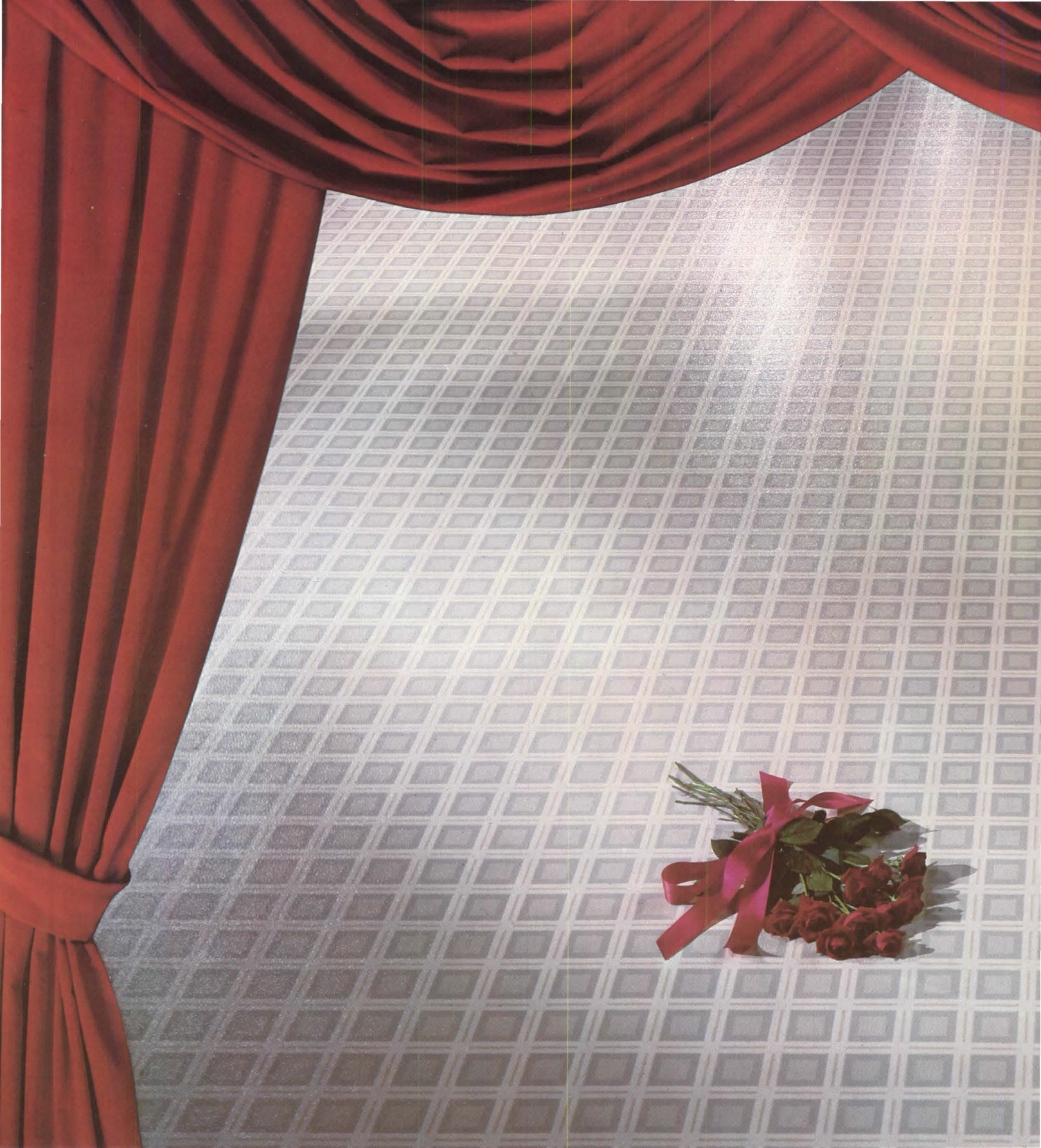




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EVENTS

Oct. 1-4: Industrial Designers Society of America annual conference and exhibit, San Antonio Marriott, San Antonio, Tex. Contact: IDSA, 1717 N St. N.W., Washington, D.C. 20036.

Oct. 3: Visual Marketing for Design Professionals Workshop, Atlanta. (Repeat workshops: Oct. 7, Houston; Oct. 10, Dallas; Oct. 20, Philadelphia; Oct. 24, Boston; Oct. 27, Chicago; Oct. 31, Tampa; Nov. 11, Denver; Nov. 14, Seattle; Nov. 18, Los Angeles; Nov. 21, San Francisco.) Contact: Ernest Burden Associates, 20 Waterside Plaza, New York, N.Y. 10010.

Oct. 3-4: Indiana Society of Architects/AIA convention, South Bend, Ind.

Oct. 4: Context of Preservation Workshop, San Francisco, sponsored by the University of California Extension, Berkeley.

Oct. 4: Conference on classical architecture, Smithsonian Institution Museum of Science and History auditorium, Washington, D.C., sponsored by Classical America, New York City, under the auspices of the resident associates of the Smithsonian. Contact: Edward Gallagher, Smithsonian Institution (202) 357-1435.

Oct. 5-9: Northwest Region/AIA convention, Eugene, Ore.

Oct. 7-8: Roof Inspection and Repair Seminar, Denver. Contact: Roofing Industry Educational Institute, Suite 250, 6851 S. Holly Circle, Englewood, Colo. 80112.

Oct. 8: Professional Liability for Architects Seminar, Seattle. Contact: Office of Professional Liability Research, Victor O. Schinnerer & Co., Inc., 5028 Wisconsin Ave. N.W., Washington, D.C. 20016.

Oct. 8-11: Tennessee Society of Architects/AIA and Gulf States Region/AIA conference, Knoxville, Tenn.

Oct. 8-11: Western Mountain Region/AIA conference, Salt Lake City.

Oct. 8-11, 15-18, 22-25: House and garden tours of Charleston, S.C. Contact: Preservation Society, Box 521, Charleston, S.C. 29402.

Oct. 9-10: Passive Solar Workshop, Washington, D.C. (Repeat workshop: Oct. 13-14, Minneapolis.) Contact: Passive Solar Associates, Box 6023, Santa Fe, N.M. 87501.

Oct. 9-12: Florida Association of Architects/AIA conference, St. Petersburg, Fla.

Oct. 13-14: Computers and Building Design Seminar, University of Wisconsin, Madison.

Oct. 13-15: Architects in Industry Seminar, Williamsburg, Va. Contact: Professional Interests Programs Office, AIA Headquarters, (202) 626-7364.

Oct. 13-16: World Energy Engineering Congress, Georgia World Congress Center, Atlanta. Contact: Association of Energy Engineers, 4025 Pleasantdale Road, Suite 340, Atlanta, Ga. 30340.

Oct. 15-17: Michigan Society of Architects/AIA convention, Hyatt Regency Hotel, Dearborn.

Oct. 16-18: Arizona Society of Architects/AIA annual convention, Adams Hotel, Phoenix.

Oct. 16-19: New Jersey Society of Architects/AIA annual convention, Atlantic City, N.J.

Oct. 17: Formwork and Shoring Conference, Miami. (Repeat conferences: Nov. 18, Raleigh, N.C.; Dec. 2, Norfolk, Va.) Contact: American Concrete Institute, Box 19150, Redford Station, 22400 W. Seven Mile Road, Detroit, Mich. 48219.

Oct. 17-19: Energy in the Design Process Conference, Toronto, sponsored by AIA and the Royal Architectural Institute of Canada. Contact: John Hoke, AIA, Institute Headquarters, (202) 626-7427.

Oct. 19-26: National Passive Solar Conference, University of Massachusetts at Amherst. Contact: Fifth National Passive Solar Conference, Box 778, Brattleboro, Vt. 05301.

Oct. 20-23: Structural Design Seminar, University of Wisconsin, Madison.

Oct. 23-26: Louisiana Architectural Association/AIA annual convention, Biloxi, Miss.

Oct. 24: Blue Ridge Chapter/AIA annual meeting, Bedford County, Va.

Oct. 24-25: Passive Solar Energy Conservation Workshop, Wichita Falls, Tex., sponsored by the University of Texas at Austin.

Oct. 29-31: North Dakota Chapter/AIA convention, Minot, N.D.

Oct. 30-31: Professional Services Management Association conference on marketing architectural and engineering services, Copley Plaza Hotel, Boston. Contact: PSMA, 1700 E. Dyer Road, Suite 165, Santa Ana, Calif. 92705.

Oct. 30-Nov. 1: Arizona Society of Architects/AIA conference, Scottsdale, Ariz.

Oct. 30-Nov. 1: Architects Society of Ohio/AIA convention, Columbus, Ohio.

Oct. 30-Nov. 1: California Council/AIA convention, Sacramento, Calif.

May 17-22, 1981: AIA convention, Minneapolis.

trast with the surrounding typical of contemporary urban structures that are cataloged in Christopher Arnold's chamber of hobgoblins on page 34.

After first reading Arnold's much needed admonishment to architects to avoid demanding and exploiting "mysterious skills" from engineers to compensate for their own insensitivity, and then reading Robert King Reitherman's peroration (page 70) on the Frank Lloyd Wright legend, I have to lean on T.S. Eliot to say that the old Imperial represented the Wright thing, even perhaps for the wrong reasons. *Visscher Boyd, AIA Canoga Park, Calif.*

No Pressure on PPG: For the record, neither Arthur Drexler nor anyone else at the Museum of Modern Art was pressured by PPG Industries, Inc., or the PPG Industries Foundation with regard to the content of the "Transformations in Modern Architecture" exhibit mounted a year ago at MOMA. The insinuations in Reyner Banham's article, "MOMA's Architectural Mystery Tour," (June, p. 56) of pressure tactics by the company and foundation are not correct.

MOMA approached the PPG Industries Foundation for sponsorship, possibly because glass was to be an important part of the exhibit. For its part, the independent foundation determined that a quality exhibition on the broad subject of modern architecture was worthy of sponsorship for its social and cultural benefits.

Decisions on the content of the exhibit were left solely to MOMA. Neither the foundation nor the company exerted or attempted to exert any influence.

Glass has long been a major architectural design material on the basis of economics, performance and other considerations. It should not be surprising, therefore, that glass-clad buildings were an important element of the exhibit. But the MOMA show did not present such architecture to the exclusion of nonglass designs. *Donald C. Hegnes, Manager Architectural and Construction Services PPG Industries, Pittsburgh*

Glass Block: The Miami Design Preservation League has been working on the restoration of art deco design buildings of the 1930s on Miami Beach. We are in the process of writing a National Endowment for the Arts-funded *Restoration Guide* for our area, and we need information on glass block.

Would anyone with current information on manufacturers, styles, history and construction technique for glass block please let us know? *Philip S. Kasen*

*Miami Design Preservation League
1630 Euclid Ave.
Miami Beach, Fla. 33127*

LETTERS

The Imperial Hotel: The photograph on page 45 of the June issue is a telling illustration of its well grouped and related articles. In this aerial shot the feeling of architectural fitness of the old Imperial, its articulated elements poised naturally and calmly on the sea of mud, is in con-

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The new 25-story Fourth & Blanchard Building in the Denny Regrade district is the most ambitious project conceived by Seattle office-space developer Martin Selig—a name synonymous with first-class planning design.

It was decided that steel design would best provide the freedom to incorporate all the proposed architectural features. Several designs were presented, the final choice being a parallelogram floor plan with angled upper stories. The steel design also helped keep the weight of the structure to a minimum. This was important for the design in seismic Zone 3. A glass curtain wall was dictated by the form of the building which demanded a clean, smooth, flush, monolithic surface—in no way competing with the upper lines.

Maximum usable space

The \$33-million building has two interconnected towers with 45-degree angled roofs. The roofs—a striking design feature—offer prime office space with spectacular views. A minimum of interior columns helps maximize use of the 531,000 sq. ft. of floor space, including the 3-level garage.

Conservation of energy was a key consideration, and an electric-hydronic heat pump

system connected to a main circulating water pipe provides heating and cooling which is both energy efficient and economical to install. In addition, the roofs were designed to accommodate solar panels in the future.

Steel speeds construction

The new building was erected on a narrow site—just half-a-block—and over 2,650 tons of A-36 and A-572 grade 50 steels were supplied by U.S. Steel. The fabricated steel was trucked from Portland at night and erected during the day using a single truck crane having a 280 ft. tower topped by a 170 ft. boom. This eliminated traffic congestion in a busy downtown area with a minimum of storage space. And the structural framing was completed one month ahead of schedule!

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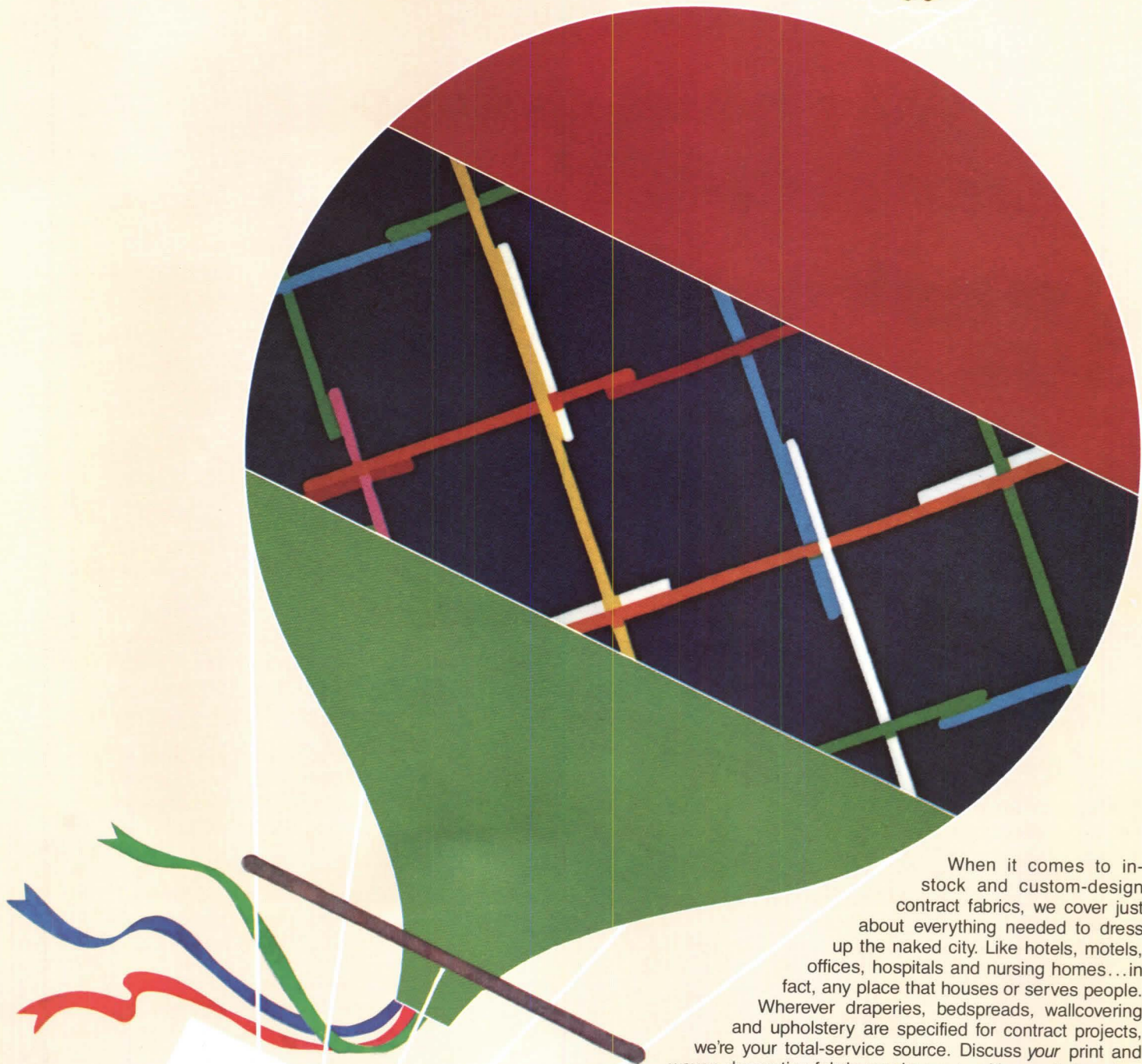
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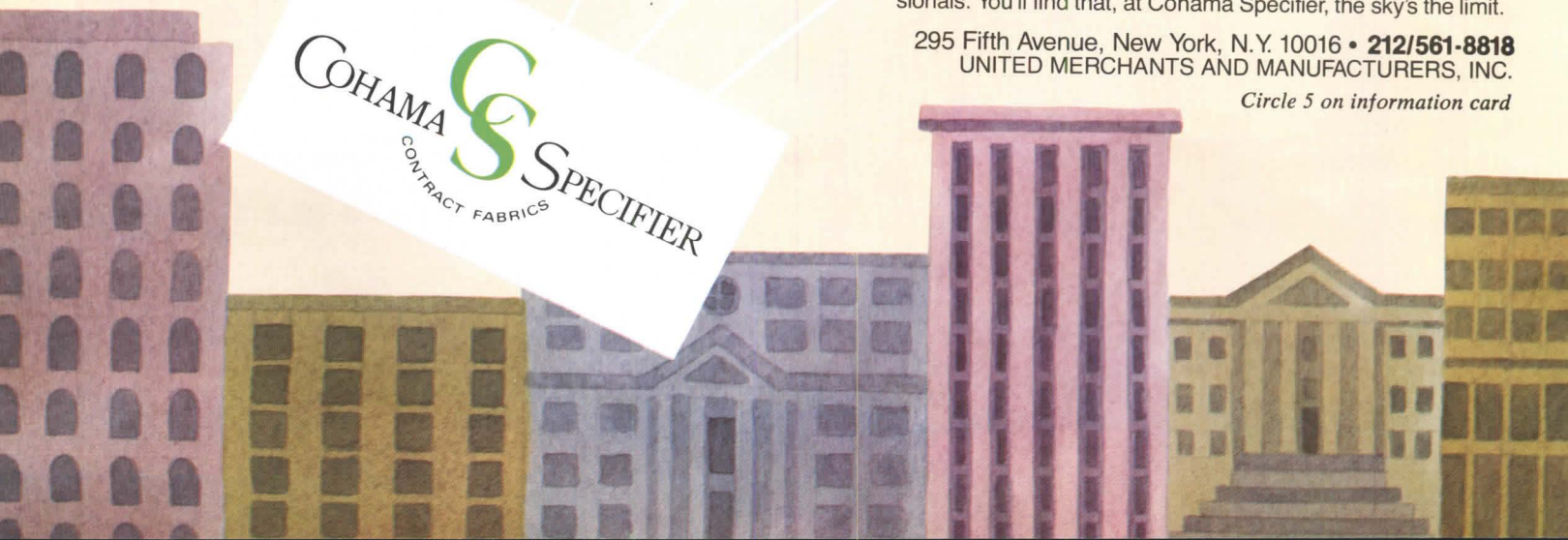


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Government

Design Effects of HUD Grants May Receive Closer Scrutiny

A proposed change in HUD's eligibility requirements for urban development action grants (UDAG) would give a boost to urban design quality. The proposed regulations call for a review of each project's impact on the physical conditions of a community: HUD would consider "whether the proposed project will restore and enhance the quality of the human environment and/or avoid and minimize adverse effects on the environment and on historic properties." Final decision on the proposed regulations is to be made in October or November.

The UDAG program was authorized under the 1977 Housing and Community Development Act for an initial three-year period at \$400 million annually. In 1980, funding was increased to \$675 million. The Carter Administration has requested \$675 million annually for 1981-83.

The program's goal is to assist severely distressed cities and urban counties in alleviating physical and economic deterioration through stimulation of commercial and industrial development and reclamation of deteriorating neighborhoods. HUD regulations require firm private sector commitment to a project before any UDAG funds are awarded. It is up to the cities themselves to seek out appropriate sources of private investment.

By August, 808 projects had received \$1.5 billion in action grant funds and \$8.6 billion in private investment.

"Since it began operation in 1978," says a HUD report, "the UDAG program has been remarkably successful in generating economic development; its capacity to create jobs, spur industrial and commercial revitalization and increase tax revenues is well known."

While HUD maintains that UDAG "has helped to establish a balance between economic development and conservation in the broader context of urban revitalization which seeks to preserve the city itself," preservation groups have disagreed. The National Trust for Historic Preservation conducted a survey on the impact of UDAG projects on the urban environment. A report of the survey was recently presented at an urban conservation seminar sponsored by the trust and the Conservation Foundation.

The 517 projects approved before the third quarter of 1979 were surveyed by the National Trust. The projects were evaluated as positive or controversial against three criteria: involvement or effect on national register listed or eligible properties, sites or districts; whether any buildings were demolished, moved or otherwise substantially altered, and whether the projects exhibit a consonant functional and physical relationship to their surroundings.

Based on a sampling of 30 percent of the neighborhood and industrial projects, the survey found that nearly 90 percent of the neighborhood projects had positive results, and the industrial projects were also predominantly positive.

Of the 105 commercial projects assessed, 60 percent were considered to be positive, nearly 40 percent were considered controversial. Of the positive projects, the survey commented, "the majority of communities are bringing into balance careful planning, good design and economic revitalization and most are using preserva-

tion as a framework for revitalization."

The controversial UDAG projects "involve not just the loss of one or more buildings with reasonable justification, but repeat a pattern of large-scale demolition, reject or lack consideration of economically feasible reuse options and in many cases, UDAG assisted projects represent a decline in architectural and urban design quality."

The current UDAG regulations require an environmental assessment and the 106 review established under the National Historic Properties Act of 1966. At the seminar, Phyllis Myers, senior associate at the Conservation Foundation, said that "environmental information need not accompany the application to Washington, and it usually doesn't." In her examination of 26 project applications, only three included environmental assessments.

"A similar situation has prevailed with respect to historic buildings," Myers said. She suggested that when the preliminary decision is made to fund a project "any information developed by the 106 review is usually not available."

Myers maintains that while the number of controversial UDAG projects is small, "these have already raised questions about whether the program is doing as much as it should to encourage . . . quality."

Both the National Trust and the Conservation Foundation call for standards that encourage conservation and quality rebuilding. In the proposed UDAG regulations there is a provision that includes a penalty for building displacement and a reward for environmental sensitivity.

The proposed regulation changes are to advance UDAG's purpose as stated in the HUD report: "What is required to make preservation an everyday reality is a partnership between the public and private sector that can translate the growing sentiment for preservation into an active will to rehabilitate and reuse whatever is worth saving and to rebuild and redevelop whatever cannot be saved."

Kathryn Welch, director of the northeast regional office of the National Trust, suggested that "the UDAG program can encourage and reinforce quality rebuilding employing valuable architectural assets or it can facilitate the revival of the flawed tactics and failures of urban renewal."

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Government

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Continued Economic Decline Observed in Older U.S. Cities

The nation's older cities are continuing to decline in population and per capita income, according to research conducted by Robert P. Nathan, director of Princeton University's urban and regional research center, and James W. Fossett of the University of Michigan. There may be "pockets of plenty," as demonstrated by Baltimore's Inner Harbor and Chicago's North Shore, but such activities "are still too small to boost the aggregate level of prosperity in any of these cities."

The research is an extension of a project that Nathan and others conducted at the Brookings Institution in which an "urban conditions index" for about 60 of the nation's largest cities was developed, based on age of housing stock, population loss and concentrations of poverty.

Cities are ranked in the index from the most depressed to the least depressed in five major groups. In the most distressed category are St. Louis, Boston, Newark, Buffalo, Pittsburgh, Cleveland, Philadelphia, Rochester, Detroit, Cincinnati and Minneapolis. Among the cities in the next category are Baltimore, Chicago, New Orleans and New York. Among those in the third category of depression are San Francisco, Milwaukee and Memphis. In the fourth category are such cities as Atlanta, Oklahoma City and Los Angeles, while in the least depressed category are Charlotte, N.C., El Paso, Tex., Tampa, Fla., Houston, Dallas, Albuquerque, N.M., Phoenix, Tucson, Ariz., San Diego and Long Beach and San Jose, Calif.

"By almost any reasonable measure of prosperity of places—levels of population, income, employment activity and concentration of low-income households—more distressed cities were appreciably worse off in the late '70s than they were 10 years earlier, and more prosperous cities appreciably better off," say the researchers.

Cities in the most distressed category suffered a population loss from 1970 to 1977 of 12.2 percent; those in the least depressed category had a population gain of 20.2 percent. In the most distressed cities, employment by retail trade fell by almost 12 percent and service employment dropped by more than 4 percent. In the least distressed cities, employment by retail trade increased by more than 20 percent and service employment grew at levels ranging from 16 to 24 percent. Overall rate of job loss was 9.4 percent in the most distressed cities. The research found that the "gap between rich and

poor cities has increased substantially during the '70s, particularly during the first half of the decade."

Nathan says that the research was entered "with the idea that some of the older cities have improved social and economic conditions as a result of neighborhood investment. But when you look at all of the cities as a whole, there's no evidence the conditions of the cities are improving."

New Buildings Program Charter Gets Final Touches in Congress

Divergent House and Senate versions of revisions in the basic charter of the federal buildings program were headed for conference last month to resolve such controversial issues as mandatory design competitions and increased design responsibilities for government architects. AIA generally supported the bills, but took the negative position on these two proposals.

Both the Senate bill (S2080), introduced last year by Senator Daniel Patrick Moynihan (D.-N.Y., see May, p. 31), and the House proposed amendments to the Public Buildings Act of 1959 (HR 7579) would authorize GSA's administrator to perform preliminary architectural and engineering design for the alteration or construction of a public building before the project is authorized by Congress. Both would reduce the government's investment in rental space in favor of publicly owned projects. The Senate legislation is more specific, stating that within 10 years after the legislation's enactment, no fewer than 60 percent of federal employees would be housed in government owned buildings and, within 20 years, no fewer than 75 percent.

Both Senate and House legislation would require the GSA administrator to submit annually a priority listing of the country's public building needs for the coming fiscal year, as well as longer range plans over a five-year period.

The Senate bill differs from the House legislation in calling for design competitions among no fewer than three qualified architectural firms for at least half of the public building construction and renovation projects expected to cost more than \$5 million.

The competitions would last no longer than 60 days from the time the firms received the competition program until preliminary design concepts would be submitted. Total stipend to all firms in any one competition would be "a sum equal to no more than one-half of 1 percent of the expected cost of the design and construction. . . ."

The Senate legislation says that design professionals employed by GSA shall pre-

pare plans, drawings and specifications for some federal buildings to maintain their professional skills and training. The position of a supervising architect within GSA would be authorized, but there is no requirement that the position would be restricted to applicants who were licensed design professionals.

Among other provisions are that GSA's administrator be authorized to conduct postoccupancy evaluations and demonstration projects "in providing productive, safe, healthful, economical, conveniently located, energy efficient and architecturally distinguished accommodations for federal agency offices."

R. Randall Vosbeck, FAIA, president-elect of the Institute, recently testified in the House on behalf of the Committee on Federal Procurement of Architectural/Engineering Services on both the Senate and House versions.

He said that COFPAES supports the House legislation that would authorize GSA's administrator to carry out preliminary engineering and design on public buildings before congressional authorization. The effects of this amendment would be to "significantly speed up the process, with attendant savings of construction and operation costs."

He also testified that COFPAES supports the reduction in the government's investment in leased office space, and said that a requirement to have the GSA administrator develop a five-year program of public building needs would be "helpful in the effort to reduce the amount of leased space often justified on an emergency basis."

Vosbeck said that COFPAES "strongly" suggests that the position of supervising architect within GSA "be limited to licensed professionals."

Vosbeck said that if design competitions as envisioned in the Senate bill are carried out, it is "extremely important" that a report be made to Congress on costs and value. Competitions, he said, "are not a panacea for good design." While COFPAES could support competitions for "unique projects of national or regional significance," he said, it opposes the legislation as written.

He said that competitions would work to the detriment of small firms who compete for federal commissions, and that the time and expense would be "excessive" to the government. Further, he said, a procedure for competitions has already been established in the Architect/Engineer Selection Act (PL92-582), passed in 1972, which works "very well," providing for competitions "where the additional time, expense and unique nature of the project" justifies their use.

Vosbeck said that the time period of 60 days in the Senate bill is not sufficient

continued on page 17

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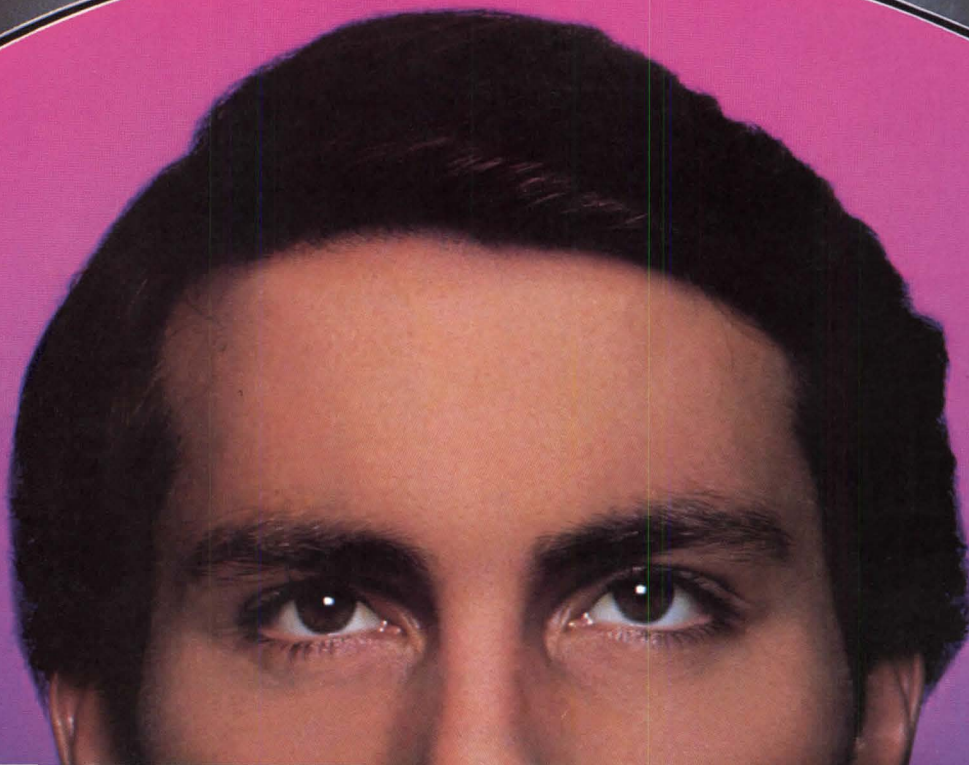


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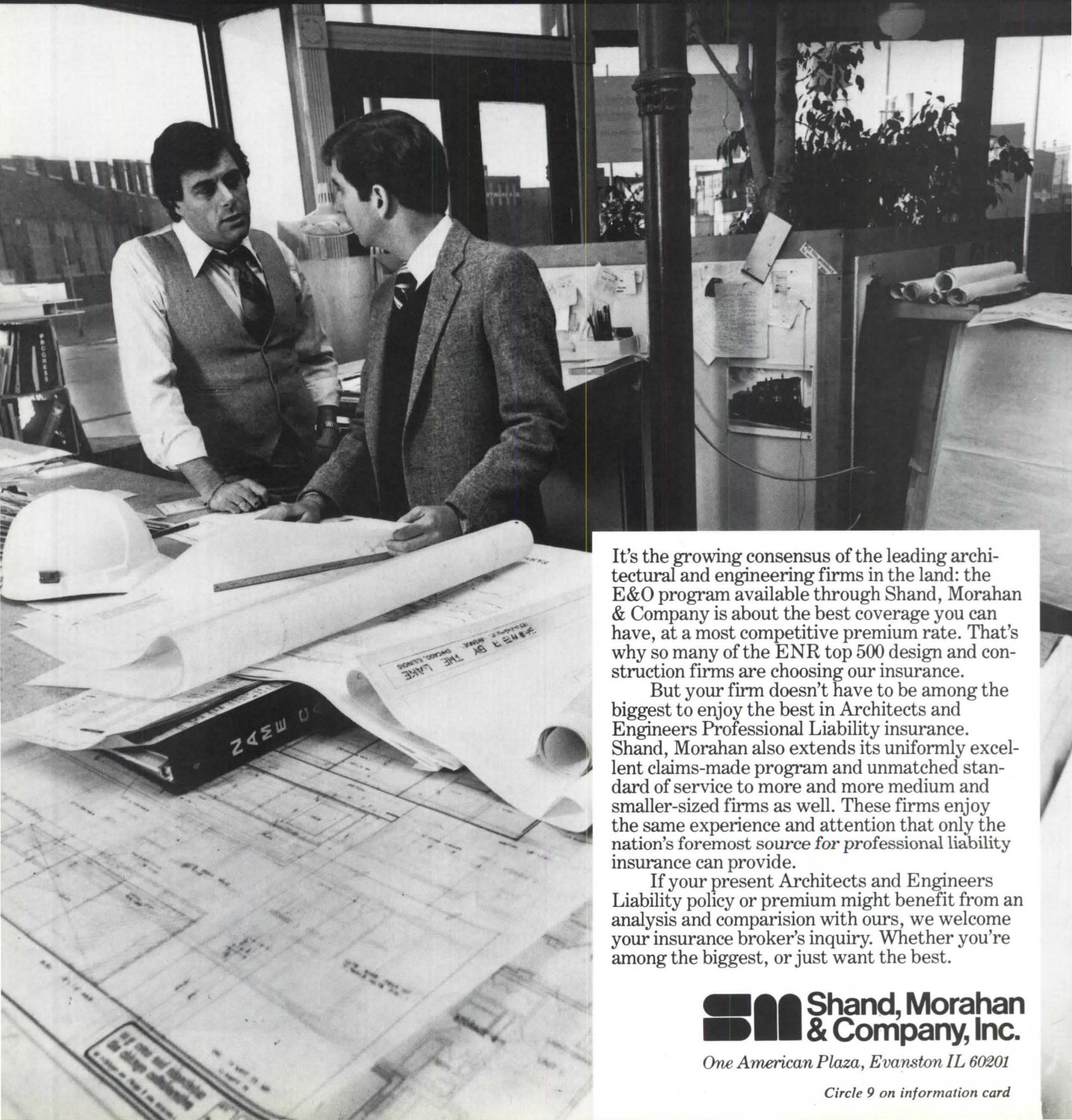
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to determine the consideration of such cost determinants as energy efficiency, flexibility and economy of maintenance. Also, construction costs "are nearly impossible to control" without a thorough evaluation of such things as building layout, size, shape, location and materials that are selected by a design competition.

If there are to be design competitions in congressional legislation, he said, they should be limited to projects of "unique national or regional significance"; should exclude most renovation projects; should be limited to a "reasonable number," perhaps five, "to test the viability of the concept"; should be limited to GSA projects until the concept has been "substantiated as desirable for other federal agencies," and should "seek to solicit meaningful preliminary designs," which would not be possible under the Senate bill without competing firms spending "significant sums in addition to that provided by the government."

Vosbeck said that COFPAES is "firmly committed to the employment of highly qualified and motivated design professionals within the federal government." But rather than having legislation that calls for them to prepare plans, specifications and drawings, such employees should be used as project administrators "to work in concert with and to challenge outside professionals to help ensure an outstanding project." The federal government already has a policy of relying on the private sector to provide needed services, Vosbeck said, and a buildup of large in-house design staffs "would be expensive and counterproductive."

President's Commission on '80s Learns AIA's Agenda for Nation

AIA recently presented to the President's Commission for a National Agenda for the '80s a report highlighting what it believes will be the critical issues of the decade. Among subjects covered in the 16-page report are increased energy conservation, development of fiscal and budgetary procedures for reducing inflationary pressures, comprehensive land use planning and improvement in the climate of international practice.

The President's commission was formed by executive order last October to "identify and examine the most critical public policy challenges of the 1980s." It will look at current problems, such as inflation and energy productivity, and also take a broad approach studying questions of "social justice, economic vigor, innovation, the general temper and spirit of the country, the quality of life in the coming decade," according to William McGill, chairman of the commission and president

of Columbia University.

The 48 commission members, appointed by President Carter, represent the fields of education, science, business, economics, government, urban policies, consumer affairs and the environment. The commission has divided itself into nine study panels. Recommendations and a final report will be presented to the President-elect in December.

AIA was invited, along with 100 other organizations, to "identify the critical issues which it believes should be addressed by a national agenda." A sampling from AIA's report follows.

Because buildings account for nearly 40 percent of the nation's total energy consumption, says the report, "it is clear that conservation strategies in the design of new buildings, retrofitting techniques for existing buildings and the application of renewable resource technologies offer the single greatest opportunity to increase energy supplies in the 1980s."

AIA emphasizes its support of the building energy performance standards and "urges national support for research, development, demonstration and application of solar energy technologies for space heating and cooling needs as a priority for the '80s."

For a proposed project, the physical, social, psychological and cultural impact upon human beings should be considered, as well as the ecological impact, says the report. In addition, AIA emphasizes the importance of "adequately funded and strongly implemented management programs for the wise use of land and water resources."

On economically related issues, the report calls for the "development of fiscal and budgetary procedures for reducing inflationary pressures" which are now "choking the housing industry." It also calls for a reduction in the costs of delay associated with large construction projects and life cycle cost and value analysis to become standard practice for the design and construction professions.

For the science and technology panel, AIA suggests that "the nation must come to grips with the near-inevitability of earthquakes," in light of the fact that 70 million Americans live in zones threatened with the risks of earthquakes. Research must be continued, says the report, on the prediction of earthquakes and mitigation of their hazards, including improved earthquake resistant building design. In addition, AIA calls for the recognition of the "critical need" for research in all areas of energy production, utilization and conservation.

AIA's thoughts for the metropolitan and nonmetropolitan policies and priorities panel involve land use, housing, communities and urban design. On land use, AIA "sees the need for federal action for

comprehensive land use planning. . . . There is a need for development of land use ethics, so that the different goals of preservation and development can be balanced and reconciled."

On housing, AIA calls for increased productivity in the housing sector and conservation of our present stock of good housing, as well as upgrading and replacement of substandard housing. AIA supports the efforts of community design centers and suggests that "cities must be planned for growth, rebuilding, historic preservation and land use in a systematic fashion."

On the government and regulation, AIA calls for more uniformity and consistency of major model codes and efforts toward simplification of codes. It suggests that "the concept of performance standards has the widespread potential for simplifying regulations."

For the panel on the electoral and democratic process, AIA's comments concern campaign financing. Because "the architectural profession, in its role as promoter of design excellence on the one hand and private competitor for public works projects on the other, is especially sensitive to public procurement decision," AIA calls for the public funding of congressional campaigns. Such a system would, AIA says, insulate public works decisions "from improper influence and promote ethical practices by both the design professions and public works agencies."

To the panel on the quality of American life, AIA emphasizes design excellence, art in architecture and architecture in recreation. Because the federal government directly authorizes for construction billions of dollars worth of facilities each year, says the report, "the '80s should see an increase in the proportion of federal building procurement decision makers having professional design experience." AIA also calls for an executive federal office with overall responsibility for design quality in all federal architecture. AIA will pursue, says the report, "opportunities to expedite the inclusion of art as an integral part of architecture," and supports an on-going recreation planning process which includes provisions for adequate funding and facilities as well as land acquisition.

On the U.S. relationship with the world community, the report suggests that "the U.S. is severely limited by antitrust, tax and other policies in the extent to which it can encourage the exportation of technology, construction services and their associated design services." Therefore, AIA calls for policies that would encourage professional firms to develop export capabilities. AIA also urges adoption of the metric system.

Government continued on page 21

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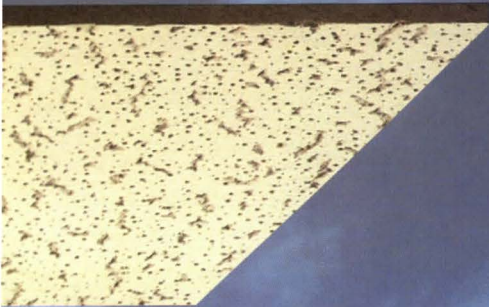


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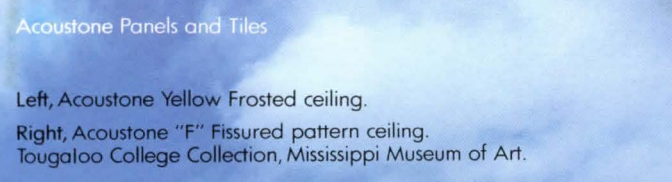
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HUD Funds Preservation Effort

HUD has granted \$36,250 to the National Trust for Historic Preservation to instruct neighborhood self-help groups in ways to conserve and improve their communities. The 18-month demonstration grant, says Geno Baroni, HUD assistant secretary for neighborhoods, is aimed at showing "that it is possible to revitalize and preserve entire neighborhoods without displacing low- and moderate-income residents."

Under the grant, neighborhood leaders from several cities will be brought together in four workshops to share information and ideas about how to organize and raise funds for the preservation of their communities. Also, six cities will be selected for on-site technical assistance, with NTHP staff advising them about available resources and about how other groups in other cities have approached similar problems. At the same time, local preservation organizations will be shown how preservation can be accomplished without displacement.

For further information, contact: Matt Andrea, Office of Neighborhood Self-Help Development, Room 4216, NVACP, HUD, Washington, D.C. 20410.

GSA Hires Educators to Study Reuse of Three Federal Tracts

As business manager for the federal government, GSA disposes of surplus personal and real property, which ranges from computers to land and buildings. Three important real properties are expected to be reported soon to GSA for disposal:

Fort Douglas, Salt Lake City, which was registered as a national historic landmark in 1920; Camp Simms, which includes 17 buildings in southeast Washington, D.C., and Montauk Air Force Base, Long Island, N.Y. In an effort to intelligently study the reuse of these properties, GSA has selected faculty members from three universities to "trade textbook theory and classroom environment for a practical, firsthand experience" in reuse study.

Ernest Cooper, professor of community planning at the University of the District of Columbia, has been assigned to study Camp Simms, a 25-acre site that has been used by the D.C. National Guard. "Reuse of Camp Simms is extremely important to people in the District of Columbia," Cooper says. He says he hopes neighborhood groups, the D.C. government, the National Capital Planning Commission and other agencies will participate in the formulation of a meaningful reuse plan.

Jacqueline Leavitt, professor of urban
continued on page 23



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After: Salmon River Central School, Fort Covington, NY
Architect: Cappuccilli-Bell Architects, A.I.A.
Contractor: Tracey Trombley Construction Company
Structural Engineer: John P. Stopen

This Formawall retrofit improved U-values from 0.88 to 0.10.

At the Salmon River Central School, Fort Covington, New York, Robertson's Formawall panels are helping to save an estimated 17,500 gallons of fuel a year.*

Cappuccilli-Bell Architects worked closely with Robertson to cover large sections of the school's 1956 aluminum and glass curtainwall with 20,000 square feet of Formawall insulated panels.

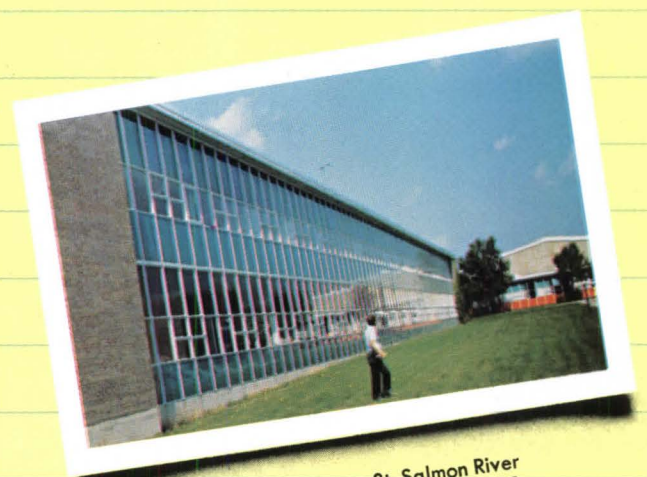
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*Based on typical (as of March 25, 1980) fuel costs of \$0.87/gallon, annual estimated savings today are \$15,225.00. (Fuel savings estimates and U-value measurements by Cappuccilli-Bell.)
Formawall, Durasil, Versacor and Vitralume are registered trademarks.



Before: Prior to Formawall retrofit, Salmon River School had a 1.10 U-value for glass and a 0.20 U-value for wall panels. (Photo by Dennis Spina, Cappuccilli-Bell.)

Robertson

Circle 13 on information card

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planning at Columbia University, will study reuse of the Montauk Air Force Base in the disposition of 307 acres of suburban waterfront property. The reuse of the site and its 40 buildings, Leavitt says, "will significantly affect the Long Island area."

Assigned to Fort Douglas is Robert D. Carpenter, professor of public administration and urban planning at the University of Arizona. The 118 acres of historic property comprise a portion of a former military facility established in 1862 to protect communications routes in the Civil War. Carpenter considers the objectives in his reuse study to be "preservation of the property's historic value and the return of the land to productive civilian use."

The reuse studies are part of GSA's faculty employment program for land redevelopment and environmental research, initiated in 1978 in an effort to analyze surplus property carefully and to put it to the best use for the good of a community. Roy Markon, commissioner of GSA's federal property resources service, describes the program as a two-way street. "For the faculty members, it will allow cooperative evaluation of theory and practice. For GSA, it provides a chance to assist communities in adapting urban design and environmental management concepts to surplus federal real property."

States' Funds Jeopardized

The House government operations committee recently voted to eliminate the one third state share of general revenue sharing funds for fiscal year 1981. The state share was to total \$2.3 billion.

If the Senate also approves the cut, some states may have to cut back on basic services or aid to local governments. Even now the recession alone is causing "fiscal difficulties in all regions, but particularly severe problems in the Northeast, industrial Midwest and Northwest," says a report recently released by the National Governors' Association. The association said the hardest hit include Michigan, Ohio, Illinois, Pennsylvania, Vermont, Oregon, Utah, South Carolina and Alabama.

The action could also affect local governments, since they have received about 44 percent of the state share. However, the House committee did agree to a stand-by countercyclical antirecession program for cities of \$1 billion each for fiscal years 1981, 1982 and 1983. The program would be triggered by two consecutive quarters of decline in real wages and salaries and real gross national product. The House voted for this program last year, but the Senate opposed it.

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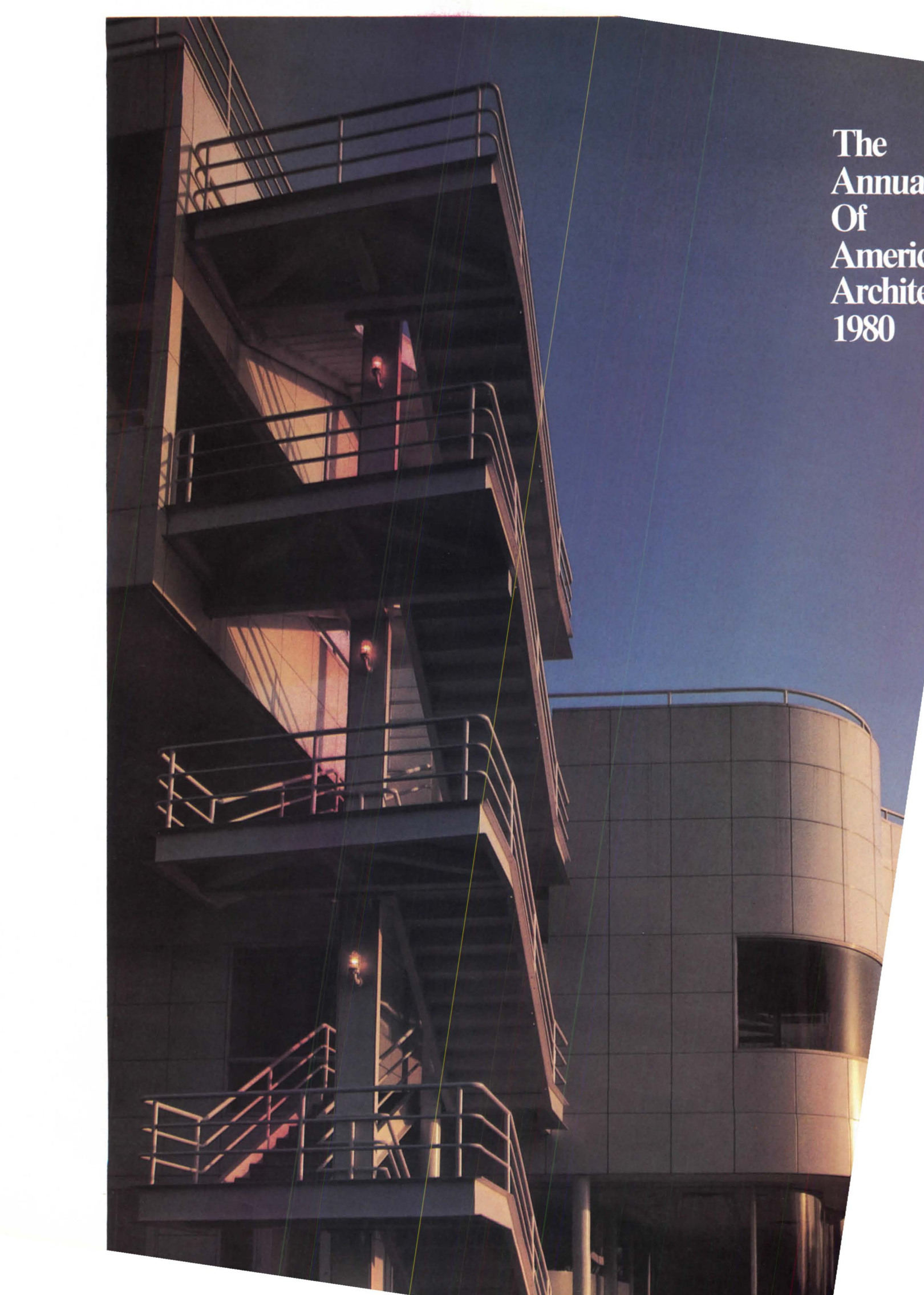
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Stringent Residential Standards Assessed as Effective Impetus

If the federal government imposed mandatory, stringent energy conservation standards for existing houses and compliance were checked at the time of sale, a substantial increase over expected voluntary retrofitting efforts would be achieved, according to a study by the Urban Institute.

Such a program would not be a financial burden for most households and the credit and housing markets would not be adversely affected, says the report, but the program would be difficult and time consuming to implement, and a new administrative structure would probably have to be installed.

The National Energy Conservation Policy Act of 1978 called for "an assessment of the potential impacts and administrative feasibility of a mandatory requirement that residential dwellings (one to four units) meet an energy standard at the time the properties are sold or transferred." The Urban Institute undertook the study with the support of HUD's office of policy development and research.

In their examination of the 1979 housing stock of an estimated 57 million single-family homes and almost 11 million units two-to-four unit buildings, authors Lorene Yap, David Carlson and Robert Dubinsky find that there "is room for improvement" in energy efficiency.

About 26 million single-family homes and 7 million units in two-to-four unit buildings lack either storm windows or doors or attic insulation, say the authors. Most of the single-family homes that have some attic insulation contain three to six inches, compared to the six to 12 inches recommended by HUD's cost effective energy conservation standards for the rehabilitation, they say.

At least 50 percent of all single-family homes have some insulation in their walls, while probably less than 10 percent have some floor insulation, it is estimated, and about 5 million of the single-family homes don't have any attic insulation, storm windows or storm doors. In the less than 15 percent of all single-family homes that are rented, over 70 percent of them lack at least one of the above three energy saving features, the authors say.

However, almost 50 percent of the occupants in the one-to-four unit residential stock added some type of insulation or conservation equipment between April 1977 and December 1978, according to a Department of Energy consump-

tion survey. An estimated 16 percent added expensive measures, while the remaining 34 percent added inexpensive measures only. And most of this retrofitting seems to have been accomplished without government subsidies, DOE reports.

The authors of the Urban Institute report conclude that "given greater national interest in energy conservation, full implementation of existing weatherization programs, a continuation of the residential energy conservation tax credit and rising fuel prices, the current amount of voluntary activity will probably continue and may even increase over the decade."

Given a time-of-sale mandatory conservation program, the authors have determined what the aggregate savings and costs between 1980-90 would be with a medium standard or a high standard. A medium standard, which "almost 50 percent of the homes in the country have already met," requires three to six inches of attic insulation, storm windows on at least some windows, weatherstripping, filling holes and air leaks, wrapping heating ducts and hot water heaters and clock thermostats. A high standard requires storm windows, attic insulation of eight to 10 inches, wall and floor insulation and minor conservation items. This standard is most comparable to the thermal guidelines developed for certain HUD-sponsored rehabilitation loan programs, but is less stringent than the proposed building energy performance standards for new homes.

Retrofitting under the medium standard, say the authors, would cost about \$400 and result in savings in heating consumption of about 35 percent for the average home, not considering airconditioning. The high standard retrofit could cost the average homeowner \$1,600 and result in savings of 60 to 70 percent.

The authors base the savings and costs estimates on current information about the energy status of the housing stock, the conservation possibilities of the mandatory program and expected future fuel prices, fuel consumption and retrofitting costs.

By 1990, the authors estimate, all of the single-family homes are expected to be in compliance with the medium standard "whether or not a mandatory program is in effect." With the high standard, it is estimated that between 19 to 23.3 million additional single-family units and 4.4 to

5.5 million additional two-to-four-unit residences would be retrofitted by 1990.

"This retrofitting represents a substantial increase over expected voluntary efforts in the absence of a mandatory program with a high standard," the authors note. "Most households who would be subject to a time-of-sale requirement would have the resources to undertake the retrofitting and would be adding on conservation features to homes which are well-maintained and at least of average quality." However, the program would place a "heavy burden" on lower-income families unless there were government subsidies, they say.

The authors also look at other possible mandatory programs in the report. One alternative is an in-use program in which compliance would occur independently of the time-of-sale. Properties would be inspected and certified as they are in housing code enforcement. The authors suggest that this type of program would "probably have less chance of being successfully implemented," but it would not interfere with the sales process and the quality of retrofitting may be higher and the energy savings larger. The retrofitting and administrative costs are expected to be similar to a time-of-sale program.

Another alternative is a mandatory disclosure program. Sellers would be required to disclose the result of a mandatory energy audit conducted by a utility company or provide their utility bills, comparisons of recent bills with past bills and comparison with those of similar units. This program would have a simpler administrative structure, but "it is reasonable to assume that the energy savings would be less," say the authors.

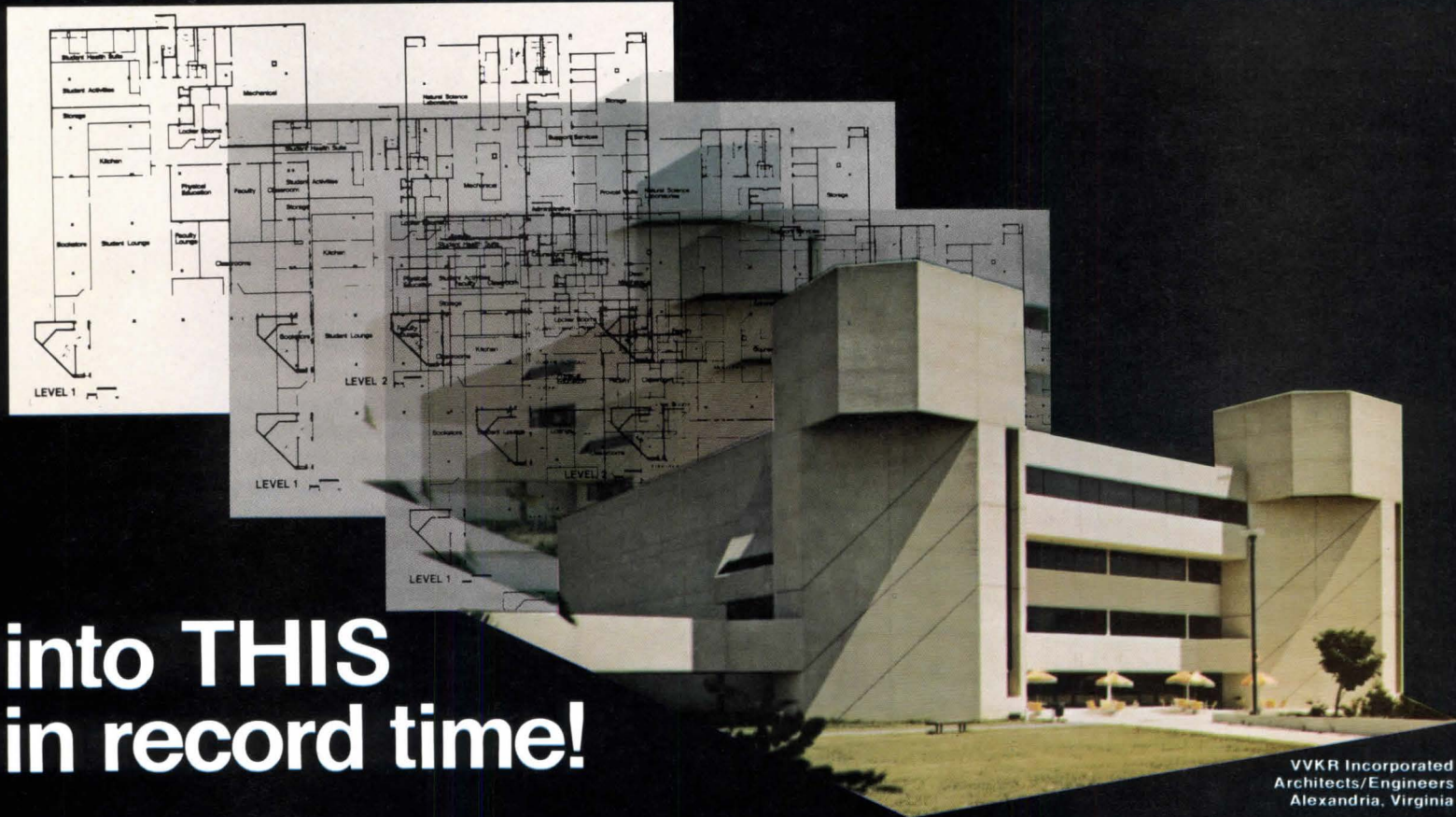
However, authors Yap, Carlson and Dubinsky emphasize that the study was not intended to examine the best means for conserving energy in homes. They also stated that "only if there is national consensus that significantly higher savings must be generated than can be gained from largely voluntary efforts does a mandatory program with stringent conservation standards become a potentially attractive option."

Performance Standards Research

The Department of Energy has entered an agreement with the National Institute of Building Sciences for research in the development and implementation of DOE's building energy performance standards. John Tato II, director of technical services in NIBS' office of technology and programs, will be project manager for the activities, and Steven L. Biegel, AIA, former AIA staff member and director of energy for the American Consulting Engineers Council, will be director of program planning. *continued on page 30*

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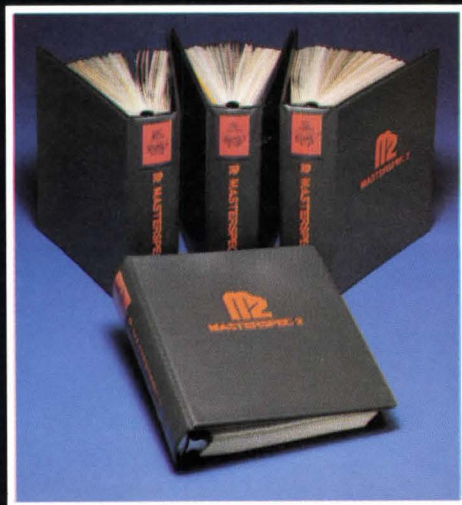
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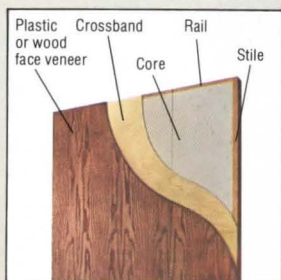
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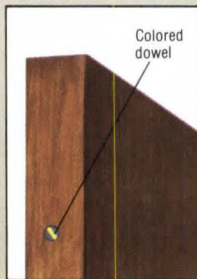


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Circle 17 on information card

Energy from page 26

NIBS will work in five areas:

- **Standards research:** Aimed at "improving" the standards themselves, research will assess current design practice in commercial, multifamily and single-family residential buildings, including an investigation of the "reasonableness" of proposed design energy budgets, climate analyses and monitoring of energy consumption in different climates.
- **Implementation of BEPS:** In order to assist DOE in its ultimate decisions on the implementation of BEPS, NIBS will report on proposed regulations for certifying state codes as equivalent to BEPS and on proposed regulations for alternative approval processes in jurisdictions that lack a certified state code.
- **Guidelines:** Response will be made to "the necessity of providing appropriate exceptions to the coverage of BEPS."
- **Codes and standards:** Study will be conducted regarding alternative energy conservation standards as "acceptable" if they meet or exceed federal standards. Specifically, the American Society for Heating, Refrigeration and Air-Conditioning Engineers' standard 90 will be analyzed.
- **Technical advice:** NIBS will provide to DOE technical advice in connection with public comment on the department's notice of proposed rulemaking.

TVA Offers Passive Designs; Southern Winners Announced

The Tennessee Valley Authority, challenged by the President to become the nation's "solar showcase," has placed top priority on passive solar houses. Through its "solar homes for the valley" project, TVA has made available 11 passive solar house designs and is completing 44 model

homes as demonstrations of the passive solar option. Houses have been constructed in Glasgow, Ky., Elkmont, Ala., Corinth, Miss., and Murfreesboro and Springfield, Tenn.

The houses range from 1,000 to 2,000 square feet; cost from \$35,000 to \$75,000, exclusive of lot; reportedly reduce yearly heating load by up to 70 percent compared to conventional houses, and are said to cost only 2 to 5 percent more to construct than conventional houses.

The houses will be sold, and performance will be monitored. Monitoring will determine whether the designs need modification for top performance in zones of climatic variation throughout the TVA service area.

TVA has published a design portfolio, "Solar Homes for the Valley," which describes the 11 house designs and presents drawings of them. Additional solar house designs are being prepared in cooperation with regional architects, builders and developers. Throughout the next two years, TVA will unveil other passive solar houses based on the 11 different designs in the portfolio.

For information, write: Solar Applications Branch, TVA, 403 Power Building, Chattanooga, Tenn. 37401.

The Southern Solar Energy Center, one of four regional centers established and funded by the Energy Department to promote the commercialization of solar technologies, has announced winners in a competition held concurrently in Louisiana, Oklahoma and South Carolina. The target cities were New Orleans, Oklahoma City and Charleston, selected because "each presented special cooling requirements found in much of the Southern region." The aim of the competition was to encourage the use of passive cooling technology and materials that are currently available.

There were two categories: category A, with awards of \$7,000 each for the design of marketable, middle-income residences suitable for construction on subdivision sites, and category B, with awards of \$1,000 each for designs that incorporated innovative passive cooling techniques.

The winners are:

- **Charleston, category A:** Martin Davis and Jean Jacques, and Mike Funderburk and John Meachem. **Category B:** Dennis Donahue, AIA, and Stacy Hull, Ralph McCoy Jr. and R. Gary Boyd.
- **New Orleans, category A:** no awards. **Category B:** Ryce Stallings, Steve Bingle and Rick Colshaw.
- **Oklahoma City, category A:** James Knight, AIA, and Bob Heatly. **Category B:** Phil Felix and William Trimble.

Information on the winning designs may be obtained from: Information Services SSEC, 61 Perimeter Park, Atlanta, Ga. 30341.

News/Practice

Construction Arbitration Claims Set Records in Volume, Value

The number of construction industry arbitration claims for the first six months of this year was the highest ever recorded for any comparable period in the 54-year history of the American Arbitration Association. There were 1,441 cases, representing an increase of 212 cases over the same period in 1979.

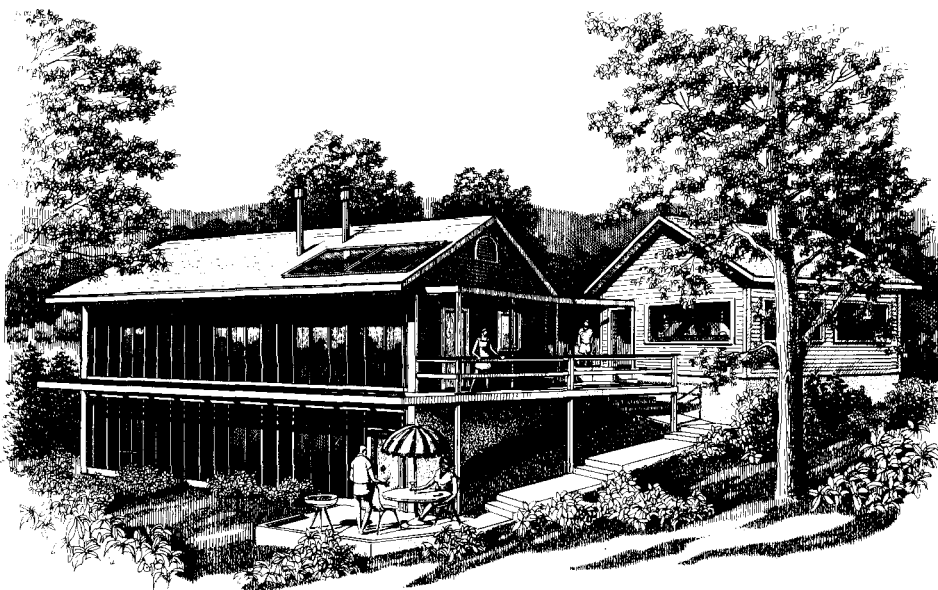
The total value of the claims and counterclaims was also the highest on record for any comparable period, says AAA. There was a 52.3 percent increase over the previous year. Only 14 claims were for \$1 million or more, with the greatest majority representing less than \$50,000.

In 855 disputes, the parties involved were the owner and either the contractor or subcontractor; in 257 cases, the parties were contractors and subcontractors; in 160 cases, the parties were either the architect or engineer and the owner, and the remaining 169 cases were made of miscellaneous combinations, says AAA.

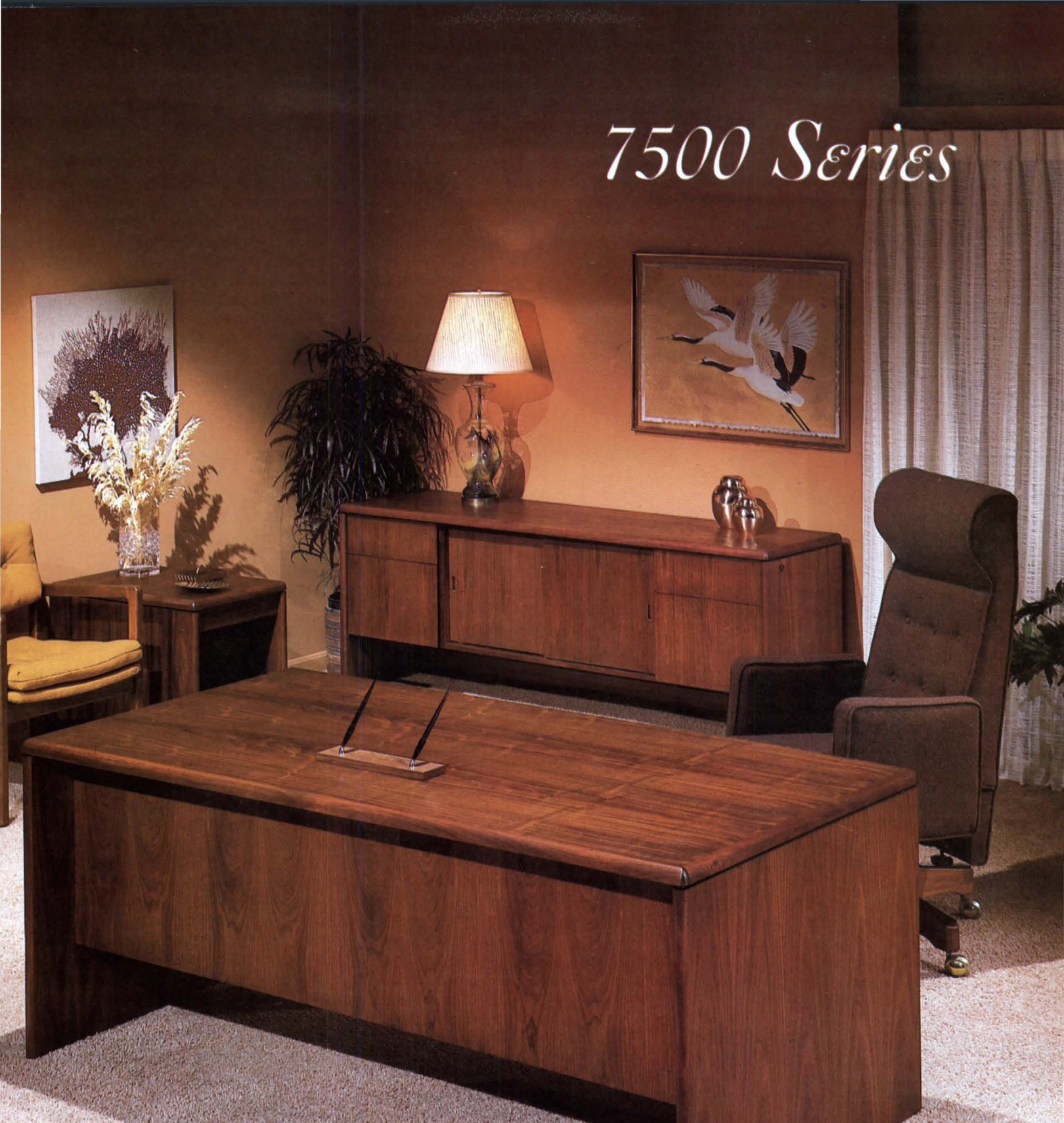
Downtown Lakefront Winners Are Announced in Milwaukee

Brown, Daltas & Associates of Cambridge, Mass., and Rome is first place winner in a planning and design competition for the development of 176 acres adjacent to Milwaukee's central business district on the shore of Lake Michigan. Second place went to Patty Berkebile Nelson Associates, Kansas City, Mo., and

continued on page 32



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Circle 31 on information card

Practice from page 30

third place to Rick Blommer, Cy Fishburn, Jim Sullivan and Harry Van Oudenallen, University of Wisconsin at Milwaukee, school of architecture. Honorable mention was won by Forest Gerald Gast and Daniel Hillmer of San Francisco and also by the team of Thomas Aidala, Barbara Maloney, Cynthia Ripley, AIA, and G. James Scoggin, AIA, of San Francisco.

The winning design by Brown, Daltas & Associates envisions a new lakefront focus associated with the central business district and providing a waterfront plaza and city landing to symbolically link the city to the water and to serve as a "crossroads" for pedestrian movement. A "har-

bor promenade," a three-story structure with an enclosed pedestrian street to provide for recreational and meeting spaces, would be related to new facilities for Milwaukee's traditional "Summerfest." These facilities, "appropriate to the lakeside landscape," would be designed for year-round use.

Along the river medium-density residential units, with parking and commercial facilities, would replace low-density light industrial buildings. New parks and playgrounds behind the housing would be developed to provide a continuous park setting between the housing and the promenade.

The competition, which was sponsored by the City and County of Milwaukee and

the Greater Milwaukee Committee, a private civic association of community leaders, was judged by Garrett Eckbo, landscape architect, San Francisco; Rai Okamoto, director of planning, City and County of San Francisco, and Robert Venturi, FAIA, Venturi, Rauch & Scott Brown, Philadelphia. Professional advisers were Lynne B. Judd and architect Patricia A. Zingsheim. An award of \$25,000 was made to the first place winner; \$15,000 to second place; \$7,500 to third place and \$3,000 each to recipients of honorable mention.

Five Professional Interest Areas Covered in October Conferences

AIA professional interest committees will sponsor five different conferences in October. Each will be open to all architects. The conferences vary in subject matter from creative financing to the state of the art in justice facilities for juveniles.

The committee on interior architecture is sponsor of a conference on "Inside Architecture," to take place on Oct. 2 at the Villard Houses, 457 Madison Ave., New York City. Representatives of firms that have been successful in interior architecture will discuss special issues confronting architects in interior design, and Brendan Gill, critic and contributor to the *New Yorker*, will summarize the day's discussions by providing his own reactions to the issues raised.

On Oct. 6 at AIA's headquarters in Washington, D.C., the housing committee will hold a conference on "Creative Financing: How the Architect-Developer Can Secure Financing." A panel to include among others, a lawyer, accountant, realtor, mortgage banker and government representative will discuss such topics as high risk monies and other equity financing and debt sources.

"Managing the Corporate Image Through Architecture and Design," the conference on Oct. 13-15 sponsored by the committee on architects in industry, will take place in Williamsburg, Va. The conference, with contributions made by practitioners, critics, educators and corporate management, will focus on the problems and parameters of developing and maintaining a consistent corporate image.

The architects in commerce and industry committee will sponsor a conference on "Energy and Design" on Oct. 20 at the Four Seasons Plaza Nacional in San Antonio, Tex.

On Oct. 30-31 at the Gainesville Hilton Hotel in Gainesville, Fla., the committee on architecture for justice will give attention to "Secure Correctional Facilities for Juveniles: 'State of the Art.'" Participants

continued on page 80



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Architect: Robert Bridges Associates, New York

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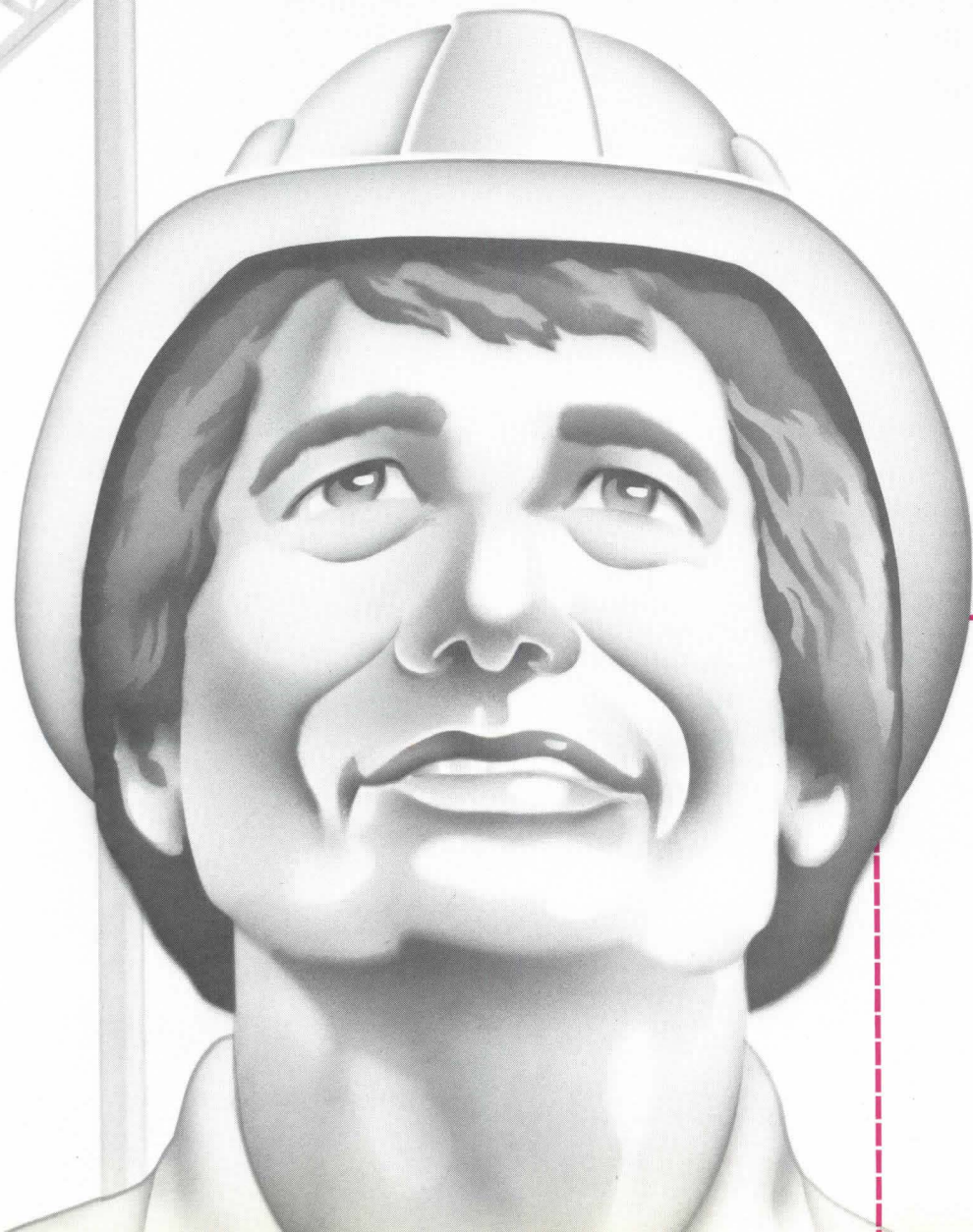
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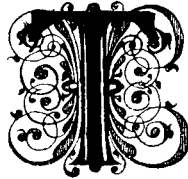
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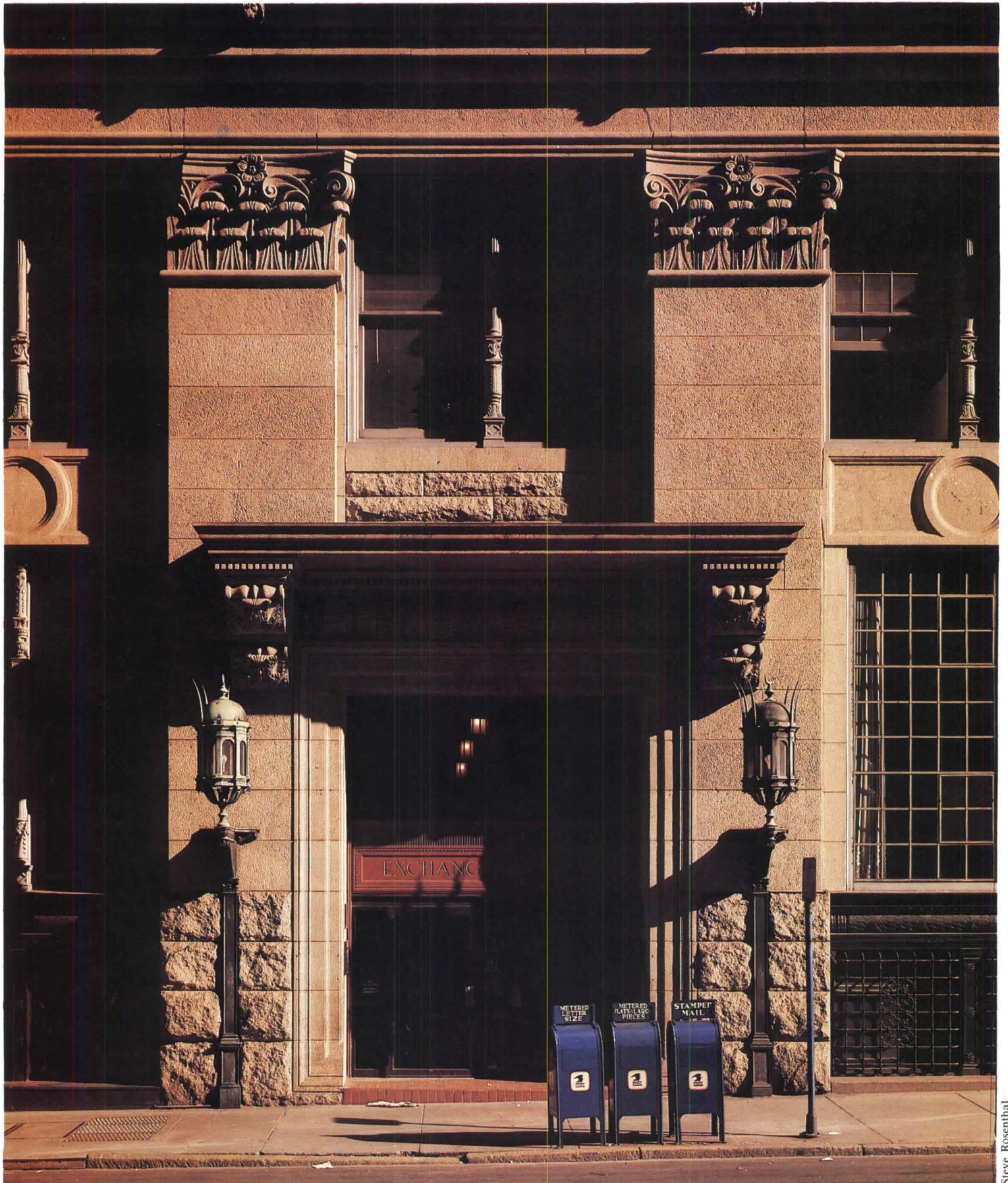
here is no clock or common memory: My Boston is not your Boston, is not John Winthrop's or Paul Revere's Boston, not Oliver Wendell Holmes' or James Michael Curley's. Yet we share a sense of Boston—a place that is, above all, memorable; a city that feeds all the routine senses of touch, sight, sound, but especially, a city that is a sight for the eyes. Boston, as planner Kevin Lynch put it, is 'imageable.' Bostonians inhabit a landscape of loveliness and livability; we pace our hours amidst an architecture of special worth."

So begins a fine book by Jane Holz Kay excerpted on the following pages in which Ms. Kay sadly but fondly documents some of what Boston has lost of its architecture over time. The other side of the coin is that Boston has also had some gains: the widely emulated revitalization of its waterfront, a generation of new buildings as good as any other American city's and better than most.

One of the most celebrated of the new, of course, is Boston's city hall, which is used in this issue as the starting point of an article on city halls as a building type. This attention to Boston, and the cover, are in observance of the city's celebration this month of its 350th anniversary.

Boston is the grand dowager of American cities. She is aging proudly and gracefully, but she has her pains and problems. America is not that good about caring for its elderly, and that goes for cities as well as individuals, as a story on page 12 points out.

So while we wish Boston many happy returns, our anniversary wishes must include social accommodation and fiscal relief as well as continued physical health. *D.C.*



Steve Rosenthal

The Stock Exchange Building (above), capital for Boston's 'merchant princes' on State Street, the major axis of finance, was largely obliterated during the city's 350th birthday celebration. Designation as a landmark didn't help Peabody & Stearns' 1891 building from losing all but its front segment. The portion shown here will become a false front for a new highrise. Facing page, cutting off the top of Beacon Hill (1811-1812) adjacent to Charles Bulfinch's State House.

The 'Lost Boston'—and the Future

In a time of rapid growth, a need to preserve a remarkable heritage. By Jane Holtz Kay

Boston as a work of collective art went far beyond those single "artistic" episodes called architecture. The city that celebrates its 350th birthday this month evolved through the shared sense of humanity and urbanity of many designers over many years and was transmitted to so many wayfarers here.

Throughout these centuries, builders have made their mark with the majesty and catastrophe that old photographs show, but never, I suspect, so fast as now. The period of anniversary is a period of great expansion. Again the city is in flux and once more the question concerns those who cherish the cityscape. Will the lost Boston chronicled here be an epilogue of past losses or a prologue to the vandalism of a future day? The sensibility to Boston's urban values, the comprehension of the grace and

Ms. Kay is architectural critic for *The Nation* and author of *Lost Boston*, to be published in November by Houghton Mifflin Co. The author has adapted material from that book for these pages.

comfort and the dignity of its building is an awareness lost along with much of its architecture. Although understanding grows, the pressure also mounts—pressure not only to maximize the value of every site and structure but to ignore the neighborhood, the scale, the sense of the old city and to build ahead by the meanest dictates of the purse.

Change, the narrative of Boston's building shows, can be a creative act. It can be a manifesto of the joy in city-making. The 18th century gave way to a still more splendid Boston in the 19th, for Victorian builders responded to the city and its citizens. Our 20th century builders do not: When 19th century architecture falls, it falls for naught. We of the 20th century seem most adept at paving paradise to put up a parking lot.

Many such "paradises" sit within the pages of *Lost Boston*. They come as reminders of a glorious heritage in a remarkable city, but above all, they come to plead for the salvation of the splendors left intact.



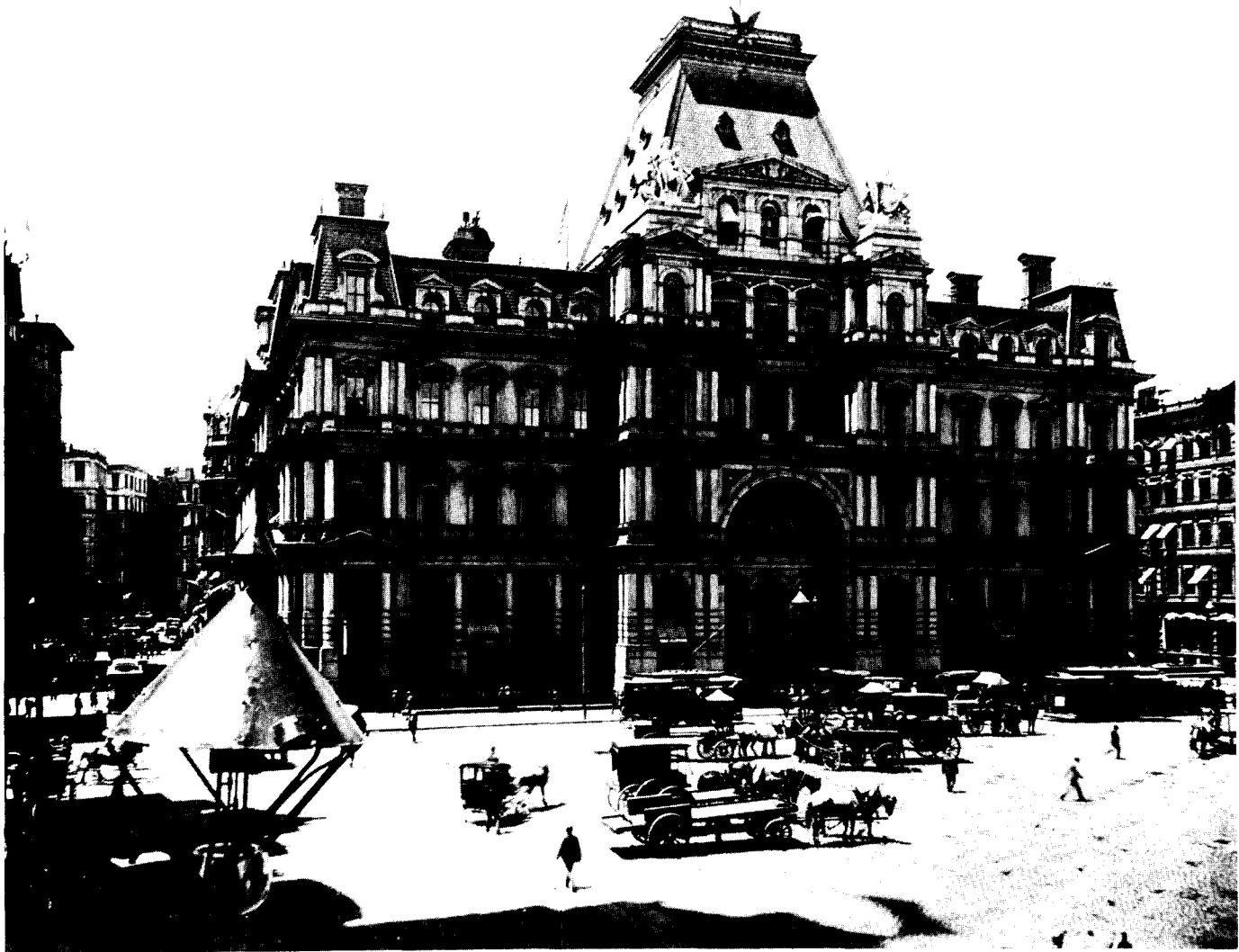
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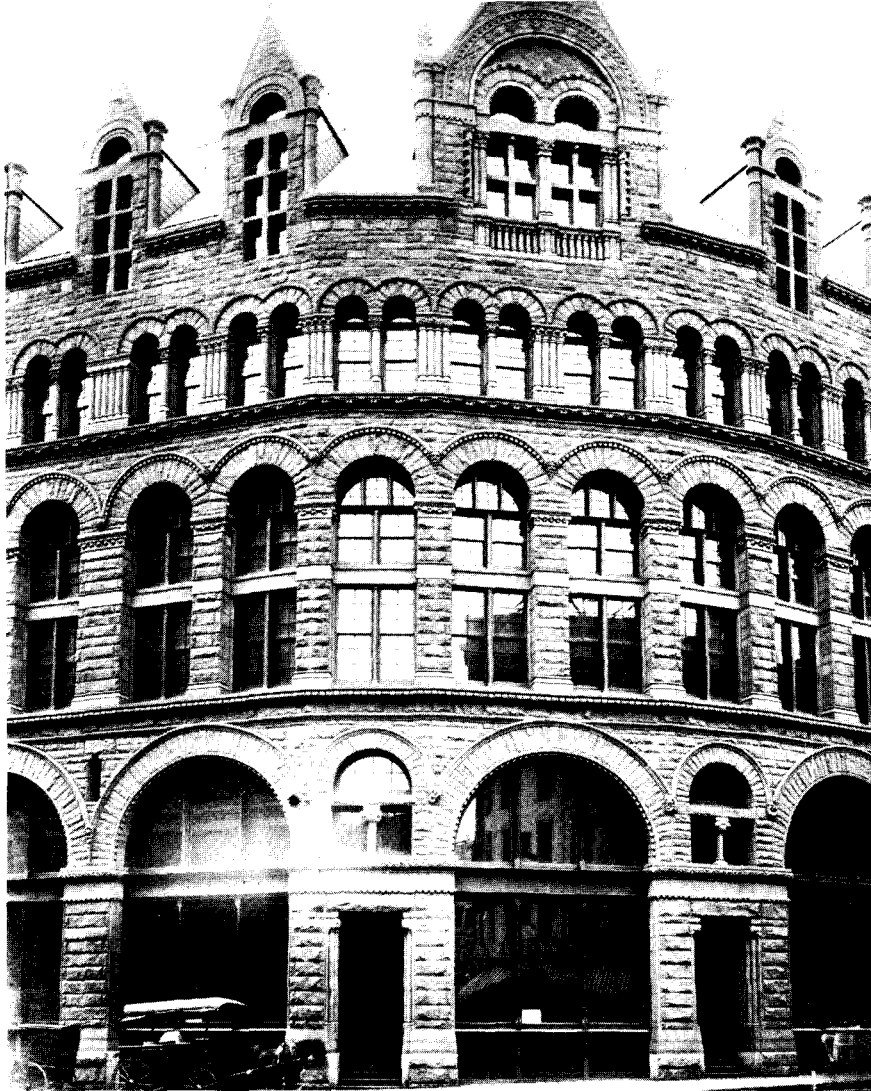
Streets and Spaces

While other towns boasted of their broad boulevards and uncluttered vistas, Bostonians idled happily within the organic contours of their winding streets, then opened them out into squares to provide “breathing holes” for the population.

Music Hall Place (facing page, above) with its human-scaled dimensions was typical of the joys of confined spaces. “More often than not I would prefer to walk in the rear alley,” Lewis Mumford wrote, “precisely for all those little hints of life, activity and transition which the placid visual arts of suburbia did their best to suppress or politely disguise.” Tremont Street (left), which held an array of many styles in many periods on a curving walkway, gradually lost all but King’s Chapel, front left in the picture, and the

Park Street Church seen in the distant spire.

Alfred B. Mullett’s grandiloquent Second Empire post office dominated Post Office Square (above). Half completed at the time of the Great Fire of 1872, the building endured but lost its adjacent structures, whereupon Boston’s enlightened citizens cleared the way for a new square and surrounded it with a handsome collection of Victorian buildings. The post office was torn down six decades later and a garage now occupies a good portion of the square.

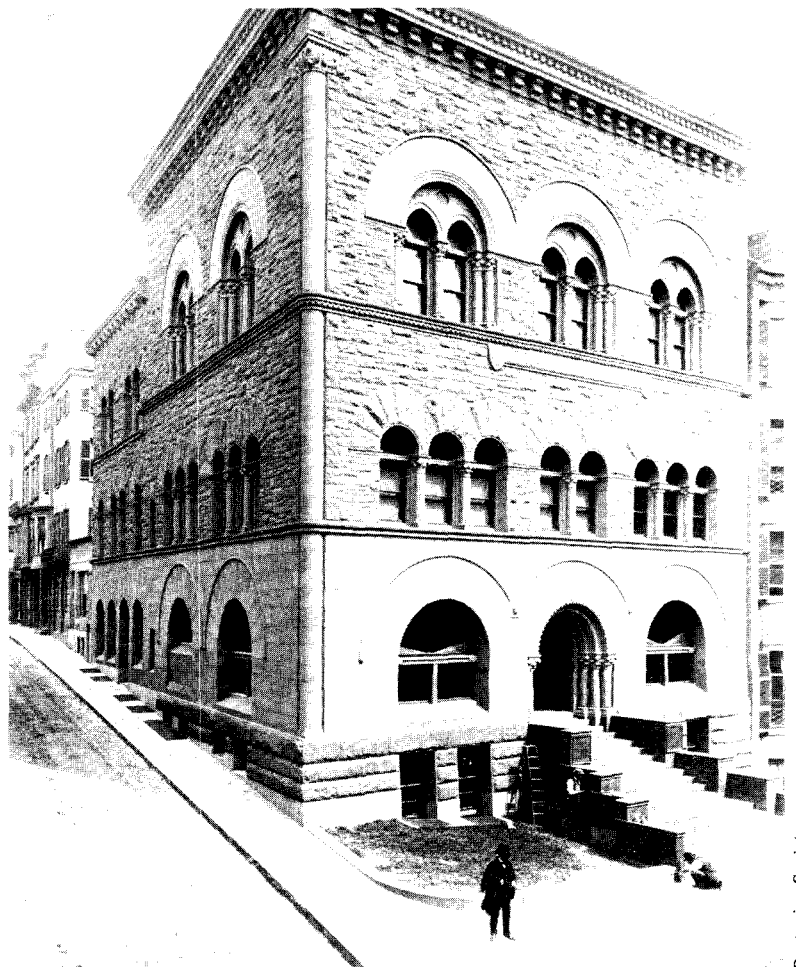


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Losses Large and Small

Boston's architecture ranged from the richly Romanesque to the compact and modest. H. H. Richardson's Ames Building of 1882 (left), a formidable contribution to the city's commercial architecture, burned in the Thanksgiving Day fire of 1889. The American Unitarian Association building (below) designed by his heirs, the prolific firm of Peabody & Stearns, typifies the magnificence of the city's charitable structures. It became the site of the Hotel Bellevue.

The West End (right), a tight-packed web of buildings, was a more modest neighborhood of shifting ethnic groups over the years. The area made famous by Herbert Gans' *The Urban Villagers* was labeled a slum during the era of the federal bulldozer and torn down for luxury housing.



Bostonian Society



Jules Aarons



Bostonian Society



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Blending New and Old

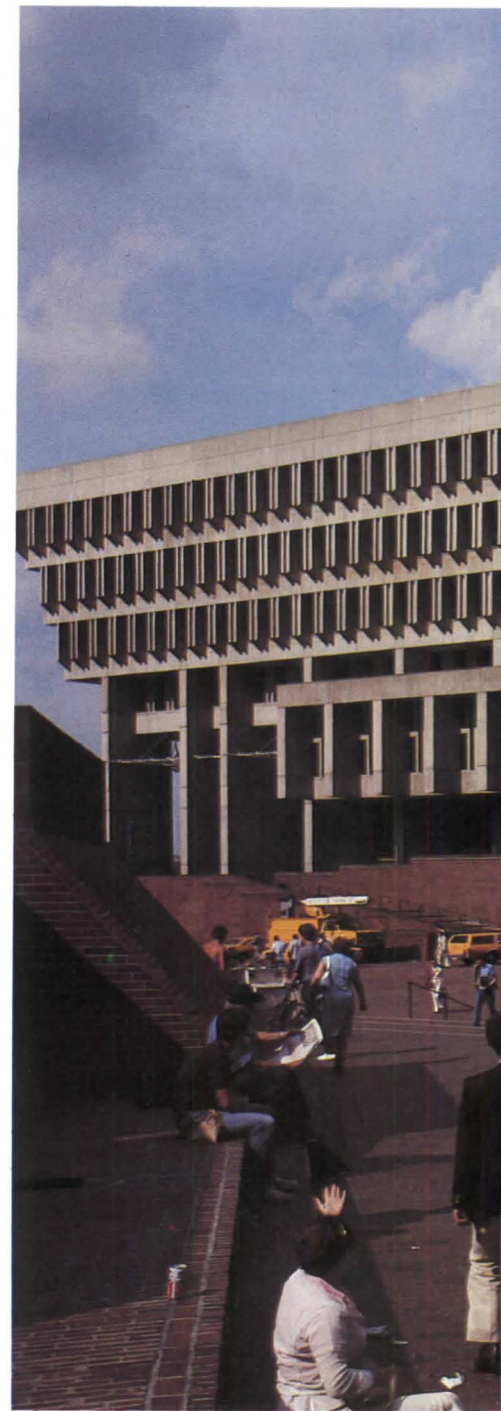
These views of Scollay Square, lost and found, underscore Boston's capacity to retain the old and integrate the new. The square seen at left with its fanciful subway station in 1914 became a respectable and then not-so-respectable entertainment and red light district during the 20th century.

Although the zesty neighborhood succumbed to the empty vastness of the city hall plaza, city planners managed to retain

the Sears' Crescent (below) in the midst of new building. Despite Boston's much-noted revival, this well-ordered approach to design has disappeared in a city where new building is dictated by political and commercial consideration in a period of growth. □

Allen Freeman





The Boston City Hall and Its Antecedents

A building type historically steeped in symbolism. By Lois Craig

"The beginning of it is what everybody has to know: everybody is contemporary with his period." Gertrude Stein's succinct reminder about writing is equally applicable to how buildings are built, how cities are designed. The Boston City Hall (1962-1968), now the star of a nightly sound and light spectacle celebrating Boston's 350th year, seems a paradox in that tradition-conscious city. But viewed in the evolution of a venerable building type, it can be seen as a major and timely example of the modernist legacy of ambivalence about the relation of form to culture, which is especially dramatic in symbolic buildings.

City halls must also be seen in their contemporary settings. The similarity of size between the ceremonial plaza of Siena's Palazzo Pubblico and Boston's City Hall plaza and the general affection of architects for Siena have prompted many comparisons. But in the end the allusions do not hold. The popular-

ity of Siena and its public palace is based on a distant view that does not include the original context of noises and smells, the lack of separation between public and private life, nor especially the political arrangement and tempestuous rearrangements that sustained it. The Boston City Hall, like the one at Siena, is a place—a building and its setting—very much of its time.

Boston's history is replete with noteworthy town and city halls, each emerging, as did their European antecedents, from an alliance of commerce and politics. In the newest configuration of this alliance, four of these symbolic centers are now part of the city's acclaimed revitalization—the Second Town House (later, Old State House), Faneuil Hall, Old City Hall and the new city hall, designed by Kallmann, McKinnell & Knowles for a nationwide competition in 1962. The new hall stimulated this renewal and now overlooks one of the country's most commercially successful downtown shopping centers, the recycled Faneuil Hall Marketplace. The First Town House (1657), destroyed by fire, represented the partnership more literally: In the manner of early medieval town halls, the city's administrative functions were housed above an open market.

Ms. Craig, principal author of *The Federal Presence: Architecture, Politics and Symbols in United States Government Building*, is associate dean of the school of architecture and planning at the Massachusetts Institute of Technology.



Allen Freeman

From modern prototype to modernist response: Siena, Italy's 13th century Piazza del Campo (at left in an 18th century drawing) holds certain similarities—in size and shape—with the 1960s plaza at Boston City Hall (above, with the surviving 19th century Sears' Crescent at extreme right).

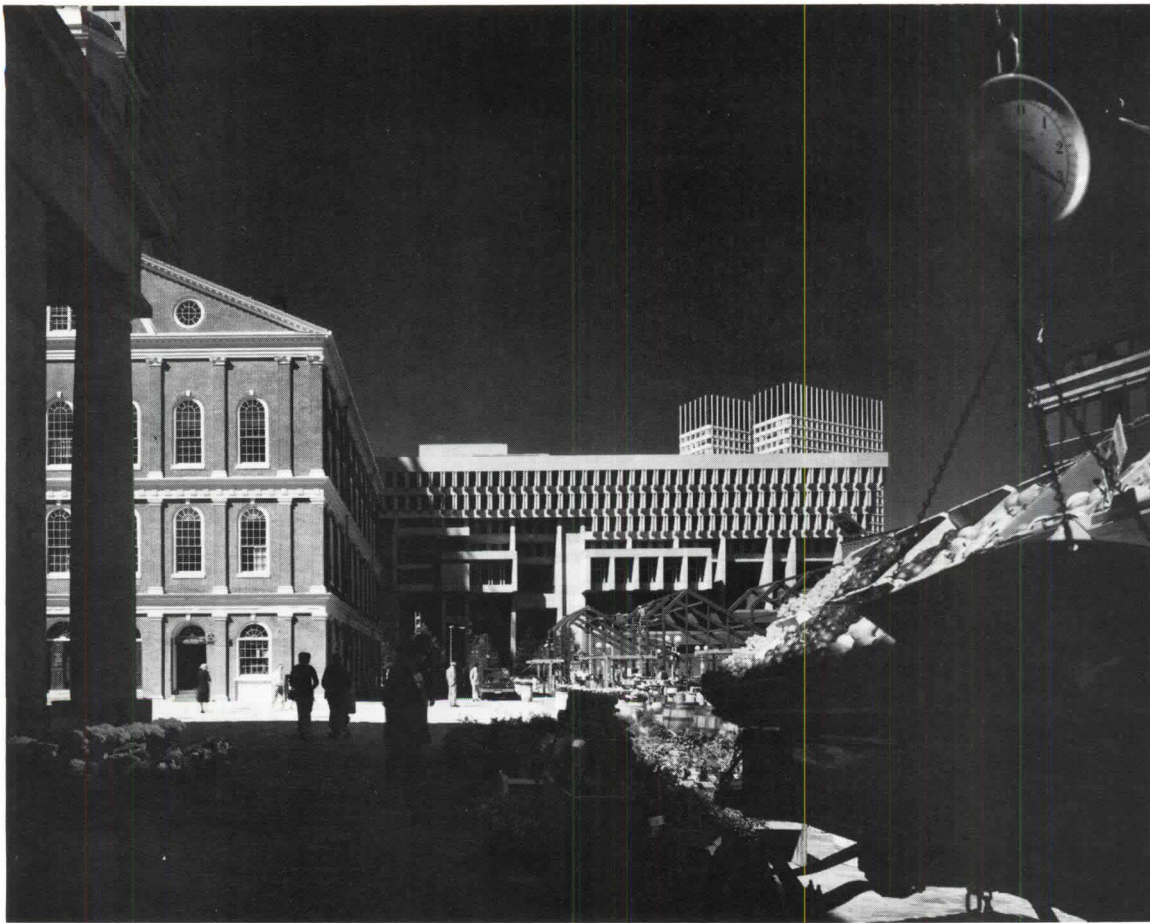
The familiar interlocking spaces and concrete forms of the new city hall have appeared and reappeared in articles, drawings, photographs and souvenirs. The building and its plaza have been thoroughly appraised in proposal, in fact and in use. Ada Louise Huxtable, Hon. AIA, said the ensemble is "one of the best urban spaces of the 20th century." Wolf Von Eckardt, Hon. AIA, called the building "truly magnificent." In an early review, Peter Collins wrote that "it is clear, even from the plans and the model, that dignitaries here will enjoy such a labyrinthine sequence of spaces, and such a breathtaking variety of levels and ceiling heights, as has not been seen since the collapse of King Minos' palace at Knossos."

In 1973, Ellen Perry Berkeley surveyed the views of the Boston populace and found "a body of opinion that was over-

whelmingly negative" about the building. She also found a curious indifference to the plaza. Peter Prangnell, writing about the Boston hall as well as winning entries in major competitions in Toronto (1958) and Amsterdam (1968), dismissed them all as "three monuments to the idiocy of our times; three monuments to outdo the neighbor city; three monuments to all that is uncitizenly."

What characterizes a "citizenly" building depends on when it is built. For eight centuries, city halls have dramatized the human search for a merging of form and idea. The means and manner of their embellishment have revealed as much about public life of their time as about style. In Siena's 13th century Palazzo Pubblico and Boston's First Town House, in Amsterdam's 17th century town hall of renowned splendor and Vienna's romantic 19th century Rathaus, in contemporary city halls like those of Toronto and Boston, one can trace the vagaries of time and diverging convictions about context—physical, historical, political.

The emergence of city states in 12th century Europe brought a new building type, the town hall. Earlier, the business of gov-



Steve Rosenthal

Boston's first town house was built above a market (below); with the opening of Faneuil Hall Marketplace (left), merchandising and civic functions are again in proximity. Rothenburg, Germany's 1572 Rauthaus (right) stands between its Gothic town hall and the market square.

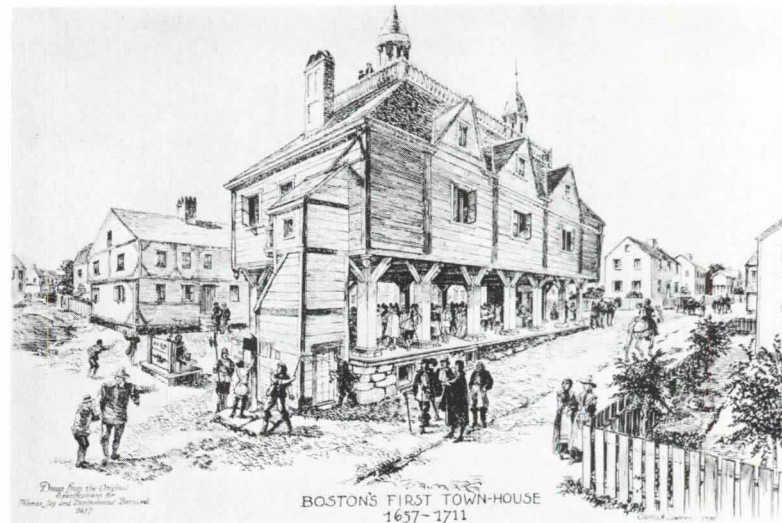
From market square to monumentality.

ernment and law took place in the palace or castle; when extra space for these functions was needed, it could be found in the churches and public squares. In the medieval town hall, commercial, administrative and ceremonial functions were typically combined; the palace hall was adapted to the council chamber over an open, arcaded market. In the heyday of the merchant guilds, the town hall often adjoined or faced the guildhalls on a public market square. At Rothenburg, when the Gothic town hall became inadequate, a grander renaissance hall was simply placed in front of it, maintaining the accessibility to the market square, with a thrifty lack of concern for stylistic fit.

In town halls that appeared at Florence and Siena in the late 13th and early 14th centuries, the ground floors were closed and the market function relegated to adjacent or nearby squares. Historian Jürgen Paul writes that this separation of political life from the life of the market marked the emergence of political architecture in the modern sense. The scale of tower and ceremonial plaza, in contrast to low and densely built surroundings, asserted civic importance. Art was also brought to the service of politics; in Siena, elaborate frescoes extol the virtues of good government, the vices of bad government and their effects on the life of the city and the countryside.

Amsterdam's grand city house of the baroque climaxed the growing pretension with which administration was adorned. Lavish painting, sculpture and architecture delivered a visual lecture on civic pride and values for one of Europe's leading centers of commerce. The new town hall (now royal palace) was celebrated in art and poetry, and reputed to be "not the last, but the first of seven wonders of the world."

By 1800, the functions of law, administration and commerce were, for the most part, separately housed. City halls served chiefly political and ceremonial functions, garbed in prevalent



Bostonian Society

styles. The ebullience of style and size was one measure of civic pride; another measure was the festivity and rhetoric that flowed at dedication ceremonies.

In Hamburg, for instance, a design competition produced an immense confection in the German renaissance manner with a 370-foot-tall tower surmounted by an eagle, the facade adorned with 20 bronze emperors and the coats of arms of the Hanseatic towns. Boston's new (now old) city hall, completed in 1865, was the first public building in America to use the second empire style, popularized by the expansion of the Louvre in Paris. According to the official report, the Boston building would "impress the spectator with a sense of fitness and propriety for the principal municipal structure of an enterprising and thrifty com-

munity." In the same period, Copenhagen turned to Dutch ornamentation of 1600, Bombay to a flamboyant Victorian eclectic. And Henry Hobson Richardson made a Romanesque statement in Albany.

Historian Asa Briggs, in *Victorian Cities*, describes the design and construction of a new town hall in Leeds, England, as a case study of Victorian civic pride and its place in community life. Queen Victoria attended the elaborate opening ceremonies in 1858, and a local newspaper declared, "For a portion of two days . . . this old and busy seat of industry becomes in a sense the seat of the Empire." The edifice that was the object of this attention was, in the best sense of boosterism, longer, wider and higher than its 15th century rival in London.

In Vienna, both construction and style were part of the political calculations of an ambitious building program that marked the inauguration of constitutional government in Austria. In one of the most fascinating recent accounts of politics and culture, *Fin-de-Siècle Vienna*, Carl Schorske relates the origins of modern urbanism in the design and building of the Ringstrasse. This event gave, he maintains, visual expression to the values of a social class and provided "an iconographic index to the mind of ascendant Austrian liberalism." The old city featured the

symbolic edifices of church and monarchy; the Ringstrasse celebrated university, parliament, city hall and theater. Each spoke in the historical language then associated with its function: for the theater, baroque; for the university, renaissance; for the parliament, classical Greek. And "to evoke its origins as a free medieval commune, now reborn after a long night of absolutist rule, liberal Vienna built its Rathaus in massive Gothic," wrote Schorske. What today are called "people activities" were provided for in the popular tradition of the Rathskeller. This immense and festive eating place still draws nightly crowds to celebrate *Wien* in music and song.

Toward the middle of the 19th century, a new force emerged, which would have far-reaching effect on the 20th century city hall. Although the principal rooms of city halls were still the public spaces, more administrative offices appeared below stairs to respond to the increasing duties of official bodies. After World War I, the number of new functions assumed by local governments proliferated. Office space expanded and moved upstairs, frequently at the expense of traditional ceremonial spaces. More often than not, civic buildings, including city halls, succumbed to the imagery of the corporate office block.

How to achieve a building that suggests government, con-



Contemporary essays in civic space and form.

tinuity of tradition and service to the community is the problem for the architect of the modern city hall. Willem M. Dudok, city planner for The Hague, designed one of the handsomest modern interpretations of the towered town hall at Hilversum (1928-30). During this period, Montreal, after fire destroyed all but the shell of its city hall, rebuilt its scaled-down version of the grand Hotel de Ville of Paris. Since then, many architects of city halls have attempted to create a contemporary sense of civic place and form, usually bereft of such traditional devices as prominent height and distant view to dwarf neighboring buildings. And bereft, too, of the traditional collaboration of the arts to deliver civic orations.

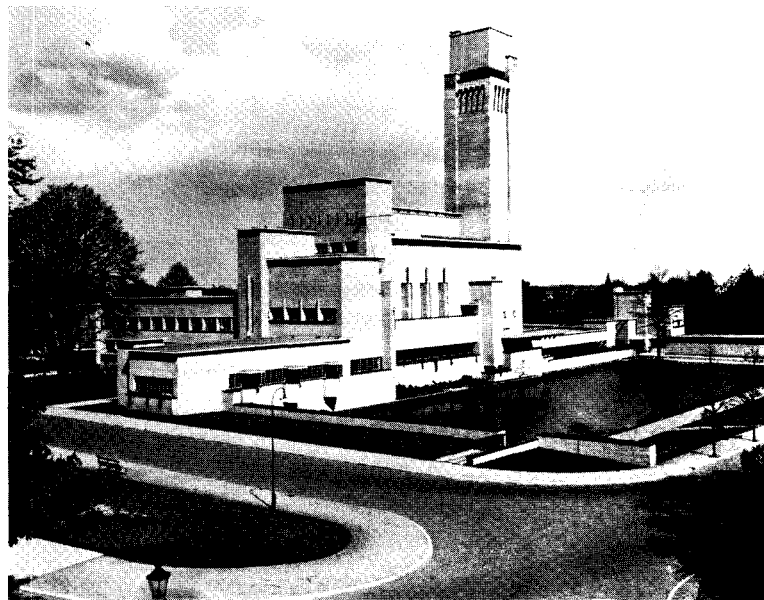
In 1943, Charles Eames re-examined the functional relations of citizens and government and elucidated a democratic ideal: "A city government should—must—be housed as the center of a mutually cooperative enterprise. . . . The city hall must properly be considered the heart of any community, the house of government. A building in which provision is made not only for the administration of rules and regulations, but a building which must contain facilities for the expression of the *idea* of government, which is never static and which can never be complete without the direct participation of the people who create it." Provision should be made, therefore, for accommodating expressions of government in "exhibitions, motion pictures, study and lecture groups, open forums."

In the same key, Alvar Aalto's competition-winning design of 1949 provided a formal articulation for a new kind of functional organization. The Säynätsalo civic center, completed in 1952, is organized around an open, landscaped public courtyard and dominated by surrounding trees. It incorporates—in addition to the council chamber—stores, offices, a bank, a post office and a public library. In thought and form, Eames and Aalto were a long way from Siena's fresco lecture on the hierarchical dispensations of good government and from the building that housed it.

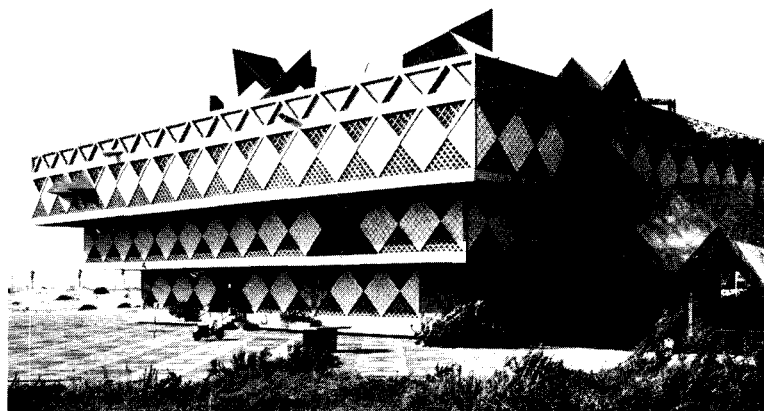
Eames and Aalto addressed the needs of the small city, itself now viewed as an ideal. Today, forms of a remarkable variety accommodate burgeoning city government. ("Somewhere there may be a Wren, a Michelangelo, a Leonardo," said the mayor of Toronto when he suggested an international competition for the design of a new city hall. Of the 1958 event, Peter Collins wryly observed, "Anyone who saw the 520 models laid out in juxtaposition would understand just what he had in mind.")

Ottawa's competition-winning hall of 1956 appears in basic office suiting; a decade later a new hall in Bat-Yam, Israel, in harlequin costuming; still later San Bernardino, in California high-tech, and more recently a prodigious hall at Hillingdon, England, appears in a kind of modern Bavarian. In curious contrast, one of the world's largest and most complex city governments, New York, resists the blandishments of symbolical centralization and evinces no interest in abandoning its delicately scaled city hall of 1803. Paradoxically, as the city rises ever higher and denser around it, its attention-getting power increases.

Amsterdam's design competition has subjected its city hall to the most clamorous examination and debate. The winning entry has been mired in revisions and politics for the past 12 years. For the same site, an earlier competition proposal faltered some 20 years until it was abandoned. In Toronto's competition, contrast and form rather than context were emphasized. The majority report of the jury judged Viljo Revell's white crescent towers "a distinctive building, different in form and materials from standard commercial buildings—impressive when seen from the square and its immediate neighborhood, and also a distinctive feature of the silhouette of Toronto as seen from the distance." Revell did not visit Toronto before winning the competition; given program emphasis on formal composition, there was no need for a site visit.



Courtesy of Royal Netherlands Embassy, Washington



Courtesy of Israel Tourism Administration



Twentieth century interpretations: Hilversum, The Netherlands, by Willem Dudok (top); Bat-Yam, Israel, by Alfred Neumann, Zvi Hecker and E. Sharon (middle), and San Bernardino, Calif., by Gruen Associates, Cesar Pelli (above and facing page).



Balthazar Korab

In contrast, the Boston city hall competition dictated a building to fit a detailed urban plan that specified site, height and formal treatment. In effect, the 256 competition entries were designed to a predetermined envelope. Some competitors complained about the uncharacteristic lack of maneuverability for a monumental statement. For its time, it was a remarkable attempt to place contextual constraints on architecture.

As built, the Boston hall, when approached from its ceremonial southwest side, is reached across a vast sloping brick plaza and entered on its third level. A subway station and fountain garden mark the “front” corners of the plaza that extends into the building as a floor.

The building’s exterior articulates interior functions: the areas of most active public use, including the reception lobby, in the brick-faced lower part; heavily hooded concrete openings defining suspended ceremonial spaces that include the chambers and offices of the councilors, exhibition halls and the mayor’s suite, and three floors of administrative offices in an upper frieze

supported by massive columns. Gerhard Kallmann, FAIA, once wrote, “A building should tear into the space that surrounds it.” That it does.

Two levels below the main entrance, the building meets a lower street that fronts on Dock Square, site of the popular Faneuil Hall Marketplace. Pedestrians have three major pathways to make the descent from the upper plaza to the market: directly down a flight of stairs next to the main entrance, around the opposite side down the stepped levels that fan out from an outdoor stage adjoining the building and by way of a ramp and center courtyard through the building. Then one crosses busy Congress Street to the market. Beyond is Boston’s harbor and the sea.

The conviction that Boston should have a new city hall as part of a new government center preceded by many years the actual creation of the ensemble. From 1917 the area known as Scollay Square was eyed for such a complex. The decision in the 1950s by the federal government to build a new office building, the



Steve Rosenthal

City halls as agents of urban regeneration.

election of Mayor John Collins, who was determined to revive a deteriorating downtown as a symbol of his reform administration, and the arrival of Edward Logue, Hon. AIA, as the administrator of a newly formed Boston Redevelopment Authority put conviction into action. Logue hired I.M. Pei & Associates to revise a 1959 plan prepared by a team that had included Frederick Adams, Kevin Lynch, Lawrence Anderson, FAIA, John Myer, FAIA, and Hideo Sasaki.

It was 1960. Like Logue, Pei was professionally schooled in the heady urban renewal strategies of the 1950s, which called for clearance of a project area and large parcel development. So Pei's plan for rebuilding downtown Boston started with the virtual leveling of a six-acre area with its jumble of narrow, crooked streets and small-scale buildings. City hall was sited to dominate its large plaza. Any sentiment for rehabilitation and incremental renewal lacked the political and economic power to support such alternatives. Increasing the tax base is a powerful argument for big new construction in a city that relies heavily on the property tax.

The winning design managed some adjustments. The plaza of the adjacent federal building was extended to reduce the apparent scale of the city hall plaza. The building absorbed some of the changes in site level instead of ending at a cliff-like drop. Then development, management and use worked their own transformations. A pedestrian bridge intended to connect City Hall Square to the marketplace was never built, nor was a motel. The architect recommended cafes on the ground floor of the federal building and at the fountain garden; these were not built. The familiar forces of expansion and turfdom introduced unintended warrens into the upper levels of the building. The inner public spaces were not decorated with tapestries; there were no plans to support concessions and services in the plaza, which the architect once suggested putting underground.

Mayor Kevin White's office of cultural affairs did a praiseworthy job of arranging for a great variety of activities and of programming special events for the building and the plaza. But daily life and use suffered from the incompleteness of design intentions and the inevitable locks-and-chains attitude to supervision and maintenance. Local architectural students delighted in testing the latter by setting up benign but lively activities to find out how soon they would be abolished by building managers.

The fountain now works so intermittently as to be perceived as nonexistent, although city officials reportedly plan its restoration. On last July 4, the entrance to the pedestrian ramp designed to give citizens 24-hour access to their building was blocked by police trestles. *Sans* inviting fountain and *sans* inviting ramp, people take the shortest pathway to the marketplace. And it is in this corridor that the liveliest activity occurs.

The one kind of city hall symbolism that appears to be internationally understandable lies in the visibility of economic investment rather than in design elements. Major city halls are expected to stimulate city renewal—physical, economic and psychological—in a synergistic spiral. The prediction that Toronto's new city hall and plaza would regenerate adjacent real estate can be measured in both the dollars and sparkle of its perimeter. At more modest scale, restorations as far apart as Baltimore and Helsinki were heralded for their roles in area rehabilitation. Today, Boston's Mayor White surveys privately developed commercial activities devoted to entertainment and leisure rather than trade in the older sense of the market. But any renaissance prince would envy the benefits to city coffers of the marketplace and waterfront renewal that has attended the development of Boston's Government Center. Even Siena's fabled public palace has undergone an adaptation of its lower chambers for exhibition galleries to attract visitors and to create an active link to the merchants' plaza, which the original design did not envision.

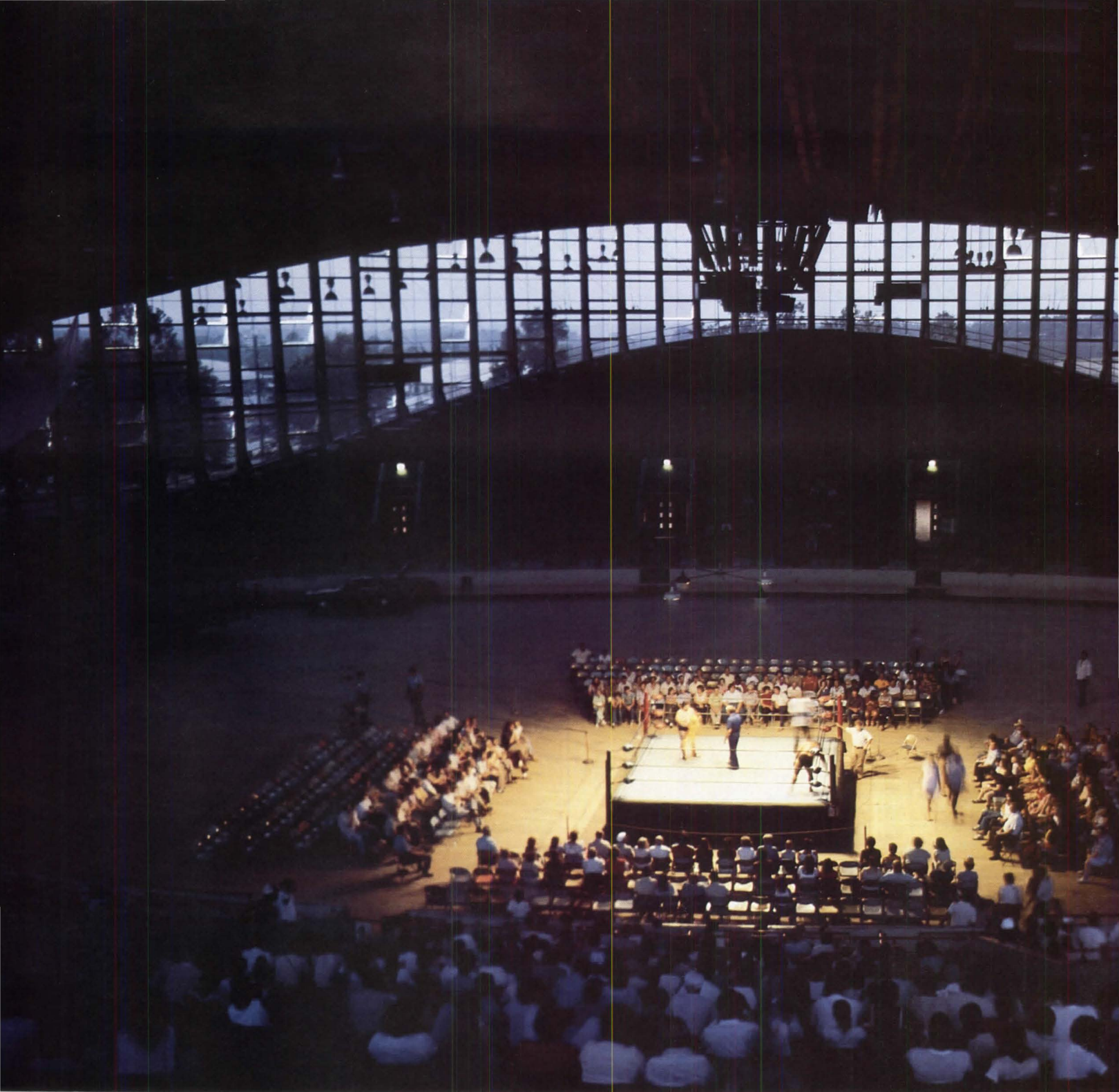
Whether new city halls can regenerate civic life is another matter that relates to issues posed by Eames in the 1940s and today posed, for example, by how one might accommodate the Boston City Hall designed for 1962 to the needs of 1980. Ironically, the 1959 plan by Adams et al. is more attuned to the sensibilities of 1980 than the Pei plan. The city hall and its plaza were an episode in a progression of linked plazas in the larger fabric of the city. Conceptually and philosophically, the proposed building was more modest and less central than in Pei's approach. The emphasis was on the place claimed by the citizens rather than the palace claimed by the rulers. This orientation was prophetic; by the time Pei's strongly focal plan of 1960 was realized, the city administration was setting up little city halls in response to the unrest of that decade.

Also more attuned to our time are the uses proposed in 1969 by Jan Wampler, then a Boston Redevelopment Administration staff member and now a professor at MIT. These included flower and flea markets in the plaza, newsstands in the lobby, exhibits in the hallways, day care in the underused exhibit halls, restaurants along the upper terraces, gardens on the roof. So, too, completion of the architect's unrealized intentions would enrich the public life.

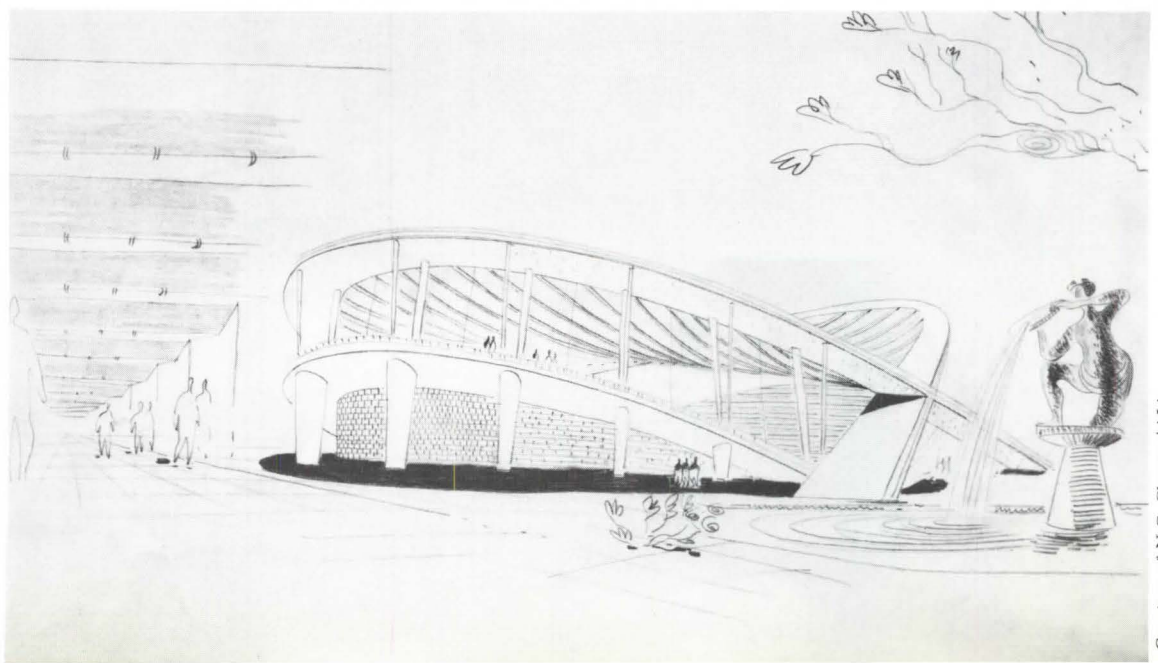
Boston City Hall and its plaza provide a generous and sturdy framework that can receive new uses and associations. Its timelessness will depend on what happens to and in the existing ensemble—on picking up where budgets and maintenance standards left off, on promoting a more intimate interaction of people and place. "The new city hall . . . will work," wrote Sybil Moholy-Nagy, "if its participation spaces work. Its life will flow around the symbolic seat of power, ignoring it." And that, in our time, is the way it is. □

Above, Boston. Facing page, the 1977 Hillingdon Civic Centre at Uxbridge (England) by Robert Matthew, Johnson-Marshall & Partners. Hillingdon's facade, with its postmodernist historical allusions, is a break from town hall and functionalist concepts.





Nowicki's vision (right) and the arena as built (across, before a recent renovation). Above, the weekly Tuesday evening wrestling events play to about 600.





A Radical Settles Down in Raleigh, N.C.

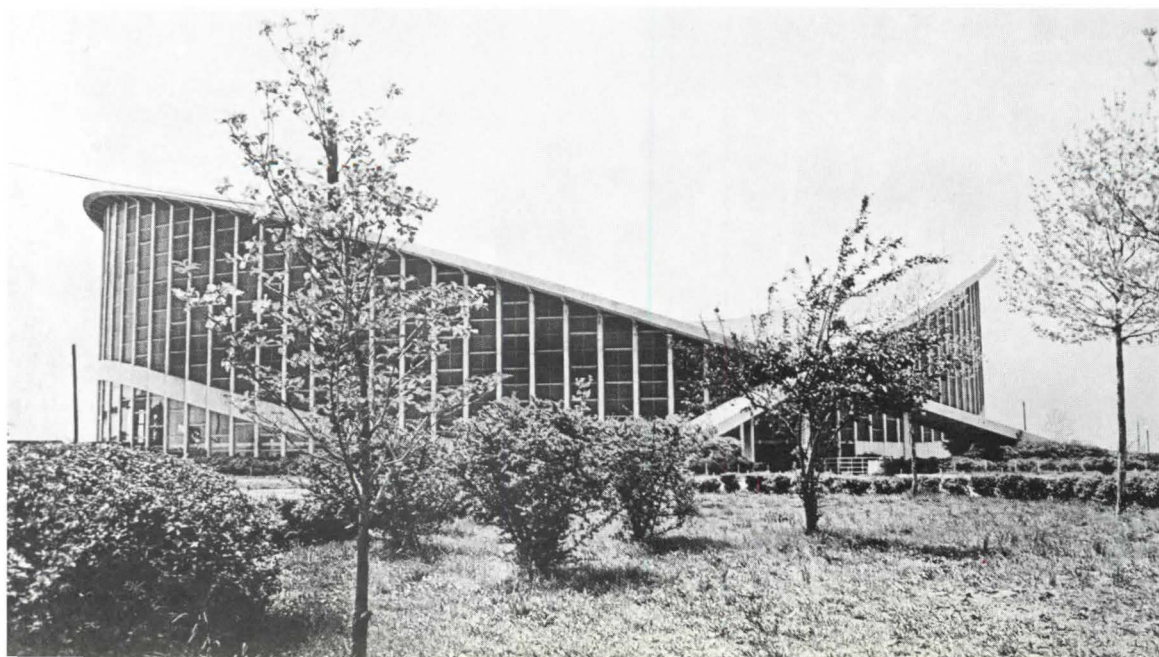
The Nowicki pavillion is both a conversation piece and an accepted civic symbol. By Ernest Wood

By all accounts, the personality of Matthew Nowicki was responsible for getting the parabolic pavilion built on the North Carolina State Fairgrounds. Those who know of the building's conception and birth recall not only the young Polish architect's professional talent but his charm and salesmanship. That and a bit of luck, an optimistic postwar attitude and some Southern politicians bent on uplifting farming and its image through its traditional showcase, the state fair. "These were tobacco chewing, cigar smoking country boys who were powers, and they loved Nowicki and he loved them," recalls a now-prominent North Carolina architect who, as a young architectural school graduate, helped turn out the working drawings for the building. "These were powerful men who knew their power and they didn't worry about what people said."

And people said plenty. One architectural magazine called the building "famous" before it was complete; it was a professor of English at North Carolina State College, now university, who coined the term "paraboleum," often still used to describe the structure. Local newspapers at first were cautiously optimistic, one writer saying when the plans were unveiled that the proposed arena with surrounding improvements looked like a good place for Buck Rogers to set down his rocket ship. But then, when the building was completed in 1953, another wrote that the soaring arches appeared to "lasso the sky." The building's sheer existence, he wrote, "just simply crowds out the publicity seeking complaints of its critics." Meanwhile, politicians carped at its dreadful acoustics and called the building, originally de-

Mr. Wood, a Raleigh-based writer and editor, grew up with Nowicki's arena and still never misses the N.C. State Fair. He is working on a book on historic preservation in the South.

Bill Bayley



Ernest Wood



Three current uses of the arena, originally designed for livestock judging: three rings of circus in its tentlike space (above), a concert (top right) with fair lights shining through and finish line for a 10,000 meter race.

signed for livestock judging, a “cow palace.”

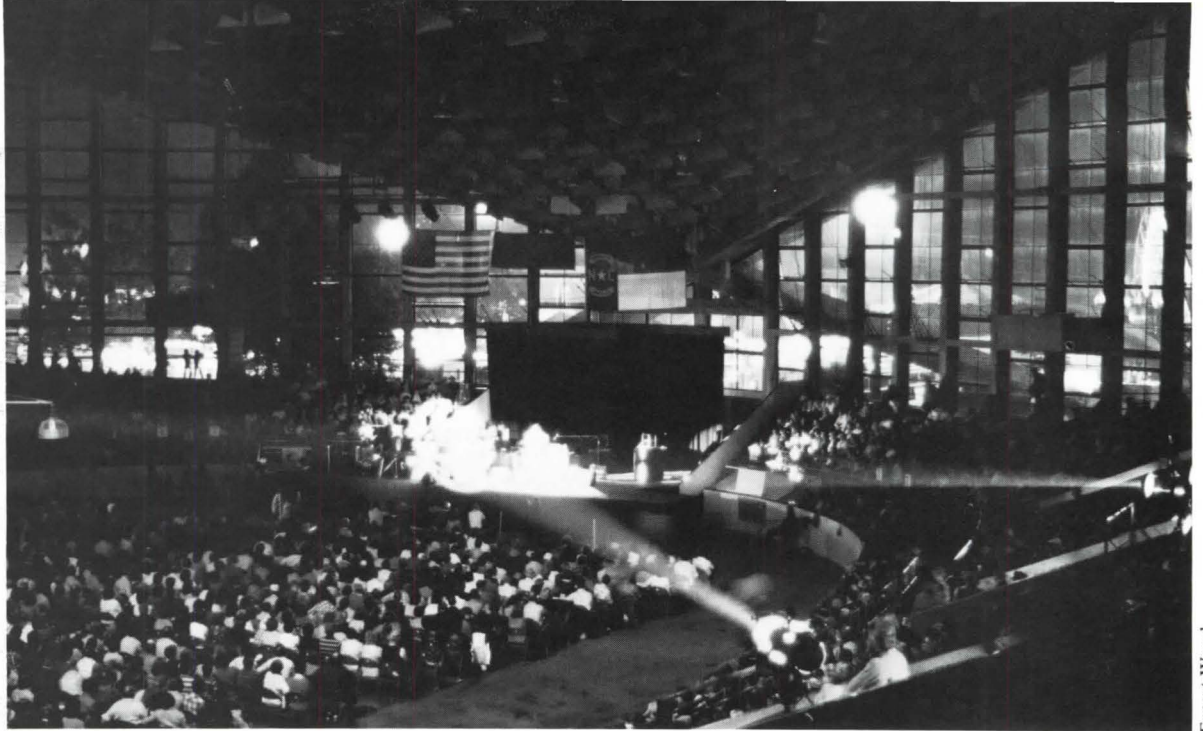
And the public? “The eyes of early fairgoers popped right out,” it was reported.

All of which should not really be a surprise. Even today, visitors to the fairgrounds—especially during fair time—can still see the contrast to the old fairgrounds buildings, many of which still stand. Yet for all the contrasts and for all its fair time flamboyance and architectural vigor, Nowicki’s arena has settled in as a year-round part of the Raleigh landscape and community. It is featured on postcards hawked to tourists, school groups visit the building and out-of-town architects regularly stop to see it. A few years back, an architectural class from Indiana spent half a week studying the building. But to Raleigh it is more than heroic architecture and more than an architectural oddity, though it is both of these things. The state fair’s James E. Strates amusement shows move on to Orlando or Syracuse, but the building remains—and changes, from event to event, inside and out. And people continue to talk about the building, saying . . .

It’s a city symbol: A local Buick dealer recently ran a televi-



Ernest Wood



Ernest Wood



Tommy Babb/The News & Observer

sion advertisement with his message and dancing, animated figures superimposed on a picture of the arena. The man who thought it up had been looking for a local image of the city. "You can't miss that if you see it," he says.

Gee whiz!: Three years ago, as running took over as a fitness mania, a local sporting goods store sponsored a 10,000-meter road race that began at Town & Davis's 1840 North Carolina capitol and ended at Nowicki's 1953 arena. Linking the city's two most important buildings was probably a fluke. The distance between them was right for the race, the street was straight and well suited for spectators, and promoters wanted a recognizable finish point. "Every time I go by the building," says the store executive responsible for the now annual race, "I say to myself, 'Gee, that's really something.'"

It's funny looking: Before that first road race, a local sports writer poked fun at the arena in a prerace column imagining what the race would be like. As his imaginary runner came down the home stretch, he spotted the saddleback building that contained the finish line: "... arena in the distance. Looks like

the roof fell in. No, it's supposed to look that way."

So, what?: The most frequent event at the arena is the weekly, Tuesday night Mid-Atlantic Championship Wrestling, where modern day gladiators cum entertainers pummel each other for the pleasure of about 600 spectators. The promoter moved to the building from a downtown auditorium 15 years ago more for parking and accessibility from the highway than for anything else. "People that come to the wrestling matches don't give a damn about the architectural structure of the building," he says.

It's accessible: One local newspaper editor has been familiar with the building since the early 1950s when, as a young reporter, he visited Raleigh to write an article for *Newsweek* on the architects at North Carolina State College, where Nowicki had been chairman of the architecture department. But he also says, "I always think of it as a place that little boys can run up." From the beginning, the fair management has had to devise some way—first by fences, more recently by signs—to keep people from trying to climb the parabolic arches.

Those arches spring directly from the ground and lean out-

'I think we're all proud of the building.'

ward from one another; cables strung between the two support the roof. The effect has been compared to two athletes locking hands and leaning away from each other. The obliquely angled arches, of reinforced concrete, seem to support each other, but actually rest on steel columns encased in concrete. A wide band, the rim of the seating platform, rises and falls along the exterior wall, echoing the line of the parabolic arches. Most of the walls, however, are glass. The arches rise 90 feet high, enclosing an area 300 feet wide and providing a dramatic interior space with no broken vistas or blocked views. Permanent seating can accommodate 5,500; 4,000 more can sit in movable chairs on the floor.

As structure, the system has proved itself sound. In 1954, the arena survived Hurricane Hazel, which passed directly over Raleigh and raised 14-inch waves in the roof surface without causing leakage or damage.

As design, the building differs markedly from Nowicki's own drawings, particularly in the exterior walls, where the architect showed fewer columns and sloping walls. (The fairgrounds today also are a far cry from Nowicki's unrealized development plan. The arena, the only part actually constructed, itself sometimes appears unfinished as a result, plunked down in the middle of flimsy food vending stands on often muddy ground—especially in off-season, when there is little activity at the fairgrounds.) Nowicki, who had come to the U.S. as a designer on the United Nations complex, was killed at age 40 in a 1950 plane crash. He was returning from a summer of work on the capital in Chandigarh, India, before the arena's design was completed. He had been associated for the arena project with William Henley Deitrick, FAIA, of Raleigh (who died in 1974); the Deitrick firm, with engineering consultants Severud, Elsted & Kreuger of New York City, completed the building after Nowicki's death—in a way whose faithfulness to Nowicki's vision remains uncertain. Henry Kamphoefner, FAIA, dean emeritus of the N.C. State school of design, who had secured the arena commission for Nowicki, recalls, "A good many people have said that if Nowicki had come back and had seen that (addition of columns and straight walls) he would have changed it."

But Thomas T. Hayes, FAIA, now practicing in Southern Pines, N.C., worked in the Deitrick office at the time and recalls that the project was well into working drawings when Nowicki left for the summer and that he knew of the changes. Both agree, however, that compromises were made in the original design, modifications necessitated in part by the fact that the building was so advanced structurally that local contractors could not have built it the way Nowicki had envisioned it.

As a functioning building, the arena had troubles. Originally designed as a livestock judging pavilion, the building was given an expanded use even as it was completed. In 1952, with the parabolas in place but the roof not yet covered, the arena was used for livestock judging for the first time. ("This was the best time," says Benjamin F. Williams, now curator of art at N.C. State University, who, as a friend of Nowicki's, recalls that the very earliest scheme had called for a translucent roof and unenclosed sides. The building under construction had that same feel. "The arches were beautiful things to walk under and around," he says.) The following year, roof in place, a reporter wrote: "All during the dedication ceremony, the great arena echoed with the deep bellows of the prize cattle lined up for judging in the arena center."

Unfortunately, the arena echoed at other times, too. Henry Kamphoefner recalls that a loud, sharp sound would create a 23-second echo in the arena. Along the way, a plan was hatched to hang 13,000 Confederate flags from the ceiling to improve the acoustics. That might have been popular with the citizenry, but it was heresy to architects. Kamphoefner says he got wind of the



Laura Wood

scheme and quickly arranged for consultants from Bolt, Beranek & Newman in Cambridge, Mass., to examine the building and its acoustics. By hanging mylar-covered fiberglass panels from the ceiling, they cut the echo to 1.5 seconds, a vast improvement, but the acoustics still were not good.

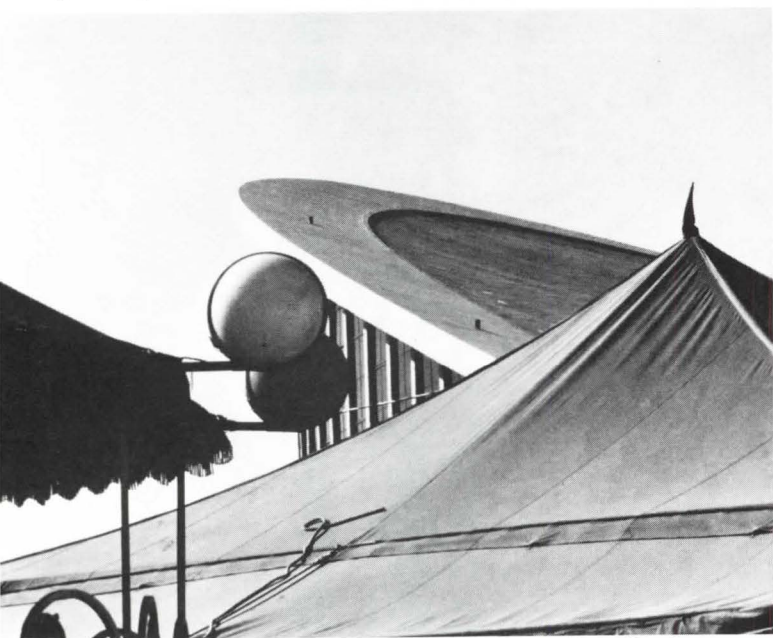
The acoustical problems have been unfortunate, for while the arena originally was never intended for concerts, the acoustical assault is one fact that many people recall vividly about the building—even, perhaps, beyond the design. Yet Nowicki apparently was aware that such problems could occur. Lewis Mumford wrote in 1954 that Nowicki felt that as modern architecture became a style, Louis Sullivan's dictum was reversed, that function followed form. Nowicki thought modern design based on the module "meant not functional exactitude, but functional flexibility. A building conceived in this fashion sacrifices exact conformity to the needs to be served at any one time in order to be ready, through this very indifference and anonymity, to serve other needs and later times," Mumford wrote. This certainly occurs at the arena in Raleigh.

A case in point: The circus, which depends on spotlights for much of its drama, suffers during matinees because the arena's large glass expanses cannot be covered. But for horse shows, events that often occur outdoors anyway, the daylight is correct and eliminates the need for artificial lighting. For horse shows at night, in fact, the floor is evenly lit to simulate daylight.

The arena is no longer used for its single, intended purpose, livestock judging. That event moved to a new building nearby in 1975 and left the arena for other events—wrestling, the circus, horse shows, concerts, motorcycle races, ice shows. The circus may be the best use, especially for the way its high-wire and aerial acts use the building's volume. And the dip in the arena's roof is not unlike the sag in a tent—without the poles. But a circus floor manager complained recently about inadequate dressing rooms, nearly nonexistent staging areas—forcing animals and performers alike to crowd doorways and spill over outdoors while awaiting their entrances—and a leaky roof.

Local users also encounter problems. For instance, when the YWCA staged a giant monopoly tournament in the arena to raise money for its building fund, officials had trouble keeping the 110x110-foot board clean of droppings from the English sparrows that roost in the acoustical baffles overhead. But local

Broken panes of glass were temporarily replaced in 1977 by clear glass, with the resulting patchy appearance (left). As part of a more complete renovation that included light and sound system improvements, all 30,000 square feet of glass were replaced (bottom) with darker panes.



Ernest Wood



users, while sometimes taking the building for granted, also may be more forgiving than out-of-towners: "We found it to be just great for what we wanted," said the Y's volunteer director of the tournament. "I think we're all proud of the building."

There are also signs of pride by the fair management. The building's 1972 nomination to the National Register of Historic Places and its 1953 AIA honor award are displayed in the lobby of the fair's administration building. The arena continues as the fair's symbol, appearing on the departmental letterhead. But diversified, heavy use is hard on the building, especially when dirt is trucked in for equestrian events and rodeos. It takes four 20-ton trucks about five hours to cover the arena floor with dirt a foot deep for these shows. After a show, the dirt is scooped up by front-end loaders. Not surprisingly, by the mid-'70s, the building was showing wear and tear. "We're not what we'd like to be," fair manager Art Pitzer told a reporter in 1975.

And the arena was beginning to suffer from neglect as well as use. In 1976, a woman complained in a local newspaper's "Hotline" column about what she had seen while waiting to get an autograph from country music star Merle Haggard after a concert. "I didn't see him," she said, "but I did see all the rust and rust stains that are eating away at the metal window frames and trim on a most unusual building. The outside must not have had a paint job since it was built. Surely the state has a few gallons of paint sitting around somewhere that could be put on it. . . ."

She was right; the building had not been painted since it was built. Maintenance of the fairgrounds and its buildings comes out of profits from the 10-day fair every October, plus bookings for events during the rest of the year, a sum which usually just keeps things going. A \$100,000 appropriation from the North Carolina General Assembly in 1971 and \$50,000 more from the fair's funds provided a new roof in 1973. (That one now has begun to leak, and the General Assembly has a request before it this year to fund another replacement.) The appropriation also provided a long-range plan for the fairgrounds and repairs of the arena's window glass itself, much of which was cracked and broken and all of which needed recaulking. Fair management wanted the broken panes near seating replaced so they would not endanger spectators. But the company that had manufactured the original blue-green glass for the arena had gone out of business, and broken panes near seats were replaced with clear glass, creating a patchy but fortunately temporary effect.

In 1976, the General Assembly appropriated \$750,000 for a more complete renovation, and a Raleigh engineering firm, Buffalo, Morgan & Associates, was hired to replace all 30,000 square feet of glass, rewire the building, replace the sound system (now much improved), upgrade the lighting and repair concrete.

Although they had been hired principally for their expertise with mechanical systems, the engineers found themselves preoccupied with the parts of the renovation that involved the esthetics of the building: glass and concrete. They made a few false starts, suggesting at first that the glass be replaced by an opaque material that would allow the building to be darkened for matinees. The state division of archives and history, with authority to oversee the project because the arena is listed on the National Register, quickly protested that idea. The solution was to replace the glass with a slightly darker, blue-green version that allows only 14 percent light transmission versus 45 percent with the original. The effect is a radical departure. "When we first started putting it in," says engineer Ray Morgan, "I shuddered. The contrast between the two was horrible, and I thought we really goofed this one. But slowly you could see what it was becoming."

What it was becoming may actually be closer to Nowicki's original intent—at least as seen from inside the arena. For the glass, while transmitting less light than the original, is transparent (unlike the original), allowing the spectator to see clouds and the tops of trees outside. From the outside, the glass allows less of the indoor lighting to show through at night events. By

Looming presence amid fairgrounds honky-tonk.

day, individual panes are not articulated as they were because the newly painted window frames and glass are now about the same color. The resulting appearance—especially from a distance—is one of uninterrupted planes between vertical columns.

The columns, now covered with a buff cementitious paint to seal the concrete, accentuate the change because of a more dramatic color contrast. A great deal of the concrete had spalled (in one place requiring replacement of 12 feet of concrete on one vertical column) and needed patching, sandblasting and, finally, sealing. The result is a slicker, less industrial appearance.

Fair officials hope this new image will give people more respect for the building. Workers found 32 bullet holes in the old glass as they removed it; a year after the renovation, there has been no more such vandalism. But that slick image was really an unavoidable side effect, something at least some of the people involved in the renovation were not sure they wanted. "In every problem, we ended up getting in a technical fix," says John Kinney, AIA, who at the time was the staff architect for the state division of archives and history and who now practices with a firm in neighboring Durham. The historians finally conceded that the arena had been compromised when built and that the renovation's compromises did no more damage to the spirit of the building than those original changes. The renovation should be low key, the historians felt. Says Kinney now, "I haven't heard people either gushing about how good it is or how bad it is. . . . That may be a good sign."

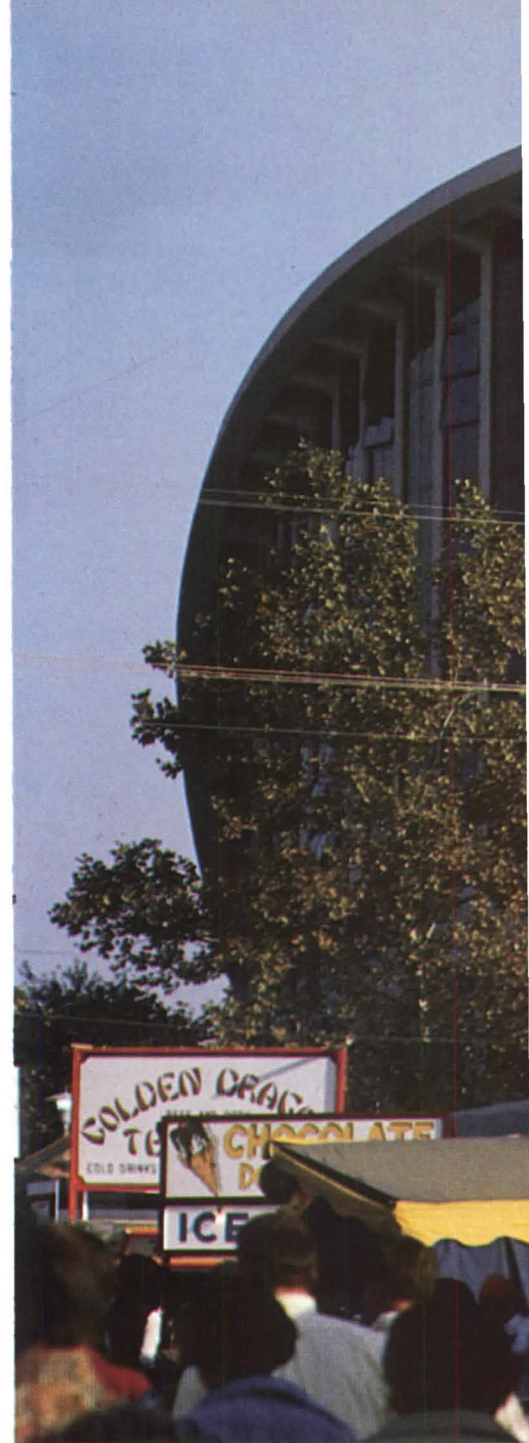
Some things don't change. The sparrows still live in the baffles and the arena continues in heavy use, booked solid about three months in advance and taking bookings now for 1983. Things are so busy that the fair management is having trouble finding time to close off the arena lobbies for painting, a job not covered in the renovation.

In the past decade, several new exhibit buildings have gone up on the fairgrounds, most striving architecturally to serve only as backgrounds for the arena. (As the architect for one said, "My feeling was to keep it simple and keep it at a distance and not detract. . . . If you cannot beat it or complement it, you're better to get off in your own place and not make an ass of yourself.") The new buildings also have served to encourage the arena's use. Attendance at events (including the fair) has been climbing steadily, to about 1.2 million last year for the entire fairgrounds.

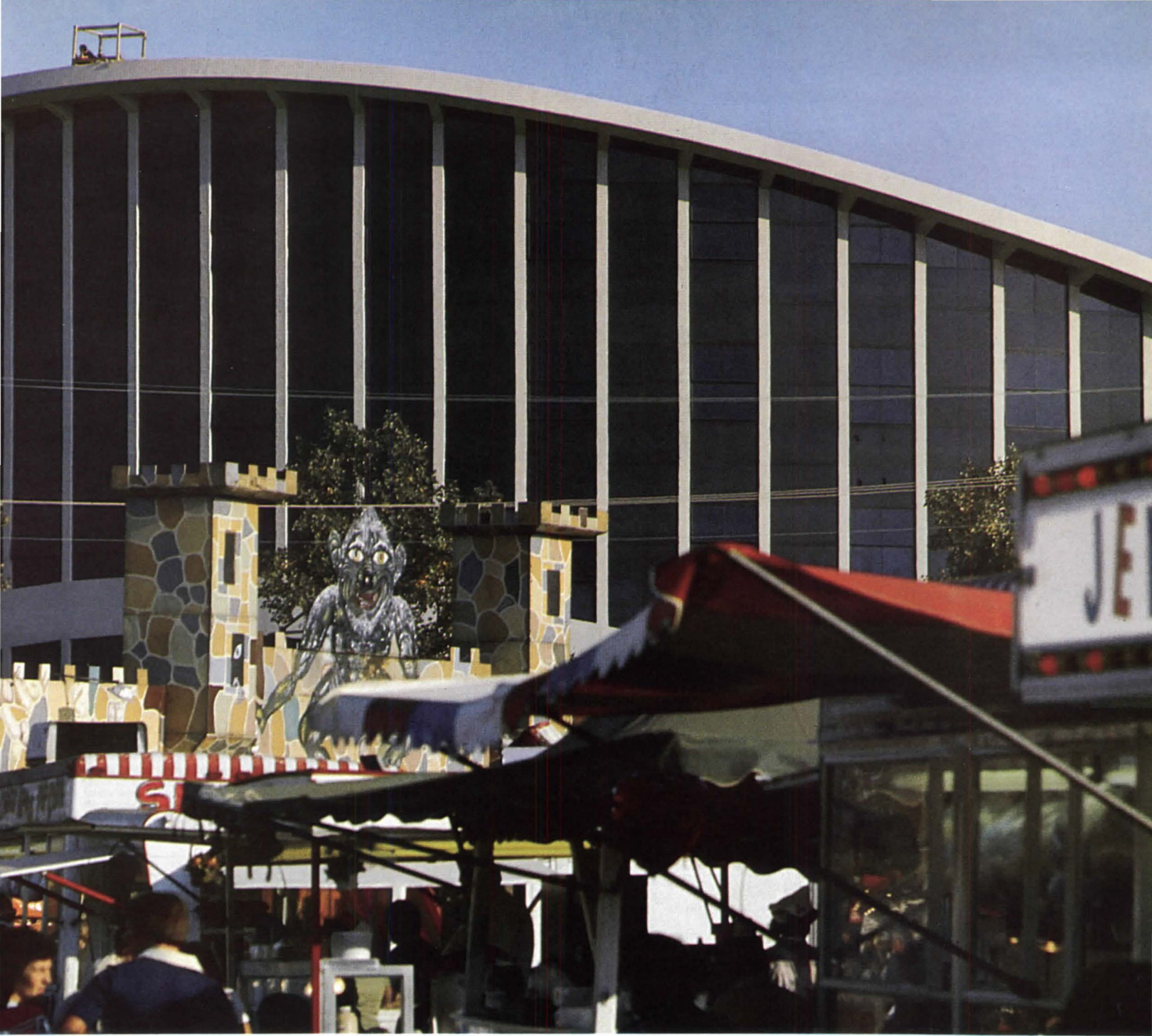
Yet for all the activity that goes on there, the arena also can be quiet and serene. One person described it as looming like a cathedral on the landscape when seen from a distance. The analogy holds for the building seen up close as well. During the fair, it towers over the foot-long hotdog stands and T-shirt concessions, the games of skill and agricultural exhibits, much the way a cathedral towers over the tightly packed buildings of a medieval town. And, like a cathedral, there is an open, grassy space around the arena. Here, fairgoers rest and eat and wait for friends—or just watch the crowds. Inside the arena, even during fair time, it's quiet; the ear-splitting disco music that accompanies the thrill rides doesn't penetrate. Fairgoers—usually older persons—can be found in the empty arena, resting, eating ice cream, looking at the large unbroken space. A sanctuary.

Those who see it every day have a special feeling for that big, quiet space. Barbara Williams is in charge of booking events into the arena, and during the fair spends full time in the building. "This time of the year (between fairs) I like to just go up and stand in the empty building," she says. "There's a certain amount of solitude there. With the birds chirping." □

The pavilion's parabolic arches provide a backdrop for fair time flamboyance. The painted horizontal mullions now blend with the newly installed darker glass; lights from a concert inside do not show through at night (near right).



Photographs by Ernest Wood



Samplings of The Work of an Emergent Dozen

By Stanley Abercrombie, AIA

The five, the seven . . . now, folks, the 12, a dozen East Coast architects who, for the past couple of years, have been meeting occasionally for discussions of their work. One characteristic they share is that they are all relatively young—28 to 38—to have finished their educations and apprenticeships and to have accomplished a body of work in independent practice. That is a major reason for showing the work of several of them here, because we think it is of interest to see what is being done now by some of those who have apprenticed to Meier, Eisenman, Graves and others and then moved on (not without carrying some influences along, of course) to their own concerns.

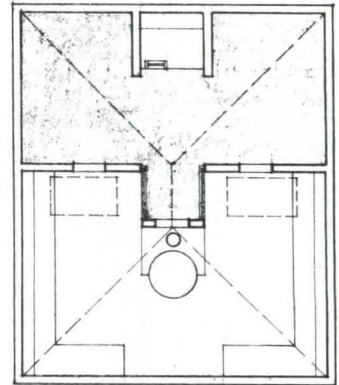
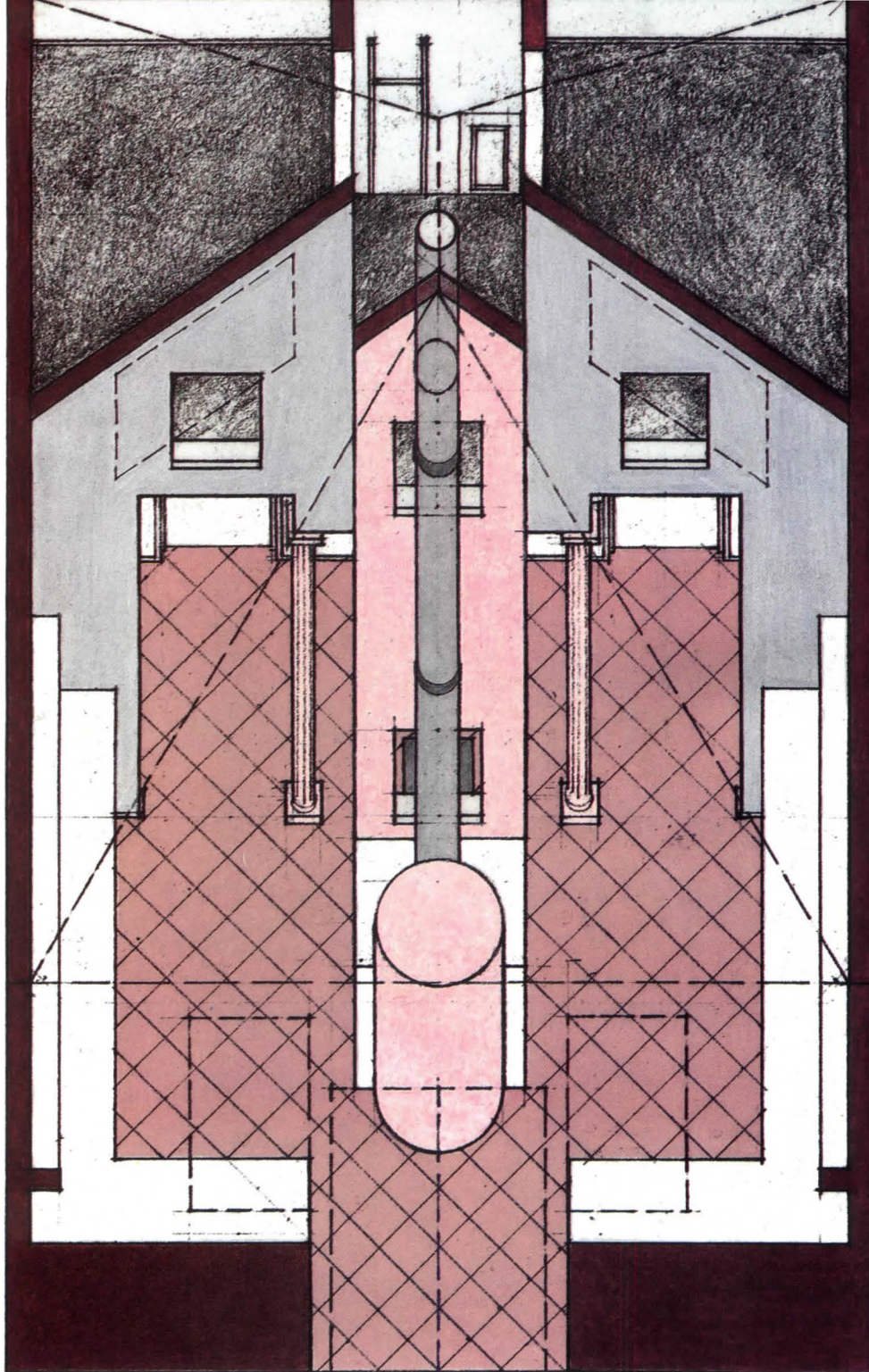
Like “the five,” whose most concrete common bond was simply their inclusion in the publication *Five Architects* (without a “the,” Peter Eisenman has pointed out), these dozen share no single style but only the facts of their informal meetings, the inclusion by work of most of them in the initial issue of *Modulus*, a new publication of the University of Virginia school of architecture, and, with the work of others, in “Architecture: Practice and Pedagogy,” an exhibit assembled by the Syracuse University school of architecture and currently being shown at New York’s National Academy of Design. (“Pedagogy” in the title refers to the fact that every member of the group not only practices architecture but also teaches—at the University of Virginia, Princeton, the Rhode Island School of Design, Pratt, Columbia, Cooper Union, the City College of New York or elsewhere—and thus exerts direct influence over an even younger generation of architects.) The 12 also share, of course, a respect for each other’s work and opinions.

But it is the group’s specific architectural concerns that will suggest to us, if anything can, where architectural design may be headed after the tiresome modern-postmodern skirmishes are put to rest. The designers shown here cannot fairly be shoe-horned into any monolithic philosophy, but several preoccupations keep cropping up here and there (but, we repeat, by no means everywhere) in their work:

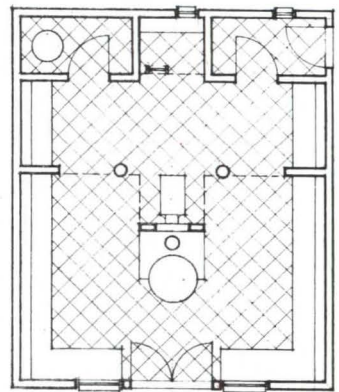
- Allusions to universal themes and metaphors beyond the significance of the actual projects;
- Work with shells, envelopes, screens and various types of layering;
- Fondness for complexity;
- The use of grids and, often, the combination of grids angled to each other;
- Unexpected shifts in scale;
- Creation of indoor-outdoor ambiguities;
- Interest in rooms as discrete, self-contained entities.

The first of the preoccupations is common to ambitious architecture of all styles and ages (though perhaps its pursuit is a bit more manic now than at most other times). The next five are philosophically supported by Robert Venturi’s 1966 *Complexity and Contradiction* and appear in much of the work of “the five” and their contemporaries. Only the last, perhaps, is a new concern—or, rather, a new return to a premodern concern: the disdaining of open planning and spatial flow for more traditional spatial definitions. And it is not only the room that is attracting new attention, but also other traditional architectural features: the entrance, the facade, the column. The open plan has made a real and permanent contribution to architectural experience; it is not about to disappear; but self-contained rooms are fundamental, too. On the whole, the interests of these young practitioners center not on any particular style, but on general and enduring aspects of architecture.

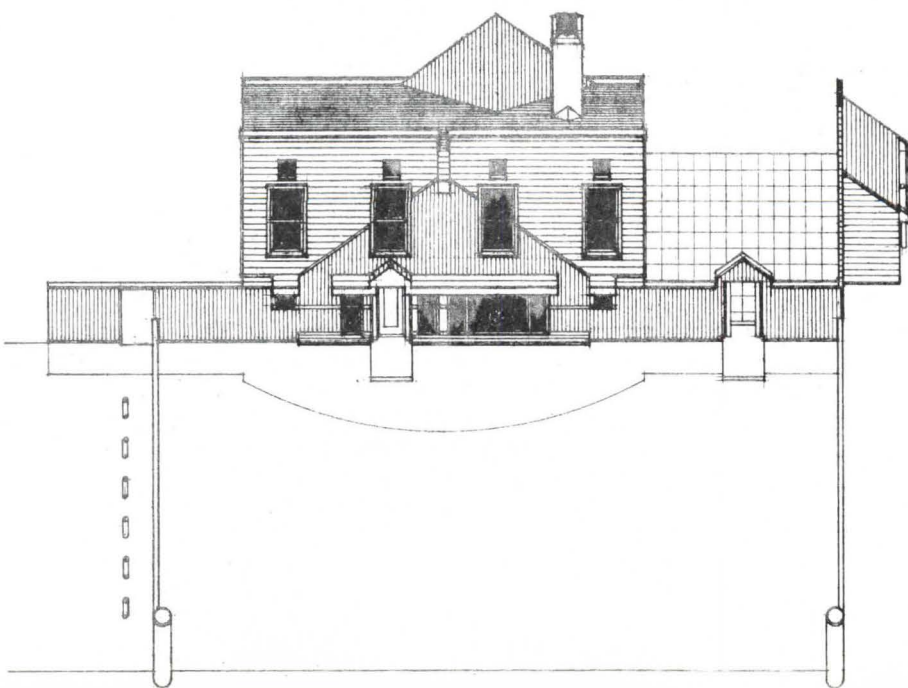
And one more thing about these architects: Although they continue the decade-old revival of interest in beautiful and often complex drawings, they do not see their own drawings as ends in themselves. All the work shown here is meant to be built, some of it under construction now, and some (as you see) already built.



upper



lower

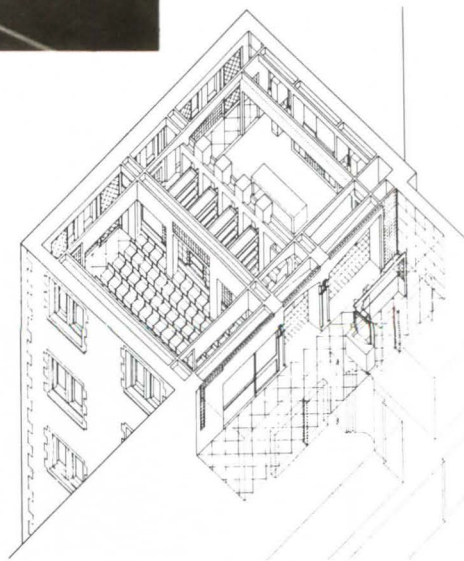


Timothy Wood, now teaching at Columbia, demonstrates two related sets of ideas in two recent residential projects. One, a small studio, seen in a combined plan-section drawing at left and in two conventional plans above, leaves the house exterior intact and introduces an imposing facade and a portico—to the interior. In the larger project, left below, the remodeling of a Long Island beach house, a gable roof has been changed to a shed roof, providing a monumentally tall wall at the front of the house. Wood has fitted this with four ordinary but surprisingly overscaled double-hung windows. The small studio thus brings some traditionally exterior architectural elements inside; the other imposes architectural forces beyond the house itself by dramatizing an adjacent forecourt: In Wood's words, the new formality and scale "upgrade the type from cottage to villa."

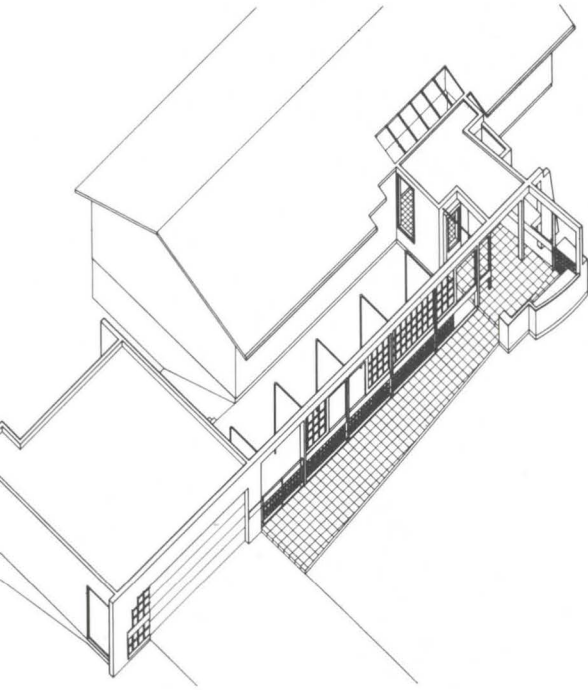


Bruce Abbey and Robert Dripps, with practice in Charlottesville, are both associate professors of architecture at the University of Virginia. Their library of anesthesiology, on the fifth floor of an existing wing of the Pennsylvania Hospital in Philadelphia, makes elaborate use of screening devices, treating the two largest spaces, a reading room and an assembly room, as separate constructions within the exterior shell. Between the two main spaces, and beyond the symbolically important book cabinet, above, is a cen-

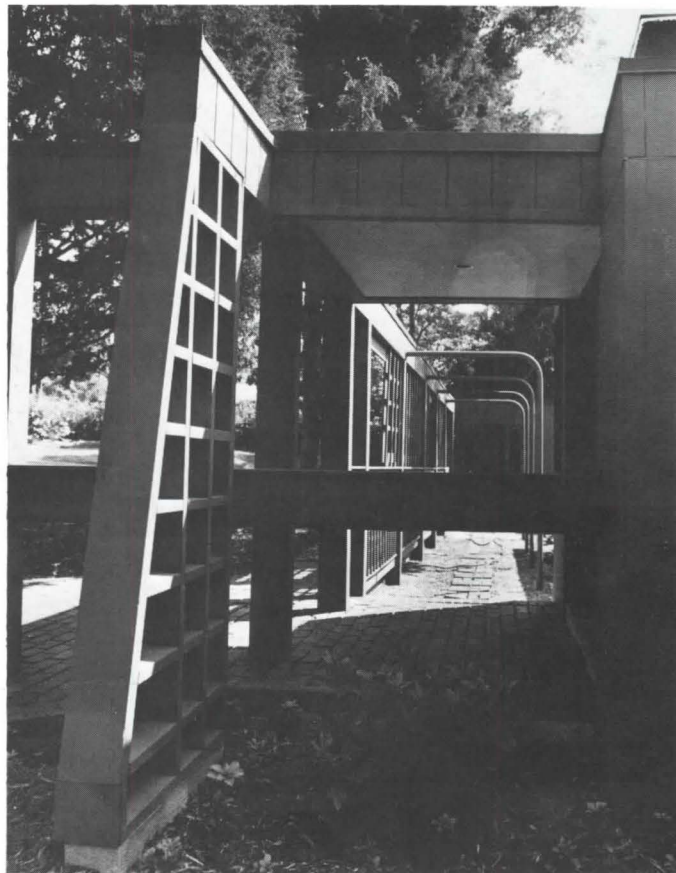
tral area of book stacks. Their Hahn house addition, axonometric and two lower photos on opposite page, adds a garage, entry and new facade to an existing suburban house. Its main feature is a fence-trellis separating public and private realms and creating a variety of visual and spatial effects from both inside and outside the house.

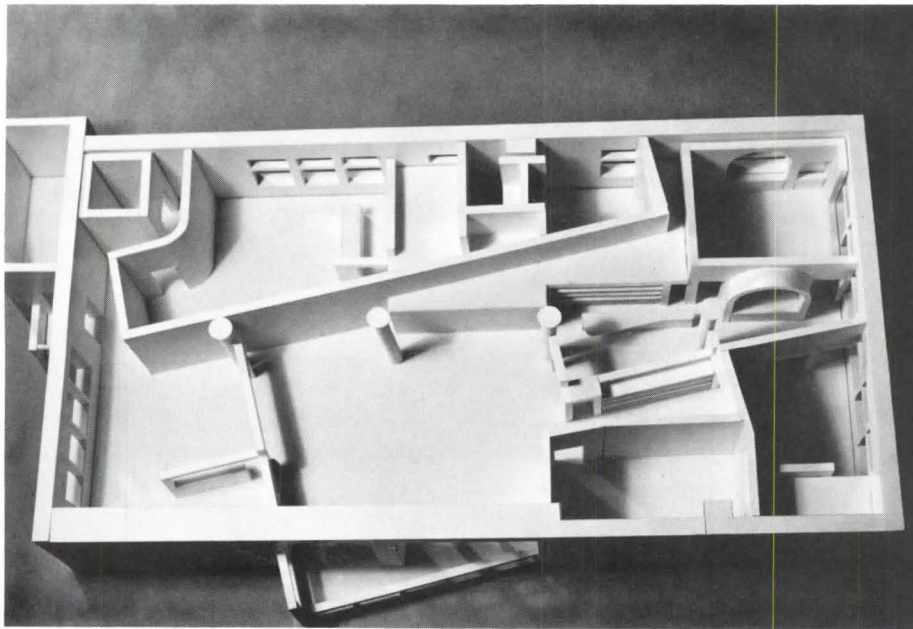
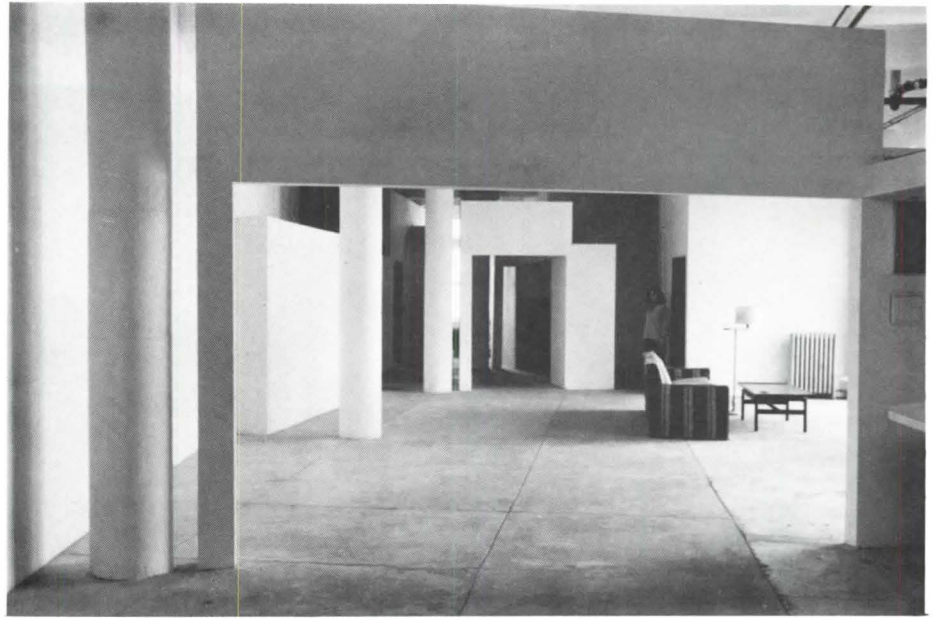
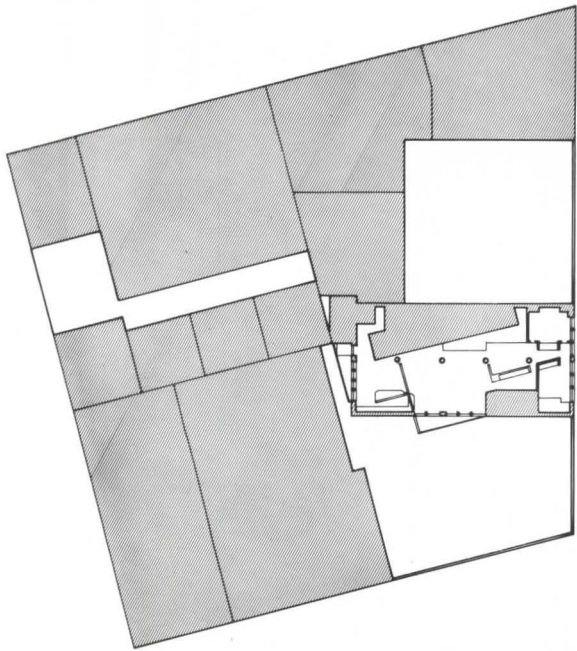


John and Christopher Chimera's design for the Melville sweater showrooms in New York City's garment district, right, suggests a series of spaces by means of parallel screen walls (with "windows" in them) rather than by actual compartmentalization. Custom designed furniture in black plastic laminate continues through these suggested spaces, altering slightly as the hierarchy of workers changes from receptionist (at the curved front desk) to salesmen (beyond the first screen) to office manager (at the rear).

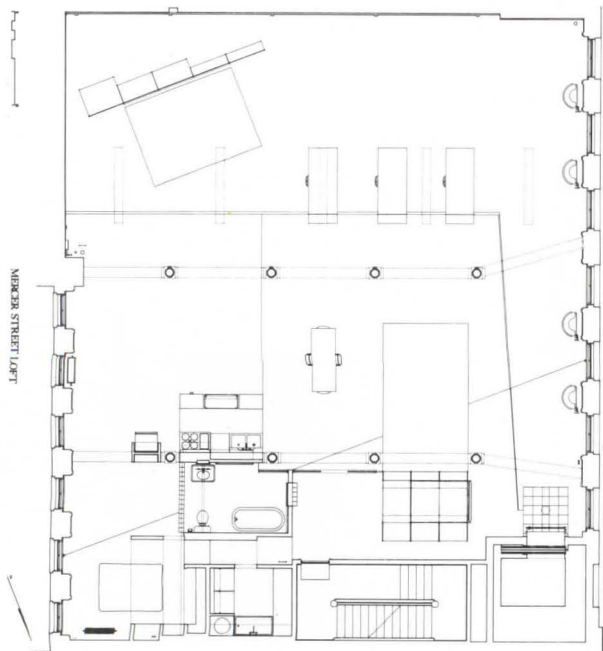


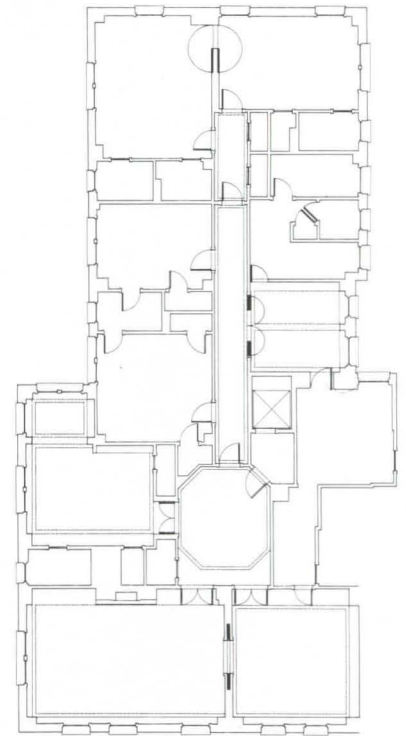
John Chimera





Jon Michael Schwarting has converted a floor of a lower Manhattan loft building into two living units, above and left, a small unit for rental and, for the owner, a larger one containing the floor's major architectural features—a row of columns, a long window wall and an old wood-paneled corner office with an arched window (which was retained). Space above the ceilings of a bedroom and bath of the rental unit have been “borrowed” to make the owner’s unit seem even larger. As in much recent work, the design has been developed from the superimposition of two grids; in this case, the grids have special significance, as they are both determined by obvious relationships to the street pattern and the neighboring buildings.

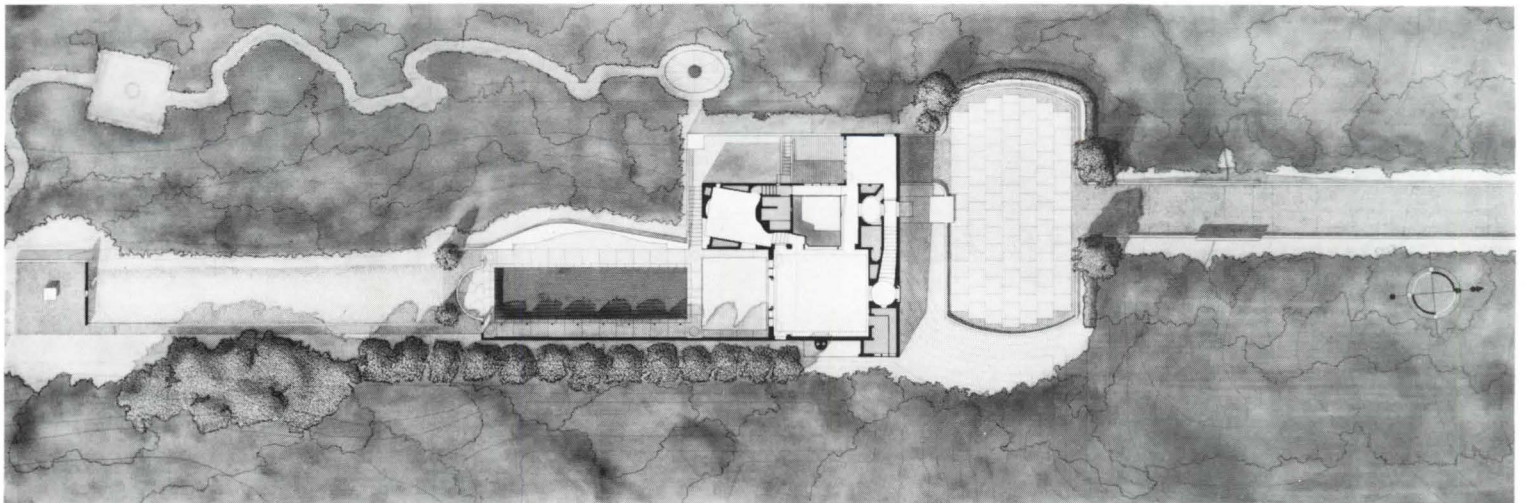




Mark Cigolle's 3,500-square-foot Soho loft, below left—used for both living and studio space—contrasts a flow of open space to the tight enclosures of some spaces built within it. It also consciously juxtaposes two contrasting sets of images, both appropriate to the idea of loft living: industrial images, evoked by such features as steel office partitions, and domestic images, evoked by frankly exposed plumbing fixtures and a chintz-covered chair. The fact that one wall's windows are not aligned with those opposite has led to the use of some diagonally placed elements, and the floor treatment—some of it painted, some left natural—continues the industrial/domestic contrast.

Henry Smith-Miller and Michael Rubin, in their recent work, have become interested in the problems and opportunities of discrete rooms. The plan of their remodeling of a Manhattan apartment, above, is what one might assume to be the "before" plan; actually it's "after." And the most radical changes of all were spent on creating the most seemingly retardataire of all the spaces, the central octagonal foyer. (It really becomes a complete octagon only above the dropped soffit, yet the sense of centrality given by the form of the room is powerful.) The shape is emphasized by the distribution of four brass wall sconces. On the pedestal at right, a John Hejduk house model.

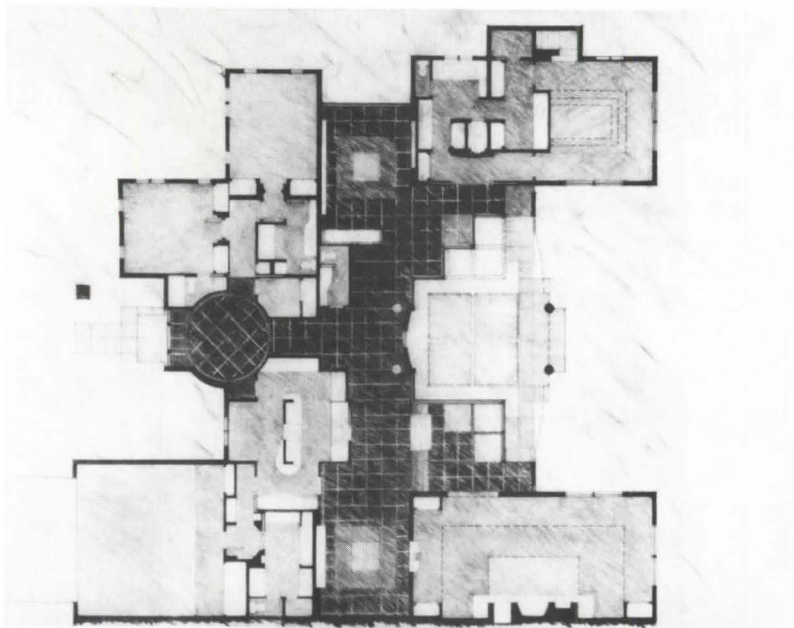
Alan Chimacoff, formerly teaching at Cornell and now at Princeton, also displays, in his site plan for the Kornaza residence, below, a concern for the creation of discrete spaces. He also experiments with combinations of rectangular and curved forms, of axial and free relationships, and of orthogonal and skewed geometries.



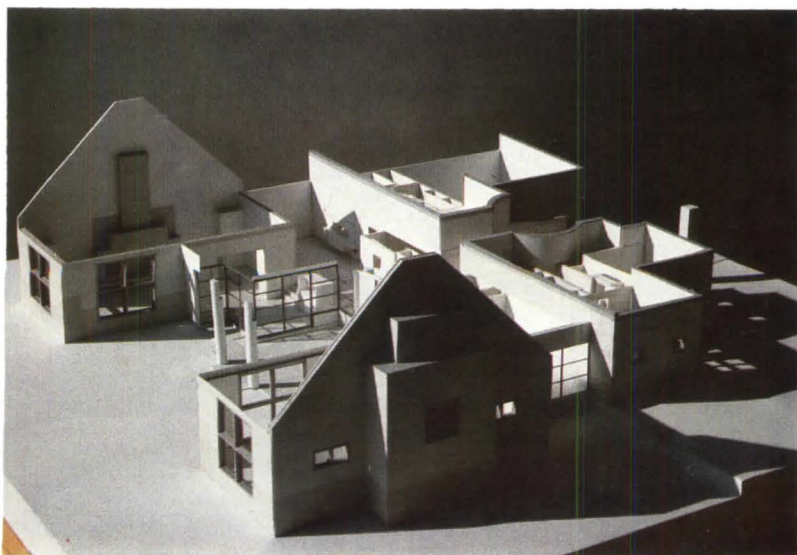


Norman McGrath

Tod Williams' recently completed work includes the BEA offices on a high floor of Hugh Stubbins' Citicorp tower, left. At the ends of a largely open central work area, groups of conference rooms and staff lunchrooms can be closed off by sliding panels of etched glass. An important sense of entry into these areas is provided by nonstructural colonnades painted a bright terra cotta. Williams' current work includes a large house in Michigan, drawing and model below. Here again, a pair of columns denote the entrance. Materials and details will be sympathetic to those of Eiel Saarinen's neighboring Cranbrook. In the plan dark gray designates circulation areas. Elements of both the BEA and Michigan plans are organized by underlying grids.

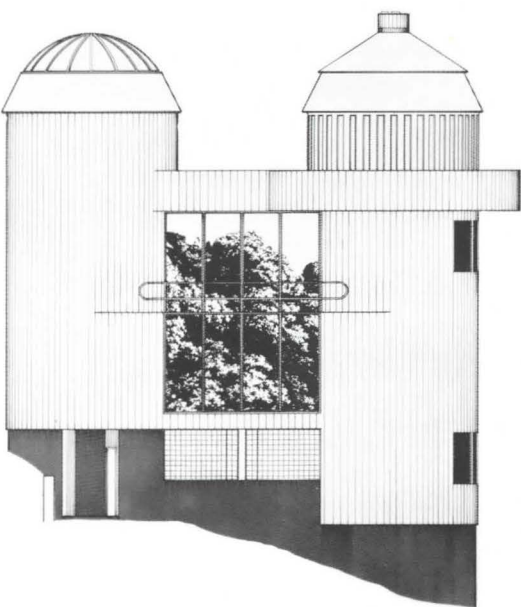


Drawing by Billie Tsien



Photograph by Kim Williams

Susana Torre has also made effective use of powerful column elements in her recent New York City embassy for the Ivory Coast, far right, above, where they form a gate between the entrance foyer and the reception room. Similar forms on a larger scale have arisen from much more practical considerations in her house project for Pound Ridge, N.Y., above right. For economy (the budget is \$45,000) the house is to be built of prefabricated components, primarily two wooden silos, each 16 feet in diameter. One of them centers on an iron spiral stair, and the two are joined by bridges glazed with mirror glass. For her Clark house remodeling on Long Island, right, Torre has opened the upper floor of a small cottage into one large living space and has set within it a new white "facade" shielding the kitchen and bath areas. Its "windows" align with actual windows in the wall beyond, and the one into the bath (at right) is fitted with frosted glass. Existing building elements, including a slightly tipsy chimney, have been left natural and exposed. □



Norman McGrath



Toward an Evolutionary Architecture

Afterthoughts on the 1980 Aspen design conference. By Susan Gill

Like sand dunes, American society has become fragmented and particulate. "The architecture profession is drifting," wrote Moshe Safdie in his introduction to the 30th annual International Design Conference at Aspen, Colo., June 15-20. "It is becoming a personal and private art. The journals are filled with works that seem to me to express a general withdrawal—indeed a reversal—from a long-time commitment to values that express concern for people and their needs."

At the Aspen conference, definition of the theme, "Form and Purpose," was a burning bush which everyone gingerly side-stepped. Definition poses three fundamental questions: What is form? What is purpose? And what is the link between them?

Does purpose precede or follow form? Do forms *have* purposes? Does Nature have purposes, or does only man have purposes? Purpose sometimes refers to the intent that precedes form. At other times it refers to the object for which something exists, the function that follows form. And those who speak of "purpose in nature" have yet a third meaning. They refer to the universal ordering principles that, together with context, define which adaptations are possible, which can survive. In nature, purpose defines how process can unfold over time.

Intentions (the purposes of man) and functions (the purposes of objects) are both static. Purpose in nature is dynamic. It is not the end, it is the directive agent.

Man intends. It is in his intentions, his grand designs that he has made some of his great mistakes. And with intention comes the fundamental issue of responsibility. Safdie said, "It's easier to do a house out of nonexisting materials for a nonexisting client on a nonexisting site, particularly if you don't build it." Bernard Rudofsky has shown how indigenous settlements, which grow gradually, according to cultural tradition, are infinitely superior environments to most architect designed housing projects. While intention is static, indigenous settlements are purposive and dynamic.

Nature evolves, nature does not intend. In that sense nature does not "design." The constant adaptation toward greater efficiency is driven by local environmental conditions. "In imperfections and constraints," Steve Gould (biologist, Harvard) said at the conference, "we see the hope of evolution." Through the process of random mutation, nature creates possibilities. Through "survival of the fittest," nature selects according to the constraints of a given context.

In the possibility for growth and response lies the ability to adapt to changing conditions. Nature is plastic, responsive, purposive. Through redundancy and duplication, nature provides more than one alternative.

In nature, as in complex machines, Jerome Lettvin (biologist and electrical engineer, Massachusetts Institute of Technology) reminded us, there's no such thing as a solution that optimizes all variables simultaneously. Nature specializes and diversifies.

The "law of cosmic laziness" reflects the tendency of natural forces toward simpler solutions. As designer Peter Pearce pointed out, "If you hired an engineer to figure out how to store the greatest amount of honey with the least amount of beeswax, the most efficient solution he could produce would be the beehive." Nature evolves simultaneously toward greater diversity

and toward greater efficiency. Evolution can become a model for designers in a world where regional differences are declining and resources are increasingly limited. Through local adaptation, nature has been spared the problems of an International Style.

Our effort to define form and purpose and to find the link between them has started us down an interesting path. If we define purpose as that which gives action a direction, and form as that which gives action an identity or structure, then we've found the link between form and purpose almost without thinking about it: It is process.

The architectural profession is prone to concentrate on man's "intentions" and buildings' "functions" and to neglect the more important meaning of purpose that defines process. We tend to overlook the process-oriented design challenge. We have missed chances to create, like nature and like the indigenous builders, environments that can evolve over time and respond to change.

The modernists are reductionist and integrative ("less is more"). The postmodernists are expansionist and disintegrative (more or less). But both movements focus on objects and neglect process. As architects at Aspen debated "the crisis in modern architecture," one might have thought that the crisis was post-modernism. "You want to expunge the last 50 years of the modern movement from the record," glared James Marston Fitch at Robert Stern, AIA. But that was merely a formal objection. Clearly the last 50 years are for the most part still standing in concrete. And postmodernism wouldn't have anything to be "post" about if modernism hadn't gone before. If there is any criticism to level at the postmodern architects, it might be that they're looking backward a little too much.

Julian Beinart summed up some of the causes for crisis as they were gradually recognized in the failure of the new towns, in the monolithic faceless bureaucracy of corporate America, in the concern for participation and public responsibility. Beinart saw two conflicting visions. The first was an architecture driven by a sense of purpose and control, intelligent about the use of resources, ecologically sound, modern in its use of history and restrained in the degree to which an architect can exercise his or her own values. The second was an architecture which was not a social and public act but demanded rather the personal interpretive power of the artist/architect and which was non-judgmental about the values of society.

As I watched the argument develop, I wondered if the architectural profession weren't acting out its own version of the Hegelian dialectic (thesis, antithesis, synthesis). There seemed to be moments of truth in both camps. If there is a crisis in architecture today, it must lie not in either view but in the attempt to define these viewpoints as singular—to give them an identity apart from the broader concerns of society.

Modernism gave us something, *but it also took something away*. Fitch defended the modern movement: It gave us the tools for an endless exploration of form. The fact that we haven't used them with the imagination and commitment we should have is nobody's fault but our own. Theo Crosby pointed out its gravest fault: The modern movement thought in terms of undifferentiated mass—mass production, masses of population. It squelched individual identity and regionalism. The real need now is interpretation. It isn't to provide endless quantities of one product which people are supposed to live in.

Modernism, the architecture of control, went out of control.

Ms. Gill is a principal in the Cambridge, Mass., firm ABRI (Architecture, Building, Research, Innovation, Inc.).



Don Monroe

Paul McCready's Gossamer Albatross entranced the Aspen audience. 'No one could do more with less.'

It gave us a technology filled with possibility, but it wiped out centuries of history and replaced them the world over with projects of boring similarity—ignorant of human nature, of man's need for symbol and play. The disasters of the modern movement demonstrated that intention is a delicate and dangerous thing. Though we can now, with more hindsight than Corbusier, envision an ideal city, are we any more capable now than we were then to predict the outcome of our intentions? The fact that "the crisis in modern architecture" was heatedly debated without ever being agreed upon suggests a curious implication. Perhaps the crisis isn't *in* architecture at all. Maybe architecture is in the crisis.

One of the greatest problems of architecture seems to be its interpretation from within. As designer Mary Dougherty, AIA, aptly pointed out, "Perhaps the problem is in looking for solutions within architecture." If that's not where the crisis is, then it would behoove the profession to consider itself (albeit more humbly) as part of the broader picture, and to be optimistic in the belief, as Julian Beinart beautifully phrased it, "that man and not architecture can achieve both equity and wonder."

The question of whether postmodernism is expunging modernism or whether modernism expunged something else would then be irrelevant. The point is that these things happened and are happening. And for very good reasons which reflect that larger context called society. The architectural profession, for all its protestations, performs more like mirror glass than like a column—it reflects, it does not support. It generally doesn't lift us into the future; it reflects where we are today.

If architecture expresses culture, what happens when the underpinnings of culture begin to come unpinned? With logic and reason corroded, the most real expression is a statement of perversion. Haven't we seen historical parallels to the present—the decadence of the late Roman Empire, the perversity of mannerism? Nobody questions now whether the late Roman Empire or mannerism should have happened. The point is that they did happen. Postmodernism likewise has something to tell us. It reaches close to some of the fundamental bases of American culture. It idolizes the right of each man to go his own way and to express himself freely—the truly American vernacular.

Robert Stern says a building should be a conversation across

time, that architects must be readers of our culture, that the rhythm of *a-b-b-a* is part of architecture. He says, "Forget the problems. Think of the possibilities." Yes, but . . . to read our culture, to read it carefully, isn't that to read all of it? Like evolution, aren't its possibilities defined—given richness and depth—by the constraints they face?

Moshe Safdie expressed concern with the point of view that says, "There are no rules, no certainties, only a wonderful freedom" or "I want to rid myself of the burden of culture." If culture has become a burden, isn't that an incredible admission? Isn't that where the crisis lies? Fashion, the constant striving after novelty, which Safdie related to the emergence of individualism and the separation of the artist from the mainstream of society, also expresses this desire for release from "the burden of culture." What are postmodernists really telling us?

Postmodernism claims to be the architecture of optimism and delight. It is the optimism of: Buy now; your dollar will be worth only 50 cents tomorrow. It is the delight of a bacchanalian orgy, not of a calla lily. It is that epicurean delight to which man turns in times of confusion. It is mirrored in contortion that expresses disillusion and frustration with technology. Postmodernism is not a release from the burdens of our culture; it is a representation of them.

Rebellion, inconsistency and confusion in society are the first signs of awakening. The current phase of the black movement began in anger, in narcissism, in the slogan "black is beautiful." So, likewise the rebellion against modernism begins with the insistence that man has a right to caprice, that absolute consistency leads to sterility.

Postmodernism, as its name indicates, looks back at something. What will happen when the profession has completed its backlash and turns around to face the future? How will purpose define our direction? Like the crisis, we know the purpose is there. But it eludes us. Perhaps like the crisis, the purpose is not *in* architecture. The purpose will become clearer as we begin to conceive of the architectural profession as part of a larger whole.

"Can you hear me?" asked Serge Chermayeff from the podium, but I believe his concern was not just with the performance of the microphone. His message represented that great, self-effacing

continued on page 82

Aalto's Luminous Library in Oregon

It was locus of a summer exhibition and symposium on his work. By Richard C. Peters, AIA

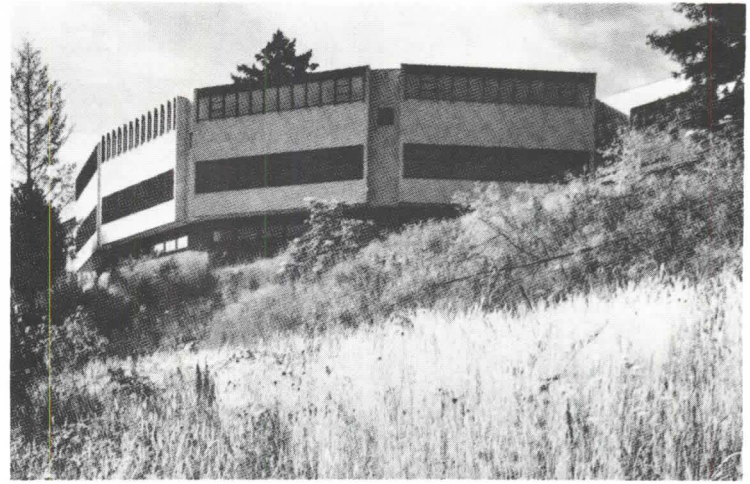
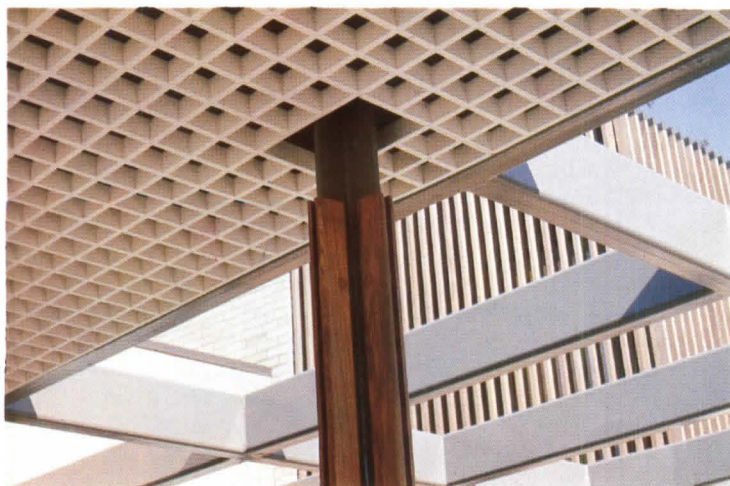
On a hilltop overlooking the Willamette Valley in Oregon sits the Benedictine Monastery, Mount Angel Abbey. It was for this 20th century Romanesque styled monastic complex that Alvar Aalto designed his second building in the U.S., a library. It was completed in 1970, 22 years after the first, Baker Hall at the Massachusetts Institute of Technology.

This year marks the 1,500th anniversary of the birth of St. Benedict, and in honor of the occasion the monks of the abbey planned a summer-long celebration beginning with a three-day architectural symposium to mark the first decade of the Aalto library and the opening of the only West Coast showing of the international Alvar Aalto exhibition.

Designed by Kaarlo Leppanen, who worked for Aalto for 30 years, and sponsored by the Museum of Finnish Architecture in Helsinki, the exhibition was displayed in a festive gold and white "jousting tent," festooned with Finnish banners and emblems of St. Benedict. The tent, designed for the event by David Pugh, FAIA, of the Portland office of Skidmore, Owings & Merrill, was on the central mall of the abbey opposite the library, which itself became the main exhibit of Aalto's genius.

Symposium participants spoke of the experience of the library. For Pietro Belluschi, FAIA, visiting it "was an exhilarating experience in the presence of a genius." Nathaniel Owings, FAIA, spoke of the "spirit of humanness" of Aalto and described how he felt the library fitted its purpose in the life of the abbey. Perhaps Juhani Pallasmaa best expressed the overall view of the panelists when he said the spirit in the library is "relaxed—almost like you feel while moving around in the woods." Mrs. Aalto, who was visiting the library for the first time, warmly described her elation in seeing the building.

Mr. Peters is a professor of architecture at the University of California, Berkeley, and a partner in the firm Peters Clayberg & Caulfield of San Francisco.



The site of the library is a forested knoll overlooking the pastoral farm lands of the valley surrounding the Willamette River. Mounts Hood, Adams, Rainier and the recently active volcano St. Helens punctuate the distant skyline, while the rest of the Cascade Mountains and the Coastal Range form the horizon to the east and west.

When Aalto first visited the hilltop with its beautiful views he was inspired to say, "It is a great privilege for me to have a building on such a grand site." It is recorded that he stood for several hours on that afternoon, April 12, 1967, and he came to the same spot many times during his visit and always asked the same question—"where does the sun come up and where does it go down and at what time?"

He was preoccupied with the source of light, and, according to Eric T. Vartiainen, AIA, on-site architect for the library, the ideas for the building stemmed from Aalto's concern for the relation of its functions to the available light on this north facing site. Having completed his design scheme in Finland with only photographs and drawings of the hilltop, this visit convinced Aalto to adjust the building's orientation in order to capture more light through the curved clerestory and the fan-shaped window wall and to move the library to the west 10 feet to further protect a grove of Douglas fir trees and provide a vista point looking to the soaring mountains between the library and the adjacent building.

The library is clad in buff colored brick, echoing the color of the stone of the neighboring buildings. From the outside it is deceptively simple and only the entrance level is seen from the campus. The almost classical facade, with its elegantly proportioned portico, is small-scaled and unpretentious and gives no indication of the drama to follow in the light-filled interior spaces.

Upon arriving under the entrance portico, supported by thin steel columns exquisitely trimmed in wood, a detail recalling other Aalto buildings, the progression begins. From the first time you grab the heavy brass door handles, you know you are in contact with Aalto's unique design spirit.

This realization is extended as you walk into the lobby, crowned by the familiar parabolic roof wells bathing the white-walled interior in warm light by day and soft incandescent light by night. It is a finely scaled exhibit and reception space and can be used separately when the library is not open. To one end, screening the restrooms, is an undulating wood screen wardrobe, designed by the Aalto office to be built by the monks for wet coats, a necessity in Oregon. To the other is a small auditorium-meeting room easily accessible to the public for the numerous cultural events at the abbey.

From the lobby you enter the library through glass doors to a narrowed vestibule with its splayed white walls, where you first experience the dramatic beauty of the library's light-filled interiors. Aalto's mastery is no better expressed than in his handling of light in this transitional area. The controlled top light of the

entry, combined with the borrowed light of the lobby, perfectly balances the quality of illumination of the interior and enables you to see and appreciate the grandeur and expansiveness of the library.

Walking down the steps, you pass on either side of a finely crafted beech wood control desk located at the central control point of the fan-shaped reading and stack spaces. The desk acts as the hub of the library and its importance is marked by a wood-stripped, canopied ceiling punctuated with two “suns”—skylights that add the movement of light to this apex.

Radiating from this central point, the reading and stack areas are separated from the control desk by a great curving light chamber—a balconied opening capped by a sloping clerestory flooding the three-tiered space in daylight. The curved railings of the opening are study counters, fitted with individual lamps designed by Aalto, and share the light bouncing off the deep sculptured wall of the light well above. The cove, which is also a source of indirect light at night, acts as a halo of light that reinforces the feeling that this is the heart of the library.

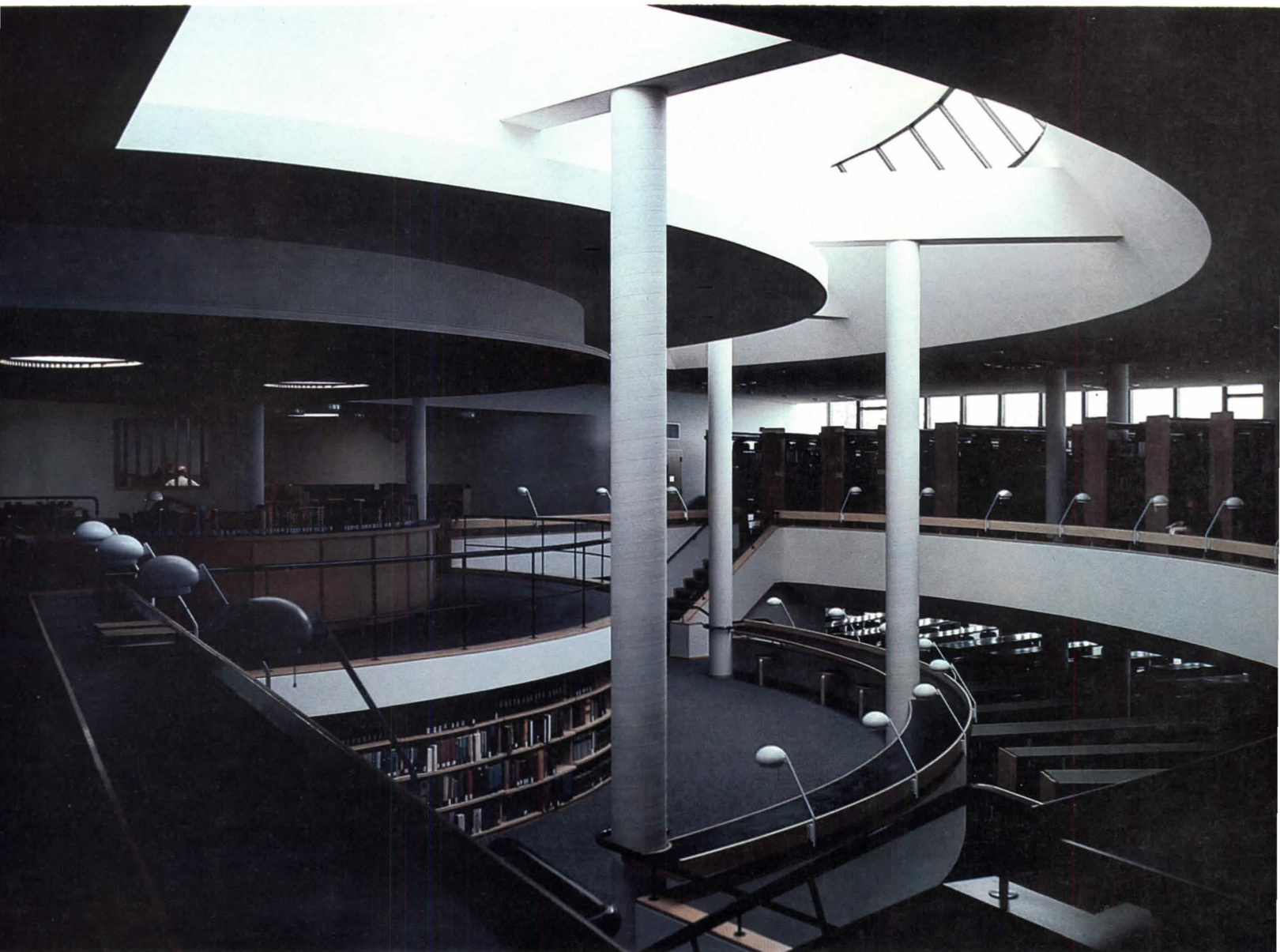
Beyond the balcony study counters the stacks radiate to the outside wall. High clerestory windows on the main floor provide a diffused light to the Aalto-designed study carrels lining the walls below, and on the lower floor small individual glass en-

The library's quiet visage (above left); some quintessential Aalto details (below left) and the great central light chamber (below) penetrating and illuminating the library's three levels.

closed study carrels have windows muted by wood screens overlooking the countryside. Strategically placed view windows are located at the intersections of the fans on the main level, accenting the main circulation routes between the paired columns and allowing a controlled glimpse of the countryside.

The building is unmistakably Aalto in the way form, space, structure and materials are manipulated with the palette of light to model the building's exterior and interior and to enhance the experience of people moving and using the building. Top lights, skylight roof monitors, clerestories and wood screened windows are orchestrated to heighten the spatial excitement, and Aalto's philosophy of “putting light where you want it and need it” is never compromised for effect alone. The colors of the interiors are basically bronze, gray, warm browns, soft blacks and white and nothing is exciting—except for the books! The books are what make the library—and “taking a book to light” is the prevailing theme.

As Father Edmund Smith, past prior of the abbey, said, “It is a delight to be there. The building makes it comfortable, but not too comfortable. Our monks and students are eager to spend a great deal of their time to search for knowledge and to exchange their discovery with one another. It is not a lounge, nor is it a social center. Aalto was able to create this space in such a way that it resonates with man's spirit. He built it to be a library and it beautifully serves that purpose. In this library, we really do have something, and we know it! It is the spirit of Aalto and it delightfully touches the spirit of man.” □



BOOKS

The Ubiquitous Strip: Two More for the Road

Americans on the Road: From Autocamp to Motel, 1910-1945. Warren James Belasco. (MIT Press, \$14.95.) **American Diner.** Richard J. S. Gutman and Elliott Kaufman in collaboration with David Slovic. (Harper & Row, \$20.)

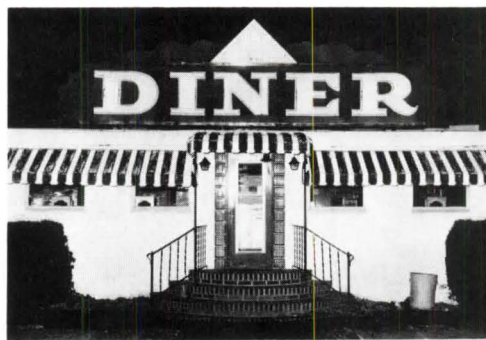
Almost a quarter century has passed since J. B. Jackson published his seminal essay on the commercial strip ("Other-directed Houses," *Landscape*, Winter 1956-57). Jackson was the first writer not only to recognize that the strip deserves careful study as a phenomenon of American culture, but that aspects of its physical form might contain lessons for contemporary designers. This thesis, most widely disseminated through Robert Venturi's *Learning from Las Vegas*, has become increasingly well known, yet interaction between the worlds of high style and popular architecture remains tentative. Many practitioners still possess little interest in the "language" of the strip. Designs that do draw from this source often transform it so that the product bears little more affinity to the prototype than does earlier, purportedly more exclusive, modernist work. Moreover, popular commercial design, on the strip and elsewhere, continues to develop in a manner quite distinct from tendencies championed by the architectural establishment.

The fact that strip architecture remains a discrete entity has both fascinated and infuriated persons concerned with the built environment. The mere recognition of this dichotomy between strip architecture and "serious" architecture challenges the long cultivated assumption that popular design is primarily a dilution of high style precedent. At the same time, the persistence of this phenomenon increasingly has been regarded as an indicator that popular design merits serious investigation. During the past five years, especially, strip architecture has become the subject of detailed study—to understand better the nature of its development and even to preserve significant examples that may now be viewed within an historical context. Recognition of these buildings as an important part of our legacy is no longer a novelty.

Among the outgrowth of this concern has been the publication recently of sev-

eral books that focus on the development of individual building types prevalent along the strip. Two of these works, Warren Belasco's *Americans on the Road* and Richard Gutman and Elliott Kaufman's *American Diner*, encompass the spectrum of recent inquiry. Belasco, a social historian, documents the conditions of long distance motoring that led to the emergence of the motel as the pre-eminent form of hostelry in the U.S. Gutman, an architect, and Kaufman, a photographer, present a nostalgic celebration of the diner as an artifact.

Belasco's book is unquestionably the more significant contribution toward an understanding of the strip. He explores



why Americans became enamored with vacationing by automobile and what habits they acquired while on the road. Early travel by car, Belasco argues, embodied a defiance of conventions. As motorists rejected the limitations imposed by the railroads, so they sought a new sense of freedom in their activities and accommodations. Roadside camping, then the autocamp and finally the motel became popular because they offered a convenient and informal atmosphere foreign to most hotels. Thus even though motels assumed some of the characteristics of older hostleries, their origins were of a substantially different order.

Although Belasco does not devote much space to discussing the motel's physical characteristics, his examination of attitudinal and typological factors provides key insight into why these buildings bear so little resemblance, in imagery as well as in form, to hotels. He also investigates economic and locational influences on the programs for motels and vehicles by which the programs became more or less standardized. Most important, perhaps, he vividly depicts how the programs for both motels and autocamps were in a

constant state of flux, with innovative features often becoming outmoded after only a few years. Like the automobile that it served, the motel demanded frequent changes in appearance and accessories. One of the most admirable achievements of the book is the subtlety, yet persuasiveness, with which the conditions contributing to the ephemeral nature of roadside architecture are presented.

The implications of this study extend well beyond the building type and period covered. Belasco has laid some very important groundwork for understanding the salient qualities of the strip and the commercial architecture that lines it. *Americans on the Road* is indispensable reading for anyone with an interest in the subject and should prove to be of greatest value to people embarking on research in this field.

American Diner is directed at a broader audience. It appears that the authors have sought to produce both an informal account of their love affair with these buildings (paralleling John Baeder's *Diner*, 1978) and a documented survey of their development. The first half of the book, by Gutman, employs the format of a full length typological history, with sections chronologically arranged delineating the diner's progress from its inception to the present day. The remaining pages contain photographs recently taken by Kaufman that depict the buildings, their staffs and their clientele. Although the book succeeds in generating enthusiasm for its subject, it falls far short of being a creditable history.

Gutman's portion is really a scrapbook of numerous short passages tailored to supplement the illustrations. There is a considerable amount of factual data, but the text is discordant and superficial. It's like reading a collection of newspaper clippings. The distinguishing characteristics of the diner are never delineated beyond its being "a restaurant of unitary construction" with a counter. Programmatic conditions, which must occupy a central role in the study of any building type, are generally treated in an incidental fashion when they are mentioned at all. Gutman's primary concern appears to be the diner's imagery, but this topic is repeatedly dismissed as being just a reflection of popular taste. His offhand approach to analysis is epitomized in the

continued on page 76

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vague synopses of design trends for five loosely defined periods, which supposedly provide a contextual backdrop. Each piece is placed *after* corresponding portions of the text that focus on the diner's development, and any relation between one part and the other, aside from the most simplistic generalities, is left up to the reader's imagination. While discussion of important manufacturers and construction techniques weighs heavily in early passages, these topics are largely ignored thereafter. Anecdotal stories further mar continuity. For all the details offered, this book fails to add significantly to our understanding of the diner. Gutman's pioneering article, "Diner Design: Overlooked Sophistication," in *Perspecta* 15 (1975) remains the most insightful work on the subject, indicating that he knows more than this book reveals.

American Diner was clearly conceived as a popular book, and it may make a contribution to fostering widespread appreciation of these buildings. It is regrettable, however, that in seeking a large readership, the authors have so compromised the book's value to people who have more than a casual interest in popular architecture. *Richard W. Longstreth, Assistant Professor, College of Architecture and Design, Kansas State University*

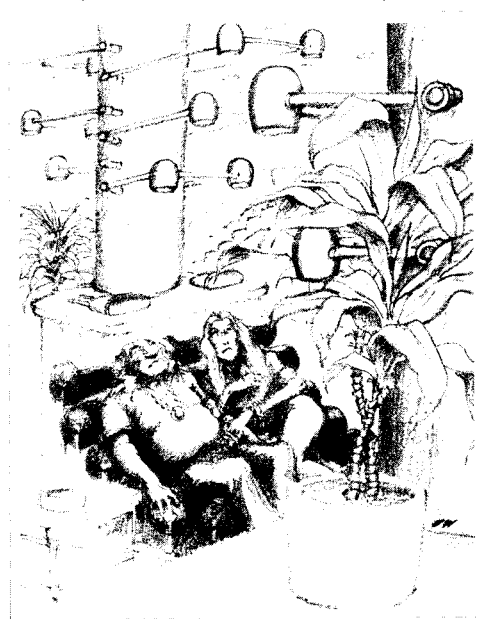
Culture and the Social Vision. *VIA*, volume four. Editors: Mark A. Hewitt, Benjamin Kracauer, John Messengale, Michael McDonough. Production editor, A. Russell Versaci. (University of Pennsylvania Graduate School of Design and MIT Press, \$20.)

Compiled, designed and edited by students at the University of Pennsylvania's graduate school of design, *VIA* has not been published since 1977. The wait was worth it, for assembled here are essays by a formidable group of people who address the theme of architecture's relationship to society. And do it extremely well.

The introductory essay is by writer Tom Wolfe, well known for his biting comments on the American scene. His caustic remarks do not spare architects nor contemporary architecture. "Architects are not the greatest egotists in the world—they can't compete with surgeons and fighter pilots—but they usually make the playoffs," he writes. "I wish I had some sort of remote-control laser-diode intragenicular scanning apparatus with which to read the secret hearts of architects as they confront the subject of 'Culture and the Social Vision.' I would like to record that almost subliminal dendritic spasm of the pyramids of Betz when for a micro-second the thought comes over them: 'What inna namea christ do I care about *culture*?—or the *social vision*? I want to be famous!—and after that, rich!

—and after that, invited to keys off the Leeward Islands by the sort of terrific people who invite Philip Johnson!' "

The other essays may be less colorful, but they are well worth any "spasm" the architect may encounter in reading them. For example, James S. Ackerman, professor of fine arts at Harvard, writes thoughtfully on "The History of Design and the Design of History," as does Jon Lang, assistant professor of urban design at the graduate school of fine arts, Uni-



A drawing by Tom Wolfe called 'Great Moments in Contemporary Architecture: The Clients' First Night in the House.'

versity of Pennsylvania, on "The Built Environment and Social Behavior."

Among the other contributions are a study of apartment houses in New York City by Robert A. M. Stern, AIA, architect and teacher, and a photo essay on Houston garden apartments by Peter C. Papademetriou, AIA, teacher and architect in Houston. Also, incisive are remarks by James Wines, partner-in-charge of SITE, Inc., New York City, who writes on "Architecture and the Crisis of Communications." In addition to other contributions to the volume there are an interview with Michael Graves, FAIA, by the editors of *VIA* and a report on a symposium on politics and architecture by George R. Collins, professor of art history at Columbia University, and Adolph K. Placzek of the Avery architectural library at Columbia.

The volume, for which congratulations are due to the students, contains more than 200 illustrations.

Earth Sheltered Handbook. Tri/Arch Associates: Gregory T. Baum, Andrew J. Boer and James C. Macintosh Jr. (Milwaukee: Tech/Data Publications, \$12.95.)
Underground House Book. Stu Campbell. (Charlotte, Vt.: Garden Way Publishing Co., \$9.95.)

This reviewer is beginning to feel like an expert on earth sheltered housing, having read and reviewed for this journal nearly every publication received in this area to date. This has been easy because before these two new ones there were only five publications to my knowledge since the energy crunch precipitated the largely do-it-yourself earth sheltered housing movement. [For the reader's convenience, a bibliography is appended to this review.]

The good news is that the student of earth sheltered housing can acquire practically all there is in print on the subject for about \$100. On the negative side, there is substantial duplication as authors and publishers respond to the growing market. (Three additional books are due out late this year and in early 1981.)

The two books reviewed here are somewhat in the mold of the first and still possibly the most influential book, *Earth-Sheltered Housing Design: Guidelines, Examples and References*, published by the Underground Space Center at the University of Minnesota. For an obscure subject such as underground housing to command a level of sales of more than 120,000 copies in two years surely signals a broad interest in the subject. This has in turn sparked the interest of publishers and authors—authors to extend the faith and publishers to extend the profits, with the two sometimes intertwined.

The Earth Sheltered Handbook is a primer basically for the do-it-yourselfer on earth sheltered housing. Filled with beautiful sketches and concisely written, it covers such topics as environmental impact, building components, esthetics, building codes and designs. The text, produced as an independent research project at the University of Wisconsin at Milwaukee, has a definite climatological bias toward the Great Lakes region.

While there is nothing particularly new in the book, the text and diagrams are effectively organized and presented. The sections on geology and construction details are outstanding. Even though this book is not directed to a sophisticated audience, I would think that any architectural office that does or anticipates doing earth sheltered housing should have this volume for reference.

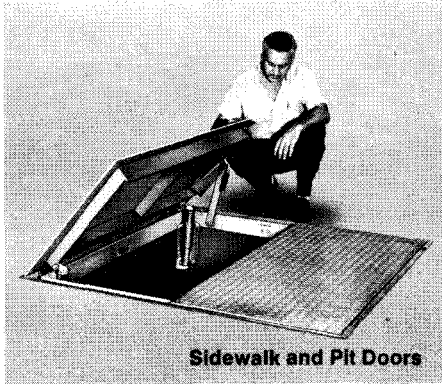
The Underground House Book is in many ways similar to *The Earth Sheltered Handbook*. Also directed to the do-it-yourselfer, its drawings and diagrams effectively illustrate the text. There are chapters on such topics as land, money, earth, water, heat and interior. Don Metz, AIA, of Lyme, N.H., who has designed and constructed many outstanding underground dwellings, consulted with the author. This book also is recommended to the student of earth sheltered housing

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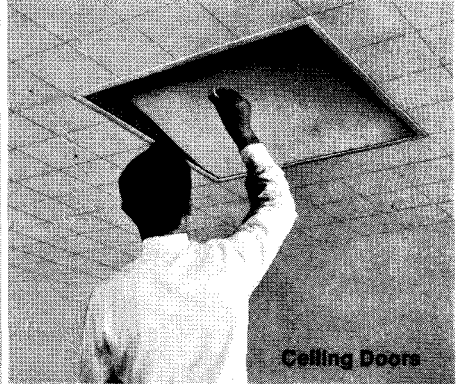
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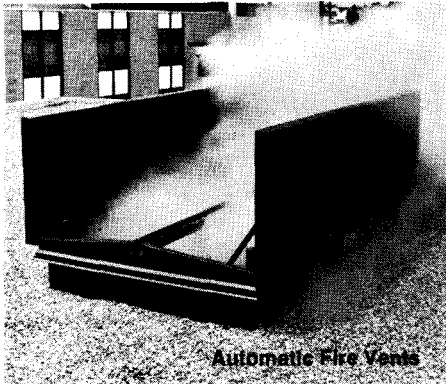
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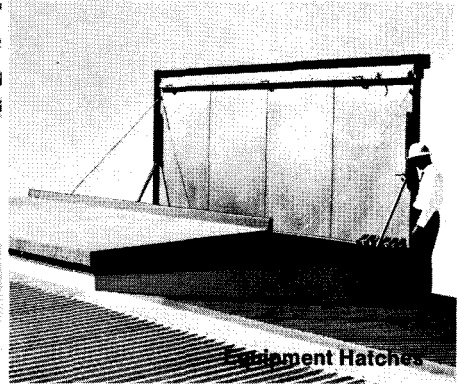
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and to architectural offices that may engage in this kind of work.

In setting standards, *Earth-Sheltered Housing Design* also seems to have established some limitations, which is unfortunate. For example, in the design area, case studies seem to be repeated from one book to the next.

An infusion of well-designed earth sheltered buildings is needed to stimulate and inspire clients and designers alike to look for the intriguing and creative design possibilities in the use of earth sheltered buildings. Out of the estimated 2,000 to 3,000 earth sheltered houses already constructed and occupied, surely there must be some exemplary designs to use as case studies other than those already published and republished. *Michael B. Barker, AICP, Administrator, Institute Department of Practice and Design*

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The Port of New York: A History of the Rail and Terminal System from the Beginnings to Pennsylvania Station. Carl W. Condit. (University of Chicago Press, \$29.95.)

Do not overlook the subtitle in deciding whether you wish to read this book, for it is much more informative than the title. Actually, as the author indicates, he has endeavored to point out the combined role of urban technology and railroad technology in understanding and evaluating the growth and development of a great city.

New York City was faced with certain problems by virtue of its insular site, and this led eventually to the interaction of rail and water transportation in serving as the circulation system for the city. To keep his materials within bounds, Condit

has considered only the standard railroads, and has omitted the street railway, electric interurbans and rapid transit, which all had their own roles to play.

Basically, the material is presented in a series of chronological chapters melding the various threads of events to effect a unified picture. Following a brief chapter on the natural setting of the city, there are two chapters on the early development of the rail lines in New York and New Jersey. The first Grand Central Depot is treated at length, followed by a chapter on the various New Jersey terminals. Considerable attention is paid to their construction, the accompanying ferry slips and an outline of how the rail lines were brought into the terminals overcoming the natural barriers.

As a prelude to discussion of the Pennsylvania Station, Condit reprints an earlier paper on the development of railroad electrification, an essential forerunner to the successful conclusion of the new station development in New York City.

His treatment of the station itself, the factors leading up to it, is architectural and engineering design, and the construction and operation, comprises the longest chapter.

A concluding chapter discusses the ac-

tual electrification of the Pennsylvania R.R. and its New York area subsidiaries, as well as the construction of the New York Connecting Railroad over Hell Gate, which permitted through service from Washington, D.C., to Boston via New York City.

One is rather surprised that Grand Central Terminal is not discussed, as the preface seems to suggest it will be. Certainly, it would seem appropriate to have included the successor to Grand Central Depot, and a work which had a great influence on the development of the city. Being essentially simultaneous with the Pennsylvania Station, it would seem within the author's time frame, and its omission is thus more surprising.

This is an important book, well documented and illustrated with maps and pictures of most of the terminals discussed. It will obviously appeal to the student of railroad history, but its audience should be much broader than that. Both architectural and urban historians will find much of value, and scholars of the history of technology should be gratified at its exposition of the role of technology in the development of a great city. *George E. Pettengill, Hon. AIA, Institute Librarian Emeritus* □



The Lost Museum: Glimpses of Vanished Originals. Robert Adams. (Viking, \$25.) Preservationists decry lost architectural masterpieces, but other artworks such as paintings, sculpture, illuminated manuscripts and jewelry have also been lost because of war, theft, restoration, censorship, sabotage or simple public indifference. Robert Adams brings together in this book more than 200 works of art, including buildings, that are now lost. This copiously illustrated book describes them and tells of the record they have fortunately left, giving us some impression of what they were like in their original glory. Above is a copy of a cartoon by Michelangelo, the original having long vanished. He made the preliminary sketches for murals he was commissioned to paint for the Palazzo della Signoria in Florence. The copy of his sketch shows Florentine soldiers bathing in the River Arno, surprised by the Pisan adversaries. Michelangelo chose the scene "because of the chance it gave him to portray male nudes in violent action; it is an early instance of his *terribilità*."

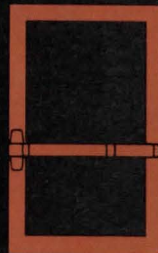
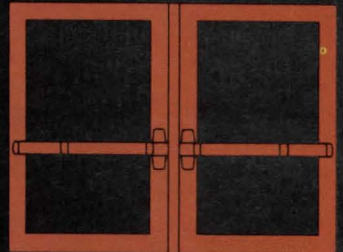
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ACSA Design Research Study

The Association of Collegiate Schools of Architecture has received a grant from the National Endowment for the Arts for a study of design research in professional schools of architecture.

ACSA will survey all 92 professional schools of architecture to determine the types of research and lists of projects; the amount and nature of funding support; the key individuals responsible, and the organization structure of these research groups. The results are to be published by January 1981.

In addition, ACSA is to conduct a two-day symposium on design research next spring or summer. The symposium will "provide a basis for expanding dialogue among the disparate schools and researchers," says ACSA, "while seeking to identify directions and possible collaborative efforts among schools, the profession and government agencies."

Local Team Chosen to Design Portland's Pioneer Square

An interdisciplinary team—William K. Martin, FAIA, landscape architect J. Douglas Macy, sculptor Lee Kelly, author/historian Terence O'Donnell, writer Spencer Gill and designer/artist Robert Reynolds—has been chosen to design the \$7.8 million Pioneer Courthouse Square in Portland, Ore. The team was chosen from five finalists and 162 submissions.

The site has been occupied by a two-level parking structure since the Portland Hotel, designed by Stanford White, was demolished. The purpose of the competition was the preparation of schematic designs that will turn the city's prime downtown area into a day and evening attraction.

The winning design is to liberate the square from its constricting 200-foot property line and give those who are walking or driving by a sense of being "in" the square. It features a large, crescent-shaped stairway descending into an amphitheater along the block's natural slope (right).

Twelve monumental columns will run along the south side relating to the major buildings surrounding the square. All-weather, colored awnings will provide protection for light rail transit (the new transit mall extends between the square and the Pioneer Courthouse and two light

rail routes to the suburbs run alongside the square).

Also included in the design are two small tinted-glass pavilions latticed in bronze and crowned with arbors of climbing roses, an information center, tea and coffee stations, glass-roofed and rose covered pergola (matching the pavilions) and channels of water along the tops of low brick walls. A small amphitheater will have a canvas covered orchestra or bandstand. The wrought iron gate from the old Portland Hotel will be placed as it once stood facing the Pioneer Courthouse. Also planned are programmable laser light shows and a weather machine, consisting of three-dimensional symbols mounted high in the square for visibility.

The jury complimented the designers on "the manner in which the adjacent buildings frame and create the edges of the space, with subtle but sensitive response to the courthouse and local historical detail. The scale of this composition enhances the buildings surrounding it."

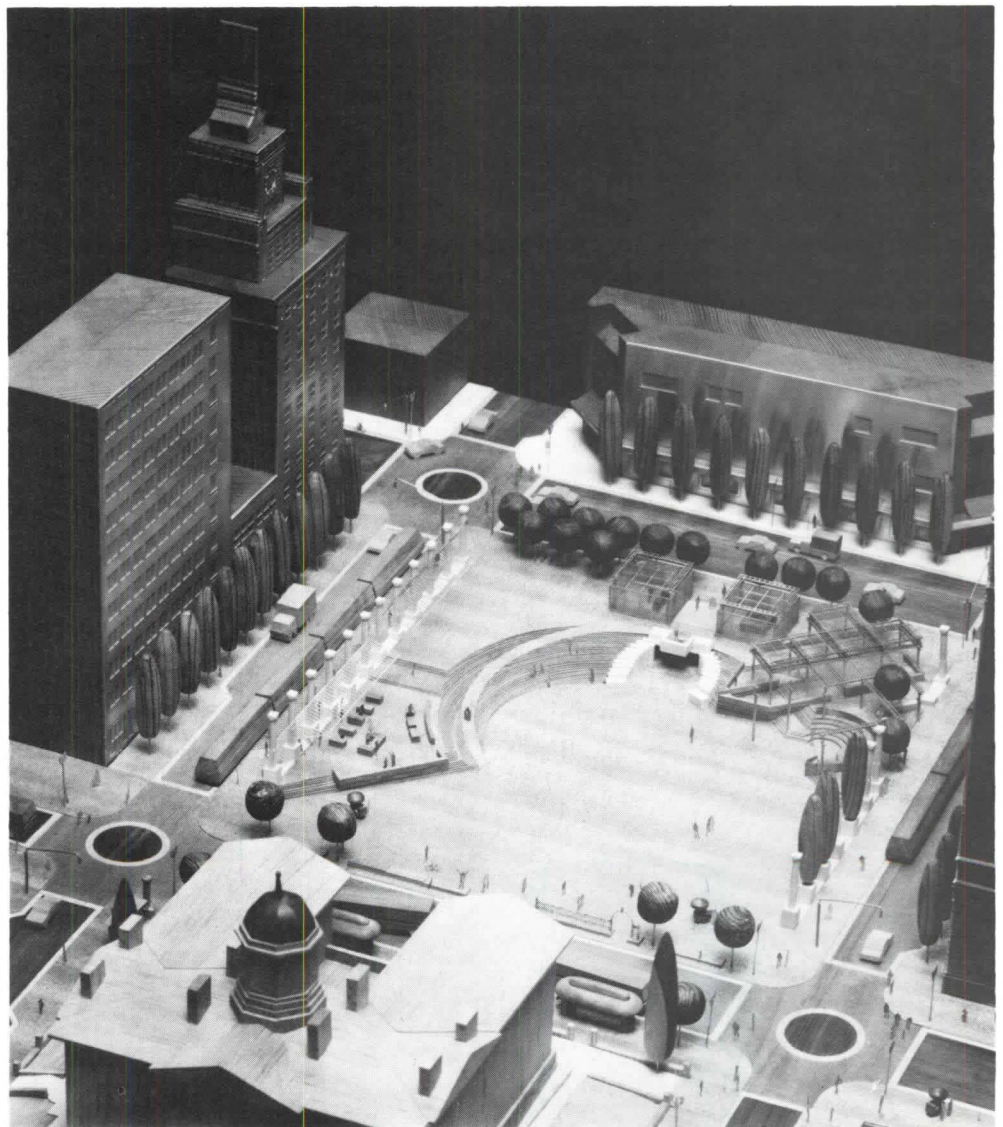
Jurors were Pauline Anderson, M. Paul Friedberg, George A. McMath, AIA, John L. Rian and Sumner M. Sharpe, with Donald J. Stastny, AIA, as professional adviser.

The other finalists were the joint venture of Machado/Silvetti and Schwartz/Silver; the joint venture of Lawrence Halprin and Charles Moore, FAIA; Geddes Brecher Qualls Cunningham, and Eisenman/Robertson.

Justice Facilities Exhibition Features 19 Recent Projects

Nineteen projects were selected for an exhibition of architecture for justice facilities featured at the congress of the American Correctional Association held in San Diego in August. The annual exhibition, sponsored by AIA and ACA, is open to architects who have designed correction/detention facilities, courts, police stations and other justice-related buildings. The exhibition will be shown at the International Association of Chiefs of Police annual meeting in St. Louis this month, and AIA's committee on architecture for justice plans to display the selected projects Oct. 30-Nov. 1 at its juvenile justice seminar in Gainesville, Fla.

Six of the projects received special
continued on page 84





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Aspen from page 71

sincerity that occasionally rises above man's arguments, labels and identities of the day. It asked us to do what most of us cannot do, to look across the generations and see the change to which he has been witness.

But the process of change over time, that missing link between purpose and form and purpose again, was considered primarily by the biologists. The modernists have become preoccupied with buildings as hardware, as objects. The postmodernists, in their search for metaphor and meaning, seem to be searching primarily in buildings as static forms as objects again.

But life is a process. We need to find meaning in the things that we do and the way that we do them, day after day. Not only objects but also actions can be imbued with symbolic significance. Catherine Bateson (anthropologist, Harvard) provided the gold to forge that missing link. "People live inside of a ritual the way they live inside of a house," she said. "I want from a ritual enough pattern so that it becomes a surface on which meaning is built up and built up by the ongoing process of life." Shouldn't we ask the same of architecture?

Paul McCready, designer of the Gossamer Albatross and Gossamer Condor, entranced his audience. Without pretense, he achieved what both the modernists and postmodernists have been striving for. No one could do more with less. And no call could awaken the depths of the human psyche more effectively than a re-enactment of the myth of Daedalus. His design evolved, responding to circumstantial evidence, directed by universal principles of aerodynamics, loading, geometry and human physiology. The entire process was purposive, but the final result was not envisioned beforehand.

Don Michael (sociologist, University of Michigan) put into words what McCready had demonstrated—that design must be recognized as an exploration, a process of adaptive adjustment and readjustment which proceeds governed by certain guiding

principles. He asked that the professions redefine competence not as a baggage of static skills and techniques but as the ability to learn from a situation as quickly as possible—"to become learners again." This is certainly the first step toward becoming part of a process guided by purpose.

We've acknowledged the disaster of grand intentions: Man's mind is not tuned finely enough to play in harmony with the future. Perhaps we should avoid intentions that impose an objectified vision on the future and seek rather a purposive system of algorithms which enable us to make decisions as design evolves.

When the next stage of architectural development emerges, it will certainly learn from both the modernists and the postmodernists—about technology from the modernists, about man's need for individual expression and meaning from the postmodernists. It will recognize that the goals of both movements—the development toward greater efficiency of the modern movement and the demand for diversity, regionalism and individualism of the postmodernists—need not conflict. In nature they don't conflict: Evolution through local adaptation increases efficiency while increasing differentiation and diversity.

We will want to look beyond the hardware technology which has until now constrained and standardized the modern movement. And we will want to look beyond the infatuation with the object which has absorbed postmodernists. We will need to understand the process-oriented concepts of software technology and to wed them to man's need for ritual in living. As with evolution, the purpose will lie not only in the forms but also in the process, that layering of meaning which Anne Tyng, FAIA, called "resonance." Here the harmony lies.

Evolutionary architecture will demand our constant learning and participation. Like dune grass, its roots will help to hold the particles of society together. Like dune grass it will bend with the wind. □

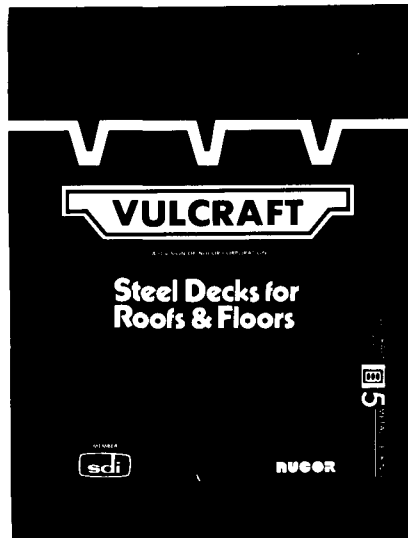
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The American Institute of Architects introduces an Unusual Addition to Its Line of Practice Aids—

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construction-related bonds and insurance, as required by AIA Document A201, General Conditions of the Contract for Construction. It provides invaluable guidance to—and mutual understanding of respective responsibilities among—owners, insurance advisors, and architects.

The *Guide* won't make you an insurance expert. Indeed, it stresses the importance of an owner's seeking the counsel of a qualified insurance professional. What it *will* do is define your proper role, as an architect, in relation to construction bonds and insurance, and give you a solid working knowledge of protective requirements and options.

Its handy looseleaf format allows you to augment the descriptive information provided with additional notes and documents from your own practice.

A Revolutionary Combination of Proven Ingredients. For the first time anywhere, the *Guide* brings together:

**Explanations* of how construction bonds and insurance requirements are met, with special reference to widely used AIA Documents.

*A comprehensive *glossary* providing clear and concise definitions of relevant insurance industry terms.

**Samples* of the many forms actually used by companies insuring construction projects.

The *Guide* explains how to start a project off on the right track by initiating the Owner's Instructions for Bonds and Insurance (AIA Document G610), and how these matters are dealt with in the

General Conditions of the Contract for Construction (A201) and other AIA Documents.

The discussion of construction bonds covers bid or proposal bonds, performance bonds, labor and material payment bonds, completion bonds, and maintenance bonds.

The *Guide's* treatment of insurance details workers' compensation insurance, employer's liability insurance, the numerous specific elements of general liability insurance, and various endorsements to property insurance.

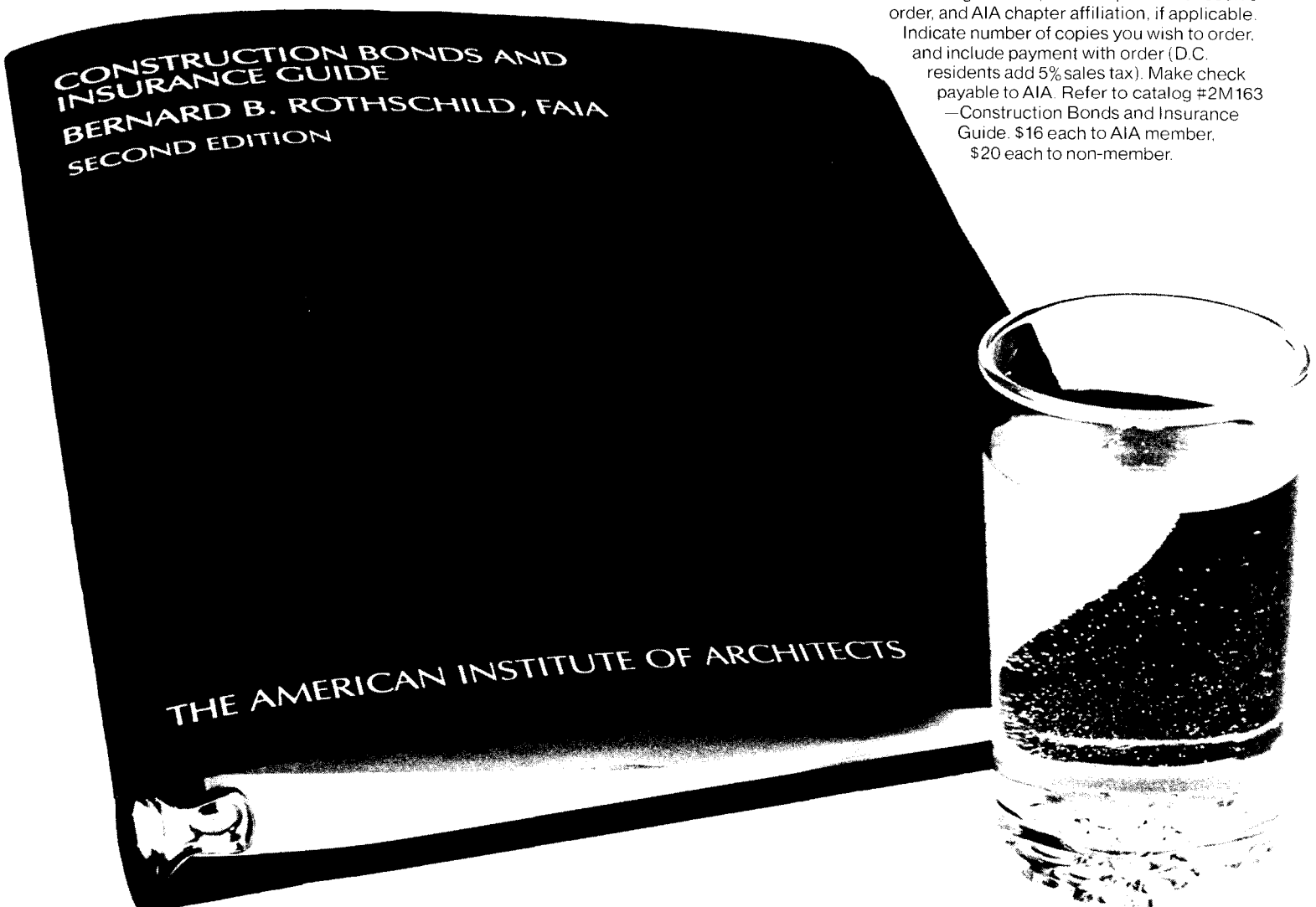
Included throughout these discussions are explanations of how levels of coverage are determined and paperwork is performed, hints about special areas of vulnerability the architect should be aware of, and notes about the considerations that apply to the architect involved in "design-build" project delivery of construction management.

In short, timely consultation of *Construction Bonds and Insurance Guide* will save everyone involved in a project from a whole range of paralyzing headaches.

Recommended Dosage: At Least One Copy Per Office. Having made the *Guide* available to your clients and their insurance advisors, you may find that the volume is constantly "on loan." Why not buy an extra copy for office use only?

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Indicate number of copies you wish to order, and include payment with order (D.C. residents add 5% sales tax). Make check payable to AIA. Refer to catalog #2M163—Construction Bonds and Insurance Guide. \$16 each to AIA member, \$20 each to non-member.



Practice from page 80
citations for "unique design features."

They are:

- Anchorage South Central Correctional Institute (Crittenden, Cassetta, Cannon of Anchorage and Hellmuth, Obata & Kassabaum Inc. of San Francisco).
- Dodge Correctional Institution, Chester, Ga. (Thompson, Hancock, Witte & Associates of Atlanta).
- Renovation of New York City's Manhattan House of Detention for Men (Gruzen & Partners, New York City).
- Mercer, Pa., Regional Correctional Facility (Berger/Spiers, Harrisburg, Pa.).
- Edmonton, Alberta, Police Headquarters (Chandler Kennedy Architectural Group of Edmonton).
- Metro Toronto West Regional Detention Centre, Etobicoke, Ontario (Moffat, Moffat & Kinoshita of Toronto).

Other projects chosen for the 1980 exhibition are Arizona Correctional Training Center, Phoenix (Varney Sexton Syndor Associates of Pheonix, and Gruzen & Partners, New York City); U.S. Border Patrol Station, Yuma, Ariz. (Architecture One Ltd., Tucson, Ariz.); Second District Courthouse, Skokie, Ill. (Lester B. Knight, Inc., Chicago); Emergency Correctional Facility, New Orleans (Grimball/Gorrononda/Savoie of Metairie, La.); Suffolk County Detention

Facility, Boston (Hellmuth, Obata & Kassabaum, P.C., Washington, D.C., and Stull Associates Inc., Boston); Berrien County Jail, St. Joseph, Mich. (Phillips Swager Associates, Peoria, Ill., and the Warren Holmes-Kenneth Black Co., Lansing, Mich.); Minnesota Supervised Living Facility, St. Peter (Hammel, Green & Abrahamson, St. Paul); Douglas County Correctional Center, Omaha (Dana Larson Roubal & Associates, Omaha); Catawba County Justice Center, Newton, N.C. (Clemmer, Bush, Sills, Abernethy Inc., Hickory, N.C.); York County Prison, York, Pa. (Williams, Shields, Snyder & Goas, Harrisburg, Pa.); Austin, Tex., police complex expansion (Holt + Fatter + Scott Inc., Austin, and Wilson-Stoeltje-Martin Inc., Austin); Carrollton, Tex., Police Facility (Pierce Partnership Inc., Dallas), and the Fairfax County Judicial Center, Fairfax, Va. (Hellmuth, Obata & Kassabaum, P.C., Washington, D.C.).

Walter A. Gathman, Albuquerque, N.M.
Marvin K. Geasler, New York City
C. E. Heimbrodt, Western Spring, Ill.
John P. Helleberg, Kearney, Neb.
A. L. Herberger, Los Angeles
Stanley P. James, Lynchburg, Va.
Dean E. Kennedy, State College, Pa.
John J. Lynch, Tempe, Ariz.
B. G. Noftsger, Oklahoma City
H. H. Swanson, Carmel, Calif.

James R. Wilkinson, FAIA: The recipient of nationwide recognition in the 1930s and '40s in such magazines as *Life* and *Time* for his pioneering in the contemporary architecture of the Southeast, Mr. Wilkinson was a partner in the Atlanta architectural, engineering and planning firm of Stevens & Wilkinson. He joined the firm in 1935 when it was known as Burge & Stevens, becoming an associate partner in 1939 and a partner in 1946 when the firm became Stevens & Wilkinson. Mr. Wilkinson died on July 24 at the age of 73.

Under his direction in the post-World War II period, the firm attracted attention for such award-winning structures as the E. Rivers School and Georgia Baptist Hospital, both in Atlanta; Rich's Retail Store, Knoxville, Tenn.; Georgia Center for Continuing Education, Athens; Baptist Valley Chapel, Waycross, Ga., and the Hapeville, Ga., Public Library.

DEATHS

Arthur Anderson, Gaithersburg, Md.
Jackson R. Bickford, Elmira, N.Y.
A. Carroll Brodnax, Houston
C. Harvey Convery, New Providence, N.J.
Philip J. diCorcia, Hartford
Carl W. Ernst, Alexandria, Va.



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BRIEFS

I. M. Pei, FAIA, is the recipient of an honorary degree of humane letters from Columbia University.

"**The Design and Building Industry's Publicity Directory**" and "The Design and Building Industry's Awards Directory" are resource guides that describe more than 400 periodicals and awards programs, giving individuals to contact, addresses, schedules, submission requirements and other pertinent data. The publicity directory is \$62.50; the awards directory is \$24.50 (or both for \$78). Contact: The Coxe Letter, Box 11316, Newington, Conn. 06111.

Inbrief, successor to AIA's *Review of Architectural Periodicals (RAP)*, is now available to subscribers. Contact: AIA Publications Fulfillment Office.

Max Bond, a partner in the New York City architectural firm of Bond Ryder Associates, has been named chairman of Columbia University's graduate school of architecture and planning. He has been an associate professor since 1968.

Jacquelin Taylor Robertson, FAIA, of New York City has been appointed dean of the University of Virginia's school of architecture.

A new tool for judging the cost effectiveness of passive solar design for commercial buildings has been developed by the National Bureau of Standards' center for building technology. The method incorporates a cost-benefit analysis approach which is described in the book *An Economic Model for Passive Solar Designs in Commercial Environments*. Also, an analysis of tax laws is provided. The book is available from the U.S. Government Printing Office, Washington, D.C. 20402 (No. 003-003-02203-9) for \$4.75.

Walter Andrew Netsch, FAIA, of Chicago has received an honorary doctor of fine arts degree from Northwestern University. The citation calls him "a master thinker and planner who has brilliantly shown us how to use land and space far better than ever before."

The first woman to head a school of architecture in this country is M. Rosaria Piomelli, AIA, who has been appointed dean of the school of architecture and environmental studies, City College of the City University of New York.

Downtown Research & Development Center is conducting its third awards program to honor both public and private sector developers for "creative and imag-

inative efforts" in the revitalization of downtown cores of cities and towns. Deadline for entries is Jan. 10, 1981. Contact: DR&DC, 270 Madison Ave., Suite 1505, New York, N.Y. 10016.

A scholarship for graduate study in the field of concrete is available from the American Concrete Institute, with applications due by Dec. 1. Contact: Education Department, ACI, Box 19150, Detroit, Mich. 48219.

Peoria Section/AIA has published the third book in a series, documenting the historical and architecturally significant structures in Peoria, Ill. "Peoria Three" is available for \$4.50; "Peoria Two" for

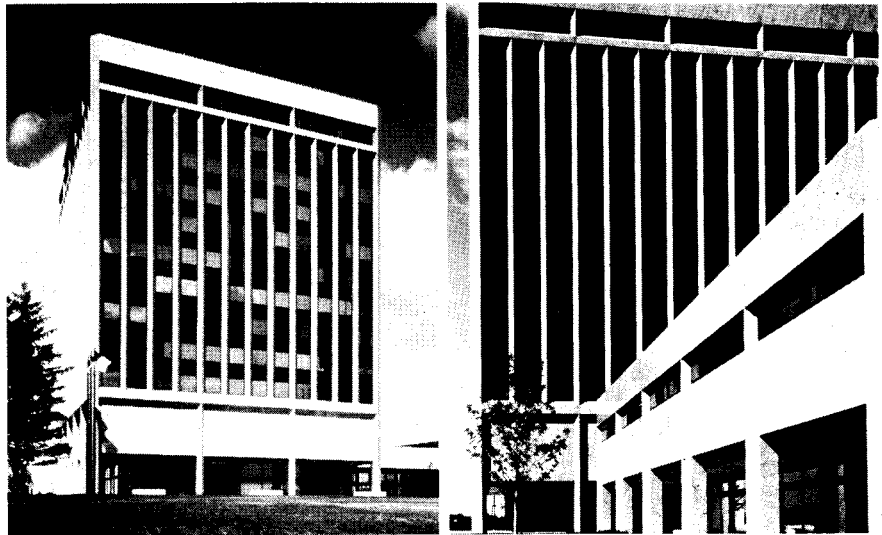
\$3.75, and "Peoria One" for \$3.25, or the set for \$10.50, postpaid. Write: Peoria Section/AIA, 735 N. Knoxville Ave., Peoria, Ill. 61602.

Charles A. Blessing, FAIA, whose work in Chicago and Detroit has "had an unparalleled influence," is the recipient of an honorary doctor of science degree from the University of Colorado.

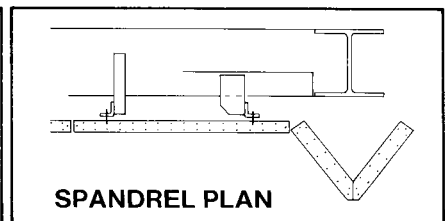
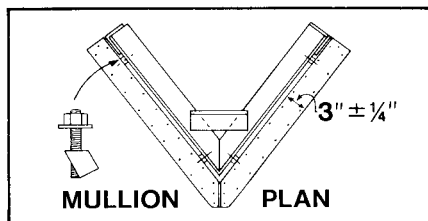
The New York Chapter/AIA has awarded its \$5,000 Le Brun traveling fellowship to Michele Conception Bertomen of New York City. The scholarship is given biennially to a resident of the U.S. with at least a year and a half of architectural experience. *Products on page 86*

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PRODUCTS

Floor Trusses.

Monex System has two parallel top and bottom chords connected by vertical wood members for compression and diagonal steel webs for tension. It forms a Pratt configuration in depths of 12, 14 or 16 inches. The webs are 20-gauge, hot-dipped galvanized steel. (Monex Corporation, Miami. Circle 195 on information card.)

Computer Components.

MiniMux 800 series components can be used with the Apple II microcomputer for energy control of commercial or industrial facilities; lighting control; security, fire and safety systems, and others. The components are completely self-contained. (American Multiplex Systems, Inc., Fullerton, Calif. Circle 198 on information card.)

Slide Duplicator.

Designed by Peter Bradshaw, Reprobox 2 has two exposures (5,600 degree Kelvin or 3,200 degree Kelvin) and includes column, bellows, camera adaptor, 35 millimeter slide stage, filter housing, diffuser and antiheat/UV glass, flash and sync cord. It can duplicate slides and negatives in formats from 35 millimeters

to two and one-fourth by two and three-fourths inches. (Leedal Inc., Chicago. Circle 197 on information card.)

Washroom Countertop for Handicapped.

1098 Series countertop of high-pressure laminated plastic over particle board has a four-inch skirt which provides 30 inches of clear access for wheelchairs when the countertop is mounted 34 inches from the floor. The top is seamless from the no-drip front edge to the coved four-inch backsplash. (Bobrick Architectural Service, New York City. Circle 196 on information card.)

Handcrafted Chair Frames.

Imported from Europe, chair frame reproductions are of traditional Queen Anne styling in unfinished beechwood. Armchairs and sidechairs are available. (Chal-Art Crafts, Paterson, N.J. Circle 199 on information card.)

Viewing, Editing System.

Visulite features basic viewer/editor models in two-foot and four-foot lengths, a portable light box with vinyl carrying case, a metal overlay frame that locks slides into place for vertical viewing and a rigid plastic sorting tray for viewing slides horizontally. Included is a 5,000 degree Kelvin color-corrected light with a

CRI rating of 91+. (Multiplex Display Fixture Co., Fenton, Mo. Circle 194 on information card.)

Hardwood Paneling.

Regal Oak is designed to harmonize with early American decors. The hardwood paneling is available in half-inch thick panels in random lengths and widths and with deep V-grooves. (Potlatch Corporation, Stuttgart, Ark. Circle 193 on information card.)

Pictorial Signs.

Six-inch by seven and three-fourths-inch signs feature engraved symbols and raised letters in English, foreign languages and Braille. Standard colors are white and black or beige and dark brown, with red used where the international symbol dictates. Pictorial signs are based on the international symbols. (Best Manufacturing Co., Kansas City, Mo. Circle 191 on information card.)

Graphics Computer System.

The A/E System, with its applications software package BASE A/E, performs two- and three-dimensional design and drafting projects. The system allows extraction of engineering analysis information from the designs such as piping diagramming, layout and isometrics; elec-

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trical schematics and ladder diagramming; facility/plant layout and space management, and structural steel design, drafting and analysis. It is available with a full-color video terminal in addition to black and white video and storage tube graphic display terminals. (Applicon Inc., Burlington, Mass. Circle 190 on information card.)

Skylights.

Thermal double-dome skylights are made of Uvex plastic sheet, a cellulose acetate butyrate material. The outer dome is 150 millimeters thick; the inner dome is 80 millimeters thick. The two domes are separated by at least two inches of air-space. The units have a minimum load bearing capacity of 100 pounds per square foot. (Nature Lite Manufacturing Co., Inc., Auburn, Wash. Circle 186 on information card.)

Outdoor Light Fixture.

Plaza 50 features a standard 120 volt ballast and 50 watt high pressure sodium lamp that produces a 3,300 lumen output. The lamp is enclosed in a precision die-cast aluminum fixture and has hinged anti-vandal opal diffuser. The light measures 7.6x5.5x13 inches. A post mounting adaptor is available. (Thorn Lighting Inc., Whippany, N.J. Circle 181 on information card.)

Computer System.

Sigmagraphics II computer assisted design system consists of a microprocessor, minidiskette storage, a digitizing tablet, a graphic CRT, a drum plotter and a custom plasma display. The system allows all plans to be computerized, common functions stored and plans to be printed. Designs can be separated into layers such as structural, overhead, architectural. (Sigma Design West, Ltd., Aurora, Colo. Circle 176 on information card.)

Wood Flooring.

Oak Bordeaux parquet wood flooring is available either prefinished or unfinished in a range of domestic and exotic woods. (Kentucky Wood Floors, Louisville. Circle 175 on information card.)

Door with Leaded Glass Panel.

Somerset entry door has clear, etched leaded glass surrounded by a narrow strip of earthtone opaque glass as its upper panel. The remainder of the door is of Weatherbond panels. (E. A. Nord Co., Everett, Wash. Circle 167 on information card.)

Stucco Coating.

Stucorock is a polymer based coating with the appearance of cementitious stucco. Its plastic base contains weather resistant pigments and fillers. The coating, available

in 21 colors, adheres to masonry, concrete, asbestos board, wood, aluminum and galvanized steel. (Stucorock Manufacturing Co., Tulsa, Okla. Circle 166 on information card.)

Rolled Document File.

Roll/Stor files are of corrugated fiberboard construction with a woodgrain plastic tambour door. The files are available in nine different styles with 16, 25 or 36 compartments in lengths of 25, 37 or 43 inches. (Bankers Box/Records Storage Systems, Itasca, Ill. Circle 165 on information card.)

Stack Tables.

The Venus Table has an apron frame of tubular steel that supports the top and forms double legs. The top is of natural oak with bumper-t mold edge. The tables stack 10 high and are available in 36-inch square or 45-inch round models. (Fixtures Manufacturing Corporation, Kansas City, Mo. Circle 164 on information card.)

Energy Management Computer.

Delta 1000 has a desk top console with CRT display and printer. The microprocessor system ties together primary energy-using systems in a building—boilers, chillers, motors, pumps, ventilating systems and lighting. (Honeywell Corporation, Minneapolis. Circle 163 on information card.)

Solar Systems.

SSI Sunbrat is a self-contained precharged system to provide domestic hot water for a family of four and is suitable for larger buildings such as condominiums. SSI Windstar systems provide cooling. SSI 1000 employs a 10-horsepower solar pumping unit and 48 collectors for large commercial and industrial applications. All systems employ refrigerant vapor, which has the ability to absorb low-grade energy, so the system can operate in all weather conditions. (Solar Specialties, Inc., Golden, Colo. Circle 162 on information card.)

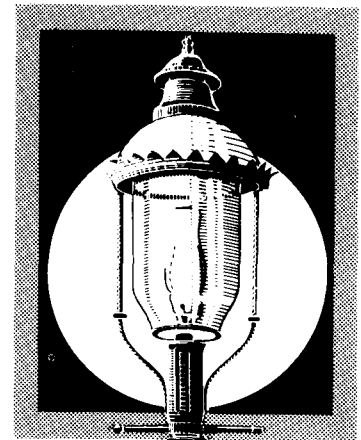
Slide Cabinet.

Abodia cabinets store 100 or 200 2x2-inch transparencies to a rack, with horizontal channel for storage and a plastic illuminated viewing screen. The cabinets are available with 15, 30 and 50 racks. (Elden Enterprises, Charleston, W. Va. Circle 161 on information card.)

Hanging Lamp.

The Game Room A-frame lamp, available in polished brass or chrome, hangs from the ceiling on a matching stem. The lamp's end panels are of white Plexiglas. (Koch + Lowy, Long Island City, N.Y. Circle 160 on information card.) □

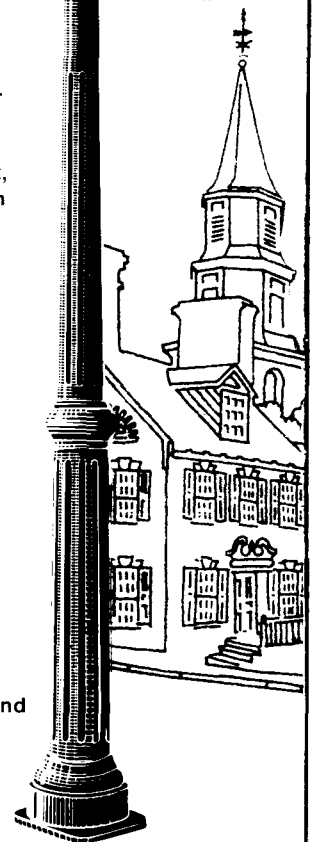
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Company	Cov. 2 & Pg. 1	<i>Batz, Hodgson, Neuwoehner</i>	
<i>Marsteller, Inc.</i>		United States Ceramic Tile	84
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<i>McLaughlin, Delvecchio & Casey</i>		United States Gypsum	18-19-21-23
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Cold Spring Granite Co.	85	<i>Compston Advertising</i>	
<i>Kerker & Associates</i>		University of Kansas	86
Columbia Lighting, Inc.	2	Von Duprin	79
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<i>Caldwell, Bartlett, Wood</i>		Westinghouse Electric Co.,	
Elk Roofing	13	Elevator Div.	Cov. 3
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Epic Metals Corp.	86	Weyerhaeuser Company	28-29
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<i>Corporate Communications &</i>			
<i>Marketing</i>			
Haws Drinking Faucet Co.	82		
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<i>Kerss, Chapman, Bua & Norsworthy</i>			
Jofco of Jasper, Indiana	31		
<i>John Brown Advertising</i>			
Levolor Lorentzen	Cov. 4		
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<i>Benefield, Levinger & Campbell</i>			
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PPG Industries (Glass)	33		
<i>Ketchum, MacLeod & Grove</i>			
PSAE (Masterspec)	27		
<i>Clarkson Associates</i>			

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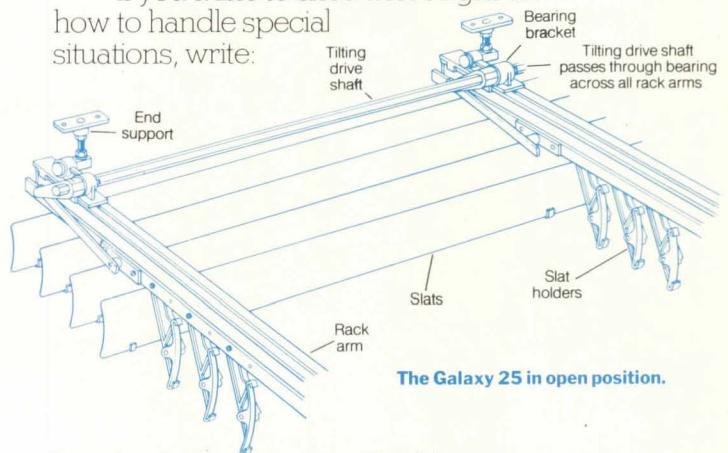
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