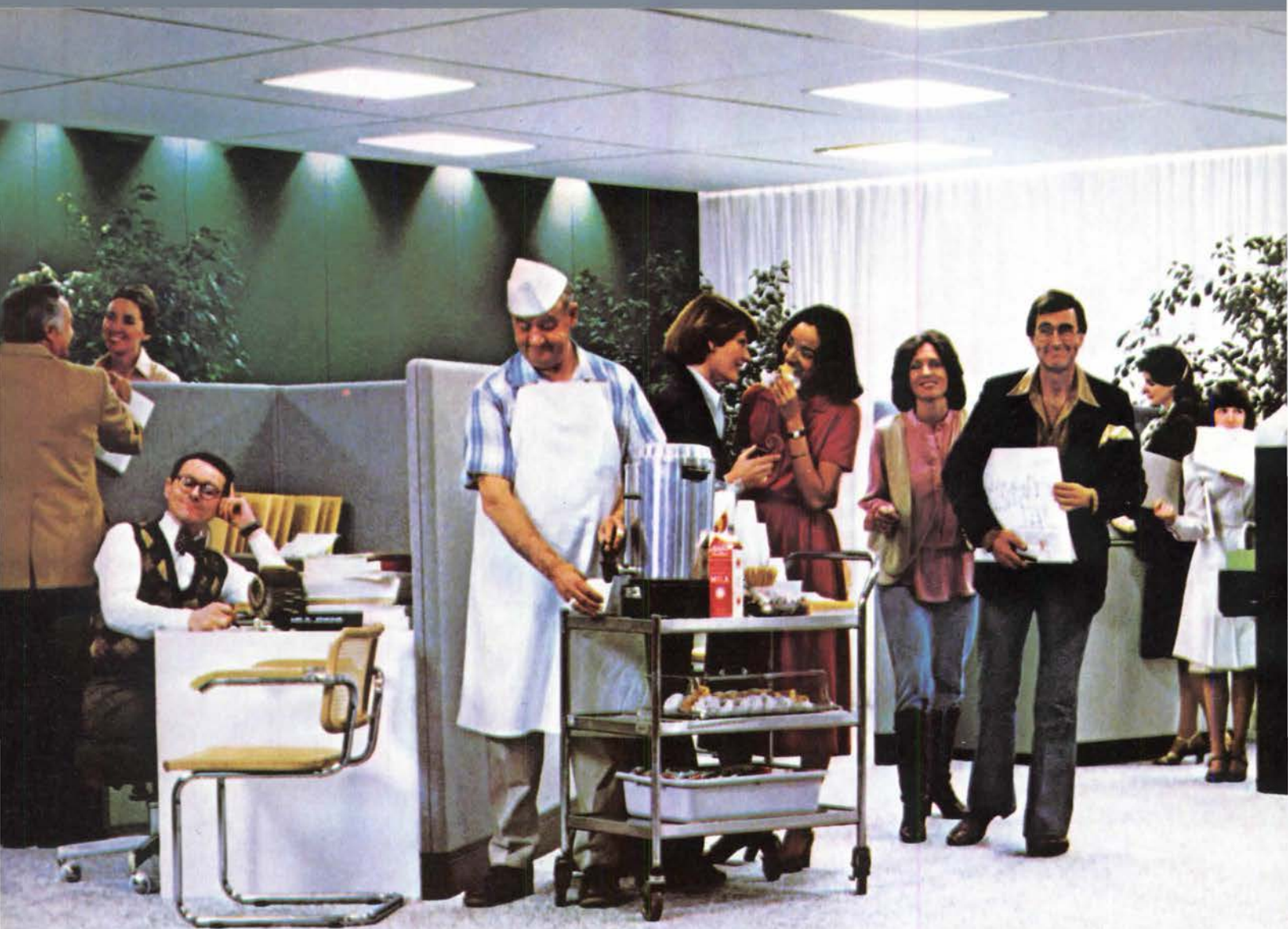
In the application of solar energy, the Solar Energy Industries Association reported that installation of solar equip-

continued on page 14

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Write J. Peter Detgen, Manager, Interiors Marketing Division, Owens-Corning Fiberglas Corporation, Fiberglas Tower, Toledo, Ohio 43659.

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Energy from page 10

ment in 1977 more than doubled the previous year's total. SEIA expects the industry to triple President Carter's goals for solar in 1978. Specifically, in residential use, HUD reports that sales of U.S. houses equipped with solar space and hot water heating devices have increased dramatically, from only 200 five years ago to more than 6,000 today.

Massachusetts was the first state to receive a substantial federal grant to implement an energy conservation plan. With \$563,000, the state is supposed to cut energy costs by \$250 million a year and by nearly 8 percent by 1980. After 1980, the savings are expected to escalate dramatically as solar hot water and solar heating systems are more widely in use.

That energy consciousness is changing people's perceptions of the built environment was brought out by an Owens-Corning Fiberglas official in announcing the seven winners of top honors in his company's sixth annual energy conservation awards program. Said OCF Vice President Charles E. Peck: "The new architectural styles for this new generation of buildings should turn out to have a freshness and honest appeal since the basis is a closer fit between the building's physical performance and the user's real needs."

In California, where Governor Jerry Brown appointed as state architect the former director and founder of Farallones Institute, a commune-like school with emphasis on "whole energy systems" for living, the first fruits of that appointment were revealed in the form of designs for three energy efficient state office buildings. While only one of the three was designed by Sim Van Der Ryn's state staff, his philosophy and emphasis on passive technology is evident in all three. Writer Allan Temko in these pages praised the three as having been designed according to human needs, "going far beyond mere temperature comfort."

Also in these pages, Margot Villecco of the AIA/RC staff explained the shift in thinking regarding energy efficiency in buildings that has taken place since the dawn of the energy crisis. While formerly the guiding principle was to protect the

building interior as much as possible from the outside elements, "energy-conscious design is now better understood," she concluded. The federal office building in Manchester, N.H., which she evaluated for its energy characteristics, would be different if designed today, she said, because under current thinking, "instead of a static structure, a building becomes a living organism by the nature of its design."

Economy

AIA Survey Documents Upturn In Employment at the End of '77; Commissions Increase 15 Percent

The nation's architectural firms suffered grievously during the recent economic recession. They were not alone, for it is reported that a quarter of Britain's architects in Jan. 1977 were unemployed and a third of that country's architectural offices had closed their doors.

AIA made its first hard survey of employment trends in the profession in 1975. It was revealed that there had been a 6.8 percent decline in employment from a base line of the last quarter of 1973. Ten states were not this fortunate, suffering a loss in employment from minus 28.1 percent to minus 11.2 percent.

At the end of 1977, another AIA employment survey was made which showed that from Dec. 31, 1973, to the end of Jan. 1977, architectural employment was down by 12 percent. There was a slight increase in employment in the fourth quarter of 1976 from the low point suffered in that year's third quarter.

The New York chapter/AIA, which, as a spokesman says, was the "first in the country to provide reliable figures on architectural activity," revealed recently some rays of hope for architects, if New York City can be a barometer. At the end of each year since 1974, the chapter has asked firms to report anonymously the total number of all employees. Using the peak year of 1969 as a base line, the chapter found that employment of all person-

nel in architectural offices was minus 30.5 percent at the end of 1974, minus 36.4 percent for '75, minus 43.3 percent for '76.

The most recent chapter survey indicates that 1977 broke the long decline, with the figure for unemployment at minus 37.5 percent. New York architects are said to believe that 1978 will not show another decline but will continue on about the same level as 1977.

At the end of 1977, AIA's regional directors were able to report that the year had seen an increase in personnel in architectural offices, in contrast with 1976 when firms had to reduce their staffs because of lack of work. According to the directors' reports, sections of the country to experience a definite upturn in 1977 included the South, the Southwest and California, while not so rapid in recovery were the New England states and the Midwest. For the country as a whole, it is estimated that commissions averaged 15 percent higher by the end of 1977 over 1976, and the value of construction contracts rose 26 percent.

That 1977 saw an extraordinary advance for the construction industry is confirmed by the "1978 Dodge/Sweet's Construction Outlook." Through 1977, the housing boom was aided and abetted by a plentiful supply of mortgage money, federal spending gave a strong thrust to public works construction and "general economic expansion finally brought forth a belated burst of commercial and industrial building." All in all, 1977 was the biggest year "in nearly three decades of cyclical ups and downs."

According to a survey by *Engineering News-Record*, office construction during the first two months of this year soared 247 percent over a comparable period in 1977. The survey of more than a dozen cities reveals booming records in Houston and San Francisco, "while Chicago and Dallas are approaching that euphoric condition." Nationwide, many older high-rises are being renovated, but increasingly important to the construction industry are lowrise and midrise office buildings on large cities' outskirts and suburbs.

Aaron Sabghir, the Commerce Department's chief statistical forecaster, predicts that expenditures for new construction will continue to expand in 1978. Compared to a gain of 14 percent in 1977, the rate of increase for 1978 is expected to be only about 10 percent. For nonresidential building, Sabghir forecasts a 19 percent increase in new construction of commercial buildings, outpacing industrial, educational and hospital construction. Included in the figure for commercial construction are stores and shopping centers.

Sabghir foresees "no strong rebound" for industrial construction in 1978. Even with the 8 percent gain expected this year,

continued on page 18



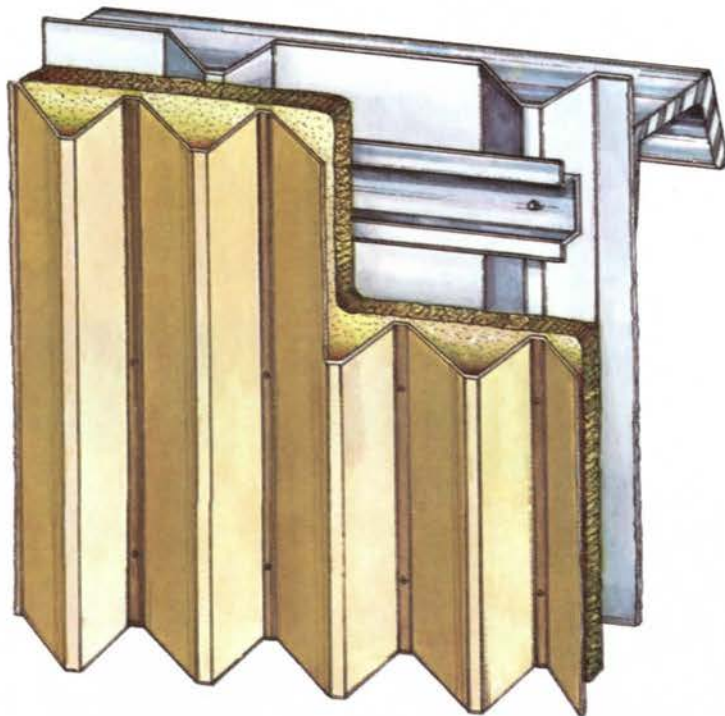
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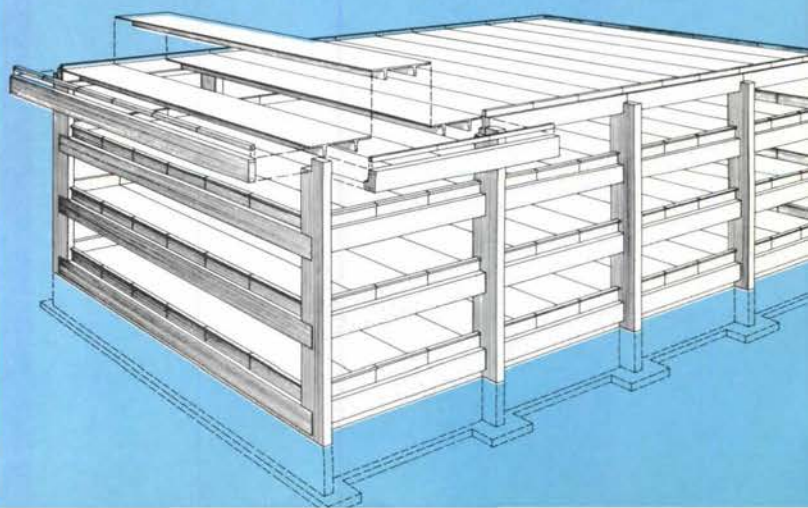
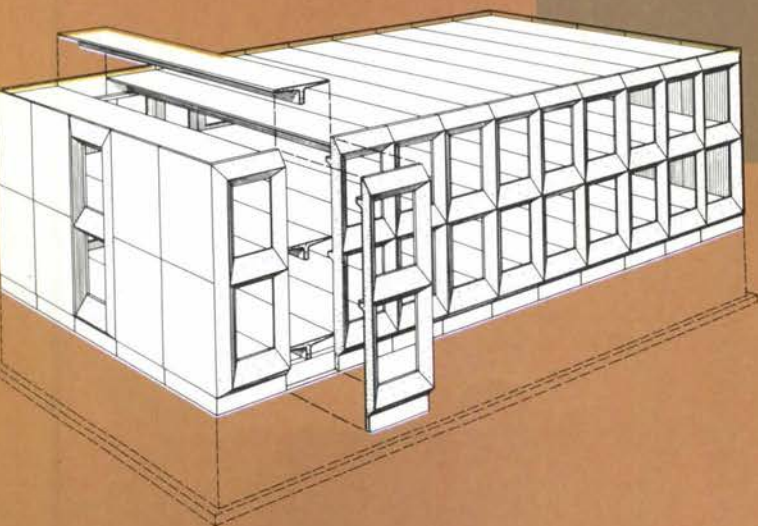
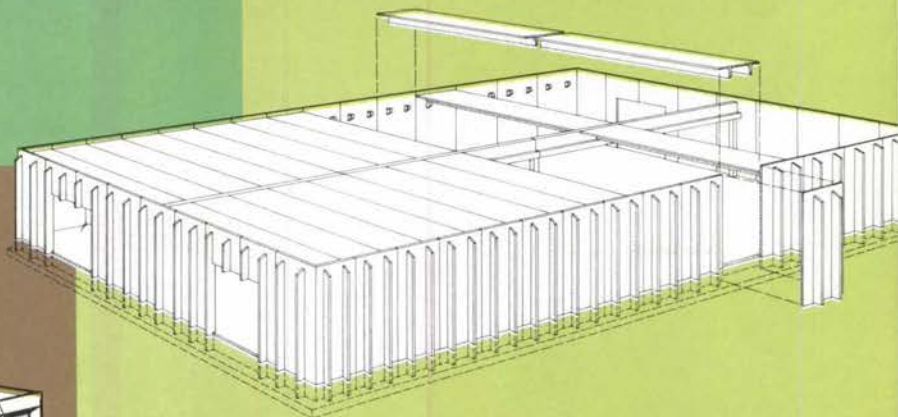
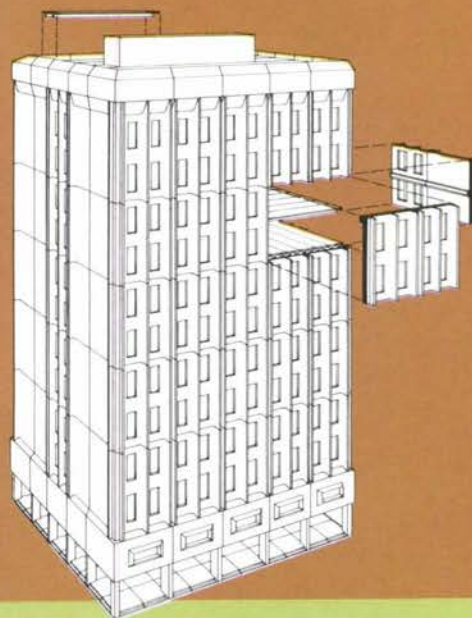
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Economy from page 14

industrial construction will be 40 percent below the 1969 peak, Sabghir believes.

Not everyone expects a replay of the upswing experienced in 1977. Some say that the remainder of the year may be plagued by such things as rising interest rates, costs of materials and uncertainty over labor negotiations. Regarding the cost of construction materials and labor across the nation for the 12-month period ended Mar. 1978, the Dodge building cost services department of McGraw-Hill Information Systems Co. reported in April that there had been an increase of 8.5 percent. This compares with an 8.9 percent rise a year earlier. Cost increases were highest—up 9.7 percent—in the region consisting of the Pacific Coast and Rocky Mountain states.

A generally optimistic outlook from construction indicators

The *Engineering News-Record's* construction cost index rose 7.1 percent for the year ending Mar. 1978, with costs of materials fueling the increase. According to ENR data, public works spending, a strong housing market and growing capital expenditures lifted the cost of construction materials 9.3 percent for the year ending in March. Lumber products, for example, were increased by 10 to 15 percent over the past 12 months.

Despite the crises of a coal strike and a severe winter, McGraw-Hill's F. W. Dodge division reported recently that in January of this year contracting for new construction stayed at near the 1977 level. In that month, contracts for future construction totaled more than \$9 billion, up 39 percent over Jan. 1977.

George A. Christie, vice president and chief economist for Dodge, says that "January's construction statistics showed the same broadly based support that gave 1977 its strong finish—sustained high demand for housing, rising commercial and industrial building and special funding for public works." February's \$9.7 billion of newly started construction was virtually even with the January rate, Dodge reports.

Christie predicts that the situation will change by midyear after the "expected cyclical decline of homebuilding sets in." Christie points to the \$4 billion released by the federal government in the final months of 1977 to create jobs in construction as having a "strong but brief impact on the otherwise dormant categories of schools, hospitals and other public non-residential buildings." Without such support in 1978, it is not known "whether the rising rate of new, private nonresidential construction will be able to fill the void."

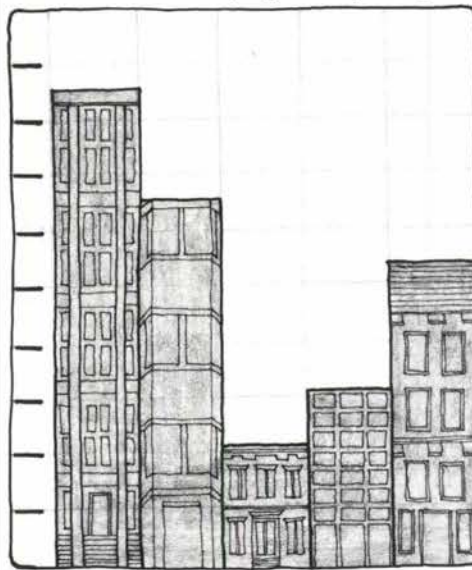
The federal monies to which Christie refers were authorized by the Public Works Employment Acts of 1976 and of

1977. The funds provided for the construction of projects owned by local governments in areas of high unemployment.

The 1977 act, which authorized \$4 billion for public works, won for President Carter one of his proposals for pumping life into the economy. Adherents of the bill said it would give a boost to the construction industry, in which unemployment in the summer of 1977 was estimated at 20 percent. Under the legislation, states and counties receive funds for the construction of schools, libraries, hospitals, municipal facilities and transit facilities through a formula based on number and percentage of unemployment. The bill requires that all construction work by private contractors be done through competitive bidding. Work for A/E services is through negotiated procurement.

Another indication of 1977's progress toward recovery is given by the Labor Department's employment and training administration which reports that building construction was one of three industry groups to have the largest increase in job openings in 1977—an increase of 70 percent or more in job increases for the three groups, well above the national level of 35 percent.

Some experts have predicted that total construction of all kinds in 1978 should reach \$146 billion—5 percent higher than the 1977 rate of \$139 billion. Nonresidential construction, a generally accepted



Illustrations by Carole Palmer

barometer of economic health and growth, is predicted to rise 13 percent. Although the actual number of housing units will probably decline, the dollar volume may increase slightly.

A reading of some of the nation's leading newspapers and periodicals indicates that 1978 may not be the glowing year that some experts have predicted. According to Commissioner of Labor Statistics Julius Shiskin, the first two months of 1978 for nationwide growth were "very poor," the reasons cited being the coal

strike and bad winter weather. Strange to say, as Shiskin points out, the coal strike had only a "dampening" effect on employment.

In April, the Labor Department reported that unemployment rose in March to 6.2 percent from 6.1 percent in February, the first time in seven months that the unemployment rate had gone up. Although this increase of only 0.1 percent is viewed by economists as statistically insignificant, the figure for jobless blacks rose sharply, from 11.8 to 12.2 percent. Even the overall slight increase in unemployment, when coupled with all the other economic woes, may be the cloud "no bigger than a man's hand" that is on the horizon.

In March, the House passed the Full Employment and Balanced Growth Act of 1978 (HR 50), better known as Humphrey-Hawkins bill. The House version, which calls for a national goal of 4 percent unemployment by 1983, has deleted

Some pessimism over interest rates, materials and labor

some strong measures in the original bill, such as making the government the employer of last resort. One amendment of interest to the construction industry calls for participating contractors in public works projects to hire unskilled workers for 20 percent of its work force. An amendment to the Senate version calls for the President to consider anti-inflation measures when he proposes specific cuts in unemployment.

As the nation's economic health goes, so goes that of architectural firms, of course, and many business analysts are projecting an economic downturn before the end of 1978. The *New York Times* reports that some of the recent economic indicators have thrown economists into "sloughs of despond." Although, says the newspaper, it is "too soon to assert that the numbing combination called stagflation is back in full bloom, it's time to worry whether 1977 was no more than a brief interlude in the awful pattern that followed the 1973-74 oil embargo."

According to *Business Week*, the "downbeat influences" for 1978 could include "a bear market in stocks, a gradual unwinding of the housing boom, worsened prospects for inflation, declining productivity, depreciation of the dollar, no anti-inflation program in place now, the threat of controls, constrained export growth and rising interest rates."

Others are more optimistic. Although Courtney M. Slater, chief economist for the Commerce Department, says that in the first quarter of this year there was probably little growth in the gross national product, she predicts a "strong

continued on page 26



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Overall night scene and photo left: The stainless facade of Burdine's of Florida, Tampa, Florida. Architects—Reynolds, Smith and Hills.

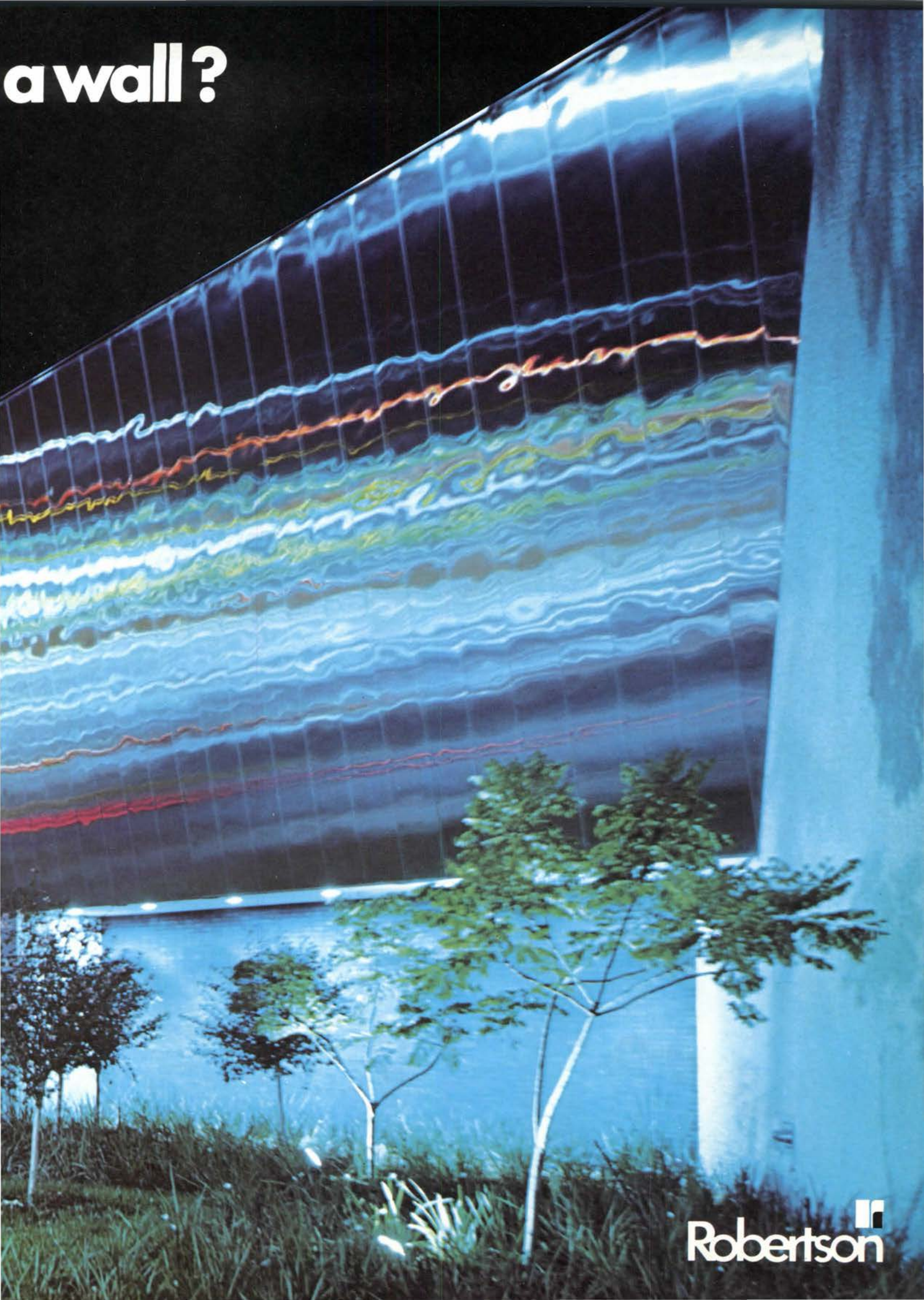
Bottom left: Teamsters Local #100 Headquarters, Cincinnati, Ohio. Architects—Wright Partnership/Architects. Below: R.G. Barry Corporate Headquarters, Fairfield County, Ohio. Architect—Don M. Hisaka & Associates.



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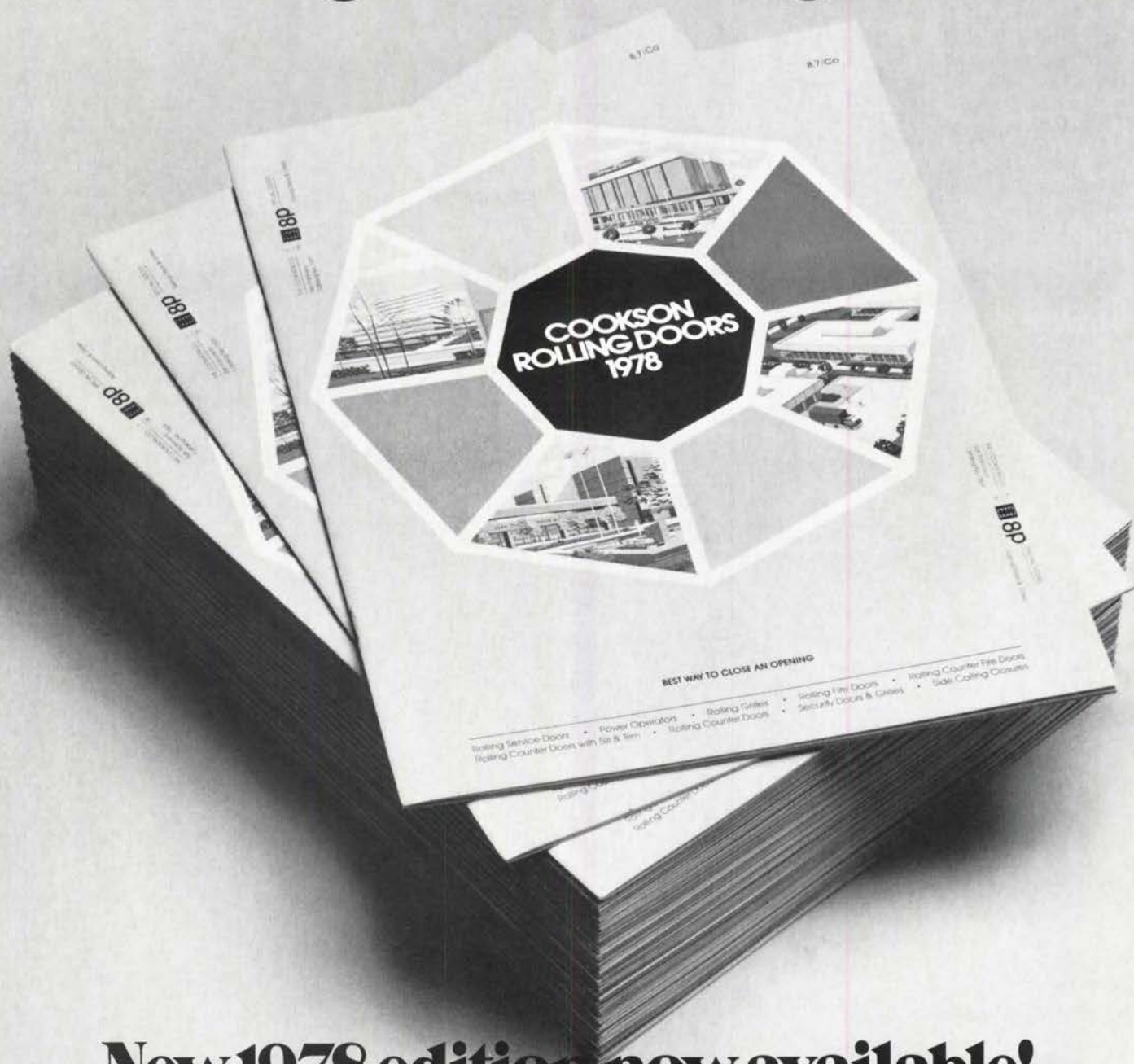


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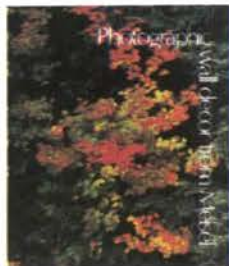
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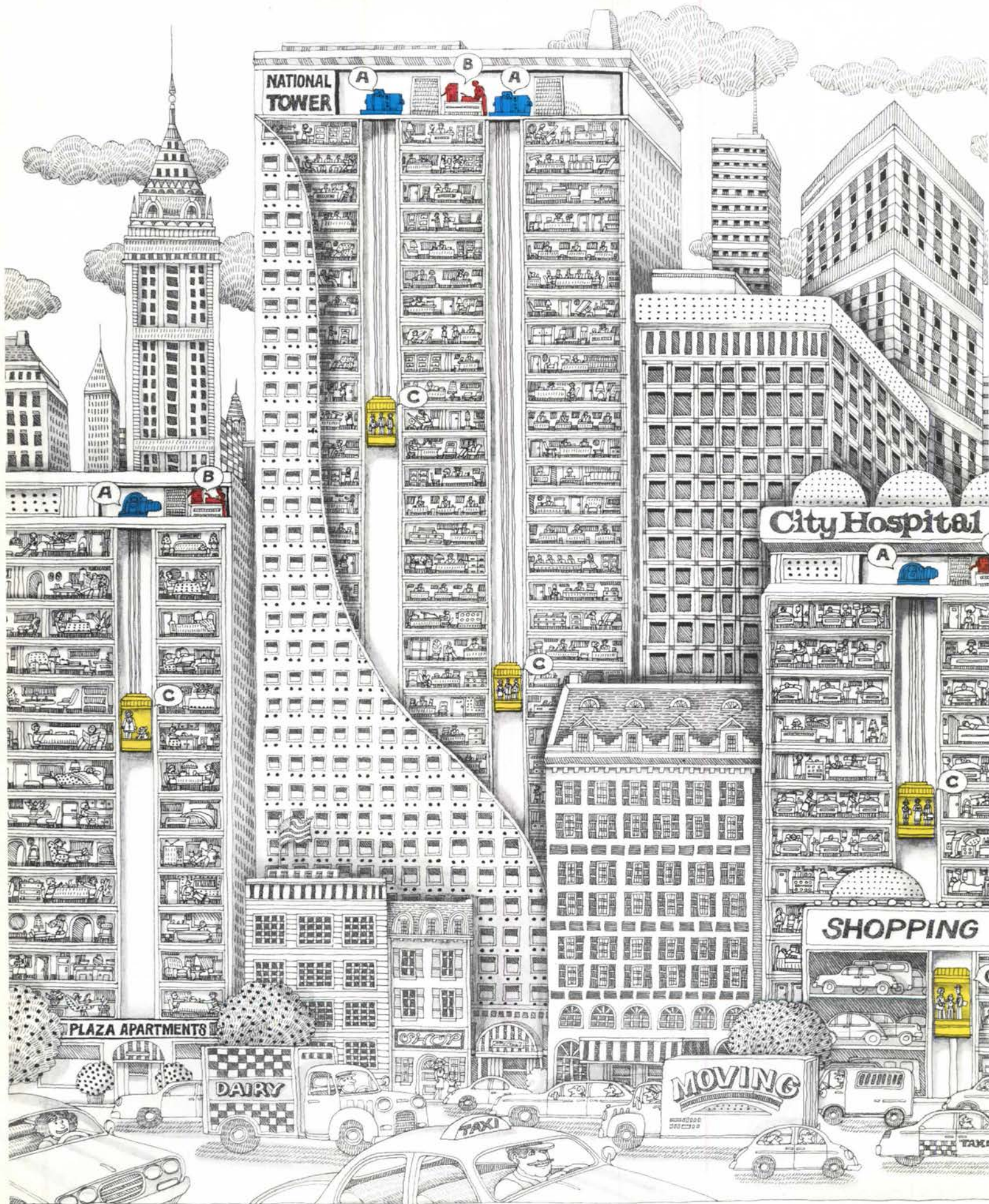


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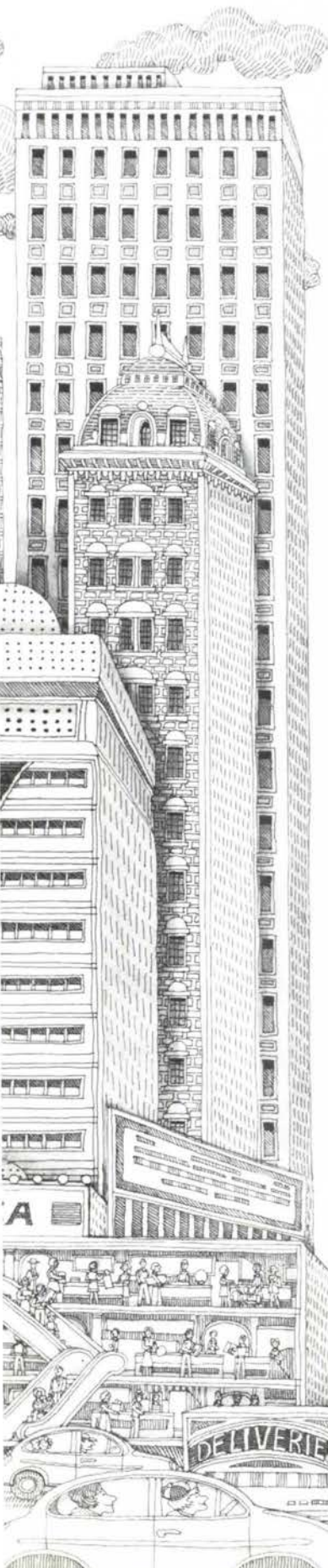
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Economy from page 18
growth of the GNP during the remainder of the year."

And as *Business Week* says, "If you are an optimist, this means the Administration will get its act together, fostering ongoing growth and decelerating inflation for 1979. . . . There is still plenty of time before the current momentum in the economy is lost; the expected second quarter surge seems to be coming along on schedule. And even the 1979 pessimists see no slowing in the third quarter."

Cities

Families and Young Professionals Rehabilitating Neighborhoods, But Many Problems Still Remain

More families and young people are moving back to central cities, causing the health of these cities to improve. Consequently, developers, investors and other potential residents view the cities with greater interest. Demographic and other factors indicate that this new life being poured into the central cities will continue in the next few years. The anticipated rise in family units will be comprised of more smaller families. These family units are better suited to urban town houses and apartments and less likely to be drawn by the child-oriented attractions of suburbia. Fewer families can now afford to live in the suburbs, with their soaring land and housing costs. Young professionals are flocking to city neighborhoods and aiding in neighborhood rehabilitation. And with the new energy consciousness and memories of the 1973 gasoline shortages, urban living without its automobile dependency becomes more attractive.

Cities also remain a strong drawing force to nonresidents for work and commercial, recreational and cultural activities, as a recent Harris poll indicates. "Although the suburbs and outlying areas have spun off from the central city, they have not spun free and have not supplanted the city in the public's mind," the report concludes.

But despite these optimistic indications, grave problems remain for the central cities. As President Carter said when announcing his national urban policy on March 27, "The deterioration of urban

life in the U.S. is one of the most complex and deeply rooted problems we face." Indeed, there are more than 300 economically distressed metropolitan cities and more than 1,800 distressed small cities, according to HUD definitions.

(HUD analyzed these cities by per capita income, population growth, unemployment rate, employment growth, housing stock and poverty level.)

To aid in the recovery of the nation's ailing cities, the President's urban policy contains a broad series of job programs, tax incentives, grants, public works, loan guarantees and a fundamental "retargeting" of many federal programs, costing \$742 million in fiscal 1979 and \$2.9 billion in 1980.

Among the proposals are: a national development bank to guarantee \$11 billion in loans over the next three years to businesses expanding or locating in designated depressed areas, both urban and rural; employment tax credits "targeted" on those companies that hire the hard-core unemployed; a "differential" tax credit for companies investing in depressed areas; a \$1 billion program of "soft" public works for various urban maintenance projects; a \$200 million fund to states that proved they were aiding distressed communities within their borders, and social service grants for such programs as meals for the elderly and day care in areas that have high concentrations of poor residents, costing \$150 million a year.

In addition, fiscal relief would be given to strapped localities in the form of an extension and reshaping of the so-called countercyclical revenue-sharing program scheduled to expire this year.

Local neighborhood self-help groups would receive direct financing for revitalization projects, totaling \$15 million. Funding of the Section 312 program, which provides 3 percent loans for housing rehabilitation, would be doubled to \$275 million. An urban Volunteer Corps, costing \$40 million and run by Action, would be created with a pool of architects, lawyers, engineers, planners and other experts to volunteer their help in renewal. Other funds would be used to improve urban transit, prevent crime, build local clinics to relieve the burden on municipal hospitals, design waste recovery systems, spur urban arts programs and build parks.

Congress gave its first reaction to Presi-

dent Carter's urban policy in April as the House and Senate budget committees completed work on their first budget resolutions, which set spending ceilings for the coming fiscal year.

The Senate committee did not vote on some of the measures because sufficient details were lacking, but it did reduce by more than half the \$2 billion requested for the development bank. The committee approved only \$600 million for loan guarantees under the bank but did include in its budget ceiling the addition of \$275 million each for the UDAG program and the Economic Development Administration's title IX program.

The House budget committee approved the amounts requested for the urban policy initiatives and added \$400 million to the amounts requested for countercyclical relief and for fiscal relief to cities for welfare costs.



Another boost to urban revitalization and rebuilding could come from the 1977 Housing and Community Development Act. Signed into law in mid-October, the act authorizes almost \$14 billion in housing and community development programs over the next three fiscal years.

The most dramatic new component is the urban development action grant (UDAG) program, funded at \$400 million per year for three years. Grants are available for local projects which combine private capital with UDAG and other public funds. The emphasis is on

continued on page 31





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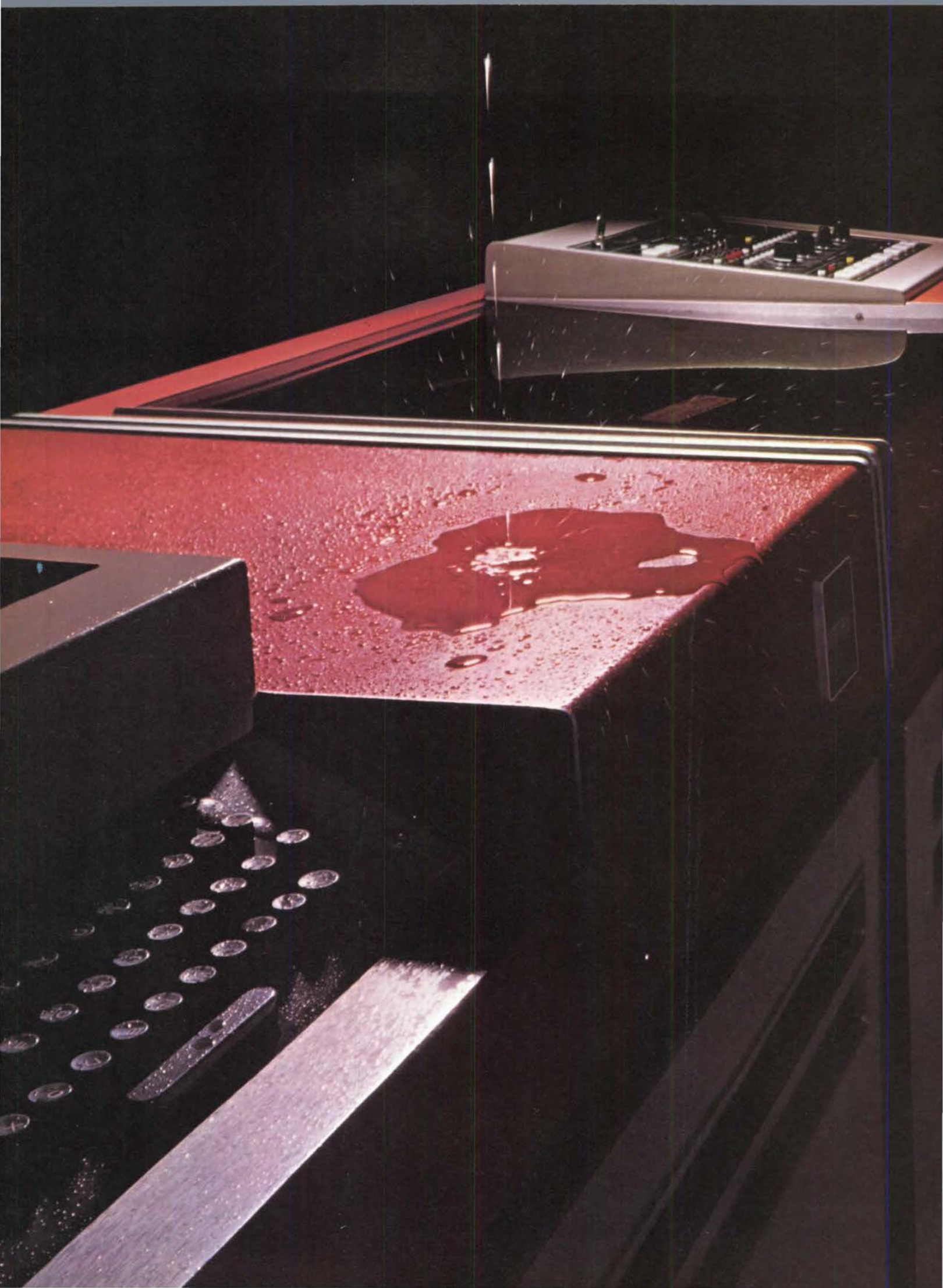
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Cities from page 26

helping meet the economic needs of low- and moderate-income people and also on bolstering the fiscal base of the community.

A major change from the 1974 law is that an alternative formula for the allocation of block grant funds can be used, thus permitting older cities to receive more funds. Smaller cities are still eligible to receive single-purpose, multi-year grants, but the new act encourages them to approach housing and community development problems in a more comprehensive manner, thus assuring a more dependable source of funds commensurate with existing need.

The new law includes a financial settlement fund, authorized at \$100 million for each of the next three fiscal years, to give assistance to local governments in continuing efforts to close out such old grants as urban renewal projects. Economic development activities under the new law have been clarified and expanded. And for the improvement of the nation's housing, the new law provides for two housing programs for low- and moderate-income people, the Section 8 rental assistance program and the traditional public housing program.

The Federal Housing Authority increases maximum mortgage amounts on single-family homes from \$45,000 to \$60,000, lowers down-payment requirements and retains the requirement for a down-payment of 3 percent of the first \$25,000 on the appraised value of a home.

President Carter has signed into law a supplemental housing authorization which creates a 20-member national commission on neighborhoods. The commission is preparing a study of the effects of existing federal programs on neighborhoods and will make recommendations for the future revitalization of urban areas. To be com-

Commission on neighborhoods evaluating federal programs

pleted in January 1979, the recommendations to the President and Congress will include: new mechanisms to promote reinvestment in existing city neighborhoods; more effective means of community participation in local governance; policies to encourage the survival of economically and socially diverse neighborhoods; policies to prevent such destructive practices as blockbusting, redlining, segregation; modification in local zoning and tax policies to facilitate preservation and revitalization of existing neighborhoods, and re-orientation of existing housing and community development programs and other tax and subsidy policies that affect neighborhoods. The commission is chaired by Joseph Timilty, a state senator from Massachusetts.

The antiredlining crusade of the neigh-

borhood movement, begun in 1973, has spurred the Administration to focus on savings and loan associations' practices. For a generation, savings and loan institutions have looked beyond the city limits to the suburbs for their mortgage customers. And although a reversal back to interest in cities is slow in coming, savings

Cincinnati, Baltimore, Savannah, Ga., and Pittsburgh, investment by private developers, community groups or both has spurred neighborhood rehabilitation. Neighborhood rehabilitation groups in Pittsburgh and Savannah are unique in their efforts to renovate without dislocating the low- and middle-income residents.



and loan institutions are rediscovering cities. Robert H. McKinney, the new chairman of the Federal Home Loan Bank Board (FHLBB), the independent agency that regulates the S&L industry, has made urban lending his number one priority.

Even a small success could have a large impact on the cities. Savings and loan associations hold about \$450 billion in mortgages, according to the FHLBB. If 1 percent—\$4.5 billion—could be shifted to the cities, it would amount to more than the entire community development block grant program's yearly funding.

McKinney proposed new antiredlining regulations on Nov. 9 which would substantially alter loan practices in central cities by forbidding lending institutions from denying a loan because of the age of the dwelling or the neighborhood in which it is located. McKinney also established the new office of community investment which encourages savings and loans to make loans to inner city areas.

The S&L industry is still hesitant to make innercity loans because of the risks involved. And the dearth of statistical evidence to support any position on urban lending is adding to the problem. So the office of community investment plans to gather facts—pro and con—with the hope that these facts will demonstrate that the cities present a good business opportunity.

It is not hard to find examples of successful neighborhood rehabilitation efforts. In such towns as Portsmouth, N.H., Newburyport and Salem, Mass., Seattle,

HUD budget projects use of the full block grants authorization

Patricia R. Harris announced HUD's 1979 fiscal year budget, which asks for project appropriations of \$10.981 billion, up a half billion from last year, and outlays of \$9.8 billion, \$1 billion over 1978. A HUD staff increase of 1,410 employees is expected.

According to Secretary Harris, the new budget projects the use of the full \$3.750 billion in block grants authorized by Congress for 1979, an increase of \$150 million over 1978. Another \$400 million is budgeted for the urban development action grants program and \$20 million is earmarked for urban homesteading, bringing the total authorized to date to \$55 million. The budget proposes rental assistance for 400,000 housing units and nearly 300,000 subsidized housing starts, compared to 51,000 starts in 1976.

New housing starts would also be encouraged by the \$1.5 billion appropriated for low-interest loans geared to attract developers to construct new apartment buildings for low- and moderate-income people.

Also, a half-billion dollars in low-interest loans would be made available in 1978 and 1979 for financing mortgages for apartment houses for moderate-income people. HUD maintains that such action would attract middle-income people back to the cities.

Cities continued on page 34



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The budget also provides \$800 million for an estimated 25,000 units for housing for the elderly, including \$50 million exclusively for housing for the handicapped, especially the nonelderly.

Meanwhile, it was reported that many of HUD's subsidized multifamily projects are deteriorating due to inadequate project income, inadequate repairs, poor HUD management and unsatisfactory on-site project management.

Multifamily subsidized projects account for roughly 40 percent of the 14,000 FHA-insured projects and about half of the 2,600 projects that are now in financial difficulty. An estimated 154,724 families live in these projects. If the present trends continue unchecked, the number of troubled projects could rise to more than 3,000 by 1982, which is equal to about two years of HUD construction of projects. In addition, insurance fund losses would increase to over \$3 billion.

HUD has also run into trouble with its "new community" developments. The program has been "plagued by a series of financial disasters," and seven communities have been foreclosed or put up for foreclosure: Newfields, Ohio; Jonathan and Cedar-Riverside in Minneapolis; Ganada and Riverton, N.Y.; Flower Mound, Tex., and Park Forest South, Ill. Six other communities may be salvageable: St. Charles, Md.; Maumelle, Ark.; The Woodlands, Tex.; Soul City, N.C.; Harbison, S.C., and Shenandoah, Ga. Recognizing this failure but not willing to give up on new communities, HUD plans to turn to a new-town-in-town approach utilizing land once designated for urban renewal. The new program is expected by August 1979.

The Feds

General Services Administration Puts New Emphasis on the Arts, Mixed Use in Public Buildings

Departing from Eero Saarinen's Dulles International Airport—soon to be expanded—the tour of the nation's capital begins. On route is the leaky Kennedy Center, the energy expensive White House, the Tidal Basin Park, where a memorial to FDR will stand; down the ceremonial Pennsylvania Avenue, to be redeveloped; with a stop at the Capitol, where Congressmen can't agree whether to restore or extend the west front of the building.

The return trip passes GSA where administrator Jay Solomon is busy making changes in federal buildings policies,



changes which bring hope for the quality of federal buildings in the future.

GSA has shifted its emphasis from new construction to restoration and reuse of existing federal buildings. It has accepted the concept of mixed use, expanded its funding for artworks for federal buildings and continues at an increased rate the sale of excess property. In addition, GSA's design action center has requested from the design community and other federal agencies suggestions to improve the quality of federal design.

Under the Public Buildings Cooperative Use Act of 1976, GSA is required to first look at historic buildings that can be restored to satisfy federal space needs. Reasons given by Solomon for this shift in emphasis are:

"First, it takes less energy to remodel an old building than to build from the ground. Second, most of the buildings are located in the central city near mass transit, which will become more important in the future. Third, if we remodel and reuse old buildings, we will be doing our part to save the central city. Fourth, utilizing space in the central city will make the government more accessible to minorities to whom we are committed to give equal employment opportunities."

This does not mean that GSA is abandoning new construction. This year GSA plans to spend nearly \$890 million on new projects.

Spurred by the same 1976 act, GSA now encourages mixed use—the government can sublease space on the ground level of its buildings to nonfederal groups for commercial purposes. To further buildings' usage, GSA has launched a "Living Buildings" program which allows spaces in buildings, such as auditoriums, courtyards, plazas and courtrooms, for cultural and neighborhood uses.

In order to "humanize" federal build-

ings, GSA's art-in-architecture program has been expanded. The amount of funds set aside for artworks—sculptures, paintings, tapestries, photographs, ceramics, woodworking, weaving—has been raised from three-eighths to one-half of 1 percent of construction costs. Since 1972, GSA has commissioned 55 artworks at a cost of about \$2.8 million for federal buildings nationwide. The first work commissioned under the revised program is Stephen Antonakos' wall-mounted sculpture of neon tubing. The \$23,000 sculpture was scheduled for completion by March 1978 at the Dayton (Ohio) federal building.

Excess federal property is being sold to private investors—more than \$58 million in 1977—or donated to communities for public uses such as schools, hospitals,



parks and recreational facilities—more than \$100 million in property value in 1977.

Embodying many of GSA's new concepts is the old post office building in Washington, D.C., to be renovated at a cost of \$18 million. It is the first test of GSA's level 3 method of selecting architects and engineers by means of a limited architectural competition (winning design, a joint venture of McGaughy, Marshall & McMillan of Norfolk, Va., the Washington firms of Arthur Cotton Moore/Associates and Stewart Daniel Hoban/Associates and the Atlanta-based Associates Space Design, Inc.). It will be the first federal building in GSA's inventory to incorporate a multiple use of private and government offices mixed with commercial shops, restaurants and facilities for cultural and educational activities (although the plan was developed prior to the effective date of the Public Buildings Cooperative Use Act). For energy savings, the roof of the 196-foot high cortile will be converted into solar collectors and integrated into the HVAC system. In addition, \$90,000 will be available for art commissions.

A similar competition has been announced for the renovation of the old post office building in St. Louis, a 104-year-old structure designed by A. B. Mullett in the Second Empire style. Mullett

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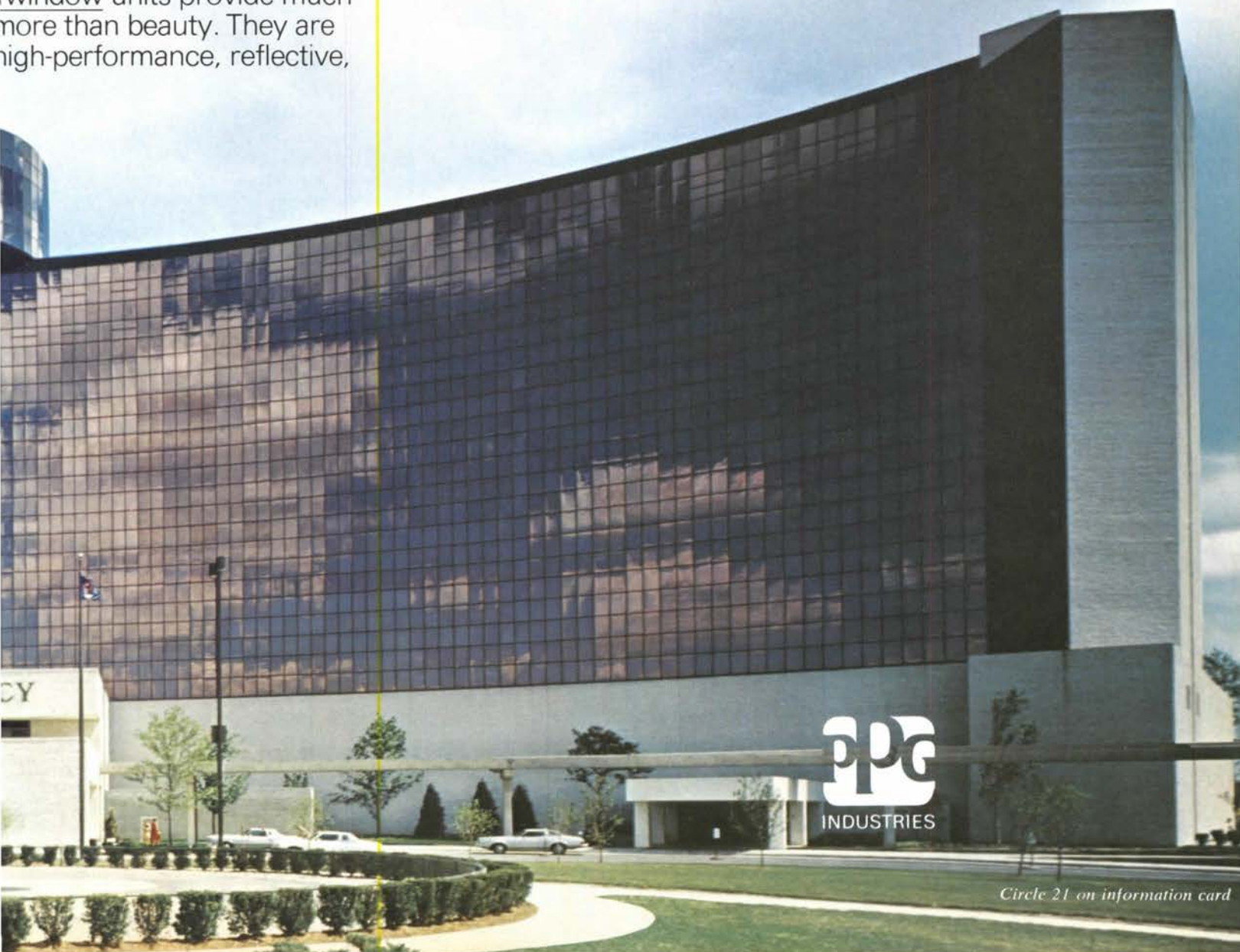
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PPG: a Concern for the Future

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designed another building in this style—the old executive office building next to the White House in Washington, D.C. GSA will spend about \$14.9 million on the St. Louis building (right).

However, promising as GSA's new directions seem, two obstacles are blocking full implementation of the Public Buildings Cooperative Use Act, Randall Vosbeck, FAIA, an Institute board member and chairman of the AIA government affairs committee, recently told the Senate committee on environment and public works.

To achieve the goals of the act, the Advisory Council on Historic Preservation (ACHP) is responsible for identifying significant buildings and recommending which may be appropriate for specific federal needs. But because of budgetary and organizational constraints, the ACHP has had great difficulty meeting its statutory responsibility. ACHP currently allocates only one half-time staff person to provide GSA with surveys and reports, and it has requested no additional funding for fiscal year 1979.

Second, the implementation guidelines put major emphasis on new or newly acquired buildings. But given GSA's very modest level of activity in this area, new construction or acquisition proposals developed under the act will only have an impact over a very long term. It would be more beneficial if GSA would apply the multiuse program to existing federal buildings, Vosbeck suggested.

Still unresolved: whether to extend the Capitol's west front

- Congress has deferred for another year the now 10-year-old question of whether to restore or extend the west front of the U.S. Capitol. In the meantime Architect of the Capitol George White, FAIA, is preparing a detailed report which will present eight alternatives for restoration or extension, to be issued this fall. The final decision is bound to be controversial since the Senate supports restoration while the House of Representatives favors an extension. AIA has consistently held the position over many years that the west front—the last visible facade of the landmark designed by Thornton, Latrobe and Bulfinch—should be restored rather than extended.
- A proposal has been submitted to Congress to renovate the Pension Building in Washington, D.C., for a national museum of the building arts. Suggested for inclusion in the museum is a showcase of two permanent, continuously updated exhibitions: "building America," which would trace the log-cabin-to skyscraper sequence, and "people and building," a smaller display designed to involve visi-



tors in mechanized exhibits. The museum would be a national clearinghouse for data on architecture, building technology, landscape architecture, urban and community design, city and regional planning and the history of all these disciplines. The third major function would be a building arts library and archives. The costs are estimated at \$21 million to renovate the building and set up permanent exhibits and \$3 million annually to run the program and for maintenance.

- "Toward a Master Plan for the United States Capitol: Phase II, the Alternatives," a report prepared by a five-firm planning group, was issued in October for Congressional and public consideration. The report poses choices for the future including: future space needs of the Supreme Court could include removal to another site; sites for future House office buildings and the underground development of the Capitol's East Plaza; feasibility studies of the design and construction of an underground people mover; a change in Congressional policy on the use of automobiles to discourage single-occupant usage, and free bus shuttle service between subway stations and Capitol Hill destinations.
- The U.S. fine arts commission has approved landscape architect Lawrence Halprin's basic design of a water garden as a memorial to President Franklin Delano Roosevelt. The memorial, planned for the District of Columbia's West Potomac Park along the western edge of the Tidal Basin, would be about 1,100 feet in length and contain water courses, waterfalls and pools.

- A plan for retrofitting the White House for solar energy technology was prepared primarily by the Friends of the Earth (FOE).

For an energy savings of a half of a reported \$61,000 heating bill, FOE suggests a greenhouse colonnade in Palladian style between the main building and the side buildings. A simple collector panel on the roof, it is estimated, would heat 550 gallons of water—enough for the family and staff; in warm weather, a southern sleeping porch would provide natural cooling.

Imminent and long-range plans for enlarging Saarinen's Dulles

- Planning of the first extension of Dulles International Airport reached the final stages as construction bids were taken in January. Congress has appropriated \$7 million for the expansion of the federally owned and operated airport terminal at Chantilly, Va., near Washington, D.C., designed by Eero Saarinen.
- Saarinen himself realized that the airport would probably have to be extended, and he developed a master plan for future development with linear additions east and west. Saarinen's concepts were incorporated in the chosen three-phase extension plan by Hellmuth, Obata & Kassabaum. The first phase is a lowrise extension 50 feet toward the field and the full length of the present catenary structure. It will be of concrete matching the 1962 facade, with skylights extending the 50-foot width placed so that Saarinen's

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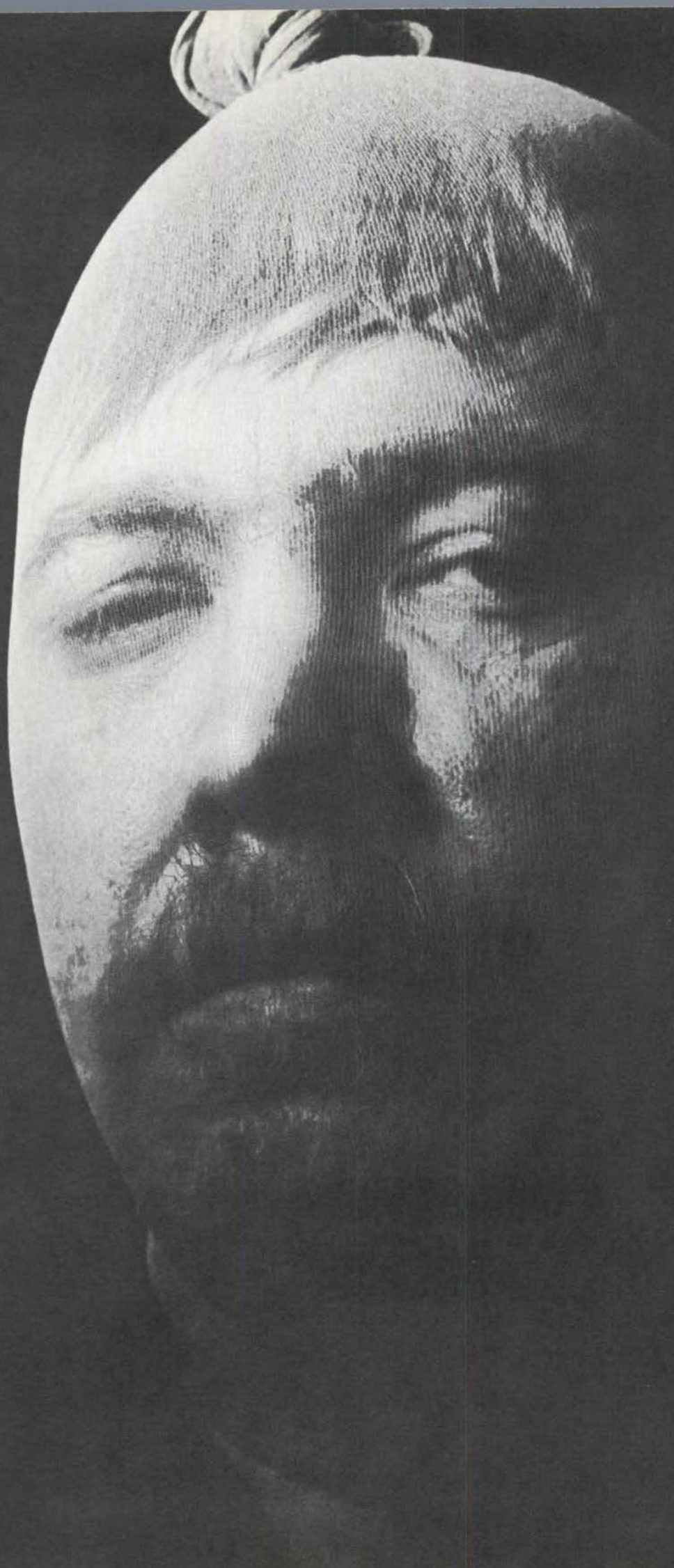
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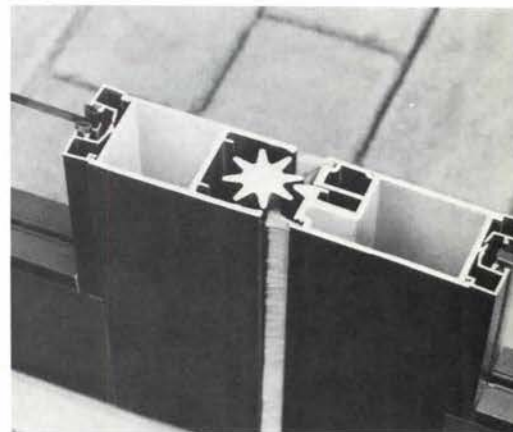
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outward leaning columns will be visible from within. The new space will provide passenger waiting rooms and centralize security functions on the terminal floor level, with baggage handling facilities located below. This lower level will extend 26 additional feet toward the control tower. The extension will not be visible from the access road nor from the large public space inside the terminal.

Linear additions to the catenary roof structure are tentatively planned in two increments. The 1985 phase would add five bays to each end, with 100-foot low-rise extensions toward the field, and the 1995 phase would place four additional bays at each end, with a widening and continuation of the lowrise "fattening" structure to 100 feet for the full length of the building.

Changes in the airport's design are subject to review only by the officials of the Department of Transportation and the National Capital Planning Commission. This process would be changed if Dulles is placed on the National Register of Historic Places, an inclusion which is recommended by the National Trust for Historic Preservation, AIA, the Advisory Council on Historic Preservation and the Virginia Historic Landmarks Commission.

- The Kennedy Center still leaks, although its flat roof was repaired in late 1976 and early '77 to the tune of \$125,000. What still leaks, with abundance, are the building's horizontal surfaces, mainly the two terraces around the building. Another leaking problem of a horizontal nature is in the floor of the kitchen which serves the center's three rooftop restaurants. Water has oozed to the ceiling of the concert hall below. The restaurants were closed three months. All repairs are to be finished by mid-1979. Congress has appropriated \$4.5 million for the work.

\$29 million appropriated for Pennsylvania Avenue project

- On May 4, President Carter signed a 1977 supplemental appropriation act which provides the first \$29 million for redevelopment of Pennsylvania Avenue between the Capitol and the White House. Initiated by President John F. Kennedy, a redevelopment plan was first unveiled in 1963. But it wasn't until 1972 that the Pennsylvania Avenue Development Corporation (PADC) was established to prepare redevelopment plans. Now, the appropriation has brought high hopes that the nation's ceremonial route will become an attractive and economically viable avenue.

PADC will receive \$130 million during the next 15 years and hopes to attract an additional \$400 million from private de-

velopers. Plans for the 21-block area during the next six years call for the restoration of the Willard Hotel; a super-block development of offices, apartments and shops; a new \$100 million hotel and media center, and two finely landscaped plazas. In addition, the Canadian government wishes to build a chancery on the avenue's east end near Capitol Hill.

Legislation

National Energy Act Still Tied In Congressional Conference as Institute Pushes for Conservation

As this magazine goes to press, Congress has recovered from its long and heated debates over the Panama Canal and has turned to other major issues confronting this nation. Not very many days remain in this session to reach decisions on a number of key bills. One of paramount importance, the National Energy Act, is still in conference, and it is anyone's guess when the legislation will be presented to an impatient President Carter.

There are five principal parts to the energy legislation: natural gas pricing, energy taxes, coal conversion, energy conservation and electric rate-setting.

AIA has been vigorous in expressing its views on energy conservation policies. To date, conferees have agreed tentatively on some aspects of energy conservation which incorporate the viewpoints held by the Institute. For example, grants would be available to schools, hospitals and local governments for the retrofitting of \$900 million in matching grants for the next three years.

In the area of energy conservation and life-cycle cost analysis in federal buildings, AIA supported goals rather than methods as the appropriate approach. There is tentative agreement among the conferees regarding the incorporation of this aim in some portions of the legislation.

Over recent months, AIA has monitored a wide range of legislative issues, ranging from common situs picketing to procurement procedures. Some of its activities regarding legislative proposals are discussed elsewhere in this news summary.

One of the more crucial bills—and one in which AIA has a great interest—being discussed by the subcommittee on miscellaneous revenues of the House ways and means committee, pertains to liability. The Product Liability Tax Equity Act (HR7711) would permit a business tax deduction for money deposited into a trust fund for contesting or paying professional liability claims. Contributions to

this "self-insurance" trust would be deductible, approximately on the same basis as liability insurance premiums are now tax deductible.

The act is aimed at easing the economic strain on professionals and product manufacturers of escalating liability insurance premiums. The rate of claims has climbed 20 percent per year, and over the past six years some premiums have increased by 300 percent. A/E firms are now paying between 1.5 percent and 9 percent of their gross annual income for liability insurance. This increase plus efforts to limit premium increases by raising policy "deductible" items has placed a tremendous financial burden on some A/E firms.

AIA is currently making a major thrust in support of the legislation and has called for accelerated hearings by the subcommittee so that the bill may be sent back to the ways and means committee for inclusion in the overall tax revision package.

Some of the other legislative matters on which AIA has expressed its views:

- Testimony was given by the Institute on the community development block grants program (PL95-128). Signed into law in Oct. 1977, the gist of the legislation, greatly simplified, is that a new funding formula has been devised which channels more funding to older urban centers.
- AIA testified in favor of placing an energy conservation element in public works projects (PL95-28). The \$4 billion jobs creation program, which included



energy conservation priority, was signed into law in May 1977.

- AIA expressed opposition to the common situs picketing bill, which was defeated in the House in March 1977.
- In 1977, AIA testified that funds in the amount of \$100 million should be appropriated for fiscal year 1978 for matching historic preservation grants. The legislation (PL95-74) was signed by the

continued on page 46

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President in July 1977, with an appropriation of \$45 million allowed. For FY 1979, AIA recently testified in support again of an appropriation of \$100 million for historic preservation grants-in-aid programs.

- AIA also supported an appropriation for FY 1978 of \$3 million for the National Institute of Building Sciences. The legislation (PL95-119), signed in Oct. 1977, appropriated \$1 million.

Opposition to establishing a pay scale for professionals

- The Institute opposes the Service Contract Extension Act (HR314), which would extend its coverage to professional employees performing under federal contracts. The current Service Contract Act does not cover such professional services, setting wage standards or prevailing wage rates for blue-collar and white-collar service employees working under federal procurement contracts. As established by the Bureau of Labor Statistics' surveys and reports, the average becomes a minimum salary level for various job categories under SCA contracts.

If extended, HR314 would require the BLS to compile salary and fringe benefits for some 65 professional service classifications, including architects. AIA holds that rigid job descriptions to establish pay could destroy the flexibility required by small firms. It is estimated that 80 percent of the architectural firms in this country have nine employees or less. The smaller the firm, the more varied and generalized are its staff's duties.

AIA also contends that an even wage distribution throughout the profession would tend to promote mediocrity and hamper opportunities for advancement. The government affairs department of the Institute estimates that the minimum/maximum pay scale would be higher than that earned by half of the surveyed architects for any given job description. Also, a department spokesman points out that even medium size firms practice regionally and nationally. "A major project announcement by a federal regional office elicits responses from architects all over the country. But with the act extended, it will be almost impossible for an agency to compare firms since these contracts cannot be competitively bid and each firm will be working from a different wage structure."

The AIA committee on architecture for health has recommended that Congress "reinforce the objectives of PL63-641 as the most effective means of total cost containment" of health care in this nation. The committee suggested that this be accomplished by modifying review procedures that would implement a require-

ment for life cycle cost analysis as the primary criterion for both the approval of health services in an area and of health facility programs. The committee also suggested an expedited approval process for the replacement of depreciated equipment and for code or regulation updating.

The AIA board approved in December a statement of policy regarding health care cost containment which says that AIA "supports the necessity to contain rising hospital care costs but recognizes that effective total health care cost containment must consider all aspects of care, including assessment of need (volume of service) and economic analysis of alternative approaches to meeting that need."

The statement suggests that both the reduction of health care costs and increase of efficiency are dependent upon capital investment. Although AIA "is committed on containment of hospital care cost, we are opposed to the idea of an arbitrary cap or moratorium on capital construction as a means of achieving this goal." If hospital construction is deferred for "any significant period of time," the effects will be to depress the construction industry and to have care facilities confront inflated costs when "catch-up" construction is attempted.

Preservation

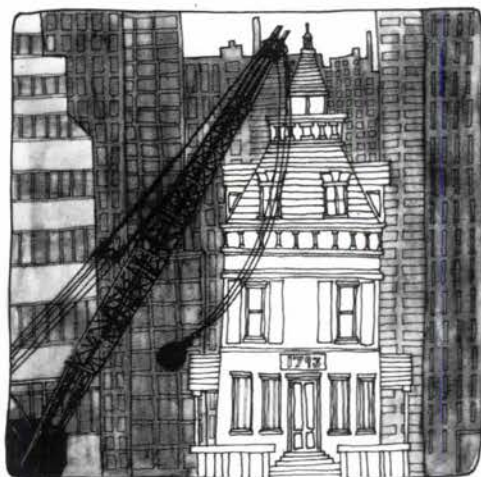
Restoration and Adaptive Use Continue to Gain Support; Congress Raises Matching Grants

As in the past, preservationists are pitted against developers in their battle to save or demolish historic buildings. Given the proliferation of restoration projects, one is easily persuaded that the preservationists are winning. Indeed, there are encouraging signs: A recent survey indicated that 87.6 percent of the nation's private architectural firms will be involved in remodeling projects during 1977-78; the membership of the National Trust for Historic Preservation has grown significantly, from 50,000 in 1974 to almost 130,500 today, and Congress has passed four laws, which although not providing large amounts of funds, at least encourage preservation rather than demolition.

In 1976, Congress passed an amendment to the National Historical Preservation Act and the Land and Water Conservation Fund Act which established a new historic preservation fund. Matching grants for preservation work will be funded from sales and leases of Outer Continental Shelf oil and gas rights. The law authorizes higher levels of matching grants—\$100 million annually for fiscal

years 1978 and 1979 compared to \$24 million for 1977.

The Tax Reform Act of 1976 disallows an income deduction to an owner of a certified historic structure for its demolition or for any losses incurred due to demolition, thus aiding in the protection of historic buildings. Tax write-offs are allowed for rehabilitation costs.



The Public Buildings Cooperative Use Act of 1976 authorizes the GSA to lease or purchase and rehabilitate buildings of historic or architectural significance for federal offices. This law is not limited to buildings listed or eligible for listing on the National Register of Historic Places.

In addition, the Public Works Employment Act of 1977 provided \$4 billion to generate employment through federally funded construction or renovation projects, with 100 percent federal funding for locally initiated public works projects in repairing or restoring municipal offices, courthouses, libraries, schools, museums and play facilities.

However, closer examination brings only cautious optimism; the threat of the wrecking ball still lingers. Even with the new federal laws, Cincinnati's Albee Theater was demolished, while the fate of New York City's Radio City Music Hall remains uncertain. Preservationists in Texas have no legal means of saving historic public buildings until 1979 due to a battle over three 19th century buildings in Dallas. Of more import to both preservationists and developers will be the U.S. Supreme Court's decision on whether the Grand Central terminal in New York City should be preserved or its integrity lost by building an office tower on top. The Penn. Transportation Co., owner of the terminal, wants to build a 55-story office tower over the Beaux-Arts original. If the U.S. Supreme Court approves the addition, it could have far-reaching impacts on the landmark law and future preservation efforts. The station's landmark status was upheld unanimously by New York State's highest court.

Preservation continued on page 48



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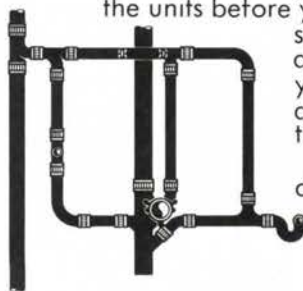
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Preservation from page 46

Across the country, railroad terminals are targets of demolition because of the decline in railroad passenger traffic. The Cincinnati Union Terminal, designed in 1933 by Fellheimer & Wagner, was abandoned in 1972 and the terminal's 400-foot long concourse demolished. This Art Deco building's fate still hangs in jeopardy. A plan was rejected to redesign the upper levels of the terminal as a school for the performing arts and the lower level as a bus storage and maintenance facility. The city then bought the terminal for \$1 million and offered it to a developer for \$1 per year. Although a new plan has not been approved, restoration ideas include turning the terminal into a recreational mall.

Although some historic buildings have been lost or threatened, there have been victories.

In Buffalo, when the new owners of Louis Sullivan's Prudential Building



(formerly Guaranty) applied for a demolition project, local citizens rose in protest. The Buffalo Preservation Board then declared the Prudential a landmark, which allowed a waiting period before demolition. An economic feasibility study was completed early this year, which concluded that construction costs would total

\$4.96 million and restoration \$1.38 million. The preservation board is now choosing who will rehabilitate the building.

Similarly, Atlanta's Fox Theatre was saved through the efforts of a local non-profit organization, Atlanta Landmarks Inc., which raised \$1.8 million to buy the 4,000-seat theater. Although the organization received some money from foundations, government agencies and benefits, the average contribution was \$15. If the money had not been raised, the "Fabulous

Saved: Buffalo's Sullivan landmark and Atlanta's Fox Theatre

Fox" would have been sold by Mosque Inc. to the Southern Bell Telephone Co. and demolished for a 45-story office building. Designed by Marye, Alger & Vinour, in 1929, the Peachtree Street theater—with its Turkish tiles, Moorish mezzanines and Arabic arches—was operated during the fund-raising campaign as a combination movie house, legitimate theater, dance theater and music hall.

The recycling of historic or otherwise cherished old buildings continues to grow in volume and popularity. Among shining recent examples: Mercantile Wharf Building, Boston, was built in 1857 as a ship chandler's warehouse and successfully restored and adapted recently for shops on the ground floor and housing on the upper stories (1977 AIA honor award). The exterior reflects the original facade and relates with the existing waterfront community.

In Chicago, Navy Pier, designed by Charles S. Frost and built in 1916, has been restored for a public recreation and cultural center (1977 AIA honor award). Stretching three-fifths of a mile into Lake Michigan, numerous alterations left physical scars that obliterated the original architecture. Chicago city architect, Jerome R. Butler Jr., AIA, removed the deteriorated material, blending new material with the old.

New Melleray Abbey, a relatively drab, nondescript Gothic institutional building in Dubuque, Iowa, was successfully converted into a chapel of "remarkable distinction." The stone exterior was unchanged, while floors on the second level were removed extending the abbey upward. Plaster and interior moldings and stone dividing walls were removed, resulting in a long and high but simple space (1977 AIA honor award).

The surge of preservation work is reflected in the AIA honor awards for design excellence: In 1975, no awards were given for restoration or adaptive reuse; in 1976, four awards, and a separate jury was established for restoration and reuse; in 1977, six awards, and in 1978, eight awards were given for restoration, rehabilitation and adaptive reuse

while only seven received current use awards. The 1978 restoration-reuse awards (see p. 118) include the following:

Two 18th century frame houses and an early 19th century barn were moved from their sites on Long Island, N.Y., relocated to a 40-acre oceanfront property and successfully restored. In Salt Lake City, a commercial block building and a four-story building were rehabilitated as the Kearns/Dayne/Alley Annex. An older school building in Baltimore was converted into a theater, Center Stage, for the resident professional acting company. A police station, designed in 1886, was restored for the Institute of Contemporary Art, in Boston. The vacant Faneuil Hall Markets, opened in 1826, were transformed into an economically viable complex of restaurants, stores, flower and food markets and offices, in Boston. The 106-year-old Robert Elliott House, located in a Washington, D.C., suburb, was enlarged by an addition conforming to the "English style" of the period, but thoroughly modernized inside. The Cooper-Hewitt Museum in New York City was created out of a landmark mansion. A 24-story explosion-damaged factory loft building in New York City was transformed into a highrise apartment complex, Turtle Bay Towers.

There are also encouraging signs for the future. In Chicago, a federally funded study will examine the economic feasibility of restoring four famous Chicago office buildings of the late 1800s—Monadnock Block, the Manhattan Building, the Marquette Building and the Old Colony Building, all on South Dearborn Street. The project is expected to explore preservation techniques, including governmental rights of taxation and acquisition as well as private financing.

Environment

From Major Oil Spills to Local Successes, the Fight Continues To Clean Up the Face of Earth

The conflict of interest common to all developed societies continues in the U.S. between those favoring unimpeded growth and those who would restrict growth in favor of balanced land-use policies. And, while environmental disasters like the recent oil spill off the coast of France grab our attention, little heralded as well as more celebrated battles are fought to build with sensitivity to the environment, to preserve the land, clean the air and provide clean water while maintaining unpolluted waterways.

On the federal level, the Carter Ad-

continued on page 55

Environment from page 48

ministration has agreed to help the Interior Department decide which of 828 politically sensitive federal water projects authorized at a cost of \$32 billion will actually be built. Administration officials have promised not to pre-empt state water rights and prerogatives, aiming their cost cutting at such things as revised cost sharing ratios for federal projects and offering financial incentives to states to use water more efficiently.

For legislation governing offshore oil development, a conference committee is working out the differences in House and Senate versions. Congressional aides expect the compromise legislation to almost certainly result in a slippage in the current schedule for discovery and production of the Outer Continental Shelf oil supply.

In California, a landmark coastal act, contested by business and labor forces who viewed it as antigrowth, became law in 1977. It established permanent controls on development along the state's 1,100-mile coastline by specifying detailed policies on which conservation and development decisions in a designated coastal zone are to be based. Those policies affect public access to the coast, recreational shorefront lands, operations affecting wetlands and estuaries, land resources (including wildlife habitats and

coastal-related agriculture), new development (giving priority to "coastal dependent development"), and industrial development dealing with offshore oil and gas development and with power plant siting.

An ambitious project to enhance the environment of downtown Seattle saw fruition in the form of a five-acre lid over a portion of I-5. Designed by the Lawrence Halprin firm, the \$24-million park uses cascading water to cover the freeway roar, and features a 33-foot "canyon." Vegetation was selected for its pollution tolerance.

Meanwhile, Chicago's suburbs are



looking for faster relief in an area of dwindling water supplies. The suburbs rely on ground water as their source, and they are depleting the supply faster than it is being replenished naturally. All agree that the answer is to tap Chicago's Lake Michigan supply, but the method is still in question. Three western suburbs have proposed a plan that they say would bring them water faster and cheaper than the five-year plan proposed by the North-eastern Illinois planning commission.

Back on the federal level, the Environmental Protection Agency has outlined 130 proposed regulations planned for implementation through the end of 1980. The outlines cover the range of EPA's program, including toxic substances control, air and water pollution controls, solid waste management and exposure to atomic radiation. The purpose is to reduce paperwork, simplify regulatory language, eliminate outdated rules and improve interagency coordination.

To give an overall picture of the problems, a 1977 report prepared by a task force of 63 leaders from the nation's 12 largest membership environmental organizations and sponsored by the Rockefeller Brothers Fund, provided a blueprint for debate on issues including population control, land use, genetic engineering, pollution and the energy economy. Entitled

continued on page 58

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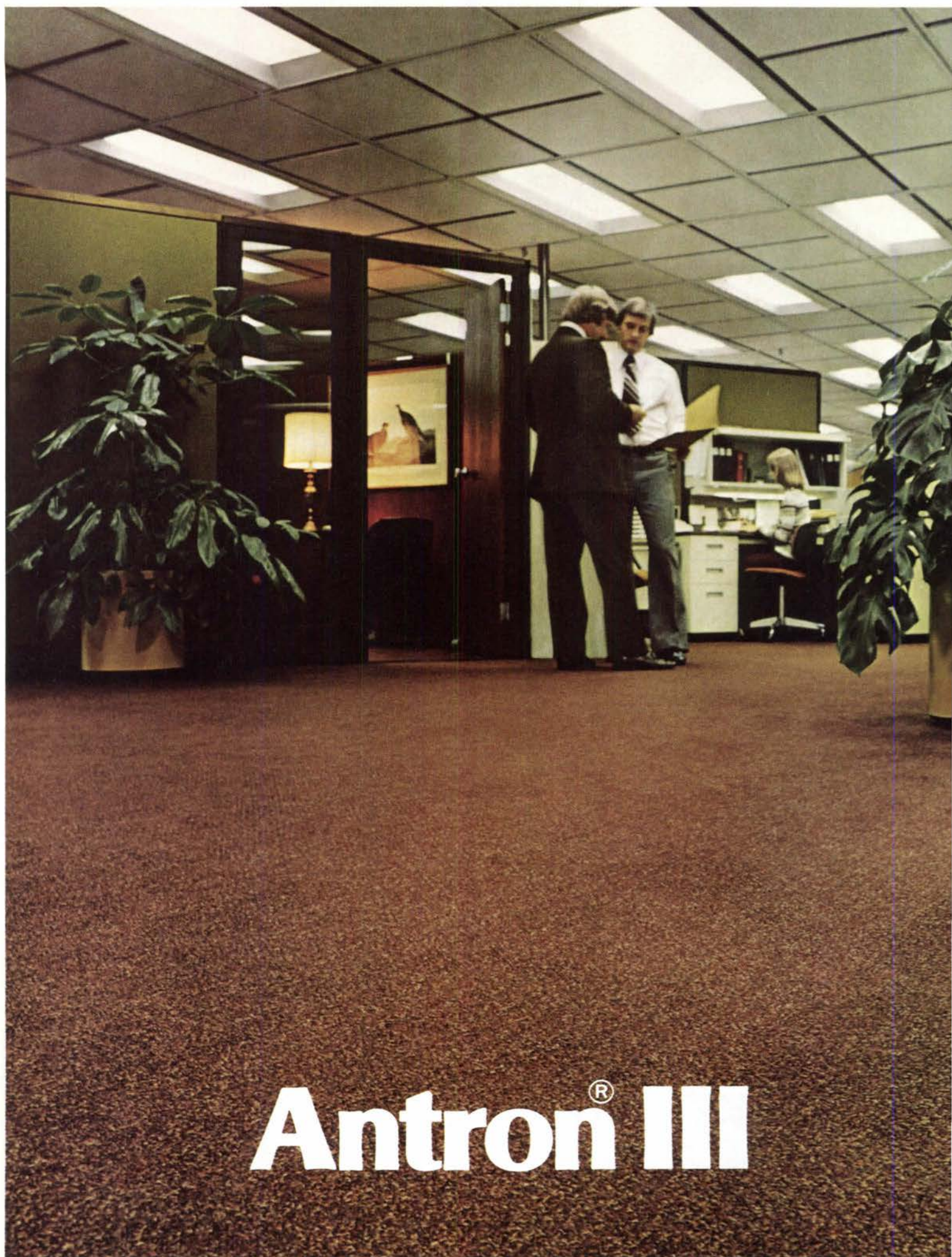
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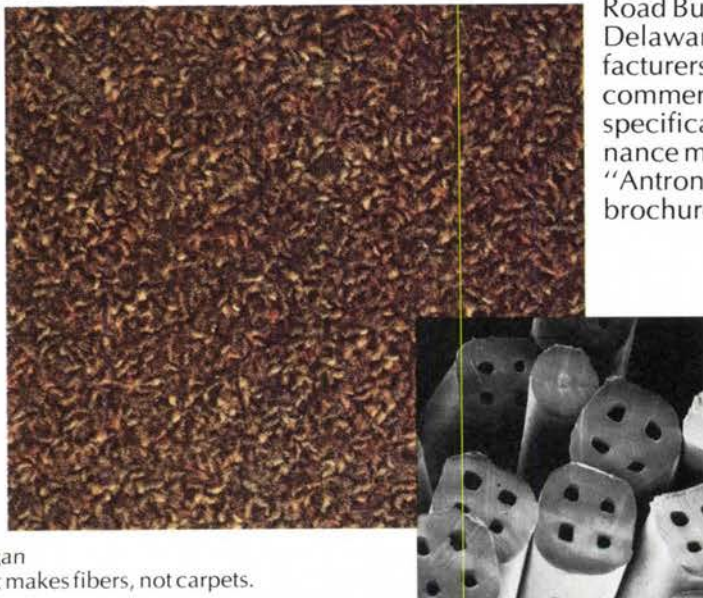
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Environment from page 55

"The Unfinished Agenda: The Citizen's Policy Guide to Environmental Issues," the report recommended many steps, including discontinuance of an expanded interstate highway system, with funds diverted to railroads; an overhaul of utility price structures; uniform legislation promoting recycling of goods, and a "national goal of population stabilization or gradual population decrease."

The environmentalists also sought: the protection of land "adjacent to parks, his-



Seattle's freeway park (Lawrence Halprin).

toric landscapes and sites, small towns and rural areas"; the encouragement of urban restoration rather than demolition; standards for privately owned forests, and increased coastal zone protection.

For long-term solutions, the report suggests, among other measures, a national recognition that the environment is a priority "on a level with defense, employment, health, education and commerce."

Institute

David Olan Meeker Jr. Replaces William Slayton as Executive; Energy Policy Is a Major Goal

David Olan Meeker Jr., FAIA, took office as executive vice president of the Institute on April 1, 1978. He replaces William Slayton, Hon. AIA, who resigned as of Dec. 31, 1977, because "it is time for me to have one last career before I reach that chiseled-in-stone retirement age of three score and five." Slayton was subsequently appointed deputy assistant secretary of state in charge of foreign buildings operations.

Meeker is a former assistant secretary of HUD; was deputy mayor of Indianapolis; worked as an architect developing building systems for academic institutions,

among other projects, and holds an advanced degree in religious architecture. He regards everything he has done as "architecture."

Among the most valuable assets he brings to his new position is the conviction that there are almost no boundaries to the role of architect. This at a time when the present and future functions of the profession are everywhere in question. He also comes with an intimate knowledge of the workings of government and extensive contacts with policy makers. "If we didn't need to have influence on public policy, AIA could as well be headquartered in Kansas City," as AIA president elect Ehrman Mitchell, FAIA, said in connection with Meeker's appointment.

AIA's first public director was appointed to the board in 1977. This non-voting member of the board, Harold C. Fleming, Hon. AIA, will help Institute policy makers draw on opinions and resources outside AIA.

AIA's primary national legislative efforts during the last 18 months or so have been aimed at advocating an equitable and comprehensive energy policy keyed to conservation and based on performance standards.

William Slayton advised Congress, in testimony before the House subcommittee on economics, that federal funds should be expended on energy efficient public works in order to increase employment and decrease energy use. The \$4 billion public works program, signed into law by President Carter and supported by AIA, was expected to create up to 280,000 jobs, principally at local and state construction sites. AIA board member Robert A. Burley, AIA, testified that a new energy conscious approach to planning in cities and metropolitan areas is essential to the long-term future of national energy conservation.

In his farewell speech as 1977 president, John M. McGinty, FAIA, again stressed energy conservation, saying that the response on the part of architects to this issue alone "will be as significant an architectural design determinant as was the Industrial Revolution. If we can succeed in meeting this design challenge, the future of our profession is secure."

In line with its emphasis on energy conservation, AIA had Michael Sizemore & Associates of Atlanta conduct an energy analysis of its headquarters building and a design scheme for retrofitting it to save energy.

In its internal affairs, the main emphasis of the Institute during 1977 was on ethics and standards, membership and dues. The main theme was perhaps sounded by McGinty when he said, what is important is not necessarily "what we do but how we do it."

Among resolutions passed at the 1977

convention in San Diego were: that the Institute proceed "with refinement of performance standards related to energy conservation and undertake a study of the best means of implementation"; that each task force investigation of an issue to be decided by the membership be required to submit "a summary of the full range of information, both pro and con, including minority opinions, alternatives and comparative benefits"; that a study of AIA's regional structure be undertaken; that AIA pursue a policy advocating that government agencies funding construction include architects in the initial determination of programs and administrative procedures; that minority affairs "be emphatically reaffirmed in view of this period of critical economic difficulty," and that communication of AIA business to the membership be improved.

The convention approved changes in the Institute's ethics, dues and membership structures, but refused to remove bans on contracting. During the year fol-

Recommendations on changes in dues, membership policies

lowing the convention, the membership task force made recommendations on changes in dues and membership based on the following criteria: that there be a minimum and a maximum level of dues; dues be based on the current year's personnel; the system not require any information which members could consider an invasion of privacy; the system allow for quarterly payment of dues; be equitable for the largest number of members possible; encourage accurate reporting; be affordable to the largest number; not endanger the financial stability of the Institute, and encourage the increase and retention of membership.

Elected at the convention were Elmer E. Botsai, FAIA, as president and Ehrman B. Mitchell, FAIA, as first vice president. Elected to serve as vice presidents were Sarah P. Harkness, AIA, who is the first woman to hold that position; Herbert Epstein, FAIA, and Charles F. Schwing, FAIA. Joseph F. Thomas, FAIA, was elected for a two year term as treasurer; Robert M. Lawrence, FAIA, began his second year as secretary.

The theme of the 1977 convention was "Tomorrow." Former astronaut Russell Schweickart sketched a not-distant future in which "tens of thousands of people" will live in space, and urged architects to involve themselves in the beginning efforts to design suitable habitats for space use. Schweickart based his prediction of space habitation on current directions in space technology and the potential uses of space installations as suppliers of energy and raw materials. The final speaker, futurist

continued on page 62

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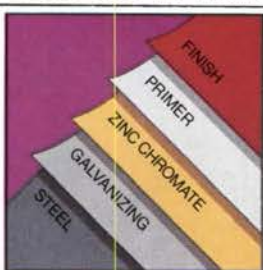
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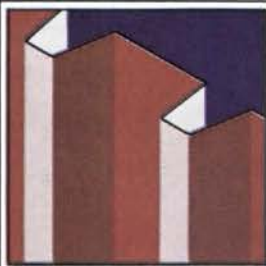
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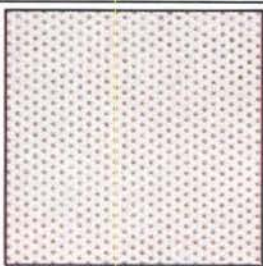
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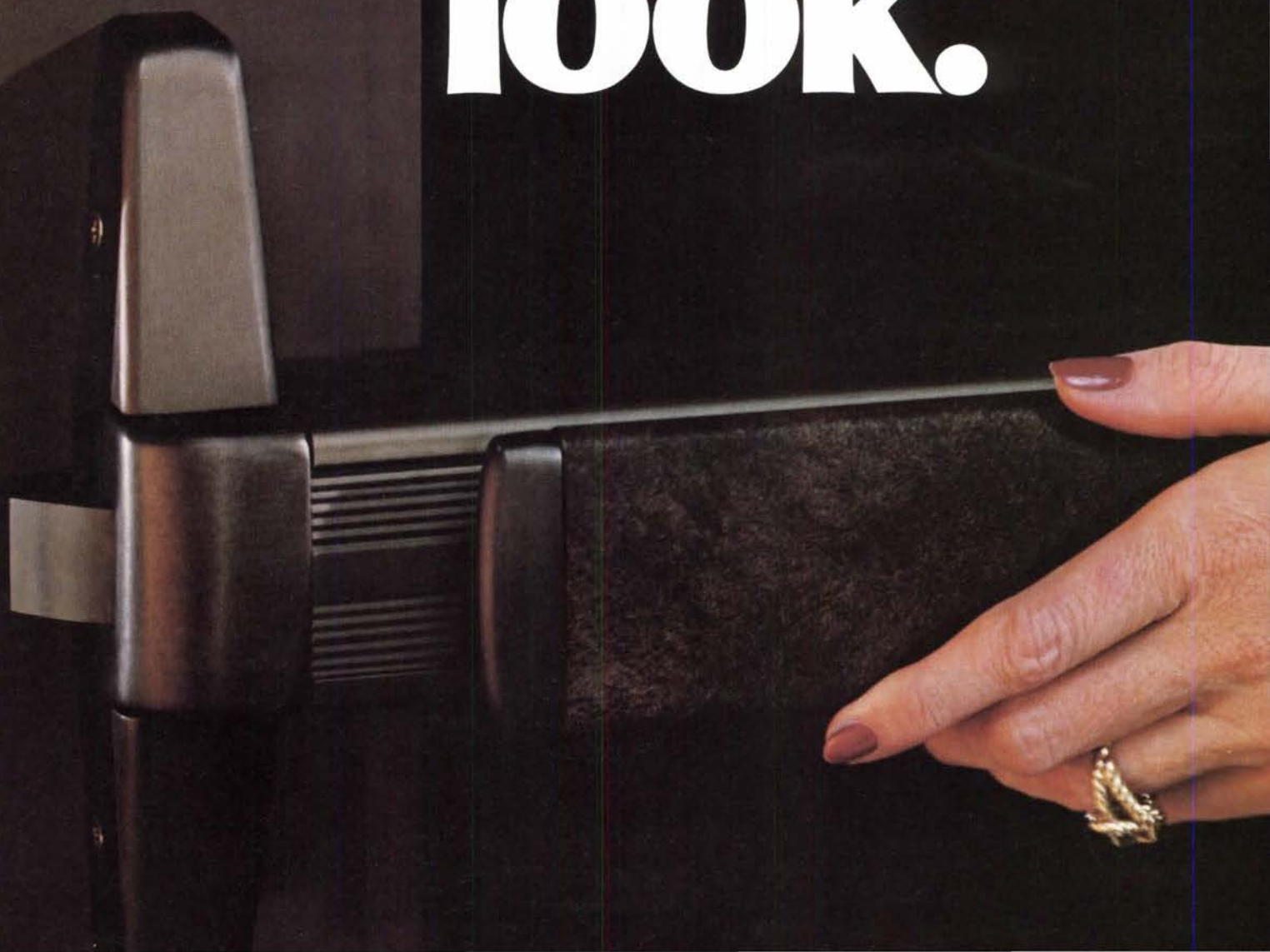
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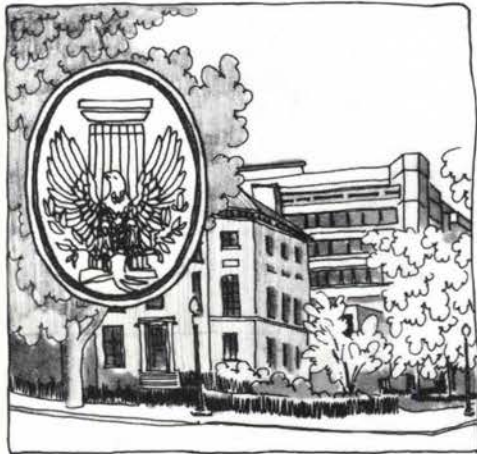
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Institute from page 58

F. M. Esfandiary, said to the dismay of some, "We are at the beginning of an energy glut . . . All the primal screaming about scarcity is a galactic farce." As for cities, he consigned them to becoming museums. "We should leave them as they are and get out," he said.

President Elmer Botsai, whose California firm specializes in investigating and troubleshooting architectural failures, has



put his primary emphasis in 1978 on improving the profession's overall competence and self image, enhancing communications to members and components and strengthening energy programs. "In the last few years," he said, "I think partly because of the economic crunch, architects' opinions of themselves have not been as high as they should be. Some of this is due perhaps to a lack of self-confidence, and one of the ways to improve self-confidence is to improve professional capabilities. I believe that the profession, by and large, has done a fairly good job, but there is no question that in certain areas it has not been adequate. I think that the public is demanding more and more of all professionals, and the level of care that must be obtained by any professional has got to improve. I don't know any other way to do that than through a professional development program that has some organization, some structure."

The 1978 program and budget clearly set forth Botsai's direction. It increased support for professional interest programs. These are designed to respond to the increasingly complex requirements of specific client groups—housing, health care, education, arts and recreation, justice, commerce, industry. The budget expanded AIA's continuing education program, increased support for practice and design programs, codes and standards, design and environment, documents, construction specifications, the financial management handbook and related practice aids. It emphasized the role of AIA's energy program through an improved *Energy Notebook*, as well as practice and

design programs, including codes, standards and documents.

Among recently published documents is a new edition of B141. Released in 1977, it is designed for use in conjunction with revised A201 and includes changes in such key matters as scheduling, budgets and cost. Among other things, the revised B141 states that the architect is responsible for making and holding to a time schedule if requested, that he is entitled to payment for all services even if construction is aborted and is required to carry extra insurance coverage or risk not being reimbursed.

For the first time, a national directory of architectural firms has been published.

Also available for the first time is *A Directory of Minority Architectural & Engineering Firms*, published by AIA in cooperation with GSA and the Department of Transportation.

A revised and expanded edition of AIA's 1975 *Compensation Management Guidelines for Architectural Services* was also published in 1978. It is composed of two parts: The first, called B161, is the so-called boilerplate containing typical terms and conditions that remain constant from job to job. The second part, called B162, is tailored into nine phases that correspond to the nine phases of *Guidelines*. There is also a supplemental booklet for in-house use by architects and engineers explaining issues that frequently come up when negotiating with clients. It is intended to work in harmony with a new, comprehensive financial management system, which the Institute is introducing piece by piece and plans to have fully coordinated by the 1980s.

In 1977, seven regional/urban design assistance teams (R/UDATs) of architects, planners, economists and social scientists went to different American communities to help them solve their planning problems. The teams visited Trenton, N.J., Fort Smith, Ark., West Palm Beach, Fla., Lansing, Mich., Portsmouth, Va., Liberty Park, N.J., and Tacoma, Wash.

The *AIA Journal*, meanwhile, won a silver medal from the Society of Publications Designers for its October 1976 cover, as well as four certificates of excellence for the design of complete issues.

A design conference attempts to define current directions

In November 1978, about 250 people met in Washington to attend an AIA-sponsored design conference. Its purpose was to explore how the profession will replace discredited tenets of modernism. About all that participants could agree upon was that architecture, as it shakes off modernism and the International Style, is experiencing a chaos of styles; and that architecture is moving toward humanism

and/or is being victimized by technocratic society. George Nelson, FAIA, was moderator. William N. Morgan, FAIA, served as chairman. Other participants were: Robert Gutman, a sociologist on the faculties of Rutgers and Princeton universities; Joseph Esherick, FAIA; British architect Norman Foster; Japanese architect Arata Isozake; Philip Johnson, FAIA, and writer William Marlin.

The Institute's committee on design has recently completed a visit of 18 American architectural schools. The committee's purpose was to help the designer evaluate the quality of education as it relates to today's needs and to give educators more contact with a range of practitioners. Among the findings: When there are real options among design and, for example, building technology, research or energy design, the design studios are invariably regarded as the test of the true architect; systems design is almost nonexistent in the schools; with the abatement of the building boom, design is concentrating again on custom-made solutions; design studios are generally isolated from other courses offered in schools; despite the fact that there are more students in school than will be able to enter design practices, the nondesigner is not accounted for in most programs; most schools are isolated from their local communities, and fewer and fewer faculty members are practicing architects.

Ethics

Advertising and Design/Build Still the Most Important Issues As AIA Prepares for Convention

Questions about professional ethics have continued to be paramount in Institute deliberations over recent months, reflecting broader societal changes and accompanying shifts in values. Developments that stress consumerism, causing a rise in public expectations of professional competence, as well as long-reaching decisions by government and state regulatory agencies, have intensified the demands on the part of the public for integrity in performance.

For AIA members two questions are pre-eminent. Stated simplistically, they are: whether in today's world of keen business competition it is demeaning to the tradition of the profession for an architect to advertise his services and fees, and whether there is a conflict of interest if an architect acts simultaneously as designer and builder. By the time this is read, AIA's 1978 convention may or may not have resolved these ethical questions. *Ethics continued on page 66*

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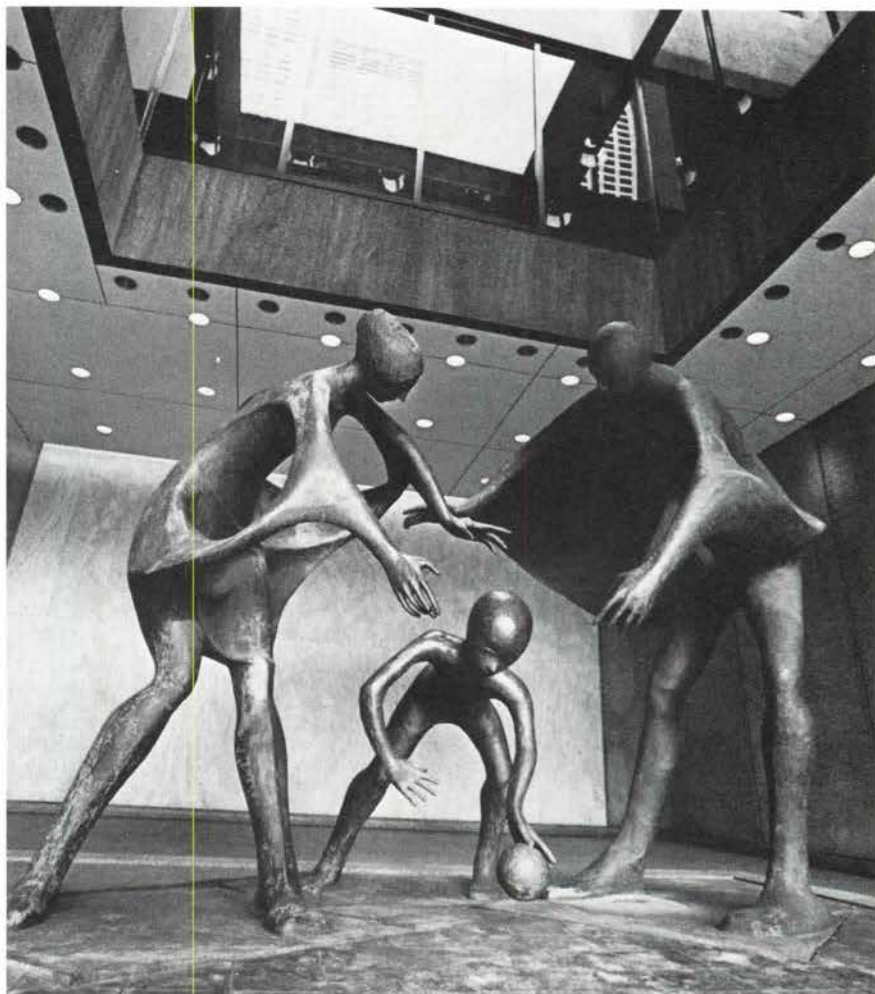
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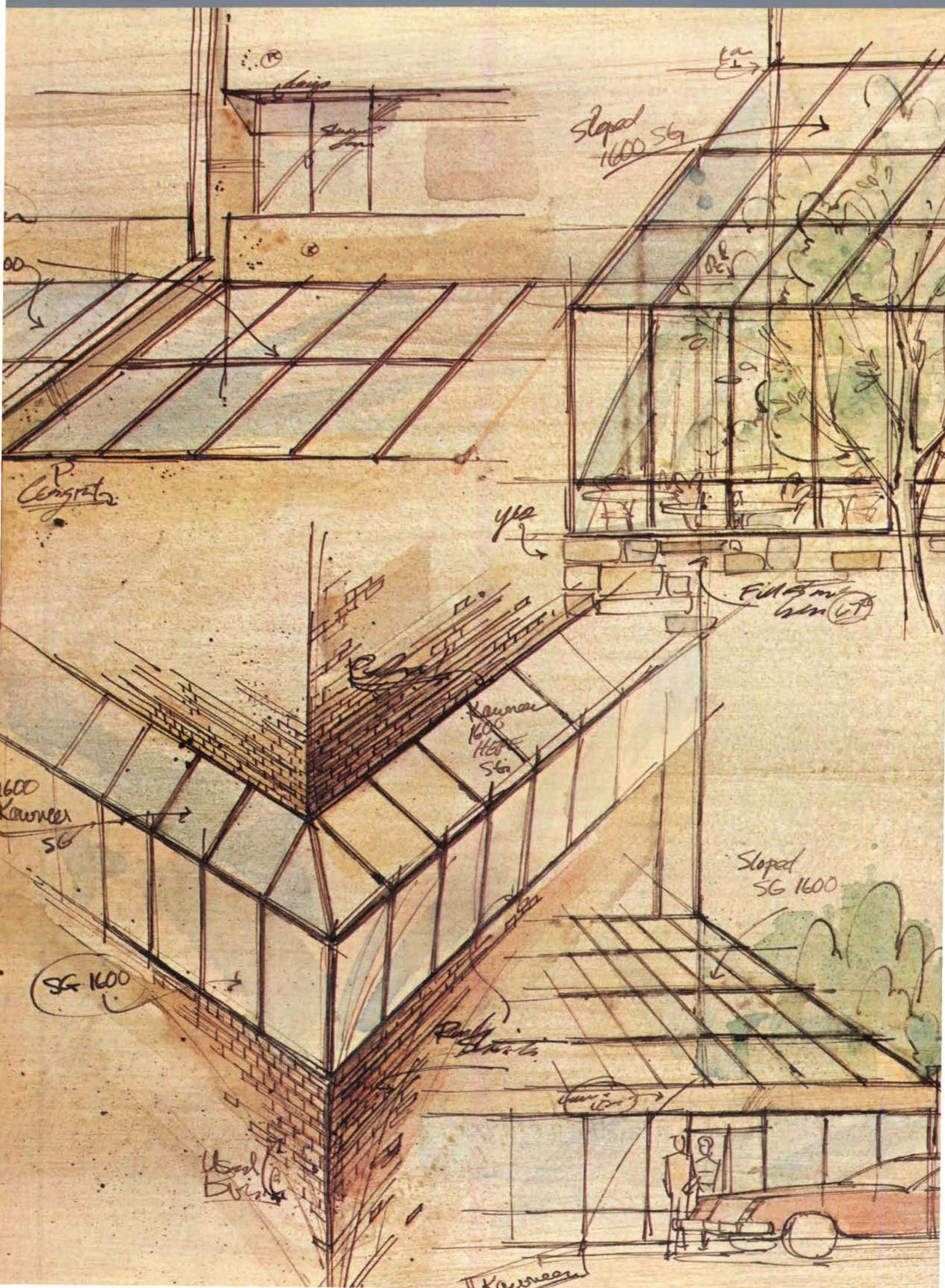
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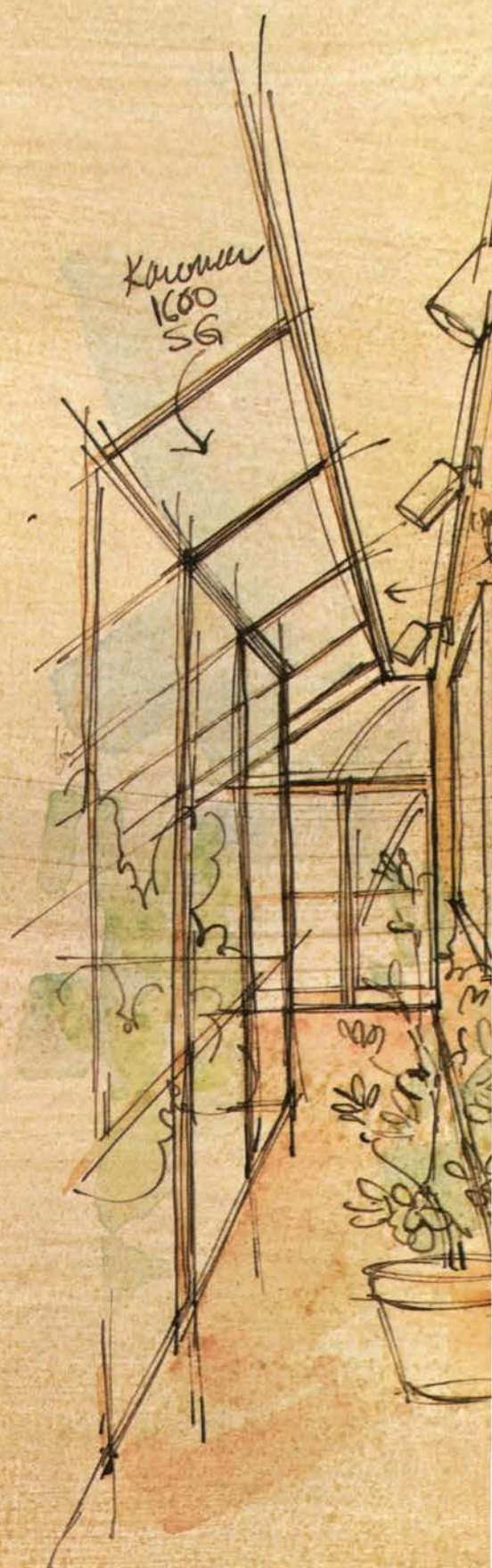
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Ethics from page 62

The JOURNAL opened its pages to AIA members for an expression of opinion on ethical matters in its "Ethics Forum." In the pages and in letters to the editor, opinions varied widely, ranging from accusations that AIA is "behind the times" to protestations that the Institute was violating the professional tradition.

At the 1977 convention, it was decided that the Institute's long-standing policy against advertising should be continued.

Despite the heated debate at San Diego in 1977, the 1978 resolutions committee did not receive a single resolution regarding advertising for debate at the Dallas convention in 1978. Elmer E. Botsai, FAIA, Institute president, in commenting on AIA grass roots meetings held earlier this year, said there was a "dichotomy between this year's grass roots and last year's convention." At the grass roots meetings, he said, an "almost lethargic attitude prevailed. . . . There were obviously pockets of outright resistance as well as pockets of 'let anything go,' but the general consensus was that we have more important concerns to tackle."

Some observers detect a note of "inevitability" in the matter of advertising. Advertising is a "distinctively American invention," as one critic of the social scene has put it, and is stimulated by



competitive business drive directed specifically to the consumer. Inescapably, advertising is associated with the entrepreneurial spirit of the free enterprise system. Last June, the U.S. Supreme Court itself said that "commercial speech" plays "an indispensable role in the free enterprise system."

This majority opinion was given in a ruling which stated that it is a violation of the Constitution's First Amendment on free speech to ban all advertising by lawyers of the availability and prices of their service. Many commentators at the time pointed out that this ruling would have a tremendous effect on all professional codes of ethics.

The American Bar Association later

yielded to the Supreme Court decision and adopted guidelines for lawyers in the advertising of their professional services.

The ruling of the Supreme Court was followed by a decision of New York State's official licensing board. It ruled that effective Oct. 1, 1977, architects as well as other professionals under its control, including doctors and dentists, would be permitted to advertise and quote fees for routine services. Advertising in the printed media, as well as on radio and television, was approved.

Some professionals finding that 'it pays to advertise'

A *New York Times* survey early this year on the consequences of the ruling indicated that some lawyers and dentists were finding that "it pays to advertise," while others were not taking advantage of the situation, believing advertising to be beneath the dignity of a professional. Previously, the New York chapter/AIA had decided to take a cautious stance until AIA modified its position, and the chapter reported in February that architects were evidently assuming the same attitude and were not advertising.

In addition to the 1977 convention decision to keep the ban on advertising, delegates also voted a reaffirmation of AIA's long-standing prohibition against its members engaging directly in contracting. A resolution was passed that AIA's board continue its investigation of the prohibition of "architects acting as designers and builders simultaneously, understanding full well that professional judgment continue to be observed in the best interest of the client, and a report be made at the 1978 convention." The design/build task force duly submitted its report to the board for review at its meeting in March.

Other professional societies are also deliberating ethical principles. For example, the National Society of Professional Engineers has been battling the courts for several years in an antitrust suit brought by the Department of Justice. Justice attorneys have held that any restraint on competitive bidding is a restraint of trade, charging that NSPE's ethical canon which prohibits competitive price bidding is illegal. In 1972, AIA agreed to modify its code of professional ethics, dropping its long-held prohibition on price bidding.

Two years ago, the Supreme Court refused to grant a hearing of the NSPE case and ordered it remanded to the lower court for reconsideration. The lower court reaffirmed its initial ruling that NSPE's strictures on competitive bidding are unlawful. And in January of this year, at long last, the Supreme Court heard oral arguments.

In a decision of far-reaching significance, the Supreme Court ruled on April 25 that NSPE had violated the antitrust laws. The justices agreed unanimously with the Department of Justice contention that NSPE's ban on competitive bidding deprived clients of their rights of free and open competition. NSPE had contended that its ethical canon was in the public interest, and that a lifting of the ban would lead inevitably to poorer quality of professional services which would ultimately result in endangering the public's health, safety and welfare.

Chief Justice Warren E. Burger agreed with the majority's conclusion but said that NSPE should still be permitted under the Constitution's First Amendment to state in its ethical canons "the view that competitive bidding is unethical." Associate Justices Harry A. Blackmun and William H. Rehnquist also agreed in the conclusion but stated that the court had gone too far in intimating "that any ethical rule with an overall anticompetitive effect promulgated by a professional society is forbidden under the Sherman Act."

Associate Justice John Paul Stevens, writing for the majority, said that NSPE's ethical canon is "an agreement among competitors to refuse to discuss prices with potential customers until after negotiations have resulted in the initial selection of an engineer." He also said that "while this is not price-fixing as such, no elaborate industry analysis is required to demonstrate the anticompetitive character of such an agreement. It operates as an absolute ban on competitive bidding, applying with equal force to both complicated and simple projects and to both inexperienced and sophisticated customers."

Meeker comments on decision of Supreme Court in NSPE case

A statement by David Olan Meeker Jr., FAIA, executive vice president of the Institute, comments that AIA has been following the NSPE case with interest, "hoping that the U.S. Supreme Court would set forth clear antitrust guidelines for voluntary professional associations which adopt standards that are higher than the law demands for the public health, safety and welfare." Although AIA is not directly affected by the court ruling, having already signed a consent decree, says Meeker, "we had hoped that the court would indicate guidelines for valid ethical standards which would minimize deception of and damage to the public."

Meeker says that AIA is currently having discussions with the Justice Department "to ensure that its ethical standards do not violate the antitrust laws and

continued on page 70



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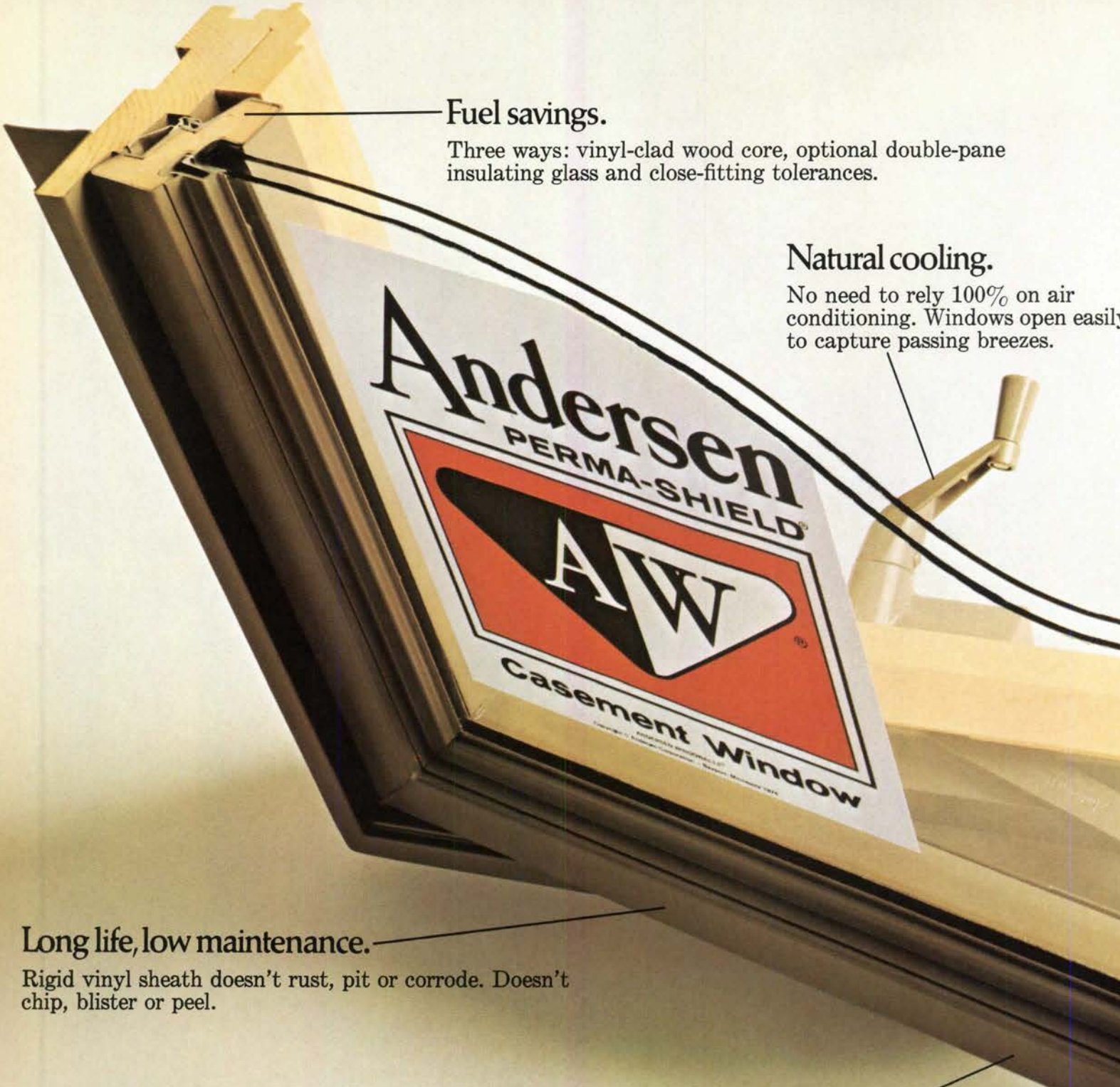
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Ethics from page 66

the First Amendment of the Constitution." AIA, he said, "reaffirms its belief that the selection of professionals on the basis of competitive bidding is not in the best interest of the client." AIA will continue working with NSPE and other engineering societies, he said, "to help establish legislative procedures for all levels of government procurement which would require the selection and negotiation with A/E firms on the basis of the best qualified to do the job."

Last year, a U.S. district court in New York rendered an opinion that the American Society of Civil Engineers had violated a consent decree made with the Justice Department in 1972. ASCE had agreed, as did AIA, to remove its ban on the submission of price quotations. The Justice Department started a reinvestigation when ASCE suspended two of its members, contending they had violated its code of ethics in an "attempt to supplant another engineer in a particular engagement after definite steps have been taken toward his employment."

The judge directed ASCE to reinstate the members, saying that their suspension implicitly retained the ban on competitive bidding. ASCE contended that its disciplinary action was based on the "attempt

A ruling against the ASCE in a competitive bidding case

to supplant" provisions of its ethical code and that the purpose of the 1972 consent decree was the elimination of a ban on price competition, and was not intended to affect submission of price information in other situations.

Although the Justice Department had asked that the judge order the complete elimination of ASCE's supplanting provision, the court found that this was but a single instance of the prohibition and there was no reason "to believe that it has been or will be used to thwart the purposes of the consent decree." Meanwhile, the Justice Department has been reviewing AIA disciplinary cases in which charges of supplanting have been involved.

Ethical matters will also be considered by the American Consulting Engineers Council's board this month. Last September, ACEC made a move toward organizational changes that would give the national federation greater responsibility in the expulsion of members for illegal acts. Currently, such duty is held by state organizations comprising the council. The new disciplinary rules will be debated by the board.

This endeavor is reported to have been undertaken in the wake of the many stories in the media regarding kickbacks and illegal activities. ACEC believes that it must have the responsibility for dis-

closing and disciplining its members in order to buttress its position on procurement. ACEC wants selection procedures to give qualification first priority, after which fee negotiations would come, in opposition to selection on the basis of competitive price bids. Price bidding, says the chairman of the ACEC model code committee, cannot cure corruption problems, but the council is unable to protest the adoption of procurement on the basis of competitive price bids unless it has "an acceptable program of correction."

Practice

AIA Grapples with the Question Of Architectural Recertification; Professional Yardstick Developed

Inevitably, many of the ethical issues which professionals are debating are tied into the broad problems of doing business in today's dynamic and changing world. For example, the question of whether AIA should support any program of recertification or license maintenance has arisen from the same kind of consumerism that has spawned the issue of advertising.

Just as the public is demanding the "right to know" about fees and costs of professional services, it is also demanding accountability, an assurance that professionals are keeping abreast of new knowledge. As with advertising, the issue of recertification was to be placed before the 1978 convention delegates.

The difficulties of keeping informed were pinpointed in a full-page advertisement by a major industrial company in newspapers in April. The advertisement said that "75 percent of all the information available to mankind has developed within the last two decades." The total amount of information is doubling every 10 years. Under such circumstances, it is no wonder that consumer groups, backed by other societal pressures, ask for proof that the money expended on professional services goes for the most up-to-date knowledge and information. And the question asked by many in recent months has been, is practice alone enough to maintain competence?

In response, AIA has been developing a voluntary professional development measuring system (PDMS) to provide a method for the architect to evaluate continuing education experience. PDMS recognizes that practice is a major means of staying informed about technological change, but it also provides a means of measuring other educational experiences such as formal and informal instruction, participation in workshops and seminars

and service to the community.

At the 1977 convention, the PDMS—endorsed previously by the AIA board—was affirmed by convention delegates. It was resolved that the board "encourage active participation by the membership" in the use of the PDMS and that a "strong liaison" be maintained with groups involved in education and licensing "to assure professional guidance and leadership in the continuing development of professional practice standards."

Subsequent to the convention, AIA continued the development and testing of the PDMS. The Institute also continued to study the development of specific proposals for the administration of professional development requirements for AIA membership. Although AIA does not advocate the adoption of license renewal requirements, it has endorsed the concept of PDMS in those states considering or establishing license renewal as requirements.

Carrying out the will of the 1977 convention, AIA has shared information with other organizations involved in education or certification and has attempted "high level discussions" with the National Council of Architectural Registration Boards to "develop a unified stand on license renewal" that would serve the interests of the profession and at the same time preserve the responsibility of state



registration boards to protect the public's interests.

NCARB has been working on its own architectural development verification program which is, in essence, a mandatory testing program of a professional's knowledge in certain key subject matter areas. The verification program will be further debated at NCARB's annual meeting in June.

Practice continued on page 170



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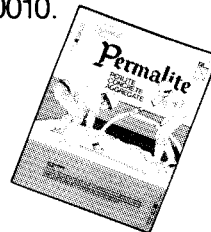
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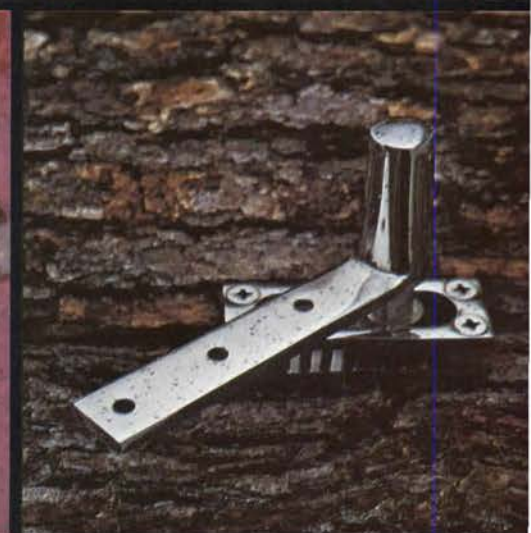
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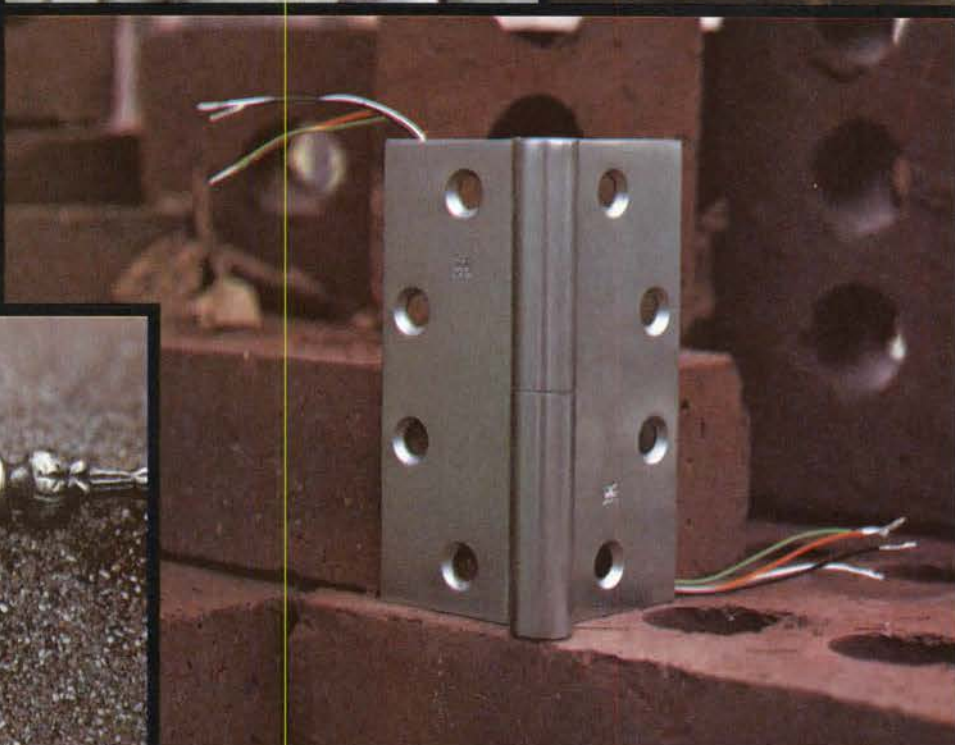


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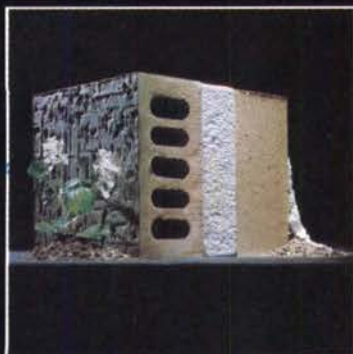




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The First Annual Review of New American Architecture

The intent of this special issue is a simple one: to bring together in a single place a sufficient sampling of recent buildings to show and discuss directions in American architectural design. Regular readers of the architectural press will have seen some of these buildings before. Our effort here is not to seek novelty, but to put them in conjunction—and in perspective.

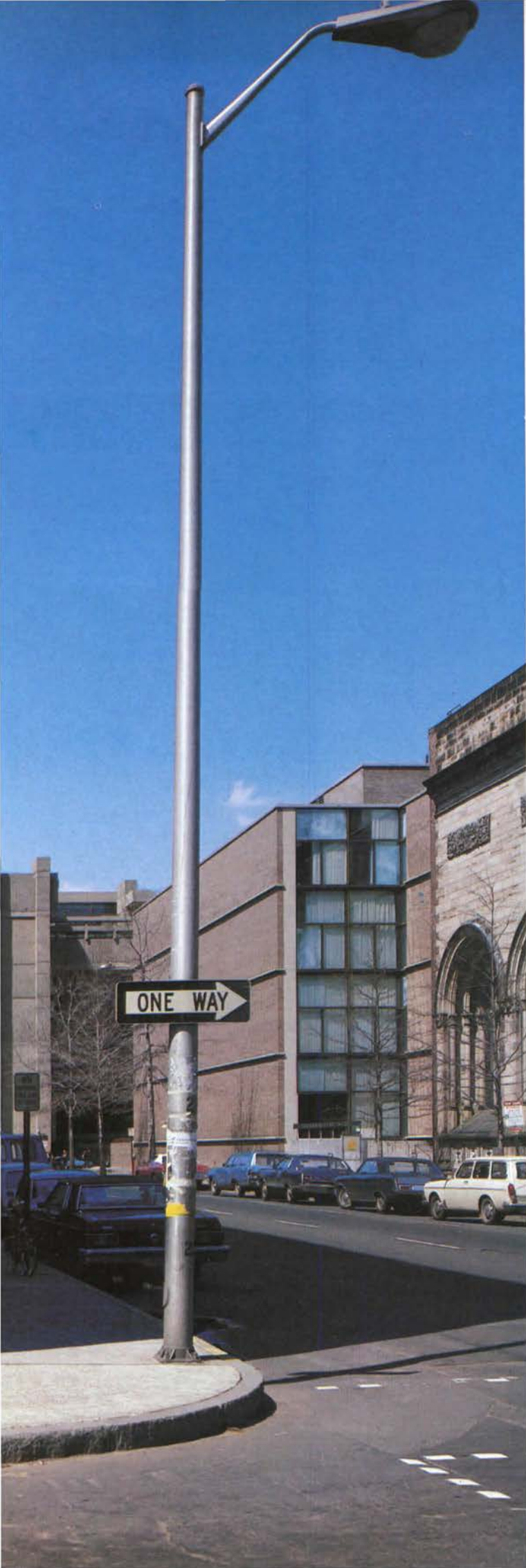
Core of the issue are the winners of the 1978 AIA honor awards. We begin, on the cover and the following pages, with a work that has several claims on the appellation “building of the year”: as an honor award winner, as the last work of Louis Kahn and, beyond these things, as a building that is rich in the fundamental qualities by which architecture is defined.

Between it and the other award winners are two intriguing libraries and a house, designed by three of Mr. Kahn’s many illustrious former students; then what are perhaps the most ambitious, if not wholly successful, corporate and civic buildings of the year. Following the awards is a sampling of the buildings chosen in 1977 by the magazines whose main function is the presentation of new work, then a discussion of current design directions from a variety of viewpoints. *D.C.*









A Legacy of Light

It was the principal organizing element of the Yale Center for British Art. By Andrea O. Dean

By a quirk of fate, Louis Kahn's last building stands across the street from his 1953 addition to the Yale Art Gallery, the work that brought him to prominence as a seminal figure in recent American architecture.

By coincidence, the preliminary ideas for the building developed by Jules Prown, director of the Yale Center for British Art from 1968 to 1976, contained echoes of Kahn's sometimes mystical thoughts about architecture. This was in 1969 before Prown knew Kahn's work well or had begun considering him, or anyone else, for the commission.

The director wrote that he wanted the building to express and reflect the institution's dual nature (exhibition gallery and library), as well as the collection it would house—"what the building wants to be," in Kahn's vocabulary. More specifically, Prown felt that since the collection speaks of people and their everyday activities, "the Mellon Center must be informed by a similar concern with people and with life. Rather than a pure abstract statement of architectural form, its building must relate to the people who will use it"—a "place of well-being," in Kahn's lexicon.

It should not be monumental and, importantly, it should have natural light—Kahn's "giver of all presences." The building, Prown continued, "should have a variety of light, spaces, scale and views" and "a clear relationship of architectural parts"—a "sense of connection" for Kahn. For the sake of visitor orientation, Prown suggested "a plan that revolves around a courtyard or courtyards"—calling to mind Kahn's library at Phillips Exeter Academy in New Hampshire.

Early on, Prown decided that "the anonymous formalist architects wouldn't do, that monumental statements were out. The grand gesture wasn't appropriate, nor was the sociological school of architects."

After selecting Kahn as architect, Prown was to define the essence of the building as "the study of man through what he makes," as contrasted to "the study of man through what he is" physiologically, which is how Jonas Salk characterized Kahn's Institute of Biological Sciences at La Jolla, Calif.

Although its metal, glass and concrete exterior appears at first

The east approach to the Yale Center for British Art, showing its concrete structure with matte finish stainless steel infill panels. To either side of the corner entrance portico are shop fronts extending the urban neighborhood (photo previous page). Diagonally across the street from right are the Yale Art Gallery, Kahn's 1953 addition and Paul Rudolph's Art & Architecture building.

Photos by Cervin Robinson

White oak walls soaring above a band of steel.

glance to bear little resemblance to Kahn's characteristically awesome, silent citadels, the new Yale Center for British Art serves as a fitting summation of his work and ideas.

At Yale, Kahn once again disclaimed the Bauhaus emphasis on formal, unchangeable design principles in favor of a personalized idiom that translates unmeasurable qualities of psyche and circumstances into architectural form. In fact, many of the most forward-looking aspects of this building, which opened its doors a year ago, are adaptations of Beaux-Arts principles firmly repudiated by most "modern" architects. Kahn returned to the use of natural light, though employing it in a completely novel way. Instead of undifferentiated spaces, he created rooms complementing the scale and tone of Paul Mellon's collection, never overwhelming it.

The exterior of the Yale Center barely hints at what lies within. It is primarily a piece of the city, and the only museum in this country with shopfronts on its ground level. The idea was to extend the urban neighborhood of Chapel Street's northeast side. The stores were in the original program and were welcomed by Kahn, according to Marshall Meyers, AIA, who spent 15 years in Kahn's office and was project architect for the Kimbell Art Museum in Fort Worth. In 1974, together with Anthony Pellechia, AIA, he founded Pellechia & Meyers, the firm which completed the design for the Yale Center after Kahn's death. "The idea of an unhysterical, quiet background building right on the street was one Kahn was long attached to," says Meyers.

Above the hustle of the street and shops, the center stands as a hushed, sealed, taut and classic rectangle. Smooth concrete post and slab construction defines its "skeleton" as Kahn called it. Serving as infill are matte finished, stainless steel panels folded back where necessary for the nearly frameless windows. The whole is held flat and tightly seamed, reminiscent of Beaux-Arts prototypes. Yet, structural and nonbearing elements are clearly distinguished, and the facade reflects Kahn's penchant for juxtaposing and visually welding unadorned materials with different textures and values.

Kahn referred to the metal panels as "pewter" and "lead," and liked to say of the facade: "On a gray day it will look like a moth; on a sunny day like a butterfly." And, indeed, though a weak, moth-like creature when the sky is gray, in sunshine it takes flight, the whole becoming animated with subtle tones, the windows reflecting the arches of the old Yale Art Gallery across the street, the life of the street, the sky.

On the center's roof gleam metal skylight casings that give a hint of overhead light flooding the fourth floor of the building. The windows more than anything else hint at and give expression to what is happening inside. On the Chapel Street side, glass openings are irregularly sized and spaced, and the slab is sup-

pressed on the second floor for a two-story library within. The result is a random-appearing rhythm, a playful counterpoint to the otherwise stern composition.

The counterpoint rhythm created by the windows on the main facade gives way to a steady, undifferentiated beat on the east elevation where all windows have the same interval, size and shape. As a result this facade looks steely, rigid, like a metallic four-story gray wall—an unfortunate introduction to the center as one approaches its entrance from the small and varied shop fronts of Chapel Street. The corner entrance portico, designed to express the structure of the building, is a 40-foot-deep low and heavy-seeming space, making the interior entrance courtyard come as all the more of a surprise.

No paintings hang in the entrance court; there is a sales desk, an information desk. It is simply meant as a vestibule. But what a vestibule! Rising the full four stories of the center, the entrance court is bathed in natural, undiffused light. Glassless openings on the second and fourth floors give glimpses into perimeter galleries. The upper three stories are paneled in white oak, a favorite of Kahn and intended here to recall the residential hallways of old England.

The entire first floor level of the entrance court is sheathed with the familiar stainless steel paneling of the exterior. The dark horizontal band it forms anchors and gives a sense of repose to the otherwise soaring vertical space. The use of stainless steel here is a holdover from the original design, which had shops on the interior of the first floor, and had to be scaled down and changed because of high cost.

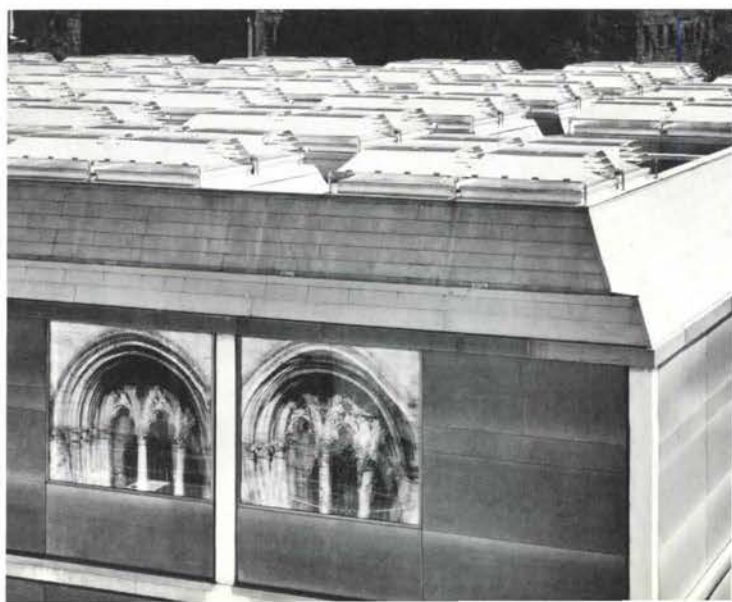
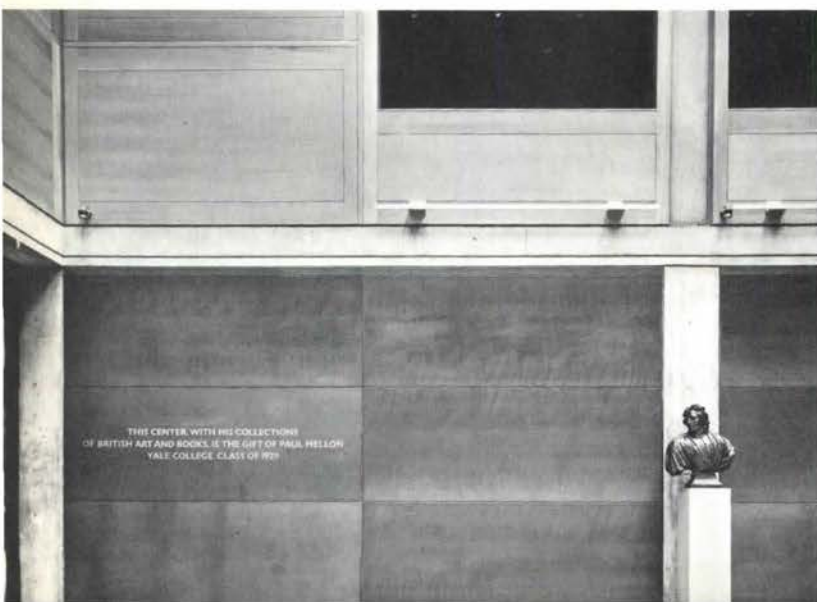
Throughout the interior of the center oak paneling, travertine floors, stainless steel panels are detailed with exquisite care and consistency equal to that used at Kimbell. Structure is always distinguished from infill.

At the end of the entrance court, just beyond two facing stainless steel elevator doors, is a circular concrete tower, containing a spiral stair rising to the fourth floor. Its muscular utilitarianism contrasts somewhat oddly to the formal elegance of the court.

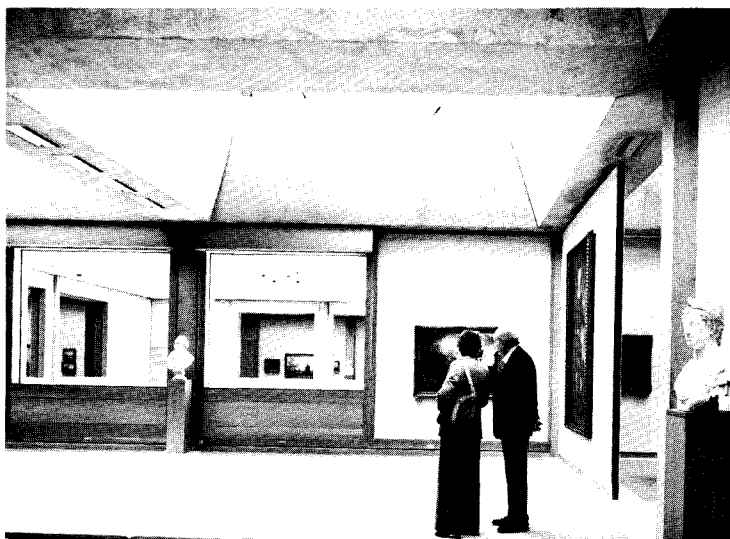
On the second floor is the even more impressive library court through which the stair tower rises rather ponderously. Paneled in oak, hung with large and lavish paintings, the library court receives soft light from louvered, angled skylights.

One begins here to understand the organizing elements of Kahn's plan for this building. These are twofold: First are the two courtyards, suggesting the dual nature of the center, around which are wrapped galleries and study rooms. The second is

Though flooded with natural light, the entrance court retains a sense of austerity. Intended as a vestibule, it has no paintings. Stainless steel sheathes the first floor level, white oak the upper floors (below left). Atop the building, skylights admit diffused light; reflected in its windows is the Yale Art Gallery.







Diffused natural light fills the library court.

illumination, of which there are three kinds: undiffused daylight, incandescent light and, most unusual and effective, the diffused natural light on the second story library court and throughout the fourth floor. It falls softly from angled, louvered skylights, designed to block out bluish north light and minimize ultra violet, according to a theory developed by consultant Richard Kelley. Aluminum baffles above plastic bubbles are angled to admit a small amount of light when the sun is high, more when it is low.

Where the natural light at Kimbell, reflected back into the vaulted rooms, serves a primarily psychological function, at the Yale Center it is the primary source of illumination. It is the quality of that light which makes Kahn's last building transcendent and has drawn to it the attention of museum people everywhere.

The basic plan is a throwback to 19th century ideas about library and museum design—but only to a point. In a Beaux-Arts plan there would be a cascading, unifying grand staircase, while here elevators are the main vehicles for circulation. The circular stair tower poses a somewhat intimidating face, and its steep, winding steps send most visitors to the elevators.

Kahn wanted to house the stairwell in a glass shaft. This was vetoed by the fire marshal. He then proposed a concrete well with glass doors. The glass was again rejected, so that he ended up with stainless steel doors and an impenetrable-looking object.

Fire regulations also distorted Kahn's original idea for a stainless steel handrail. Designed by Pellechia & Meyers, it is probably heavier and more convoluted in shape than Kahn might have liked. Vincent Scully calls it "the Bauhaus Revenge on Kahn."

In the absence of a connecting grand stair, Kahn's plan is, as William Jordy has said, "more disjunctive than the primitivised Beaux-Arts emblem in plan leads us to expect. The entrance court is not spatially linked with the galleries and exhibition galleries on the first floor, as an authentic Beaux-Arts scheme would have had it." A split persists between upstairs and downstairs.

Around the large, public areas of the courtyards are wrapped small, intimate spaces—exhibition galleries, library and study rooms. The residential qualities of the galleries are underscored by the ever present 20-foot bay system and the detailing. Undyed natural fiber carpeting is used everywhere, interrupted at each column line by a flush strip of travertine. In the center of many of these carpeted squares, interior designer Benjamin Baldwin has placed back-to-back pairs of seating units, recalling stiff-legged, straight-backed Britannica.

As Kahn's biographers Romaldo Giurgola, FAIA, and Jaimini Mehta wrote of his concept of "room": "For Kahn, this unit is not an abstract entity, such as implied by 'space' in contemporary architecture, but concrete, corporeal and, above all, human. Here Kahn was working with a keen perception of the human activities; their rhythm, their light, and the subtle transition between different activities. Defining in such simple terms the identity of architecture space is one of the basic contributions of Louis Kahn."

The paintings in the Mellon collection, with their intimate yet formal subject matter, were intended to be viewed in the home, where people could meet, browse and talk at leisure, a feeling

On the walls of the library court (right) hang large, lavish paintings illuminated by diffused natural light. Through the court rises the cylindrical stair tower (bottom left). The intimate residential feeling of the exhibition galleries is reinforced on the fourth floor (top) by pyramidal V-beams and skylights topping each 'room.' The library (center) has oak fittings, stainless steel ducts and light fixtures and window-side carrels to create 'a place where a person is alone near a window.'





The fourth floor study gallery (right) is divided into 20-foot bays, each with its own skylight. Running through the second floor exhibition galleries (above) are large, cylindrical stainless steel airconditioning ducts.

Kahn simulates at Yale. His rooms look onto courtyards, into other galleries and out over the street.

The library has "the invitation of books" and with its window-side carrels embodies Kahn's idea of a library as a place "where a person is alone near a window." The precedent was Phillips Exeter.

The Yale Center library has big windows through which light pours, too much of it in the afternoon. Kahn had wanted to use wooden shades to block out afternoon sun; instead, there are movable canvas window panels. They are especially distracting when seen from the street, where they look like baggy, flapping things. Still, the library itself, as Vincent Scully has written, "is an English library right enough, with all the sheltered, sunbeam moted peace of the originals, even though its space is also notable by the passage through it of enormous, silvery cylindrical ducts, worthy of High Tech's shiniest fantasies."

These ducts, running through the second and third floor exhibition galleries as well, were intended as a forthright expression of the entrails of the building. But in the galleries they overpower and contrast disturbingly with the small, English genre paintings hung beneath them.

The singular qualities of the Yale Center come together on the fourth floor; it is figuratively and literally the high point of the building. Here the intimate residential feeling of the galleries is further reinforced by truncated, pyramidal, concrete V-beams. Skylights, admitting diffused light, top each 20-foot bay. The painting study gallery, instead of being one long corridor-like space is, again, divided into bays.

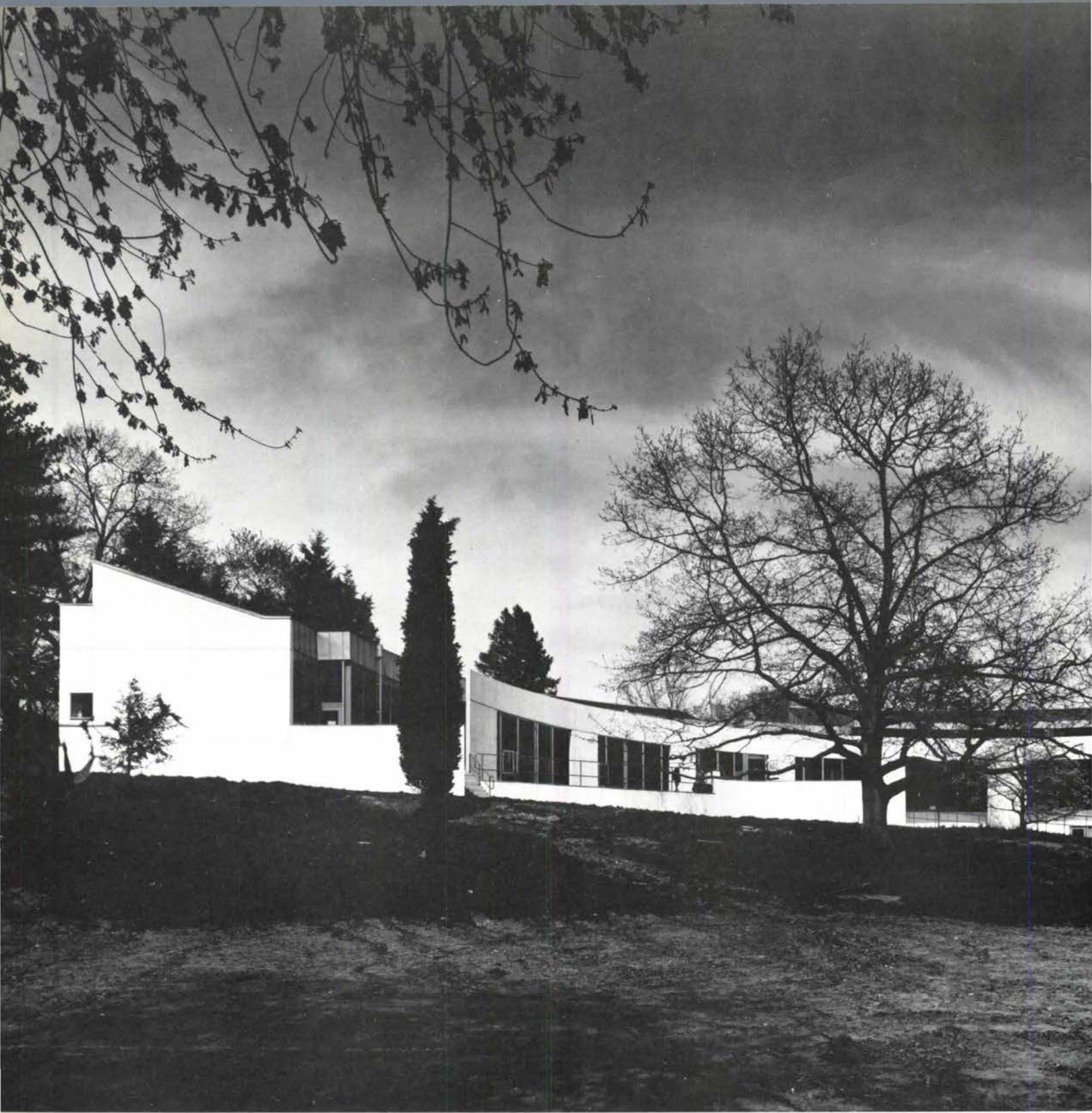
And unlike the arrangement in most museums where administrative offices are remote from exhibition spaces, here they open directly onto painting galleries. This creates a physical closeness between curators and the world over which they preside. And since all offices have skylights and picture-hanging spaces, the entire fourth floor could become an exhibition gallery, an extra "availability," as Kahn put it.

Kahn believed in designing "not for need but for desire." "Bare need," he said, "comes from the known, and supplying only what is lacking can bring no lasting joy. Did the world need the Fifth Symphony? Did Beethoven need it? He desired it; now the world needs it. Such desires bring about the new need."

Quite possibly Kahn's perception of the "desires" for the Yale Center for British Art have already brought about "new needs" in museum design. □



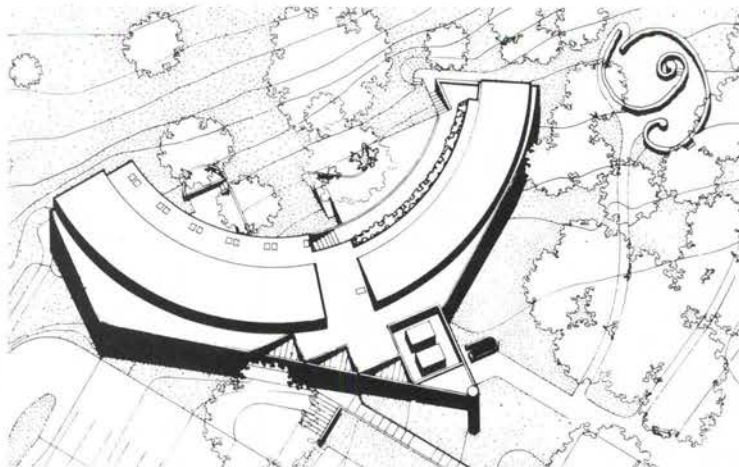




Welcoming Place to Read and Reflect

Mitchell/Giurgola's Tredyffrin public library in Strafford, Pa. By Nory Miller

The Tredyffrin library arcs toward its suburban park (left); its park wall is fully glazed but shielded by a concrete sun-screen. Outside the arc form, the plan accommodates offices, workshop and entry. Mechanical services are gathered in a small tower on the parking lot side (below).



Rollin La France



Harold Guida

"A good building is a good place to be," says Aldo Giurgola, FAIA, and it might be taken for the worst kind of cliché were his words not backed up in concrete, which they are.

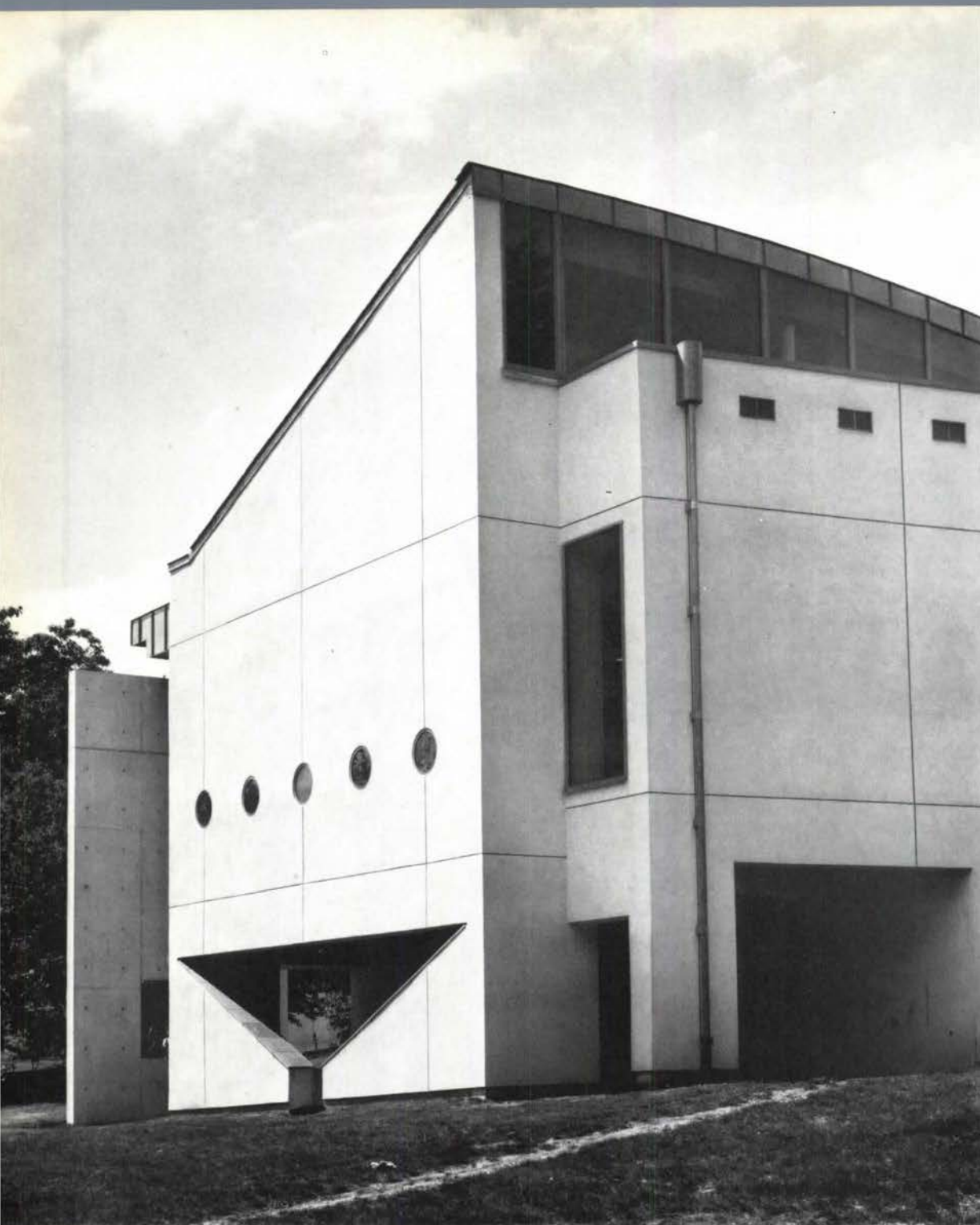
In the unsettled Seventies ("S" for sardonic, sophisticated, subversive, surreal, slick, solipsistic . . .), Giurgola is an exception. He is neither an evangelist for modern architecture nor its confessed sinner, nor yet a volunteer undertaker. Literate in both modern and contemporary vocabularies, Giurgola attempts to work through them toward what he feels are the essential architectural goals—buildings firmly conceived, at home in their settings and good places to be.

Like Sullivan's *function*, after which form followed, Giurgola's *good* is intended to indicate far more than adequate plumbing. Good has to do with the personality of a building and its materials, provision for man's private aspirations and the presumption of his public ones.

Mitchell/Giurgola's Tredyffrin Public Library "has to do" with a place to read and reflect, a place that acknowledges individuality and puts it in a social and natural context. The library is small—20,000 square feet, \$1.2 million, located on Philadelphia's exclusive Main Line, in the town of Strafford, set in Strafford Park across from tennis courts. Its walls are stucco over concrete with a roof of cedar shingles. Such materials along with modest scale make for a comfortable relationship with its residential neighbors despite differences in style.

Simple geometry is the ordering principle. The plan is an arc, with various permutations on the hump to accommodate offices and other complicating functions.

Not only the deviations in form but also the basic form makes this building a fragment. An arc is but a piece of a circle. Unlike the self-contained shapes of Greek classicism and its modern revisitations, an arc is inherently unfinished. It is pervious to its



A comparison to Aalto is unavoidable. On the opposite page, Giurgola's library is shown on left, Aalto's library at Seinajoki on right.

Photos by Rollin La France



The arc, itself a segment, is cut into rings.

setting. This arc sits in the crest of a hill with a commanding view of the park. It is with nature but not of it.

The arc itself is raised above the extraneous irregularities, a story higher at point of contact, sloping downward as it retreats. It reads clearly from within or without. Inside the arc is the library's raison d'être, the reading room.

As the building appears as a segment in its surroundings, the reading room is but a series of segments. It is sliced subtly into rings, function by function, providing a sense of intimacy for each place while maintaining their connections to each other and the whole. Outside the layering continues, terrace after terrace, into the park. Color too modulates the passage from inside to outside as the blue-painted window frames connect to the blue paving stone just beyond.



Nory Miller

The park is the true focus of the library. It turns its back and an almost solid wall to the parking lot and tennis courts on the opposite side and wraps around the park. Only a glass shield separates library from park, with a concrete sunscreen—the wall faces south—superimposed 11 feet farther out. The screen filters outgoing views as it filters incoming light.

The views are different and specific for each reader and unfold in episodes for someone moving about. Because of the arc form, a reader can always see the park but not always the rest of the library and, in fact, is closer to outdoors than most of indoors, creating in effect a quiet balance between being alone in nature and being in an esteemed community institution.

Light is most always solely natural during the day. It streams in from the south-facing window wall and washes across the ceiling from north-facing clerestories. At the ends of corridors and next to each carrel, there are atypical windows intended to

seem like someone's personal view. Three skylights—the most striking elements on the nonpark exterior—fill the entrance and adjacent areas with light. A special skylight calls attention to the circulation desk. It is lozenge-shaped and rimmed in yellow.

One enters the library from the unprepossessing, almost motley, nonpark side through a doorway that is suddenly energetic with decoration—patterned tiles and wooden doors applied in rectilinear design. The entrance is midway on the arc.

Inside, neutral carpeting, white walls and formwork and light wood furniture leave most of front stage to the park and the books, with the important accent of the circulation desk (touched with red leather and backed by an autumn-colored tapestry). The honey- and reddish-toned Douglas fir ceiling slopes from the window wall to the top of the clerestories and holds the whole performance together.



Rollin La France

Intimations of Kahn and Aalto are everywhere.

The reading room is layered—stacks to the wall, then tables and chairs and finally a sunken curve of seating around the park, high-backed built-ins with generous cushions. This last came from Giurgola's memories of home. "My image," says Giurgola, "was the Piazza di Siena, an 18th century stadium in Rome. It is full of trees with only three or four deep tiers. It is not a place for a hot sports contest. It is a place to relax, to leisurely read a newspaper as you watch."

Almost half of the arc is the children's section. Children are treated as adults—almost. The Aalto-designed furniture is smaller and gayer with blue insets. The formwork is willfully curvilinear and the little staircase has been expanded into a carpeted amphitheater for story hour and adorned by an unexpected apple green slash of wall. But there is little of the

frenetic clowning normally used to attract children.

In the irregularities behind the arc are offices, workrooms and lavatories. Downstairs, in a basement opening onto the park are meeting rooms, staff, lounge, a reception area and a big hunk of partially finished footage to expand into. Mechanical details are stashed in a small tower.

For this library, Giurgola has freely drawn from architectural precedent—in the shed roof from vernacular houses and recent revivals to the color-rimmed skylight à la Corbusier's La Tourette. Evidence of his teacher Louis Kahn is everywhere, most specifically, perhaps, in the archetypal geometry of plan, the Beaux-Arts collonade between sunscreen and curtainwall, the benches along the periphery and the separation of served and servant spaces.

But mainly, the Tredyffrin Library owes its debt to Alvar Aalto and his classic library at Seinäjoki, Finland. The fan-like



Harold Guida

Giurgola's layering of space is never clearer than at the edge where the library slips little by little into the park.

plan, sloped and sculpted ceiling, radial stacks, clerestory back lighting, layering punctuated with small white columns, folk-craftlike doorway—these are very like Seinajoki but with interesting reversals.

Seinajoki curves around its own sunken reading room, densest in the center of the circle. Tredyffrin curves around the park, empty in the center. Yet both use the curved form to give inherent definition to a repetitive, linear space. Similarly, both use wood for warmth and color, but Aalto put it on the floor and Giurgola put it on the ceiling.

"Wood," says Giurgola, "is the least abstracted thing you can think of. The problem with modern materials is they are all homogenized—no character, no personality. Wood or brick have the tremendous advantage of texture—they're dancing."

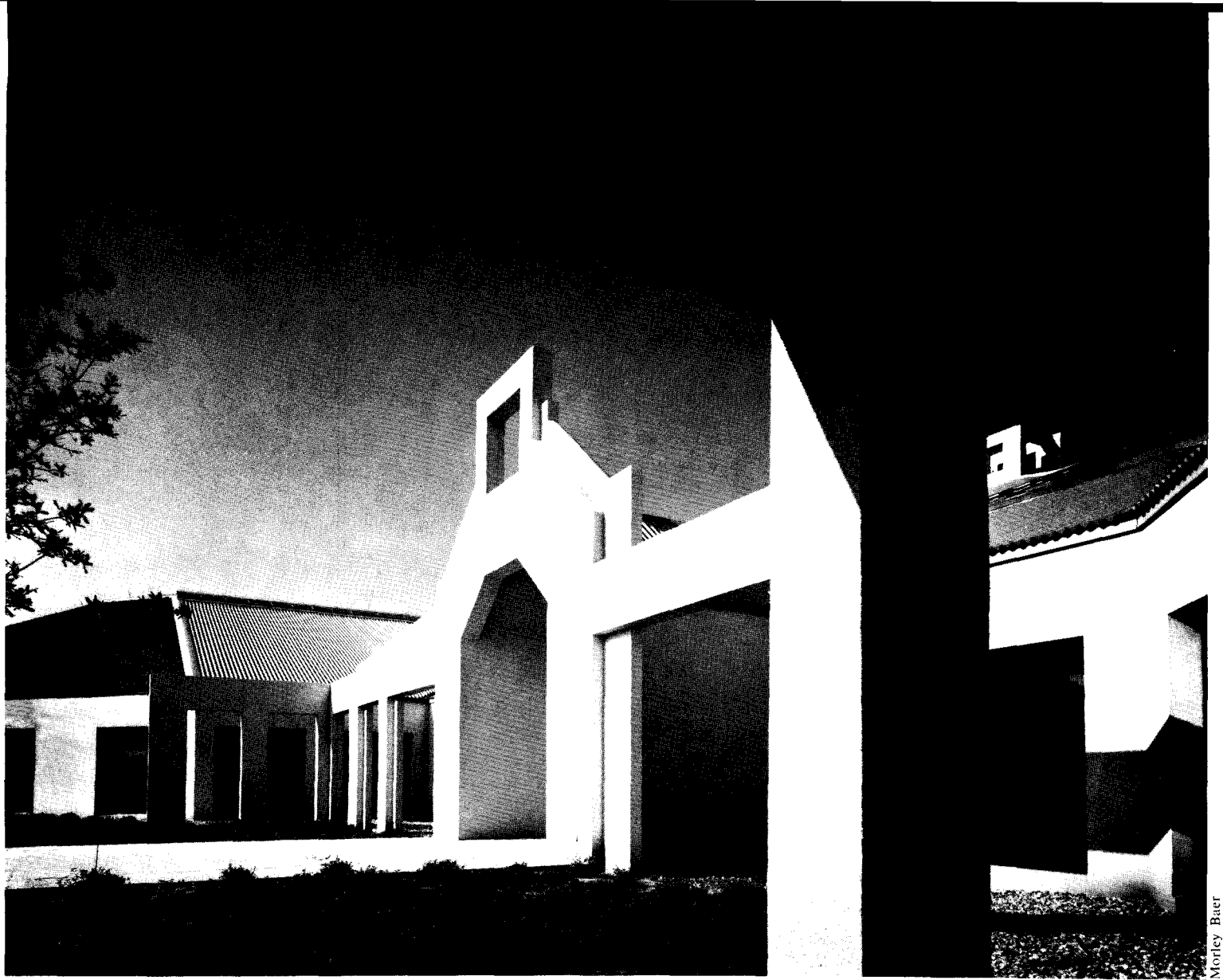
Personality is exactly what Giurgola is looking for although not the eccentric or expressionist images this word calls forth.

"You can't do things from too impersonal a standpoint," he says. "You can't build out of psychology or sociology or technology."

Subjectivity, of course, has its disadvantages. It tends to be self-indulgent. For instance, two of the library's three skylights which happily mark the entrance on the exterior are afterthoughts once inside. And on the end wall, the dramatic inverted beaker-shaped cutout makes for a striking facade and was once intended to signal a special auditorium entrance. But when the entrance was eliminated, the cutout remained, dramatically signaling nothing.

The overall personality of Tredyffrin is one of dignified accessibility and good will. Indeed, use of the library is up 800 percent over what it was in its predecessor building. The meeting rooms are "booked solid," says the librarian. "Even the police come here to meet." It is a good place to be. □





Morley Baer

An Evocative Enclosure of Luminous Space

MLTW/Turnbull Associates' library and city museum in Biloxi, Miss. N.M.

Biloxi, Miss., is a Gulf Coast town, kept alive by shrimp boats and golf-playing tourists. Creole, Cajun, Yugoslav, Greek, Italian, all make their home here, as once did Jefferson Davis. His house still stands, but most of Biloxi's past has been swept away by devastating hurricanes.

The latest wreckage, from Camille, coincided with a new mayor's ambitions and 1976 bicentenomania, yielding this sensitive and successful building by MLTW/Turnbull Associates of San Francisco. But it didn't start out that way.

It started with \$1 million budgeted for a parking garage that Mayor Jerry O'Keefe thought would be better used for a library and city museum. But he wanted it to be special so he went to William Turner, AIA, head of architecture at Tulane University, and suggested a competition among students from local colleges. Some students would get a prize, he thought, and their ideas could be turned over to a local practitioner.

Turnbull fashioned the entry (above) from memories of Biloxi's Spanish colonial predecessor, then recalled it under the cultural center's grand stair (opposite page).

Next thing anyone knew, the man from Tulane showed up with William McMinn, FAIA, dean of the one-year-old school of architecture at Mississippi State. McMinn had an idea for a full-fledged design *festival* involving six *famous* architects from all over the country in a public learning *experience*. Later, a local architect would build something.

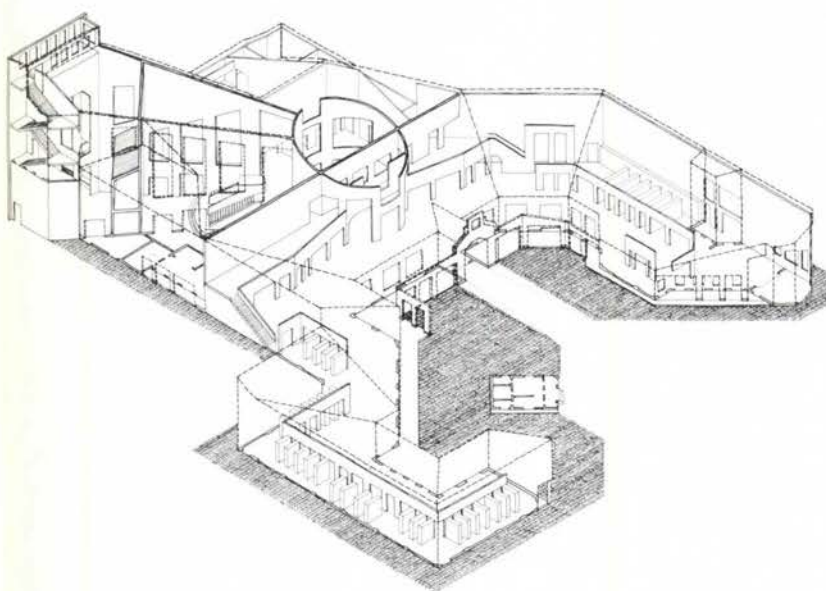
So Biloxi invited Robert Stern, AIA, from New York City; Stanley Tigerman, FAIA, from Chicago; O'Neil Ford, FAIA, from San Antonio, Tex.; Kemp Mooney from Atlanta; Harry Wolfe, AIA, from Charlotte, N.C.; and Charles Moore, FAIA, from California/Yale to come to Biloxi and each head a team of local students in a five-day, televised, open house design charrette.

Only Moore couldn't make it; so his suggested substitute—William Turnbull, FAIA—was the California man in that Biloxi ballroom in November of 1974. "It was a lot of pressure," Turnbull remembers. "By Wednesday, I was still looking at blank paper."

By Friday's presentation, however, he managed a design that completely won the confidence of Mayor O'Keefe and others.



Dave Gleason



The library wraps around its site, making a public square with the 1905 city hall across the street and a continuous window on the garden for its visitors to read by (opposite page). The cultural center is approached from the opposite direction and intersects only at the central rotunda.





Karl Smith

'A sort of push me/pull you with pinchers.'

By February, Biloxi had switched gears and offered Turnbull the commission.

Mississippi architects, however, had not changed gears. There was a campaign (unsuccessful) to fire McMinn from his academic post. And somehow Turnbull didn't get licensing reciprocity from the Mississippi state board—on which several Biloxi and neighboring Gulfport architects sat—nor could he get his application forwarded to the National Council of Architectural Registration Boards. Instead, as his papers sat on some desk, he was threatened with a misdemeanor charge for practicing without a license and forced to withdraw his application.

Finally, Turnbull hired The Architects Group of Mobile, Ala., who were licensed in Mississippi to associate on the project. In 1977 Mississippi passed a law requiring architects not licensed in Mississippi to associate with *resident* Mississippi licensed firms.

Complaints from local architects and their allies kept up throughout construction. "But we got over that provincialism," says city attorney Cono Caranna, "and got one hell of a building."

The building in plan is a sort of push me/pull you with pinchers. On one side, the library's entrance and segmented arms frame a courtyard, which it shares with the neoclassical city hall across the street.

The open space is called Bicentennial Plaza and gives Biloxi its strongest public symbol downtown. Set in it is an 1830s Creole tourist cottage that became the state's first free library. (Nicholas H. Holmes Jr., FAIA, of Mobile was restoration architect). On the other side is a high observation tower forming a 65-foot entrance foyer for the cultural center.

Inside, the library and center are linked—and kept separate—

by a rotunda in which an octagonal circulation desk acts as control point. Everything has been done to give a domestic scale and setting, which is transformed by light into something quite special.

Turnbull sounds like his late teacher Louis Kahn: "I asked what did the building want to be. Good public buildings had to be comfortable for people, as comfortable as houses from previous generations when there were libraries, not TV rooms. Where do people want to read? By the window in the sunshine. It needed intimate scale, a garden outlook, light. In the city you make a garden with a wall around it. What could we make a wall out of? The thing there was most of was books. So it is a hollow wall—books on one edge, garden on the other. The meeting rooms, museum, etc., hang off the back. For the control place in between, there is the one piece of clear geometry. We put the cottage in the garden as a monument. No one makes statues of Jeff Davis anymore."

In some ways, Turnbull's library suggests a comparison with Giurgola's. Both chose to wrap their buildings around a garden, opening that view while controlling sunshine with a heavy screen wall and closing the back wall but allowing light in at the top. Both control the interiors by layering them. Both use a sloped dominating roof/ceiling to focus and contain their designs.

The connection between Giurgola's design and Aalto's at Seinajoki has already been drawn but Kahn's Exeter library should also be mentioned. Though a rectangle in plan, it embodies the concept of "man takes the book to light" in its peripheral carrels and benches.

Yet the differences in form and feeling between the Strafford and Biloxi buildings are considerable. Where Giurgola edges toward the classical, Turnbull embraces the picturesque. Where Giurgola's library is sunshine bright, Turnbull's is luminous. The former is immensely welcoming and comfortable in a down-to-

The cultural center weaves inside-outside ambiguities with its entry through the Mission-like observation tower (far right) into a public area depicted as if it were an outdoor courtyard. Layers of pierced walls mark the transitions as space flows freely (right).



Echoes of Spanish Mission and, perhaps, Gothic.

earth, matter-of-fact way. Biloxi has a hushed "atmosphere."

Turnbull's building, of course, is a good bit larger—33,000 square feet, 68,000 volume capacity—and pieced together with the architect's penchant for complexity and ambiguity using many of the techniques seen in his previous work (designed with and without Charles Moore). The library as walled garden is the kind of foregrounding seen previously in his lattice-enclosed Zimmerman house as porch of 1975, and reminiscent of MLTW's raised sleeping loft as four poster bed at Sea Ranch. Here also are the framed views, layering and overlapping, partial levels rather than stories, emphasis on surface rather than mass, concentration on irregularities, historic allusions, town planning techniques of organization within a single building and traditional building materials and methods. The latter effected an impressive \$38 per square foot construction cost.

The building rises and falls, protrudes and draws back, with hard edges and an intense feeling of unconnected things juxtaposed, held in check by the seemingly molten roof. Things push up into a tower or peel off into a sunscreen.

It is a facade as full of recognition as it is of energy. Not only are there the signs of historic styles—most notably Spanish Mission in the stucco-covered concrete, broad asymmetrical "campanile" and (gray metal) corrugated roof—but there are a number of forms that become emblematic for the building itself. Most strongly, these are the crenellated tower, the circular series of skylights above the rotunda and the abstracted Spanish colonial library entrance (which is recalled under the grand stairs of the cultural center).

The facades are also full of complicating, distinguishing, size-minimizing details. One wing ends in what can only be described

as a corner drugstore detail complete with the only column on the site. The other wing ends in a sudden verticality with windows rising and angling in anticipation. Both entrances are detailed with ceilings that soar or drop (or both) and shapes that focus on the very special experience of entering.

All around, there are recessed areas for fire doors and other irregularities, fronted by pierced screens which reinforce the facade in absentia. And all around, there is what Turnbull calls "wainscoting," a low band of slightly different color that not only serves to break up the monotony and scale of the wall, but rises and falls to mark the various formal events.

Inside, the building is as fluid and inflected as it is on the exterior. On the garden side is a series of little living rooms with lamps, coffee tables, even wing-backed armchairs and flower arrangements, along with more typical library furniture. The ceiling holds close here but, rising steadily toward the back, it delivers an arresting balance between the awesomeness of height and the intimacy of modest, focused space.

"Too many libraries," volunteers city attorney Caranna, "are waterproof boxes where one librarian can sit in the middle with a machine gun and get anyone going out the door. This is residential. Nearby there is a retirement home and some low-income housing. People from both can now walk to the finest living room in Biloxi and sit in some of the finest chairs."

What pulls this building into a realm beyond comfort, though, is the quality of light. It washes in through windows and skylights and is filtered by an unbelievably delicate color scheme. The walls are painted various grays and whites. The ceilings are a muted aqua, and beams and exposed ducts are shades of lavender. Bookstacks are royal blue, upholstery is purple and the wing-backed chairs meld these tones in a floral pattern.

How appropriate to the Magnolia State, very like the colors



Photos by Karl Smith

of the Gulf. Turnbull turned to these hues as a refreshing antidote to the hot and humid climate. And they read not as candy colors but as a soft, sustained mood.

The distracting element is the carpet, although nicely changing colors from one space to the next, it does so within the earthy ranges. Apparently, the architect intended the carpet to be within the same color range as the rest of the interior but cost suggested ready-mades and ready-mades suggested browns and beiges. Despite the ensuing earth and sky rationalization, it is unfortunate.

At an angle to the library is the axis of the cultural center with the rotunda as ball bearing. High, skylit and cylindrical, the rotunda is the pivot, connected yet separate. It is separated not only by shape and a pierced screen drum but by the witty device of detailing interior forms as if they were exterior ones.

For instance, a direct glance from the library at the screen wall of the cultural center falls upon two chairs and a large potted plant in front of two small windows *with windowsills*. Never mind that these are really cutouts in a screen wall, the sills make them windows and the windows make the center *out-of-doors*, at least as far as anyone in the library might see it.

It is the same from the center to the library. Upon entering the center, one comes upon an immense staircase, behind which is the library. Like a Southern stair, says Turnbull. Perhaps, but even more like the Laurentian Library stair. Not only does it pick up some of Michelangelo's details, but it behaves in much the same manner. As the Laurentian stairs were overscaled to give the sensation of walking up an outside stair, there to emphasize the specialness of the reading room, Turnbull's stair—also “outside” a library—is overscaled to create an outdoor courtyard (complete with window sills all around). The “court-

yard” is both a focus for the center and a device for differentiating it from the adjacent library.

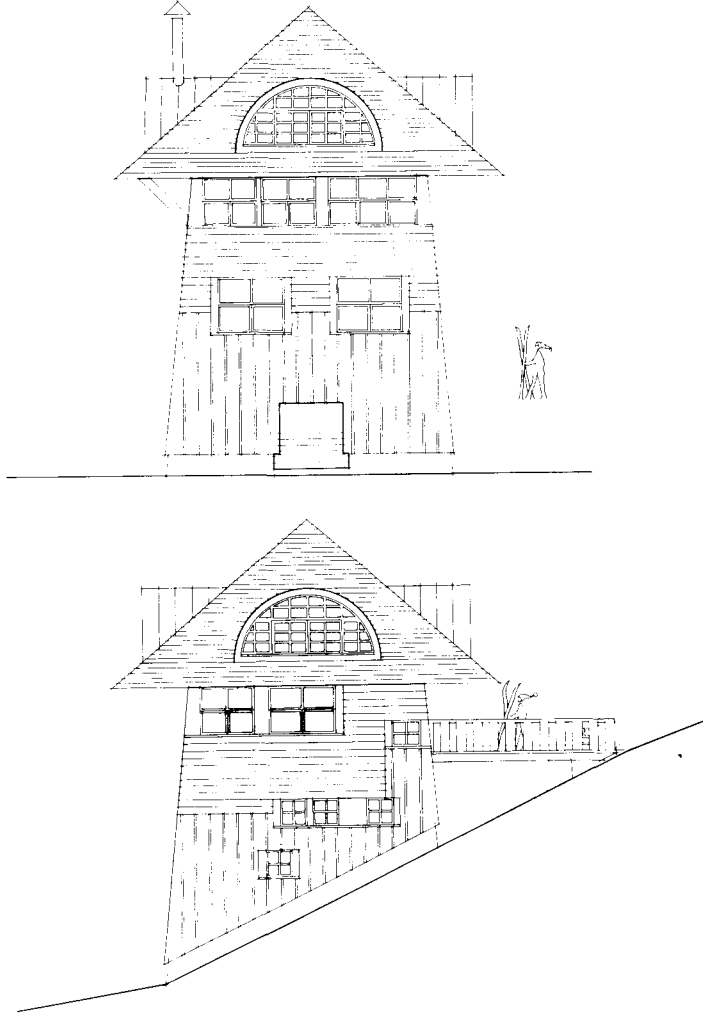
Around the “courtyard” are arranged the 120-person meeting room and a variety of exhibit spaces through a complex series of screens differentiated by color, lighting and openings. Throughout the building, pierced screens play a dominant role, not only ordering it into layers but charging it with a certain tension. The stiff rectilinear joints, thick and slightly awkward proportions, hard juxtapositions, nervous complications like chamfered corners result in a kind of clenched equilibrium between solid and void, surface and mass.

The library opened in September 1977. Head librarian Jackie Sue Broome says people like the elegance and soothing effect of the library. She doesn't like the “sprawled out quality.” She, like most librarians, would have preferred a square building where the librarian can monitor everything. Last February, an electronic surveillance system was installed to compensate. The tower, though, is still a problem. The mayor intended for it to have coin telescopes that told about the history of Biloxi. The wiring is there but the telescopes aren't, and meanwhile drunks keep going up there and throwing bottles off and the fire extinguisher has been stolen twice so the tower is locked much of the time.

A lot of people, the librarian says, still hate the roof. (After all, this is Quonset hut country.) And the lines seem “awfully straight and modern-day.” She had something more with columns in mind. (And a good case could be made for the building recalling the Spanish Mission and Victorian Gothic of Turnbull's San Francisco rather than anything much in the South.)

But the cool colors and dramatic spaces, the feeling people get and, it comes up again and again, the wing-backed chairs have won everyone over, says Ms. Broome. □





Thomas Bernard

Forceful Gesture on a Wooded Hillside

Venturi & Rauch's Brant-Johnson vacation house in Vail, Colo. N.M.

"We thought of an Art Nouveau grandfather clock with arts and crafts overtones while designing this house," Robert Venturi, FAIA, explains. "It's Palladio fused with Aalto and Le Corbusier inside and a lot of other things," says partner Denise Scott Brown. One might also add: a little pagoda, the proverbial child's drawing attenuated, a tree house, a lighthouse, a face with hat. It is Venturi & Rauch eclectic in the midst of developer eclectic—a ski and vacation house above the Swiss chalet and Tudor "new town" of Vail, Colo.

Despite its small size and untaxing program, perhaps because of them, the Brant-Johnson house is among the firm's most successful "nonstraightforward" architecture. It is complex, contradictory, accommodating but, in the end, whole. Venturi speaks of the "difficult whole"; the unity which [quoting August Heckscher] 'maintains, but only just maintains, a control over the clashing elements which compose it. Chaos is very near; its nearness, but its avoidance, gives . . . force.' " It is that force more than any other quality—more than talent even—that makes this house on the hill different from its neighbors below.

The house was built for a young family and bachelor friend and unpredictable numbers of guests. It is a four-story house, "at home in the trees," on a steep slope. Private floors are below, public above—sauna and storage at ground level; four bedrooms on level two; kitchen, dining and TV/guest room on three with a porch off back, and a vaulted parlor on four with big dormer windows and a warm fire—2,600 square feet in all.

When Venturi speaks of it, he uses words like "romantic." "A tower house is appealing, romantic," he says. "The top floor is like an attic in the tree tops. It's romantic to be in an attic, it's fun to be high." It is wood inside and out (a client request):

cedar siding, cedar shingles, old pine floorboards, oak stairs, maple counters. Even the electrical outlets, medicine chest and dishwasher door panels are wood. It not only looks handcrafted, it was handcrafted, from the carpentry to custom-made lanterns and hardware.

It is also tense. Exaggerated formal gestures and exaggerated formal conflicts—all in exaggerated scale—give this house its peculiarly impudent stance, especially from the exterior. The stance is all the more pronounced by its sudden appearance atop a rambling board and dirt walkway.

Basically, each facade is one big bilaterally symmetrical, centrally focused gesture, made emphatic by contrast and threatening to come apart at any moment. Each facade is an exercise in verticality with its high-waisted siding, hierarchy of openings and gradual incline. The low-slung hip roof, on the other hand, is about as subtle a stop sign as a bully's fist. Its slope is as fast as the facade's is slow and its eaves have the place surrounded. The huge dormers seem to have broken through in the crash.

Visually, it isn't clear if the dormers belong to the roof or the facade and this helps hold the composition together as does the fundamental parallel that both are pyramidal shapes pointing toward the sky (similarly the semicircular windows).

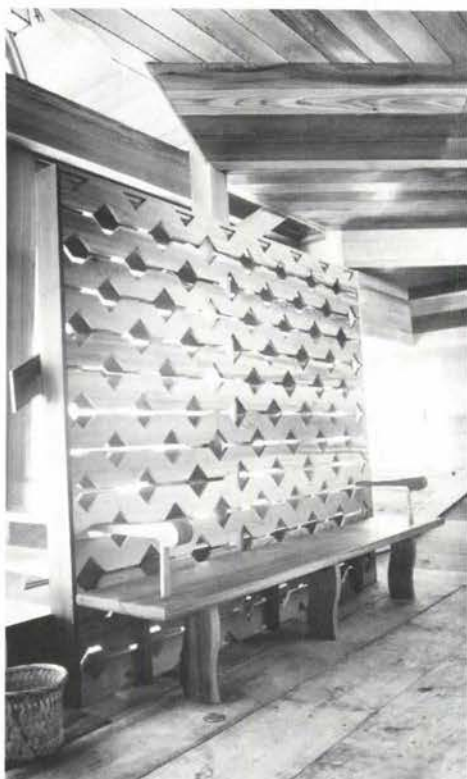
This thrust is intensified by opposition from the openings in the facades. These are never entirely symmetrical. On the front facade, they form a triangle in direct rebellion. In all cases, they are right-angled and nondirectional objects that, by holding their own against the squeeze job of the trapezoidal surround, seem almost bug-eyed in their demand for equal time.

Meanwhile, the unity of material holds together what the

The wooden house carries imagery of rustic log cabins and adventurous frontier towns, but delivered with sophistication and a 'civilized' sense of self-mockery. Opposite page: the treetop parlor.



In the middle of the third floor, Venturi adds an unexpected ornamental screen.



From the road, there is a long, twisted hill path leading slowly up to the house, some stairs to the door and, inside . . .



'A fugue of wood'; a kind of angry romanticism.

articulation of siding threatens to put asunder. On the front, the changes in direction of the boards, from vertical to horizontal back to vertical, seem to indicate stories—although their idea of where the stories are doesn't jibe with the windows' and the windows are right. On the side facades, not even this pattern holds. We are dealing with applied ornament here, complete with vestigial shutters and sills, a condition made patently clear by the parallel vertical cuts in wood and concrete at the entry. Boards running up and down heighten the tower effect as they fight the slant; horizontal boards bring the roof's power down into the body of the house, and the changes of direction keep everything lively.

The fireplace's blank dormer, the chimney, the porch (where nonsymmetrical benches and fenestration are held in check under the shadow of the overhang) are all accommodated as little acts around the main event.

Things calm down a bit as you go inside, but they don't get any less "nonstraightforward." The big mouth of the building, for instance, suggests one entrance parallel to the facade. In fact, there are two, both perpendicular. Where entry occurs is also shifted off center.

Once inside the main entrance, you land in a basement with sauna and staircase. The attic turns out to be the most important and lavished-upon space. Unlike a *piano nobile* arrangement though, the only way to enter the public spaces directly is through the back porch, and even then you arrive in the kitchen.

The kitchen is actually both kitchen and dining room, with the shapes failing to intersect just enough so that their discomfort with each other reads through. Two floors are largely symmetrical in plan, two are not in the least. Rooms and staircases are accommodated without much fuss until the top floor. The one exception is the third floor wooden lace screen for, says Venturi, "a little bit of glitter." Venturi also pulls a bench out of it, like a rabbit out of a hat. What holds the place together, and keeps up an interest below the parlor, is the fugue in wood—accented in white for window frames and black for entrywall, doors and fireplace.

The grand parlor is beautiful. The barrel vaults of the dormers flow into a groin vault that wraps up the room in curves of cedar and light. It is enclosure within enclosure, with the space in between acknowledged in the crowning cove. It is knowable from the outside but distinct.

Here the vault dominates; outside the straight, squat lines of the hip roof are in charge. Inside is almost as centralized as the Todi Chapel; outside the centrifugal pull of the corners and dormers leave the center struggling. What is front on the outside is merely one of two dormers fitted comfortably with mattress window seats that double as guest beds. Here, front is the fireplace—a 90 degree turn.

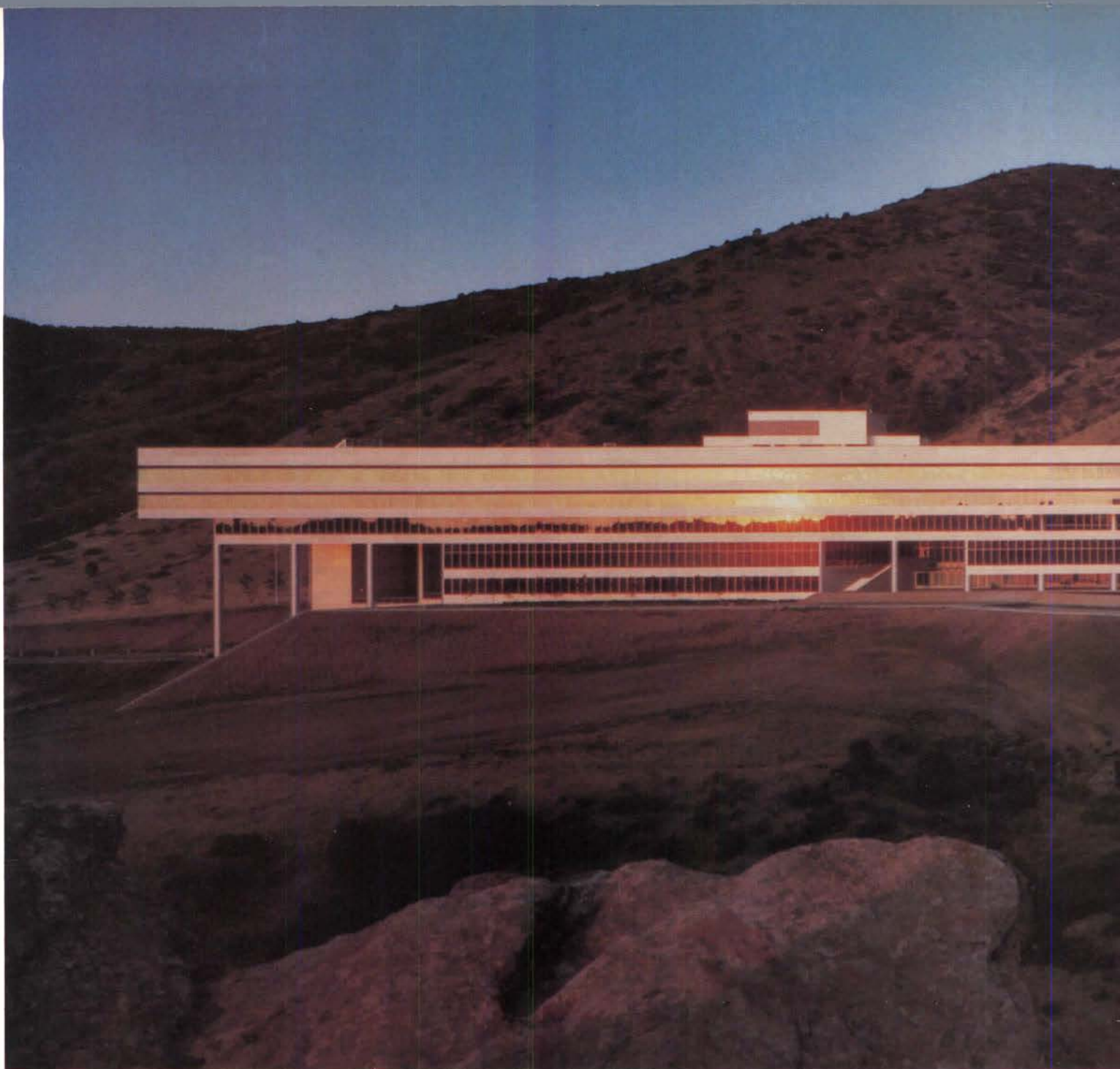
A number of elements enrich the basic fabric. The fireplace is both fireplace and a residual dormer and the duality is played off in a series of superimposed planes. The stairs come to a landing where physically the room begins, then continue three steps more. The curve upward and frontward of the dormers appears from some angles continuous, but from others, scalloped.

It is complicated and contradictory but somehow also warm and relaxed, at least by contemporary standards. And it brings up a quandary in Venturi's work. Because for all the polemic on the messy vitality of life and popular taste and the fallacy of the avant-garde, there remains in much of the work a kind of white-knuckled aggression that is intelligent, deftly executed but, not surprisingly, repellent to the "masses."

The Brant-Johnson House is caught somewhere in between. It does indeed have a romantic quality with its rustic country feel, its lovely lumber and wonderful "attic." But there is that odd and angry—if brilliant—exterior first. □



Nory Miller



Bright Object Laid at the Foot of the Rockies

The Architects Collaborative's Johns-Manville headquarters near Denver. By Donald Canty

Johns-Manville world headquarters near Denver, by The Architects Collaborative, has contributed one of the great images of recent architecture: a bold slash of gleaming aluminum across an incredibly rugged and beautiful landscape.

The site is an otherwise undisturbed valley in the 10,000-acre Ken-Caryl ranch, owned by the corporation since 1971. The valley ends at the beginning of the Rocky Mountains, a ridge of rocks called "the hogbacks," and it was here that the building was placed. Its only near neighbors are the giant rocks of the fountain formation on the valley floor, staring up at the building like a herd of thoroughly bewildered prehistoric beasts.

This is no contest between man and nature: Man could not successfully compete with such a landscape. Nor, TAC decided,

should he try to imitate its burly grandeur or otherwise blend the building into it. So TAC set out to design a building that would immediately identify itself as a "man-made object."

And a finely wrought object it is: an exceedingly long and sleek four-story structure with an angular cafeteria stepping down into the valley near one end, the whole sheathed in aluminum plate with a clear anodized finish. But for all of its sheen and size (750,000 square feet), the building is not such a commanding presence in the valley as many photographs of it, including the one above, seem to indicate. In reality, it reads more as it does in the aerial photo at right, as an incident in a landscape which TAC itself describes as "overwhelming."

Were there no other reason, the building would be notable

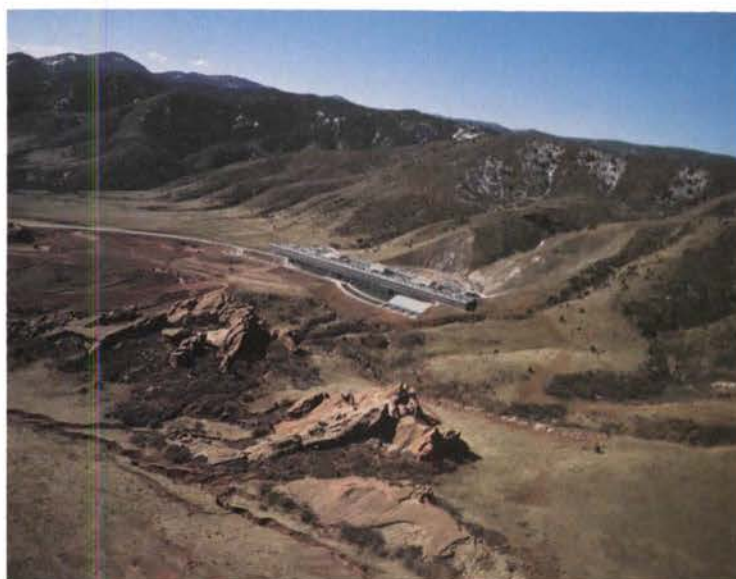


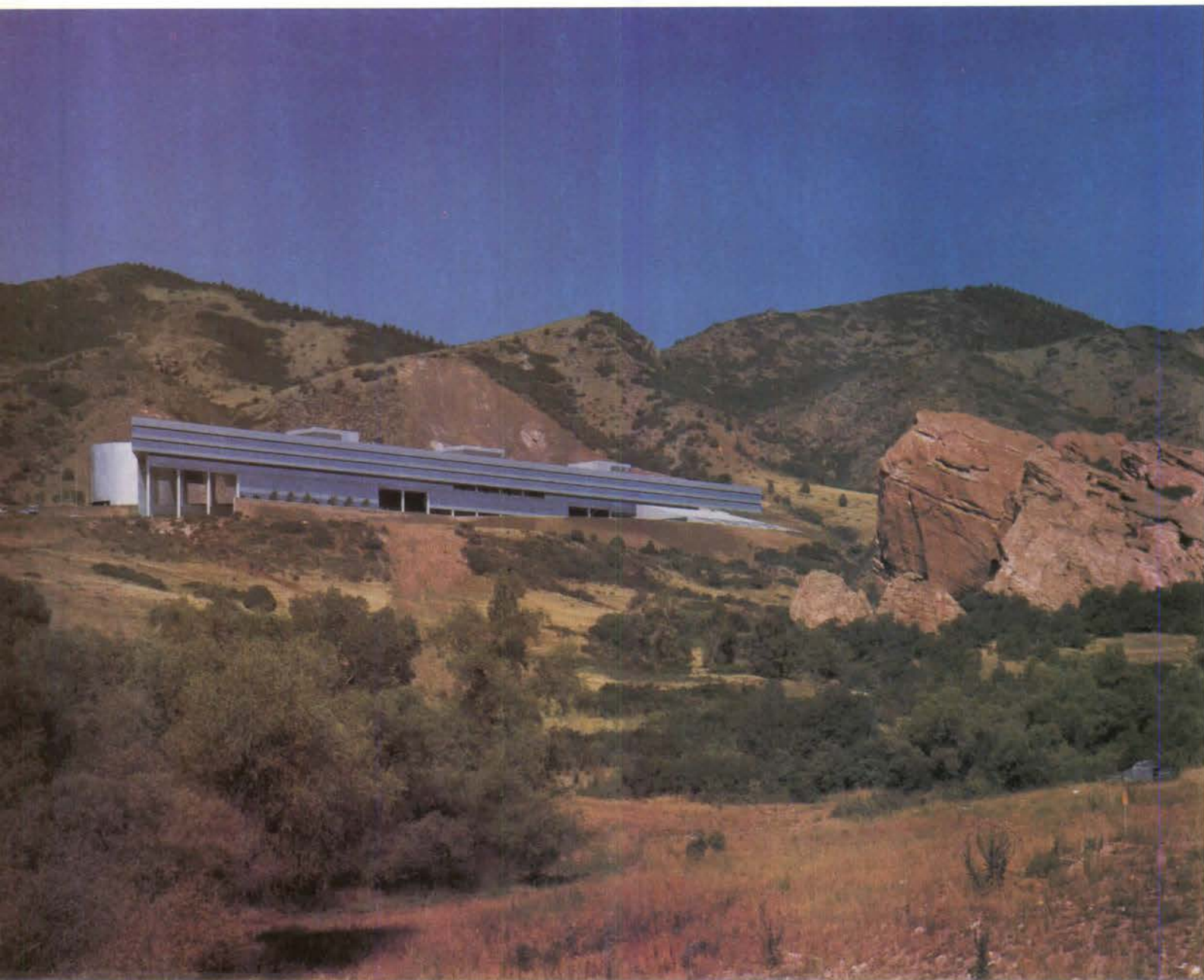
Ground level photos by Nick Wheeler

for the circumstances of its birth. TAC and its design were selected in 1973 in a limited competition among nine firms. The jury, chaired by Harry Weese, FAIA, commended Johns-Manville for the highly unusual use of a competition for a corporate headquarters, for its sensitivity to the environment, and for its aspirations that the building is a "significant advance in the states of the art" and "an influence to similar undertakings in the future."

Indeed, one would hope that other corporations would set their sights similarly high, not just in seeking a landmark design but in having the commitment to see it through to completion as close to the original concept as this building is. Nevertheless, there is one respect in which the building's influence could be less than positive, and that is its location.

The ranch in which it sits, where still roams a herd of Johns-Manville Black Angus cattle, is 22 miles from Denver. The city is distantly visible from parts of the building but the drive from it via the major interstate seems, if anything, longer than it actually is. Leaving the highway, one traverses rolling, largely open countryside with the majestic Rockies in the back-





The access road winds into a central court.

ground. The last few miles are on a winding canyon road along which the lone sign of man's hand is Johns-Manville's earlier, less ambitious research and development center. Arriving at the headquarters building, one feels far from the city indeed.

One way in which the building's size is often dramatized is to say that if it stood on end it would be one of the West's tallest towers. "Too bad it wasn't," says one Denver planner, lamenting that so large an investment could have been very useful in strengthening the city's core rather than encouraging suburban sprawl, which is spreading rapidly and inexorably towards Johns-Manville's ranch.

Approaching the building past the staring rocks, one sees it obliquely, as above. The dramatic frontal view on the previous pages is visible only to hikers and climbers. Early on, consideration was given to a configuration of the access road that would have let the building reveal itself more theatrically, but it was abandoned because of cost and possible disruption of the valley.

The road curves upward directly into the building itself, revealing for the first time that it is bifurcated into two parallel

rectangular wings. The road continues through an open, thrice-bridged courtyard between the wings.

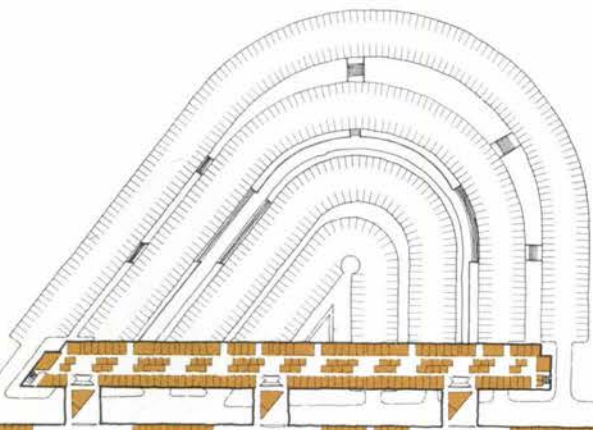
To the left, through a forest of shining columns, are acres of parking in a natural amphitheater between the building and the hogbacks. Additional parking is on the roof, reached by helixes at either end which add further drama to the sharply rectilinear form. There are 1,700 parking spaces in all (for a working population of some 1,900 in the building).

The competition jury praised TAC for placing the building against the hogbacks and using its breadth to shield the parking from the valley's view. "The roadway approach is elegant and minimal," it said. "The arrival is dramatic with a view under the building. The complex forms a very distinctive image from the air." (This last was a program requirement since Johns-Manville executives and customers often arrive by helicopter.)

In summary, the jury said: "All of the elements—parking terraces, helix ramps, reflecting pools, greenhouse (not yet built) and wide open ground level—are combined in a sculptural composition of great interest and variety. . . . This can become a singular piece of work—one worthy of its site and the aspirations of its user."

Other competitors were Welton Becket & Associates, Caudill





Problems of coping with the competition program.

Rowlett Scott, Inc., Vincent G. Kling & Partners, Neuhaus + Taylor, I. M. Pei & Partners, William L. Pereira Associates, RTKL, Inc., and Sert, Jackson & Associates. Associate architect to TAC on the building was Carl Groos Jr., AIA, of Denver. TAC principals in charge were William J. Geddis, FAIA, and Joseph D. Haskins. Project architects for design were John P. Sheehy and Michael Gebhart.

Sheehy and others at TAC, despite their victory and their pride in the end result, are openly critical of the competition program, produced with the help of the Space Design Group, which subsequently did the building's interiors. Their main point of criticism is that, through a complicated formula, the program required an excessive ratio of perimeter to interior offices (even a Johns-Manville official close to the project calls the ratio "extreme").

The other competitors clearly also had problems with this requirement (the Pei scheme was an intriguing assemblage of what look like glass cubes on the valley floor, each nearly square in plan to maximize perimeter space). The TAC scheme fell somewhat short of the exact ratio and it was relaxed by the jury.

Nevertheless, it had its impact on the building as designed: mainly the bifurcation into two wings. This means that roughly half of the perimeter spaces in each wing look out on the other wing rather than the scenery. Only roughly a fourth of all of the perimeter offices have the magnificent valley view. A like number look out on the hogbacks, but over a sea of parked cars.

The cars also dominate the vaunted view from the air. Johns-Manville ruled out underground parking or an above-ground garage. Some consideration was given to putting the parking in a remote location on the ranch, of which there are plenty, and bringing employees and visitors to the building via shuttle buses or people-movers. This idea was defeated by the fact that the building's population is "very mobile," according to Eric Dienstbach, who saw the project through both the competition and construction for the corporation, with people coming and going all day. Also, Sheehy says, TAC decided it wanted to "welcome the automobile" and make it integral to the building.

The Johns-Manville building inevitably invites comparison with the Weyerhaeuser building near Tacoma, Wash., another very large corporate headquarters in a beautiful natural setting. The major difference is that Weyerhaeuser shares views widely through open office landscaping, while Johns-Manville has conventionally partitioned offices. During construction, Johns-Manville occupied temporary quarters near the interstate and tried a variety of office arrangements, according to Dienstbach, "some of them tending toward landscaping." The Space Design Group, not advocates of landscaping, did the temporary interiors as well as those of the new headquarters. Sheehy said that the building designed on the assumption that it would be open and that TAC fought hard for landscaping.

Given the partitions and the length of the building, and thus of its corridors, the innermost spaces of the office floors can seem like endless rows of people-boxes (*see plan*). For relief, however, employees have at their disposal a generous variety of communal spaces on the lower floors, most of them with fine views—notably the handsome, terraced cafeteria with its patio overlooking the valley.

If the cafeteria is the building's most successful interior space, the lobby-reception area (left) is surely the least. Its garish futurism seems almost a parody of the disciplined modernity of the exterior. In general, the interior design is the only major failure of execution in what the competition jury perhaps fulsomely predicted would be "a great building." □

Upper left, a dramatic aluminum X marks the building's entry as seen from the parking lot. Center left, the lobby-reception area. Right, the east facade shines in a reflecting pool.



Bold Symbol of a City's Image of Its Future

I. M. Pei & Partners' Dallas city hall and park plaza. By John Pastier

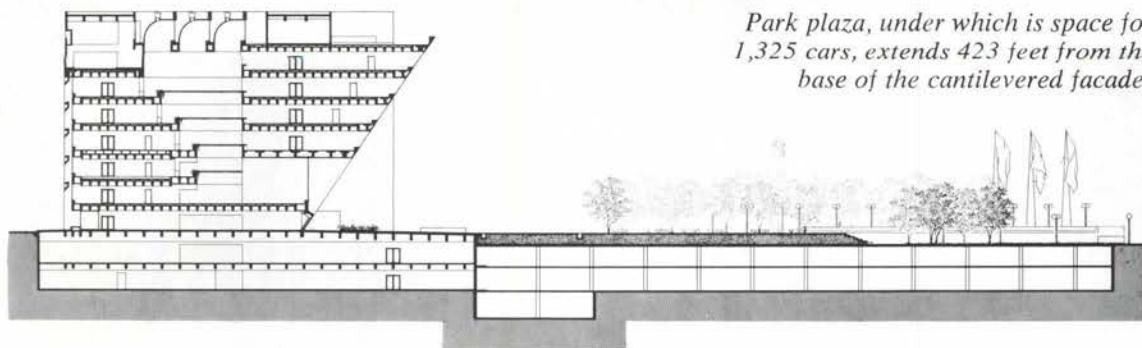
In this time of architectural questioning and change, the Dallas city hall and park plaza (I.M. Pei & Partners, Harper & Kemp) embody familiar and perhaps even old-fashioned values: monumental scale, studied formalism, structural daring, thoughtful detailing and a heroic, futuristic stance. They are bold and confident symbols for a sanguine and expansive city. Small may be considered beautiful in California, but in the Texan center of the sunbelt the calculus of success and accomplishment is still simple and straightforward.

For all its overwhelming drama, it would be a mistake to think of the city hall as primarily an essay in architectural form. Coupled with its park, its main significance is urbanistic, both as a component of a problematic downtown and as an icon for the

entire city. The 11-year process of planning and construction was clouded by controversy and hesitation, but that effort has been justified by the results. In the architectural context of downtown Dallas, the city hall is a Neiman-Marcus in the midst of bargain basement operators. During the postwar boom that nearly tripled the city's population, good design has been painfully scarce in downtown's plentiful construction. The city hall, and to a slightly lesser extent the new ReUnion (Welton Becket & Associates), have already made 1978 the best year for downtown Dallas architecture in a generation.

Both as architecture and as formal urban design, the city hall and park plaza are unrepresentative of the city that exists. Rather than epitomizing prevailing developmental attitudes and practices, the new center of government represents the way Dallas has always liked to see itself, namely as progressive, sophisti-

Mr. Pastier is a teacher and free lance writer in Los Angeles.



Park plaza, under which is space for 1,325 cars, extends 423 feet from the base of the cantilevered facade.



cated, cultured and, perhaps paradoxically, as both future-oriented and tastefully conservative. This Dallas mystique, nurtured far more through economic expansion than environmental design, has finally been given some credibility in urbanistic form.

The park plaza, extending 425 feet out from the front of the city hall, was originally proposed by Pei himself and is strongly related to the building. The city hall's 68-foot northward cantilever will shade the plaza during Dallas' blistering summers, and implicitly link the building and park. That six-acre expanse, which forms the roof of a 1,325-car underground garage, is the first large planned pedestrian open space in downtown. Unfortunately, it is not near the center of building concentration and pedestrian activity, but is at the core's southern fringe. Furthermore, downtown growth is headed north and west, away from the plaza, so that the park seems destined to be a place of premeditated civic ceremony rather than a natural crossroads and spontaneous meeting point. Its northern edge will soon be flanked by a new library and a federal reserve bank, which, combined with the city hall and the immense convention center to the east, seem likely to produce a vast segregated civic center of the sort beloved by officialdom and lamented by people concerned with the richness of city life.

The separation of the city hall and park from the heart of downtown yields one advantage: A spectacular view of the

Dallas skyline can be had from both the ground and the building's north windows. The open space facilitating this vista is handsomely composed, being split diagonally into paved and planted domains. Although planned asymmetrically, its formalism and scale recall the monumentality of the City Beautiful movement. Three awkwardly conical flagpoles rise eight stories to anchor one corner, and the paved area contains a 180-foot round pool of turquoise-colored water enlivened by a vertical jet and a whimsically bobbing red sculpture by Marta Pan. Eventually, the plaza will house a major Henry Moore sculpture.

The plaza's best embellishment, however, will not consist of works of art. Scores of gnarled live oaks and other trees indigenous to the north Texas prairie have been planted throughout both the paved and grassy areas, and in time promise to soften and humanize the surgically precise lines and forms of the park. Here is a brilliant and wonderfully understated symbol of origins and regional identity—while the building demonstrates a portable cosmopolitanism and concern with technology and future time, the trees stand as quiet reminders of ecological order, the cycle of seasons and a sense of special place.

The city hall's futuristic quality stems, of course, from its dramatically pitched cantilever. It is easy to envision this north facade becoming a favorite shooting location for films set in the 21st century. (One Pei building, the National Center for Atmos-

Photos by Robert Lautman





Dennis Brack



Dennis Brack

City hall stands at the southern edge of the northward spreading downtown core (top) and east of ReUnion (tower in center of photo right above). Le Corbusier's center at Firminy (center) and Pei's double cantilever (across page).



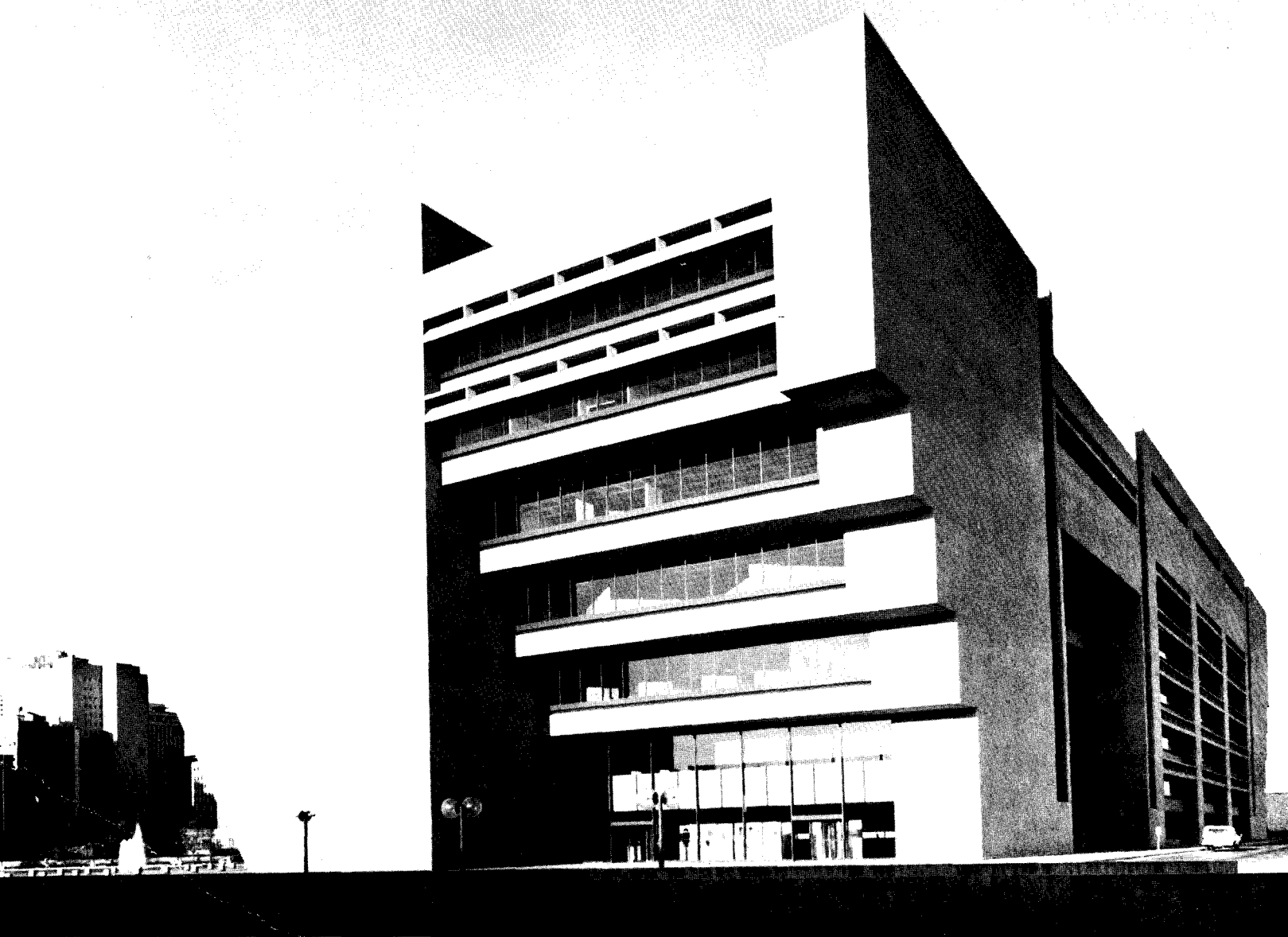
Robert Lautman

'An effect of drama rather than mere theatrics.'

pheric Research near Boulder, Colo., has already appeared in just such a film, Woody Allen's "Sleeper.") In less capable hands, that looming shape could look like Buck Rogers posturing, but in this case the effect is one of drama rather than mere theatrics. This is not a new shape for city halls. Tempe, Ariz., and West Covina, Calif., are two earlier examples of four-directional and two-directional outward sloping forms, but never before has such a steeply sloped overhang been executed on such a grand scale. The north face is 560 feet long, and at a 2:3 pitch, it extends 34 degrees out from its plaza level supports.

The short east and west facades also cantilever outward over part of their length, but there the building mass is stepped at each floor instead of forming an inclined plane. Not surprisingly, all these daring sculptural gestures require extraordinary structural effort to keep them firmly in place. That the final results seem so effortless and relatively inexpensive (construction costs were less than \$42 per square foot) is a tribute to the collaboration of the architectural team with structural engineers Terry-Rosenlund & Co., general contractor Robert E. McKee, Inc., and concrete post-tensioning contractor VSL Corp.

The cantilever is supported and stabilized by a combination of 14 major bearing walls and associated roof-level box beams post-tensioned by unusual methods. To simplify installation, reduce costs and provide a smooth monolithic cantilever face,



Robert Lautman

the vertical and horizontal cables were installed in loops that permitted tightening from the top and rear while avoiding or reducing the need for conventional anchorages at the footings and front face of the building. The stress applied to each set of cables reached as much as 6 million pounds.

Interestingly, this structural tour de force is not given total architectural expression. Rather than thrusting out on an unimpeded diagonal, the cantilevered front is punctuated visually by three massive vertical stair towers reminiscent of Le Corbusier's entrance pylons for the high court at Chandigarh. (Coincidentally, the sloping front itself recalls, in its angle and visual impact, Corbu's Firminy youth and cultural center.) Those solid 19-foot-wide shafts seem to prop up the sharply leaning facade, but they do so only visually and are in fact structurally independent of the cantilever. The result, although expressionistically arguable, is psychically justified since a looming slope nearly two football fields long and over 100 feet high would appear disconcertingly precarious.

Visual solidity has also been introduced at the ground level, but with less happy results. Five of the six major bays fronting the plaza are blank concrete to a height of 15 feet. When combined with the width of seven solid service bays, the result is a first story that is nearly nine-tenths windowless masonry, almost three times as tall as an average person. Project designer Theodore Musho, AIA (Theodore Amberg was project architect) gives two reasons for this decision: to give the huge building a

proper visual base and to emphasize the single glass entrance bay near its eastern end. But these two benefits are gained at the cost of walling off the building from its park, and creating an eye-level "streetscape" inhospitable to human presence for nearly 500 feet of its length. Here the otherwise impressive gestures of formal monumentalism become inadvertently brutal: There is no ground level transition of scale receptive to human presence. In this single instance the building fails as a civic symbol, for it seems designed to overwhelm its constituency rather than show its deference.

After having run that long gauntlet of unrelieved concrete, however, the visitor is rewarded by an airy three-story lobby, and is drawn left and upward by a flight of escalators. At the top of this moving staircase, a sloped interior court soars 100 feet to a vaulted clerestory roof. Although this space is monumentally scaled and abstractly detailed, it is nevertheless pleasantly surprising and satisfying. It is ringed by four floors of side balconies, of which three levels step back as a reversed echo of the sloping front. The roof vaults and their supporting 14-foot-deep beams further modulate this "grand court," and polished brass handrails and flower-filled planters within the balcony fronts provide hints of a personal scale within the collective one.

The main floor of this court corresponds to a Renaissance *piano nobile*, and is covered by a burnt orange carpet that provides a major counterfoil to the exposed buff-colored concrete structure. This essentially open floor houses many of the build-



From the plaza, one enters the three-story lobby (right) and proceeds by escalator to the 100-foot-high central court (above right in photo taken during opening ceremonies). Lit partially by clerestory windows, the court is glazed on one of its four sides, open to balconies on three. The main floor (above left) is where many of the public counters are located.



Photos by Robert Lautman

Traffic on the balconies enlivens the huge court.

ing's public counters. Above it, one long side of the court rises vertically and is glazed flush with the structural frame, but tiers of open corridors line the other three sides and their traffic animates the space throughout its height. The topside quarter-barrels introduce subdued northern light, and give rise to the thought that there is a neat symmetry of architectural monuments in the twin cities of north Texas: Fort Worth also has an exceptional concrete-vaulted public building of recent vintage, Louis Kahn's Kimbell Art Museum.

Beyond this main space, the city hall is perforce a setting for the slow repetitive processes of bureaucracy, and the intermittently more dramatic actions of elective democracy. Both of these functions are housed in a half-dozen bays 64 feet, 4 inches wide, each representing 14 modules of 4 feet, 8 inches. These latter units also govern the dimensions of service cores, window mullions, full-height partitions and the ribbed grid of the exposed concrete ceilings. Three modules determine the floor-to-floor height of 14 feet (clear heights are a nonmodular 10 feet), and the slopes and steps of the exterior walls and interior balconies all conform to a ratio of two horizontal modules by three vertical ones.

Within this consistently rational structural framework, there is a freer office landscape of low partitions which embody all the drawbacks and advantages inherent in such a system. Perhaps significantly, elected representatives occupy closed offices that permit privacy. About half the building's occupants have stunning panoramic views of the downtown skyline with the park and plaza as a foreground, and this vista is also prominent from the employee cafeteria and the lobby of the city council chamber. The chamber itself is a high-ceilinged rectangular space whose sharply sloped floor provides 250 seats facing a horseshoe-shaped council desk and a huge white overhead band containing the city seal and two 19-foot-square projection screens. These screens dominate the space inordinately, and to know their purpose is to understand something about Dallas itself. Most city council debates, it seems, involve requests for zoning changes, and the screens are needed for the visual presentations made by both sides in such contested issues.

Realizing this, the significance of the city hall and park becomes stronger, and one can only admire an architectural team that was able to persist for 11 years to give this laissez-faire metropolis such an exceptional public monument, and one can only be glad that the city itself saw fit to set an example so triumphantly above the prevailing norm. □



Honor Awards/1978

By Mary E. Osman

Two juries selected 15 projects of "exceptional excellence in architecture" as winners of AIA's 1978 honor awards. The winning designs vary from Louis Kahn's Yale Center to a modest community services center in a low-income area to the sophisticated rehabilitation of a six-acre landmark marketplace in a large, preservation-conscious city. The winners underscore a respect for past architectural achievements—this is the first time since AIA started three years ago to distinguish projects for rehabilitation, restoration or adaptive use that designs in this "extended use" category outnumber those to win awards in the "current use" category of recently built structures. For the second year, energy-conscious issues were very much in the minds of all jurors, reports Herbert E. Duncan Jr., FAIA, adviser to both juries on energy matters. "None of the winning projects appears to have been designed without a reasonable concern for energy considerations," he says, and at least one entry of "superior architectural design" did not receive an award because of its "disregard" of energy conservation.

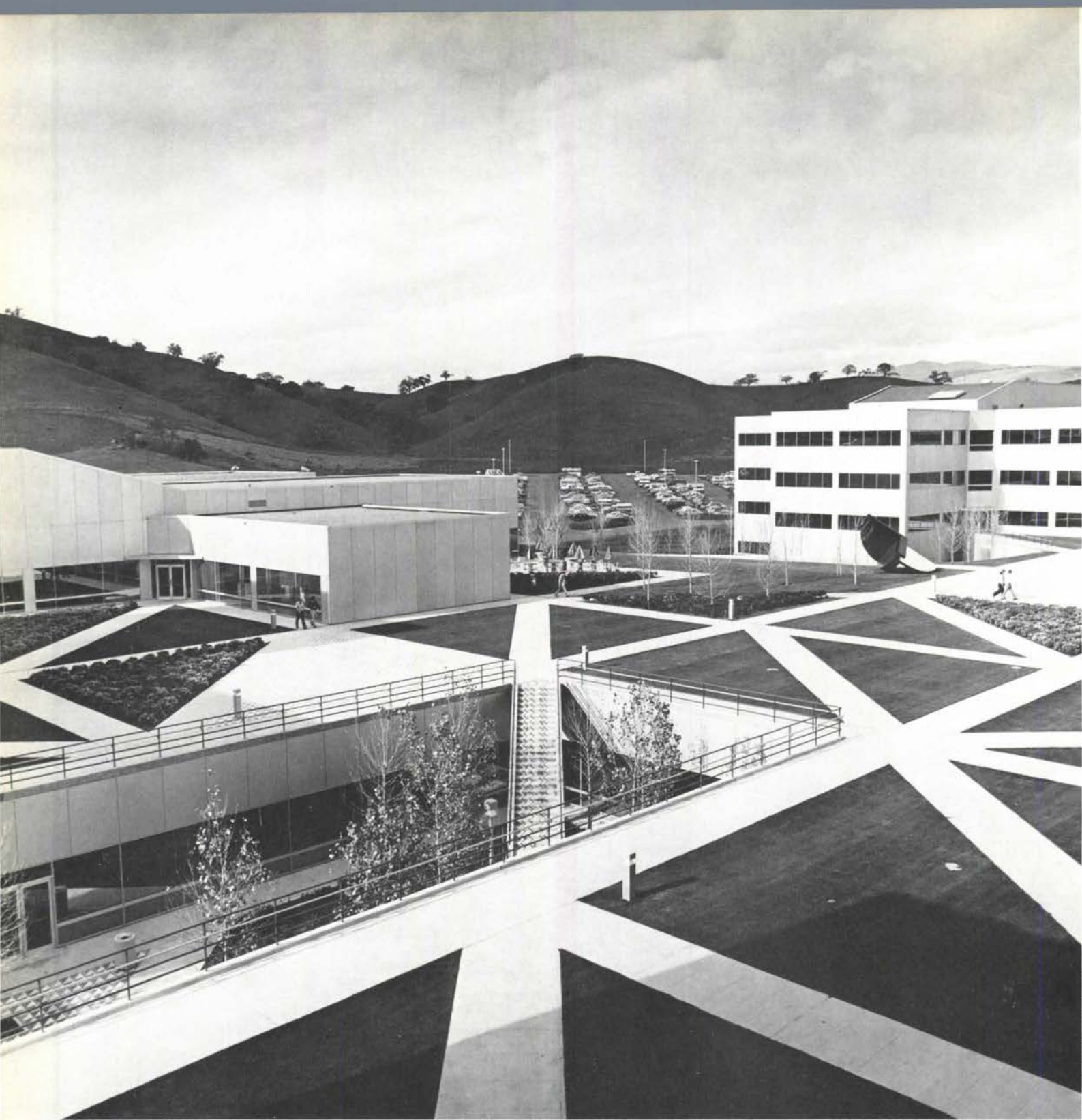
The jury for extended use, chaired by George M. Notter Jr., FAIA, said that foremost in its deliberations was "design excellence" rather than "preciseness of restoration." To achieve quality in adaptive use, the jury said, "commitment of the owner" must be united with the "dedication of the architect." Serving with Notter were Donn Emmons, FAIA; A. Quincy Jones Jr., FAIA; Charles W. Moore, FAIA; Terry Morton (National Trust for Historic Preservation), and student William Michael Comer.

The jury for contemporary use, chaired by William C. Muchow, FAIA, conceded that another jury at another time might very well select other than the seven projects that won recognition. This, the jury said, "substantiates the premise that architecture is an art" and that we are all "subjective in our evaluations of it." Among the foremost considerations were how well the architect satisfied the program requirements and how well the solutions responded to social, environmental and energy issues. Serving with Muchow were Fred Bassetti, FAIA; Joseph Esherick, FAIA; Patrick Quinn, AIA; William Warner, AIA, and student Robert M. McAnulty III.

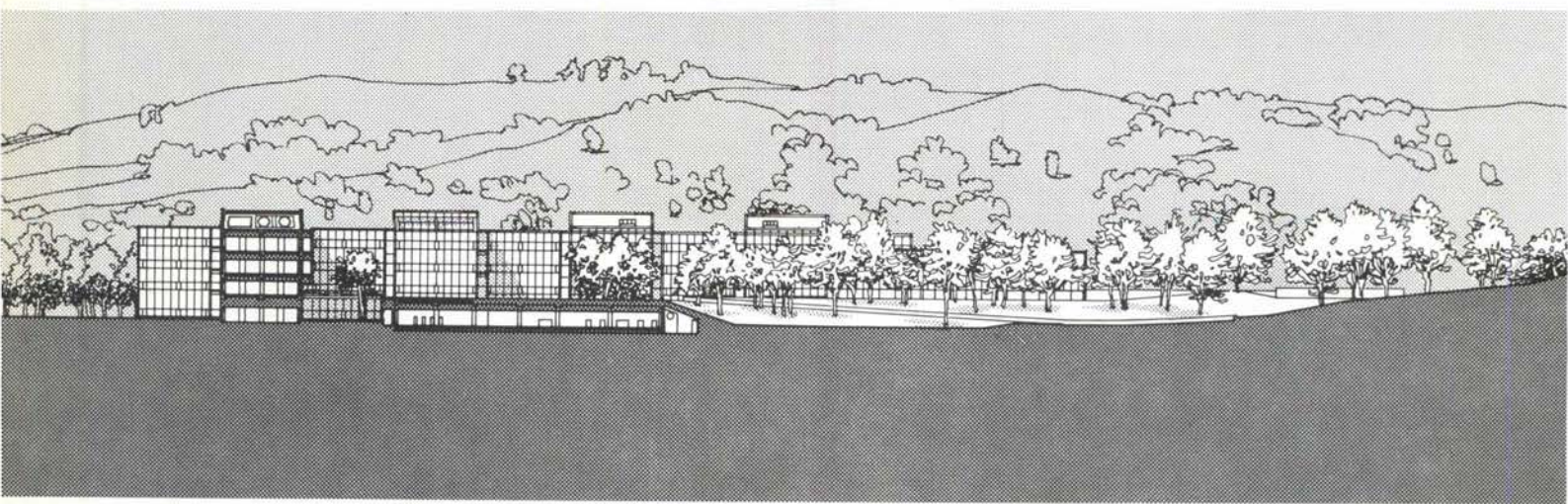
Right, the IBM Santa Teresa Laboratory (see following pages).

Joshua Freiwald





Photograph by Joshua Erickson Ltd.



Angular Buildings Around A Terrace That Is Also a Roof



One honor award juror found the configuration of the IBM Santa Teresa Laboratory, San Jose, Calif., an echo of its site—a plain surrounded by hills. The terrace that is the roof for one element of the complex, the computer center, reminded the juror of the plain and the surrounding nine colorful buildings of the hills.

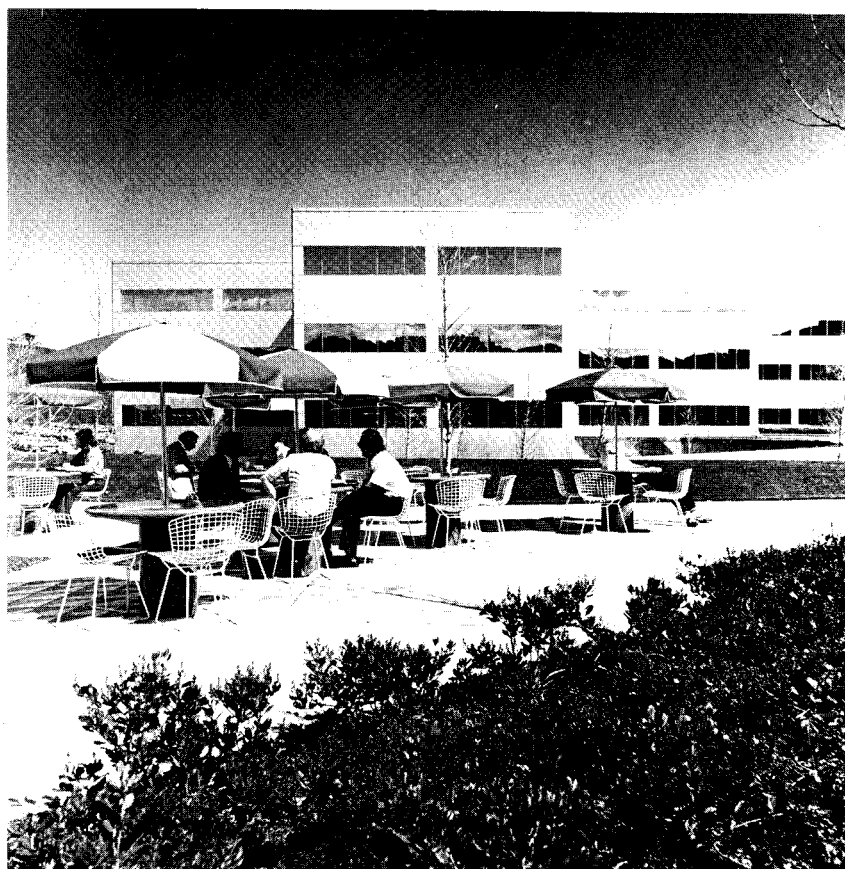
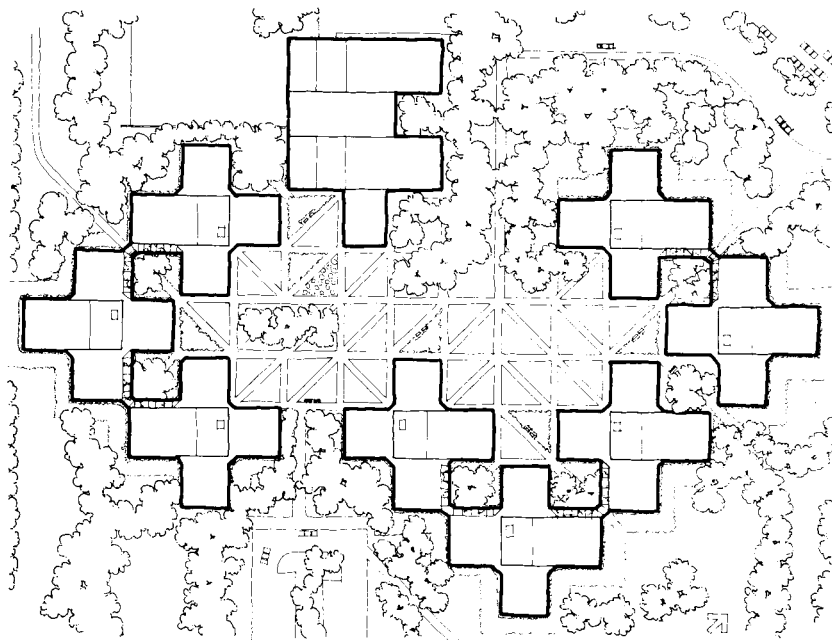
Designed by McCue Boone Tomsick (now MBT Associates), the campus-like facility consists of eight repetitive four-story structures and a two-story support and services center, all clustered tightly around a continuous sunken ground floor that contains the 45,000-square-foot computer center. Thus, the computer center itself is emphatically central and yet subtly withdrawn. Its roof terrace is used as a focal plaza and a pedestrian circulation area. The buildings are joined beneath the plaza and most of them are further linked by bridges at upper levels (see pages 118 and 119).

Preservation and incorporation of the agricultural site, say the architects, was a primary planning objective. This has been achieved in a variety of ways. Views toward the hills and the valley are afforded from the plaza, and the very clustering of the buildings provides for six courtyards which help make the complex one with nature. And architecturally, the cruciform shape of the buildings means that no office is more than 15 feet from a window.

In addition to the large computer center, the facility provides work spaces for 2,100 programmers and support staff. It has a library, classrooms, reproduction facilities and food and medical services. A requirement of the client was that the staff have an "optimal working environment" and that the programmers have private offices for the efficient fulfillment of their highly technical work. It was also requested that as many offices as possible be oriented to the outside. Privacy requirements and the necessity for special storage spaces led the architects to design a basic office unit 10 feet square and to fit it with custom-built furniture. Fifteen offices, a computer terminal room and a conference room form a "team module."

The modules are grouped as wings of a cruciform around the central core that contains support staff and personnel. The modules are organized into a "Tartan Grid" pattern which defines circulation systems and allows for continuous vistas to the outside.

Each building is color-coded throughout. On the exterior, the color-coding extends to the point where the wings of two structures join to form a courtyard. Thus, each courtyard has two colors for adornment and variety. The brilliant colors together with the varying configurations and the profuse use of artworks are a means of controlling scale. The jury commended the de-





Among design factors, energy and earthquakes.

sign for its "sensitivity to human scale and proportion," saying that the facility provides for human efficiency and comfort "with pleasure and excitement."

The complex also earned the praise of the jury for the way in which its "reflective and vividly colored surfaces magically blend the buildings into their natural surroundings." The designers, however, faced and solved an array of technical problems, not

the least of which was siting an energy-conscious facility in an earthquake-prone area. The steel frame is highly flexible to move as freely as possible under severe seismic conditions.

The exterior wall is a custom aluminum curtainwall. It incorporates flush-glazed reflecting glass and color-coated courtyard panels. The foundation is a spread footing system interconnected with grade beam. The structural system consists of welded steel frame and concrete slab on steel deck.

In addition to the solar reflective glass, the energy features in-



Photos by Joshua Freiwald

clude, say the architects, insulated walls and roof, variable hydronic systems and a ventilation system capable of delivering 100 percent outside air for "free" cooling. Heating of the entire facility is by heat reclaim chillers that use heat rejection from the computer airconditioning load. Individual switch light fixtures operate through the computer system for maximum efficiency. To the jury, the facility met both esthetic and functional requirements. The jury found in all this "a delicate balance of technical knowledge, artistic ability and imagination."

Barrier-free in all the customary ways, such as access at grade to the lobby and by ramp onto the plaza level, with elevators providing access at all levels, the facility also has equipment positioned for limited reach and uses Braille at the elevators.

Client: IBM General Products Division. Structural engineers: Forell/Elsesser Engineers, Inc. Mechanical and electrical engineers: Gayner Engineers. Landscape architect: The SWA Group. General contractor: Swinerton & Walberg. Completed in 1977.

Art Institute Expanded and Adorned with Sullivan Relics



An addition to the Art Institute of Chicago, designed by Skidmore, Owings & Merrill, the jury said, responded to two almost separate problems. The first problem was to provide necessary new facilities for a major museum in a large city's downtown; the second was to make it a "significant work of urban sculpture." It was the second accomplishment which the jury recognized as being "particularly well conceived."

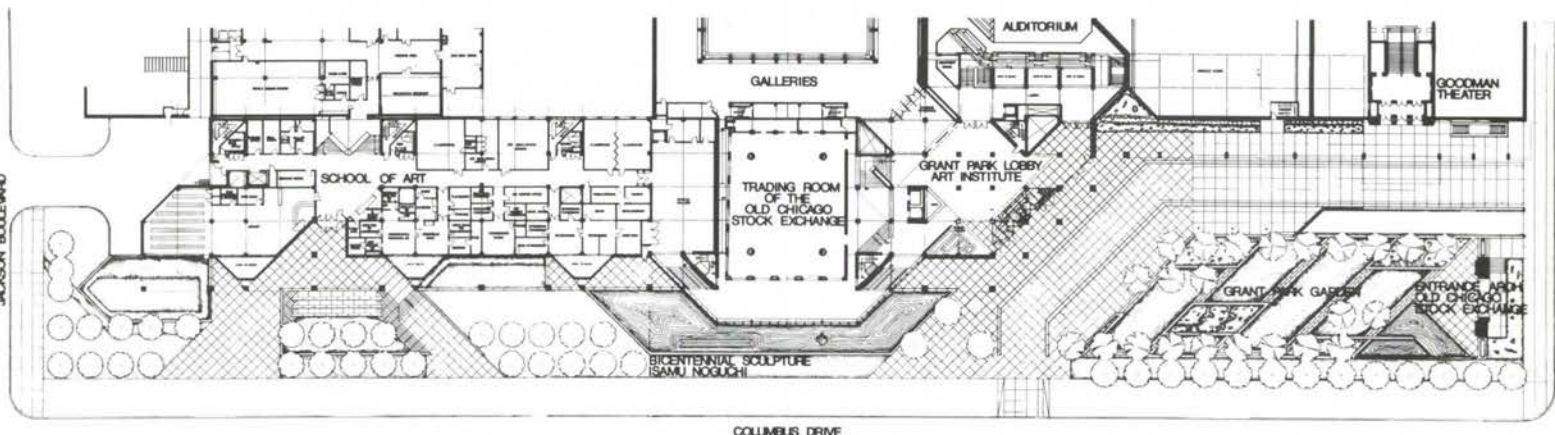
The jury cited among the demanding challenges facing the architects such matters as a site facing a downtown park off a heavily traveled street, the relationship of large new spaces to an existing structure with both serving differing requirements and the inclusion of significant elements from Adler & Sullivan's Old Stock Exchange Building which had been demolished. The total achievement, said the jury, was handled "sensitively and with

resolution." The project "is superbly sophisticated and knowing mainstream architecture of character—a work of art in itself," the jury said.

In addition to the consolidation of food services, separate facilities for serving restaurants and art collection, a long-range plan for future galleries and a sculpture court over railroad track air rights, the program also included: new facilities for the school of art (110,000 square feet); a 1,000-seat lecture hall (22,000 square feet); galleries (25,000 square feet); a new entry to the existing structure and the consolidation of facilities for members (10,000 square feet); a garden where the entry arch of the Stock Exchange structure is reconstructed, and reconstruction of the trading room from the Old Stock Exchange placed in the midst of galleries that exhibit work by the Chicago

Howard Kaplan





Hedrich Blessing

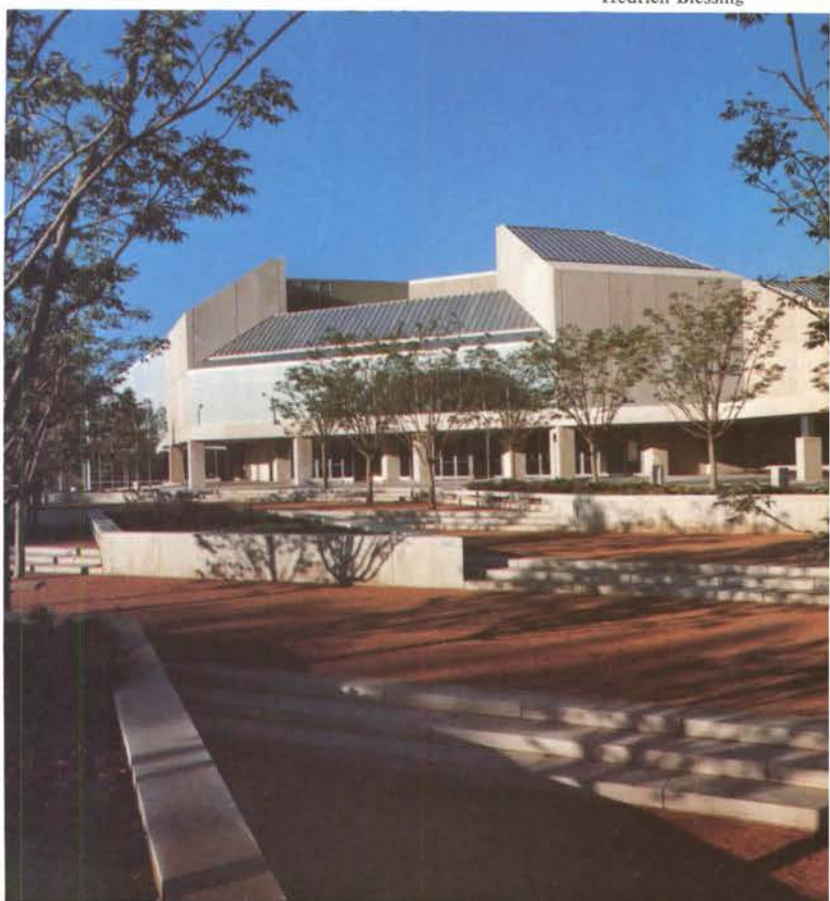
school of architecture. Restoration of the trading room was done by Chicago architects John Vinci & Lawrence Kenny, a firm which has long been active in preservation.

Many design considerations were dictated by strict legal limitations on the construction of a building across from a city park, say the architects. The problem was solved by an esthetic "second front" that relates to the park and is compatible in materials with the existing structure but is at the same time contemporary in design, mass and scale. The pediment of the Art Institute's 1893 structure was made a fundamental part of the design.

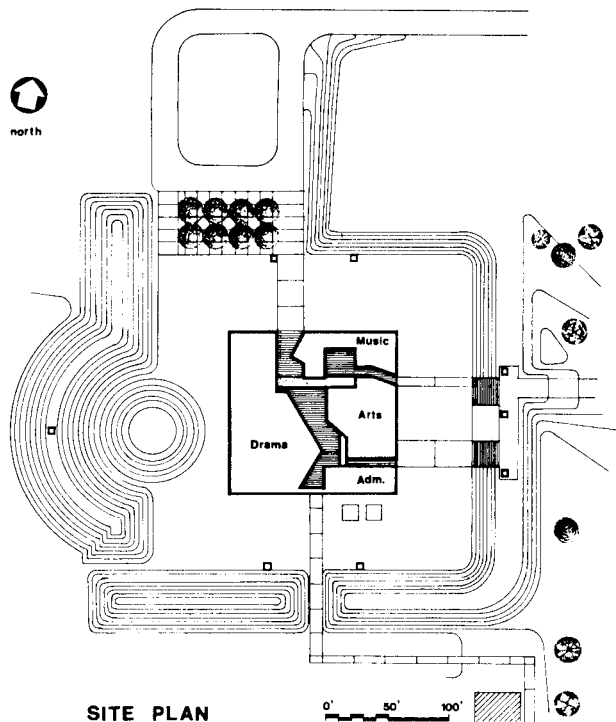
The structural system consists of reinforced concrete slab, beams, columns and retaining walls; steel beams, metal deck, and lightweight concrete fill for the roof, and caisson foundation. The mechanical systems are made up of six decentralized air handling units to serve specific functions of individual areas. Chilled water and high-pressure steam generated in the existing main central plants are used. The air is humidified by low-pressure steam in areas where art is exhibited.

There is access by the handicapped to both new and old structures. The auditorium has a ramped center aisle with spaces for wheelchairs. Knurled hardware is placed at hazardous locations, and telephone equipment is designed for use by the partially deaf and is at heights accessible to wheelchairs.

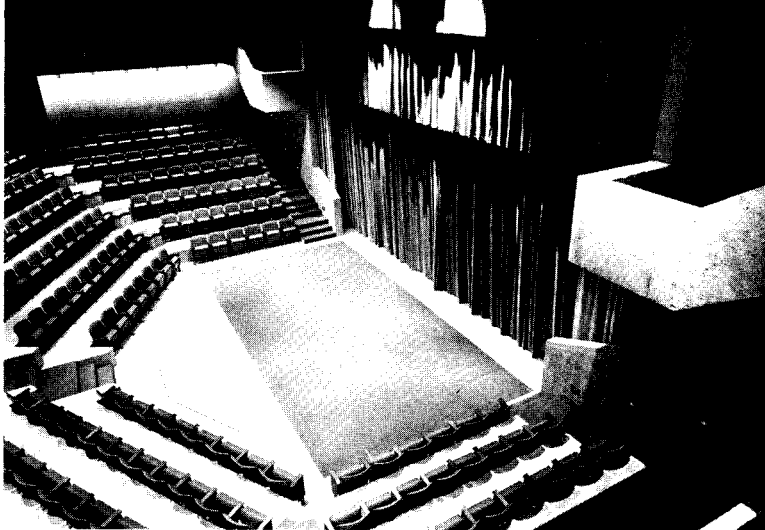
Client: Art Institute of Chicago. Structural, mechanical and electrical engineers: Skidmore, Owings & Merrill. Landscape architects: Skidmore, Owings & Merrill. General contractor: Morse/Disel, Inc. Completed in 1977.







SITE PLAN



Concrete Masses Cut Through by Pedestrian 'Streets'

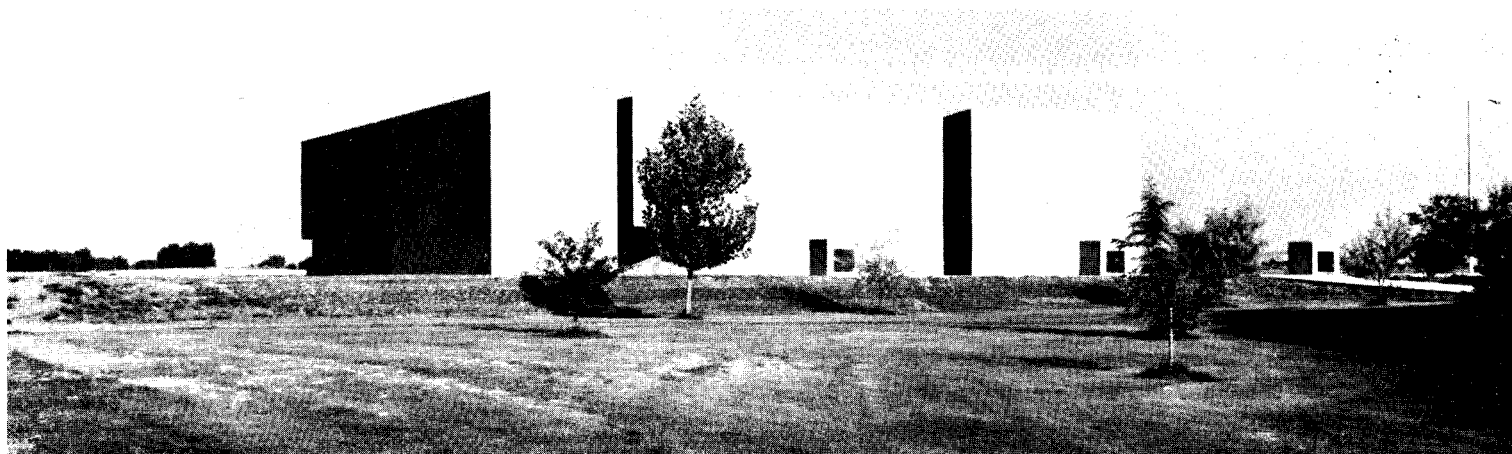


Design for its own sake, said the jury, was not sought in the selection of honor award winners, but the art-music-drama complex at Columbia Basin Community College, Pasco, Wash., was esteemed "for its sense of integrity, however different its appearance from the norm or the fashion of the day." Designed by Brooks Hensley Creager, the structure is an "outside-in building," the jury said. It presents itself as a "small walled ancient Middle East village in sharp contrast to the desert." Its four basic functional parts are connected by bridges, forming covered walkways below.

A problem for the designers was how to respond to the semi-desert climate and to the flat and barren surrounding spaces. The solution was the design of a self-contained, virtually windowless concrete box with internal interconnecting hallways or "streets." Views of the landscape can be seen only through the three canyon-like gateways through the courtyard. The flat exterior walls are enhanced at night when used for slide and movie projections.

"Massive concrete walls act as energy flywheels since nights are cool and days are often hot, while the interior 'streets,' like a Moroccan village, give protection from heat and glare of the sun," the jury said. The building accommodates faculty offices, workshops, display and support areas for three college departments as well as a thrust stage theater. The finish on most interior sides of exterior walls is sandblasted insulating concrete, where durability and appearance are the controlling factors; other partitions are steel studs with painted gypsum board.

Client: State of Washington. Structural engineers: Esvelt & Saxton. Mechanical and electrical engineers: Marque Clerc Riley, Inc. Landscape architect: L. Keith Hellstrom. General contractor: Hazen & Clark, Inc. Completed in 1971.





Photos by John Zemanek, AIA

Village-like Assemblage of Community Service Buildings



Successful both architecturally and socially, the Three "H" Services Center, Houston, is simple and direct—"almost Oriental in its understatement," said the jury. The 10 small buildings that make up the complex "have the careful casualness of a small tight village." The center resulted from community action taken when a rural slum area was annexed by a fast-growing city, leaving the families stranded without community services. John Zemanek, AIA, an instructor at a nearby university, and his architectural students took on the problem as a class project—and solved it.

A citizens' committee, as clients, expressed what was needed; a drive was launched to raise money; a site was bought, and construction documents produced by Zemanek and his students.

The units are grouped around a covered deck and a raised court at one end of a five-acre site. Nothing is superfluous, and the tower—in fact a symbolic entrance—illuminates the units

and the parking facilities. Concrete piers, with floors at three feet above grade, give protection from rising waters that flood the area periodically. There is an "unusual marriage of economic simplicity and esthetic quality," said the jury. Only the doors are painted. Asbestos side sheeting reduces insurance and maintenance costs; interiors are of unpainted particle board. The complex is "rich in spatial and formal complexity without resorting to gimmickry or stylistic contrivance," the jury said. Built at a cost of \$18 per square foot, the complex "makes no great claims to polemical or esthetic innovation, but stands simply as architecture, devoid of pretense."

Client: Bordersville Neighborhood Council. Student associate: Larry Koehler. Structural engineer: E. George Cunningham. Mechanical and electrical engineer: John Zemanek, AIA. Landscape architect: John Zemanek, AIA. General contractor: Richard H. Sikes, Inc. Completed in 1975.

A Modest Country House

That Opens to the Outdoors

Sited on 34 acres in the hills of northern California, this small house (1,200 square feet) is unpretentious, seemingly a part of the land. Virtually everything—even much of the furniture—was designed and built by Chester Bowles Jr., AIA, with the aid of his family. The house was designed as a vacation home for a family, but during the six years of its construction, the children grew up and moved away. They come back periodically and unpredictably, however, and the house, which usually accommodates only two or three people, expands to become home for ten or more, and is used year-round.

"Detailing is simple, straightforward and inventive," the jury said. "The way in which the entire building can be opened up and all of the glazed walls slide back amounts to converting the house to a garden pavilion." The rooms change character "with function and exposure, resulting in an intriguing array of spaces of . . . great richness and interest."

Floor joists overhang the foundation crawl space by three feet or so. There are 3,000 feet of roof overhang for shade; the overhang is three to nine feet over windows, depending on the exposure, and zero at solid walls. Heating is by fireplace; cooking is performed on a wood stove. A homemade solar hot water heater furnishes about 50 percent of hot water needs. Natural ventilation provides effective cooling in summer, even when outside temperature reaches 95 degrees. Although the architect/owner is just now beginning to measure energy consumption, he says that costs appear to be less than \$200 yearly.

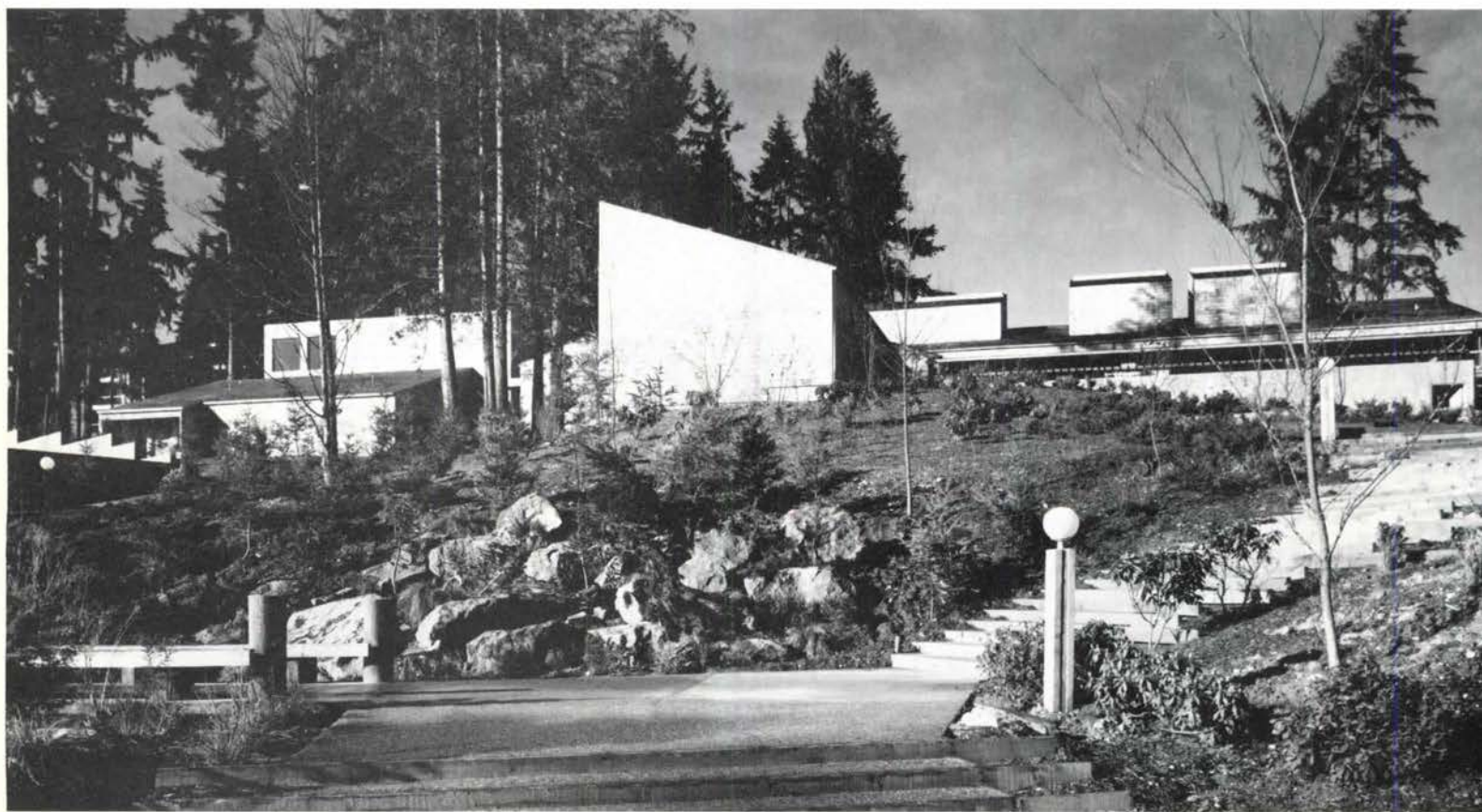
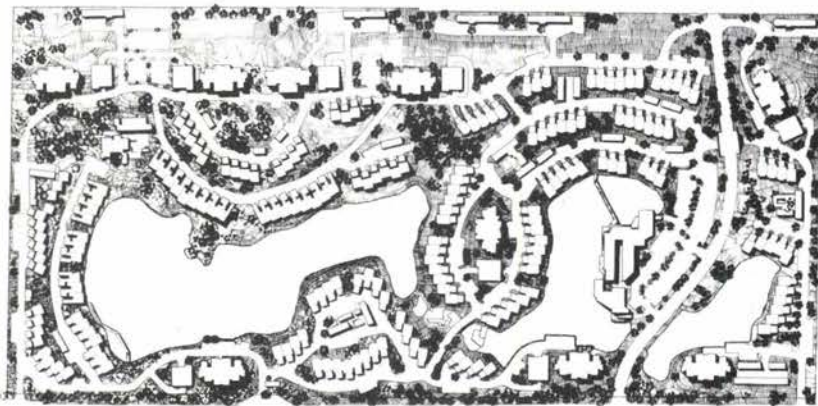
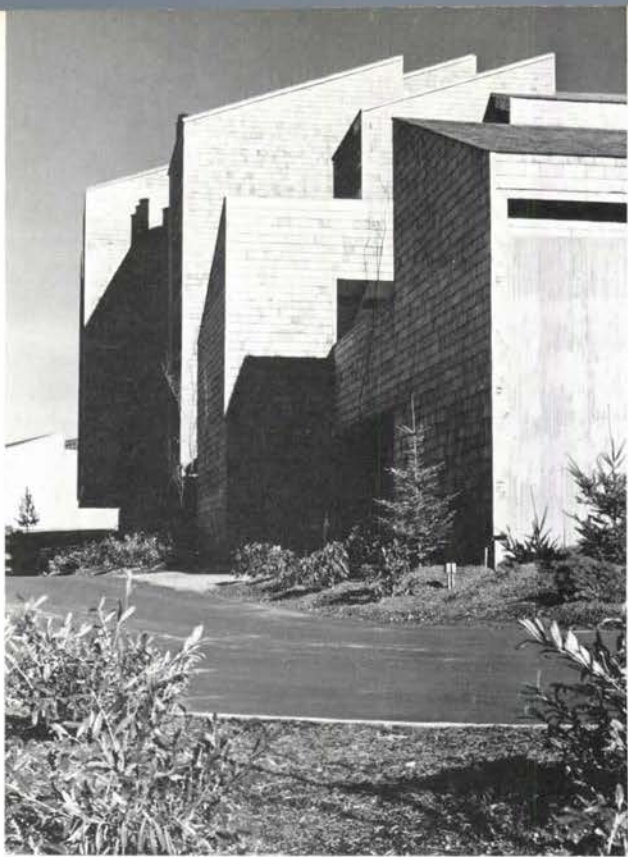
Client: Mary and Chester Bowles Jr. General contractor: Chester Bowles and family. Completed in 1977.



Chris Dawson



Chester Bowles Jr., AIA





Lakes Created as Centerpieces of an Apartment Complex

Sited on 80 rolling, tree-filled acres on what was once a hog farm in a rural area near Redmond, Wash., the Sixty-01 Apartments provide 770 dwelling units in two-, three- and four-story structures. Part of the site—more than 15 acres of peat bogs—was once considered unbuildable land. The architects (George Bissell, FAIA, and Frank August & Associates) won the jury's praise for the skillful integration of buildings and site and for the creation of a "sensitive balance between structure and nature."

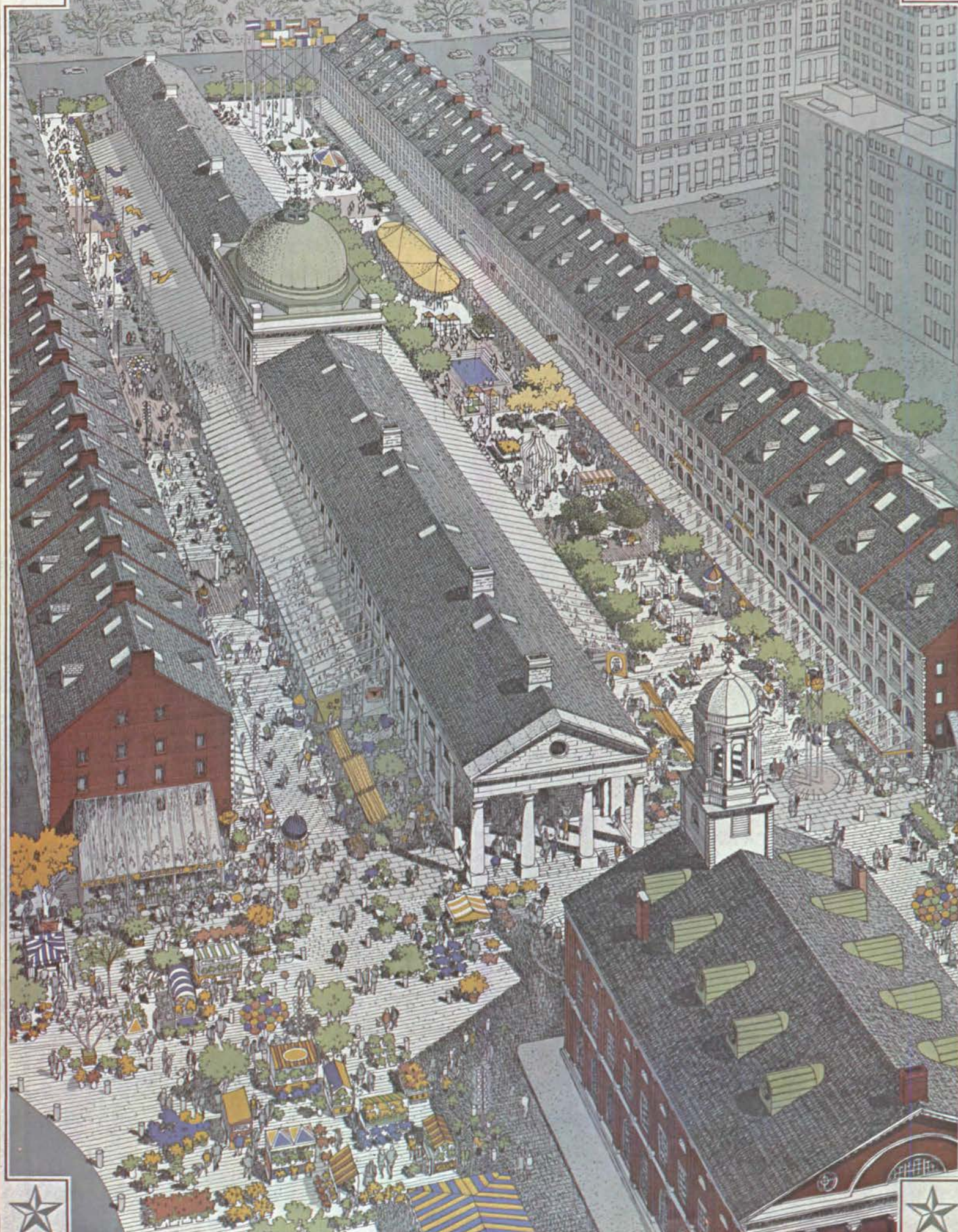
The designers transformed the bogs into lakes, making them the centerpiece of the development. The lakes serve for recreation and are used also for such purposes as drainage and irrigation water storage. In addition to the lakes, the development boasts of such amenities as a spa, indoor-outdoor swimming pools, tennis courts and stables. Well-designed walks, benches, retaining walls, bridges and fences make outdoor spaces pleasant and comfortable.

Economically, it was indicated that the desired density be 10

units per acre. To save as many trees as possible and to minimize earth moving, the architects designed the structures to fit the varying degrees of the site's rolling slope. Units, which curve with the shoreline and terrain to minimize site lines, are joined in offset patterns, allowing clusters to be formed between and around the trees. The warm, brown shingled roofs serve to unify the complex.

Construction is wood frame with cedar shingles and boarding on the exteriors. Interiors are cedar and painted gypsum board. Clerestory windows and skylights are used as sources of light. Because of the climate, cooling is not required. Heating is by electric baseboard strips, which was considered conventional at the time the development was built.

Client: Howard Connor. Structural engineer: Robert Lawson. Mechanical and electrical engineers: Bissell/August Associates. Landscape architect: John Lantzus. General contractor: North-coast Construction. Completed in 1971.



An Old Marketplace Given New Life in Boston



Faneuil Hall was built in 1742 (John Lambert Smibert), rebuilt after a fire in 1763 and enlarged to three times its original size in 1806 (Charles Bulfinch). Hence, the hall may seem to look down with the condescension of old age upon the adjacent Quincy Markets, opened in 1826 (Alexander Parris). Someone has said that behind every door in Boston there is a preservationist, but the Faneuil Hall Marketplace buildings were condemned. Located on a six-acre site at the city's heart and near the new city hall complex, the three block-long buildings were a natural for restoration. A proposal submitted by Benjamin Thompson & Associates was selected as the most appropriate scheme among several to rescue the landmark area, turn it into an economically viable complex of restaurants, stores, flower and food markets and offices and reinforce the vitality of the downtown.

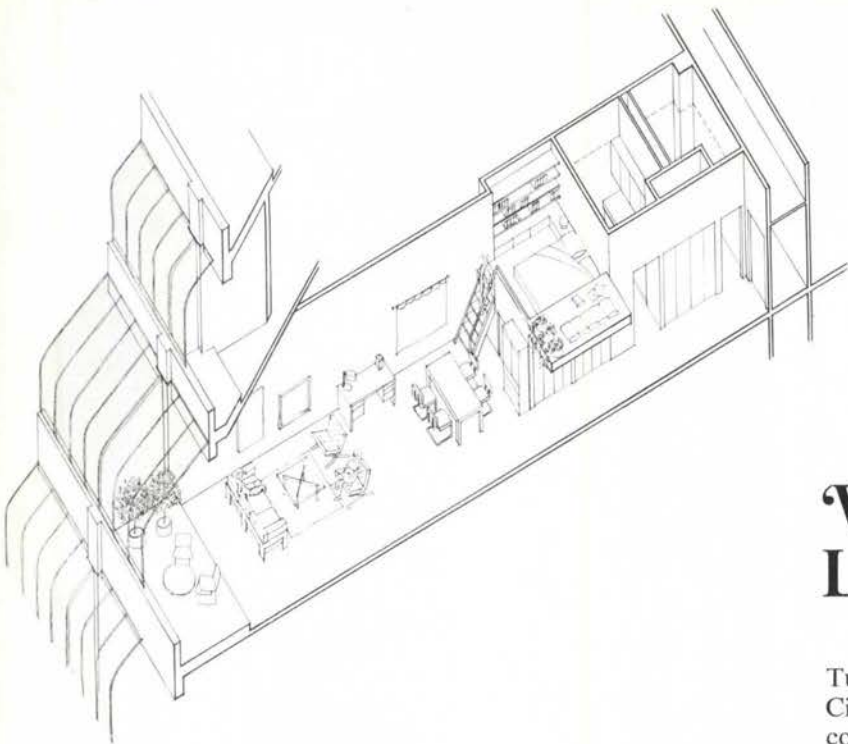
The jury said that the project's distinction "lies in its respect for the original fabric that allows the sense of the original buildings to come through with real dignity and power." The complex reflects, the jury said, "the excitement of the marketplace as a people place, consolidated by excellent graphics and expanded by the lateral transparency of the glass sheds." The "streets" between the three long buildings have been covered with glass canopies, creating virtually year-round outdoor places of enjoyment. A park runs the length of the southern portion of the market building, and custom-designed street furniture and lighting invite people to linger. Restoration is in three phases, scheduled for final completion in August. Once again, the marketplace is a colorful center, "out of the past into the present and the evolving future."



Photos by Steve Rosenthal

Client: The Rouse Co. Members of the BTA team: Benjamin Thompson, FAIA, and Thomas Green, AIA (principals); Bruno D'Agostino and Jane McM. Thompson (associates); J. Marcus Rector, AIA (project architect). Landscape, graphic and interior design: Benjamin Thompson & Associates, Inc. Structural engineer: Zaldastani Associates. Electrical engineers: Verne G. Norman Associates, Inc.; William Konig Electric Co. Mechanical engineers: J. C. Higgins Co. General contractor: George H. B. Macomber. Completed in 1976 (first phase) and 1977 (second phase).





'Wedding Cake' Factory Lofts Made into Apartments

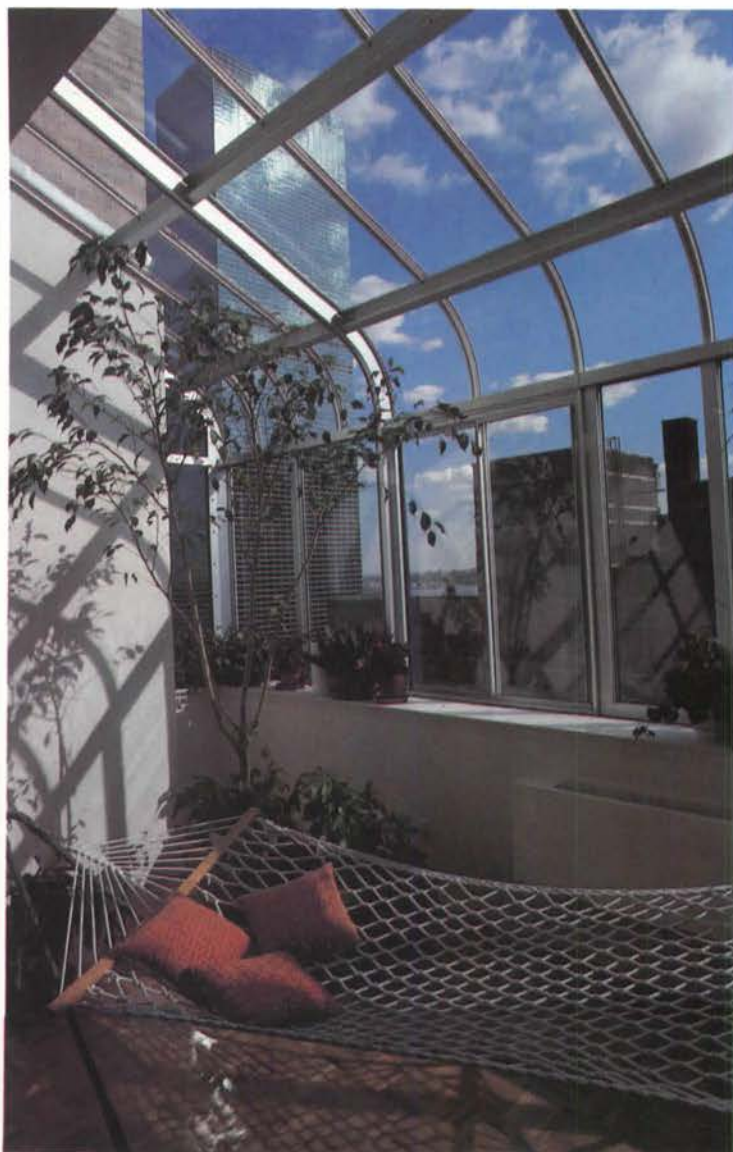


Turtle Bay Towers was the first major project under New York City's tax abatement program allowing tax incentives for the conversion of commercial structures to residential use. Bernard Rothzeit & Partners took on the challenge of converting a damaged 24-story factory loft building into 342 luxury rental units. The problem was compounded by having to deal effectively with a 200-foot-deep, through-the-block mass while meeting the legal requirements for light and air exposure. Moreover, a gas explosion in 1974 had torn off one side of the structure, completely destroying the passenger elevator core. The renovation had to be accomplished within the economic constraints of the owner/developer and had to meet the city's stringent building code and zoning law.

The architects capitalized on the old building's high ceilings, large windows, unusual spaces and "wedding cake" design. The 20 different setback variations and the organization of apartment layouts take full advantage of urban and river views. The jury commended the project's "spatial ingenuity" in creating "a set of exciting and highly habitable places while dealing with problems that few people have solved credibly." New aluminum and glass greenhouses were added at the setbacks to extend the apartments to the terrace parapet line. Existing freight elevators were converted to passenger use, and glass-enclosed planting areas at the rear of the cab beautify even this space. An existing multilevel loading dock was redesigned as the 100-foot-long lobby and a new ramp added to provide access to elevators and each floor.

The old structure had a steel frame with reinforced concrete slab and masonry perimeter walls. New courts were built to match existing finishes. A 24-story steel column and spandrels were added to form angled walls and to carry the steel remaining after the removal of the damaged elevator core. Insulating glass was set in new aluminum window frames, replacing the existing steel sash and single pane units. Insulation was added to the perimeter walls and the existing two-pipe steam system was overhauled for efficiency. Further energy savings were effected by the installation of a heat transfer coil between the kitchen exhaust system and the 100 percent fresh air corridor supply to extract heat from the exhaust and supply the corridors with recaptured heat. The architects estimate that this alone saves \$6,562 annually in oil.

Client: Rockrose Development Corporation. Structural engineers: Harwood & Gould. Mechanical and electrical engineers: George Langer. General contractor: Rockrose Construction Corporation. Completed in 1977.



Photos by William Rothschild





Expansion Through Replication of Part of a House

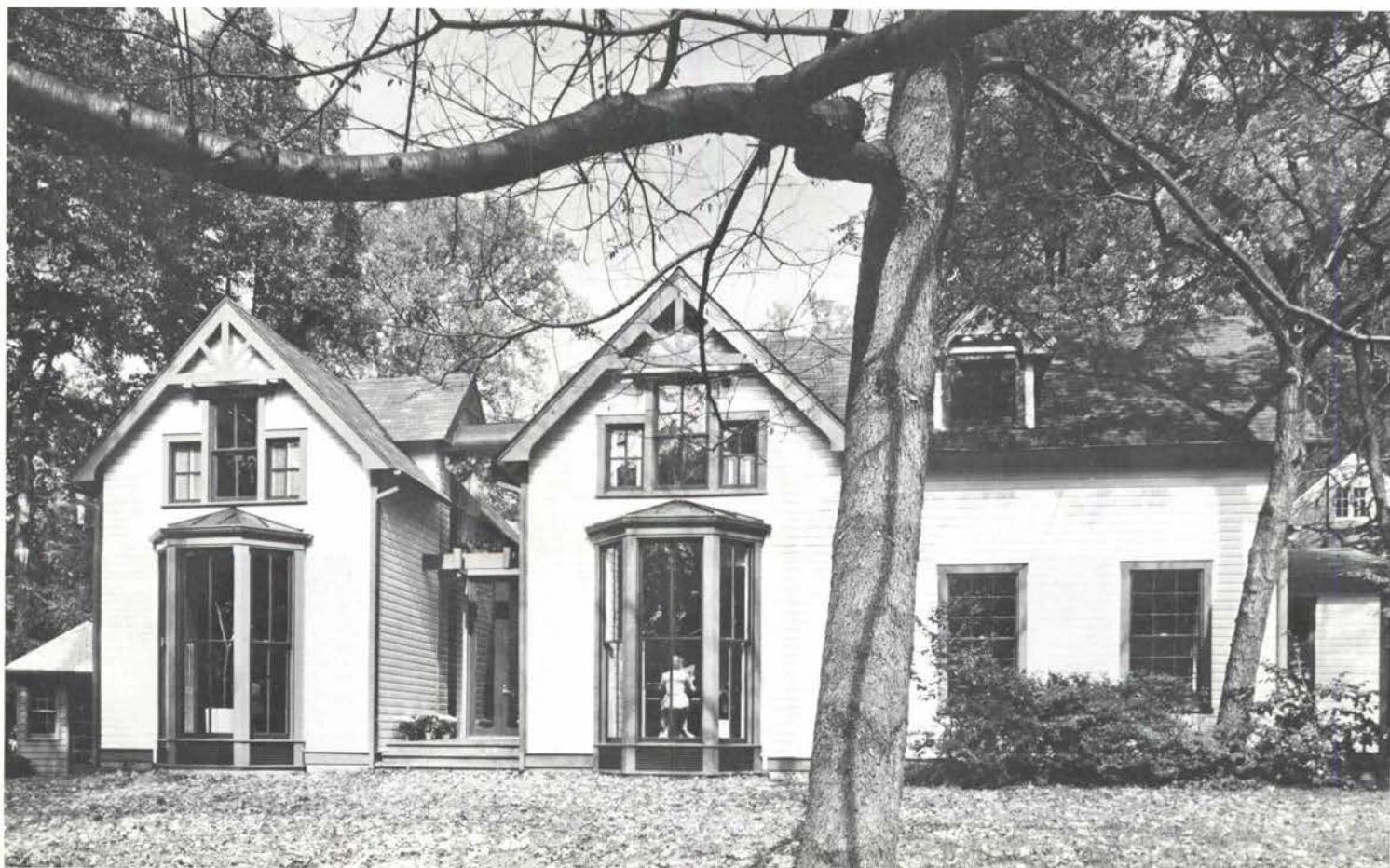


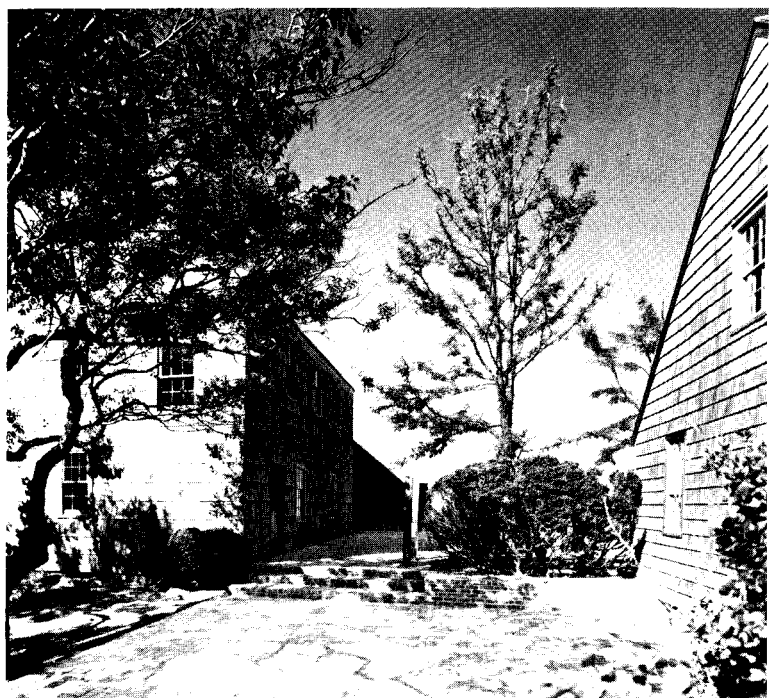
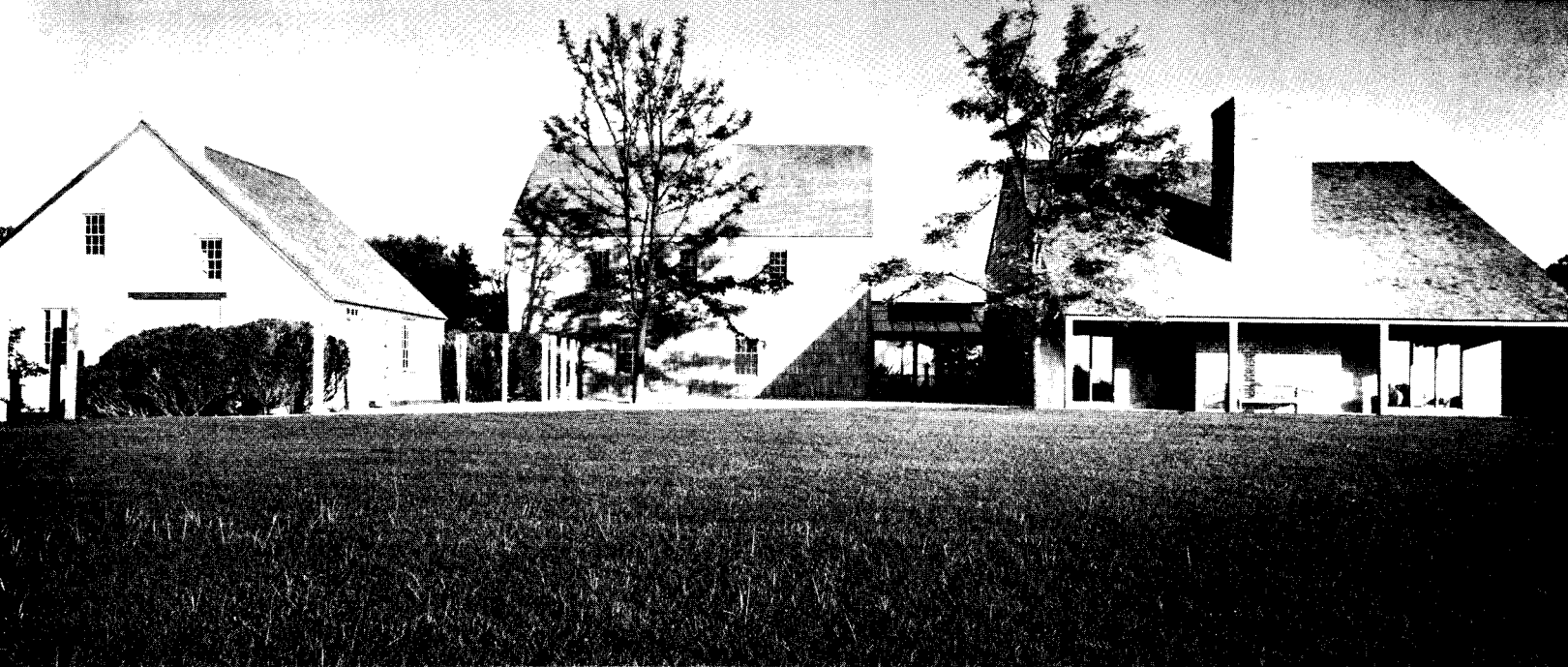
Designed by an unknown architect and built in 1871, the Elliott house in Chevy Chase, Md., was once an outbuilding for a grander structure, similar in Gothic revival style, that was destroyed in the wake of a rural area's becoming a suburb. The original character of the cottage was changed over the years by periodic additions. When the present owners bought the house in 1975, Hugh Newell Jacobsen, FAIA, was asked to convert it into a home that would be functional in today's world and yet retain its existing charm.

A new front entry serves as the link that joins the old and the new. This link was a deliberate attempt to announce that this is a contemporary house where the original is appreciated but where the new is a reflection of modern life styles. In the words of the jury, the restoration was "beautifully done. Sensitive details originating from the existing house become part of the new design in a solution that is both simple and creative."

Bay windows, running from floor to ceiling on the inside, were added to the existing house and its addition, replacing the front door and helping evoke the spirit of another age. Architectural detailing and color used in small country houses of the 1800s were carefully researched. The bay windows are designed to take advantage of solar heat gain in winter when the trees are bare of leaves; in summer, the natural shading eases heat gain. All of the sash is double-glazed Thermopane, and the entire house is insulated with four-inch Fiberglas foil-enclosed batts.

Client: Mr. and Mrs. Robert Elliott. Structural engineers: Kraas & Mok. Landscape architect: Hugh Newell Jacobsen, FAIA. General contractor: Robert Elliott. Completed in 1976.





Photos by Bill Maris

Old Houses Moved into a New Grouping on a New Site

The owner of several 18th and early 19th century houses, sited on a major noisy traffic route in an old town on eastern Long Island, N.Y., moved them to a 40-acre beachfront site. The structures were reassembled and restored by Howard Barnstone, FAIA. Before the Houston firm was retained as prime architect, work had been done by William Chafee, AIA, of Denver and Morey & Hollenbeck of East Hampton, N.Y. The jury admired the "level of care" exhibited in the project, saying that "in detail after detail, the issues have been faced and thoughtfully dealt with."

At the new site, "whole" and "half" houses were placed in a series of complexes visually related to one another—a departure from their former soldier-like alignment. Three buildings form the main complex, overlooking farmland and ocean. A barn and house, connected by a greenhouse, form a single residence; a half house, with bedrooms and kitchen, is a place for guests. The house contains bedrooms, dining room, study and kitchen, and the barn is now the living room. Its original hand-hewn wood beams form beguiling geometric patterns. The kitchen—a distillation of elegant simplicity—took a year to plan and develop.

Some of the hand-hewn beams used in the restoration were found in old barns, bought just for the lumber. Special hand-cut shingles, milk paint and original hardware were used. The small mullioned windows of another era were kept but supplemented by several large glass windows open to the view. In a word, said the jury, the complex is "impeccable."

Project architect: Ted B. Gupton; project representative: Anthony Disunno. Historical consultant: Daniel M. C. Hopping. Landscape architect: Zion & Breen Associates. General contractor: M. Clarke Smith; Samuel Lester. Completed in 1976.



A Mansion Made into a Museum Without Disruption

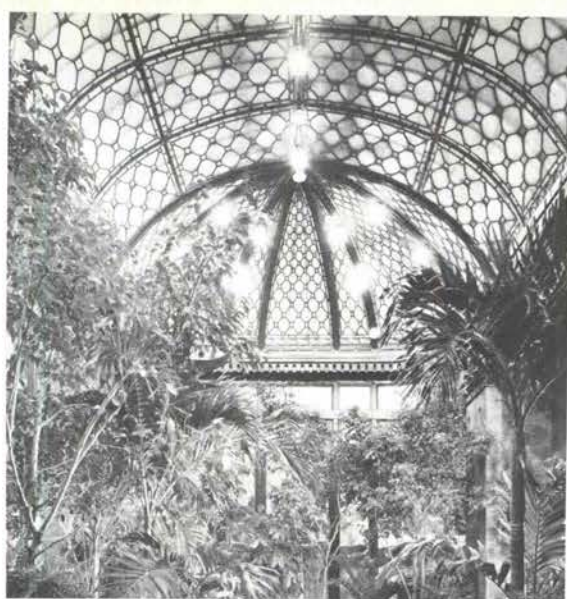


Restoration architects Hardy Holzman Pfeiffer Associates adapted a landmark mansion (Babb, Cook & Willard, 1901) to contemporary use as the Cooper-Hewitt Museum in New York City. "The project," said the jury, "identifies the creative energy involved in the conversion from one use to another while maintaining the context of the original fabric." The architects decided that the rooms should be deliberately evocative of the turn-of-the-century, but adaptation required changes in public circulation, new technical systems for fixed temperature and humidity control and some new construction. The polyglot character of the mansion and its high quality original finish materials were considered assets.

Collections are exhibited on the main and second floors, an array of small jumbled rooms having been converted into a long gallery on the second floor. A library is on the third floor and a study collection on the fourth. The architects ingeniously made use of what was there; for example, an elevator was built into existing cabinetry in space previously occupied by a pipe organ, and all mechanical equipment is integrated into existing building spaces such as coal chutes and plenums. A major portion of the original duct distribution layout was used to provide constant temperature and humidity control.

Each level of the building is organized around a large central hall. Special lighting was provided in the main hall which has become a public thoroughfare.

Client: Smithsonian Institution. Lighting consultant: Jules Fisher & Paul Marantz, Inc. Structural engineers: LeMessurier Associates. Mechanical and electrical engineers: Flack & Kurtz. General contractor: New-Again Restorations, Inc. Completed in 1976.



Photos by Norman McGrath



Photos by Richard Anderson

School Becomes Home For Repertory Theater Group

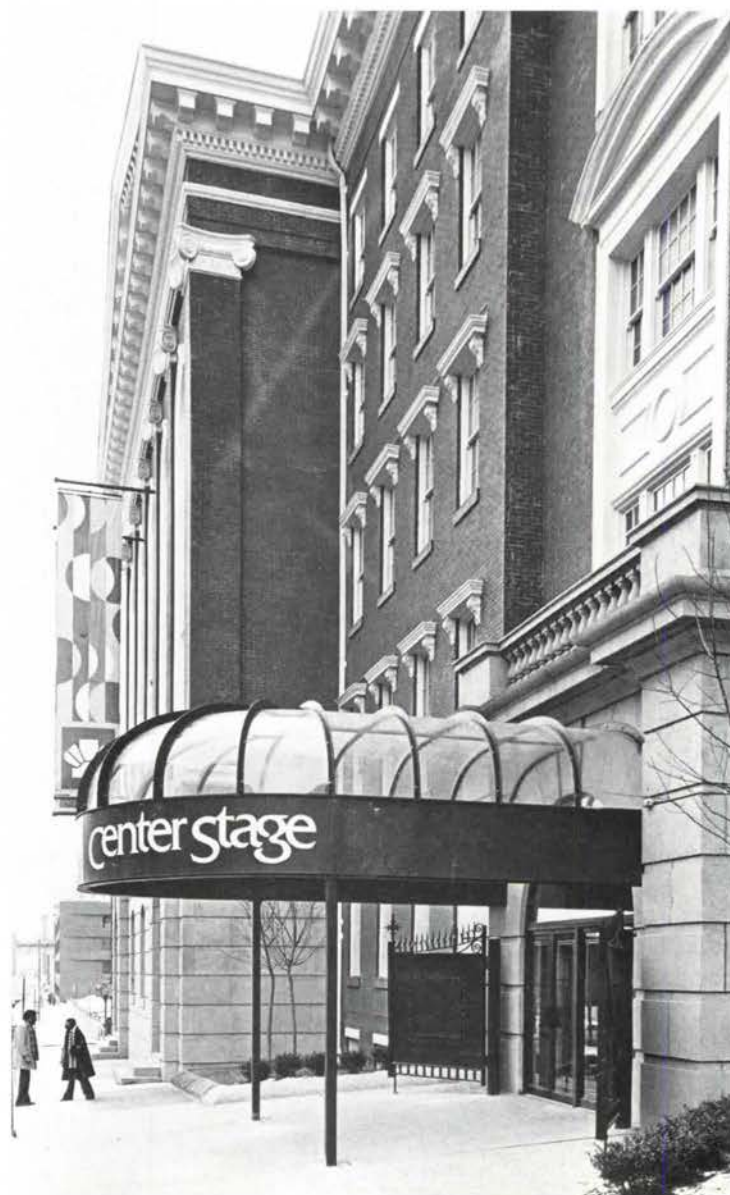


A disastrous fire in 1974 destroyed the structure that was home for Baltimore's repertory theater, Center Stage. A school, built in 1856, was donated by the Jesuits and gratefully accepted. Its location, near the city's other cultural facilities, is ideal. After 11 months of construction, the school, converted by James R. Grieves Associates, Inc., became the theater's new home. The jury called the conversion a "superb example" of an architect's creativity in establishing a "successful new use" for what was a nonfunctioning building.

During the first phase of construction, 45,000 square feet of the structure's 90,000 square feet have been converted into a 500-seat thrust stage theater with supporting facilities. The restoration architects removed the building's south section and installed three 11-foot-deep steel trusses from which a steel catwalk was hung to form the ceiling over the theater below. Spaces between the trusses form a third floor for supporting facilities. The top of the truss, covered with concrete plank, creates a floor for a future 300-seat end stage theater. And a courtyard will someday be an outdoor theater.

The old kitchen was made into a contemporary cafe. Lobbies, linking to proposed future classrooms, restaurant and offices, are sited in the building's center section. A concrete slab forms the step risers and platforms for the orchestra level and traps. The 150-seat balcony is formed of steel framing and cast-in-place concrete slabs. Lighting and sound systems are controlled from a booth behind the theater balcony.

Client: Center Stage Board of Directors. Theater consultant: Roger Morgan Studios, Inc. Structural engineers: Skarda & Rickert. Mechanical and electrical engineers: Burdette, Koehler, Murphy. Landscape architect: Valley Landscape, Inc. General contractor: Morrow Brothers, Inc. Completed in 1975.



Two Buildings United by Bridging and Glazing an Alley



Architects Boyd A. Blackner & Associates conceived an alley/bridge as a glass void to act as a foil and unite two more assertive historic structures in Salt Lake City. The Daynes Building, a four-story walk-up commercial landmark almost completely abandoned because it was thought too small to justify elevators and airconditioning, is now linked to the Kearns Building, a prime highrise office structure that had been maintained and improved with modern mechanical systems. The jury called the solution "imaginative and unique." It ties a landmark "to the support system of its neighbor through a link that functions like an umbilical cord."

There is a "symbiotic relationship" among the two buildings and the glass alley—each benefits the other. Kearns shelters Daynes from excessive airconditioning heat gain, and Daynes also benefits from Kearns' heating plant and elevators. The alley acts as a "seismic hinge" between the two buildings, significantly reducing the heat loss of both.

Client: Standard Buildings, Inc. Project architect: William D. Erickson, AIA; job captain: Craig L. Ames. Structural engineers: Newland Malmquist. Mechanical engineers: Heath Engineering Co. Electrical engineers: Ron Tyler. Landscape architect and interiors: Boyd A. Blackner & Associates. General contractor: Perce Young Construction Co. Completed in 1976.



Photos by Patrick King





Richardsonian Police Station Becomes a Gallery



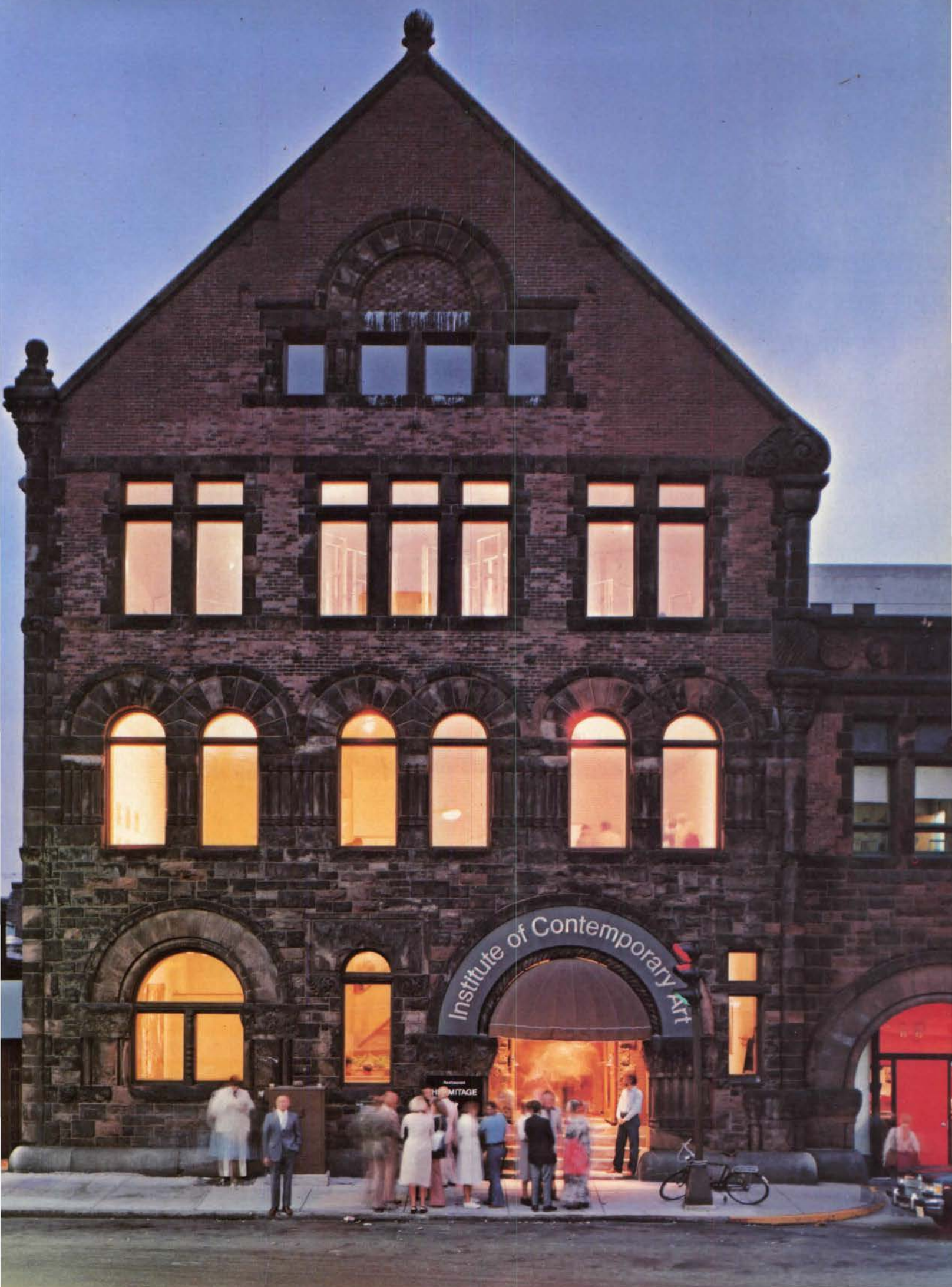
The Institute of Contemporary Art in Boston wanted a facility with a strong sense of identity and found it in a police station (Arthur H. Vinal, 1886). Designed in the vernacular of Henry Hobson Richardson, the building boasts exquisitely detailed stone and brick facades, slate roofs, copper trim and cast-iron columns—all of which Graham Gund Associates, Inc., the restoration architects, cared for but left as designed. The jury said that the project's uniqueness lies in the fact that "it has created a sense of place that is at once both personal and public."

Space that once was used for prison cells, drill halls and guardrooms is now devoted to art. An exhaustive structural analysis established certain design constraints when it was found that central bearing walls and a chimney could not be removed. Large openings were cut and reinforced with new tie rods. Existing column load points were used to restructure the new front space. Another constraint was a program requiring a restaurant of 2,000 square feet. To control circulation when either the restaurant or gallery is closed, the architects created a large two-and-a-half-story space, taking advantage of arched windows. The restaurant slides under the entry on two lower levels. Now, restaurant and gallery are amenities which buttress each other. In a mere 22,225 square feet, the architects were able to provide space for gallery and restaurant, storage room, elevator, auditorium, offices and loading docks.

Client: Institute of Contemporary Art. Designer: Graham Gund, AIA; coordinator: Dennis Rieske. Structural engineers: LeMessurier Associates. Mechanical engineers: Fitzmeyer & Tocci, Inc. Electrical engineers: Courville Associates Inc. General contractor: Faletra & Kumins, Inc. Completed in 1975. □



Photos by Steve Rosenthal



Progressive Architecture

ARCHITECTURAL RECORD

Some Images They Conveyed in 1977

In addition to AIA, the other major institution which gives recognition to individual works of architecture is the professional press: or that part of it which makes publication of new buildings its stock in trade, in this country the two magazines whose logos are shown above. Indeed, "publication" is, with "premiation," a term that has an honorific meaning peculiar to architecture.

Traditionally, architectural journals have been in part fashion magazines and, in part news magazines, the "news" being the buildings that they engage in a competitive rush to show as fresh out of the ground as possible. Lamentably, they have also been copybooks for the lazier and less generative members of the profession. In these roles they are, willy-nilly, standard setters. Thus any effort to examine the directions of American architectural design, such as this one, should include a look at some of the buildings which these journals recently have chosen to publish/premiate. We take such a look on the following pages, limiting it to American work and to the year 1977.

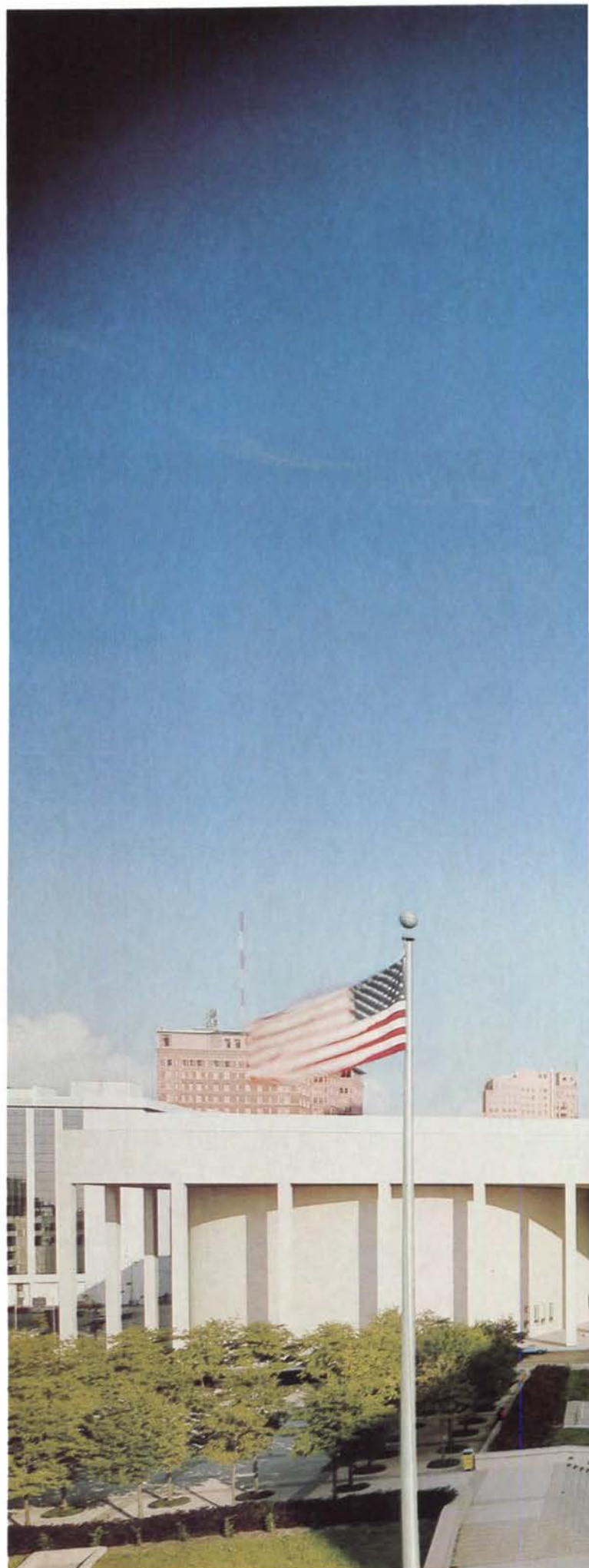
Of course, it is possible to overstate the similarities between awards and the publication of buildings (as the *Record* does in claiming that each of the houses chosen for its annual residential issue somehow is thereby an award winner). For one thing, awards are bestowed by juries of the entering architects' peers which change year by year. The magazines' choices are made by a kind of standing jury of their editors, some of whom are architects and some not, which is not changeable annually. This difference can lend a certain capriciousness to the awards and a certain predictability to what is chosen by the magazines.

Another difference is that the identities of awards entrants are concealed from the juries, while the identities of the architects whose work is being considered by the magazines is known, sometimes very well known indeed. Lest this seem a veiled charge of cronyism, let me make a few personal observations as one who has been an editor of two magazines of the kind under discussion. Naturally, friendships do grow between editors and architects, and, editors being more or less human, these friendships do sometimes influence choices of buildings. But this does not happen nearly so often as many architects like to think. Very nearly all of the choices made by the magazines are based on honest, if admittedly fallible, professional judgment.

Nevertheless, there are factors other than the excellence of a given building that do influence the magazine's decisions, and this is another large difference between them and the awards juries. One such factor is, to coin a phrase, the architecture of the magazines themselves. One building may be chosen over another of similar quality because it will look especially good in a given issue, relate well to other content or make a specific point.

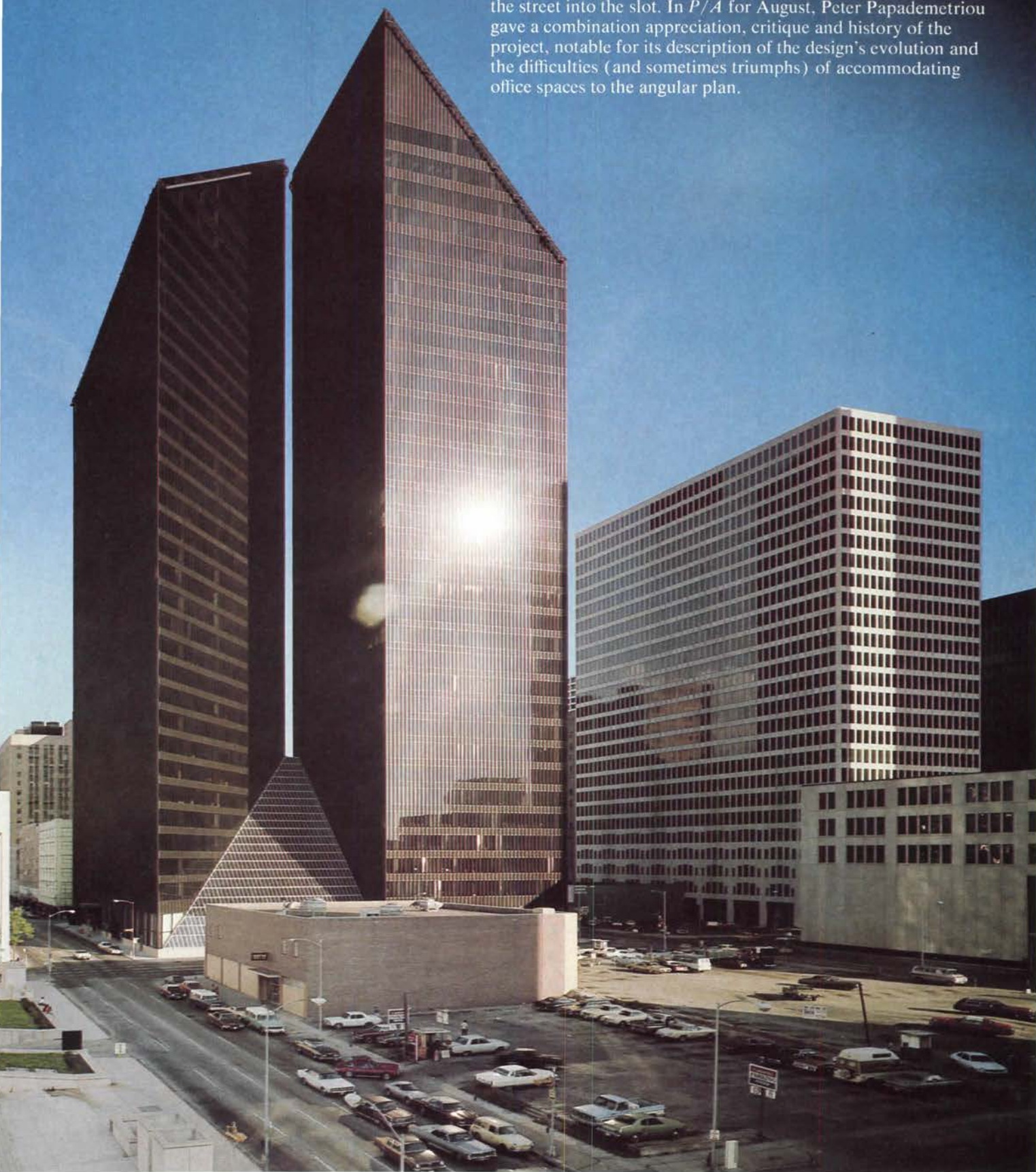
And magazines do have axes to grind. The editorial choices of the *Architectural Forum* in the 1930s were influenced by its espousal of the causes of modern architecture in general, and Frank Lloyd Wright in particular. Neither was uncontroversial among the practitioners of the day. And in the crisis days of the '60s, when I was on the *Forum*, we gave an extra look to works which had a special urban relevance. Similarly, it doesn't hurt to be a certified L. A. Silver or New York White in the halls of *P/A* today.

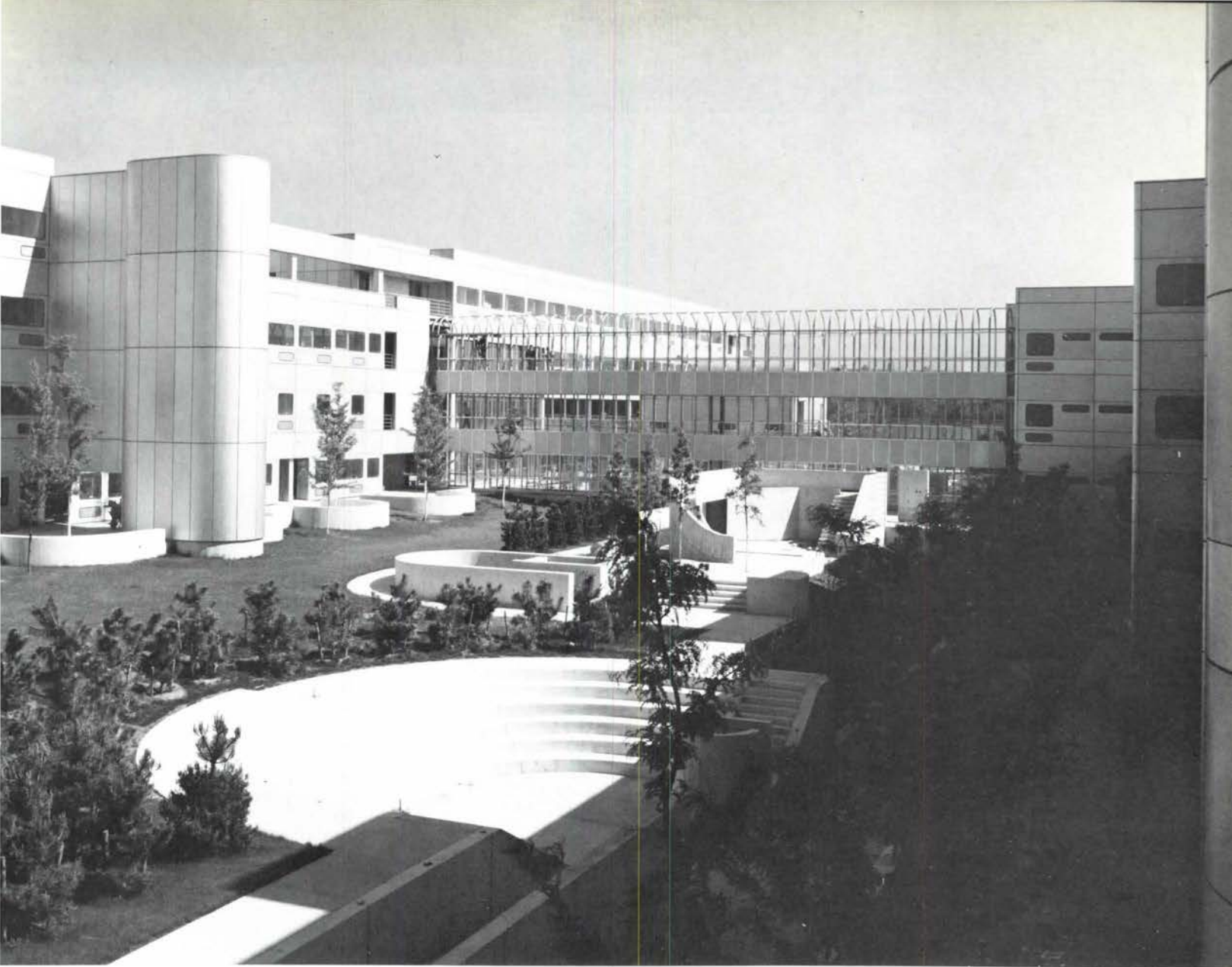
The images that follow were chosen to illuminate directions and what the magazines consider to be directions. In selecting them from the hundreds published in 1977, we definitely do not consider ourselves to be bestowing awards. D.C.



Don Sudnik

Pennzoil Place (Johnson/Burgee Architects, S. I. Morris Associates), won a 1977 honor award and is this year's winner of the \$25,000 R. H. Reynolds memorial award. It stands in dramatic contrast to its neighbors in Houston, as it would in the skyline of almost any other city: twin trapezoidal towers of dark anodized aluminum and steel separated by a 10-foot slot of space; their top eight stories angling toward each other; the angle repeated in a glazed atrium which rises eight stories from the street into the slot. In *P/A* for August, Peter Papademetriou gave a combination appreciation, critique and history of the project, notable for its description of the design's evolution and the difficulties (and sometimes triumphs) of accommodating office spaces to the angular plan.





Ezra Stoller

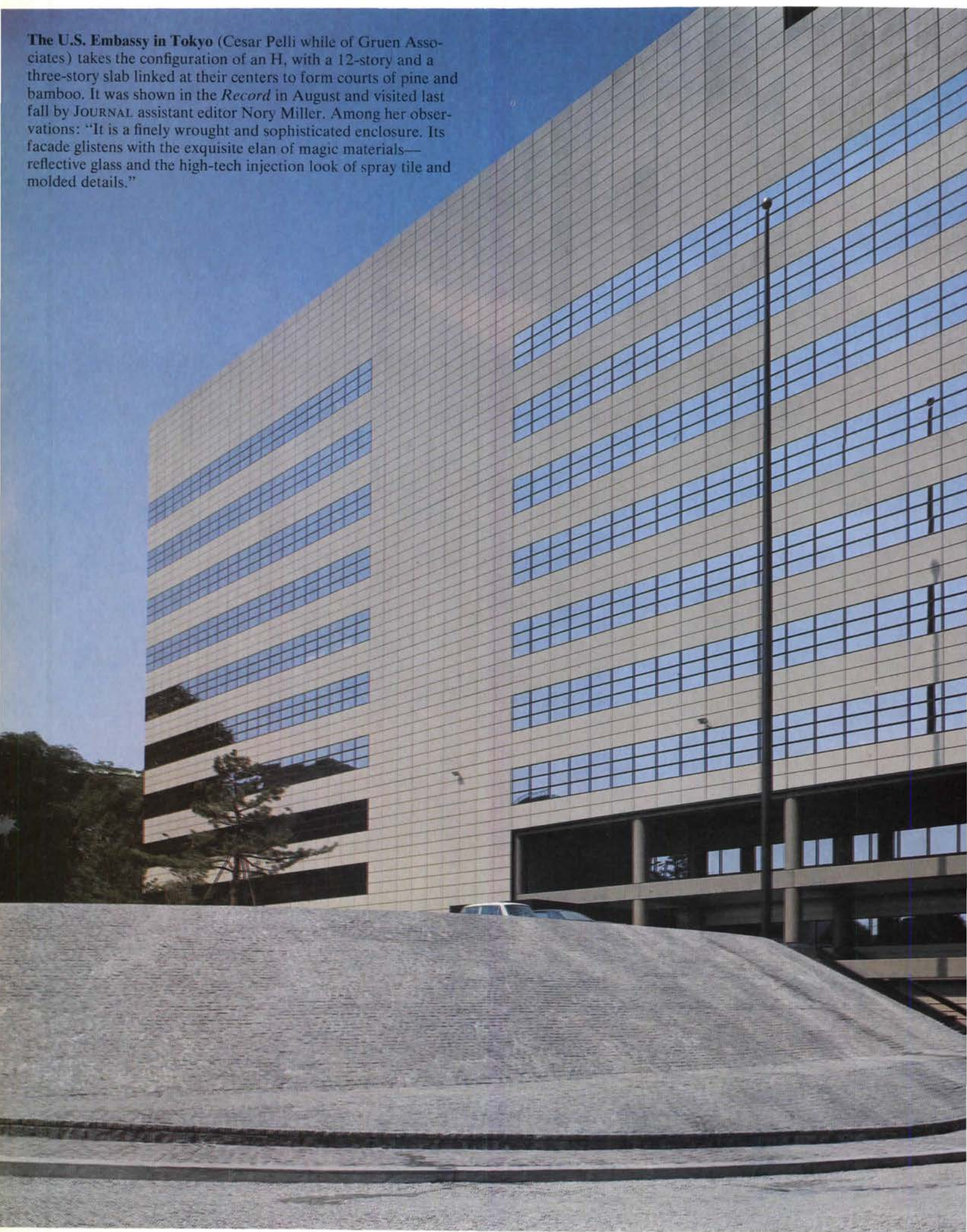
Art Center College of Design (Craig Ellwood Associates) is a two-story, rectangular art school of 165,000 square feet. Partially embedded into an irregular Pasadena hillside, its main element is a glazed bridge heroically framed in black-painted steel trusses traversing a 192-foot ravine. In *P/A* for August, Michael Franklin Ross traced the bridge scheme to a 1934 Mies

van der Rohe sketch as well as to several earlier Ellwood projects and suggested that the Mies legacy "is alive and well" in the Ellwood office, if "almost forgotten" elsewhere. Indeed the art center is one of a very few Miesian buildings to have appeared in the magazines in 1977. (And Ellwood has announced his intention to spend more time on art than architecture.)

Marvin Rand



The U.S. Embassy in Tokyo (Cesar Pelli while of Gruen Associates) takes the configuration of an H, with a 12-story and a three-story slab linked at their centers to form courts of pine and bamboo. It was shown in the *Record* in August and visited last fall by JOURNAL assistant editor Nory Miller. Among her observations: "It is a finely wrought and sophisticated enclosure. Its facade glistens with the exquisite elan of magic materials—reflective glass and the high-tech injection look of spray tile and molded details."





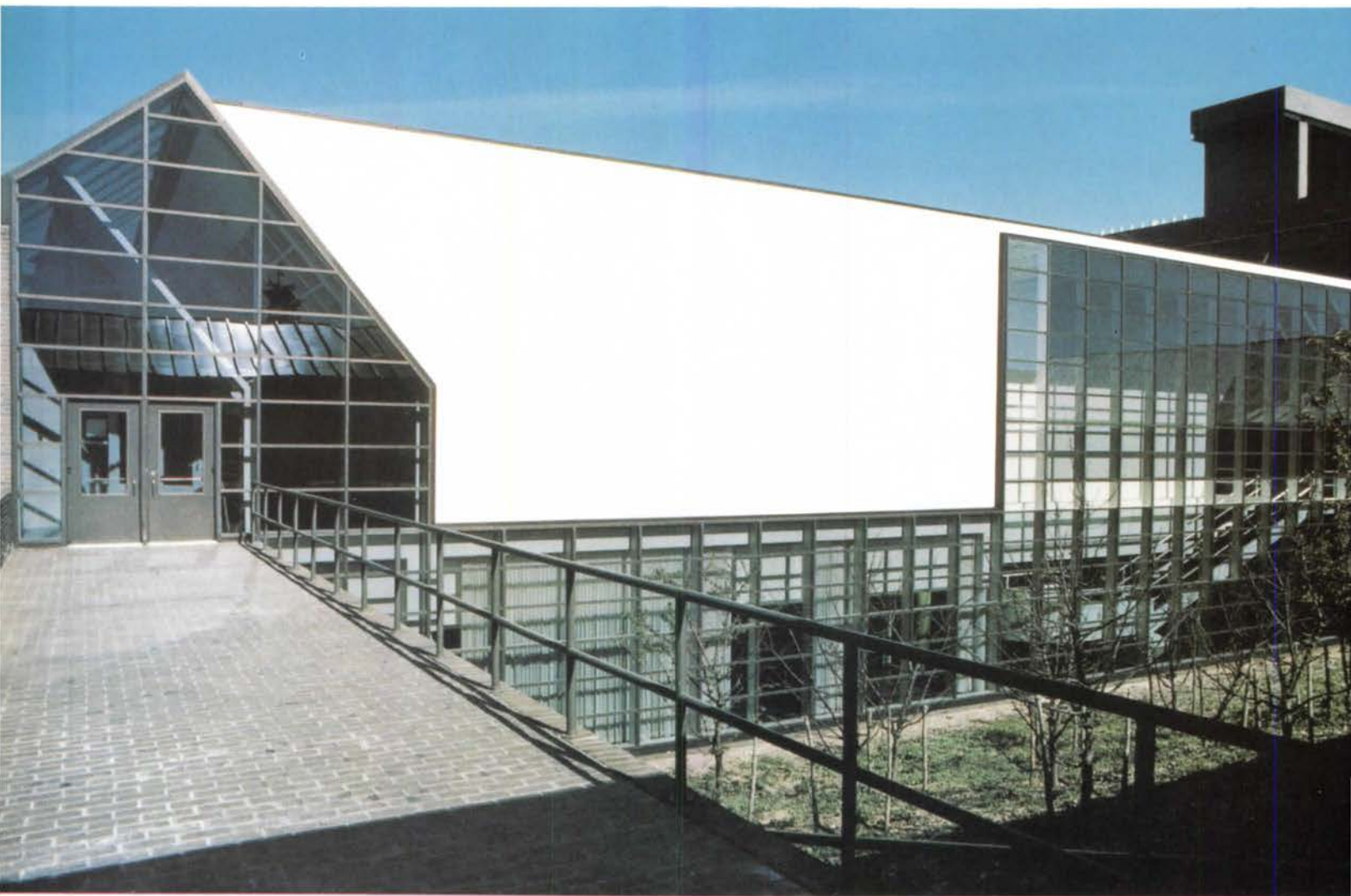
Josiah Quincy School (The Architects Collaborative) is far more than a school. It is the virtual nucleus of Boston's multiethnic South Cove neighborhood and a kind of minicity in itself: In addition to a K-5 school for 820 pupils it contains "sub-schools" for children with various disabilities, and a battery of community facilities including a "little city hall," and there is a housing tower on one corner of the site. A brilliant physical expression of its role in the neighborhood, and a gift of space to this dense city, is the use of the roof for recreation facilities for pupils and residents alike. All of this came about through a multifaceted planning process that began in the early 1960s (recounted briefly in *P/A* in December) largely under the guidance of Hermann Field, then director of Tufts New England Medical Center. Quincy School is a building as an act of urban strategy, abetted by architecture.




Steve Rosenthal

Dance Instructional Facility for the State University of New York at Purchase (Gunnar Birkerts & Associates). The large skylight at right in the photo below emphasizes the angular form of this two-story building but also symbolizes the importance of light to its design. Corridors also are skylit, and a tilted plane of reflective glass (bottom photo) brings diffused light into the dance studios themselves. In the *Record* for February, Mildred

F. Schmertz rhapsodized that the necessarily long corridors, whose walls jut in and out, were made "as uplifting to the spirit as the dance itself by Birkerts' mastery of light and form." In a thoughtful accompanying essay, Birkerts noted that "there is a clear distinction between bringing in light, and providing windows for looking out. The conventional opening in the wall, the window, is the worst means of illuminating space."





House VI (Peter Eisenman). This small weekend house in Connecticut was the subject of three reviews in *P/A* for June, one by its architect, one by philosopher William Gass and one by sociologist Robert Gutman. Eisenman cited De Stijl and Corbusier and said that architecture "is based on a dialectic between what is real and what is virtual." And further, "Architecture is the synthesis or transcendent state that arises out of that dialectic." Glass said that to him the house was "an environment for the mind and, like a lyric, romantic in its fierce embrace of form, its search for truth." Gutman found the house "a landmark in the history" of a movement variously called conceptual architecture, autonomous architecture and postfunctionalism. He also said, "I am not sure, however, what it would be like to live in House VI for any period of time." □



High-tech as pure elaboration: In the Brooklyn Children's Museum, Hardy Holzman Pfeiffer presents an oil tank recycled as movie theater, colored air ducts and pipes, tubes shooting through the air, upsidedown fluorescent fixtures, sideways bricks, peek-through windows and all manner of architectural and technical exuberance, buried under a playground (above right).



Photos by Norman McGrath

Design Directions: Looking for What Is 'Missing'

The three 'looks' of high-tech, slick and historicism. N.M.

It has become a cliché to say that contemporary architecture is pluralistic and questioning, that many have lost the faith—if not the form—of modern architecture, and that the future is up for grabs. Like most clichés, it is true but unsatisfying.

What emerges is a sense of third-generation rebellion, not necessarily against the whole modern movement, but against that which has been most prolific—the postwar work of Mies van der Rohe, Le Corbusier, Marcel Breuer and their not always talented followers. Mies' neoclassicism seems to be on the way down and, with it, symmetry and travertine (although Philip Johnson and Aldo Rossi are there to catch it). Also fading in popularity is the structural muscularity of postwar *beton brut*.

The box and the gesture are giving way to the greenhouse, the curve and the kinesthetic experience. Meanwhile, the work of Frank Lloyd Wright, Alvar Aalto, young Corbusier, Constructivist and de Stijl architects is enjoying, if anything, more attention than it has in decades.

If the office tower was the building type of the 1960s, the building type of the early 1970s was the house. Today, it is the small institution—museum, library, medical facility. It has been through these smaller and more flexible projects that many designers have been able to explore what they feel was "missing"—an exploration, however, that also has its counterpart in some of the larger buildings of the '70s.

While no geniuses of the next wave on the order of a Wright or Corbusier seem to have appeared, there are esthetic choices that are appearing regularly. Perhaps most prominent—and persuasive to fellow practitioners and students—are: *historicism* (sometimes called postmodernism but with a continuing argument over the membership roster); *high-tech* (here used as a description of design, not structure or mechanics), and what critic Robert Jensen has dubbed the *Slick Style*.

It is necessary to make a few disclaimers, for there is work that overlaps categories and contradictory work within each. The categories are not equivalent in any theoretical sense and much is left out. What they each represent is an identifiable "look," which is not an irrelevant component of esthetics.

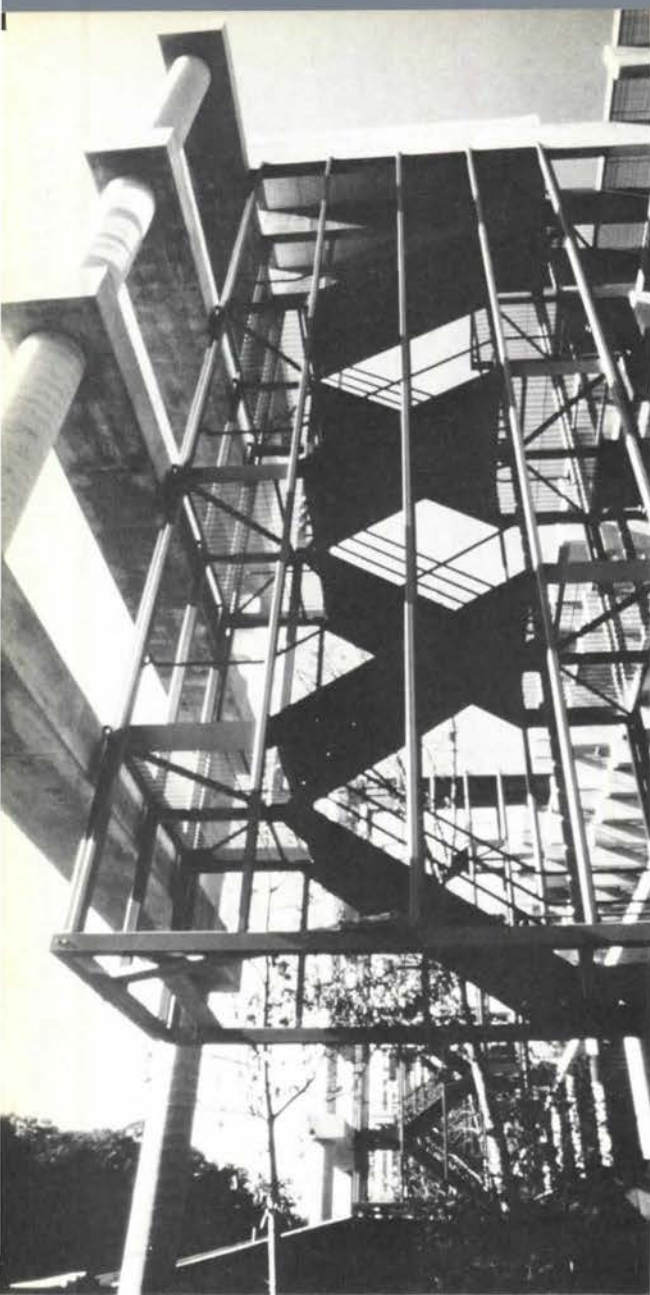
The three new "looks" presented here vary greatly in the degree to which they depart from the principles or forms of modern architecture. What ties them together, though, is their search at some level for something else. Postwar building is seen as too minimal, too somber, too repetitive, too capitalistic, too imperialistic, too . . . and not enough.

One quality common to all is an interest in decoration. Whether it be found in pieces and patterns from the past, brightly colored entrails, reflective materials or a jungle of plants, variety and elaboration is preferred to big blank surfaces. Nonmainstream facades may be turning up gridded these days (especially since Isozaki's Gumma museum), but it is their flesh, not bones, that is articulated.

Another aim seems to be to engage the participation of the visitor on some level. He is expected to associate parts of the building with his own memories or feel the sense of moving from one place to another. He is to try to unwarp visually what the architect has purposely made discordant, follow a changing screen of images in mirrored facades, receive communications (which may be multivalent, complex and ambiguous) and exhibit surprise (probably the most prevalent word in 1970s design discussions). To walk through a high-tech building is to feel not only that you know how it was put together but that you could rearrange it on a moment's whim.

Even the jargon reflects this changing bias. Colin Rowe's "phenomenal transparency" is much the same as the old word "interpenetration," but discussed from the viewer's perspective rather than abstractly.

The emphasis, then, is less on the building as object and more on the building as experience. Not required by that emphasis but going along with it is a tendency to produce buildings that appear fragmentary, made of two dimensional parts, lightweight and transient. These are qualities also of early modern work and probably, like it, the buildings owe these characteristics to many of the same factors—low budgets, a desire to contrast strongly with what went before, and an unstable sociocultural situation which does not tend to produce images of stolid permanence.



High-Tech: Pipes and bar joists in screaming technicolor; crazy salads of metal, concrete, Fiberglas, canvas; every scratchy screwhead sticking out—that is high-tech. It can be real, like Helmut Shulitz's house in Beverly Hills—a prefab, interchangeable-part, frame-and-infill Tinkertoy overlooking the valley. Or it can be quasi-real like the Wellesley Science Center in which laboratories can be changed from wet to dry in a half hour without so much as a screwdriver but which also turns out to be poured on site with custom-made furniture.

It can also be pseudo all the way. For now it is a look. It is so much a look that buildings as alien in concept as Hartman-Cox's National Permanent building in Washington, D.C., and Skidmore, Owings & Merrill's California First Bank in San Francisco borrow the appearance of big fat tubes—arranged like something between Lincoln Logs and classical columns—or actual tubes, for the sake of a little action on the facade.

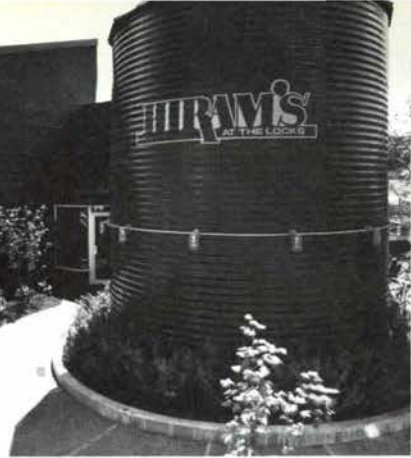
Tech (stripped of its hyphenated modifiers) is nothing new, of course. At the very least, it appeared with the Industrial Revolution and meant, minimally, two things. New materials and methods were to be preferred over traditional and, in designing a building, structure was to be set first and allowed to determine spaces. The imagery, however, varied from Corb's ship prows to Mies' rolled sections to Gropius' own "order-it-from-Ward's-and-paint-it-white" house.

Archigram added, among other things, equal time for HVAC and R. Buckminster Fuller, the concept of a building as a kit

of interchangeable parts. Firms like Hardy Holzman Pfeiffer reinvented exposed and brightly painted ducts and found objects. High-tech as a decorative style, as much as an approach to building, has been spreading ever since.

Perhaps the most famous and argued about is Piano & Rogers' Place Beaubourg. More to the point, high-tech is showing up in the Dubuque, Iowas, all over the Western world.

(1) Wellesley Science Center, Wellesley, Mass. Architect: Perry Dean Stahl & Rogers. Photo: Edward Jacoby. (2) Southern Illinois University Recreation Building, Carbondale, Ill. Architect: Ralph Rapson & Associates. (3) Liberty Elementary School, Columbus, Ohio. Architect: Don M. Hisaka & Associates. Photo: Thom Abel. (4) Hiram's at the Locks, Seattle. Architect: Barnett Schorr Co. Photo: Jim Cummins. (5) Greater Model Community Recreation Center, Baltimore. Architect: Nathan S. Leblang & Associates. Photo: Jeffrey Kliman. (6) Home State Bank Drive-up, Jefferson, Iowa. Architect: Charles Herbert & Associates. (7) Schulitz House, Beverly Hills, Calif. Architect: Helmut C. Schulitz. Photo: Helmut C. Schulitz. (8) National Permanent Building, Washington, D.C. Architect: Hartman-Cox. Photo: Robert Lautman. (9) Michigan City Public Library, Michigan City, Ind. Architect: C. F. Murphy Associates. Photo: Keith H. Palmer. (10) St. Mary's College Recreation Center, Notre Dame, Ind. Architects C. F. Murphy Associates.





Slick: As it happens, man turned to mirror to keep the cold in. That was more than 10 years ago. A huge popular success (among architects anyway), it finally hit the big time with Roche & Dinkeloo's United Nations Plaza and I. M. Pei & Partners' John Hancock Tower in Boston. What hit the big time with these buildings was the argument that mirrored glass buildings disappeared into the landscape.

People had been looking for this quality at least since Corb and gang had claimed it for plain old glass and, by the mid-'70s, big buildings were in such disrepute as to go begging for alibis. If background architecture was in, dematerialization must be ideal. "Does the Pei Hancock tower over Trinity Church?" "What Hancock?" one replies. "I don't see anything." Really??? Actually, very little since the legendary cloak and Claude Rains without bandages has really been invisible.

But mirrored buildings *are* something different—shimmering, sheer, seemingly no heavier than sunlight. The outside changes with each reflection, the inside is anybody's guess. It is packaging, advertising, participatory theater. It may not be solid and eternal looking like a Greek temple bank, but it's an eye-grabber.

Meanwhile, kindred spirits have been at work in Los Angeles. Calling themselves—largely in jest—the Silvers, they are, or were, mostly lead designers at the big commercial houses—among them, Cesar Pelli, AIA, formerly of Gruen Associates, now dean at Yale with his own New Haven firm; Anthony Lumsden, AIA, of Daniel Mann Johnson & Mendenhall; Paul Kennon, AIA, of Caudill Rowlett Scott, now in Houston, and Frank Dimster, formerly of William Pereira & Associates, now on his own. Several of the Silvers, as well as Kevin Roche and John Dinkeloo, come out of Saarinen's office, where exterior mirror glass was virtually invented (for the Bell labs of the 1960s).

They often use reflective material on the exterior, but not necessarily mirror. Pelli, for one, is adamant against it. He likes the rich sensuous quality of partially reflective, partially transparent glass. Like much recent L.A. art, the work is deeply in-

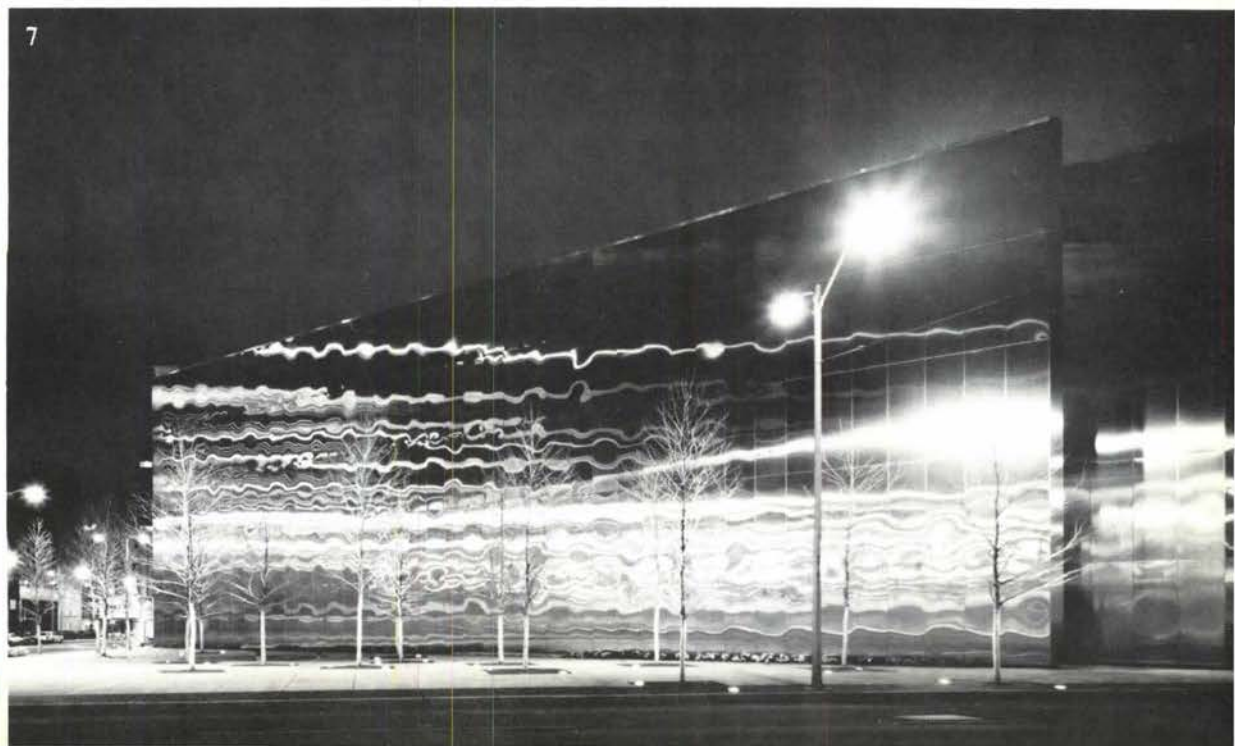
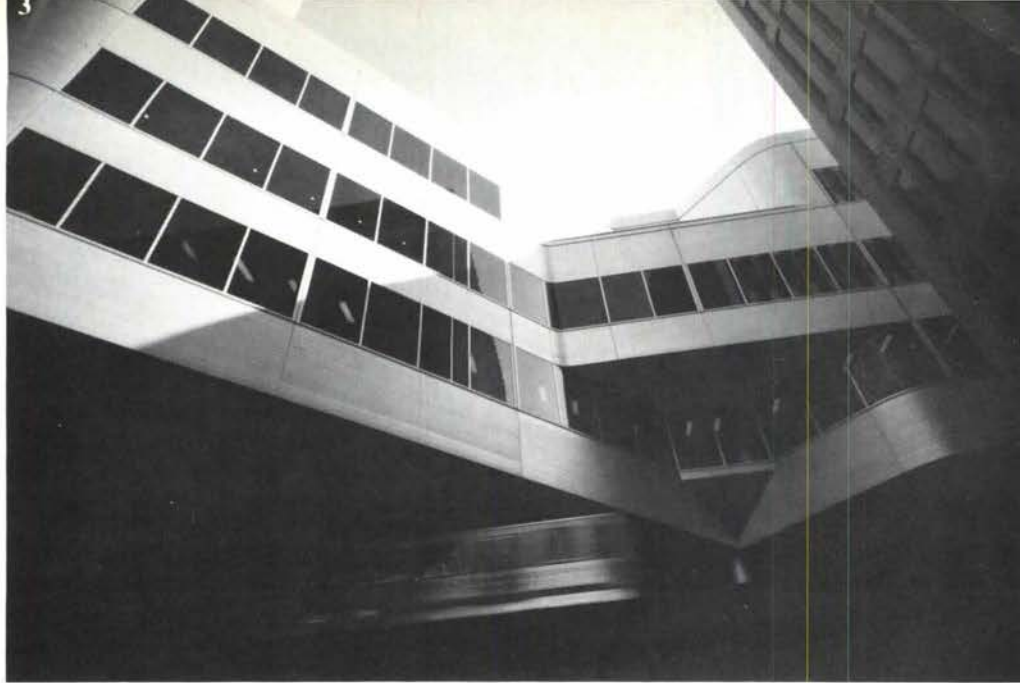
involved in intricacies of light and weather, and it is highly, highly finished.

But all that glitters is not glass. Aluminum skins are showing up and hardly anyone is anodizing them dark anymore—TAC's Johns-Manville, Meier's Bronx Center, Stubbins' Citicorp, to name three. Aluminum isn't standing in for fireproofed steel here, or in any other way looking tensed, compressed or weighted down. Aluminum is just shine, a kind of magic paint.

The search for slick is sending designers back to the golden age of sleek—the streamlined moderne. Portman's Renaissance Center in Detroit and Bonaventure in L.A. are perhaps the best examples, resembling nothing if not blown up moderne furniture. But there is also a general reappearance of glass block, interior and exterior tile, translucent materials, neon (or fluorescents in imitation), rounded and inflected shapes.

Here slick overlaps with historicism. It overlaps with tech, if not high-tech, in its molded/injected plastic looks and futuristic celebration of motion. Slick began in Italian interiors some time ago. What America is producing is the big Slick, the enclosure slick. There are also some slick interiors showing up. Oddly, they rarely occur in the same buildings.

(1) Equibank Building, Pittsburgh. Architects: Skidmore, Owings & Merrill (Myron Goldsmith, FAIA, partner in charge of design). Photo: Ezra Stoller. (2) Bonaventure, Los Angeles. Architect: John Portman & Associates. Photo: Alexandre Georges. (3) Rush Medical College, Chicago. Architect: Metz Train Olson & Youngren. Photo: Philip Turner. (4) Citicorp Center, New York City. Architect: Hugh Stubbins & Associates. Photo: Nick Wheeler. (5) NCNB Tower and Radisson Hotel, Charlotte, N.C. Architects: Odell Associates and Thompson, Ventulett & Stainback. Photo: Gordon H. Schenck Jr. (6) John Hancock Tower, Boston. Architect: I. M. Pei & Partners. Photo: Gorchev & Gorchev. (7) Homestead Federal Savings and Loan Association, Dayton, Ohio. Architect: Richard Levin Associates. Photo: George Cserna.





Historicism: Eclecticism may have been reborn in the '50s or '60s, but in the '70s it became legitimate. More than that, it became persuasive. As dedication to the future wavers, interest in the past quickens.

When the Museum of Modern Art in New York City decided that modern was over, it didn't show Venturi or Kroll, it presented an exhibit/polemic on the Beaux-Arts. Since, museums have treated us to shows on Palladio, Wright, Italian rationalists and 200 years of American architectural drawings.

The preservation movement began by trying to save seminal but individual landmarks, moved much of its energies onto whole districts and now finds it not so dangerous to occasionally claim that restoration and recycling are the only moral paths for contemporary architecture.

Historicism in new American work is supposed to divide into two categories—white (the New York Five and followers) and gray (also called the new "Shingle Style" or postmodernism). Who is who, and where the equally historicist Europeans and Japanese fit in, is a matter of understandable confusion—sometimes leading to such strange results as Charles Jencks conferring the crown of postmodernism on a premodern Catalanian.

A convincing argument can be made that there is as wide a chasm between Venturi (Apollonian) and Moore (Dionysian) as between Venturi and Eisenman. Graves' allusions are to natural surroundings as well as to early Corbu, unlike his fellow whites and, in fact, his buildings are not white. For some years, a guerrilla band mentality (as often forced from outside as generated inside) has attempted to obscure differences within ranks and similarities between, but that is changing.

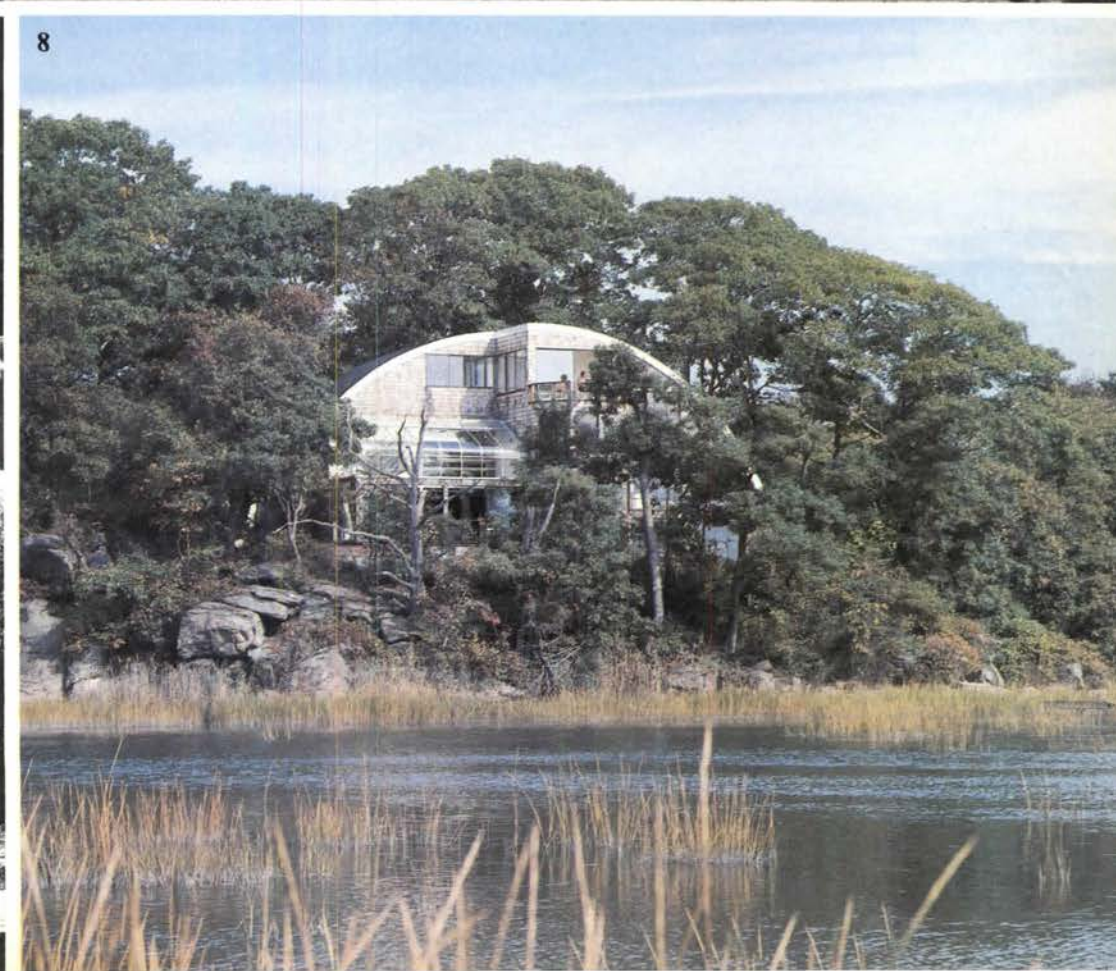
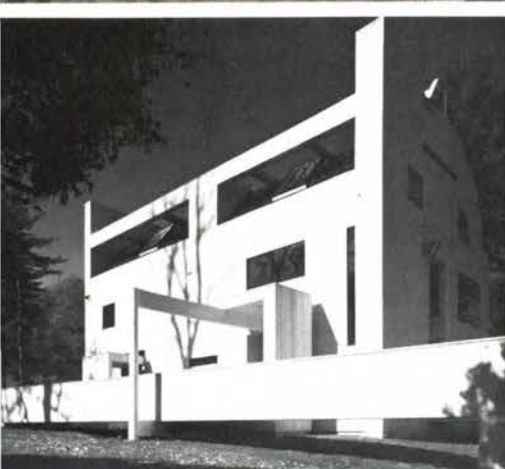
The thread common to all is historicism. A thread common to many is the conception of architecture not as form-making but fragment-weaving, with the two-dimensional implication in-

tended. At its tamest, this can simply mean that a building is related in placement and appearance to its neighbors. More startling is the esthetic presumption that a building or addition may appear so much a fragment or assemblage that you can visually feel the ripped edges. It is this quality that differentiates much of the contemporary work from any previous eclecticism.

Disillusionment with the pursuit of Utopia has provoked some of the architects to take rather Dadaist stances (such as Eisenman's claims that we must enter a postfunctional age), aimed more at shaking up the audience than leading them. Others—specifically Venturi and his spiritual students—look not only to the past for relief from the future but also to the previously inappropriate present of commercial strips and subdivisions.

Meanwhile, historians are reminding us that the concept of a world or art in continual progress from worse to better is our rather recent inheritance from the Industrial Revolution and positivist philosophers. □

(1) Snyderman residence, Fort Wayne, Ind. Architect: Michael Graves, AIA. Photo: Yukio Futagawa. (2) Weekend house, Westchester County, N.Y. Architect: Venturi & Rauch. Photo: Stephen Shore. (3) Madison Avenue Branch, People's Savings Bank, Bridgeport, Conn. Architect: Zane Yost & Associates. Photo: David Crofoot. (4) Houlton Regional Hospital, Houlton, Me. Architect: Payette Associates. Photo: Nick Wheeler. (5) House, East Quogue, N.Y. Architect: Hobart Betts Associates. Photo: David Franzen. (6) Maidman house, Long Island, N.Y. Architect: Richard Meier & Associates. Photo: Ezra Stoller. (7) House, Westchester County, N.Y. Architect: Robert A. M. Stern & John S. Hagman. Photo: Edmund Stoecklein. (8) Woerner residence, Guilford, Conn. Architect: Peter Kurt Woerner. Photo: Robert Perron.



Design Directions: Other Voices

Recently we asked a group of practitioners, historians and critics "to summarize their thoughts on the design directions that are emergent in the pluralist and questioning 1970s." The responses follow.

Robert Jensen: 'The Discrepancy Is Between What Is and What Ought to Be'

The phrase "pluralist and questioning" is the most positive characterization of the 1970s. It seems just as plausible to say that there is a disintegration of faith in systems and ideas which have previously sustained us; a loss of self-confidence; a fear of being overtaken by disaster. This feeling contrasts with that of all other decades since World War II. It exists in individuals who struggle to maintain their lives and in institutions out of which any architecture (if it is to be built) must spring. It is a natural mood.

Within it, preservation has become the best carrier of that moral force architecture needs if it is to have value beyond shelter. Preservation is capable of projecting a vision of new possibilities, of hope for our own future, which functionalist modern once claimed for itself and which has now fled from that style. The existing context—city neighborhoods, streets, individual examples of older architecture—in which people have lived their lives and in which they place whatever sense of private wholeness and connection with society that remains to them, has become a primary symbol of our "humanness."

The best preservation work is split. It reveals contradictions and does not gloss over them. A restored old building is allowed to radiate its own style and the force of its past era like a beacon in new or deteriorating neighborhoods. Or if the building must be altered for new use, its most decorative parts are retained like

jewels in a setting which cleanly reveals them. Present functional improvements and technical means are thus made available within the sensual familiarity of private and sacred boundaries (modern physical convenience is not the enemy). This split, this disjunction between old and new, gives preservation its potency: It tells the truth.

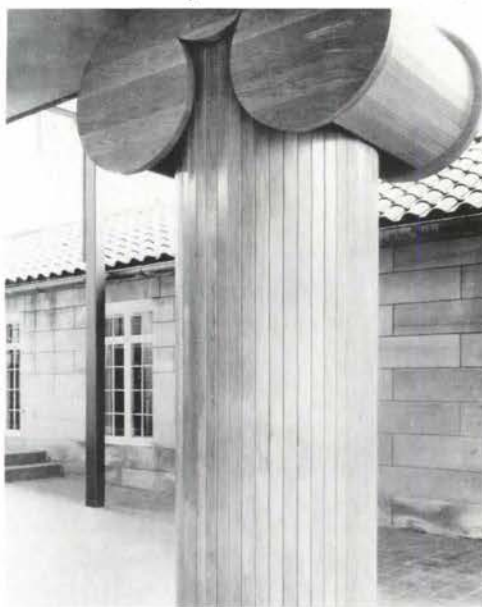
Some entirely new projects that lift all of their forms whole out of history are now being designed. But they look too easy; the struggle is given up. The best new work uses ornament that could never have been designed in any other era but this one. Fragments of forms allude to past styles and to immediate nature—plants, trees, streams, hills. Not a real reproduction of a Roman temple front for a new bank, but a *trompe l'oeil* temple front painted on a flat cheap wall. Or pieces of classical moldings and pediments appear like apparitions; an isolated cartoon-like column, sadly distorted but clearly Ionic, suddenly appears at a corner.

These ornaments seem "slapped on" and often have graceless beginnings and ends. They are not there to decorate essential parts of the building, as historic ornament was. The buildings are not made into symbols of abstract ideas, as were the best functionalist modern buildings, but are made symbolic of other physical things. Some possibility exists of the symbols being immediately recognizable to everyone. It is an attempt to reach sensual and popular energies which are with us if we can find them. We can even make fun of ourselves, an honest and liberating act.

It is a mistake to characterize this ornamented modern as "postmodern," for

only the forms have changed. There is as large a discrepancy in our society today between what we are and what we could (and should) become, as there ever was in the 1920s. The discrepancy is between what is and what ought to be. And it is the knowledge of this discrepancy that defines the modern era, not some specific style.

Preservation and ornamented modern now carry our best values, but are not the major new style of practice. That is the mirror-glass building, those pure Euclidian solids of cylinders, cubes, trapezoids and triangles which began appearing in the late 1960s. They are stretched and slick,



Oberlin museum addition, Venturi & Rauch.

acute-angled geometric exercises dismissing human scale, revealing nothing of their structure or functions—abstract shimmering things sealed from all memory.

They are awesome and some are beautiful. They are a different reaction to crisis; they brazen it out. But in some part of this slick style—in its fortress-like quality that reveals nothing about itself and appears to be beyond all adversity—we can sense the fear anyway, glossed over.

This is the style that is clearly winning, the style of the 1970s. If it accurately reflects the tendency of society to conceal things from itself, to either deny or destroy that knowledge of the discrepancy just mentioned, then we *will* be in a post-modern era. And it will not be a good one.

Robert Jensen is an architect and freelance critic in New York City and teaches architectural history at New York Institute of Technology.

Charles Moore, FAIA, is co-head of the architecture/urban design program at the University of California at Los Angeles.

Alan Chimacoff, formerly of Chimacoff/Peterson Architects, has his own practice and teaches at Princeton University.

Paul Goldberger is architectural critic

for the *New York Times*.

Jonathan Barnett, AIA, formerly director of urban design for New York City and director of the graduate program in urban design at the City College of New York, is now an urban design consultant.

Thomas Hall Beeby is a principal of Hammond, Beeby & Babka and teaches at Illinois Institute of Technology.

John Pastier teaches urban design and architecture at California Polytechnic

State University at Pomona and at Southern California Institute of Architecture.

Malcolm Holzman, AIA, is a partner of Hardy Holzman Pfeiffer.

Emilio Ambasz, formerly curator of industrial design at the Museum of Modern Art, has his own practice in industrial and architectural design.

Charles Montooth, AIA, is a senior staff architect at Taliesin West, the Frank Lloyd Wright Foundation.

Charles Moore: As at Disneyland, We Already Had The Future; it Was the '50s'

Sometime in the '60s, many architects and architectural students stopped looking entirely for the light at the end of the tunnel and started adjusting our vision to the light in the tunnel itself. It is even hard to remember by now the anguish and fury that Robert Venturi's gentle pronouncement that "Main Street is almost all right" let loose among mild-mannered, utopian practitioners. But by now, the profound changes of attitude suggested in that bland announcement have largely come about, and it seems to me (granted that we all see what we want to) that our architectural condition, and our near future will (I fervently hope) be based on the following exaggerated expectations:

No longer will architects see the planet as a slate to be wiped clean in readiness for a utopian vision. As any visitor to Disneyland can see, we already had the Future, and it was the '50s. Instead, and with increasing sensitivity, the messages from what exists (including, soon enough, those '50s buildings themselves) will be received, responded to, even reproduced.

No longer will the kind of utopian diagrams which have produced just yesterday's new towns prevail as planning visions. Instead, places people enjoy, like Charleston, S.C., or Savannah, Ga., will be looked to for the power of their piecemeal responses to different problems. In Charleston, for instance, the problem of cars—solved diagrammatically, in say, Columbia, Md., with huge parking lots which lie in front of entrances that can't help but seem like backdoors—has been taken care of, from time to time, bit by bit. The central part of town is compact, so not so many cars are required. Gardens at the side of "single" houses provide pleasant storage for a car or two each. And some block interiors, left over from previous requirements, provide storage for some more. The sidewalks are often brick, and take you to what is unquestionably the front door. I guess it will be a surprise to nobody when the continent's favorite megastructure turns out to be the 1733 plan of Savannah.

It will be no surprise, either, and a great step forward, when architects get over our frantic compulsion to be *original* (one of the most bitter residues of the modern movement, and one of the most persistent), and candidly let successful existing buildings and details serve as models. This does not mean an end to freedom or creation. It was, I think, T. S. Eliot who pointed out that "the bad poet borrows, the good poet steals."

Perhaps it's only a prejudice, but since

most successful models around us are small scale and since most of the big corporate structures around—however beautifully detailed—fill most of us with despair, it seems to me that the small structures on which human care has been concentrated, instead of over which it has been thinly spread, will once again occupy the attention of good architects. An appropriate fee structure and the rest of the necessary machinery will be developed to allow that to occur. You only need to look down on Boston from the John Hancock Tower at the liveliness of the Back Bay streets and the aloofness of the new monuments to see how the alternatives assert themselves.

As "reality" gets more complex, we travel more and learn more and remember more places and times. The near and far, in time and place, dance in our heads. The doctrinaire expectations of the recent past about what is "real," and therefore suitable for architectural representation, will give way. The multiple realities of, say, Disneyland will be perceived, and to an increasing extent we can begin to enjoy the city as theme park.

Alan Chimacoff: 'The Emperor's Postmodernism: Clothes but No Emperor'

Architecture is in a state of confusion about style. "Style" is used here not in the sense of the automobile styling of Detroit. It is used in acknowledgment of highest achievement where the characteristics of a work or group of works are so pronounced that a style, either personal or general, can be understood.

From books, magazines, lectures and symposia we are hearing that modern architecture is dead. Offered to us as replacement are postmodernism, neorationalism, postfunctionalism. But we are not given the rules of order for these popular replacements.

It is possible to view the present situation as a natural development from the original precepts of modern architecture. As its roots, modern architecture was stylistically pluralistic. The distinctly different styles of Frank Lloyd Wright, Le Corbusier and Mies van der Rohe, emerging by 1930, stand as testament. These generally adhere to vague principles of the then new architecture.

But beyond its loose principles, modern architecture was without the rules that in previous styles had determined appearances. Modern architecture emphatically permitted freedom and placed the greatest demand upon individual invention. As a consequence, one can cite such different buildings as James Stirling's Leicester Laboratories and Louis Kahn's

project in Bangladesh and call them both modern architecture.

Today, an increasing amount of work reveals concern for and reliance upon premodern sources for guidance. This loosely assembled collective sentiment is called postmodern (Charles Jencks includes just about anything that isn't smooth and white). But contrary to the wishes of Robert Stern, who seems to hope that postmodernism is a style, this sentiment is not a style—nor can it become one. As with modern architecture, it cannot become a style because there are no rules.

I think of it as "The Emperor's Postmodernism." But unlike the fairy tale, here there are only clothes and no emperor—no corpus, no body, no structure, only trappings.

The present emphasis placed on the use of historical antecedent can be traced to two articles by Colin Rowe: "The Mathematics of the Ideal Villa," written in 1946, and "Mannerism and Modern Architecture," written in 1950. These established a critical basis for understanding modern architecture from the standpoint of principles that transcend periods and styles. And they opened the door to the acceptance of historical antecedent.

Independent of Rowe, although probably not without a debt of inspiration, 20 years later Robert Venturi published *Complexity and Contradiction in Architecture*. This book put forth a similar position, and although Venturi presented it as a personal view, it was considered as a general theoretical position. And since Venturi is a practitioner, use of historical allusion was legitimated for use in practice. The time was ripe. Younger architects were frustrated at the limited potential for richness and elaboration in their buildings.

Postmodernism is the next stage in the lineage. As described by Robert Stern, it has three characteristic principles: contextualism, allusionism, ornamentation.

As for ornamentation, Arthur Drexler, among others, has said modern architecture has been a scant period in the history of civilization when our propensity to decorate has been suspended. Allusionism and contextualism have been part of modern architecture (although not as "isms") since its beginnings. A reading of Rowe's articles and a view of Le Corbusier's house for Ozenfant in its surroundings (1922), for example, will bear this out. Additionally, all three were distinctly a part of styles that existed before modern architecture—especially so in the 19th century English "free style" that is now attracting attention.

Thus the critical seeds leading to a postmodern sentiment—but not style—were sown as early as 1946 and have been growing steadily for 30 years. These

tendencies in America are consistent with tendencies abroad. Without suggesting a "neo-International Style," it is possible to see a certain sentiment as extending internationally, with many apparent inconsistencies and contradictions.

The climate is a confused one architecturally and has spawned a lot of licentious behavior among people who make buildings. Seldom do people acknowledge that there must be diction before contradiction, which tends to cast the premise into the category of *Articles of Faith*. Postmodernism is a case where the participants are writing history rather than making it and then hoping their prophecies will self-fulfill.

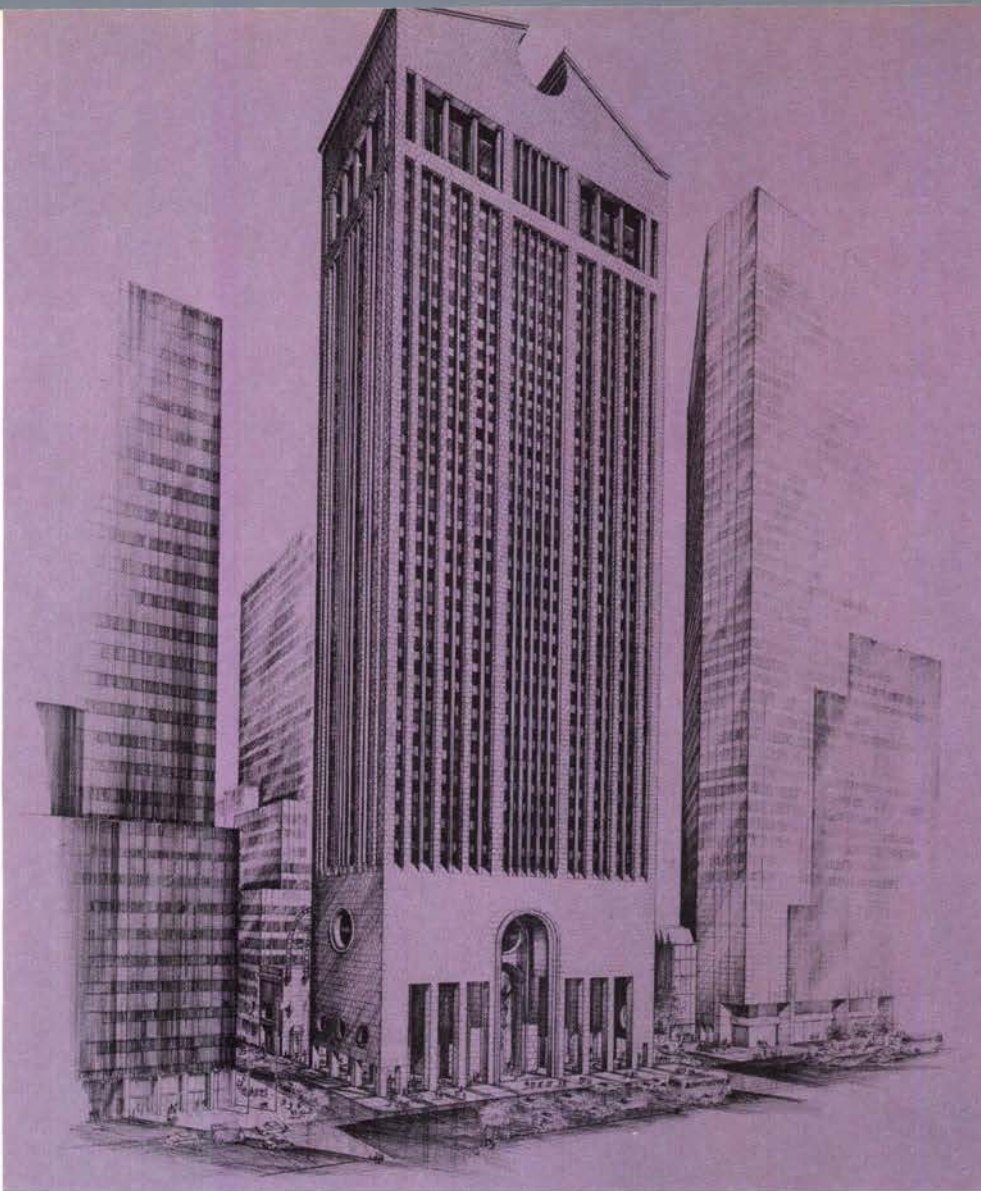
But if many of the projects are confused, even perverse, it is a healthy confusion born of frustration. We can be hopeful because, for the first time in many decades, questions are being raised about architecture and urbanism almost as frequently as answers are being posed.

Paul Goldberger: 'No Longer a Belief That Dogma Will Do Our Work for Us'

Predictions of the future are always dangerous; who could have guessed in 1968 that we would be seeing pediment-topped skyscrapers in 1978? But I think it is fair to say that the general trends we have seen in the last couple of years—trends which have come to be summarized by the term "postmodernism"—will continue. The International Style is no longer a valid ideological force today, and I doubt that it ever again will be; it began as a radical idea but by now is conservative, the very establishment that it is fashionable to struggle against.

There are times when I wonder if the pendulum has not swung too far. There are a lot of very silly things being done in the name of "breaking out of the box," pretentious, oddly shaped skyscrapers, but in the end suggest no more real depth of thought than did the bargain-basement Mies buildings they are replacing.

I don't consider, however, Philip Johnson and John Burgee's proposed AT&T headquarters (above) for New York City to fall into that category—while its scooped-out broken pediments may be startling, it is never silly or deliberately foolish. That building is a serious and earnest attempt to reinterpret historical form in a way that will never be directly imitative of historical styles nor conventionally "modern," and while I am a bit uneasy about how that form will work at the huge scale of a 630-foot-high building, I am deeply respectful of the impulses behind it. That the nation's largest corporation could have agreed to build what is in



some ways the nation's most radical skyscraper is clearly a significant event. The move away from the International Style and toward a richer, more historically derivative architecture is now something more than the academic crusade of the Venturis, Moores and Sterns; in one gesture, Philip Johnson has stretched out an arm of the architectural establishment to embrace it.

That does not mean we will see a lot of buildings with Chippendale tops and Pazzi Chapel bottoms. At least I hope we don't. Because what is significant about AT&T is not the appropriateness of that model, but the message it carries that there are no direct and easy models, that there are no formulas that can do our thinking for us. If there is any truth to be stated about our time, it is not so much that the International Style is dead as that *ideology* is dead. There is no longer any belief that dogma will do our work for us; there is no longer any belief that there is one true way to the making of good architecture. Many styles are valid—each has a certain place if it can be justified by factors of program, economics, client preferences, contextual relationships and so forth.

We will continue to see a lot of buildings of a lot of different types, including many that we would consider "modern,"

of International Style, in derivation. The point is that when such buildings are made today, it is not because of any belief that they are showing us the one true route to the Kingdom of Heaven—it is merely because they happen to do the job at that particular instance. This end of ideological basis for architecture, in the worst scenario, leads to chaos, but in a more ideal sequence of events it can free us to get in touch with architecture's basics more than we have done for generations.

Postmodernism is *not* just historical allusion; it is being free enough from dogma to be willing to use history where it is desirable, but not with the sense that one is bound to do that any more than one should be bound to an I-beam. If architecture comes to focus more and more on what works, rather than on what is correct according to some abstract theory, it is altogether likely that postmodernists will deal more seriously with questions of space, scale, plan, composition, precision and so forth—with architecture's fundamentals—than their recent predecessors have done. The work of the best designers around today—Venturi & Rauch, Moore, Gehry, Graves, Meier, Gwathmey—succeeds for that reason: They know the basics and they care about them more than about theories.

Jonathan Barnett: 'Architects Removed from History Are Being Allowed Back in'

To talk about "the death of modern architecture" or "postmodernism" only creates confusion. A theory once widely held by art historians is being thrown into the dust bin, but there has been no equivalent change in architecture itself.

The modern period in architecture begins at about the same time as the modern period in everything else, that is, sometime around the middle of the 18th century. Modern materials, new building types, and vast social and geographic changes in the city all begin to develop at this time. Any architecture that continues to use steel, reinforced concrete, laminated wood, large panes of glass, elevators, plumbing stacks, artificial light and ventilation, electric appliances and so on has to be described as modern, as it is profoundly different from the architecture of earlier periods. Similarly, apartment houses, office towers, shopping centers, hospitals, factories and the suburban house may have parallels at earlier historical periods, but they are all examples of modern building types.

The history of art and architecture is also a product of the modern period. It is ironic that this new historical self-consciousness created greater interest in the work of earlier times just when the art historians had evolved a system of classification that assumed no historical self-consciousness. As art history became more sophisticated, the course of contemporary architecture deviated more and more from the stylistic uniformity that the art historian had learned to identify in earlier historical periods. Many art historians concluded that architecture had somehow become sick during the 19th century, as it couldn't be classified according to a system that seemed to work for all earlier architecture. The alternate explanation, that something might be wrong with the system of classification, seemed to occur to practically no one. The remarkable belief that architecture had become sick led inevitably to a search for a cure; a concern with "modernism" and the need to produce "a style appropriate to our own age."

There is no question that some architects were more inventive than others. Certain individuals found ways to use modern materials unashamedly while other architects were trying to disguise modern innovations as much as possible. Some architects were more interested in thinking about new types of buildings needed by modern society. It was the art historian, however, who took the work of certain innovators and promoted it as the

beginning of a "new tradition," an "International Style," a "modern movement."

Sigfried Giedion, Nikolaus Pevsner and their many followers have told and retold, polished and amplified, an essentially partisan kind of history. They sought not only to describe past events but to influence future events. It is not that they are bad historians. On the contrary, they are much too good. Their arguments are so well constructed that it has taken years to see that they were engaged in creating a prospectus for a type of architecture that would meet their own vision of what was right. They were so anxious that the work of certain European architects of the 1920s and '30s become the cure for architectural sickness that they suppressed a great deal of awkward information.

For one thing, Le Corbusier's work began to change radically in the late '30s, Oud's in the '40s, Gropius' in the '50s. The earlier, "more correct" work of these figures continued to receive the most emphasis in the historical accounts. Because they wished to create the impression of a style, comparable to earlier historical periods, these historians left out, or under-rated, innovative architects like Hugo Häring, Marinus Dudok, Johannes Duiker, and much of the work of Erich Mendelsohn. In this way they made the work of the innovators seem much more uniform than it actually was. Frank Lloyd Wright could be dealt with in only the most fragmentary way, as he didn't fit into the pattern very well. Architects like Edwin Lutyens or McKim, Mead & White were ruthlessly suppressed.

These historians then went back and created a historical background for modernism, again through a process of ruthless suppression of anything that didn't fit the argument they were creating. What gives a historian the right to say that Turbinenhalle in Berlin by Peter Behrens is an important monument of modern architecture while Cass Gilbert's Woolworth Building does not deserve to be mentioned? What other form of history celebrates a tiny group while ignoring a whole series of major events?

It is a great tribute to the ingenuity of the historians who created the "history of modern architecture" that is taught in practically every architectural school (and appears on our architectural licensing exams) that they got away with it at all. It is astonishing that their story has lasted so long and become so firmly established.

The art historians did influence events by creating a series of expectations about architecture. When these expectations were not fulfilled, architects were uncomfortable. They felt the "spirit of the age" looking over their shoulders. A few art historians, notably Vincent Scully, started saying 25 years ago: "Wait a minute; perhaps the historians are wrong, not the

architects." A few people he influenced, a group in which I include myself, started saying the same thing.

In 1957, I wrote a college thesis — at Scully's suggestion — on American architecture between 1920 and 1940, the period of "reaction and retrogression," and learned that the architects of this period were interested in the same issues as the European "modernists." In 1966, in the 75th anniversary issue of *Architectural Record*, I wrote a reinterpretation of recent American architectural history that did not rely on the good guys versus bad guys thesis. No one paid any attention.

At a recent Architectural League dinner, Robert Venturi read an article, "Learning from Lutyens," that he and Denise Scott Brown had written in 1969. No one paid any attention to that article at the time, either. Now, however, the old theories of modernism are crumbling. One by one, the architects who had been removed from history are being allowed back in. Architects no longer feel that they must follow "the spirit of the age." Well, I'll try not to say "I told you so," but I do say: "Whew, what a relief."

Thomas Hall Beeby: Of Manifest Destiny and the Death of Prophets

The leaders of modern architecture are considered to have used revolution for social or political change. Progress was the goal. Tendencies were puritanical or ascetic. The European leaders related directly to indigenous socialist and Marxist movements. The American reformer allied himself with the utopian vision of the "American Dream," thus appearing at once ethically evangelic and pragmatically conservative. The judgment of architecture was removed from matters of taste to the search for truth.

Esthetics was displaced by moral judgment of a religious nature and modern architecture joined temperance and universal sufferage as progressive reform movements of the social gospel. The prophets of reform—Sullivan, Wright and Mies—preached an architecture of "manifest destiny." "Ours is a land of destiny!" Sullivan wrote. "Here nature had prepared, through the ages, a slumbering continent, a virgin wilderness, to be the home of a free man—free in their bodies, free in their souls; that the silently working calm and the power of the wilderness, the potency of the soil, of the waters and the air might permeate them physically, mentally, morally and spiritually, and lift them up to be a great people animated by a great purpose, a great force, a great beauty."

The architectural prophets had the

common characteristics of revolutionary leaders, such as Lenin or Martin Luther. They appeared in an apparently corrupt society. In American cities, the late 19th century was a period of vast privileged wealth and abject immigrant poverty. Anarchy by foreign-born workers and monopolies by unprincipled capitalists created a moral crisis for the ethical middle class and the controlling Protestant church.

A compromise solution was seen in what became known as the social gospel. Missionary activity abroad, settlement houses in our cities, the Sunday school and modern architecture were all aimed at the salvation of the masses without disruption of privilege—which supported both the church and architecture. [When] “a philosophy or gospel of democracy [is] the motive power of the world,” wrote Sullivan, then “will our art cease to be a wanderer and come into its own.”

The architectural prophets had to locate the center of the spiritual crisis within their “calling” in order to legitimize their position. “American culture, such as it was, wore a false face, a hideous masquerade. . . . Thus doomed to spiritual sterility, art and architecture were facing extinction in all the Hell there was,” wrote Wright. The architect became “saviour of the culture of modern American Society.” Virtuous buildings would produce a virtuous society. Legitimacy was ensured by claiming Whitman and especially Ruskin and Morris as ancestors.

Revelation necessarily involved rejection of the past. The result was a “new man” often assuming a pseudonym to graphically illustrate his transformation. A prophet was ascetic. In his transcendent state he was often without feeling; he obstructed sentiment and rejected spontaneity. He loved humanity because it was unchanging but not people because they were unpredictable. He appeared beyond influence. He formed not personal ties, but spread his attention over a larger group who became his disciples. Wrote Sullivan: “I am unfolding to you a philosophy of art simpler and deeper than the world has hitherto known, because, through my love of my land, of my people, of Democracy, and of the Infinite Creator, has come then insight and the power so to do.” Wrote Wright: “I gave to all, impartially, the freedom of my workroom, my work and myself.”

The followers were given the necessary confidence to combat the surrounding culture but never usurp the visionary role of the leader. “If you do not follow this course,” said Mies, “you may go astray and that could slow down architectural development or even make it impossible.” The believers were surrounded by general supporters not sharing in the holy state but defending the beliefs. The vision was

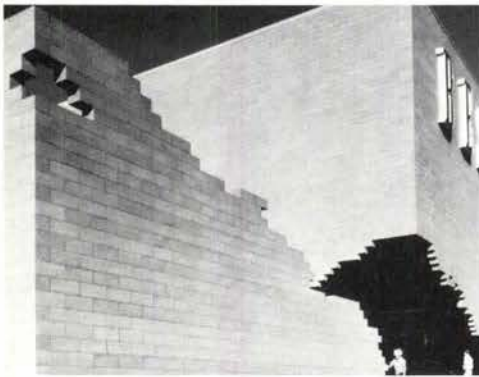
always millennial, with the leader becoming immortal.

Placed in a culture historically valuing ascetic self-denial, pragmatism and industry, the union of evangelic architecture and a society searching for the “Kingdom of God on Earth” was complete. However, as in any evangelical sect, fervor rarely lasts beyond the generation which voluntarily commits itself to the cause. The next generation drifts into either dogma or mysticism or rebellion. This is historically the dilemma of any evangelic sect, particularly those tied to a millennial prophecy which promises historical realization.

It is no accident that the blind optimism surrounding the “American Dream” began to be seriously questioned simultaneously with the attacks on the tenets of modern architecture. Both are based on a faith in manifest destiny which is now threatened on every side by perceived failures—both material and spiritual. Today, the sacred center of Crown Hall is uninhabited; Taliesin lies an empty monastic ruin, and the relics associated with Louis Sullivan stand in splendid disuse at the Cliff Dwellers Club. There are no prophets any more.

John Pastier: ‘Progress from Outsiders Free of Tribal Myths and Taboos’

There are trends and there are trends. The best ones cross your path when you’re not looking for them. They scurry into hiding as soon as they sense you peering through the field glasses of speculation hoping to spy their form. What was it that flitted in yonder tree: a full-fledged and



SITE, Inc.'s Best Products showroom.

rarely seen *Trendus Veritabilis*, a heavily spotted *Trendus Ordinarius*, a scrawny common gray trendlet or merely a dying leaf rattling in the breeze?

The one striking phenomenon of recent architecture is that it is in a healthy state of flux. The “modern movement” has been convincingly undermined by such perceptive revisionists as Robert Venturi, Charles Moore and Charles Jencks, just

as it has been enlarged by people as diverse as Philip Johnson, John Johansen, Cesar Pelli and John Portman. It has been turned into a brilliant revival style by fastidious estheticians such as Richard Meier, John Hejduk and Peter Eisenman, while it has been effectively ignored by countless owner-builders and small-scale architect-contractors who find direct involvement a better teacher than academic precedent.

To underscore this pluralism, I would like to discuss a relatively ignored factor: the work of SITE, Inc. This team of New York-based artists and poets have built monumentally paradoxical structures whose wit, vigor and former qualities have produced a highly metaphoric architecture that combines intriguing symbolism, social commentary, popular comprehension and commercial effectiveness.

Whether or not the work indicates a trend, its message is clear: Architectural progress can come from outsiders who are free of the profession’s tribal myths and taboos.

But today’s diversity and pluralism may prove short lived. Students, whose numbers total roughly half those of licensed practitioners, are in general less intellectually curious and socially concerned than their predecessors, and are correspondingly more conformist, careerist and security-conscious. If this persists, the present sense of intellectual expansiveness and freedom may be supplanted by a more apathetic Eisenhower-era viewpoint.

Such narrow pragmatism may already be felt in professional practice. The architectural recession and free-spending OPEC clients have coincided to form a situation where some of the busiest firms are gratefully working within cultures and esthetic traditions that they cannot conceivably understand as well as their own, and may also be working for or within countries whose strong class systems, economic processes and political practices contrast sharply with those that operate here.

Other influences also seem to be afoot. Today’s low-voltage economy, prohibitive housing costs, energy problems and newfound sense of the past are all grounds to think that a resource and culture conserving architecture based upon soft technology and minimum intervention may continue to develop. Some of my colleagues feel that we will see more reuse and making do. There may also be

Pastier continued on page 228

Preview of a coming attraction: Already celebrated in the daily press, I. M. Pei’s about-to-open addition to the National Gallery seems certain to be one of the most discussed buildings of 1978.



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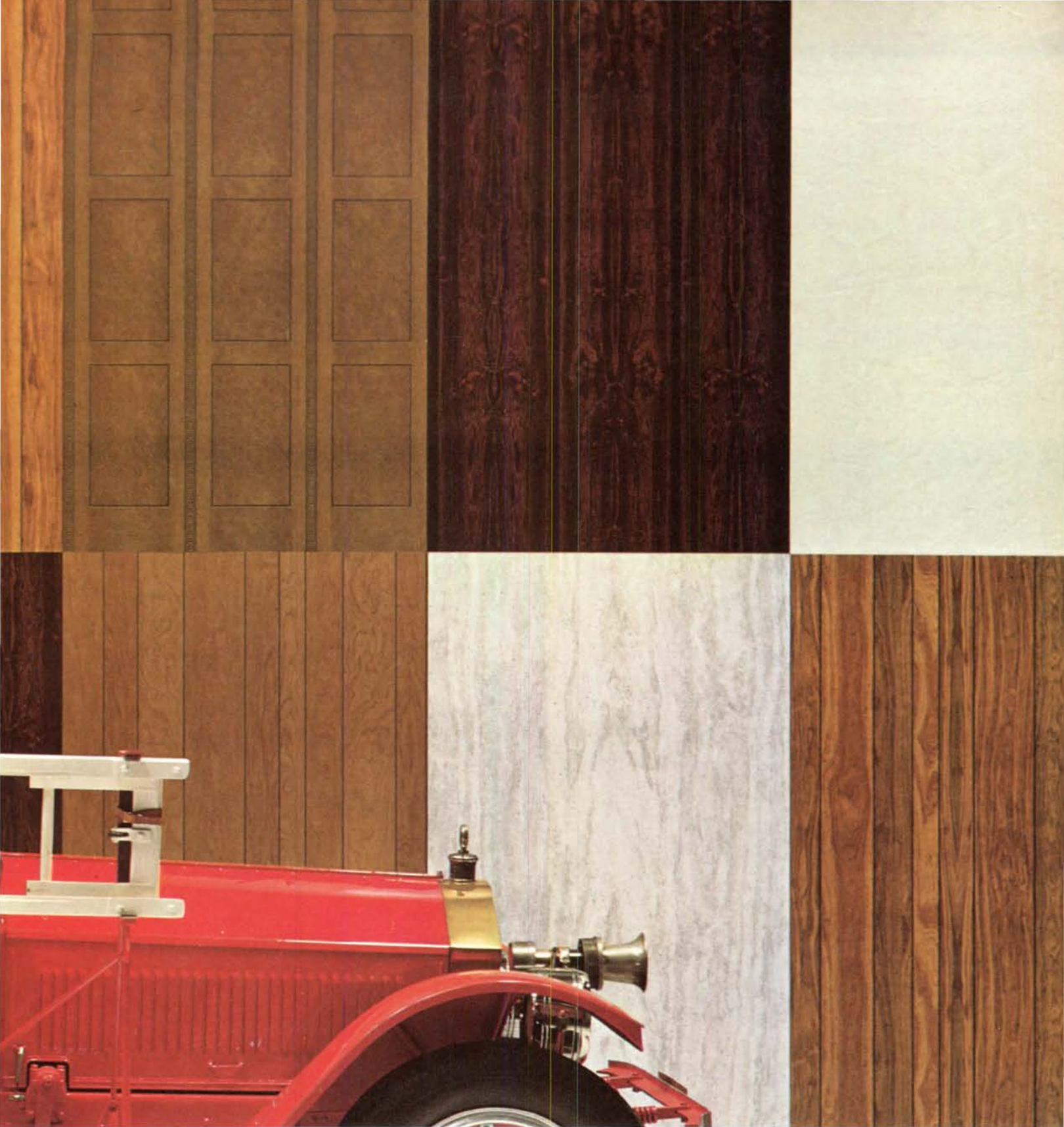


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Practice from page 70

In a joint statement dated Dec. 9, 1977, the top executives of AIA and of NCARB said that they share a common goal of "improving professional competence among architects in order to better serve the public." The officers said that they recognize that "there is considerable confusion and anxiety among architects regarding the divergent directions of AIA and NCARB on the method of license maintenance and professional development." Hence, said the signers of the statement, they would "exercise their concerted efforts in the next few months to determine courses of action which can best fulfill the needs for professional development and license maintenance." While such efforts are under way, they said, they would not initiate legislation in this area.

Many people look to Iowa as a leader among the states in requiring professional development for recertification, while others regard the legislation with dismay, predicting that many aspects of the law are so unpalatable that they may be challenged in the courts as a violation of individual rights.

The Iowa law, which went into effect on Jan. 1, requires among other things that regulatory boards submit their rules for administrative review on Oct. 1. A spokesman for the Iowa Board of Architectural Examiners has said that the board will propose a program that requires 20 contact hours of professional development.

Another state which has been watched by those in opposition to mandatory continuing education as just more bureaucratic invasion is California. The California council/AIA developed a proposal for legislative action which is similar to AIA's PDMS. Early in 1977, the council indicated preliminary support of a mandatory provision. In March, however, the

An AIA/NCARB program for intern-architect development

council's directors passed a resolution supporting voluntary rather than mandatory continuing education.

Among the groups vociferously opposed to both AIA's and NCARB's programs and to mandatory continuing education as either a requirement for AIA membership or for recertification is the Ohio Society of Architects. That society does not blame complaining consumer groups that are calling for proof of professional competence, but "overzealousness" on the part of AIA and NCARB, a view which is denied by both organizations since neither has sponsored legislation that makes continuing education a requirement for license maintenance.

The Maryland Society of Architects is

of the opinion that an architect's performance is "scrutinized and regulated" by many state and federal review and enforcement agencies and that what is needed are "more stringent initial licensing criteria," among other things.

In an effort to have the candidate for registration better prepared, AIA and NCARB have been strongly united in the intern-architect development program (IDP), the aim being to give those entering the profession the best opportunities for exposure and exploration in the broad issues of architectural practice.

In support of IDP, 21 instruction booklets called *SupEdGuides* were developed



and published in 1977. Also developed was a system for recording, measuring and assessing the intern-architect's education and training progress.

After a 16-month pilot test, four AIA state components completed preparations in 1977 for putting the IDP to work. The concept of helping bridge the gap between graduation from architectural school and licensure is currently supported by all 55 registration boards through their membership in NCARB, by AIA and its components and by the Association of Collegiate Schools of Architecture. Each is represented on the IDP coordinating committee and all are assisting those states now planning to participate in the program.

NCARB says that "many states are taking the actions necessary to incorporate [adopt] the IDP's training experience requirements as satisfactory to their own requirements. Once this step is taken, a jurisdiction is set to go statewide." The ultimate objective "is to take the quantum leap from a few statewide IDP states to a nationwide program that would encompass all of NCARB's member boards and all of AIA's components."

The 100 interns who worked in 60 firms in the states of Colorado, New Jersey and Texas during the pilot project have helped point the way toward having registration candidates better prepared for careers as registered architects.

There may be too many intern-architects seeking registration, however, according to the Bureau of Labor Statistics. The BLS projects that in the next nine years there will be 47,000 newly graduated architectural students seeking the 28,000 positions that will be available. AIA believes that the BLS figure is inflated. On the basis of NCARB reports, it estimates that there will be 2,700 newly registered

architects per year for the next nine years.

Not all architectural graduates go into active practice, as a study by the Association of Student Chapters/AIA revealed. The study found that 51.8 percent of recent graduates are employed in architectural practice, this category being defined to include those getting full credit toward licensing. For the others, 21.9 percent are in fields where architectural skills are used but where no credit is allowed and 7 percent are in areas of employment completely outside architecture.

As AIA's long-range planning committee remarks, "AIA is caught between the need for steps to preserve the traditional practice of architecture on the one hand and to foster the expansion of practice on the other. How it responds to this dilemma will have a significant impact on the process of refining the process of architectural education."

The matter of whether A/E services should be selected by competitive bidding or by the traditional method of competence for state and local projects has been under investigation by the American Bar Association. The ABA has developed two

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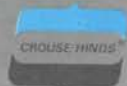
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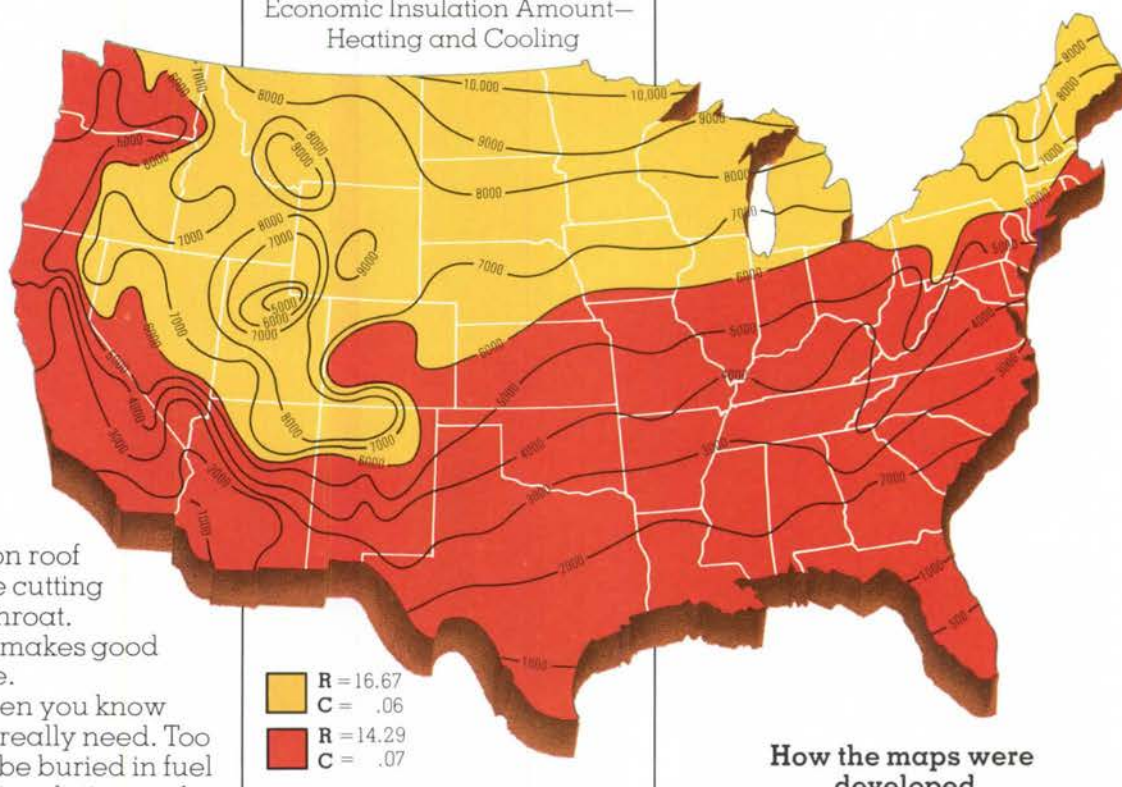
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Heating and Cooling



for heating and cooling our not so farfetched example could run as high as \$1,900,000. How's that for a quick way to go broke!

How to avoid going broke

Take a hard look at these two "Economic Insulation" maps. Using 7,000 degree-days, 500 cooling hours and 80°F temp. difference. The map for a new roof recommends an "R" of 16.67 ("C" of .06). Translated into energy costs a year, that's only \$25,000 to heat and cool this building. A savings of \$104,700 the first year and a possible reduction in equipment cost of \$1,500,000.

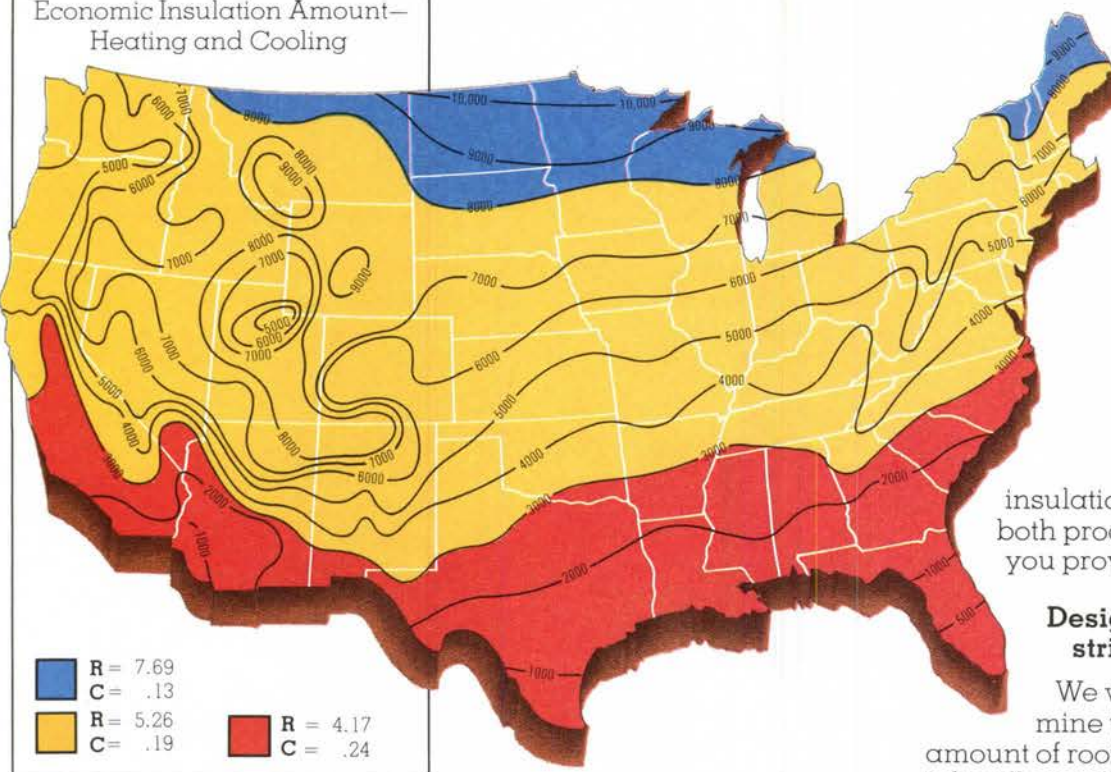
How the maps were developed

Owens-Corning has taken twenty years of energy management experience and put it into a computer.

We used a metal-deck commercial or industrial building, with gas heat and electric cooling, as our base. We did thorough calculations for degree zones throughout the country. Then we factored in a 15-year building life. A 5% annual fuel inflation estimate. We put corporate income taxes at 48%. Electric costs at \$0.03kwh, \$1.80/M cu. ft. (1 million btu) for gas. Equipment costs were pegged at \$1000/ton—cooling. \$35/1 M btu—heating. Plus 5% equipment maintenance cost. Roof resist-

RE-ROOFING

Economic Insulation Amount—
Heating and Cooling



insulation requirements, both products will give you proven performance.

Design help with no strings attached

We will help you determine the economic amount of roof insulation. EMS 3 is hardly a salesman. It's there to help owners, engineers and architects obtain energy-efficient roofs.

Of course we want to sell you our insulation. We believe if we help you find the economic amount of roof insulation you'll probably come to us for the right insulation for your roof.

What you should do now

Planning a new building or replacing an old roof? Incorporate the "economic insulation" amount from the maps into your specifications. If you're not directly involved in specifications, pass them along to the person who is. If there is anything that you don't understand about insulation, call your local Owens-Corning representative. That phone call might keep you from going broke.

Want more information on our roof "economic insulation" amount maps, or how to talk to our computer, drop us a line. Write to A. K. Meeks, Owens-Corning Fiberglas Corporation, Fiberglas Tower, Toledo, Ohio 43659.

**OWENS-CORNING
FIBERGLAS**

*T.M. Reg. O.-C.F. Corp.

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ance: 1.50—summer, 1.11—winter. Insulation 3/4" fiber glass.

For equipment design an 80°F temp. diff. and deck ETD of 62°F were used. Allowed for 10% roof insulation cost adjustment and 75% heating system efficiency. The maps are the result.

If you're designing a new roof or replacing an old one, you can tell at a glance the economic amount of insulation you should be using for your project. Pure and simple.

Talk to our computer about your special requirements

Our "economic insulation" maps should cover most of new roofing and re-roofing projects. If your roof is a special case, you can talk to our EMS 3 computer by using a touchtone telephone or computer terminal. Give EMS 3 the basic information about your project and EMS 3 will tell you the economic insulation amount based on your input. It will also give your projected first-year heating and cooling savings, equipment savings on new construction, and added insulation cost. We'll send you full details so you

can call EMS 3 about your special requirements.

Ask us about our roof insulation

We've got Fiberglas® Roof Insulation and Fiberglas Urethane Roof Insulation (FURI). Depending on your design and

Fiberglas Roof Insulation Thermal Values

"R"	"C"	Nominal Thickness
9.09	.11	2-1/4"
7.69	.13	1-7/8"
6.67	.15	1-5/8"
5.26	.19	1-5/16"
4.17	.24	1-1/16"
3.70	.27	15/16"
2.78	.36	3/4"

FURI Insulation Thermal Values

"R"	"C"	Nominal Thickness
20.00	.05	3-3/4"
16.67	.06	3-3/16"
14.29	.07	2-5/8"
12.50	.08	2-3/8"
11.11	.09	2"
10.00	.10	1-13/16"
9.09	.11	1-11/16"

Practice from page 170

alternative A/E procurement systems, one of which calls for competitive bidding.

The first alternative would rank the three most qualified A/E firms and negotiations would take place with the firm ranking highest on scope and compensation. This is essentially the Brooks law approach used by federal agencies and is the method favored by AIA and the major engineering societies.

The second approach considers price, and the three most qualified firms for the project under consideration would be asked to submit estimated costs for A/E services.

Although state agencies and legislatures have shown considerable interest in recent months in revising their procedures for A/E selection, there has been little concrete action. Knoxville, Tenn., and Kentucky are the only jurisdictions to actually enact procurement changes, and they both have elected the ABA model which embraces the Brooks bill approach. Currently, five states and four cities are considering the two alternatives on a pilot test basis.

Setting aside certain contracts just for small A/E businesses

The Brooks law makes no reference to the size of firms. Legislation pertaining to small businesses is now being heard in the Senate (S2259). The law would permit federal agencies to set aside certain A/E contracts exclusively for small businesses. The Committee on Federal Procurement of A/E Services, of which AIA is a member, has suggested that the section of the legislation pertaining to A/E services be eliminated from the bill. By their very nature, COFPAES, says, A/E firms are small businesses. According to definitions of the Small Business Administration, more than 95 percent of A/E firms are small businesses. Hence, says COFPAES, set-asides for small A/E firms would be self-defeating.

In a report submitted to the office of federal procurement policy, an inter-agency committee of representatives of 11 federal agencies, including GSA, a strong argument was made against the use of fees as a factor in the selection process. The committee endorsed the Brooks law approach by means of which the fee is a factor only in final negotiations.

The report also evaluated the "project proposal method" for A/E services which involves three levels of procedure. Although the process was considered useful in securing better design services, it takes a longer time and runs the risk of discrimination against small, less well-known firms. In level 1, firms respond to a written questionnaire; level 2 supple-

ments the data with more detailed written responses and interviews. Level 3 involves the preparation of conceptual drawings, life cycle cost estimates and an estimated project budget. Level 3 was used by GSA in awarding a contract for the renovation of Washington, D.C.'s old post office building.

The committee found that the cost of response to level 1 is about \$200 and level 2 costs firms an average of \$2,500. Under level 3, competing firms for the old post office building received a development fee of \$46,000. The committee urged that "special consideration" be given to smaller firms in the use of the project proposal method.

One of an architect's major clients is the federal government. In the news in recent months has been a report by the U.S. General Accounting Office entitled "Procedures Used for Holding Architects and Engineers Responsible for Their Design Work." The report deals with the procedures of GSA and the Defense Department in the procurement of A/E services.

The report found that "some federal agencies are not adequately documenting causes for errors and omissions in plans and specifications," saying that government should not pay "increased construction costs when the A/E is responsible." Very few attempts have been made by the federal agencies, GAO says, "to pursue potential claims against A/Es." The reason, GAO believes, is that agency officials have attached a "higher priority to avoiding construction delays than to building a case against an A/E."

GAO examined 54 contracts valued at \$534.2 million and found that change orders valued at \$30.2 million had been issued. GAO classified 1,575 of the change orders, costing \$13.4 million, as "design deficiencies." The report concedes that the term design deficiency is loosely defined, sometimes being used as a mechanism to expedite change order approval. The report recommended that the cause of change orders and individual responsibility be determined and that A/E liability be enforced, with costs recovered for negligence.

The matter of liability and other legal problems of architects has been addressed head-on by the Arizona Society of Architects. A plan has been devised to encourage firms to seek legal advice before expensive litigation is necessary. Participating architectural firms will pay \$100 for a six-month subscription for legal counsel from a participating law firm. If further legal counsel is required, legal fees will be at a reduced rate. Arizona is one of seven states which has no statute of limitations, and even an architect in retirement may come to appreciate the unprecedented plan.

Codes & Regulations

Building Code Organizations Contemplate Three-Way Merger, Consolidation of Their Systems

Building codes and regulations over the years have so proliferated that today a building must be designed to meet an array of requirements from agencies, regulatory bodies and code officials—locally and federally. It is estimated that 10 percent is added to the cost of construction to meet building code provisions. Some architects think this figure is too low.

James Lammers, AIA, in *Architecture Minnesota* (Jan./Feb. 1978) said that the "architect has to walk a narrow line in designing buildings that conform to the various codes and regulations. On the one hand, he is vitally concerned with the ultimate safety and well-being of the occupants of the building; on the other hand, he is concerned with the total cost of the project. He must search for an optimum design much as a structural engineer designs a beam which will ade-



quately support the load, but will not be overdesigned to the point of being wasteful."

In recent months, a number of events have occurred that may help simplify matters and bring order out of confusion. AIA has long been concerned about standardized building code procedures and in 1975 published a report entitled "One Code: A Program for Regulatory Reform." It calls for a single performance-oriented national building code to be based on "accepted consensus standards."

Thirty-nine months after the AIA board approved the report, the nation's three model building code organizations

continued on page 178



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rough and smooth faces, handsome patterns.

Redwood. The natural choice.



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ASSOCIATION 617 Montgomery Street, San Francisco, CA 94111

Redwood—a renewable resource

STAGGERED TRUSS STEEL FOUR WEEKS CONSTRUCTION



FRAMING SYSTEM SAVED TIME IN LEXINGTON PROJECT.

When this new 377-room Hyatt-Regency Hotel was being planned as part of the \$47 million Lexington Center project in Lexington, Ky., it was inevitable that the best design and construction ideas, plus the best materials would be used—with special concern for speed of construction and economy.

For a very simple reason: the hotel will be owned by the people who designed and built it: Hunt/Landmark Ltd., an affiliate of Ellerbe Architects, the 65-year-old international architectural, engineering and planning firm... and Huber, Hunt & Nichols, Inc., one of the country's largest building contractors.

For their hotel, they specified steel construction and chose the innovative Staggered Truss steel framing system developed by U.S. Steel under a grant from the United States Steel Corporation.

Mr. K.R. Kaufman, construction manager for Hunt/Landmark Ltd., emphasized how the use of the staggered truss design saved time and reduced costs. "The steel erection took three months" he said, "which was faster than we had planned and much faster than any other system. It saved us at least 4 weeks construction time."

This system consists of story-high trusses spanning the full building width at alternate floors of each column line. The trusses are supported only on the two rows of exterior columns and are arranged in a staggered pattern on adjacent column lines. This

achieves an efficient structural frame for resisting wind loads while at the same time providing floor layouts with large column-free areas. Consequently, it is a system that lends itself to high-rise residential buildings such as apartments and hotels.

Structural steel, both ASTM A36 and ASTM A572, Grade 50, was fabricated in only two months, including fifty-six trusses. The pre-assembled trusses measured 60-feet by 9-feet 4-inches. The hotel contained more than 1,200 tons of steel.

In this project, and in many others, the Staggered Truss steel framing system proved to be the fastest, and the most practical and

economical construction system. For more information on the design of Staggered Truss structures, contact a USS Construction Representative through your nearest U.S. Steel Sales Office. Or write for our booklet, "Staggered Truss Framing Systems for High Rise Buildings" (ADUSS 27-5227-02), to U.S. Steel, Box 86 (C788), Pittsburgh, Pa. 15230.

OWNER: Hunt/Landmark Ltd., Lexington, Kentucky.
(the City and County of Lexington, Kentucky are owners of the Arena, Convention Center and Retail Mall).

ARCHITECT/ENGINEER: Ellerbe Associates, Inc.,
Bloomington, Minnesota.

ASSOCIATE ARCHITECT: Johnson/Romanowitz/
Architects, Lexington, Kentucky.

CONTRACTOR: Huber, Hunt & Nichols, Inc.,
Indianapolis, Indiana.

FABRICATOR: International Steel Company,
Evansville, Indiana.

ERECTOR: Whalen Erecting Co. of Ky., Inc.,
Lexington, Kentucky.



United States Steel

TRADE MARK

Codes & Regulations from page 174

—the Building Officials and Code Administrators International, the International Conference of Building Officials and the Southern Building Code Congress International—announced in April a plan that may result in the merger of the three. This effort to simplify matters regarding building codes and regulations has the endorsement of AIA's codes and regulations center, whose director is James R. Dowling.

The three groups have initiated a feasibility study for the consolidation of membership services and publications. The long-range objective is to blend the three groups into a single organization, with a national headquarters and regional offices in three cities where the groups are currently located (Birmingham, Ala., Chicago and Whittier, Calif.). Among the significant results of such a merger would be the promulgation of one series of model construction codes using national consensus procedures and the publication of a "one voice" code officials' journal. Ottmar H. Becker, president of BOCA, says, "The construction industry would welcome one democratically maintained model code promulgated nationally by the private sector."

Meanwhile, BOCA will include one professional A/E member and one industry member on each of its major code changes committees. This action is the result of a 1977 recommendation of BOCA's advisory council, of which Dowling is chairman. Design professionals, says Dowling, have long believed that code change committees of all model

An attempt to bring order to building industry criteria

code organizations would benefit from having design professionals deliberate proposed code changes.

AIA supported the establishment by Congress of the National Institute of Building Sciences in part because such a potential ally would help achieve order in the area of building codes and procedures. NIBS has received its first capital funds appropriation from Congress—\$1 million for fiscal year 1978. It has established offices in Washington, D.C., and Gene C. Brewer has been appointed president and chief executive officer of the nonprofit, nongovernmental institution.

One of the mandates given NIBS, says Brewer, was "to bring order out of the confusion of building criteria, standards and codes and other regulations that constrain the \$170 billion housing and building industry. . . ." In pursuit of this objective, NIBS recently said it will undertake in-depth study and research in the areas of building technology and regulations that "will lay the groundwork for a more

rational system of building regulations that could lead to savings easily running into the billions of dollars."

Dowling, recently appointed a member of NIBS' consultative council to the executive committee, says that NIBS has established task forces on government activities, installation procedures, standards and testing and information and education. The task forces will report to the council, which in turn will make recommendations to the NIBS board.

Brewer also announced in April that in order to investigate the uses of insulation in "the mounting confusion at each step of the construction process," an insulation task force had been formed. The task force will make recommendations dealing with the development of criteria and standards which will be provided to Congress, federal agencies, all segments of the building community and the public. "In so doing, we hope that a direction will be defined for the nation that will lead to more effective energy conservation in all types of buildings," Brewer said.

OSHA rescinds more than 1,000 regulations deemed unnecessary

Another regulatory body of importance to the architect is the Occupational Safety and Health Administration, established with the broad responsibility of ensuring that as far as possible "every employee in the U.S. has safe and healthful working conditions." OSHA was given the authority to develop and promulgate safety and health standards, to develop and issue regulations and to conduct investigations to determine the status of compliance with standards and regulations.

In late 1977, OSHA announced that it was rescinding some 1,100 obsolete, unnecessary or misdirected job safety regulations. The move resulted from Labor Secretary Ray Marshall's intent to introduce "common sense priorities" in the elimination of "nitpicking" regulations that have "little or no effect on employee safety and health." AIA has worked with OSHA, says Dowling, on the review of numerous proposed regulations and has called for revocation of those requirements "which cannot be documented and/or are unenforceable."

A group from labor and management is acting together to present a unified front to OSHA about reform of regulations which apply to the construction industry. Last fall, the group met at a conference of the New York building and construction industry joint safety committee and voted to launch a campaign for OSHA reform.

More than 20 labor and management organizations met in Washington, D.C., in January to decide on campaign strate-

gies. The group is pushing to obtain a separate safety standard for construction, objecting to a veritable maze of current rules. OSHA Secretary Eula Bingham has asked the group to select the regulations that should be rewritten or deleted—a task which the group views as having been accomplished under other Administrations but is willing to do again.

OSHA is undoubtedly concerned with the construction field because it remains one of the nation's most hazardous industries. In a recent report entitled "The Safety and Health Record in the Construction Industry," based on data collected by OSHA from 1972 to 1975, the Bureau of Labor Statistics reports that the construction industry has had the "highest injury and illness rate of all major industries." BLS says that except for mining, the construction industry has the highest number of work-related deaths relative to the number of employees. Interestingly, BLS found a relationship between an incidence of injuries and illnesses and the size of a firm. Very large firms with 2,500 or more employees had the lowest rates.

In at least one instance in recent months, OSHA backtracked on a former decision. The case involved a ruling in which Skidmore, Owings & Merrill was involved, first cited for exposing its employees to safety hazards during the construction of the Sears Tower in Chicago. In its first appeal, SOM was told that the citations were upheld, but at a later hearing OSHA reversed itself, ruling that architects "are not engaged in construction" when making routine inspections at the construction site. To be liable, the OSHA ruling said, "an employer must perform actual construction work or exercise substantial supervision."

There has been confusion about whether an OSHA inspector has to present a warrant to an employer. The Supreme Court will rule on a case which challenges the Occupational and Safety Act on the grounds that it fails to protect citizens against improper searches.

'Bill of rights for handicapped' signed into regulations

Last year, Health, Education and Welfare Secretary Joseph Califano approved regulations in Section 504 of the Rehabilitation Act of 1973, which can be used to bar federal funds from those who discriminate against the handicapped. This "bill of rights for the handicapped" will have major implications for barrier-free design in public buildings.

Section 504 states: "No otherwise qualified handicapped individual in the U.S. . . . shall, solely by reason of his handicap, be denied the benefits of, or be subjected to discrimination under any

continued on page 182

Laminated architectural glass.



For more reasons than meet the eye.

The J.C. Penney Distribution Center is a beautiful example of how laminated architectural glass, with the Saflex® interlayer from Monsanto, can put a combination of features to work in a single glazing.

The design challenge was to combine aesthetics with functionality. Sloped glazing of laminated glass was a natural solution. The sloped design satisfied the aesthetic considerations. And laminated glass answered Penney's concerns about protection from the elements.

For example, a heavy impact may break the glass but the broken fragments will adhere strongly to the Saflex interlayer, which also holds the lite in the frame. Benefits: no dangerous splinters, no falling fragments. And the strength of Saflex also affords a degree of security against break-ins as well as a functional weather barrier.

Another benefit: Saflex laminated to reflective glass produces a combination glazing with superior solar control. And

the reflective coating is protected from abrasion.

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What more can be achieved by laminated architectural glass?

The Saflex interlayer can be tinted in one of a variety of colors to reduce glare and absorb solar heat. In store windows, a special ultraviolet control laminate protects product displays against fading. And, laminated glass is especially suited for

atriums and skylights, where design also calls for safety and weather protection.

The fact is, laminated architectural glass combines more performance features in a single glazing system than anything you can name.

For a list of leading laminated glass manufacturers, write: Monsanto Plastics & Resins Company, an operating unit of Monsanto Company, Dept. 804, 800 N. Lindbergh Blvd., St. Louis, Missouri 63166.



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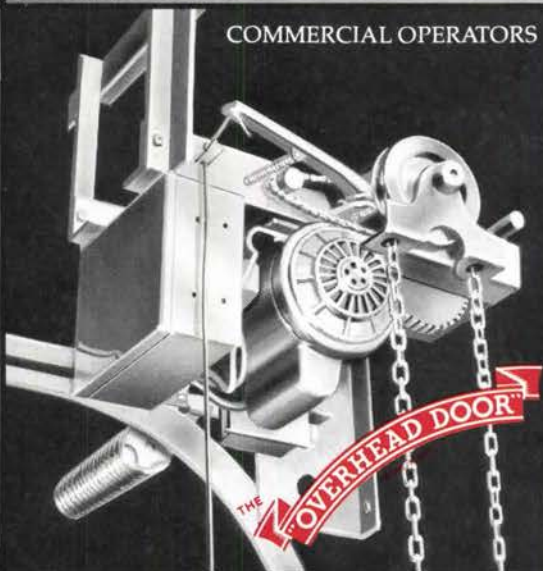
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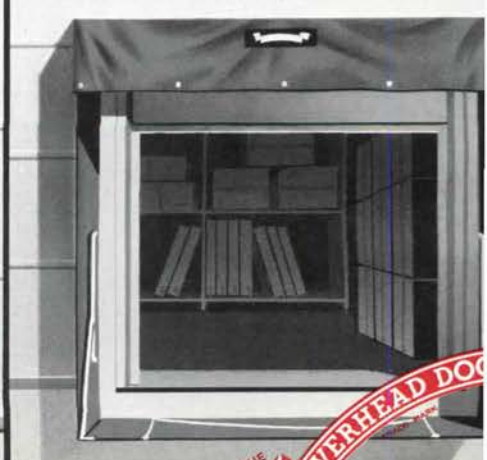
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Codes & Regulations from page 178
program or activity receiving federal financial assistance." The regulations will apply to institutions such as schools, hospitals and museums and other organizations such as public housing agencies and local transit systems.

The object of the law is to make programs accessible, but not necessarily in all areas of all buildings. HEW officials emphasize that "not every classroom or dormitory room" must be accessible.

All new buildings receiving funds from HEW "must be designed and constructed to be accessible to handicapped persons." Buildings renovated after June 1977 must be made accessible to the "maximum ex-



tent feasible." For existing buildings, the regulations state that required alterations be completed by June 1, 1980.

The Architectural Barriers Act of 1968 (PL 90-480) was the first legislation promoting barrier-free design. The American National Standards Institute's specifications for making buildings and facilities accessible to, and usable by, the physically handicapped (ASNI Standard 117.1) became the regulations' model. It described certain minimum conditions of building design, parking, washroom facilities and site grading, among other things, that could make buildings accessible.

But after years of dealing in implementing the 1968 law, handicapped people staged demonstrations to persuade California to sign into law Section 504. The new standards most likely to be adopted are the forthcoming 1978 revision of the 17-year-old ANSI 117.1. This revision will be approximately 10 times longer, more prescriptive and, for the first time, will detail accessibility specifications for both single and multifamily housing and related exterior spaces, and for mobile homes.

Meanwhile, HUD is actively pursuing architectural barrier-free regulations for multifamily housing, and it, too, plans to

make use of the new ANSI standards. GSA is continuing its effort to make federally owned or leased buildings completely barrier-free. The agency has budgeted \$16 million to spend on barrier correction until fiscal year 1979. In addition, the 1977 DOT mandate, issued in face of strong opposition by transit systems and vehicle manufacturers, sets Sept. 30, 1979, as the date when new buses purchased with federal subsidies must be the "tranbus," a recently developed vehicle with a low floor and a ramp to accept wheelchairs.

One recent example of a transit system that ran into barrier-free problems was the partially completed Metro system in Washington, D.C. In 1975, a judge filed an injunction against the opening of a major Metro station because it did not have an elevator—the principal means for wheelchair users to reach the trains. The station remained closed several months. And since then, elevators have been installed at every Metro station at a cost of \$65 million (less than 2 percent of the system's \$5 billion total projected cost).

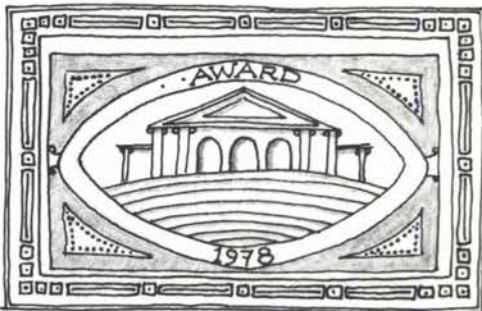
Another incentive for barrier-free design is that businesses can claim up to \$25,000 in tax deductions for the expense of removing architectural barriers that restrict movement of handicapped persons. Approved in the Tax Reform Act of 1976, eligible expenses include the costs of grading to make entrance levels, enlarged parking lot spaces, curb ramps, wider doors and doorways, floors with nonslip surfaces and toilets that accommodate wheelchairs. Expenses of barrier-free measures in new construction or in comprehensive renovation are not eligible for tax deductions. IRS published regulations in April 1977.

Bartlett citations given to seven barrier-free projects

Each year, some of the AIA honor award winners are chosen to also receive the Bartlett awards, which recognize outstanding architectural design that is free of barriers to the elderly and physically handicapped. The award is sponsored by the President's committee on employment of the handicapped. The 1978 winners are: the art-drama-music complex, Columbia Basin Community College, Pasco, Wash. (Brooks Hensley Creager); IBM Santa Teresa Laboratory, San Jose, Calif. (MBT Associates); Yale Center for British Art, New Haven (Louis I. Kahn; design and construction completed after his death by Pellicchia & Meyers); addition to the Art Institute of Chicago (Skidmore, Owings & Merrill); Three "H" Services Center, Houston (John Zemanek, AIA); Center Stage, Baltimore (James R. Grieves Associates, Inc.), and Faneuil Hall Marketplace, Boston (Benjamin Thompson & Associates, Inc.).

Awards

Each year architects are recognized in numerous award programs. Projects are honored for design excellence, energy design consciousness, restoration work, design of buildings using stone, concrete, plywood, red cedar. Following are some of the 1977 and the announced 1978 national awards.



AIA selected 15 projects for design excellence in its 30th annual honor awards program in 1978 (see p. 118).

In 1977, 17 projects received honor awards for design excellence; six of these projects incorporated restoration or adaptive reuse. It was the first time that the jury included energy conservation as a factor in their deliberations.

Winners of the awards for extended use: Canal Square, Washington, D.C. (Arthur Cotton Moore/Associates); Navy Pier Restoration, Chicago (Jerome R. Butler Jr., AIA, Chicago city architect); New Melleray Abbey, Dubuque, Iowa (Hammel Green & Abrahamson; Willoughby Marshall; Frank Kacmarcik); Mercantile Wharf Building, Boston (John Sharratt Associates, Inc.); College Center, Vassar College, Poughkeepsie, N.Y. (Shepley Bulfinch Richardson & Abbott); Franklin Court, Philadelphia (Venturi & Rauch).

The 1977 award winners for new design: vacation house, Mount Desert, Me. (Edward Larrabee Barnes, FAIA); elderly residential project, Cidra Municipality, P.R. (Jorge Del Rio, AIA/Edward Lopez); Humanities and Social Sciences Building, Southern Illinois University, Carbondale, Ill. (Geddes Brecher Qualls Cunningham); Concord Pavilion, Concord, Calif. (Frank O. Gehry & Associates); 1199 Plaza, New York, N.Y. (Hodne/Stageberg Partners); Pennzoil Place, Houston (Johnson/Burgee and S. I. Morris Associates); Bronx Developmental Center, Bronx, N.Y. (Richard Meier & Associates); Penn Mutual Tower, Philadelphia (Mitchell/Giurgola); John Hancock Tower, Boston (I. M. Pei & Partners); Spelman Halls, Princeton University, Princeton, N.J. (I. M. Pei & Partners); William J. Campbell Courthouse Annex, Chicago (Harry Weese & Associates).

Awards continued on page 188

A hall of fame for the heroes of space.

ELEVATORS BY DOVER

In the hills above Alamogordo, New Mexico, the International Space Hall of Fame honors the pioneers of all nations who opened the doors of the universe to man. Exhibits, both indoors and out, document the significant events in the exploration of space and offer predictions of marvels yet to come. Visitors and staff move swiftly between the five floors of the multi-million dollar structure on Dover traction elevators. For more information on Dover Elevators write Dover Corporation, Elevator Division, Box 2177, Dept. G, Memphis, Tennessee 38101.

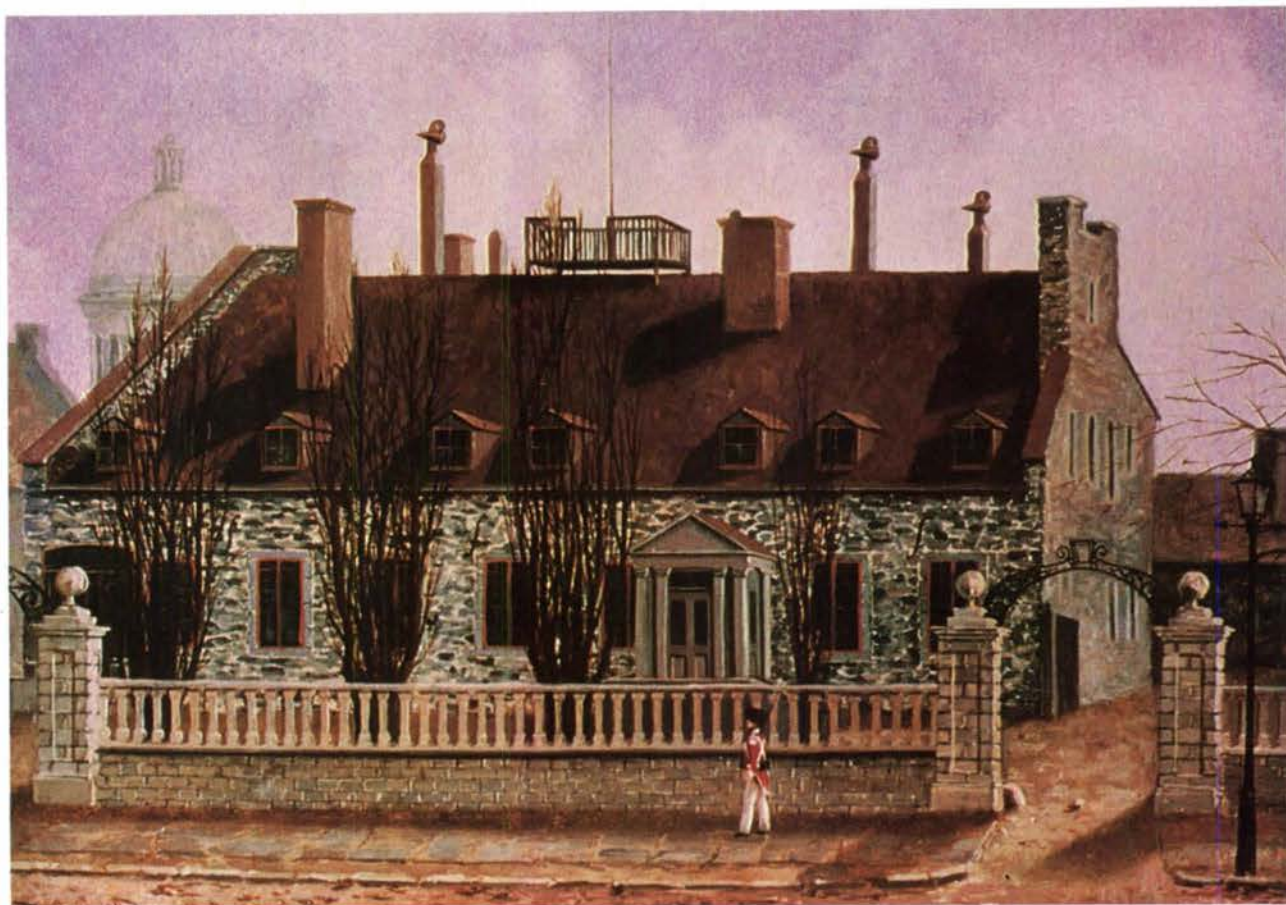
The International Space Hall of Fame,
Alamogordo, New Mexico
Architect: Charles Nolan,
Alamogordo, New Mexico
General Contractor: Frank Tatsch,
Silver City, New Mexico



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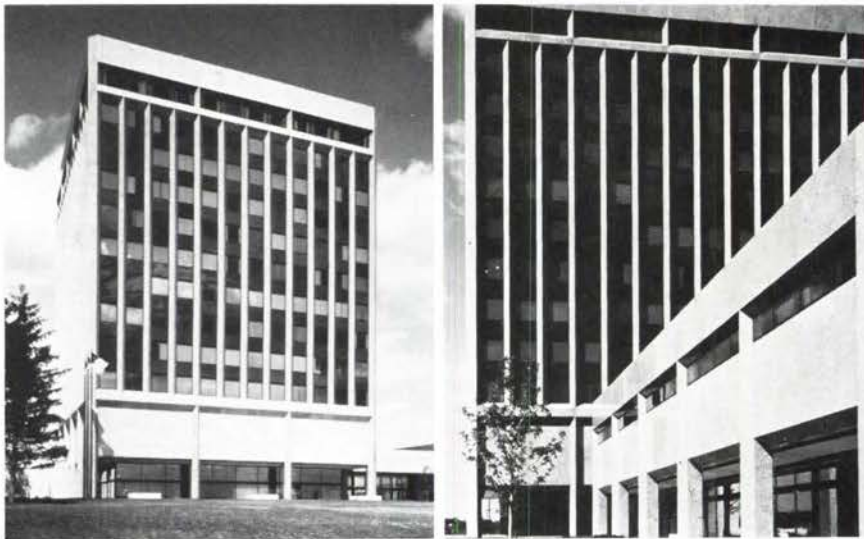
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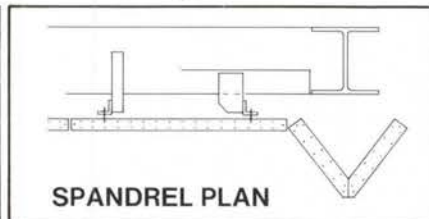
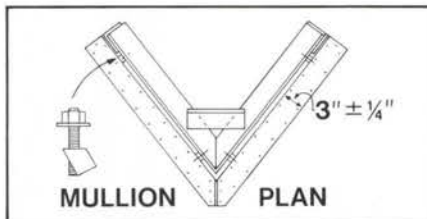


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Awards from page 182

The AIA gold medal, the highest honor awarded by AIA, was given to Philip Johnson in 1978 and posthumously to Richard Neutra in 1977. The Kemper award, given annually to an AIA member who has made an outstanding contribution to the Institute and to the profession, was presented in 1978 to Carl Bradley, FAIA, president of Archonics Corporation, and in 1977 to Ronald A. Straka, FAIA, who heads his own design consulting firm and was chairman of the urban planning and design committee.

The architectural firm award for 1978 went to Harry Weese & Associates and in 1977 to Sert Jackson & Associates. The Charles Eames house, Pacific Palisades, Los Angeles, designed by Charles Eames, is this year's winner of the 25-year award, and the Christ Lutheran Church, Minneapolis, designed by Saarinen, Saarinen & Associates (Hills, Gilbertson & Hayes, associated architects) received the 25-year award in 1977. Lawrence B. Anderson, FAIA, won the AIA/Association of Collegiate Schools of Architecture award for excellence in architectural education in 1978 and Henry L. Kamphoefner, FAIA, won the award in 1977.

Pennzoil Place in Houston (designed by Philip Johnson and John Burgee, S. I. Morris Associates) is the winner of the 1978 R. S. Reynolds memorial award. The award is given annually for the design of a "permanent, significant work of architecture, in the creation of which aluminum has been an important contribution."

Pennzoil building cited as 'sculpture, urban space'

The winning work, said the jury, "is most significant for the ways in which it addresses an urban situation. It enhances the city as a composition in solid geometry that works at three separate public scales: first, at five miles as a dynamically changing sculpture of large and simple form, experienced in time and motion; second, at the street scale, forming elegant urban spaces in the city grid, and third, at the site itself, inside the atrium, as an exciting personal space."

The jury consisted of John M. McGinty, FAIA, past president of the Institute; Hans Hollein, an architect from Vienna, Austria, who was recipient of the award in 1966, and Richard A. Meier, FAIA, the 1977 recipient for his Bronx Development Center.

The Reynolds aluminum prize for architectural students was given in 1978 to Roberto E. Paredes of Georgia Institute of Technology for his prototype health center and in 1977 to Daniel T. Dolan of Yale University's school of architecture for his design of a shelter for



emergency and multipurpose uses.

The 1978 AIA medals given to artists and craftsmen whose works are related to architecture include: painter Richard Haas, who revitalizes neglected walls of buildings with his paintings; David A. Macaulay, a prize-winning writer and illustrator of children's books on architecture and city planning, and illustrator Nicholas M. Solovioff. Robert Venturi, FAIA, received the 1978 medal given to an individual or organization responsible for a significant project related to architecture—his book *Complexity and Contradiction in Architecture*. John Portman, FAIA, Frederick Gutheim, Hon. AIA, and the National Trust for Historic Preservation are 1978 AIA medalists for accomplishments toward the integration of disciplines related to architecture. Portman combines the roles of architect and developer; Gutheim is architectural writer, critic, historian and consultant on urban affairs. The National Trust was cited for "conscience for preservation" and its encouragement of public participation. Three individuals who "have inspired or influenced the architectural profession" received 1978 medals: Stanislaw Nowicki, professor of architecture for 40 years; August Komendant, a structural engineer, author and teacher, and landscape architect Robert N. Royston.

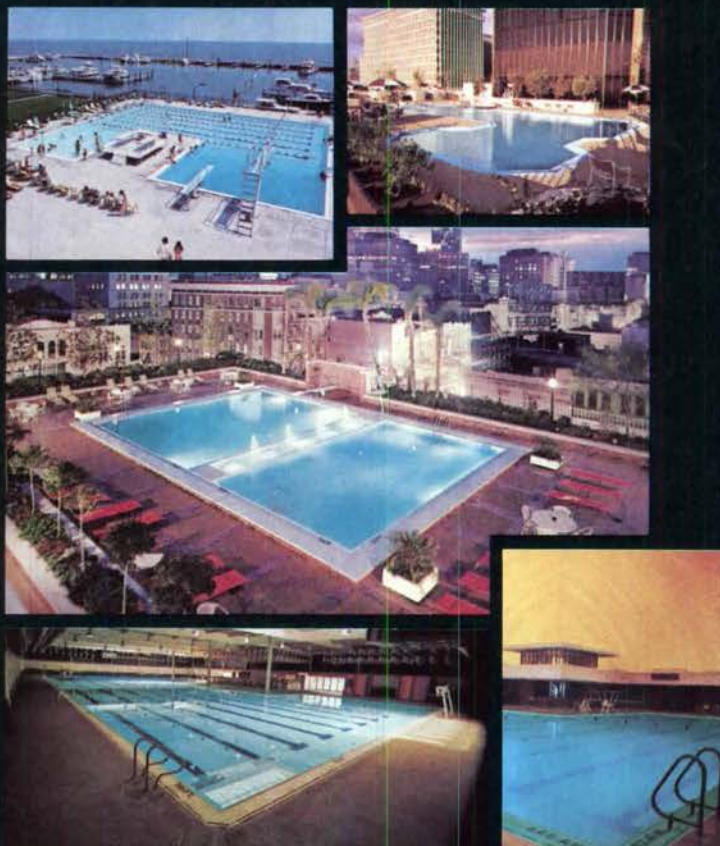
AIA's 1977 medal winners include sculptors Louise Nevelson and Claes Oldenburg, for artistic achievement related to architecture. For significant achievement in recording architectural accomplishments, the 1977 medals were

continued on page 196



Seagram Building (Johnson/Mies, top left); Lovell 'health' house (Neutra, top); Nevelson artwork (center); Oldenburg 'clothespin'.

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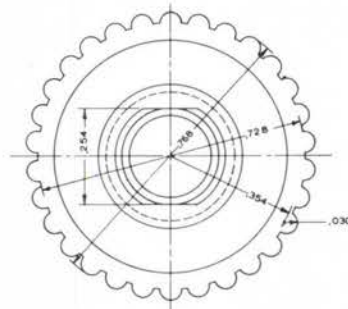


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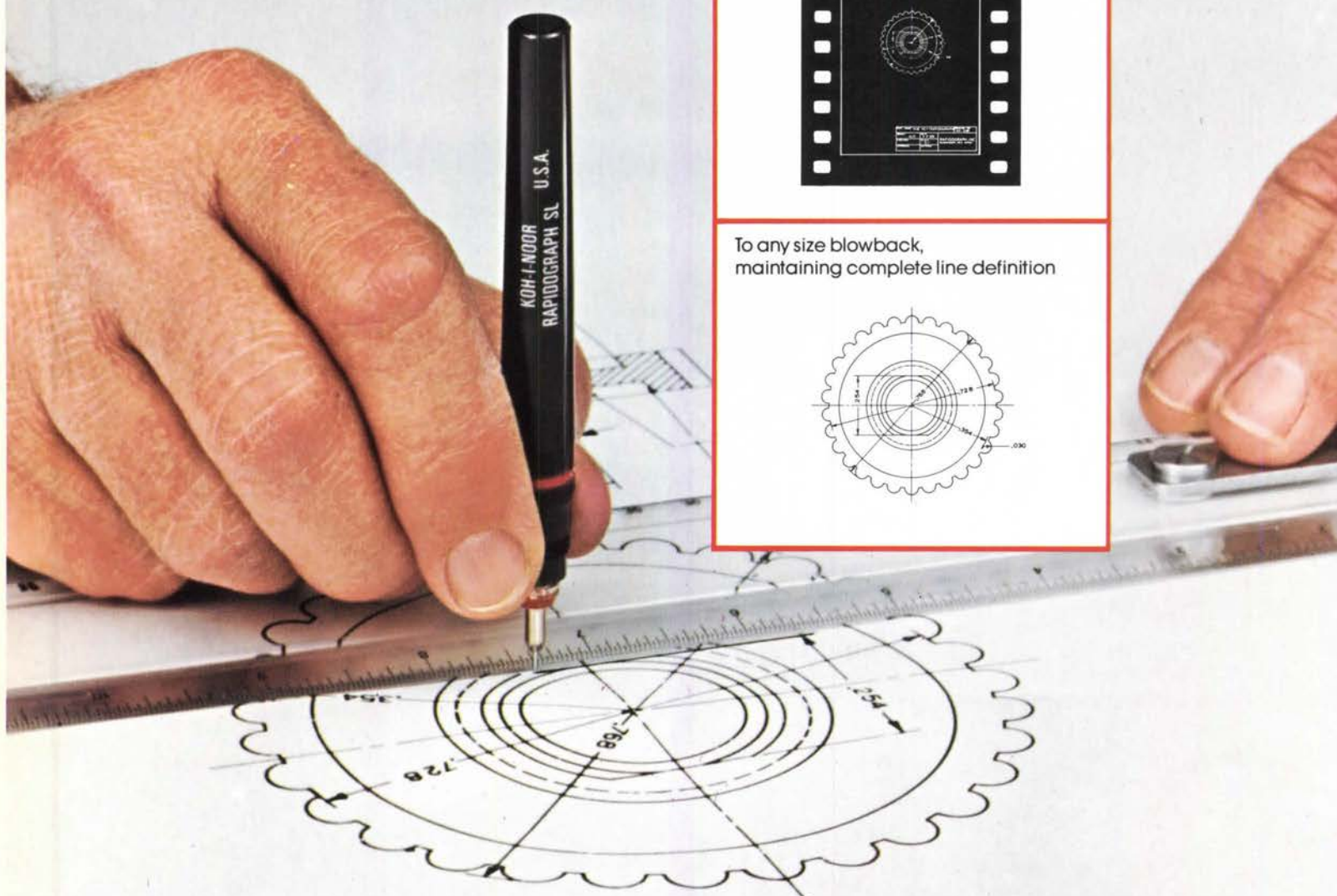
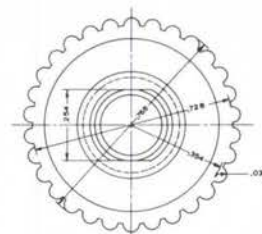
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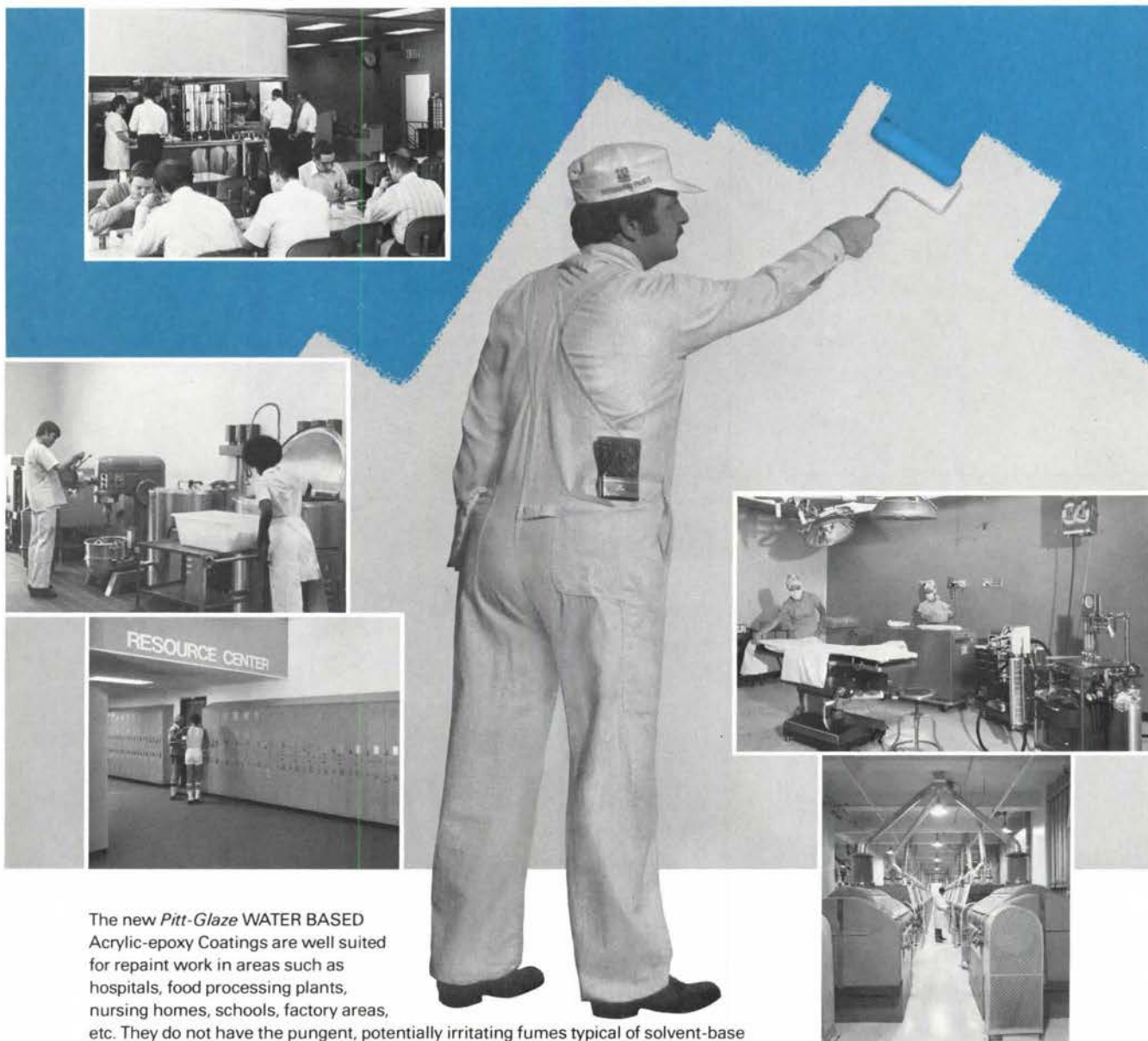
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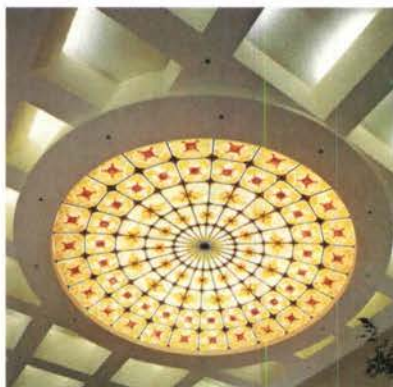
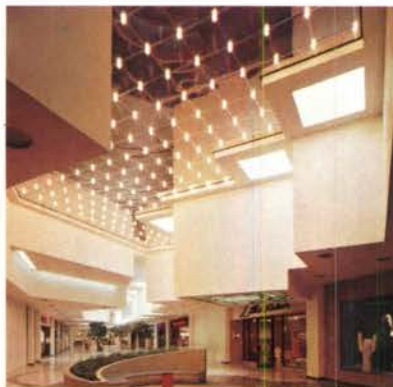
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The 1977 CRSI Design Awards Portfolio is available. This fully illustrated publication describes structural systems and specific design features of all winning structures. For your copy, write to Concrete Reinforcing Steel Institute, Attention: Victor A. Walther, Jr., Director of Marketing.

1977 Design Award Jury

Chairman

John M. McGinty, FAIA, 1977 President of AIA, The McGinty Partnership, Inc., Houston, Texas

James S. Polshek

Dean of the Graduate School of Architecture, Columbia University, New York, New York.

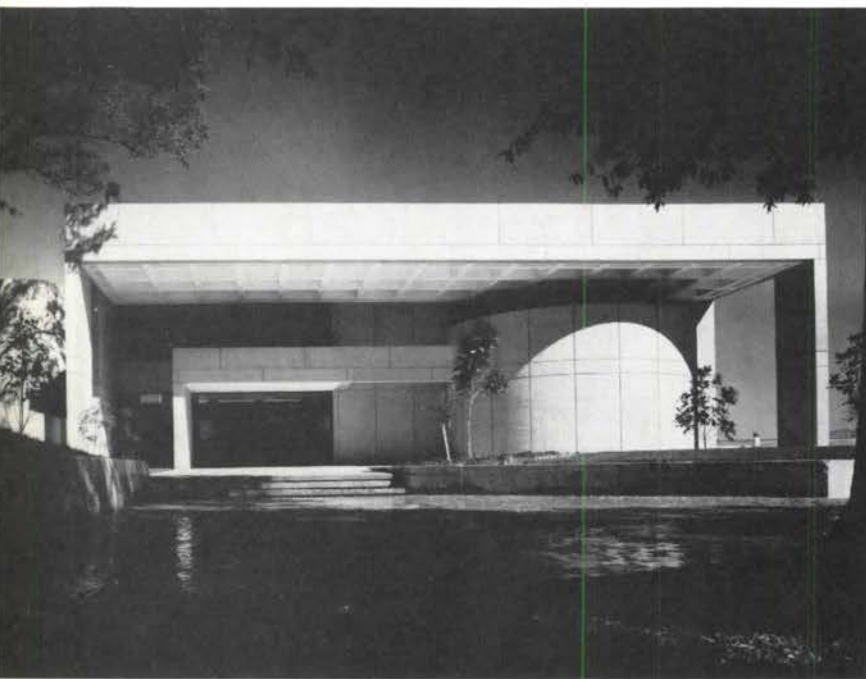
Leland J. Walker, FASCE, 1977 President of ASCE, Northern Testing Laboratories, Inc., Great Falls, Montana

Russell S. Fling, P.E., President, R.S. Fling & Partners, Inc., Columbus, Ohio

Gordon G. Wittenberg, FAIA, Chairman, Wittenberg, Delony & Davidson, Inc., Little Rock, Arkansas

A.I.A. Representative:

Mrs. Maria F. Murray, Director, Awards Program, The American Institute of Architects, Washington, D.C.



Hunter Museum of Art, Chattanooga, Tennessee.

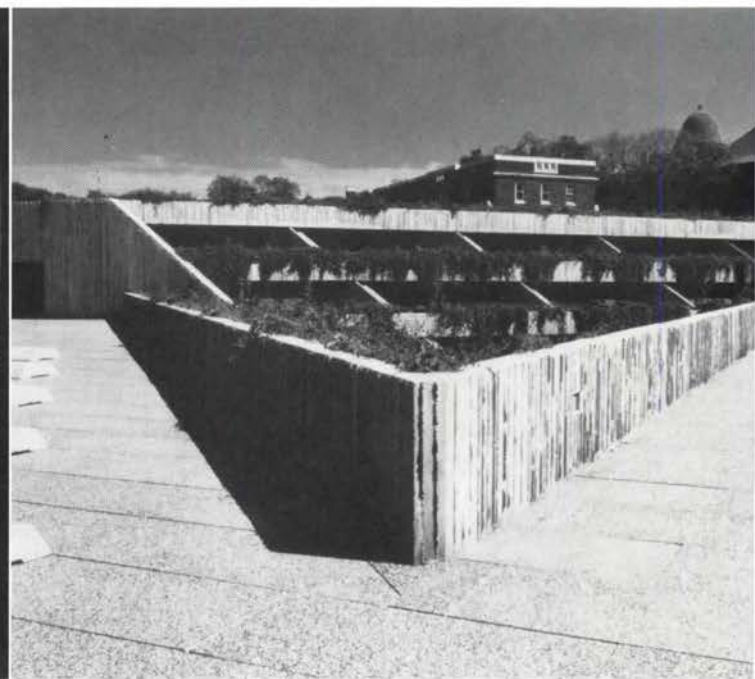
Jury Comments: "Excellent juxtaposition of a new building to an old museum...honestly expresses concrete technology in twentieth-century terms, made possible by intelligent site analysis."

Owner: Board of Trustees, Hunter Museum of Art, Chattanooga, Tennessee.

Architect: Derthick & Henley, Architects, Chattanooga, Tennessee.

Structural Engineer: Bennett & Pless, Inc., Atlanta, Georgia.

General Contractor: Raines Brothers, Inc., Chattanooga, Tennessee.



Williamson Hall, Minneapolis Campus, University of Minnesota.

Jury Comments: "The use of reinforced concrete made possible a sensitive solution...The underground building provided an opportunity to enhance a campus open space."

Owner: University of Minnesota, Minneapolis Campus.

Architect: Myers and Bennett Architects/BRW, Edina, Minnesota.

Structural Engineer: Meyer, Borgman and Johnson, Inc., Minneapolis, Minnesota.

General Contractor: Lovering Associates, Inc., St. Paul, Minnesota.

Award Winners.



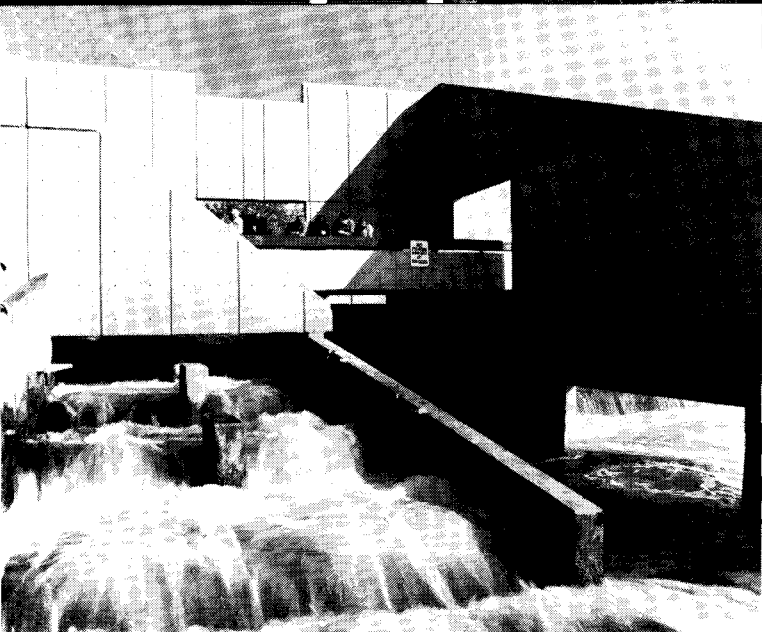
National Permanent Building, Washington, D.C.

Jury Comments: "A tour de force of intricate detailing of structural and mechanical systems creates a facade of great interest...A spectacular success as a speculative office building."

Owner and General Contractor: The Lenkin Corporation, Bethesda, Maryland.

Architect: Hartman-Cox Architects, Washington, D.C.

Structural Engineer: KCE Structural Engineers, Washington, D.C.



Grand River Fish Ladder, Grand Rapids, Michigan.

Jury Comments: "A unique project...designed as an art form to enrich the long-neglected visual aspects of our environment. A skillful solution with superb collaboration between architect, engineer, and sculptor."

Owner: City of Grand Rapids, Michigan.

Architect and Structural Engineer: W.B.D.C., Inc., Grand Rapids, Michigan.

Sculptor: Joe Kinnebrew, Grand Rapids, Michigan.

General Contractor: Triangle Associates, Inc., Grand Rapids, Michigan.



A Country Estate, Rancho Santa Fe, California.

Jury Comments: "The clear expression of the primary concrete structure is further reinforced by its juxtaposition to elegant wood...The proportioning of individual concrete structural elements and the decorative concrete details are handled in an exceptionally sensitive manner."

Owner: Roland Sahm, Rancho Santa Fe, California.

Architect: Fred M. Briggs AIA, Laguna Beach, California.

Structural Engineer: Richard L. Foley, Newport Beach, California.

General Contractor: Harry Wanket Construction, Inc., Carlsbad, California.



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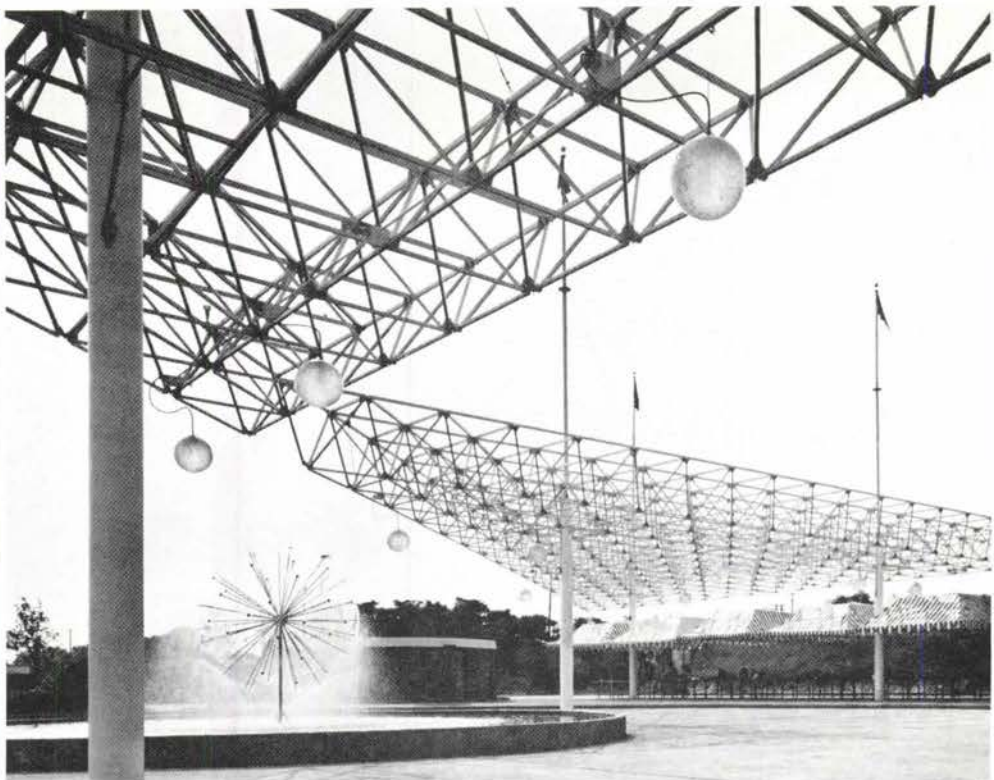
Awards from page 188

given to Arthur Drexler, who directs the department of architecture and design at the Museum of Modern Art in New York City, and to the Historic American Buildings Survey. Barbara Ward, an authority on economic and environmental development; G. Holmes Perkins, FAIA, dean of the graduate school of fine arts at the University of Pennsylvania from 1951 to 1971, and the Walker Art Center in Minneapolis won 1977 AIA medals in recognition of achievements in inspiring and influencing the architectural profession. Also honored was the City of Boston in recognition of outstanding urban projects related to architecture and the Pittsburgh History & Landmarks Foundation for its successful efforts to preserve landmark architecture in Pittsburgh and Allegheny County and to educate the public about the significance of its architectural heritage. Montreal's metro system received the 1977 medal given in recognition of the integration of several disciplines related to architecture.

In both 1978 and 1977, 11 persons outside the profession were made honorary members of AIA. In 1978, 66 members were elected to the college of fellows, a lifetime honor bestowed for outstanding contribution to the profession; in 1977, 56 were elected.

Rehabilitation, restoration and community efforts cited

- The seventh biennial HUD design awards emphasized rehabilitation and restoration over new construction, and community and neighborhood endeavors over individual works of architecture. The winners of the 1976 awards are: honor awards for project design—Arts for Living Center, New York City (Prentice & Chan, Ohlhausen); Gary Farmer's Market, Gary, Ind. (Whitley/Whitley, Inc.); Lancaster Central Market, Lancaster, Pa. (Haak, Kaufman, Reese & Beers); Linwood Court, Cambridge, Mass. (R. D. Fanning Architects, Inc.; Paul G. Feloney & Associates); Market Square Historic Redevelopment, Newburyport, Mass. (Anderson Notter Associates, Inc.); O'Bryant Square, Portland, Ore. (Daniel, Mann, Johnson & Mendenhall); Park Centre, Cleveland (Dalton-Dalton-Little-Newport); Penns Landing Square, Philadelphia (Louis Sauer Associates). Honor awards for urban design concepts include: Buchanan Street Mall, San Francisco (The SWA Group); Mill Hill Historic Park, Trenton, N.J. (City team: architects/designers); Over-The-Rhine Community Center, Cincinnati (Woolen Associates, Inc.; David Niland); Queensgate 11 Town Center, Cincinnati (Urban Design Associates). Honor awards for management approaches are: Baltimore's design review systems, Baltimore; City of



Gary Farmer's Market (top); Mercantile Wharf Building (below).

Santa Cruz historic preservation, Santa Cruz, Calif. (Joe H. Hall and Carole G. Nelson); facade easement, Hudson, N.Y. (Raymond, Parish & Pine); Greensboro housing management improvement program, Greensboro, N.C.; housing for the elderly development process, Lansing, Mich. (O'Dell, Hewlett & Luckenbach, Inc.); Indiana Township housing: phase two, Indian Township, Me. (Adams Associates, Inc.); Painted Post Village reconstruction, Painted Post, N.Y. (Leibowitz/Bodouva & Associates, New York City); Philadelphia Garment Center, Philadelphia (Nolen & O'Neill). Special mention awards went to Apalachicola-economic development through historic preservation, Apalachicola, Fla. (Wil-

loughby M. Marshall, Inc.); downtown Aurora decision chart, Aurora, Ill. (Ben-Ami Friedman and Estell Kazman); Eastwood, Roosevelt Island, N.Y. (Sert, Jackson & Associates).

- The 1977 homes for better living awards program, sponsored by AIA in cooperation with the magazine *House & Home*, presented awards to the following: for custom-designed homes, Bohlin & Powell for a house in northwestern Connecticut and to Richard Meier & Associates for a home in Mount Kisco, N.Y.; for multifamily housing to Natkin & Weber for housing in South San Francisco and to John Sharratt Associates Inc. for the Mercantile Wharf Building in Boston;

continued on page 198



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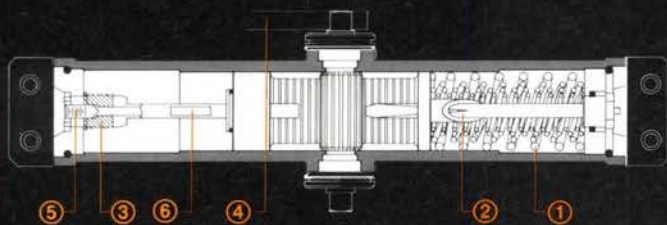
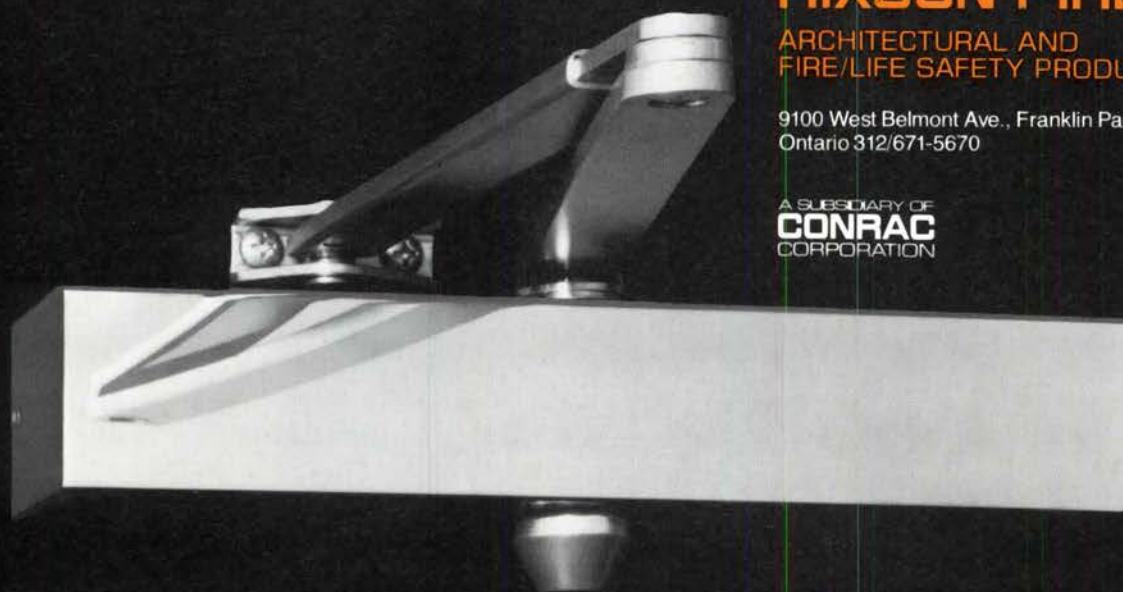
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Awards from page 196

for a merchant-built house to Fisher-Friedman Associates for the Whaler's Island project in Foster City, Calif.

- Robert E. Zehner and Clement Kilia are winners of the first craftsman of the year award which is sponsored jointly by AIA and AFL/CIO's department of building and construction trades. The winners are honored for their plaster restoration of Iolani Palace in Honolulu. Two awards of merit winners are Clyde Fjuimoto for sheet metal work at the Naval facilities project in Honolulu and Charles Coleman for work as foreman lather at St. George Ukrainian Catholic Church in New York City.

- Seven projects won top honors and honorable mentions in Owens-Corning Fiberglas Corp.'s sixth annual energy conservation awards in 1977. Two top winners in the special category were Bedford Mews, designed by Pomeroy, Lebunduska Associates, and the consulting engineering firm H. F. Lenz Co., for its energy audit of Carnegie-Mellon University's science hall. Top winner in the commercial category was Gunnar Birkerts & Associates for its creative use of architectural/engineering energy saving techniques in IBM's Southfield, Mich., office building. Ellerbe Associates, Inc., won honorable mention in this category for its energy conserving design of Western Life Insurance Co.'s corporate headquarters building in Woodbury, Minn. Winner in the governmental category was a team of architects, engineers and space planners (McGaughy, Marshall & McMillan, Arthur Cotton Moore/Associates, and Associated Space Design) for the proposed renovation of the old post office (top photo) in Washington, D.C. Moore, May & Harrington, Inc., won honorable mention in the governmental category for the energy conserving design of the Gainesville (Fla.) Municipal Airport's terminal building. Rowe Holmes Associates won an honorable mention for the design of the business administration building at the University of South Florida in Tampa.

- Nine buildings and four bridges were selected for top honors in the 1977 Prestressed Concrete Institute awards program. Special jury awards went also to two bridge projects and a convention center. The winning buildings are: Alagco Batch Plant/Shop, Anchorage (CCC/HOK); Dupont Circle Metro Station, Washington, D.C. (Harry Weese & Associates); Federal Correction Institution, Butner, N.C. (Middleton, McMillan); federal office building and courthouse complex, Eugene, Ore. (WEGROUP); Mallinckrodt Center (bottom), St. Louis (Hellmuth, Obata & Kassabaum); Metropolitan Life Insurance Co. Midwestern Head Office, Dayton, Ohio (Lorenz & Williams, Inc.); Nizny Building, Dayton

(structural engineers: Winstandley & Associates, Inc.); Southwest Division Office, Safeco Insurance Co. of America, Richardson, Tex. (Iconoplex, Inc.); West Beach Bathhouse, Indiana Dunes National Lakeshore, Chesterton, Ind. (Howard Needles Tammen & Bergendoff).

Winner of a special jury award was the

Energy conservation and use of concrete, plywood and masonry

George L. Smith II Georgia World Congress Convention Center, Atlanta (Thompson, Ventulett, Stainback & Associates, Inc.).

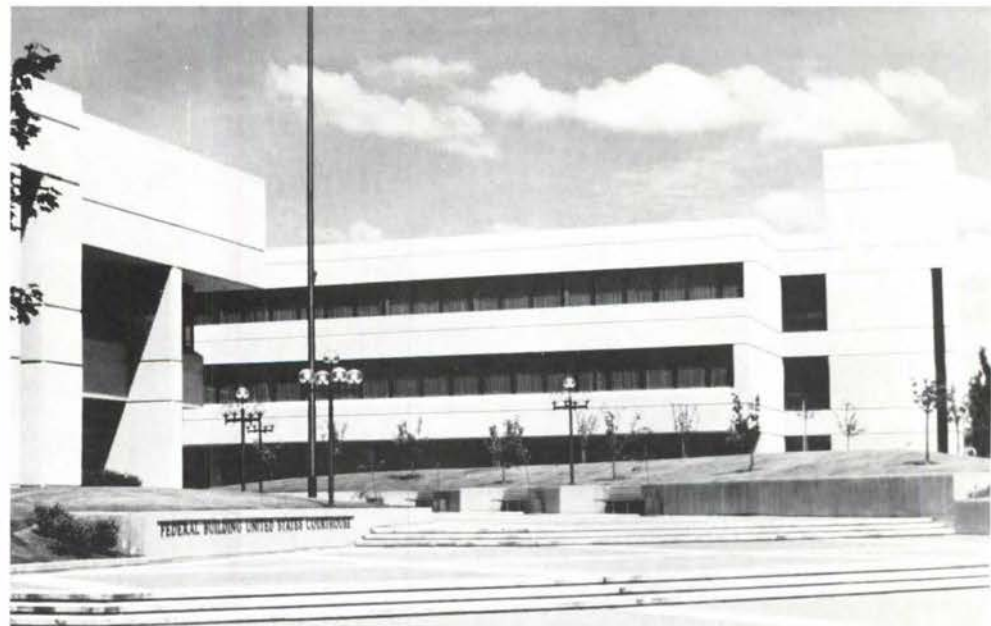
- Winners of the 1978 American Plywood Association's design awards program are: Backen, Arrigoni & Ross Inc., for a residential/single-family house in Orinda, Calif; Taylor & Collum, Inc., for commercial/institutional building, the Shenandoah Recreation Center, Shenandoah, Ga.; and Timothy Wood, for a

vacation house, Stillwater, N.J.

William McCulloch, AIA, of Newport Beach, Calif, is winner of a top award in the 1977 American Plywood Association's design awards program. The architect used rough-sawn plywood siding to convert a 1,400-square-foot traditional 1950s tract house into a 2,100-square-foot contemporary residence. Other top winners are: Donald Sandy Jr., AIA, and James A. Babcock, for Tree Swallow Court, a townhouse project; William P. Bruder, for a pinewood cabin, and Charles Herbert & Associates, for a branch bank building.

- Davis, Brody & Associates was the recipient of the 1977 Louis Sullivan award for architecture, sponsored by the International Union of Bricklayers and Allied Craftsmen. The entries were judged on the basis of the number of buildings or projects in which masonry is a major element rather than on a single project. The

continued on page 200



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Awards from page 198

four buildings and complexes submitted by Davis, Brody & Associates were Waterside and East Midtown Plaza, housing complexes in New York City; a synagogue, and a New York State University campus complex.

- Nineteen buildings were named as award winners in the American Institute of Steel Construction's annual competition for steel-framed structures in 1977. They are: the Pavilion, Concord, Calif. (right, Frank O. Gehry & Associates); Pennzoil Place, Houston (Johnson/Burgee with S. I. Morris Associates); the John Hancock Tower, Boston (I. M. Pei & Partners); Prince of Peace Lutheran Church, Burnsville, Minn. (Frederick

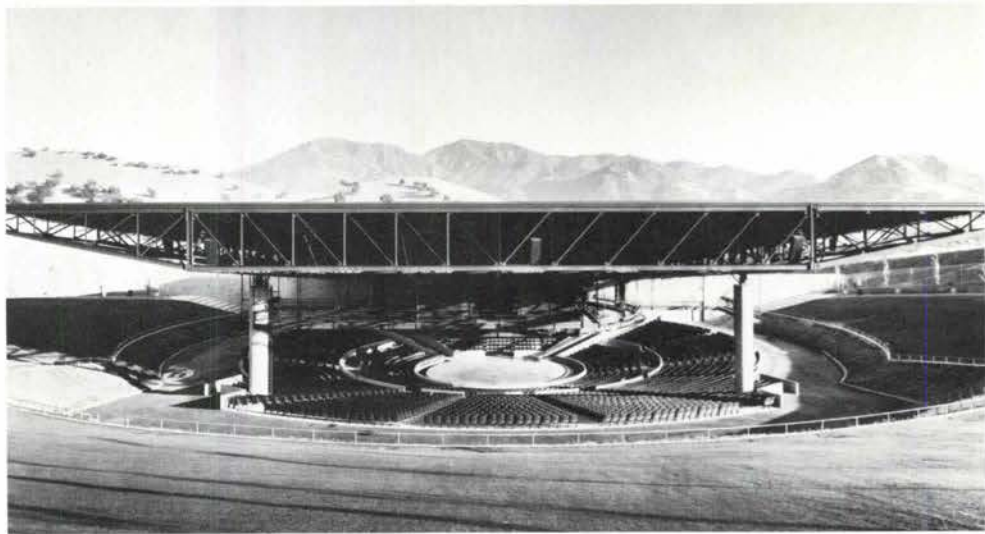


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Bentz/Milo Thompson & Associates, Inc.); Coal Street Park Ice Skating Facility, Wilkes-Barre, Pa. (Bohlin & Powell); Freightliner Corporate Headquarters, Portland, Ore. (Boutwell, Gordon, Beard & Grimes); Larkspur Ferry Terminal, Larkspur, Calif. (Braccia/Debrer/Heglund); Chicago Police Training Center, Chicago (Bureau of Architecture, Chicago Department of Public Works); American High School, Miami (Caudill Rowlett Scott); National Air and Space Museum, Washington, D.C. (Hellmuth, Obata & Kassabaum); Satellite Ball Casting Plant, Chandler, Ariz. (Lester B. Knight & Associates, Inc.); John A. Volpe International Terminal, Logan International Airport, Boston (Kubitz & Pepi, Inc.); Robin Hood Dell West, Fairmount Park, Philadelphia (John H. MacFadyen & Alfredo De Vido); Ramapo College Physical Education Building, Mahwah, N.J. (Mahony & Zvosec/Kenneth DeMay); House of Representatives and Senate Conference Facilities, Oklahoma City (Architectural Associates of Meyer/Brown, Inc.); physical education facility, University of Minnesota, Duluth (The Leonard Parker Associates); Georgia World Congress Center, Atlanta (Thompson, Ventulett, Stainback & Associates, Inc.); Hennepin County Government Center, Minneapolis (John Carl Warnecke & Associates).

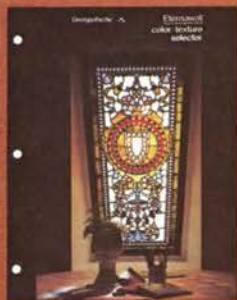
- As part of its mission to promote historical preservation in this country, the National Trust for Historic Preservation gives awards annually to individuals and organizations who make significant contributions to the preservation and restoration of culturally significant sites and buildings. Awards for 1977 include the following: the Pennsylvania Academy of Fine Arts in Philadelphia for the restoration of its Victorian building of 1876, restoration under the direction of Hyman Myers, AIA, of Day & Zimmermann Associates; the Mark Twain Memorial in Hartford, Conn., for the "exemplary restoration of a Queen Anne style house,"

continued on page 206

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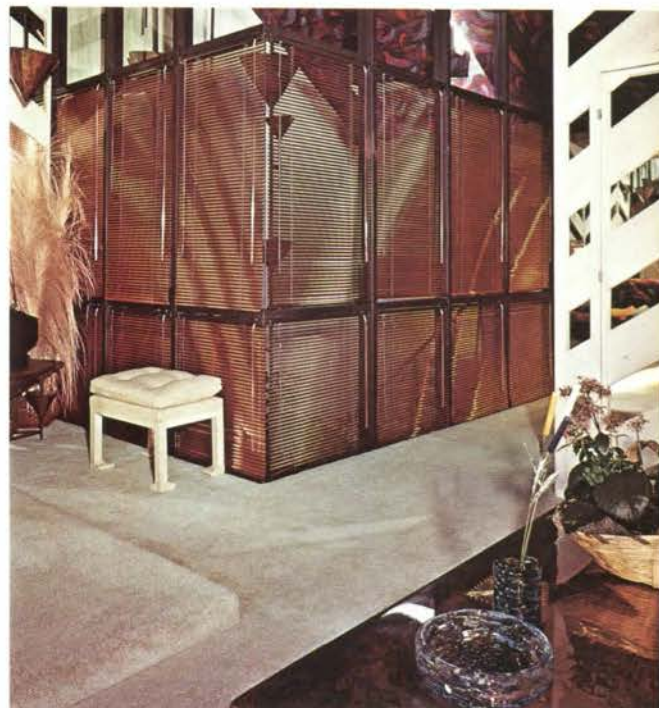
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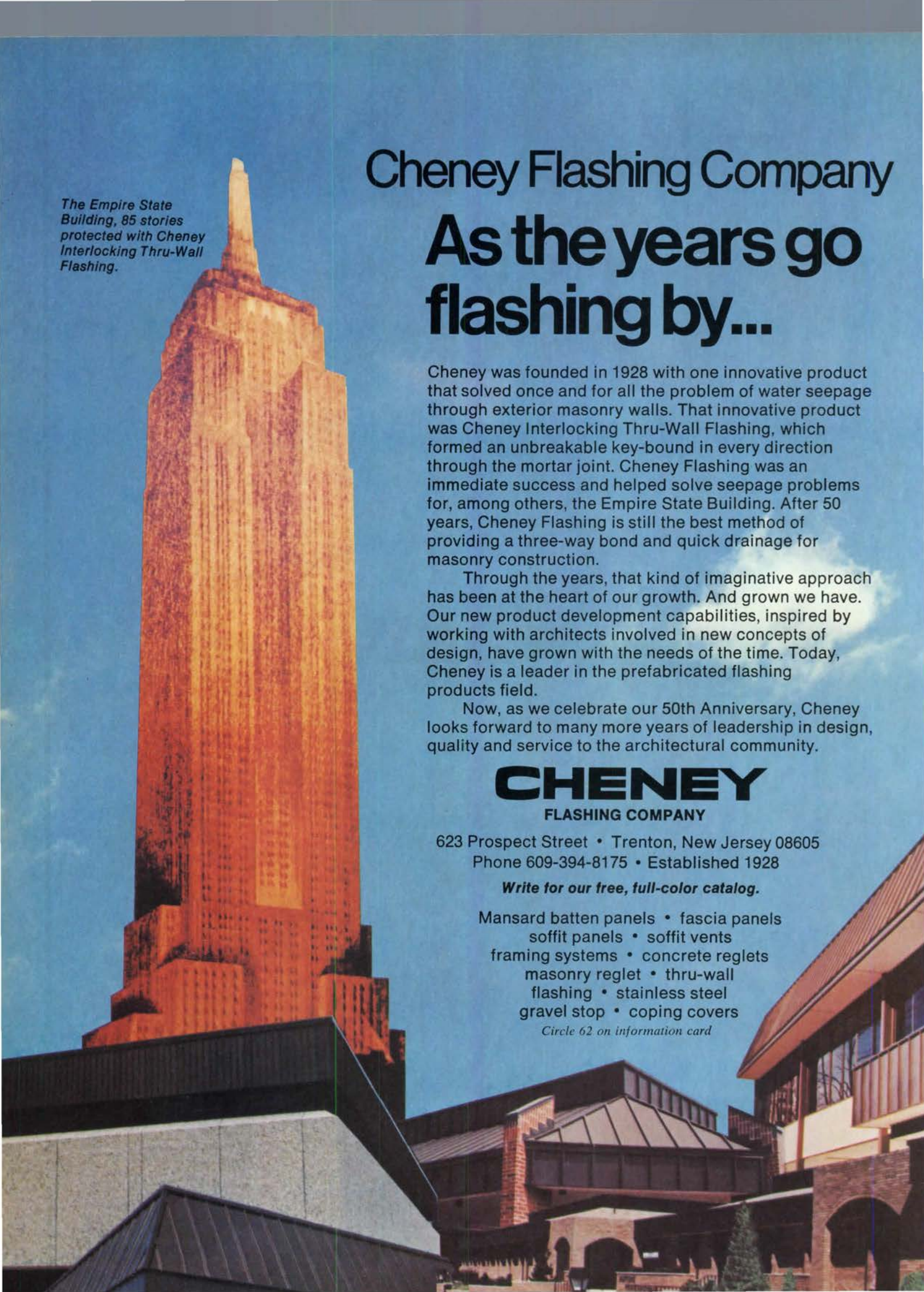
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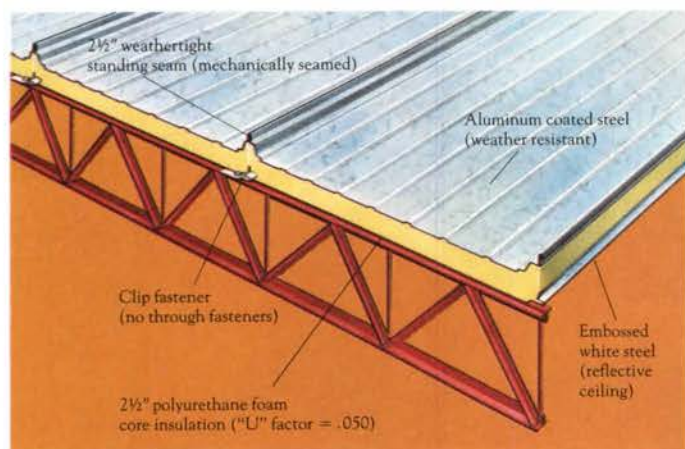
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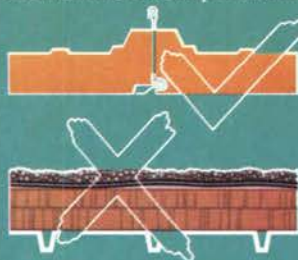
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Awards from page 200

designed in 1874; German Village Society, Inc., of Columbus, Ohio, and its founder Frank Fetch for the restoration and rehabilitation of historic German Village, a 233-acre area in downtown Columbus; Franklin Savings Association of Austin, Tex., for its "dramatic reuse of the 100-year-old Walter Tipps house" as a branch office; four groups in Bath, Me., for 10 years' effort in the preservation of shipbuilding sites, the downtown trade district and ecclesiastical landmarks, and Kahuku Sugar Mill on Oahu, Hawaii, for its restoration of an 1890 sugar mill to interpret the history of sugar.

- The National School Boards Association has awarded special citations to seven architectural firms for the "excellence" of their entries in the third annual exhibition of school architecture in 1977, cosponsored by NSBA and AIA. The firms honored are: Ashley Humphries & Partners for Garza-Pena Elementary Schools, San Juan, Tex.; William Blurock & Partners/Arthur D. Decker & Associates for the East County Performing Arts Center, El Cajon, Calif.; Carmichael-Kemp for the Development Center for the Handicapped, Glendale, Calif.; Facilities Planning Group for Rose City Park School, Portland; FGM, Inc. for Nathan Hale Middle School, Crestwood, Ill.; HTB, Inc. for the Model Secondary School for the Deaf, Washington, D.C.; Porter/Jensen/Hansen/Manzagol for the renovation of an education center, district administration, warehouse and central kitchen facility, San Juan Capistrano, Calif.

- The 1977 Red Cedar Shingle & Hand-split Shake Bureau and AIA honored three architects and their projects which demonstrate design excellence and significant functional or esthetic use of red cedar shingles or shakes, including: Adams residence, Roseau, Minn., designed by Thomas N. Larson, in the single-family residence category; Embarcadero Condominiums, Newport, Ore., designed by Campbell-Yost-Grube, in the vacation home category, and Oakes College, University of Santa Cruz, Santa Cruz, Calif., designed by MBT Associates, in the residential multifamily category.

- Three projects were selected to receive the 1978 Tucker awards, given annually by the Building Stone Institute to "honor the design and build team who contributes to the construction of an outstanding stone project completed within the last two years." Two awards are in the category of a structure more than 25 years of age: the U.S. Supreme Court, designed by Cass Gilbert, Cass Gilbert Jr. and John R. Rockart, and the Tribune Tower, designed by John Mead Howells and Raymond M. Hood. In the category of a

continued on page 210



Adams house (top); Embarcadero Condominiums (center); Dillworth Plaza.



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WHAT'S NEW

**ENERGY MANAGEMENT
VIEWS FROM NECA - THE
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"THE MORAL EQUIVALENT OF WAR"—

and "one of the greatest tests of our national will." Those are some of the grim phrases used by prominent Americans to describe our national energy situation. Our national will seems to be blunted because there is no consensus about the nature and dimension of the problem itself. Unless we face an imminent crisis, it seems that this society can absorb great changes in life style only when they are voluntary, and are perceived as desirable or contributing to a higher standard of living. When potential changes appear to be forced upon us or to be detrimental to our future expectations, the great defensive reactions mobilized to preserve the status quo may make us unable to deal with the problem until it becomes a catastrophe. We just are not accustomed to running out of things we want.

So, in the interest of developing a national consensus, let's review the problem and its most desirable solution. Oil makes up only 3% of U.S. energy reserves, but accounts for about 47% of our consumption. We import about 43% of our oil needs, mostly from foreign countries who collectively control international prices at a level much higher than is justified by production costs. The exorbitant cost of imports is causing a serious drain on our international trade balance and has contributed to our domestic unemployment. If present trends continue, we stand to increase oil imports even further with additional reductions in the value of the dollar and even more severe unemployment impact. Natural gas reserves comprise about 4% of our energy reserves, but gas has amounted to as much as 28% of our energy use. At present, gas imports are insignificant but the gas industry has asked for unlimited freedom to import

liquefied natural gas in the immediate future. Few forecasters expect domestic production of oil and gas to ever return to historical growth no matter how high the prices become. We have frantically increased drilling for new oil and gas, yet our reserves continue a long-term decline.

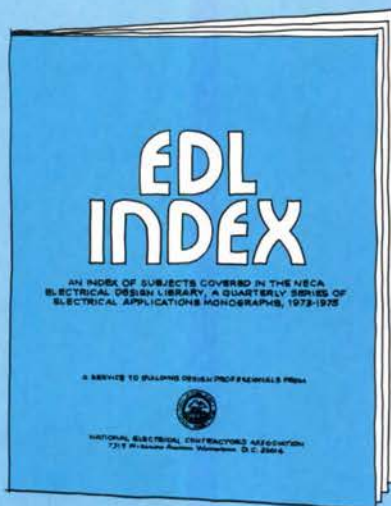
On the other hand, coal amounts to about 90% of our domestic energy reserves, enough to last several hundred years. But it presently supplies only about 23% of our energy. Domestic uranium reserves will last only a

courage maximum production at the most economical prices of all forms of energy, and become expert managers of our total energy resources. Research and development of renewable energy forms must also be increased.

Indications are that industrial leaders have already realized the benefits of better energy management. Most large companies have appointed energy managers and most industries have taken measures to get more out of their energy investment. The results are noticeable in demand for electricity . . . the most cost-effective way of using our coal and nuclear abundance. This demand is expected to increase from 28% of all energy now in use to about 50% by the year 2000, only 22 years from now. The outlook for a financially healthy and productive electrical industry will determine whether this desirable trend continues. Except possibly for personal transportation and petrochemical products, there is literally no job presently being done by oil and gas that cannot be accomplished efficiently by electricity.

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few generations, but with the breeder reactor, these supplies could be extended indefinitely. Other forms of energy, such as solar, geothermal, oil shale, and gasified coal, are still experimental. Economical sources are not yet available, except in very narrow applications. These may hold great promise if we can adjust to the different life style they will require.

The solution seems to be obvious. Simultaneously, we must decrease our dependence on oil and gas, increase our use of abundant coal and nuclear power, en-



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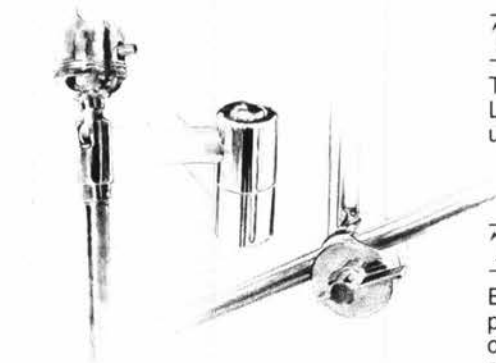
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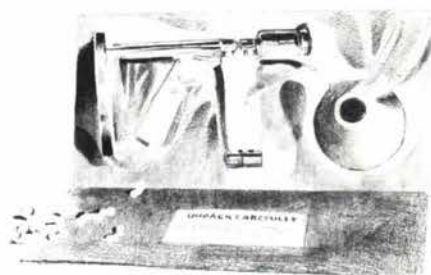
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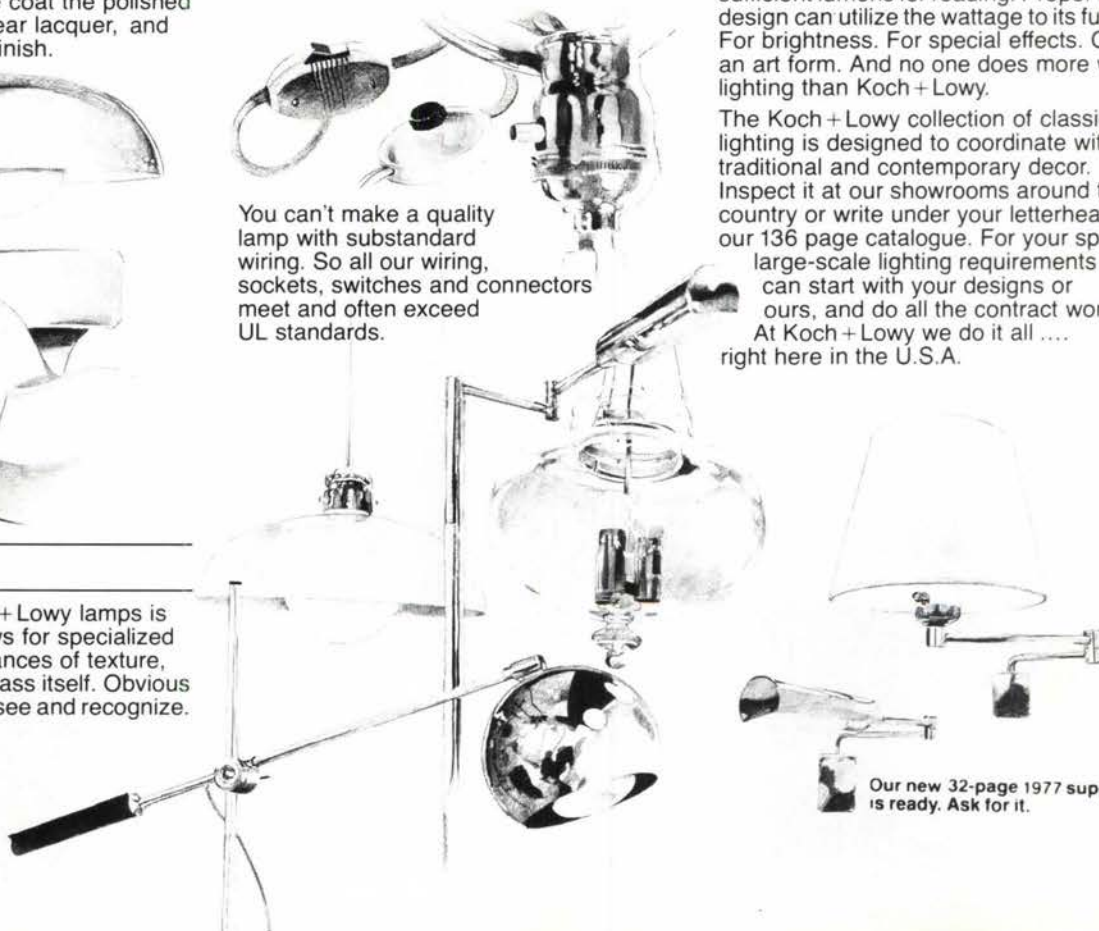
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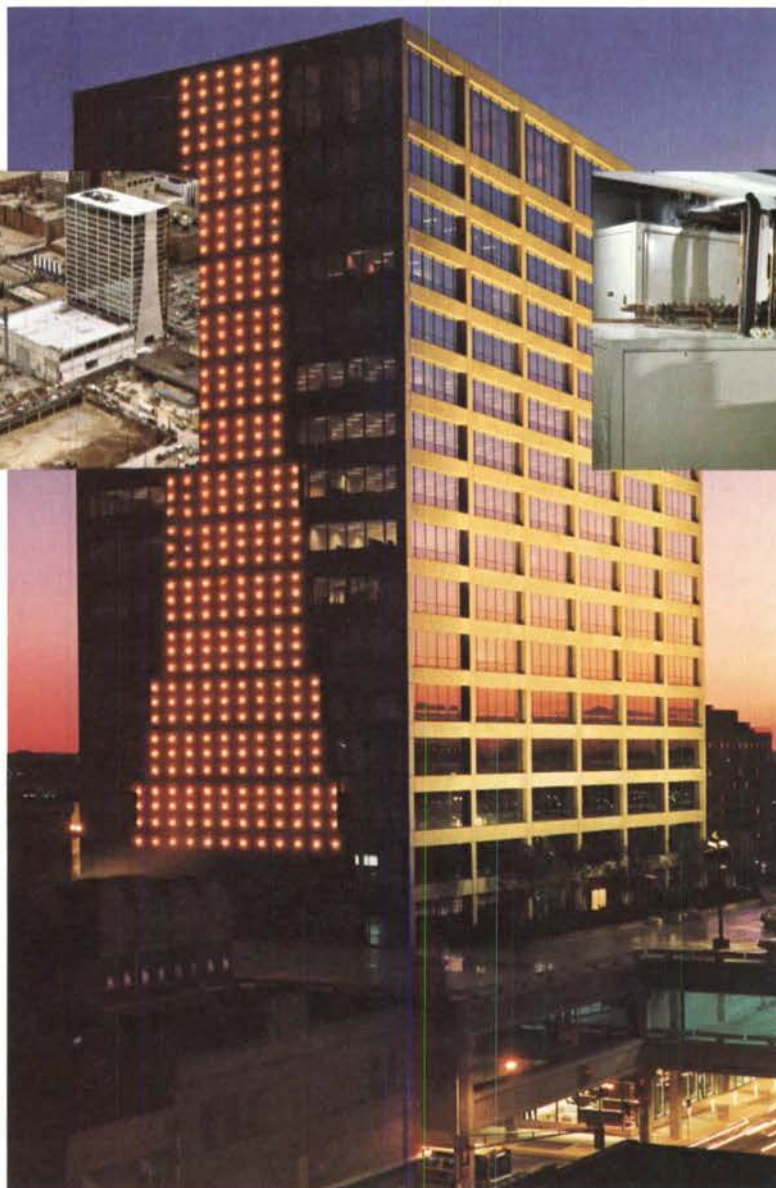
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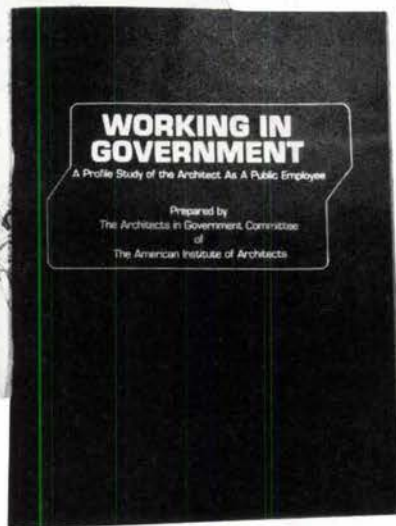


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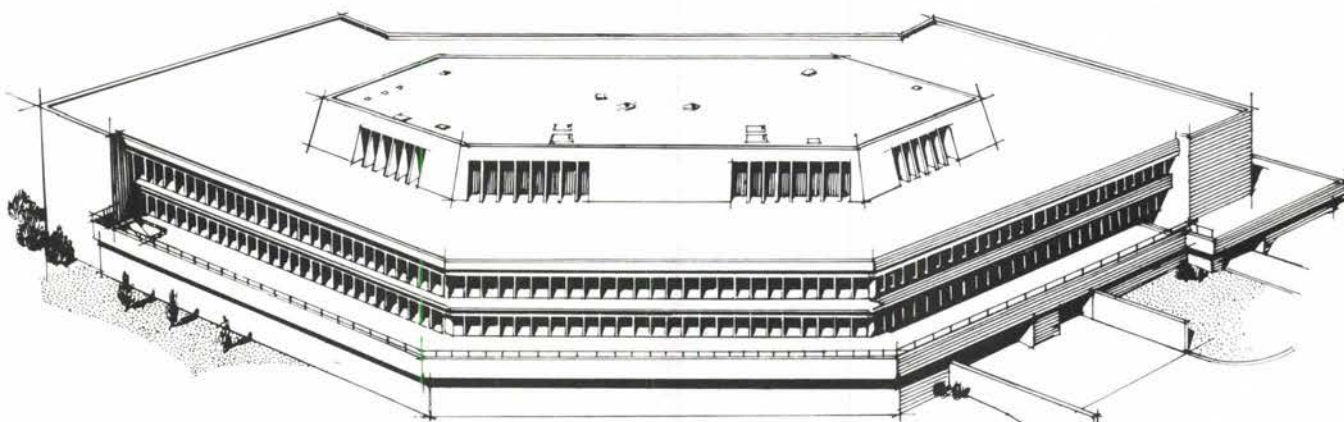
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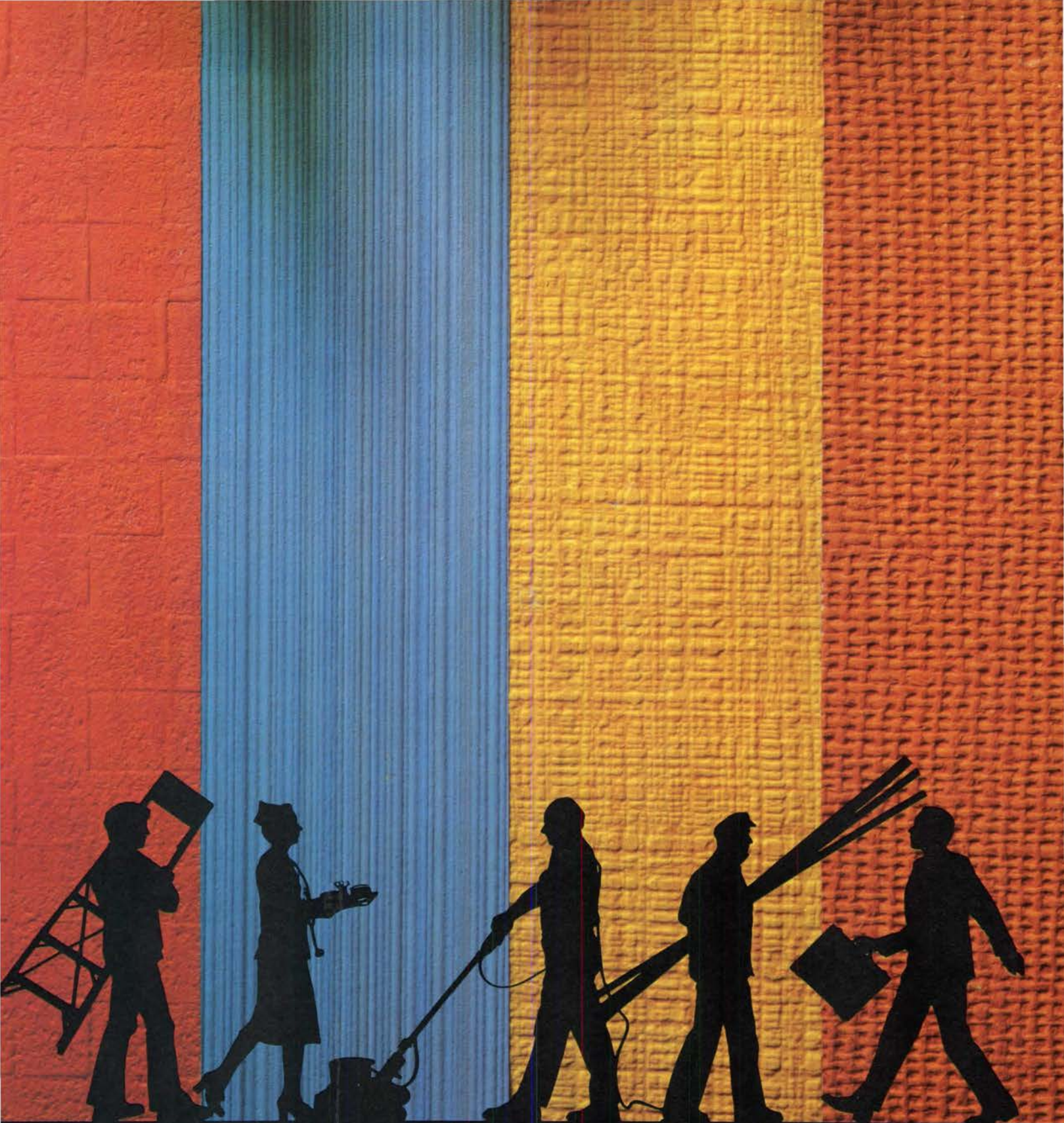
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Pastier from page 164

more hands-on involvement with construction and more design attention given to detail. The California state office building competition has recently shown the important values of energy efficiency, mixed-use occupancy and concern with urban texture and human scale.

Pressed, I say that the fuzzy trend fluttering in the distant foliage is one of humanistic values in the midst of puzzling changes, but perhaps time will show that I am peering at a bright leaf that is soon to fall.

Malcolm Holzman: Expand Preservation to Include the 'Stabilized Ruin'

Interest in old structures during the last decade evolved in part because of three factors. First, the rising cost of construction made vacant land with old buildings appear to be an economic alternative. Second, America's historical awareness (partially awakened by the bicentennial) reached new heights. Third, Williamsburg showed that considerable revenue could be generated by historic attractions. Many American communities restored houses that belonged to governors, generals or

captains of industry as a record of life from past decades. They developed railroad stations into restaurants and stores and adapted industrial buildings for housing, theaters and museums.

Today, planners realize that the built world is a resource with limitations. It is too expensive to restore and maintain many old structures. The cultural value of restoration may *not* always justify the expense. Finding compatible new uses is a problem (e.g., Cincinnati Union Terminal, U.S. Customs House, etc.). Many finished restorations deny real time. Recycled spaces are new. Restored spaces are also new but carefully fashioned in terms of decorative detail, often furnished in the style of a given period, and appropriately lighted. Both eliminate the physical and psychological distance imparted by use (and abuse) because of their "proper" presentation of a given moment in history.

The scope of preservation work should be broadened beyond its conceptual framework of recycling and restoration. Specifically, it should include a category for "stabilized ruins." A site could qualify for preservation if it were of outstanding social, political or cultural importance. It would not have to be of the highest architectural significance but should possess a unique character. Sites could be in a state

of disrepair but not totally disintegrated. There is no proof to date that a ruin can be economically viable. But two decades ago, few people believed that reuse was an alternative to new construction.

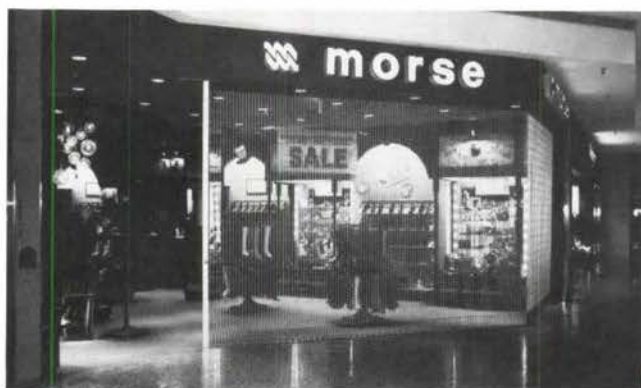
The main facility at Ellis Island is proposed as the first "stabilized ruin." It has been selected because its success or failure cannot be measured in dollars. Ellis Island has been the subject of numerous reuse and restoration proposals since its abandonment in 1954 by the bureau of immigration and naturalization. It has deteriorated and has been vandalized. The federal government is developing a program for the island, but its use has not been established. To plan and rebuild the 37 buildings and 27 acres on the island could take at least 10 and possibly 30 years (1988 to 2008), and cost more than \$50 million. Instead, it might serve as a prototype for a "stabilized ruin."

Ellis Island is already much more than buildings and land. Almost 25 percent of Americans are related to immigrants who were processed through this point of entry. It is familiar, as well, through books and films that have recorded associated emotions: the joy of freedom from oppressive political systems, fear and anticipation of life in a new land, sorrow at separation from loved ones, bewilderment

continued on page 231

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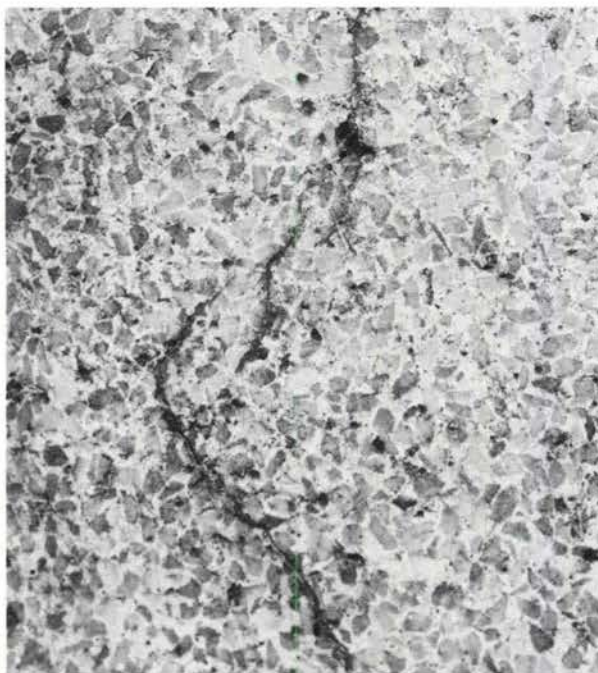


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Holzman from page 228
because of language and physical disability.

A new direction for historic attractions could be developed in the following ways:

The history of the island could be presented as fragmentary and incomplete. The immigrants processed through the island did not come away with one unified impression.

New visitors could be asked to create in their own minds the island as they think it stood many years ago.

The government would not provide a homogenized and tape-recorded version of history. A visitor's "understanding" of Ellis Island would depend on him.

Stabilization of the island's architecture could preserve the spirit of the place better than rebuilding it. A spanking clean series of buildings (or if funds run out, one building) with new paint, perfectly finished floors, up-to-date lighting and security systems cannot match the expressiveness of time: peeling plaster, barri-



caded stairways, and decrepit equipment (wheelchairs, benches, medical cabinets, etc.).

If stabilized, the present state of decay can more closely recall the passage of time. Far fewer dollars need be spent. It could be available in three to five years.

Since an immigration museum exists in the recently rebuilt base of the Statue of Liberty less than three-quarters of a mile across New York Bay, a coordinated program between the two facilities would eliminate the need for a formal presentation of island history. Instead, efforts could be spent developing the island's natural environment. Considerable landfill has been added to Samuel Ellis's original sandbar. It is a combination of formally planted sycamores and lawns contrasting with common ailanthus, vines and dense undergrowth. Both landscapes, together with the "stabilized ruin," could provide metropolitan New York with a unique visitors' attraction.

If the island proved successful, it would indicate that the public has a higher level of sophistication than it is given credit for, that old buildings can be thought about in yet another way, and that the concept of a "stabilized ruin" might even be examined as a commercial venture.

Emilio Ambasz: Architecture Is 'the Reply to Man's Passion and Hunger'

AIA JOURNAL asks: What is the future of architecture?

The future is the opiate of the people. On the other hand, the future conceived as an ideal serves as a model for approximation, or, in some cases, to steer away from. But in either case the image of possible futures functions as a critical set of dialectical guidelines giving form and meaning to our present alternatives.

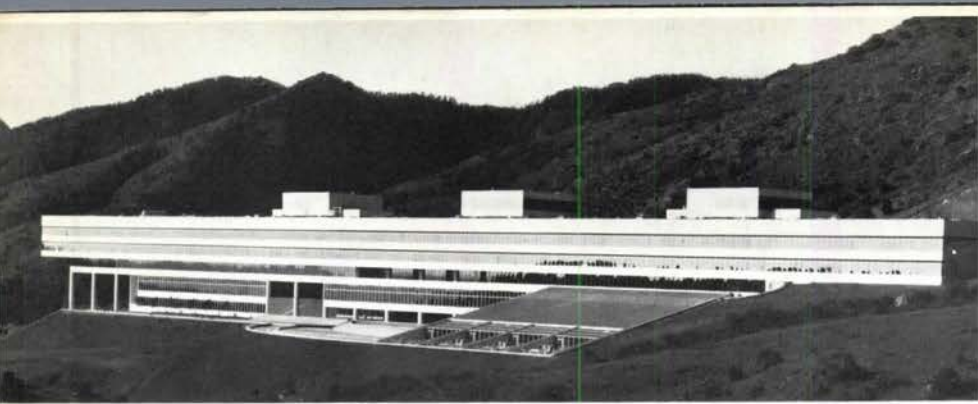
Europe's eternal quest has always been Utopia, the myth of the end. America's returning myth is Arcadia, the eternal beginning. While the traditional vision of Arcadia is that of a humanistic garden, America's Arcadia has turned into a man-made nature, a forest of artificial trees and mental shadows.

America's architect (Arcadian variety), like the first chair maker using the wood of surrounding trees, is now beginning to use the objects and processes (and, sometimes, the memories) surrounding him. But—since no more trees remain, just chairs—he has to be careful that his creations are either capable of returning to their original state or of being reused, lest he find himself the gardener of a man-made desert. The architect, that old thaumaturge of the eternal gesture, must now learn both how to celebrate the ritual of the beginning and how to design for the ritual of the end.

The systematic principle underlying such notion of order is the concept of open-ended system, where the possibilities for changing patterns of relationships remain always open, but where each of the component elements assumes an irreducible identity at the same time as it retains the ability to become a part of a larger entity.

The methodological principle guiding such practice is the search for prototypical solutions. Prototypes are symbolic formalizations; the combination of known types. As the individual and social conditions which prompted the prototype's creation undergo changes (changes brought about sometimes by the action of the prototype making legible the underlying values of the culture which created it), the prototype "understood" becomes a type which, in turn, may later become part of a new prototype.

continued on page 234



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An architecture in dynamic consonance with a man-made nature in a constant state of becoming involves specialized tasks. First, *empirical*, to construct a cartography of the products and production techniques which populate the man-made garden. Second, *normative*, to develop a program of individual needs and desires in the context of a larger program of social necessities, so as to guide the utilization of the empirical cartography. Third, *synthetic*, to give form to new structures which will allow man to reconcile his fears and desires with the limitations imposed by the empirical realm and the pressures of the normative domain.

Architecture is not the answer to the pragmatic needs of man (that is the task of building), but the reply to his passion and imagination. It is not hunger, but love and fear, or wonder, which makes us create. The poetic principle is the fundament of our making universes. The architect's milieu may have changed, but the task remains the same: giving poetic form to the pragmatic.

Charles Montooth: 'The Quest for Freedom' and Watchful Consumers

The 1960s and '70s have seen a veritable explosion of architectural shapes leaving the land with the imprint of, in some cases, men of talent; in others, men of irrepressible but undisciplined ego. At best, ego has been disciplined and combined with talent to produce remarkable architecture. At worst, it has produced complicated designs and transient architecture such as that which results from mural painting on undistinguished forms. In architecture that is an expression of ego the results are apt to be less disciplined, more exuberant, more inventive, and often visually awkward. As the smoke from this architectural explosion clears away, we can discern the culmination of a half-century of architectural adventure, shaped in part by technological progress.

One trend is the consolidation and refinement of a wide variety of forms. This trend reflects the concerns of architects who seek to enclose space in carefully articulated elements of composition. These practitioners appear to be working to obtain the most expressive character of each material used.

Another trend combines engineering and design to produce buildings which clearly express their underlying structure. The architecture of Nervi comes to mind as an example of this direction. More recently, we have seen attempts to integrate the mechanical aspects into the

building fabric or, in some cases, to feature them as conspicuous components. The most successful instances of the former are the air supply in Saarinen's TWA terminal at Kennedy airport and the lighting of the underground stations of Weese's Washington Metro. Examples of the latter are to be found in Hardy Holzman Pfeiffer's Columbus, Ind., Occupational Health Center and Piano & Rogers' Beaubourg. Beaubourg is the ultimate expression of this trend. It must be said, however, that the maze of exposed tubes, frames and conveyors which characterizes the famous building is a relatively disciplined venture compared with some of its predecessors in this country. The Occupational Health Center at Columbus, Ind., is colorful, bold, busy, but lacking in repose. A more pleasing solution to light and air distribution problems is found in Warnecke's Aid Association for Lutherans headquarters. One feels the designer has approached his task with humility and a desire to provide a workable environment for his clients. Here there is no intent to shock the occupants.

Related to these trends is growing public and client participation in design decisions. In the hands of a sensitive artist, this participation can and should be helpful. This is not to say that it won't at times be difficult. Along with this increased participation of others in our work, we architects can expect far more careful scrutiny of the way our buildings work. Critics and consumers of our products will be watching to see if our buildings perform as intended.

The '60s and '70s witnessed the resurrection and flowering of the atrium. Wright's Guggenheim Museum is, of course, the outstanding example of this form of free flowing interior space. This renowned building and the Portman hotels have made the glass-topped, enclosed court a mandatory feature in all

but the most utilitarian buildings. The quest for freedom in interior space represented by atrium addiction is evident in the trend toward open office environments. As experience with this kind of working arrangement is gained, a more humane and useful architecture could result.

An important trend is the development of large structures providing diverse spaces for a variety of purposes. Such structures take advantage of repeated structural elements for economy and of a unified design theme for esthetic simplicity and harmony. Wright's Civic Center at Marin County, Calif., exemplifies this direction in architecture.

A trend that is related to the exposed entrails approach to design is the application of solar collection devices and energy conservation techniques to architecture. Often the idea is good but the execution is clumsy. In defense of such work though, the clients are usually satisfied even if the critics are not.

One element in the current scene could have both good and bad implications for the future of design. This is a direction that could stem from New York City's Museum of Modern Art Beaux-Arts exhibition. One hopes that this and the current fashion of rejecting the "modern movement" does not bring about a return to the practice of imitating past styles. What should come from this turning backward is an increasing emphasis on sensible preservation and restoration of good buildings coupled with a renewed appreciation of graphic enrichment of visible elements of structures.

The future will most likely be a continuation of past trends, resulting in increasing numbers of good buildings. We should see a flowering of the architecture of a free and technologically advanced society. It should set an example of restrained use of resources and respect for climate and the natural environment. □



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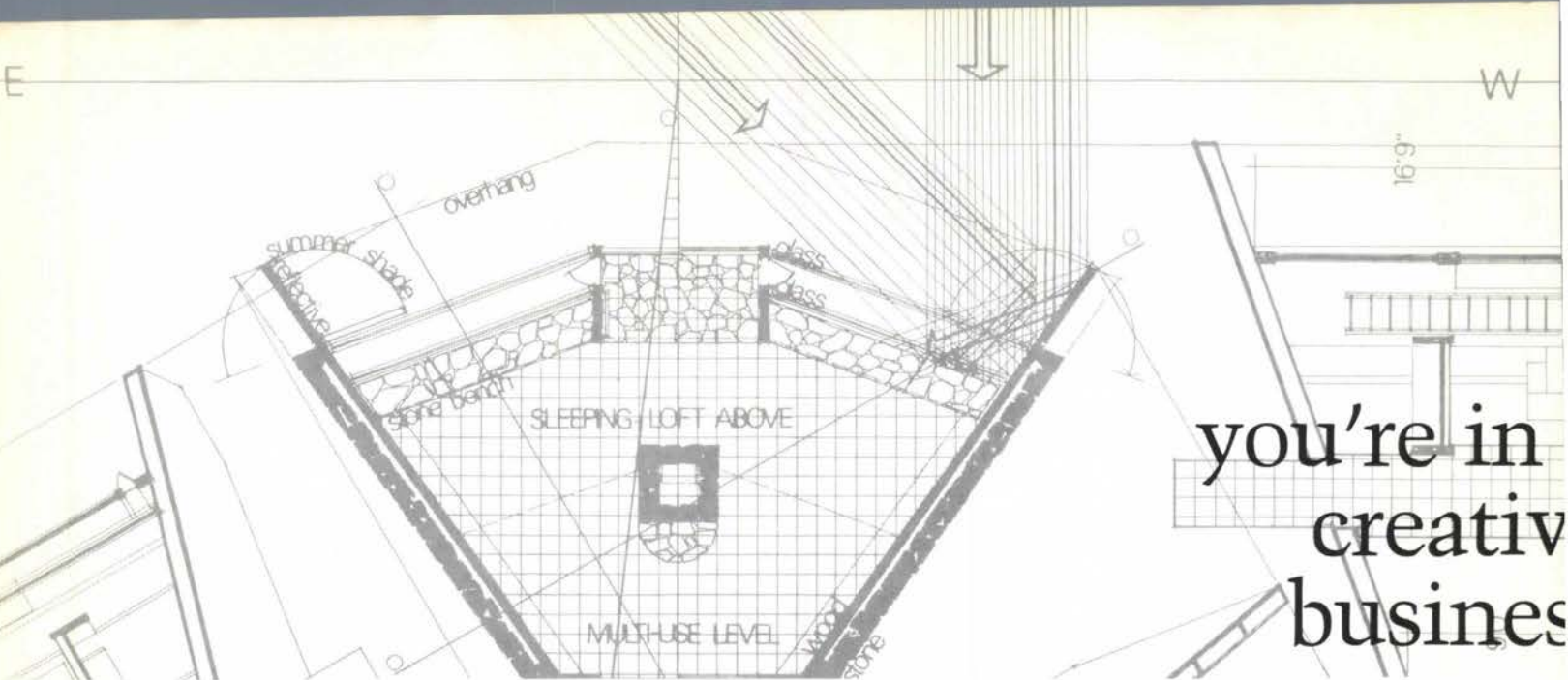
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